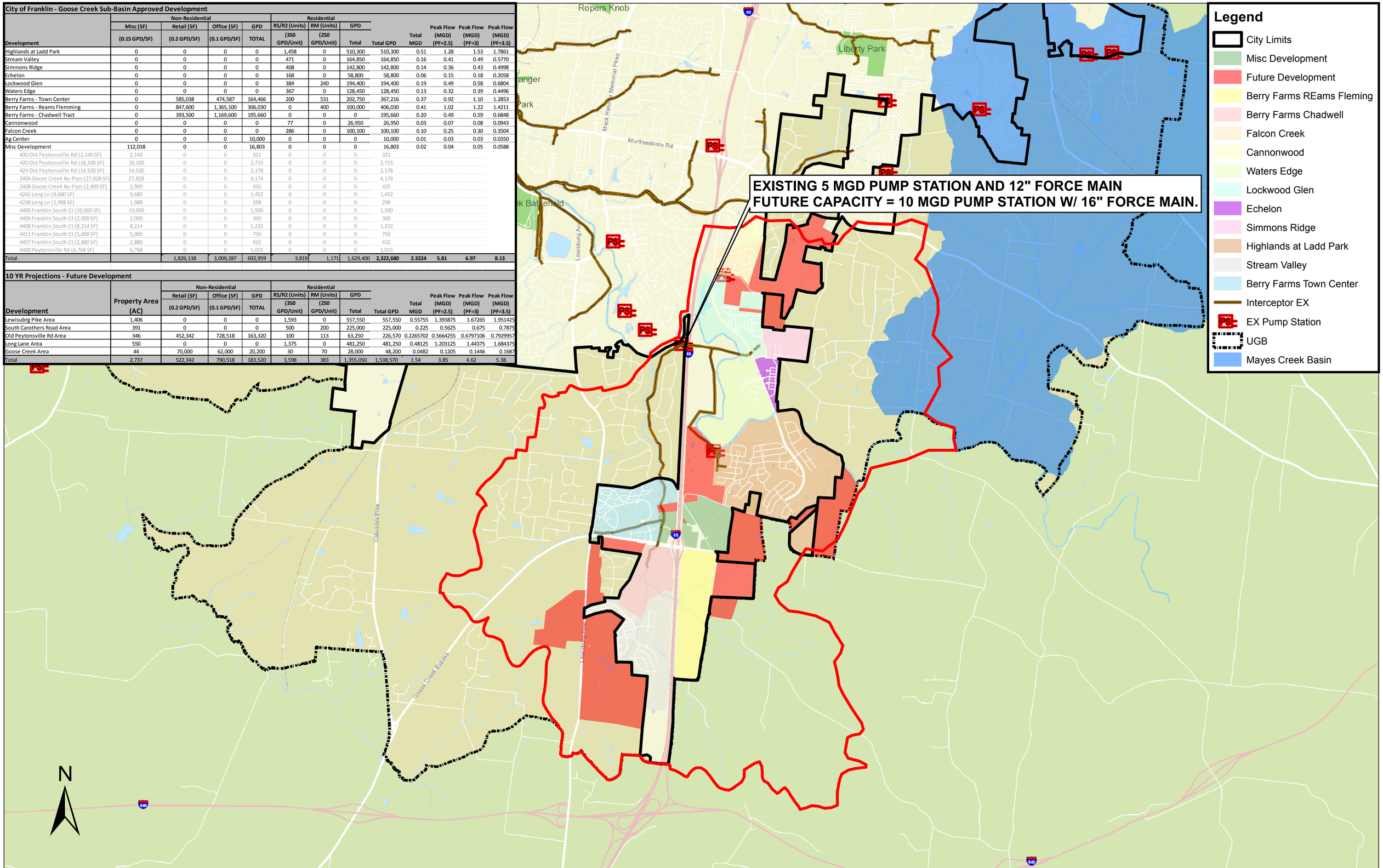
City of Franklin - Goose Creek Sub-Basin Approved Development

