

THE HIGHLAND COUNCIL

**NORTH PLANNING APPLICATIONS COMMITTEE –
12 January 2016**

Agenda Item	4.2
Report No	PLN/003/16

**15/03392/FUL : Scottish Hydro Electric Transmission PLC
Land 500M West Of Philips Mains, Mey, Caithness**

Report by Area Planning Manager

SUMMARY

Description : Formation of development platform and erection of 132/33kV Gas Insulated Switchgear (GIS) substation and associated development consisting of transformer buildings, site access, SUDS and foul drainage infrastructure, temporary compounds, security fencing and landscaping

Recommendation - GRANT

Ward : 04 – Landward Caithness

Development category : Major

Pre-determination hearing : n/a

Reason referred to Committee : Major

1. PROPOSED DEVELOPMENT

- 1.1 The planning application is for an electrical substation to transform electricity from renewable energy developments in the vicinity to the high voltage transmission network. This development consists of the construction of a 132/33kV Gas Insulated Switchgear (GIS) substation. This substation is to facilitate the connection and conversion of the generation input at 132kV from the Meygen tidal scheme, with a further 33kV capacity to receive generation input from Scottish and Southern Energy Power Distribution (SHEPD) network.
- 1.2 The substation development comprises: -
- the creation of a 2.02 ha development platform at approximately 47.9m Above Ordnance Data (AOD) on which the following elements detailed below will be sited;
 - two transformer buildings, each measuring 46.9 m x 16.9 m x 12.8 m (height). Each will be gable ended, with a shallow symmetrically pitched roof, clad in steel profiled cladding.
 - one 132 kV / 33 kV GIS building, measuring 44.1 m X 32.7 m X 8 m (height). The building is gable ended, with a shallow symmetrically pitched roof, clad in

steel profiled cladding; and will contain the switchgear, battery room, control and communications room, mess room and toilet / wash room 1. construction lay down to the north east of the substation platform;

- approximately 0.73 km of site access road (5.0 m width – approximately 0.4 ha in all) heading northeast from the substation platform before following the woodland boundary and forming a new junction off the C1033;
- internal site access roads between the substation buildings; 5 m in width with one gated exits: onto the main access road to the C1033;
- a 2.4 m high steel palisade security fence to surround the substation buildings with gated access at the road exit;
- a post and wire fence around the substation site boundary to delineate the site extent; and
- CCTV cameras and security lighting will be installed. Motion activated lighting will be installed sufficient to facilitate safe normal access / egress of the substation during the hours of darkness.

1.3 The applicant has stated that given the proximity of the Proposed Development to the coast, the electrical infrastructure will be enclosed within a series of buildings to protect the equipment from possible corrosion caused by salt in the atmosphere. Within these buildings, the switch gear will be Gas Insulated (GIS) using sulphur hexafluoride (SF6) the SF6 gas provides the phase to ground insulation. As the dielectric strength of SF6 gas is higher than air, the clearances required are smaller, therefore the overall size of the equipment and the completed substation can be reduced substantially, when compared to the footprint required for conventional Air Insulated Substations (AIS).

1.4 The existing coniferous woodland plantation between the substation platform and the C1033 road to the north is included within the planning application boundary. The applicant seeks to retain and manage this woodland cover to secure screening of the substation from the north and west .

1.5 No existing infrastructure exists on the site with the exception of the access track to the west to Hollandmey Farm and adjacent forestry.

1.4 The project has been “screened out” from the requirement of Environmental Impact Assessment (EIA). Nevertheless the planning application is supported with a substantial package of environmental and technical information. The information is of a standard that allows consultees and the Council to make a judgement on the application.

1.5 The supporting information has allowed for full consideration of the design and siting options for the substation in the wider area.

1.6 **Variations:** None

2. **SITE DESCRIPTION**

2.1 The substation site is located on farmland which feels secluded in the immediate landscape given the extent of forestry blocks to most points of the compass apart from to the north east of the site. The landform gently rises to both the south east and south west. The substation is within poorer quality agricultural land laid to grass adjacent to a block of coniferous forestry which separates the site from the C1033 road. The substation site occupies an area of approximately 2.2 ha of the

total site area which extends to 4.3 ha including the woodland to the north which provides screening. The total site area includes all land required to accommodate construction, landscaping and access together with all building footprints and electrical infrastructure on site. The site is located approximately 1km south east of the village of Mey. The nearest property is Phillip Mains approximately 340m to the east of the site.

- 2.2 The area of the substation carries no site specific landscape designation. There are no natural heritage designations on, or in the immediate vicinity of, the site. There are no listed buildings or scheduled monuments located on site or in the immediate vicinity.

3. PLANNING HISTORY

- 3.1 **12/02137/SCRE** – Construct a new 132kV/33kV substation and associated infrastructure. EIA not required.
- 3.2 **15/04103/S37** - Erect a 132kV AC overhead, double circuit, steel lattice tower, transmission line between the proposed Sealing End Tower at Weydale and the proposed Sealing End Tower at Reaster, Caithness. The Highland Council is a consultee to this application, the determining body is the Scottish Government Energy Consents Unit. This case remains under live consideration.

4. PUBLIC PARTICIPATION

- 4.1 Advertised : Schedule 3 development
Representation deadline : 22.10.2015
Timeous representations : 0
Late representations : 0
- 4.4 Consultation and correspondence is noted in relation to the Proposal of Application Notice (PAN) to the Highland Council on 10th March 2014. The applicant has provided as part of this process evidence of public exhibitions held in four rounds between 2011 and 2014 utilising Mey Hall and Caithness Horizons with associated publicity, advertising and direct mailings.

5. CONSULTATIONS

- 5.1 **THC Transport Planning** : No objection. The site is accessed from the A836 onto the U1633 and then the C1033 where the site takes access. The C1033 forms part of the National Cycle Route 1. The U1633 and the C1033 are single track roads with passing places suitable for cars only. These minor routes are unlikely to be built to modern construction standards and will typically experience low traffic flows. Concerns are raised regarding surface cracking suggesting weakness in the foundation with mitigation noted as required to facilitate construction / abnormal vehicle movements. Further detail of the site access including provision and maintenance of the visibility splay is requested as is consideration of an un-laden trial run for the abnormal load route utilising the A836, U1633 and the section of the C1033.

- 5.2 Traffic management during construction is a key consideration with a **Traffic Management Plan** advocated with points to cover including consideration of abnormal loads, temporary and permanent works and traffic management measures, signage requirements, restrictions on HGV traffic and measures to ensure that public roads are kept free of mud and debris.
- 5.3 A “**wear and tear**” **agreement** in accordance with Section 96 of the Roads (Scotland) Act 1984 will be required, under which the developer is responsible for the repair of any damage to the Council’s road network that can reasonably be attributed to construction related traffic.
- 5.4 **THC Contaminated Land** : No objection.
- 5.5 **THC Access** : No objection. Indicates that access rights, per Land Reform (Scotland) Act 2003 will be exercisable outwith the immediate confines of the substation. Concern to be addressed to ensure that access to the wider area is not impeded, particularly wider public access rights between the public road and the site compound area.
- 5.6 **THC Forestry** : Initially lodged a holding objection pending appropriate condition. Notes that the existing woodland stand within the applications site, 25yr old Sitka spruce and Lodgepole pine, provides screening of the proposed development and retention of such will continue to do so for the next 15 – 20 years. However the narrow strips of new plantings may not be adequate in extent nor stability to provide screening in the event of the loss of the existing woodland. A tree management plan which incorporates a more considered and long term approach to the site as a whole is advocated with acceptance that such may be covered by a suspensive condition.
- 5.7 **THC Environmental Health** : No objection. The principal issue requiring to be addressed is the **potential noise impact to neighbouring residential properties** arising during both the construction period and when it becomes operational. Environmental Health state the need to consider construction hours on site given the 16 month construction period to secure periods of quiet for local residents. A **Construction Noise Management Plan** is advised. In excess of the construction phase Environmental Health note that noise associated with the operation of electrical sub-stations can result in a distinctive tonal hum. Background noise assessment undertaken to date is subject to query and is considered to be insufficient with further background noise data required in advance of development at the site. Conditions are advocated to ensure satisfactory evidence base for background noise and to safeguard amenity through construction and upon operation phases of the development.
- 5.8 **THC Historic Environment** : No objection.
- 5.9 **THC Flood Team** : No objection. Clarification was sought on a number of issues with respect to diversion of existing drainage on site, drainage undertakings proposed in relation to and impact of potential runoff from the proposed SUDS system. Further information regarding discharge rates from the retention basin and sensitivity tests to demonstrate that no flooding to property or critical roads during a 200 year rainfall event would arise from the development is advised.

- 5.10 **Dunnet & Canisbay Community Council** : No response noted.
- 5.11 **SNH** : No objection. Indicate that the proposal may affect the Caithness Lochs Special Protection Area (SPA), designated for its wintering populations of Greenland white-fronted geese, whooper swans and (Icelandic) greylag geese.

This procedure is applied in Scotland through The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended), and is known as the 'Habitats Regulations Appraisal' of plans. SNH have indicated that in their view the proposed development is unlikely to have a significant effect on any of the qualifying interests either directly or indirectly due to the separation distance between the construction area and known feeding fields for the noted SPA species.

SNH have stated that an **appropriate assessment is therefore not required** the Planning Authority concurs with this assessment.

- 5.12 **SEPA** : No objection. Response is split between headings as follows;
- **Pollution Prevention and Environmental Management**
No objection dependent on condition being applied regarding a site specific **Construction Environmental Management Plan** (CEMP) to ensure satisfactory control of any pollution issues arising to the receiving environment
 - **Wetland Ecology**
No objection SEPA in are agreement with the information submitted that there are no Groundwater Dependent Terrestrial Ecosystems present and given current agricultural use have no objections to this development on wetland ecology grounds.
 - **Private Water Supplies**
No private water supplies were identified within 250m of the proposed site. If such are discovered during construction SEPA have requested to be reconsulted.
- Regulatory requirements are noted in relation to watercourse crossings which will require separate authorisation by SEPA under the Water Environment (Controlled Activities) (Scotland) Regulations 2011.

6. **DEVELOPMENT PLAN POLICY**

The following policies are relevant to the assessment of the application

- 6.1 **Highland Wide Local Development Plan 2012**
- Policy 28 - Sustainable Design
 - Policy 29 - Design Quality & Place-making
 - Policy 30 - Physical Constraints
 - Policy 31 - Developer Contribution
 - Policy 52 - Principle of Development in Woodland
 - Policy 55 - Peats and Soil
 - Policy 57 - Natural, Built & Cultural Heritage
 - Policy 58 - Protected Species
 - Policy 59 – Other Important Species
 - Policy 61 – Landscape
 - Policy 63 – Water Environment

Policy 64 - Flood Risk
Policy 66 - Surface Water Drainage
Policy 67 - Renewable Energy Developments
Policy 69 - Electricity Transmission Infrastructure.
Policy 72 - Pollution
Policy 77 - Public Access

6.2 **Caithness Local Plan 2002**

No relevant policies

7. **OTHER MATERIAL CONSIDERATIONS**

7.1 **Draft Development Plan**

Caithness & Sutherland Local Development Plan (CaSPlan), proposed plan as considered and approved at PDI Committee 4th November 2015.

The proposed plan is supportive of appropriate development to maximise opportunities arising from the energy sector, particularly within the Area for Energy Business Expansion in the north east of Caithness.

7.2 **Highland Council Supplementary Planning Policy Guidance**

- Construction Environmental Management Process for Large Scale Projects (August 2010).
- Flood Risk & Drainage Impact Assessment (Jan 2013).
- Highland's Statutorily Protected Species (March 2013).
- Trees, Woodlands and Development (Jan 2013).

7.3 **Scottish Government Planning Policy and Guidance**

Second National Planning Framework for Scotland (NPF3), the Scottish Planning Policy (SPP), Electricity Generation Policy Statement, 2020 Routemap for Renewable Energy in Scotland, towards Decarbonising Heat: Maximising the opportunities for Scotland, Draft Heat Generation Policy Statement and Low Carbon Scotland: Meeting Our Emissions Reduction Targets 2013 - 2027

The Scottish Government have principal policies on Sustainability and Placemaking including Policies for: -

- A Low Carbon Place
 - Delivering Heat and Electricity.
 - Support for construction and improvement of strategic energy infrastructure.
- A Natural Resilient Place
 - Valuing the natural Environment.
 - Promoting responsible extraction of Resources.
 - Managing Flood risk and Drainage.

8. PLANNING APPRAISAL

8.1 Section 25 of the Town and Country Planning (Scotland) Act 1997 requires planning applications to be determined in accordance with the development plan unless material considerations indicate otherwise. The Council also uses this approach for the consideration of consultation responses on Section 37 applications.

8.2 This means that the application requires to be assessed against all policies of the Development Plan relevant to the application, all national and local policy guidance and all other material considerations relevant to the application.

The determining issues in this case are: -

- Does the proposal accord with the Development Plan?
- If it does, are there any material considerations for not approving the proposed development?
- If it does not accord, are there any material considerations for approving the proposed development?

8.3 Assessment

To address the determining issues, the Planning Authority must consider the following:-

- a) Development Plan
- b) National Policy
- c) Roads / Traffic Impact and Public Access
- d) Water / Drainage and Peat
- e) Natural Heritage
- f) Design
- g) Landscape, including Wild Land, and Visual Impact
- h) Archaeology & Cultural Heritage
- i) Noise
- j) Construction Impacts
- k) Other Material Considerations within representations

8.3 Development Plan Policy Assessment

The main elements of this application fall within the considerations of the adopted Highland-wide Local Development Plan (HwLDP), the Caithness Local Development Plan (2002) (as continued in force April 2012) and the Caithness and Sutherland Local Development Plan Proposed Plan).

8.4 The principal HwLDP policy on which the application needs to be determined is Policy 69 - Electricity Transmission Infrastructure. Other policies listed at 6.2 of this report are also relevant and the application must be assessed against these also for example Policy 61 - Landscape. These matters are assessed in full within a number of material considerations examined within this report. The Planning Authority will support proposals where it is satisfied they are located, sited and

designed such as they will not be significantly detrimental. If the Planning Authority is satisfied that there will be no unacceptable impact on the environment, including all natural, built and cultural heritage features affected by the development then the application will accord with the Development Plan.

Scottish Planning Policy

- 8.5 The Scottish Government's policy and advice is set out in its National Planning Framework 3 (NPF 3) and Scottish Planning Policy, which advances policies on Sustainability and Placemaking, and subject policies on a Successful, Sustainable Place; a Low Carbon Place; a Natural, Resilient Place; and a Connected Place. Policy is very supportive of renewable energy development. It highlights that planning authorities have a duty to contribute to sustainable development, through their Development Planning function. The use of renewable energy forms a significant part of that agenda.
- 8.6 SPP highlights that the Development Plan is the starting point of decision making on planning applications. The content of SPP is a material consideration that carries significant weight, although it is for the decision maker to determine the appropriate weight to be afforded to it in each case. There is no indication within SPP of a lessening of policies which are focused upon protecting the natural, built and cultural environment.

Roads, Traffic Impact and Public Access

- 8.7 The site will take access from the A836 onto the U1633 and then the C1033 where the site takes access. The C1033 forms part of the National Cycle Route 1.
- 8.8 Transport Planning have identified that remedial works to facilitate the development on both the U1633 and then the short section of the C1033 from East Lodge to where the site takes access is likely to require improvement / strengthening to handle construction traffic and abnormal loads. Given the extent of wind farm development in Caithness abnormal load routes in the area are well established with comment from Transport Planning that reasonable use of the 'A' class road network in the vicinity is unlikely to require improvement / strengthening unless otherwise identified by the developer in consideration of abnormal loads. Where works are required on the U1633 and then the section of the C1033, such works will require further assessment, with any and all works required to be undertaken in accordance with the Council's technical approval process. A Traffic Management Plan will be required during construction (and decommissioning)
- 8.9 A "wear and tear" agreement in accordance with Section 96 of the Roads (Scotland) Act 1984 will be required, under which the developer is responsible for the repair of any damage to the Council's road network that can reasonably be attributed to construction related traffic. As part of this agreement, pre-start and post construction road condition surveys will need to be carried out by the developer to the satisfaction of the Planning Authority in consultation with the Roads Authority.

Water / Drainage

- 8.10 The site is not in an area of indicative flood risk. There are no identified private water supplies in the immediate vicinity of the substation site. A site specific Construction Environmental Management Process Plan (CEMP) has been requested by SEPA. This can be managed by planning condition ensuring compliance with the Council's Supplementary Guidance on Construction Environmental Management and Flood Risk as noted earlier in this report. This can deal with the limited waste water requirements and surface water run-off generated by the development incorporating suitable Sustainable Urban Drainage systems (SUDs) by design.
- 8.11 The Council's Flood Team has also advised on requirements to be secured by condition for example; to secure improved information and demonstration of no flood risk during a 200 year rainfall event and discharge rates from the detention basin. This can be secured by condition. All on-site drainage will need to be able to attenuate for the 30 year event and sensitivity analysis provided to show the potential flow paths for the 1:200 year event.

Natural Heritage

- 8.12 The development site carries no ecological designation. A number of protected species have the potential to use / visit the site, but no evidence of bats, pine martin, polecat or otter have been found during site assessment surveys.
- 8.13 SNH is content with the application, raising no objection to the application. In line with the Council's CEMP supplementary guidance there will be a need for pre-commencement surveys to confirm particular interest prior to any development works and appropriate site management techniques being deployed to safeguard protected species who may venture into the development site during construction. This can be controlled by condition,
- 8.14 It is unlikely the development, during construction and as built, will have impact on local ornithological interests.

Design

- 8.15 The GIS substation will introduce a large structure into the local landscape. The development requires a level platform to facilitate the safe deployment of electrical infrastructure – extending to 2.2 ha. The site will house three large buildings; the GIS substation itself with two transformer buildings together with associated infrastructure. These buildings are of a functional form and finish, being gable ended, with shallow symmetrically pitched roofs and clad in steel profile sheeting. Design mitigation has been offered on a number of fronts; the orientation of the development on site, proximity to and retention of the woodland adjacent and the use of an enclosed GIS substation thereby reducing the size and scale of the plant in comparison to an open Air Insulated Switchgear (AIS) design, notwithstanding the technical rationale for this design given the added protection afforded to equipment from sea air. Disruption to the existing grid infrastructure in the wider area is also negligible as this site can be constructed offline as an adjunct to the

transmission network. It lies adjacent to **existing woodland, which will provide screening**, with additional screening provided by landscaping (profiling) and additional tree and shrub planting. The site also offers room for future development phases thereby reducing the likelihood of the development of satellite sites were the renewable energy resources of this area of the Pentland Firth or other parts of the generating capacity locally be subject to expansion. Three buildings, GIS control building with two transformer buildings, are deployed across the site, with low roof pitches to reduce impact. The site is to be managed as a “dark site” with external lighting only being deployed when manned.

- 8.16 The requirements of the **substation buildings are such that they will be finished in profiled steel cladding**. This is largely as a result of their scale. Muted earth tone colours are considered to be the most favourable colour choice for these buildings. Muted greens or browns would match well with a number of the existing colours seen in the landscape. There would be benefits to ensuring the 2.4 m high steel palisade fence around the substation is similarly coloured. This could be set by condition.
- 8.17 **Forestry planting** to tie into the adjacent plantation is proposed to extend woodland into the western area of the site which shall help reduce the longer term visibility of the substation. Tree and shrub planting on mounds to the south and east of the substation platform area will also assist in this regard. This approach is considered to provide added screening and balance for the scale of the features in the landscape. To reduce the landscape effect of the hard forest edges and to create a softer transition native woodland edge planting of mixed species would be welcomed. The retention and ongoing management of the existing woodland on the site is a key aspect to retain substantial screening benefits to the north of the site and the C1033 between Inkstack and Rigifa. Existing woodland outwith the site to the west also aids screening. Where visible, from the east travelling west, the site will only be visible for a short section and will have the backdrop of the woodland to the north and west.
- 8.18 No objections have been made to the main elements of the design, where function largely dictates the form. A key caveat from several consultees, not least of which being the Forestry Officer, is the retention and management of the existing woodland in conjunction with proposed new tree planting to consolidate and expand the screening and backdrop afforded by such. A robust **management and maintenance programme** to ensure an early establishment of proposed new elements of tree/shrub/woodland planting is advocated. The applicant has offered to submit a finalised landscaping plan for approval, required by condition, to incorporate many of the positive suggestions that have been set out.

Landscape and Visual Impact

- 8.19 The substation site is not set within a designated landscape. It forms part of the Landscape Character Type of “Mixed Agriculture and Settlement” and is situated abutting “Sweeping Moorland” to the west. It should be noted that both of these landscape character types have been subject to commercial coniferous afforestation in the vicinity of the proposed development. This provides a mosaic of

low density residential, forestry and unmanaged land in the wider area. The site buildings will be of an industrial type and form which are not unfamiliar in the wider landscape of Caithness given both the size and scale of modernised farm steadings together with scattered industrial development.

- 8.20 The site is relatively isolated with a small cluster of properties approximately 0.5km away to the north west of the site by West Lodge. These properties will be screened from the development by the existing coniferous plantation between the development and the C1033 road. Likewise the nearest settlement at Mey, again to the north west will be largely screened from the development by this belt of woodland. The nearest property is Phillip Mains to the east of the development located approximately 340m away. Given the scattered nature of development and settlement in the surrounding area there are a number of properties with only some having visibility of the development, and others only being impacted in a short term manner from passing construction traffic accessing the development site. The only property to be considered to be visually affected by the development to a degree which is regarded as significant or detrimental to its enjoyment is Phillip Mains.
- 8.21 The supporting assessment has concluded that significant visual impact is predicted on the visual amenity at Phillip Mains. The mitigation proposed, comprising landscaping, new planting and management of existing plantations are considered to reduce the perceived level of visual effect. Material colour finishes of both buildings and fencing is subject to condition which shall further assist in integrating the buildings and fence into the landscape. It is also notable that the site will, to a significant extent, be backdropped by the existing forestry. The visual effect to views from surrounding areas, arterial routes and key visitor attractions such as the Castle of Mey, are considered as reducing to a non-significant level after the completion of construction works.
- 8.22 The importance of the screening afforded by the existing woodland between the substation site and the C1033 is recognised by a number of consultees not least the Council's Forestry and Historic Environment Teams. Given the nature of concerns raised as to the long term sustainability of this screening in conjunction with additional plantings a more considered **Tree Management Plan** in association with landscaping works is considered pertinent and can be secured by condition. This would remove the holding objection lodged by THC Forestry in that this matter would be subject to further agreement to ensure the long term viability and screening afforded to the development by the woodland on site.

Archaeology & Cultural Heritage

- 8.22 There are **no Scheduled Monuments and no Listed Buildings within the site**. The Highland Council Historic Environment Record and the RCAHMS database hold no records for heritage assets within the site. There are no direct impacts perceived on any significant archaeological interests, nor any predicted indirect impacts. Minor effects on Castle of Mey and its associated Lodge would occur in the worst case scenario of complete loss of tree screening to the north of the site but negligible impact in the retention of the tree screening. Consideration of screening and the retention of the woodland is considered in above sections.

