

NYMNPA

27/11/2018

From: James Cox
Sent: 27 November 2018 16:26
To: Rob Smith
Cc: 'Robert Staniland'
Subject: RE: LNG proposals s96a initial clarifications [NLP-DMS.FID262297]

Rob,

Please find attached our response to these queries, alongside updated versions of the following plans:

- LNG / Generator Plant Compound Layout Plan (ref. 40-ARI-WS-7100-CI-18-01026); and
- LNG / Generator Plant Sections (ref. 40-ARI-WS-7100-CI-10-01027)

These supersede those that were originally submitted on 5th October 2018 and reflect:

- i. A revised lighting scheme;
- ii. The removal of fire water and foam storage tanks; and
- iii. The introduction of a 3m timber screening fence at the south-western boundary of the site.

For consistency, we will also submit to you updated plans for the Phase 6a submission (ref. NYM/2018/0663/CVC), reflecting these same amendments to the LNG facility.

James Cox
Senior Planner

NYMNPA

27/11/2018

From: Rob Smith
Sent: 29 October 2018 15:51
To: James Cox
Cc: Robert Staniland
Subject: LNG proposals s96a initial clarifications

James

As discussed recently, please see attached a request for initial clarifications relating to the LNG s96a proposals.

I look forward to receiving your response in due course.

Kind regards

Rob Smith
Senior Minerals Planner

North York Moors National Park Authority
The Old Vicarage
Bondgate
Helmsley
York
YO62 5BP

LNG proposals – initial clarifications (s96a application - NYM/2018/0662/nm)

- It is assumed that the access road to the LNG compound and the internal access route and parking areas within the compound itself will be provided with a bituminous surface, however this is not specifically shown on the drawings. Please could this be clarified. [This is confirmed.](#)
- As vehicles exiting the LNG facility would presumably exit the Woodsmith site onto the public highway without passing via the main site wheel cleaning facilities, please clarify whether contingency provision for such cleaning will be available if necessary? [As both the drive in and out of the site is always cleaned and the LNG compound is concrete there will be no need for vehicles associated with the LNG facility to clean their wheels.](#)
- Please clarify what surfacing is proposed for other elements of the LNG compound (ie areas not specifically intended for use by vehicles)? [The container bases will be concrete and the areas between the roads will be surfaced in bitmac.](#)
- The layout drawing for the LNG compound shows provision of two lighting columns adjacent to the NE corners of the LNG tanks filling area. There may be potential for light from these to be directed towards the main site entrance area, where existing tree and shrub vegetation is at its thinnest (as noted on the site visit held on 25 October 2018). Is there potential for these columns to be re-located/re-orientated to reduce the potential for this? [The lighting scheme for the LNG facility has been redesigned in response to these comments and now incorporates lower-level bollard lighting, akin to that which has been installed at the Cross Butts P&R facility. This is reflected on a revised site layout plan \(ref. 40-ARI-WS-7100-CI-18-01026 rev. 2\). All higher level lighting, including that around the LNG compound, will be orientated into the site so as to avoid light spill. Lighting will also only be used when it is necessary \(see below\).](#)
- Is the red 'dot' shown on the drawing (but not accompanied by a corresponding 'L' symbol, as used to indicate proposed lighting columns on the drawing), located near the point where the access road enters the main compound, intended to represent a lighting column. If not what does this symbol represent? [This is confirmed and has been clarified on the revised layout drawing. The light will be operated via a control switch at the entrance gate and used on a timer so as to ensure that it is on no longer than necessary.](#)
- Please could more detail be provided of the intended level of illumination from the lighting units, together with details of measures to minimise the potential for light emission in this currently dark area of the site. [As set out above, the lighting scheme has been redesigned so as to minimise the potential for light emissions. Specification details of the proposed lighting are appended to this note.](#)
- Please also clarify whether it is intended that artificial lighting would be in permanent use during hours of darkness? [The LNG facility will be an unmanned site, with lighting only used as and when necessary i.e. for tanker refilling, maintenance or emergencies. When not in use, the site will be unlit, including during night time hours.](#)
- Has consideration been given, in design of the lighting of the scheme, to the potential for presence of protected species or other potentially sensitive ecological receptors? [As detailed above, the revised lighting scheme has sought to keep the quantum and usage of lighting to a minimum. The revised site layout drawing shows how any lighting will be directed into the site – as far as possible – in order to avoid any impacts on protected species or potentially sensitive ecological receptors.](#)