Development	Non-Residential Misc (SF) (0.15 GPD/SF)	Non-Residential Retail (SF) (0.2 GPD/SF)	Non-Residential Office (SF) (0.1 GPD/SF)	Non-Residential GPD TOTAL	Residential RS/R2 (Units) (350 GPD/Unit)	Residential RM (Units) (250 GPD/Unit)	Residential GPD Total	Total GPD	Total MGD	Peak Flow (MGD) (PF=2.5)	Peak Flow (MGD) (PF=3)	Peak Flow (MGD) (PF=3.5)
Highlands at Ladd Park	0	0	0	0	1,458	0	510,300	510,300	0.51	1.28	1.53	1.7861
Stream Valley	0	0	0	0	471	0	164,850	164,850	0.16	0.41	0.49	0.5770
Simmons Ridge	0	0	0	0	408	0	142,800	142,800	0.14	0.36	0.43	0.4998
Echelon	0	0	0	0	168	0	58,800	58,800	0.06	0.15	0.18	0.2058
Lockwood Glen	0	0	0	0	384	240	194,400	194,400	0.19	0.49	0.58	0.6804
Waters Edge	0	0	0	0	367	0	128,450	128,450	0.13	0.32	0.39	0.4496
Berry Farms - Town Center	0	585,038	474,587	164,466	200	531	202,750	367,216	0.37	0.92	1.10	1.2853
Berry Farms - Reams Flemming	0	847,600	1,365,100	306,030	0	400	100,000	406,030	0.41	1.02	1.22	1.4211
Berry Farms - Chadwell Tract	0	393,500	1,169,600	195,660	0	0	0	195,660	0.20	0.49	0.59	0.6848
Cannonwood	0	0	0	0	77	0	26,950	26,950	0.03	0.07	0.08	0.0943
Falcon Creek	0	0	0	0	286	0	100,100	100,100	0.10	0.25	0.30	0.3504
Ag Center	0	0	0	10,000	0	0	0	10,000	0.01	0.03	0.03	0.0350
Misc Development	112,018	0	0	16,803	0	0	0	16,803	0.02	0.04	0.05	0.0588
400 Old Peytonsville Rd (2,140 SF)	2,140	0	0	321	0	0	0	321				
420 Old Peytonsville Rd (18,100 SF)	18,100	0	0	2,715	0	0	0	2,715				
424 Old Peytonsville Rd (14,520 SF)	14,520	0	0	2,178	0	0	0	2,178				
2406 Goose Creek By-Pass (27,828 SF)	27,828	0	0	4,174	0	0	0	4,174				
2408 Goose Creek By-Pass (2,900 SF)	2,900	0	0	435	0	0	0	435				
4242 Long Ln (9,680 SF)	9,680	0	0	1,452	0	0	0	1,452				
4238 Long Ln (1,988 SF)	1,988	0	0	298	0	0	0	298				
4400 Franklin South Ct (10,000 SF)	10,000	0	0	1,500	0	0	0	1,500				
4404 Franklin South Ct (2,000 SF)	2,000	0	0	300	0	0	0	300				
4408 Franklin South Ct (8,214 SF)	8,214	0	0	1,232	0	0	0	1,232				
4411 Franklin South Ct (5,000 SF)	5,000	0	0	750	0	0	0	750				
4407 Franklin South Ct (2,880 SF)	2,880	0	0	432	0	0	0	432				
4400 Peytonsville Rd (6,768 SF)	6,768	0	0	1,015	0	0	0	1,015				
Total		1,826,138	3,009,287	692,959	3,819	1,171	1,629,400	**2,322,680**	**2.3224**	**5.81**	**6.97**	**8.13**