Noise

- 8.23 The development of a substation will introduce new noise to the area. This will arise during both construction and operational stages. The substation operation will produce a tonal noise emission linked to electrical frequencies, particular from the transformer elements, which will be contained within the buildings. It is considered that these elements would be located within buildings, and all are located away from main receptors, principally local housing, which shall minimise any effects.
- 8.24 **Background noise assessment** has been undertaken at two sites to represent the three closest properties; Phillip Mains, West Lodge and Woodlands. The submitted estimates of the likely noise impact to arise from the substation suggest impact on existing housing is estimated to be very low, and therefore not significant, on account of separation and enclosure. However the Council's Environmental Health Service is concerned about the nature and extent of background noise surveys and have requested that further limited background noise surveys be undertaken to t clearly establish background noise levels. This is a key point were issues with noise to be cited of concern or by complaint. **Additional background noise survey** to the satisfaction of Environmental Health **can be secured by condition.**
- 8.25 With regard to the construction phase, impact on nearby properties from both noise and vibration should be limited, given the separation distance to the nearest noise sensitive properties. The impact of construction traffic may be of greater concern, but is also short lived and manageable. The applicant has suggested that these matters can be effectively managed through a **Construction Noise Management Plan (CNMP)** approach, submitted and approved by the Planning Authority; this can be controlled by condition. This has been welcomed by Environmental Health and would ensure working hours and working practices are managed in a manner to limited impact on residents' outwith day time hours, weekends and principal holidays. This can still allow some planned exceptions when particular activities necessitate continuous working over short periods. The expectation is for 7 days a week working, with high noise activities, such as blasting being managed outwith weekends and public holidays.

Construction Impacts

- 8.26 The locality will experience disruption as a result of construction most significantly from construction traffic on the surrounding road network with other matters such as noise, vibration and general activity associated with construction. It is noted that the developer has effectively managed such issues in other projects of a similar nature throughout Highland, demonstrating that such impacts can and are effectively controlled through the deployment of good construction and environmental site / man management. The impact of the overall build contract for this project is estimated at 16 months, although each phase of the works and their varied impacts are focused within shorter timescales. Community liaison from the developer with the local community is proposed to advise parties of the proposed work programme. In this manner key activities can be managed to minimise impact on the community. The establishment of a community liaison group and

agreed plan derived therefrom to cover the construction phase(s) would be considered good practice and can be secured as a component of the Construction and Environmental Management Document (CEMD).

8.27 Other Considerations – not material

Transmission infrastructure linking this substation to the Grid is subject to separate consideration per Section 37 Electricity Act (1989). The Council is a consultee of the Scottish Government on this matter currently, which remains under consideration as detailed in section 3.2.

9. CONCLUSION

- 9.1 In essence this is a proposal to house the necessary equipment and infrastructure for the conversion of renewable energy into electricity. Although the buildings are functional in nature and large in scale the site is largely well screened and visible only for a short section of public road and where visible it will have the woodland as a backdrop. It is considered appropriate for some additional planting to be undertaken to the east of the site to help mitigate its visual impact from this direction. There is strong support for renewable energy projects from the Scottish Government and the required associated grid infrastructure upgrades. Such investment in modern infrastructure is welcomed particularly from an economic perspective both at a national level and locally given the level of construction and operational activity that it supports. The substation is designed so that there is room for future expansion to allow for future renewable energy developments to be easily accommodated within it. The application is one part of a significant upgrade to the electricity infrastructure in Caithness, allowing for future long term development, particularly of the renewables industry. It is therefore a regional and national strategic asset.
- 9.2 The Council and statutory consultees have considerable experience of such projects being implemented and have developed working practices with the applicant to offset potential risks to the environment and local receptors, particular during construction. Pre-application consultations with the applicant has resulted in many of the initial concerns raised with this project being addressed, resulting in a project that has raised few issues, with no public representation received regarding the substation proposal.
- 9.3 In design terms the application presents a proposal which is set into the terrain, with existing woodland that will screen a substantial electrical development in a wide rural location, with little surrounding industrial development. Planning conditions have been highlighted from consultees to ensure effective control by the Planning Authority in respect of construction and environmental management, flood risk, construction and operational noise, tree management and landscaping measures. The use of muted earth tone colours in green or brown as the principal colour for the main buildings should ensure the three buildings is best absorbed into the landscape. The security fencing surrounding the site should also be delivered in the same colour, set by condition.

9.4 All relevant matters have been taken into account when appraising this application. It is considered that the proposal accords with the principles and policies contained within the Development Plan and is acceptable in terms of all other applicable material considerations.

10. RECOMMENDATION

Action required before decision issued

Notification to Scottish Ministers	N
Notification to Historic Scotland	N
Conclusion of Legal Agreement	N
Revocation of previous permission	N

Subject to the above, it is recommended the application be **Granted** subject to the following conditions and reasons / notes to applicant:

1. No development shall commence until further current background (LA90) **noise survey(s)** are undertaken at the representative noise sensitive properties, namely a location representing both West Lodge and Woodlands and by Phillip Mains, as identified in figure 12.1 of the Environmental Report. For the avoidance of doubt, such monitoring shall be undertaken for a period of not less than one calendar week at the identified monitoring locations. The developer shall include any noise mitigation measures identified for the assessment of and agreement in writing, by the Planning Authority in consultation with the Environmental Health Authority, including a timetable for the implementation of such mitigation measures. The development shall thereafter proceed in accordance with the agreed measures.

Reason : To ensure that the noise impact of the development can be assessed, if necessary following a complaint, in order to demonstrate that it does/does not exceed the predicted noise levels set out within the supporting noise assessment.

2. No development shall commence until a finalised **Construction and Environmental Management Document (CEMD)** has been submitted for the approval in writing by the Planning Authority. The approved CEMD and its supporting Plans and timetable for implementation shall then be undertaken by the developer unless otherwise agreed in writing with the Planning Authority. For the avoidance of any doubt the CEMD shall also include the access track and public road. The CEMD shall highlight, in a series of plans where most appropriate, the specific safeguards to be implemented on site as generally set out in the supporting Environmental Appraisal to the application, addressing the following interests: -

- An updated Schedule of Mitigation (SM) including all mitigation proposed in support of the planning application, other relevant agreed mitigation (e.g. as required by agencies) and as set out in planning conditions

- Processes to control / action changes from the agreed Schedule of Mitigation.
- Construction Phase - Community Liaison Plan with formation of a representative community liaison group.
- Soil / Peat Management Plan – to include details of all stripping, excavation, storage and reuse of material.
- Site Restoration Plan, including all tracks / road verges, where not covered by the approved Landscaping Plan.
- Pollution Prevention Plan
- Species Protection Plan
- Construction Traffic Management Plan, subject to the phasing plan as set out in condition 5, which shall include but not necessarily be limited to:
 - a. A detailed protocol and programme for the delivery of abnormal loads prepared in consultation and agreement with interested parties, this shall include methods of dealing with emergency vehicles during the load movements. All such movements on Council maintained roads shall take place outwith peak times on the network, including school travel times and shall avoid local community events.
 - b. The approved route shall only use A class roads with direct access to the site from the A836 using the U1633 and thereafter from East Lodge, west to the site access utilising this section of the C1033 only.
 - c. Full details of all temporary and permanent works and traffic management measures required to allow over-sail and over-run of abnormal load vehicles outwith the carriageway but within the public road boundary on the abnormal load route.
 - d. Measures (including temporary signage) to inform road users and local residents of abnormal load movements and periods of heavy construction traffic
 - e. An un-laden trial run for the abnormal load route along the A836, U1633 and C1033 shall be evidenced
 - f. Proposed traffic management measures on the proposed section to used of the C1033 to include consideration of an advisory speed limit for construction traffic, temporary signage (for abnormal load movements, highlighting cycle use on NCR1, for the new access etc.) and traffic management proposals at the site access such as a banksman if required. The proposals shall include details of maintenance of the measures.
 - g. Restriction on the timing of HGV traffic to and from the site to take account of sensitive receptors such as schools.
 - h. Measures to ensure that construction traffic adheres to the traffic management plan.
 - i. Measures (including a wheel wash and road sweeping) to ensure that all affected public roads are kept free of mud and debris arising from the development.

- Site Waste Management Plan.
- Construction Noise and Vibration Mitigation Plan which shall include but not necessarily be limited to:
 - i. A clear statement of intent that contractors will employ the best practicable means and methods of construction to minimize the impact of noise on neighbouring residents.
 - ii. An outline of the most significant noise generating activities and operations taking place throughout the development
 - iii. Identification of the principal noise sensitive receptors
 - iv. An outline of the principal noise mitigation measures to be implemented, including any specific measures to be employed for particular operations/activities
 - v. A construction timetable.
 - vi. The proposed times of operation for construction activity.
 - vii. The Community liaison arrangements
 - viii. The complaints procedure for residents who may be affected by the works.

Further guidance is contained within BS 5228: "Code of Practice for Noise and Vibration Control on Construction and Open Sites –Part 1: Noise"

- Details of the appointment of an appropriately qualified Environmental Clerk of Works with roles and responsibilities which shall include but not necessarily be limited to:
 - i. Providing training to the developer and contractors on their responsibilities to ensure that work is carried out in strict accordance with environmental protection requirements;
 - ii. Monitoring compliance with all environmental and nature conservation mitigation works and working practices approved under this consent;
 - iii. Advising the developer on adequate protection for environmental and nature conservation interests within, and adjacent to, the application site;
 - iv. Directing the placement of the development (including any micro-siting, if permitted by the terms of this consent) and the avoidance of sensitive features; and
 - v. The power to call a halt to development on site where environmental considerations warrant such action.
- Details of any other methods of monitoring, auditing, reporting and communication of environmental management on site and with the client and the Planning Authority and other relevant parties.

Reason : To protect the environment from the impacts of construction activities associated with this development.

3. No other development shall commence until full details in writing and on plan of **road improvements / mitigation** - to facilitate the development on the U1633 and the C1033 between East Lodge, west to the development site hereby approved - has been submitted by the developer for the approval in writing of the Planning Authority in consultation with the Roads Authority. Such works shall include, but not be limited to, structural assessment of the carriageway, strengthening of the carriageway, culverting or other works to the drainage ditches, junction improvements and provision of two additional or upgraded passing places (one on the U1633 and one on the C1033) all as required to allow for the extra-ordinary movement of heavy goods vehicles and abnormal loads during construction. The development shall thereafter be undertaken in accordance with the agreed details and upon completion of all agreed pre-commencement works on / in the environs of, the public highway.

Reason : In the interests of road safety, and that the works involved comply with applicable standards.

4. No other development shall commence until full details in writing and on plan form of the site access (illustrating achievable visibility splays) onto the C1033 has been submitted to, and approved in writing by, the Planning Authority. For the avoidance of doubt the visibility splay of 4.5 x 120m shall be achieved with maintenance of such being solely the responsibility of the developer. The development shall thereafter be undertaken in accordance with approved details.

Reason : In the interests of road safety and for the avoidance of doubt

5. In the event that the development is to be phased, no development shall commence until a **Phasing Plan** outlining details of the phasing of the development has been submitted to, and approved in writing by, the Planning Authority. It is considered that such a plan shall specify traffic management and road improvement / mitigation required for any such phased elements. The development shall thereafter be undertaken in accordance with any approved Phasing Plan.

Reason : To ensure that in the event of the phasing of development all relevant matters can be assessed so as to avoid adverse impact on local services and infrastructure until required improvements have been put in place.

6. **Noise** arising from within the operational land of the sub-station, hereby permitted, shall: -

- a) not exceed 30 dB at noise sensitive premises as highlighted within supporting Environmental Appraisal May 2015, when measured and / or calculated as an Leq, 5min, in the 100Hz one third octave frequency band; and
- b) the Rating Level of noise arising from the use of plant, machinery or equipment installed or operated within the operational land of the sub-station, hereby permitted, must not exceed the current background noise levels at noise sensitive premises as highlighted within supporting Environmental Appraisal May 2015. The Rating Level should be calculated in accordance with BS 4142: 2014: Methods for rating and assessing industrial and commercial sound.

Reason : To protect the amenity of residents.

7. During the construction phase(s), the development hereby approved shall not operate working hours, outwith the hours of:

- Monday – Friday inclusive. 0730 – 1800 hours
- Saturday - 0800 – 1600 hours
- Sundays – Only permitted in exceptional circumstances and limited to 1000 - 1600 where subject to approval in writing by the Planning Authority. Exceptions shall be subject to 48hrs notice in advance of such works

In the event of exceptions to the above, particularly through the commissioning phase of the development, departures to the stated working hours shall be subject to agreement in writing not less than 48hrs notice in advance of such works.

Reason : In order to safeguard the amenity of neighbouring properties and occupants.

8. Unless otherwise agreed the substation shall operate with the following **surface water** provisions: -

- i) An alarm shall be fitted to each transformer to indicate any significant and/or rapid loss of oil.
- ii) A reinforced concrete bund designed to accommodate a minimum of 110% of oil in the transformer (bund will be designed to comply with SEPA's PPG2 available on SEPA website) shall be provided.
- iii) The bund wall shall be designed to include a small weir immediately above an external gully so that in the event of an oil contaminated water over topping the bund wall, it shall be directed via the gully directly (on the surface and visible for all to see) into the Full Retention Separator.
- iv) The bund, weir, and all surfaces used to transport the oil to the interceptor shall be impermeable to oil.
- v) There shall be two oil detection bund pumps located within each bund. These pumps shall allow rainwater to be pumped out of the bund, therefore maintaining maximum capacity of the bund at all times during normal usage. Each of these pumps shall be fitted with sensors that ensure that they do not pump oil if present.
- vi) The oil detection bund pumps shall also be fitted with an alarm (each). Should the pumps fail, the alarm shall notify the operator immediately of the failure by telemetry.
- vii) The pump unit shall be set to pump out only water and leave any hydrocarbons, including emulsified hydrocarbons, in the banded area.
- viii) An impermeable roadway with raised kerbs and ramps shall be used to protect the delivery area during transfer of oil to the transformer. This area shall act as a delivery storage area. This discharge from this area shall also drain via an interceptor.
- ix) Should spill occur during transfer, the oil shall automatically shut off, thereby preventing a discharge.

x) The separator shall be sized in line with manufacturer's guidelines to cope sufficiently with the flows produced by both pumps and that of the surface water originating from the loaded area.

xi) A swale or similar shall be used to transfer the separator's discharge to the water environment as this will provide an additional opportunity for a visual inspection prior to the discharge leaving the site.

Reason : To ensure the design of the substation minimises the risk of pollution to the surrounding area / watercourses in a manner as discussed and agreed between SEPA and SSE for all electrical substations.

9. All **surface water drainage provision** within the application site shall be implemented in accordance with the approved plans and, as it relates to, or is relied upon by, an individual phase, shall be completed prior to the first occupation of any of the development within that phase. For the avoidance of doubt the following requirements shall be met;

- Discharge from the detention basin shall be no greater than: 17.8 l/s for a 10 year event, 23.3 l/s for a 30 year event and 31.9 l/s for a 100 year event
- A sensitivity test shall be provided for review that demonstrates that there will be no flooding to property or critical roads during a 200yr event and that water arising from this event can be contained within the site boundary.

Reason : To ensure that surface water drainage is provided timeously and complies with the principles of SUDS; in order to protect the water environment.

10. Within one year from the commencement of development a final site specific **Landscape Plan and Landscape Maintenance Plan** for the totality of the development site shall be submitted for the approval in writing of the Planning Authority. The approved plan shall then be implemented as agreed, with a minimum of 5 years maintenance from the submission of the Completion Notice (see informatives).

Reason : To ensure a robust landscape plan is developed and implemented to screen and backdrop development, befitting the landscape and local biodiversity / woodland interests.

11. No development shall commence until an **external finish colour for all buildings and the security fencing** surrounding this development has been submitted to, and approved in writing by, the Planning Authority. For the avoidance of doubt the agreed colour(s), shall be painted / provided in a muted earth tone colour from either a green or brown colour palette. Thereafter, the approved colour(s), shall be fully implemented on site, unless otherwise agreed in writing with the Planning Authority.

Reason : To minimise the impact of the development on the landscape when initially constructed.

12. No development, site excavation or groundwork shall commence until a **Tree Planting Plan and Maintenance Programme** has been submitted to, and approved in writing by, the Planning Authority. Such details shall specify measures for the long term maintenance of the woodland to the north and west as well as additional tree planting to help screen the site to the east. The approved Tree Planting Plan shall be implemented in full by the developer during the first planting season following commencement of development, or as otherwise approved in writing by the Planning Authority, with maintenance thereafter being carried out in accordance with the approved Maintenance Programme.

Reason : In order to secure the long term management of the woodland on site and appropriate screening to the east.

REASON FOR DECISION

The proposals accord with the provisions of the Development Plan and there are no material considerations which would warrant refusal of the application.

TIME LIMITS

TIME LIMIT FOR THE IMPLEMENTATION OF THIS PLANNING PERMISSION

The Highland Council hereby makes the following Direction under Section 58(2) of the Town and Country Planning (Scotland) Act 1997 (as amended).

The development to which this planning permission relates must commence within FIVE YEARS of the date of this decision notice. If development has not commenced within this period, then this planning permission shall lapse.

FOOTNOTE TO APPLICANT

Initiation and Completion Notices

The Town and Country Planning (Scotland) Act 1997 (as amended) requires all developers to submit notices to the Planning Authority prior to, and upon completion of, development. These are in addition to any other similar requirements (such as Building Warrant completion notices) and failure to comply represents a breach of planning control and may result in formal enforcement action.

1. The developer must submit a Notice of Initiation of Development in accordance with Section 27A of the Act to the Planning Authority prior to work commencing on site.
2. On completion of the development, the developer must submit a Notice of Completion in accordance with Section 27B of the Act to the Planning Authority.

Copies of the notices referred to are attached to this decision notice for your convenience.

Accordance with Approved Plans & Conditions

You are advised that development must progress in accordance with the plans approved under, and any conditions attached to, this permission. You must not deviate from this permission without consent from the Planning Authority (irrespective of any changes that may separately be requested at the Building Warrant stage or by any other Statutory Authority). Any pre-conditions (those requiring certain works, submissions etc. prior to commencement of development) must be fulfilled prior to work starting on site. Failure to adhere to this permission and meet the requirements of all conditions may invalidate your permission or result in formal enforcement action

Flood Risk

It is important to note that the granting of planning permission does not imply there is an unconditional absence of flood risk relating to (or emanating from) the application site. As per Scottish Planning Policy (p.198), planning permission does not remove the liability position of developers or owners in relation to flood risk.

Scottish Water

You are advised that a supply and connection to Scottish Water infrastructure is dependent on sufficient spare capacity at the time of the application for connection to Scottish Water. The granting of planning permission does not guarantee a connection. Any enquiries with regards to sewerage connection and/or water supply should be directed to Scottish Water on 0845 601 8855.

Septic Tanks & Soakaways

Where a private foul drainage solution is proposed, you will require separate consent from the Scottish Environment Protection Agency (SEPA). Planning permission does not guarantee that approval will be given by SEPA and as such you are advised to contact them direct to discuss the matter (01349 862021).

Local Roads Authority Consent

In addition to planning permission, you may require one or more separate consents (such as dropped kerb consent, a road openings permit, occupation of the road permit etc.) from TECS Roads prior to work commencing. These consents may require additional work and/or introduce additional specifications and you are therefore advised to contact your local TECS Roads office for further guidance at the earliest opportunity.

Failure to comply with access, parking and drainage infrastructure requirements may endanger road users, affect the safety and free-flow of traffic and is likely to result in enforcement action being taken against you under both the Town and Country Planning (Scotland) Act 1997 and the Roads (Scotland) Act 1984.

Further information on the Council's roads standards can be found at:

<http://www.highland.gov.uk/yourenvironment/roadsandtransport>

Application forms and guidance notes for access-related consents can be downloaded from:

<http://www.highland.gov.uk/yourenvironment/roadsandtransport/roads/Applicationformsforroadoccupation.htm>

Mud & Debris on Road

Please note that it is an offence under Section 95 of the Roads (Scotland) Act 1984 to allow mud or any other material to be deposited, and thereafter remain, on a public road from any vehicle or development site. You must, therefore, put in place a strategy for dealing with any material deposited on the public road network and maintain this until development is complete.

Protected Species - Halting of Work

You are advised that work on site must stop immediately, and Scottish Natural Heritage must be contacted, if evidence of any protected species or nesting/breeding sites, not previously detected during the course of the application and provided for in this permission, are found on site. For the avoidance of doubt, it is an offence to deliberately or recklessly kill, injure or disturb protected species or to damage or destroy the breeding site of a protected species. These sites are protected even if the animal is not there at the time of discovery. Further information regarding protected species and developer responsibilities is available from SNH: www.snh.gov.uk/protecting-scotlands-nature/protected-species

Protected Species - Contractors' Guidance

You must ensure that all contractors and other personnel operating within the application site are made aware of the possible presence of protected species. They must also be provided with species-specific information (incl. guidance on identifying their presence) and should be made aware of all applicable legal requirements (incl. responsibilities and penalties for non-compliance).

Construction Hours and Noise-Generating Activities

Notwithstanding construction hours limitations imposed by condition you are advised that construction work associated with the approved development (incl. the loading/unloading of delivery vehicles, plant or other machinery), for which noise is audible at the boundary of the application site, should not normally take place outwith the hours of 08:00 and 19:00 Monday to Friday, 08:00 and 13:00 on Saturdays or at any time on a Sunday or Bank Holiday in Scotland, as prescribed in Schedule 1 of the Banking and Financial Dealings Act 1971 (as amended).

Work falling outwith these hours which gives rise to amenity concerns, or noise at any time which exceeds acceptable levels, may result in the service of a notice under Section 60 of the Control of Pollution Act 1974 (as amended). Breaching a Section 60 notice constitutes an offence and is likely to result in court action.

If you wish formal consent to work at specific times or on specific days, you may apply to the Council's Environmental Health Officer under Section 61 of the 1974 Act. Any such application should be submitted after you have obtained your Building Warrant, if required, and will be considered on its merits. Any decision taken will reflect the nature of the development, the site's location and the proximity of noise sensitive premises. Please contact env.health@highland.gov.uk for more information.

Major Development Site Notice

Prior to the commencement of this development, the attached Site Notice must be posted in a publicly accessible part of the site and remain in place until the development is complete. This is a statutory requirement of the Town and Country Planning (Scotland) Acts and associated regulations.

Schedule 3 Development Site Notice

Prior to the commencement of this development, the attached Site Notice must be posted in a publicly accessible part of the site and remain in place until the development is complete. This is a statutory requirement of the Town and Country Planning (Scotland) Acts and associated regulations.

Bonds

A s96 agreement under the Roads (Scotland) Act 1984 shall be required in relation to potential damage to the public road. You are advised to contact the Roads Authority direct to agree the necessary Bond as well as any pre and post constriction Road survey(s).

