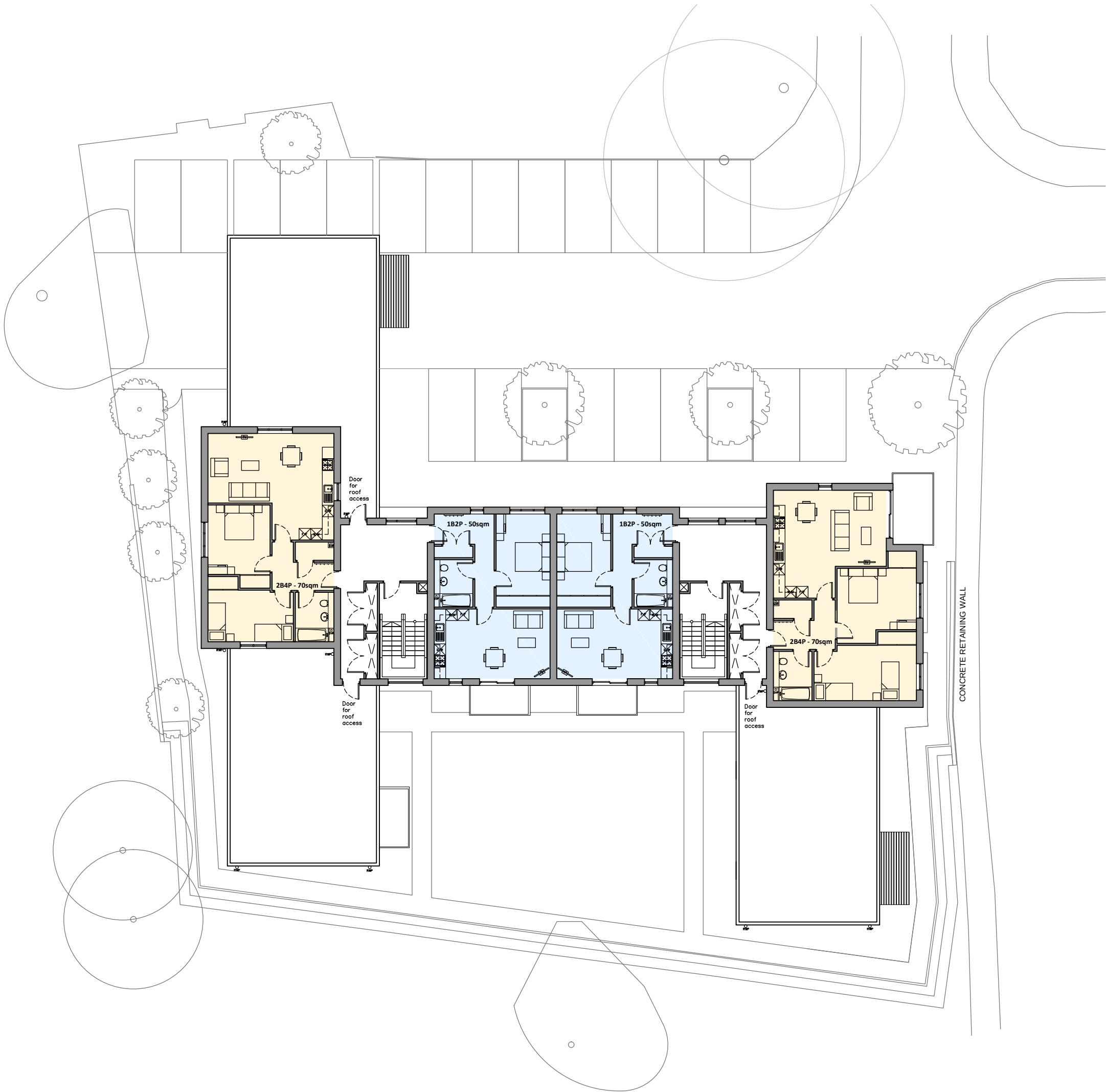




NOTES

This drawing to be read in accordance with the specification/Bills of Quantities and related drawings. No Dimensions to be scaled from this drawing. All stated dimensions to be verified on site and the Architect notified of any discrepancies.



Scale bar 50mm at 1:1



Proposed Trees



Existing Trees



Proposed Planting



Existing Planting

Please note that trees adjacent to the site are correct and have been surveyed. And trees along the earthwork bank, are estimated sizes, based on maps.



