HOLDGATE CONSULTING

Drainage Strategy

Project

Proposed New Development
151 Heckmondwike Road
Dewsbury

Project Reference

22-311

Client

Mr Arif Asmal

28 June 2022

The Old Hall,
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Ref: 22-311

Proposed Development
Heckmondwike Road
Dewsbury
WF13 3NS

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Revision	Date	Description	Prepared	Approved
P01	28/06/2022	First Issue	MA	NM

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Contents

List of Figures ii
List of Tables ii
List of Appendices ii
1. Introduction 1
1.1. Terms of Reference 1
1.2. Sources of Information 1
2. Development Site 2
2.1. Location 2
3. Drainage 3
3.1. Existing Drainage 3
3.2. Proposed Foul Drainage 3
3.3. Sustainable Drainage Systems (SuDS) 3
3.4. Proposed Storm Drainage 3
4. Conclusions and Recommendations 4
5. Limitations 5

List of Figures

Figure 2-1: Site Location Plan 2

List of Tables

Table 2.1: Site Location Reference 2

List of Appendices

Appendix A – Key Stakeholder Consultation
Appendix B – Site Information
Appendix C – Proposed Development
Appendix D – Drainage Strategy

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1. Introduction

1.1. Terms of Reference

1.1.1. Holdgate Consulting has been commissioned by Mr Asmal to prepare a Drainage Strategy (DS) to support validation of a planning application.

1.1.2. This report assesses existing drainage provision, flood zone and proposes a drainage strategy for foul and storm flows discharging from the development area. This report has been prepared in compliance with current policies and best practices to support planning submission to the LPA.

1.2. Sources of Information

1.2.1. This Drainage Strategy has been based on the following sources of information:

- DEFRA / EA's aquifer and source protection data (https://magic.defra.gov.uk/MagicMap.aspx)
- EA's Flood Map for Planning; (https://flood-map-for-planning.service.gov.uk/)

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2. Development Site

2.1. Location

2.1.1. The development site is located at 151 Heckmondwike Road, Dewsbury. This is an urban area surrounded by residential dwellings and amenities. Development boundary is in part hard surfaced near Heckmondwike Road and covered with overgrown vegetation elsewhere (Appendix B). The site is accessed via Heckmondwike Road.

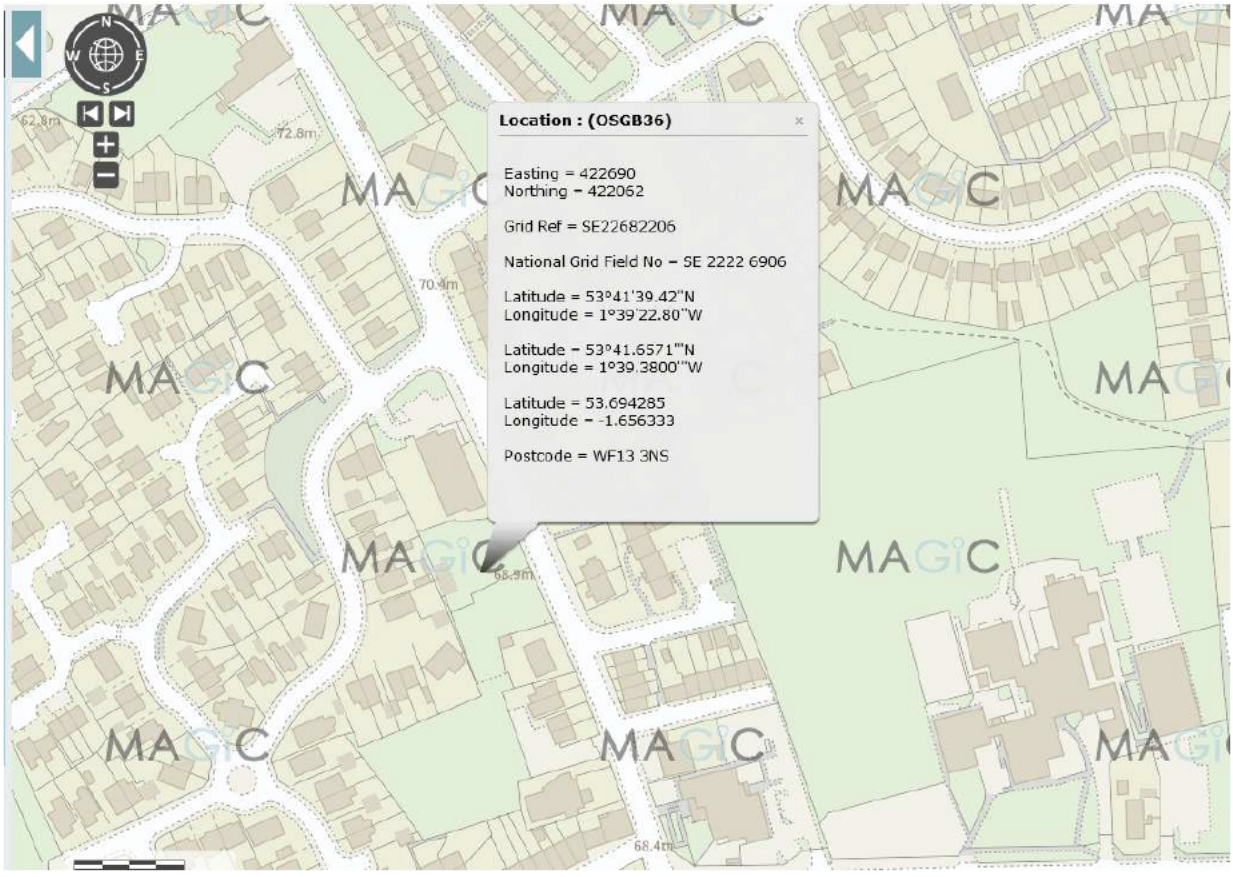
2.1.2. Development is proposing to build a fuel service station forecourt with kiosk. Access and egress will be formed from Heckmondwike Road in a one-way arrangement.

