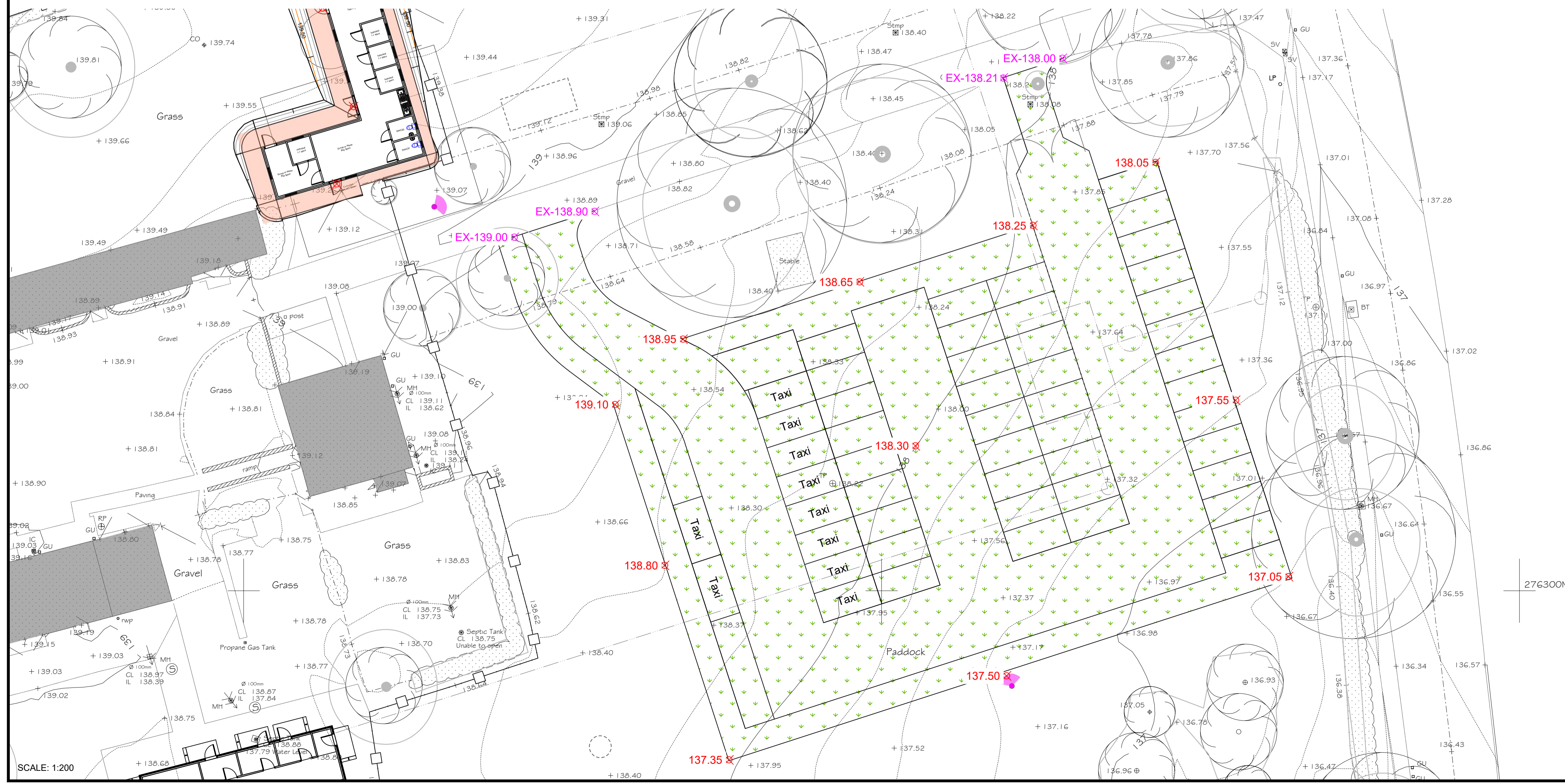


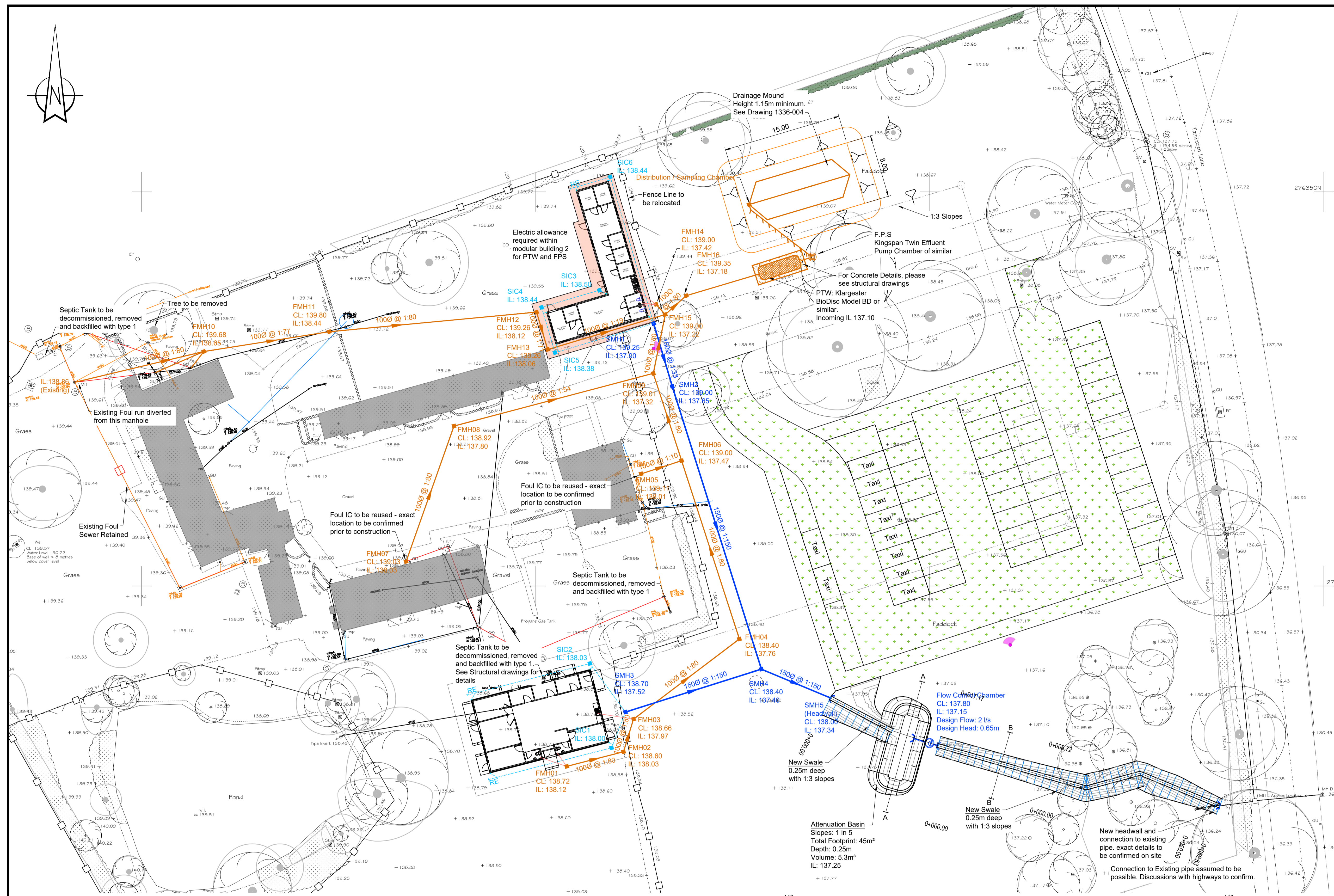
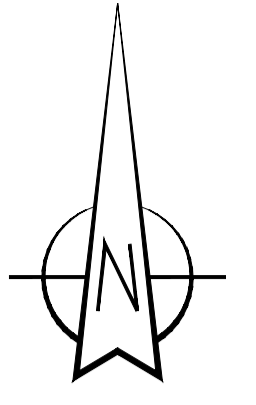
**KEY**

- 123.45 ✕ Proposed Level
- EX-123.45 ✕ Proposed Level to tie into existing
- Proposed Footway Construction
- Proposed Grasscrete Car Park
- Proposed Contours



REV	DETAILS	DRAWN BY	CHECKED BY	DATE
CLIENT: The Island Project				
PROJECT: Jerrings Hall Farm				
DRAWING TITLE: Proposed Levels				
SCALES:	AS SHOWN	SHEET SIZE:	A1	
DRAWN:	MRM	CHECKED:	PD	DATE: 07.03.2020
DRAWING NUMBER: 1336-006				REVISION: -

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- KEY**
- Existing Surface Water Sewer (assumed)
  - Existing Foul Water Sewer (assumed)
  - Proposed Surface Water Sewer
  - Proposed Surface Water Inspection Chamber (Type 3)
  - Proposed Attenuation Basin
  - Proposed Swale
  - ⌋ Proposed Headwall
  - Proposed Hydro-Brake (CTL-SHE-0064-2000-1200-2000)
  - Proposed Surface Water Lateral
  - Proposed Surface Water Inspection Chamber (Type 4)
  - ⊕ Proposed Rodding Eye
  - Proposed Foul Water Sewer
  - Proposed Foul Water Inspection Chamber
  - Proposed Package Treatment Works

**NOTES**

Existing Drainage locations approximate. Exact locations and levels of chambers and sewers to be identified on-site prior to installation of new drainage works.

Contractor to allow for flush test to locate all existing foul drainage.

Existing Foul drainage to connect into new foul system.

Package Treatment Works has been sized to accommodate 50 staff and 23 non-resident pupils on a non-canteen school. 50 litres / person / day

Drainage Mound sized based on Vp of 20.

Existing Surface Water Sewers to be retained. Inspection survey and repairs to be made as necessary.

Existing surface water network utilises soakaways. exact locations unknown. Existing surface water system to be retained

RWP and SVP locations assumed.

All Surface Water Manholes to have 300mm Catchpits below ILS shown

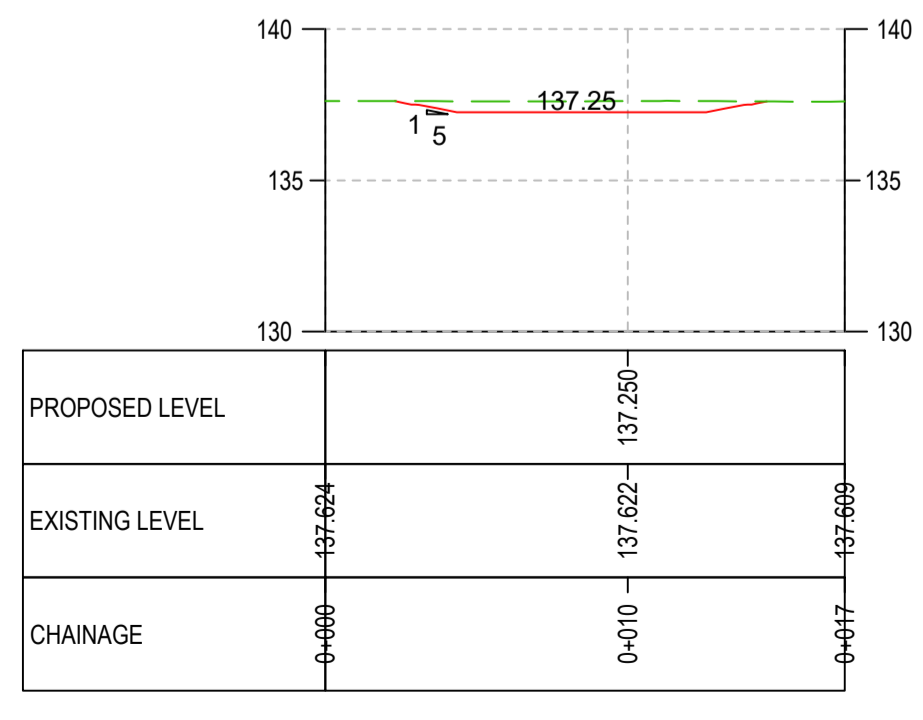
Please see Drawing Number 1336-002 + 003 for Drainage Sections.

REV	DETAILS	DRAWN BY	CHECKED BY	DATE
C	Upstream swale slope amended	MRM	PD	15.05.20
B	Original drainage proposals removed	MRM	PD	13.05.20
A	Tank replaced by Basins and swales. PTP relocated. Sections added.	MRM	PD	11.05.20

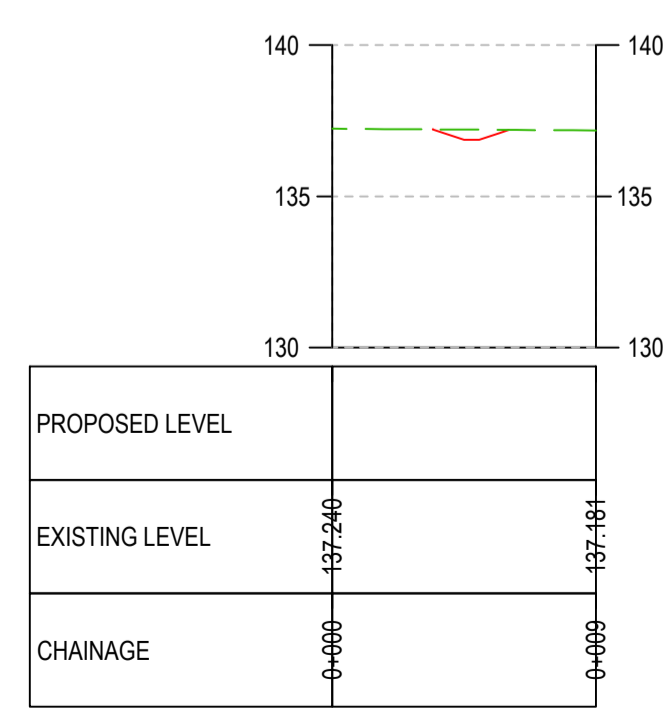
**The Island Project**

**Jerrings Hall Farm**

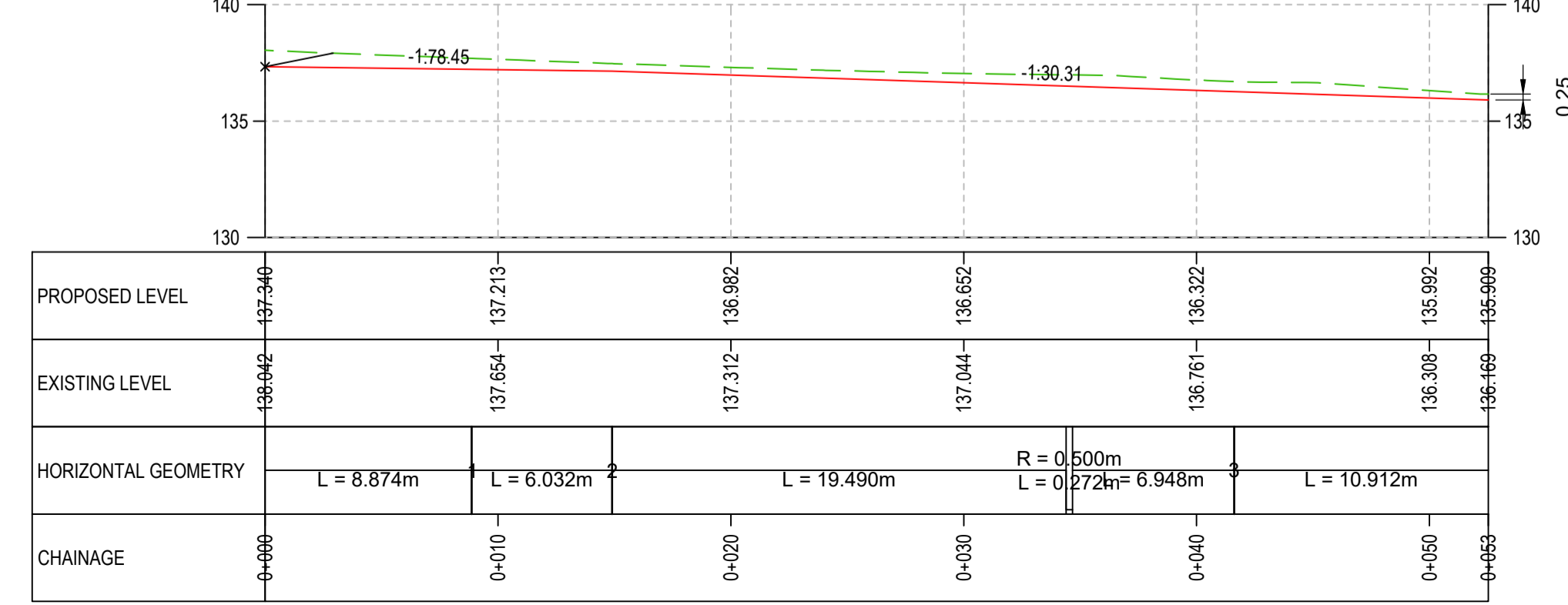
**Drainage Layout**



SECTION A-A CH 0+000.00 - 0+017.17  
SCALE: H 1:250, V 1:250



SECTION B-B CH 0+000.00 - 0+008.72  
SCALE: H 1:250, V 1:250

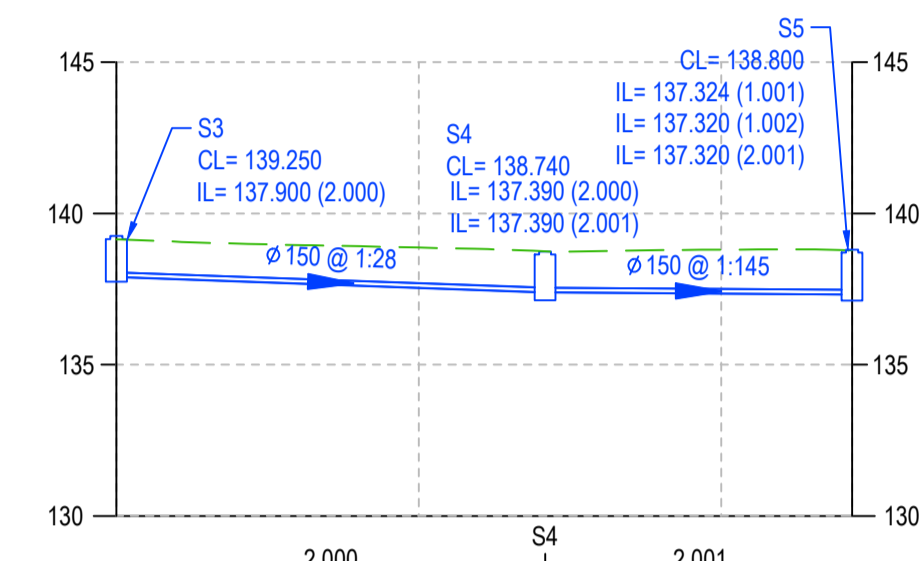
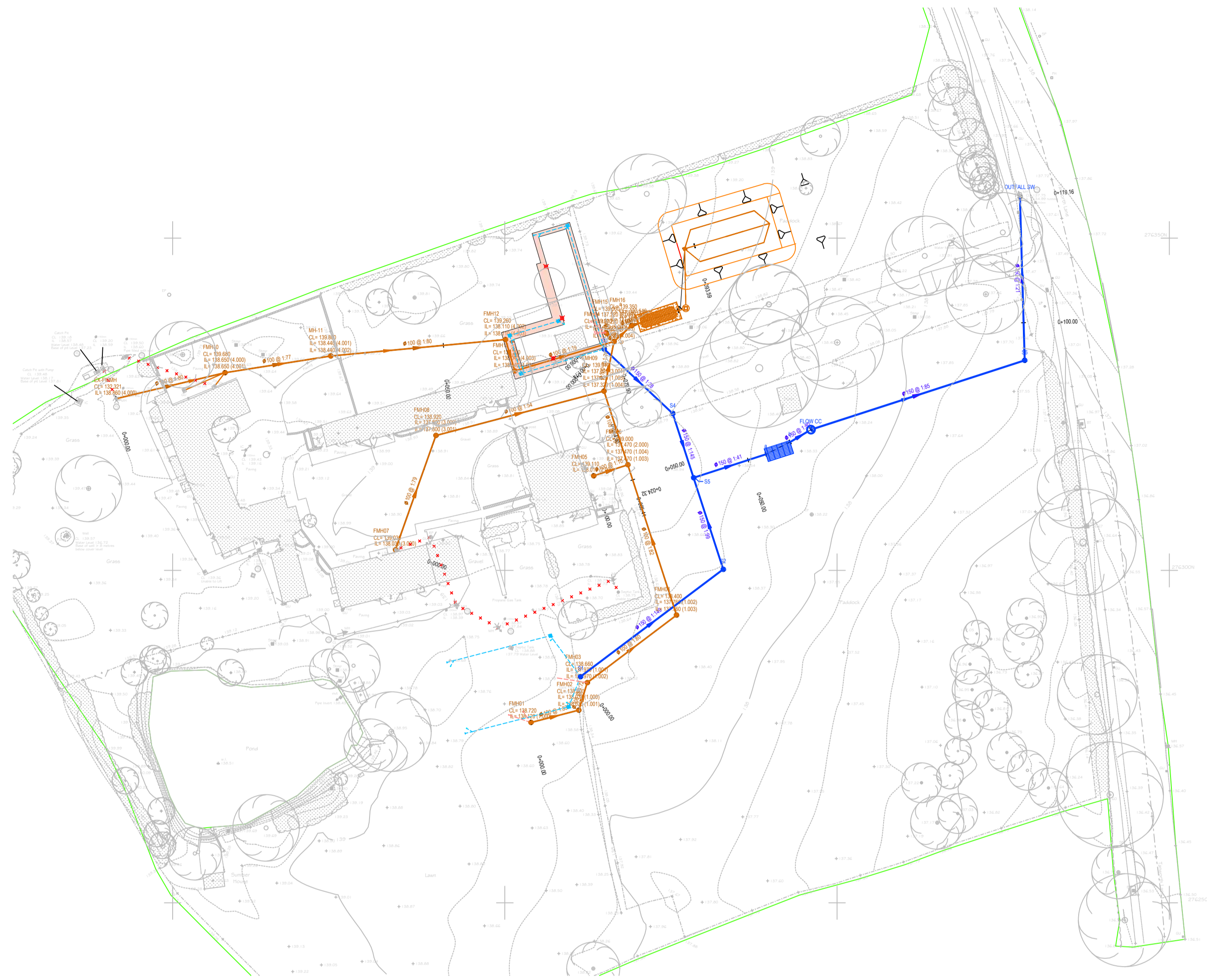