Project

Norcot Community Centre
Lyndhurst Road
Tilehurst
Reading

Title

Proposed Third Floor
Affordable Housing

Scale

1:200 @ A3

Date

12/04/2018

Drawn

RSB

Checked

MS

Drawing Number

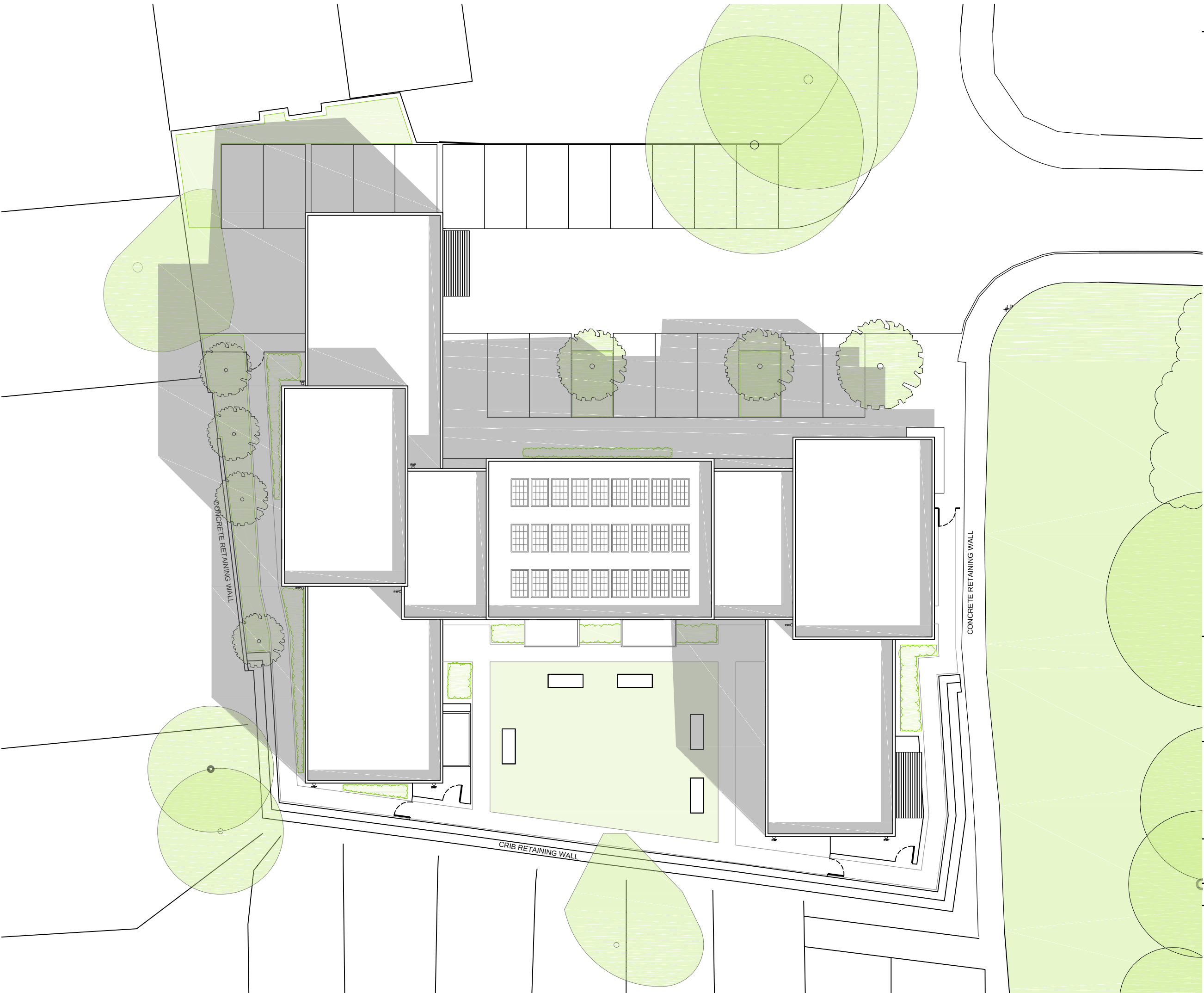
7870_PL106

Revision

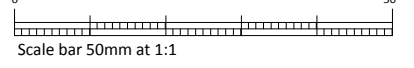
A

Saunders

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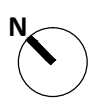


This drawing to be read in accordance with the specification/Bills of Quantities and related drawings. No Dimensions to be scaled from this drawing. All stated dimensions to be verified on site and the Architect notified of any discrepancies.



-  Proposed Trees
-  Existing Trees
-  Proposed Planting
-  Existing Planting

Please note that trees adjacent to the site are correct and have been surveyed. And trees along the earthwork bank, are estimated sizes, based on maps.



Project
Norcot Community Centre
Lyndhurst Road
Tilehurst
Reading

Title
Proposed Roof Plan

Scale 1:200 @ A3	Date 15/04/2018
Drawn RSB	Checked MS
Drawing Number 7870_PL103	Revision A

