

Table 9-4: NPA sewer capacity calculations

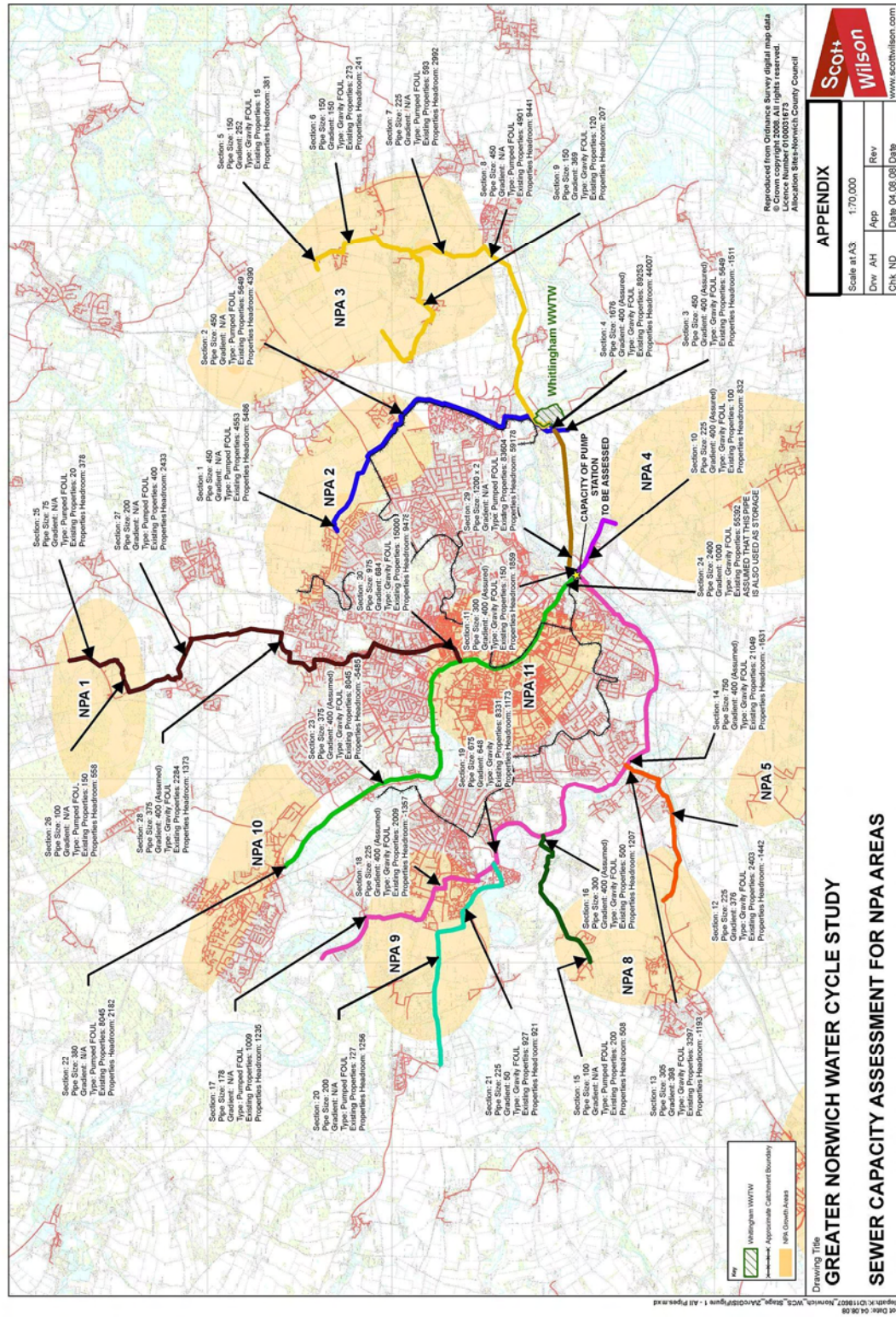


Table 9-5: RPA 1 Reepham sewer capacity calculations

