

INDEX	
SHEET NO.	DRAWINGS INDEX
1	TITLE SHEET
2	EXISTING OVERALL SITE PLAN
3	PROPOSED OVERALL SITE PLAN
4	PROPOSED SITE PLAN - BASE BID
5	PROPOSED SITE PLAN - ALTERNATE #4
6	PROPOSED SITE PLAN - ALTERNATE #6
7	CONSTRUCTION DETAILS - BASE BID
8	PROPOSED SITE GRADING AND EROSION CONTROL - BASE BID
9	PROPOSED SITE GRADING AND EROSION CONTROL - ALTERNATE #4
10	PROPOSED SITE GRADING AND EROSION CONTROL - ALTERNATE #6
11	SPOT ELEVATIONS - BASE BID
12	SPOT ELEVATIONS - ALTERNATE #4
13	SPOT ELEVATIONS - ALTERNATE #6
14	WATER MAIN PLAN - BASE BID
15	WATER MAIN PLAN - ALTERNATE #4
16	WATER MAIN PLAN - ALTERNATE #6
17	SEWER PLAN AND PROFILE
18	SEPTIC SYSTEM SITE PLAN
19	ELECTRICAL SITE PLAN
20	ENLARGED ELECTRICAL SITE PLAN
21	ELECTRICAL ONE-LINE DIAGRAM
22	ELECTRICAL DETAILS
23	CAMPSITE DETAILS
24	COMFORT STATION DETAIL
25	SITE DETAILS
26	PROCESS DETAILS
27	SEPTIC SYSTEM DETAILS
28	TEMPORARY EROSION CONTROL DETAILS



Indiana 811

Know what's below.
Call before you dig.

CALL TWO WORKING DAYS BEFORE YOU DIG
Call 811 or 800-382-5544

INDIANA DEPARTMENT OF
NATURAL RESOURCES



FERDINAND
STATE FOREST

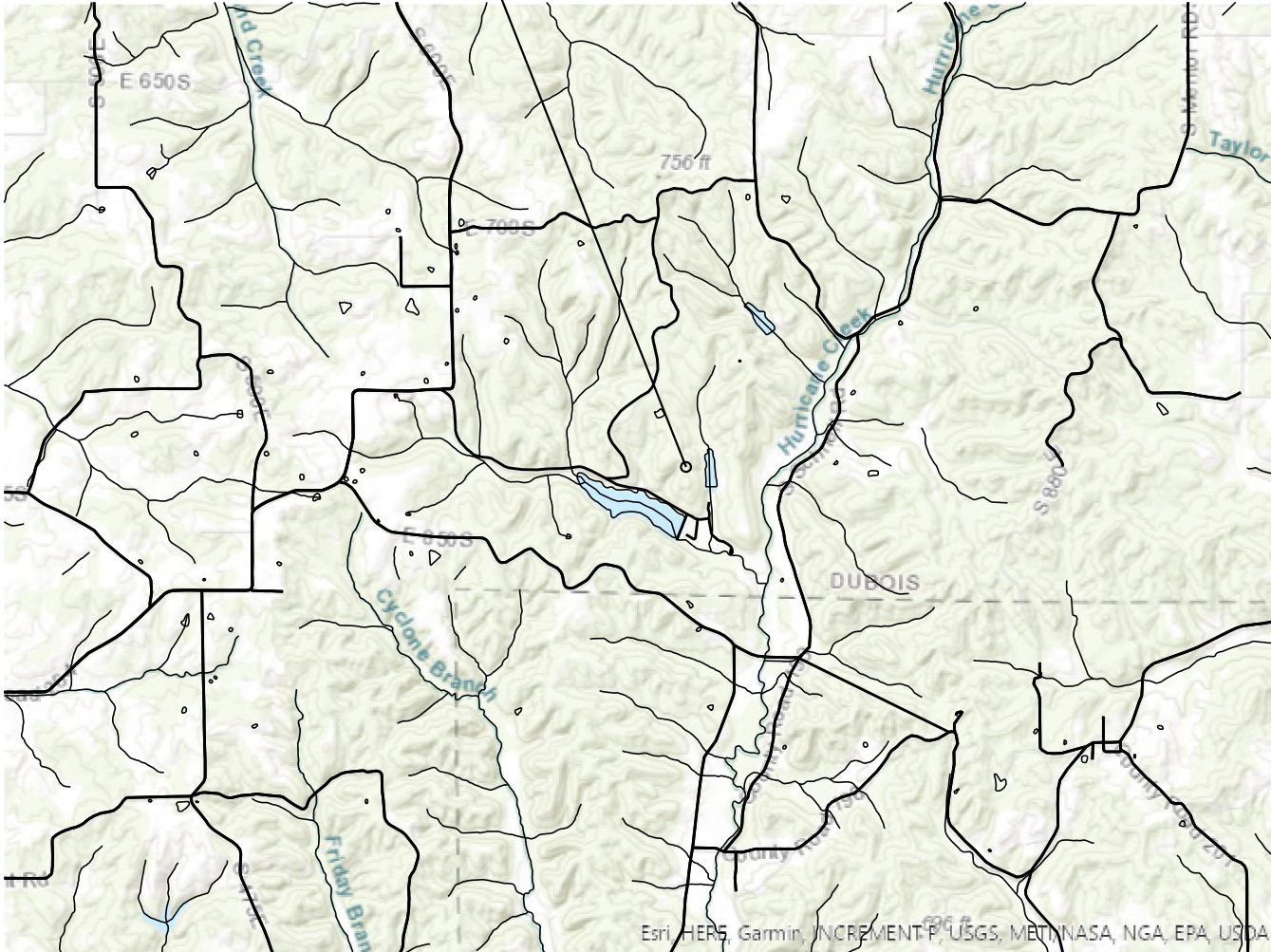
PROJECT NO: CDC 2409631016/ENG2209631441

CAMPGROUND IMPROVEMENTS
BASE BID AND ALTERNATES

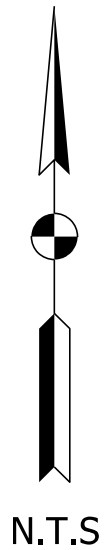


Project Description
RECONSTRUCTION OF EXISTING CAMPSITES & PAVEMENT AROUND CAMPSITES.
LOCATED APPROXIMATELY 5 MILES SOUTH-WEST OF ST. ANTHONY AND 6 MILES NORTHEAST OF FERDINAND
IN SECTION 7 & 18, T-3-S, R-3-W IN FERDINAND TOWNSHIP, IN DUBOIS COUNTY, INDIANA

PROJECT LOCATION



VICINITY MAP



PROJECT AREA



LEGEND			
	Road		Fire Tower
	Property Boundary		Property Office
	FL - Fire Lane*		Campground
	Hiking Trail**		Boat Launch
	Safety Zone		Picnic Shelter
	Swimming		Gatehouse
	Residence		Water Areas

DNR FACILITY MAP

UTILITIES	
Electric Utility	
Greg Dilger - Engineering Project Manager, Dubois REC, Inc., Phone: 812-482-1188 office, 812-639-2325 cell	

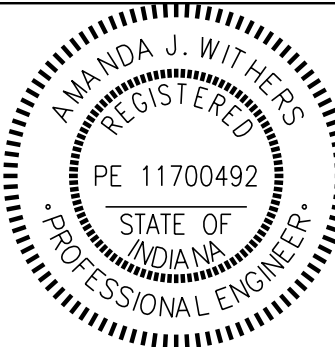




Engineers and Consultants

8790 PURDUE ROAD
INDIANAPOLIS, IN 46268-6128
PHONE: (317) 298-4500

Copyright CMT, Inc.



PLANS
PREPARED BY: CRAWFORD, MURPHY & TILLY INC. (317) 298-4500
PHONE NUMBER

CERTIFIED BY: Amanda J. Withers 3/10/2025
DATE

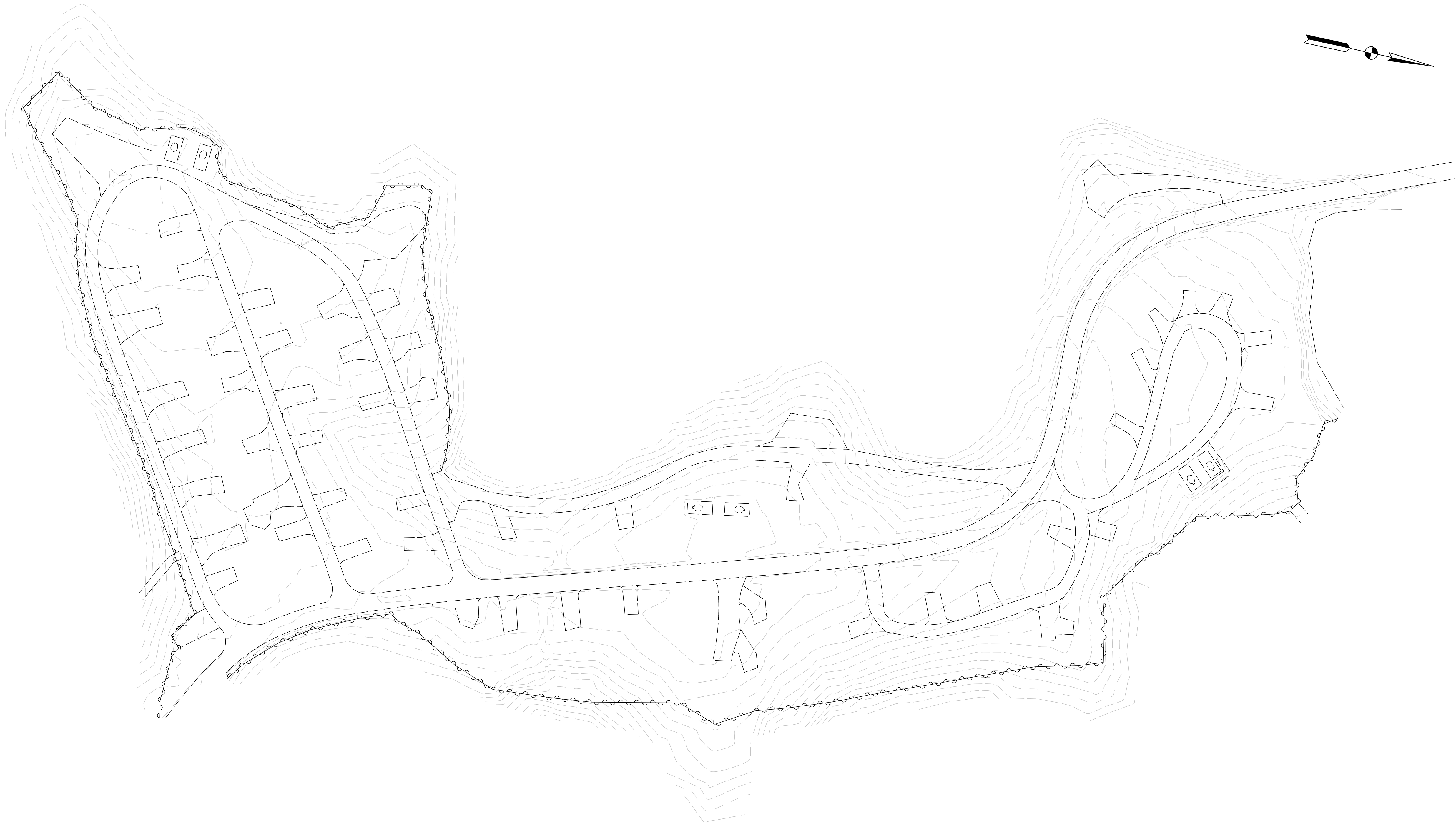
APPROVED
FOR LETTING: _____ DATE

INDIANA DEPARTMENT OF NATURAL RESOURCES

SHEETS		
1	of	28
PROJECT		
CDC 2409631016		

Plot: 3/10/2025 1:16:08 PM

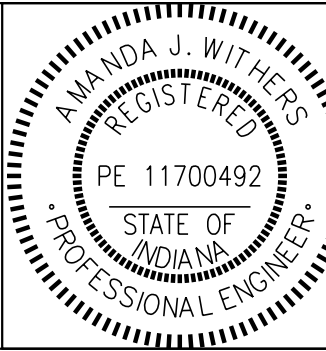
File: J:\IN-DNR\23005799-00_FerdinandSFCamp\Draw\Sheets\ShT_Title.dgn



NOTE:
EXISTING ELECTRIC AND WATER UTILITIES
ARE LOCATED NEAR THE CCC SHELTER AT
THE SOUTH END OF THE CAMPGROUND.