- The covering letter states that all component parts of the LNG plant will have a RAL6008 finish. For the avoidance of doubt does this include the exhaust stacks and other ancillary equipment used in association with the generators and transformers? [This is correct.](#)
- It is understood from a recent telephone conversation with Rob Staniland that it may not be practicable for the LNG storage tanks themselves to be painted a dark colour, in order to reduce the potential for heat absorption. Please could you confirm a proposed alternative colour for the tanks? [This is correct as the supplier – Calor – has since confirmed that a dark colour could have a negative impact on the insulation capacity of the tanks. Accordingly, the proposed alternative colour is a standard white. The tanks will be hidden behind a screen fence that forms part of the revised layout – see below.](#)
- It is noted that two 10m high CCTV columns are proposed, together with a smaller column. Is any visible lighting proposed in direct association with these CCTV columns? What is the proposed finish of the columns? [No direct lighting is proposed by virtue of the CCTV system being infrared. The columns will have a power coated steel RAL6008 finish.](#)
- It was noted during a site visit on 25 October that there may be potential for highly filtered views of the LNG compound area from the B1416 in the vicinity of the main Woodsmith Mine entrance. This is unlikely to be a significant concern in terms of day time views given the proposed colouring of plant and equipment but could be more significant at night (see above). Has consideration been given to the potential for installation of a screen fence (ie similar to the environmental fencing along part of the western boundary of the Woodsmith Mine fence) to the south western boundary of the main compound area, rather than the standard 2.4m security fence? [The revised layout now includes a screen along the south western boundary. This will comprise a 3m high, close boarded timber fence, to the same specification as that adjacent the NPG kiosk. As an added benefit, the fence may also serve to reduce the noise impact at the most proximate receptors at Soulsgrave Farm and Sneaton Foss Caravan Park. In this respect, it should be noted that noise levels associated with the Phase 6a works were not predicted to exceed the agreed construction noise limits at any of the identified noise-sensitive receptors during the daytime, evening or night-time. Nevertheless, the additional barrier would be expected to attenuate any noise emissions further.](#)

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Appendix – Lighting Specification (Bollard Lighting)

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Kingfisher Lighting

Datasheet

Deco

Deco is a robust bollard with a classic look suitable for most schemes. Available in LED it comes with both emergency and photocell options. The effect is a comfortable, low-glare light output.

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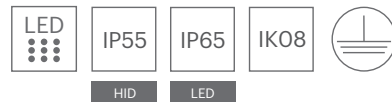
Key Features

	Lumen Output	Power
LED	1,322 (luminaire lumens) (1,734 LED Lumens)	20W
Ceramic metal halide	3,300 - 7,000	35W - 70W
Cosmopolis	-	45W - 60W
Metal halide	5,300	70W
High pressure sodium - SON	6,500	70W
Compact fluorescent	-	42W

- 230Vac
- Efficacy 86.7 luminaire lm/W
- 2000-4200K (HID), 4000K (LED), CRI >70
- Lifetime, >50,000hr L70
- Flange plated
- Bolt on root option

Applications

- Urban environment
- Residential
- Hospitality & leisure
- Retail
- Commercial
- Pathways & parks



Optics

Deco Symmetrical with polycarbonate lens

Specification Text

The luminaire shall be manufactured from high pressure die-cast aluminium. The LED version shall have a luminous efficacy up to 86.7 lm/W and will be capable of producing up to 1,322 luminaire lumens at 4000K with a CRI>70. The luminaire will be rated at IP65.

Dimensions



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Specifications

Weight	7.36-12.5 kg
Material	Die-cast aluminium
Paint Finish	Anthracite grey (RAL 7016)

All units of measurement in mm.