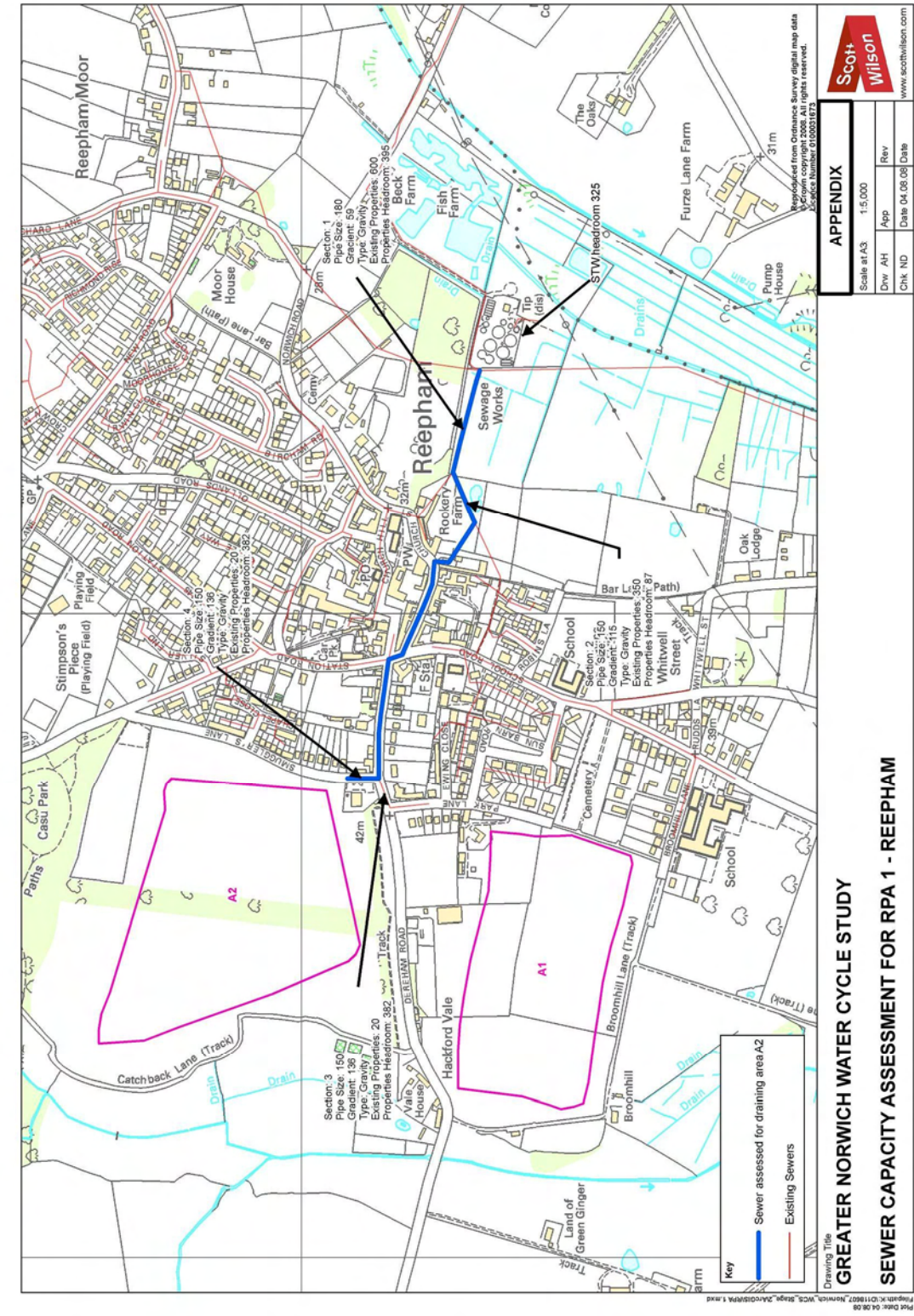


Table 9-6: RPA 2 Aylsham sewer capacity calculations

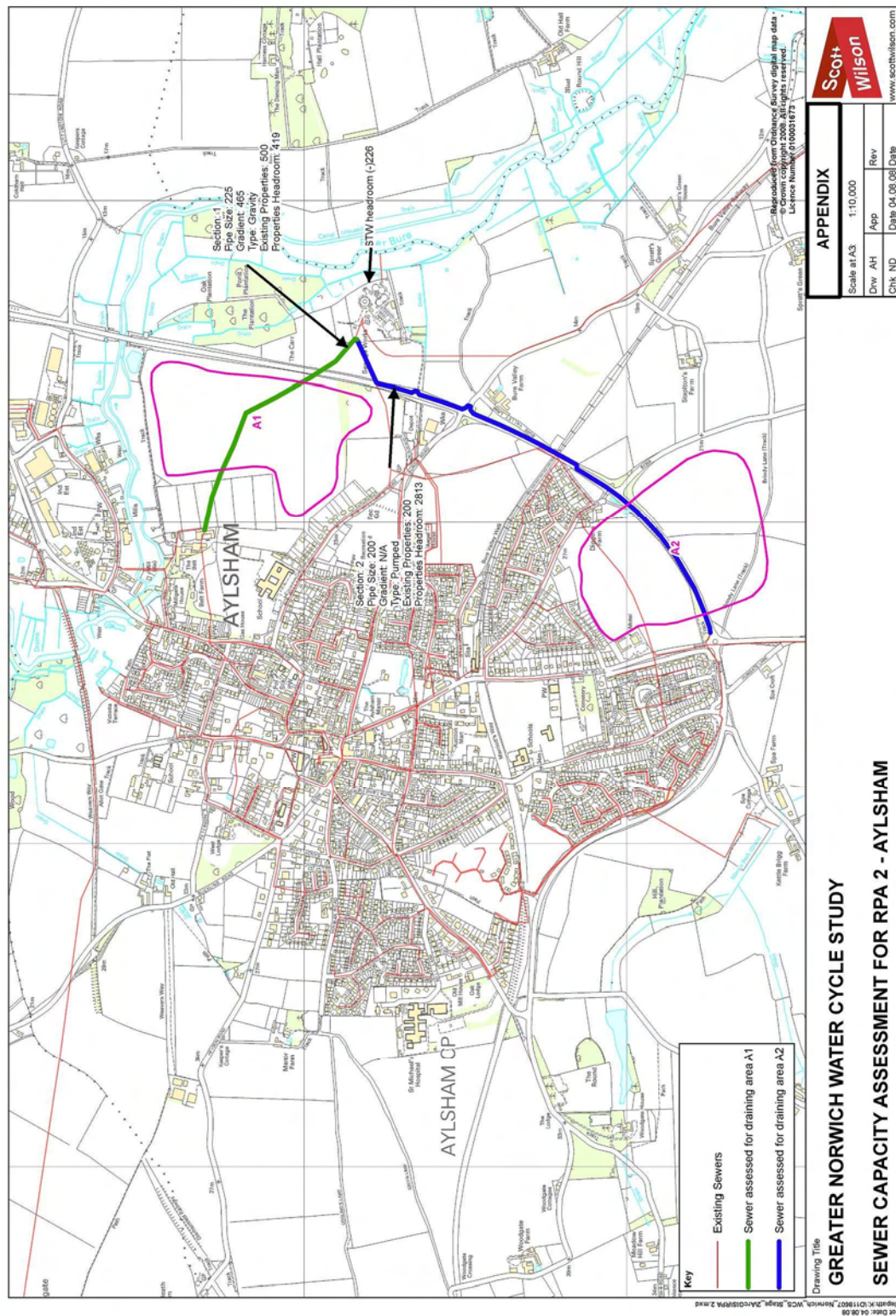


Table 9-7: RPA 3 Wroxham sewer capacity calculations