LEGEND

-  LIGHT
-  VAULT TOILETS
-  WATER HYDRANT



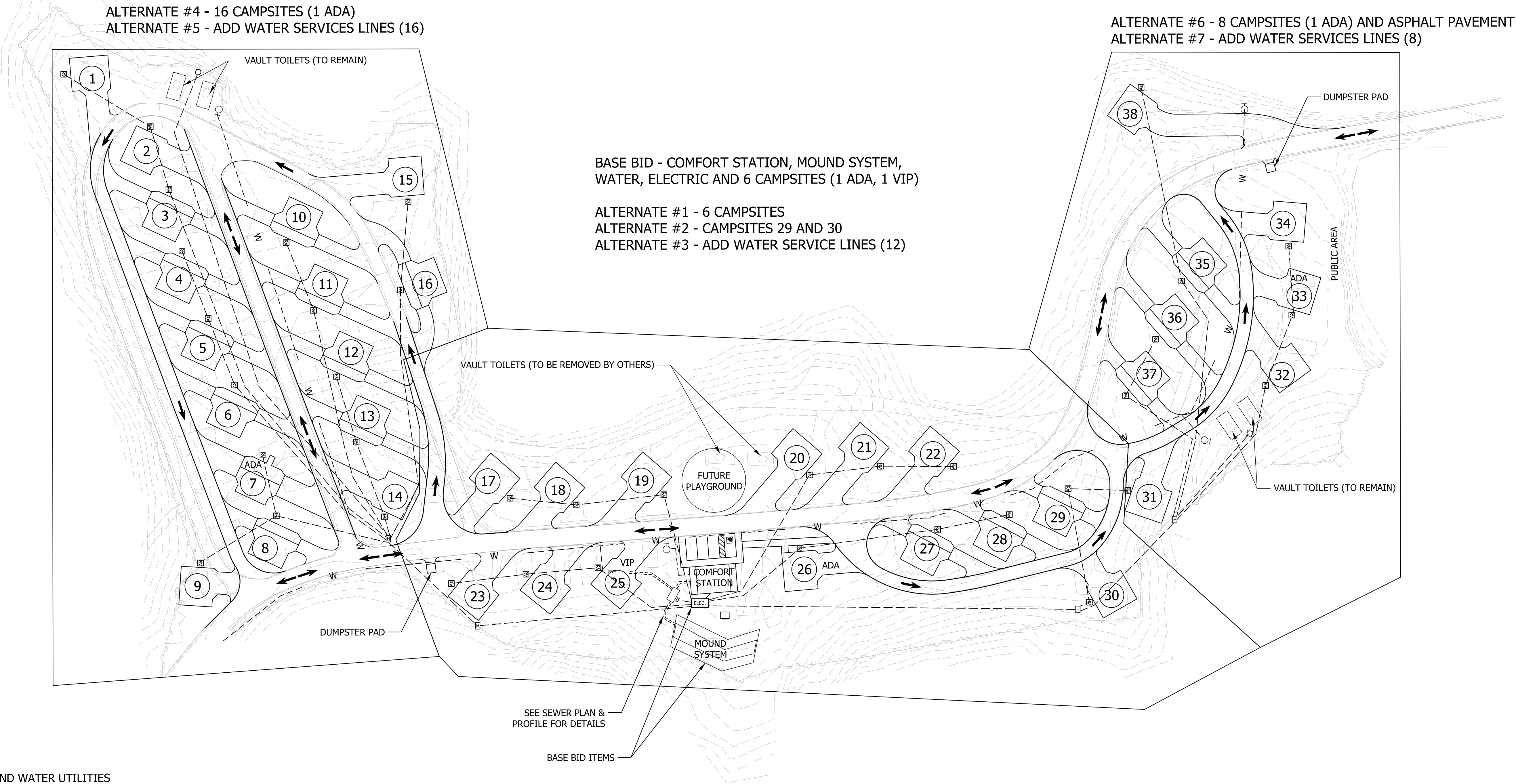
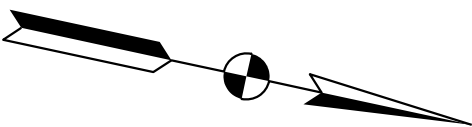
RECOMMENDED FOR APPROVAL		<i>Amanda J. Withers</i>		3/10/2025	
				DATE	
DESIGNED:	LNB	3/10/2025	DRAWN:	BTS	3/10/2025
CHECKED:	AW	3/10/2025	CHECKED:	LNB	3/10/2025

INDIANA DEPARTMENT
OF NATURAL RESOURCES

EXISTING OVERALL
SITE PLAN





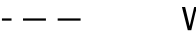
SCALE					
1" = 50'					
			SHEETS		
			2	of	28
			PROJECT		
			CDC 2409631016		

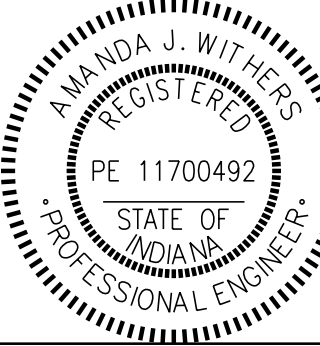
BASE BID - COMFORT STATION WITH MOUND SYSTEM AND 6 CAMPSITES AT CENTER (EAST SIDE, 1 VIP, 1 ADA), WATER AND SEWER TO VIP SITE, ELECTRIC TO ALL CAMPSITES AND ELECTRIC WATER AND SEWER TO COMFORT STATION
ALTERNATE #1 - 6 CAMPSITES AT CENTER (WEST SIDE), ELECTRIC TO CAMPSITES
ALTERNATE #2 - ADD CAMPSITES #29 AND #30, INCLUDING ELECTRIC AND SITEWORK
ALTERNATE #3 - ADD WATER SERVICES AND HYDRANTS TO ALL 12 CAMPSITES IN BASE BID, ALTERNATE #1 AND #2
ALTERNATE #4 - 16 CAMPSITES TO SOUTH (1 ADA), ELECTRIC TO CAMPSITES AND WATER TO 2 HYDRANTS AND ROAD WORK
ALTERNATE #5 - ADD WATER SERVICES AND HYDRANTS TO ALL 16 CAMPSITES IN ALTERNATE #4
ALTERNATE #6 - 8 CAMPSITES TO NORTH (1 ADA) WITH ELECTRIC AND WATER, WATER TO 2 HYDRANTS AND ASPHALT PAVEMENT
ALTERNATE #7 - ADD WATER SERVICES AND HYDRANTS TO ALL 8 CAMPSITES IN ALTERNATE #6
ALTERNATE #8 - ASPHALT ALL GRAVEL ROADS
ALTERNATE #9 - ASPHALT ALL GRAVEL CAMPSITES



NOTE:
EXISTING ELECTRIC AND WATER UTILITIES
ARE LOCATED NEAR THE CCC SHELTER AT
THE SOUTH END OF THE CAMPGROUND.

LEGEND

-  LIGHT
-  VAULT TOILETS
-  TRAFFIC FLOW ARROWS
-  WATER HYDRANT
-  WATER LINES



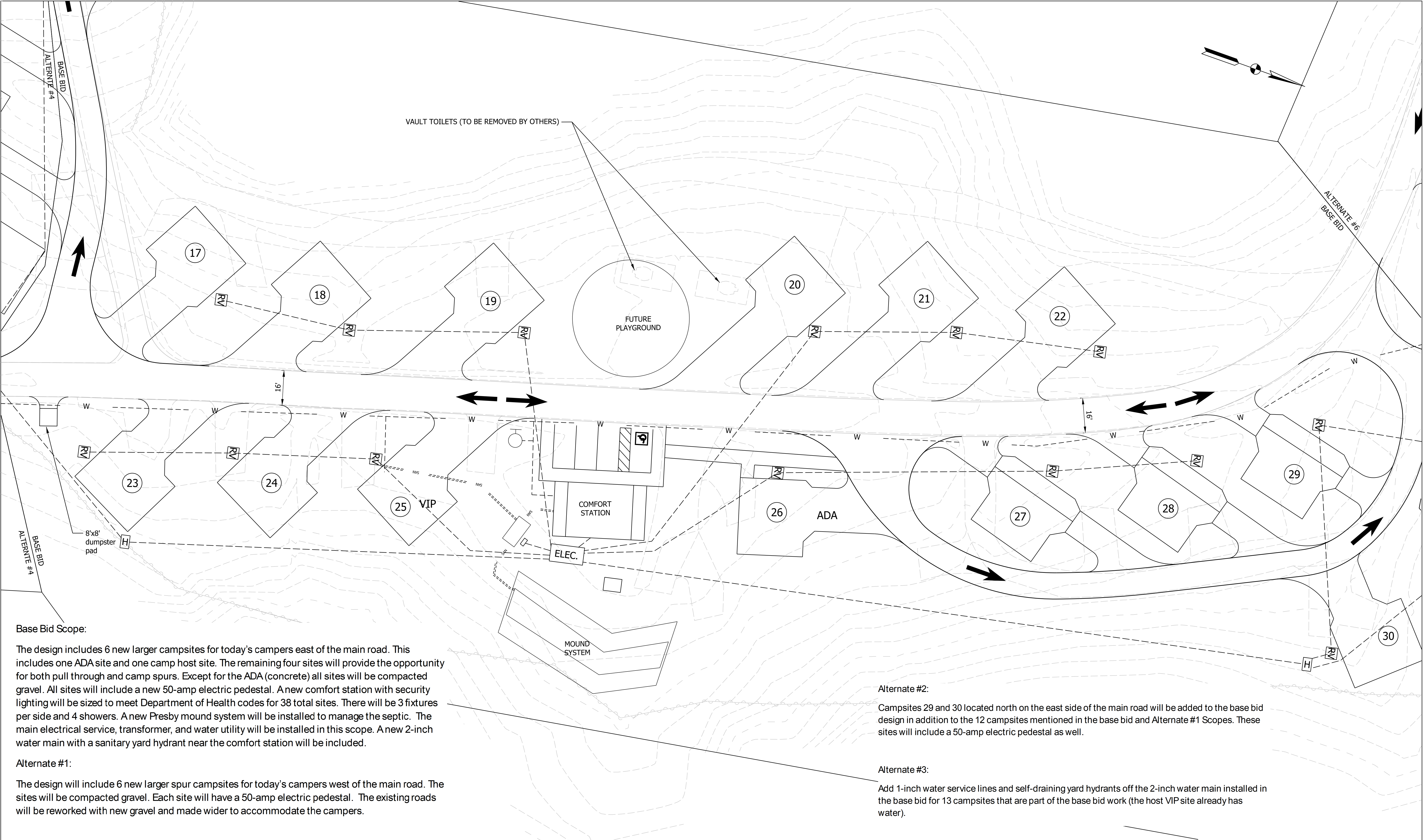
RECOMMENDED FOR APPROVAL	<i>Amanda J. Withers</i>	3/10/2025
DESIGNED:	LNB	3/10/2025
DRAWN:	BTS	3/10/2025
CHECKED:	AW	3/10/2025
CHECKED:	LNB	3/10/2025

INDIANA DEPARTMENT
OF NATURAL RESOURCES

PROPOSED OVERALL
SITE PLAN

SCALE
1" = 50'

SHEETS
3 of 28
PROJECT
CDC 2409631016



Base Bid Scope:

The design includes 6 new larger campsites for today's campers east of the main road. This includes one ADA site and one camp host site. The remaining four sites will provide the opportunity for both pull through and camp spurs. Except for the ADA (concrete) all sites will be compacted gravel. All sites will include a new 50-amp electric pedestal. A new comfort station with security lighting will be sized to meet Department of Health codes for 38 total sites. There will be 3 fixtures per side and 4 showers. A new Presby mound system will be installed to manage the septic. The main electrical service, transformer, and water utility will be installed in this scope. A new 2-inch water main with a sanitary yard hydrant near the comfort station will be included.

Alternate #1:

The design will include 6 new larger spur campsites for today's campers west of the main road. The sites will be compacted gravel. Each site will have a 50-amp electric pedestal. The existing roads will be reworked with new gravel and made wider to accommodate the campers.






Alternate #2:

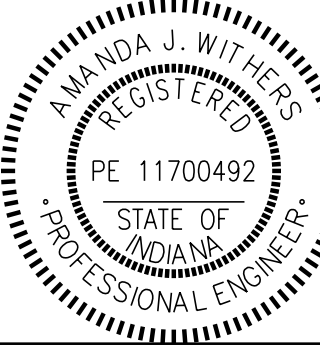
Campsites 29 and 30 located north on the east side of the main road will be added to the base bid design in addition to the 12 campsites mentioned in the base bid and Alternate #1 Scopes. These sites will include a 50-amp electric pedestal as well.

Alternate #3:

Add 1-inch water service lines and self-draining yard hydrants off the 2-inch water main installed in the base bid for 13 campsites that are part of the base bid work (the host VIP site already has water).

LEGEND

-  LIGHT
-  VAULT TOILETS
-  TRAFFIC FLOW ARROWS
-  WATER HYDRANT
-  W WATER LINES



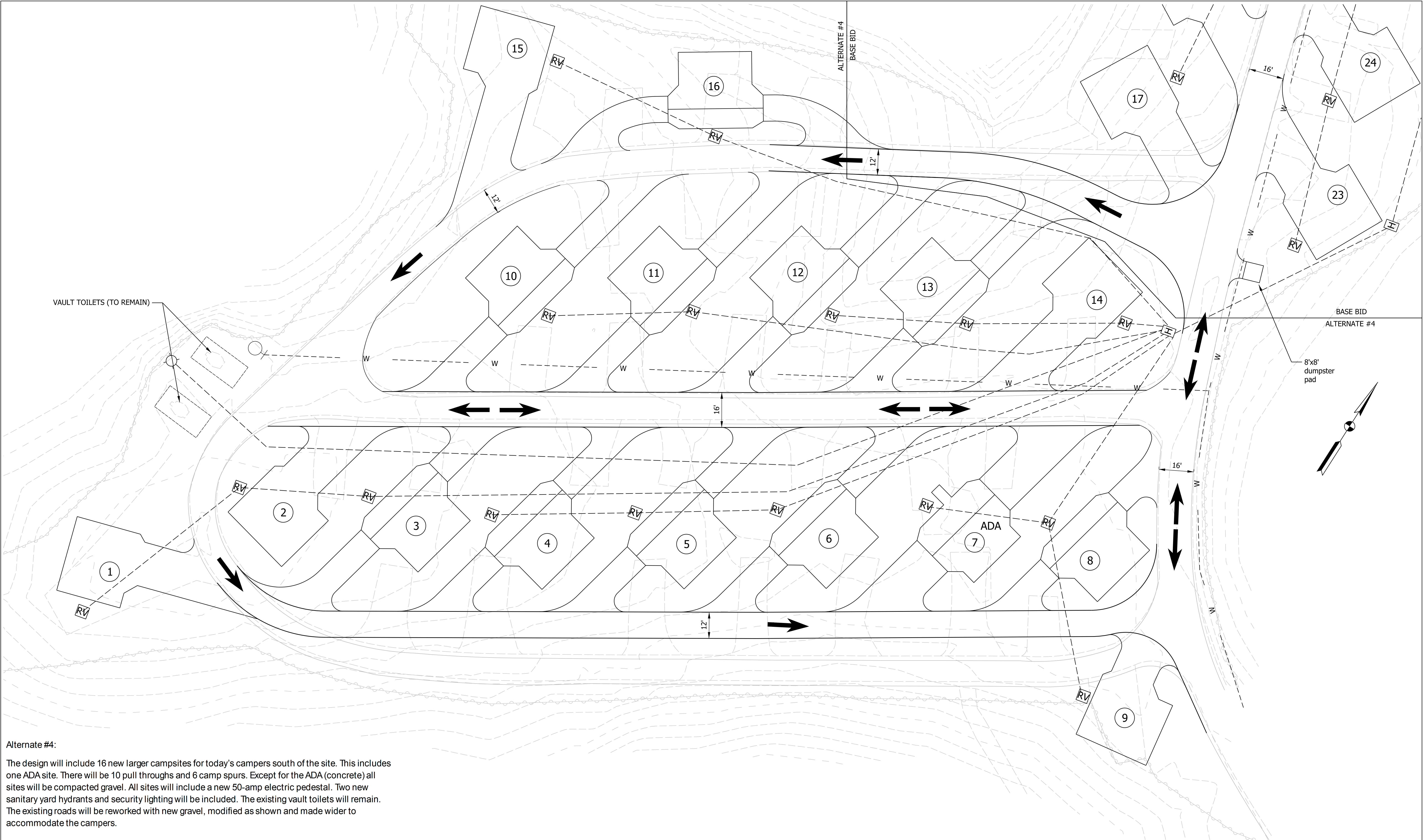
RECOMMENDED FOR APPROVAL	<i>Amanda J. Withers</i>	3/10/2025
DESIGNED:	LNB	3/10/2025
DRAWN:	BTS	3/10/2025
CHECKED:	AW	3/10/2025
CHECKED:	LNB	3/10/2025

