

# LONDON AREA WASTEWATER AND STORM WATER MASTER PLAN



# Utility Master Plans

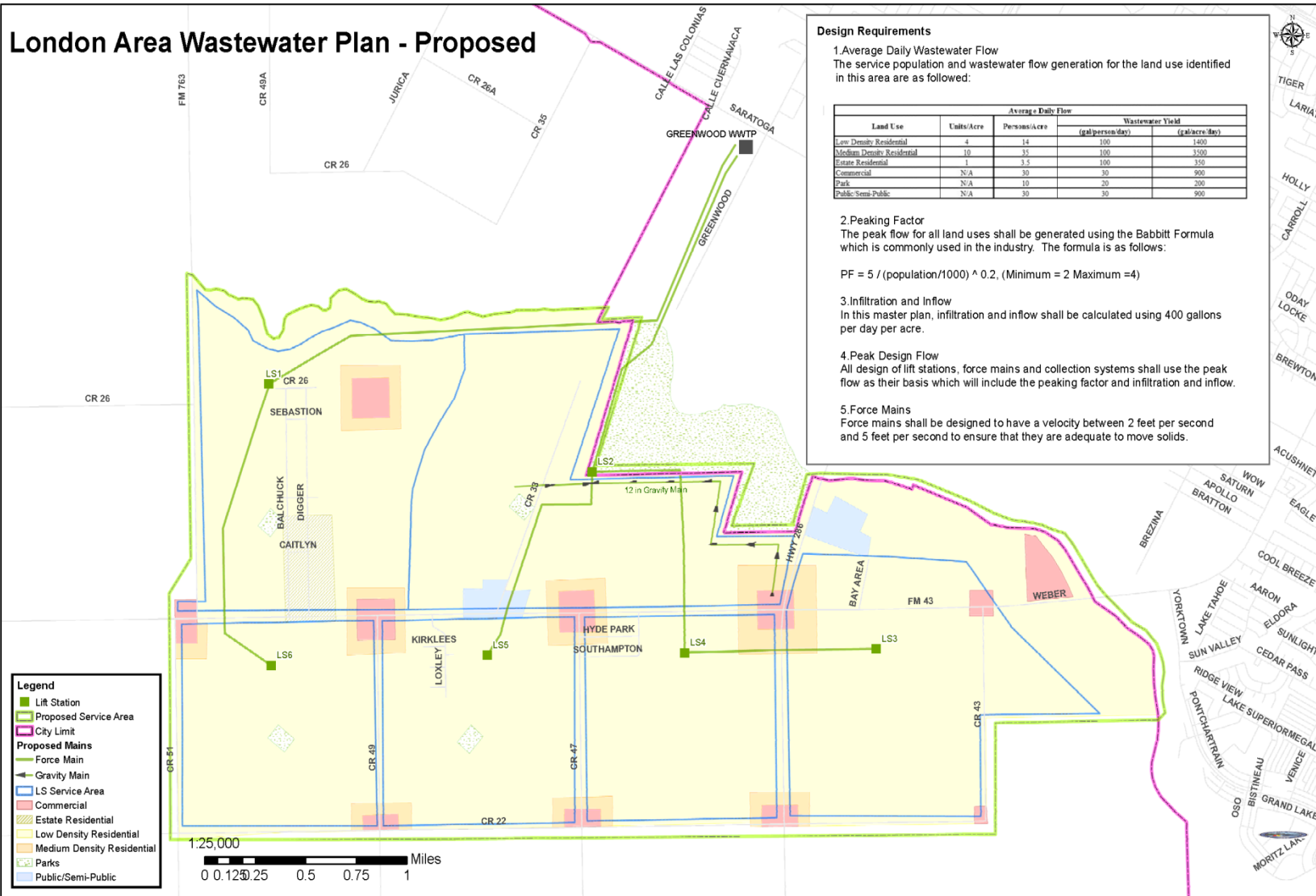
- Identify technical requirements.
- Allows city to obtain necessary ROW or easements to expand system through the platting process.
- Requires future development to design systems in an efficient manner that will benefit others.
- Does not:
  - Identify areas that will be annexed.
  - Address costs or reimbursement to developers.
  - Set policy related to growth.