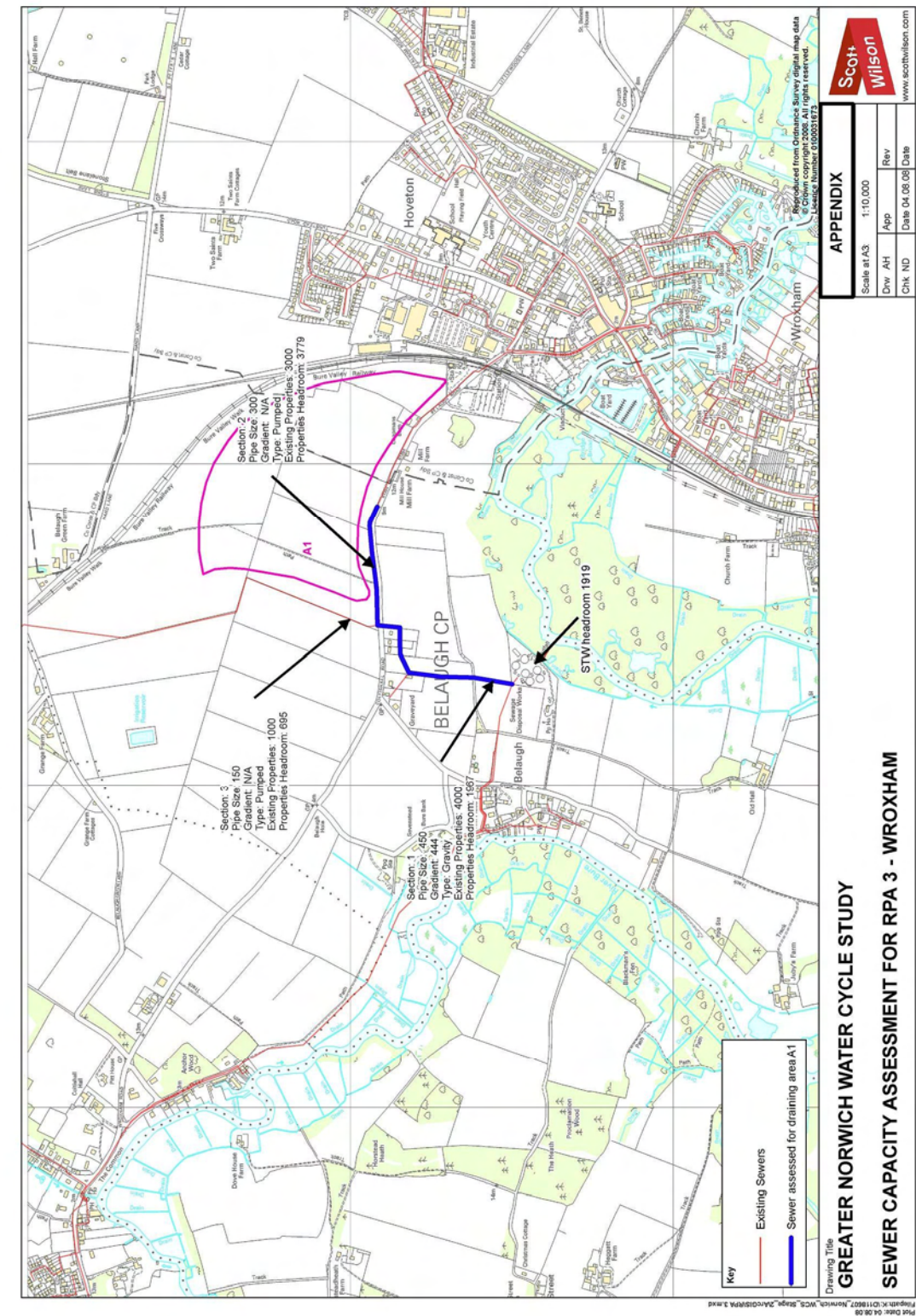


Table 9-8: RPA 4 Acle sewer capacity calculations

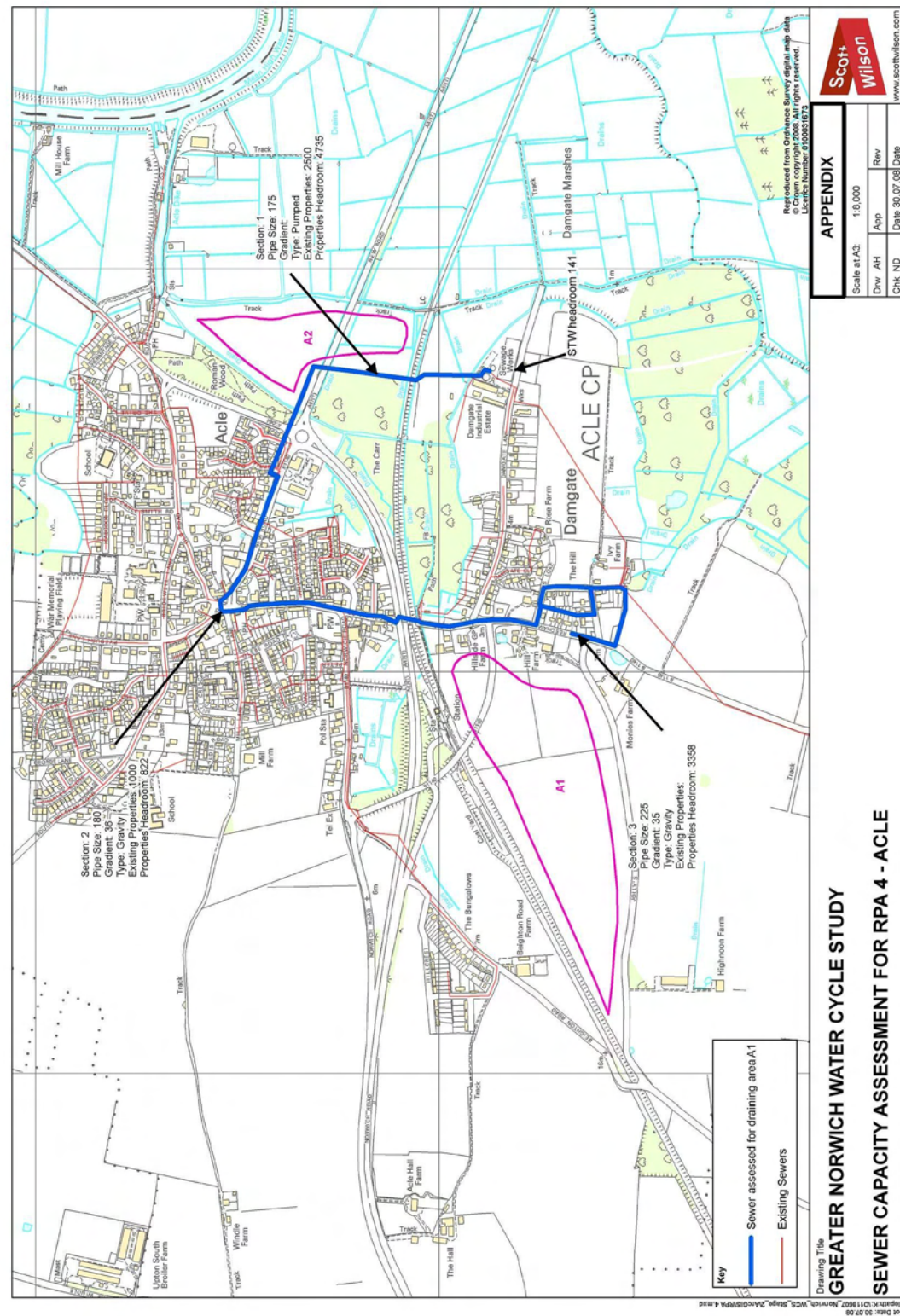


