



GROUND
INTEGRITY

Roslyn Avenue, Netherton
Enabling and R&S Strategy (Weeks 1-18)
March 2026 Rev 2



Roslyn Avenue, Netherton

Introduction & Scope of Works

Introduction

This Strategy is for the proposed site clearance, earthworks, road construction and installation of drainage (including attenuation) for 82No. plots at Roslyn Avenue Netherton for Weeks 1-18.

Ground Integrity Scope of Works (Weeks 1-18)

- GI acting as PC,
- Vegetation strip of the full site covering around 35,756m²,
- Topsoil strip, disposal of excess and stockpiling of suitable soil to be reused in landscaping and gardens (in agreed location),
- Cut and fill in accordance with an Earthworks Specification including breaking out and crushing of 'hard-dig' bedrock, including disposal of excess soils,
- Management of surface water,
- Implementation of a MMP (Dow:Cop)
- Installation of an attenuation tank,
- Installation of 2no. retaining walls,
- Road and footpath construction including connection to Roslyn Avenue
- Surface water and foul drainage installation including connection to existing drainage.
- Construction of Harron Homes compound and temporary sales area,
- Ducting for electric diversion
- Construction of plots 7, 52-57 to DPC



Roslyn Avenue, Netherton

Reference Documents and Specifications

- Site Layout Ref: 692-PL01 Rev G dated 06/02/2026
- Build Route Ref: 662.304 Rev C dated 17/10/2025
- Geoenvironmental Appraisal Ref: 5080/1 dated July 2024
- Earthworks Specification Ref: 5080/2 dated Jan 2025
- Surface Water Management Plan Ref: EE100008-Rev A dated 08/10/2025
- Section 38 Layout Plan Ref: EE100008-200-P3 dated 11/11/2025
- Section 104 Layout Plan Ref: EE100008-201-P2 dated 04/11/2025
- External Levels Layout Sheet 01-03 Ref: EE100008-202-P2 dated 04/11/25

Roslyn Avenue, Netherton

Site Strip and Earthworks

The Site Strip and earthwork volumes are based on Topographical Survey and Finished Levels Drawing provided by Harron Homes.

Site Strip

Site strip area	= 35,756m ²
General topsoil strip	= 10,727m ³
Retention of topsoil for landscaping	= 4,846m ³

Earthworks

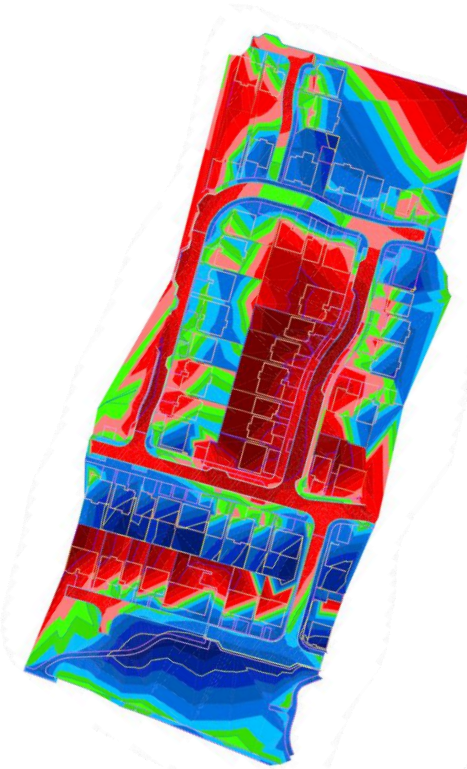
Cut (inc. 450m ³ 'hard-dig' rock)	= 8,791m ³
Filling	= 8,791m ³

Attenuation & ponds

Temporary pond	= 2,000m ³
Cut (inc. 919m ³ 'hard-dig' rock)	= 2,552m ³
Disposal (Inert)	= 1,891m ³

Estimated Surplus Arisings

Topsoil (Inert/clean)	= 5,881m ³
Subs-soil (Inert) - Exc. foundations	= 6,9840m ³



Cut & Fill Model



Finished Surface Model

	- DENOTES PLOT AREAS -500MM.
	- DENOTES S38 TARMAC ROAD -700MM.
	- DENOTES GARDENS -300MM.
	- DENOTES POS/ LANDSCAPE AREAS -300MM.
	- DENOTES S38 FOOTPATH -170MM.
	- DENOTES DRIVEWAYS -295MM.
	- DENOTES BLOCK PAVED ROAD -700MM.
	- DENOTES ADOPTABLE VERGE -300MM.
	- DENOTES FOOTPATH -300MM.

