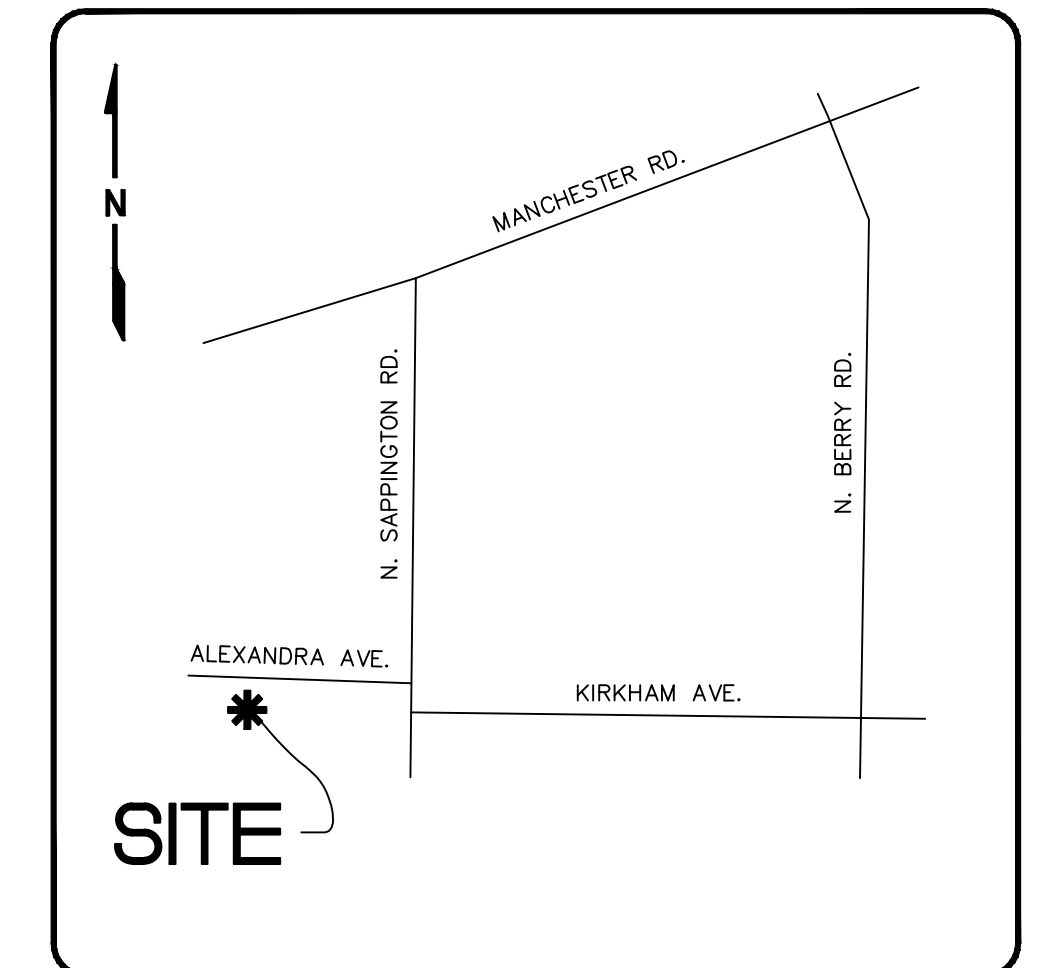


LEGEND

DESCRIPTION	SYMBOL
EXISTING MAJOR CONTOUR	---500---
EXISTING MINOR CONTOUR	---502---
PROPOSED MAJOR CONTOUR	—504—
PROPOSED MINOR CONTOUR	—502—
PROPOSED SPOT ELEVATION	+502.00
EXISTING SANITARY SEWER	—●—
EXISTING STORM SEWER	—□—
PROPOSED SANITARY SEWER	—●—
PROPOSED STORM SEWER	—■—
EXISTING WATERLINE	—W—
EXISTING FIRE HYDRANT	—●—
EXISTING GAS LINE	—G—
EXISTING OVERHEAD UTILITY	—OW—
USE IN PLACE	(U.I.P.)
ADJUST TO GRADE	(A.T.G.)
TO BE REMOVED	(T.B.R.)
TO BE REMOVED AND REPLACED	(T.B.R.&R.)
TO BE REMOVED AND RELOCATED	(T.B.R.&REL.)

FF = FINISHED FLOOR ELEVATION
 TF = TOP OF FOUNDATION ELEVATION
 BF = BASEMENT FLOOR ELEVATION
 GF = GARAGE FLOOR ELEVATION
 CO = CLEAN OUT
 DS = DOWNSPOUT
 TC = TOP OF CURB ELEVATION
 BC = BOTTOM OF CURB ELEVATION

SITE PLAN
814 ALEXANDRA AVE.
 CITY OF GLENDALE, ST. LOUIS COUNTY, MISSOURI



LOCATION MAP
N.T.S.