2.1.3. EA's Flood Map for Planning (Appendix A) indicates development is in Flood Risk Zone 1 (<0.1% EAP).

Table 2.1: Site Location Reference

OS X	OS Y	National Grid Reference	Postcode
422690	422062	SE22682206	WF13 3NS

Figure 2-1: Site Location Plan



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3. Drainage

3.1. Existing Drainage

3.1.1. Site does not benefit from formal drainage in its current form. Yorkshire Water Asset Location Map (Appendix B) indicates an abandoned sewer to rear of the site running parallel to Heckmondwike Rd, and a 150mm foul sewer is recorded within the development boundary which is also arranged in a similar manner. Both sewers head southwest towards Spen View. A 750mm storm sewer runs southeast along Heckmondwike Road.

3.2. Proposed Foul Drainage

3.2.1. Proposed foul drainage will pick up internal foul connections from the kiosk northwest of the development and discharge to the nearby 150mm public foul water manhole (Appendix D). Formal S106 agreement is required.

3.3. Sustainable Drainage Systems (SuDS)

3.3.1. The site is proposing a fuel service station on largely brownfield land which does not lend itself to use of soakaways due to increased risk of contamination. The drainage proposal will provide 30% betterment.

3.4. Proposed Storm Drainage

3.4.1. Storm drainage will convey flows generated from the forecourt and perimeter via gravity to the northeast. An oil interceptor and offline cellular storage are proposed northeast of the site followed by a flow control manhole at site exit. Storm drainage will connect to the 750mm public storm water sewer via saddle connection (Appendix D). Formal S106 agreement is required. Surface water discharge is limited to 30% betterment of brownfield rates, equating to 15.5l/s.

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4. Conclusions and Recommendations

4.1.1. The findings of this report and recommendations are summarised below:

4.1.2. This report has been produced to support a planning application for a development at 151 Heckmondwike Road, Dewsbury, WF13 3NS.

4.1.3. The development is proposing a fuel service station with kiosk.

4.1.4. The drainage proposal will provide 30% betterment to brownfield rates.

4.1.5. Site benefits from a 750mm public surface water sewer to the northwest on Heckmondwike Road and 150mm foul sewer to the rear of the development. Drainage proposes separate foul and storm connections which discharge into the respective sewers. Both connections will require separate S106 agreements.

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5. Limitations

5.1.1. The information, conclusions and recommendations presented within this report are deemed to be current at the time of issue. No guarantee can be given to the status of this information other than at the time of issuing. Where necessary, the user shall confirm the status of any applicable assessments and consents.

5.1.2. This report has been commissioned by Mr Asmal. No third party may receive a copy of this report without first obtaining our permission in writing.

5.1.3. This report is confidential and has been prepared solely for the benefit of Mr Asmal and those parties with whom a warranty agreement has been executed or with whom an assignment has been agreed. Should any third party wish to use or rely upon the contents of this report, written approval must be sought from Holdgate Consulting and a charge may be levied against such approval. Holdgate Consulting accepts no responsibility or liability for the consequences of this document being used for any purpose or project other than for which it was commissioned, or this document being used by any third party with whom an agreement has not been executed.