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Architecture+UrbanDesign

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0 50
Scale bar 50mm at 1:1



Neighbouring
Gardens

Site Boundary

Existing
Building

South East Elevation



Existing
Greenspace

Site Boundary

Neighbouring
Gardens

North East Elevation

Project

Norcot Community Centre
Lyndhurst Road
Tilehurst
Reading

Title

Proposed South East
& North East Elevations

Scale

1:200 @ A3

Date

12/04/2018

Drawn

RSB

Checked

MS

Drawing Number

7870_PL107

Revision

A

Saunders

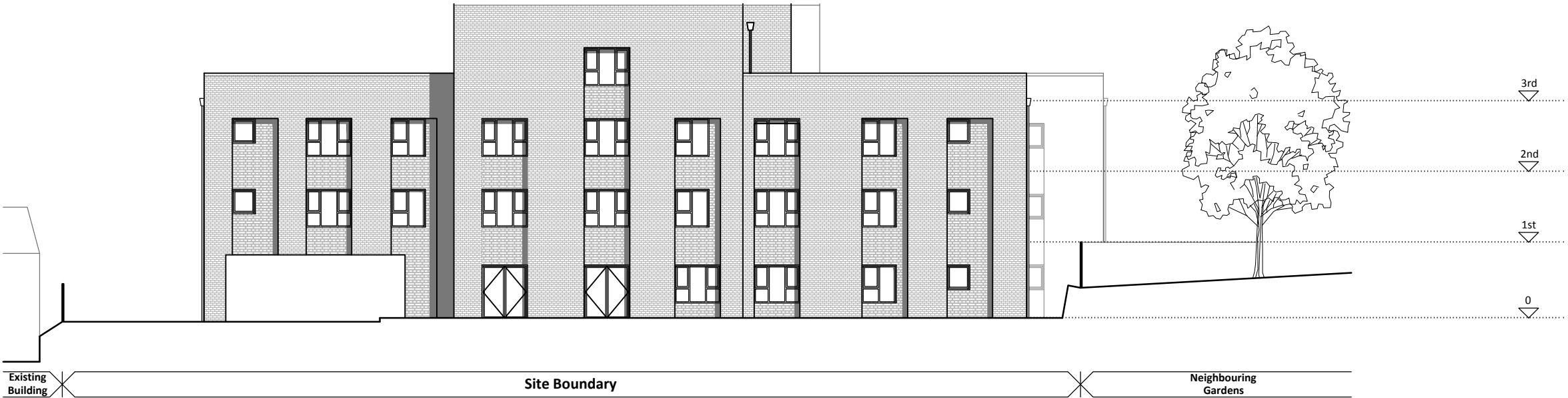
Architecture + Urban Design

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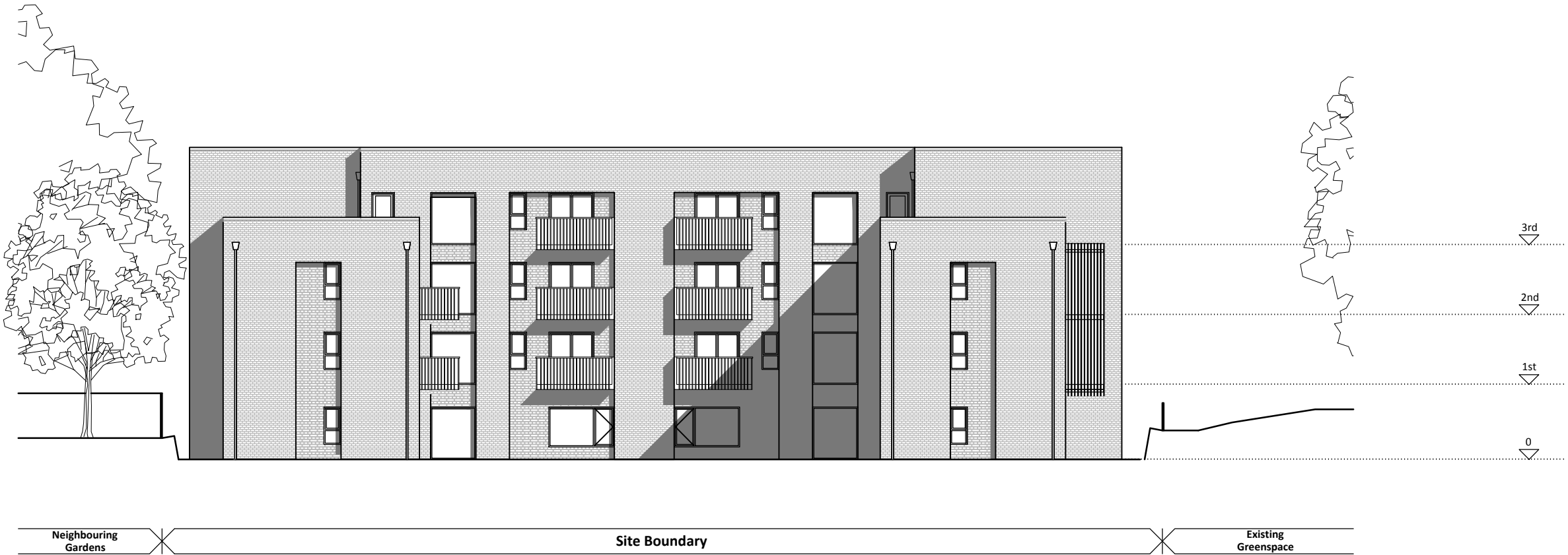
This drawing to be read in accordance with the specification/Bills of Quantities and related drawings. No Dimensions to be scaled from this drawing. All stated dimensions to be verified on site and the Architect notified of any discrepancies.



