

JV TIERNEY & CO

MECHANICAL ELECTRICAL & SUSTAINABLE ENGINEERS

SITE UTILITIES INFRASTRUCTURE REPORT

BELGARD GARDENS, TALLAGHT, DUBLIN 24

UTILITIES INFRASTRUCTURE

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Belgard Gardens

Tallaght, Dublin 24

Utility Infrastructure Report

Rev:	Issue Date:	Prepared By:	Checked By:
1	19/12/2018	DB	RB



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J.V. Tierney and Company (2002) Limited Trading as J.V. Tierney & Co. Registration No. 359680
Registered Office: 4th Floor, Harmony Court, Harmony Row, Dublin 2.

 Member of the Association of Consulting Engineers of Ireland



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 - 2.4 Public Realm Lighting

1.0 Existing Utility Infrastructure

1.1 Electricity

1.2 Gas

1.3 Telecoms





TITLE:
20170619-020_A0

1.1 Electricity

COLOUR CODE:

- BLACK - 38KV & HIGHER VOLTAGE OVERHEAD LINES
- GREEN - MV(10KV/20KV) OVERHEAD LINES
- BLUE - LV (400V/230V) OVERHEAD LINES
- CYAN - 38KV & HIGHER VOLTAGE UNDERGROUND CABLE ROUTES
- RED - MV/LV (10KV/20KV/400V/230V) UNDERGROUND CABLE ROUTES

DATE: 19-Jun-2017

**** SCALE:** 1:1300

** SCALE WHEN PRINTED ON AN A0 PAGE
XY COORDINATES DISPLAYED IN IRISH GRID COORDINATE SYSTEM

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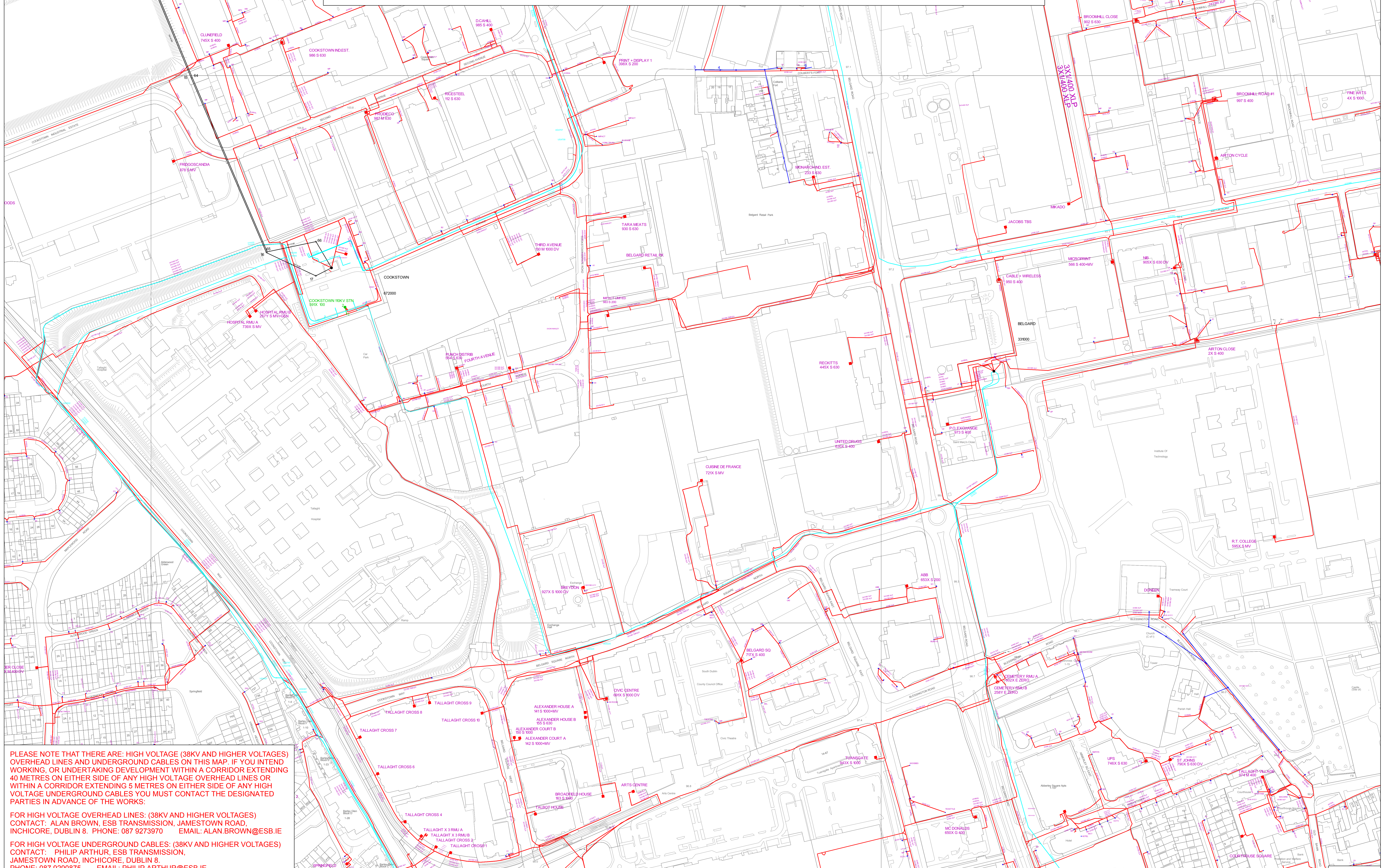
WARNING