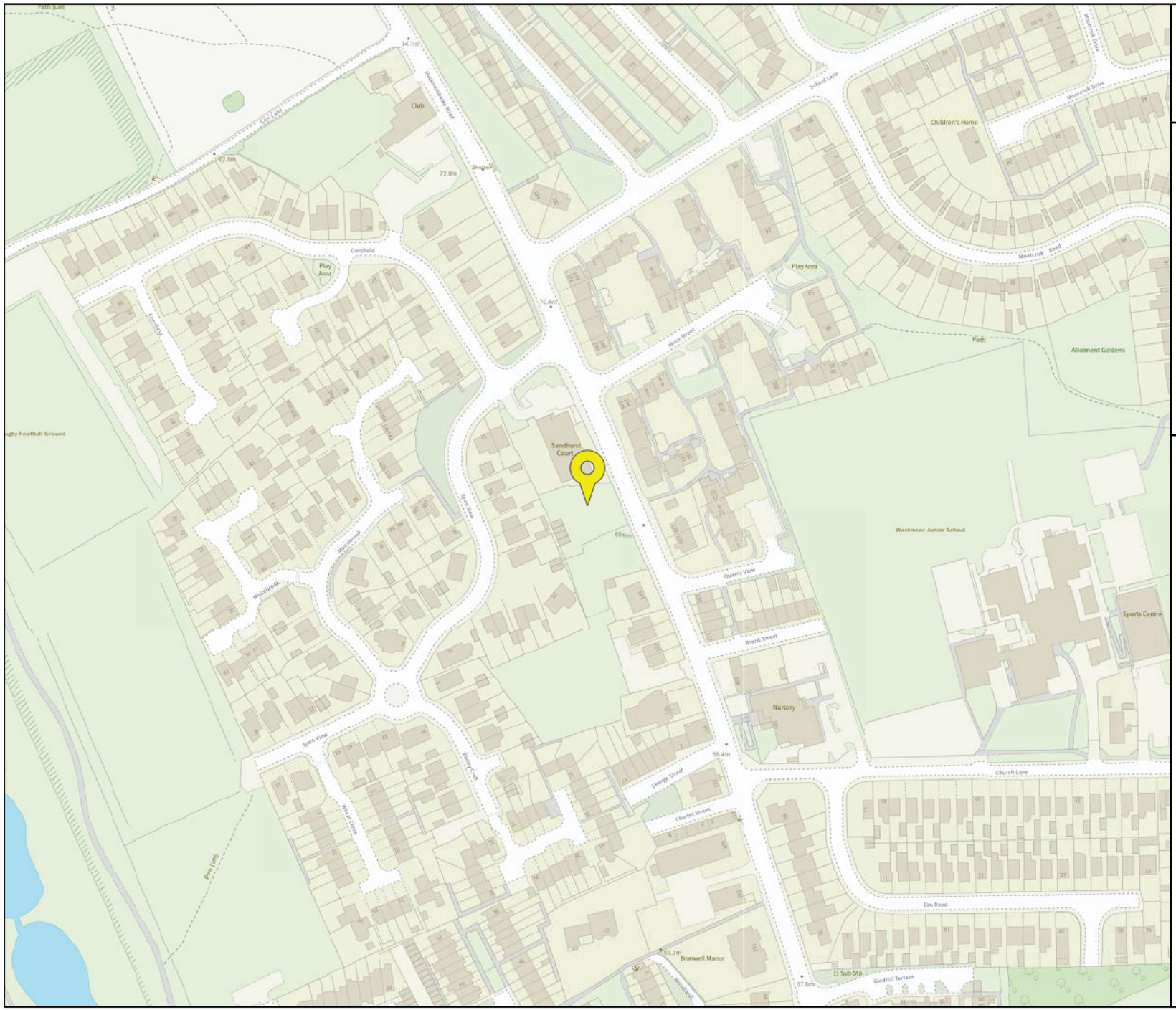
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Appendix A

KEY STAKEHOLDER CONSULTATION



Environment Agency

Flood map for planning

Your reference
22-311

Location (easting/northing)
422689/422073

Scale
1:2500

Created
28 Jun 2022 20:27

- Selected point
- Flood zone 3
- Flood zone 3: areas benefitting from flood defences
- Flood zone 2
- Flood zone 1
- Flood defence
- Main river
- Water storage area

0 20 40 60m

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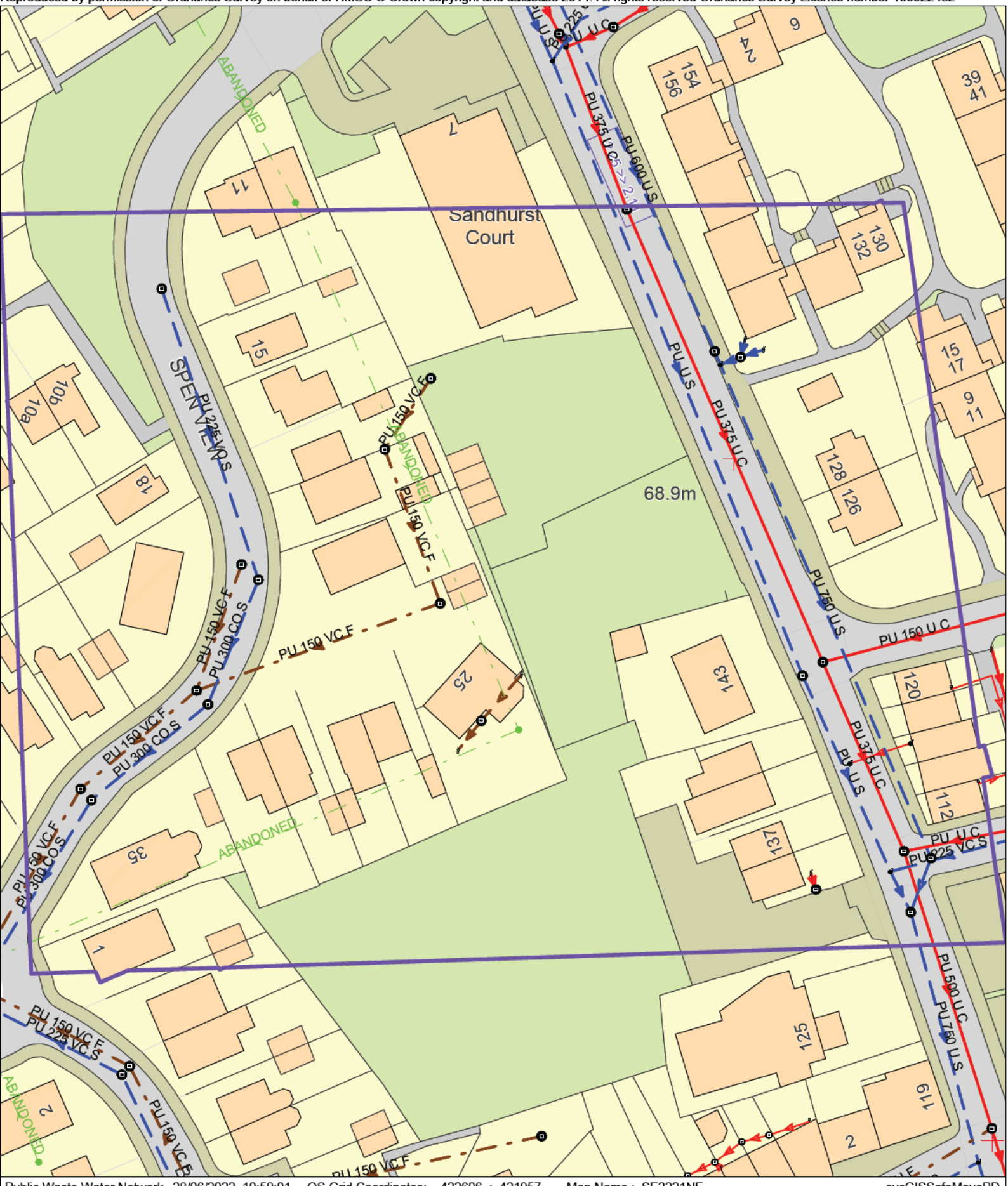
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Appendix B
SITE INFORMATION