INDIANA DEPARTMENT
OF NATURAL RESOURCES

PROPOSED SITE PLAN - BASE BID

SCALE
1" = 20'

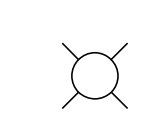
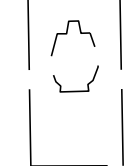
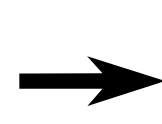
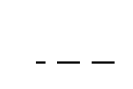
SHEETS
4 of 28
PROJECT
CDC 2409631016

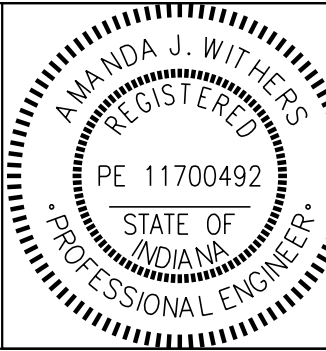


Alternate #4:

The design will include 16 new larger campsites for today's campers south of the site. This includes one ADA site. There will be 10 pull throughs and 6 camp spurs. Except for the ADA (concrete) all sites will be compacted gravel. All sites will include a new 50-amp electric pedestal. Two new sanitary yard hydrants and security lighting will be included. The existing vault toilets will remain. The existing roads will be reworked with new gravel, modified as shown and made wider to accommodate the campers.

LEGEND

-  LIGHT
-  VAULT TOILETS
-  TRAFFIC FLOW ARROWS
-  WATER HYDRANT
-  W WATER LINES



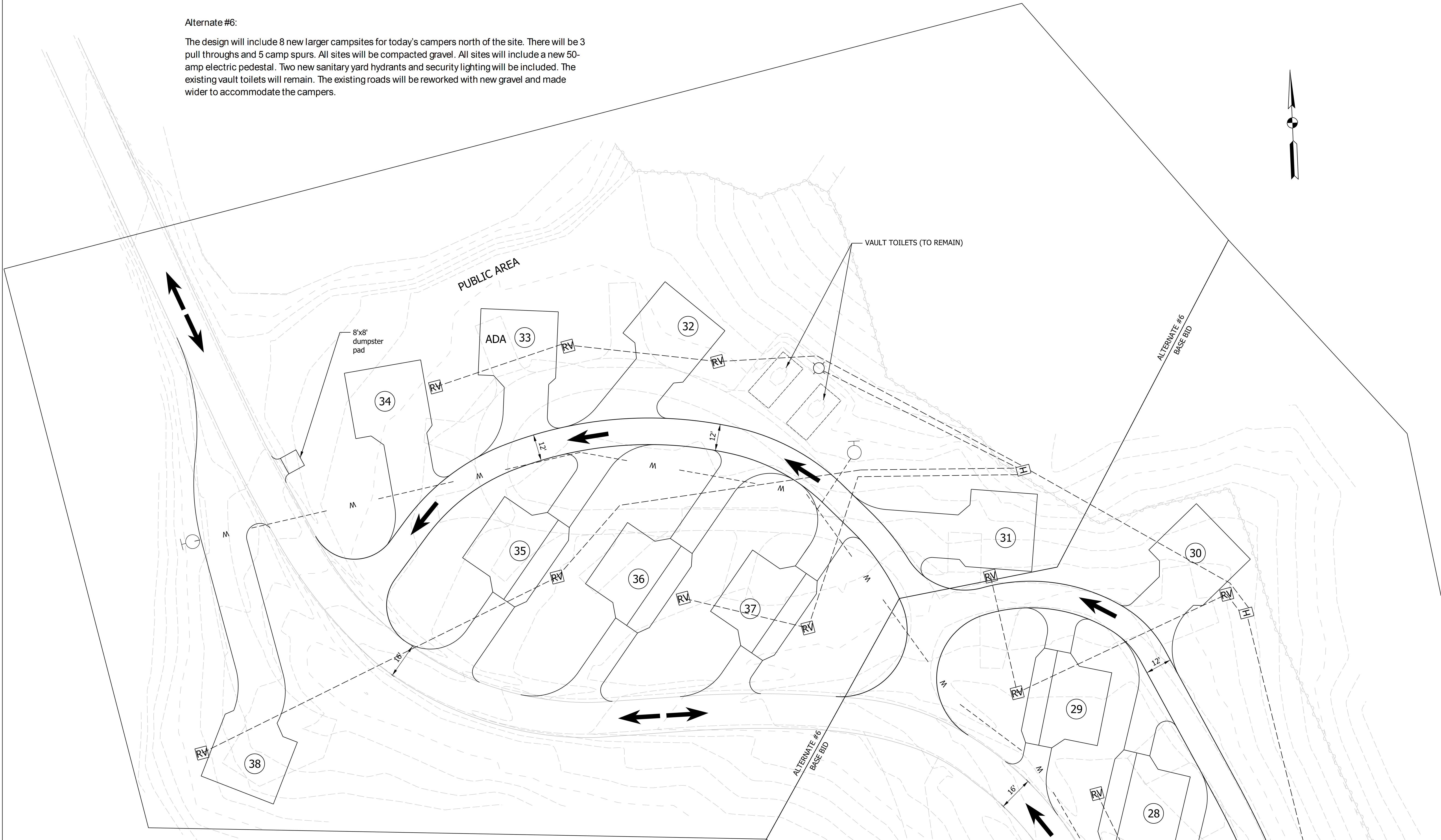
RECOMMENDED FOR APPROVAL	<i>Amanda J. Withers</i>	3/10/2025	DATE
DESIGNED:	LNB	3/10/2025	DRAWN:
CHECKED:	AW	3/10/2025	CHECKED:
			LNB 3/10/2025

INDIANA DEPARTMENT OF NATURAL RESOURCES
PROPOSED SITE PLAN DETAIL - ALTERNATE #4

SCALE	1" = 20'
SHEETS	5 of 28
PROJECT	CDC 2409631016

Alternate #6:

The design will include 8 new larger campsites for today's campers north of the site. There will be 3 pull throughs and 5 camp spurs. All sites will be compacted gravel. All sites will include a new 50-amp electric pedestal. Two new sanitary yard hydrants and security lighting will be included. The existing vault toilets will remain. The existing roads will be reworked with new gravel and made wider to accommodate the campers.



LEGEND



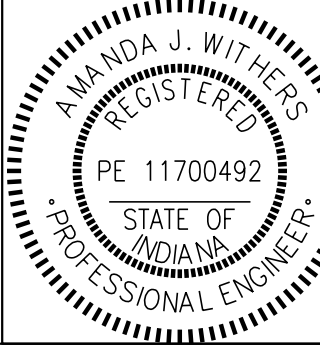
TRAFFIC FLOW ARROWS



HYDRANT



LIGHT POLE



RECOMMENDED
FOR APPROVAL

Amanda J. Withers
3/10/2025
DATE

DESIGNED: LNB 3/10/2025

DRAWN: BTS 3/10/2025

CHECKED: AW 3/10/2025

CHECKED: LNB 3/10/2025

INDIANA DEPARTMENT
OF NATURAL RESOURCES

PROPOSED SITE PLAN DETAIL - ALTERNATE #6

SCALE

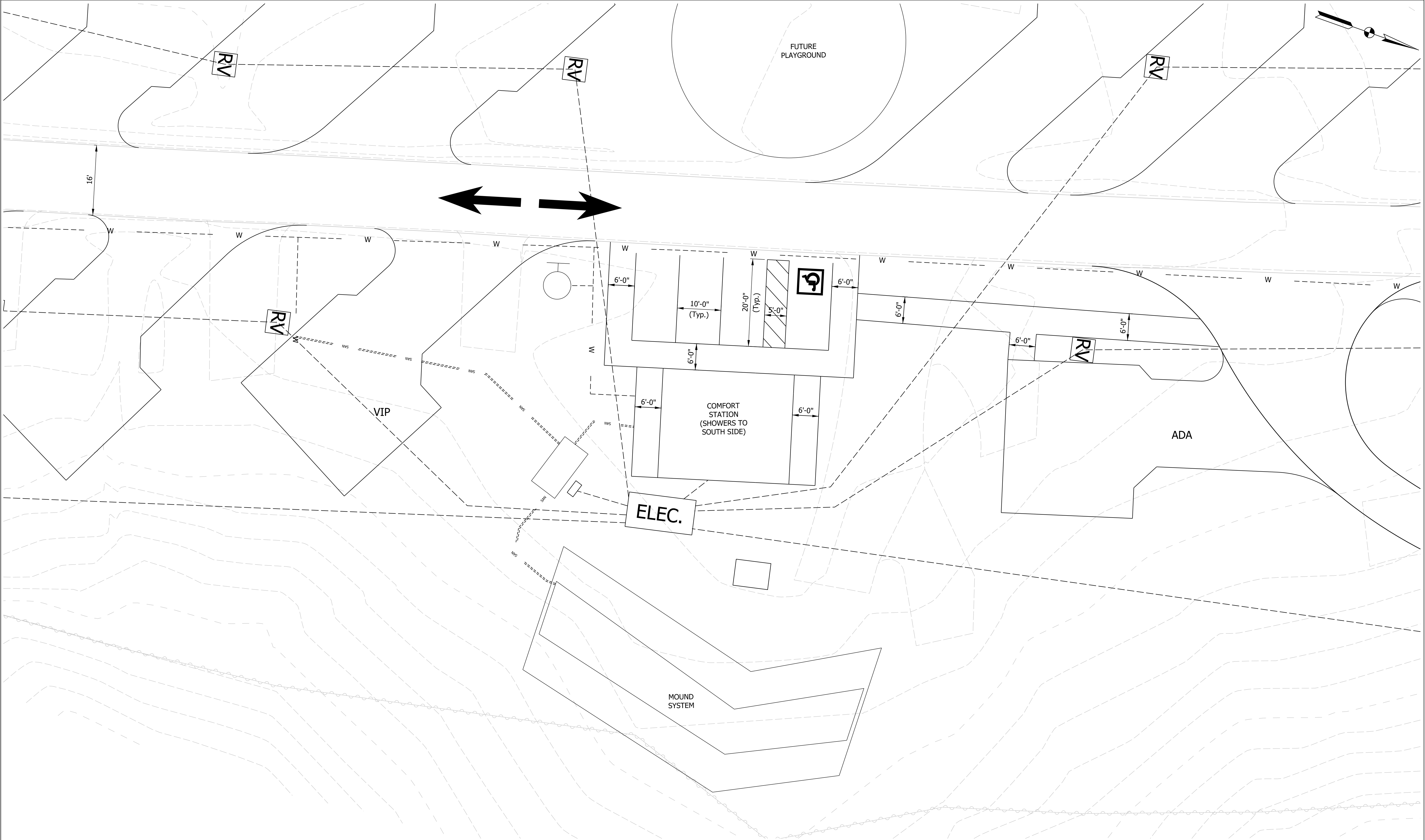
1" = 20'