Roslyn Avenue, Netherton

Site Investigation Summary

Issue	Remarks
Made ground	Encountered in one pit (TP06) beneath the topsoil to a depth of 2.4m; comprised of Cobbles and Boulders of Sandstone with gravelly Sand (Reworked Natural material), believed to be a localised borrow pit or small-scale quarry, further occurrences of which (yet to be identified) may be present. The cobbles of sandstone were not uniform and were of different colours and shapes; the excavation was also very unstable and no 'structure' could be seen in the sidewall, as would be expected in weathered bedrock. Trial pits TP25 to 27 were excavated to delineate the made ground, however, all three found shallow sandstone bedrock at c. 1m depth. Possible Reworked Natural material was also encountered in WS03 & WS06 to depths of around 2m; comprising very loose sandy Gravel of sandstone.
Natural ground	Topsoil (typically 300mm in thickness), over weathered bedrock comprising gravelly Sand, sandy Gravel and/or Cobbles with occasional boulders and a matrix of sand/gravel. Sandstone bedrock was encountered in all trial pits at depths varying between 1.0m and 2.5m (ave. of 1.5m).
Contamination	No visual/olfactory evidence of hydrocarbon contamination was noted. Topsoil is suitable for re-use within the proposed residential end-use.
Mining & quarrying	The south of the site is located within a Coal Mining Development Low Risk Area (within the defined coalfield, but no known defined risks have been recorded by the Coal Authority; there may still be unrecorded issues). The north of the site is beyond the Coal Authority's defined coalfields. A sandstone quarry, later recorded as a refuse tip, is located immediately north/north-east. Numerous additional sandstone quarries recorded within 250m to the east, west and south-west; most notably c. 75-100m west/south-west and 100-150m east.
Hazardous gas	The site lies in an area where between 3-5% of homes are estimated to be above the radon action level. A former refuse tip is present immediately beyond the north/north-eastern boundary. Infilled quarries are also present within 250m to the east and west. Monitoring wells have been installed across the site and a Hazardous Gas Risk Assessment will be issued on completion of the monitoring.
Preparatory works	Stripping of topsoil, with stockpiling for subsequent re-use or disposal off-site.
Foundations	The vast majority of plots at the site will be founded on traditional strip foundations at a minimum depth of 600mm; founding stratum will be weathered bedrock (gravelly Sand, sandy Gravel or Cobbles of Sandstone). Locally, trench fill foundations (near TP06, WS03 & WS06) will be required where reworked natural material was encountered.
Groundwater & excavations	Groundwater was not encountered within any of the exploratory holes. Shallow excavations are unlikely to remain stable in the short term due to overbreak in the granular residual soils (namely the cobbles). Excavation greater than c. 1.5m is likely to prove difficult across most of the site.
Flooding & drainage	The site lies within Flood Zone 1, where the risk of flooding from rivers or the sea is classified as low. It is understood that surface water will be stored in an attenuation tank, to be disposed off-site.
Highways	Based on visual inspection of the shallow natural materials and published guidance, the Granular Residual Soils should provide a CBR value of at least 5%. This value should be verified prior to redevelopment.

Roslyn Avenue, Netherton

Earthworks Specification Summary

The base of the area to be filled shall be proof rolled with a dead weight roller, and any soft spots or materials shall be removed and replaced with compacted fill. The fill shall also be compacted to the same specification as adopted for subsequent filling works.

Soft spots are defined as areas where the exposed surface comprises cohesive material with an undrained shear strength when measured using a Hand Shear Vane (HSV) of less than 50kPa.

The sub-grade surface should be surveyed prior to placement of any fill.

The Specification requirements shall be controlled by in-situ and laboratory testing as follows:

- Moisture content, Atterberg Limits, particle size distribution & particle density (BS1377: Part 2: 1990)
- Laboratory compaction test; 2.5 kg hammer method (BS1377: Part 4: 1990)
- In-situ density test (sand replacement method, SRDs), plate load test & in-situ CBR test (BS1377: Part 9: 1990)

Where plate load tests are utilised to determine the CBR value at formation, equivalent CBR values shall be derived using the method detailed in Section 7.14 of the Highways Agency Interim Advice Note 73/06 Revision 1 (2009).

If a Nuclear Density Meter (NDM) is used to determine the bulk density and moisture content, then the NDM shall be calibrated by undertaking NDM tests adjacent to SRD tests, at a frequency of at least 1 SRD: 10 NDMs.

In-situ compliance testing (i.e. density tests) shall be undertaken on a minimum of 3 samples per material source/ type and a nominal frequency of 1 test per 500m³ of placed fill.

Laboratory compliance testing shall be undertaken on a minimum of 6 samples per material source/ type, with 1 additional test per 1,000m³ of placed fill.

Where different sources/ types of fill material are utilised, it may be necessary to undertake laboratory testing on samples obtained from the same location as the in-situ tests, in order that the data can be correlated.

The Contractor should arrange for the following survey work as directed by Harron:

- All setting out necessary to allow the works to proceed
- Recording of the base and extent of all excavations
- Recording the locations and volumes of all stockpiles of suitable materials left on site for Harron's use during the development works
- As-built survey of the finished surface on completion of the contract

The Contractor should supply the results of this survey work to the Engineer for inclusion in the Verification Report.

CBR values should be determined at highway formation level at nominal 25m intervals, with test locations staggered across the width of the highway to ensure the whole highway area is assessed.