# LONDON AREA

- TOTAL SERVICE AREA = 5,485 ACRES
- ESTIMATED CUSTOMERS (4 HOUSES/AC) = 21,940 HOUSEHOLDS

# WASTEWATER MASTER PLAN

## London Area Wastewater Plan - Proposed



# WASTEWATER COSTS TO DEVELOPERS

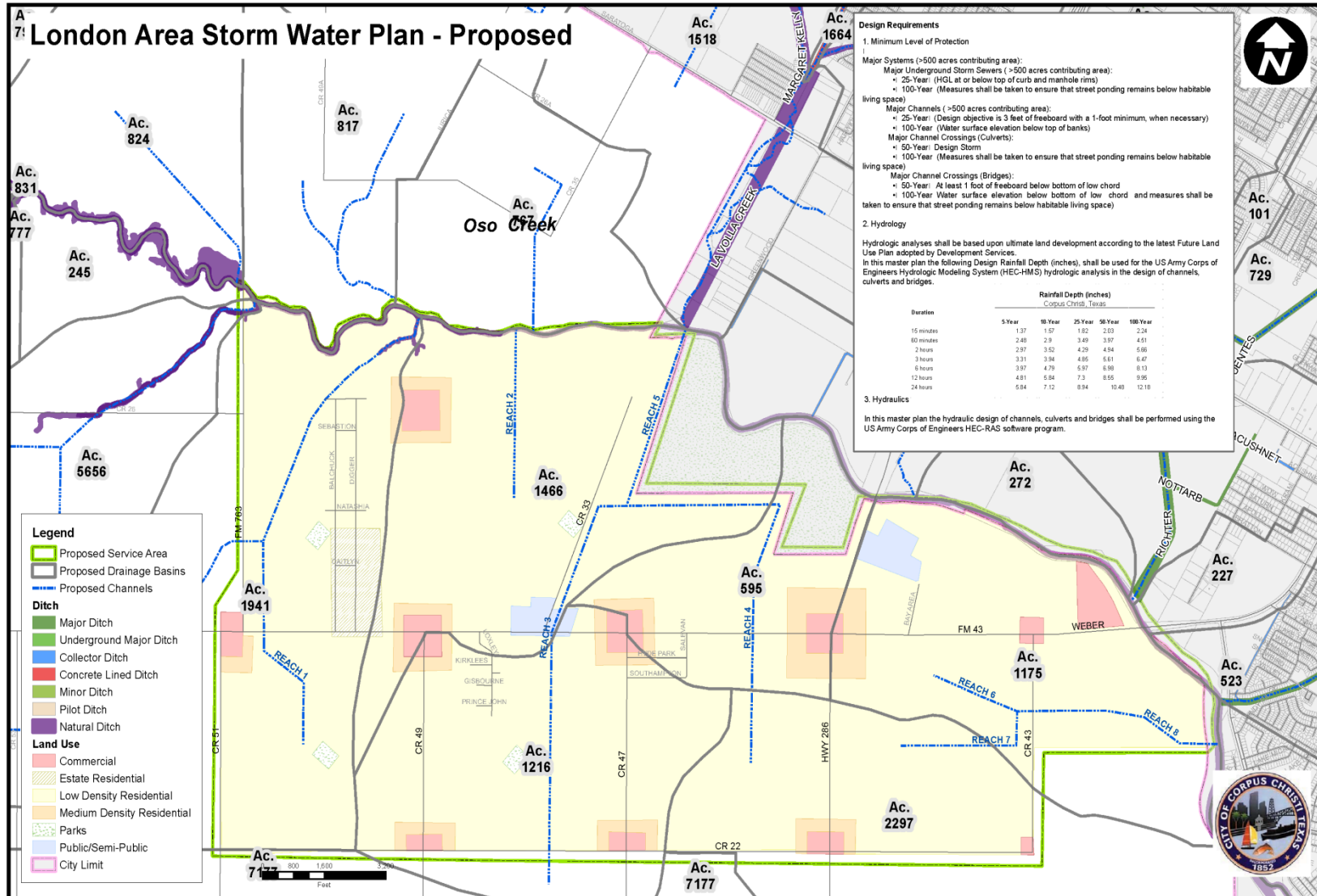
TRUNK MAIN ESTIMATE									
ID	Pipe Diameter	Length	Depth Range	Unit Cost	Construction Sub-Total	Contingency (30%)	Construction Sub-Total	Administrative Subtotal (30%)	Project Total
	(in)	(ft)	(ft)	(\$/LF)	(\$)	(\$)	(\$)	(\$)	(\$)
LS 1	15	1800	Over 18'	\$515.00	\$927,000	\$280,000	\$1,207,000	\$370,000	\$1,577,000
LS 1	24	2000	Over 18'	\$600.00	\$1,200,000	\$360,000	\$1,560,000	\$470,000	\$2,030,000
LS 2	15	1800	Over 18'	\$515.00	\$927,000	\$280,000	\$1,207,000	\$370,000	\$1,577,000
LS 2	18	1600	Over 18'	\$550.00	\$880,000	\$270,000	\$1,150,000	\$350,000	\$1,500,000
LS 3	15	3000	14' - 18'	\$400.00	\$1,200,000	\$360,000	\$1,560,000	\$470,000	\$2,030,000
LS 4	15	2600	14' - 18'	\$400.00	\$1,040,000	\$320,000	\$1,360,000	\$410,000	\$1,770,000
LS 5	15	2600	14' - 18'	\$400.00	\$1,040,000	\$320,000	\$1,360,000	\$410,000	\$1,770,000
LS 6	15	2600	14' - 18'	\$400.00	\$1,040,000	\$320,000	\$1,360,000	\$410,000	\$1,770,000
Trunk Main Subtotal					\$8,254,000	\$2,510,000	\$10,764,000	\$3,260,000	\$14,024,000

