A SITE PLAN FOR
852 QUEEN ANNE PLACE
A TRACT OF LAND BEING LOT 11 OF BLOCK 4 OF WARWICK PLACE, PLAT BOOK 10 PAGE 9, ST. LOUIS COUNTY, MISSOURI

SHEET INDEX

1. OVERALL PLAN
2. SITE DEVELOPMENT PLAN
3. EXISTING CONDITIONS & DEMOLITION PLAN
4. PROPOSED DRAINAGE AREA MAP & STORM WATER MITIGATION PLAN

PROJECT BENCHMARK:

This project was performed with the use of Global Positioning System (GPS) equipment and the use of a Continuous Operating Reference Station (CORS) as part of the Missouri Department of Transportation (MoDOT) Virtual Reference System (VRS) Network. Data was obtained with the use of a Trimble R10 GPS Receiver and a TSC7 Data Collector.

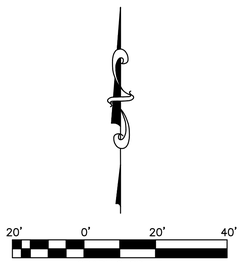
Horizontal Datum is Grid North, Missouri State Plane Coordinate System NAD'83 (2401), East Zone Vertical Datum is NAVD'88. Horizontal and Vertical data observation tolerance is 0.10 feet, horizontal and vertical Control point (CORS).

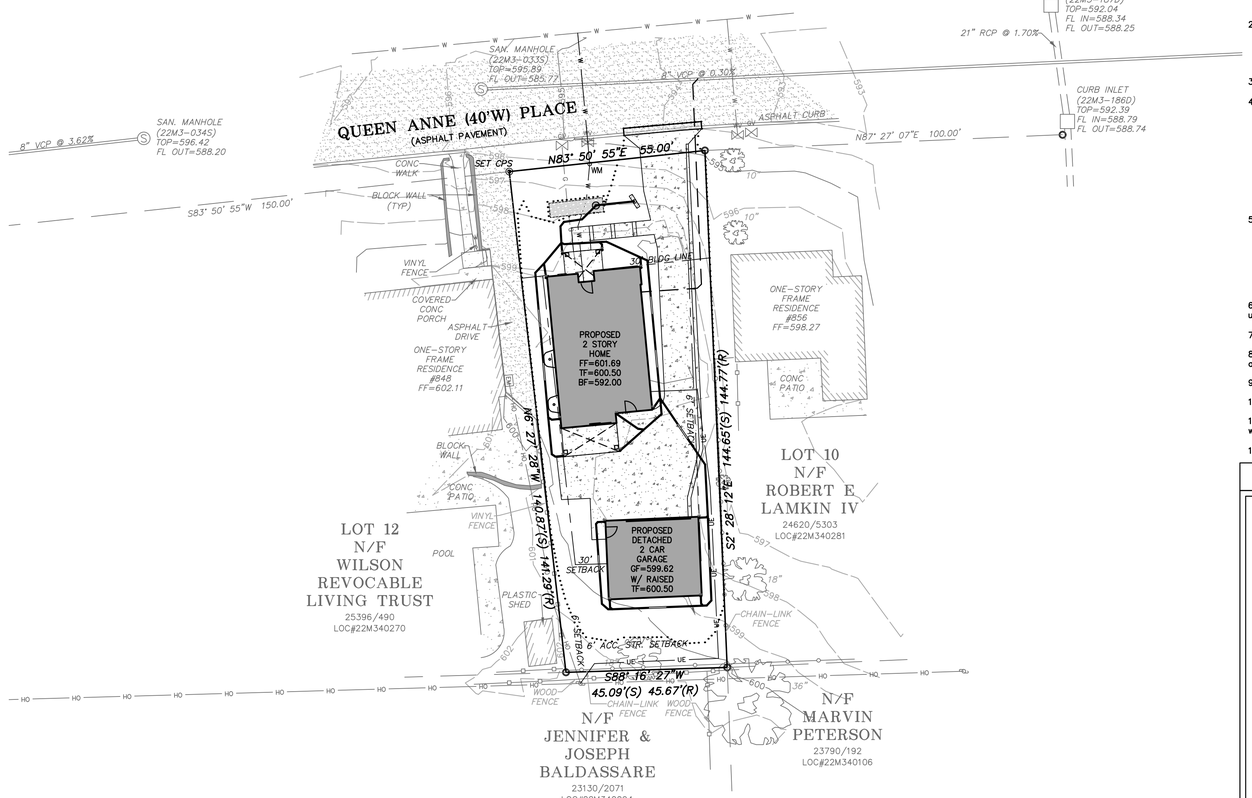
SITE BENCHMARK:

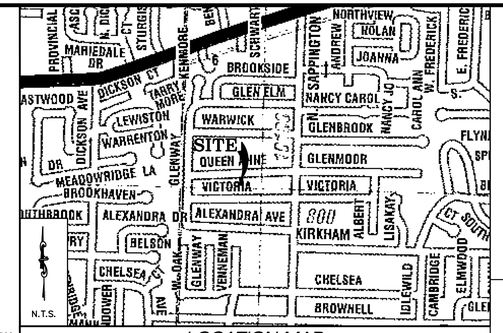
Description: Water Valve south of asphalt curb.

Collected Elev. = 594.87 feet

Location: Approximately 22 feet East and 8 feet North of the Northwestern corner of Subject Parcel.







LOCATION MAP

DEVELOPMENT NOTES:

1. Site Address:
   852 Queen Anne Place
   Kirkwood, MO 63122
   Loc.#22M340252

2. Owner Information:
   Huy Lam
   503 Cardinal Lane
   Ballwin, MO 63021
   Deed Book 13189, Page 2490

3. Area of Tract: 7,135 Square feet or 0.16 Acres, more or less.

4. Present Zoning: "R-2" Single Family Dwelling District (Glendale)

   "R-2" Single Family Dwelling District Dimensional Requirements

Front Yard Setback:	30 Feet
Side Yard Setback:	6 Feet because lot width is less than 65 Feet
Rear Yard Setback:	30 Feet
Accessory Structures:	Per Section 400.070 qualifications, can be within 6' or rear or side Property Line.
Minimum Site Area:	7,500 Sq. ft.
Minimum Lot Width:	65 Feet typically (this lot has less)
Impervious Area:	55% of lot & 45% of the required front yard setback

5. Utility Provider Districts:

Water:	Missouri American Water
Sewer:	MSD
Telephone:	AT&T Distribution
Gas:	Spire Missouri East
Electric:	Ameren Missouri Electric
Fire District:	Glendale
School District:	Kirkwood

6. According to the FIRM Flood Insurance Rate Map 29189C0307K Dated February 4, 2015, this development is located in Zone X unshaded, Areas determined to be outside the 0.2% chance annual floodplain.

7. Basis of Bearing: Grid North, Missouri State Plane Coordinate System, NAD' 83, East Zone.

8. The existing utilities shown hereon are per observed evidence and available utility maps. All utilities shall be field verified prior to any excavation or construction.

9. Existing water tap was destroyed December 2025 per Missouri–American Water Company.

10. Proposed land disturbance = 6,500 square feet = 0.15 acres.

11. Front yard impervious calculation: 523 sf impervious in front yard divided by 1,619 sf front yard = 32.3% front yard impervious, which is less than the 45%, as required.

12. Driveway cannot be more than 25% of lot frontage (13.75'). It is shown on Sheet 2 as 13.64', which is less, as required.

GENERAL UTILITY NOTES:

1. UTILITY DATA SOURCES: UNDERGROUND UTILITIES SHOWN ON THESE PLANS HAVE BEEN PLOTTED FROM AVAILABLE RECORDS, SURVEYED SURFACE INDICATORS, AND/OR MARKINGS PROVIDED BY MISSOURI ONE CALL (811) AT THE TIME OF SURVEY. THD DESIGN GROUP DOES NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE UTILITY INFORMATION SHOWN.