22-311 Existing Site
Legend
151 Heckmondwike Rd
Site Bounds
Google Earth
© 2022 Google
1.28 m

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Public Waste Water Network 28/06/2022 10:59:01 OS Grid Coordinates: 422606 : 421957 Map Name : SE2221NE svcGISSafeMovePD

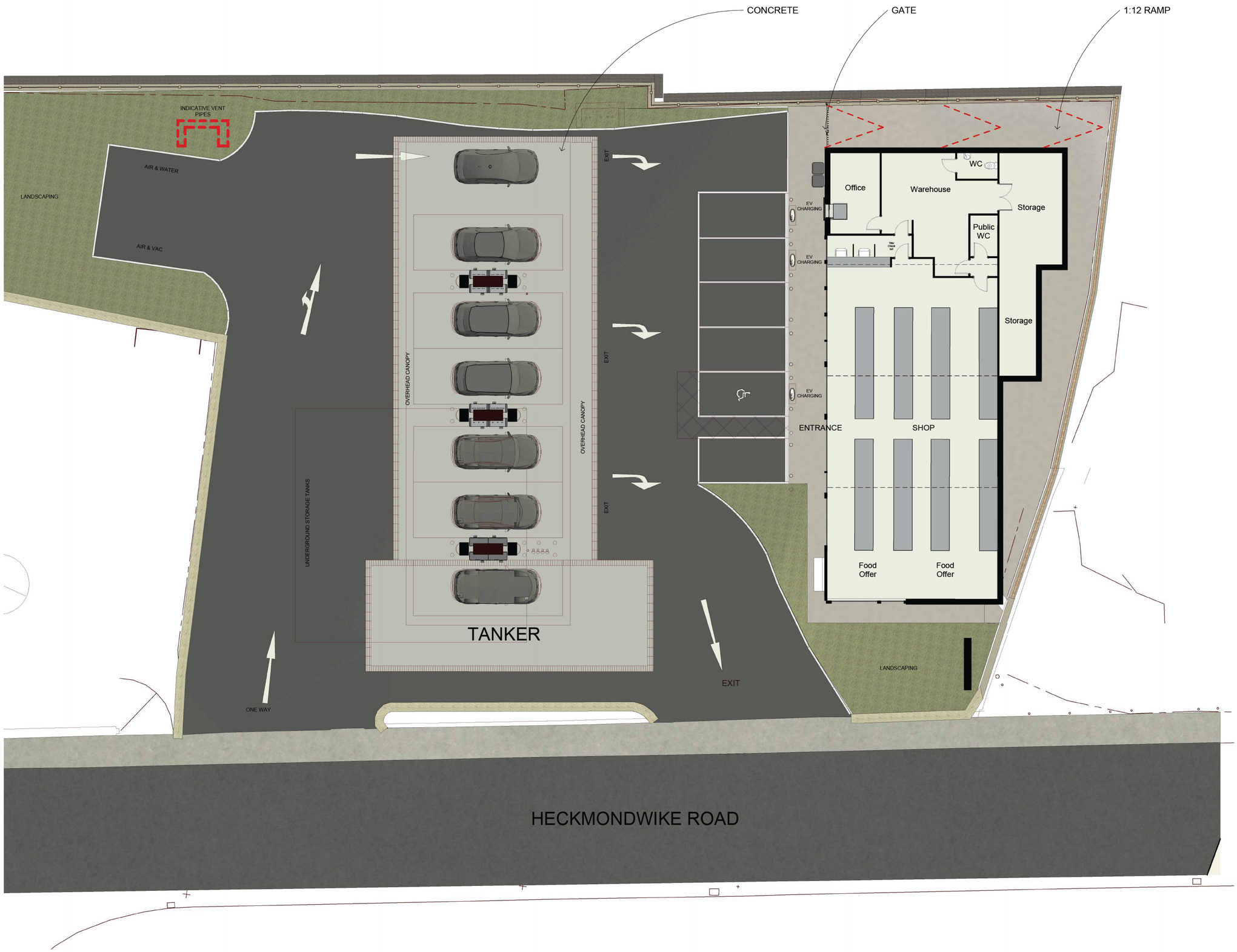
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APPENDIX C
PROPOSED DEVELOPMENT



