OCSC

O'CONNOR · SUTTON · CRONIN

MULTIDISCIPLINARY CONSULTING ENGINEERS

G467: N83 BRIDGE STREET DUNMORE

SITE-SPECIFIC FLOOD RISK ASSESSMENT

For

Galway County Council

30 June 2025

NOTICE

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DOCUMENT CONTROL & HISTORY

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	G467	OCSC	XX	XX	RP	C	0004	S3	P01

Rev.	Status	Authors	Checked	Authorised	Issue Date
P01	S3	Suhas HS	Anthony Horan	Anthony Horan	30/06/2025

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1 INTRODUCTION

1.1 APPOINTMENT

O'Connor Sutton Cronin & Associates (OCSC) have been appointed by *Galway County Council* to carry out a Site-Specific Flood Risk Assessment (SSFRA) for the Dunmore Regeneration scheme.

1.2 ADMINISTRATIVE JURISDICTION

The proposed scheme is in the jurisdiction of Galway County Council (GCC), and therefore this SSFRA was carried out with reference to the following:

- Galway County Council Development Plan 2022-2028;
- The Planning System and Flood Risk Management Guidelines for Planning Authorities (Department of Environment, Heritage and Local Government and the Office of Public Works).

1.3 SITE LOCATION

The subject site is located on the N83, Bridge Street, Dunmore, Co. Galway, as shown in **Error! R eference source not found.**, and is immediately bound by:

- Existing buildings, to the east and west;
- Barrack Street, to the south.

Figure 1-1: Site Location

1.4 INFORMATION CONSULTED

This flood risk assessment has been prepared on the information available from the following sources:

- OPW website **www.floodinfo.ie**;
- DECLG website **www.myplan.ie**;
- GCC and Irish Water records;
- Geological Survey of Ireland Maps (GSI);
- Topographical survey of the proposed site.

2 SITE CONTEXT

2.1 EXISTING SITE OVERVIEW

The site is in Dunmore town centre, Co. Galway and is comprised of the existing secondary national road N83 along Bridge Street and the existing buildings along the eastern side of the street.

The road on the south of the sinking river is graded to low points approximately halfway along Bridge Street south, from approximately the centre of the bridge, with levels in the order of +57.13m AOD, and the junction of Bridge Street and Barrack Street. The road is graded from south to north at approximately 2.3%.

2.2 PROPOSED DEVELOPMENT CONTEXT

The work being carried out allow for the regeneration of the area,

1. Demolition of Building on Bridge Street to allow the realignment of the N83;
2. New Public Realm along Bridge Street linking the Town Square with the Sinking River;
3. Improvements to the road, footpath, cycleway and vulnerable road user's facilities on High Street & Bridge Street;
4. The incorporation of traffic signals at the junction of High Street/ Castle Street/ Bridge Street/ Barrack Street;
5. Improvements to the road, footpath, and vulnerable road user facilities on Castle Street and Barrack Street which from part of the R328;
6. Provision of all ancillary works, public lights, services, boundaries, street furniture and amenities.

3 RELEVANT GUIDANCE

3.1 THE PLANNING SYSTEM AND FLOOD RISK MANAGEMENT GUIDELINES#

"The Planning System and Flood Risk Management" (PSFRM) Guidelines were published by the Department of the Environment, Heritage and Local Government in November 2009 was published. The Flood Risk Management Guidelines give guidance on flood risk and development. The guidelines recommend a precautionary approach when considering flood risk management in the planning system.

The core principle of the guidelines is to adopt a flood risk sequential approach to managing flood risk and to avoid development in areas that are at risk. The sequential approach is based on the identification of flood zones for river and coastal flooding. The guidelines include definitions of Flood Zones A, B and C. It should be noted that these do not consider the presence of flood defences, as there remain risks of overtopping and breach of the defences.

Table 3-1: Flood Risk Zones

Zone A	**High Probability of Flooding** Where the probability of flooding from rivers and the sea is highest (greater than 1% or 1 in 100 for river flooding or 0.5% or 1 in 200 for coastal flooding)
Zone B	**Moderate Probability of Flooding** Where the probability of flooding from rivers and the sea is moderate (between 0.1% or 1 in 1000 and 1% or 1 in 100 for river flooding and between 0.1% or 1 in 1000 year and 0.5% or 1 in 200 for coastal flooding)
Zone C	**Low Probability of Flooding** Where the probability of flooding from rivers and the sea is low (less than 0.1% or 1 in 1000 for both river and coastal flooding). Flood Zone C covers all areas of the plana which are not in zones A or B.

The guidelines set out the different types of development appropriate to each zone. Exceptions to the restriction of development due to potential flood risks are provided for with the Justification Test, where the planning need and the sustainable management of flood risk to an acceptable level must be demonstrated. This recognises that there will be a need for future development in existing towns and urban centres that lie within flood risk zones, and that the avoidance of all future development in these areas would be unsustainable.

A three staged approach to undertaking an FRA is recommended:

- Stage 1: Flood Risk Identification – Identification of any issues relating to the site that will require further investigation through a Flood Risk Assessment;
- Stage 2: Initial Flood Risk Assessment – Involves establishment of the sources of flooding, the extent of the flood risk, potential impacts of the development and possible mitigation measure;
- Stage 3: Detailed Flood Risk Assessment – Assess flood risk issues in sufficient detail to provide quantitative appraisal of potential flood risk of the development, impacts of the flooding elsewhere and the effectiveness of any proposed mitigation measures.

The Site-Specific Flood Risk Assessment (SSFRA) addresses the requirements for Stage 2.

3.2 GALWAY DEVELOPMENT PLAN & STRATEGIC FLOOD RISK ASSESSMENT

The Galway Development Plan 2022-2028 identifies a number of objectives relating to flooding applicable to this project, some are outlined below.

FL6: Maintain and enhance, as appropriate, the existing surface water drainage system in the county. Ensure that new developments are adequately serviced with surface water drainage infrastructure and promote the use of Sustainable Drainage Systems in all developments. Surface Water runoff from development sites will be limited to pre-development levels and planning applications for new developments will be required to provide details of surface water drainage and Sustainable drainage proposals.

FL7: Protect water bodies and water courses within the County from inappropriate development, including rivers, streams associated undeveloped riparian strips, wetlands and natural flood plains. This will include protection buffers in riverine, wetland and coastal areas as appropriate.

3.3 CLIMATE CHANGE

The PSFRM Guidelines require that account be taken of the effects of climate change over the design life of a development, typically 100 years. Design parameters to take account of climate change were established in the *GDSDS* and revised following later studies and Climate Change Sectorial Adaptation Plan Flood Risk Management (2015-2019) Development published by the OPW. These parameters are set out in **Error! Reference source not found.**, below.

Table 3-2: Climate Change - Impact on Design Parameters

Design Category	Impact of Climate Change
Drainage	10% increase in rainfall
Fluvial (River)	20% increase in flood flow
Tidal/Coastal	Sea level rise of 500 mm[1]

4 FLOOD RISK IDENTIFICATION

4.1 EXISTING HYDROLOGICAL ENVIRONMENT

The site is in proximity to The Sinking River, see **Error! Reference source not found.**. This River flows f rom east to west to where it discharges to the River Clare, approximately 10km downstream. This river flows mainly through agricultural land. There appears to be no culverts on this river. The bridge crossing the river in Dunmore is a 4-arch protected structure.

Figure 4.1: Sinking River adjacent to the site

4.2 EXISTING SURFACE WATER DRAINAGE

There is an existing surface water sewer along Bridge Street. This sewer is indicated as flow from south to north and discharging to The Sinking River, with the outfall at the west side of the bridge.

4.3 TOPOGRAPHICAL SURVEY

The existing ground levels across the overall site are typically graded from south to north along Bridge Street with an approximate gradient 2.3%.

4.4 HISTORICAL MAPS

The historical 6" (1837 – 1842) and the 25" (1888 – 1913) mapping have been examined. Historical mapping is often a very useful source of information for assessing the flood history of an area. The historical maps examined do not indicate flooding in the area proposed for this development.

4.5 HISTORICAL FLOODING

The Office of Public Works (OPW) gathers and collates data from reported flood events throughout the country. From a review of the OPW's National Flood Hazard Mapping database (**www.floodmaps.ie)**, there are no reported incidents of flooding in the vicinity of the site.
Error! Reference source not found.2 shows the historical reported flood events in the vicinity of D unmore. There are no reports of flooding occurring within the town centre or in the immediate vicinity of the scheme.