2. LOCATIONS ARE APPROXIMATE: THE LOCATIONS, SIZES, AND DEPTHS OF ALL EXISTING UTILITIES ARE TO BE CONSIDERED APPROXIMATE ONLY. THE ABSENCE OF A UTILITY ON THE PLANS DOES NOT CONSTITUTE A WARRANTY THAT NO UTILITY EXISTS WITHIN THE PROJECT LIMITS.

3. CONTRACTOR RESPONSIBILITY & VERIFICATION: IN ACCORDANCE WITH MISSOURI REVISED STATUTES CHAPTER 319, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR REQUESTING UTILITY LOCATES THROUGH MISSOURI ONE CALL (1–800–DIG–RITE) AT LEAST TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION.

4. FIELD EXPLORATION (POTHOLING): THE CONTRACTOR SHALL PHYSICALLY VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES BY NON–DESTRUCTIVE METHODS (E.G., HAND DIGGING OR VACUUM EXCAVATION) PRIOR TO THE COMMENCEMENT OF ANY GRADING, TRENCHING, OR CONSTRUCTION. ANY DISCREPANCIES BETWEEN FIELD FINDINGS AND THESE PLANS MUST BE REPORTED TO THD DESIGN GROUP AND THE UTILITY OWNER IMMEDIATELY AND BEFORE WORK PROCEEDS IN THE AFFECTED AREA.

5. LIABILITY: FAILURE BY THE CONTRACTOR TO VERIFY UTILITY LOCATIONS SHALL BE AT THEIR OWN RISK. THD DESIGN GROUP ASSUMES NO LIABILITY FOR DAMAGES OR DELAYS RESULTING FROM UTILITY DISCREPANCIES OR INTERFERENCE NOT PREVIOUSLY VERIFIED IN THE FIELD BY THE CONTRACTOR.

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SYMBOL LEGEND

EXISTING		PROPOSED	EXISTING		PROPOSED
×	FOUND CROSS	✖	TV	CABLE TV BOX	TV
○	FOUND IRON PIPE	○		LIGHT STANDARD	
●	SET IRON ROD	◉		CLEAN OUT	
	BENCHMARK		S	SANITARY MANHOLE	S
×500	SPOT GRADE	⌖ 500	ST	SAMPLING TEE	ST
TS	TRAFFIC SIGNAL BOX	TS	T	SEPTIC TANK ACCESS	T
▫	PHONE BOX	▫	D	STORM SEWER MANHOLE	D
U	UTILITY MANHOLE	U		GRATE INLET	
○	BOLLARD	○		AREA INLET	
✉	MAILBOX	✉		DOWNSPOUT	
▫	SIGN	▫		DRAINAGE SWALE	
▫	POST	▫	516	SURFACE CONTOUR	516
	SHRUB			TREE LINE	
	DECIDUOUS TREE		8" PVC	SAN. SEWER	8" PVC
	EVERGREEN TREE		12" CMP	STORM SEWER	12" CMP
EB	ELECTRIC BOX	EB	OH	OVERHEAD ELECTRIC LINE	OH
EM	ELECTRIC METER	EM	UE	UNDERGROUND ELECTRIC	UE
	UTILITY POLE		G	GAS LINE	G
	GUY WIRE		W	WATER LINE	W
	GAS METER		T	TELEPHONE LINE	T
GV	GAS VALVE	GV	FOL	FIBER OPTIC LINE	FOL
	WATER METER		UTV	CABLE TV	UTV
WV	WATER VALVE	WV		GUARDRAIL	
	HYDRANT		X	WIRE FENCE	X
	WATER SHUT OFF			WROUGHT IRON FENCE	
⊙	SPRINKLER HEAD	⊙		CHAIN LINK FENCE	
⊗	IRRIGATION VALVE BOX	⊗	MH A	SANITARY DESIGNATOR	MH A
W	WELL	W	CI 204	STORM DESIGNATOR	CI 204
TP	TEST HOLE	TP			