Scale bar 50mm at 1:1



North West Elevation



South West Courtyard Elevation

Project

Norcot Community Centre
Lyndhurst Road
Tilehurst
Reading

Title

Proposed North West
& South West Elevations

Scale
1:200 @ A3

Date
12/04/2018

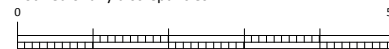
Drawn
RSB

Checked
MS

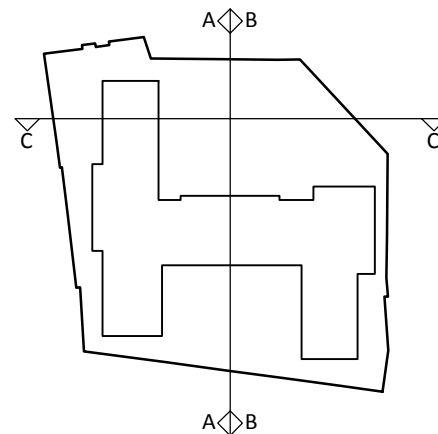
Drawing Number
7870_PL108

Revision
A

This drawing to be read in accordance with the specification/Bills of Quantities and related drawings. No Dimensions to be scaled from this drawing. All stated dimensions to be verified on site and the Architect notified of any discrepancies.



Scale bar 50mm at 1:1



Existing Ground Level

(BASE) 0 = 58M

Neighbouring
Gardens

Site Boundary

Existing
Building

Section A-A

Existing Ground Level

(BASE) 0 = 58M

Existing
Building

Site Boundary

Neighbouring
Gardens

Section B-B

Existing Ground Level

(BASE) 0 = 58M

Existing
Greenspace

Site Boundary

Neighbouring
Gardens

Project

Norcot Community Centre
Lyndhurst Road
Tilehurst
Reading

Title

Proposed Sections A-A, B-B and C-C

Scale

1:200 @ A3

Date

12/04/2018

Drawn

RSB

Checked

MS

Drawing Number

7870_PL109

Revision

A

Saunders

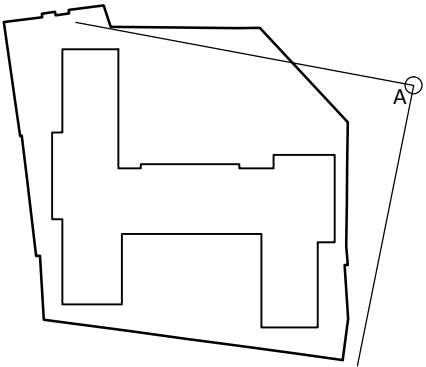
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This drawing to be read in accordance with the specification/Bills of Quantities and related drawings. No Dimensions to be scaled from this drawing. All stated dimensions to be verified on site and the Architect notified of any discrepancies.