Table 9-9: RPA 5 Hingham sewer capacity calculations

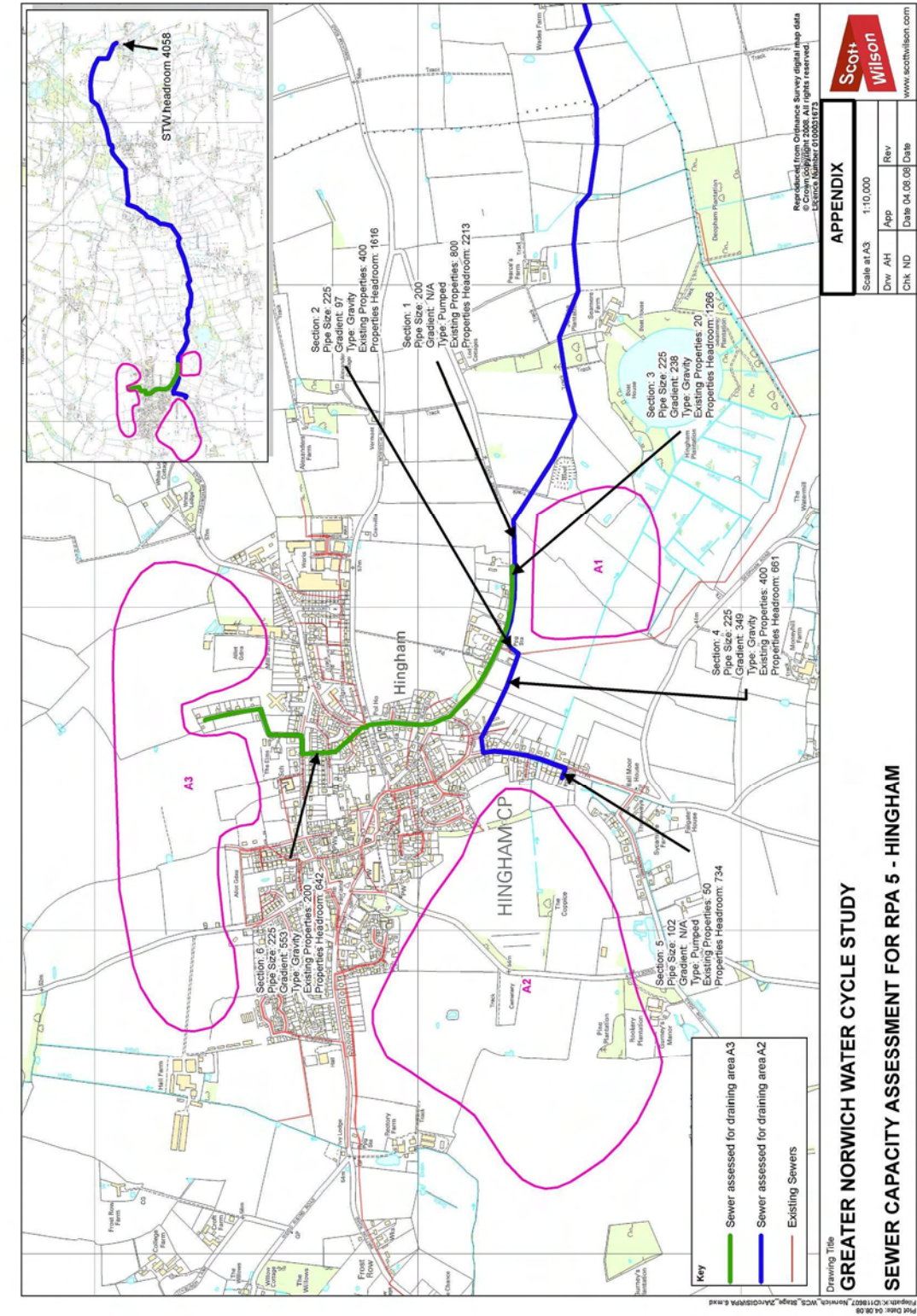
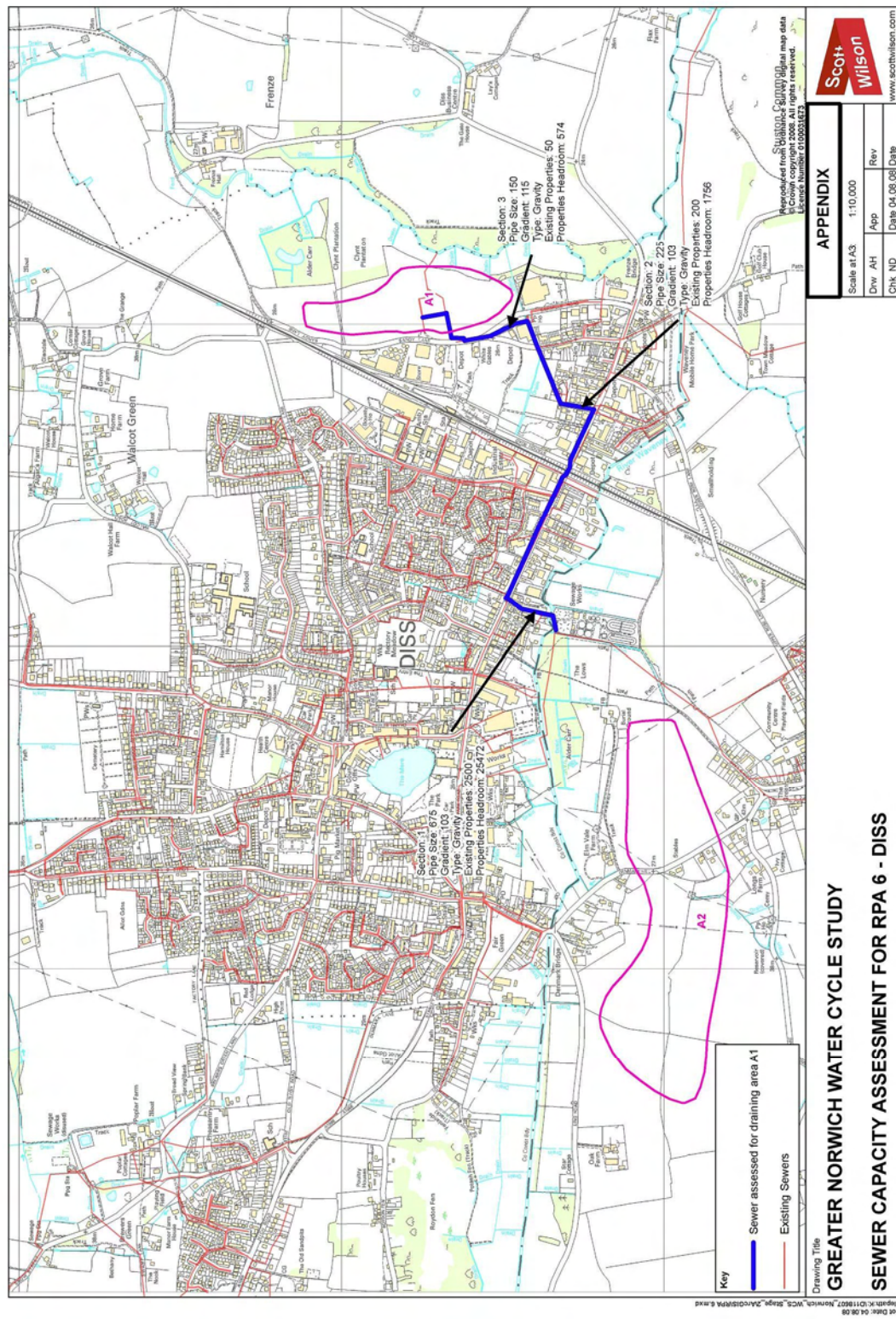
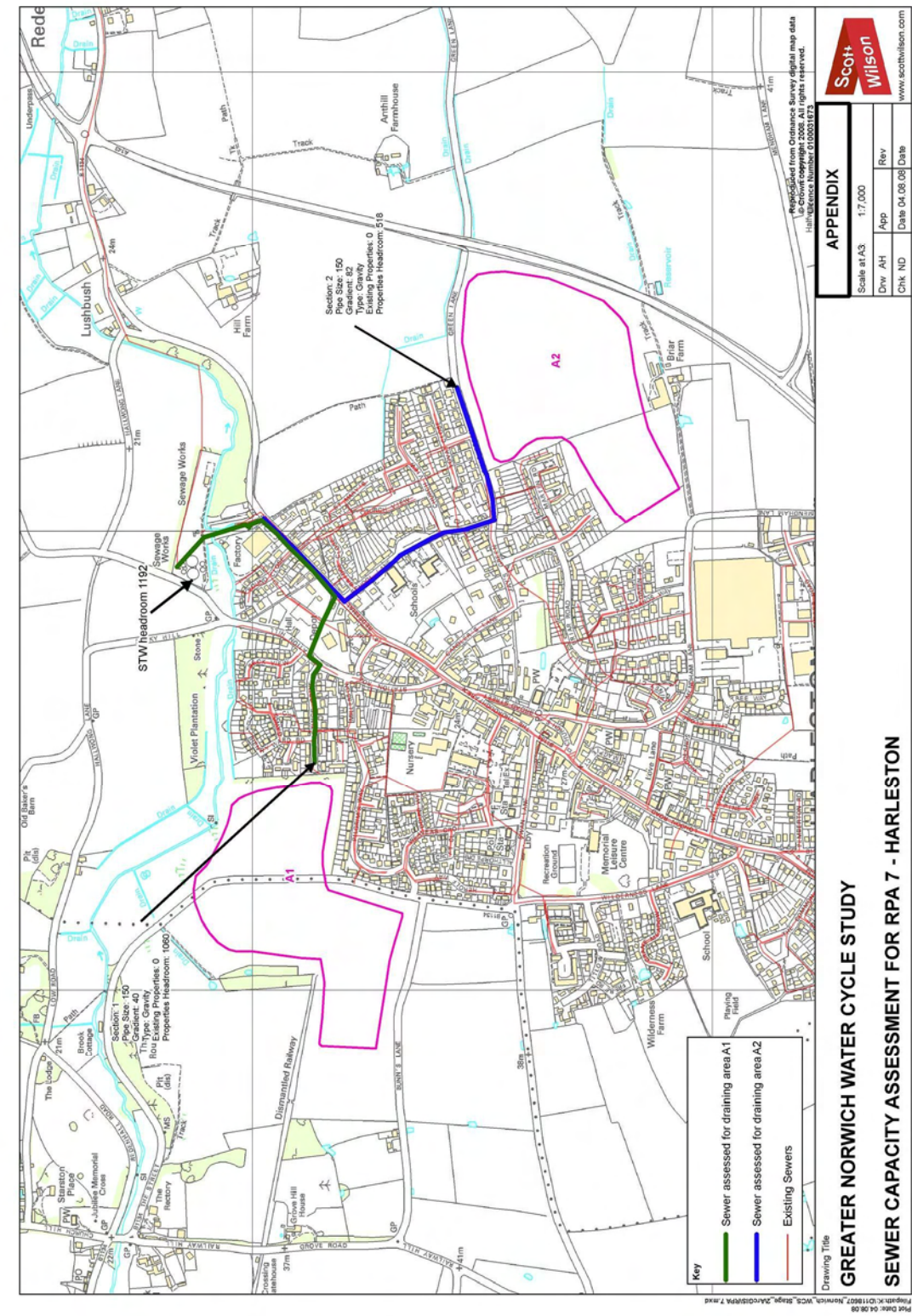