ABBREVIATIONS

AC	ACRE	XSEC	CROSS SECTION	DAI	DOUBLE AREA INLET	GI	GRATE INLET	PVMT	PAVEMENT	TBP	TO BE PROTECTED
AI	AREA INLET	XING	CROSSING	DS	DOWNSPOUT	HDPEHIGH	DENSITY POLYETHYLENE	PDE EASEMENT	PERMANENT DRAINAGE	TBR	TO BE REMOVED
ATG	ADJUST TO GRADE	CFS	CUBIC FEET PER SECOND	ESMT	EASEMENT	HW	HIGH WATER	PVC	POLYVINYL CHLORIDE	TBR&REL	TO BE REMOVED & RELOCATED
APPROX	APPROXIMATELY	CI	CURB INLET	ELEV	ELEVATION	HGL	HYDRAULIC GRADE LINE	PCC	PORTLAND CEMENT CONCRETE	TBR&R	TO BE REMOVED & REPLACED
ASPH	ASPHALT	CO	CLEANOUT	EP	END OF PIPE	HYD	HYDRANT	PC	PRECAST CONCRETE	TW	TOP OF WALL ELEVATION
BW	BASE OF WALL ELEVATION	C&G	CURB & GUTTER	EX	EXISTING	IMP	IMPROVEMENT	PROP	PROPOSED	TYP	TYPICAL
BM	BENCHMARK	CO	CLEANOUT	FPS	FEET PER SECOND	IP	IRON PIPE OR PIN	RR	RAILROAD	UIP	USE IN PLACE
BMP	BEST MANAGEMENT PRACTICE	CMP	CORRUGATED METAL PIPE	FF	FINISH FLOOR	LS	LAND SURVEYOR	RCP	REINFORCED CONCRETE PIPE	VCP	VITRIFIED CLAY PIPE
BLDG	BUILDING	CONC	CONCRETE	FH	FIRE HYDRANT	MH	MANHOLE	ROW	RIGHT–OF–WAY	WV	WATER VALVE
CATV	CABLE TELEVISION	DCI	DOUBLE CURB INLET	FE	FLARED END	MSD	METROPOLITAN ST. LOUIS SEWER DISTRICT	SCH	SCHEDULE	YD	YARD DRAIN
CALC	CALCULATED	DIP	DUCTILE IRON PIPE	FBD	FLAT BOTTOM DITCH	NTS	NOT TO SCALE	SWPPP	STORMWATER POLLUTION PREVENTION PLAN		
CIP	CAST IRON PIPE	DIA	DIAMETER	FD	FLOOR DRAIN	OC	ON CENTER	TBA	TO BE ABANDONED		
CL	CENTERLINE	Q	DISCHARGE	FL	FLOW LINE	OH	OVERHEAD				
CP	CLAY PIPE			FTG	FOOTING						