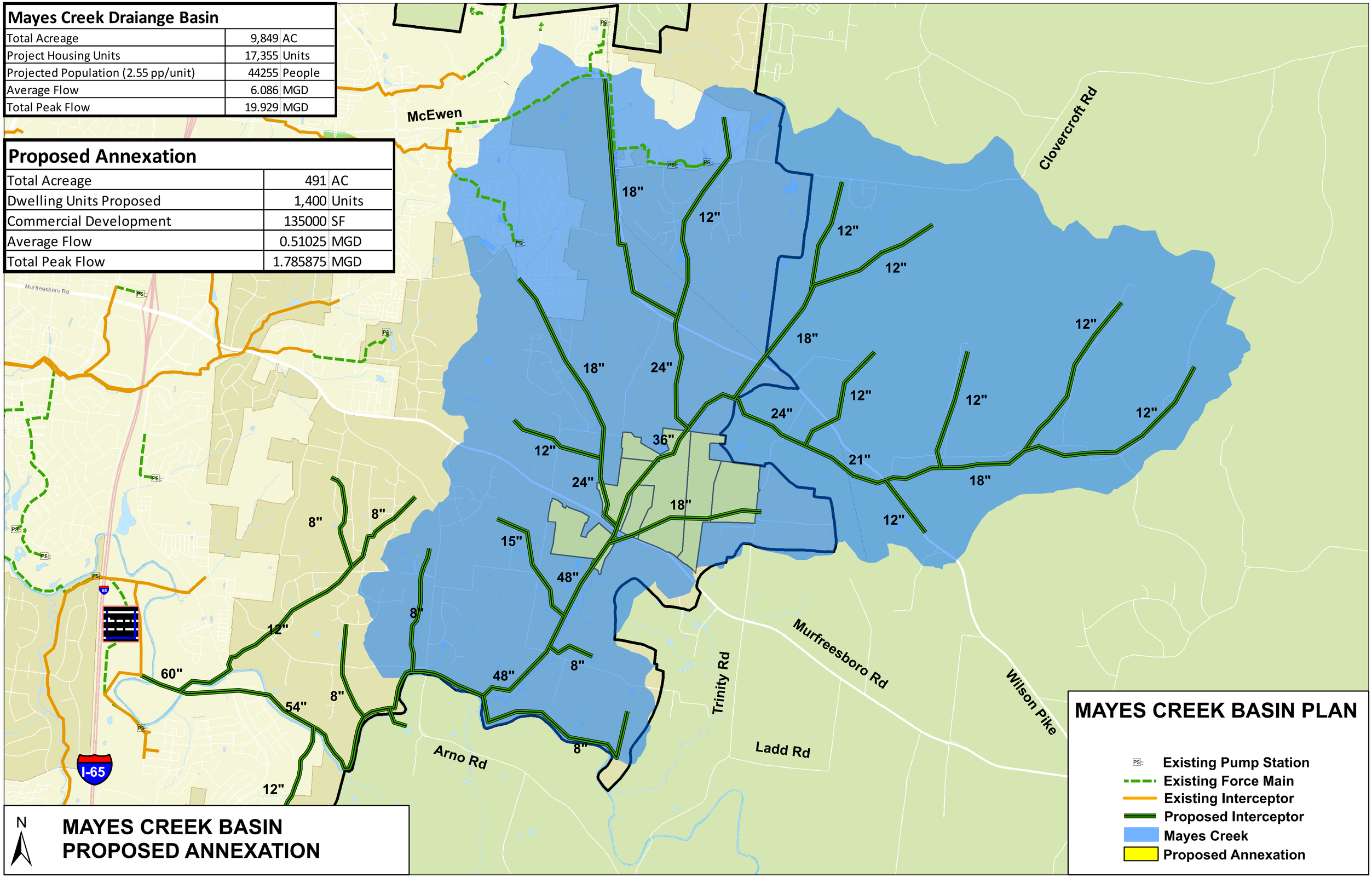
10 YR Projections - Future Development

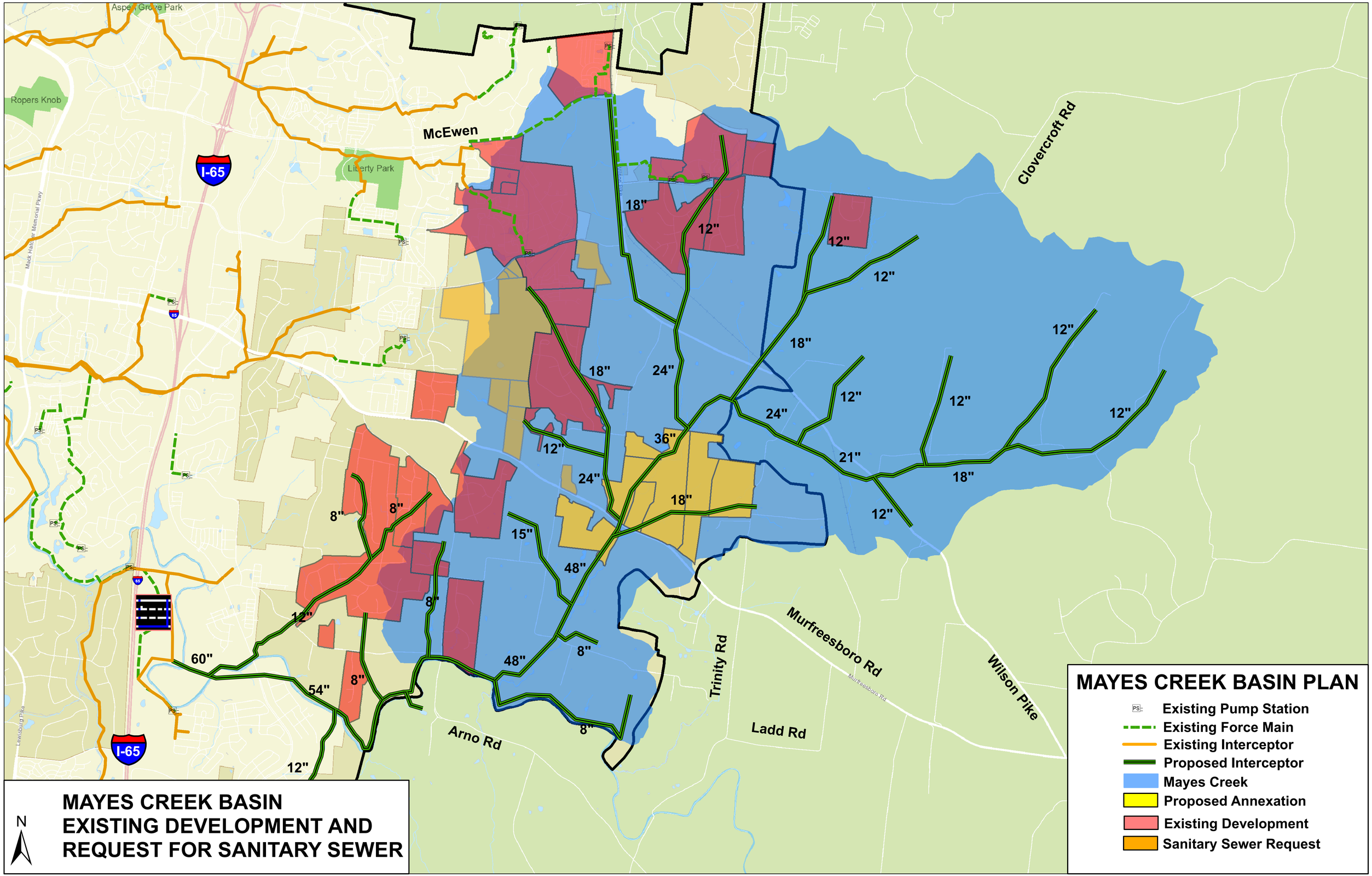
Development	Property Area (AC)	Non-Residential Retail (SF) (0.2 GPD/SF)	Non-Residential Office (SF) (0.1 GPD/SF)	Non-Residential GPD TOTAL	Residential RS/R2 (Units) (350 GPD/Unit)	Residential RM (Units) (250 GPD/Unit)	Residential GPD Total	Total GPD	Total MGD	Peak Flow (MGD) (PF=2.5)	Peak Flow (MGD) (PF=3)	Peak Flow (MGD) (PF=3.5)
Lewisburg Pike Area	1,406	0	0	0	1,593	0	557,550	557,550	0.55755	1.393875	1.67265	1.951425
South Carothers Road Area	391	0	0	0	500	200	225,000	225,000	0.225	0.5625	0.675	0.7875
Old Peytonsville Rd Area	346	452,342	728,518	163,320	100	113	63,250	226,570	0.2265702	0.5664255	0.6797106	0.7929957
Long Lane Area	550	0	0	0	1,375	0	481,250	481,250	0.48125	1.203125	1.44375	1.684375
Goose Creek Area	44	70,000	62,000	20,200	30	70	28,000	48,200	0.0482	0.1205	0.1446	0.1687
Total	2,737	522,342	790,518	183,520	3,598	383	1,355,050	1,538,570	1.54	3.85	4.62	5.38



Mayes Creek Draiange Basin		
Total Acreage	9,849	AC
Project Housing Units	17,355	Units
Projected Population (2.55 pp/unit)	44255	People
Average Flow	6.086	MGD
Total Peak Flow	19.929	MGD