Site
1 : 100

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rev	description	drwn	auth	date
C	Amended site plan to allow for vehicle tracking and to allow for spare for a vehicle to pass through without using a filling station bay. Moved 2m to boundary + 3m parking bays reduced from 3.4m	AO	JC	26 05.22
B	Amended site plan as per clients comments: Reduced shop footprint to 24x9. Added +1 filling station and shifted across to fit. Designed and generated 3D site model from plans, inc materials and other detailing	AO	JC	18 05.22
A	Extended filling station area and building down 2.5m + amended internal plans as per clients drawings	AO	JC	05 05.22

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Designers & Architects
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Client
MR A ASMAL

Project
PETROL FILLING STATION @ HECKMONDWIKE ROAD, DEWSBURY

Project No	Drawing No	Rev
2713	SK01	C

Description
SITE PLAN AND FLOOR PLAN

Scale	Date Drawn	Drawn By	Authorised By
1 : 100 @ A1	25.04.22	AO	JC

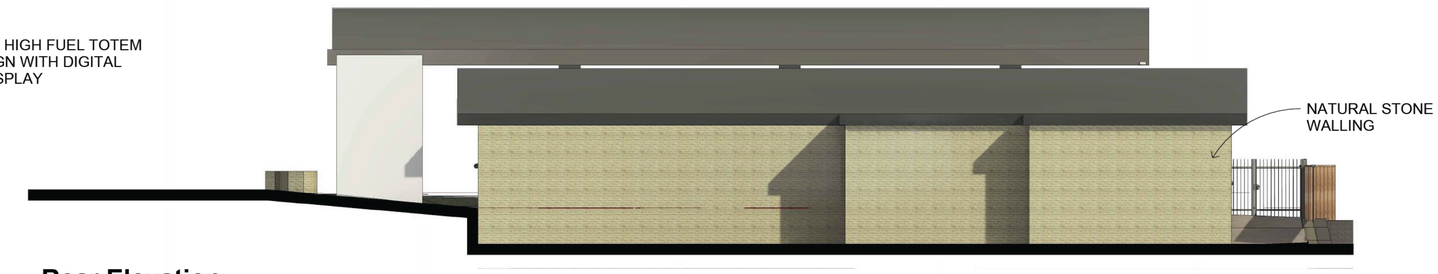
Purpose of Issue
Planning ○ Building Regs ○ Tender ○ Construction ○ Comment ○ Info ●

Only figured dimensions should be used.

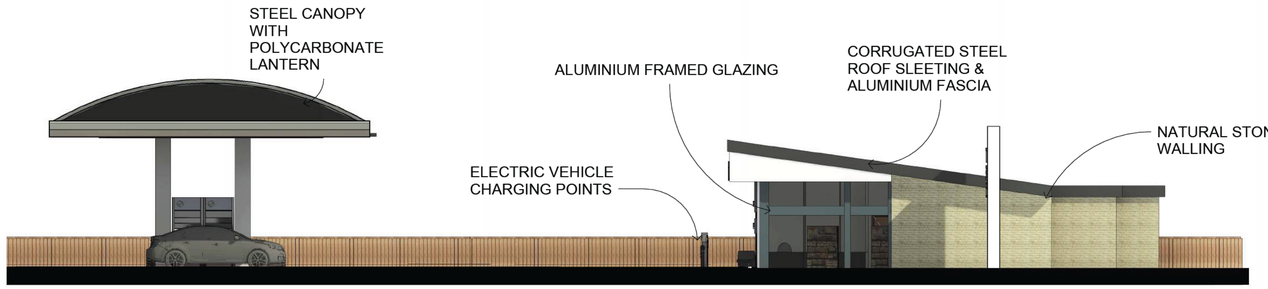
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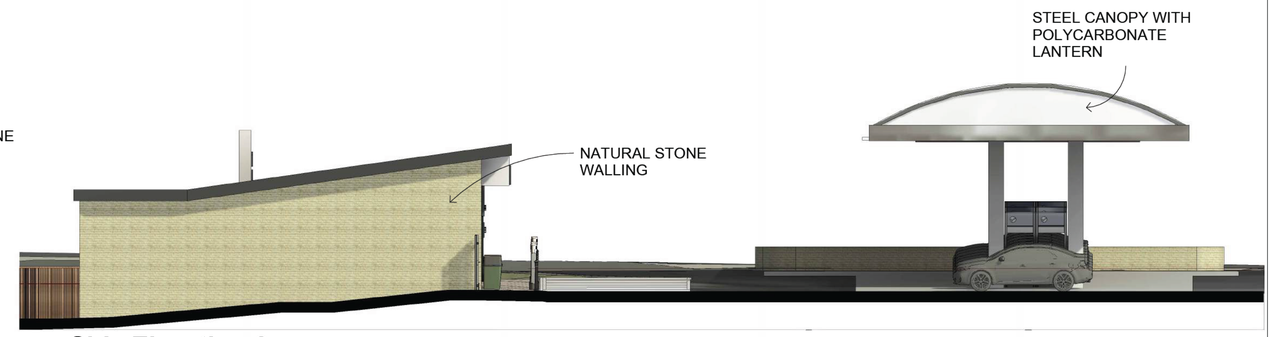
Front Elevation
1 : 100