SHEETS

6 of 28

PROJECT

CDC 2409631016



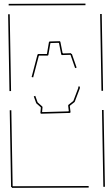
LEGEND



LIGHT



WATER HYDRANT



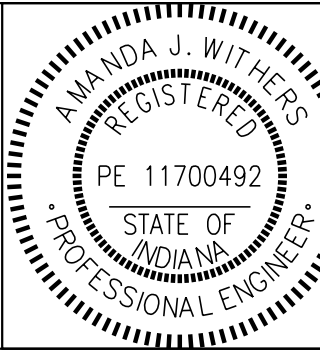
VAULT TOILETS



TRAFFIC FLOW ARROWS

--- W ---

--- WATER LINES



RECOMMENDED FOR APPROVAL

Amanda J. Withers

3/10/2025
DATE

DESIGNED: LNB 3/10/2025

DRAWN: BTS 3/10/2025

CHECKED: AW 3/10/2025

CHECKED: LNB 3/10/2025

INDIANA DEPARTMENT
OF NATURAL RESOURCES

CONSTRUCTION DETAILS - BASE BID

SCALE

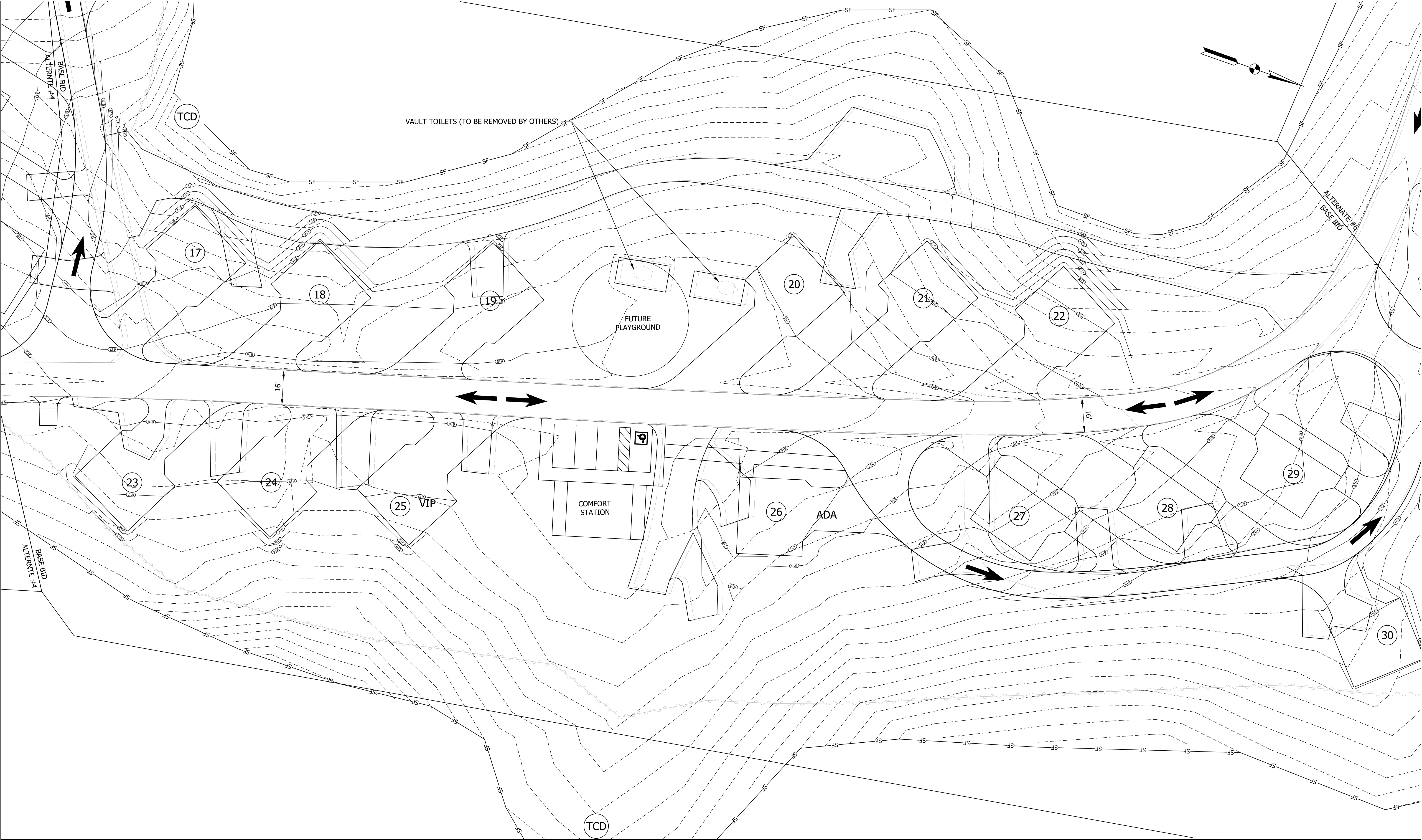
1" = 10'


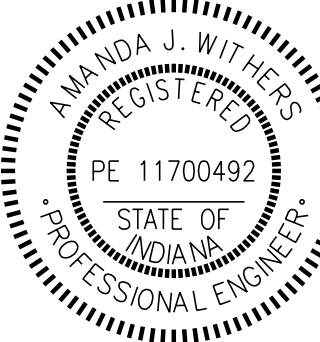





SHEETS

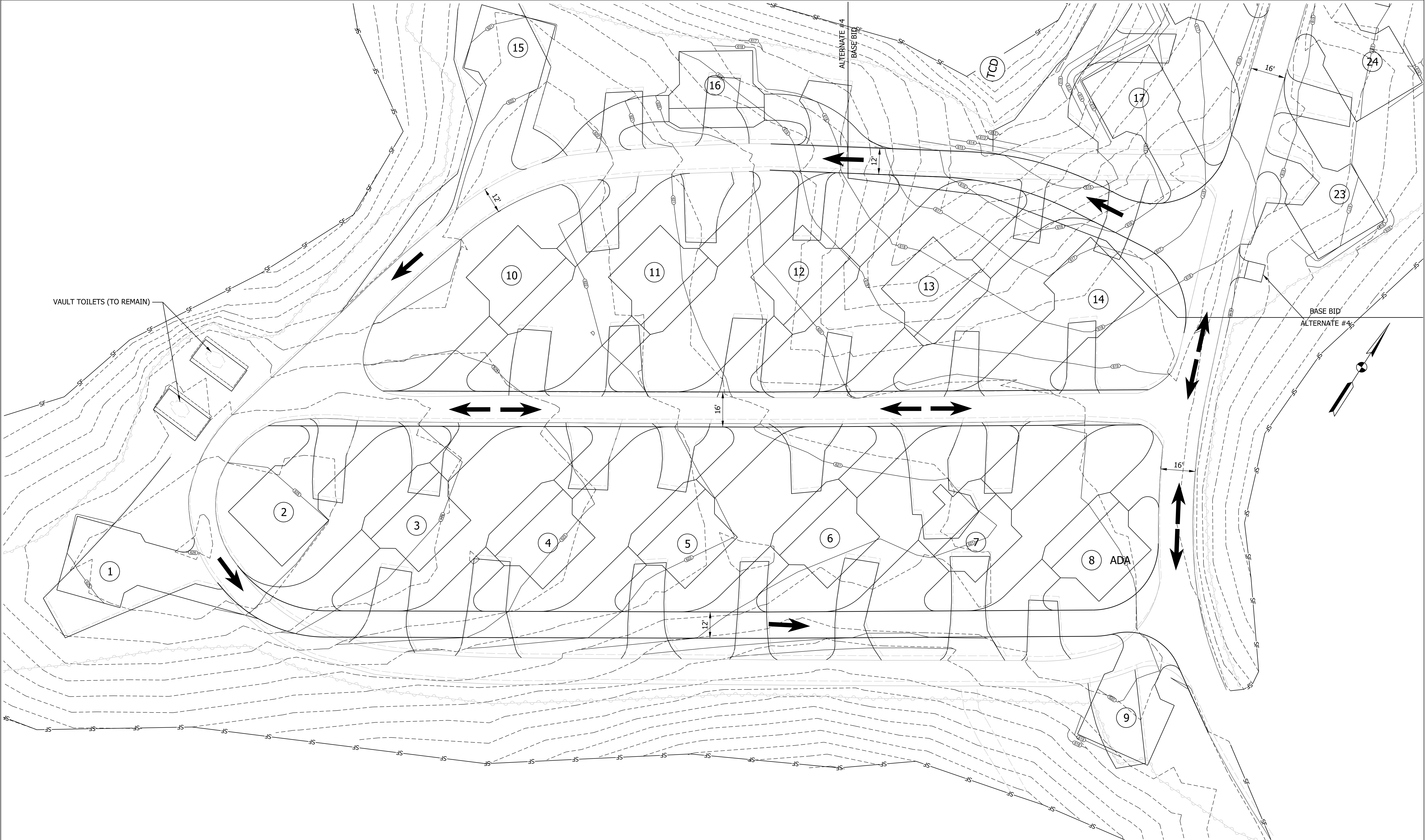
7 of 28

PROJECT

CDC 2409631016

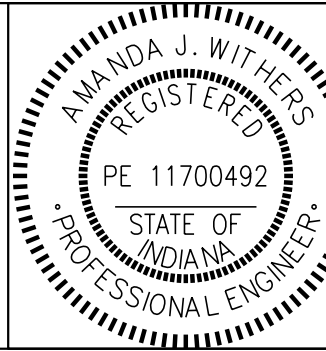


LEGEND		 —SF— SILT FENCE			RECOMMENDED FOR APPROVAL <u>Amanda J Withers</u> 3/10/2025 DATE		INDIANA DEPARTMENT OF NATURAL RESOURCES		SCALE 1" = 20'		
	LIGHT		VAULT TOILETS			TRAFFIC FLOW ARROWS	DESIGNED: <u>LNB</u> 3/10/2025 DRAWN: <u>BTS</u> 3/10/2025	PROPOSED SITE GRADING AND EROSION CONTROL - BASE BID	SHEETS		
	WATER HYDRANT		TEMPORARY CHECK DAM		CHECKED: <u>AW</u> 3/10/2025	CHECKED: <u>LNB</u> 3/10/2025			8 of 28		
						PROJECT CDC 2409631016					



LEGEND

-  LIGHT
-  WATER HYDRANT
-  VAULT TOILETS
-  SILT FENCE
-  TRAFFIC FLOW ARROWS
-  TCD TEMPORARY CHECK DAM



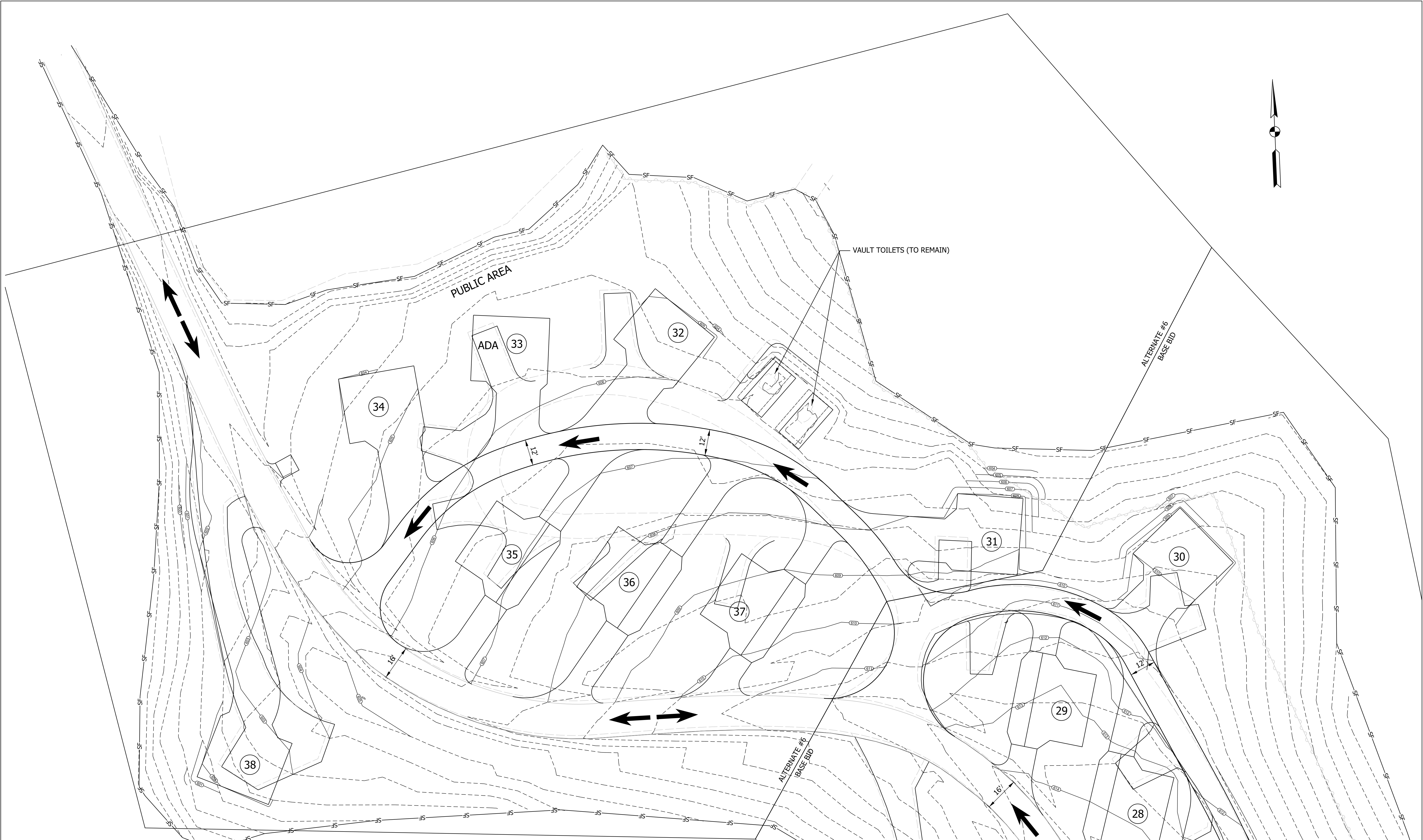
RECOMMENDED FOR APPROVAL	<i>Amanda J. Withers</i>	3/10/2025
DESIGNED:	LNB	3/10/2025
DRAWN:	BTS	3/10/2025
CHECKED:	AW	3/10/2025
	LNB	3/10/2025

INDIANA DEPARTMENT
OF NATURAL RESOURCES

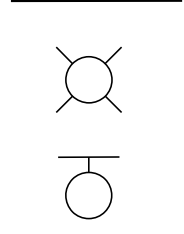
PROPOSED SITE GRADING AND
EROSION CONTROL - ALTERNATE #4

SCALE
1" = 20'

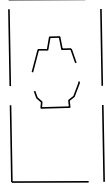
SHEETS		
9	of	28
PROJECT		
CDC 2409631016		