CL-SWALE CH 0+000.00 - 0+052.53  
SCALE: H 1:250, V 1:250



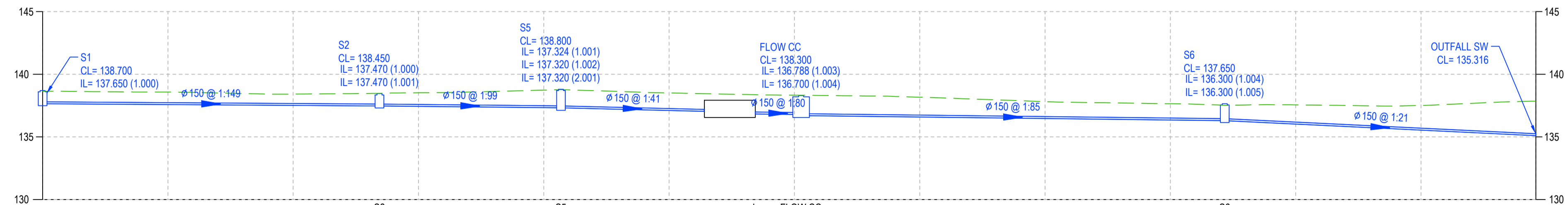
1336-001

REVISION: C



PART NAMES	
GEOMETRY	
COVER LEVELS	???
INVERT LEVELS	137.390, 137.390, 137.320, 137.390

SW-RUN-2.0 CH 0+000.00 - 0+024.32  
 SCALES: H 1:250, V 1:250

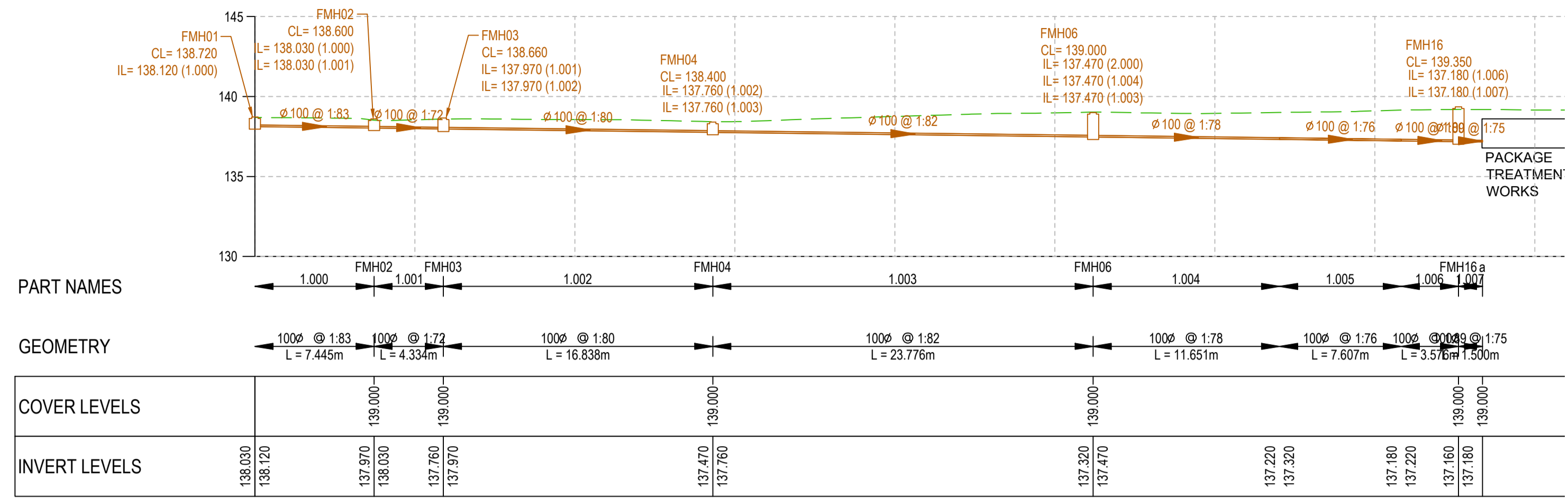
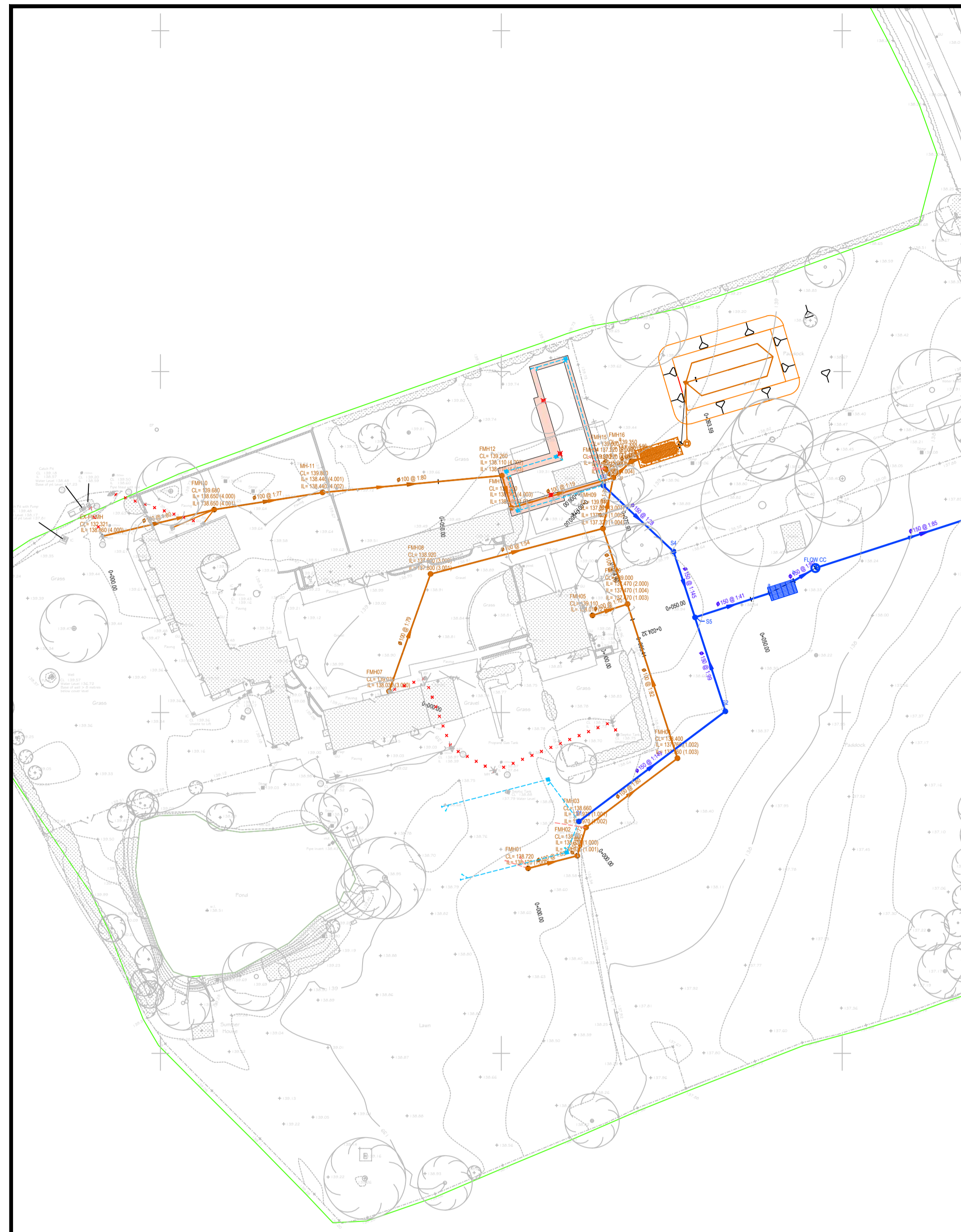


PART NAMES	1.000	S2	1.001	S5	1.002	a	b	FLOW CC	1.003	1.004	S6	1.005
GEOMETRY	150ø @ 1:149 L = 26.884m		150ø @ 1:99 L = 14.483m	150ø @ 1:41 L = 11.428m				150ø @ 1:80 L = 3.658m		150ø @ 1:85 L = 33.827m		150ø @ 1:21 L = 24.822m
COVER LEVELS		139.000	???	139.000	139.000	139.000	139.000	139.000	139.000	139.000	139.000	
INVERT LEVELS	137.470, 137.650	137.324, 137.470	137.041, 137.320	136.788, 136.833, 136.300, 136.700	136.300, 136.700	136.300, 136.700	136.300, 136.700	136.300, 136.700	136.300, 136.700	136.300, 136.700	136.300, 136.700	

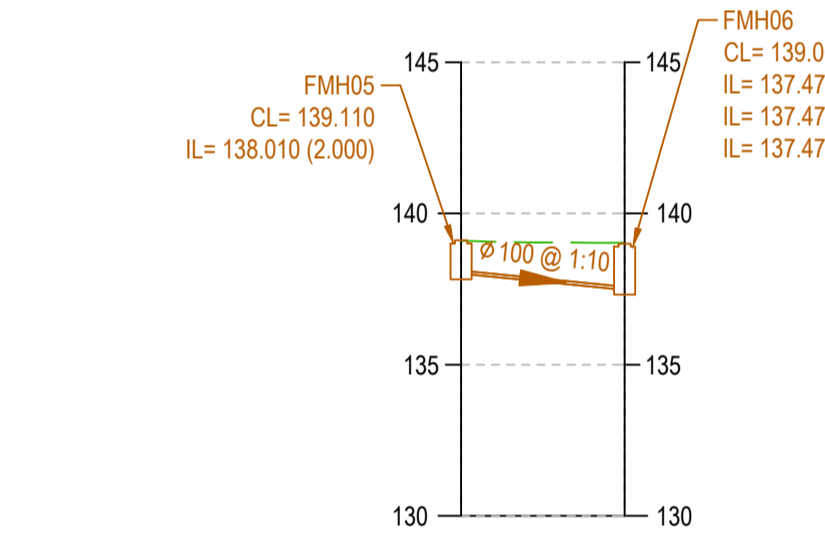
SW-RUN-1.0 CH 0+000.00 - 0+119.16  
 SCALES: H 1:250, V 1:250

REV	DETAILS	DRAWN BY	CHECKED BY	DATE
CLIENT: The Island Project				
PROJECT: Jerrings Hall Farm				
DRAWING TITLE: Surface Water Drainage Long Sections				
SCALES: 1:250			SHEET SIZE: A1	
DRAWN: MRM	CHECKED: PD	DATE: 10.03.2020		
DRAWING NUMBER: 1336-003				REVISION: -

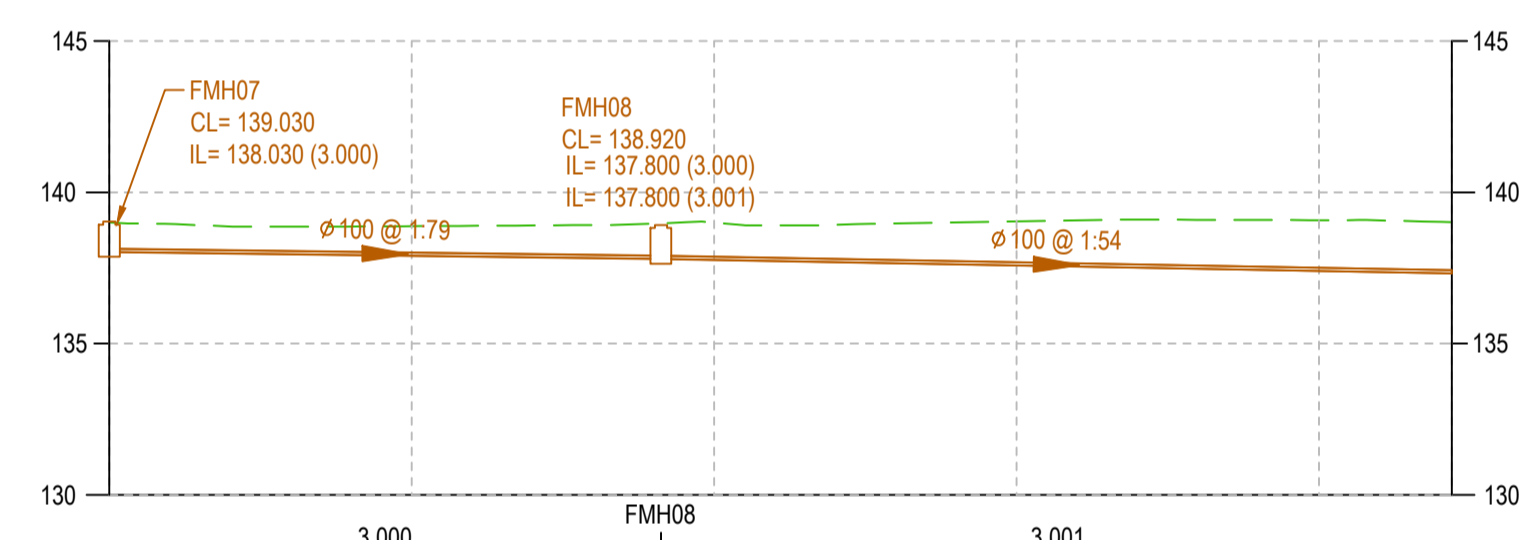
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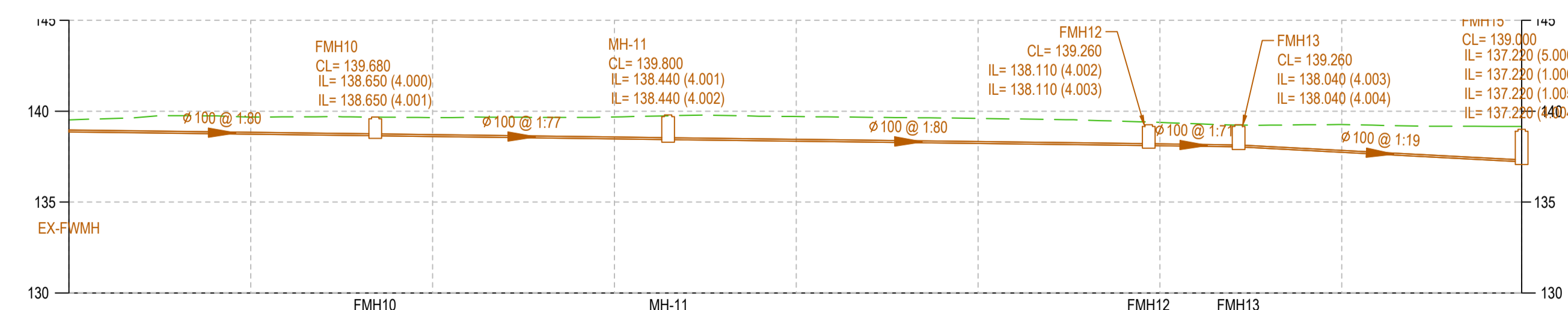
FW-RUN-1.0 CH 0+000.00 - 0+093.59  
 SCALES: H 1:250, V 1:250



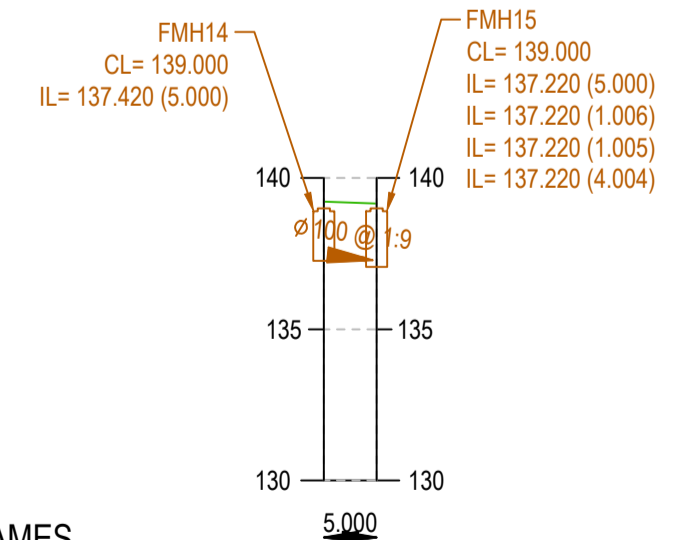
FW-RUN-2.0 CH 0+000.00 - 0+005.41  
 SCALES: H 1:250, V 1:250




FW-RUN-3.0 CH 0+000.00 - 0+044.40  
 SCALES: H 1:250, V 1:250



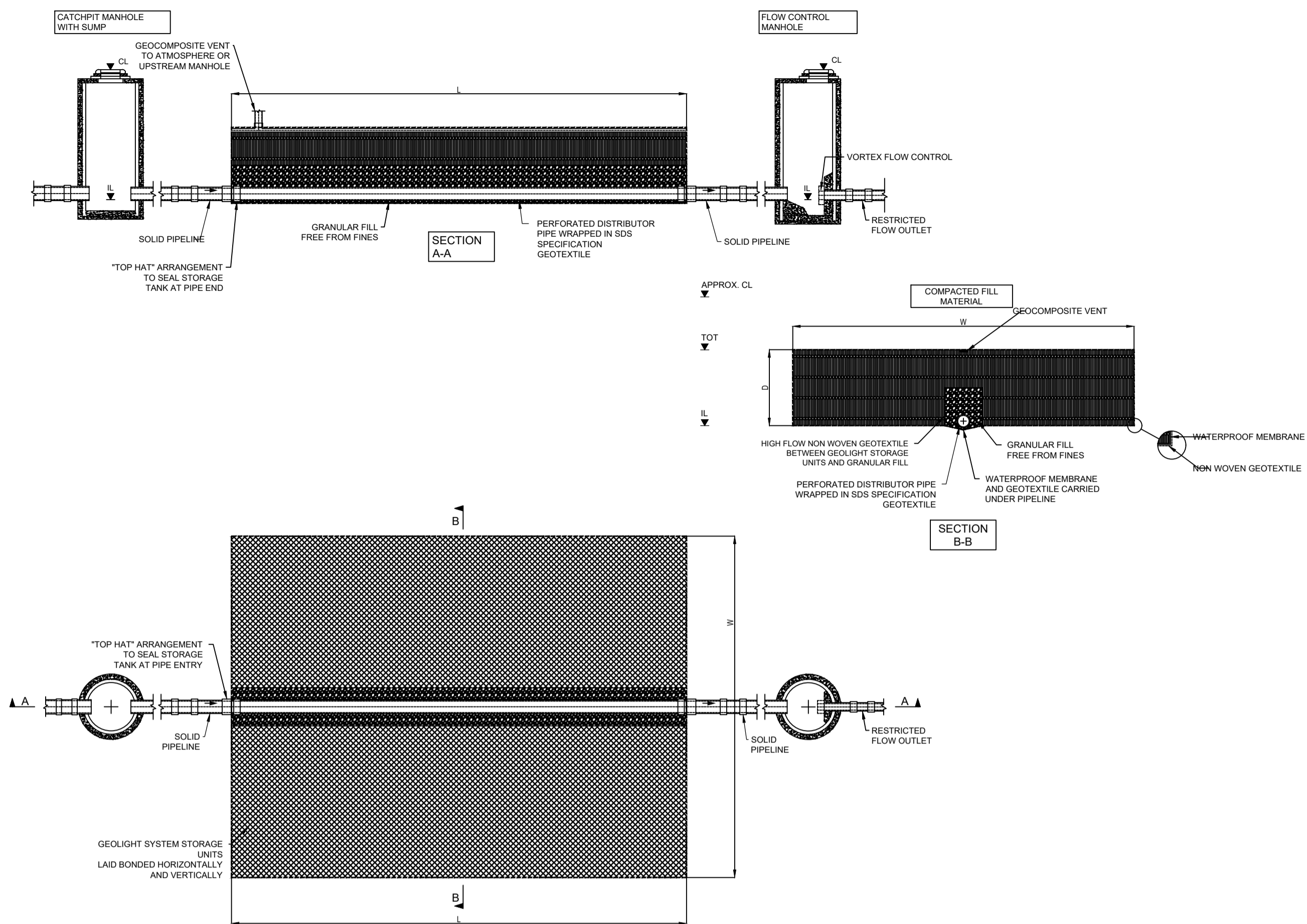
FW-RUN-4.0 CH 0+000.00 - 0+079.90  
 SCALES: H 1:250, V 1:250