MSD BASE MAP 22M3

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852 QUEEN ANNE PLACE

SITE PLAN

OVERALL PLAN

STATE OF MISSOURI
MARK L. KILGORE
NUMBER E-2000150026
09/29/2026
REGISTERED PROFESSIONAL ENGINEER

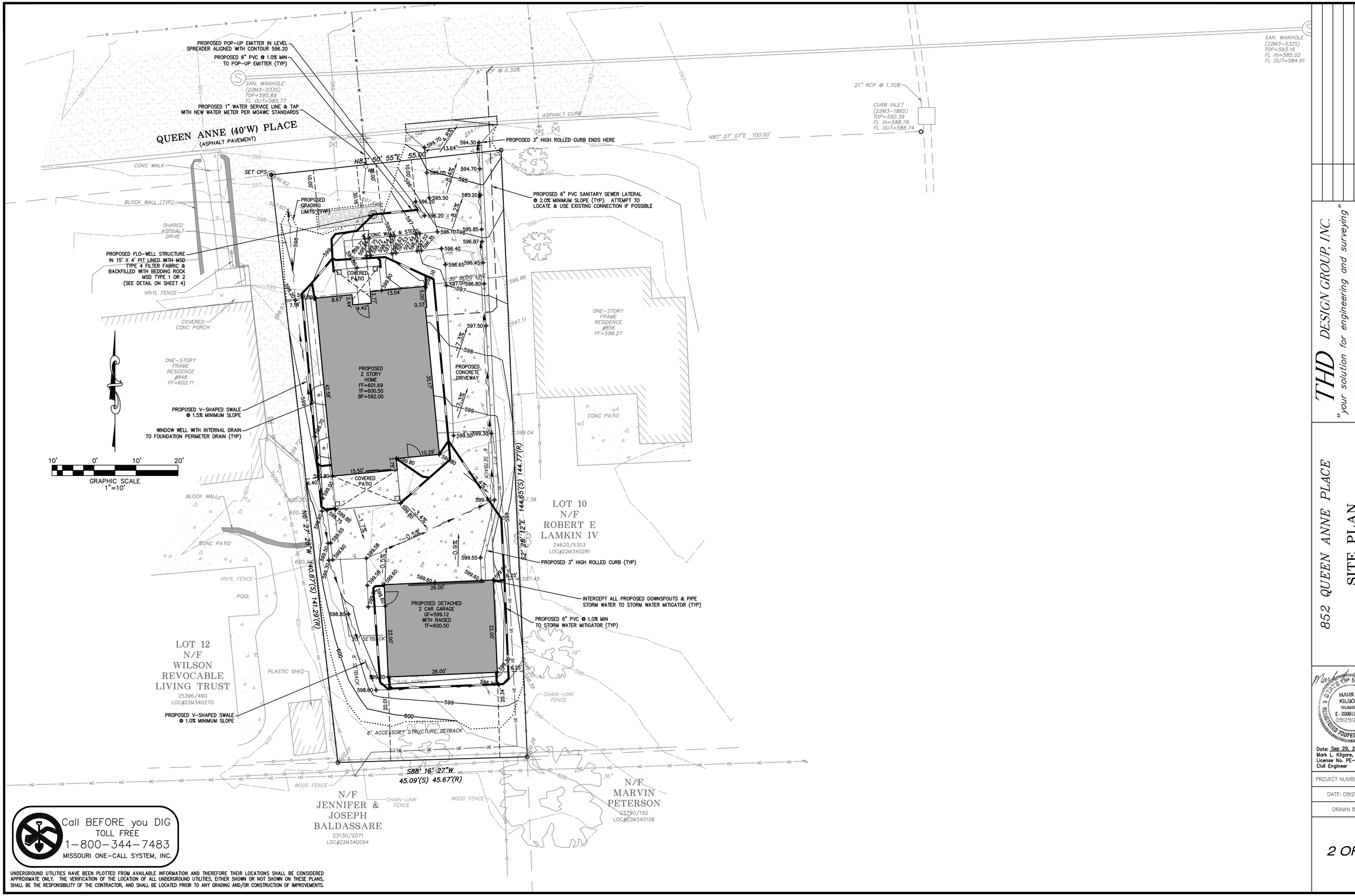
Date: Sep 29, 2026
Mark L. Kilgore, P.E.
License No. PE–2000150026
Civil Engineer