THIS MAP INDICATES THE APPROXIMATE LOCATION OF ESB TRANSMISSION (400KV, 220KV, 110KV, 38KV) AND DISTRIBUTION (20KV, 10KV, 230V/400V) UNDERGROUND CABLES AND OVERHEAD LINES IN THE GENERAL AREA OF THE PROPOSED WORKS. ESB NETWORKS TAKES NO RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS OF THE MAP. IT IS THE USER'S RESPONSIBILITY TO INDEPENDENTLY VERIFY THE INFORMATION AND THE LOCATION OF UNDERGROUND CABLES AND OVERHEAD LINES. LOW VOLTAGE (230V/400V) SERVICE CABLES (E.G. HOUSE SERVICES, FACTORY/SHOP SERVICES, PUBLIC LIGHTING LAMP SERVICES, ETC) ARE NOT INCLUDED BUT THEIR PRESENCE SHOULD BE ANTICIPATED. THE DEPTHS OF UNDERGROUND CABLES MUST NEVER BE ASSUMED. ADDITIONAL MORE DETAILED INFORMATION IS AVAILABLE FOR HIGH VOLTAGE TRANSMISSION UNDERGROUND CABLES (38KV, 110KV, 220KV, 400KV) FROM THE LOCAL ESB NETWORKS TRANSMISSION REPRESENTATIVE - SEE ATTACHED LIST FOR CONTACT DETAILS OR CALL 1850 372 757. NO WORK SHOULD BE CARRIED OUT IN THE VICINITY OF 38KV OR HIGHER VOLTAGE UNDERGROUND CABLES WITHOUT PRIOR CONSULTATION WITH ESB NETWORKS. BEFORE ANY MECHANICAL EXCAVATION IS UNDERTAKEN, THE ACTUAL LOCATION OF ALL UNDERGROUND ELECTRICITY CABLES MUST BE ESTABLISHED AND VERIFIED ON THE SITE USING:
(A) UP-TO-DATE MAP RECORDS; (B) CABLE LOCATOR EQUIPMENT OPERATED IN BOTH POWER AND RADIO MODES; (C) CAREFUL HAND DIGGING OF TRIAL HOLES USING 'SAFE DIGGING PRACTICE'. REFER ALSO TO IHA CODE OF PRACTICE FOR AVOIDING DANGER FROM UNDERGROUND SERVICES'. ESB TAKES NO RESPONSIBILITY FOR AND SHALL BEAR NO LIABILITY, HOWSOEVER ARISING, IN RELATION TO ANY DAMAGE, INJURY/DEATH OR LOSS OF SUPPLY AS A RESULT OF DAMAGE OR INTERFERENCE WITH ITS NETWORKS.

X,Y: 307839, 228522

X,Y: 309347, 228522

ESB NETWORKS HAS ISSUED THIS MAP AS A PDF DOCUMENT. IF VIEWING A PAPER VERSION OF THIS MAP, THE VIEWER MUST ENSURE THAT IT HAS BEEN PRINTED IN COLOUR TO FIT TO AN A0 (OR LARGER) PAGESIZE AND THAT EACH OF THE COLOURS INDICATED ON THE COLOUR CODE LEGEND ABOVE ARE CLEAR AND DISTINCT FROM EACH OTHER TO MAINTAIN A CORRECT REPRESENTATION OF THE ELECTRICAL NETWORK INFORMATION.



PLEASE NOTE THAT THERE ARE: HIGH VOLTAGE (38KV AND HIGHER VOLTAGES) OVERHEAD LINES AND UNDERGROUND CABLES ON THIS MAP. IF YOU INTEND WORKING, OR UNDERTAKING DEVELOPMENT WITHIN A CORRIDOR EXTENDING 40 METRES ON EITHER SIDE OF ANY HIGH VOLTAGE OVERHEAD LINES OR WITHIN A CORRIDOR EXTENDING 5 METRES ON EITHER SIDE OF ANY HIGH VOLTAGE UNDERGROUND CABLES YOU MUST CONTACT THE DESIGNATED PARTIES IN ADVANCE OF THE WORKS:

FOR HIGH VOLTAGE OVERHEAD LINES: (38KV AND HIGHER VOLTAGES)
CONTACT: ALAN BROWN, ESB TRANSMISSION, JAMESTOWN ROAD, INCHICORE, DUBLIN 8. PHONE: 087 9273970 EMAIL: ALAN.BROWN@ESB.IE

FOR HIGH VOLTAGE UNDERGROUND CABLES: (38KV AND HIGHER VOLTAGES)
CONTACT: PHILIP ARTHUR, ESB TRANSMISSION, JAMESTOWN ROAD, INCHICORE, DUBLIN 8. PHONE: 087 9290875 EMAIL: PHILIP.ARTHUR@ESB.IE

X,Y: 309347, 227522

Important Safety Notice:
 Damage to gas pipelines can result in serious injury or death. Gas network information is provided as a general guide. The exact location and depth of medium or low pressure distribution gas pipes must be verified on site by carrying out necessary investigations, including, for example, hand digging trial holes along the route of the pipe.
 Service pipes are not generally shown but their presence should always be anticipated.

High pressure transmission pipelines are shown in red. If a transmission pipeline is identified within 10m of any intended excavations then work must not proceed before GNI has been consulted. The true location and depth of a transmission pipeline must be verified on site by a representative of GNI. Contact can be made through 1850 427 747.

All work in the vicinity of the gas network must be completed in accordance with the current edition of the Health & Safety Authority publication, Code of Practice For Avoiding Danger From Underground Services which is available from the Health and Safety Authority (1890 289 389) or can be downloaded at www.hsa.ie.

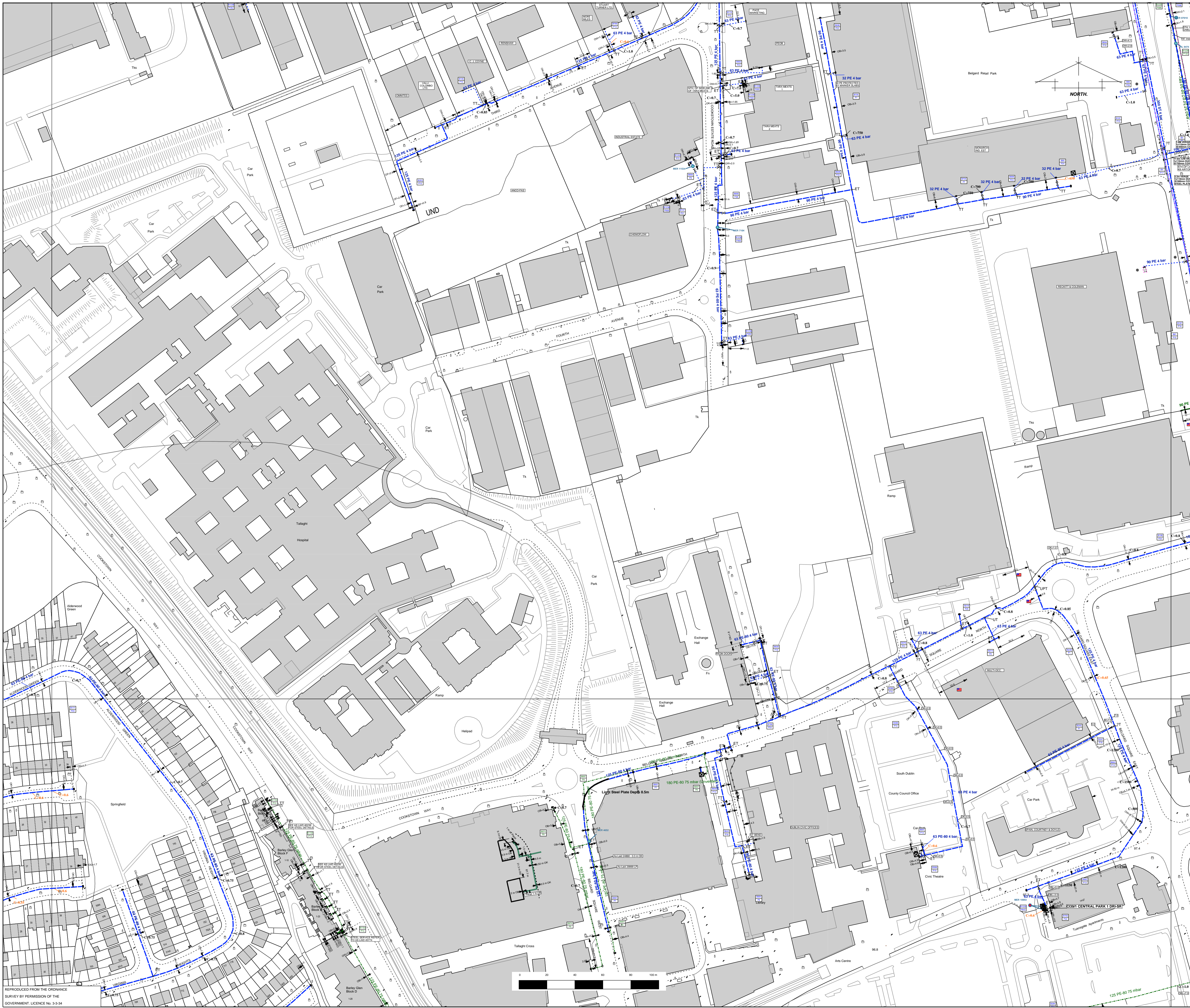
Legal Notice:
 Gas Networks Ireland (GNI) and its affiliates, accept no responsibility for the accuracy of any information contained in this document including data concerning location and technical designation of the gas distribution and transmission network (the Information). The Information should not be relied on for accurate distance or depth of cover measurements.