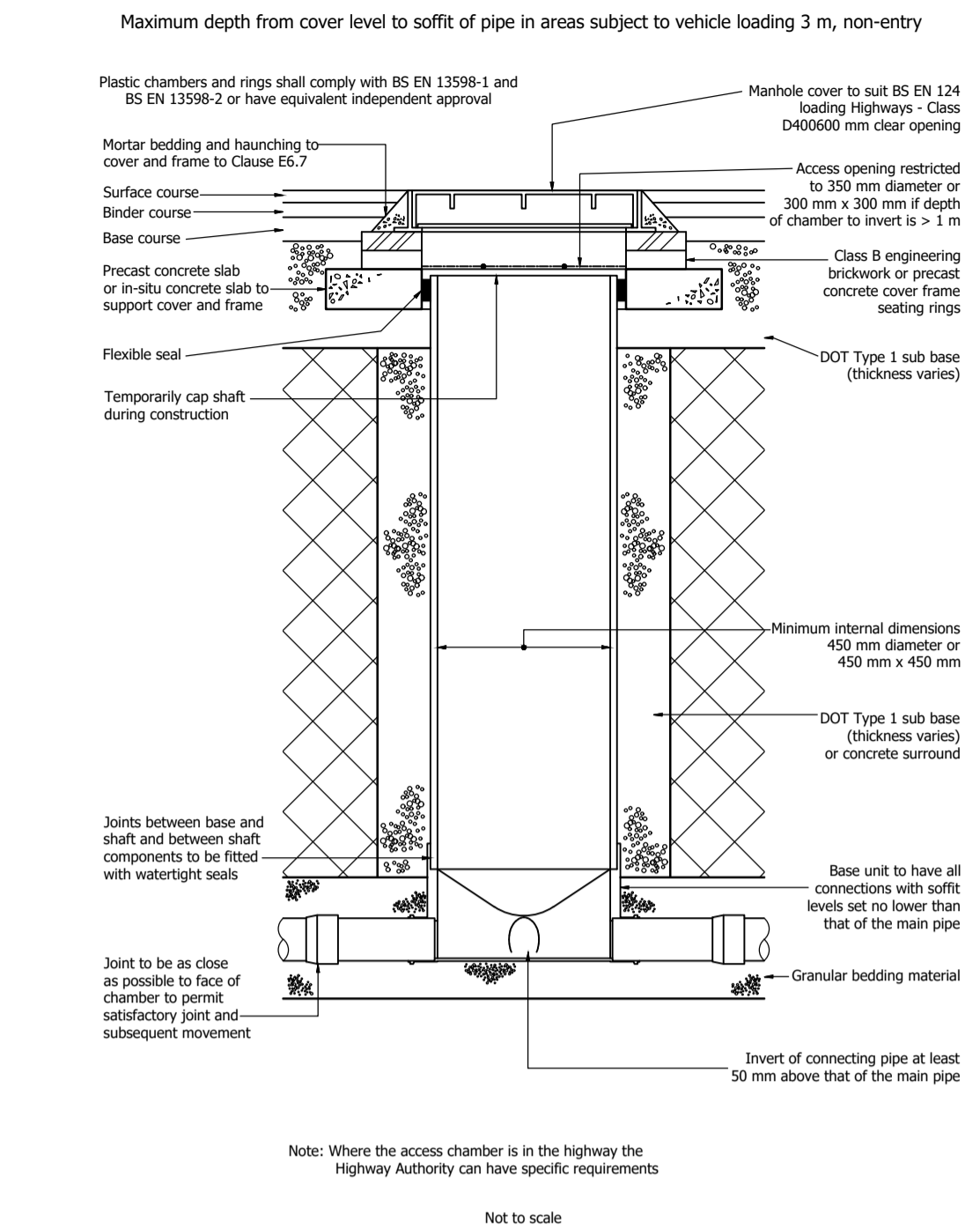
FW-RUN-5.0 CH 0+000.00 - 0+001.74  
 SCALES: H 1:250, V 1:250

REV	DETAILS	DRAWN BY	CHECKED BY	DATE
CLIENT: The Island Project				
PROJECT: Jerrings Hall Farm				
DRAWING TITLE: Foul Water Drainage Long Sections				
SCALES: 1:250		SHEET SIZE: A1		
DRAWN: MRM	CHECKED: PD	DATE: 10.03.2020		
 Condon Drew Associates				
DRAWING NUMBER: 1336-002				REVISION: -

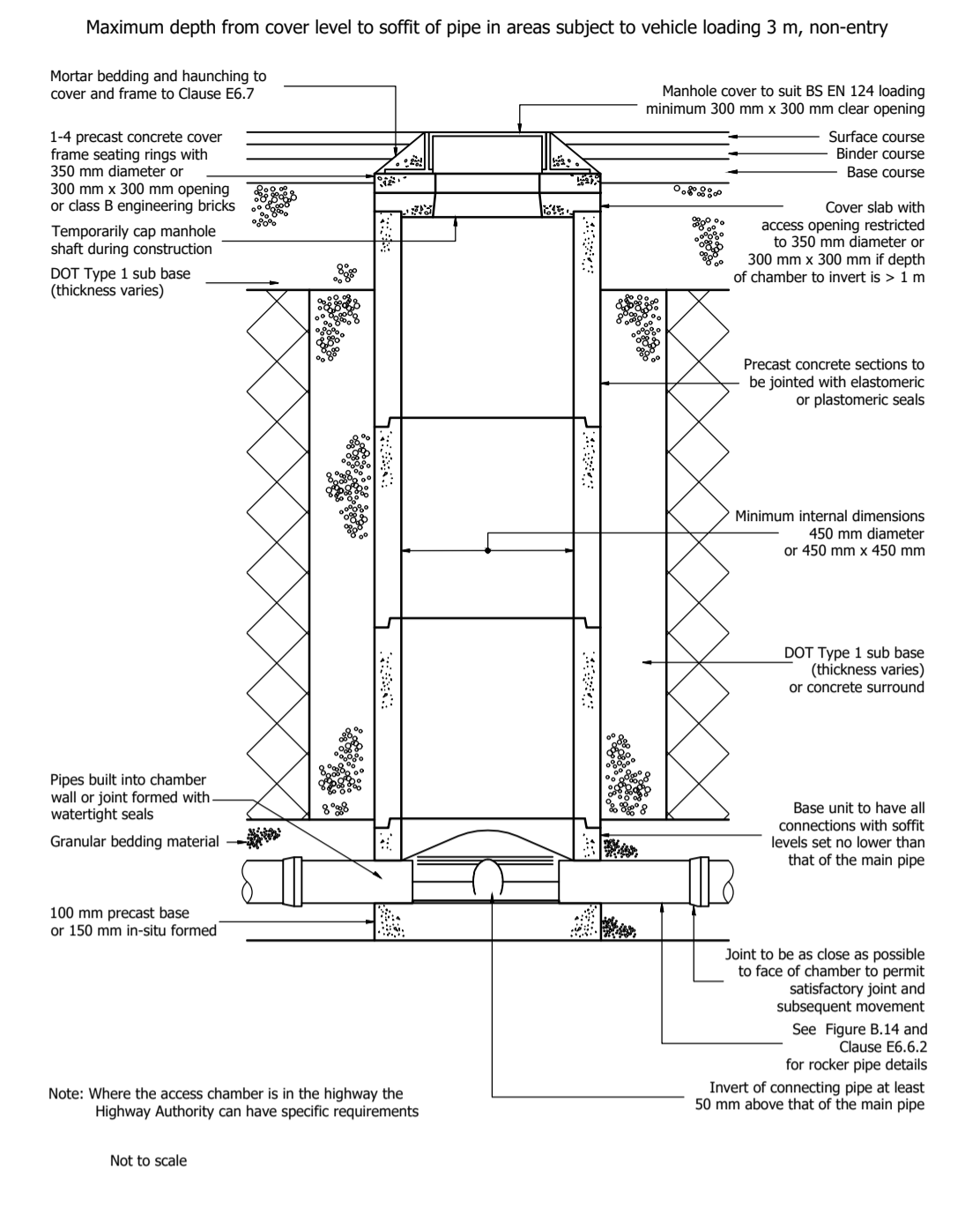
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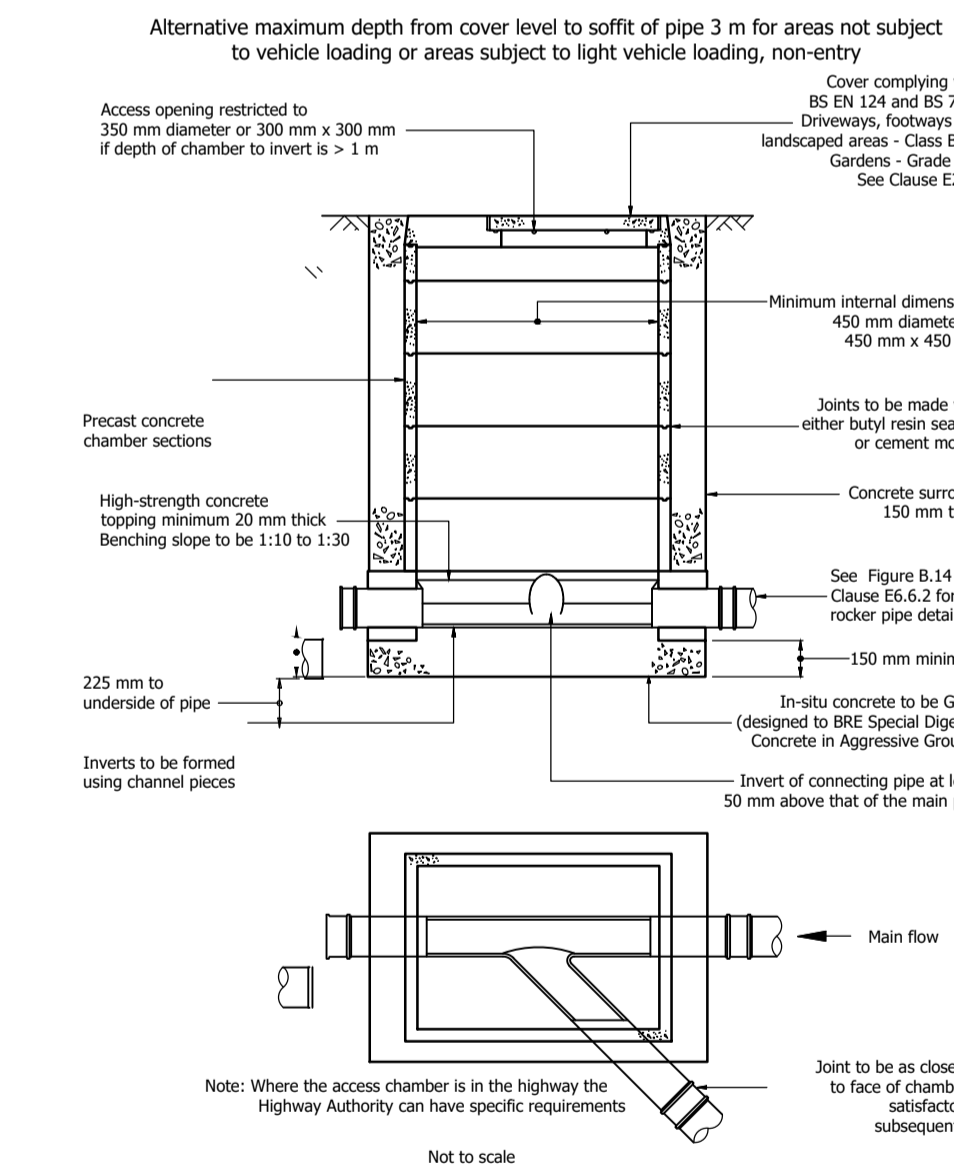
**TYPICAL INSPECTION CHAMBER DETAIL - TYPE 3 (Flexible material detail)**



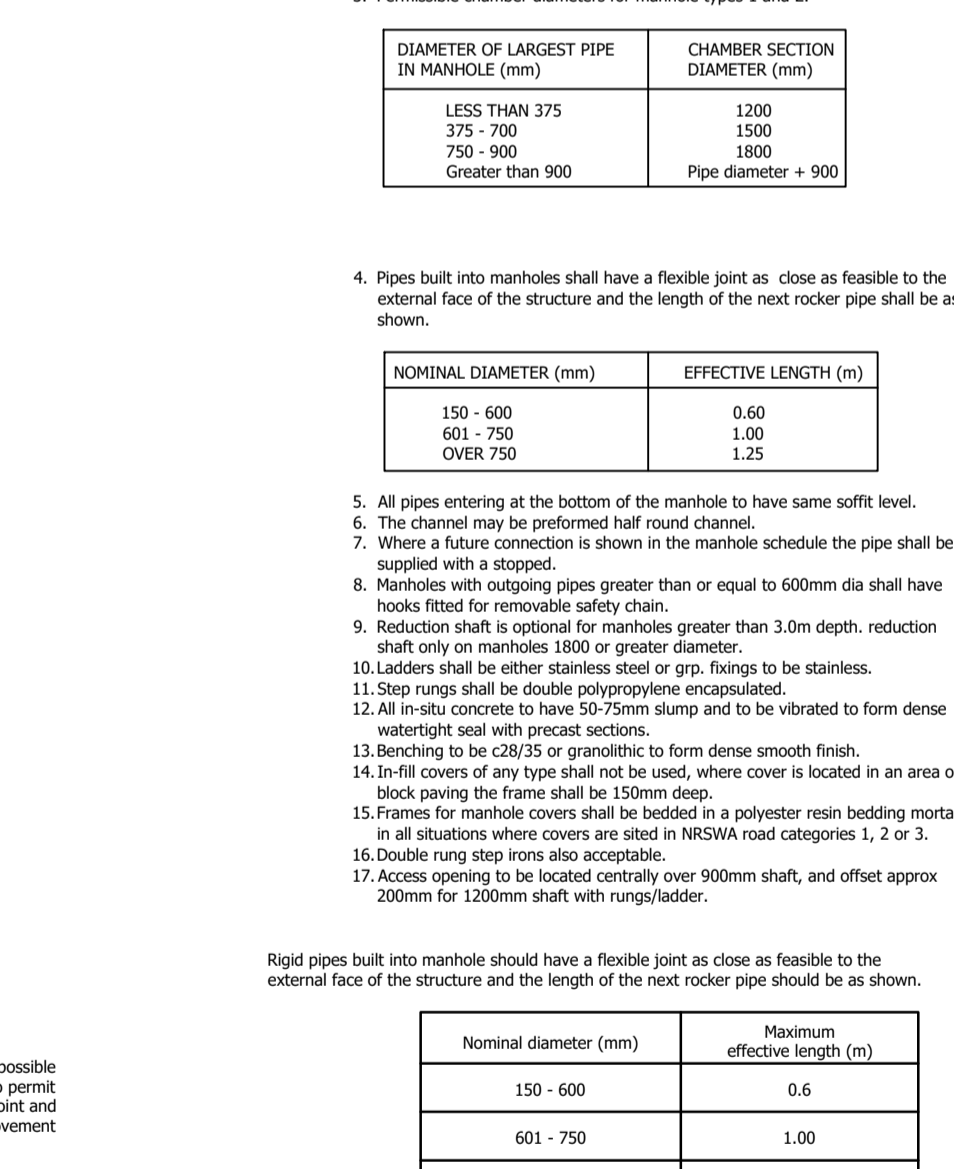
**TYPICAL INSPECTION CHAMBER DETAIL - TYPE 3 (Rigid material detail)**



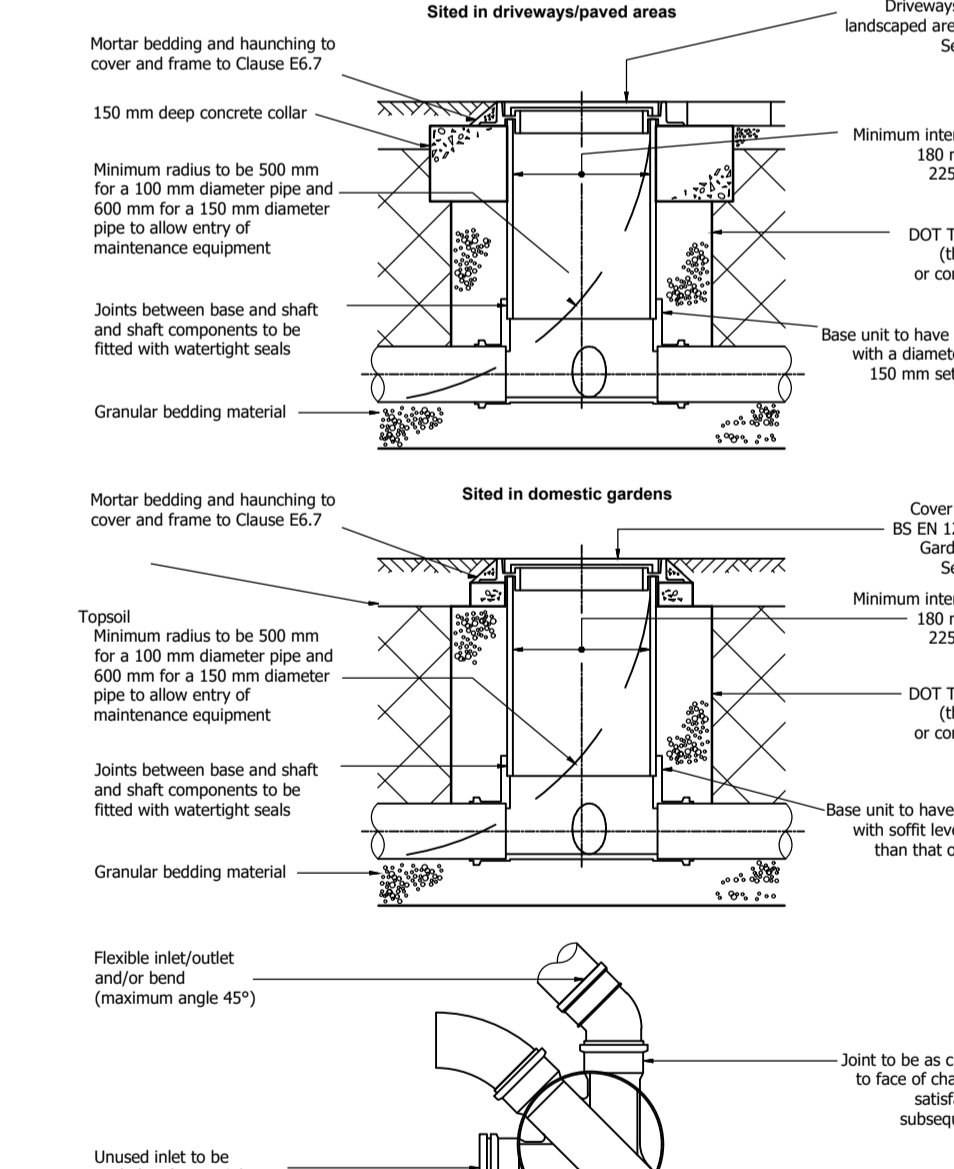
**TYPICAL INSPECTION CHAMBER DETAIL - TYPE 3 (Rigid material detail)**



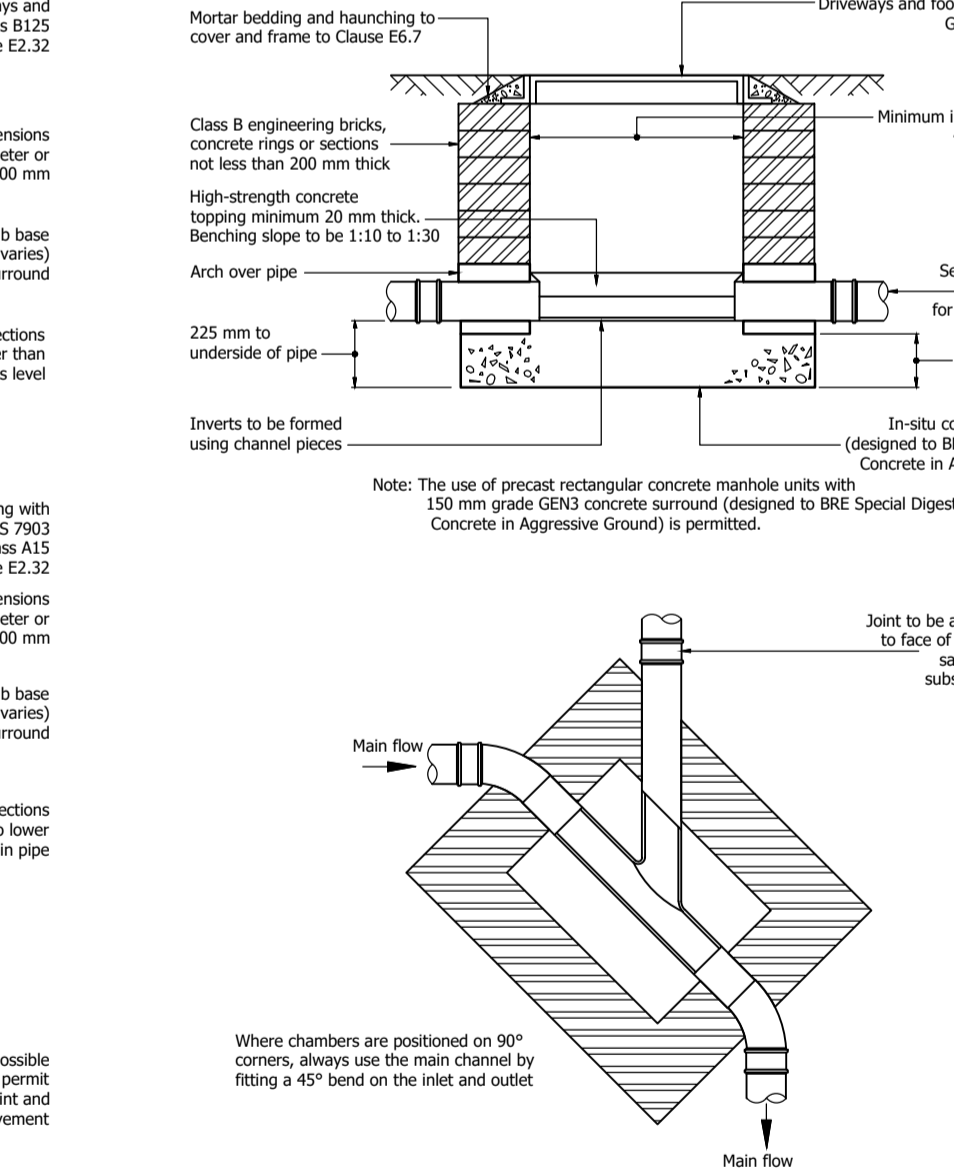
**TYPICAL INSPECTION CHAMBER DETAIL - TYPE 4 (Flexible material detail)**