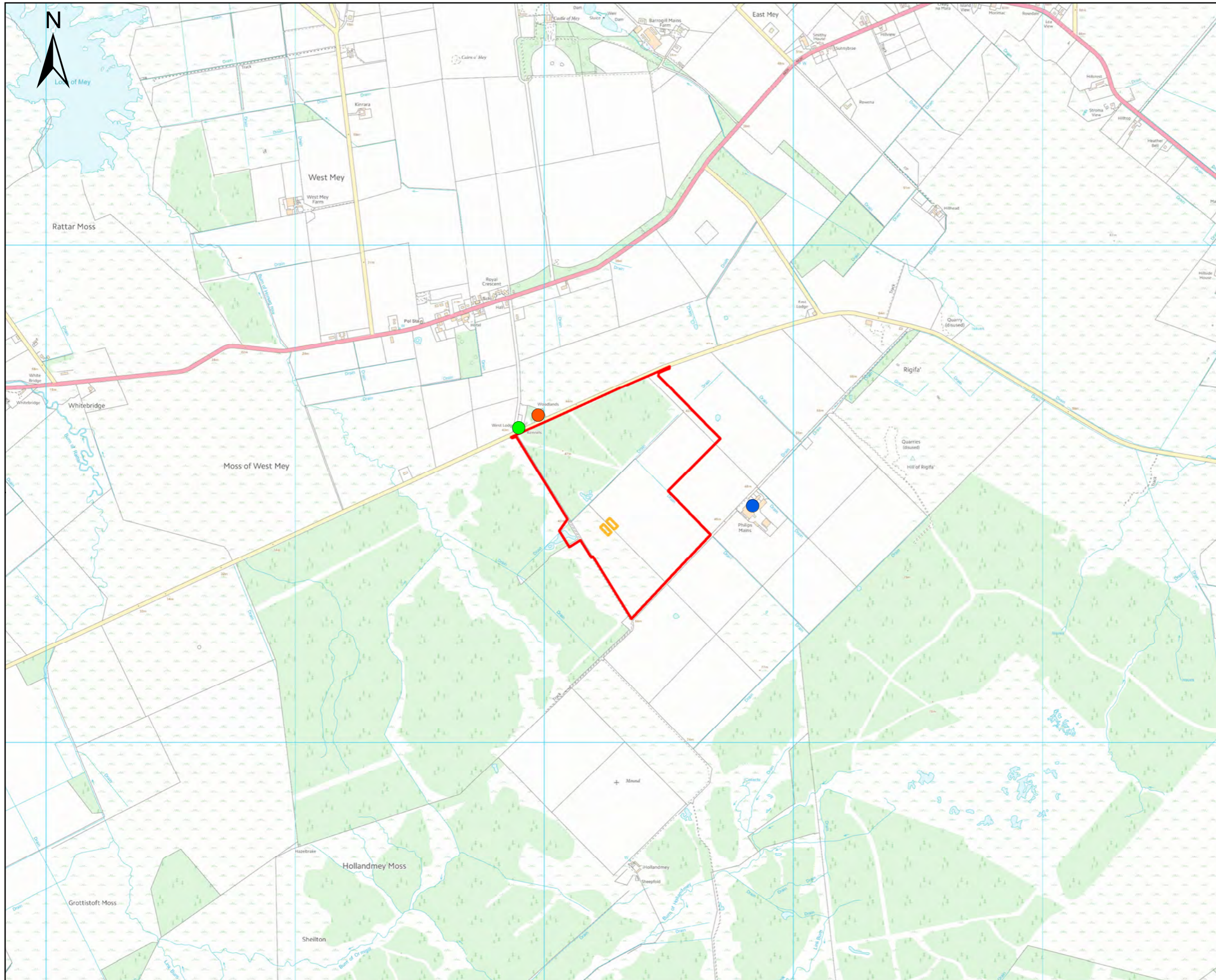
Signature: Dafydd Jones

Designation: Area Planning Manager North

Author: David Barclay

Background Papers: Documents referred to in report and in case file.

Relevant Plans: Application Form and Supporting Environmental Appraisal
Environmental Appraisal – Figure 12.1 Noise Sensitive Receptors
Drawing No. GILB1-COM-CA-014-01 (REV 03) - Location Plan
Drawing No. LT22_GILB_0802_0012 (REV 00) - Site Layout Plan
Drawing No. GILB1-COMM-CA-004-01 (REV 08) – Site Sections
Drawing No. GILB-COMM-24-08 – Elevation Plan
Drawing No. GILB1-COMM-BUI-003-01 (REV 03) – Elevation Plan
Drawing No. GILB1-COMM-CA-001_02 (REV 05)– Access Layout
Drawing No. GILB1-COMM-FOU-002-01 (REV 02) – Ground
Surface Finishes
Drawing No. GILB1-COMM-CA-021_02 (REV 01) - Drainage SUDS
Details
Drawing No. GILB1-COMM-CA-021_01 (REV 01) – Drainage Swale
Details
Drawing No. GILB1-COMM-CA-020_01 (REV 02) – Drainage
Layout Sheet 1
Drawing No. GILB1-COMM-CA-020_02 (REV 02) – Drainage
Layout Sheet 2
Drawing No. GILB1-COMM-CA-020_03 (REV 02) – Drainage
Layout Sheet 3
Drawing No. GILB1-COMM-CA-020_04 (REV 02) – Drainage
Layout Sheet 4
Drawing No. GILB1-COMM-CA-020_05 (REV 02) – Drainage
Layout Sheet 5
Drawing No. GILB1-COMM-CA-020_06 (REV 02) – Drainage
Layout Sheet 6



Legend

- Site Boundary
- Noise Generating Equipment

Noise Receptors

- Phillips Mains
- West Lodge
- Woodlands

Figure 12.1: Sensitive Receptors

Project: Gills Bay Substation

Client: Scottish Hydro Electric Transmission Plc

Project No: LT000022

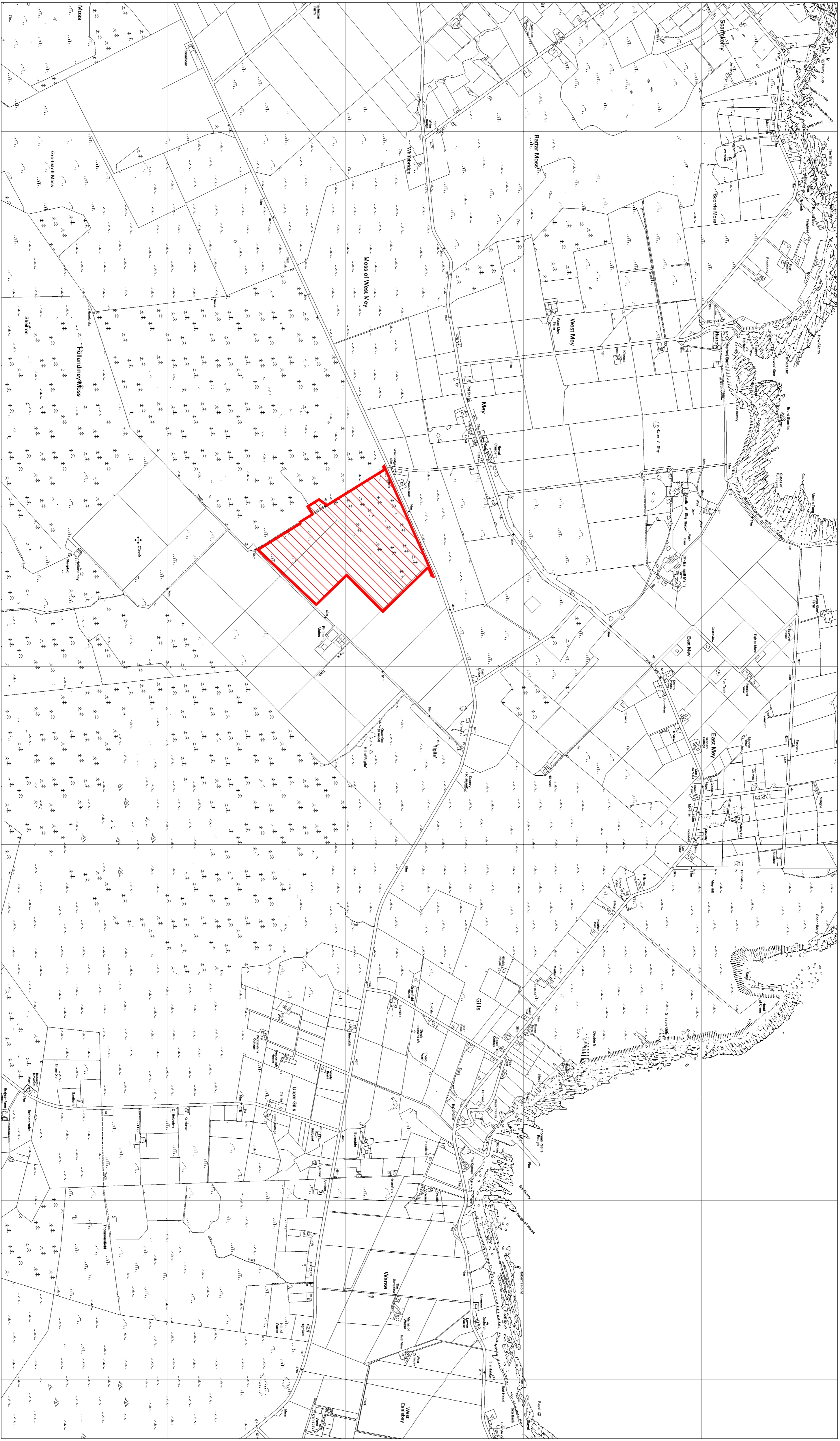
Issue: 1

Date: June 2015

Drawn By: CO



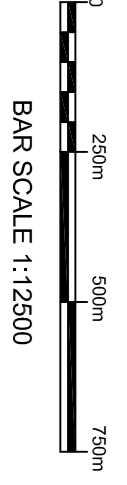
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 SITE LOCATION

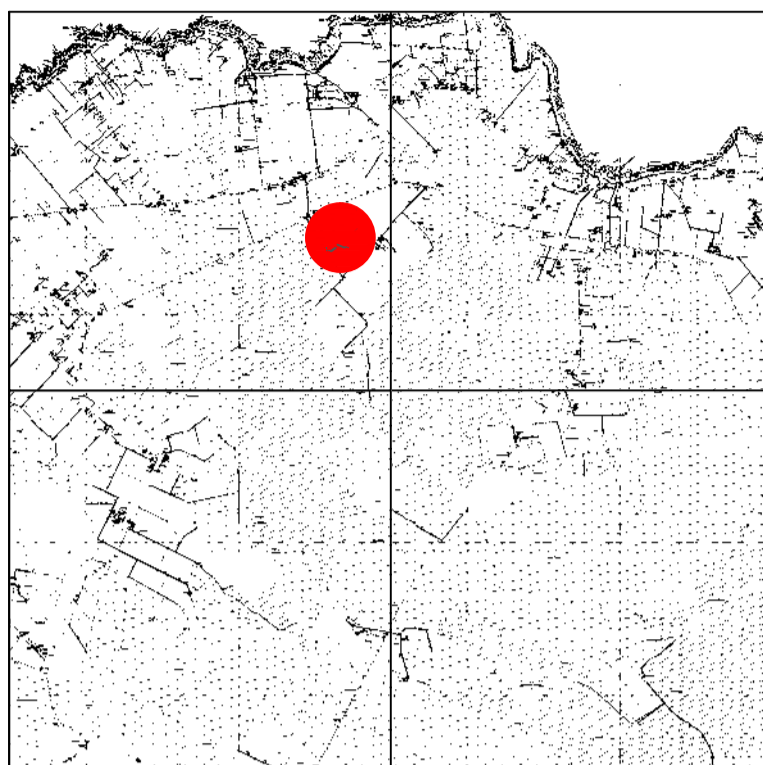


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FM	JS	19/06/15
00	ISSUED FOR PLANNING APPROVAL	
FM	JS	10/06/15
REVISION		
DRAWN / CHECKED		
APPROVED DATE		
CONTRACT No.		
CUSTOMER	Scottish and Southern Energy	
DESTINATION	GILLS BAY 132KV SUBSTATION	
TITLE	LOCATION PLAN	

Balfour Beatty **ABB**

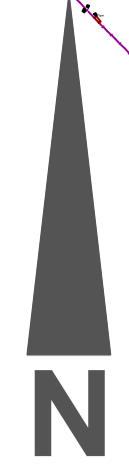
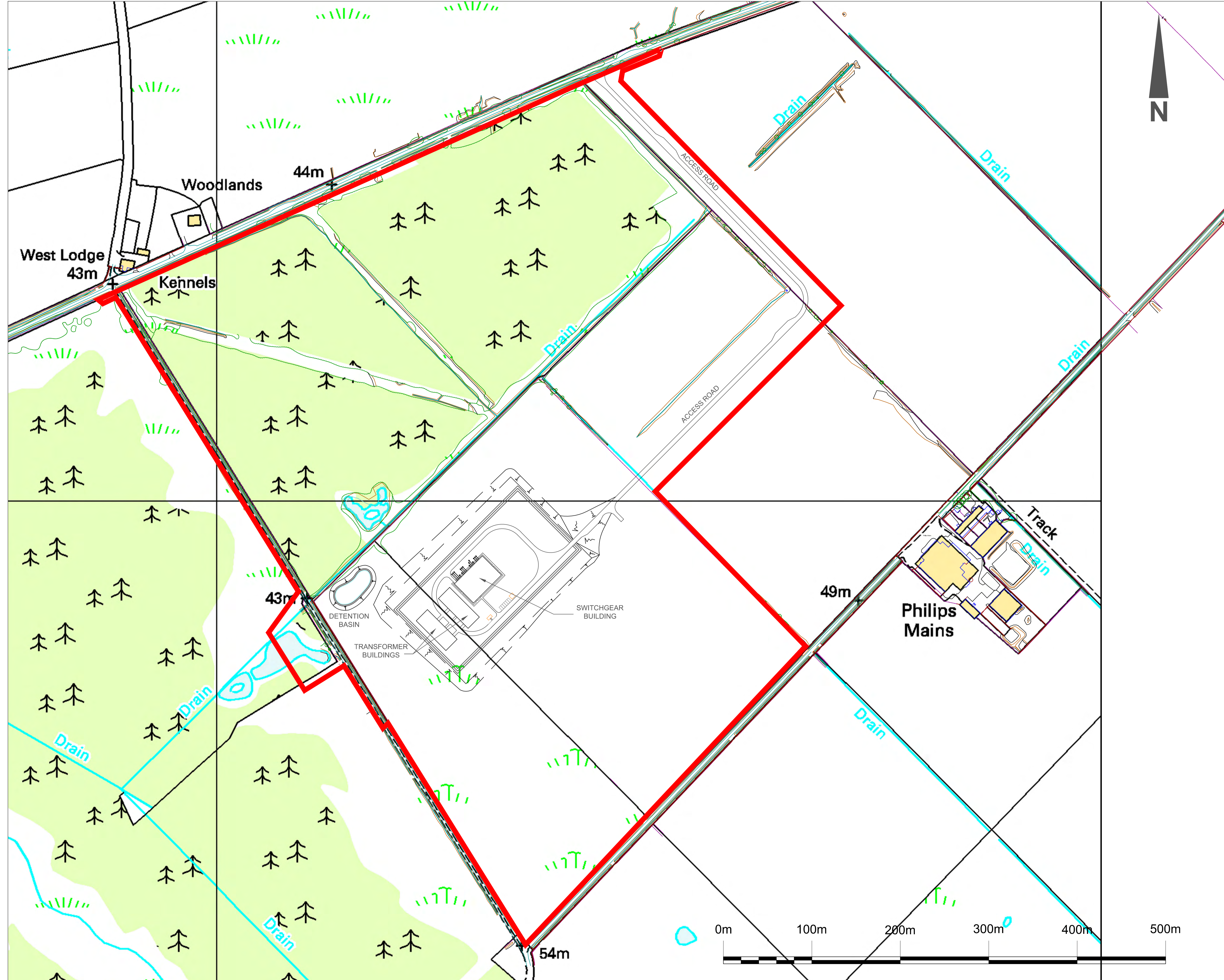
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 DRAWING No. GILB1-COMM-CA-014-01





SITE LOCATION PLAN
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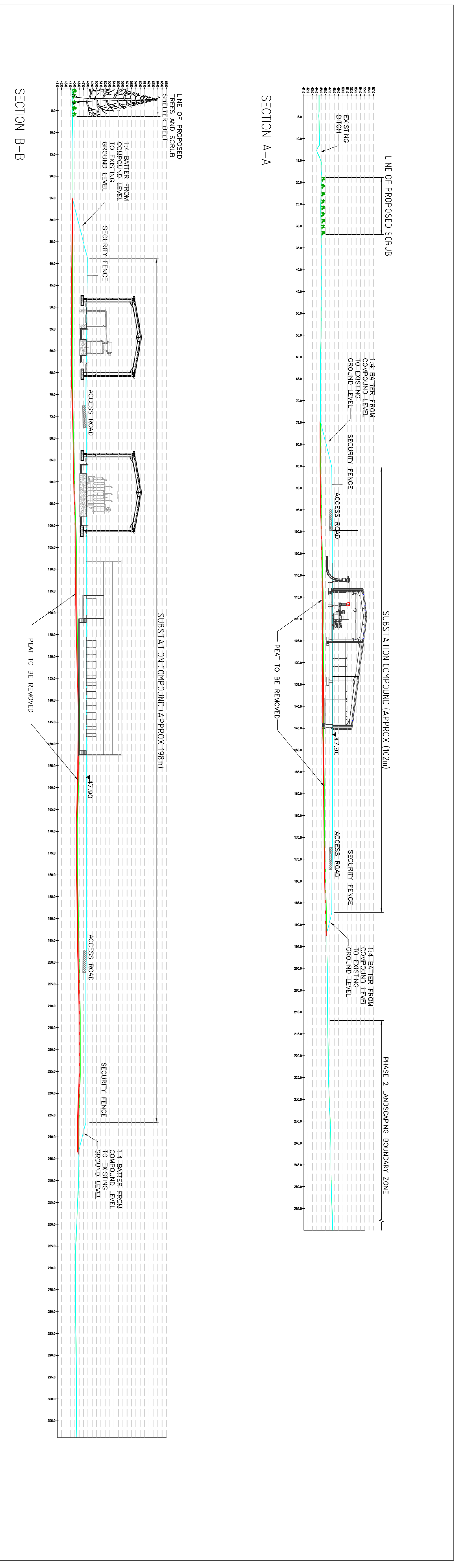
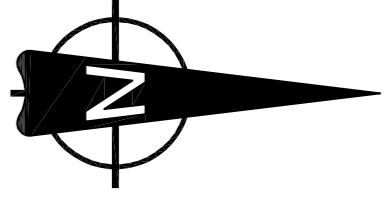
- LEGEND**
- SITE RED LINE BOUNDARY
 - GILLS BAY SUB STATION
 - SUB STATION PLATFORM



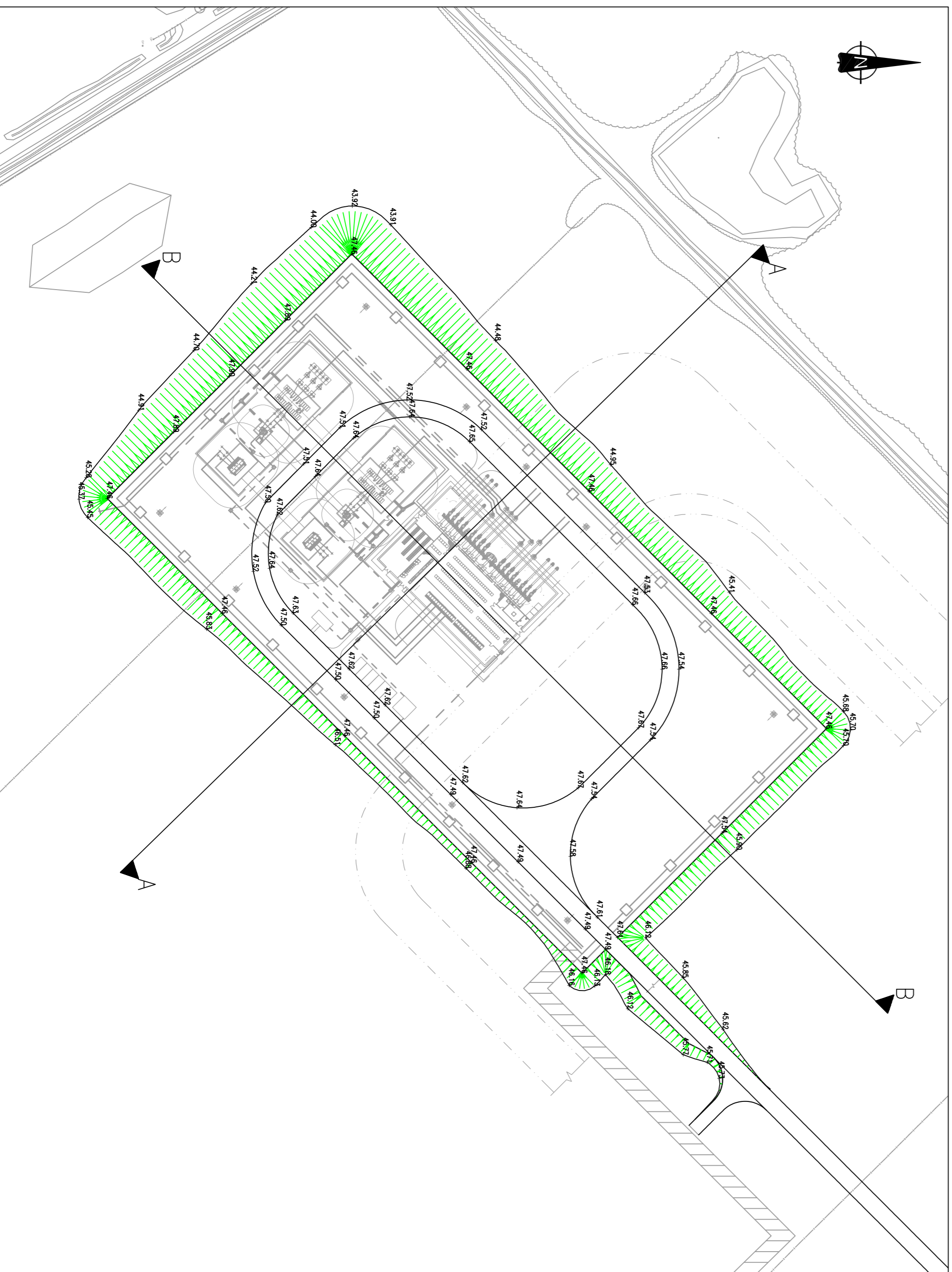
SITE PLAN
Scale 1:2000

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Rev:	Date:	Description:
Revisions:		
SSE Inveralmond House, 200 Dunkeld Road Perth, PH1 3AQ, UK www.sse.com		
Project: DOUNREAY - GILLS BAY 132kV RADIAL		
Project Number:	LT000022	Location: GILLS BAY
Title: GILLS BAY GIS 132kV SUBSTATION & CONVERTOR SITE PLAN SHOWING RED LINE BOUNDARY		
Drawing Status:	FOR INFORMATION	Drawn: PF
Scale:	1:2000 @ A1	Checked: JW
Date:	05.08.15	Approved: JS
Drawing Number:	LT22_GILB_0802_0012	Sheet No: 00 Revision No: 00



SECTIONS – SCALE 1:500



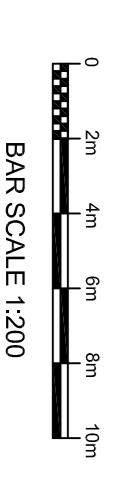
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LEGEND