Note Earthwork suitability testing to be carried out using trial pits, 4 week prior to cut & fill

Roslyn Avenue, Netherton

Sequence - Week 1

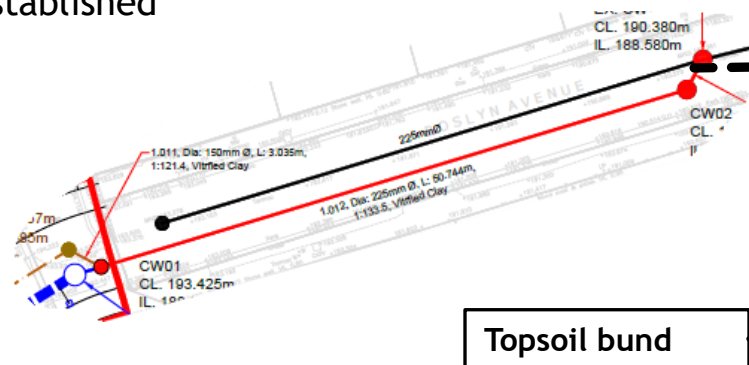
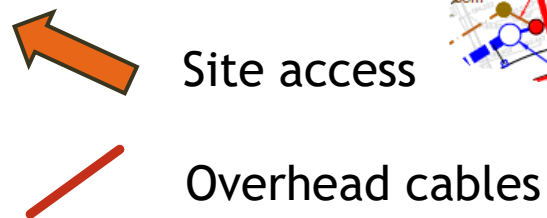
- 300mm Topsoil strip to south part of the site to form a barrier bund for surface water along the southern perimeter of the site, excess to stockpile,

Initial topsoil strip within the south part of the site to allow early bulk excavation and formation of a storage pond to manage construction surface water,

- Formation of temporary site access including wall removal,
- Install barrier fencing to delineate 'no go area' of the Overhead cables,
- Off-site drainage connection works to commence,

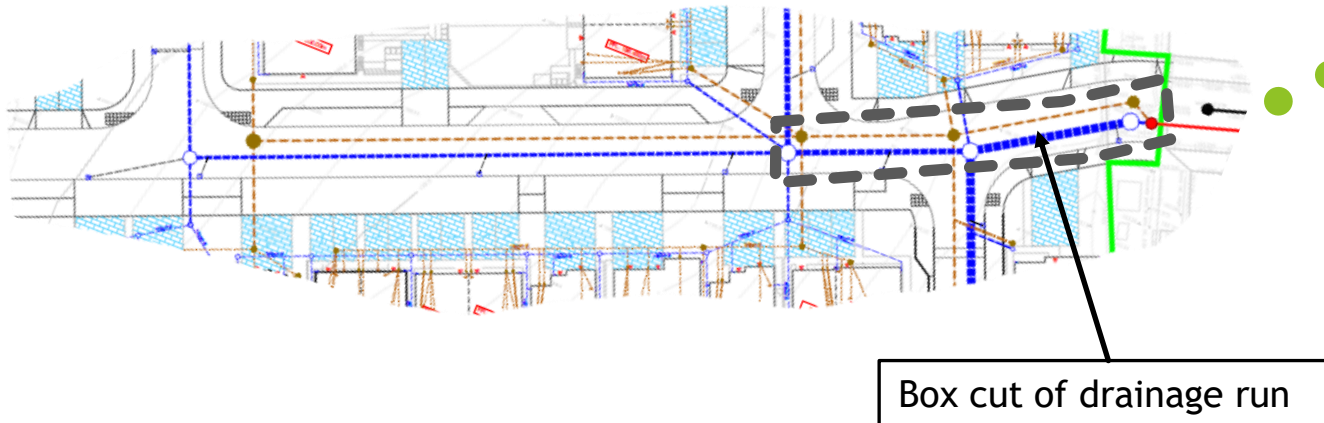
Early connection to existing sewer is key to managing surface water discharge unless other discharge locations are available

- GI's compound established



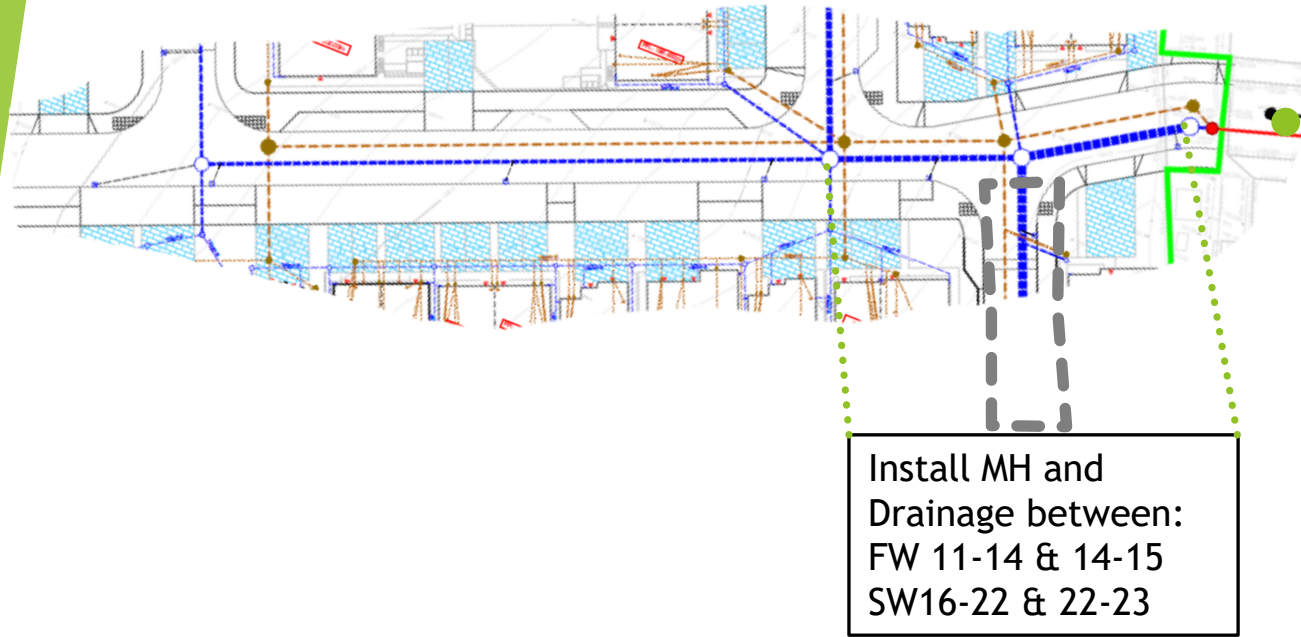
Roslyn Avenue, Netherton Sequence - Week 2