Proposed Annexation		
Total Acreage	491	AC
Dwelling Units Proposed	1,400	Units
Commercial Development	135000	SF
Average Flow	0.51025	MGD
Total Peak Flow	1.785875	MGD




MAYES CREEK BASIN
EXISTING DEVELOPMENT AND
REQUEST FOR SANITARY SEWER
N
MAYES CREEK BASIN PLAN
Existing Pump Station
Existing Force Main
Existing Interceptor
Proposed Interceptor
Mayes Creek
Proposed Annexation
Existing Development
Sanitary Sewer Request
McEwen
Clovercroft Rd
Murfreesboro Rd
Wilson Pike
Trinity Rd
Ladd Rd
Arno Rd
I-65
Ropers Knob
Liberty Park
Aspen Grove Park
Mack Hatcher Memorial Pkwy
Lewisburg Pike
18"
12"
12"
12"
18"
18"
24"
12"
12"
12"
24"
36"
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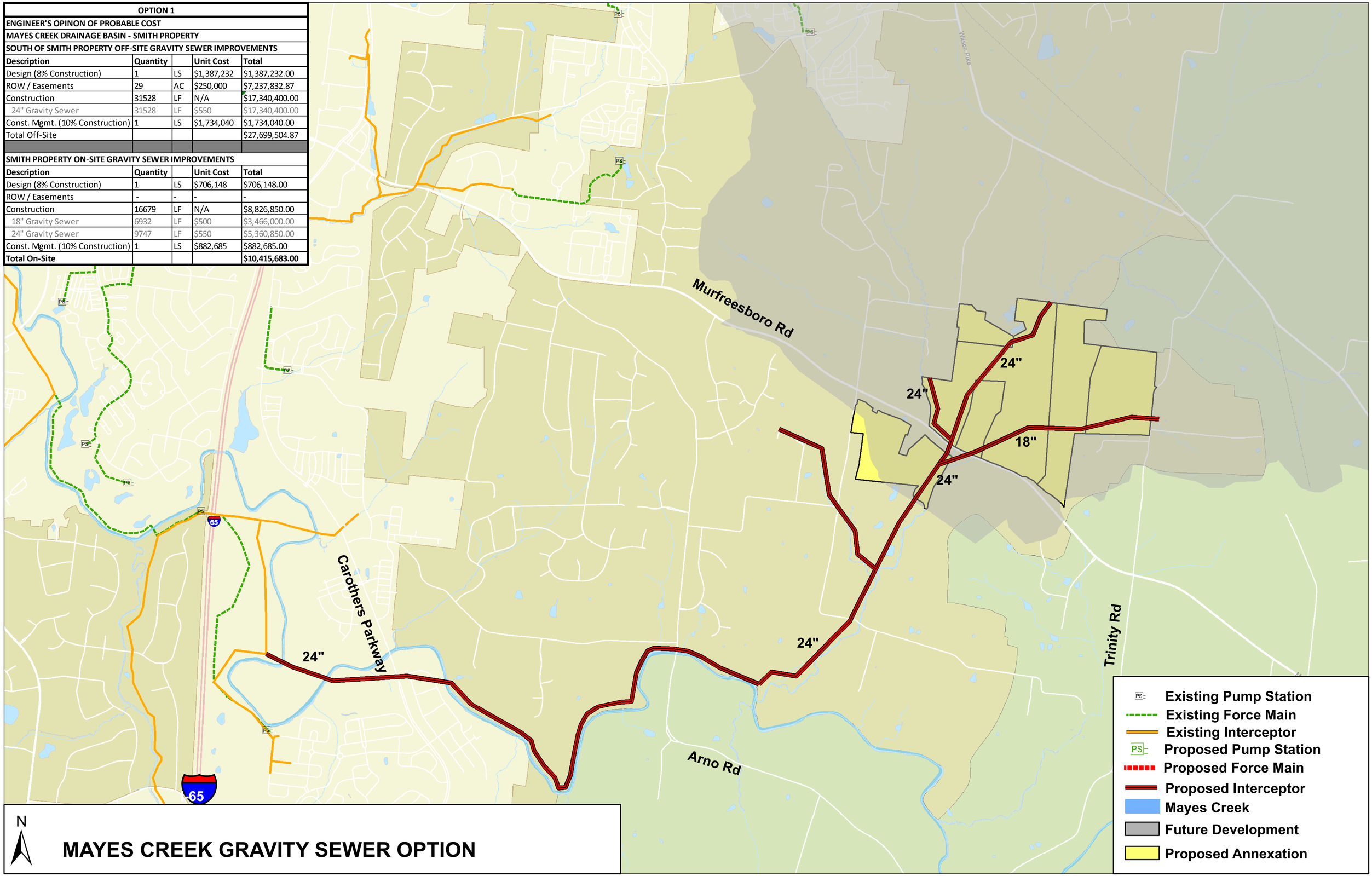
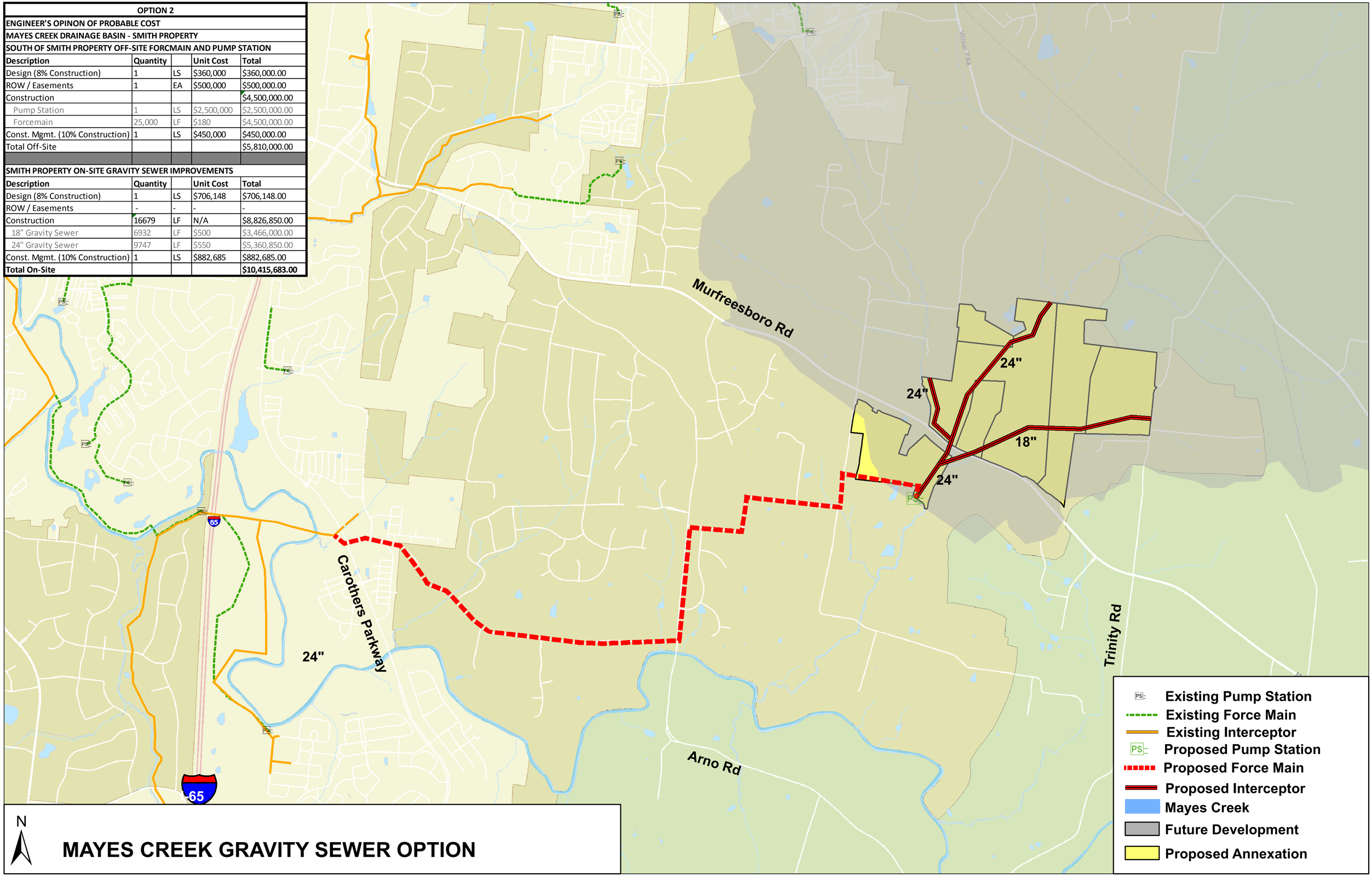
21"
18"
24"
18"
12"
8"
8"
15"
48"
8"
12"
60"
54"
8"
48"
8"
8"
12"