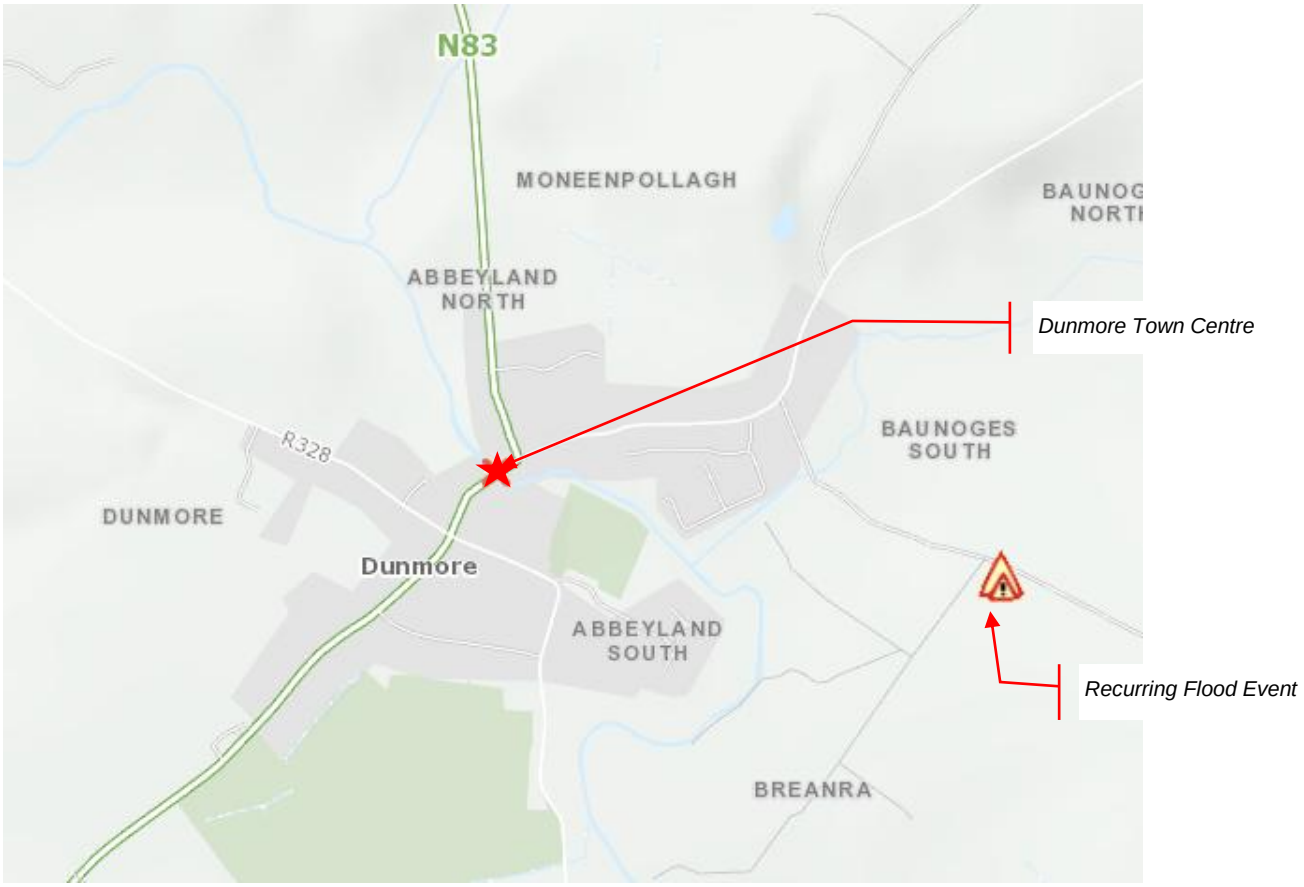


Figure 4-2: National Flood Hazard Mapping (excerpt from www.floodmaps.ie)

A recurring flood event is indicated approximately 1km from Bridge Street, Dunmore. A report for this flood was generated in 2005. The report highlights that in a number to areas heavy rainfall is identified as the source of flooding for all the floods noted. There was no flooding reported in Dunmore town centre.

4.6 GROUNDWATER FLOODING

The OPW's Preliminary Flood Risk Assessment (PFRA) does not include an assessment of the flood risk posed by ground water. This information is currently generated by Geological Survey Ireland (GSI) and will be openly available information when published. There are no reported incidents of ground water flooding in the vicinity of Dunmore town centre, see **Error! Reference source not found.**3.

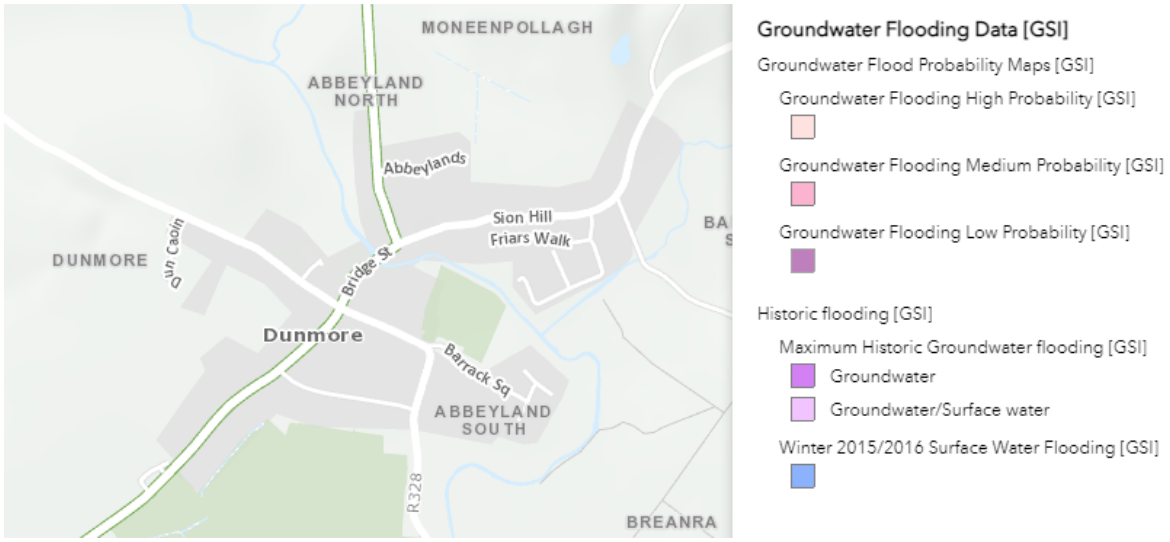


Figure 3-3: Extract from the GSI Groundwater Flooding Data Viewer

According to the Geological Survey Ireland (GSI), the proposed site is located in an area where the ground is made from dark fine-grained limestone and shale. The proposed site is located in the vicinity of a locally important aquifer with bedrock that is moderately productive. The groundwater vulnerability is noted as low within Dunmore town centre.

The Strategic Flood Risk Assessment noted that the hydro-geological conditions in the FEMFRAM study area together with other available information indicated that the conditions do not exist for groundwater flooding; therefore, groundwater flooding is not a significant risk within the FEMFRAM study area. There is however a risk of groundwater flooding to basements or deep excavations.

As there are no basements in the vicinity of the proposed works, it can be concluded from the information provided, that ground water flooding does not pose a significant risk to the proposed site and no mitigation measures are required.

4.7 IRISH COASTAL PROTECTION STRATEGY STUDY

The Irish Coastal Protection Strategy Study (ICPSS) was commissioned by the OPW in 2003 with the objective to assess coastal flooding and erosions extents in Ireland. The study has produced predictive flood maps and levels for coastal flood events with various probabilities of occurrence (e.g. the 1% AEP event). Predicted water levels were modelled at nodes around the coast and are based on analysis and computational models. Dunmore is located approximately 40km from the western coast. Figure 4-4 indicates the proximity to the coast.