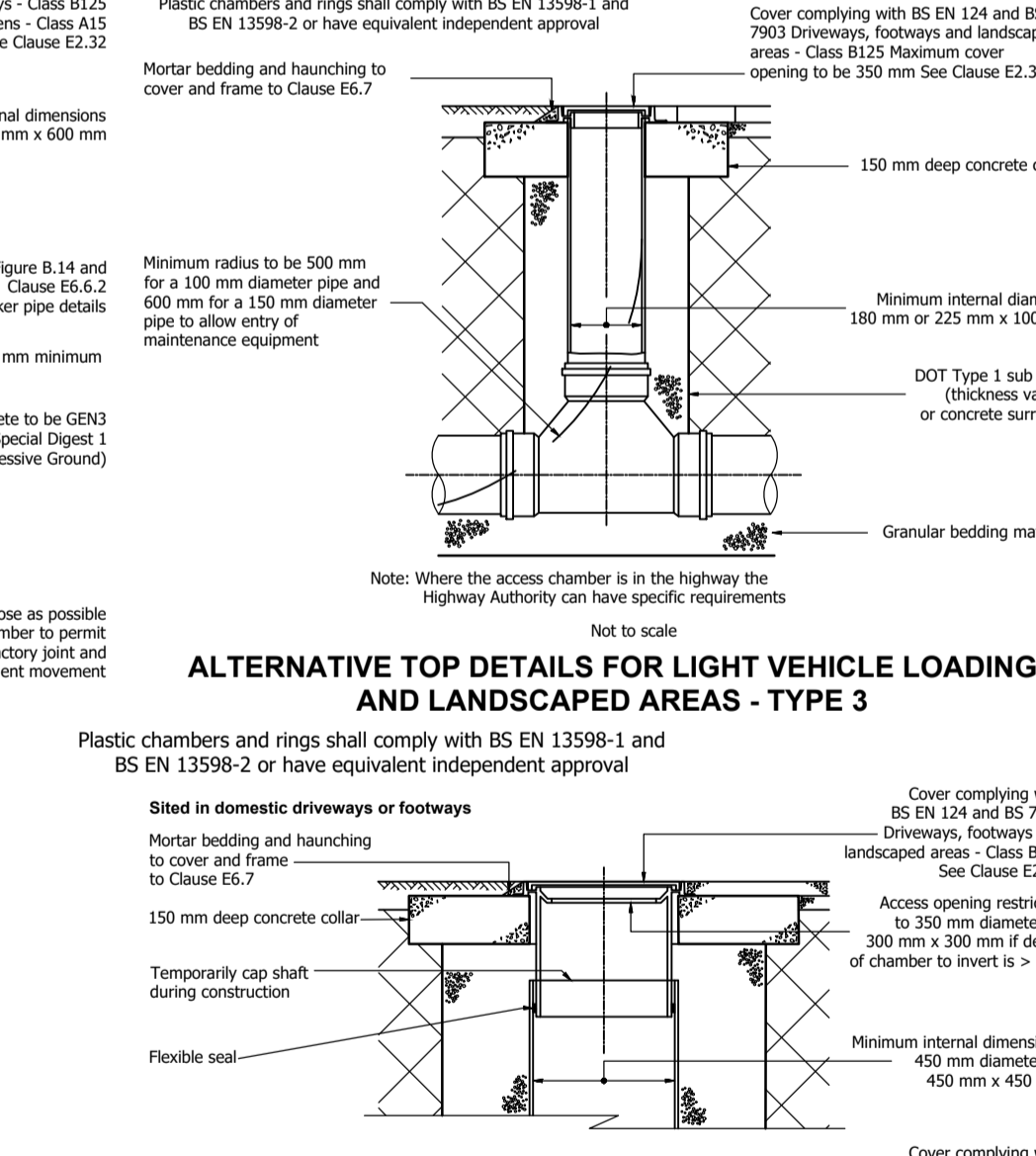
**TYPICAL INSPECTION CHAMBER DETAIL - TYPE 4 (Rigid material detail)**



**TYPICAL INSPECTION CHAMBER DETAIL - TYPE 4 (Alternative construction detail)**



**ALTERNATIVE TOP DETAILS FOR LIGHT VEHICLE LOADING AND LANDSCAPED AREAS - TYPE 3**



**MANKHOLE NOTES**

- Access cover grades (depth of frame to suit location and highway category).  
**BS EN 124**  
**CLASS D 400** - Carriageway and parking areas  
**CLASS B 125** - Footways etc.  
 Access covers for type 1 and 2 manholes to have a minimum clear opening of 675mm sq.
  - Permissible chamber diameters for manhole types 1 and 2.
- | DIAMETER OF LARGEST PIPE IN MANHOLE (mm) | CHAMBER SECTION DIAMETER (mm) |
|--|-------------------------------|
| LESS THAN 375                            | 1200                          |
| 375 - 700                                | 1500                          |
| 750 - 900                                | 1800                          |
| Greater than 900                         | Pipe diameter + 900           |
- Pipes built into manholes shall have a flexible joint as close as feasible to the external face of the structure and the length of the next rocker pipe shall be as shown.
- | NOMINAL DIAMETER (mm) | EFFECTIVE LENGTH (m) |
|-----------------------|----------------------|
| 150 - 600             | 0.60                 |
| 601 - 750             | 1.00                 |
| OVER 750              | 1.25                 |
- All pipes entering at the bottom of the manhole to have same soffit level.
  - The channel may be preformed half round channel.
  - Where a future connection is shown in the manhole schedule the pipe shall be supplied with a stopper.
  - Manholes with outgoing pipes greater than or equal to 600mm dia shall have hooke fitted for removable safety chain.
  - Reduction shaft is optional for manholes greater than 3.0m depth, reduction shaft only on manholes 1800 or greater diameter.
  - Loaders shall be either stainless steel or grp. Rings to be stainless.
  - Step rungs shall be double polypropylene encapsulated.
  - All in-situ concrete to have 50-75mm slump and to be vibrated to form dense watertight seal with precast sections.
  - Benching to be c28/35 or granolithic to form dense smooth finish.
  - In-fill covers of any type shall not be used, where cover is located in an area of block paving the frame shall be 150mm deep.
  - Frames for manhole covers shall be bedded in a polystyrene resin bedding mortar in all situations where covers are sited in M50WA road categories 1, 2 or 3.
  - Double rung step irons also acceptable.
  - Access opening to be located centrally over 900mm shaft, and offset approx 200mm for 1200mm shaft with rungs/ladder.

Rigid pipes built into manhole should have a flexible joint as close as feasible to the external face of the structure and the length of the next rocker pipe should be as shown.

Nominal diameter (mm)	Maximum effective length (m)
150 - 600	0.6
601 - 750	1.00
over 750	1.25

All pipes entering the bottom of the manhole to have soffits level.

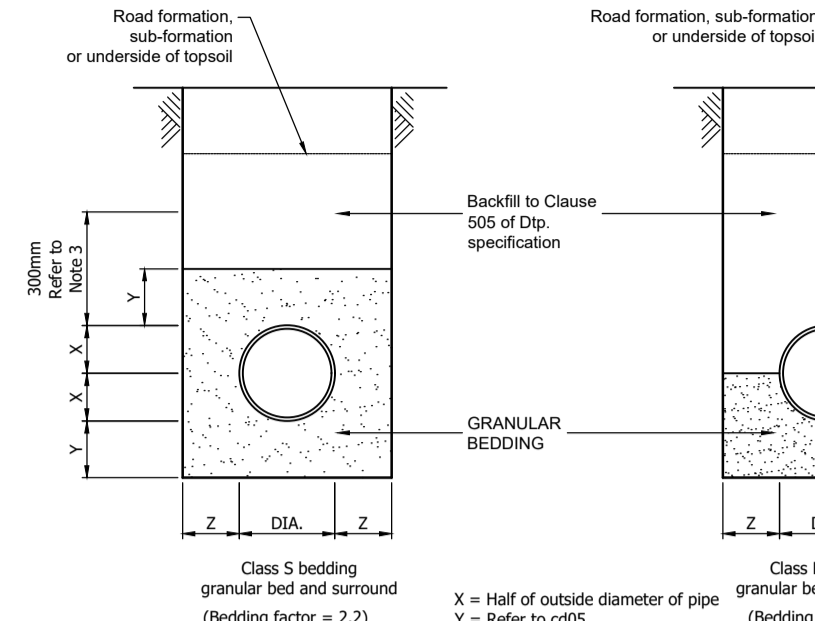
REV	DETAILS	DRAWN BY	CHECKED BY	DATE
CLIENT:	The Island Project			
PROJECT:	Jerrings Hall Farm			
DRAWING TITLE:	Drainage Details Sheet 1 of 2			
SCALES:	1:250	SHEET SIZE:	A1	
DRAWN:	MRM	CHECKED:	BJC	DATE: 10.03.2020
DRAWING NUMBER:	1336-004			REVISION:

**PIPE BEDDING DIMENSIONS**

PIPE DIAMETER	Y MINIMUM		MAXIMUM TRENCH WIDTH	L
	Y1 MIN.	Y2 MIN.		
100	100	200	700	18
150	100	200	750	18
200	100	200	800	18
225	100	200	825	18
250	100	200	850	18
300	100	200	925	18
350	100	200	1000	18
375	100	200	1025	18
400	150	200	1090	18
450	150	200	1175	36
500	150	200	1240	36
525	150	250	1270	36
600	150	300	1370	36
675	150	350	1420	36
700	225	300	1460	36
750	225	300	1500	36
800	225	300	1560	36
825	225	300	1585	36
900	225	300	1675	36
975	225	300	1805	36
1050	225	300	1865	36
1125	225	350	1950	36
1200	275	350	2035	36
1350	275	400	2220	54
1500	275	450	2340	54
1650	275	500	2510	54
1800	275	500	2690	54

- NOTES:
- All dimensions are in millimetres.
  - DIMENSION Y1 shall be used unless Y2 is specified or is directed by the engineer.
  - DIMENSION Y2 shall be used in place of Y1 where the excavation is in rock or in mixed soils containing rock boulders, large flints or other irregular hard spots.
  - DIMENSION Y2 shall be increased by 40mm for each additional 1.0m of cover in excess of 5.0m.
  - DIMENSION L is the width of compressible filler required at joints in concrete.

**GRANULAR BEDDING DETAILS**



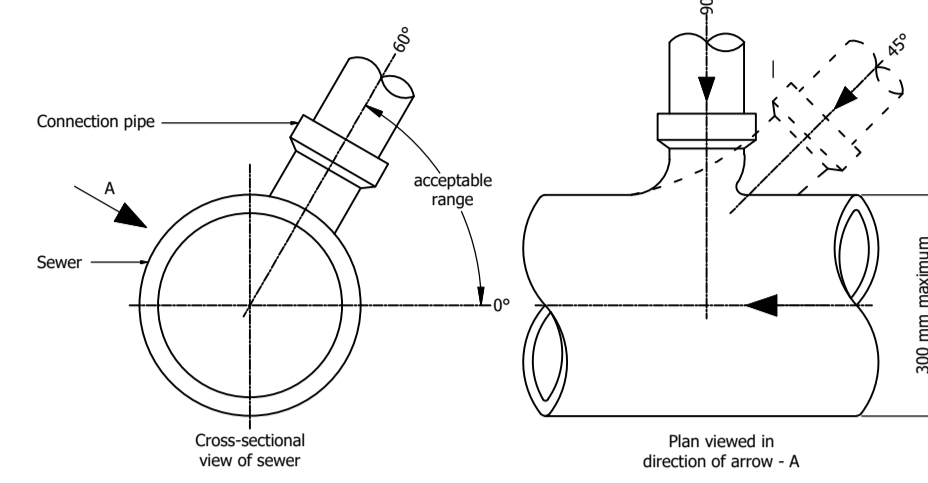
- NOTES:
- Refer to tables for dimensions and bedding details.
  - Bedding beneath and at the sides of the pipe to be well compacted.
  - The first 300mm of fill above the crown of the pipe is to be lightly tamped by hand, mechanical compaction may be used only above this level.
  - Geotextiles may be used where directed or approved by the engineer to contain bedding material in certain soils e.g. running sand.
  - In very wet conditions, where directed or approved by the engineer a temporary land drain may be laid within the granular bed.
  - Where groundwater is known to be above the soft of the pipe, Class S bedding with minimum Y of 150mm should be used.

**GRANULAR BEDDING AND SIDEFILL MATERIALS**

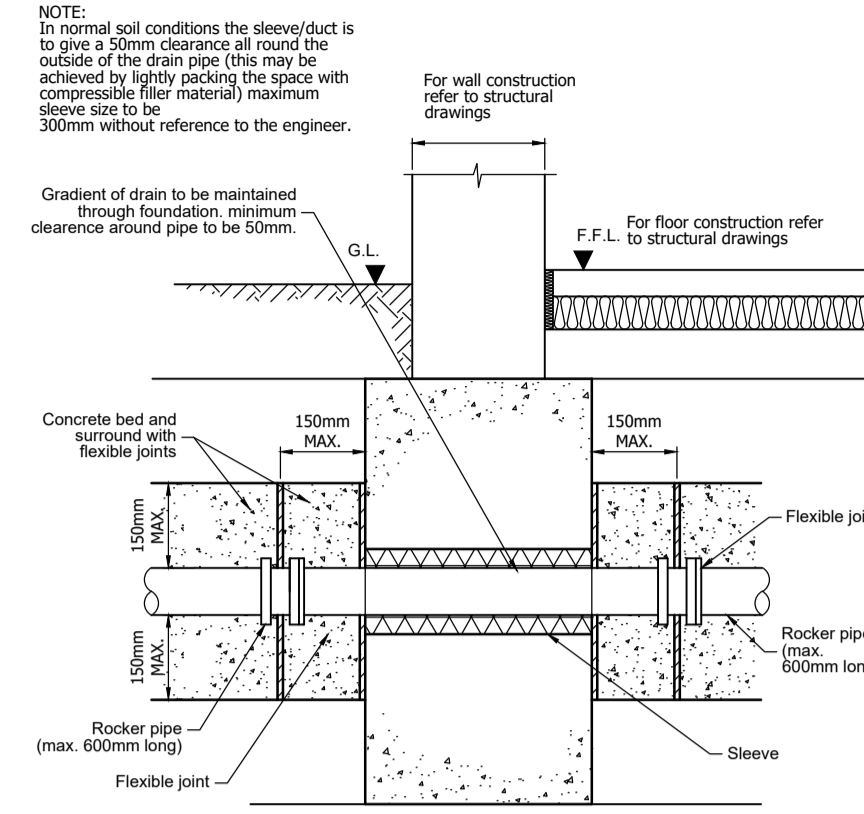
PIPE DIAMETER	CLASS OF BEDDING	IMPORTED GRANULAR MATERIAL (NOTE 1)
100	S	10mm NOMINAL SIZE
100 TO 150	B	10 OR 14mm NOM. SINGLE SIZE OR 14 TO 5mm GRADED
OVER 150	S	10, 14, 20mm NOM. SINGLE SIZE
OVER 150 TO 500	B	OR 14 TO 5mm GRADED OR 20 TO 5mm GRADED CRUSHED ROCK
OVER 500	S	10, 14, 20mm NOM. SINGLE SIZE
OVER 500 TO 1500	B	OR 14 TO 5mm GRADED OR 20 TO 5mm GRADED

- NOTES:
- Imported granular materials to include aggregates to BS 882, Air-cured blast furnace slag to BS 1047 & sintered pulverized fuel ash to BS 3797.
  - Angular materials should be chosen to ensure sufficient support is provided.
  - To heavier pipes.
  - CLASS S bedding shall be used with flexible pipes.