OPTION 1				
ENGINEER'S OPINON OF PROBABLE COST				
MAYES CREEK DRAINAGE BASIN - SMITH PROPERTY				
SOUTH OF SMITH PROPERTY OFF-SITE GRAVITY SEWER IMPROVEMENTS				
Description	**Quantity**		**Unit Cost**	**Total**
Design (8% Construction)	1	LS	$1,387,232	$1,387,232.00
ROW / Easements	29	AC	$250,000	$7,237,832.87
Construction	31528	LF	N/A	$17,340,400.00
24" Gravity Sewer	31528	LF	$550	$17,340,400.00
Const. Mgmt. (10% Construction)	1	LS	$1,734,040	$1,734,040.00
Total Off-Site				$27,699,504.87
SMITH PROPERTY ON-SITE GRAVITY SEWER IMPROVEMENTS				
Description	**Quantity**		**Unit Cost**	**Total**
Design (8% Construction)	1	LS	$706,148	$706,148.00
ROW / Easements	-	-	-	-
Construction	16679	LF	N/A	$8,826,850.00
18" Gravity Sewer	6932	LF	$500	$3,466,000.00
24" Gravity Sewer	9747	LF	$550	$5,360,850.00
Const. Mgmt. (10% Construction)	1	LS	$882,685	$882,685.00
Total On-Site				**$10,415,683.00**