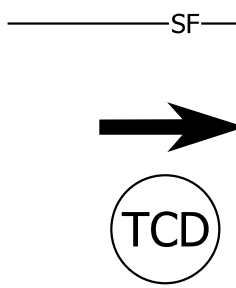
LEGEND



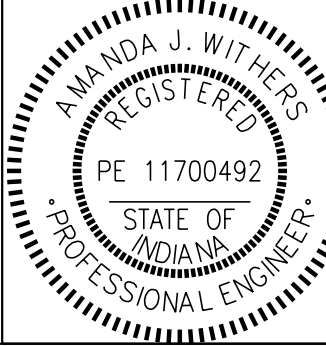
LIGHT
WATER HYDRANT



VAULT TOILETS



SILT FENCE
TRAFFIC FLOW ARROWS
TEMPORARY CHECK DAM



RECOMMENDED FOR APPROVAL

Amanda J. Withers

3/10/2025
DATE

DESIGNED: LNB 3/10/2025

DRAWN: BTS 3/10/2025

CHECKED: AW 3/10/2025

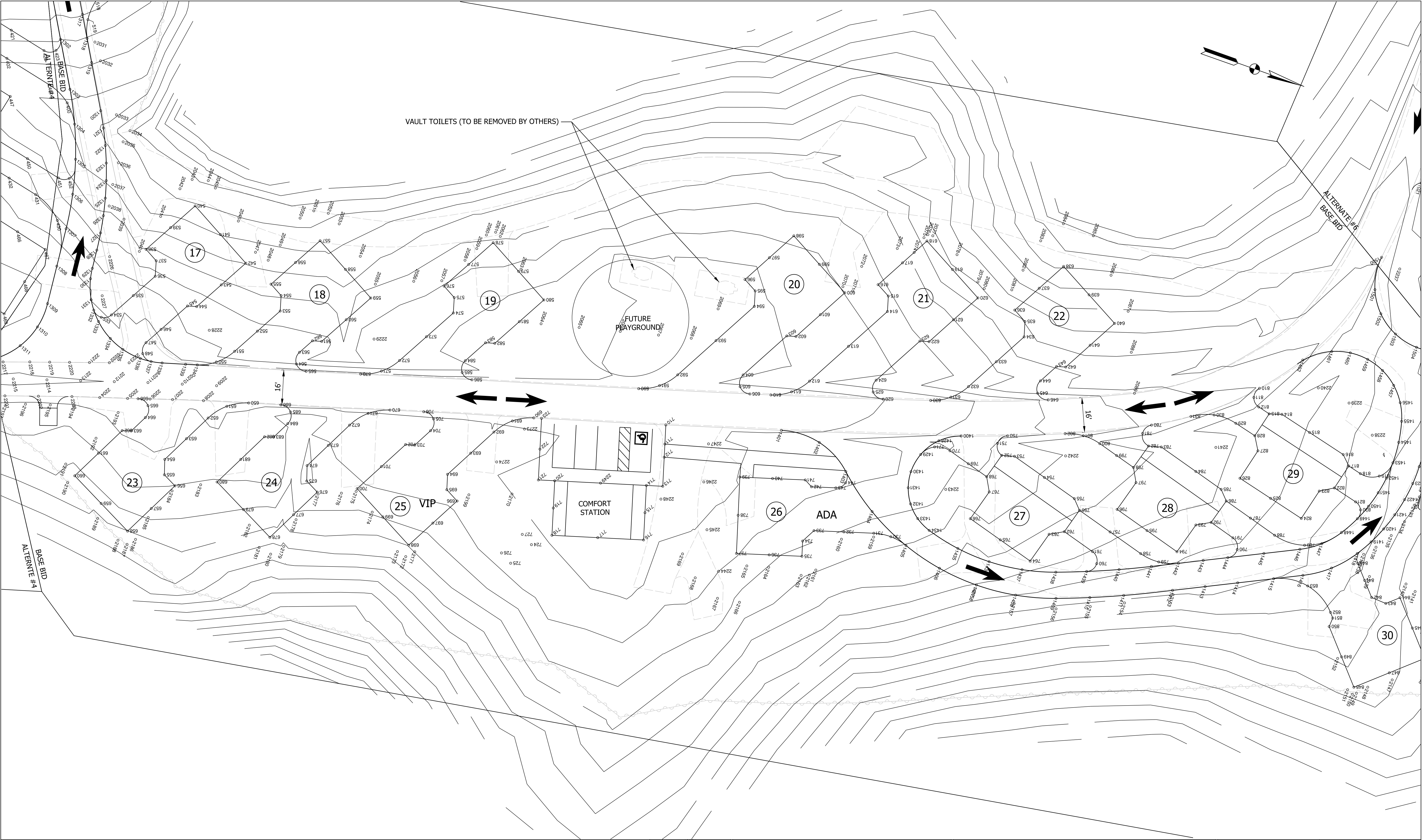
CHECKED: LNB 3/10/2025

INDIANA DEPARTMENT
OF NATURAL RESOURCES

PROPOSED SITE GRADING AND
EROSION CONTROL - ALTERNATE #6

SCALE
1" = 20'

SHEETS
10 of 28
PROJECT
CDC 2409631016



LEGEND



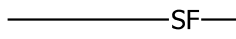
LIGHT



WATER HYDRANT



VAULT TOILETS



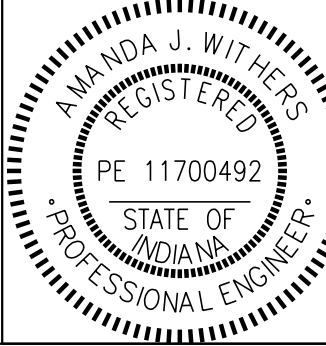
SILT FENCE



TRAFFIC FLOW ARROWS



TEMPORARY CHECK DAM



RECOMMENDED
FOR APPROVAL

Amanda J. Withers

3/10/2025
DATE

DESIGNED: LNB 3/10/2025

DRAWN: BTS 3/10/2025

CHECKED: AW 3/10/2025

CHECKED: LNB 3/10/2025

INDIANA DEPARTMENT
OF NATURAL RESOURCES

SPOT ELEVATIONS
BASE BID

SCALE

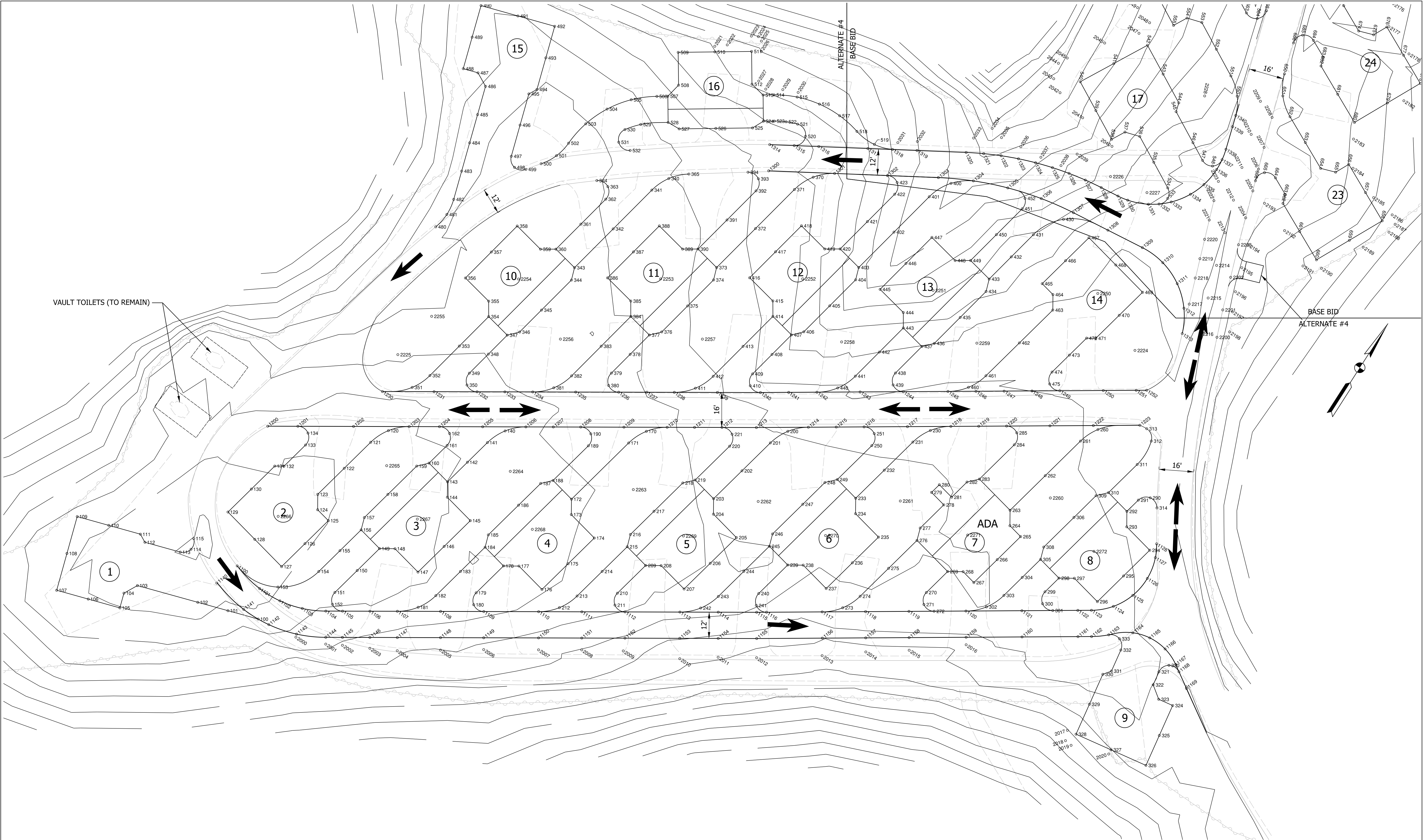
1" = 20'

SHEETS

11 of 28

PROJECT

CDC 2409631016



LEGEND



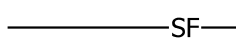
LIGHT



WATER HYDRANT



VAULT TOILETS



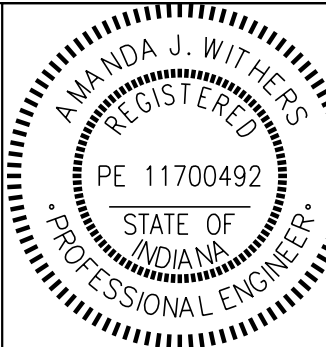
SILT FENCE



TRAFFIC FLOW ARROWS



TEMPORARY CHECK DAM



RECOMMENDED FOR APPROVAL

Amanda J. Withers

3/10/2025
DATE

DESIGNED: LNB 3/10/2025

DRAWN: BTS 3/10/2025

CHECKED: AW 3/10/2025

CHECKED: LNB 3/10/2025

INDIANA DEPARTMENT
OF NATURAL RESOURCES

SPOT ELEVATIONS
ALTERNATE #4

SCALE

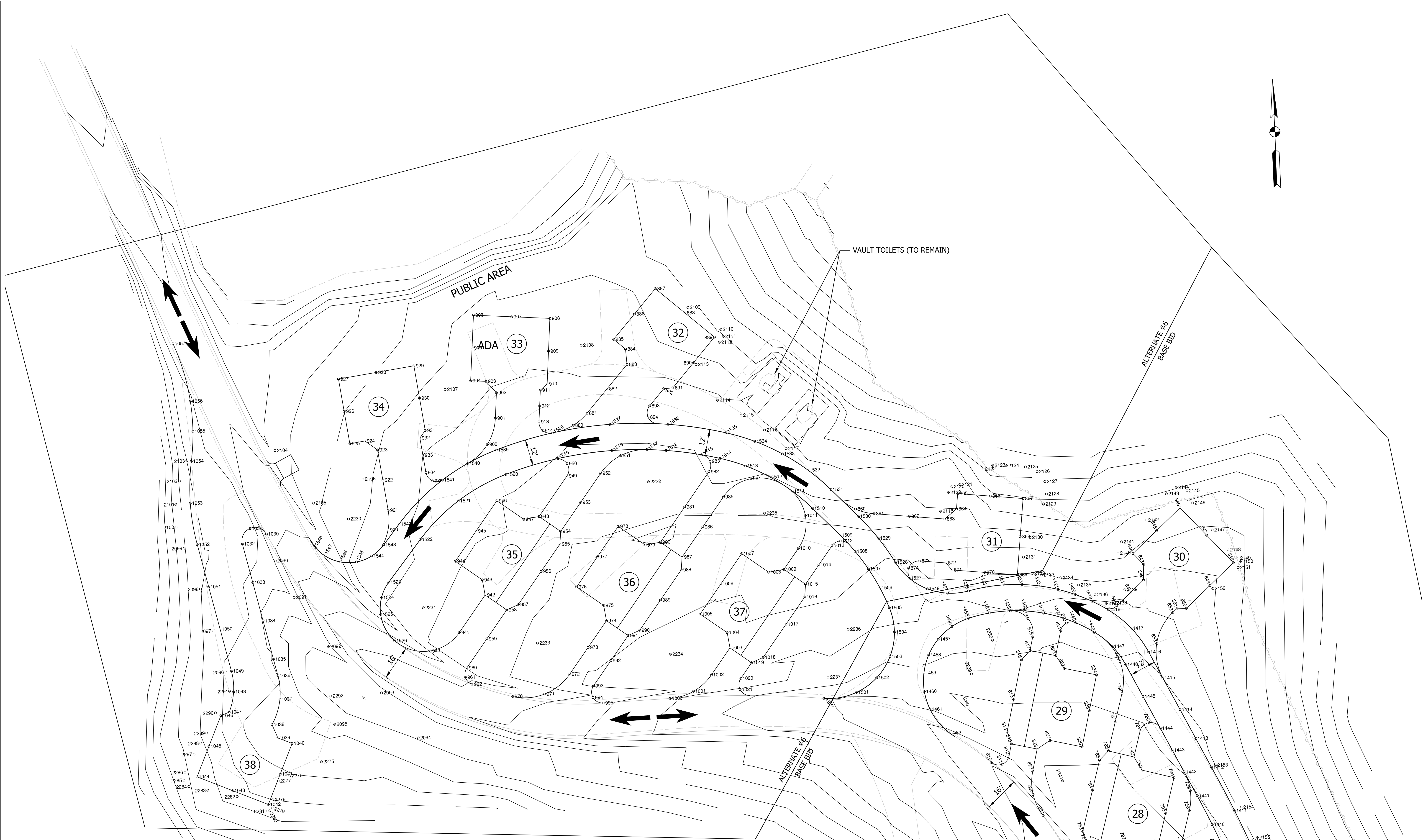
1" = 20'