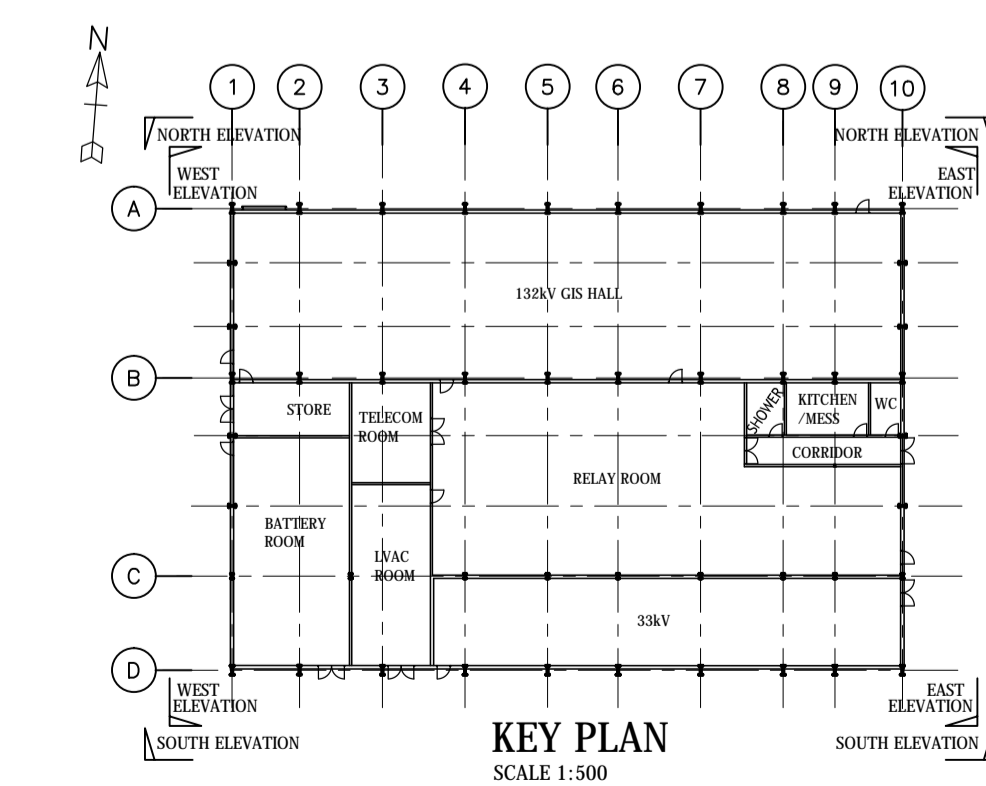
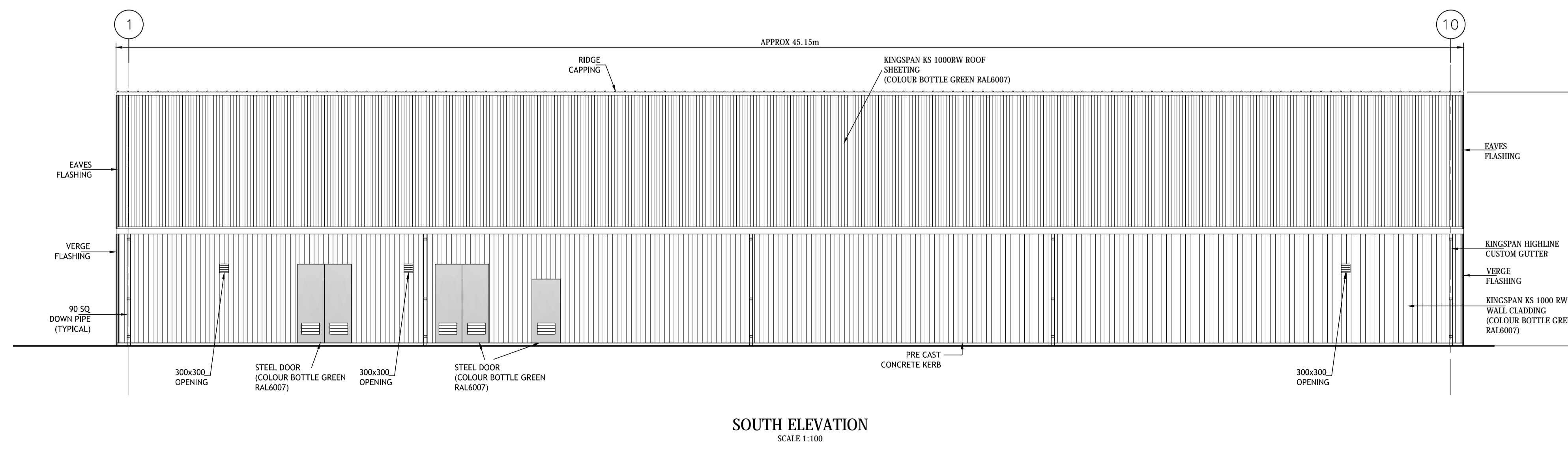
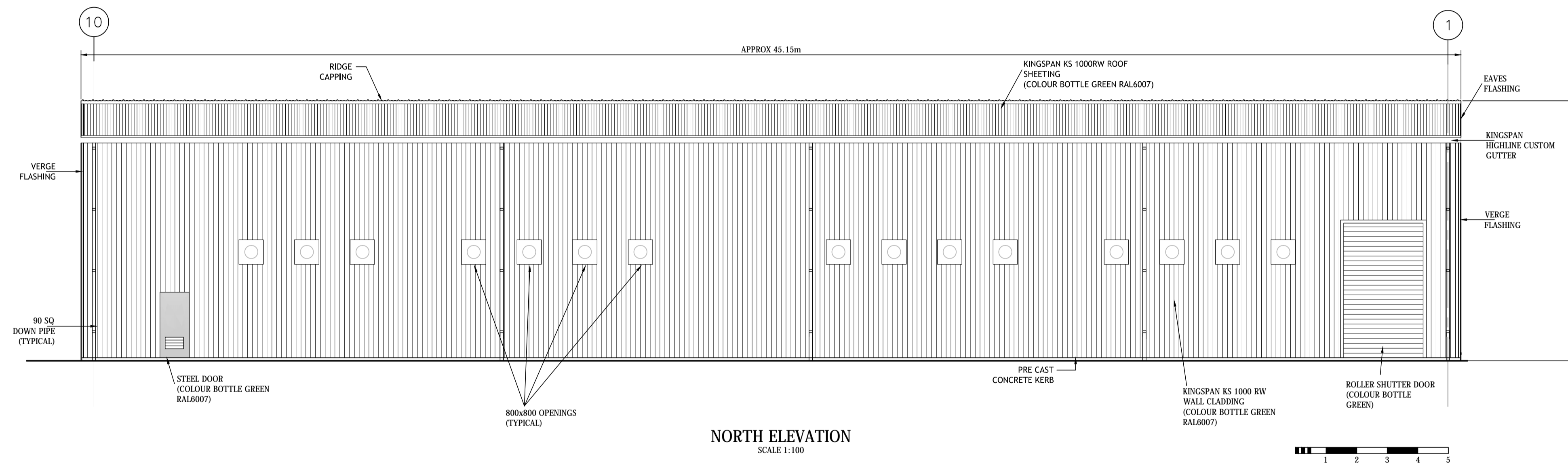
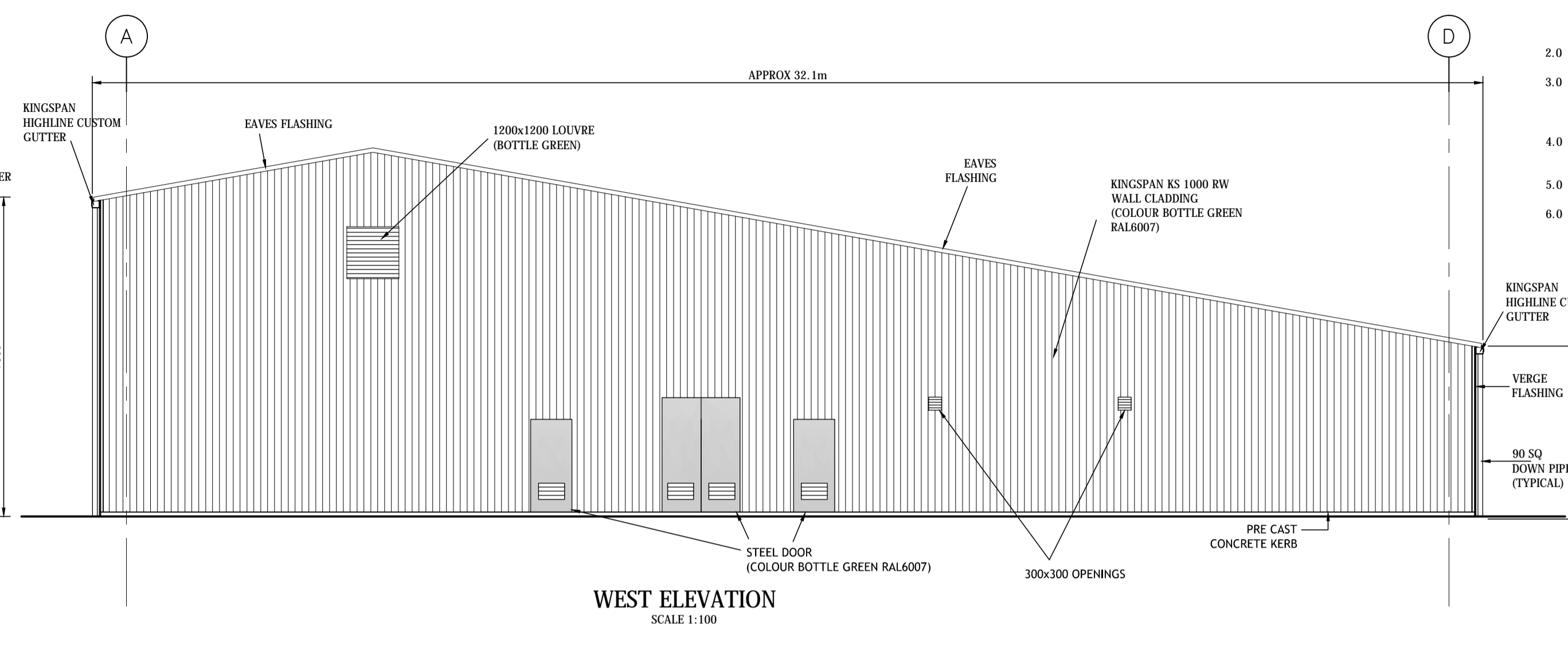
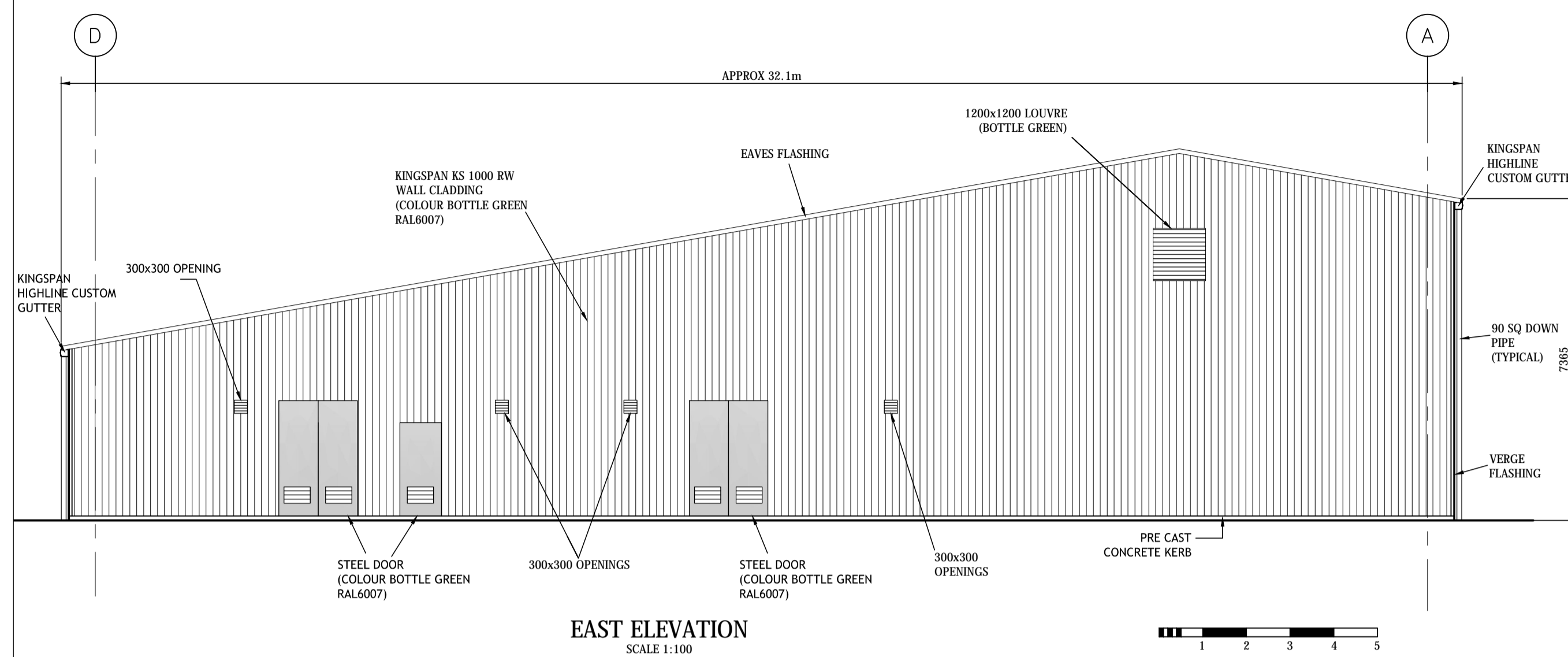
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— PROPOSED GROUND LEVEL

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ASX	19/06/15	
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ASX	18/06/15	
05	FM JS	DRAWING UPDATED TO SHOW LANDSCAPING
ASX	10/06/15	
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ASX	27/04/15	
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ASX	17/04/15	
01	FM JS	CUT / FILL INFORMATION ADDED TO DRAWING
ASX	09/04/15	
00	FM JS	FIRST ISSUE
ASX	31/03/15	
REVISION		
DRAWN (CHECKED)		
APPROVED DATE		
CONTRACT NO. 106249		
CUSTOMER Scottish and Southern Energy		
DESTINATION GILS BAY 132kV SUBSTATION		
TITLE SITE SECTIONS ROAD LAYOUT		
CONTRACT No. SCALE AS SHOWN @ A1		
DRAWING No. GILB1-COMM-CA-004-01		



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- 6.0 HOLES FOR GIB RAILS TO BE INFILLED TO GIB RAIL SUPPLIERS REQUIREMENTS

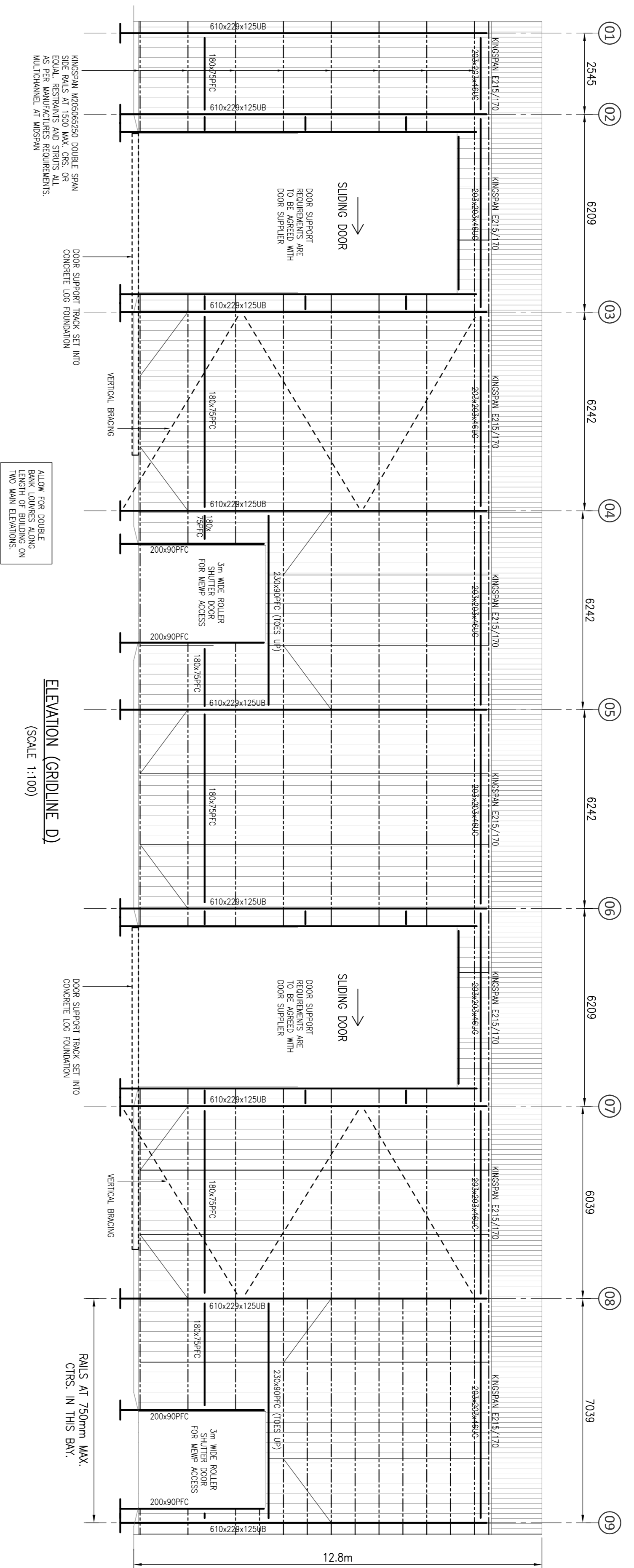


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0		PRELIMINARY
0		DESCRIPTION

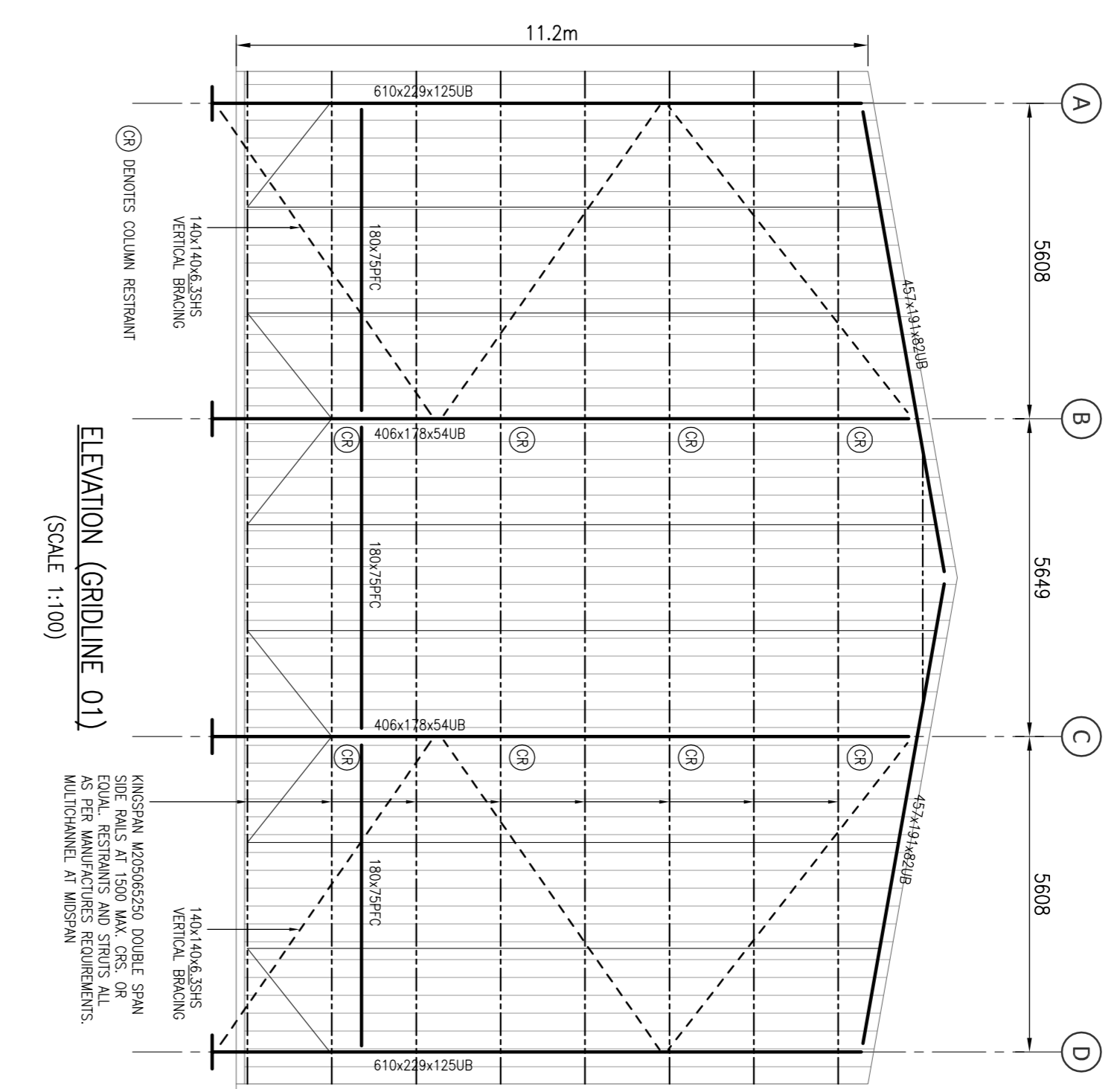
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 CUSTOMER - SSE
 DESTINATION - GILLS BAY 132 KV GIS
 TITLE - ELEVATIONS

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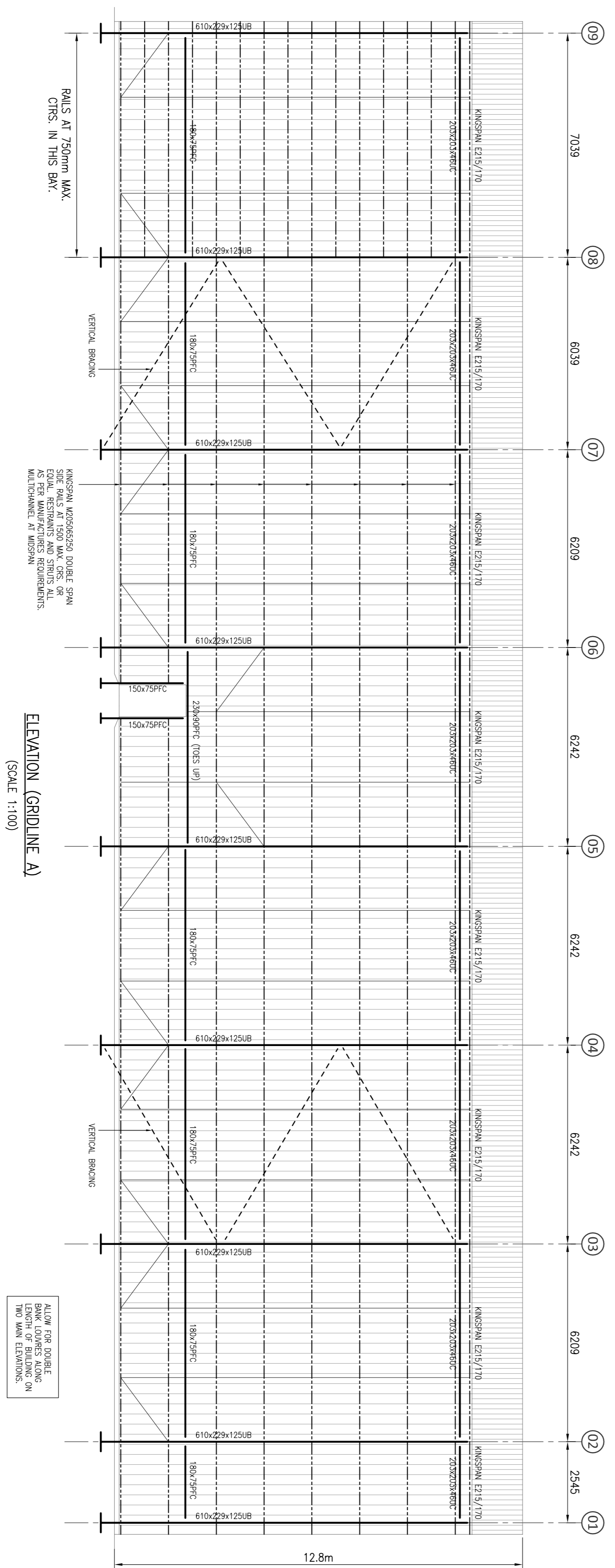