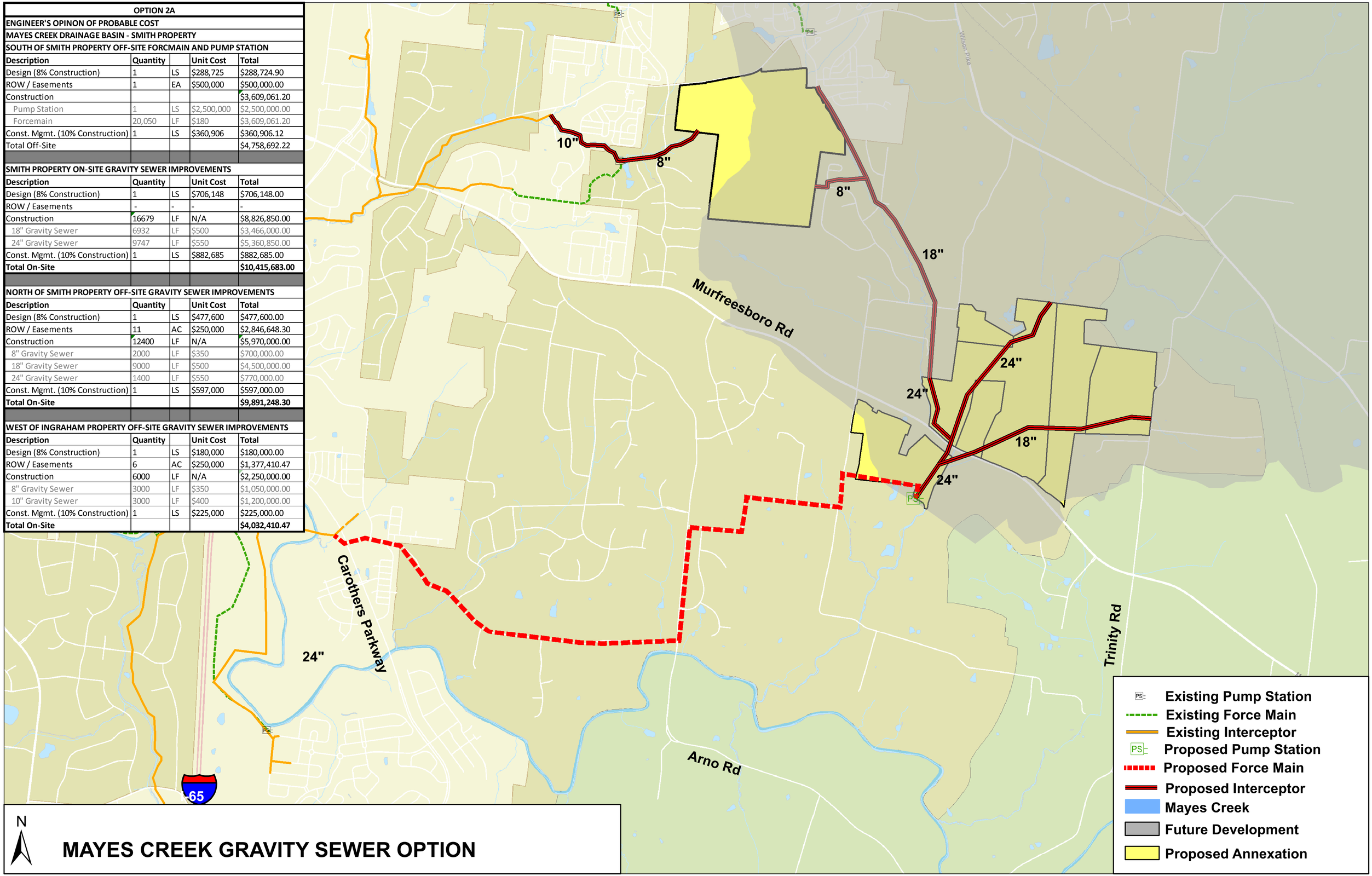
MAYES CREEK GRAVITY SEWER OPTION

OPTION 2				
ENGINEER'S OPINON OF PROBABLE COST				
MAYES CREEK DRAINAGE BASIN - SMITH PROPERTY				
SOUTH OF SMITH PROPERTY OFF-SITE FORCMAIN AND PUMP STATION				
Description	**Quantity**		**Unit Cost**	**Total**
Design (8% Construction)	1	LS	$360,000	$360,000.00
ROW / Easements	1	EA	$500,000	$500,000.00
Construction				$4,500,000.00
Pump Station	1	LS	$2,500,000	$2,500,000.00
Forcemain	25,000	LF	$180	$4,500,000.00
Const. Mgmt. (10% Construction)	1	LS	$450,000	$450,000.00
Total Off-Site				$5,810,000.00
SMITH PROPERTY ON-SITE GRAVITY SEWER IMPROVEMENTS				
Description	**Quantity**		**Unit Cost**	**Total**
Design (8% Construction)	1	LS	$706,148	$706,148.00
ROW / Easements	-	-	-	-
Construction	16679	LF	N/A	$8,826,850.00
18" Gravity Sewer	6932	LF	$500	$3,466,000.00
24" Gravity Sewer	9747	LF	$550	$5,360,850.00
Const. Mgmt. (10% Construction)	1	LS	$882,685	$882,685.00
Total On-Site				**$10,415,683.00**