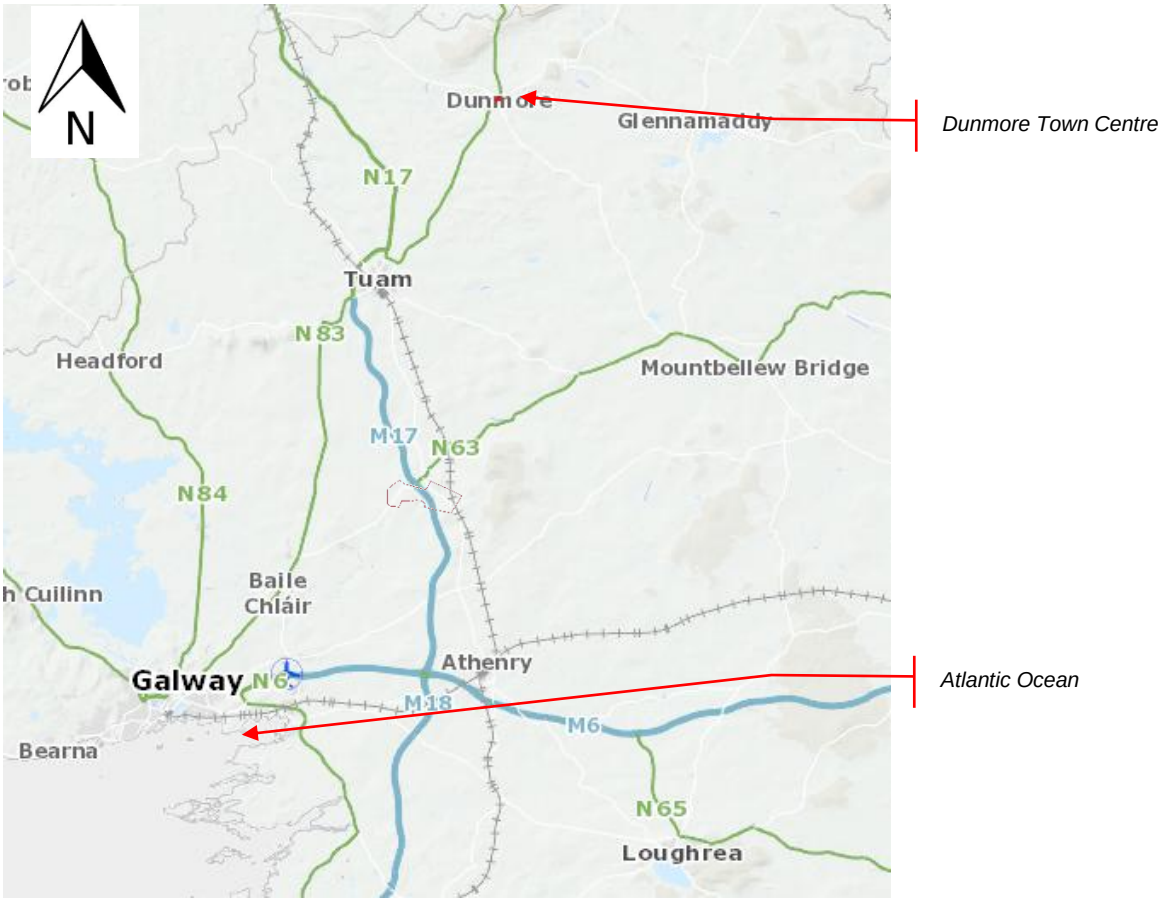


Figure 4-4: Dunmore Proximity to Coast

It can be concluded from the information above that coastal flooding is not a considered a risk to the proposed site.

4.8 PRELIMINARY FLOOD RISK ASSESSMENT

The Catchment Flood Risk Assessment and Management Study (CFRAMS) is a national programme which to date has produced both a series of Preliminary Flood Risk Assessments (PFRA) which cover the entire country, as well as more detailed flood maps in certain catchments across the country.

Prior to the publication of the detailed CFRAMS flood mapping, a series of Preliminary Flood Risk Assessment (PFRA) maps were published. These maps indicated preliminary tidal and fluvial flood zones along with pluvial and groundwater risks.

4.9 CATCHMENT FLOOD ASSESSMENT AND MANAGEMENT

The OPW in conjunction with Galway County Council have developed the Flood Risk and Hazard maps as part of the CFRAMS programme.

Figure 4-5 below is an extract from the CFRAM fluvial flood map for the area surrounding Dunmore. The flood map below indicates that there is no flooding of the Sinking River modelled in the vicinity Dunmore town centre.

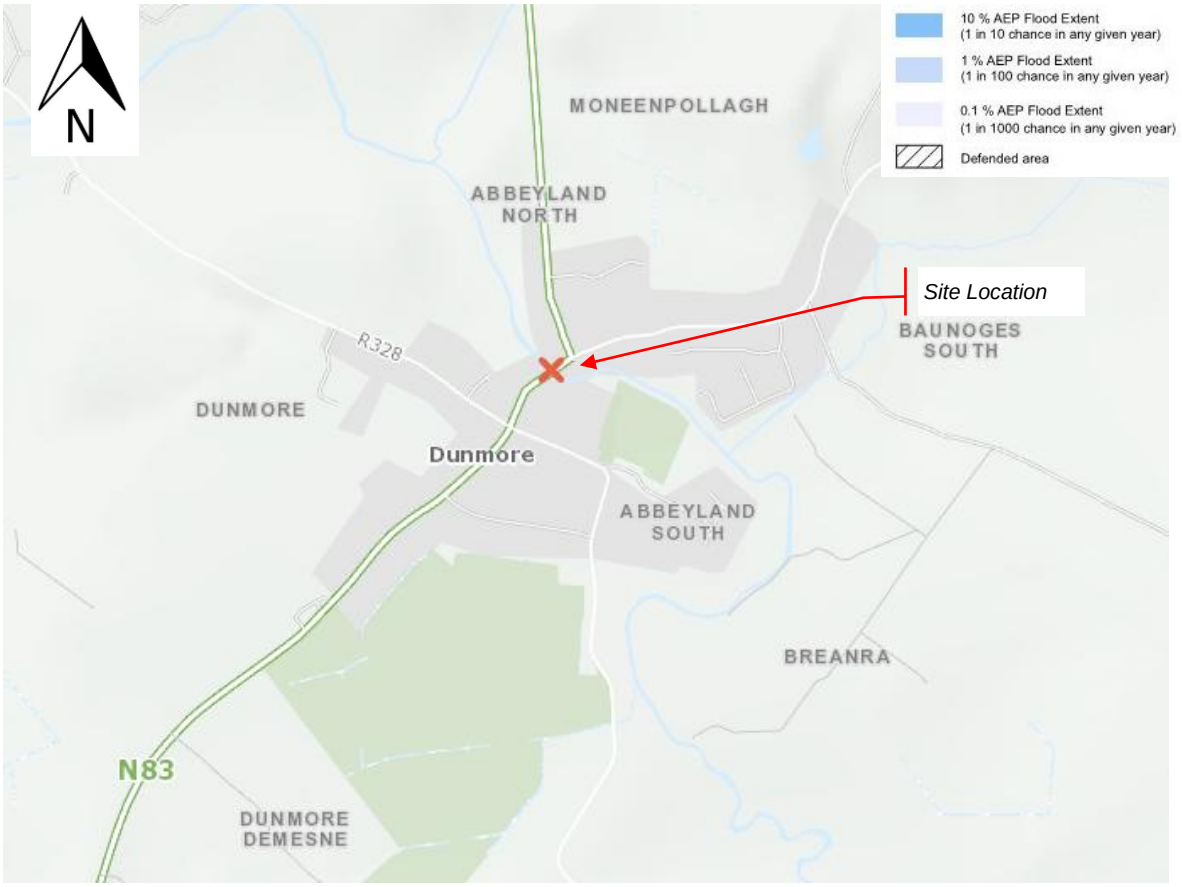


Figure 4-5: Turvey River CFRAM extent (excerpt from www.floodinfo.ie)

The proposed development has been designed as Flood Zone C in line with above.

5 FLOOD RISK ASSESSMENT

5.1 SOURCES OF FLOODING

Fluvial Flooding

Fluvial flooding is the result of a river exceeding its capacity and excess water spilling out onto the adjacent floodplain. The proposed works are located close to the Sinking River. From information available from the OPW it can be concluded that the area in located in Flood Zone C and is not considered to be at risk of flooding from the Sinking River.

Pluvial Flooding

Pluvial flooding is the result of rainfall-generated overland flows which arise before run-off can enter any watercourse or sewer. It is usually associated with high-intensity rainfall.

There is an existing surface water network located on Bridge Street. There are no reported incidents of pluvial flooding in Dunmore. The proposed works includes the construction of an additional surface water infrastructure to manage surface water runoff onsite.

It is therefore concluded that pluvial flooding is not a risk to the area, nor as a result of the proposed works.

Coastal Flooding

Coastal flooding is the result of sea levels which are higher than normal and result in sea water overflowing onto the land during high tides or storm surges. Given the site is approximately 40km north of the coast, coastal flooding is not considered a significant risk to the area.

Groundwater Flooding

Groundwater flooding occurs when the level of the water stored in the ground rises as a result of prolonged rainfall. From a review of the available information, there is no risk of groundwater flooding at the site.

5.2 DEVELOPMENT VULNERABILITY

The PSFRM Guidelines classify potential development in terms of its vulnerability to flooding. The types of development falling within each vulnerability class are described in *Table 3.1* of the *PSFRM Guidelines*, which is reproduced in Table 5-1.

Table 5-1: Development Vulnerability Class

Vulnerability Class	Land uses and types of development which include:
Highly vulnerable development (including essential infrastructure)	Garda, ambulance and fire stations and command centres required to be operational during flooding; Hospitals; Emergency access and egress points; Schools; Dwelling houses, student halls of residence and hostels; Residential institutions such as residential care homes, children's homes and social services homes; Caravans and mobile home parks; Dwelling houses designed, constructed or adapted for the elderly or, other people with impaired mobility; and Essential infrastructure, such as primary transport and utilities distribution, including electricity generating power stations and sub-stations, water and sewage treatment, and potential significant sources of pollution (SEVESO sites, IPPC sites, etc.) in the event of flooding.
Less vulnerable development	Buildings used for: retail, leisure, warehousing, commercial, industrial and non-residential institutions; Land and buildings used for holiday or short-let caravans and camping, subject to specific warning and evacuation plans; Land and buildings used for agriculture and forestry; Waste treatment (except landfill and hazardous waste); Mineral working and processing; and Local transport infrastructure.
Water-compatible development	Flood control infrastructure; Docks, marinas and wharves; Navigation facilities; Ship building, repairing and dismantling, dockside fish processing and refrigeration and compatible activities requiring a waterside location; Water-based recreation and tourism (excluding sleeping accommodation); Lifeguard and coastguard stations; Amenity open space, outdoor sports and recreation and essential facilities such as changing rooms; and Essential ancillary sleeping or residential accommodation for staff required by uses in this category (subject to a specific warning and evacuation plan).