Table 9-10: RPA6 Diss sewer capacity calculations



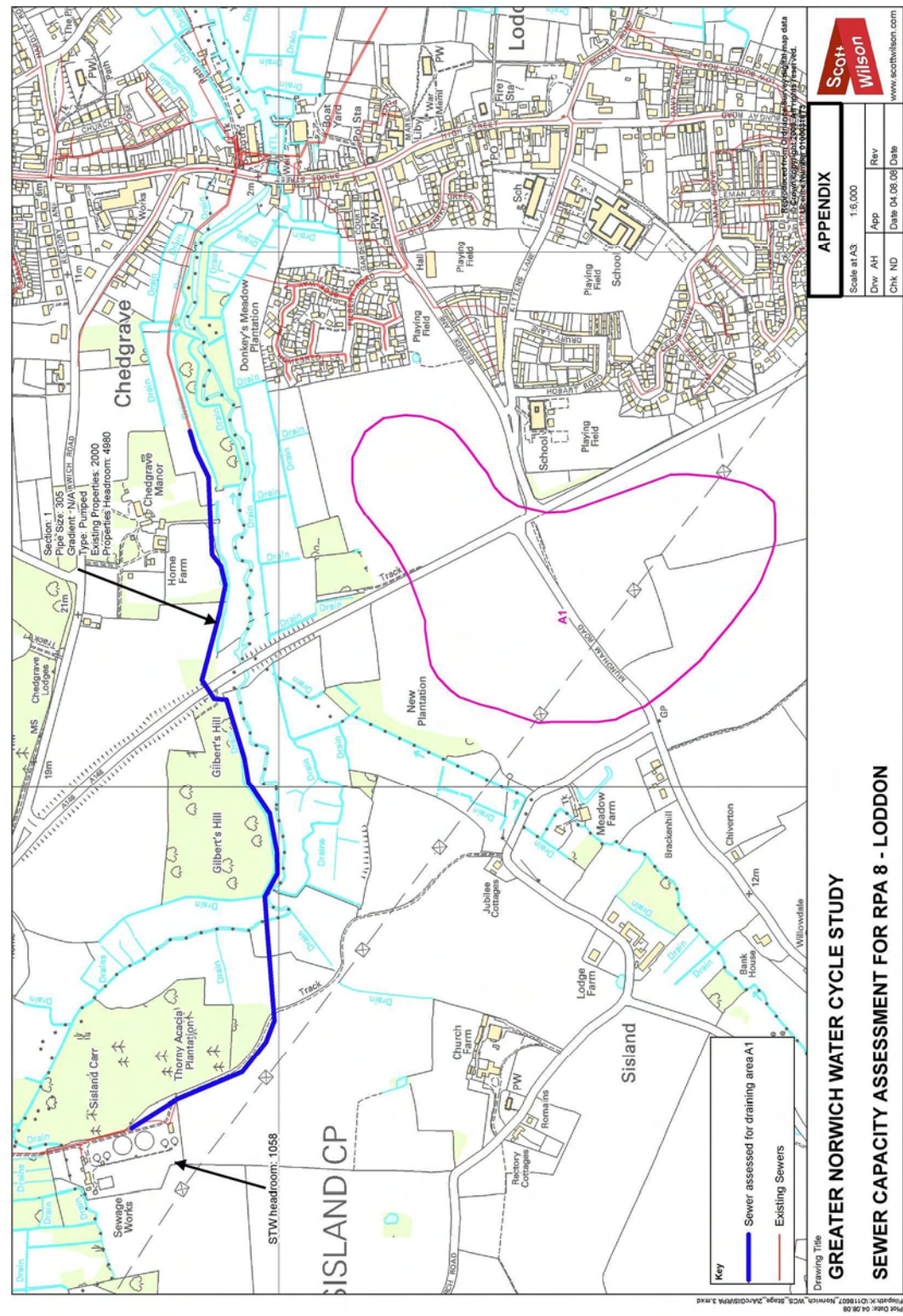
GREATER NORWICH WATER CYCLE STUDY
SEWER CAPACITY ASSESSMENT FOR RPA 6 - DISS

Table 9-11: RPA7 Harleston sewer capacity calculations



GREATER NORWICH WATER CYCLE STUDY
SEWER CAPACITY ASSESSMENT FOR RPA 7 - HARLESTON

Table 9-12: RPA8 Loddon sewer capacity calculations



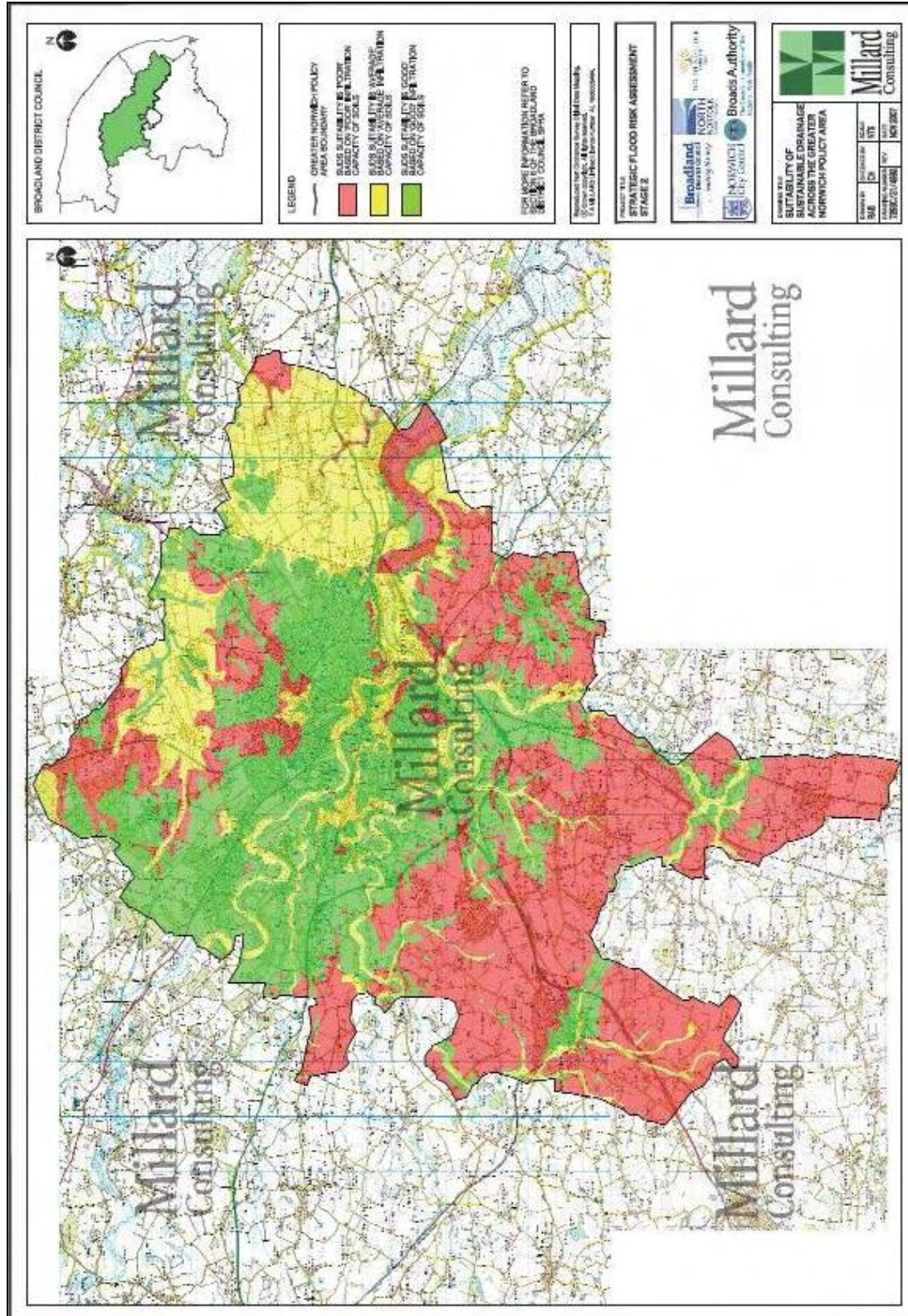
Appendix G: WWTW in the vicinity of NPA & RPA PGAs¹⁶