- Further topsoil strip in the southern area of the site and stockpile for off site disposal,
- Commence cut & fill to formation level as per agreed model (South part of site only) to allow temporary storage pond to be formed and construction of attenuation tank, approximate fill level within attenuation area to be c. +500mm above top of attenuation tank,
- Complete off-site connection works,
- Excess sub-soil to stockpile, hard-dig material segregated for processing,
- Box cut of drainage run (see below) to 300mm below invert,
- Form temporary access road for adjacent field.



Roslyn Avenue, Netherton Sequence - Week 3

- Remaining topsoil strip of south part of the site,
- Continue bulk excavation of the southern half of the site, including temporary storage pond,
- Excess sub-soil to stockpile for off-site disposal, segregate suitable hard-dig for processing,
- Box cut of drainage run (see below) to 300mm below invert,
- Temporary connection of pond to discharge via pumping.
- Install surface and foul drainage SW16-23



Roslyn Avenue, Netherton Sequence - Week 4

- Continue box cut of drainage run within hard-dig area between SW21-SW22 to 300mm below invert,
- Install MH and drainage between FW 11-14 & 14-15 and SW16-22 & 22-23,
- Complete cut & fill for southern half of the site including attenuation tank



Temporary outfall (via pumping)

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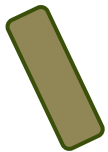
Sequence - Week 5

- 300mm Topsoil strip of northern half of the site
- Install MH and drainage between FW 13-14 and SW 21-22,
- Install road sub-base at entrance SW16-SW23
- Box cut between SW15-SW16. Also to be used for surface water storage,
- Safe access below overhead cables.

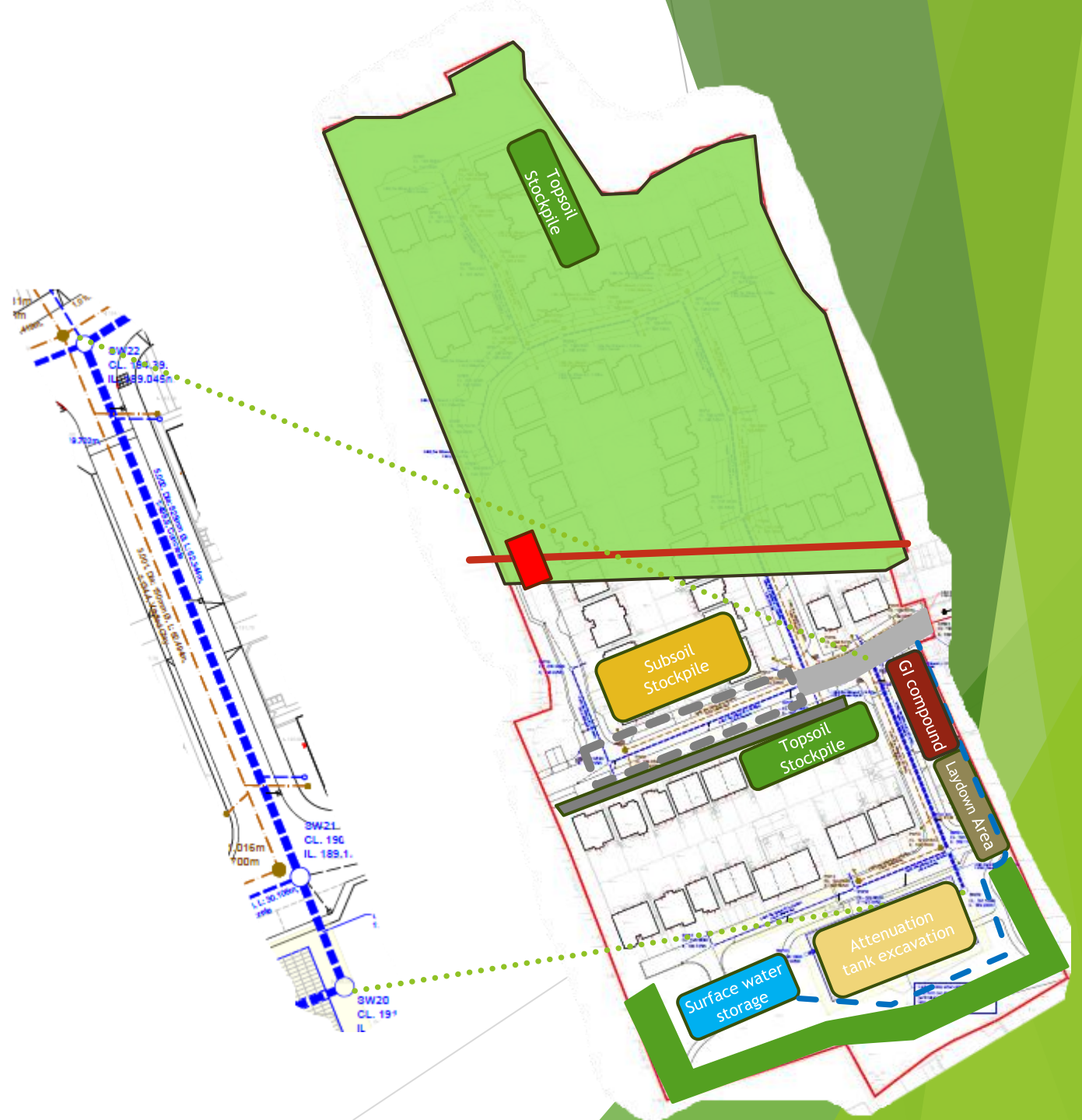
Topsoil strip below overhead cables to be dozer work.