The proposed works are to comprise of the demolition of a number of building and the widening of the N83, Bridge Street. As this is a national road it, therefore is considered to be **Highly Vulnerable Development**.

The *PSFRM Guidelines* define the zones in which each class of development is appropriate – this is summarised in
. The *PSFRM Guidelines* recognises that flood risks should not be the only deciding factor in zoning for development. They also recognise that circumstances will exist where development of a site within a floodplain is desirable; in order to achieve compact and sustainable development of the core of urban settlements. In order to allow consideration of such development, the *PSFRM Guidelines* provide a **Justification Test**, which establishes the criteria under which desirable development of a site in a floodplain may be warranted.

Table 5-2: "Appropriateness" Matrix

	Flood Zone A	**Flood Zone B**	**Flood Zone C**
Highly Vulnerable Development	Justification Test	Justification Test	**Appropriate**
Less Vulnerable Development	Justification Test	Appropriate	Appropriate
Water-compatible Development	Appropriate	Appropriate	Appropriate

The proposed works are for the upgrade of a national road and is classed as '**highly vulnerable**' in accordance with Table 3.1 of the PSFRM Guidelines.

From the sections above it can be seen that the area of works is within Flood Zone C.

5.2.1 INFRASTRUCTURE

The proposed development includes the construction of additional surface water infrastructure which consists of SuDS measures, where applicable, which will minimize the impact to the receiving environment. There is no increase to the hard standing area as part of the works; however, the hard standing is being changed from existing buildings to road surfacing. Additional infrastructure is to be provided to efficiently drain these areas.

6 CONCLUSIONS AND RECOMMENDATIONS

The assessment is carried out in full compliance with the requirements of "The Planning System & Flood Risk Management Guidelines" published by the Department of the Environment, Heritage and Local Government in November 2009.

As detailed with in the previous sections of this report, the area of works is located within Flood Zone C for both fluvial and tidal flooding. The area is not considered to be at risk from pluvial or groundwater flooding, therefore in accordance with the Planning System and Flood Risk Management Guidelines for Planning Authorities, there is no significant risk for flooding in the proposed development and it appropriate for use.

7 VERIFICATION

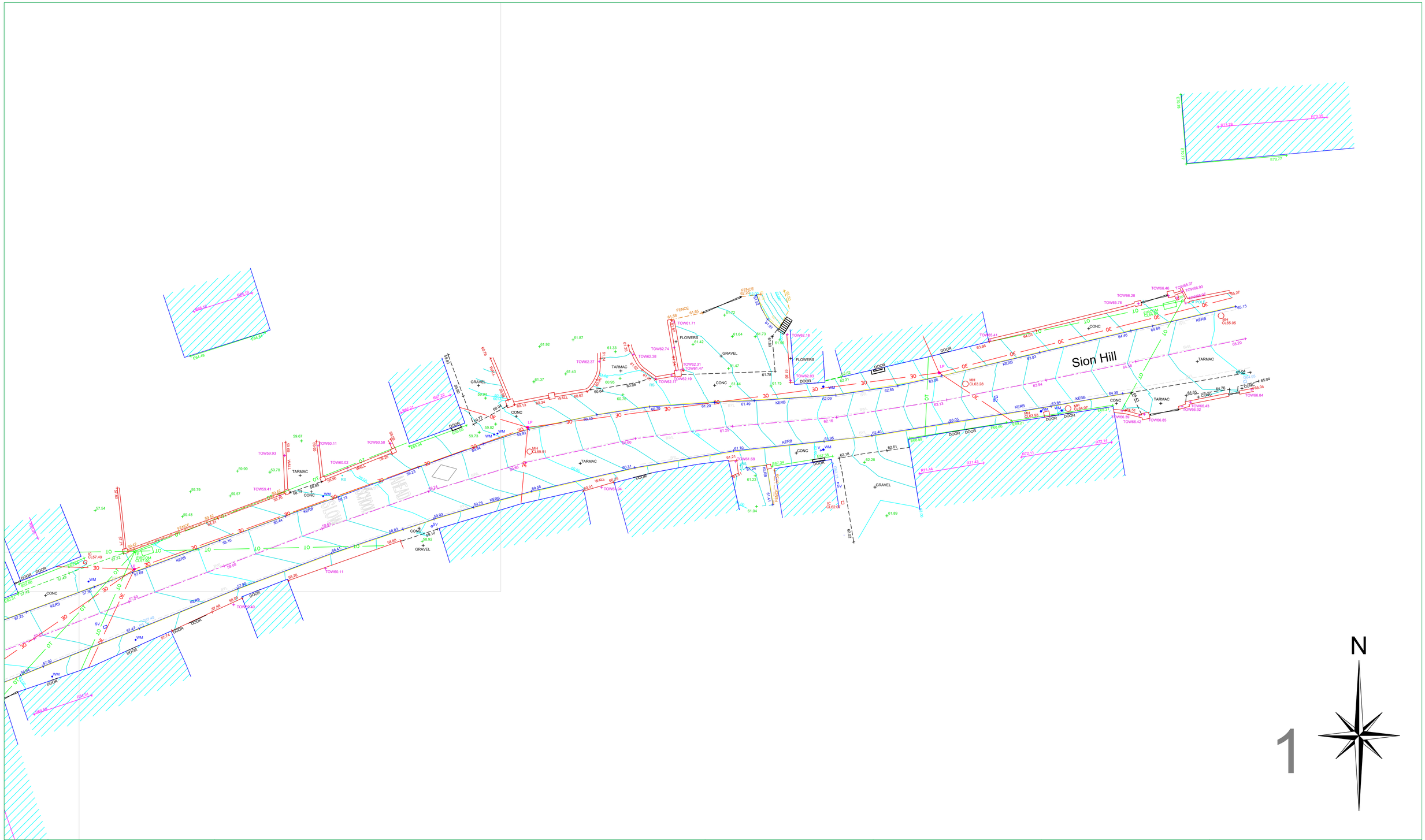
This report was compiled and verified by:

Suhas HS BEng (Civil), M. Tech (Transportation), MIEI

Civil Engineer

O'Connor Sutton Cronin & Associates

Appendix A TOPOGRAPHICAL SURVEY



APEX SURVEYS

www.apexsurveys.ie
info@apexsurveys.ie
00353 1 691 0156

RURAL/NATURAL FEATURES :

BUSH
SAPLING
TREE
HEDGE
TROUGH
CATTLE GRID

LINEWORK:

EMBANKEMENT TOP +101.50
DRAIN +101.50
BREAKLINE +101.50
BUILDING +101.50
KERB BOTTOM +101.50
WALL +101.50
PATH/CHANGE SURFACE +101.50
O/HEAD ELECTRICITY OE
O/HEAD TELECOM OT

STREET FURNITURE :

BOLLARDS BD *
BORE HOLE BH +
BUS STOP BS *
CRASH BARRIER CB
ELECTRICITY POLE EP *
EARTHING ROD ER +
GATE
GROUND LIGHT LT *
ILLUMINATED BOLLARD BOL
LAMP POST LP *
MARKER POST MKR
POST POST * *
POST BOX POST BOX +
ROADSIGN RS * RS
SIGN POST SIGN
TELEPHONE BOX TB
TELEPHONE POLE TP *
TRAFFIC LIGHT TL *
TRIAL PIT TPIT +

SERVICES :

AIR VALVE AV +
ARMSTRONG JUNCTION AJ
CABLE TV IC CATV
COVER LEVEL CL
EIRCOM COVER EIRCOM
EIRCOM JUNCTION BOX EIRCOM BOX
ELECTRICAL CABLE PIT ECP
ESAT COVER ESAT
ESB COVER ESB
ESB JUNCTION BOX ESB BOX
FIRE HYDRANT FH *
GAS VALVE GV
GULLY G
INSPECTION COVER IC
MANHOLE MH
SEPTIC TANK SEPTIC
SLUICE VALVE SV *
STOPCOCK ST *

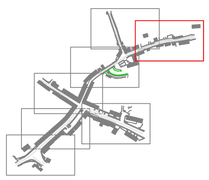
SERVICES :

SERVICE BOX (UNKNOWN) BOX
TRAFFIC COVER TLIC
VENT VENT *
WATER METER WM +
UNABLE TO LIFT UTO

LEVELS :