Rear Elevation
1 : 100



Side Elevation 1
1 : 100



Side Elevation 2
1 : 100



3D View 3



3D View 1



{3D} Copy 1

rev	description	drwn	auth	date
C	Amended site plan to allow for vehicle tracking and to allow for space for a vehicle to pass through without using a filling station bay. Moved 2m to boundary + 3m parking bays reduced from 3.4m	AO	JC	26.05.22
B	Amended site plan as per clients comments: Reduced shop footprint to 24x8. Added +1 filling station and shifted across to fit. Designed and generated 3D site model from plans, inc materials and other detailing	AO	JC	18.05.22
A	Extended filling station area and building down 2.5m + amended internal plans as per clients drawings	AO	JC	05.05.22

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Client: MR A ASMAL

Project: PETROL FILLING STATION @ HECKMONDWIKE ROAD, DEWSBURY

Project No	Drawing No	Rev
2713	SK02	C

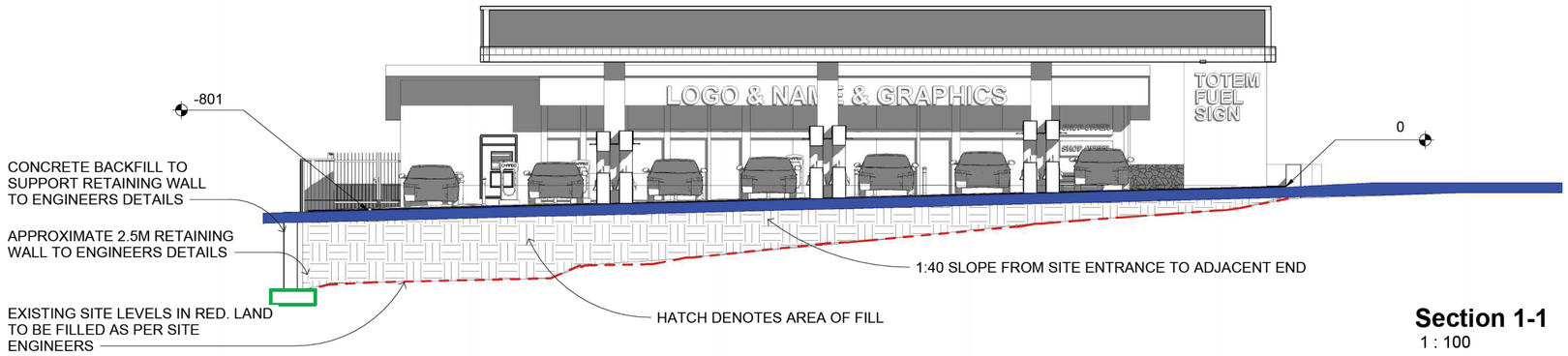
Description: PROPOSED ELEVATIONS AND 3DS

Scale	Date Drawn	Drawn By	Authorised By
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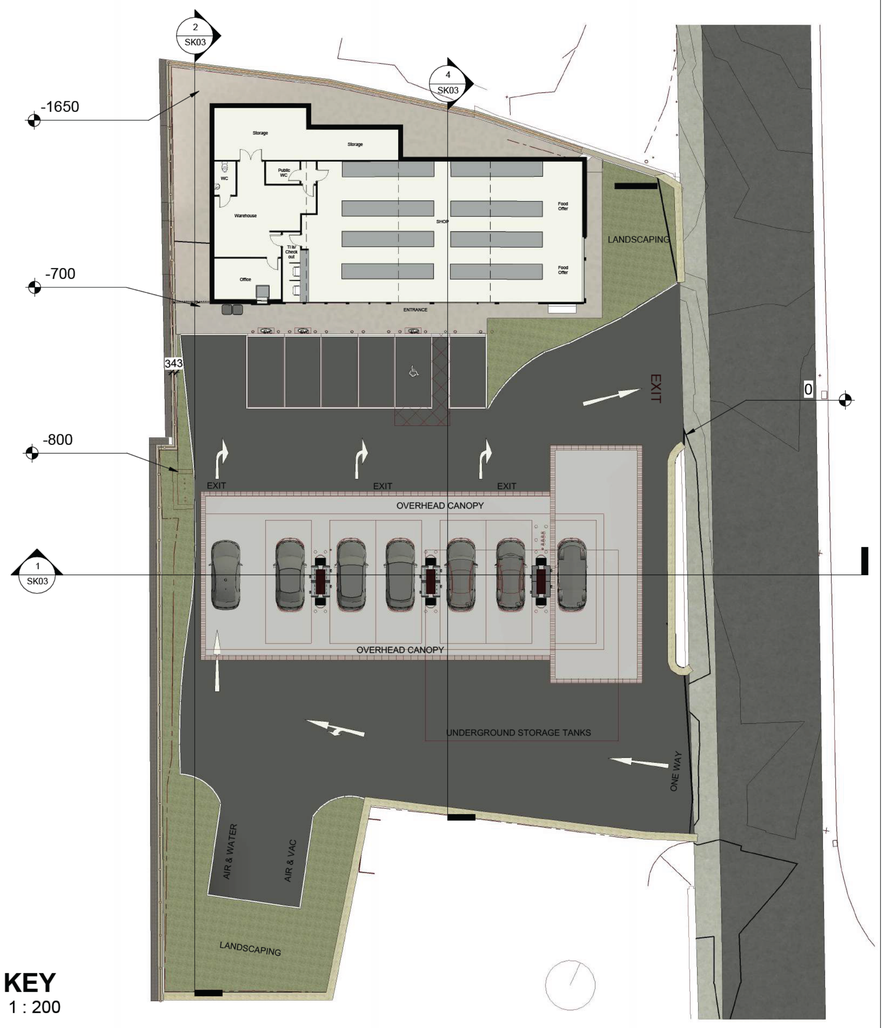
Purpose of Issue: Planning ○ Building Regs ○ Tender ○ Construction ○ Comment ○ Info ●

