
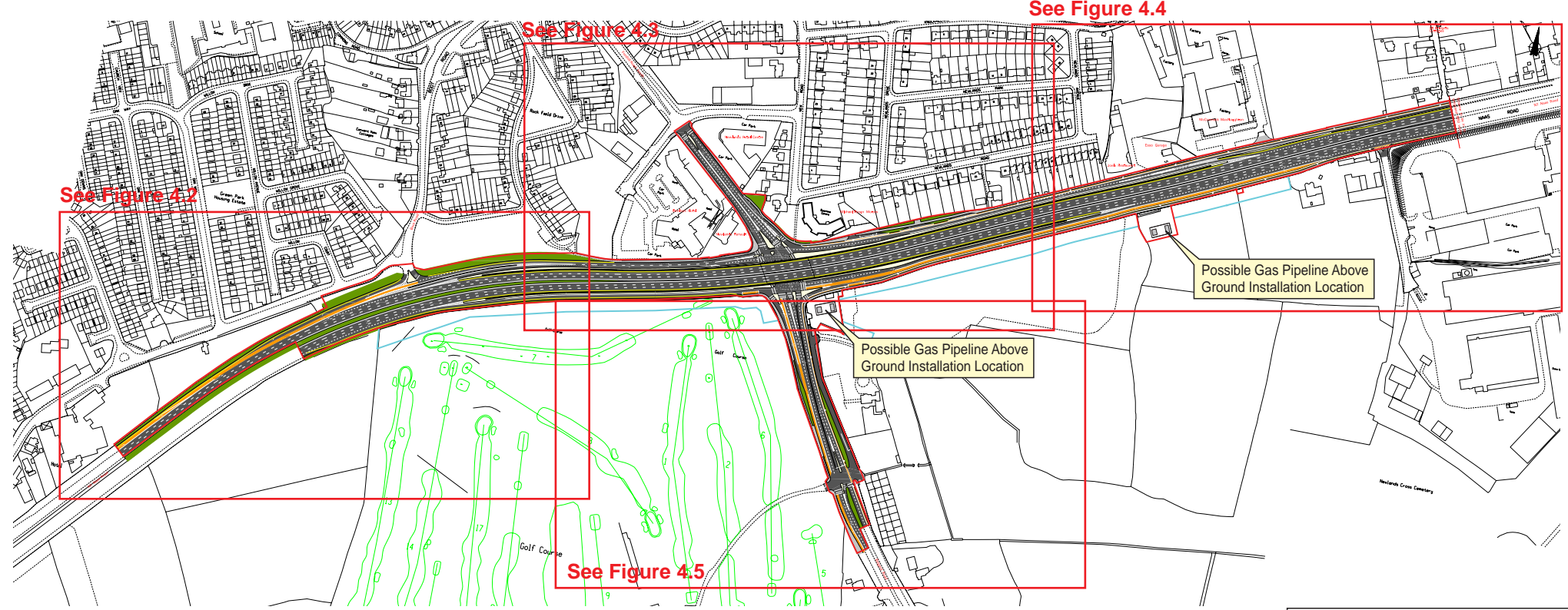


0 metres 300  
 Scale 1:7500

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**Legend**

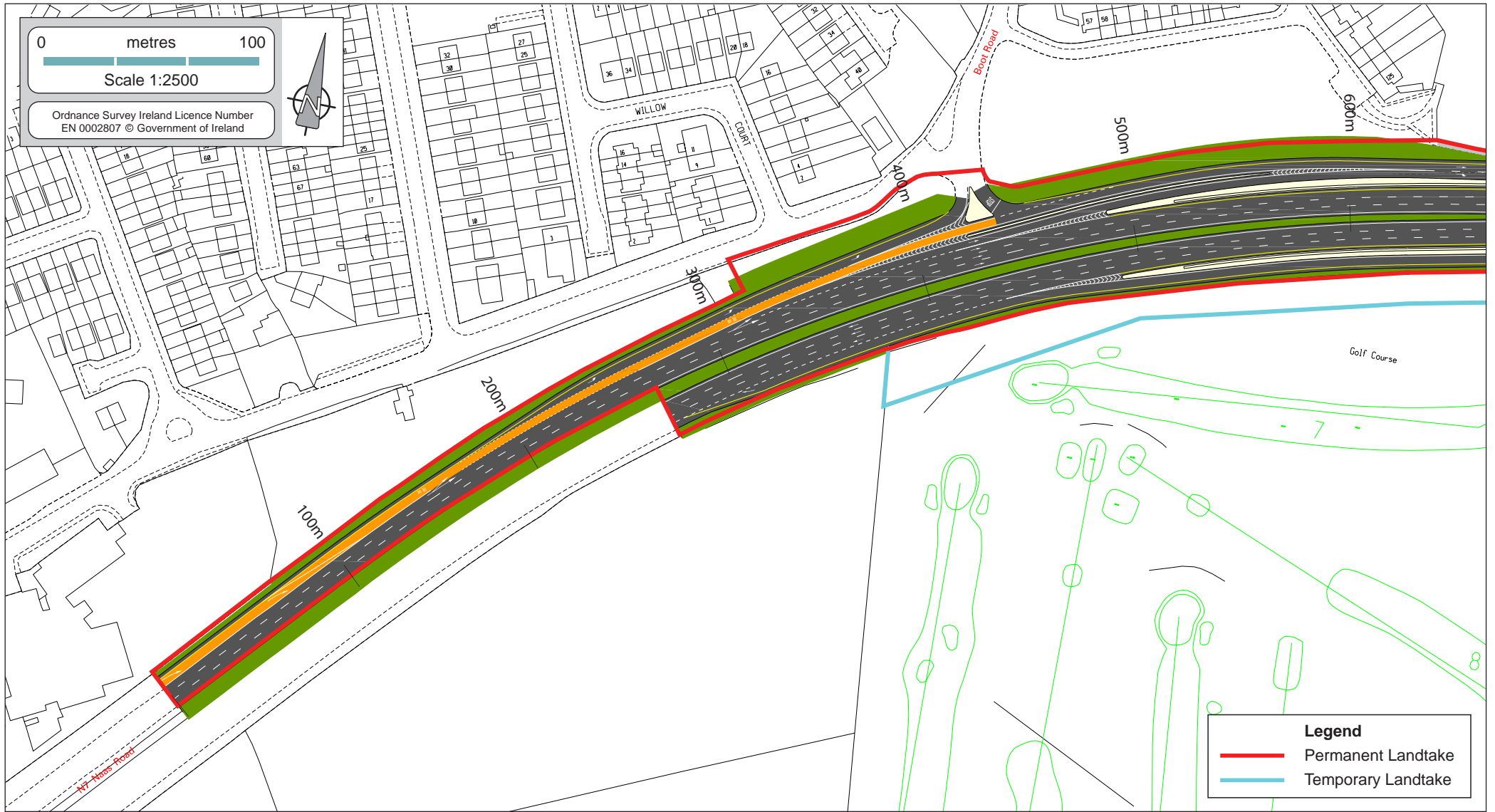
- Permanent Landtake
- Temporary Landtake