GENERAL NOTES

- BOUNDARY & IMPROVEMENT SURVEY PROVIDED BY ALTEA SURVEYING.
- GRADING AND STORMWATER DRAINAGE TO CONFORM TO THE STANDARDS OF THE CITY OF GLENDALE, MSD, AND MoDNR.
- SLOPES SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL.
- SANITARY SEWERS TO MEET THE CITY OF GLENDALE AND M.S.D. STANDARDS ON SITE.
- ALL UTILITY SERVICES SHALL BE UNDERGROUND.
- UTILITY INFORMATION PER SURVEY PROVIDED AND AVAILABLE RECORDS.
- ALL PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED TO THE CITY OF GLENDALE STANDARDS.
- THE FINISHED GRADE LEVEL AT THE BUILDING TO BE MINIMUM OF 6" BELOW TOP OF FOUNDATION FOR MASONRY AND 8" FOR FRAME AND BRICK VENER.
- THE GROUND IMMEDIATELY ADJACENT TO THE FOUNDATION SHALL BE SLOPED AWAY FROM THE BUILDING AT A SLOPE OF NOT LESS THAN ONE UNIT VERTICAL IN 12 UNITS HORIZONTAL (1:12) FOR A MINIMUM DISTANCE OF 8 FEET MEASURED PERPENDICULAR TO THE FACE OF THE WALL.
- ALL GRADING SHALL CONFORM TO THE APPROVED GRADING PLAN.
- FOUNDATION FOOTINGS SHALL BE CONSTRUCTED SO AS TO MAINTAIN A 2"6" DEPTH OF EARTH COVER OR AS REQUIRED BY THE LOCAL BUILDING CODES.
- BUILDING DIMENSIONS ARE TO BE VERIFIED WITH ARCHITECT PRIOR TO EXCAVATION OR CONSTRUCTION.
- THIS IS NOT A SURVEY AND DOES NOT MEET THE "MISSOURI MINIMUM STANDARDS FOR BOUNDARY SURVEYS."
- ALL SEWER CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE METROPOLITAN ST. LOUIS SEWER DISTRICT STANDARD CONSTRUCTION SPECIFICATIONS FOR SEWER AND DRAINAGE FACILITIES, 2009.
- LEAF SCREENS ARE RECOMMENDED ON ALL DOWNSPOUTS THAT ARE PIPED TO STORM WATER BMP. SEE DOWNSPOUT DETAIL.

PROJECT DATA

LOCATOR NO. : 22M321635
 ADDRESS : 814 ALEXANDRA AVE., GLENDALE, MO 63122
 OWNER : JOLEN INVESTMENTS LLC
 AREA OF TRACT : 9,000 S.F. (0.207AC.)
 PRESENT ZONING : R-2
 PRESENT USAGE : SINGLE FAMILY RESIDENCE
 PROPOSED USAGE : SINGLE FAMILY RESIDENCE
 SCHOOL DISTRICT : KIRKWOOD
 FIRE DISTRICT : GLENDALE
 WATERSHED(S) : RIVER DES PERES
 FIRM PANEL : 29189C0307K
 UTILITIES : MISSOURI-AMERICAN WATER CO., METRO, ST. LOUIS SEWER DIST., SPIRE / LACLEDE GAS COMPANY, AT&T TELEPHONE COMPANY, AMEREN UTE

YARD SETBACK REQUIREMENTS

FRONT: 35.17' (AVERAGE OF ADJACENT HOUSES) (30' MINIMUM)
 SIDE: 6'
 REAR: 30'
 ACCESSORY BUILDINGS: 6' FROM SIDE & REAR

SITE COVERAGE

	AREA (S.F.)	AREA (AC.)	PERCENTAGE
TOTAL SITE	9,000	0.207	
EXISTING IMPERVIOUS	1,736	0.040	19.3%
PROPOSED IMPERVIOUS	4,247	0.097	47.2% *
CHANGE	+2,511	+0.057	+245%
FRONT YARD SETBACK	1,800	0.041	
EXISTING IMPERVIOUS	293	0.007	16.3%
PROPOSED IMPERVIOUS	439	0.010	24.4% **
CHANGE	+146	+0.003	+150%

* NO MORE THAN 55% ALLOWABLE PER SECTION 3B
 ** NO MORE THAN 45% ALLOWABLE PER SECTION 3B

- PROPOSED BUILDINGS (2,614 S.F.) (ROOFS = 2,965 S.F.)
- PROPOSED PAVEMENT (1,633 S.F.) AND WALLS

DIFFERENTIAL RUNOFF

DESIGN STORM: 15-YEAR 20-MINUTE
 4.20 CFS/AC. ROOF SURFACE
 3.54 CFS/AC. PAVED SURFACE
 1.70 CFS/AC. PERVIOUS SURFACE

EXISTING CONDITIONS:
 HOUSE - 1,247 S.F. x 4.20 / 43,560 = 0.120
 PAVED - 489 S.F. x 3.54 / 43,560 = 0.040
 OPEN - 7,264 S.F. x 1.70 / 43,560 = 0.283
 TOTAL Q = 0.443 CFS

PROPOSED CONDITIONS:
 HOUSE - 2,319 S.F. x 4.20 = 0.223
 GARAGE - 646 S.F. x 4.20 = 0.062
 PAVED - 1,633 S.F. x 3.54 = 0.133
 OPEN - 4,402 S.F. x 1.70 = 0.172
 TOTAL Q = 0.590 CFS

NET INCREASE OF 0.15 CFS

STORM WATER CALCULATIONS

DESIGN STORM: 15-YEAR 20-MINUTE
 4.20 CFS/AC. ROOF SURFACE
 3.54 CFS/AC. PAVED SURFACE
 1.70 CFS/AC. PERVIOUS SURFACE

FOR NEW CONSTRUCTION, THE RUNOFF FROM THE ENTIRE ROOF AREA IS TO BE COLLECTED AND DETAINED.