Any representations and warranties, express or implied, are excluded to the fullest extent permitted by law. No liability shall be accepted for any loss or damage including, without limitation, direct, indirect or consequential loss, arising out of or in connection with the use or re-use of the Information.

- | | |
|---|--|
| | Aurora Telecom Fibre Optic Cable |
| | Aurora Telecom Duct |
| | Aurora Telecom Sub-duct |
| | Aurora Telecom Inserted Gas Pipe |
| Contact Aurora Telecom on 1850-427-399 or (01)203-0120. | |
| | Transmission Pipe (High Pressure) |
| | Transmission Pipe (Construction Issue) |
| | Distribution Pipe (Medium Pressure) |
| | Distribution Pipe (Low Pressure) |
| | Service Pipe (Medium Pressure) |
| | Service Pipe (Low Pressure) |
| | Strategic Pipe (Medium Pressure) |
| | Strategic Pipe (Low Pressure) |
| | Inserted Pipe (Medium Pressure) |
| | Inserted Pipe (Low Pressure) |
| | Distribution Pipe (Abandoned) |

- | | | | |
|--|-------------------------|--|-----------------------|
| | Cover (depth in meters) | | Pressure Monitor |
| | CP Test Point | | Protection (Sleeve) |
| | End Cap | | Protection (Slabbing) |
| | Hot Tap | | Reducer |
| | Installation | | Service Terminator |
| | Valve | | Tee |
| | Mains Verification ** | | Transition |