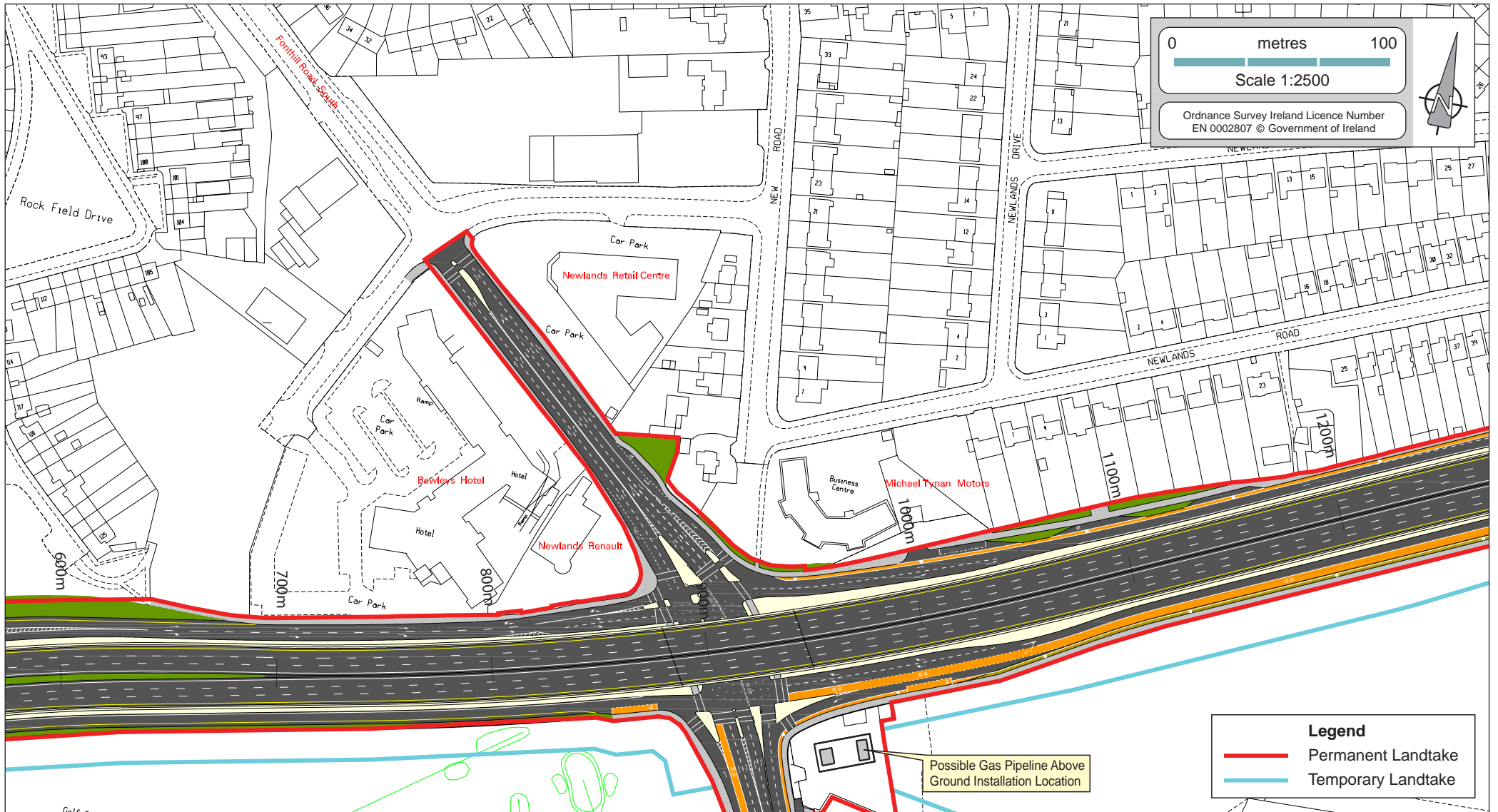
**Proposed Scheme Layout - Keyplan**

Newlands Cross Upgrade EIS

D4556.11 | December 2007 | Figure 4.1



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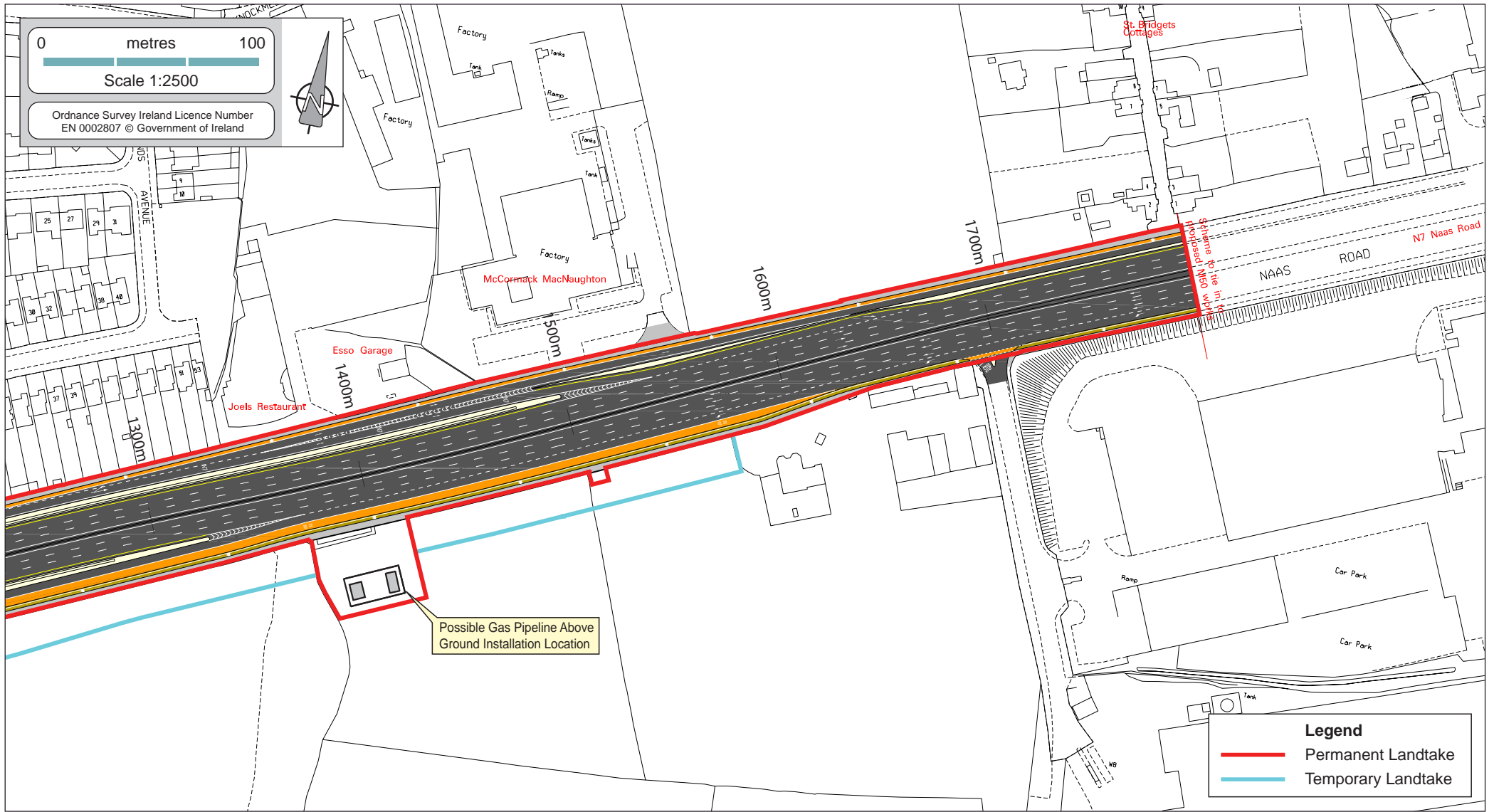
Proposed Scheme Layout - 2 of 4