Reference	Description	WWTW in vicinity	Easting	Northing	Capacity (PE)	Headroom (PE)	Headroom (Property)	Receiving Watercourse
NPA1	North Sector (North of Airport)	Rackheath WWTW	626797	314044	260	-343	-163	Dobbs Beck
NPA2	North East Sector (inside the NNDR)	Whitlingham WWTW	627810	307732	66,250	108,908	51,861	River Yare
NPA3a	North East Sector (outside the NNDR)	Rackheath WWTW	626797	314044	260	-343	-163	Dobbs Beck
NPA3b	East Sector (outside the NNDR)	Whitlingham WWTW	627810	307732	66,250	108,908	51,861	River Yare
NPA4	South East Sector (Vicinity of Poringland)	Poringland WWTW	628325	300912	930	809	385	River Chet
NPA5	South Sector (A11-A140 outside A47)	Stoke Holy Cross WWTW	622901	302988	341	164	78	River Tas
		Swardeston WWTW	619702	302801	1,100	2,181	1,038	Intwood Stream
NPA6	Long Stratton	Long Stratton WWTW	619500	295500	1,200	2,117	1,008	Trib of River Tas
NPA7	Wymondham	Wymondham WWTW	609604	302904	4,400	8,521	4,058	Trib of River Tiffey
NPA8	South West Sector (A11-B1108)	Wymondham WWTW	609604	302904	4,400	8,521	4,058	Trib of River Tiffey
NPA9	West Sector (River Yare to River Wensum)	Wymondham WWTW	609604	302904	4,400	8,521	4,058	Trib of River Tiffey
NPA10	North West Sector (A1067 - NNDR)	Wymondham WWTW	609604	302904	4,400	8,521	4,058	Trib of River Tiffey
NPA11	Norwich	Whitlingham WWTW	627810	307732	66,250	108,908	51,861	River Yare
RPA 1	Reepham	Reepham WWTW	610414	322706	850	682	325	Blackwater Drain
RPA 2	Aylsham	Aylsham WWTW	620589	325793	-1,440	-474	-226	River Bure
RPA 3	Wroxham	Belaugh WWTW	629344	318449	2,273	4,021	1,915	River Bure
RPA 4	Acle	Acle-Damgate WWTW	640726	309880	720	297	141	Trib. of River Yare
RPA 5	Hingham	Wymondham WWTW	609604	302904	4,400	8,521	4,058	River Tiffey
RPA 6	Diss	Diss WWTW	612092	279309	4032	10,160	4,838	River Waveney
RPA 7	Harleston	Harleston WWTW	624931	284136	1,392	2,503	1,192	Starston Brook (Trib. of River Waveney)
RPA 8	Loddon	Sisland WWTW	634330	299287	1,600	2,221	1,058	Trib of River Chet

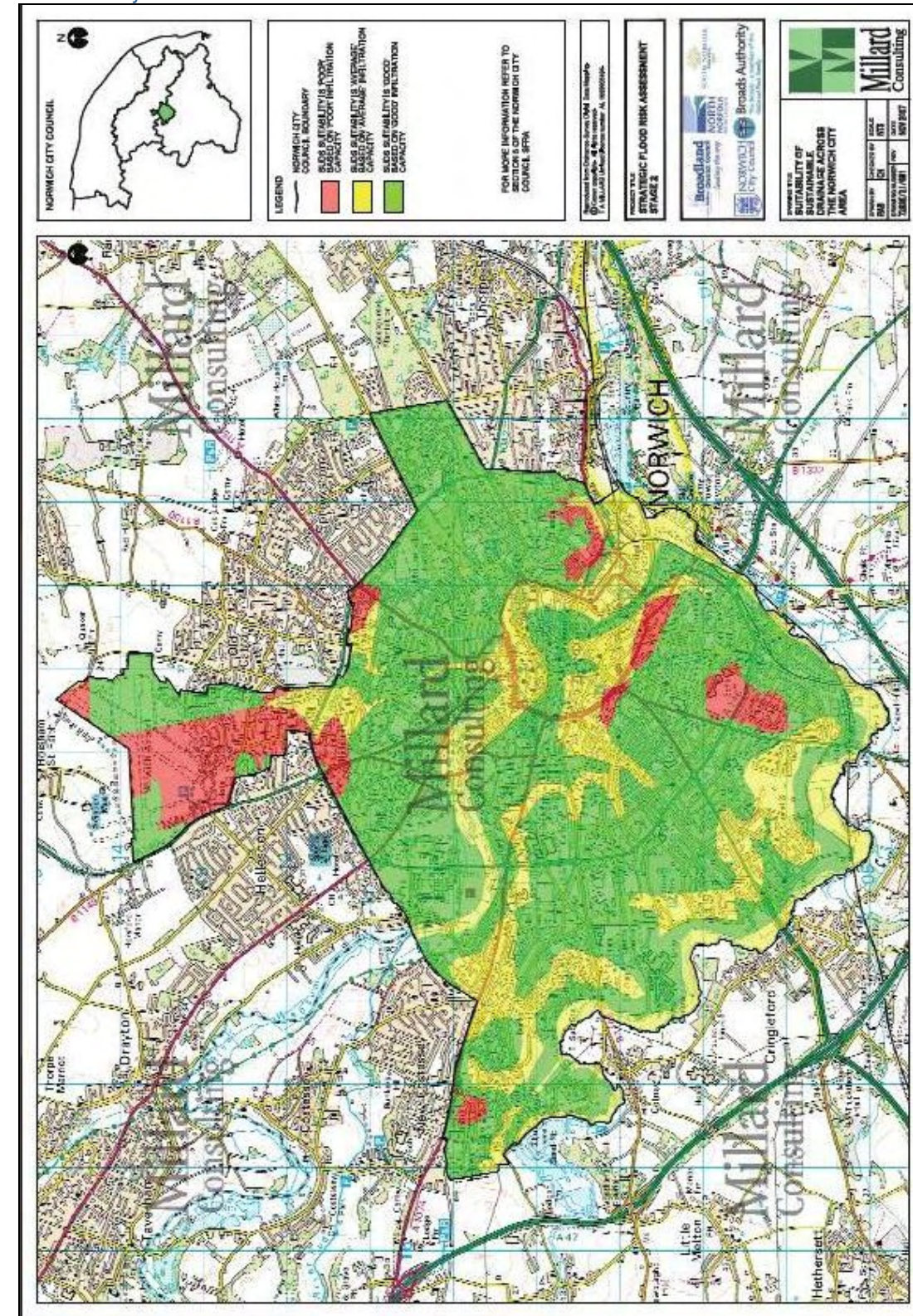
¹⁶ Information based on AWS provided data

Appendix H: Suitability of SUDS (from SFRA)