PROJECT NUMBER: 25-5101

DATE: 09/29/2026

DRAWN BY: MK

1 OF 4



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SITE PLAN

SITE DEVELOPMENT PLAN

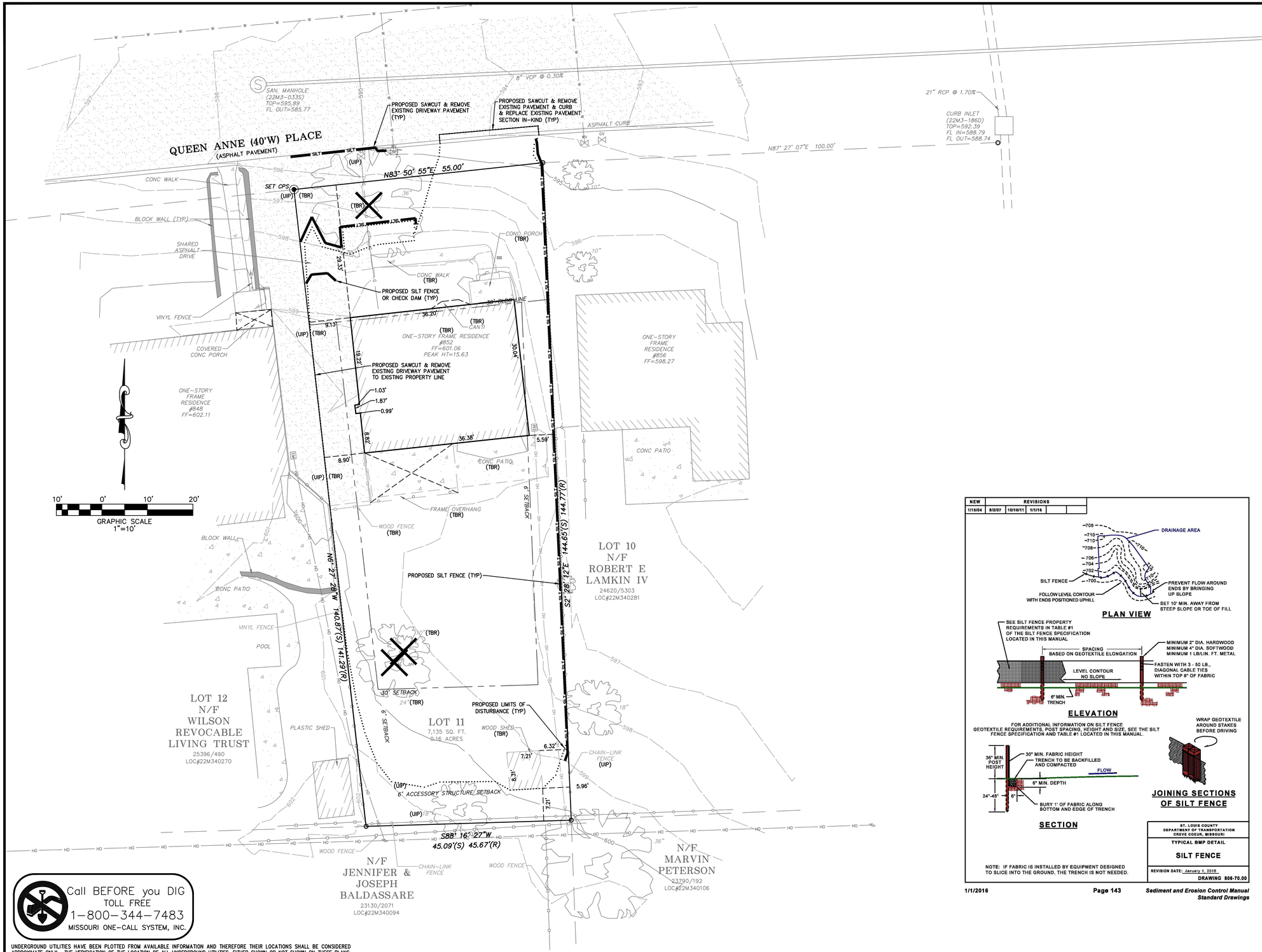
MARK L KILGORE NUMBER E-2000150026 09/29/2026 REGISTERED PROFESSIONAL ENGINEER

Date: Sep 29, 2026
Mark L. Kilgore, P.E.
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Civil Engineer

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NEW	REVISIONS				
1/15/04	8/2/07	10/10/11	1/1/16		

NOTE: IF FABRIC IS INSTALLED BY EQUIPMENT DESIGNED TO SLICE INTO THE GROUND, THE TRENCH IS NOT NEEDED.