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Figure 4.3



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Proposed Scheme Layout - 3 of 4

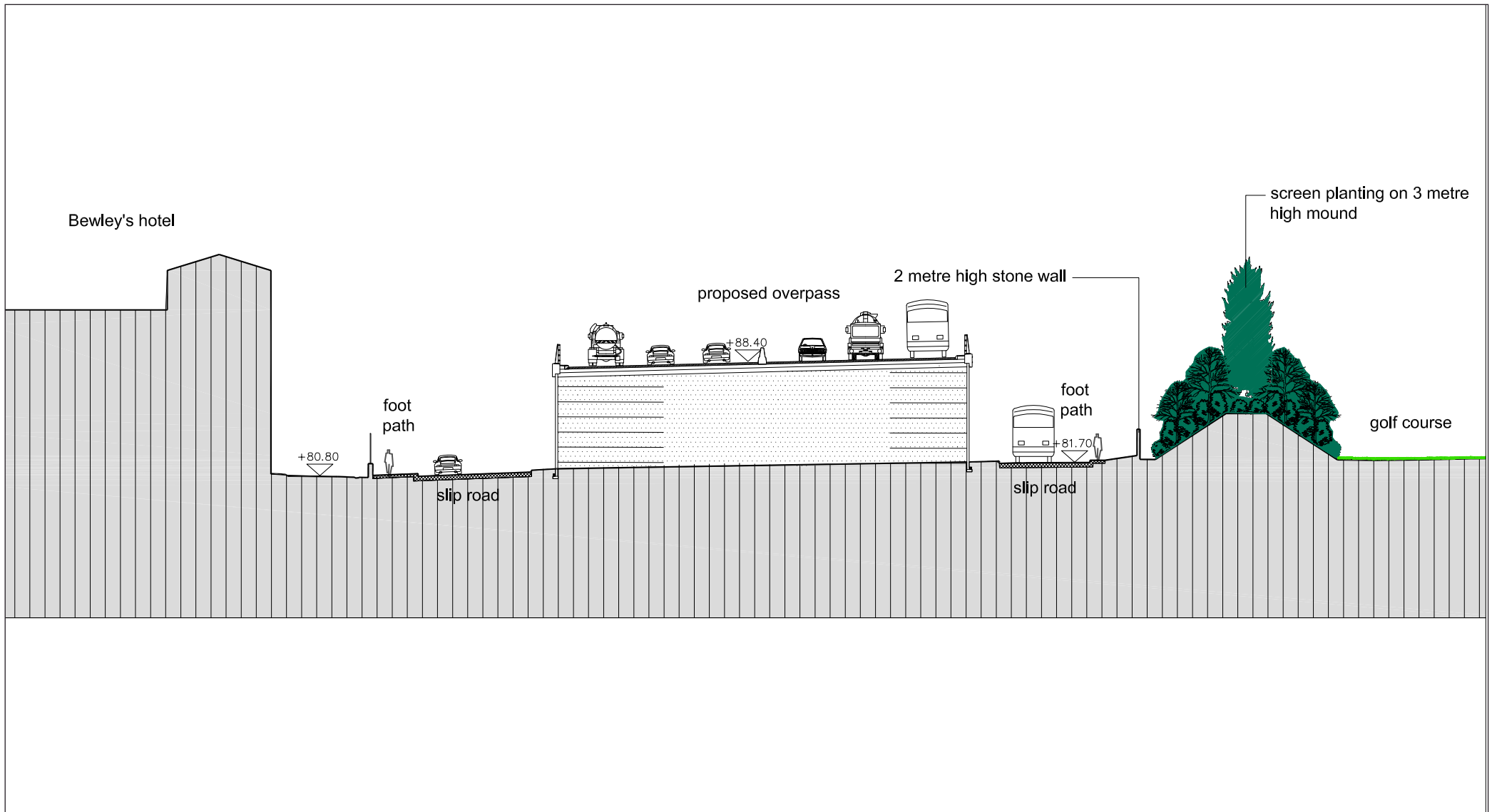
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Figure 4.4