SHEETS

12 of 28

PROJECT

CDC 2409631016



LEGEND



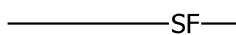
LIGHT



WATER HYDRANT



VAULT TOILETS



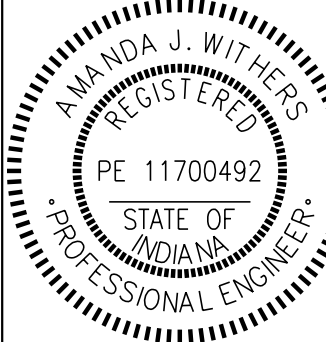
SILT FENCE



TRAFFIC FLOW ARROWS



TEMPORARY CHECK DAM



RECOMMENDED
FOR APPROVAL

Amanda J. Withers

3/10/2025
DATE

DESIGNED: LNB 3/10/2025

DRAWN: BTS 3/10/2025

CHECKED: AW 3/10/2025

CHECKED: LNB 3/10/2025

INDIANA DEPARTMENT
OF NATURAL RESOURCES

SPOT ELEVATIONS
ALTERNATE #6

SCALE

1" = 20'

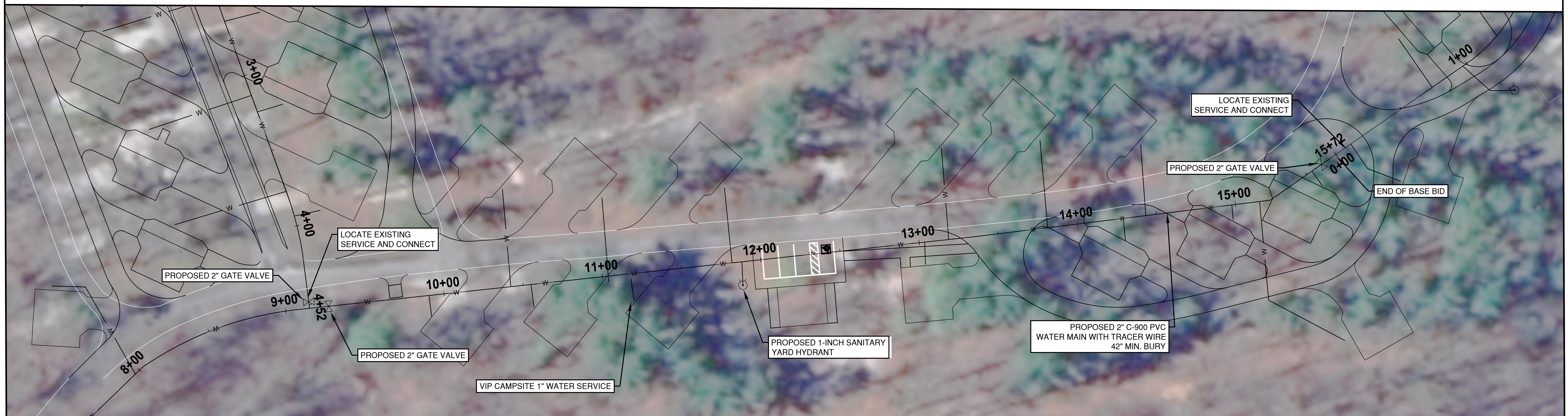
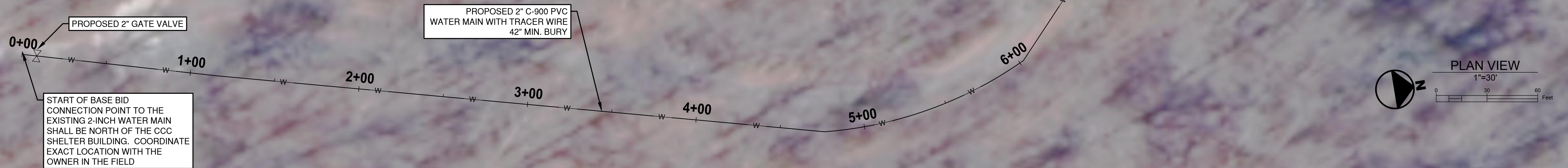
SHEETS

13 of 28

PROJECT

CDC 2409631016

1. 2 INCH C-900 PVC WATER MAIN WITH TRACER WIRE
2. WATER MAIN TO BE INSTALLED AT MINIMUM BURIED DEPTH OF 42"
3. WATER MAIN TO UTILIZE THE SAME TRENCH AS ELECTRICAL CONDUIT
4. CONTRACTOR TO INSTALL WATER MAIN A MINIMUM OF 12" BELOW CONDUIT
5. ALL EXISTING UTILITIES SHALL BE KEPT IN SERVICE DURING CONSTRUCTION EXCEPT WHERE PERMISSION IS GRANTED OTHERWISE BY OWNER
6. ALL VALVE BOXES SHALL BE COVERED WITH CONSTRUCTION DEBRIS AND SHALL REMAIN ACCESSIBLE TO OWNER
7. ALL DISTURBED AREA SHALL BE CLEANED UP AND RESTORED TO A SIMILAR CONDITION
8. TREES TO BE REMOVED (BY OTHERS) BEFORE INSTALLATION OF WATER MAIN
9. ALL CAMPSITE WATER SERVICES TO BE 1" C-900 PVC WATER MAIN WITH TRACER WIRE AT MIN. DEPTH 42-INCHES WITH A FROST PROOF 1-INCH SANITARY YARD HYDRANT



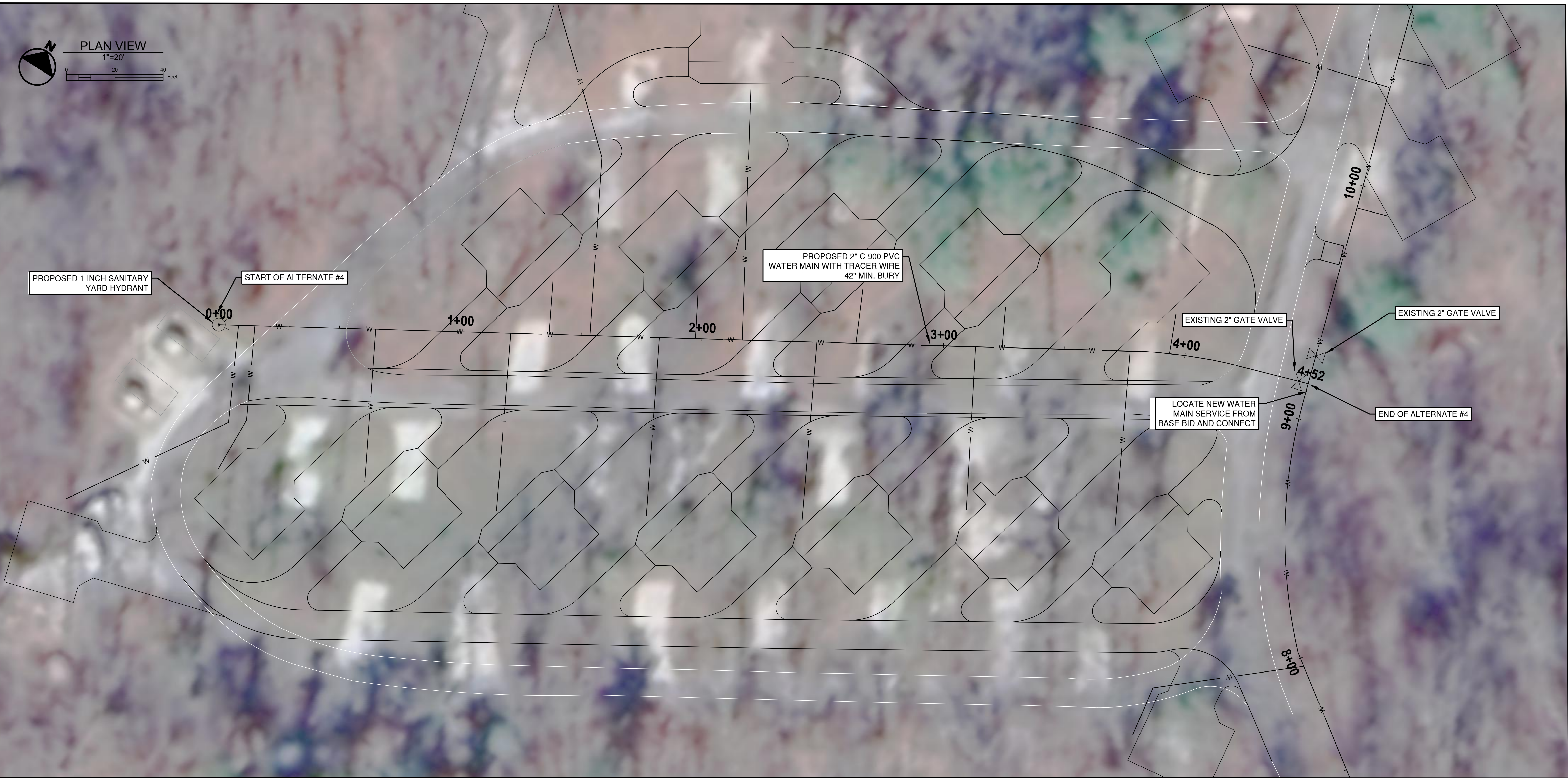
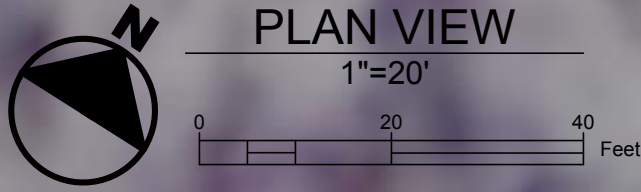
Amanda J Withers 3/10/2025

DESIGNED: <u>LMR</u>	DRAWN: <u>LMR</u>
CHECKED: <u>AJW</u>	CHECKED: <u>AJW</u>

INDIANA DEPARTMENT
OF NATURAL RESOURCES

WATER MAIN PLAN - BASE BID

SHEETS		
14	of	28
PROJECT		
CDC 2409631016		

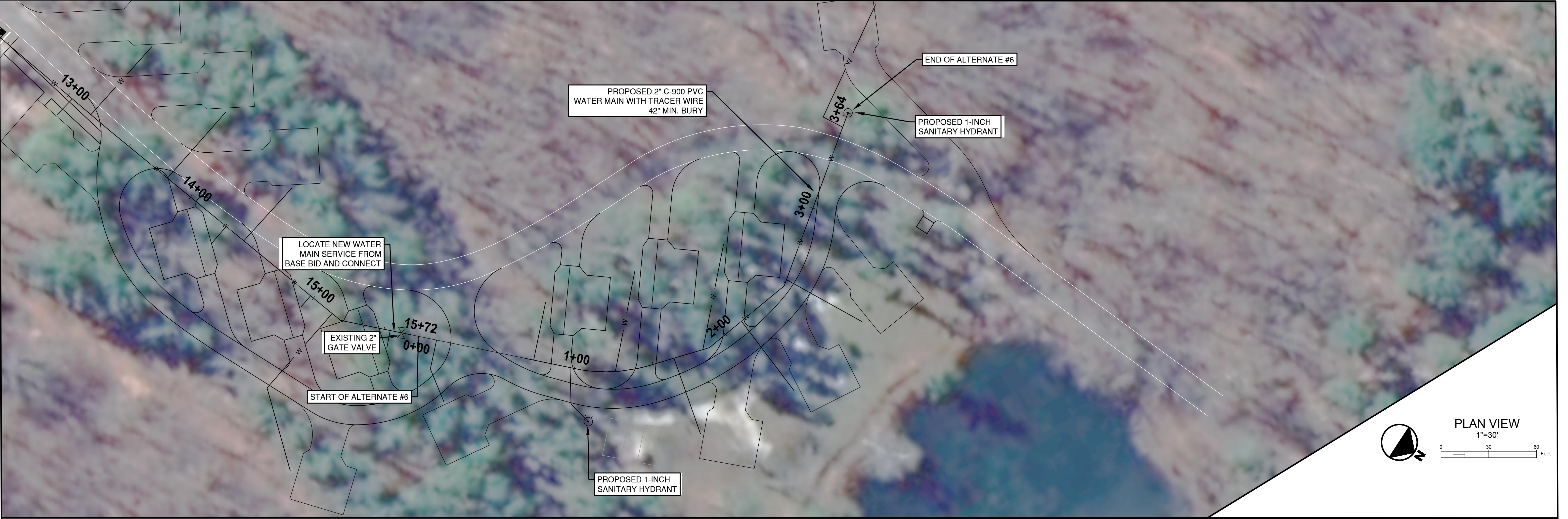


- GENERAL NOTES:
- 1. 2 INCH C-900 PVC WATER MAIN WITH TRACER WIRE
 - 2. WATER MAIN TO BE INSTALLED AT MINIMUM BURIED DEPTH OF 42"
 - 3. WATER MAIN TO UTILIZE THE SAME TRENCH AS ELECTRICAL CONDUIT
 - 4. CONTRACTOR TO INSTALL WATER MAIN A MINIMUM OF 12" BELOW CONDUIT
 - 5. ALL EXISTING UTILITIES SHALL BE KEPT IN SERVICE DURING CONSTRUCTION EXCEPT WHERE PERMISSION IS GRANTED OTHERWISE BY OWNER
 - 6. ALL VALVE BOXES SHALL BE COVERED WITH CONSTRUCTION DEBRIS AND SHALL REMAIN ACCESSIBLE TO OWNER
 - 7. ALL DISTURBED AREA SHALL BE CLEANED UP AND RESTORED TO A SIMILAR CONDITION
 - 8. TREES TO BE REMOVED (BY OTHERS) BEFORE INSTALLATION OF WATER MAIN
 - 9. ALL CAMPSITE WATER SERVICES TO BE 1" C-900 PVC WATER MAIN WITH TRACER WIRE AT MIN. DEPTH 42-INCHES WITH A FROST PROOF 1-INCH SANITARY YARD HYDRANT