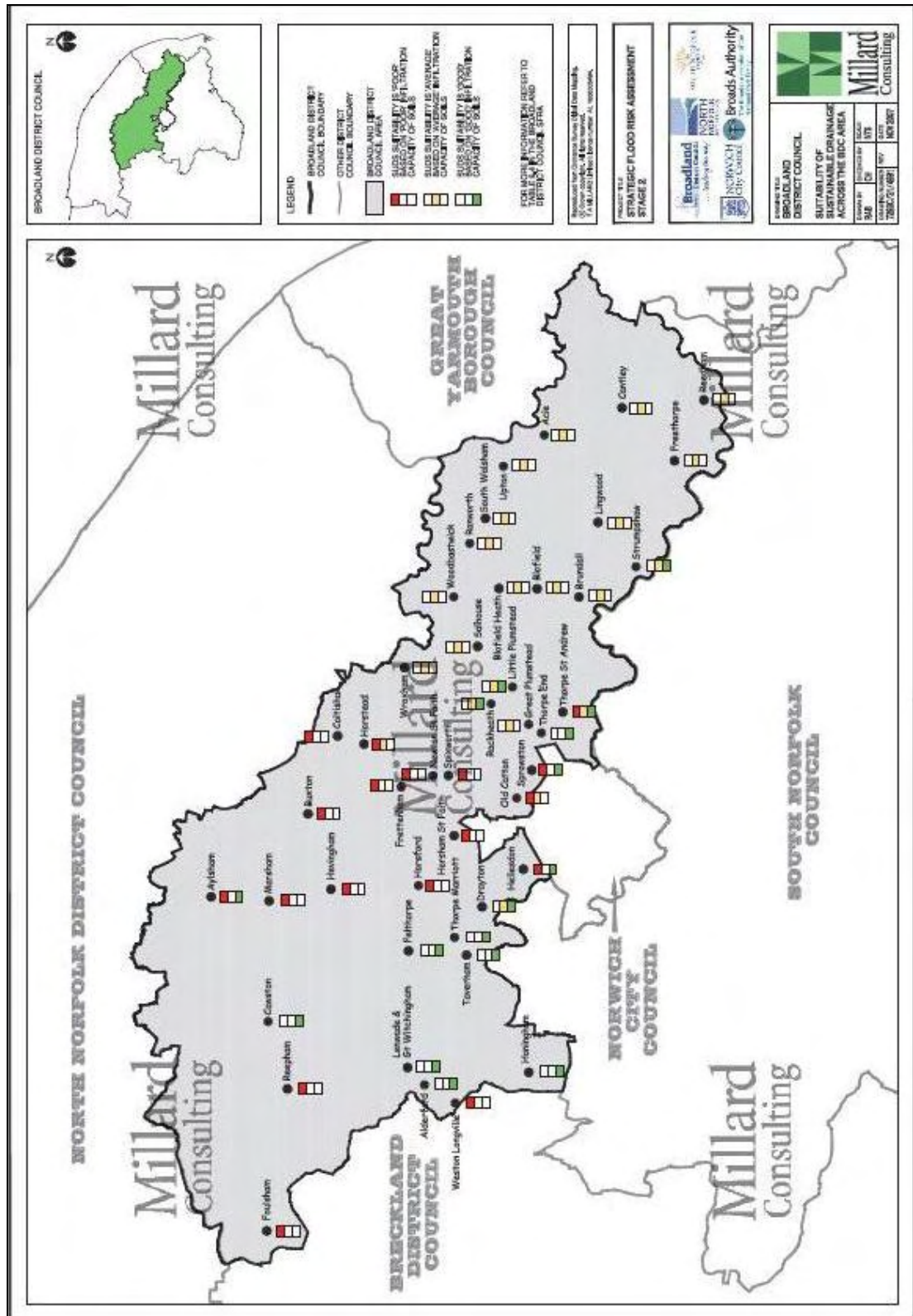
Greater Norwich



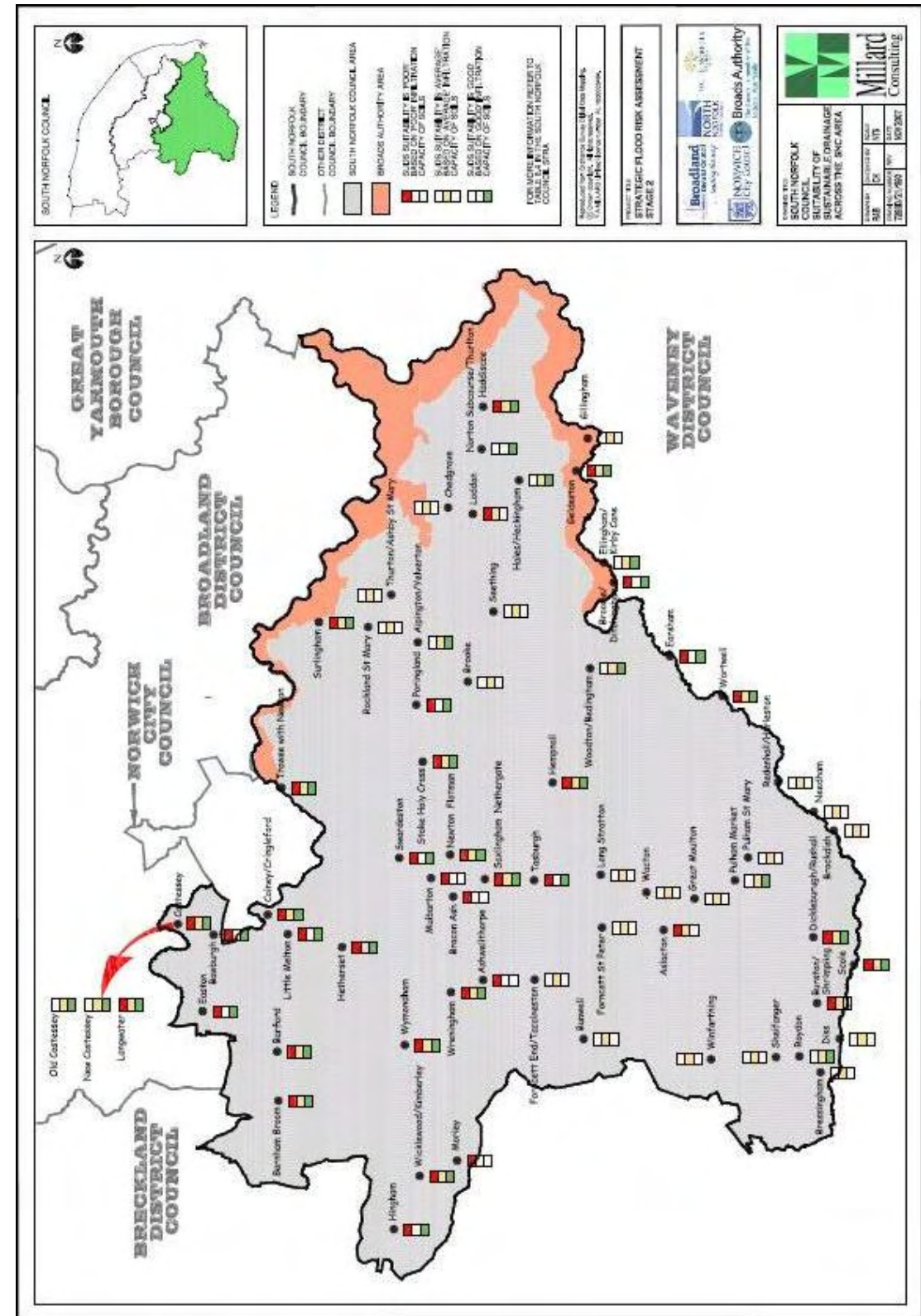
Norwich City Council



Broadlands District Council



South Norfolk Council



Appendix I: Ranking Tables

Calculations										Section Sheet 1 of 1	
Job Title Norwich Water Cycle Study - Costing Calcs										Date	Job no. D118607
Element Ranking Table for Various Options										01/04/2008	Project no.
Originator	Checked	Revisor	Suffix	Orig	1		2				
PC	ND		Date	Check	21/08/2008	PC					

Ranking Scoring	20
	10
	0

PGA	PGA Description	WWTW		Water Supply		Water Resources		Total (£)	Cost Rank	Total Points	FLOOD			ENVIRONMENT				Total Points	Overall Rank	
		Whitlingham	Heigham	Max Boreholes	Wensum Reuse	GOGDS	Off Line Storage				To development	From development	SUDS	Conservation Designations	Groundwater Vulnerability	Source Protection Zone	Traffic Light Points			Traffic Light Rank
NPA1	North Sector (North of Airport)	10,700,000	5,300,000	7,700,000	11,600,000	5,200,000	17,400,000	57,900,000	7	100	20	10	20	10	0	20	80	1	180	6
NPA2	North East Sector (inside NNDR)	5,600,000	6,400,000	8,400,000	11,600,000	4,800,000	17,400,000	54,200,000	4	160	20	10	0	10	0	10	50	9	210	4
NPA3a	North East Sector (outside NNDR, vicinity of Rackheath)	7,100,000	7,300,000	9,300,000	11,600,000	7,200,000	17,400,000	59,900,000	9	60	20	10	20	10	0	20	80	1	140	9
NPA3b	East Sector (outside of NNDR)	5,800,000	7,100,000	9,000,000	11,600,000	7,100,000	17,400,000	58,000,000	8	80	20	10	10	10	0	20	70	4	150	8
NPA4	South East Sector (vicinity of Poringland)	5,700,000	5,900,000	8,000,000	11,600,000	5,800,000	17,400,000	54,400,000	5	140	20	10	0	10	10	0	50	9	190	5
NPA5	South Sector (A11-A140 Outside A47)	7,500,000	5,900,000	7,700,000	11,600,000	5,800,000	17,400,000	55,900,000	6	120	20	10	0	10	10	10	60	7	180	6
NPA6	Long Stratton	13,500,000	12,200,000	14,100,000	11,600,000	12,100,000	17,400,000	80,900,000	11	20	20	10	0	10	10	20	70	4	90	11
NPA7	Wymondham	14,000,000	8,600,000	10,600,000	11,600,000	12,000,000	17,400,000	74,200,000	10	40	10	10	20	10	10	20	80	1	120	10
NPA8	South West Sector (A11-B1108)	9,700,000	3,800,000	5,900,000	11,600,000	3,800,000	17,400,000	52,200,000	1	220	20	10	0	10	10	20	70	4	290	1
NPA9	West Sector (River Yare to River Wensum)	12,400,000	3,300,000	5,300,000	11,600,000	3,200,000	17,400,000	53,200,000	2	200	10	10	0	10	0	0	30	11	230	3
NPA10	North West Sector (A1067-NNDR)	12,100,000	3,400,000	5,400,000	11,600,000	3,400,000	17,400,000	53,300,000	3	180	20	10	20	10	0	0	60	7	240	2