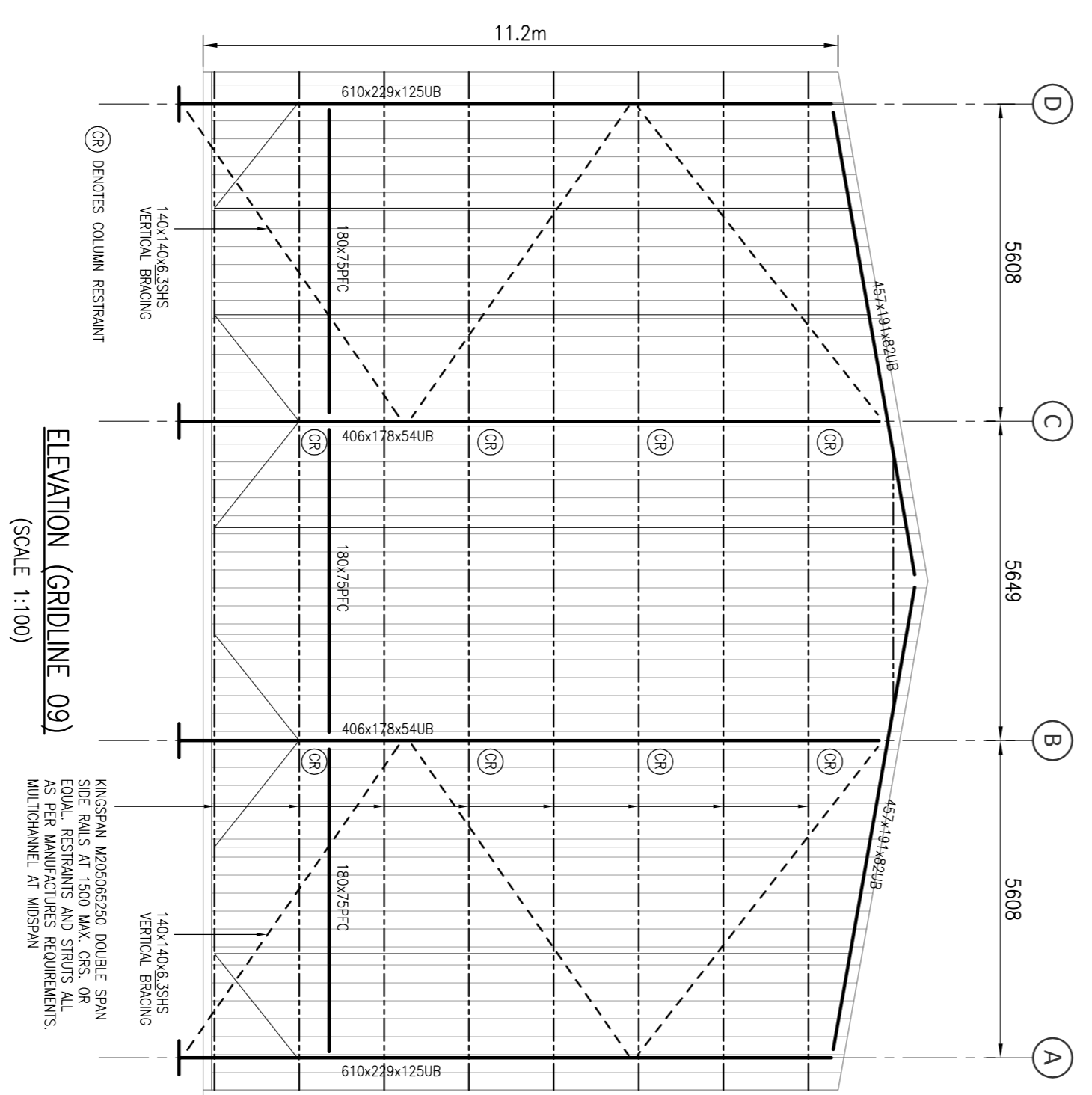
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(SCALE 1:100)



ELEVATION (GRIDLINE 01)
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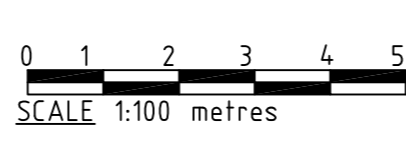


ELEVATION (GRIDLINE A)
(SCALE 1:100)



ELEVATION (GRIDLINE 09)
(SCALE 1:100)

- NOTES:
- ALL STEEL TO BE GRADE S355 UNLESS NOTED OTHERWISE.
 - ALL VERTICAL BRACING TO BE 140x140x35S18/S355 12H U.N.O.
 - ALL BOLTED CONNECTIONS AT WINDOW LOCATIONS MUST RESPECT INTERNAL FRAMING AND BE COUNTERSUNK IF NECESSARY.
 - ALLOWANCE TO BE MADE FOR 1.5 TONNES OF ADDITIONAL COLD ROLLED STEEL NOT IDENTIFIED ON DRAWINGS.
 - SWAY AND DEFLECTION OF THE STEELWORK HAS BEEN DESIGNED IN ACCORDANCE WITH BS 5950, TABLE 9.

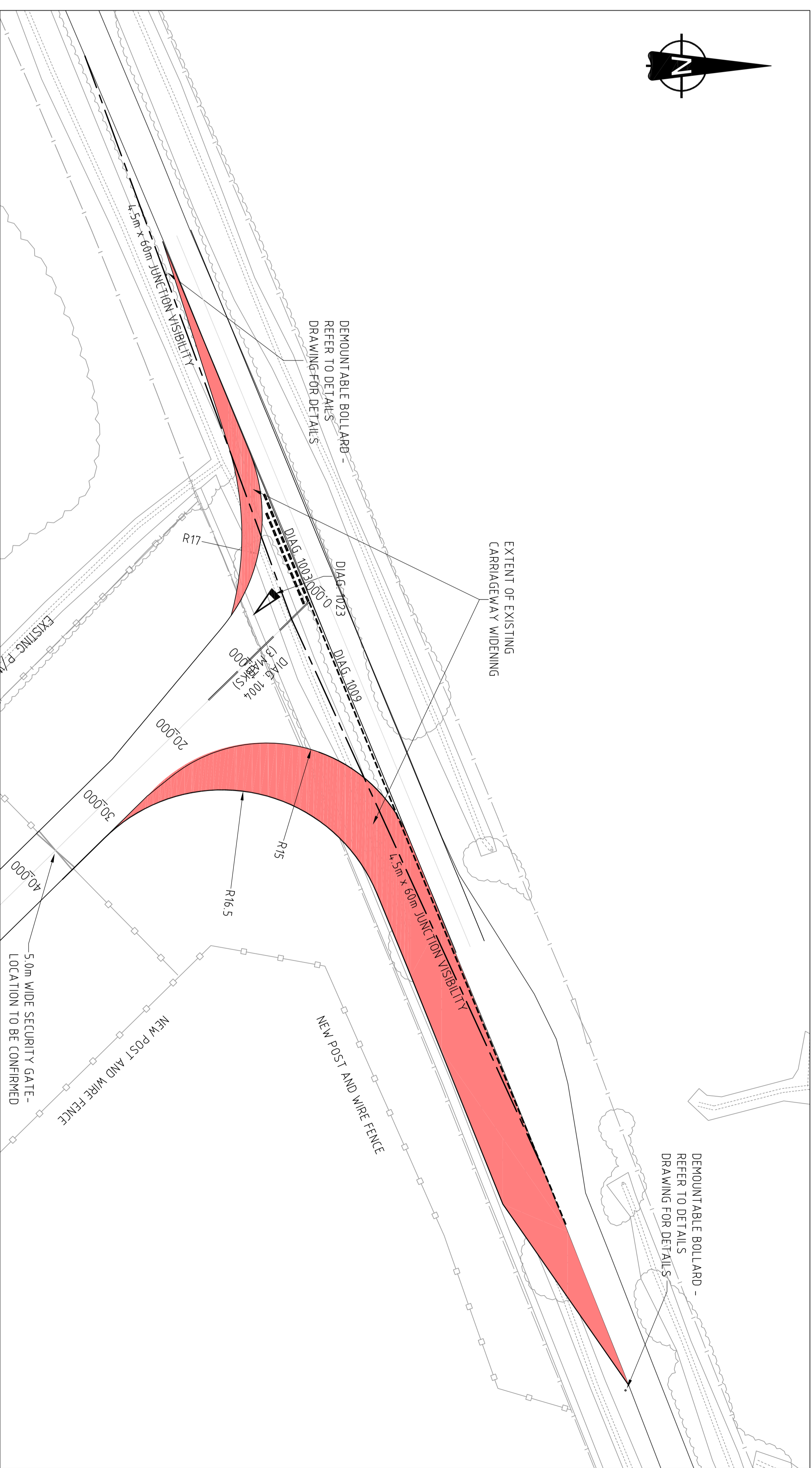


04			
03	AMENDED TO SUIT COMMENTS IN 1310629-BRR-105	17/06/15	ASK
02	BUILDING LENGTH INCREASED BY 1m. DOORS AMENDED.	27/05/15	ASK
01	UPDATED TO REFLECT CHANGE TO HEIGHT OF BUILDING	27/04/15	ASK
00	FIRST ISSUE		BW
REVISION		27/05/15	ASK
DRAWN / CHECKED			
APPROVED / DATE			
CUSTOMER'S CONTRACT NO.			
CUSTOMER			
Scottish and Southern Energy			
DESTINATION			
GILLS BAY 123KV SUBSTATION			
TITLE			
STEELWORK ELEVATIONS G11 AND G12 BUILDINGS			
CONTRACT NO.		SCALE 1:100 @ A1	
DRAWING NO.		G1B1-COMM-BU-003-01	
DRAWING TITLE		G1B1-COMM-BU-003-01	

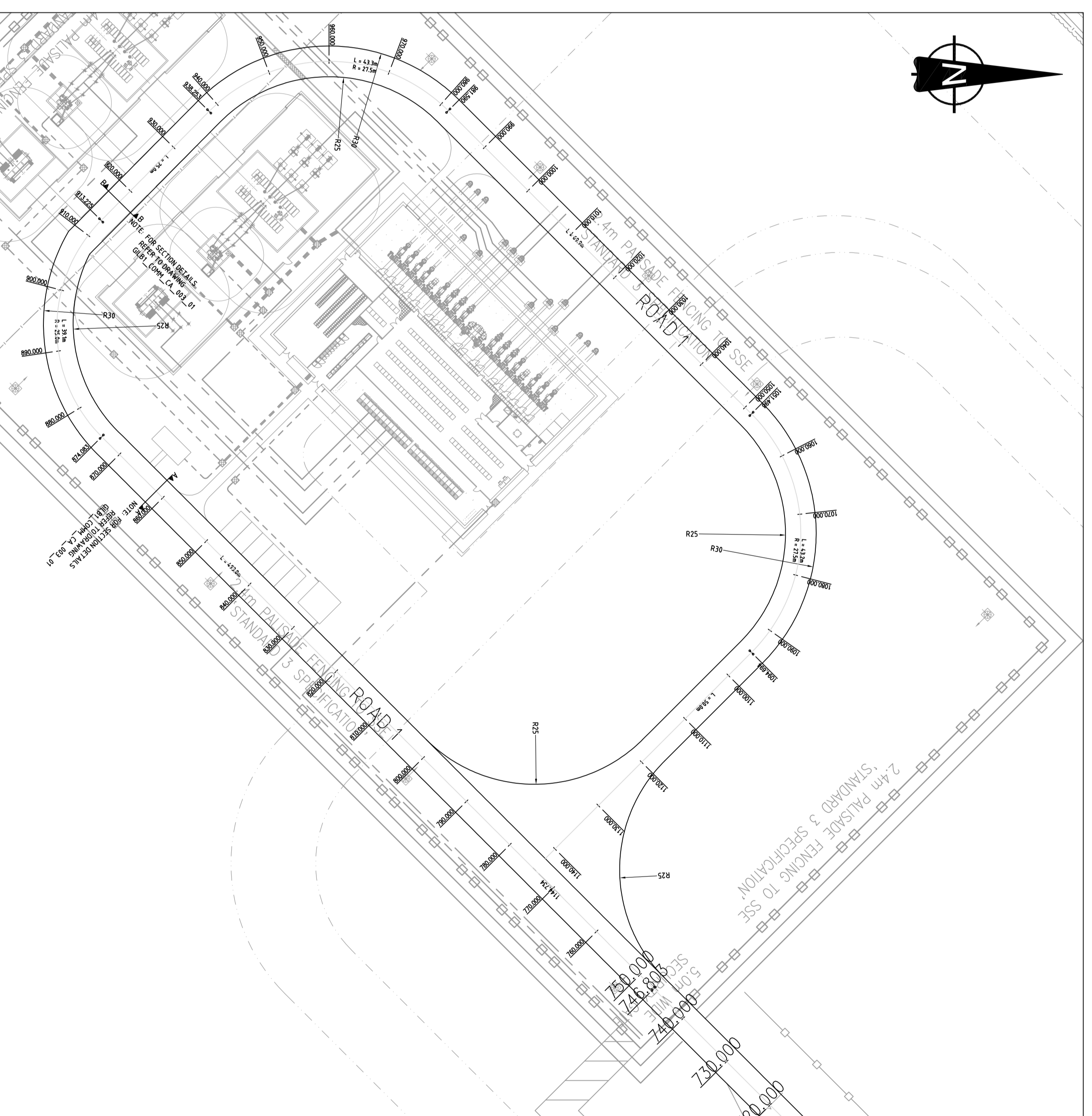
Balfour Beatty **ABB**



SITE ROAD LAYOUT - SCALE 1:1000



ACCESS ROAD LAYOUT - SCALE 1:250



COMPOUND ROAD LAYOUT - SCALE 1:200

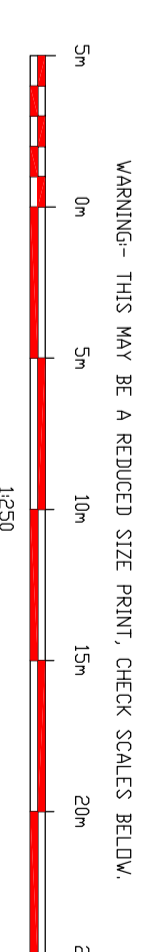
- ROAD LEGEND**
- EXTENT OF WIDENED CARRIAGEWAY
 - BOLLARD
 - DIAG. 1003 AT ANY TIME
 - DIAG. 1009 AT ANY TIME
 - DIAG. 1004 AT ANY TIME
 - DIAG. 1023
 - 2.4M X 50M VISIBILITY SPLAY - LOCAL DISTRIBUTOR ROAD TO INDUSTRIAL ACCESS ROAD

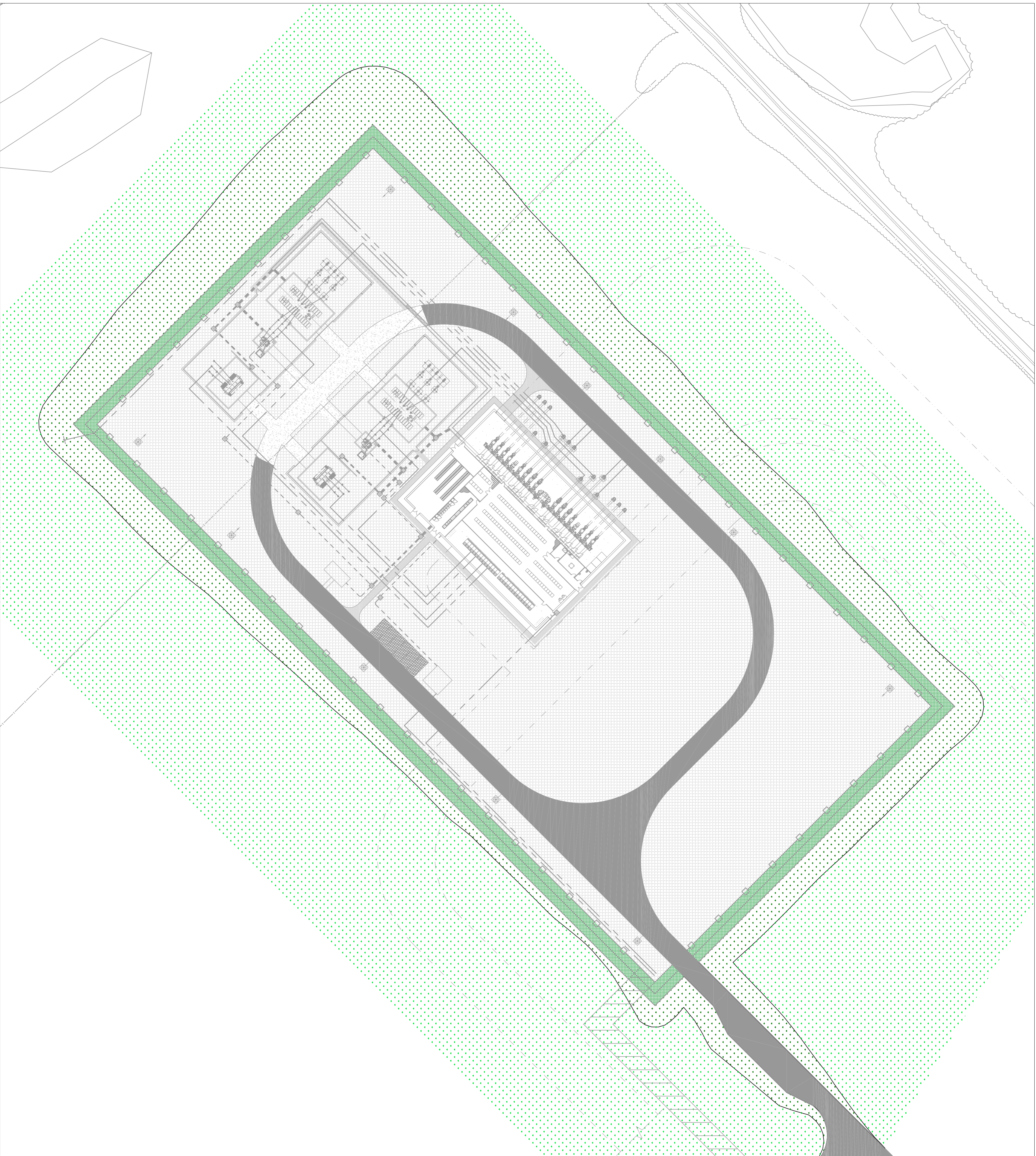
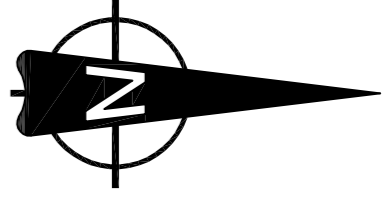
5	VARIBILITY SPLAY ADDED TO PROPOSED ACCESS ROAD JUNCTION
FM	JS
ASK	24/08/15
4	REVISED TO SPLIT UPDATED ACCESS ROAD BROADLOTH PROPOSALS
FM	JS
ASK	23/06/15
3	AMENDED TO SPLIT COMMENTS IN 13.0629-RRR-107
FM	JS
ASK	18/05/15
2	DRAWING UPDATED TO SPLIT REVISED SITE LAYOUT
FM	JS
ASK	27/04/15
1	FUTURE WORKS REMOVED
FM	JS
ASK	30/03/15
0	FIRST ISSUE
FM	JS
ASK	27/03/15
REVISION	DESCRIPTION
DRAWN	CHECKED
APPROVED	DATE
CONTRACT No.	109249

CUSTOMER	SCOTTISH & SOUTHERN ENERGY
DESTINATION	GILTS BAY 132/133KV SUBSTATION COMMON
TITLE	ROAD LAYOUT GILTS BAY 132/133KV SUBSTATION

Balfour Beatty **ABB**

CONTRACT No.	11442	SCALE	AS SHOWN
DRAWING No.	GILB1-COMM-CA-001_02		





SURFACE TYPE LEGEND
(DRAWING MUST BE IN COLOUR)

	EXISTING GROUND
	EXTERNAL PLATFORM
	SLOPE DOWN TO EXISTING
	SUBSTATION COMPOUND (STONE FINISH)
	ROAD - TARMAC FINISH
	ROAD - CONCRETE FINISH
	CARPARKING
	FOOTPATHS
	SERVICES CONNECTION