** Please contact GNI on 1850-427747 for specific information.



REPRODUCED FROM THE ORDNANCE SURVEY BY PERMISSION OF THE GOVERNMENT LICENCE No. 3-3-34

L2 Gas

Design Department - DUBLIN

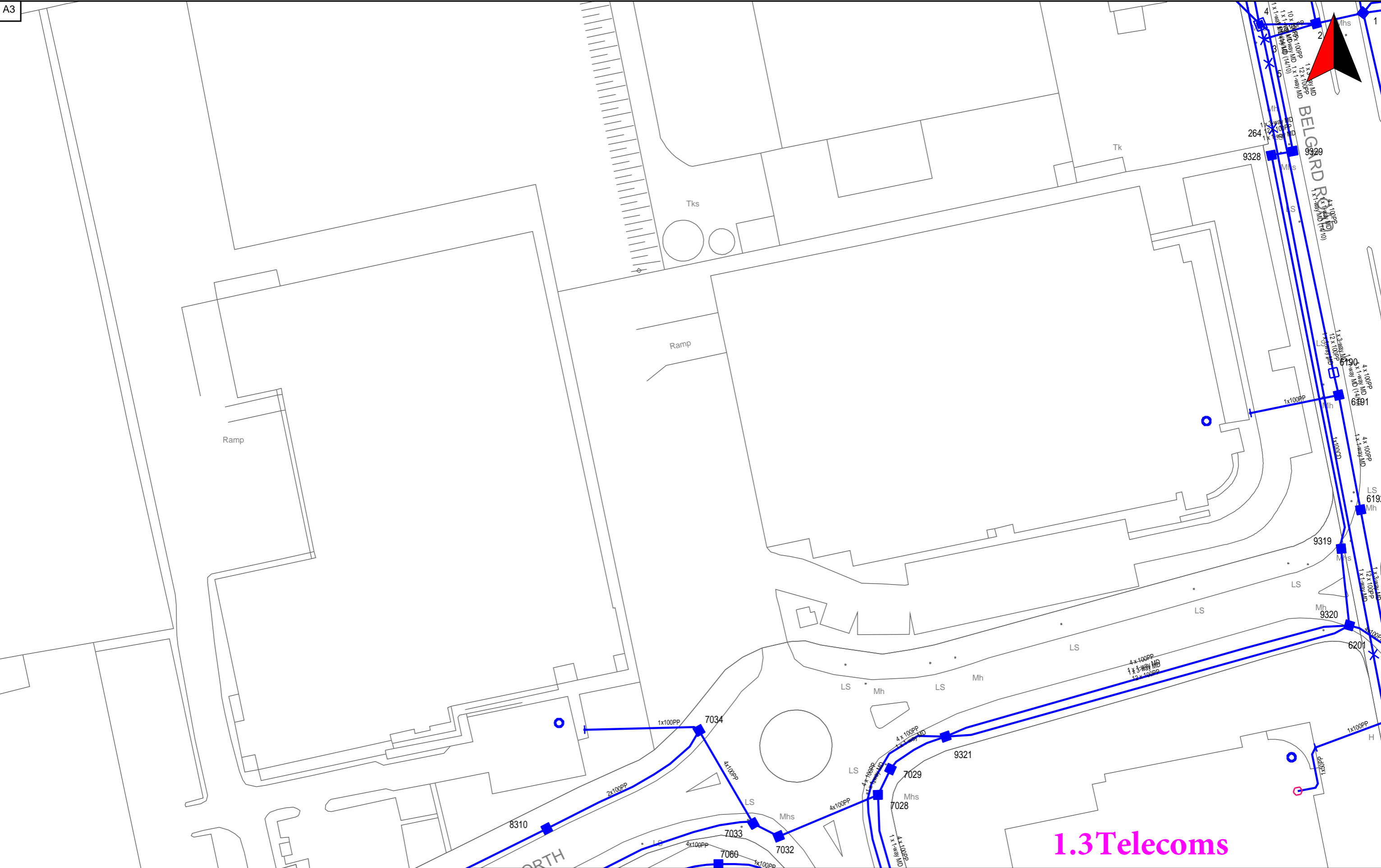
GAS NETWORK INFORMATION

Issue: OCS

Location: TALLAGHT HOSPITAL D.24

Plot Date: 20/06/17 Contact: D.O'MAHONEY

Plotted by: DK Scale: 1:1250



PLANT REQUESTED FROM eircom emaps CBYD SERVICE
<https://cbyd.emaps.eircom.ie/>

Scale: 1:750
Date: 16/06/2017

Irish National Grid Co-Ordinates
Centre XY: 308700 m, 227935 m
emaps CBYD

THE INFORMATION IN THIS DRAWING IS CONFIDENTIAL AND SHOULD NOT BE DISCLOSED TO ANY THIRD PARTY WITHOUT THE EXPRESS WRITTEN CONSENT OF eircom LTD. THE DRAWING IS NOT TO BE PHOTOCOPIED OR REPRODUCED IN ANY WAY

THE INFORMATION GIVEN IS COMPILED FROM RECORDS AND IS BELIEVED TO BE CORRECT. THERE MAY, HOWEVER, BE DEPARTURES FROM THE COURSE(S) AND DEPTH(S) SHOWN OR INDICATED. THERE MAY ALSO BE ITEMS OF eircom PLANT OF WHICH NO RECORDS IN HELD. THE INFORMATION IS GIVEN WITHOUT PREJUDICE TO THE LEGAL RIGHTS OF eircom LTD. TO COMPENSATION SHOULD eircom PLANT BE DAMAGED.

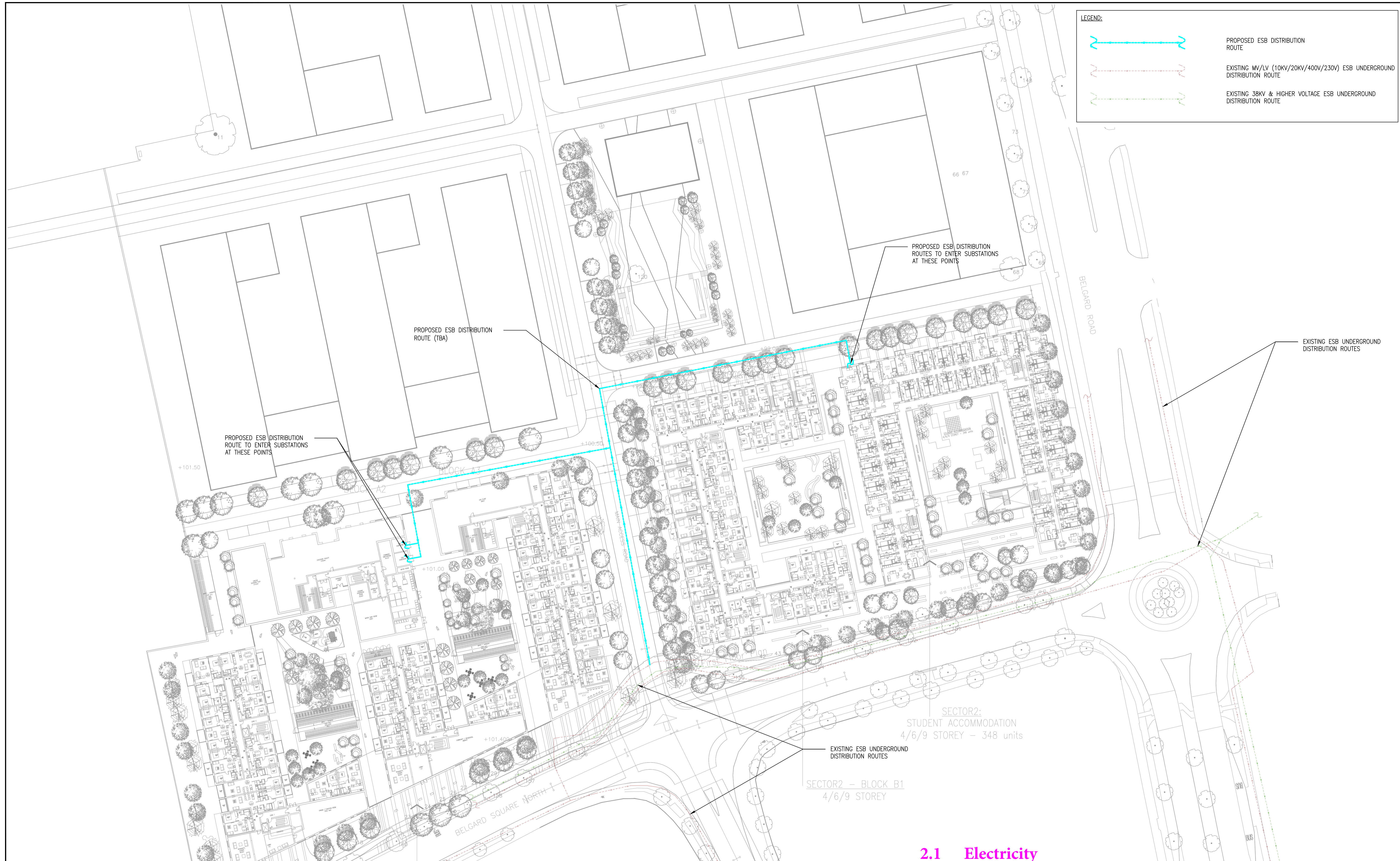


- 2.0 Proposed Utility Infrastructure
 - 2.1 Electricity
 - 2.2 Gas
 - 2.3 Telecoms
 - 2.4 Public Realm Lighting



LEGEND:

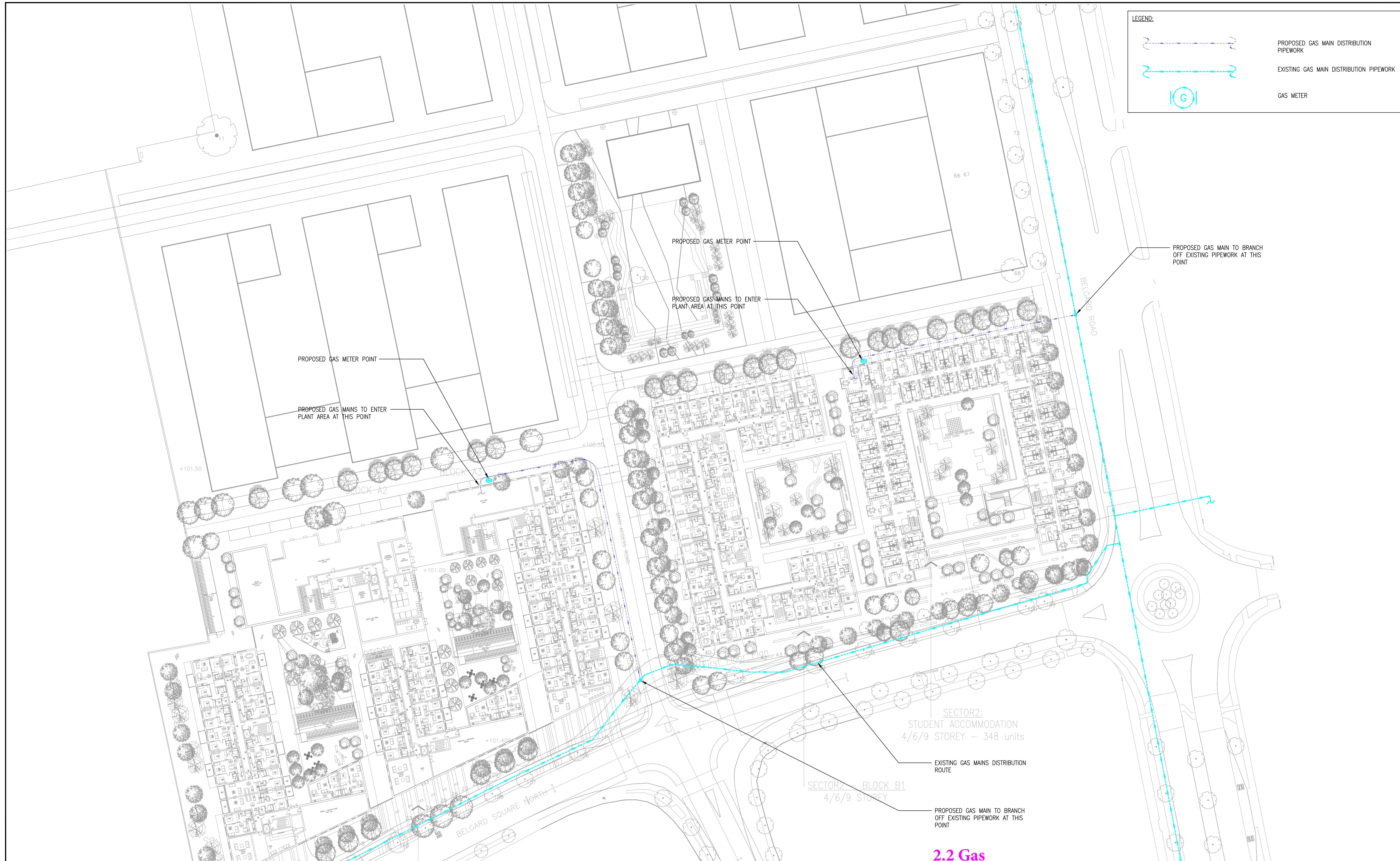
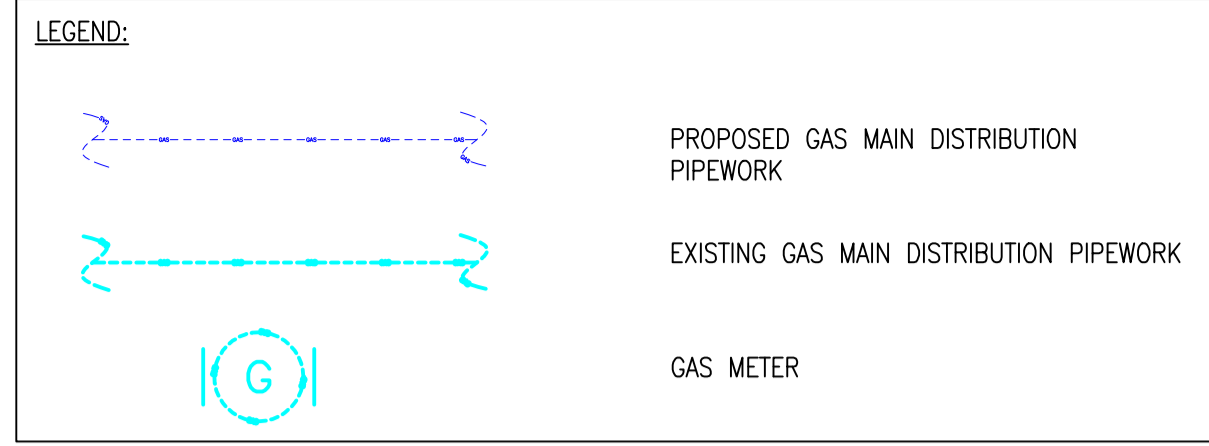
- PROPOSED ESB DISTRIBUTION ROUTE
- EXISTING MV/LV (10KV/20KV/400V/230V) ESB UNDERGROUND DISTRIBUTION ROUTE
- EXISTING 38KV & HIGHER VOLTAGE ESB UNDERGROUND DISTRIBUTION ROUTE



2.1 Electricity

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J.V. Tierney & Co. Consulting Mechanical & Electrical Engineers & Project Managers <small>The Tannery 53-56 Cork Street Dublin 8 Ireland</small>		<small>Eircode: D08 P92R Tel: +353 (0)1 421 4900 E-mail: mail@jvtierney.ie Website: www.jvtierney.ie</small>		
<small>I.S. EN ISO 9001 ISO 14001 OHSAS 18001 Est. 1948</small>		Scale 1:500@A1L	Project Number 3972	
Drawn DB	Date 16/08/2018	Drawing Number (60)0S0-01	Revision ---	
Checked RB	Date 20/08/2018			
Project BELGARD GARDENS TALLAGHT, CO. DUBLIN MASTERPLAN		Title PROPOSED ESB SITE LAYOUT PHASE 1		



2.2 Gas

REV	DATE	DESCRIPTION	BY	CHK

Project		BELGARD GARDENS TALLAGHT, CO. DUBLIN MASTERPLAN	
Title		PROPOSED GAS MAIN SITE LAYOUT PHASE 1	

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ISO 9001:2015
ISO 14001
OHSAS 18001
Est. 1948