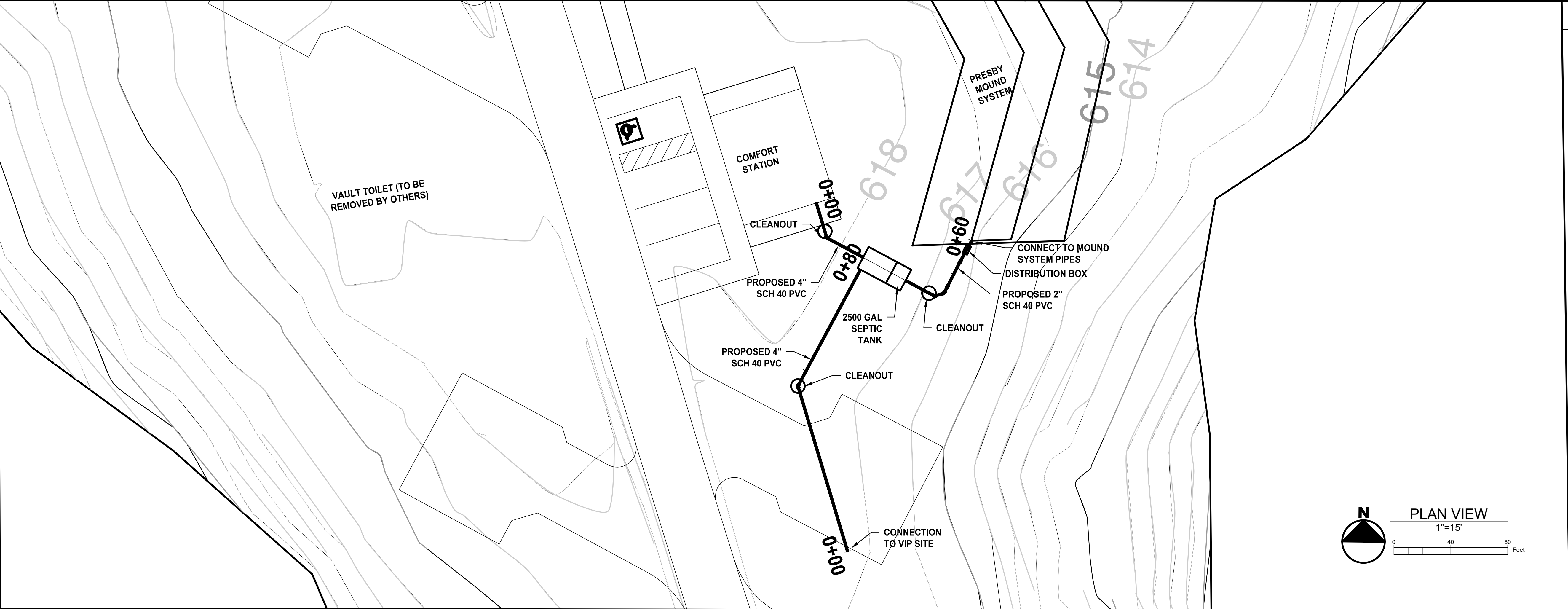
Amanda J. Withers		3/10/2025	DATE
DESIGNED: LMR	DRAWN: LMR		
CHECKED: AJW	CHECKED: AJW		

INDIANA DEPARTMENT OF NATURAL RESOURCES		
WATER MAIN PLAN - ALTERNATE #4		SHEETS 15 of 28
		PROJECT
		CDC 2409631016



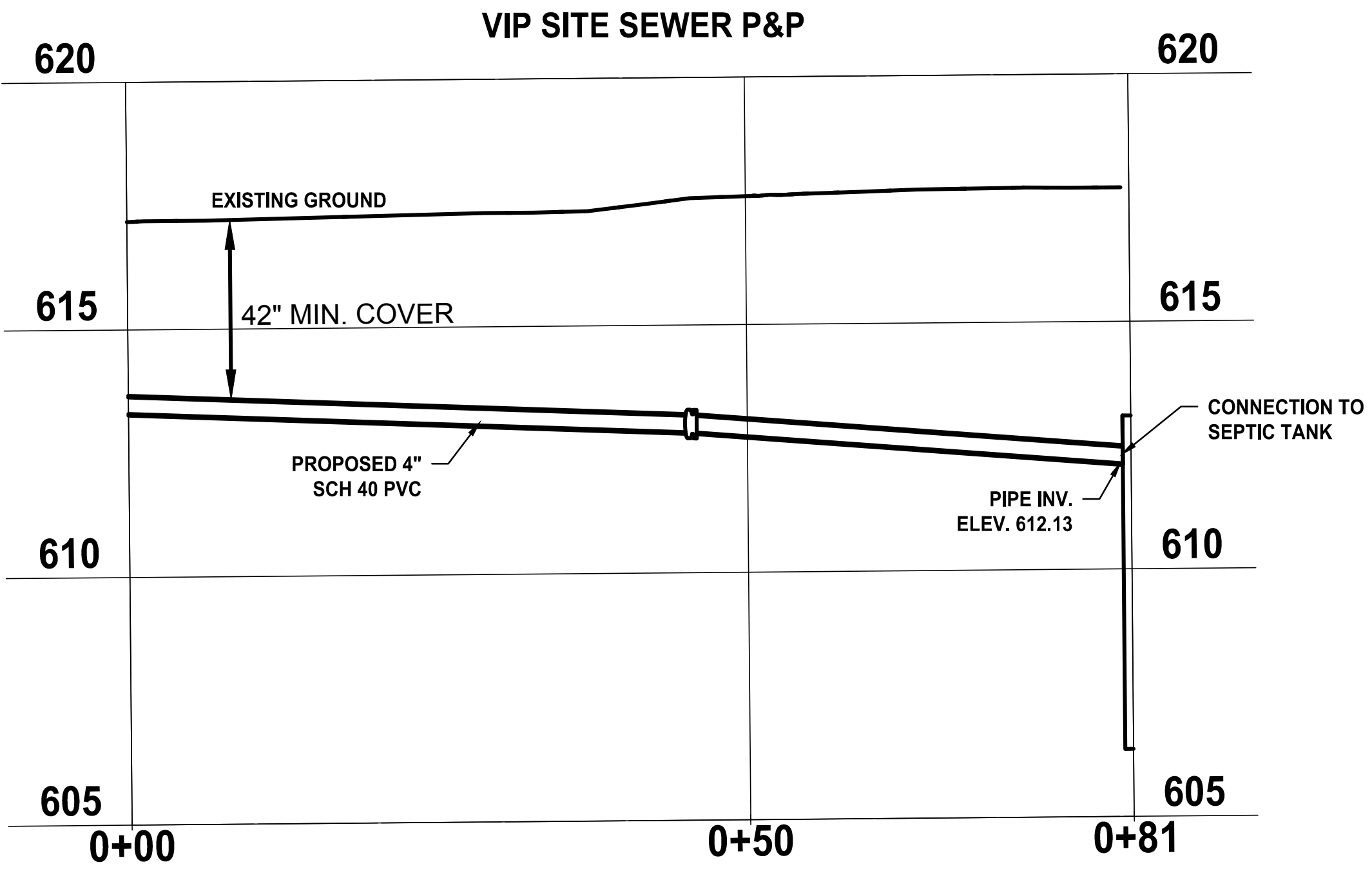
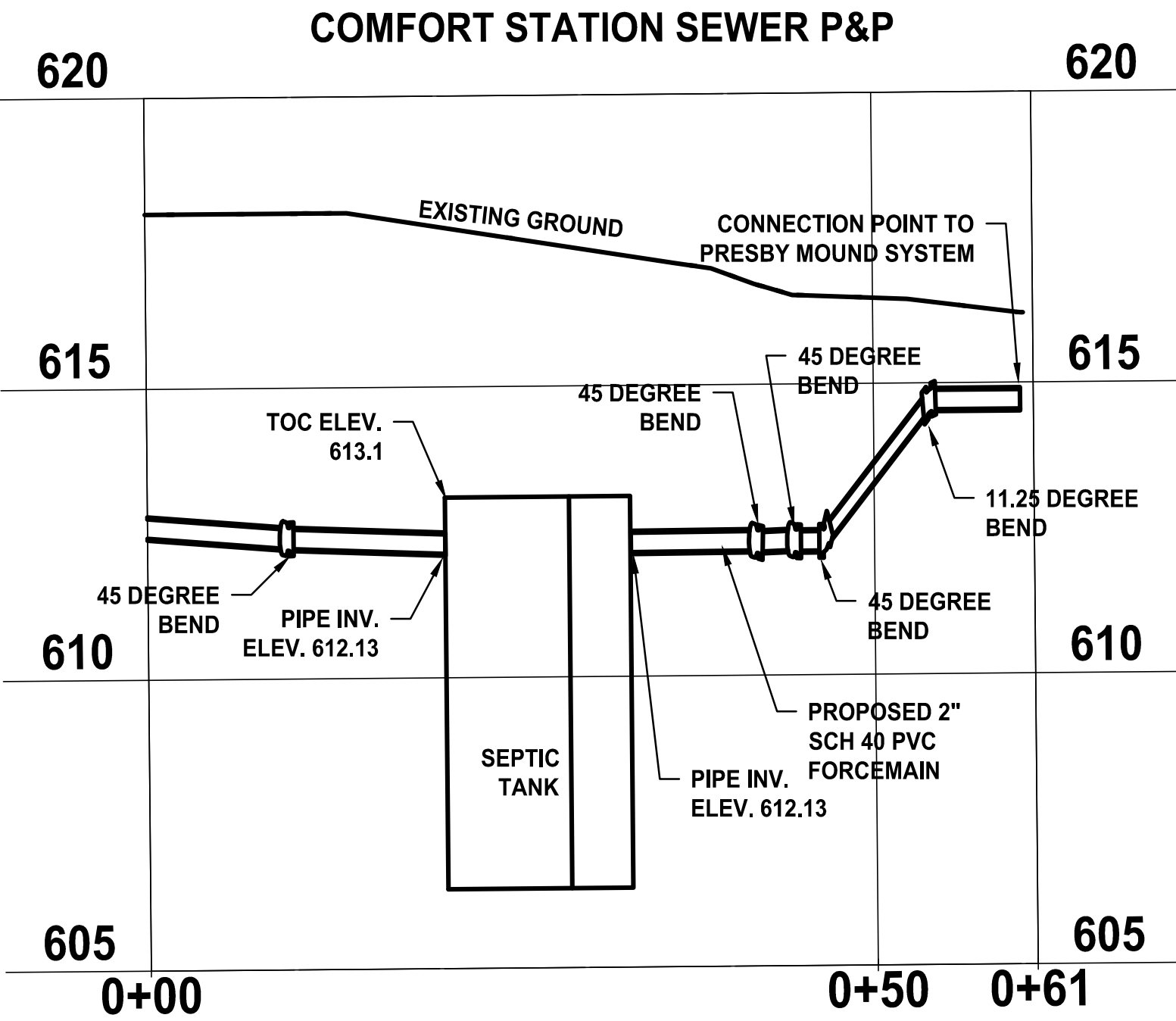
- GENERAL NOTES:
- 1. 2 INCH C-900 PVC WATER MAIN WITH TRACER WIRE
 - 2. WATER MAIN TO BE INSTALLED AT MINIMUM BURIED DEPTH OF 42"
 - 3. WATER MAIN TO UTILIZE THE SAME TRENCH AS ELECTRICAL CONDUIT
 - 4. CONTRACTOR TO INSTALL WATER MAIN A MINIMUM OF 12" BELOW CONDUIT
 - 5. ALL EXISTING UTILITIES SHALL BE KEPT IN SERVICE DURING CONSTRUCTION EXCEPT WHERE PERMISSION IS GRANTED OTHERWISE BY OWNER
 - 6. ALL VALVE BOXES SHALL BE COVERED WITH CONSTRUCTION DEBRIS AND SHALL REMAIN ACCESSIBLE TO OWNER
 - 7. ALL DISTURBED AREA SHALL BE CLEANED UP AND RESTORED TO A SIMILAR CONDITION
 - 8. TREES TO BE REMOVED (BY OTHERS) BEFORE INSTALLATION OF WATER MAIN
 - 9. ALL CAMPSITE WATER SERVICES TO BE 1" C-900 PVC WATER MAIN WITH TRACER WIRE AT MIN. DEPTH 42-INCHES WITH A FROST PROOF 1-INCH SANITARY YARD HYDRANT

	<i>Amanda J. Withers</i> 3/10/2025 <div>DATE</div>		INDIANA DEPARTMENT OF NATURAL RESOURCES			
	DESIGNED: LMR	DRAWN: LMR	WATER MAIN PLAN - ALTERNATE #6		SHEETS	
	CHECKED: AJW	CHECKED: AJW			16 of 28	
					PROJECT	
					CDC 2409631016	