Scale bar 50mm at 1:1



Project

Norcot Community Centre
Lyndhurst Road
Tilehurst
Reading

Title

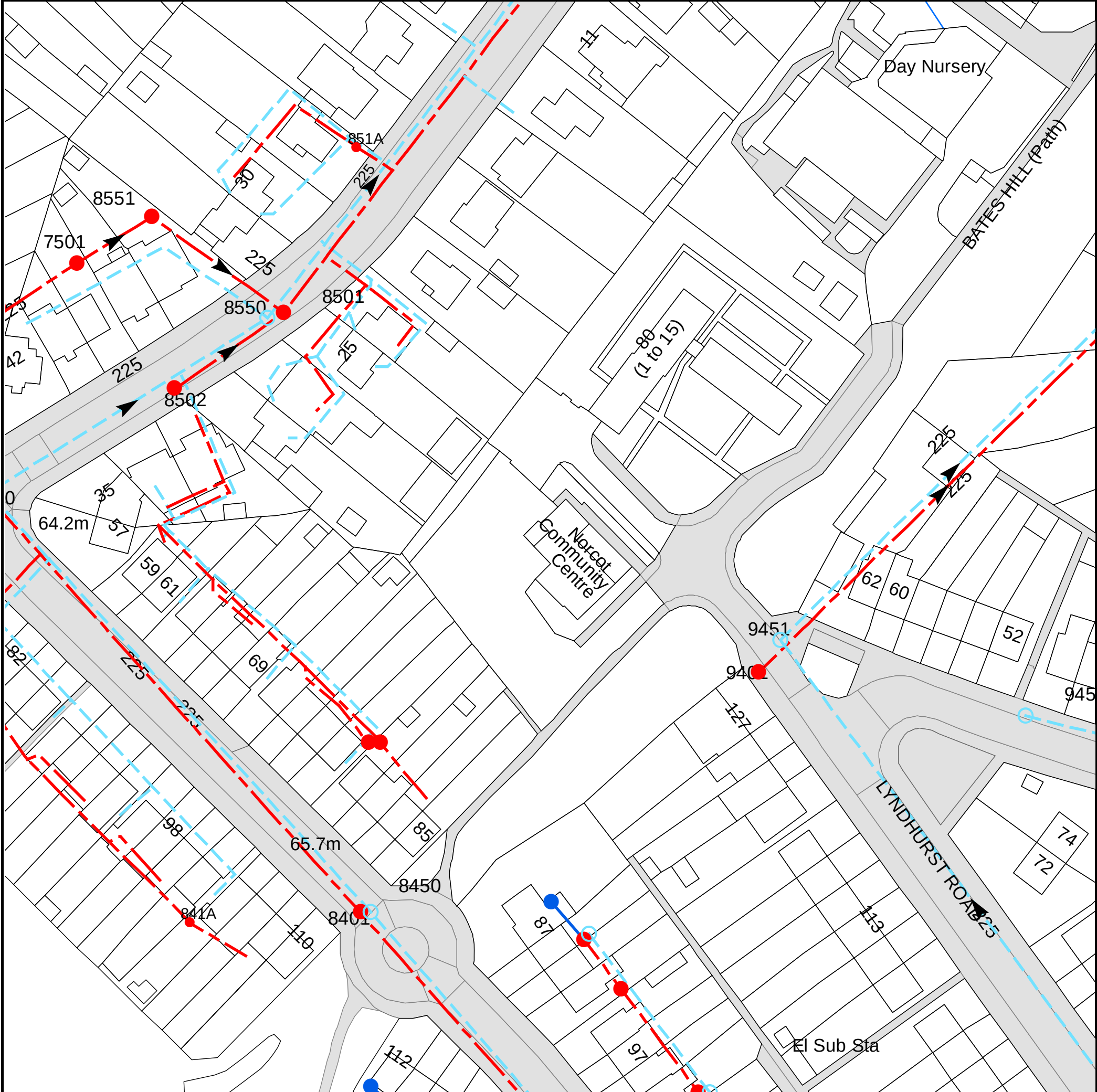
Artist Impression From
Lyndhurst Road

Scale	Date
NS @ A3	12/04/2018
Drawn	Checked
RSB	MS
Drawing Number	Revision
7870_PL110	A

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Architecture+Urban Design

APPENDIX C

SEWER PLANS



The width of the displayed area is 200 m and the centre of the map is located at OS coordinates 467883,174515

The position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified and established on site before any works are undertaken.

Based on the Ordnance Survey Map with the Sanction of the controller of H.M. Stationery Office, License no. 100019345 Crown Copyright Reserved.



ALS Sewer Map Key

Public Sewer Types (Operated & Maintained by Thames Water)

	Foul: A sewer designed to convey waste water from domestic and industrial sources to a treatment works.
	Surface Water: A sewer designed to convey surface water (e.g. rain water from roofs, yards and car parks) to rivers or watercourses.
	Combined: A sewer designed to convey both waste water and surface water from domestic and industrial sources to a treatment works.
	Trunk Surface Water
	Trunk Foul
	Storm Relief
	Trunk Combined
	Vent Pipe
	Bio-solids (Sludge)
	Proposed Thames Surface Water Sewer
	Proposed Thames Water Foul Sewer
	Gallery
	Foul Rising Main
	Surface Water Rising Main
	Combined Rising Main
	Sludge Rising Main
	Proposed Thames Water Rising Main
	Vacuum

Notes:

- 1) All levels associated with the plans are to Ordnance Datum Newlyn.
- 2) All measurements on the plans are metric.
- 3) Arrows (on gravity fed sewers) or flecks (on rising mains) indicate direction of flow.
- 4) Most private pipes are not shown on our plans, as in the past, this information has not been recorded.
- 5) 'na' or '0' on a manhole level indicates that data is unavailable.

Sewer Fittings

A feature in a sewer that does not affect the flow in the pipe. Example: a vent is a fitting as the function of a vent is to release excess gas.

	Air Valve
	Dam Chase
	Fitting
	Meter
	Vent Column

Operational Controls

A feature in a sewer that changes or diverts the flow in the sewer. Example: A hydrobrake limits the flow passing downstream.

	Control Valve
	Drop Pipe
	Ancillary
	Weir

End Items

End symbols appear at the start or end of a sewer pipe. Examples: an Undefined End at the start of a sewer indicates that Thames Water has no knowledge of the position of the sewer upstream of that symbol, Outfall on a surface water sewer indicates that the pipe discharges into a stream or river.

	Outfall
	Undefined End
	Inlet

Other Symbols

Symbols used on maps which do not fall under other general categories

	Public/Private Pumping Station
	Change of characteristic indicator (C.O.C.I.)
	Invert Level
	Summit

Areas

Lines denoting areas of underground surveys, etc.