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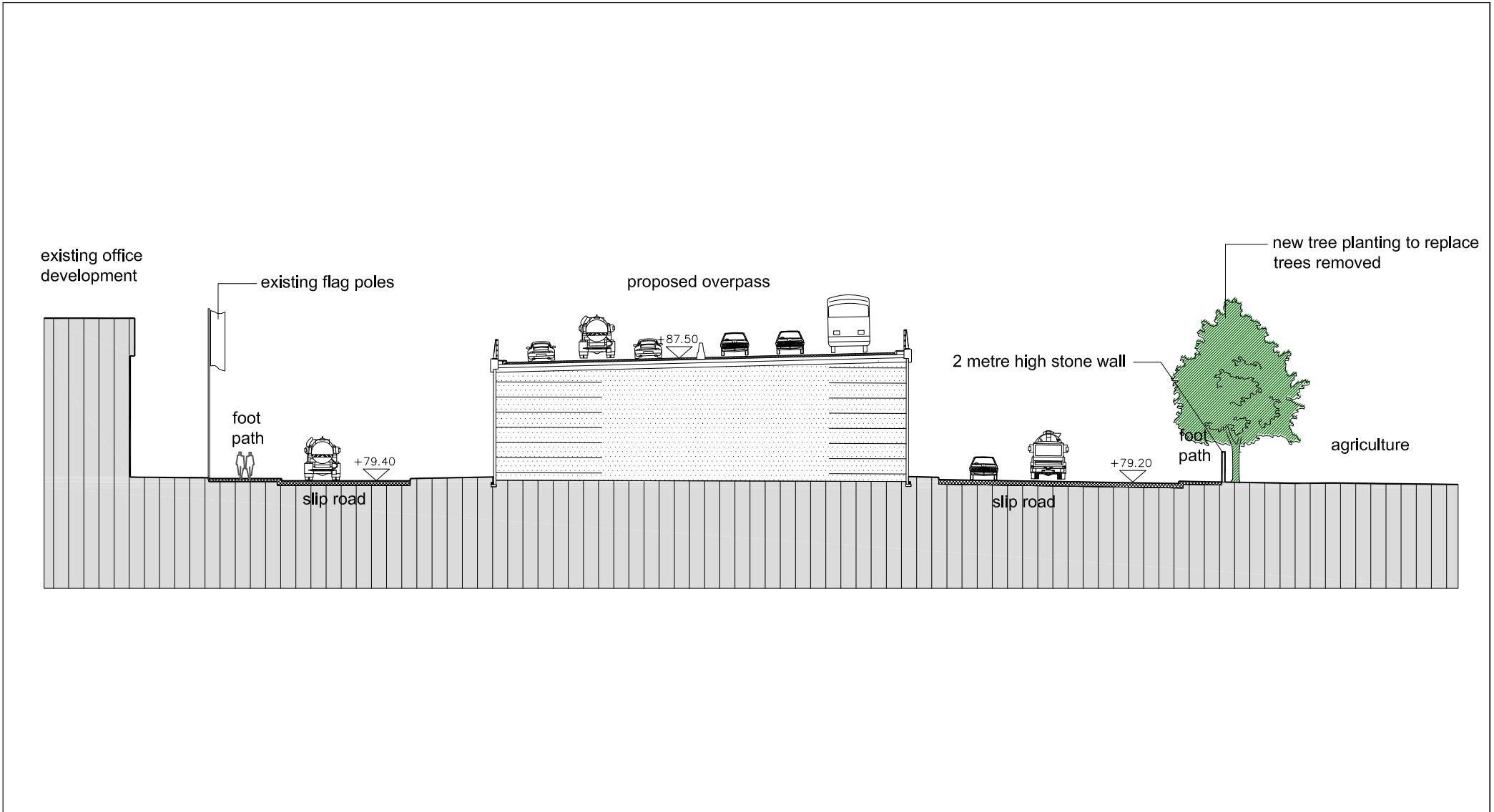
Section A-A at Chainage 800