ST. LOUIS COUNTY DEPARTMENT OF TRANSPORTATION CREVE COEUR, MISSOURI

TYPICAL BMP DETAIL

SILT FENCE

REVISION DATE: January 1, 2016 DRAWING 806-70.00

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SITE PLAN

EXISTING CONDITIONS & DEMOLITION PLAN

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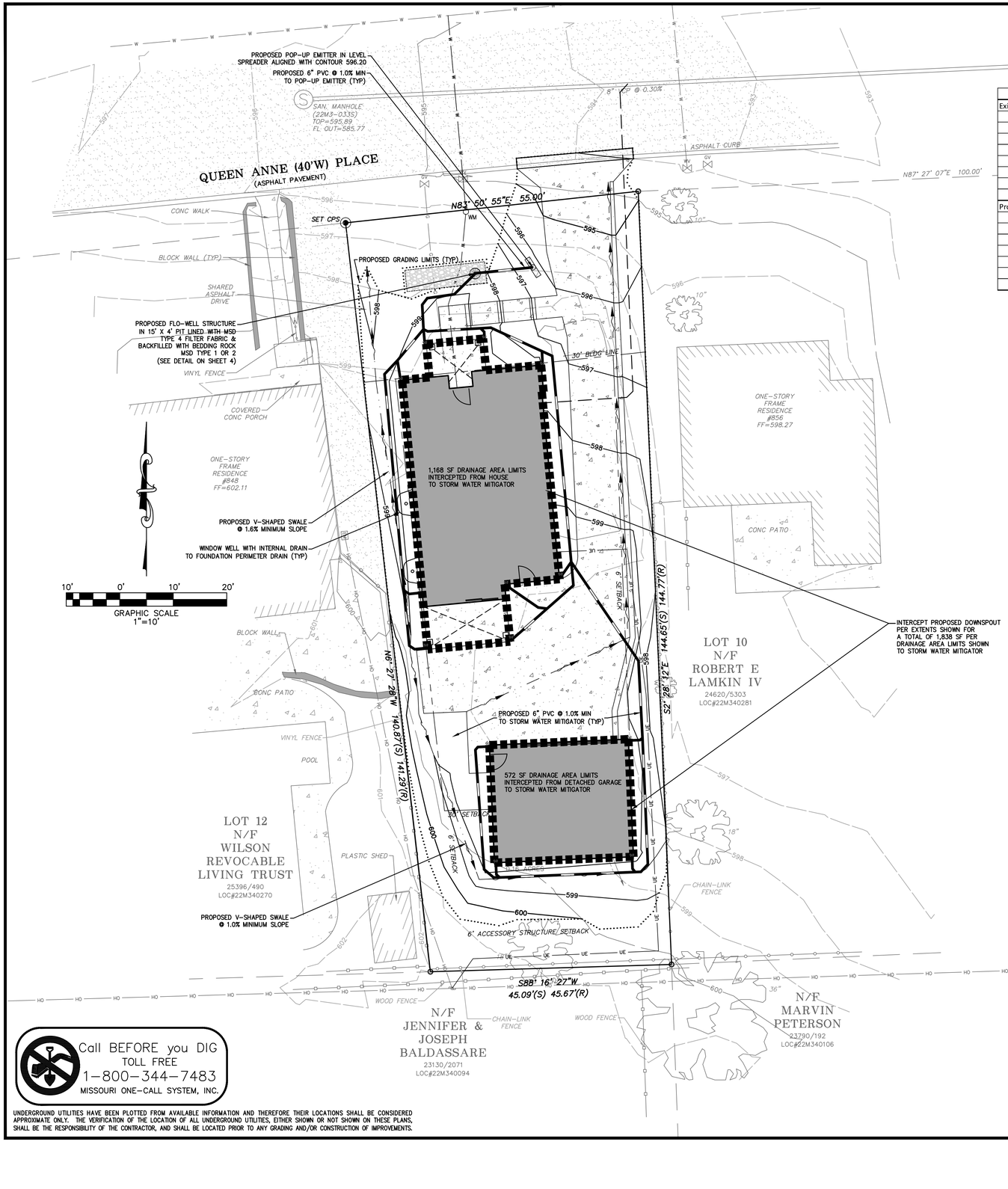
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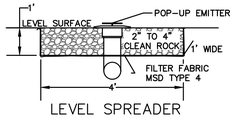
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DATE: 09/29/2026

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LEVEL SPREADER
TYPICAL SECTION

NOT TO SCALE

NOTES:
1. ALL PIPE SHALL BE SCHEDULE 40 PVC OR APPROVED EQUAL.