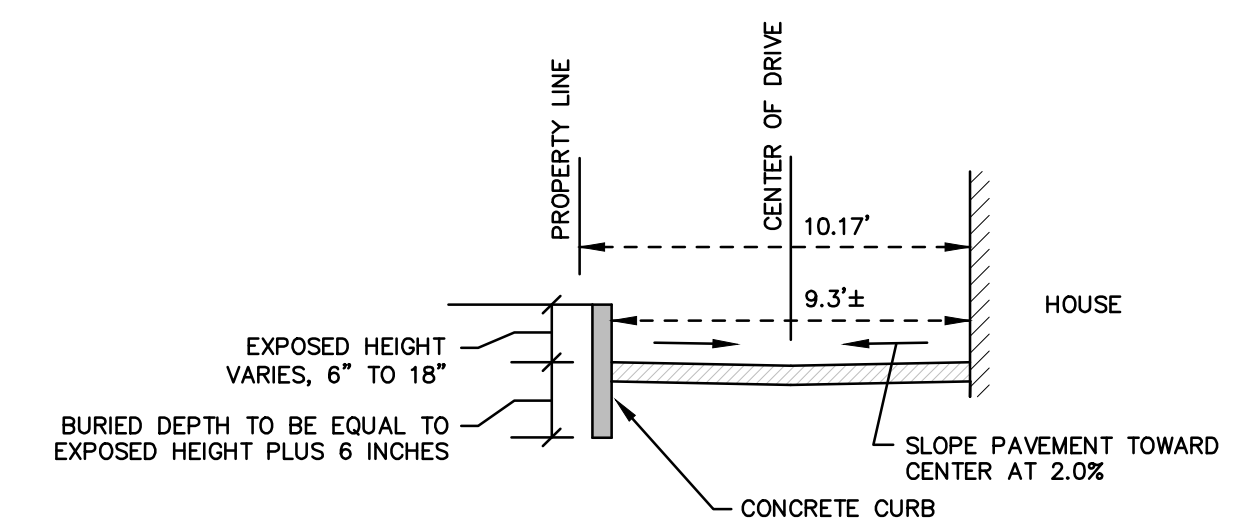
PROPOSED ROOF AREA: HOUSE = 2,319 S.F., GARAGE = 646 S.F., TOTAL = 2,965 S.F.

RUNOFF = 2,965 S.F. x 4.20 CFS/AC. / 43,560 = 0.286 CFS

RUNOFF VOLUME TO BE DETAINED:
 0.286 CFS x 60 S/MIN x 20 MIN = 343 C.F.

VOLUME OF PROPOSED DRY WELL:
 19.5' x 8.5' x 5' x 40% VOIDS = 331 C.F.
 PLUS FOUR 50 GAL FLO-WELLS x 60% = 16 C.F.

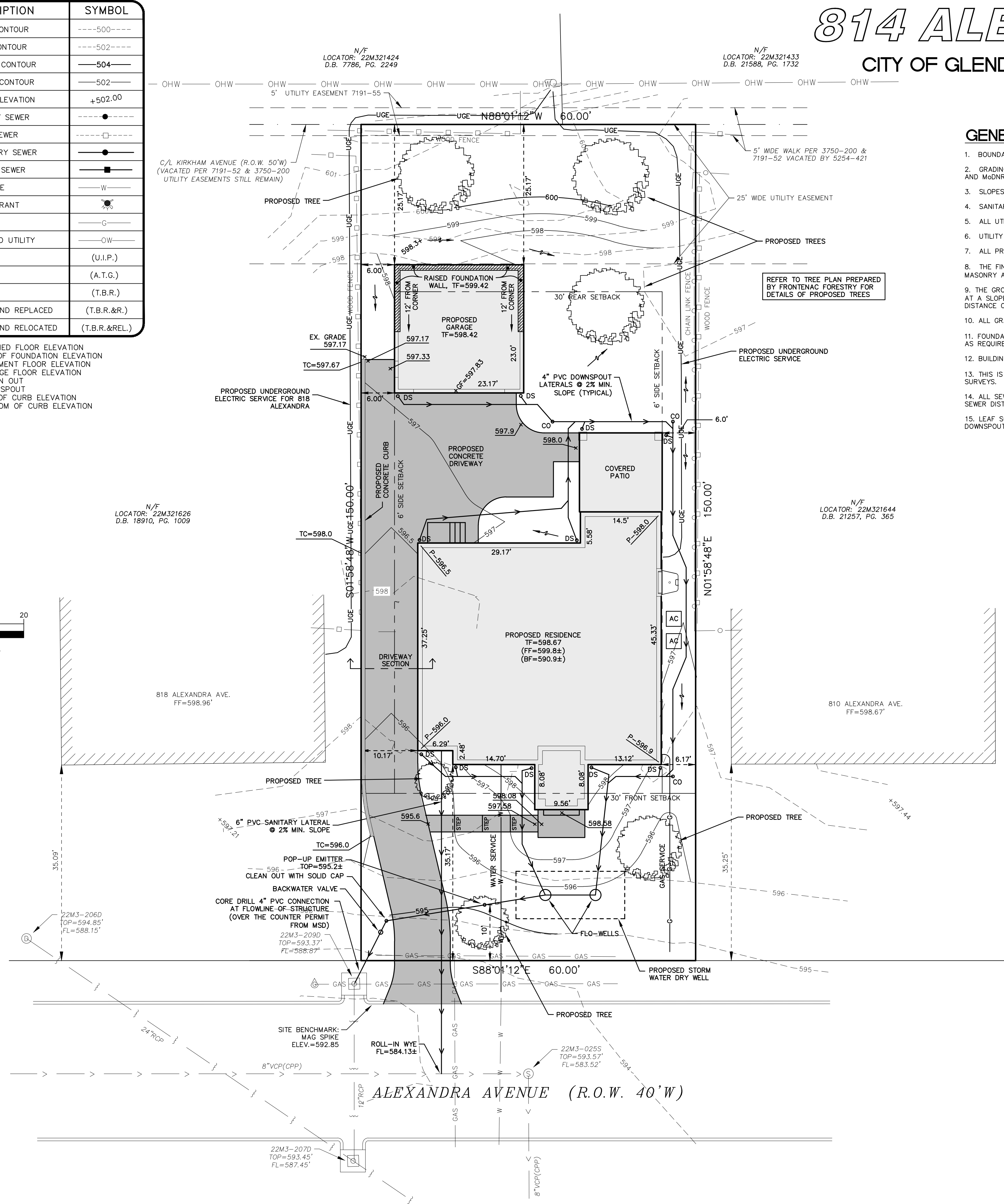
TOTAL VOLUME PROVIDED = 347 C.F.