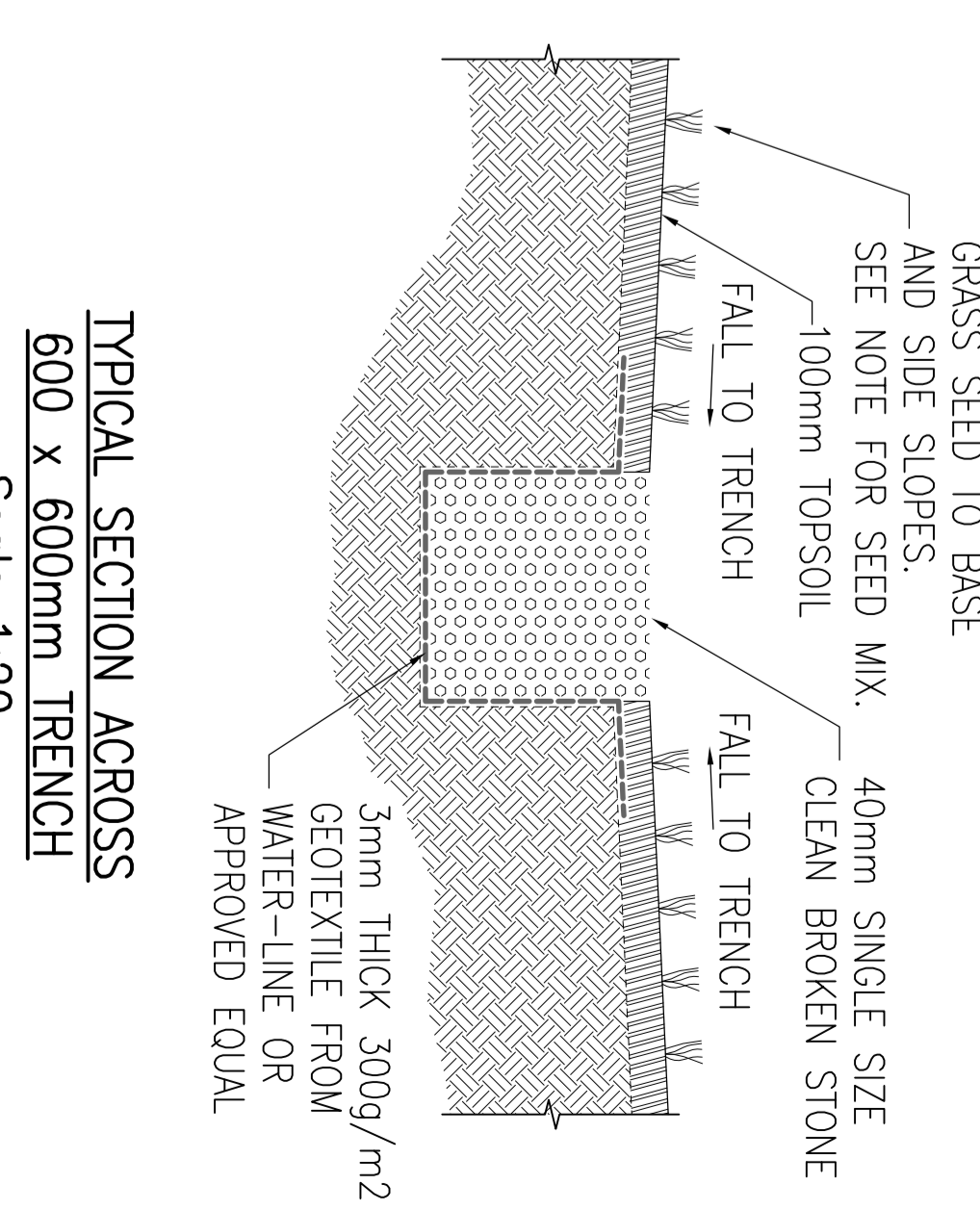
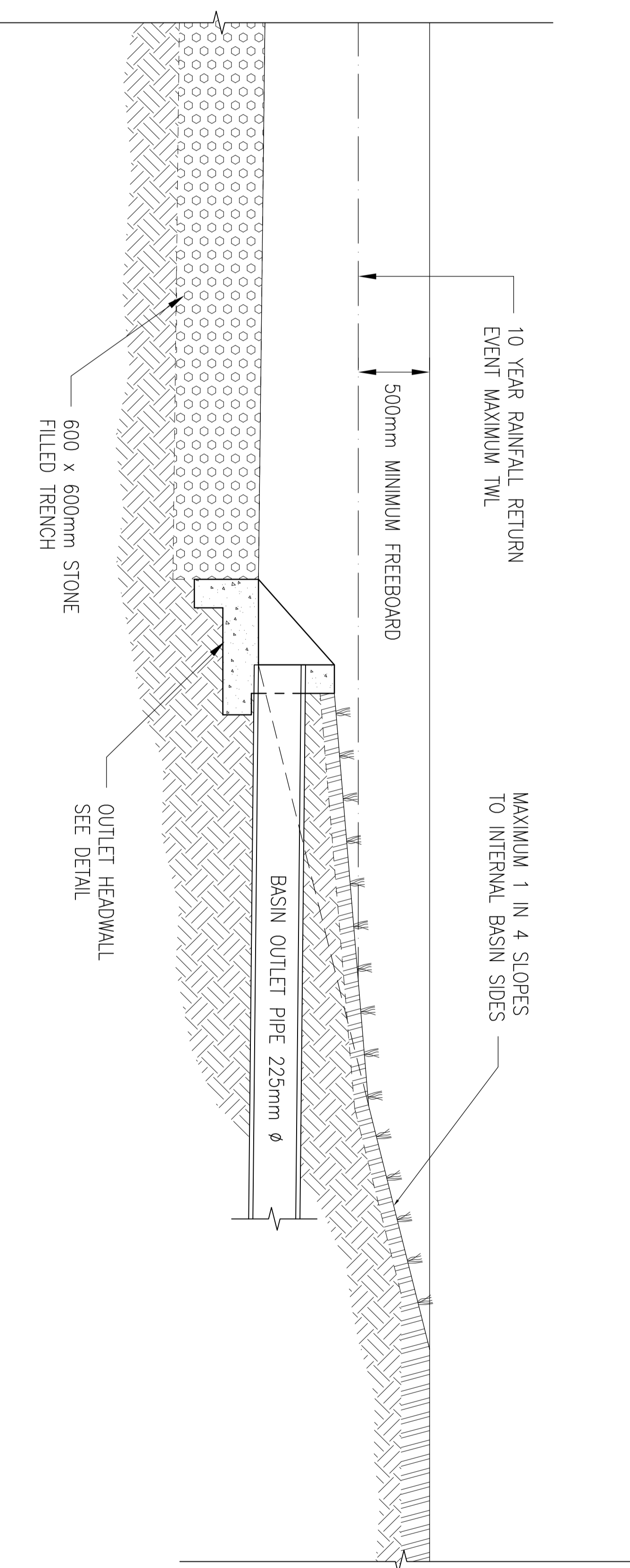
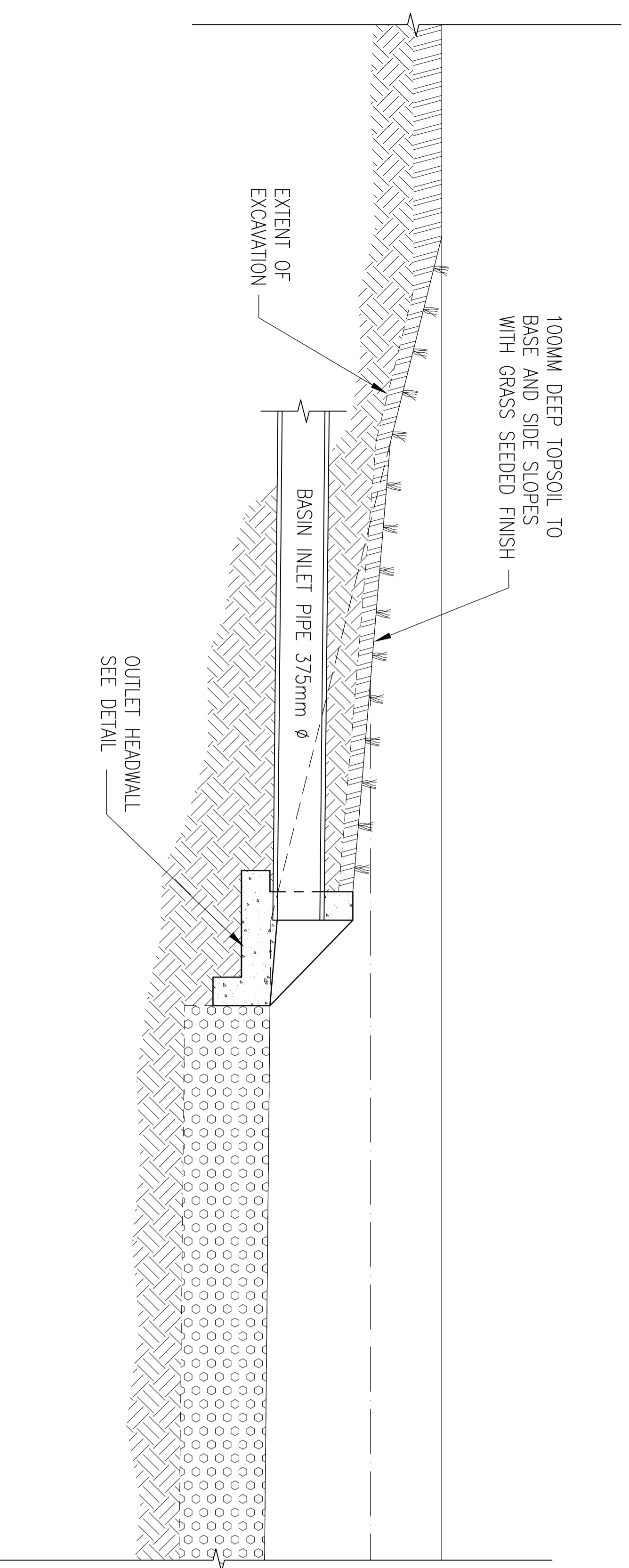
04	
03	
02	AMENDED TO SITE COMMENTS IN 13.06/24-HRR-118
01	ISSUANCE UPGRADED TO SOFT FINISHED SITE LAYOUT
00	FIRST ISSUE
ASX	27/04/15
FM	27/03/15
ASX	27/03/15
REVISION	
DRAWN (CHECKED)	DESCRIPTION
PROJECTED DATE	
CUSTOMER	109249
DESTINATION	Scottish and Southern Energy
TITLE	QILS BAY 132kV SUBSTATION
	PROPOSED SURFACE FINISHES

Balfour Beatty **APP**

CONTRACT No. SCALE 1:500 @ A1

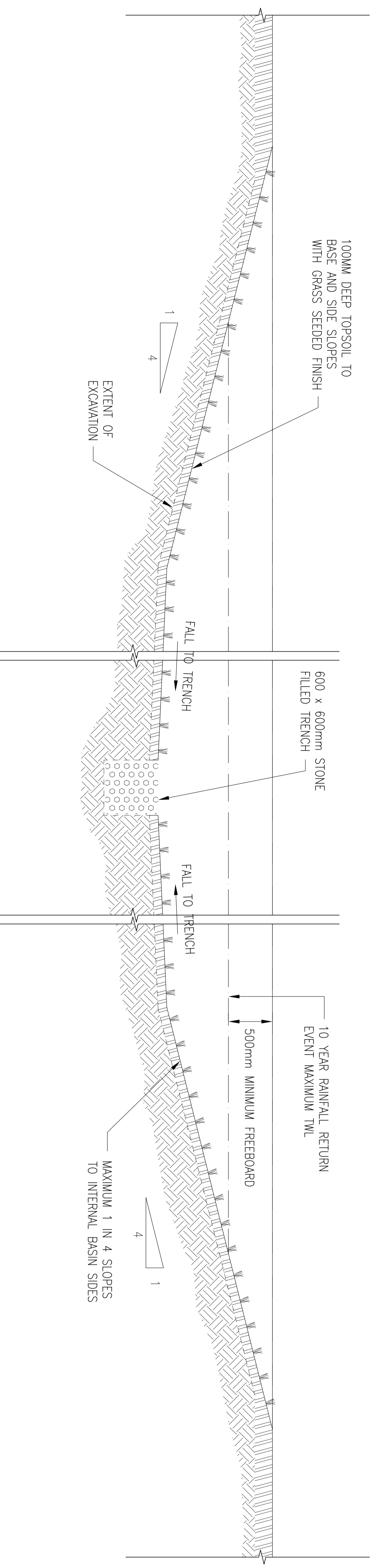
QILB1-COMM-FOU-002-01



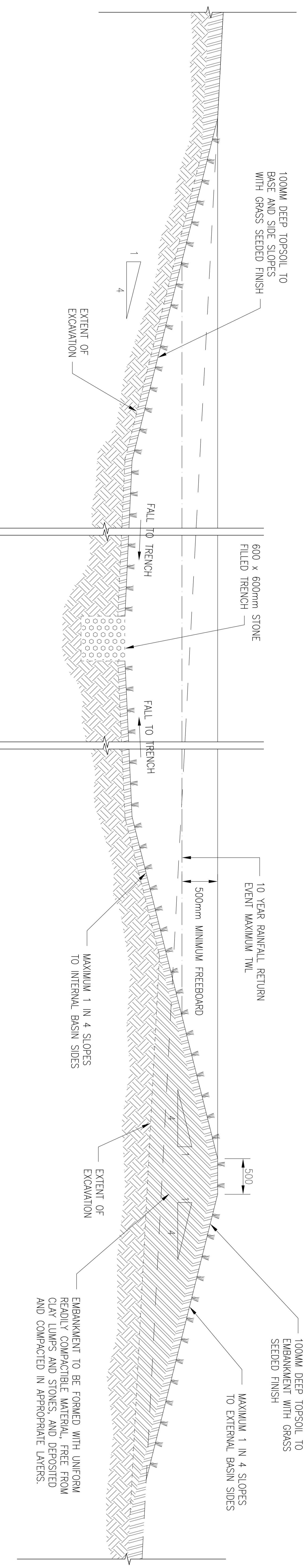


TYPICAL SECTION ACROSS 600 x 600mm TRENCH
Scale 1:20

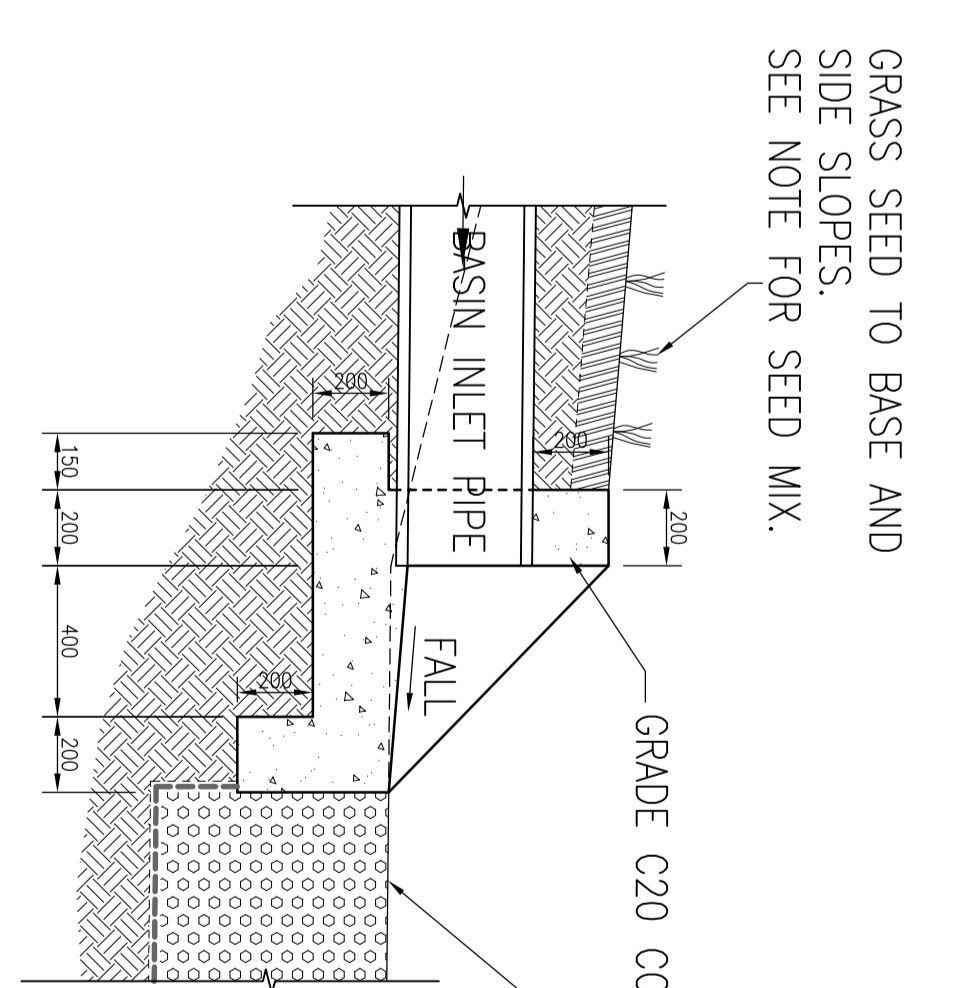
TYPICAL SECTION ALONG BASIN LENGTH
Scale 1:25