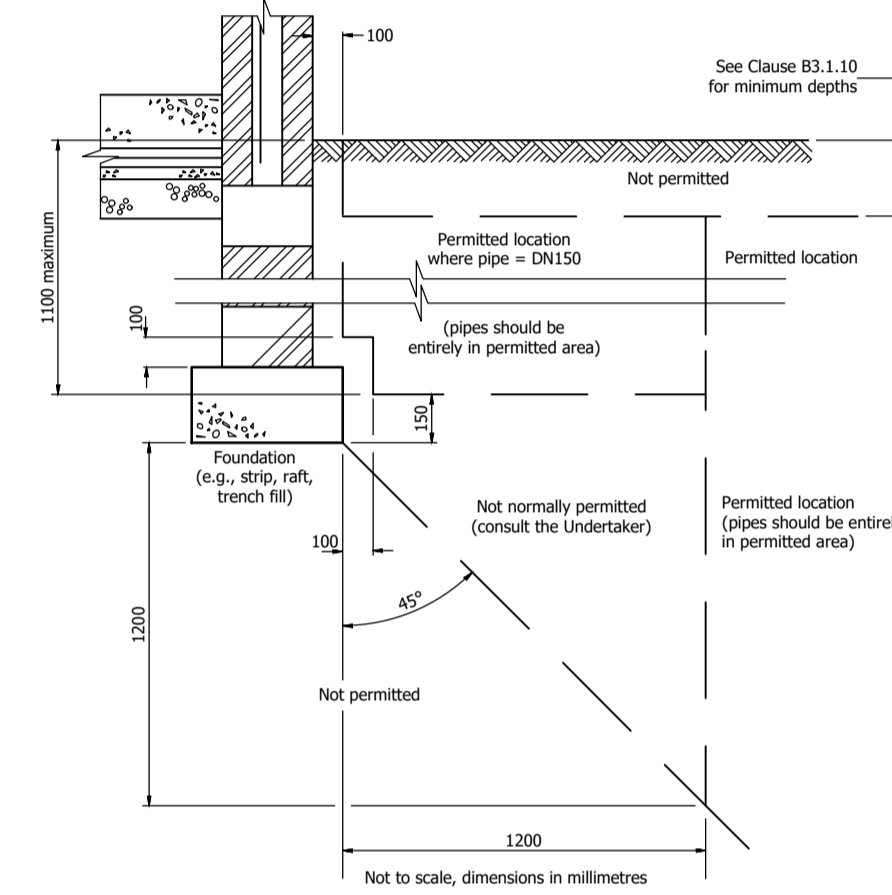
**CONNECTIONS TO SEWER**



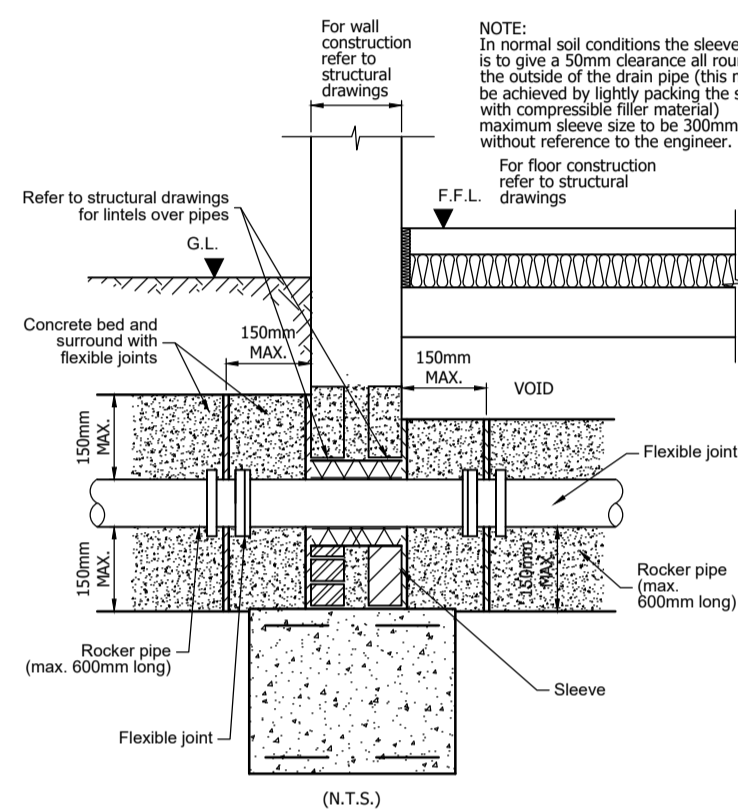
**DRAINS THROUGH STRIP FOUNDATIONS**



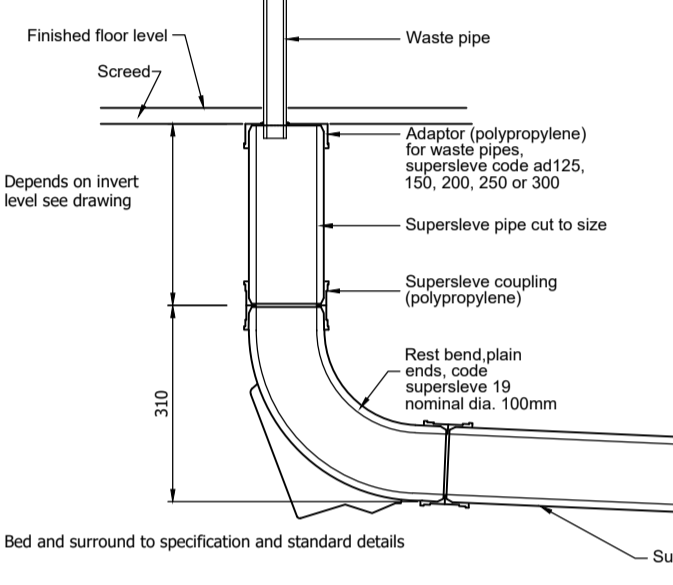
**PERMITTED LOCATION OF SEWERS AND LATERAL DRAINS IN PROXIMITY TO BUILDINGS**



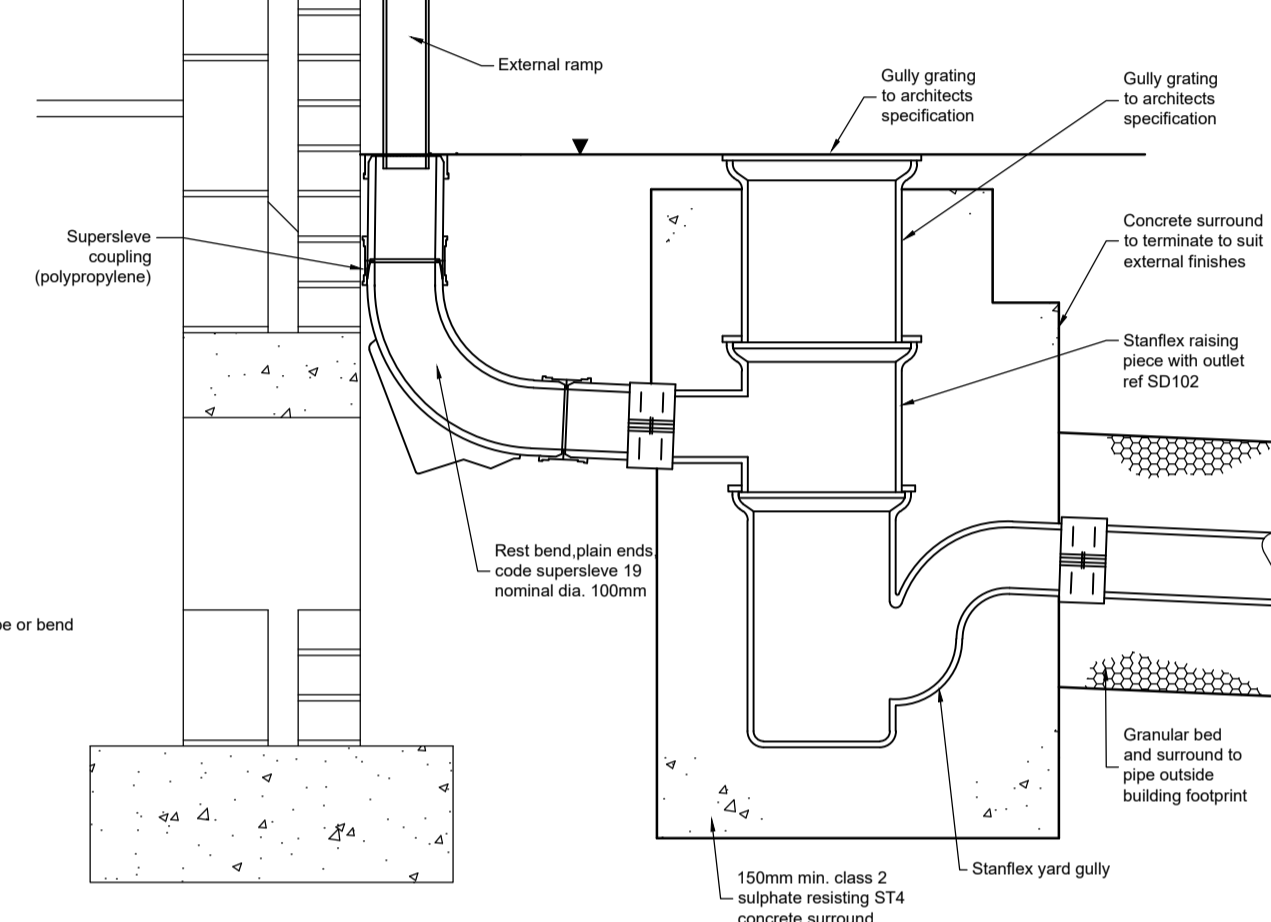
**DRAINS THROUGH WALL FOUNDATIONS**



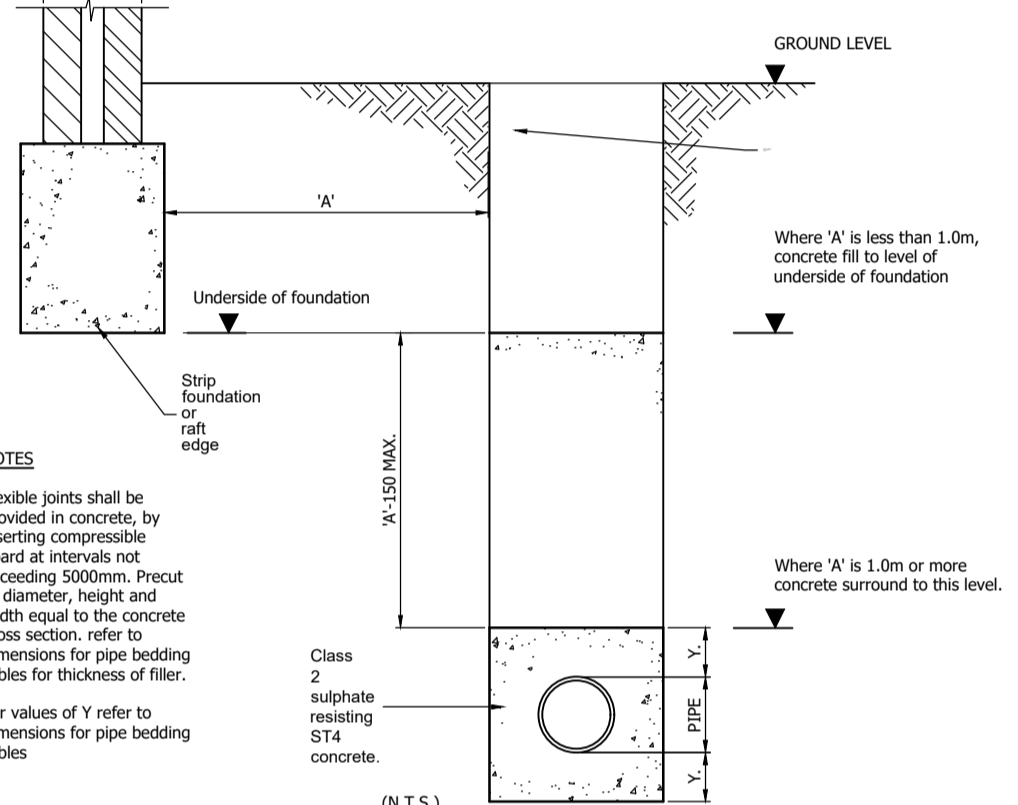
**SVP CONNECTIONS**



**RWP CONNECTIONS DIRECT TO SEWER**

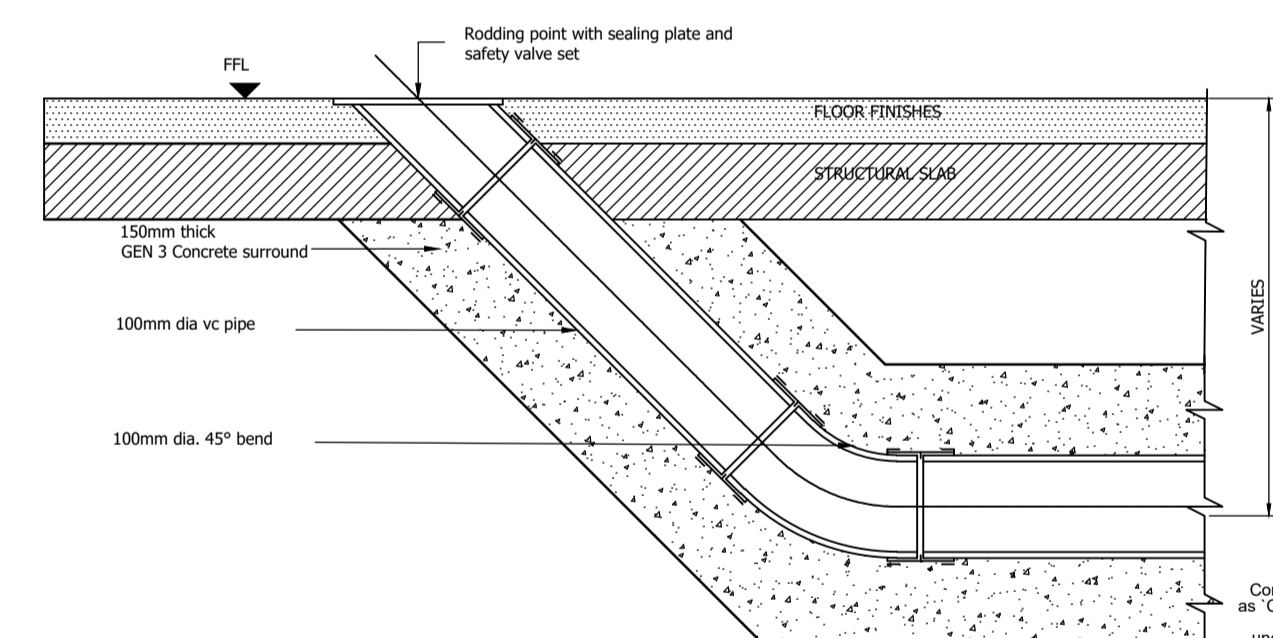


**PIPE RUNS NEAR BUILDINGS**

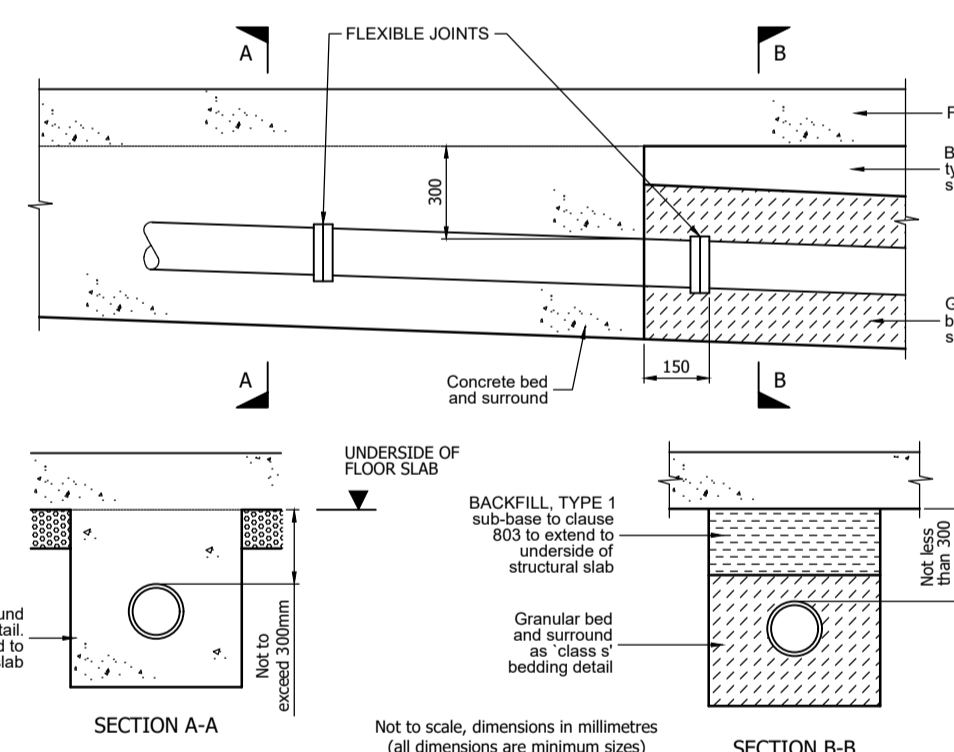


- NOTES:
- Flexible joints shall be provided in concrete, by inserting compressible board at intervals not exceeding 500mm. Precut to diameter, height and width equal to the concrete cross section, refer to dimensions for pipe bedding tables for thickness of filler.
  - For values of Y refer to dimensions for pipe bedding tables.

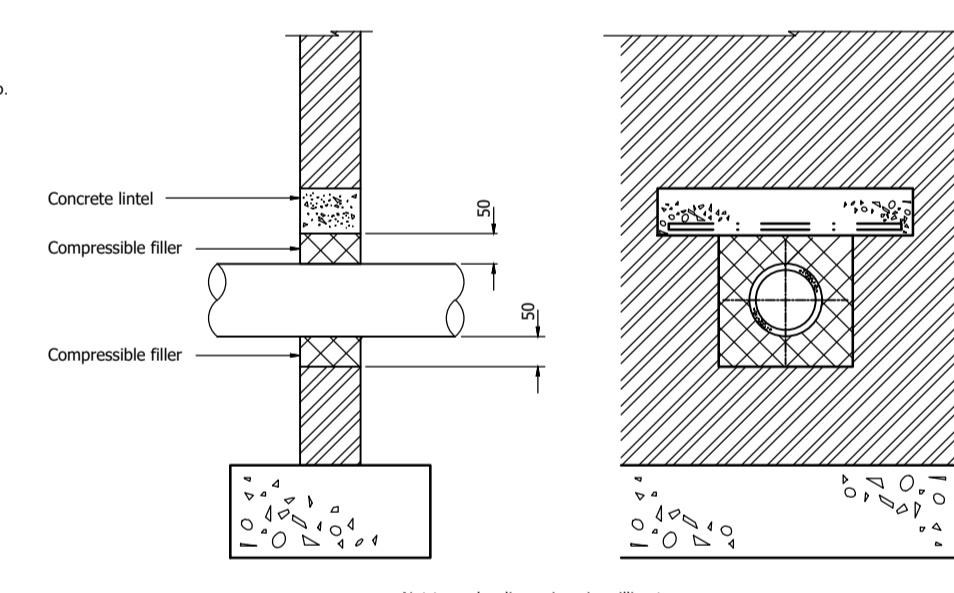
**DETAIL OF RODDING EYE**



**DRAINS UNDER BUILDINGS**

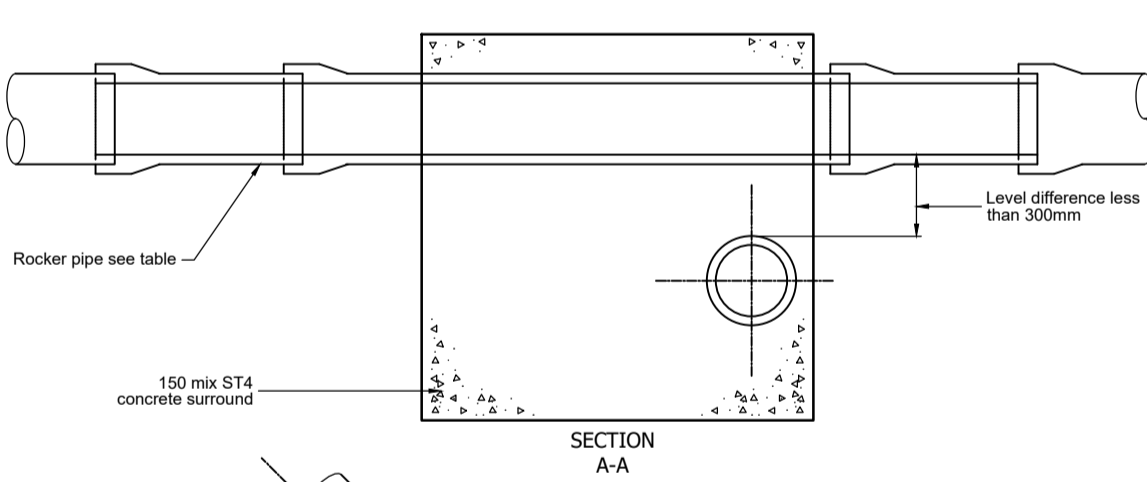


**PROTECTION OF PIPES PENETRATING SINGLE LEAF BOUNDARY WALLS**

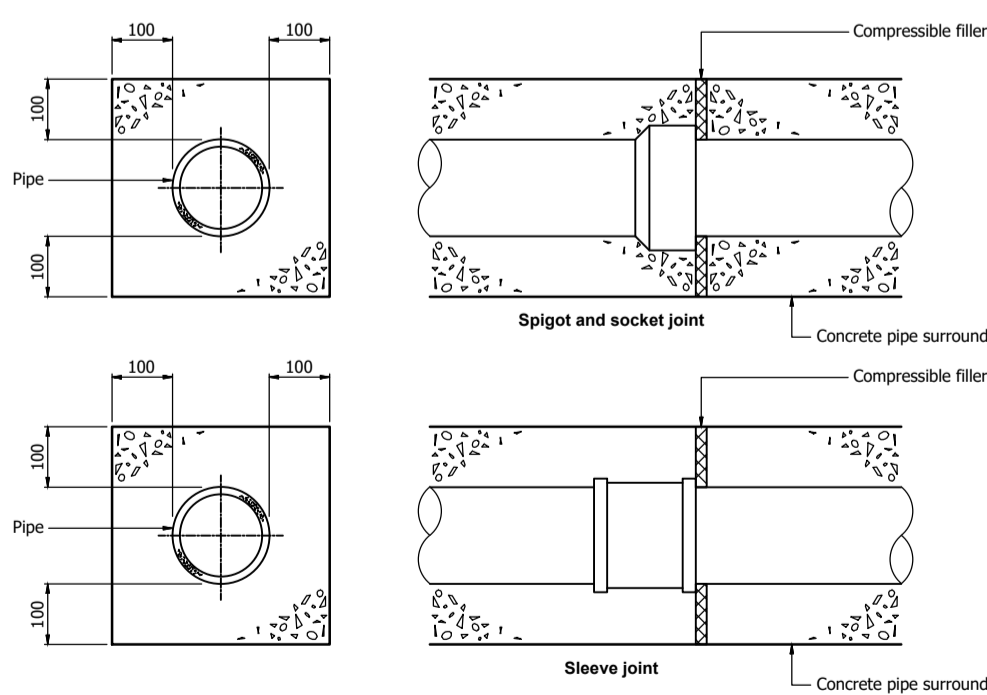


- NOTES:
- Concrete bed and surround shall be provided as section a-a where distance between underside of slab and pipe-soffit is less than or equal to 300mm.
  - Where pipes with flexible joints are used the concrete protection shall be interrupted over its full cross-section at each joint by a shaped compressible filler. (see dimensions for pipe bedding table for thickness of compressible filler).
  - If pipes are surrounded in concrete, the joints shall be protected from the ingress of concrete by wrapping them with two coats of mastic bandage tape.