Scale	1:500@A1L	Project Number	3972
Drawn	DB	Date	16/08/2018
Checked	RB	Date	20/08/2018
Drawing Number	(50)050-01	Revision	--

SECTOR 01 - BLOCK A1 / A2 / A3
4/6/7/8/10 STOREY

SECTOR 2 - BLOCK B1
4/6/9 STOREY

SECTOR 2:
STUDENT ACCOMMODATION
4/6/9 STOREY - 348 units

EXISTING GAS MAINS DISTRIBUTION ROUTE

PROPOSED GAS MAIN TO BRANCH OFF EXISTING PIPEWORK AT THIS POINT

PROPOSED GAS MAIN TO BRANCH OFF EXISTING PIPEWORK AT THIS POINT



PROPOSED GAS METER POINT

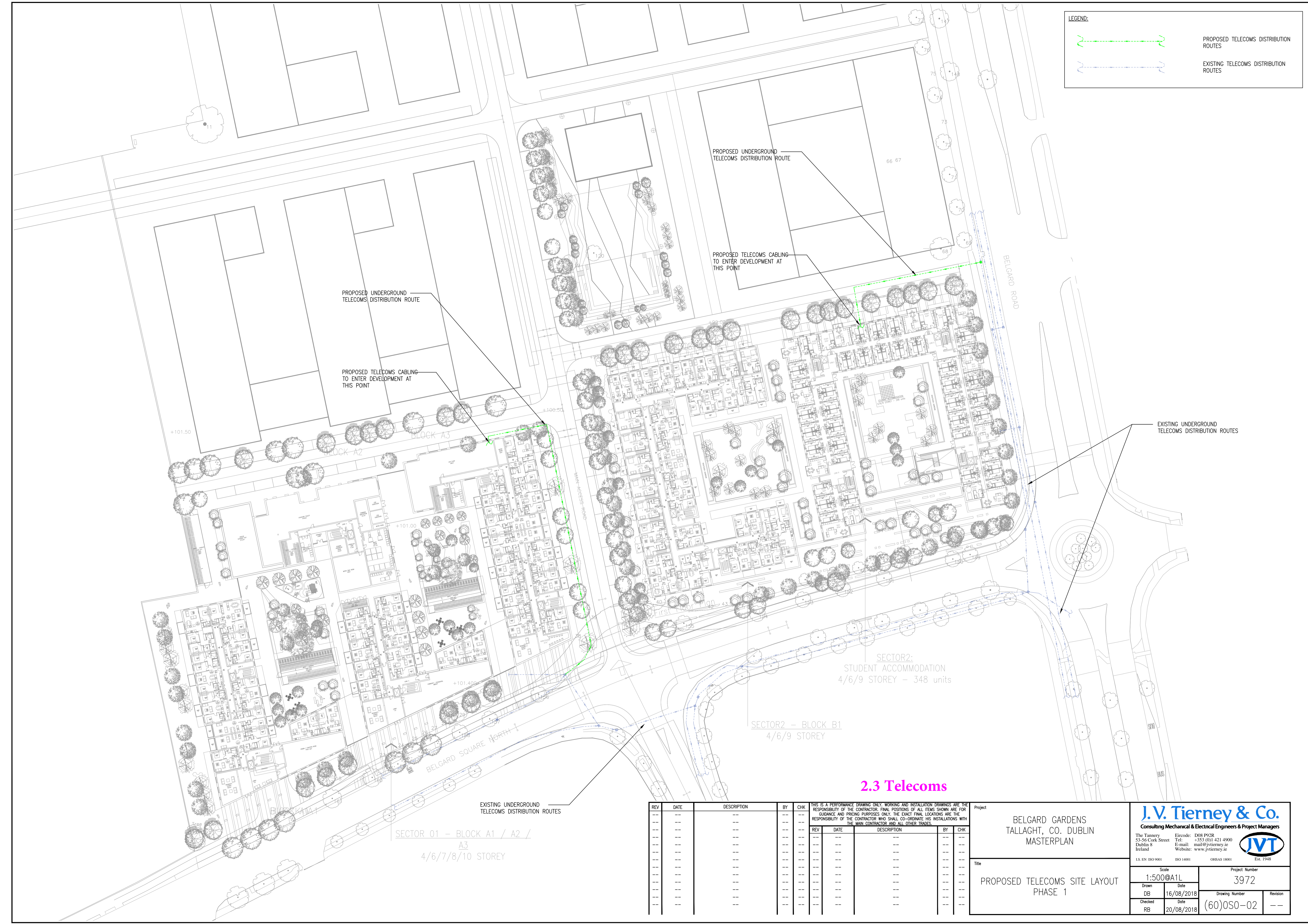
PROPOSED GAS MAINS TO ENTER PLANT AREA AT THIS POINT

PROPOSED GAS METER POINT

PROPOSED GAS MAINS TO ENTER PLANT AREA AT THIS POINT

LEGEND:

 PROPOSED TELECOMS DISTRIBUTION ROUTES
 EXISTING TELECOMS DISTRIBUTION ROUTES



2.3 Telecoms

REV	DATE	DESCRIPTION	BY	CHK
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Project

**BELGARD GARDENS
TALLAGHT, CO. DUBLIN
MASTERPLAN**

Title

**PROPOSED TELECOMS SITE LAYOUT
PHASE 1**

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Website: www.jvtierney.ie

ISO 9001 ISO 14001 OHSAS 18001 Est. 1948

Scale: **1:500@A1L**

Project Number: **3972**

Drawn	Date	Drawing Number	Revision
DB	16/08/2018	(60)0S0-02	---
Checked	Date		---
RB	20/08/2018	---	---



NOTES:

- PUBLIC LIGHTING DUCTS TO BE INSTALLED IN ACCORDANCE WITH SDCC SPECIFICATION.
- PUBLIC LIGHTING COLUMNS TO BE INSTALLED AS SHOWN IN FIGURE 1.
- PUBLIC LIGHTING MICRO PILLAR SUPPLIED BY ADJACENT ESB MINI-PILLAR. QUANTITIES AS INDICATED ON DRAWING. PLEASE REFER TO FIGURE 2 FOR CONNECTION DETAIL.
- APPROXIMATE LOCATION OF EXISTING 8M PL COLUMNS, EXISTING ROADWAY LIGHTING TO BE RELOCATED WHERE REQUIRED DUE TO JUNCTION REALIGNMENT.
- SINGLE ROADWAY LIGHTING COLUMNS WITH DOUBLE LIGHT SOURCE MOUNTED AT 6M (FACING BACK IN) AND AT 8M TOWARDS ROADWAY
- ALLOW FOR A 6M TREE EXCLUSION ZONE AROUND LIGHTING COLUMN WHILE USING A 6M HIGH COLUMN
- FINAL SCHEME TO INCLUDE FOR A FULLY CO-ORDINATED SITE LIGHTING DRAWING WITH PUBLIC REALM PLANTING, STREET FURNITURE, CAR PARKING SPACES AND CYCLE TRACKS ETC.
- PUBLIC LIGHTING DUCTING TO BE HDPE 107MM DIAMETER RED TWIN WALL.