	Agreement
	Operational Site
	Chamber
	Tunnel
	Conduit Bridge

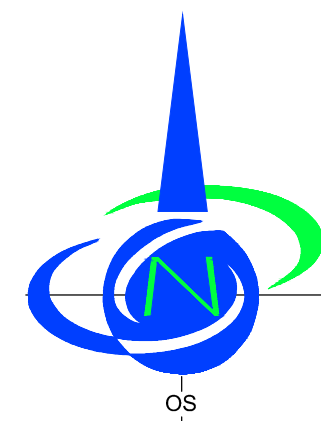
Other Sewer Types (Not Operated or Maintained by Thames Water)

	Foul Sewer
	Surface Water Sewer
	Combined Sewer
	Gully
	Culverted Watercourse
	Proposed
	Abandoned Sewer

- 6) The text appearing alongside a sewer line indicates the internal diameter of the pipe in millimetres. Text next to a manhole indicates the manhole reference number and should not be taken as a measurement. If you are unsure about any text or symbology present on the plan, please contact a member of Property Insight on 0845 070 9148.

APPENDIX D

TOPOGRAPHICAL SURVEY



Trees/Tree Abbreviations

ASH	Ash	LP	London Plane
BAY	Bay	MAP	Maple
BEE	Beech	OAK	Oak
CB	Copper Beech	POP	Poplar
CED	Cedar	RM	Red Maple
CHE	Cherry	RW	Redwood
CON	Coniferous	SB	Silver Birch
EUC	Eucalyptus	SER	Service Tree
FR	Fruit	SP	Scots Pine
HAW	Hawthorn	SYC	Sycamore
HAZ	Hazel	WAL	Walnut
HC	Horse Chestnut	WILL	Willow
HOL	Holly	WP	Weeping Willow
LAB	Laburnum	YEW	Yew
LAU	Laurel	**MB	Multiple stems/trunks
LI	Lime		Overall dia shown

Trees denoted with "approx" have been surveyed by remote methods and therefore their positions & dimensions cannot be guaranteed.

Tree Dimensions (average) AS - As shown
Spread/Trunk Dia/Height UTS - Unable to survey

Key

AV	Air Valve	LP	Lamp Post
BL	Bollard	M	Meter
BM	Bench Mark	MH	Manhole Cover
BP	Boundary Point	MK	Marker
BT	BT Cover	MS	Milestone
CATV	Cable Television Cover	RG	Ridge Level
cab	Cabinet	RS	Road Sign
cl	Cover Level	rw	Rain Water Pipe
EP	Electric Power Pole	SC	Stop Cock
EV	Eaves Level (u/s fascia)	Str	Strainer
FH	Fire Hydrant	SV	Stop Valve
FL	Floor Level	exp	Soil Vent Pipe
FP	Fence Post	TH	Threshold Level
G	Gully	TL	Traffic Light
GP	Gate Post	TP	Telephone Pole
GV	Gas Valve	UTL	Unable To Lift
IC	Inspection Chamber	VP	Vent Pipe
I	Invert Level	WM	Water Meter
KO	Kerb Outlet	WO	Wash Out

Linetypes

Bank	Building
Drop kerb	Electric
Fence	Foliage
FWS (Streamed Star)	Grid Cross
Hedge	Kerb
Manhole	Pipe
Ridge	SWS (Streamed Star)
Telephone	Track/Path
Tree Canopy	Verge
Water line	Wall

Coordinate System

This survey has been oriented to the O.S. National Grid (OSGB36) via a global position system and the O.S. Active Network (OS Net) OSGB36. True OSGB36 coordinates have been established at STN3 E 467880.447 N 174493.694 EL 61.413 and a further OSGB36 point established to create a true O.S. bearing for angle orientation. All levels are based on O.S.Datum. A scale factor of 1:1 has been applied to the survey and therefore the coordinate system must be considered arbitrary.



Land & Measured Building Surveyors

27-29 New Street
Charfield
South Glos.
GL12 8ES
Tel: 01453 845017
Tel: 01453 845360
www.dandosurveying.co.uk
enquiries@dandosurveying.co.uk