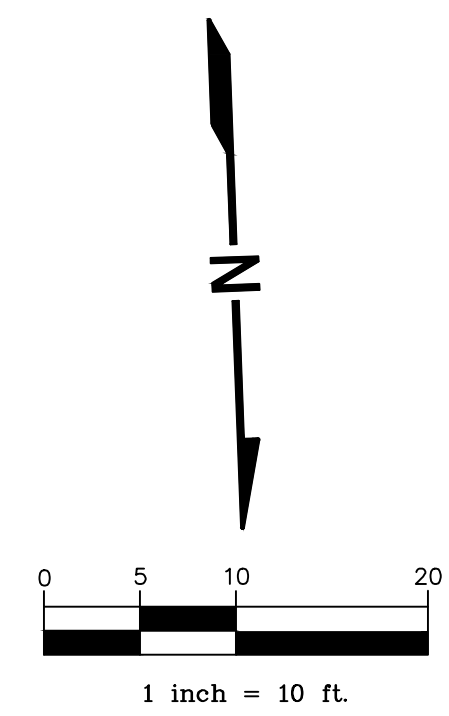
DRIVEWAY SECTION

EXISTING UTILITY NOTE

UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE RECORDS. THEREFORE, THE LOCATIONS OF ANY UNDERGROUND FACILITIES SHOWN HEREON MUST BE CONSIDERED APPROXIMATE. PRIOR TO BEGINNING WORK ON THE SITE, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXACT LOCATION OF THESE FACILITIES, ALONG WITH ANY IN EXISTENCE THAT ARE NOT SHOWN; TO VERIFY THEIR LOCATION BOTH HORIZONTALLY AND VERTICALLY (IN ACCORDANCE WITH THE REQUIREMENTS OF THE RESPECTIVE UTILITY/FACILITY OWNER); AND TO VERIFY THAT MINIMUM CLEARANCES AND COVER REQUIREMENTS BETWEEN THE EXISTING FACILITIES AND THE PROPOSED WORK WILL BE MET.



PROPOSED SITE PLAN



THE WORK PREPARED BY OR UNDER THE AUTHORITY OF THIS ENGINEER HAS BEEN AUTHENTICATED BY HIS SEAL AND DATED 05/14/26. THIS SEAL IS VALID ONLY FOR THE STATE OF MISSOURI. THE ENGINEER IS NOT RESPONSIBLE FOR THE ACCURACY OF ANY INFORMATION NOT SHOWN OR REFERRED TO IN THIS PLAN. THE ENGINEER'S RESPONSIBILITY IS LIMITED TO THE DESIGN AND CONSTRUCTION OF THE WORK SHOWN ON THIS PLAN. THE ENGINEER DOES NOT WARRANT THE ACCURACY OF ANY INFORMATION NOT SHOWN OR REFERRED TO IN THIS PLAN. THE ENGINEER'S RESPONSIBILITY IS LIMITED TO THE DESIGN AND CONSTRUCTION OF THE WORK SHOWN ON THIS PLAN.

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 814 Alexandra Avenue
 Glendale, MO 63122

Vance Engineering, Inc.
 10537 Lackland Road
 St. Louis, MO 63114
 P: 314.427.1800