BED LEVEL + BED101.50
EAVE LEVEL + E101.50
FLOOR LEVEL + FL101.50
INVERT LEVEL + IL101.50
ROAD LEVEL + 101.50
RIDGE LEVEL + R101.50
SOFFIT LEVEL + SL101.50
SPOT LEVEL + 101.50
TOP OF FENCE LEVEL + TOF101.50
TOP OF WALL LEVEL + TOW101.50
WATER LEVEL + WL101.50
SURVEY CONTROL STATION

SHEET LAYOUT :



PLAN PRODUCED BY:

APEX SURVEYS

CONTACT INFORMATION:

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00353 1 691 0156

CLIENT:

O'Connor - Sutton - Cronin

PROJECT:

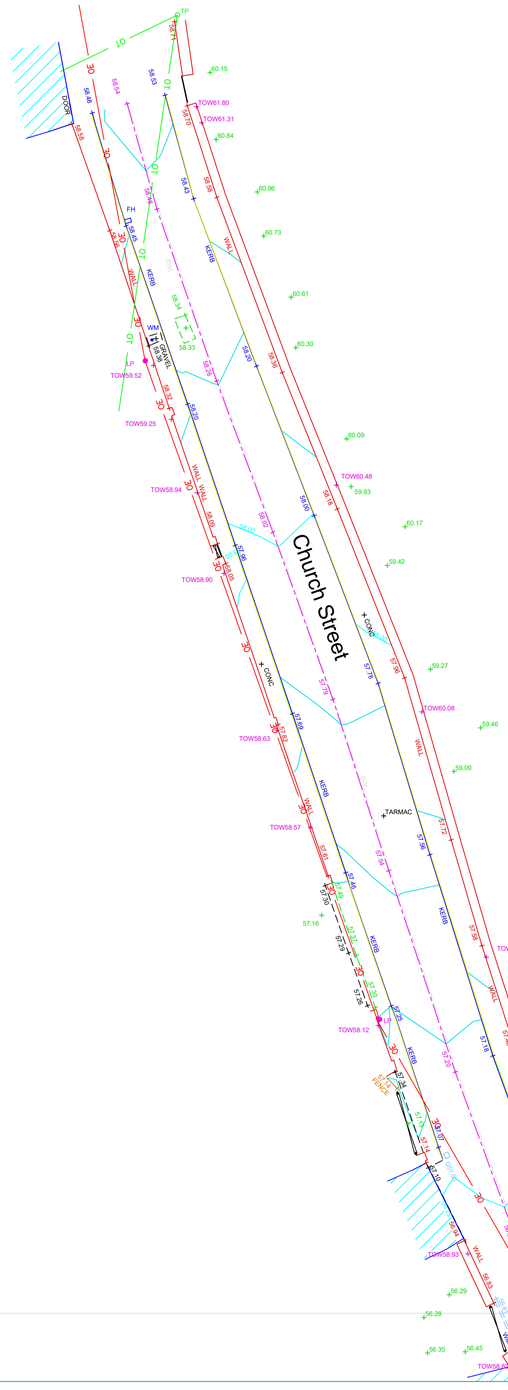
Bridge Street, Dunmore

GRID SYSTEM: Irish Transverse Mercator
DATUM: Malin Head (OSGM15)
NOTES: Drawing Contains Scale Factor

REVISIONS:

No.	Date	Description
001	N/A	Original Drawing

SCALE : 1/200 A1
DATE : 13/03/2020
DRG No: 4255
SHEET: 1 of 7
DESCRIPTION : 2D Topographical
SURVEYED BY : Gheroghe C. Marza
PROCESSED BY : Lisa Afeltra
CHECKED BY : Alan Brady



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- GATE
- GROUND LIGHT
- ILLUMINATED BOLLARD
- LAMP POST
- MARKER POST
- POST
- POST BOX
- ROADSIGN
- SIGN POST
- TELEPHONE BOX
- TELEPHONE POLE
- TRAFFIC LIGHT
- TRIAL PIT

SERVICES :

- AIR VALVE
- ARMSTRONG JUNCTION
- CABLE TV IC
- COVER LEVEL
- EIRCOM COVER
- EIRCOM JUNCTION BOX
- ELECTRICAL CABLE PIT
- ESAT COVER
- ESB COVER
- ESB JUNCTION BOX
- FIRE HYDRANT
- GAS VALVE
- GULLY
- INSPECTION COVER
- MANHOLE
- SEPTIC TANK
- SLUICE VALVE
- STOPCOCK

SERVICES :

- SERVICE BOX (UNKNOWN)
- TRAFFIC COVER
- VENT
- WATER METER
- UNABLE TO LIFT

LEVELS :

- BED LEVEL
- EAVE LEVEL
- FLOOR LEVEL
- INVERT LEVEL
- ROAD LEVEL
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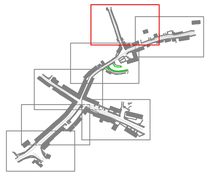

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DRG No: 4255

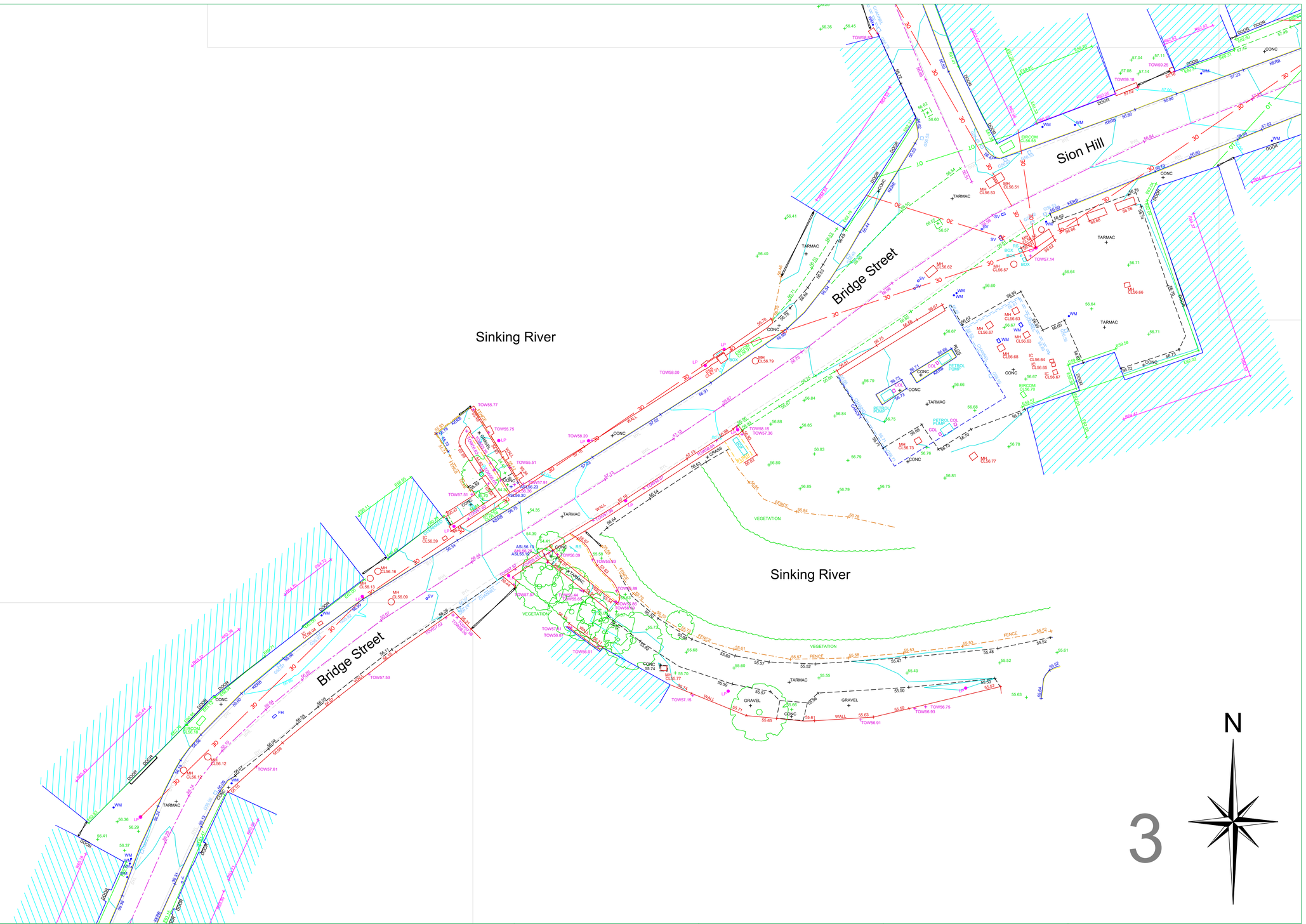
SHEET: 2 of 7

DESCRIPTION : 2D Topographical

SURVEYED BY : Gheroghe C. Marza

PROCESSED BY : Lisa Afeltra

CHECKED BY : Alan Brady



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PATH/CHANGE SURFACE 101.50
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BORE HOLE BH
BUS STOP BS
CRASH BARRIER CB
ELECTRICITY POLE EP
EARTHING ROD ER
GATE TR
GROUND LIGHT LT
ILLUMINATED BOLLARD BOL
LAMP POST LP
MARKER POST MKR
POST POST
POST BOX POST BOX
ROADSIGN RS
SIGN POST SIGN
TELEPHONE BOX TB
TELEPHONE POLE TP
TRAFFIC LIGHT TL
TRIAL PIT TPIT