Project Name:
Norcot Community Centre
Lyndhurst Road, Reading, RG30 6UB

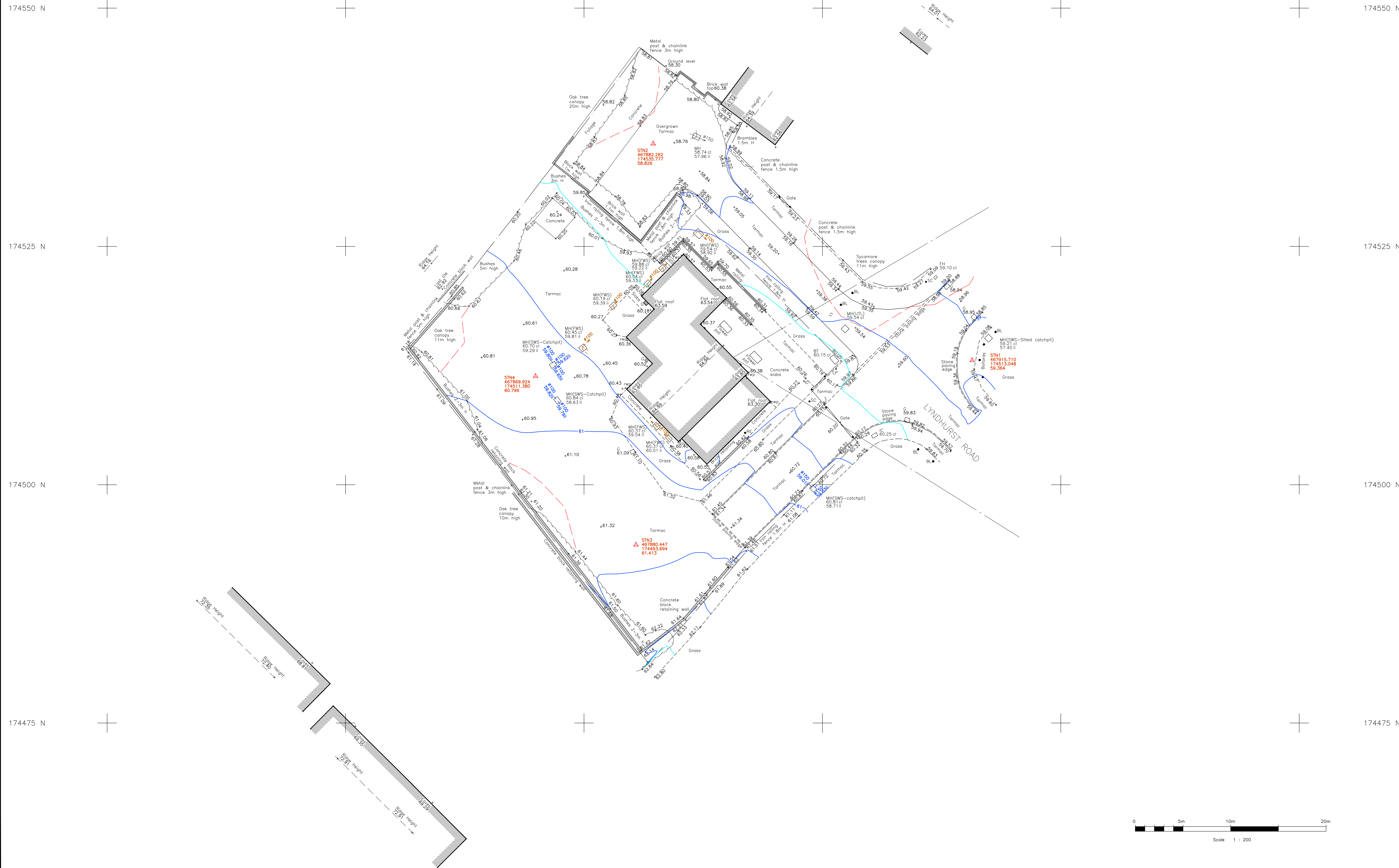
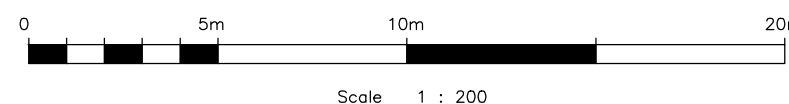
Drawing Title:
Topographical Survey

Client:
WSP Parsons Brinkerhoff
Agent:

Date: 5th Jun 2017 Scale: 1:200 @ A1

Grid Orientation Sheet ID Rev
North GPS WSPNorcotTOPO None

Site Level Datum Surveyed By Drawn By
OS GPS VM VM



APPENDIX E

MICRODRAINAGE OUTPUT

WSP Group Ltd										Page 1	
.					Norcot Community Centre						
.					Brownfield Calculations						
.											
Date 08/06/2018					Designed by Drew McGilchrist						
File DUMMY NETWORK.MDX					Checked by Kevin Ritter						
XP Solutions					Network 2016.1.1						

Existing Network Details for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type
1.000	20.000	0.100	200.0	0.060	4.00	0.0	0.600	o	100	Pipe/Conduit
2.000	10.000	0.050	200.0	0.060	4.00	0.0	0.600	o	100	Pipe/Conduit
1.001	50.000	1.667	30.0	0.060	0.00	0.0	0.600	o	100	Pipe/Conduit

Network Results Table

PN	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Vel (m/s)	Cap (l/s)
1.000	59.720	0.060	0.0	0.54	4.2
2.000	59.670	0.060	0.0	0.54	4.2
1.001	59.620	0.180	0.0	1.41	11.1

Free Flowing Outfall Details for Storm

Outfall Pipe Number	Outfall Name	C. Level (m)	I. Level (m)	Min I. Level (m)	D,L (mm)	W (mm)
1.001		59.210	57.953	57.450	0	0