Code	Power	Light Source	Luminaire Lumens	Optic	CCT(K)	IP	IK	Weight (kg)	Paint Finish	Product Type
LED										
BDE1020LEDFKG	20W	LED	1322	Symmetrical polycarbonate lens	4000	IP65	IK08	7.36	Anthracite grey (RAL 7016)	Standard 20W flanged
BDE1020LEDFKGPEC	20W	LED	1322		4000	IP65	IK08	7.89	Anthracite grey (RAL 7016)	With photocell flanged
BDE1020LEDFKGEN	20W	LED	1322		4000	IP65	IK08	7.70	Anthracite grey (RAL 7016)	Emergency option flanged
Ceramic Metal Halide										
BDE1035CHFKG	35W	Ceramic Metal Halide	3300	Symmetrical polycarbonate lens	4000	IP55	IK08	12.50	Anthracite grey (RAL 7016)	Standard 35W flanged
Cosmopolis										
BDE1045COSFKG	45W	Cosmopolis	-	Symmetrical polycarbonate lens	4000	IP55	IK08	10.00	Anthracite grey (RAL 7016)	Standard 45W flanged
Compact Fluorescent										
BDE1042FFFKG	42W	Fluorescent	3200	Symmetrical polycarbonate lens	4000	IP55	IK08	7.80	Anthracite grey (RAL 7016)	Standard 42W flanged
BDE1042FFFKGPEC	42W	Fluorescent	3200		4000	IP55	IK08	7.90	Anthracite grey (RAL 7016)	With photocell flanged
BDE1042FFFKGEN	42W	Fluorescent	3200		4000	IP55	IK08	9.41	Anthracite grey (RAL 7016)	Emergency option flanged
BDE1042FFFKGENPEC	42W	Fluorescent	3200		4000	IP55	IK08	9.51	Anthracite grey (RAL 7016)	Emergency option with photocell flanged

Codes with **EM** at the end relate to emergency version of fitting

Codes with **PEC** at the end relate to photocell option

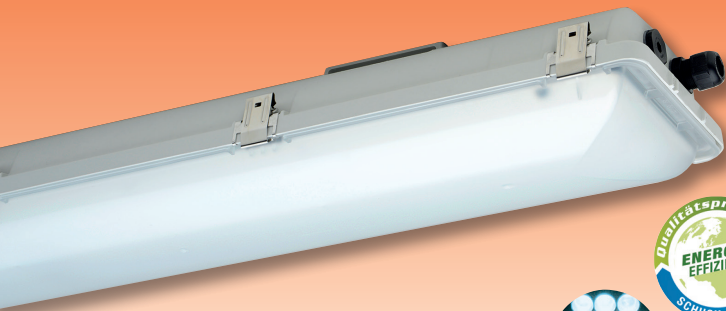
Accessories / Options

Photocell option	See specification table
Emergency option	See specification table
Bolt-on root	Contact us for details

Appendix – Lighting Specification (LNG Compound Lighting)

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ExeLed 2 N

LED-Emergency Light Fitting for Ex-Zones 2/22

Series nD867...

Application:

Hazardous locations of zones 2 and 22, in workshops for the illumination of the escape routes etc. according to DIN VDE 0108.

Design:

Housing: Glass fibre reinforced polyester resin. Version H with separate battery box at one small side of the housing.

Cover: Injected polycarbonate, frosted (F) or clear.

Closure: Stainless steel clips (KE), two of them as safety clip (KES), to be opened with

screwdriver only.

Reflector: Aluminium, painted, carrying the LED-modules and all electrical components, clipped into the cover, suspendable.

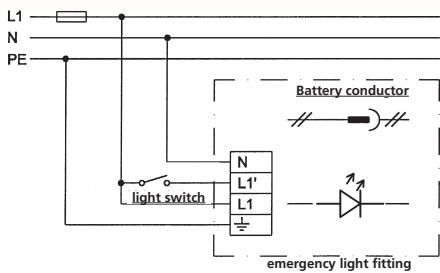
Connection: 4 poles up to 2,5 mm².

Cable entries: 3 entries M25 x 1,5, (2 glands - one of them is plugged)

Standard: Facing downwards or forwards.

Mechanical installation:

Mounting accessories see spare parts/ accessories. Sealing gaskets for direct ceiling mounting are included.

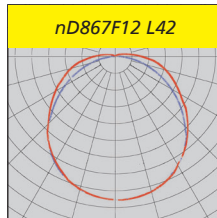
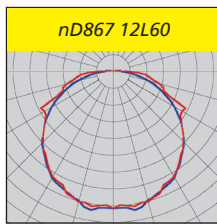


Starting:

Connect battery conductor.

Out-of-operation: separate battery conductor.

Stand-by operation: Do not connect L1'.