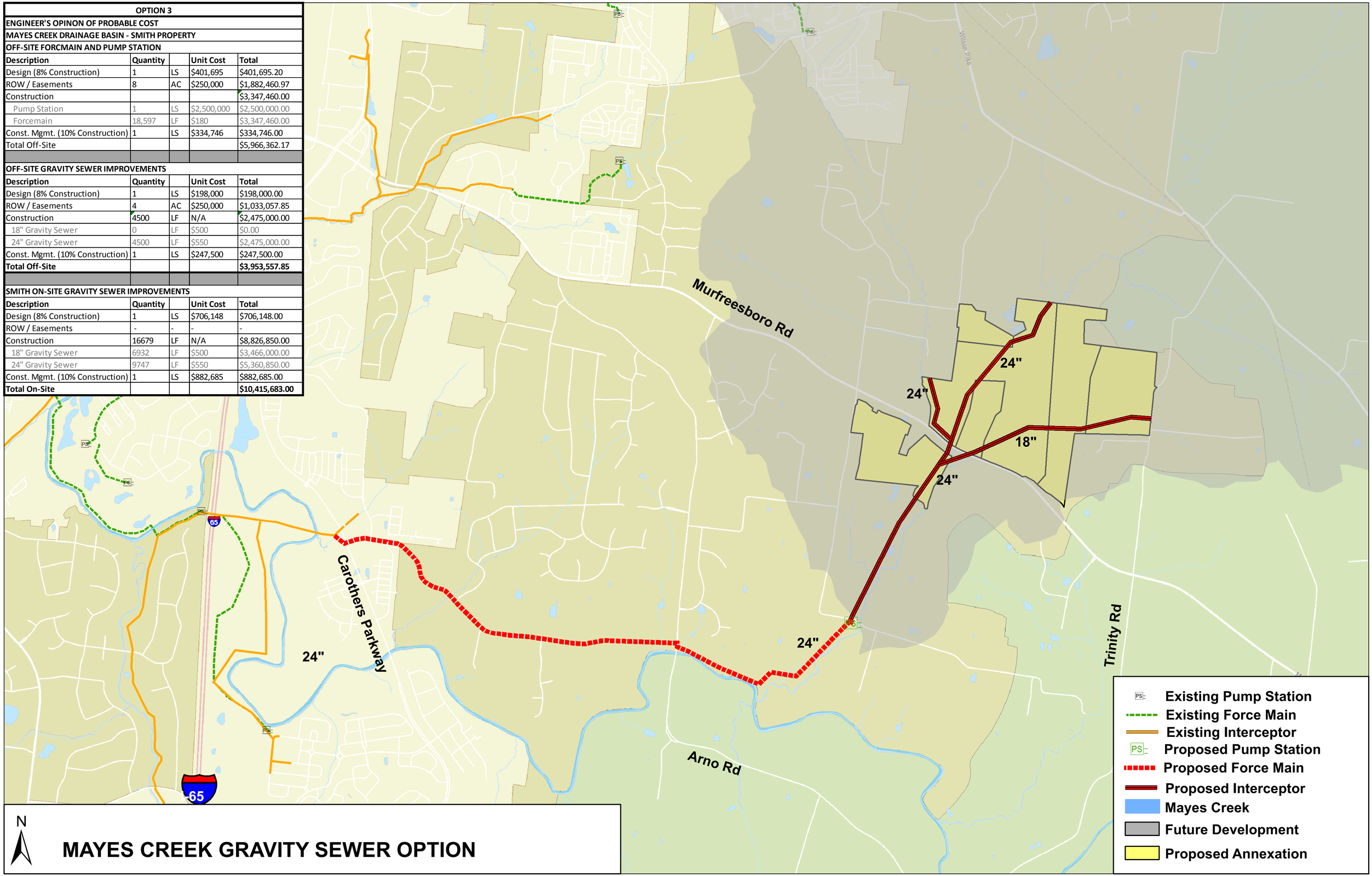
MAYES CREEK GRAVITY SEWER OPTION

OPTION 2A				
ENGINEER'S OPINON OF PROBABLE COST				
MAYES CREEK DRAINAGE BASIN - SMITH PROPERTY				
SOUTH OF SMITH PROPERTY OFF-SITE FORCMAIN AND PUMP STATION				
Description	**Quantity**		**Unit Cost**	**Total**
Design (8% Construction)	1	LS	$288,725	$288,724.90
ROW / Easements	1	EA	$500,000	$500,000.00
Construction				$3,609,061.20
Pump Station	1	LS	$2,500,000	$2,500,000.00
Forcemain	20,050	LF	$180	$3,609,061.20
Const. Mgmt. (10% Construction)	1	LS	$360,906	$360,906.12
Total Off-Site				$4,758,692.22
SMITH PROPERTY ON-SITE GRAVITY SEWER IMPROVEMENTS				
Description	**Quantity**		**Unit Cost**	**Total**
Design (8% Construction)	1	LS	$706,148	$706,148.00
ROW / Easements	-	-	-	-
Construction	16679	LF	N/A	$8,826,850.00
18" Gravity Sewer	6932	LF	$500	$3,466,000.00
24" Gravity Sewer	9747	LF	$550	$5,360,850.00
Const. Mgmt. (10% Construction)	1	LS	$882,685	$882,685.00
Total On-Site				**$10,415,683.00**
NORTH OF SMITH PROPERTY OFF-SITE GRAVITY SEWER IMPROVEMENTS				
Description	**Quantity**		**Unit Cost**	**Total**
Design (8% Construction)	1	LS	$477,600	$477,600.00
ROW / Easements	11	AC	$250,000	$2,846,648.30
Construction	12400	LF	N/A	$5,970,000.00
8" Gravity Sewer	2000	LF	$350	$700,000.00
18" Gravity Sewer	9000	LF	$500	$4,500,000.00
24" Gravity Sewer	1400	LF	$550	$770,000.00
Const. Mgmt. (10% Construction)	1	LS	$597,000	$597,000.00
Total On-Site				**$9,891,248.30**
WEST OF INGRAHAM PROPERTY OFF-SITE GRAVITY SEWER IMPROVEMENTS				
Description	**Quantity**		**Unit Cost**	**Total**
Design (8% Construction)	1	LS	$180,000	$180,000.00
ROW / Easements	6	AC	$250,000	$1,377,410.47
Construction	6000	LF	N/A	$2,250,000.00
8" Gravity Sewer	3000	LF	$350	$1,050,000.00
10" Gravity Sewer	3000	LF	$400	$1,200,000.00
Const. Mgmt. (10% Construction)	1	LS	$225,000	$225,000.00
Total On-Site				**$4,032,410.47**