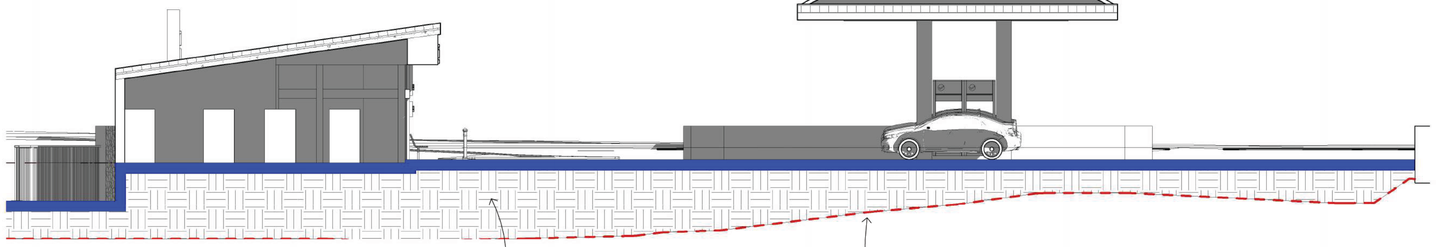
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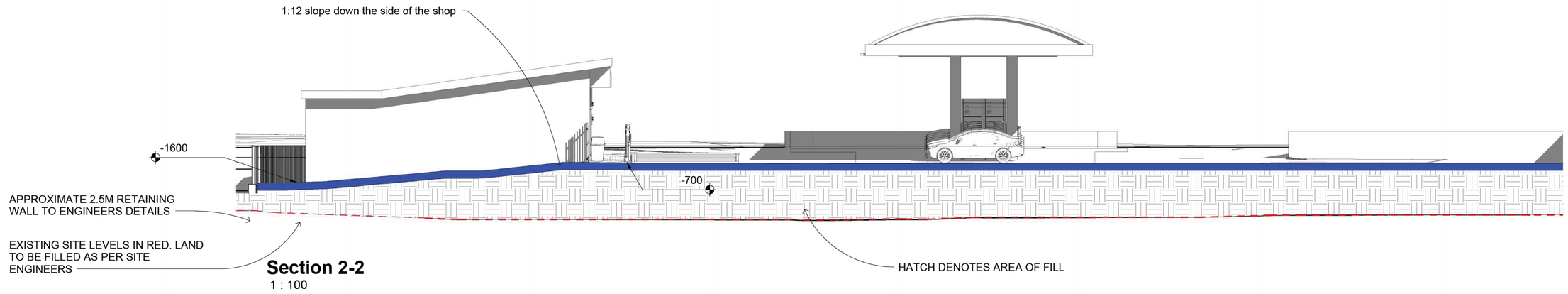
Section 1-1
1 : 100





Section 3-3
1 : 100

KEY
1 : 200



Section 2-2
1 : 100

rev	description	drwn	auth	date
C	Amended site plan to allow for vehicle tracking and to allow for space for a vehicle to pass through without using a filling station bay. Moved 2m to boundary + 3m parking bays reduced from 3.4m	AO	JC	26 05.22
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Client: MR A ASMAL

Project: PETROL FILLING STATION @ HECKMONDWIKE ROAD, DEWSBURY

Project No	Drawing No	Rev
2713	SK03	

Description: SITE SECTIONS SHOWING INDICATIVE SITE LEVELS

Scale	Date Drawn	Drawn By	Authorised By
As indicated @ A1	25.04.22	AO	JC

Purpose of Issue: Planning ○ Building Regs ○ Tender ○ Construction ○ Comment ○ Info ●

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APPENDIX D
DRAINAGE STRATEGY

Drawing Legend

Surface Water Drainage Legend
(Dimensions are approx. internal sizes).