VANCE ENGINEERING, INC.
 MISSOURI STATE CERTIFICATE OF AUTHORITY NO. 2003022184

814 ALEXANDRA AVENUE

SITE PLAN

MISSOURI PROFESSIONAL ENGINEER
 MICHAEL CLAY VANCE
 LICENSE NO. E-25616

6/2/2026
 PROFESSIONAL ENGINEER
 MISSOURI LIC NO E-25616

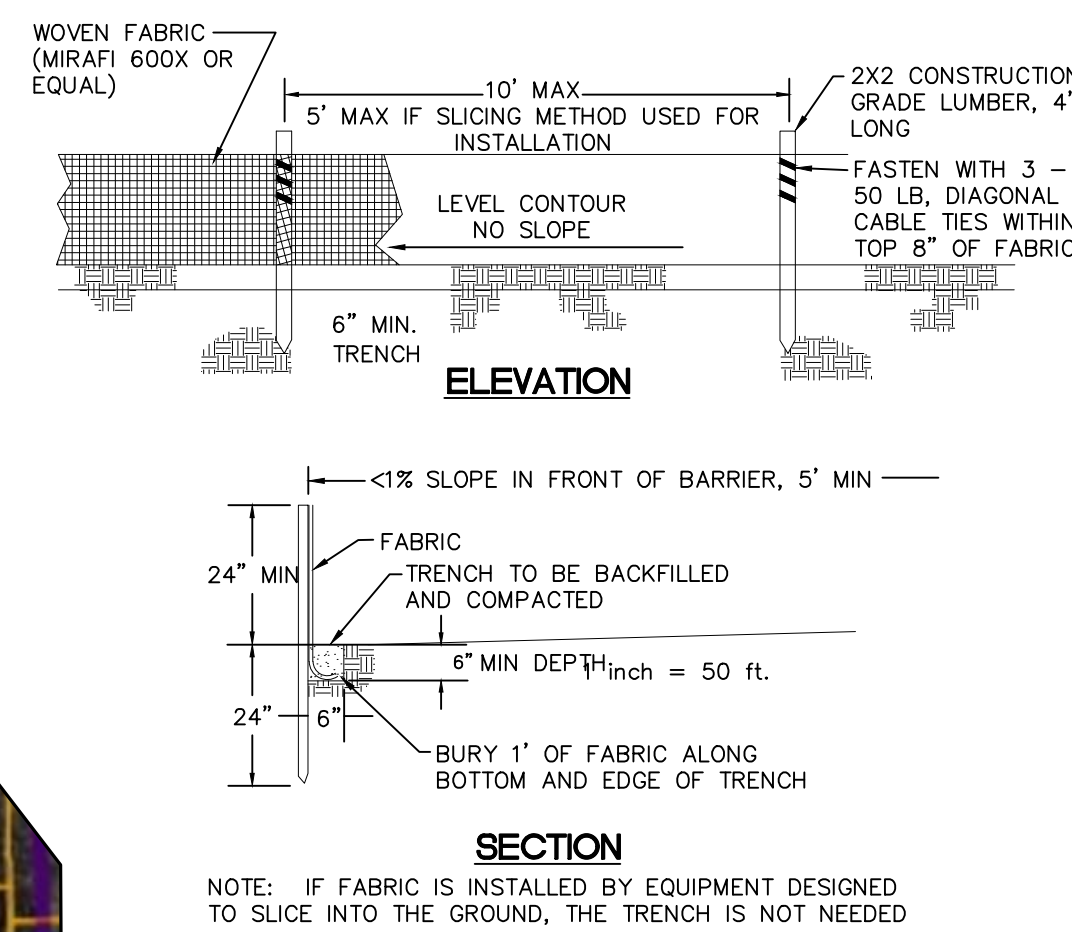
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06/01/26 CITY

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AERIAL - ADJOINING PROPERTIES