Safe access for plant & machinery as per GS6 if overhead cables are still present

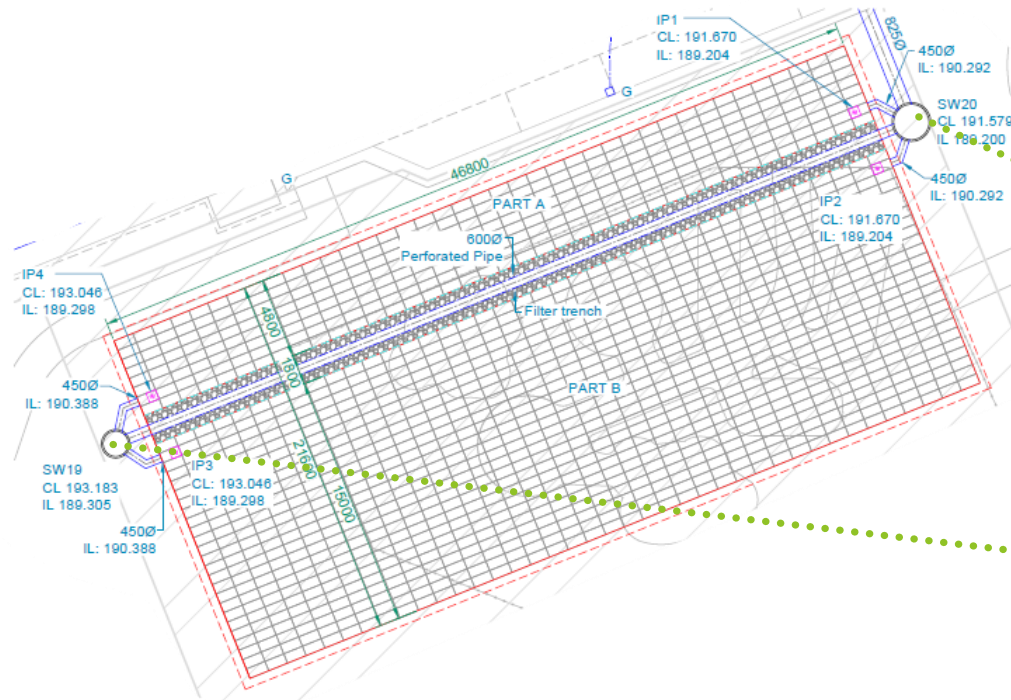


Laydown - Attenuation Tank



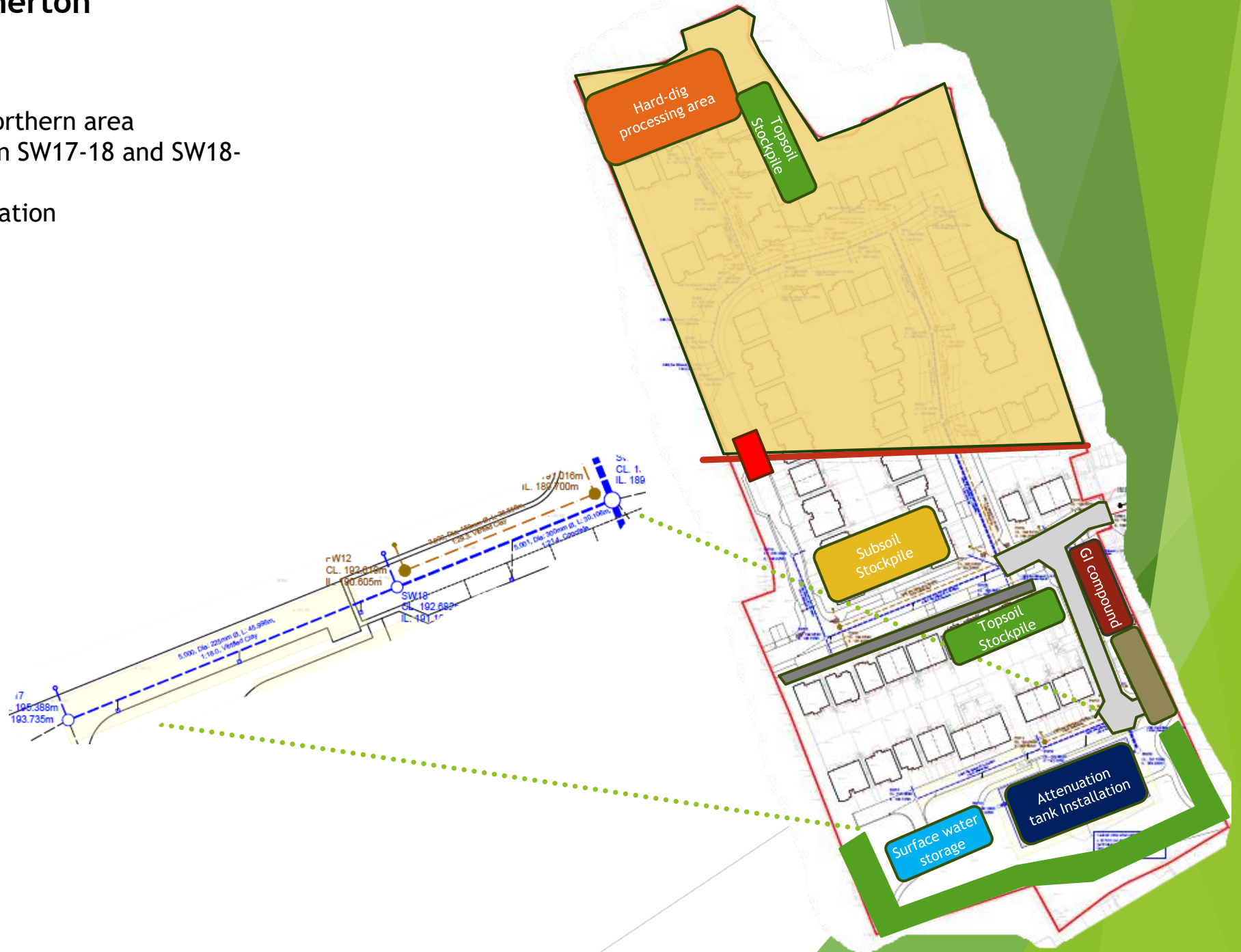
Roslyn Avenue, Netherton Sequence - Week 6

- Complete topsoil strip of northern part of