59,463,636

PGA	PGA Description	WWTW		Water Supply		Water Resources		Total (£)	Cost Rank	Total Points	FLOOD			ENVIRONMENT				Total Points	Overall Rank	
		Upgrade Existing	Heigham	Max Boreholes	Wensum Reuse	GOGDS	Off Line Storage				To development	From development	SUDS	Conservation Designations	Groundwater Vulnerability	Source Protection Zone	Traffic Light Points			Traffic Light Rank
NPA1	North Sector (North of Airport)	25,200,000	5,300,000	7,700,000	11,600,000	5,200,000	17,400,000	72,400,000	4	160	20	20	20	10	0	20	90	1	250	2
NPA2	North East Sector (inside NNDR)	21,400,000	6,400,000	8,400,000	11,600,000	4,800,000	17,400,000	70,000,000	3	180	20	20	0	10	0	10	60	9	240	3
NPA3a	North East Sector (outside NNDR, vicinity of Rackheath)	21,200,000	11,600,000	9,300,000	11,600,000	7,200,000	17,400,000	78,300,000	9	60	20	20	20	10	0	20	90	1	150	8
NPA3b	East Sector (outside of NNDR)	24,200,000	11,600,000	9,000,000	11,600,000	7,100,000	17,400,000	80,900,000	10	40	20	20	10	10	0	20	80	4	120	10
NPA4	South East Sector (vicinity of Poringland)	21,700,000	11,600,000	8,000,000	11,600,000	5,800,000	17,400,000	76,100,000	8	80	20	20	0	10	10	0	60	9	140	9
NPA5	South Sector (A11-A140 Outside A47)	18,400,000	11,600,000	7,700,000	11,600,000	5,800,000	17,400,000	72,500,000	5	140	20	20	0	10	10	10	70	7	210	5
NPA6	Long Stratton	18,600,000	12,200,000	14,100,000	11,600,000	12,100,000	17,400,000	86,000,000	11	20	20	20	0	10	10	20	80	4	100	11
NPA7	Wymondham	13,740,000	8,600,000	10,600,000	11,600,000	12,000,000	17,400,000	73,940,000	7	100	10	20	20	10	10	20	90	1	190	6
NPA8	South West Sector (A11-B1108)	17,700,000	11,600,000	5,900,000	11,600,000	3,800,000	17,400,000	68,000,000	1	220	20	20	0	10	10	20	80	4	300	1
NPA9	West Sector (River Yare to River Wensum)	20,500,000	11,600,000	5,300,000	11,600,000	3,200,000	17,400,000	69,600,000	2	200	10	20	0	10	0	0	40	11	240	3
NPA10	North West Sector (A1067-NNDR)	23,700,000	11,600,000	5,400,000	11,600,000	3,400,000	17,400,000	73,100,000	6	120	20	20	20	10	0	0	70	7	190	6

74,621,818

PGA	PGA Description	WWTW		Water Supply		Water Resources		Total (£)	Cost Rank	Total Points	FLOOD			ENVIRONMENT				Total Points	Overall Rank	
		Upgrade Existing	Heigham	Max Boreholes	Wensum Reuse	GOGDS	Off Line Storage				To development	From development	SUDS	Conservation Designations	Groundwater Vulnerability	Source Protection Zone	Traffic Light Points			Traffic Light Rank
NPA1	North Sector (North of Airport)	19,400,000	5,300,000	7,700,000	11,600,000	5,200,000	17,400,000	66,600,000	1	220	20	20	20	10	0	20	90	1	310	1
NPA2	North East Sector (inside NNDR)	19,400,000	6,400,000	8,400,000	11,600,000	4,800,000	17,400,000	68,000,000	2	200	20	20	0	10	0	10	60	8	260	2
NPA3a	North East Sector (outside NNDR, vicinity of Rackheath)	19,400,000	11,600,000	9,300,000	11,600,000	7,200,000	17,400,000	76,500,000	9	60	20	20	20	10	0	20	90	1	150	9
NPA3b	East Sector (outside of NNDR)	19,400,000	11,600,000	9,000,000	11,600,000	7,100,000	17,400,000	76,100,000	8	80	20	20	10	10	0	20	80	4	160	7
NPA4	South East Sector (vicinity of Poringland)	19,400,000	11,600,000	8,000,000	11,600,000	5,800,000	17,400,000	73,800,000	7	100	20	20	0	10	10	0	60	8	160	7
NPA5	South Sector (A11-A140 Outside A47)	19,400,000	11,600,000	7,700,000	11,600,000	5,800,000	17,400,000	73,500,000	6	120	20	20	0	10	10	10	70	6	190	6
NPA6	Long Stratton	19,400,000	12,200,000	14,100,000	11,600,000	12,100,000	17,400,000	86,800,000	11	20	20	20	0	10	10	20	80	4	100	11
NPA7	Wymondham	19,400,000	8,600,000	10,600,000	11,600,000	12,000,000	17,400,000	79,600,000	10	40	10	20	20	10	10	20	90	1	130	10
NPA8	South West Sector (A11-B1108)	19,400,000	11,600,000	5,900,000	11,600,000	3,800,000	17,400,000	69,700,000	5	140	20	10	0	10	10	20	70	6	210	4
NPA9	West Sector (River Yare to River Wensum)	19,400,000	11,600,000	5,300,000	11,600,000	3,200,000	17,400,000	68,500,000	3	180	10	10	0	10	0	0	30	11	210	4
NPA10	North West Sector (A1067-NNDR)	19,400,000	11,600,000	5,400,000	11,600,000	3,400,000	17,400,000	68,800,000	4	160	20	10	20	10	0	0	60	8	220	3

Calculations										Section Sheet 1 of 1	
Job Title Norwich Water Cycle Study - Costing Calcs								Date	Job no. D118607		
Element Ranking Table for Various Options								01/04/2008	Project no.		
Originator	Checked	Revision	Suffix	Orig	1	2					
PC	ND		Date	Check	21/08/2008	PC					

Ranking Scoring

20
10
0

PDS		1,000		Water Supply				Water Resources			FLOOD			ENVIRONMENT				Total Points	Overall Rank	
PGA	PGA Description	Upgrade Existing	Heigham	Max Boreholes	Wensum Reuse	GOGDS	Off Line Storage	Total (£)	Cost Rank	Total Points	To development	From development	SUDS	Conservation Designations	Groundwater Vulnerability	Source Protection Zone	Traffic Light Points	Traffic Light Rank	Total Points	Overall Rank
RPA1	Reepham	2,540,000	5,900,000	7,100,000	6,900,000	5,900,000	1,800,000	30,140,000	2	200	20	20	0	0	0	20	60	3	260	1
RPA2	Aylsham	4,530,000	6,300,000	7,500,000	6,900,000	6,200,000	1,800,000	33,230,000	5	140	20	10	10	10	0	20	70	2	210	5
RPA3	Wroxham	700,000	5,100,000	6,300,000	6,900,000	5,000,000	1,800,000	25,800,000	1	220	0	10	10	10	0	0	30	8	250	2
RPA4	Acle	3,140,000	7,400,000	8,600,000	6,900,000	7,300,000	1,800,000	35,140,000	6	120	0	10	10	0	0	20	40	6	160	6
RPA5	Hingham	2,750,000	6,800,000	8,000,000	6,900,000	6,800,000	1,800,000	33,050,000	4	160	20	20	10	10	10	10	80	1	240	3
RPA6	Diss	330,000	11,300,000	12,500,000	6,900,000	11,300,000	1,800,000	44,130,000	8	80	20	0	10	10	0	0	40	6	120	8
RPA7	Harleston	550,000	10,600,000	11,800,000	6,900,000	10,500,000	1,800,000	42,150,000	7	100	10	10	10	10	0	20	60	3	160	6
RPA8	Lodden	1,080,000	7,100,000	8,300,000	6,900,000	7,100,000	1,800,000	32,280,000	3	180	10	10	0	10	10	20	60	3	240	3