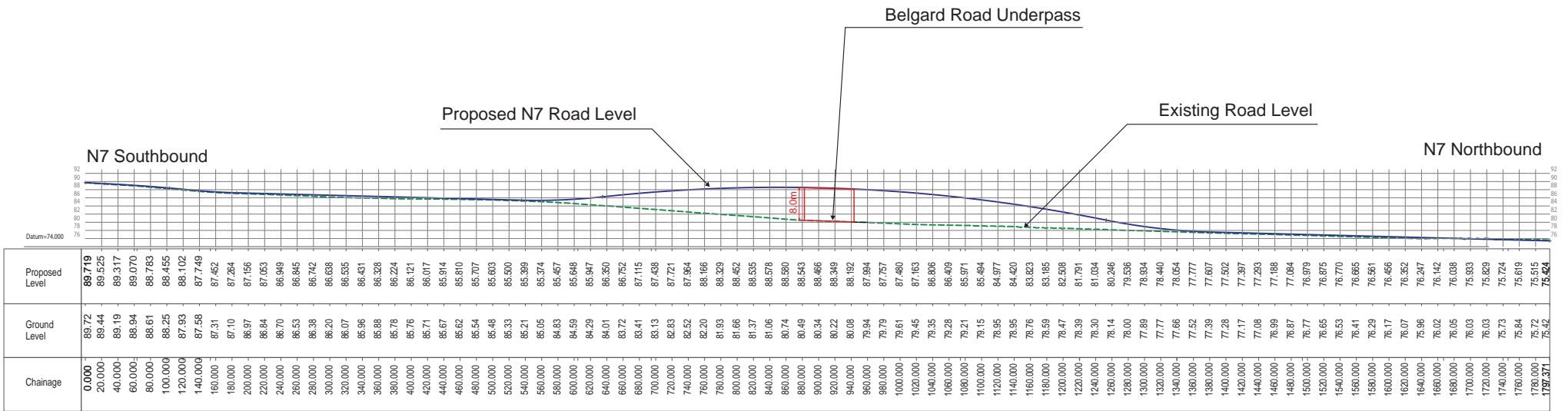
Newlands Cross Upgrade EIS

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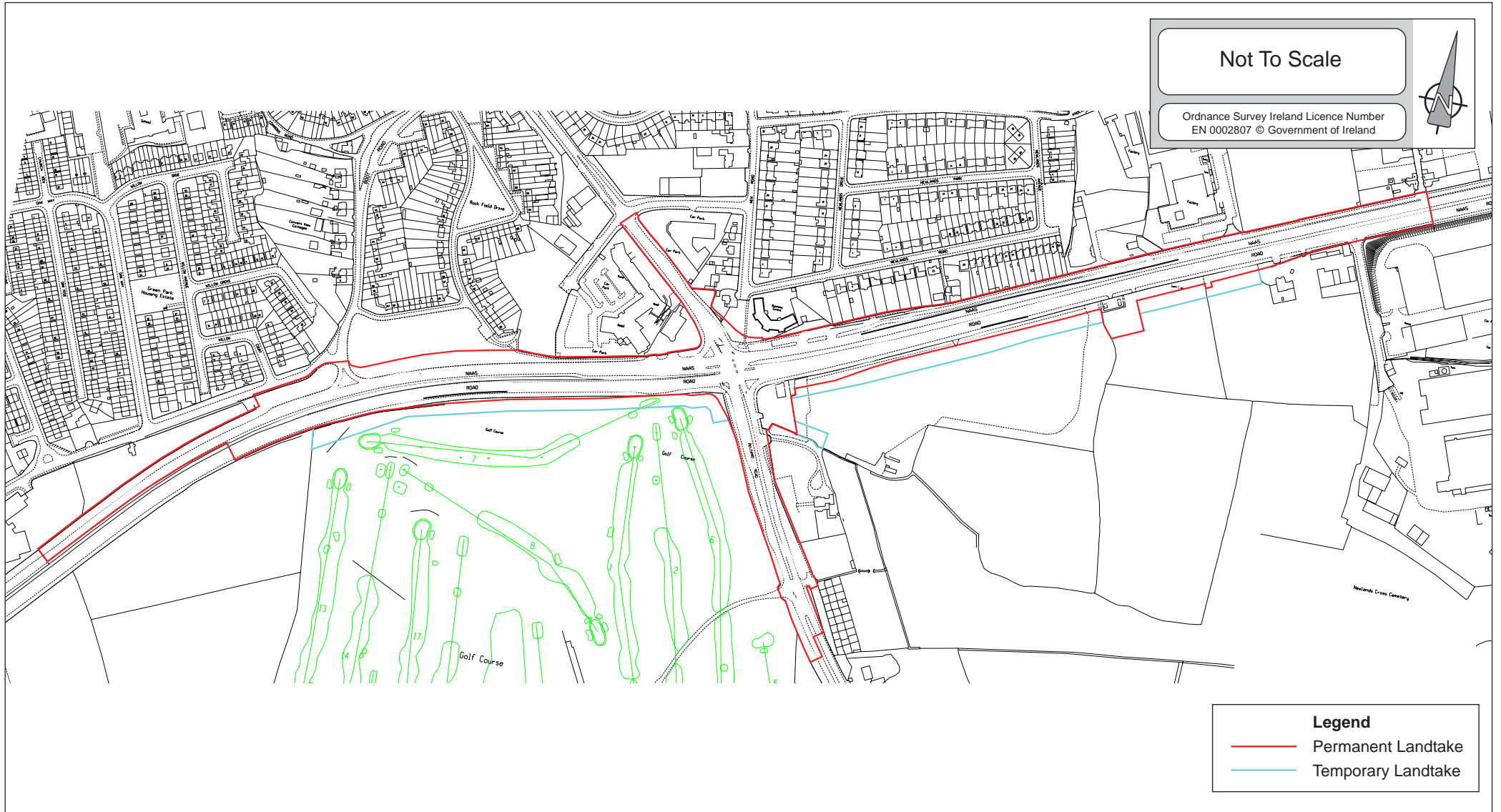
Figure 4.6





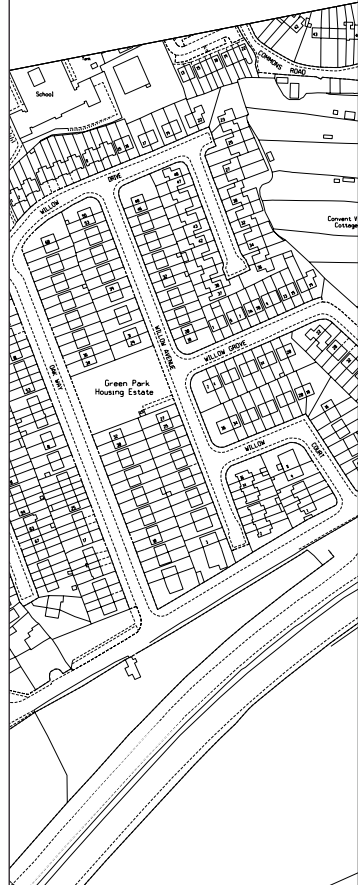
Longitudinal Section Control MC00





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Stage 1 :- Construct offline highway works to facilitate future diversion of the N7 westbound traffic