Technical Data:

LED: Line modules 5,000K, typically CRI 80, Lifetime $L_{70B_{10}} > 100.000h$, $L_{80B_{50}} > 100.000h$ at max. ambient temperature

Incorporated NiCd battery, electronic charger, short circuit protected battery and reverse battery protection

Electronic deep discharge protection: acc. to EN 61347-2-7

Re-charging time: 24h, acc. to EN 60598-2-22

Automatic monitoring: of the emergency light fitting according to EN 62034, indication of the test results by 2-coloured LED (luminescence diode) at the luminaire

Mode of operation:

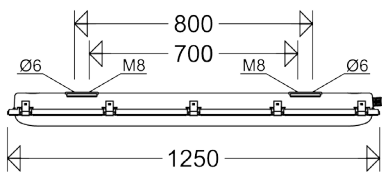
maintained operation = switching over to battery operation in case of mains failure, line modules will be operated with reduced luminous flux as emergency lighting.

stand-by operation = switching on in case of mains failure.

Options:

- dimmable via DALI-interface (DIMD) - inhibiting facility

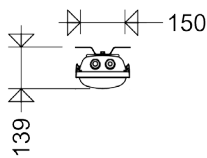
nD867... 12L.. (without battery box)



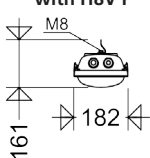
with HK865 P



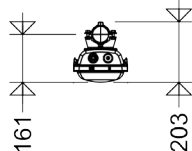
with 15AP P



with H8V P



with RO84 ... P



SCHUCH Quality - your advantage:

- reliable, fail-safe and long-lasting
 - operation in maintained, switched maintained or stand-by mode possible
 - multifunctional LED with coded indication of the functions, states and potential faults of the electronic device and the battery
 - automatic weekly function test
 - automatic annual duration test
 - manual actuation of duration test is possible
 - easy battery replacement due to connector
- flexible when installed in the light band



Notes:

Properties, limitations and details for controlling LED-light fittings: See „Technical Supplement“.

All technical data is relevant at the time of print.

Actual technical data can be found in the internet under www.schuch.de.

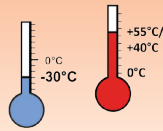
Article no.	Type	Power consumption [W] *	Luminous flux [lm] *	Luminous flux [lm] * (emergency)	Luminous efficacy [lm/W] **	Cover frosted	Cover clear	1h operation time	3h operation time	Ta max [°C]	Energy efficiency class	Substitute for **	Weight [kg] (without packing material)
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Note:

This light fitting is not suitable for applications in areas with permanent high humidity in combination with only short periods of operation, such as sewage or stormwater retention tanks or water treatment plants.

nD867...

II 3 G Ex ec IIC T4 Gc
II 3 D Ex tc IIIC T80°C Dc
IP66



Ignition protection: ec

Marking:

II 3 G Ex ec IIC T4 Gc (Zone 2)

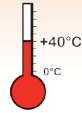
II 3 D Ex tc IIIC T80°C Dc (Zone 22)

Rated voltage: 220-240V AC, 50-60Hz.

Permissible ambient temperature:

-30°C up to +55°C

reduced emergency light duration if operated below 0°C. For nD867 H Nominal range acc. to EN60598-2-22, 0°C up to 45°C.



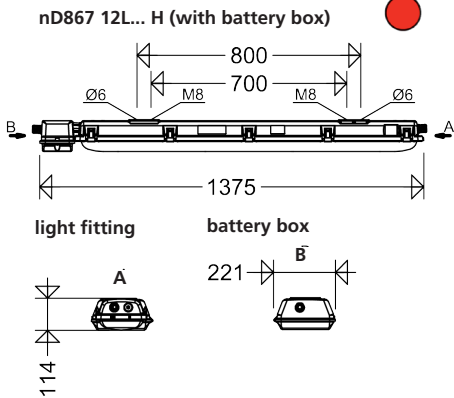
86700 0001	nD 867F 12L42/1/1,6	33	4.420	750	134	•	•	•	40	A++	2 x 36W	5,1
86700 0002	nD 867F 12L60/1/1,6	48	6.060	750	126	•	•	•	40	A++	2 x 58W	5,1
86700 0011	nD 867 12L42/1/1,6	33	4.690	800	142	•	•	•	40	A++	2 x 36W	5,1
86700 0012	nD 867 12L60/1/1,6	48	6.430	800	134	•	•	•	40	A++	2 x 58W	5,1
86700 0101	nD 867F 12L42/3/4	33	4.420	750	134	•	•	•	40	A++	2 x 36W	5,5
86700 0102	nD 867F 12L60/3/4	48	6.060	750	126	•	•	•	40	A++	2 x 58W	5,5
86700 0111	nD 867 12L42/3/4	33	4.690	800	142	•	•	•	40	A++	2 x 36W	5,5
86700 0112	nD 867 12L60/3/4	48	6.430	800	134	•	•	•	40	A++	2 x 58W	5,5