the site, stockpile for retention on site,
- Bulk excavation of northern area,
- Continue install MH and drainage between SW 21-22, and install between SW19-20,
- Installation of attenuation tank.



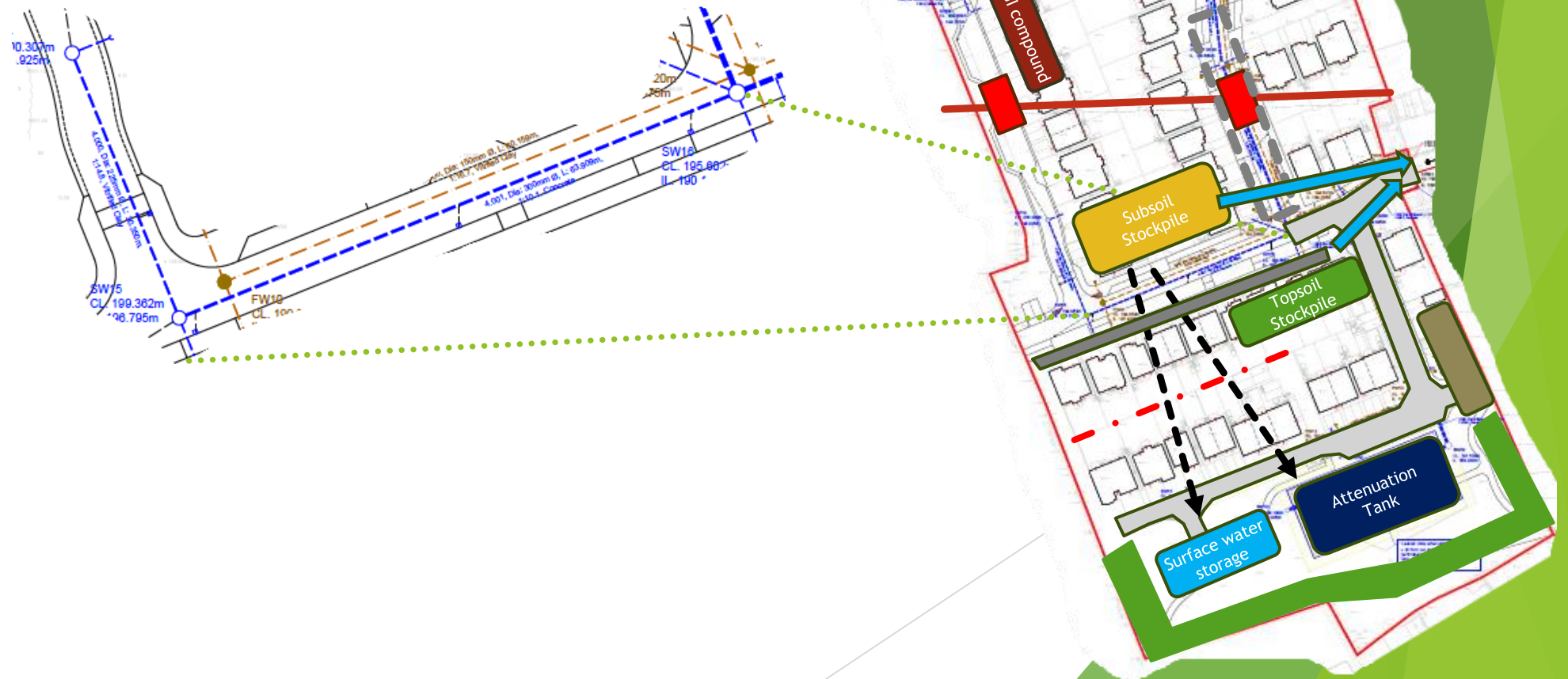
Roslyn Avenue, Netherton Sequence - Week 7