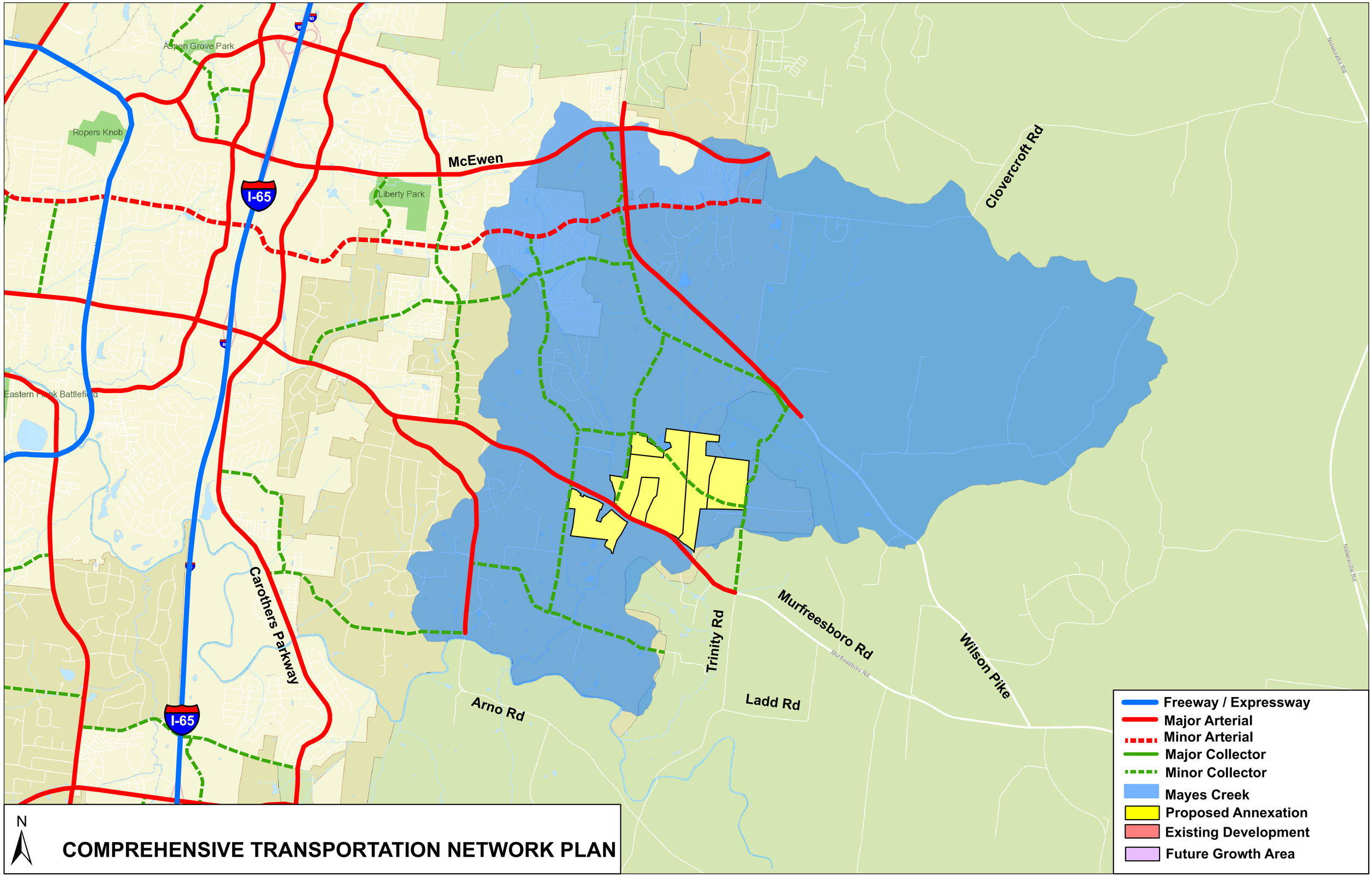


MAYES CREEK GRAVITY SEWER OPTION

OPTION 3				
ENGINEER'S OPINON OF PROBABLE COST				
MAYES CREEK DRAINAGE BASIN - SMITH PROPERTY				
OFF-SITE FORCMAIN AND PUMP STATION				
Description	**Quantity**		**Unit Cost**	**Total**
Design (8% Construction)	1	LS	$401,695	$401,695.20
ROW / Easements	8	AC	$250,000	$1,882,460.97
Construction				$3,347,460.00
Pump Station	1	LS	$2,500,000	$2,500,000.00
Forcemain	18,597	LF	$180	$3,347,460.00
Const. Mgmt. (10% Construction)	1	LS	$334,746	$334,746.00
Total Off-Site				$5,966,362.17
OFF-SITE GRAVITY SEWER IMPROVEMENTS				
Description	**Quantity**		**Unit Cost**	**Total**
Design (8% Construction)	1	LS	$198,000	$198,000.00
ROW / Easements	4	AC	$250,000	$1,033,057.85
Construction	4500	LF	N/A	$2,475,000.00
18" Gravity Sewer	0	LF	$500	$0.00
24" Gravity Sewer	4500	LF	$550	$2,475,000.00
Const. Mgmt. (10% Construction)	1	LS	$247,500	$247,500.00
Total Off-Site				**$3,953,557.85**
SMITH ON-SITE GRAVITY SEWER IMPROVEMENTS				
Description	**Quantity**		**Unit Cost**	**Total**
Design (8% Construction)	1	LS	$706,148	$706,148.00
ROW / Easements	-	-	-	-
Construction	16679	LF	N/A	$8,826,850.00
18" Gravity Sewer	6932	LF	$500	$3,466,000.00
24" Gravity Sewer	9747	LF	$550	$5,360,850.00
Const. Mgmt. (10% Construction)	1	LS	$882,685	$882,685.00
Total On-Site				**$10,415,683.00**



MAYES CREEK GRAVITY SEWER OPTION



COMPREHENSIVE TRANSPORTATION NETWORK PLAN