LEGEND

- ESB STATION
- PUBLIC LIGHTING MICRO-PILLAR
- ESB MINI PILLAR
- ELECTRICAL VEHICLE CHARGING POINT
- PL 1 No. Ø100MM PUBLIC LIGHTING DUCT
- LV ESB 2 No. 160mm ESB LV DUCTS.
- LV 1 No. Ø100MM LV LIGHTING DUCT.
- A** TYPE A EXISTING 8M OCTAGONAL GALVANISED STEEL LIGHTING COLUMN.
- B** TYPE B SCHUCH 6M TWIN HEAD OCTAGONAL GALVANISED STEEL LIGHTING COLUMN. LED LAMP SOURCE WITH INTEGRAL LIGHTING CONTRL MODULE.
- B1** TYPE B1 TWIN HEAD COLUMN 6M AND 8M MOUNTING HEIGHT OF LANTERNS.
- C** TYPE C OCTAGONAL GALVANISED STEEL LIGHTING COLUMN. LED LAMP SOURCE WITH INTEGRAL LIGHTING CONTRL MODULE. (PLAZA AREA)
- D** TYPE D LOW LEVEL BOLLARD. LED LAMP SOURCE WITH INTEGRAL LIGHTING CONTRL MODULE.
- E** TYPE E GROUND MOUNTED UPLIGHTER. LED LAMP SOURCE WITH INTEGRAL LIGHTING CONTRL MODULE.
- ON STREET CAR PARKING.

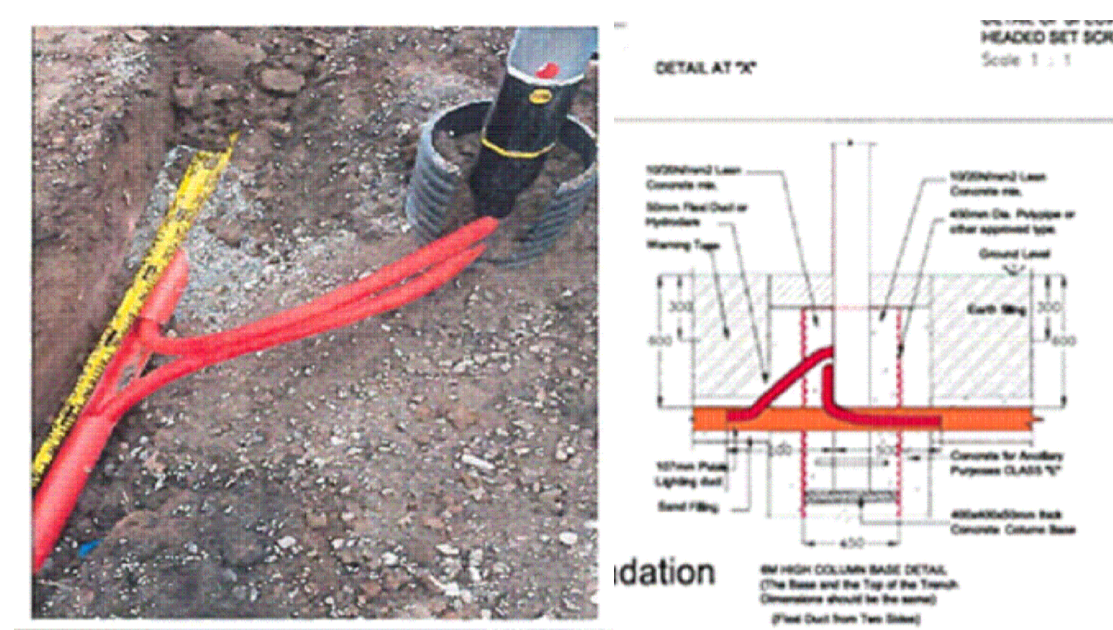


FIGURE 1
SLEEVED COLUMN FOUNDATION BASE DETAIL
SCALE: N.T.S.

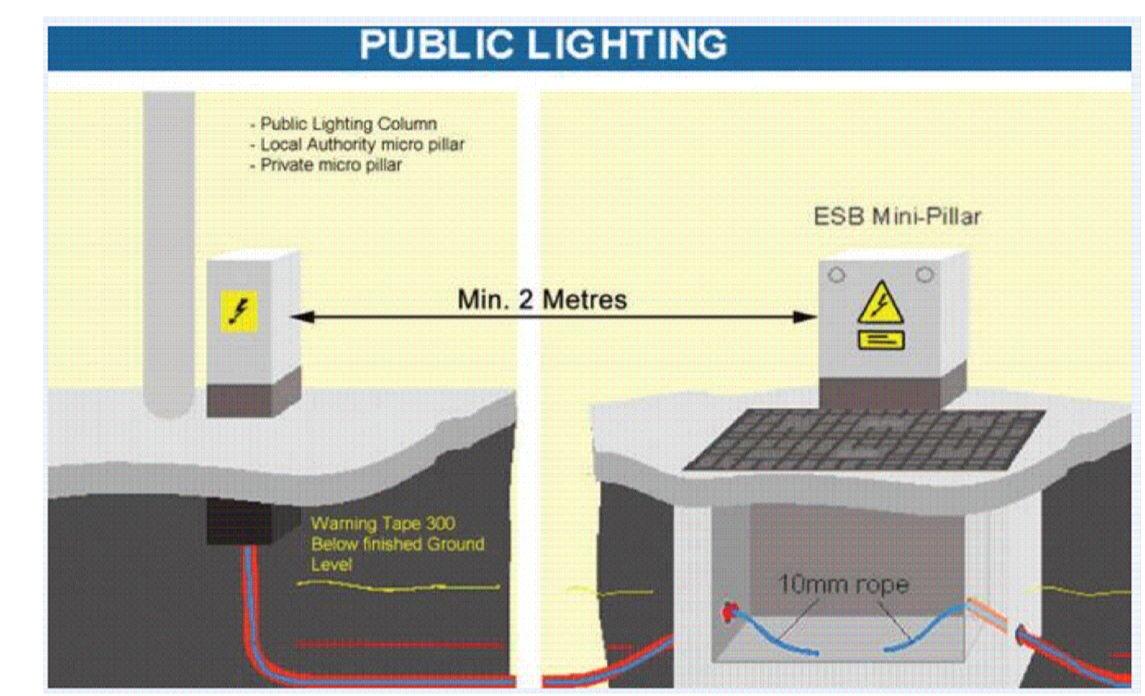


FIGURE 2
PUBLIC LIGHTING
SCALE: N.T.S.



