EXTERNAL WORKS KEY

—UBL—UBL—UBL— ④	DENOTES COURSES OF FACING BRICKWORK BELOW DPC
—ACO—ACO—ACO—	DENOTES LOCATION OF ACO DRAIN TO CONNECT TO SW SYSTEM
—FOE—FOE—FOE—	DENOTES LOCATION OF FLAG ON EDGE MAX. RETAINED HEIGHT 450mm
—FGB—FGB—FGB—	DENOTES LOCATION OF FENCE & GRAVEL BOARD RETAINMENT AS DETAIL
32.60 ● —RET—RET—RET— 32.00 600mmHIGH	DENOTES RETAINING STRUCTURE AS CLIENTS STANDARD DETAILS RETAINED HEIGHTS ARE FOR RETAINED DEPTH ONLY AND DO NOT ALLOW FOR HANDRAIL OR PARAPET WALL HANDRAILS/BALLUSTRADES AS CLIENT DETAILS TO COMPLY WITH APPROVED DOCUMENT
32.60 ●	DENOTES FINISHED GROUND / SURFACE LEVEL
1:25	DENOTES PROPOSED GRADIENTS
	YARD GULLY TO CONNECT TO SW SYSTEM
	ACCESS RAMP TO COMPLY WITH APPROVED DOCUMENT PART M SECTION 6.14 1 IN 15 MAX. GRADIENT OVER A MAXIMUM DISTANCE OF 10m 1 IN 12 MAX. GRADIENT OVER A MAXIMUM DISTANCE OF 5m.
TTTTT RAMP	ACCESS RAMP AS ABOVE BUT FORMED TO SHAPE USING DRIVEWAY SURFACING MATERIAL
30.57	DENOTES SITE BOUNDARY LEVEL FROM TOPO. SURVEY
	DENOTES BATTER SLOPES

RETAINING FEATURES AND STRUCTURES SHOWN ON THESE DETAILS ARE PROVIDED TO INDICATE THE LOCATIONS IN WHICH SUCH FEATURES WILL BE REQUIRED.
IT IS INCUMBENT UPON THE CLIENT TO ENSURE THAT THEY CONSULT WITH THEIR STRUCTURAL ENGINEERS FOR THEM TO PRODUCE THE RELEVANT RETAINING FEATURE DESIGNS AND CALCULATIONS IN ACCORDANCE WITH RELEVANT GUIDELINES AND COP'S.

CONTRACTOR TO BE AWARE OF AND TAKE APPROPRIATE ACTION TO ENSURE DE-STABILISATION OF ANY EXISTING STRUCTURES, TREES, EMBANKMENTS OR OTHER FEATURES DOES NOT OCCUR AS A RESULT OF ANY EXCAVATIONS WORKS UNDERTAKEN IN ACCORDANCE WITH THE DESIGNS SHOWN ON THIS DRAWING IF CONTRACTOR IS UNSURE ABOUT ANY ASPECT OF THE ABOVE HE SHOULD SEEK ADVICE BEFORE COMMENCING EXCAVATION WORK.

IF THE CLIENT OR CONTRACTOR IDENTIFIES ANY DISCREPANCIES BETWEEN THE DRAWINGS PRODUCED BY REFA FOR THIS PROJECT THEN THEY SHOULD CONTACT REFA IMMEDIATELY AND BEFORE ANY WORKS COMMENCE OR PROCEED IF IN DOUBT ASK !!!

ALL EXISTING SERVICES TO BE LOCATED AT COMMENCEMENT IN ACCORDANCE WITH UNDERTAKERS REQUIREMENTS AND PROTECTED ACCORDINGLY DURING THE WORKS.

CONTRACTOR/CLIENT SHOULD NOTE THE EXISTENCE OF EXISTING BURIED PLANT AND OR OVERHEAD POWER CABLE(S) BEFORE WORK COMMENCES CONTRACTOR MUST UNDERTAKE RISK ASSESSMENT AND PROVIDE METHOD STATEMENT FOR WORKING IN THIS AREA IN ACCORDANCE WITH HSE AND POWER SUPPLIERS GUIDELINES TO SATISFACTION OF THE CDM CO-ORDINATOR.