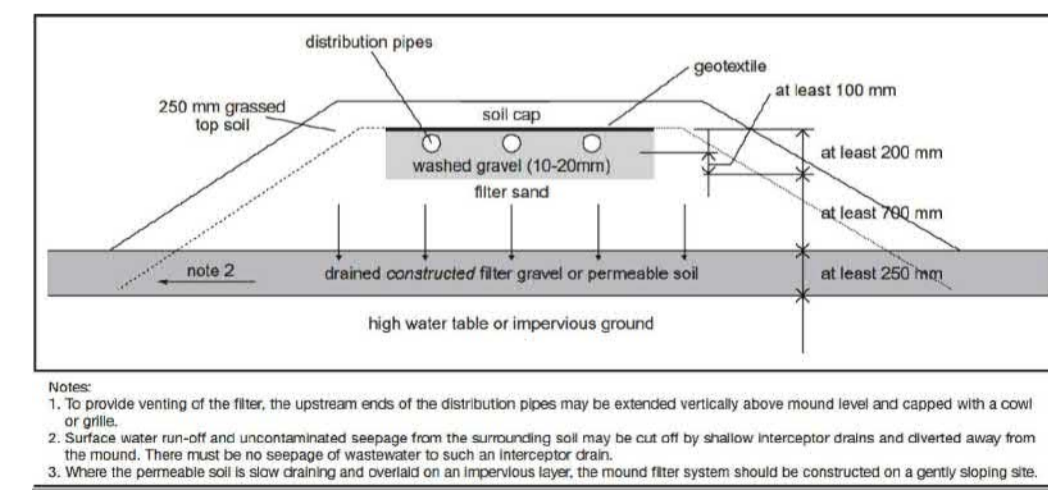
**PLAN CROSSOVER DETAIL**



**JOINTS FOR CONCRETE ENCASED PIPES**



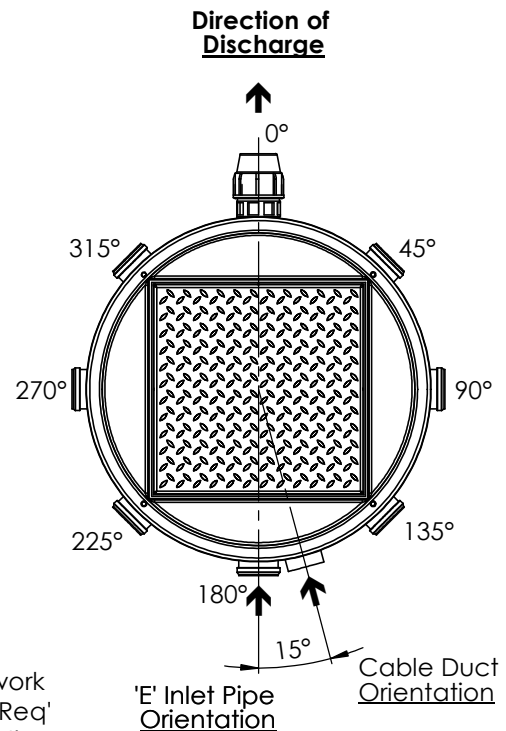
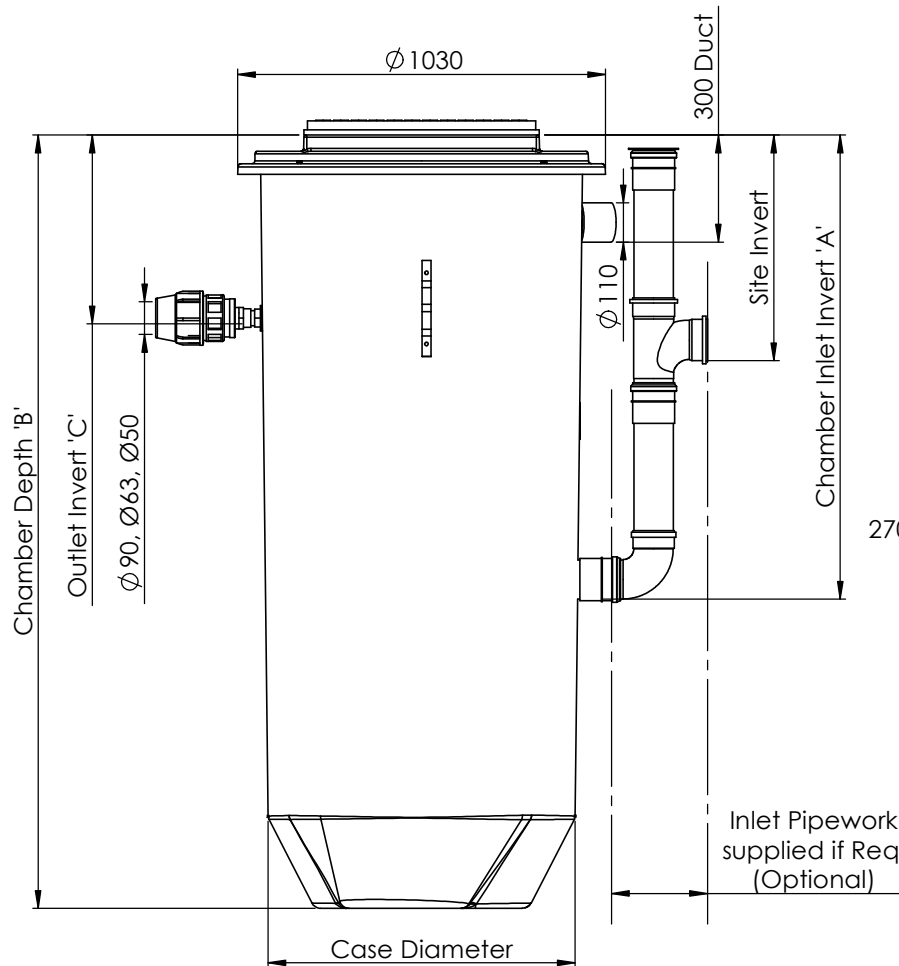
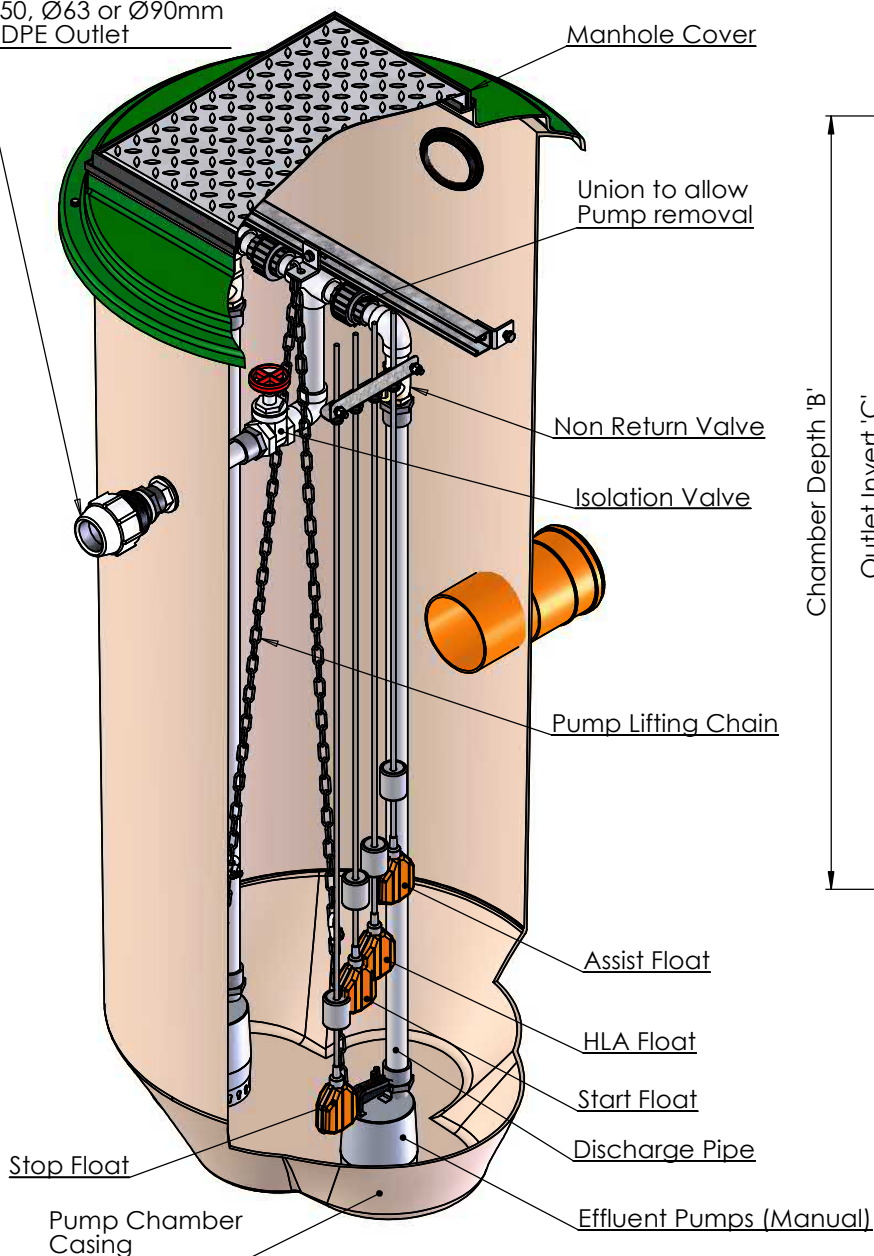
- NOTES:
- Refer to tables for dimension and bedding materials. Bedding beneath and at sides of the pipe to be well compacted.
  - Where a concrete cradle is provided, the first 300mm of fill above the crown of the pipe is to be lightly compacted by hand, mechanical compaction may be used only above this level.
  - Concrete cradles and arches may be extended to the sides of the trench.
  - Geotextiles may be used where directed or approved by the engineer to contain bedding material in certain soils e.g. running sand.
  - In very wet conditions, where directed or approved by the engineer a temporary land drain may be laid within the granular bed.
  - Where pipes with flexible joints are used, the concrete protection is to be interrupted over its full cross-section at intervals not exceeding 5 metres (or as directed by the engineer) by a shaped former of bitumen impregnated compressible filler. These interruptions shall coincide with pipe joints. See dimensions for pipe bedding table for thickness of compressible filler.
  - Concrete to be class 2, sulphate resisting ST4 concrete.
  - Where flexible pipes are used, care must be taken to prevent the pipes from floating.



- Notes:
- To provide venting of the filter, the upstream ends of the distribution pipes may be extended vertically above ground level and capped with a coil or grille.
  - Surface water run-off and uncontrolled seepage from the surrounding soil may be cut off by shallow interceptor drains and diverted away from the mound. There must be no seepage of wastewater to such an interceptor drain.
  - Where the permeable soil is slow draining and covered on an impervious layer, the mound filter system should be constructed on a gently sloping site.

REV	DETAILS	DRAWN BY	CHECKED BY	DATE
CLIENT:	The Island Project			
PROJECT:	Jerrings Hall Farm			
DRAWING TITLE:	Drainage Details Sheet 2 of 2			
SCALES:	1:250	SHEET SIZE:		A1
DRAWN:	MRM	CHECKED:	BJC	DATE: 10.03.2020
 Candon Drew Associates				REVISION:
DRAWING NUMBER:	1336-005			-

Ø50, Ø63 or Ø90mm  
MDPE Outlet



- Notes:**
- Pumpwell delivered with Control Panel and Float Switches not installed to avoid damage in transit.
  - Read Operating and Installation Guidelines before installing.

Case Diameter	Outlet Invert 'C'	Chamber Depth 'B'			Inlet Invert 'A' - Standard			Inlet Size 'D'	Inlet Positions 'E'
		Chamber A (2.16m)	Chamber B (2.67m)	Chamber E (1.58m)	Chamber A (1.3m)	Chamber B (1.8m)	Chamber E (0.7m)		
Ø900mm	535mm	•			•			Ø110mm or Ø160mm	0°, 45°, 90°, 135°, 180°, 225°, 270°, 315°
			•			•			
				•			•		

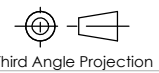
Please check with Clearwater Process Control that this drawing is the latest issue				
Issue	Date	Drawn by	Approved by	Description
05	31/05/19	J.Belovic		CC1488 - Adding Inlet Pipe Position
04	09/04/19	J.Belovic		CC1470 - Changing Lid to Manhole Cover
03	13/12/18	J.Belovic		CC1451 - Adding 'E' - 1.5m' Configuration

Material : Various  
 Finish :  
 Weight : 102.16 Kg  
 Modelled By : Name

Tolerance (unless stated) :  
 Thickness : n/a  
 Surface Area : m²

**Drawing : DS1176P** Page 1 of 1  
**Twin Effluent Pump Chamber Sales Drawing**

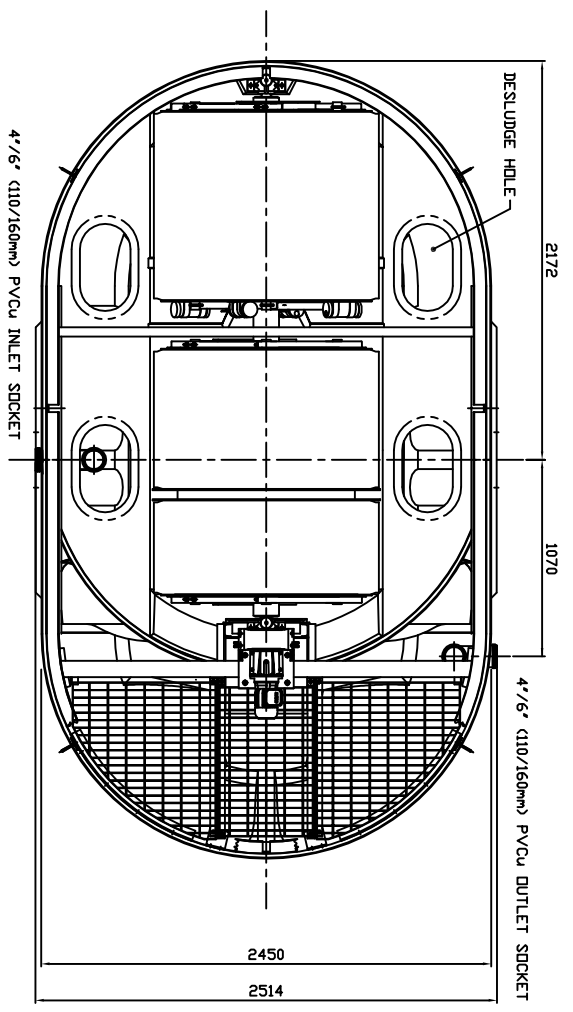
All Dimensions In mm Scale: Do Not Scale



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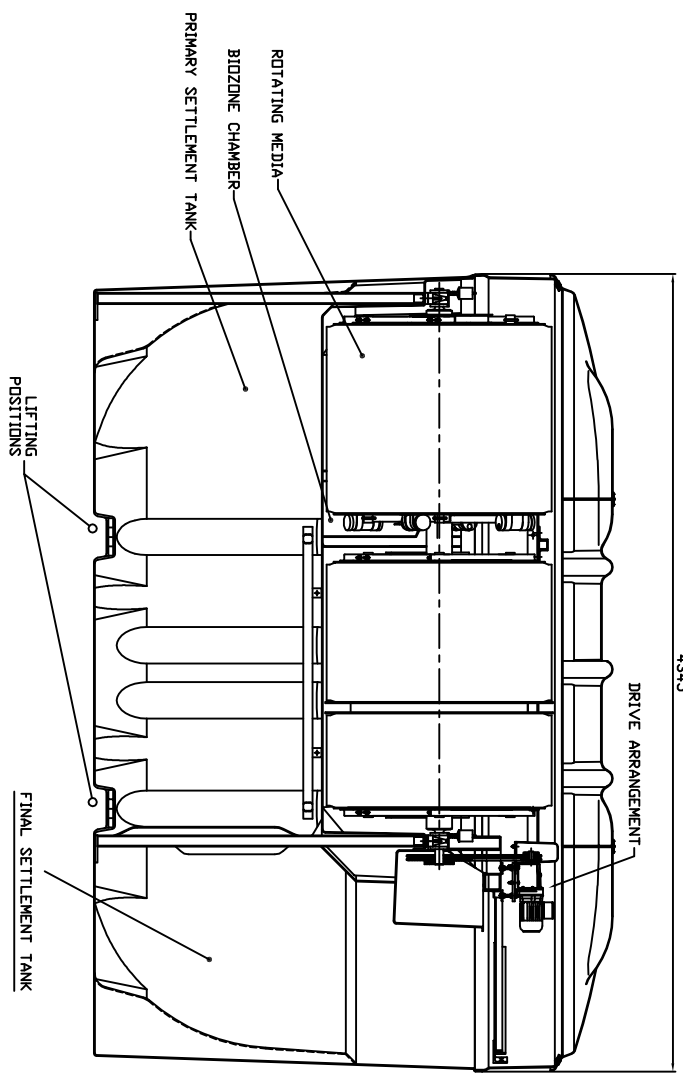
Item is Unsolvable  
 Item Conflicts



PLAN VIEW WITH TOP COVERS REMOVED

END ELEVATION

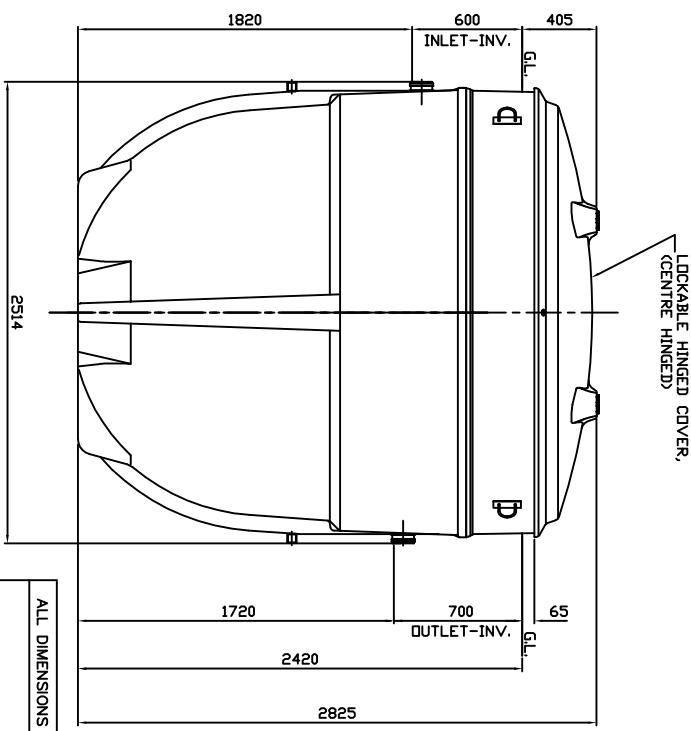
- NOTES**
1. BIDDISC TANK AND COVER ARE MANUFACTURED IN GLASS REINFORCED POLYESTER (GRP). COVER IS FINISHED IN GREEN TO B.S.4800 TINT 12B25
  2. ELECTRICAL SUPPLY: 240 VOLTS, 2amps, SINGLE PHASE (THREE PHASE OPTIONAL) CONTROL PANEL SUPPLIED.
  3. BIDDISC MUST BE LIFTED BY THE LIFTING POSITIONS PROVIDED.
  4. FOR INSTALLATION, MAINTENANCE AND DESLUDGE DETAILS REFER TO PROCEDURE DOCUMENTS SUPPLIED WITH UNIT.
  5. DIMENSIONS APPLICABLE TO 600 INVERT HEIGHT DMLY.



APPROX. DRY WEIGHT 1315 KG

COVER, TOP SECTION, BASE & BIOZONE TANK SECTIONED ON CENTRE LINE FOR CLARITY.

FINAL SETTLEMENT TANK



LOCKABLE HINGED COVER, (CENTRE HINGED)

ALL DIMENSIONS ARE IN MILLIMETRES - DO NOT SCALE

ISSUE	DATE	BY	INITIALS	DESCRIPTION
3	24/04/18	L.S.	CC1235	INLET/OUTLET DIMS FOR BP-BL BIDDISCS
2	19/11/12	L.S.	CC1104	
1	17.05.10	J.C.		INITIAL ISSUE

**Kingspan**  
ENVIRONMENTAL

**BF BIDDISC**  
GENERAL  
DIMENSIONS

SCALE	1:15	SHEET SIZE	A1
DRAWING No.	DS0498P	ISSUE	3

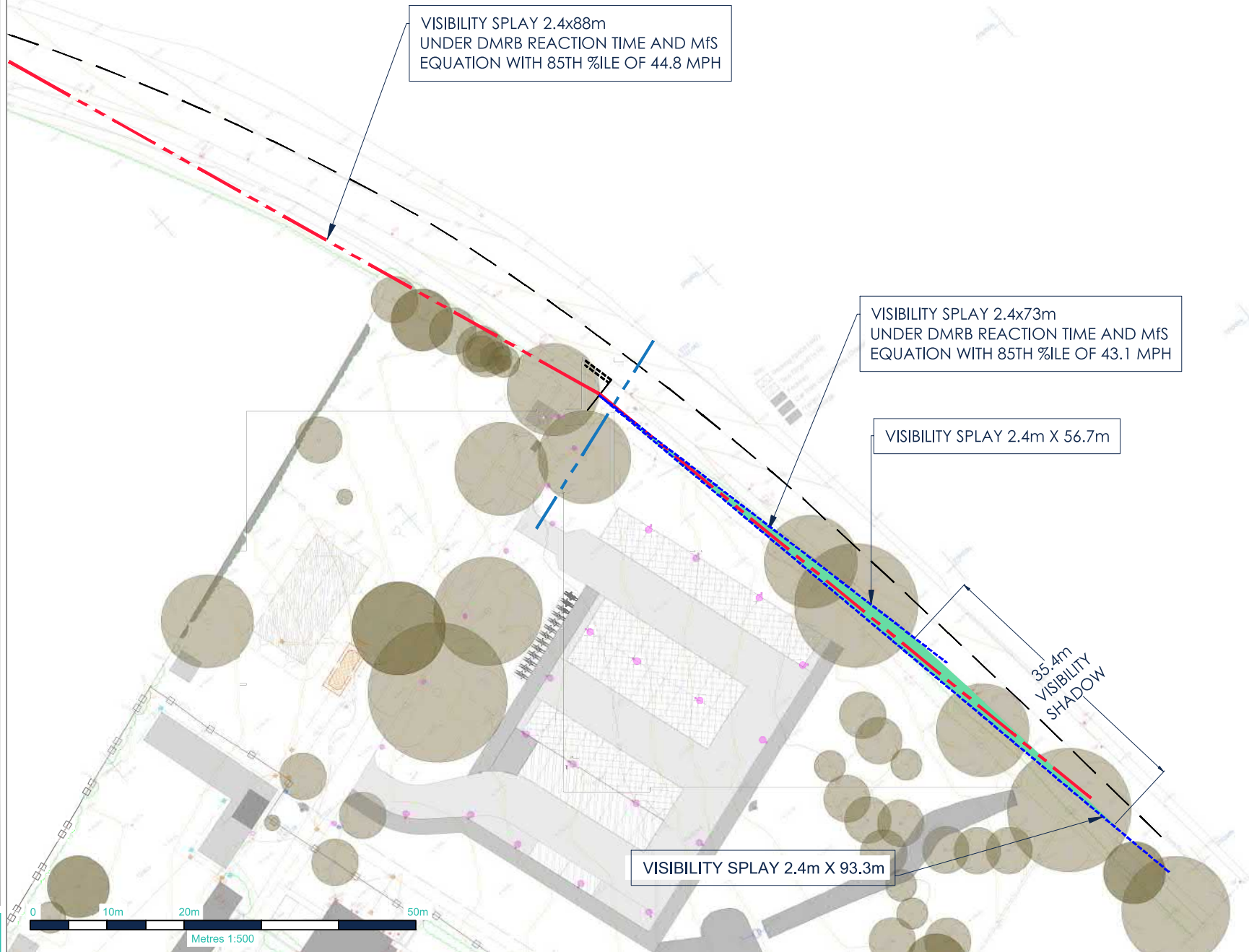
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north