FIGURE 3
LIGHT TYPE B
SCALE: N.T.S.

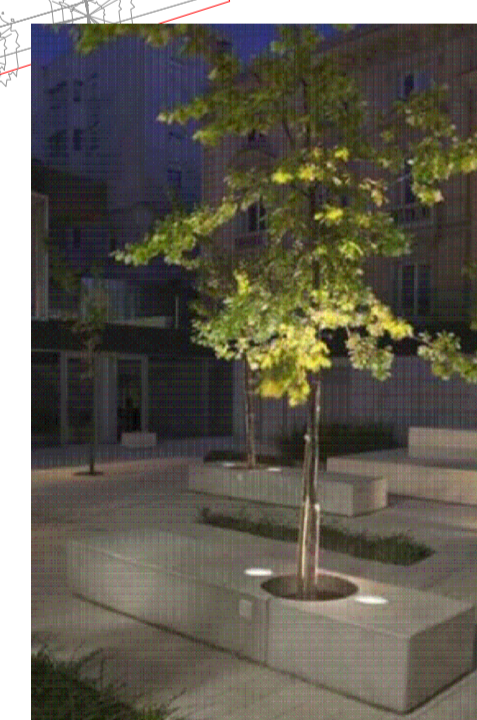


FIGURE 6
UPLIGHTER TYPE E
SCALE: N.T.S.



FIGURE 5
TWIN HEAD LIGHT TYPE B1
SCALE: N.T.S.

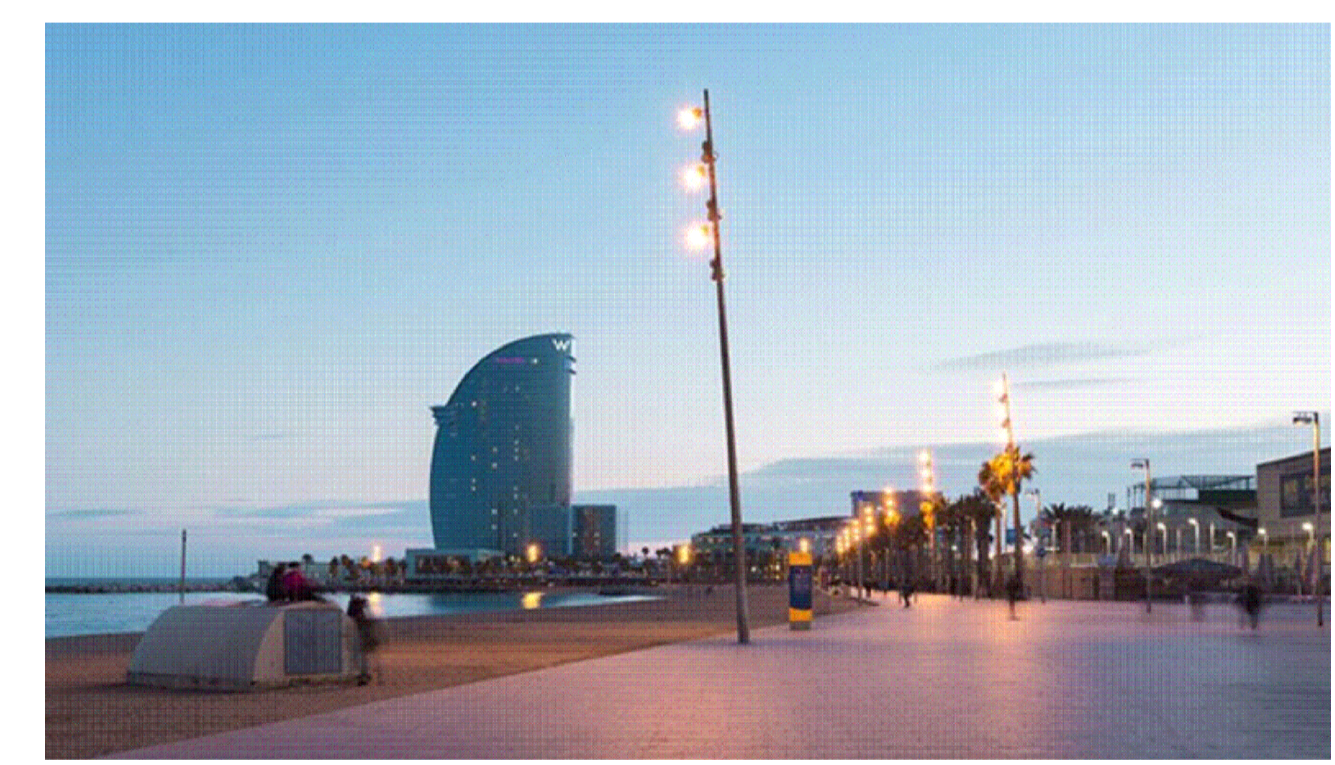


FIGURE 4
LIGHT TYPE C (TYPICAL EXAMPLE)
SCALE: N.T.S.

REV	DATE	DESCRIPTION	BY	CHK	THIS IS A PERFORMANCE DRAWING ONLY. WORKING AND INSTALLATION DRAWINGS ARE THE RESPONSIBILITY OF THE CONTRACTOR. FINAL POSITIONS OF ALL ITEMS SHOWN ARE FOR GUIDANCE AND PRICING PURPOSES ONLY. THE EXACT FINAL LOCATIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR WHO SHALL CO-ORDINATE HIS INSTALLATIONS WITH THE MAIN CONTRACTOR AND ALL OTHER TRADES.
P1	31/05/2018	FOR COMMENT	FK	AP	
P2	11/06/18	SDCC PL DEPT. COMMENTS ADDED	EM	AP	
P3	31/08/2018	AS CLOUDED	FK	AP	
P4	27/09/18	ISSUED FOR COMMENT	CS	AP	
P5	07/11/2018	AS CLOUDED	FK	AP	

BELGARD GARDENS TALLAGHT, Co. DUBLIN MASTERPLAN

PUBLIC REALM LIGHTING PROPOSED LAYOUT

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S.I. EN ISO 9001 ISO 14001 OHSAS 18001 Est. 1948

Scale: 1:500@A1L
Drawn: EM
Checked: AP

Date: 15/05/2018
Date: 27/09/18

Project Number: 3972
Drawing Number: (60)-00-00
Revision: P5

This Report was prepared by: David Breen

Signed: David Breen

Position: Project Engineer
J.V. Tierney & Co.

Date: 28/09/2018

Checked by

Signed: 

Rory Burke - Chartered Engineer
Director
J.V. Tierney & Co.

Date: 28/09/2018