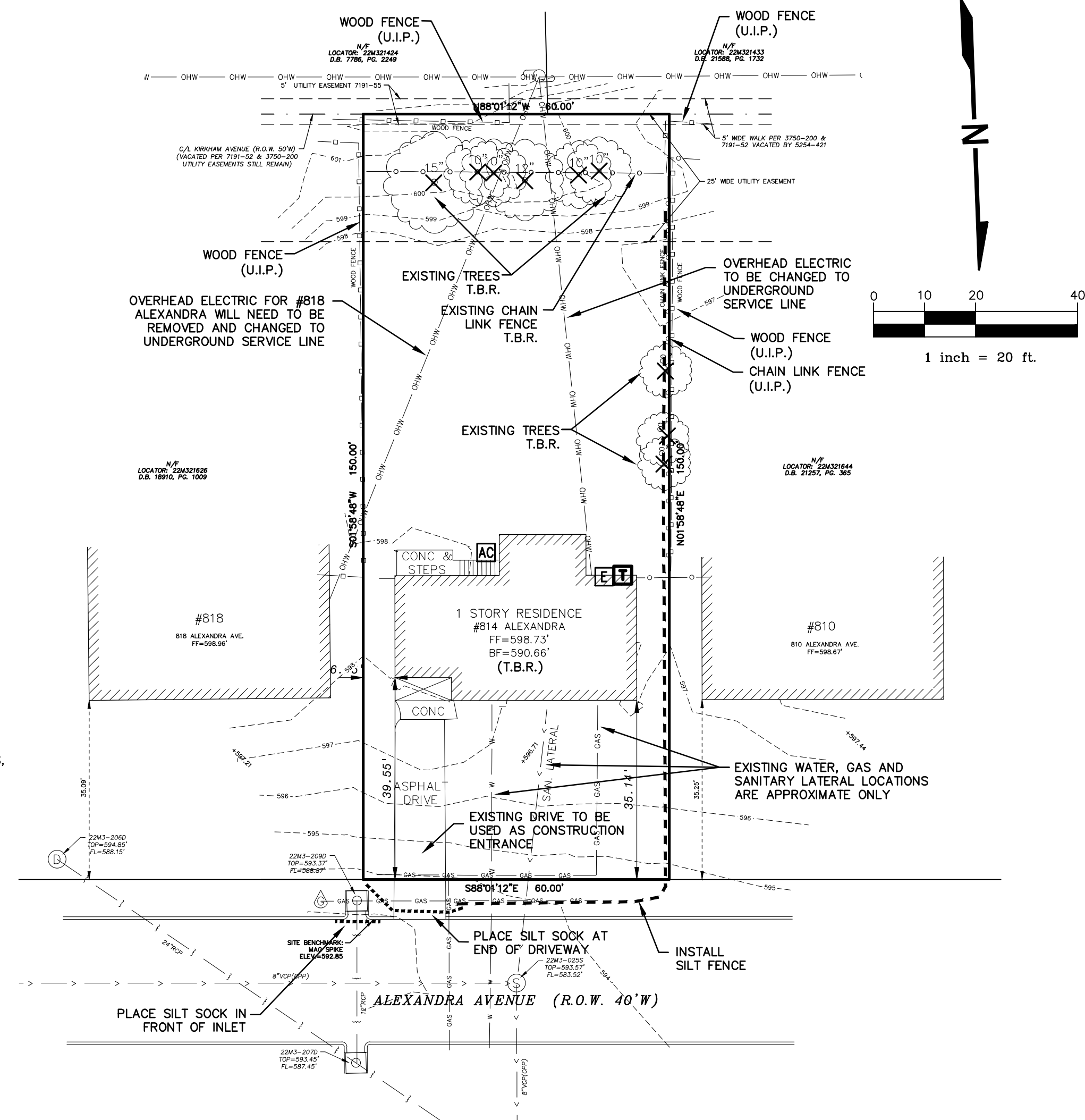


MAXIMUM SPACING ALONG SLOPES

3:1 SLOPES	30' FENCE TO FENCE
3:1 TO 10:1 SLOPES	50' FENCE TO FENCE
SLOPES <10%	100' FENCE TO FENCE

- NOTES:**
- SEE PLAN FOR INITIAL INSTALLATION LOCATION.
 - INSTALL SILT FENCE PRIOR TO DISTURBANCE OF NATURAL VEGETATION AND AT APPROPRIATE INTERVALS DURING CONSTRUCTION OF FILL SLOPES.
 - INSPECT & MAINTAIN FENCE AFTER EVERY RAINSTORM OR MINIMUM 2 WEEK INTERVALS DURING DRY PERIODS.
 - SILT IS TO BE REMOVED WHEN DEPTH ALONG THE FENCE REACHES 12" OR 1/2 THE FENCE HEIGHT.
 - REPAIR / REPLACE TORN OR CLOGGED FABRIC, LOOSE FABRIC, BROKEN POSTS, ETC. TO MAINTAIN INTEGRITY OF SILT FENCE THROUGHOUT CONSTRUCTION.
 - STABILIZE ANY AREAS SUSCEPTIBLE TO UNDERMINING AS SOON AS THEY ARE NOTICED.
 - EXTEND/ADD FENCE AS NECESSARY TO MAINTAIN/PROVIDE ADEQUATE PROTECTION.
 - UPON ESTABLISHMENT OF ADEQUATE VEGETATION, REMOVE FENCE, REGRADE AND VEGETATE TRENCH AREA.

SILT FENCE DETAIL
N.T.S.



BACKWATER VALVES



Quick View Backwater Valves with Extension Kit to Premade Lengths
Socket Valve with complete Extension Assembly in precut lengths.

Valve x Extension Size ¹	Socket Valve With Extension	Valve x Extension Size ¹	Socket Valve With Extension	Pressure Rating
2 x 12HT	S27SP-120	4 x 12HT	S47SP-120	43 psi (100 feet of head)
2 x 16HT	S27SP-160	4 x 16HT	S47SP-160	
2 x 20HT	S27SP-200	4 x 20HT	S47SP-200	
2 x 24HT	S27SP-240	4 x 24HT	S47SP-240	
2 x 36HT	S27SP-360	4 x 36HT	S47SP-360	
2 x 48HT	S27SP-480	4 x 48HT	S47SP-480	
3 x 12HT	S37SP-120	6 x 12HT	S67SP-120	
3 x 16HT	S37SP-160	6 x 16HT	S67SP-160	
3 x 20HT	S37SP-200	6 x 20HT	S67SP-200	
3 x 24HT	S37SP-240	6 x 24HT	S67SP-240	
3 x 36HT	S37SP-360	6 x 36HT	S67SP-360	
3 x 48HT	S37SP-480	6 x 48HT	S67SP-480	

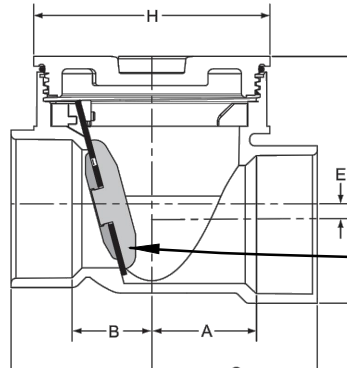
¹ - Size designates nominal valve size x extension height (HT-top of valve to top of extension, inches).

Quick View Service Access Extension Kit Only in Premade Lengths
Extension Assembly in precut lengths. Use existing valve top Access Plug.

Size ¹	Premade Extension	Size ¹	Premade Extension	Pressure Rating
2 x 12HT	SAEK-020-120	4 x 12HT	SAEK-040-120	43 psi (100 feet of head)
2 x 16HT	SAEK-020-160	4 x 16HT	SAEK-040-160	
2 x 20HT	SAEK-020-200	4 x 20HT	SAEK-040-200	
2 x 24HT	SAEK-020-240	4 x 24HT	SAEK-040-240	
2 x 36HT	SAEK-020-360	4 x 36HT	SAEK-040-360	
2 x 48HT	SAEK-020-480	4 x 48HT	SAEK-040-480	
3 x 12HT	SAEK-030-120	6 x 12HT	SAEK-060-120	
3 x 16HT	SAEK-030-160	6 x 16HT	SAEK-060-160	
3 x 20HT	SAEK-030-200	6 x 20HT	SAEK-060-200	
3 x 24HT	SAEK-030-240	6 x 24HT	SAEK-060-240	
3 x 36HT	SAEK-030-360	6 x 36HT	SAEK-060-360	
3 x 48HT	SAEK-030-480	6 x 48HT	SAEK-060-480	

¹ - Size designates nominal valve size x extension height (HT-top of valve to top of extension, inches). All extension kits can be cut shorter in the field for custom fits.