- Continue cut & fill of northern area
- Install drainage between SW17-18 and SW18-21,
- Attenuation tank installation



Roslyn Avenue, Netherton Sequence - Week 8

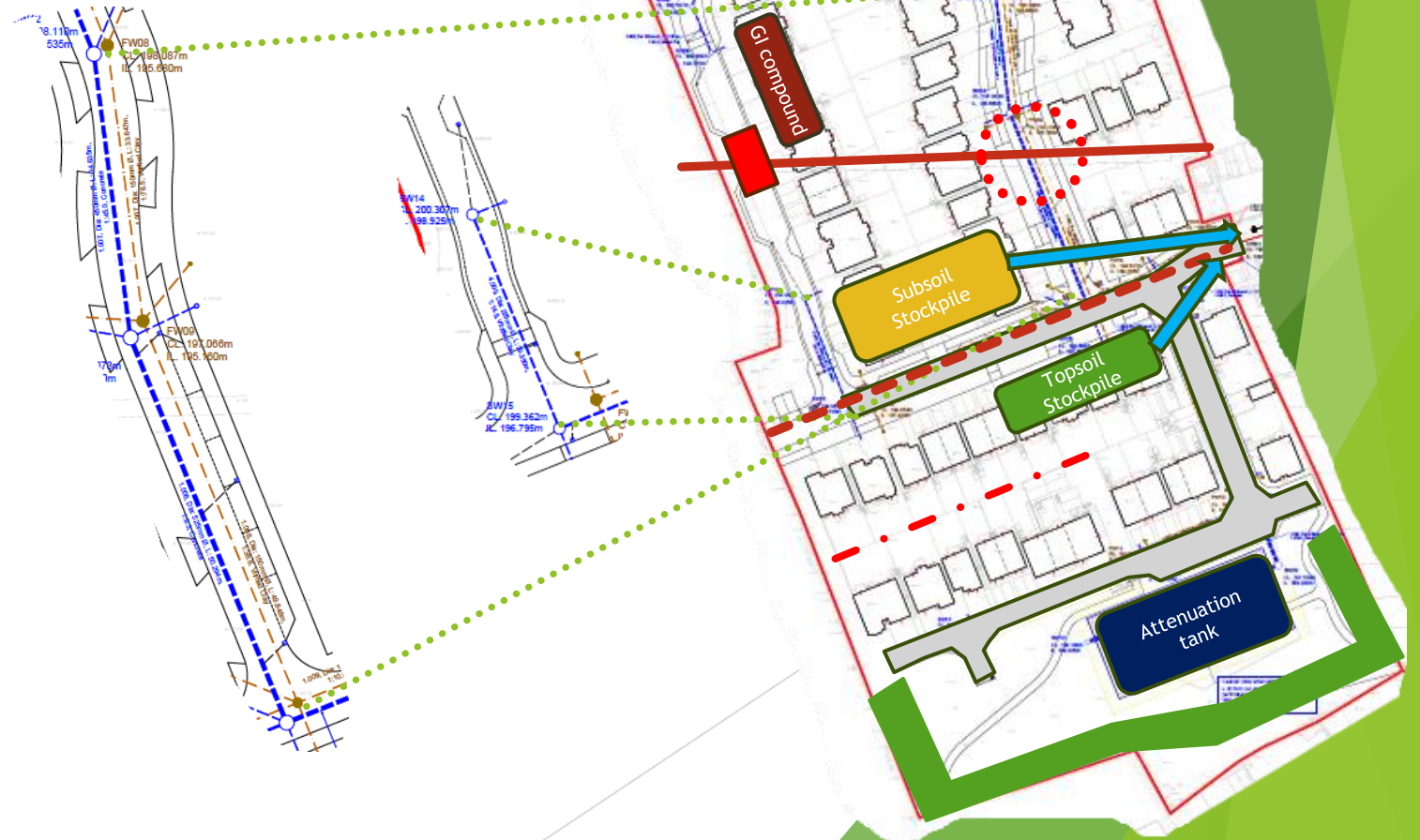
- Disposal of excess topsoil and subsoil from stockpiles
- Install drainage between SW 15-18,
- Box cut between SW13-16 (**Overhead cable removal?**), and install drainage,
- Installation of retaining walls plots 11-16
- Complete attenuation tank,
- Filling of POS area
- Road base SW18-21



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Sequence - Week 9

- Disposal of excess topsoil and subsoil from stockpiles,
- Box cut of SW7-9 & 11)
- Install MH and drainage between SW 13-16
- Installation of retaining walls plots 11-16
- Place service duct for Electric diversion,
- Road base SW15-16
- Temporary access road to adjacent field removed.