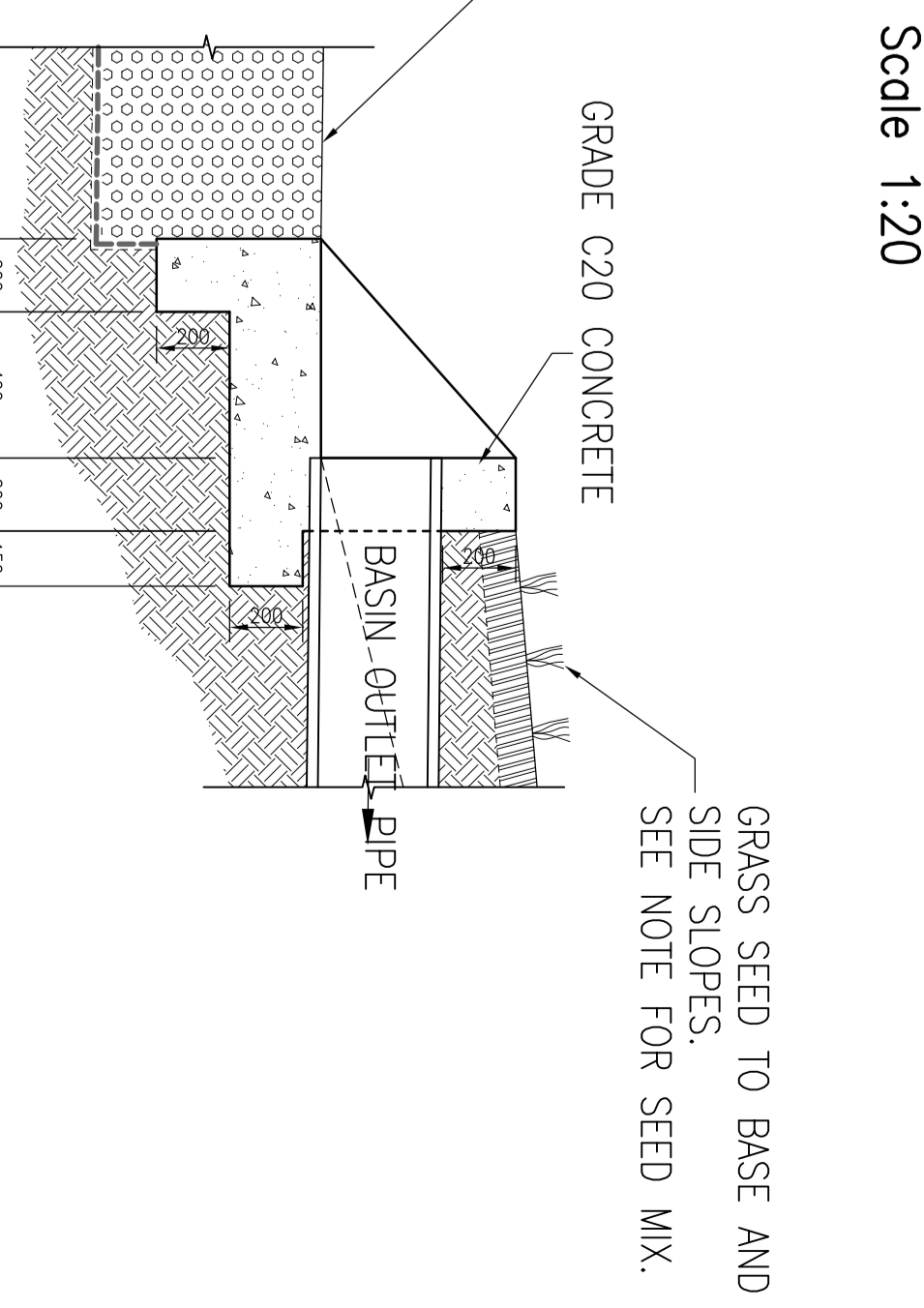
TYPICAL SECTION ACROSS BASIN
Scale 1:25



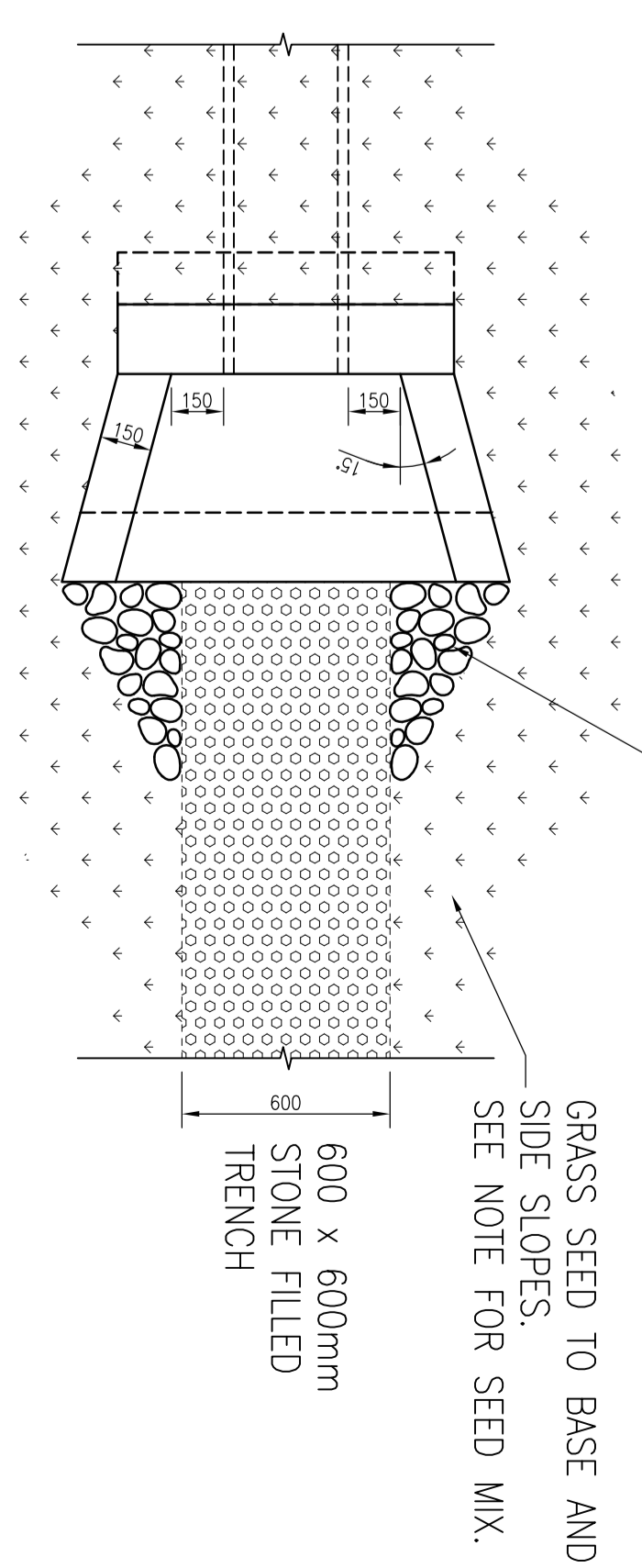
TYPICAL SECTION ACROSS BASIN
Scale 1:25



INLET HEADWALL SECTION
Scale 1:20



OUTLET HEADWALL SECTION
Scale 1:20

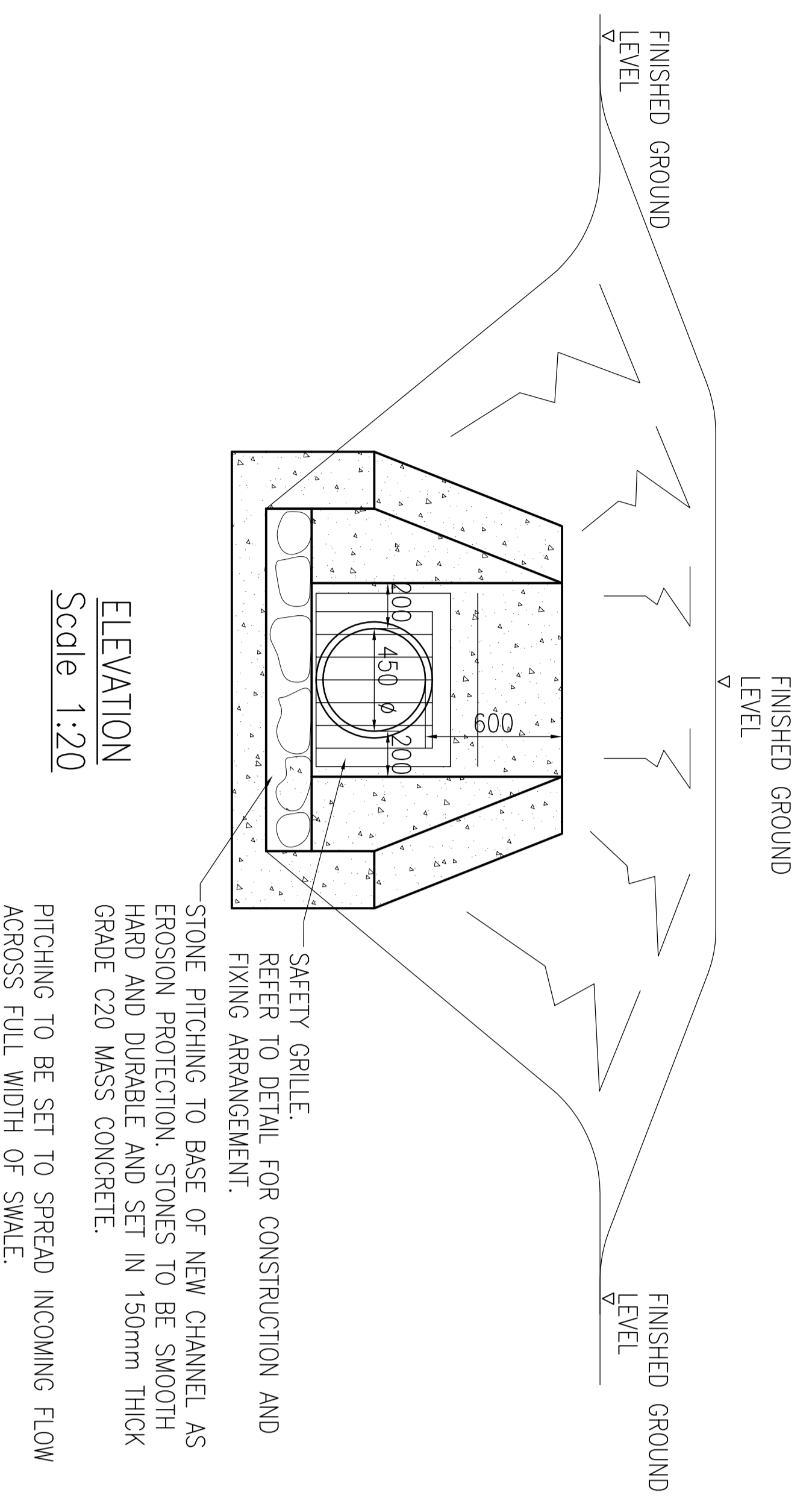
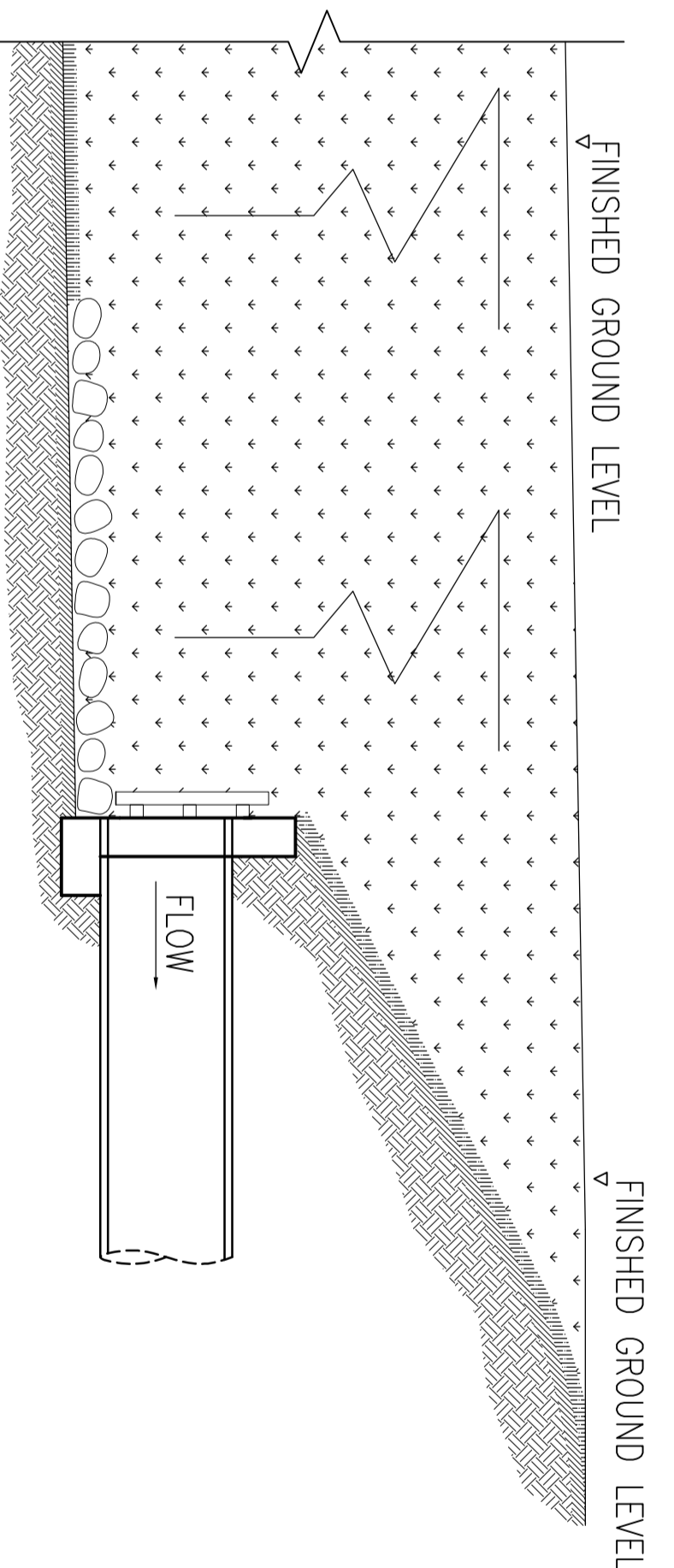
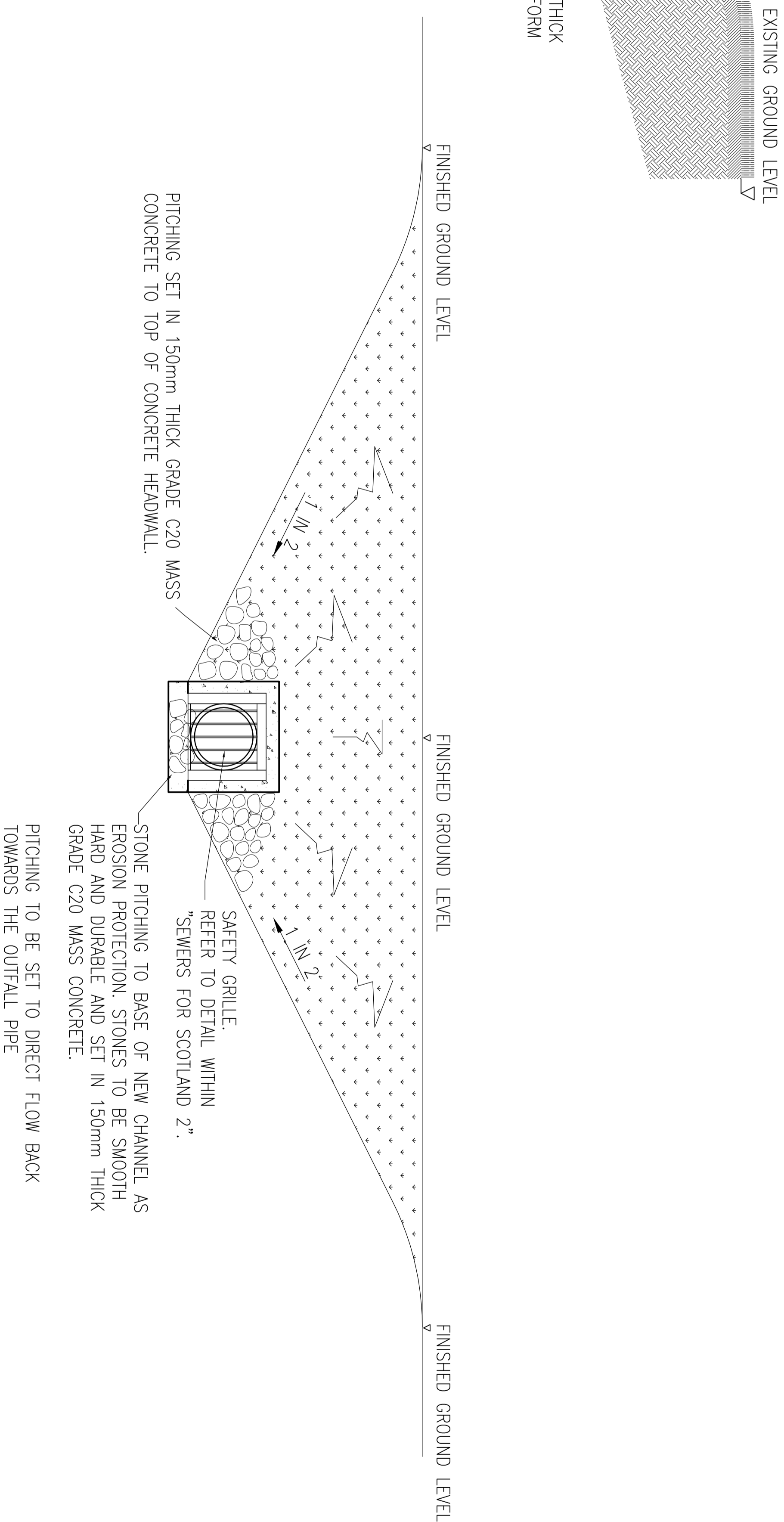
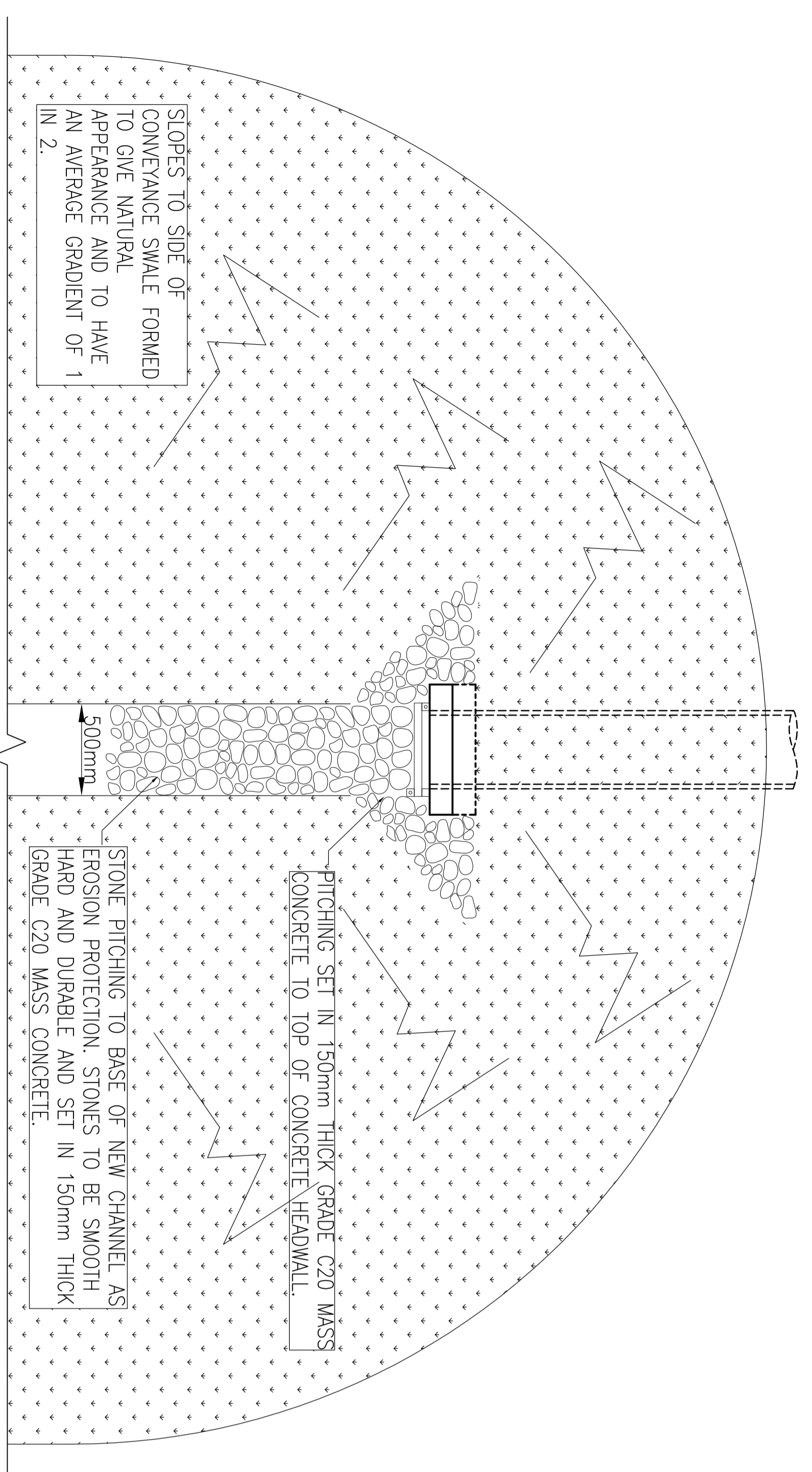
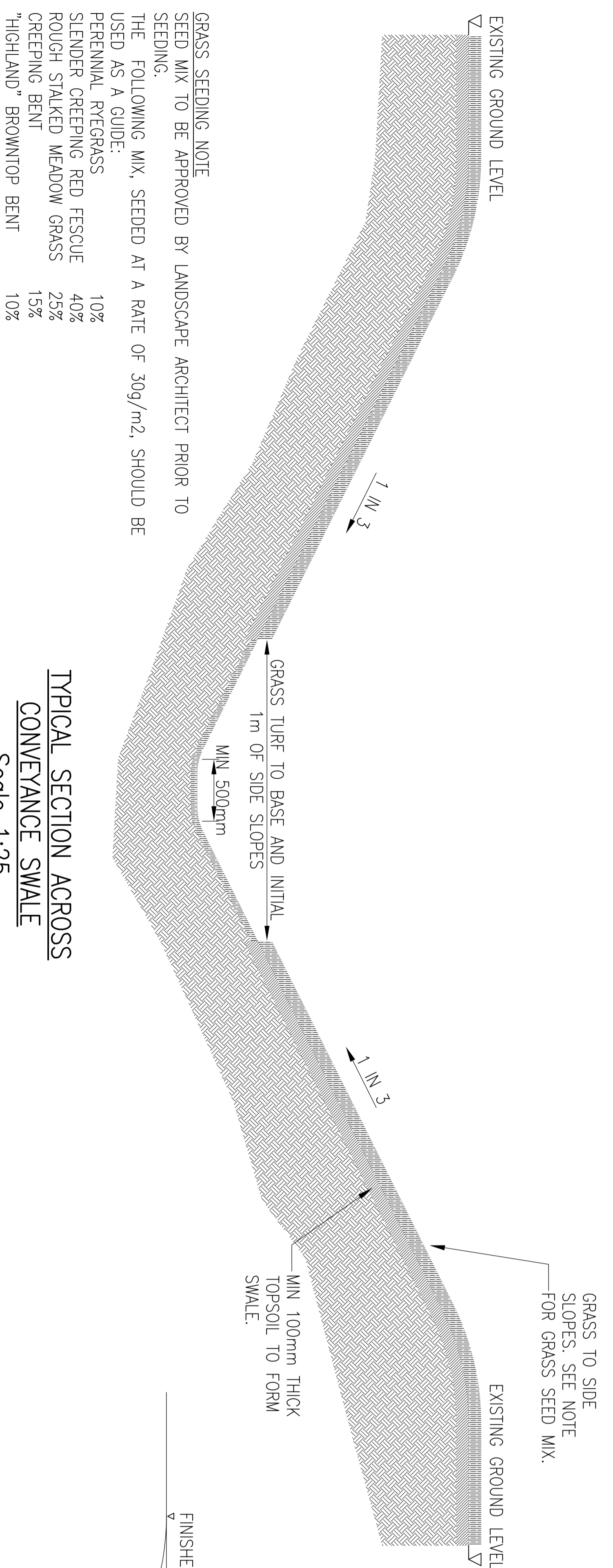


PLAN OF HEADWALL
Scale 1:20

GRASS SEEDING NOTE
SEED MIX TO BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO SEEDING. THE FOLLOWING MIX SHOULD BE USED AS A GUIDE:
PERENNIAL PREGRASS 10%
SLENDER CREEPING RED FESCUE 40%
ROUGH STALKED MEADOW GRASS 25%
CREEPING BENT 15%
"HIGHLAND" BROWNTOP BENT 10%

CONTRACT NO.	11442	SCALE	AS SHOWN
DRAWING NO.	GILB1-COMM-CA-021_02		
DESIGNATION	GILS BAY 132/33KV SUBSTATION COMMON		
TITLE	DETENTION BASIN CONSTRUCTION DETAILS GILS BAY 132/33KV SUBSTATION		
DATE	18/05/15	REVISED	30/04/15
BY	AS	CHECKED	AS
APPROVED	DATE		
CONTRACT NO.	109249		
CUSTOMER	SCOTTISH & SOUTHERN ENERGY		
DESIGNER	Balfour Beatty ABB		

Balfour Beatty ABB



TYPICAL CROSS SECTION OF CONVEYANCE SWALE
Scale 1:25

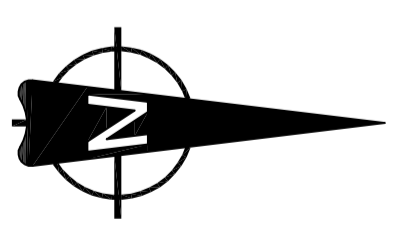
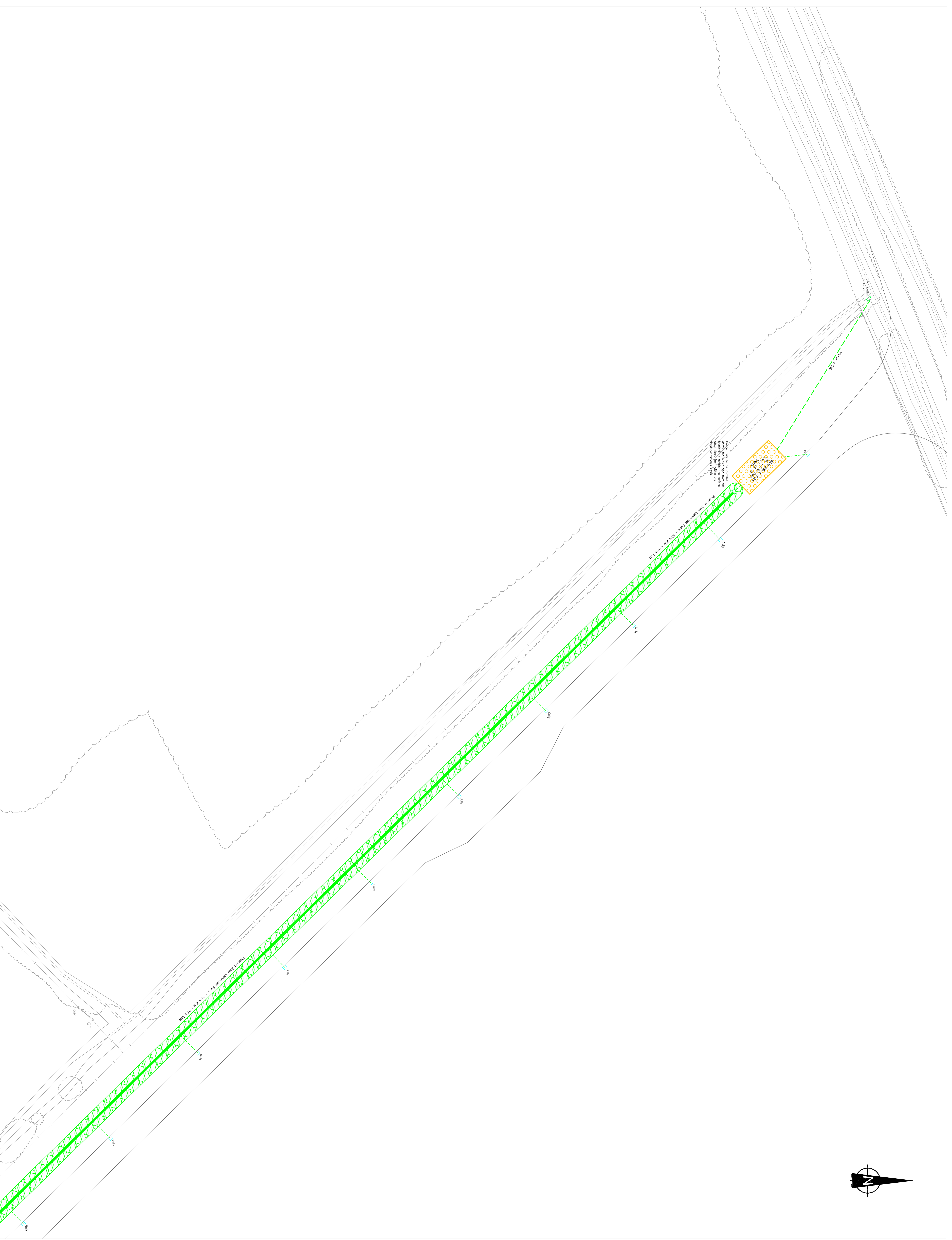
OUTLET ELEVATION
Scale 1:25

PLAN OF OUTLET
Scale 1:25

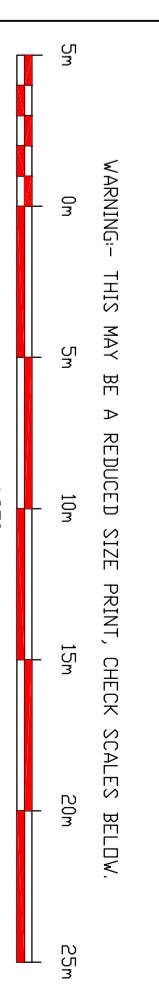
TYPICAL SECTION ACROSS CONVEYANCE SWALE
Scale 1:25

CONTRACT No.	11442	SCALE	AS SHOWN
DRAWING No.	GLB1-COMM-CA-021_01		
TITLE	CONVEYANCE SWALE CONSTRUCTION DETAILS GILS BAY 132/33KV SUBSTATION		
CUSTOMER	SCOTTISH & SOUTHERN ENERGY		
DESTINATION	GILS BAY 132/33KV SUBSTATION COMMON		
APPROVED	DATE	DESCRIPTION	
1	18/05/15	AMENDED TO SUIT COMMENTS IN 130823-RRR-123	
00	30/04/15	FIRST ISSUE	
DRAWN	CHECKED	DATE	
1092149			

Balfour Beatty **ABB**



- DRAINAGE LEGEND**
- SURFACE WATER DRAIN
 - STONE FILLED FILTER TRENCH
 - SAND
 - GALLEY



NO.	DATE	DESCRIPTION
2	J.S.	AMENDED TO SUIT COMMENTS IN 13.0629-RRR-119
1	J.S.	18/06/15
01	J.S.	DRAWING UPDATED TO SUIT CURRENT LAYOUT PROPOSALS
0	J.S.	30/04/15
0	J.S.	FIRST ISSUE