STANDARD VALVE



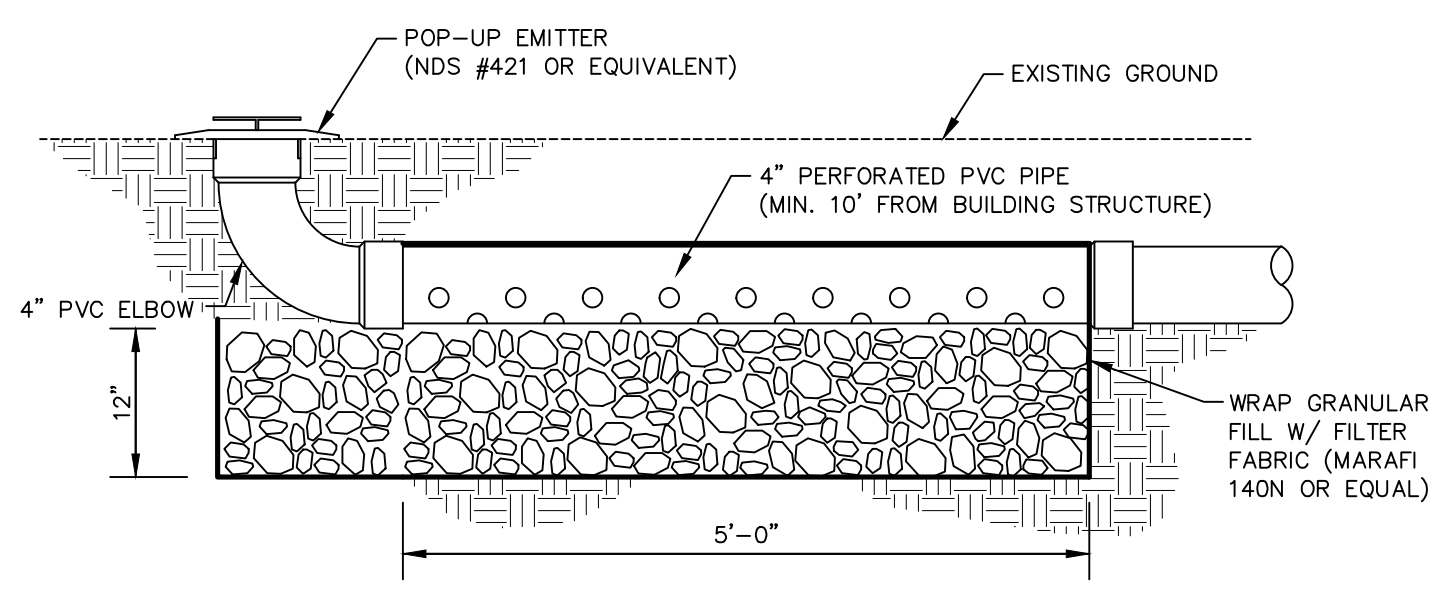
Standard Valve Dimensions (inches)

Size	A	B	C	E	F	G	H	I
2	1-13/16	1-3/4	2-5/8	5/16	3-1/4	5-9/32	4-3/16	4-9/16
3	2-5/8	2	4-3/16	13/32	4-1/8	7-3/4	6	6-1/8
4	3-5/8	3-3/4	5-7/16	23/32	5-7/16	10-15/16	8-1/4	7-15/16
6	4-3/4	4-5/8	7-3/4	13/16	7-3/16	15-3/8	11-1/4	10-13/16

Valve with Extension Kit Dimensions (inches)

HEIGHT-D	Valve Size			
	2	3	4	6
12	10-3/4	10-7/8	10-1/4	10-1/4
16	14-3/4	14-7/8	14-1/4	14-1/4
20	18-3/4	18-7/8	18-1/4	18-1/4
24	22-3/4	22-7/8	22-1/4	22-1/4
36	34-3/4	34-7/8	34-1/4	34-1/4
48	46-3/4	46-7/8	46-1/4	46-1/4

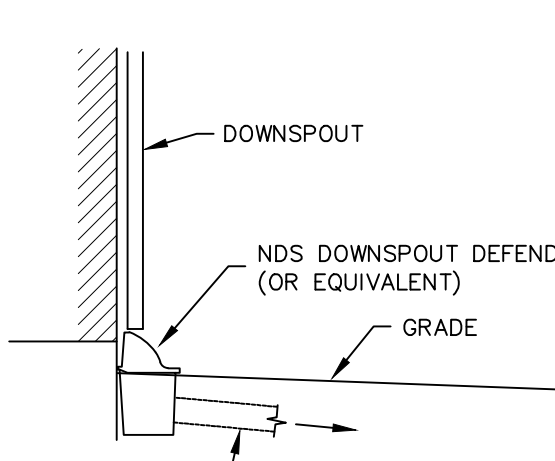
D = Top of plug Standard Valve to top of plug with Extension



- NOTES:**
- GRANULAR FILL SHALL BE 1" MIN. CLEAN DRAINAGE ROCK.
 - COMPACT SOIL MATERIAL UNDER LAWN TO 85% MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED PROCTOR COMPACTION TEST. (ASTM D 1557)