- i) Construct the temporary traffic diversions offline and to the south of the proposed overbridge location. In constructing this temporary diversion, construct as much of the permanent works as is feasible. This temporary diversion will facilitate the diversion of the N7 from its current alignment and enable construction works to commence to the north of the scheme.
- ii) Having constructed the temporary diversion, install temporary traffic lights to facilitate the revised alignment of the N7 eastbound and westbound carriageways and place road markings on the Belgard Road to suit the traffic management requirements.

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### Construction Methodology : Stage 1

Newlands Cross Upgrade EIS

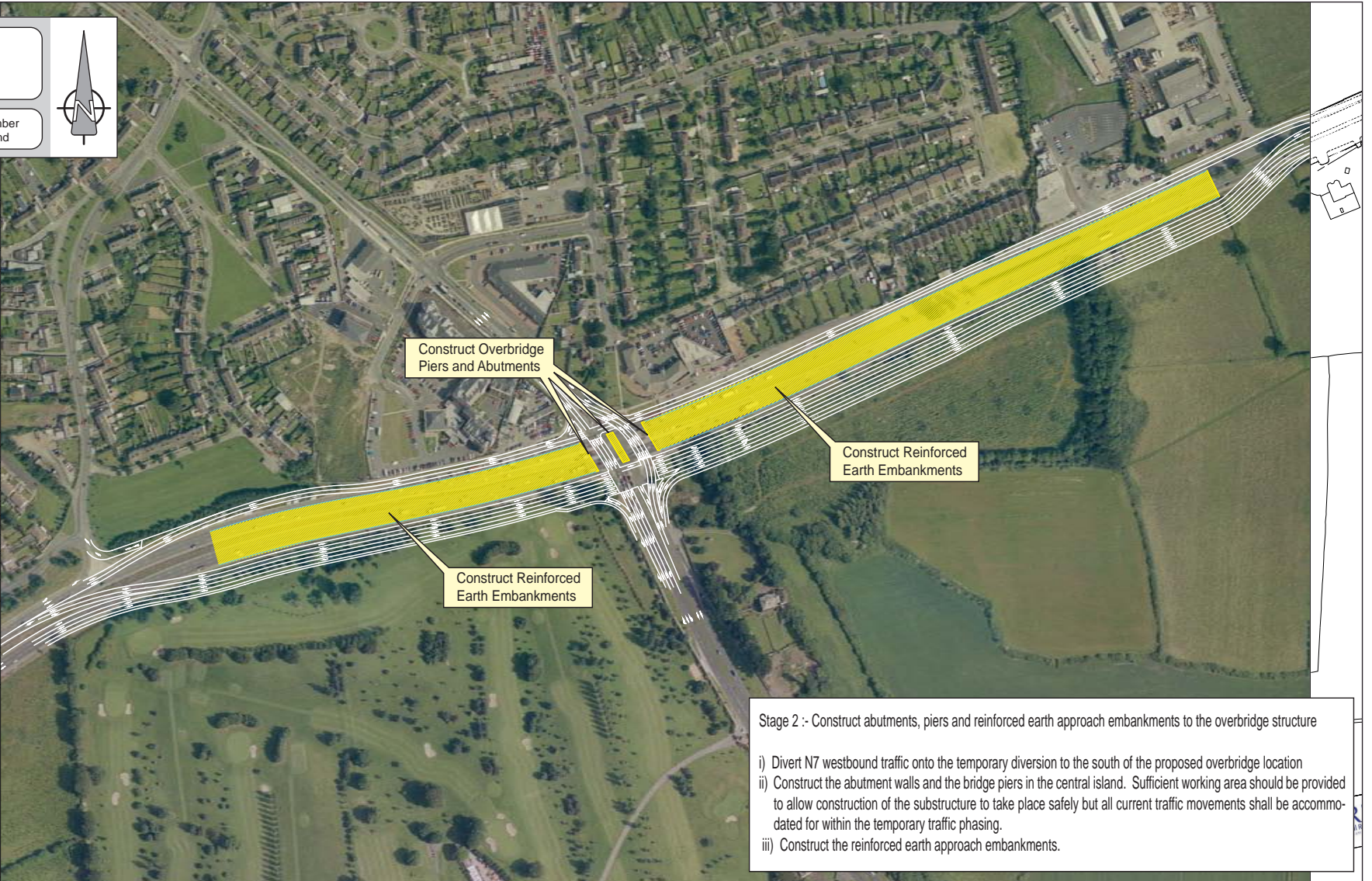
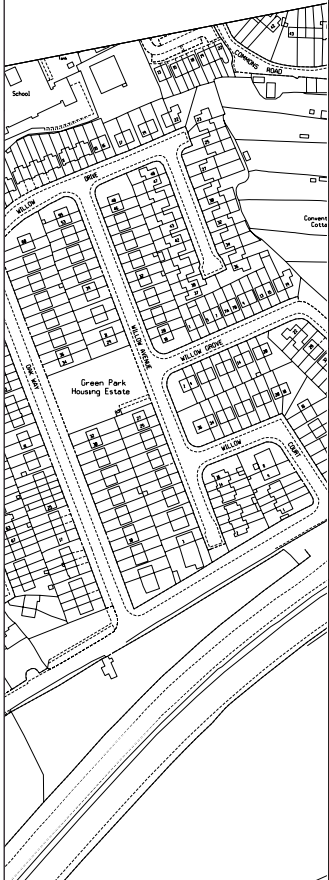
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Figure 4.10