SERVICES :

AIR VALVE AV
ARMSTRONG JUNCTION AJ
CABLE TV IC CATV
COVER LEVEL CL
EIRCOM COVER EIRCOM
EIRCOM JUNCTION BOX EIRCOM BOX
ELECTRICAL CABLE PIT ECP
ESAT COVER ESAT
ESB COVER ESB
ESB JUNCTION BOX ESB BOX
FIRE HYDRANT FH
GAS VALVE GV
GULLY G
INSPECTION COVER IC
MANHOLE MH
SEPTIC TANK SEPTIC
SLUICE VALVE SV
STOPCOCK ST

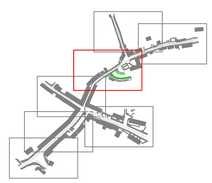
SERVICES :

SERVICE BOX (UNKNOWN) BOX
TRAFFIC COVER TLIC
VENT VENT
WATER METER WM
UNABLE TO LIFT UTO

LEVELS :

BED LEVEL BED101.50
EAVE LEVEL E101.50
FLOOR LEVEL FL101.50
INVERT LEVEL IL101.50
ROAD LEVEL 101.50
RIDGE LEVEL R101.50
SOFFIT LEVEL SL101.50
SPOT LEVEL 101.50
TOP OF FENCE LEVEL TOF101.50
TOP OF WALL LEVEL TOW101.50
WATER LEVEL WL101.50
SURVEY CONTROL STATION

SHEET LAYOUT :



PLAN PRODUCED BY:

APEX SURVEYS

CONTACT INFORMATION:

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Unit 78 Dunboyne Business Park
Dunboyne, Co. Meath, Ireland
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info@apexsurveys.ie
00353 1 691 0156

CLIENT:

O'Connor - Sutton - Cronin

PROJECT:

Bridge Street, Dunmore

GRID SYSTEM: Irish Transverse Mercator
DATUM: Malin Head (OSGM15)
NOTES: Drawing Contains Scale Factor

REVISIONS:

No.	Date	Description
001	N/A	Original Drawing

SCALE : 1/200 A1
DATE : 13/03/2020
DRG No: 4255
DESCRIPTION : 2D Topographical
SURVEYED BY : Gheroghe C. Marza
SHEET: 3 of 7
PROCESSED BY : Lisa Afeltra
CHECKED BY : Alan Brady

APEX SURVEYS

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RURAL/NATURAL FEATURES :

BUSH
SAPLING
TREE
HEDGE
TROUGH — TR
CATTLE GRID — GRID

LINEWORK:

EMBANKEMENT TOP	101.50
DRAIN	101.50
BREAKLINE	101.50
BUILDING	101.50
KERB BOTTOM	101.50
WALL	101.50
PATH/CHANGE SURFACE	101.50
O/HEAD ELECTRICITY	OE
O/HEAD TELECOM	OT

STREET FURNITURE :

BOLLARDS	BD
BORE HOLE	BH
BUS STOP	BS
CRASH BARRIER	CB
ELECTRICITY POLE	EP
EARTHING ROD	ER
GATE	
GROUND LIGHT	LT
ILLUMINATED BOLLARD	BOL
LAMP POST	LP
MARKER POST	MKR
POST	POST
POST BOX	POST BOX
ROADSIGN	RS · RS
SIGN POST	SIGN
TELEPHONE BOX	TB
TELEPHONE POLE	TP
TRAFFIC LIGHT	TL
TRIAL PIT	TPIT

SERVICES :

AIR VALVE	AV
ARMSTRONG JUNCTION	AJ
CABLE TV IC	CATV
COVER LEVEL	CL
EIRCOM COVER	EIRCOM
EIRCOM JUNCTION BOX	EIRCOM BOX
ELECTRICAL CABLE PIT	ECP
ESAT COVER	ESAT
ESB COVER	ESB
ESB JUNCTION BOX	ESB BOX
FIRE HYDRANT	FH
GAS VALVE	GV
GULLY	G
INSPECTION COVER	IC
MANHOLE	MH
SEPTIC TANK	SEPTIC
SLUICE VALVE	SV
STOPCOCK	ST

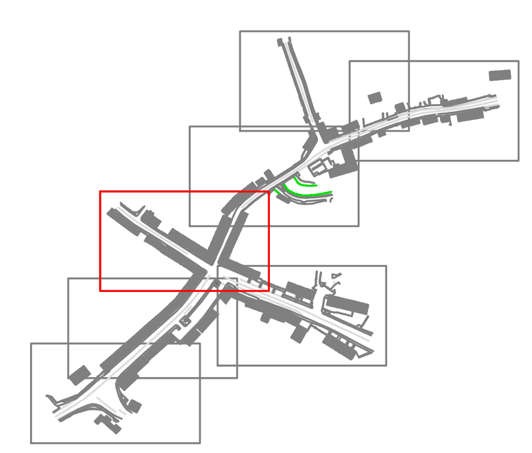
SERVICES :

SERVICE BOX (UNKNOWN)	BOX
TRAFFIC COVER	TLIC
VENT	VENT
WATER METER	WM
UNABLE TO LIFT	UTO

LEVELS :

BED LEVEL	BED101.50
EAVE LEVEL	E101.50
FLOOR LEVEL	FL101.50
INVERT LEVEL	IL101.50
ROAD LEVEL	101.50
RIDGE LEVEL	R101.50
SOFFIT LEVEL	SL101.50
SPOT LEVEL	101.50
TOP OF FENCE LEVEL	TOF101.50
TOP OF WALL LEVEL	TOW101.50
WATER LEVEL	WL101.50
SURVEY CONTROL STATION	

SHEET LAYOUT :



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CLIENT:

O'Connor - Sutton - Cronin

PROJECT:

Bridge Street, Dunmore

GRID SYSTEM: Irish Transverse Mercator
DATUM: Malin Head (OSGM15)
NOTES: Drawing Contains Scale Factor

REVISIONS:

No.	Date	Description
001	N/A	Original Drawing

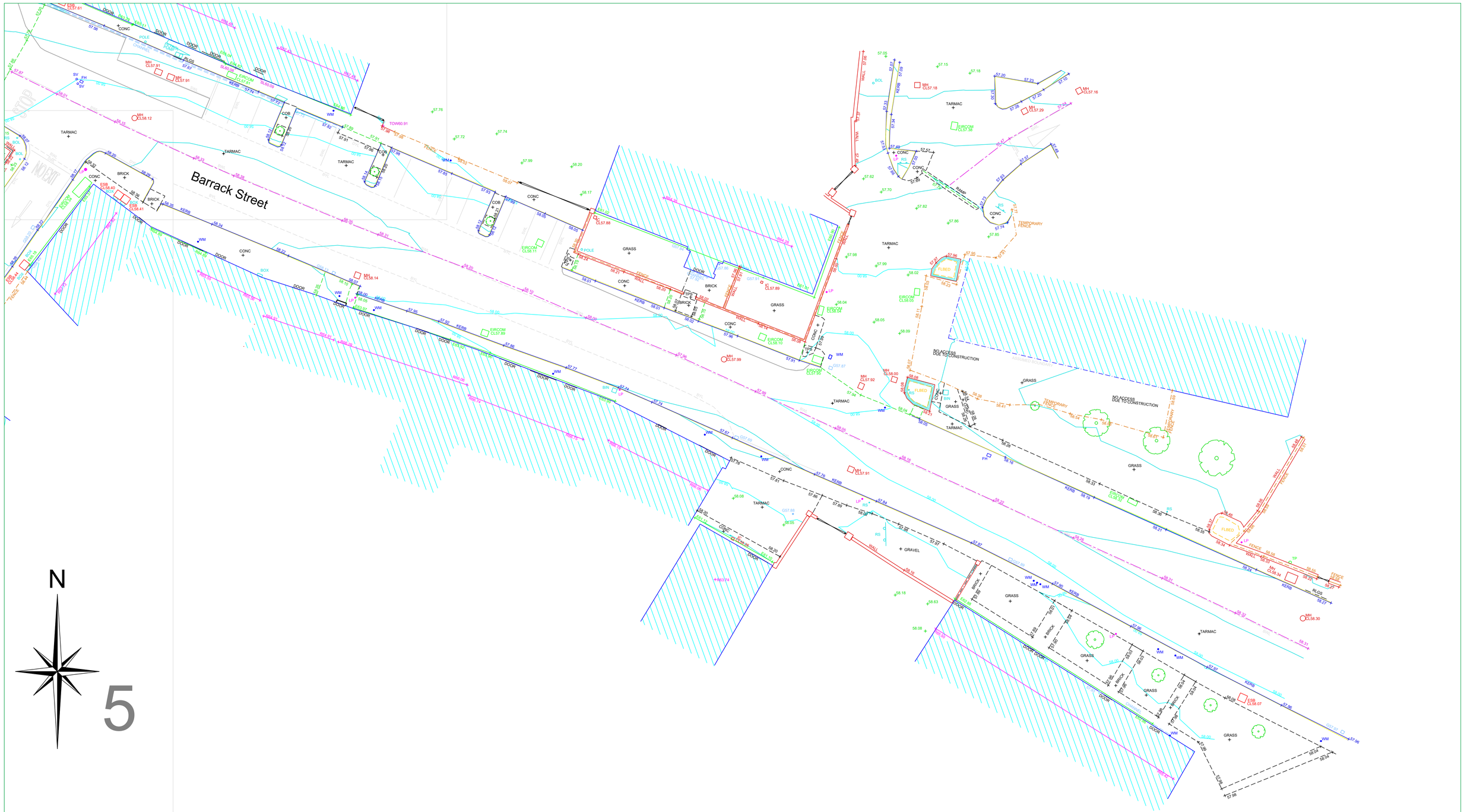
SCALE : 1/200 A1

DATE : 13/03/2020

DRG No: 4255

SHEET: 4 of 7

DESCRIPTION : 2D Topographical
SURVEYED BY : Gheroghe C. Marza
PROCESSED BY : Lisa Afeltra
CHECKED BY : Alan Brady



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RURAL/NATURAL FEATURES :

BUSH
SAPLING
TREE
HEDGE
TROUGH
CATTLE GRID

LINEWORK:

EMBANKEMENT TOP
DRAIN
BREAKLINE
BUILDING
KERB BOTTOM
WALL
PATH/CHANGE SURFACE
O/HEAD ELECTRICITY
O/HEAD TELECOM

STREET FURNITURE :

BOLLARDS
BORE HOLE
BUS STOP
CRASH BARRIER
ELECTRICITY POLE
EARTHING ROD
GATE
GROUND LIGHT
ILLUMINATED BOLLARD
LAMP POST
MARKER POST
POST
POST BOX
ROADSIGN
SIGN POST
TELEPHONE BOX
TELEPHONE POLE
TRAFFIC LIGHT
TRIAL PIT

SERVICES :

AIR VALVE
ARMSTRONG JUNCTION
CABLE TV IC
COVER LEVEL
EIRCOM COVER
EIRCOM JUNCTION BOX
ELECTRICAL CABLE PIT
ESAT COVER
ESB COVER
ESB JUNCTION BOX
FIRE HYDRANT
GAS VALVE
GULLY
INSPECTION COVER
MANHOLE
SEPTIC TANK
SLUICE VALVE
STOPCOCK

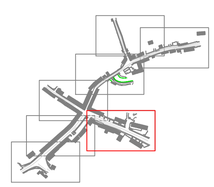
SERVICES :

SERVICE BOX (UNKNOWN)
TRAFFIC COVER
VENT
WATER METER
UNABLE TO LIFT

LEVELS :

BED LEVEL
EAVE LEVEL
FLOOR LEVEL
INVERT LEVEL
ROAD LEVEL
RIDGE LEVEL
SOFFIT LEVEL
SPOT LEVEL
TOP OF FENCE LEVEL
TOP OF WALL LEVEL
WATER LEVEL
SURVEY CONTROL STATION

SHEET LAYOUT :



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CLIENT:

O'Connor - Sutton - Cronin

PROJECT:

Bridge Street, Dunmore

GRID SYSTEM:	Irish Transverse Mercator
DATUM:	Malin Head (OSGM15)
NOTES:	Drawing Contains Scale Factor

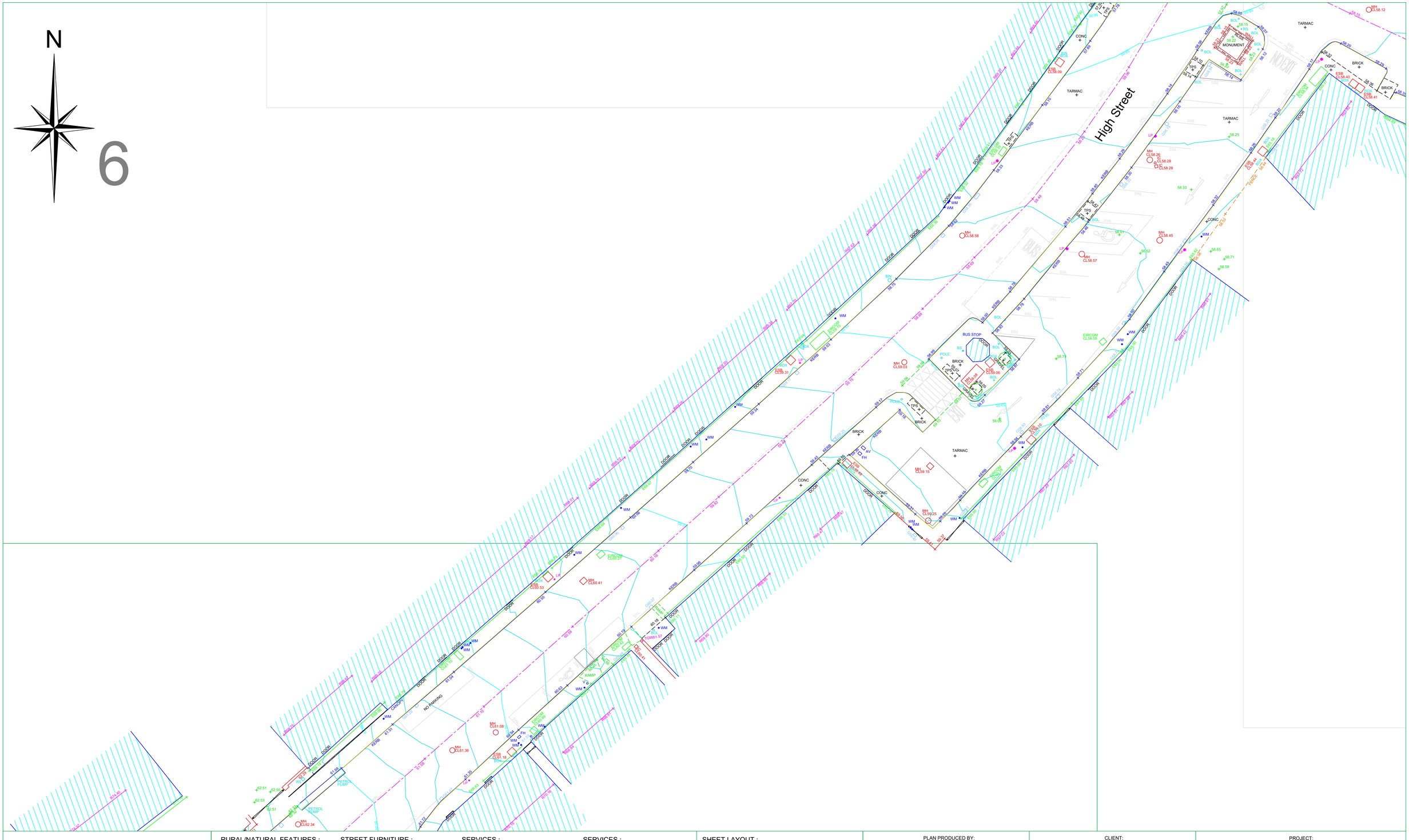
REVISIONS:

No.	Date	Description
001	N/A	Original Drawing

SCALE :	1/200 A1	DATE :	13/03/2020
DRG No:	4255	DESCRIPTION :	2D Topographical
		SURVEYED BY :	Gheroghe C. Marza
SHEET:	5 of 7	PROCESSED BY :	Lisa Afeltra
		CHECKED BY :	Alan Brady

N

6



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RURAL/NATURAL FEATURES :

BUSH
SAPLING
TREE
HEDGE
TROUGH
CATTLE GRID

TR
GRID

LINEWORK:

EMBANKEMENT TOP	101.50
DRAIN	101.50
BREAKLINE	101.50
BUILDING	101.50
KERB BOTTOM	101.50
WALL	101.50
PATH/CHANGE SURFACE	101.50
O/HEAD ELECTRICITY	OE
O/HEAD TELECOM	OT

STREET FURNITURE :

BOLLARDS	BD
BORE HOLE	BH
BUS STOP	BS
CRASH BARRIER	CB
ELECTRICITY POLE	EP
EARTHING ROD	ER
GATE	
GROUND LIGHT	LT
ILLUMINATED BOLLARD	BOL
LAMP POST	LP
MARKER POST	MKR
POST	POST
POST BOX	POST BOX
ROADSIGN	RS RS
SIGN POST	SIGN
TELEPHONE BOX	TB
TELEPHONE POLE	TP
TRAFFIC LIGHT	TL
TRIAL PIT	TPIT

SERVICES :