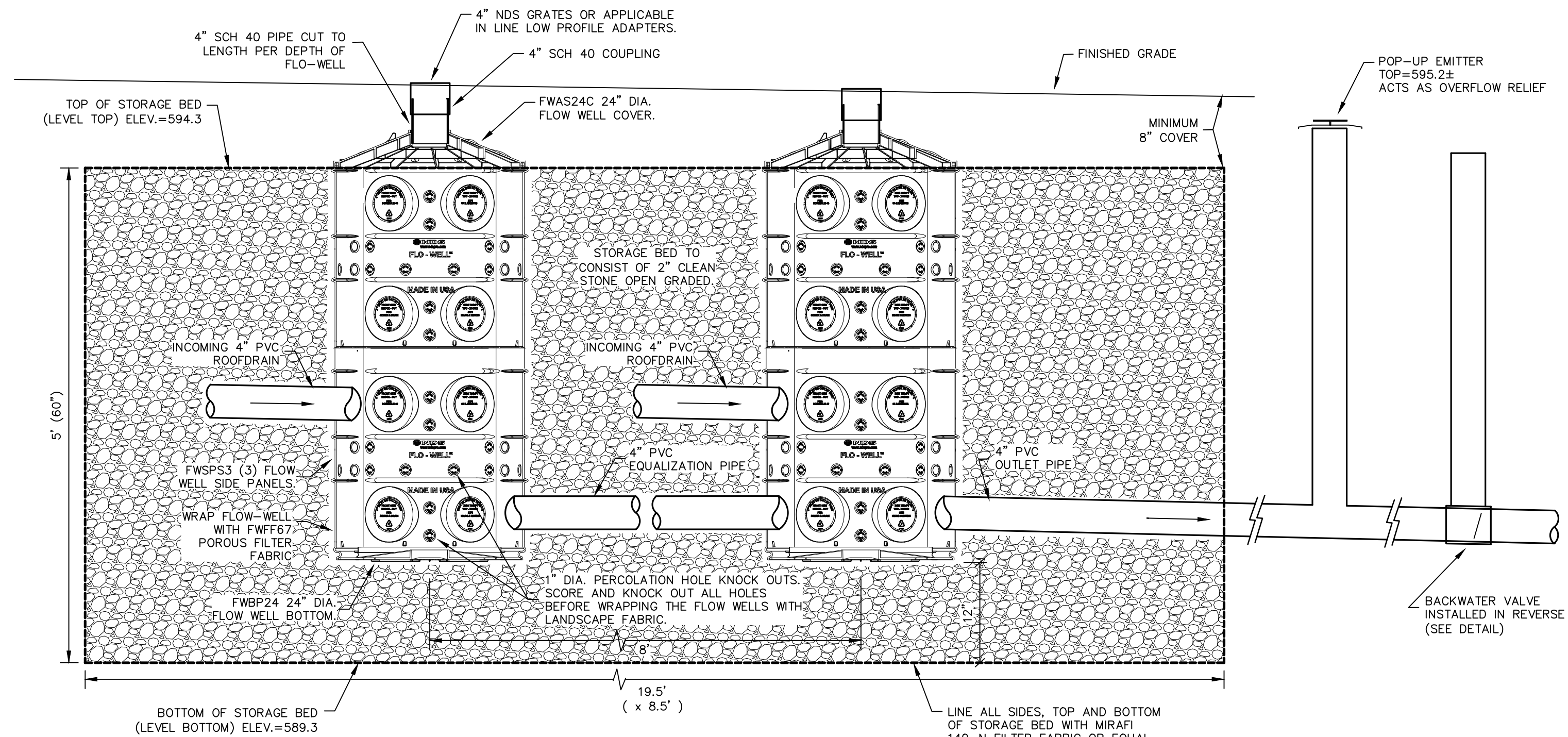
POP-UP EMITTER

POP-UP EMITTERS TO BE LOCATED NO CLOSER THAN 10 FEET TO PUBLIC SIDEWALKS, STREETS, OR NEIGHBORING PROPERTY LINES.



DOWNSPOUT DETAIL

FOR DOWNSPOUTS THAT ARE PIPED TO DRY WELL



STORM WATER STORAGE BED (DRY WELL) with NDS FLO-WELL

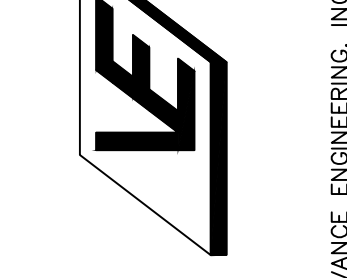
NOTE: CONTRACTOR SHALL REFER TO AND FOLLOW THE INSTALLATION PROCEDURES PROVIDED IN THE MANUFACTURERS INSTALLATION GUIDE.

EXISTING UTILITY NOTE

UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE RECORDS. THEREFORE, THE LOCATIONS OF ANY UNDERGROUND FACILITIES SHOWN HEREON MUST BE CONSIDERED APPROXIMATE. PRIOR TO BEGINNING WORK ON THE SITE, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXACT LOCATION OF THESE FACILITIES, ALONG WITH ANY IN EXISTENCE THAT ARE NOT SHOWN; TO VERIFY THEIR LOCATION BOTH HORIZONTALLY AND VERTICALLY (IN ACCORDANCE WITH THE REQUIREMENTS OF THE RESPECTIVE UTILITY FACILITY OWNER); AND TO VERIFY THAT MINIMUM CLEARANCES AND COVER REQUIREMENTS BETWEEN THE EXISTING FACILITIES AND THE PROPOSED WORK WILL BE MET.

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814 ALEXANDRA AVENUE

SITE PLAN

02/2026
MICHAEL CLAY VANCE
PROFESSIONAL ENGINEER
MISSOURI LIC NO E-25616

REVISOR

06/01/26 CITY

26048

05/14/26

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