Simulation Criteria for Storm

Volumetric Runoff Coeff	0.750	Additional Flow - % of Total Flow	0.000
Areal Reduction Factor	1.000	MADD Factor * 10m³/ha Storage	2.000
Hot Start (mins)	0	Inlet Coefficient	0.800
Hot Start Level (mm)	0	Flow per Person per Day (l/per/day)	0.000
Manhole Headloss Coeff (Global)	0.500	Run Time (mins)	60
Foul Sewage per hectare (l/s)	0.000	Output Interval (mins)	1
Number of Input Hydrographs	0	Number of Storage Structures	0
Number of Online Controls	0	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Profile Type	Summer
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	18.800	Storm Duration (mins)	30
Ratio R	0.400		

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.	Norcot Community Centre	
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Date 08/06/2018	Designed by Drew McGilchrist	
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XP Solutions	Network 2016.1.1	

1 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 0
 Number of Online Controls 0 Number of Time/Area Diagrams 0
 Number of Offline Controls 0 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
 Region England and Wales Cv (Summer) 0.750
 M5-60 (mm) 18.900 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status OFF
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 1, 30, 100
 Climate Change (%) 0, 0, 40

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)
1.000	1	15 Winter	1	+0%	1/15 Summer	30/15 Summer			60.214
2.000	2	15 Winter	1	+0%	1/15 Summer	30/15 Summer			60.157
1.001	3	15 Winter	1	+0%	1/15 Summer	30/15 Summer			60.123

Surcharged Flooded				Pipe		Status	Level Exceeded
PN	US/MH Name	Depth (m)	Volume (m³)	Flow / Cap. (l/s)	Flow (l/s)		
1.000	1	0.394	0.000	1.19	4.9	SURCHARGED	12
2.000	2	0.387	0.000	1.23	4.9	SURCHARGED	17
1.001	3	0.403	0.000	1.11	12.2	SURCHARGED	18

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.	Norcot Community Centre	
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XP Solutions	Network 2016.1.1	

30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 0
 Number of Online Controls 0 Number of Time/Area Diagrams 0
 Number of Offline Controls 0 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
 Region England and Wales Cv (Summer) 0.750
 M5-60 (mm) 18.900 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status OFF
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 1, 30, 100
 Climate Change (%) 0, 0, 40

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)
1.000	1 15 Winter		30	+0%	1/15 Summer	30/15 Summer			61.401
2.000	2 15 Winter		30	+0%	1/15 Summer	30/15 Summer			60.902
1.001	3 30 Winter		30	+0%	1/15 Summer	30/15 Summer			60.805

PN	US/MH Name	Depth (m)	Surcharged Volume (m³)	Flooded Flow / Cap.	Pipe Flow (l/s)	Overflow (l/s)	Pipe Status	Level
								Exceeded
1.000	1	1.581	0.625	2.44	10.0	FLOOD	12	
2.000	2	1.132	2.177	1.41	5.6	FLOOD	17	
1.001	3	1.085	5.409	1.29	14.1	FLOOD	18	

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.	Norcot Community Centre	
.	Brownfield Calculations	
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Date 08/06/2018	Designed by Drew McGilchrist	
File DUMMY NETWORK.MDX	Checked by Kevin Ritter	
XP Solutions	Network 2016.1.1	

100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 0
 Number of Online Controls 0 Number of Time/Area Diagrams 0
 Number of Offline Controls 0 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.400
 Region England and Wales Cv (Summer) 0.750
 M5-60 (mm) 18.900 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0 DVD Status OFF
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 1, 30, 100
 Climate Change (%) 0, 0, 40

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)
1.000	1 30 Winter		100	+40%	1/15 Summer	30/15 Summer			61.406
2.000	2 30 Winter		100	+40%	1/15 Summer	30/15 Summer			60.910
1.001	3 60 Winter		100	+40%	1/15 Summer	30/15 Summer			60.820

PN	US/MH Name	Depth (m)	Surcharged Volume (m³)	Flooded Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Pipe Status	Level Exceeded
1.000	1	1.586	6.378	2.44		10.0	FLOOD	12
2.000	2	1.140	9.990	1.41		5.6	FLOOD	17
1.001	3	1.100	20.384	1.29		14.1	FLOOD	18

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ICP SUDS Input (FSR Method)		Results
Return Period (Years)	100	QBAR rural (l/s)
Area (ha)	0.180	
SAAR (mm)	700	QBAR urban (l/s)
Soil	0.150	
Growth Curve	(None)	

Partly Urbanised Catchment (QBAR)
 Urban: 0.000
 Region: Region 6

Quick Storage Estimate

Variables

Results

Design

Overview 2D

Overview 3D

Vt

Variables

FSR Rainfall

Return Period (years) 100

Region England and Wales

M5-60 (mm) 19.000

Ratio R 0.400

Cv (Summer) 0.750

Cv (Winter) 0.840

Impemeable Area (ha) 0.108

Maximum Allowable Discharge (l/s) 2.0

Infiltration Coefficient (m/hr) 0.00000

Safety Factor 2.0

Climate Change (%) 40

Quick Storage Estimate

Variables

Results

Design

Overview 2D

Overview 3D

Vt

Results

Global Variables require approximate storage of between 45 m³ and 64 m³.

These values are estimates only and should not be used for design purposes.