AIR VALVE	AV
ARMSTRONG JUNCTION	AJ
CABLE TV IC	CATV
COVER LEVEL	CL
EIRCOM COVER	EIRCOM
EIRCOM JUNCTION BOX	EIRCOM BOX
ELECTRICAL CABLE PIT	ECP
ESAT COVER	ESAT
ESB COVER	ESB
ESB JUNCTION BOX	ESB BOX
FIRE HYDRANT	FH
GAS VALVE	GV
GULLY	G
INSPECTION COVER	IC
MANHOLE	MH
SEPTIC TANK	SEPTIC
SLUICE VALVE	SV
STOPCOCK	ST

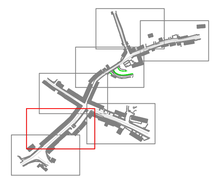
SERVICES :

SERVICE BOX (UNKNOWN)	BOX
TRAFFIC COVER	TLIC
VENT	VENT
WATER METER	WM
UNABLE TO LIFT	UTO

LEVELS :

BED LEVEL	+ BED101.50
EAVE LEVEL	+ E101.50
FLOOR LEVEL	+ FL101.50
INVERT LEVEL	+ IL101.50
ROAD LEVEL	+ 101.50
RIDGE LEVEL	+ R101.50
SOFFIT LEVEL	+ SL101.50
SPOT LEVEL	+ 101.50
TOP OF FENCE LEVEL	+ TOF101.50
TOP OF WALL LEVEL	+ TOW101.50
WATER LEVEL	+ WL101.50
SURVEY CONTROL STATION	

SHEET LAYOUT :



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PROJECT:

Bridge Street, Dunmore

GRID SYSTEM: Irish Transverse Mercator
DATUM: Malin Head (OSGM15)
NOTES: Drawing Contains Scale Factor

REVISIONS:

No.	Date	Description
001	N/A	Original Drawing

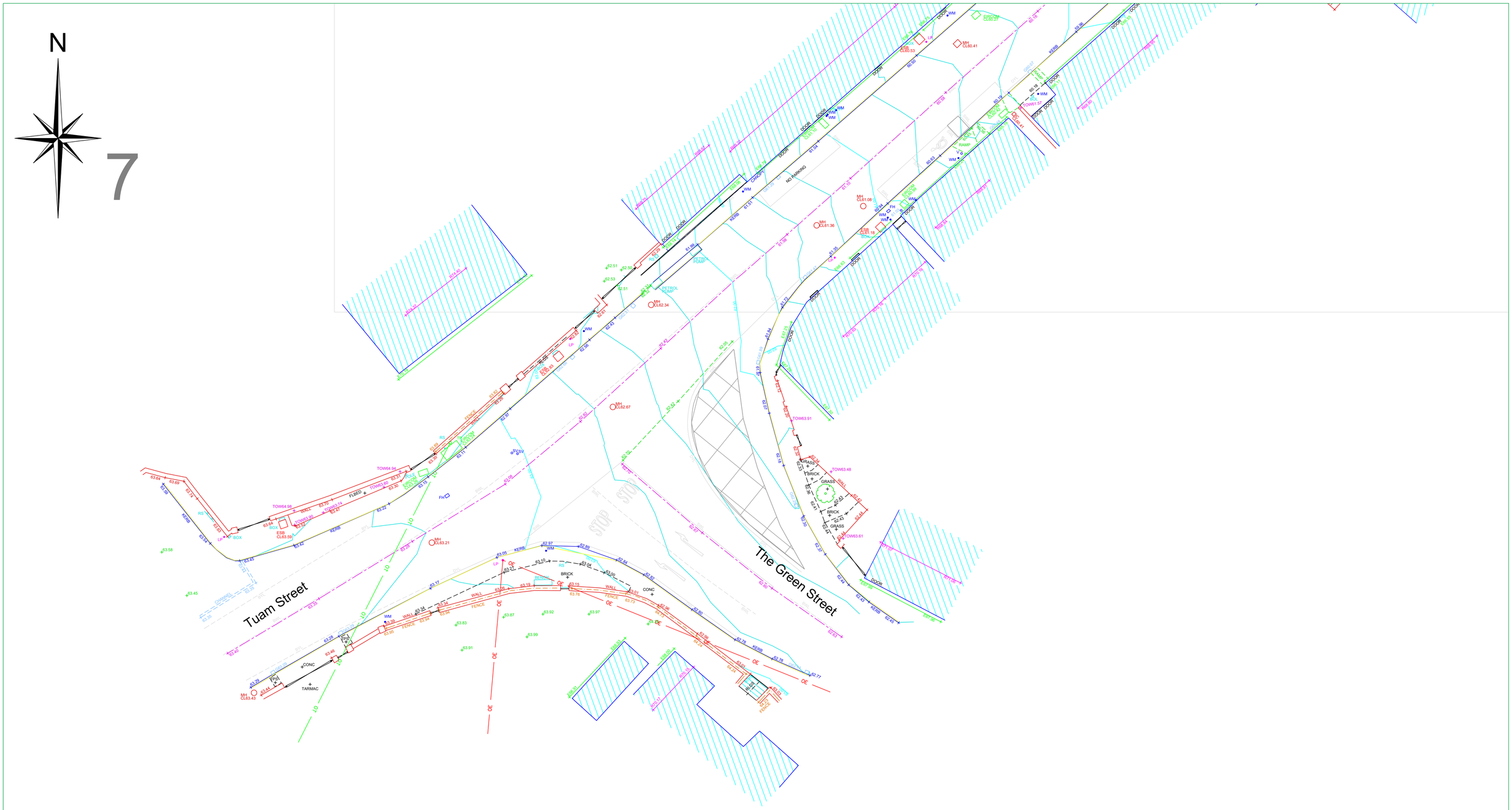
SCALE : 1/200 A1

DATE : 13/03/2020

DRG No: 4255

SHEET: 6 of 7

DESCRIPTION : 2D Topographical
SURVEYED BY : Gheroghe C. Marza
PROCESSED BY : Lisa Afeltra
CHECKED BY : Alan Brady



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RURAL/NATURAL FEATURES :

BUSH
SAPLING
TREE
HEDGE
TROUGH
CATTLE GRID

LINEWORK:

EMBANKEMENT TOP +101.50
DRAIN +101.50
BREAKLINE +101.50
BUILDING +101.50
KERB BOTTOM +101.50
WALL +101.50
PATH/CHANGE SURFACE +101.50
O/HEAD ELECTRICITY OE
O/HEAD TELECOM OT

STREET FURNITURE :

BOLLARDS BD
BORE HOLE BH+
BUS STOP BS
CRASH BARRIER CB
ELECTRICITY POLE EP
EARTHING ROD ER+
GATE
GROUND LIGHT LT+
ILLUMINATED BOLLARD BOL
LAMP POST LP
MARKER POST MKR+
POST POST
POST BOX POST BOX+
ROADSIGN RS RS
SIGN POST SIGN
TELEPHONE BOX TB
TELEPHONE POLE TP
TRAFFIC LIGHT TL
TRIAL PIT TPIT+

SERVICES :

AIR VALVE AV+
ARMSTRONG JUNCTION AJ
CABLE TV IC CATV
COVER LEVEL CL
EIRCOM COVER EIRCOM
EIRCOM JUNCTION BOX EIRCOM BOX
ELECTRICAL CABLE PIT ECP
ESAT COVER ESAT
ESB COVER ESB
ESB JUNCTION BOX ESB BOX
FIRE HYDRANT FH+
GAS VALVE GV
GULLY G
INSPECTION COVER IC
MANHOLE MH
SEPTIC TANK SEPTIC
SLUICE VALVE SV
STOPCOCK ST

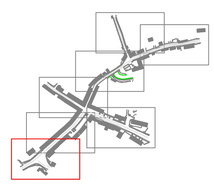
SERVICES :

SERVICE BOX (UNKNOWN) BOX
TRAFFIC COVER TLIC
VENT VENT
WATER METER WM+
UNABLE TO LIFT UTO

LEVELS :

BED LEVEL +BED101.50
EAVE LEVEL +E101.50
FLOOR LEVEL +FL101.50
INVERT LEVEL +IL101.50
ROAD LEVEL +101.50
RIDGE LEVEL +R101.50
SOFFIT LEVEL +SL101.50
SPOT LEVEL +101.50
TOP OF FENCE LEVEL +TOF101.50
TOP OF WALL LEVEL +TOW101.50
WATER LEVEL +WL101.50
SURVEY CONTROL STATION

SHEET LAYOUT :



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PROJECT:

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GRID SYSTEM: Irish Transverse Mercator
DATUM: Malin Head (OSGM15)
NOTES: Drawing Contains Scale Factor

REVISIONS:

No.	Date	Description
001	N/A	Original Drawing

SCALE : 1/200 A1
DRG No: 4255
SHEET: 7 of 7

DATE : 13/03/2020
DESCRIPTION : 2D Topographical
SURVEYED BY : Gheroghe C. Marza
PROCESSED BY : Lisa Afeltra
CHECKED BY : Alan Brady

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MULTIDISCIPLINARY CONSULTING ENGINEERS

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