APPROVED DATE	DESCRIPTION
15/04/15	
30/04/15	
18/06/15	
15/04/15	

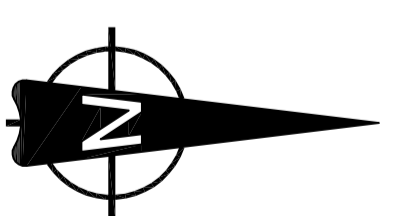
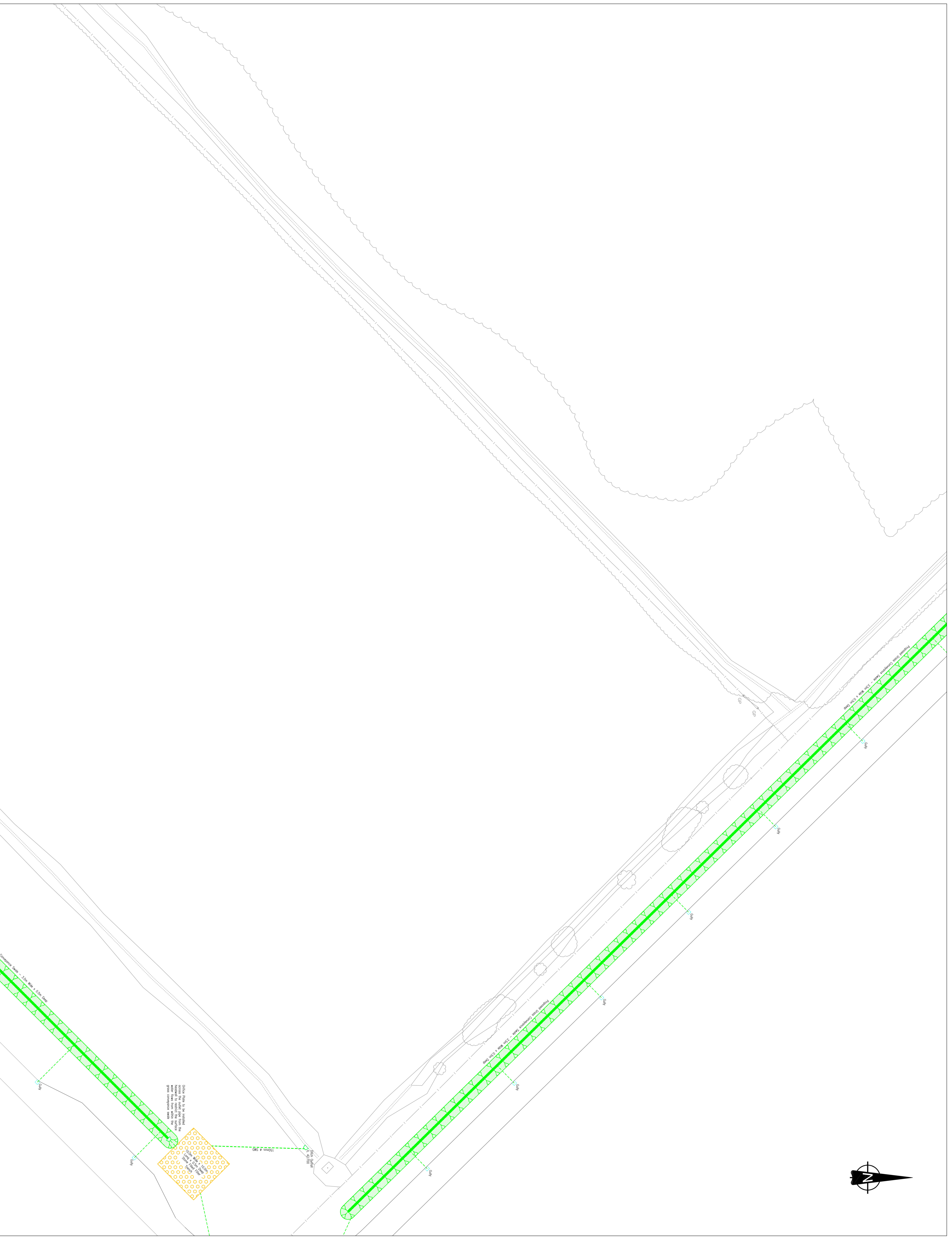
CUSTOMER
SCOTTISH & SOUTHERN ENERGY

DESTINATION
GILLS BAY 132/33KV SUBSTATION COMMON

Balfour Beatty ABB

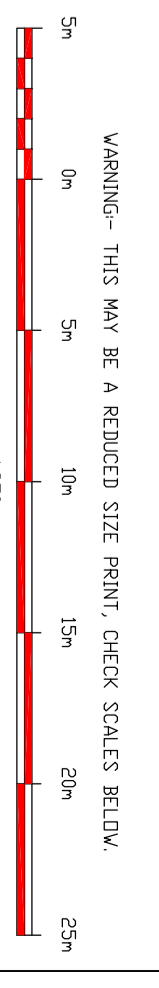
DRAINAGE LAYOUT SHEET 1
GILLS BAY 132/33KV SUBSTATION

CONTRACT No. 11442 SCALE 1/250
DRAWING No. GILB1-COMM-CA-020_01



DRAWING LEGEND

- SURFACE WATER DRAIN
- STONE FILLED FILTER BRANCH
- SMALLE
- QUALITY



NO.	DATE	DESCRIPTION
2	18/06/15	AMENDED TO SUIT COMMENTS IN 13.0629-RRR-119
1	24/04/15	SCALE AMENDED ON PLAN AND GENERAL UPDATES CARRIED OUT TO COMMENT
00		FIRST ISSUE

DESIGN NO. 109249

REVISION CHECKED DATE DESCRIPTION

APPROVED DATE

CUSTOMER
SCOTTISH & SOUTHERN ENERGY

DESTINATION
GILLS BAY 132/133KV SUBSTATION COMMON

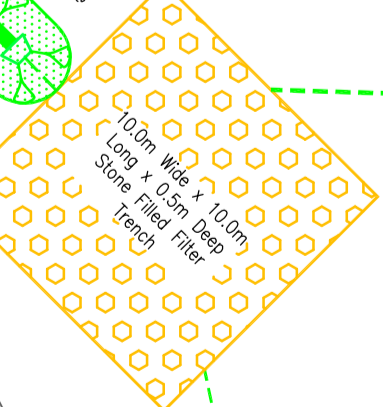
TITLE
DRAINAGE LAYOUT SHEET 2
GILLS BAY 132/133KV SUBSTATION

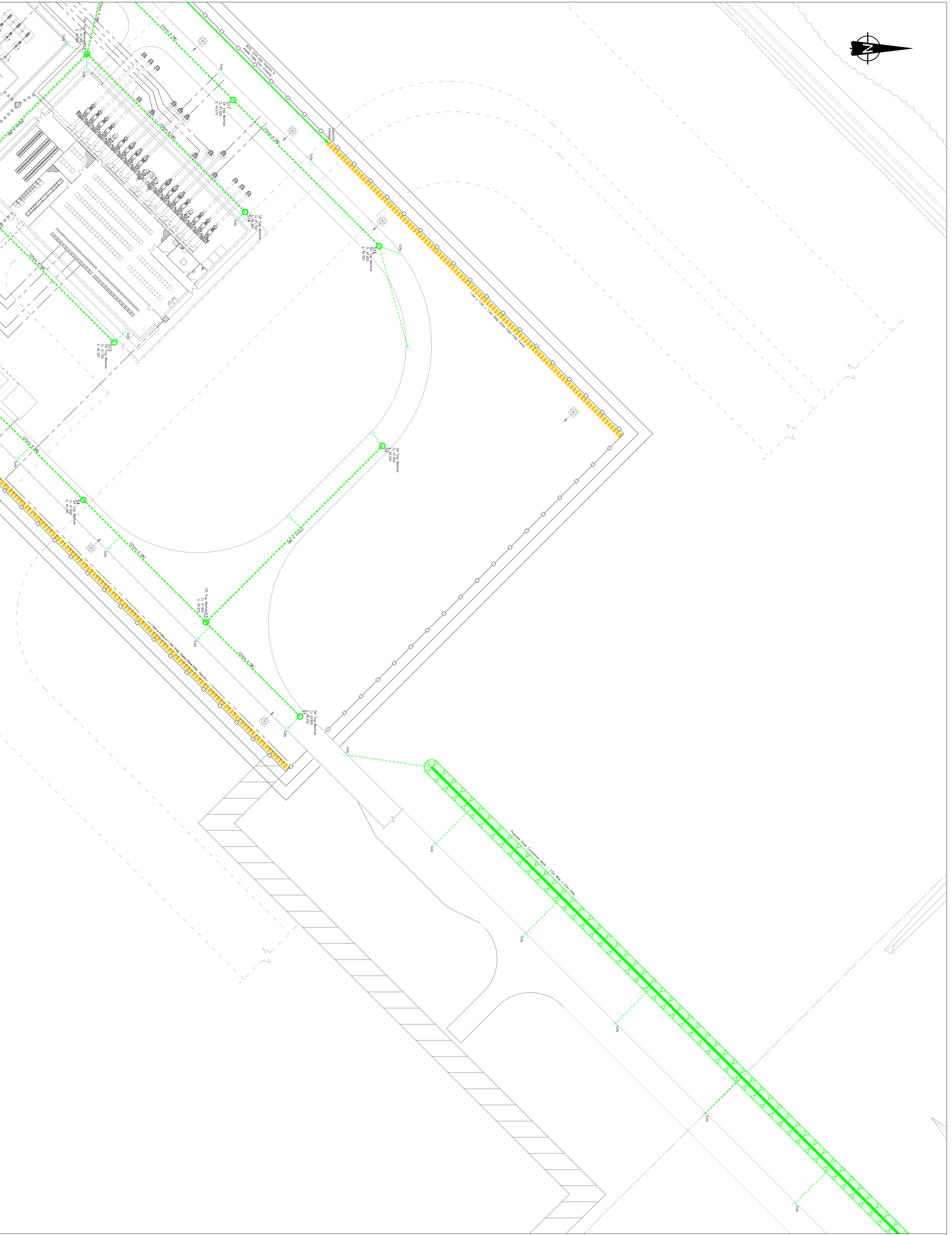
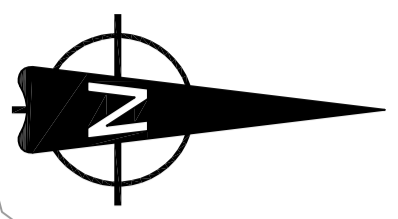


CONTRACT NO. 11442 **SCALE** 1/250

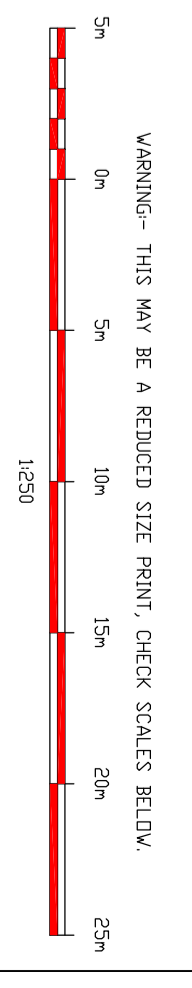
DRAWING NO. GLB1-COMM-CA-020_02

OTHER NOTES TO BE AMENDED AND AGREED TO BY THE CLIENT AND CONSULTANT. ALL AMENDMENTS TO BE MADE IN RED. THE CONSULTANT WILL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED IN THIS DRAWING.





- DRAINAGE LEGEND**
- SURFACE WATER DRAIN
 - TREATED STORM DRAIN
 - STONE FILLED FILTER FRENCH
 - SILT TRAP MANHOLE
 - INSPECTION CHAMBER
 - MANUAL SHUT-OFF VALVE
 - ◇ GULLY
 - ▨ SWALE



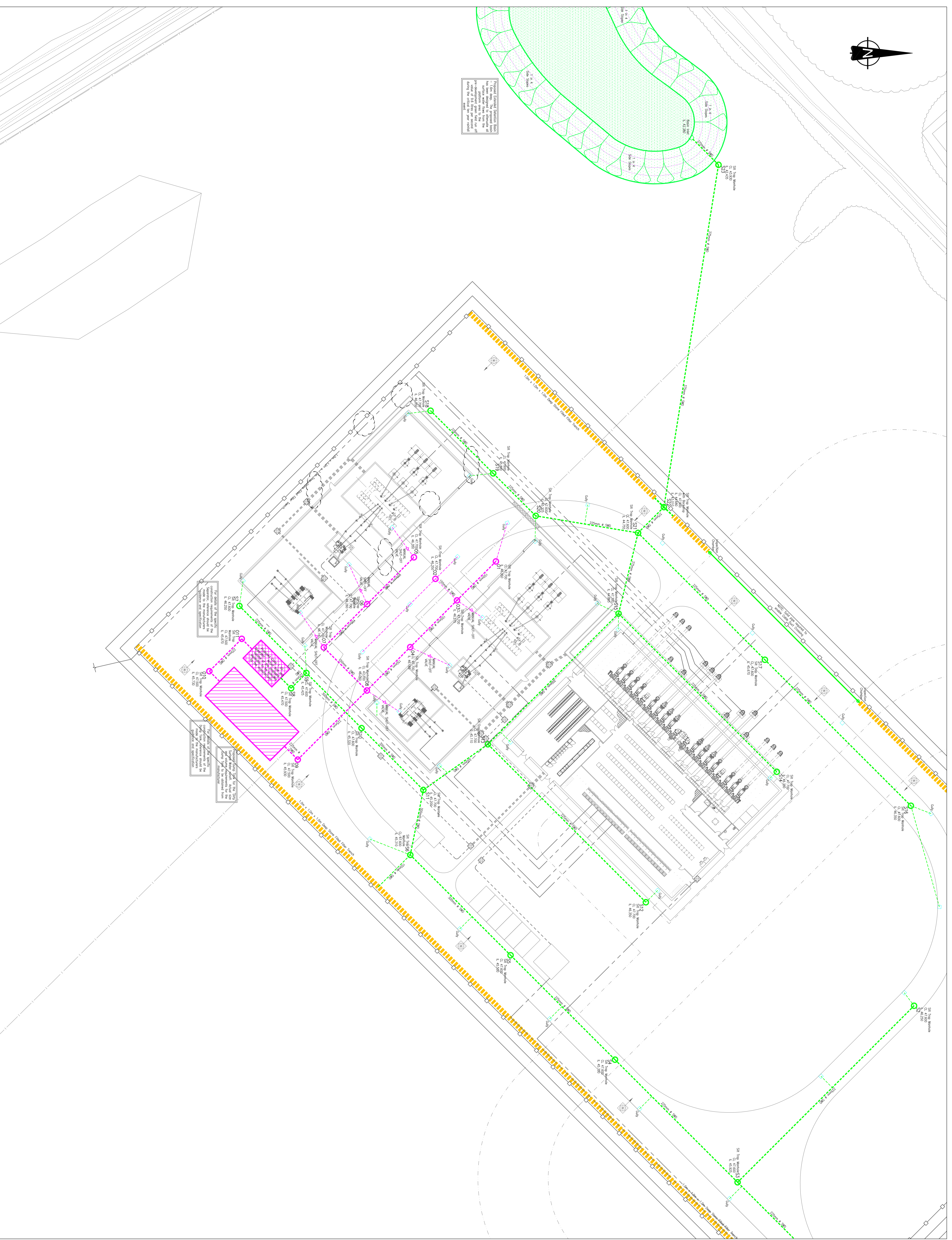
NO.	DATE	DESCRIPTION
2	18/06/15	AMENDED TO SUIT COMMENTS IN 13/06/15-RRR-119
1	24/04/15	SCALE AMENDED ON PLAN AND GENERAL UPDATES CARRIED OUT TO COMMENT
0	15/04/15	FIRST ISSUE

APPROVED DATE: 15/04/15
 DRAWN CHECKED: [Signature]
 DESCRIPTION: [Blank]
 APPROVED DATE: 24/04/15
 DRAWN CHECKED: [Signature]
 DESCRIPTION: [Blank]

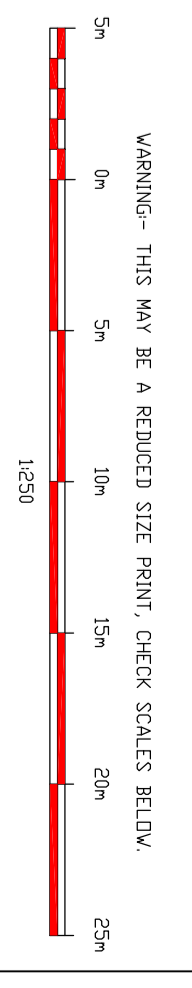
CUSTOMER: SCOTTISH & SOUTHERN ENERGY
 DESTINATION: GILLS BAY 132/133KV SUBSTATION COMMON
 TITLE: DRAINAGE LAYOUT SHEET 4
 GILLS BAY 132/133KV SUBSTATION

Balfour Beatty ABB

CONTRACT No: 11442 SCALE: 1/250
 DRAWING No: GLB1-COMM-CA-020_04



- DRAINAGE LEGEND**
- SURFACE WATER DRAIN
 - TREATED STORM DRAIN
 - STONE FILLED FILTER TRENCH
 - S1T TRAP MANHOLE
 - S1T TRAP MANHOLE
 - INSPECTION CHAMBER
 - MANUAL SHUT-OFF VALVE
 - ◇ GILTY



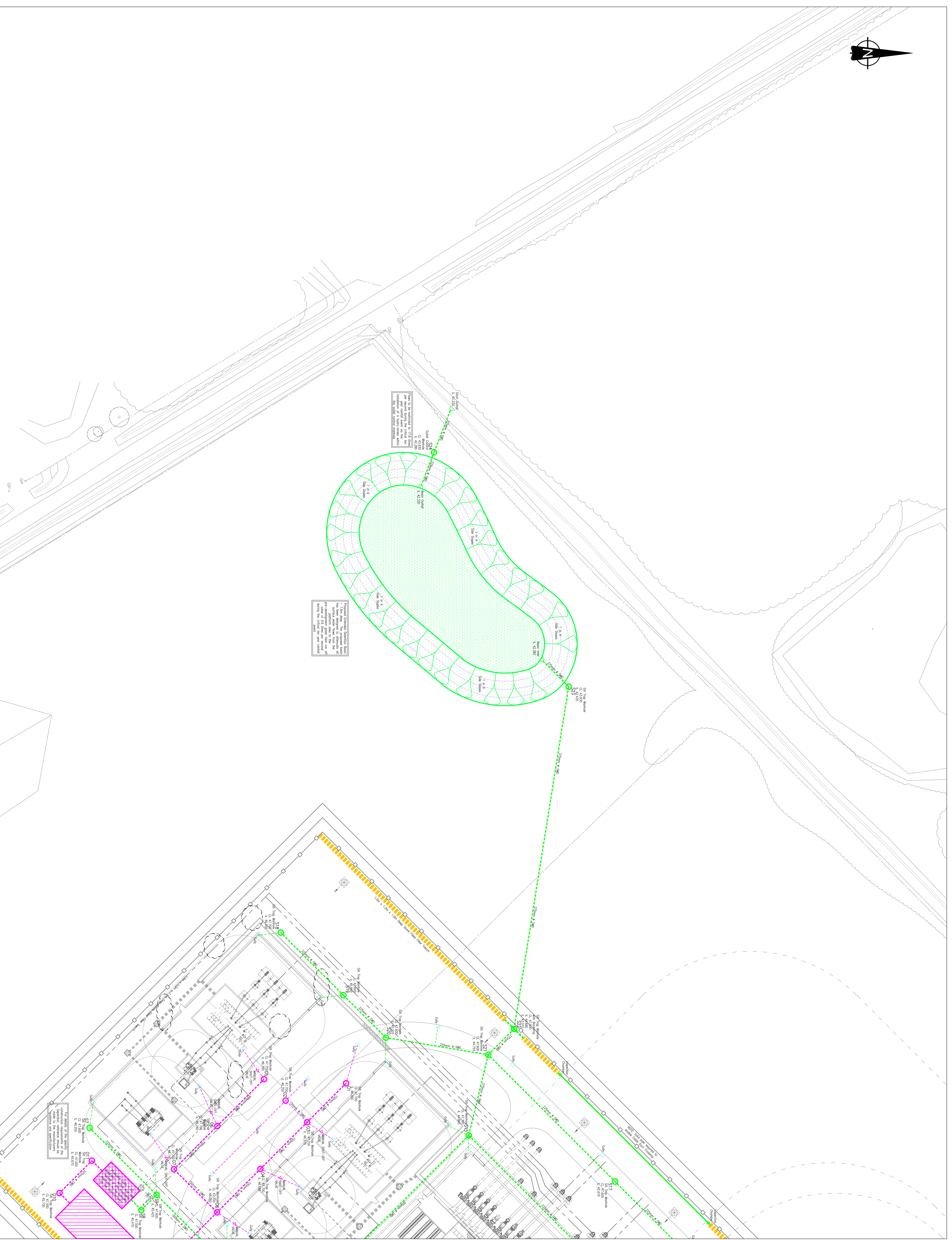
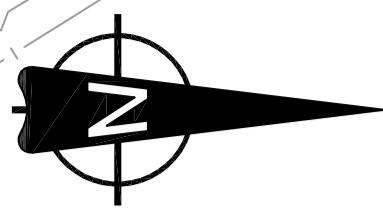
NO.	DATE	DESCRIPTION
00	24/04/15	FIRST ISSUE
01	27/05/15	SCALE AMENDED ON PLAN AND GENERAL NOTES CARRIED OUT TO COMMENT
02	18/06/15	MANUAL SHUT-OFF VALVES ADDED. SURFACE WATER DRAIN CHANGED TO SOLID PIPE AT CABLE DUCT CROSSING.
03	18/06/15	AMENDED TO S1T COMMENTS IN 13.0623-RRR-119

APPROVED DATE: 15/04/15
 DRAWN CHECKED: DESCRIPTION
 CUSTOMER: 109249

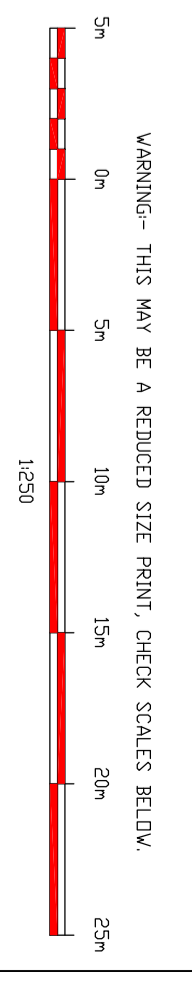
CUSTOMER: SCOTTISH & SOUTHERN ENERGY
 DESTINATION: GILTS BAY 132/133KV SUBSTATION COMMON
 TITLE: DRAINAGE LAYOUT SHEET 5
 GILTS BAY 132/133KV SUBSTATION

Balfour Beatty **ABB**

CONTRACT No: 11442 SCALE: 1/250
 DRAWING No: GILB1-COMM-CA-020_05



- DRAINAGE LEGEND**
- SURFACE WATER DRAIN
 - TREATED STORM DRAIN
 - STONE FILLED FILTER TRENCH
 - SALT TRAP MANHOLE
 - INSPECTION CHAMBER
 - MANUAL SHUT-OFF VALVE
 - ◇ GILTY



NO.	3	AMENDED TO SMT COMMENTS IN 13.0629-RR-119
DATE	18/08/15	
BY	JS	
NO.	02	MANUAL SHUT-OFF VALVES ADDED. SURFACE WATER DRAIN CHANGED TO SOLID PIPE AT CABLE DUCT CROSSING.
DATE	27/05/15	
BY	JS	
NO.	01	SCALE AMENDED ON PLAN AND GENERAL NOTES CARRIED OUT TO COMMENT.
DATE	24/04/15	
BY	JS	
NO.	00	FIRST ISSUE
DATE	15/03/15	
BY	JS	

APPROVED	DESCRIPTION
DATE	
1092149	

CUSTOMER
SCOTTISH & SOUTHERN ENERGY

DESTINATION
GILLS BAY 132/33KV SUBSTATION
COMMON

TITLE
DRAINAGE LAYOUT SHEET 6
GILLS BAY 132/33KV SUBSTATION

Balfour Beatty
ABB

CONTRACT NO. 11442 SCALE 1/250
DRAWING NO. GILB1-COMM-CA-020_06