### SITE LOCATION



- - - - SITE ACCESS  
VISIBILITY SPLAYS
- - - - PARKING EXIT VISIBILITY 17m
- - - - VISIBILITY SPLAYS AROUND  
TREE TRUNKS
- AREA OF VISIBILITY SHADOW

2	LAYOUT UPDATE	AF	19/08/21
1	LAYOUT UPDATE	CB	27/05/20
-	FIRST ISSUE	CB	06/03/19
REV:	DESCRIPTION:	BY:	DATE:

STATUS: FOR INFORMATION

CLIENT: SANDERSON WEATHERALL

SITE: THE ISLAND PROJECT

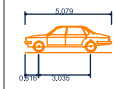
TITLE: VISIBILITY SPLAYS



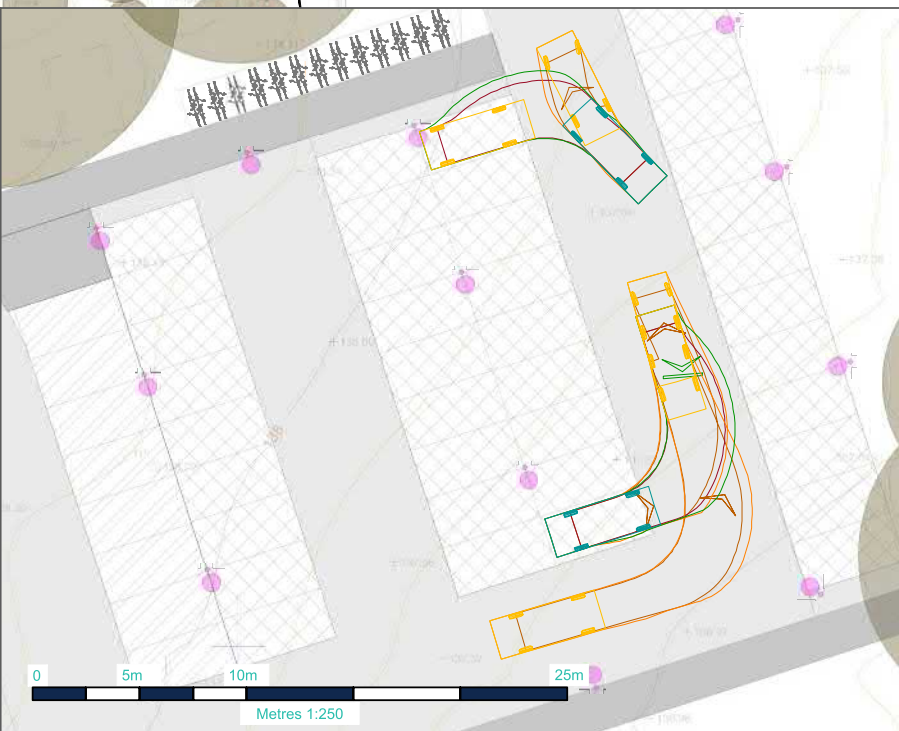
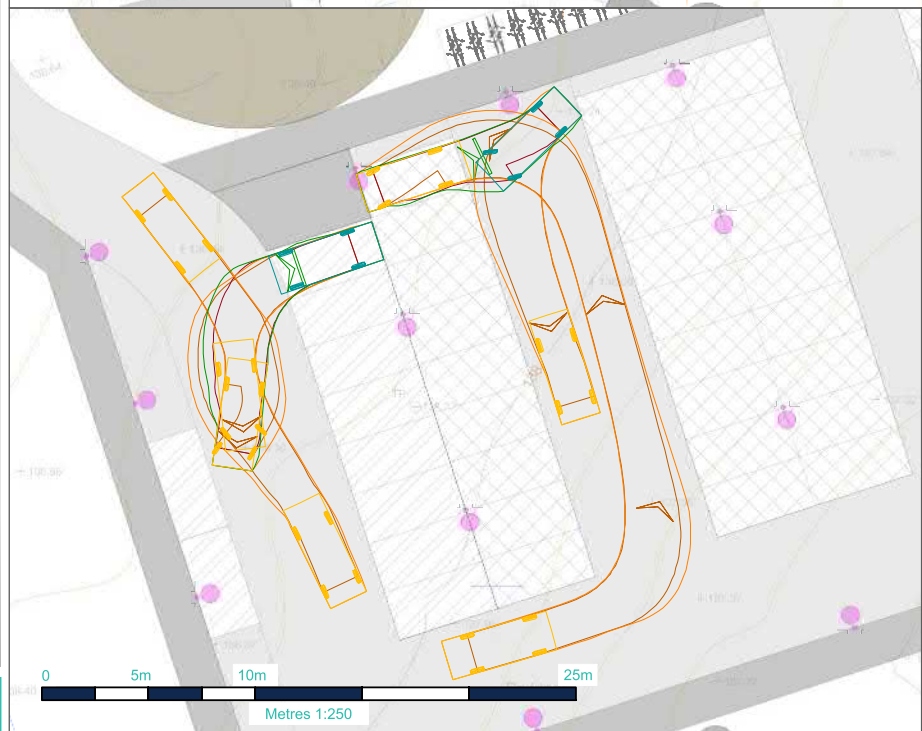
SCALE AT A3:	DATE:	DRAWN:	CHECKED:
1:500	06/03/19	CB	SM
PROJECT NO:	DRAWING NO:	REVISION:	
528-0003	SK03	2	



Area of root protection construction



Large Car (2006)  
 Overall Length 5.079m  
 Overall Width 1.872m  
 Overall Body Height 1.525m  
 Min Body Ground Clearance 0.310m  
 Max Track Width 1.831m  
 Lock to lock time 4.00s  
 Kerb to Kerb Turning Radius 5.900m



2	LAYOUT UPDATE	AF	19/08/21
1	LAYOUT UPDATE	CB	27/05/20
-	FIRST ISSUE	CB	06/03/19
REV:	DESCRIPTION:	BY:	DATE:

STATUS: **FOR INFORMATION**

CLIENT: SANDERSON WEATHERALL

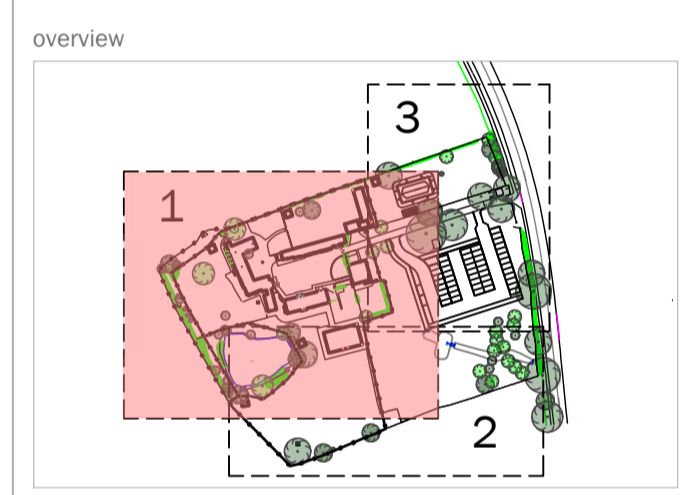
SITE: THE ISLAND PROJECT

TITLE: SITE ACCESS IMPROVEMENTS AND SWEEP-PATH ANALYSIS



SCALE AT AS: 1:250 / 1:500	DATE: 06/03/19	DRAWN: CB	CHECKED: SM
PROJECT NO: 528-0003	DRAWING NO: SK04	REVISION: 2	

- Site Boundary
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- Proposed Tree  
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Suggested Species Mix: Emorsgate Wildflowers for Woodland Mix EW1F. Sowing rate: 1.5g/m<sup>2</sup>
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Suggested Species Mix: Germinall A4 Low Maintenance Areas. Sowing rate: 35g/m<sup>2</sup>
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Suggested Species Mix: Germinall seeds EP1 Pond Edge Mixture. Sowing rate: 4g/m<sup>2</sup>
- Proposed Planting Bed
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- Proposed Hedge Planting
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notes

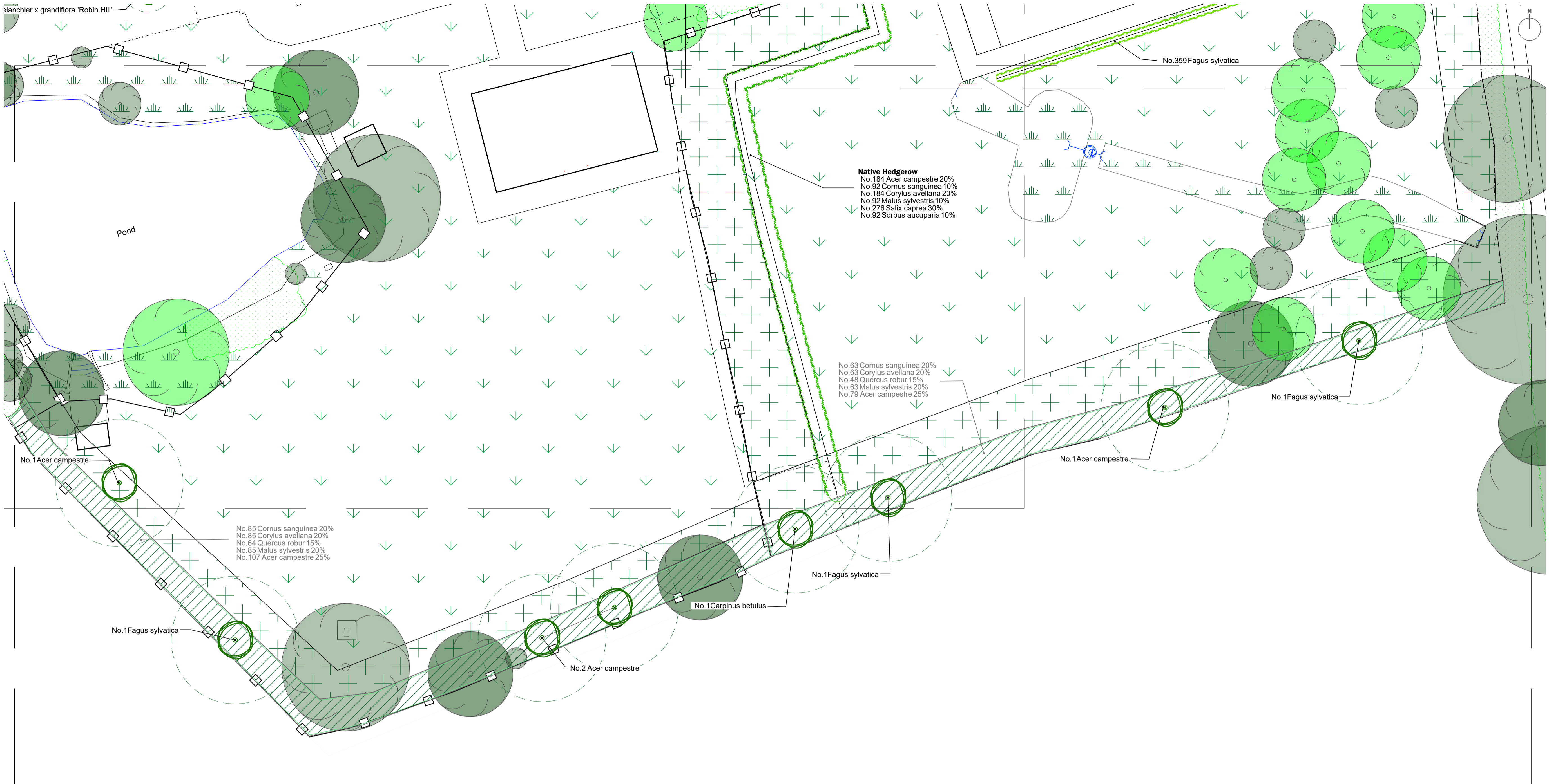
For further guidance, refer to HSE Construction (Design and Management) Regulations 2015.

revisions

rev	by	chk	date	detail

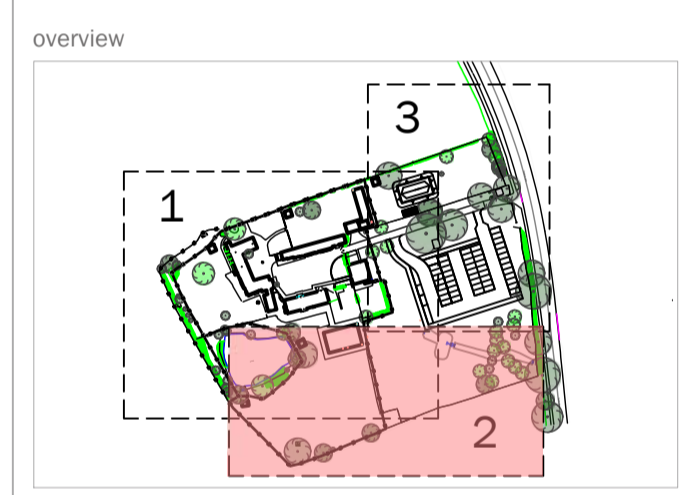
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purpose of issue **PLANNING**  
 client  
**The Island Project**  
 project title  
**Jerrings Hall Farm, Dickens Heath**  
 drawing title  
**Detailed Landscape Design Proposals**  
 date **28/05/2020** drawn by **OW**  
 drawing number **edp5137\_d009** checked **OK**  
 scale **1:200 @ A1** QA **XXX**



**DRAFT**

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notes

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revisions

rev	by	chk	date	detail

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purpose of issue **PLANNING**  
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project title  
**Jerrings Hall Farm, Dickens Heath**

drawing title  
**Detailed Landscape Design Proposals**

Sheet 2 of 4  
date 28/05/2020 drawn by OW  
drawing number edp5137\_d009 checked OK  
scale 1:200 @ A1 QA XXX

**Planting Schedule**

**Trees**

Number	Common Name	Species	Girth	Height	Specification	Density
7	Common Maple	Acer campestre	12-14cm	350-425cm	RB :Heavy Standard :Clear Stem min. 200	Counted
6	Snowy Mespilus 'Robin Hill'	Amelanchier x grandiflora 'Robin Hill'	12-14cm	12-14cm	RB :Heavy Standard :Clear Stem 175-200	Counted
5	Common Hornbeam	Carpinus betulus	12-14cm	350-425cm	RB; 3x; Heavy Standard; clear stem 175-200cm; 5 breaks	Counted
3	Common Beech	Fagus sylvatica	14-16cm	400-450cm	Extra Heavy Standard :Clear Stem 175-200 :5 brks :RB	Counted
2		Malus domestica 'Braitree Seedling'	8-10cm	250-300cm	B :Standard :Clear Stem 150-175 :3 brks	Counted
4	Common Crab Apple	Malus sylvestris	12-14cm	350-425cm	Heavy Standard :Clear Stem 175-200 :RB :3x	Counted
5	Double Gean	Prunus avium 'Plena'	12-14cm	350-425cm	RB; 3x; Heavy Standard; clear stem 175-200cm; 5 breaks	Counted
<b>Total :32</b>						

**Shrubs**

Number	Common Name	Species	Height	Pot Size	Specification	Density
237	Common Maple	Acer campestre	60-80cm		1+1 :Transplant	0.75Ctr
26		Chaenomeles superba 'Jet Trail'	30-40cm	3L	C:	4/m <sup>2</sup>
189	Common Dogwood	Cornus sanguinea	60-80cm		1+1 :Transplant	0.75Ctr
189	Common Hazel	Corylus avellana	60-80cm		1+1 :Transplant	0.75Ctr
30	Broom	Cytisus kewensis	20-25cm	3L	C	4/m <sup>2</sup>
30	Shrubby Veronica 'Carl Teschner'	Hebe 'Carl Teschner'	20-30cm	3L	C	4/m <sup>2</sup>
189	Common Crab Apple	Malus sylvestris	60-80cm		1+1 :Transplant	0.75Ctr
143	Common Oak	Quercus robur	60-80cm		1+1 :Transplant	0.75Ctr
<b>Total :1033</b>						

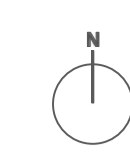
**Bulbs**

Number	Common Name	Species	Bulb Size	Specification	Density
324	Common Snowdrop	Galanthus nivalis		Grade 10/+	20/m <sup>2</sup>
324	English Bluebell	Hyacinthoides non-scripta		Grade 10/+	20/m <sup>2</sup>
429		Narcissus 'Tete a Tete'		Grade 10/+	20/m <sup>2</sup>
<b>Total :1077</b>					

**Hedges**

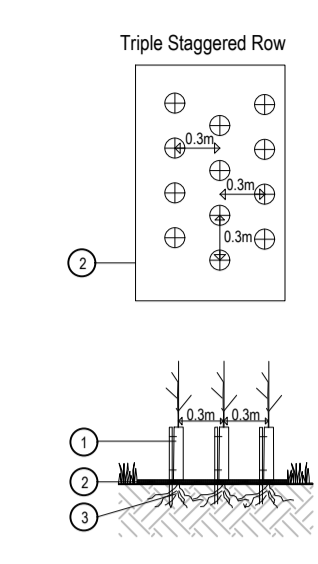
Number	Common Name	Species	Height	Specification	Density
317	Common Maple	Acer campestre	100-125cm	1+2: Transplant - seed raised: B	0.3Ctr Triple Staggered at 0.3m offset
159	Common Dogwood	Cornus sanguinea	60-80cm	1+1: Transplant - seed raised: Branched: 3 brks: B	0.3Ctr Triple Staggered at 0.3m offset
317	Common Hazel	Corylus avellana	60-80cm	1+2: Transplant - seed raised: Branched: 3 brks: B	0.3Ctr Triple Staggered at 0.3m offset
740	Common Beech	Fagus sylvatica	80-100cm	B; 1+2; Transplant - seed raised	0.3Ctr
159	Common Crab Apple	Malus sylvestris	80-100cm	1+2: Transplant - seed raised: B	0.3Ctr Triple Staggered at 0.3m offset
475	Goat Willow	Salix caprea	80-100cm	0/2: Cutting: Branched: 2 brks: B	0.3Ctr Triple Staggered at 0.3m offset
159	Rowan	Sorbus aucuparia	80-100cm	1+1: Transplant - seed raised: B	0.3Ctr Triple Staggered at 0.3m offset
<b>Total :2326</b>					





**DRAFT**

-  Site Boundary
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Mature Canopy Extent Illustrated
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Suggested Species Mix: Germinal A4 Low Maintenance Areas. Sowing rate: 35g/m<sup>2</sup>
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Suggested Species Mix: Emorsgate EM10 Tussock Mixture. Sowing rate: 4g/m<sup>2</sup>
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Suggested Species Mix: Germinal seeds EP1 Pond Edge Mixture. Sowing rate: 4g/m<sup>2</sup>
-  Proposed Planting Bed
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**Triple Staggered Row** - For use in Public Open Space (POS)

1. Tubex shrub shelter with supporting cane or stake or similar approved.
2. 2m wide biodegradable weed mat roll pegged down with biodegradable pegs along line of hedgerow to prevent weed growth and retain moisture.
3. Whip to be notch planted following clearance of any existing vegetation.

Immediately after planting, water the whip, saturating the ground around its base to field capacity.

For further general guidance on planting refer to BS8545:2014 Section 10 and BS4428:1989 Section 9.

Products suggested in italics above are available from Tubex (<http://www.tubex.com/>).

**Whip Maintenance and Management During 5 Year Establishment Period**

Immediately following planting, the whip should be watered thoroughly. Following this, and with regard to prevailing weather conditions, newly planted whips should be watered regularly during periods of dry weather. When watering, the square meter of ground around the whip should be soaked to field capacity (refer to BS8545:2014 for further detail) by surface watering. Watering frequency is more important than quantity to prevent the roots of the newly planted whip from drying out.

All whips are fitted with protective guards to prevent animal damage. These should be checked regularly to ensure they remain in place and are providing adequate protection against the animals in the area. If damage to trees from browsing by animals still occurs, additional measures may be required.

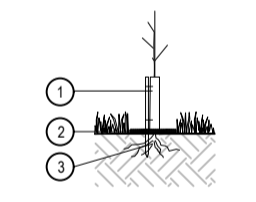
A formal assessment of areas of whip planting should be carried out annually by a qualified arborist who will be able to advise on solutions should any problems be picked up. During this assessment, any guards and canes/stakes should be checked to ensure they are providing protection but not damaging the developing whip and that its roots are still firmly seated in the ground. If the whip has become loose in the ground, the soil around the base should be re-firmed and guards adjusted accordingly.