2. ALL PERFORATED PIPE SHALL BE WRAPPED IN POLYESTER FILTER SOCK.

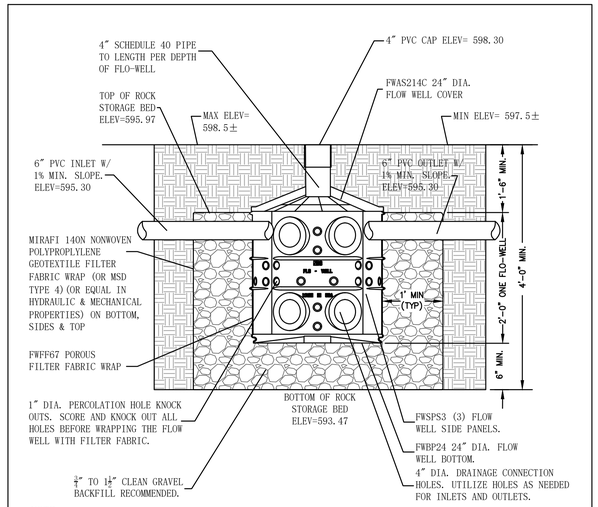
Coverage Calculations				
Existing				
	Building & porches	1,408		19.7%
	Pavement	1,035		14.5%
	Street	0		0.0%
	Green Space	4,692		65.8%
	Total	7,135		
	Existing Impervious Coverage			34.2%
Proposed				
	Building & porches	1,838		25.8%
	Pavement	1,829		25.6%
	Street	0		0.0%
	Green Space	3,468		48.6%
	Total	7,135		
	Proposed Impervious Coverage			51.4%

Differential Runoff Calculations						
Existing						
		Area (sf)	Area (ac)	PI	Q	
	existing impervious sum	2,443	0.056	3.54	0.199	cfs
	ex pervious sum	4,752	0.109	1.70	0.185	cfs
	Total	7,195	0.1652	ac	**0.384**	cfs
			0.17	ac		
Proposed						
		Area (sf)	Area (ac)	PI	Q	
	proposed impervious sum	3,667	0.084	3.54	0.298	cfs
	proposed pervious sum	3,528	0.081	1.70	0.138	cfs
	Total	7,195	0.1652	ac	**0.436**	cfs
			0.17	ac		
	Differential Runoff =				**0.052**	**cfs**
	Existing impervious amount total =	2,443	sf			
	Proposed impervious amount total =	3,667	sf			
	Differential impervious = min imp to intercept =	1,224	sf			
	Actual impervious area intercepted per DA map =	1,838	sf >= min required therefore sufficient			

DIFFERENTIAL RUN OFF MITIGATION CALCULATION

15yr-20min DIFFERENTIAL RUNOFF:	0.052	cfs								
20min DIFFERENTIAL VOLUME REQUIRED:	0.052	cfs	x	20	min	x	60	sec	=	62.40 cf
FLO-WELL DRY WELL VOLUME:	1	units	x	50.00	gal	/	7.48	gal / cf	=	6.68 cf
Rock pit width, W, dimension (4 ft min):	4	ft	Rock area = L x W =		60	sf	Flo-Well depth		2	ft (constant)
Rock pit length, L, dimension (4 ft min):	15	ft								
Flo-Well diameter:	2	ft	Well area = pi r^2 =		3.1416	sf	Difference	=	56.86	sf
Rock volume at Flo-Well depth =	2	ft	x	56.86 0.17	sf	=	113.72	cf		
Depth of rock under Flo-Well =	0.5	ft								
Rock volume under Flo-Well =	0.5	ft x	60.00	sf	=		30	cf		
Sum of 2 rock volumes =	113.72	cf +	30.00	cf	=		143.72	cf		
Rock void volume =	143.72	cf x	0.4	(40% void volume ratic	=		57.49	cf		
System storage provided:	6.68	cf	+	57.49	cf	=	64.17 62.40	cf provided cf required		

STORM WATER MITIGATION EXCEEDED



NOTE:

- MUST BE INSTALLED 10' AWAY FROM STRUCTURE OR FOUNDATION.
- FWAS24 KIT DOES NOT COME WITH FWPB24 BOTTOM.

NDS FLO-WELL INSTALLATION (WITH GRAVEL & FILTER FABRIC WRAP)

NOT TO SCALE

STORM WATER MITIGATOR

ROCK PIT: 15'L X4'W

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SITE PLAN

PROPOSED DRAINAGE AREA MAP
& STORM WATER MITIGATION PLAN

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