***. versions L60 with through-wiring Tmax +35°C

for high temperatures up to +55°C

Design:

Same as standard version, but with separate battery box at one small side of the housing.



86700 0201	nD 867F 12L42/1/1,6 H	33	4.420	750	134	•	•	•	55	A++	2 x 36W	6,1
86700 0202	nD 867F 12L60/1/1,6 H	48	6.060	750	126	•	•	•	55	A++	2 x 58W	6,1
86700 0211	nD 867 12L42/1/1,6 H	33	4.690	800	142	•	•	•	55	A++	2 x 36W	6,1
86700 0212	nD 867 12L60/1/1,6 H	48	6.430	800	134	•	•	•	55	A++	2 x 58W	6,1
86700 0301	nD 867F 12L42/3/4 H	33	4.420	750	134	•	•	•	55	A++	2 x 36W	6,5
86700 0302	nD 867F 12L60/3/4 H	48	6.060	750	126	•	•	•	55	A++	2 x 58W	6,5
86700 0311	nD 867 12L42/3/4 H	33	4.690	800	142	•	•	•	55	A++	2 x 36W	6,5
86700 0312	nD 867 12L60/3/4 H	48	6.430	800	134	•	•	•	55	A++	2 x 58W	6,5

* see notes

** The given information is for rough orientation only. In each individual case a lighting calculation is necessary.

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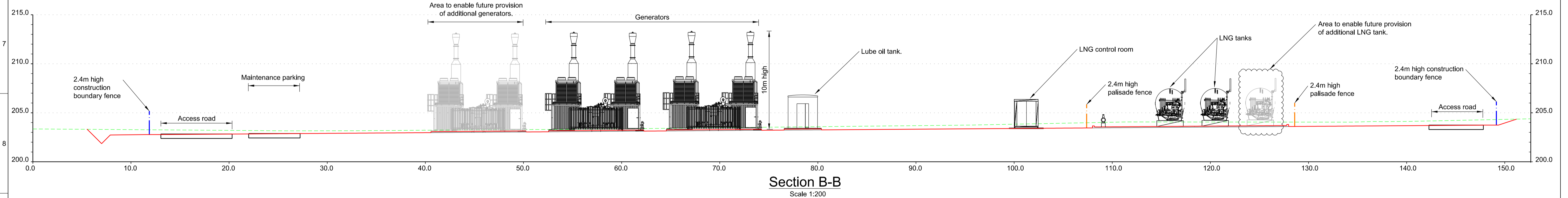
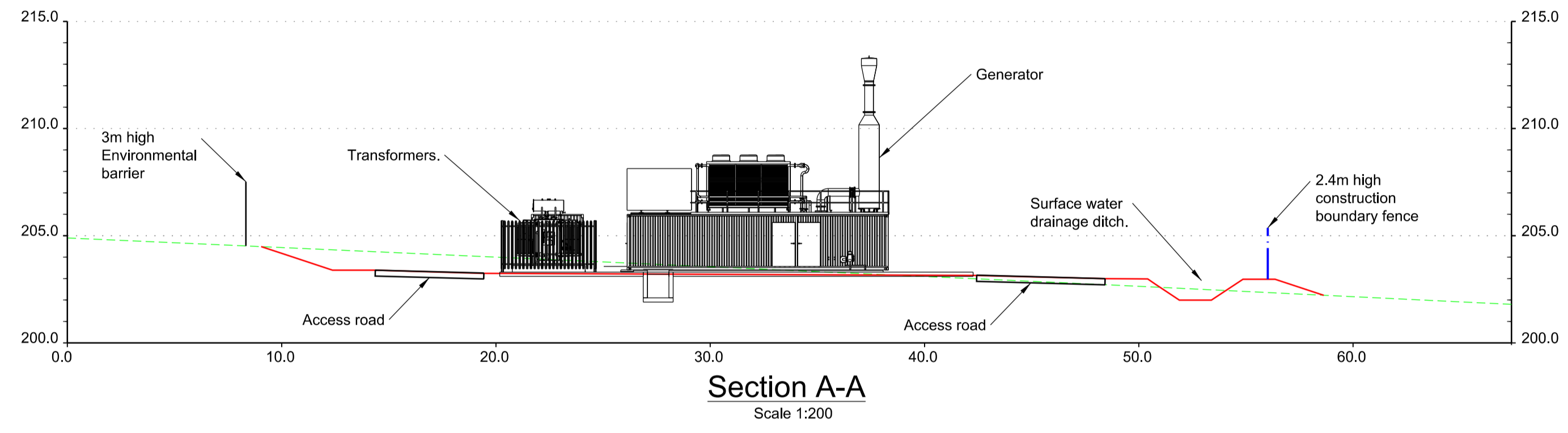
Explosion protected Light Fittings