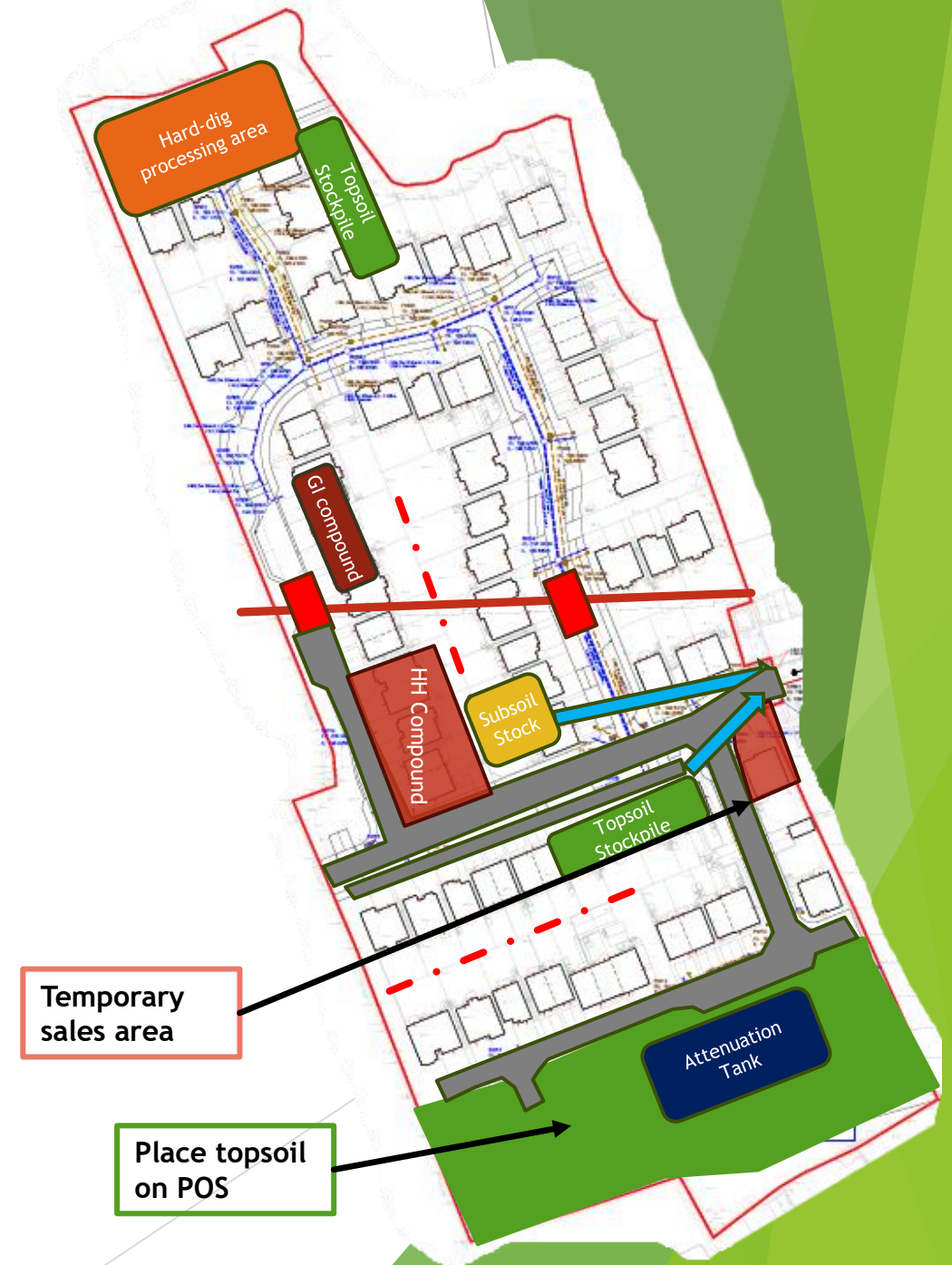


Permanent 11kV cable ducting

Roslyn Avenue, Netherton

Sequence - Week 10-13

- Disposal of excess topsoil and subsoil from stockpiles,
- Progress remaining Road and Sewer works,
- Installation of retaining wall for plots 47-52,
- Construction of Harron Homes permanent compound,
- Construction of Harron Homes temporary sales area,
- Spread of topsoil within POS.
- Temporary access road to adjacent field removed.
- Road base to sections available.
- Plot works to start on Plots 17-22, 52-57



Roslyn Avenue, Netherton Sequence - Week 14-18

- Disposal of excess subsoil from stockpiles,
- Attenuation tank installation including remaining MH and pipes
- Complete filling above attenuation tank
- Continue with Plot works on Plots 17-22, 52-57
- Construction of existing roads to binder



Construction of plots to DPC