The space above the mulch mat around the whip should be kept clear of competing vegetation and weeds at all times.

The shrub shelter/guard should be removed once the whip has established a strong enough root system to support itself and has begun to grow strongly clear of the top of the shelter/guard, likely to be 1-2 years after planting. Biodegradable mulch mats can remain in place indefinitely.

Formative pruning should be carried out in accordance with BS3998 as required during the first 5 years to ensure the desired form is achieved.

For further guidance on whip and tree maintenance during establishment refer to BS8545:2014 Section 11.



**Whip Planting Detail** - For use in Public Open Space (POS)

1. Tubex shrub shelter with supporting cane or stake or similar approved.
2. 50x50cm biodegradable mulch mat pegged down with supplied biodegradable plastic anchor pegs around the whip to prevent weed growth and retain moisture.
3. Whip to be notch planted following clearance of any existing vegetation.

Immediately after planting, water the whip, saturating the ground around its base to field capacity.

For further general guidance on planting refer to BS 8545:2014 Section 10 and BS4428:1989 Section 9.

Products suggested in italics above are available from Tubex (<http://www.tubex.com/>).

**Whip Maintenance and Management During 5 Year Establishment Period**

Immediately following planting, the whip should be watered thoroughly. Following this, and with regard to prevailing weather conditions, newly planted whips should be watered regularly during periods of dry weather. When watering the square metre of ground around the whip should be soaked to field capacity (refer to BS8545:2014 for further detail) by surface watering. Watering frequency is more important than quantity to prevent the roots of the newly planted whip from drying out.

All whips are fitted with protective guards to prevent animal damage. These should be checked regularly to ensure they remain in place and are providing adequate protection against the animals in the area. If damage to trees from browsing by animals still occurs additional measures may be required.

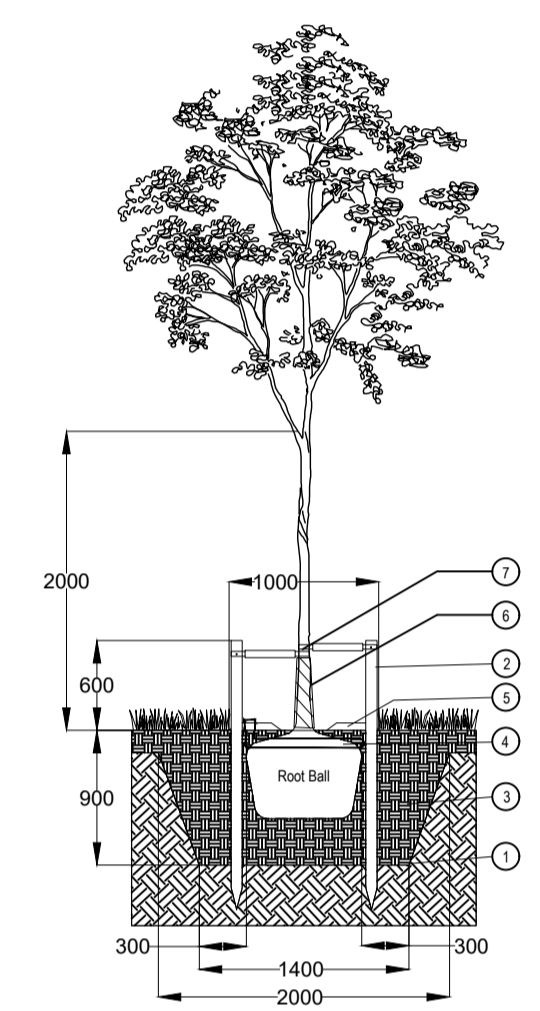
A formal assessment of areas of whip planting should be carried out annually by a qualified arborist who will be able to advise on solutions should any problems be picked up. During this assessment any guards and canes/stakes should be checked to ensure they are providing protection but not damaging the developing whip and that its roots are still firmly seated in the ground. If the whip has become loose in the ground the soil around the base should be re-firmed and guards adjusted accordingly.

The space above the mulch mat around the whip should be kept clear of competing vegetation and weeds at all times.

The shrub shelter/guard should be removed once the whip has established a strong enough root system to support itself and has begun to grow strongly clear of the top of the shelter/guard, likely to be 1-2 years after planting. Biodegradable mulch mats can remain in place indefinitely.

Formative pruning should be carried out in accordance with BS3998 as required during the first 5 years to ensure the desired form is achieved.

For further guidance on whip and tree maintenance during establishment refer to BS8545:2014 Section 11.



**Tree Pit Detail** - For use in Public Open Space (POS)

1. Excavate tree pit to sufficient size to accommodate tree root ball with 300mm free space around the root ball. Loosen any compaction in base of excavated pit to aid drainage. The tree should be planted at a depth where the root flare is still visible, just breaching the soil surface, following backfilling.
2. 2x tanalised timber tree stakes 1.8m, 75mm Ø and crossbar driven into backfilled pit to provide support to the tree.
3. Backfill tree pit with subsoil and topsoil excavated from pit if this is regarded as of sufficient quality to promote the healthy establishment of the tree. If either the top soil or sub soil excavated from the pit is of poor quality, then soil ameliorants may be used sparingly or imported topsoil compliant with BS3882 should be used.
4. RootRain Metro irrigation system or similar approved. Place around top of root ball and nail to supporting stake, ensuring filter cap finishes slightly above mulch level.
5. 75mm deep bark mulch layer to be spread evenly over a circular area 1000mm Ø around the tree to prevent weed growth and retain moisture. Alternatively, a suitable mulch mat can be used covering the same area.
6. Clear spiral guard to be fitted to trunk to protect against animal browsing.
7. Use two tree ties comprising nylon reinforced rubber belt with two spacers, fixed to tree stakes in accordance with manufacturers guidance. (Green Blue Urban GLB5B (35mm wide belt) and GLPFA (38mm Plastic Sleeve) or similar approved)

Immediately after planting, water the tree, saturating the tree pit to field capacity.

For further guidance on tree planting refer to BS 8545:2014 Section 10.

Products underlined above are available from Green Blue Urban (<http://greenblueurban.com/>).

**Tree Maintenance and Management During 5 Year Establishment Period**

Immediately following planting, the tree should be watered thoroughly. Following this, and with regard to prevailing weather conditions, newly planted trees should be watered regularly during periods of dry weather. If the tree pit has been specified with an irrigation pipe, this should be used as the primary method of watering. If no irrigation pipe is specified, the square metre of ground around the tree should be soaked to field capacity (refer to BS8545:2014 for further detail) by surface watering. Watering frequency is more important than quantity to prevent the root ball of the newly planted tree from drying out.

All trees are fitted with protective guards to prevent animal damage. These should be checked regularly to ensure they remain in place and are providing adequate protection against the animals in the area. If damage to trees from browsing by animals still occurs, additional measures may be required.

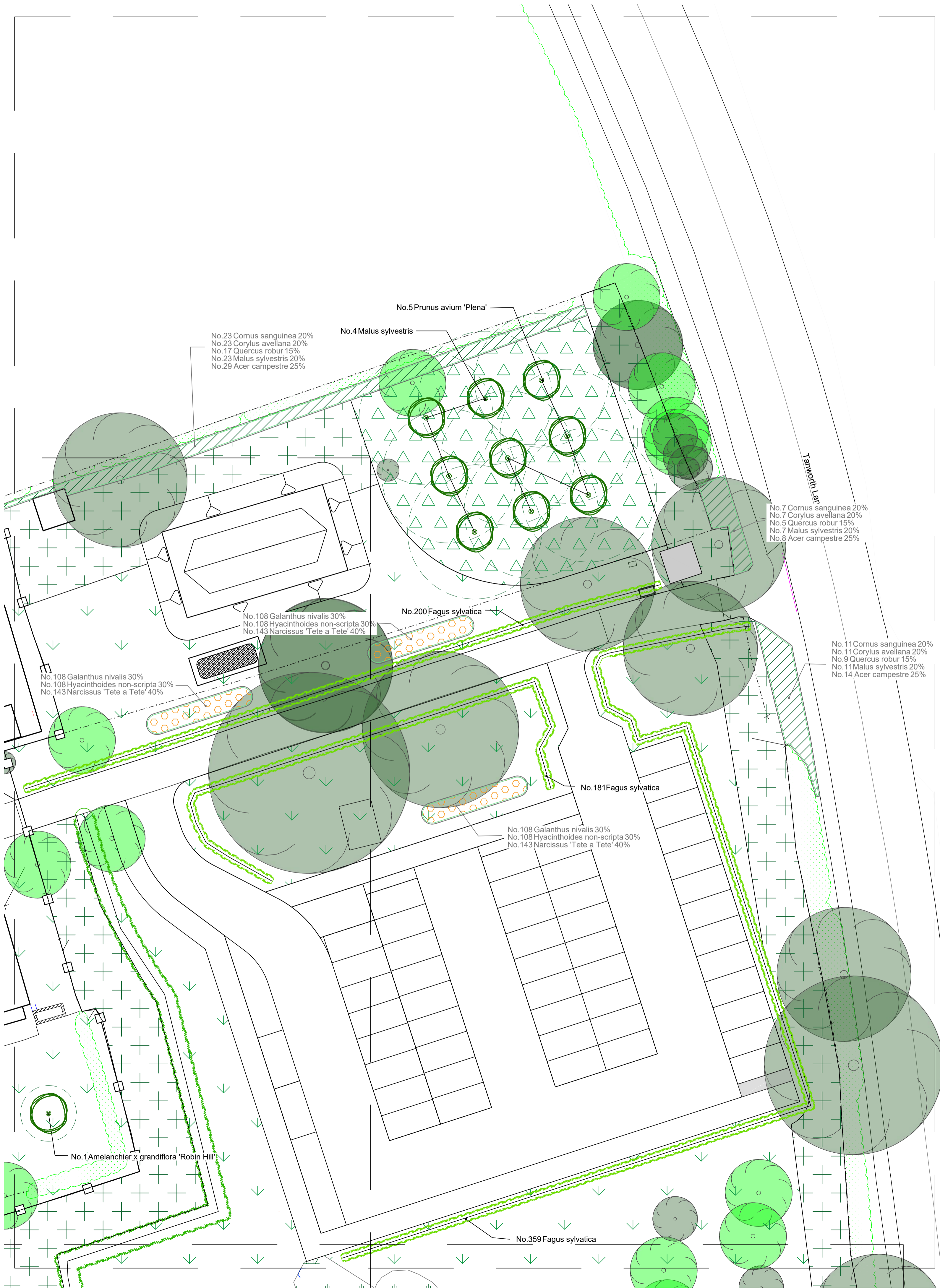
A formal assessment of young tree health and development should be carried out annually by a qualified arborist who will be able to advise on solutions should any problems be picked up. During this assessment, any guards and ties should be checked to ensure they are providing support but not damaging the tree and that the tree is still firmly seated in the ground. If the tree has become loose in the ground, the soil around the base should be re-firmed and stakes and ties adjusted accordingly.

The mulched area around the base of the tree should be kept clear of competing vegetation and weeds at all times.

Tree stakes and ties should be removed once the tree has established a strong enough root system to support itself. Tree guards should only be removed if they are beginning to restrict tree growth or if it is felt the risk of damage has significantly reduced due to strong tree growth and development or changes in the surrounding environment.

Formative pruning should be carried out in accordance with BS3998 as required throughout the 5 year establishment period.

For further guidance on tree maintenance during establishment refer to BS8545:2014 Section 11.



overview



notes

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revisions

rev	by	chk	date	detail

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purpose of issue **PLANNING**

client **The Island Project**

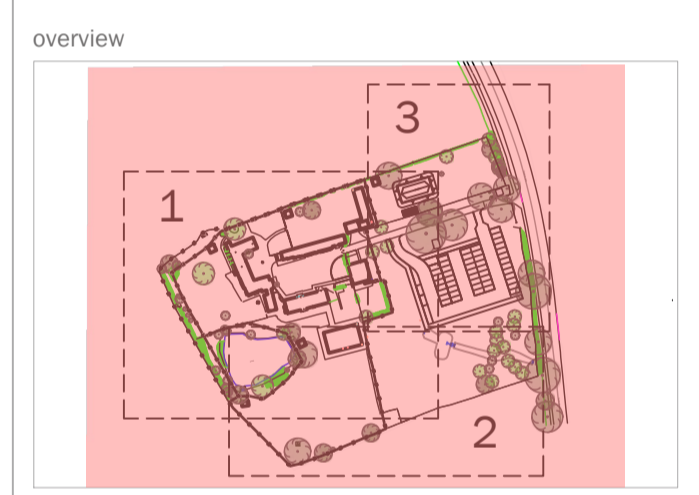
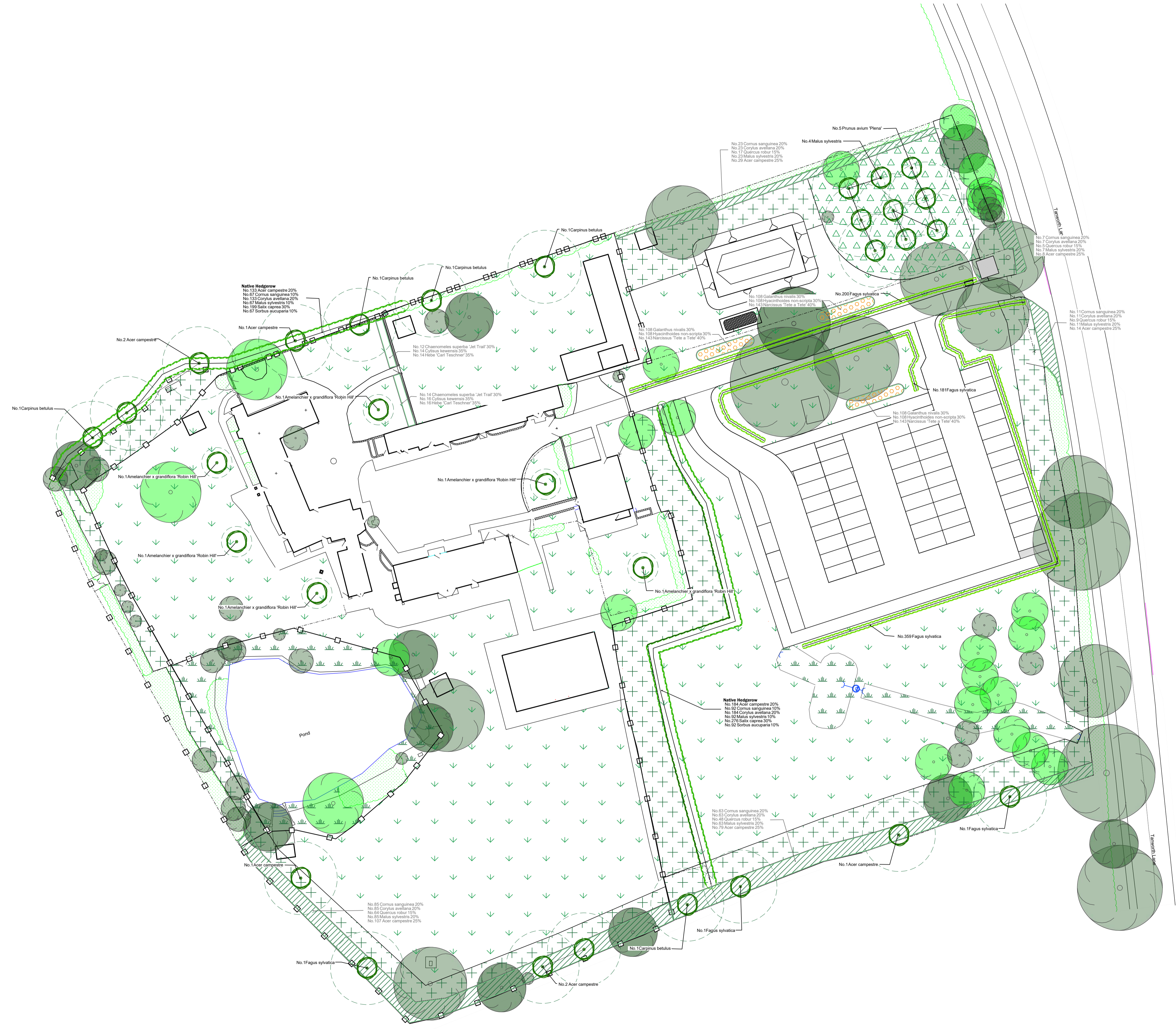
project title **Jerrings Hall Farm, Dickens Heath**

drawing title **Detailed Landscape Design Proposals**

**Sheet 3 of 4**

date	28/05/2020	drawn by	OW
drawing number	edp5137_d009	checked	OK
scale	1:200 @ A1	QA	XXX

- DRAFT**
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 All dimensions in millimeters unless otherwise specified.  
 Do not scale off this drawing, written dimensions to be taken only.  
 All base plans used are provided by the client and architect, except where otherwise expressly agreed in writing. EDP shall have no responsibility or liability for any loss direct or consequential.  
 This drawing must not be copied in whole or part without prior written consent from EDP.

purpose of issue **PLANNING**

client  
**The Island Project**

project title  
**Jerrings Hall Farm, Dickens Heath**

drawing title  
**Detailed Landscape Design Proposals**

**Sheet 4 of 4**

date 28/05/2020 drawn by **OW**  
 drawing number **edp5137\_d009** checked **OK**  
 scale QA **XXX**

NO DIMENSIONS TO BE SCALED FROM THIS DRAWING

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**CDM - RESIDUAL RISKS**  
The following are considered to be significant risks relevant to this drawing, which could not be fully mitigated or removed through design. Further possible control measures have been identified within the Design Risk Assessments which may help to mitigate these and other identified risks further during the construction / maintenance process.

- NOTES**
1. THE DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DOCUMENTS & DRAWINGS PROVIDED BY BOX TWENTY.
  2. THIS DRAWING DOES NOT SHOW ALL COMPONENTS THAT MAY BE NECESSARY TO LOCATE SERVICES IN A FULLY CO-ORDINATED MANNER.
  3. THIS DRAWING SHALL BE USED FOR THE INTENDED PURPOSE ONLY AND BOX TWENTY WILL NOT BE HELD RESPONSIBLE FOR ANY OTHER USE.
  4. EMERGENCY LIGHTING KEY SWITCHES ARE TO BE PROVIDED ADJACENT TO DISTRIBUTION BOARDS.
  5. IN FLOOR AND CEILING VOIDS THE ROUTING OF ELECTRICAL SERVICES SHALL BE COORDINATED WITH MECHANICAL SERVICES ROUTES, ADHERING TO THE RECOMMENDED SEPARATION DISTANCES.
  6. FOR DETAILS OF LUMINAIRES SEE SCHEDULE OF LUMINAIRES.
  7. EACH EMERGENCY LUMINAIRE OR INTEGRAL EMERGENCY LIGHTING KIT (AS APPROPRIATE) SHALL BE LINKED TO THE UNSWITCHED LINE OF THE LOCAL NORMAL LIGHTING CIRCUIT. EMERGENCY KEY SWITCHES SHALL BE INSTALLED ADJACENT TO THE APPROPRIATE DISTRIBUTION BOARD FOR TESTING PURPOSES.
  8. GENERALLY ALL LIGHTING SHALL BE MANUALLY CONTROLLED WITH OVERRIDING TIMERS INTEGRATED WITHIN CONTROL SYSTEM.
  9. THE LIGHTING CONTROL SYSTEM SHALL BE INSTALLED PREFERABLY BY THE ASSOCIATED SPECIALIST. IF IT IS INSTALLED BY THE ELECTRICAL CONTRACTOR THE WORK MUST BE CARRIED OUT STRICTLY IN ACCORDANCE WITH THE SPECIALIST'S INSTRUCTIONS.

- LEGEND**
- 20A ONE WAY SWITCH
  - WALL MOUNTED LUMINAIRE
  - BOLLARD TYPE LUMINAIRE
  - 5M POLE TOP LUMINAIRE
  - BRICK MOUNTED LUMINAIRE
  - PASSIVE MOVEMENT DETECTOR WITH PHOTOCELL
  - DISTRIBUTION BOARD SPAN
  - SINGLE PHASE ISOLATOR
  - METER - ELECTRICITY
  - FIXED CCTV CAMERA
  - INTERCOM
  - INCOMING LV SUPPLY CABLE
  - SUBMAIN SUPPLY CABLE
  - EXISTING COMMS ROUTE
  - PROPOSED COMMS ROUTE

**NOTE:**  
LUMINAIRES IN PURPLE ARE EMERGENCY VERSIONS. REFER TO LUMINAIRE SCHEDULE FOR TYPES.



SCALE 1 : 200

REV	TENDER/ISSUE	REVISION COMMENTS	DATE	DESIGN	NO	BY

<b>BOX TWENTY</b> 2nd FLOOR, MARINER HOUSE 62 PRINCE STREET, BRISTOL BS1 4DD	Client	SANDERSON WEATHERALL
	Project	THE ISLAND PROJECT JERRINGS HALL
Dwg Name	EXTERNAL SERVICES LAYOUT	
Dwg No	2161-820-ZZ-ST-DR-E-70800	
Designed By	Project Start Date	Purpose of Issue
NB	FEB 2020	TENDER
Scale	200	@A0, T1

File name: Z:\00 PROJECTS\2161 - THE ISLAND PROJECT - JERRINGS HALL\9 DRAWINGS & MODELS\3. ELECTRICAL\2161-820-ZZ-ST-DR-E-70800.DWG, printed on 03 March 2020 01:27:33, by Nick Brown