LIFT STATION & FORCE MAIN ESTIMATE									
ID	Size	Length	Depth	Unit Cost	Construction Sub-Total	Contingency (30%)	Construction Sub-Total	Administrative Subtotal (30%)	Project Total
	(in) or (mgd)	(ft)	(ft)	(\$/in-LF)	(\$)	(\$)	(\$)	(\$)	(\$)
LS 1	6	N/A	30	N/A	\$2,500,000	\$750,000	\$3,250,000	\$980,000	\$4,230,000
	18	15400	5	\$200	\$3,080,000	\$930,000	\$4,010,000	\$1,210,000	\$5,220,000
LS 2	10	N/A	30	N/A	\$3,500,000	\$1,050,000	\$4,550,000	\$1,370,000	\$5,920,000
	18/8	18000	5	\$175	\$3,150,000	\$950,000	\$4,100,000	\$1,230,000	\$5,330,000
LS 3	2	N/A	25	N/A	\$1,500,000	\$450,000	\$1,950,000	\$590,000	\$2,540,000
	12	5000	5	\$150	\$750,000	\$230,000	\$980,000	\$300,000	\$1,280,000
LS 4	5	N/A	20	N/A	\$2,250,000	\$680,000	\$2,930,000	\$880,000	\$3,810,000
	18	11800	5	\$200	\$2,360,000	\$710,000	\$3,070,000	\$930,000	\$4,000,000
LS 5	2	N/A	25	N/A	\$1,500,000	\$450,000	\$1,950,000	\$590,000	\$2,540,000
	12	6000	5	\$150	\$900,000	\$270,000	\$1,170,000	\$360,000	\$1,530,000
LS 6	2	N/A	25	N/A	\$1,500,000	\$450,000	\$1,950,000	\$590,000	\$2,540,000
	12	7800	5	\$150	\$1,170,000	\$360,000	\$1,530,000	\$460,000	\$1,990,000
Lift Station Subtotal					\$24,160,000	\$7,280,000	\$31,440,000	\$9,490,000	\$40,930,000

# WASTERWATER SERVICE AREA

- **LIFT STATION, FORCE MAIN & TRUNKLINE PROJECT TOTAL = \$54,954,000**
- **COST PER HOUSEHOLD = \$2,580**

# STORM WATER MASTER PLAN



# STORM WATER COSTS TO DEVELOPERS

CHANNEL ESTIMATE										
ID	ROW Needed	Length	Bottom Width	Unit Cost	Structures	Construction Sub-Total	Contingency (30%)	Construction Sub-Total	Administrative Subtotal (30%)	Project Total
	(ft)	(ft)	(ft)	(\$/CY)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
Reach 1	170	12000	10-15	\$14.00	\$500,000.00	\$7,100,000	\$2,130,000	\$9,230,000	\$2,769,000	\$11,999,000
Reach 2	130	4100	6	\$14.00	\$300,000.00	\$1,300,000	\$390,000	\$1,690,000	\$507,000	\$2,197,000
Reach 3	130	13100	20	\$14.00	\$700,000.00	\$4,200,000	\$1,260,000	\$5,460,000	\$1,638,000	\$7,098,000
Reach 4	130	8350	15	\$14.00	\$500,000.00	\$2,900,000	\$870,000	\$3,770,000	\$1,131,000	\$4,901,000
Reach 5	140	4500	40	\$14.00	\$200,000.00	\$1,600,000	\$480,000	\$2,080,000	\$624,000	\$2,704,000
Reach 6	110	2300	8	\$14.00	\$250,000.00	\$700,000	\$210,000	\$910,000	\$273,000	\$1,183,000
Reach 7	110	3800	8	\$14.00	\$400,000.00	\$2,700,000	\$810,000	\$3,510,000	\$1,053,000	\$4,563,000
Reach 8	130	5500	12	\$14.00	\$400,000.00	\$3,600,000	\$1,080,000	\$4,680,000	\$1,404,000	\$6,084,000
						<b>\$20,500,000</b>	<b>\$6,150,000</b>	<b>\$26,650,000</b>	<b>\$7,995,000</b>	<b>\$34,645,000</b>

- **COST PER HOUSEHOLD = \$1,579**



# QUESTIONS???