Accessories / Spare Parts

Article No.	Type	
Spare batteries		
90222 9029	AKKU NiCd 6V 4,0Ah	Spare battery 4.0Ah
90222 9030	AKKU NiCd 6V 1,6Ah	Spare battery 1.6Ah
90222 9021	AKKU 2627 4,0Ah	Spare battery 4.0Ah (Types ...H)
90222 9023	AKKU 8020 1,6Ah	Spare battery 1.6Ah (Types ...H)
Spare covers		
86601 9001	8654F	PC, frosted
86601 9000	8654	PC, clear
Glands/breather		
90117 9006	2537 G	ex-protected plastic cable gland M25 x 1,5 with nut
90118 9006	2538 G	ex-protected plastic plug M25 x 1,5 with nut
90259 9000	Klimastutzen EX	M25 x 1,5
Mounting material		
86501 9003	HK 865 P	2 retaining clips for variable mounting distances
90001 0002	H8V P	2 suspensions eyes with bolts, stainless steel
90000 0002	15A P	2 ceiling brackets, hot galvanized steel
90032 0002	15AV P	2 ceiling brackets, stainless steel
90037 0004	RO84 112 A P	2 pipe clamps 1 1/2", stainless steel, with support
90038 0004	RO84 2 A P	2 pipe clamps 2", stainless steel, with support
26000 0004	W26 P	2 wall mounting angles
26000 0002	W26/30 P	2 wall mounting angles 30°
26000 0003	W26/45 P	2 wall mounting angles 45°

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AMENDED



Notes:
1. For sections locations refer to drawing 40-ARI-WS-7100-CI-18-01026.

Key:
— Proposed ground
- - - Existing ground

2	26/11/18	CG	CW	CW
Planning				
1	23/11/18	KK	CW	CW
Planning				
0	05/10/18	KK	CW	CW
Planning				
Issue	Date	By	Chkd	Appd