- Existing Storm Sewer
- New Surface Water Inspection Chamber 450mm dia. polypropylene up to 3000mm deep
- New Private Surface Water PVC Pipe 100Ø 1in80 unless otherwise noted
- Linear Drainage Channel (ACO) with silt bucket

Foul Water Drainage Legend
(Dimensions are approx. internal sizes).

- Existing Foul Sewer
- New Private Foul Inspection Chamber 450mm dia. polypropylene up to 3000mm deep
- New Private Foul Inspection Chamber 225mm dia. polypropylene or vitrified clay up to 600mm deep. To be upsized to 450Ø where depth needs to be increased beyond 600mm
- New Private Foul PVC Pipe 100Ø 1in80 unless otherwise noted

Combined Drainage Legend
(Dimensions are approx. internal sizes).

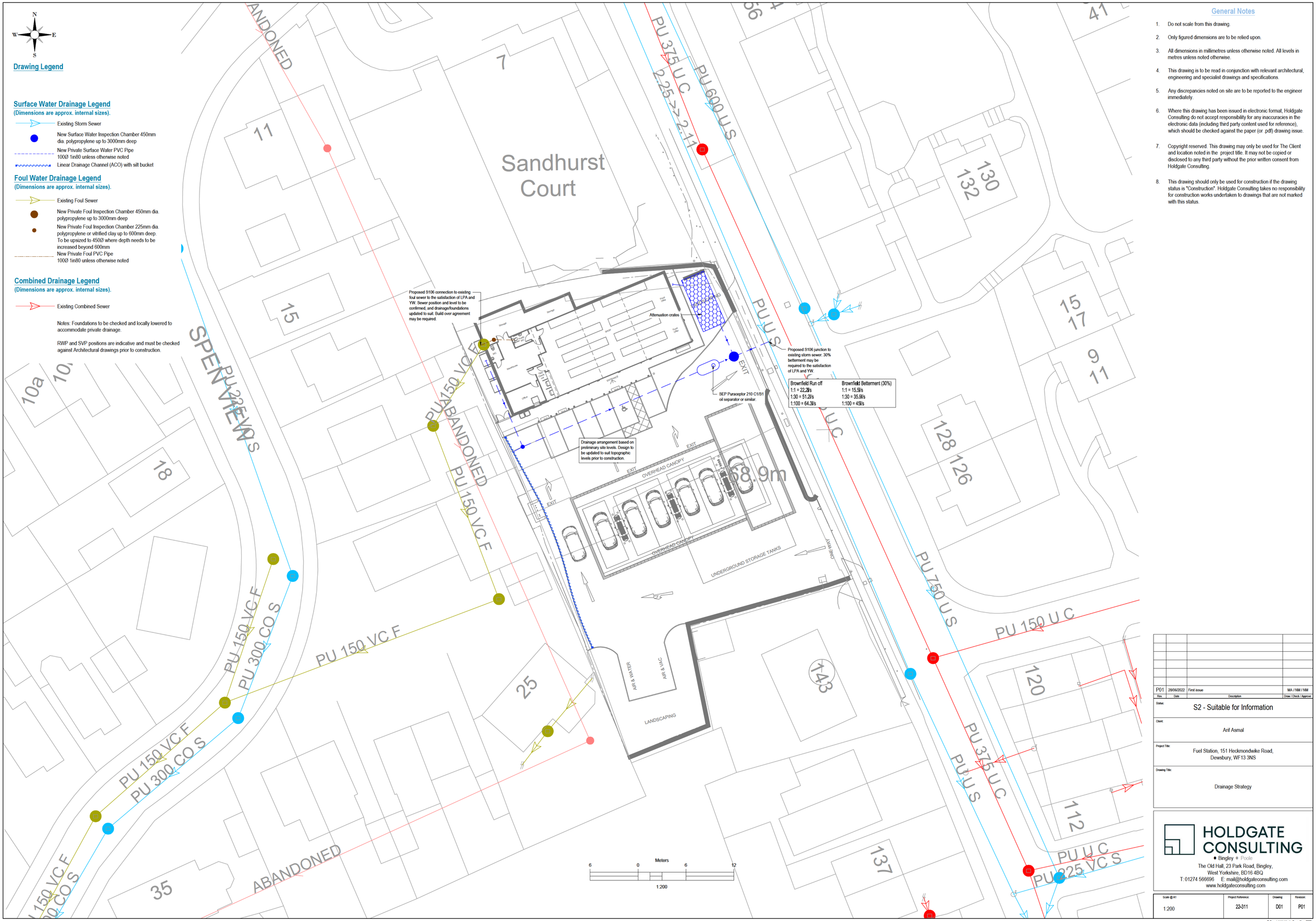
- Existing Combined Sewer

Notes: Foundations to be checked and locally lowered to accommodate private drainage.

RWP and SVP positions are indicative and must be checked against Architectural drawings prior to construction.

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Rev.	Date	Description	Draw / Check / Approve
P01	28/06/2022	First issue	MA / NM / NM

Status: S2 - Suitable for Information

Client: Arif Asmal

Project Title: Fuel Station, 151 Heckmondwike Road, Dewsbury, WF13 3NS

Drawing Title: Drainage Strategy

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Scale @ A1	Project Reference:	Drawing:	Revision:
1:200	22-311	D01	P01

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