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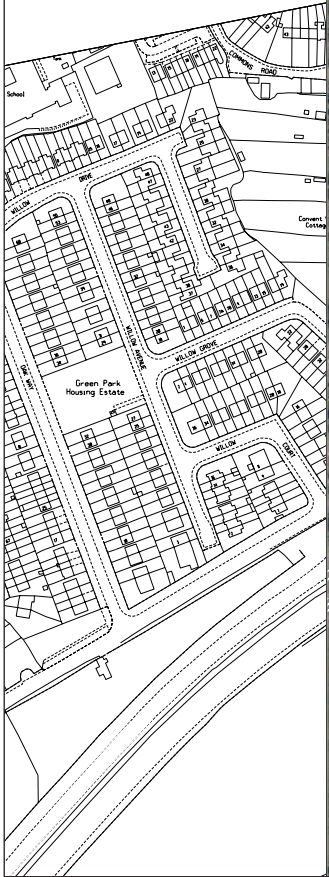
Stage 2 :- Construct abutments, piers and reinforced earth approach embankments to the overbridge structure

- i) Divert N7 westbound traffic onto the temporary diversion to the south of the proposed overbridge location
- ii) Construct the abutment walls and the bridge piers in the central island. Sufficient working area should be provided to allow construction of the substructure to take place safely but all current traffic movements shall be accommodated for within the temporary traffic phasing.
- iii) Construct the reinforced earth approach embankments.



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Stage 3 :- Lift precast beams into place during a series of overnight road closures

- ii) Lift precast beams into place during a series of overnight possessions. This will require alternate road closures to the east and west spans of the bridge deck but will also enable the contractor to facilitate some through traffic movements during the possessions.
- ii) Place Glass Reinforced Concrete permanent formwork between precast beams, to enable the construction of the deck slab to proceed above the live carriageways beneath.

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### Construction Methodology : Stage 3

Newlands Cross Upgrade EIS

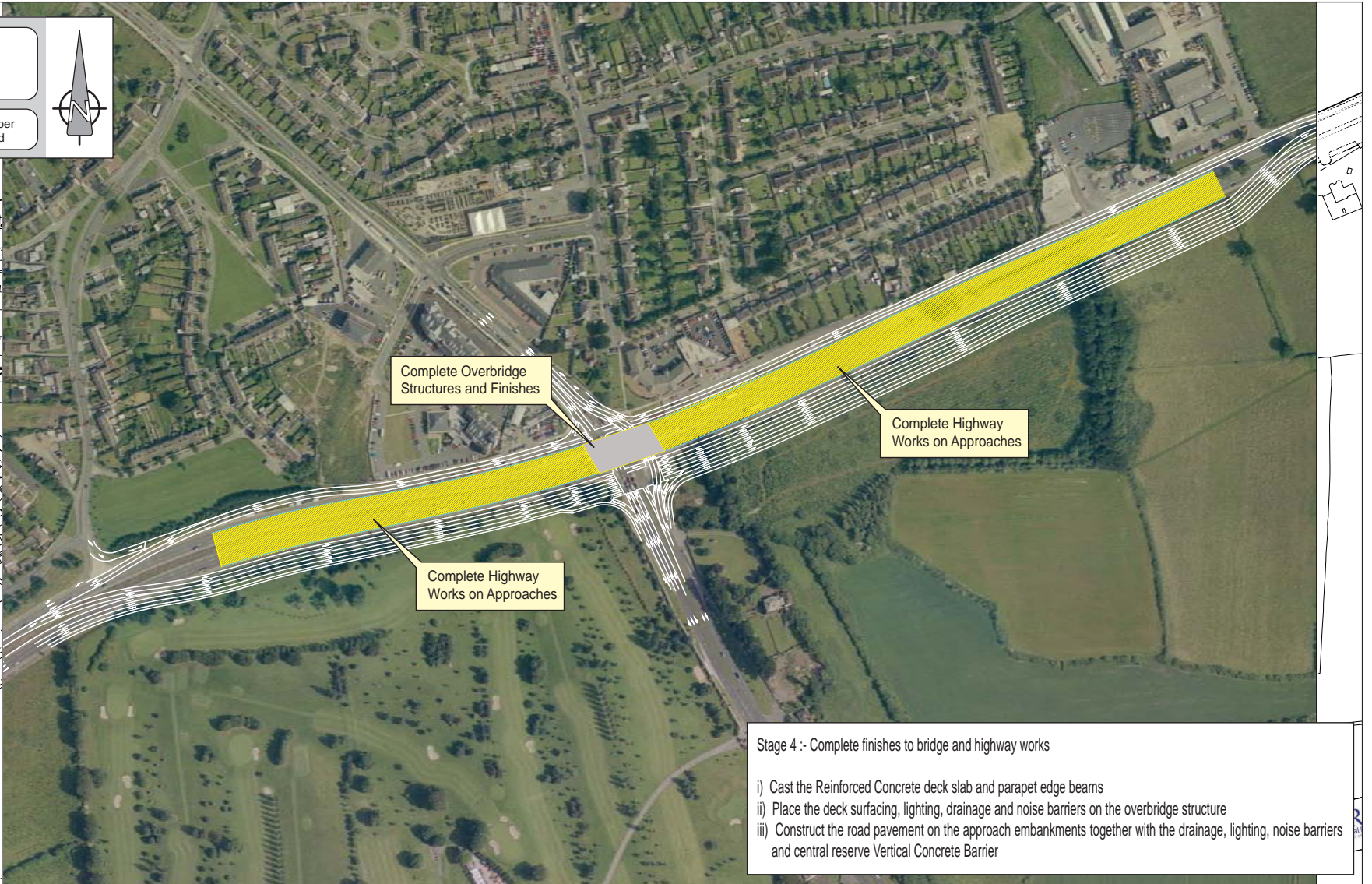
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Figure 4.12

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Stage 4 :- Complete finishes to bridge and highway works