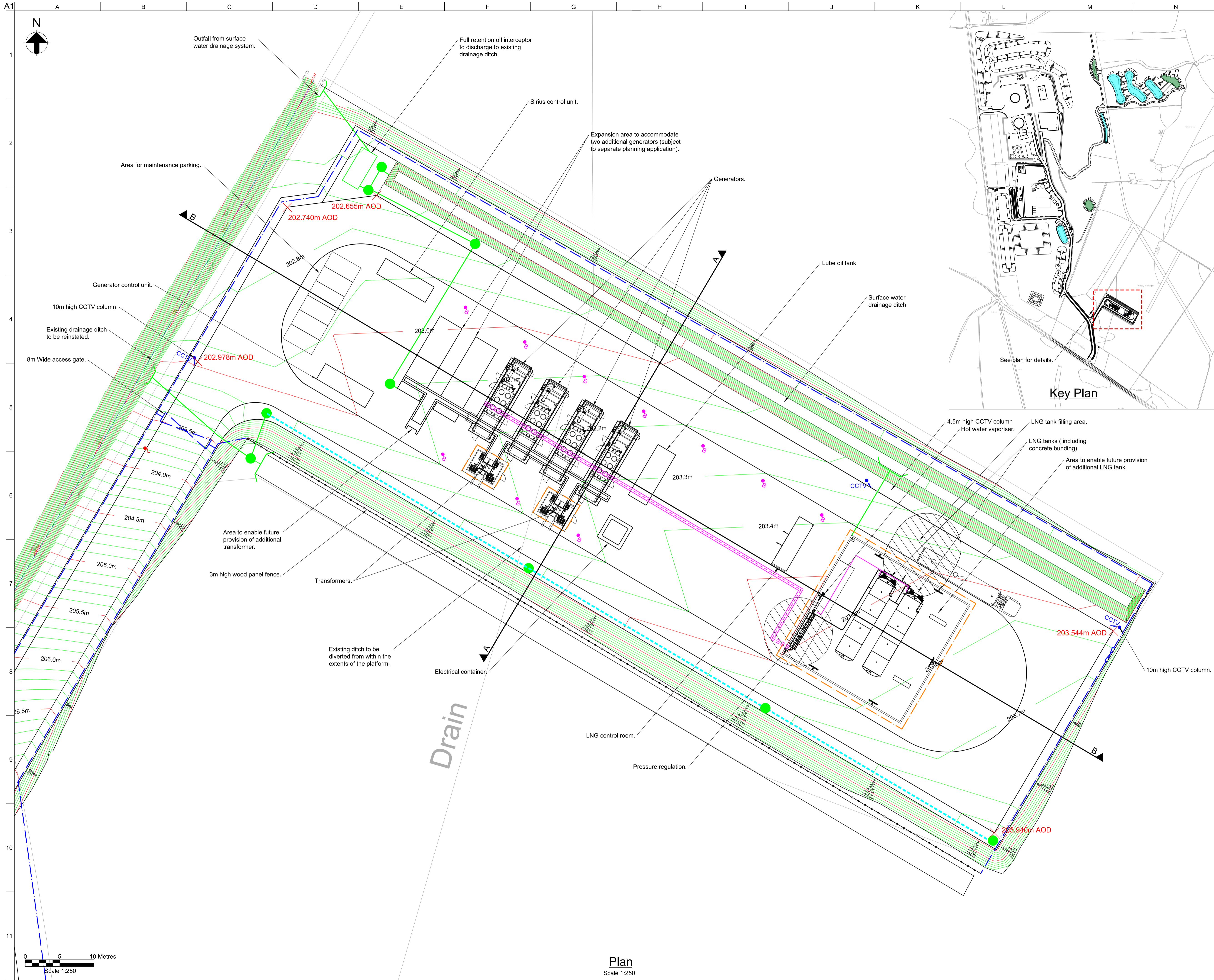


Client
Sirius Minerals Plc

Job Title
Woodsmith Mine
Proposed Minehead

Woodsmith Mine
Section 96a
LNG / Generator Plant
Sections

Scale at A1	1:200
Discipline	Civils
Job No	253285
Drawing No	40-ARI-WS-7100-CI-10-01027
Issue	2
Planning Status	Planning



- Notes:
- For sections refer to drawing 40-ARI-WS-7100-CI-10-01027.
- Key:
- Surface water drainage carrier pipe
 - Surface water drainage manhole
 - Culvert
 - Filter drain
 - Minor contour
 - Major contour
 - 2.4m high palisade fence
 - 4m high lighting column
 - 2.4m high construction boundary fence
 - 3m high wood panel fence
 - CCTV
 - CCTV column
 - 1m High lighting bollard
 - LNG compound lighting
 - Exclusion zone. Open drains and access ways to underground drains are not permitted within hatched area

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AMENDED

2	27/11/18	JB	CW	CW
Planning				
1	23/11/18	CG	CW	CW
Planning				
0	05/10/18	KK	CW	CW
Planning				
A	04/10/18	KK	CW	CW
Draft				
Issue	Date	By	Chkd	Appd

ARUP

Client
Sirius Minerals Plc

Job Title
Woodsmith Mine
Proposed Minehead

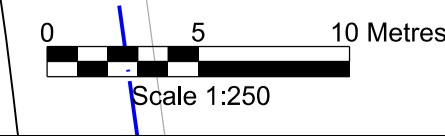
Woodsmith Mine
Section 96a
LNG / Generator Plant
Compound

Scale at A1 1:500

Discipline Civil

Job No 253285 Drawing Status Planning

Drawing No 40-ARI-WS-7100-CI-18-01026 Issue 2



Plan
Scale 1:250

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