FOUNDATIONS TO BE DESIGNED / CONSTRUCTED TO TAKE INTO ACCOUNT THE PROXIMITY AND DEPTH OF ADJACENT SEWERS AND DRAINS.

TO CATER FOR ANY DEVIATIONS IN THE AS CONSTRUCTED ROAD / FOOTPATH LEVELS IN RELATION TO THE DESIGN LEVELS, THE PROPOSED FLOOR LEVELS SHOWN MUST BE CHECKED ON SITE BY THE SITE AGENT OR ENGINEER IN RELATION TO AS BUILT ROAD LEVELS TO ENSURE COMPLIANCE WITH PART M OF THE BUILDING REGULATIONS.

PLEASE NOTE THAT THIS DRAWING IS ISSUED FOR INFORMATION/TENDER PURPOSES ONLY UNTIL TECHNICAL APPROVAL HAS BEEN GRANTED.
ANY WORK UNDERTAKEN PRIOR TO TECHNICAL APPROVAL BEING GRANTED IS AT THE CLIENTS RISK.



GENERAL

1. All adoptable sewers and associated works are to comply fully with "Sewers for Adoption" 6th.Edition
2. All highway works to be to adoptable standards and to to comply fully with the Local Authority specification.
3. All private drainage works are to comply fully with part H of the Building Regulations
4. All existing invert levels to be checked by the Contractor at the start of works and any discrepancies notified to REFA. All levels are based on topographical survey information provided by others.
5. All materials to bear the relevant B.S.Kitemark and comply fully with the specifications. All concrete & concrete products must use Sulphate resistant cement (unless the site investigation report proves that sulphate attack from soils and groundwater will not occur)
6. All opening notices etc. as required under highways acts etc. are to be obtained prior to commencement of works. All works are to be inspected by L.A., NHBC or Relevant Water Authority as applicable.

C.D.M. REGULATIONS 2015

In line with the above regulations we are obliged to inform the Client of their responsibilities under section CDM 15/1, and residual risks that may be encountered in the construction of these works.
All design work has been carried out with Health and Safety aspects given full consideration.
Wherever possible risks have been eliminated from the design, however due to the very nature of this type of work it is not possible to remove all the risks from the design.
We would also respectfully remind the Client of his obligations to take all reasonable steps in ensuring that only competent Contractors who have a valid safety policy are employed.
They should also provide satisfactory responses at tender stage as to the manner in which they will deal with the elements of risk involved in this type of work and in particular those highlighted by REFA below:-

1. Support / treatment for ALL excavation work.
2. Guarding to edges of excavations to prevent people,materials and vehicles falling into excavation.
3. Guarding of excavations outside working hours to prevent unauthorised access.
4. Undermining to adjacent roads or structures.
5. Confined space operations.
6. Dealing with existing services.
7. Traffic management on existing highways.
8. Procedure to be followed in event of accident or emergency.
9. Method of working where contaminated ground is present on site.
10. Confirmation will be required that all operatives are adequately trained, copies of relevant training certificates to be supplied.

The above list is by no means exhaustive but it does highlight operations that present a risk to contractors and the general public.
For clarification on any item please contact REFA.

rev	Revision details	RevBy	Date
C	REVISED FOLLOWING COMPLETION OF PLOT DRAINAGE	ADP	07.2.18
B	REVISED TO NEW PLANNING LAYOUT	ADP	23.1.18
A	REVISED TO NEW SEWER REVISIONS	NCW	6.7.17

smas worksafe consultant www.smasltd.com — as recognised by SSIP SAFETY SCHEMES IN PROCUREMENT

Drawing Stage					
	Draft		Comments	●	Tender
●	Issued		Information		Construction
		●	Approval		As Built

Client
WAINHOMES LIMITED

Job title
HOLLIN LANE MIDDLETON

Drawing title
EXTERNAL WORKS DRAWING 1

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GEOTECHNICAL • ENVIRONMENTAL

Date	Scale	Drawn
29.6.17	1/250	NCW

DRAWING No 14158/11/1 Rev C

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A1 SHEET