- i) Cast the Reinforced Concrete deck slab and parapet edge beams
- ii) Place the deck surfacing, lighting, drainage and noise barriers on the overbridge structure
- iii) Construct the road pavement on the approach embankments together with the drainage, lighting, noise barriers and central reserve Vertical Concrete Barrier

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**Construction Methodology : Stage 4**

Newlands Cross Upgrade EIS

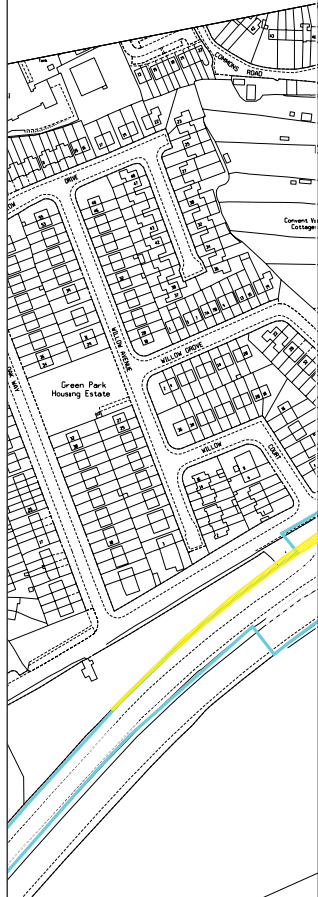
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Figure 4.13

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### Construction Methodology : Stage 5

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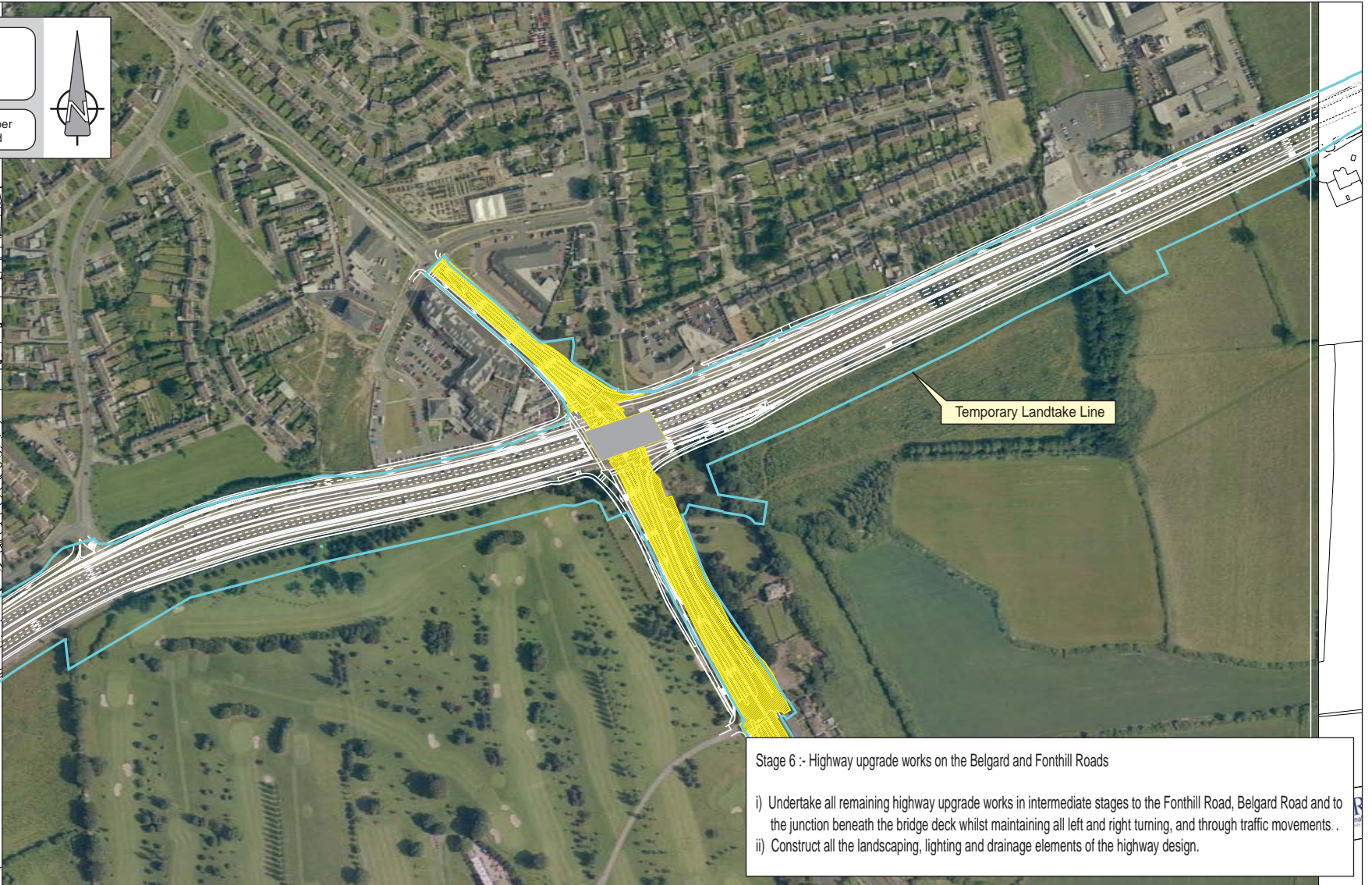
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Figure 4.14

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Temporary Landtake Line

Stage 6 :- Highway upgrade works on the Belgard and Fonthill Roads

- i) Undertake all remaining highway upgrade works in intermediate stages to the Fonthill Road, Belgard Road and to the junction beneath the bridge deck whilst maintaining all left and right turning, and through traffic movements.
- ii) Construct all the landscaping, lighting and drainage elements of the highway design.

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Construction Methodology : Stage 6

Newlands Cross Upgrade EIS

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Figure 4.15

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Stage 7 :- Final highway scheme arrangement

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Construction Methodology : Stage 7

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Figure 4.16