GENERAL NOTES

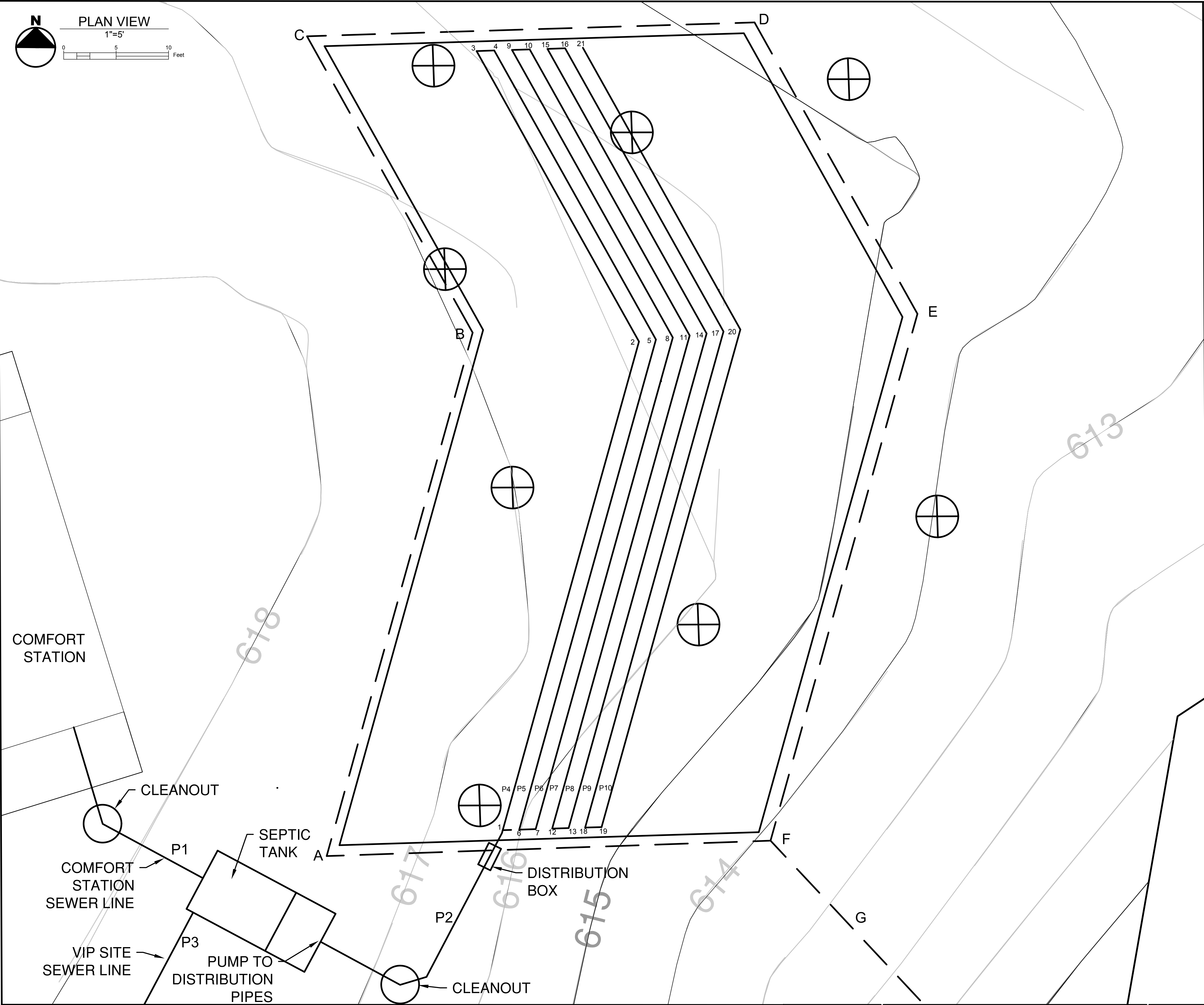
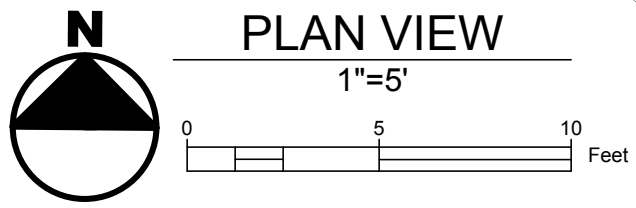
1. SEWER PIPE TO BE 4" SCH 40 PVC
2. 42" MINIMUM BURY DEPTH
3. CONTRACTOR SHALL MAINTAIN MINIMUM 10' HORIZONTAL CLEARANCE BETWEEN ALL EXISTING AND NEW WATER MAINS
4. CONTRACTOR SHALL MAINTAIN 18" VERTICAL DISTANCE BETWEEN ANY PIPE CROSSINGS
5. CONTRACTOR TO REPAIR ALL DISTURBED AREAS AND SEED SIMILAR TO ADJACENT TURF
6. SEE SEPTIC TANK DETAIL ON SHEET 25. THREE SEPT TANK RISERS TO BE CONSTRUCTED UP TO GROUND LEVEL
7. SEE PIPE CLEAN OUT DETAIL. THREE CLEAN OUT RISERS TO BE CONSTRUCTED UP TO GROUND LEVEL



Amenda J. Withers		3/10/2025	DATE
DESIGNED: LMR	DRAWN: LMR		
CHECKED: AJW	CHECKED: AJW		

INDIANA DEPARTMENT OF NATURAL RESOURCES	
SEWER PLAN AND PROFILE	

		SHEETS	
		17	of 28
		PROJECT	
		CDC 2409631016	



EXISTING GRADE SHOTS OBTAINED ON-SITE ARE PROVIDED FOR THE SOIL ABSORPTION FIELD. THE GRADE SHOTS PROVIDED FOR THE SOIL ABSORPTION FIELD WERE NOT EXTRAPOLATED FROM COMPUTER TOPOGRAPHY FOR THE PURPOSES OF ESTABLISHING CONTOUR LINES

	PIPE	LENGTH (LF)	DIA. (IN)	PIPE SPEC.	POINT NO.	GROUND ELEV.	PIPE INV	SLOPE	BED ELEV.
BUILDING TO SEPTIC	P1	20	4	SCH 40 PVC			612.13	1.50%	
SEPTIC TO DISTRIBUTION PIPES	P2	27	2	SCH 40 PVC			614.5		
VIP SITE TO SEPTIC	P3	80	4	SCH 40 PVC			612.13	1.48%	
PRESBY DISTRIBUTION PIPE	P4	80	12	Advanced Enviro-Septic Pipe	1	616.2	614.7	0.10%	614.2
					2	616.38	614.65	0.10%	614.15
					3	615.97	614.62	0.10%	614.12
	P5	80	12	Advanced Enviro-Septic Pipe	4	615.87	614.62	0.10%	614.12
					5	616.29	614.59	0.10%	614.09
					6	616.02	614.54	0.10%	614.04
	P6	80	12	Advanced Enviro-Septic Pipe	7	615.83	614.54	0.10%	614.04
					8	616.21	614.49	0.10%	613.99
					9	615.78	614.46	0.10%	613.96
	P7	80	12	Advanced Enviro-Septic Pipe	10	615.71	614.46	0.10%	613.96
					11	616.14	614.43	0.10%	613.93
					12	615.7	614.38	0.10%	613.88
	P8	80	12	Advanced Enviro-Septic Pipe	13	615.53	614.38	0.10%	613.88
					14	616.05	614.33	0.10%	613.83
					15	615.64	614.3	0.10%	613.8
	P9	80	12	Advanced Enviro-Septic Pipe	16	615.57	614.3	0.10%	613.8
					17	615.97	614.27	0.10%	613.77
					18	615.4	614.22	0.10%	613.72
	P10	80	12	Advanced Enviro-Septic Pipe	19	615.28	614.22	0.10%	613.72
					20	615.89	614.17	0.10%	613.67
					21	615.5	614.14	0.10%	613.64

DRAINAGE DEPTH SUMMARY		
	GROUND	INVERT
A	617.3	610.72
B	616.9	610.92
C	616.6	611.12
D	614.7	610.32
E	614.6	610.12
F	613.9	609.92
G	609.7	

DRAINAGE PIPE SLOPE SUMMARY		
	LENGTH	SLOPE
AB	61.8	0.36%
BC	32.4	0.62%
CD	42.7	1.87%
DE	31.84	0.63%
EF	52.2	0.38%
AF	42.3	1.86%
FG	33.9	0.65%

GENERAL NOTES

- SEE SHEET 17 FOR DETAILS ON P1, P2, & P3
- PRESBY MOUND SYSTEM TO BE INSTALLED AS PER DIRECTION FROM MANUFACTURER
- MINIMUM OF 4-INCHES OF COVER OVER ADVANCED ENVIRO-SEPTIC PIPES
- NO ABANDONED WELLS ON SITE, NO EXISTING WELLS TO BE ABANDONED
- SYSTEM IS 2500+ FEET FROM PROPERTY LINES IN ALL DIRECTIONS

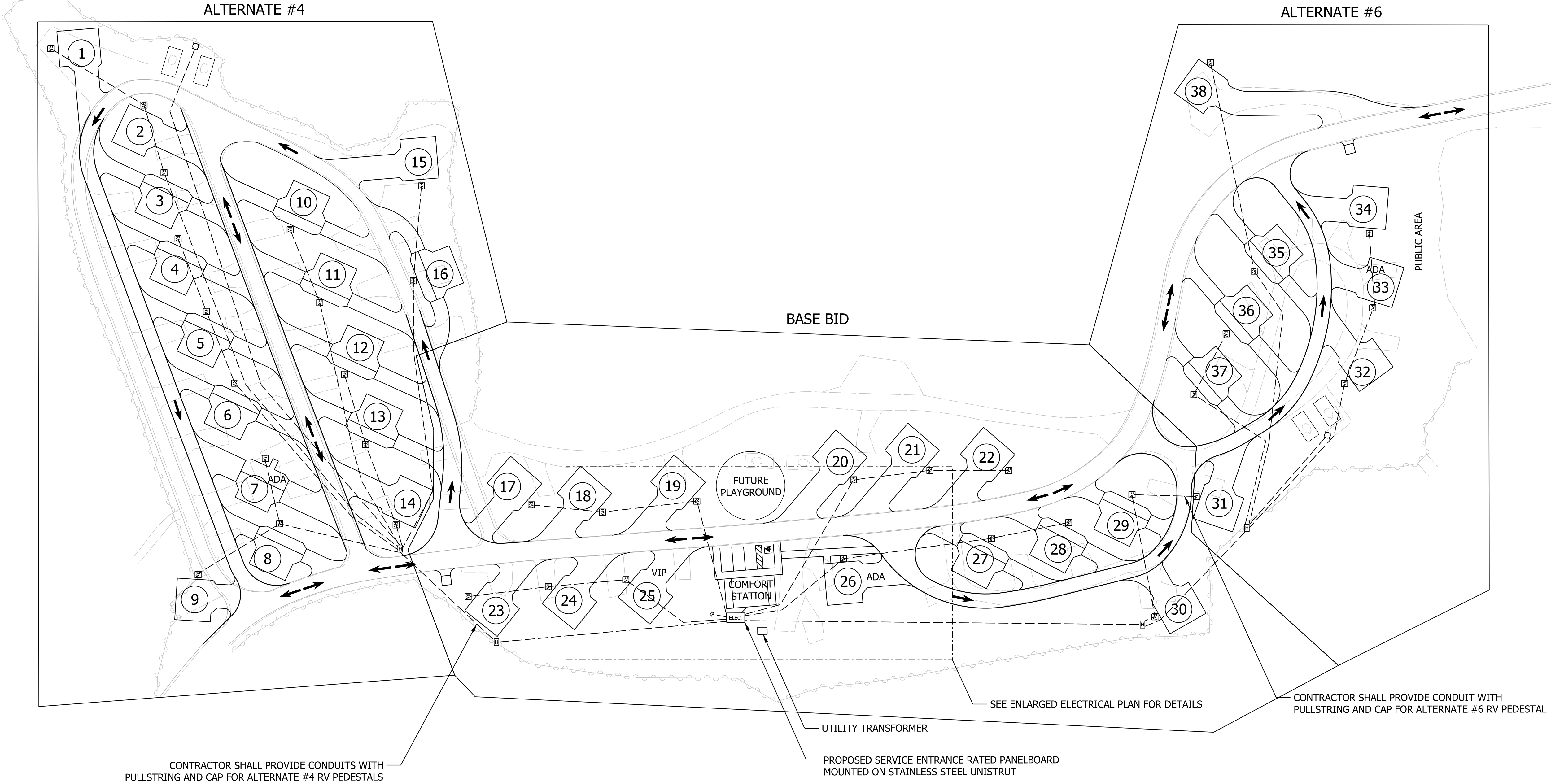
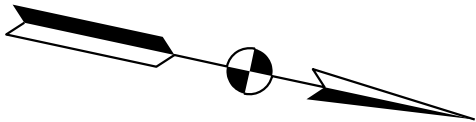
⊕ – SOIL SAMPLING SITE



DESIGNED: LMR		DRAWN: LMR	
CHECKED: AJW		CHECKED: AJW	

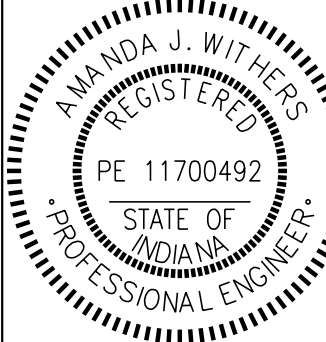
INDIANA DEPARTMENT OF NATURAL RESOURCES		SHEETS	
SEPTIC SYSTEM SITE PLAN		18 of 28	
		PROJECT	
		CDC 2409631016	

- GENERAL NOTES
1. ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN CONFORMANCE WITH NFPA (CURRENT LOCAL VERSION IN FORCE), THE RESPECTIVE EQUIPMENT MANUFACTURER'S DIRECTIONS AND ALL OTHER APPLICABLE LOCAL CODES, LAWS, ORDINANCES AND REQUIREMENTS IN FORCE. ANY INSTALLATION WHICH VOID THE U.L. LISTINGS (OR THIRD PARTY LISTING) AND/OR THE MANUFACTURER'S WARRANTY OF A DEVICE SHALL NOT BE PERMITTED.
2. THE LOCATION, SIZE, AND TYPE OF MATERIAL OF EXISTING UNDERGROUND UTILITIES INDICATED ON THE PLANS IS NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT OR COMPLETE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES OF HIS OPERATIONAL PLANS AND SHALL OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION AND ASSISTANCE RELATIVE TO THE LOCATION OF THE FACILITIES AND THE WORKING SCHEDULE OF THE COMPANIES FOR REMOVAL OR ADJUSTMENT WHERE REQUIRED. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY OF JURISDICTION. THE ENGINEER SHALL ALSO BE IMMEDIATELY NOTIFIED. ANY SUCH MAINS AND SERVICES SHALL BE RESTORED TO SERVICE AT ONCE AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT.
3. THE DRAWINGS ARE DIAGRAMMATIC AND ARE NOT INTENDED TO SHOW EVERY DETAIL OF CONSTRUCTION, METHODS, MATERIALS AND EQUIPMENT, OR EXACT LOCATIONS, ROUTING, ETC. THEY INDICATE THE RESULT TO BE ACHIEVED BY THE ASSEMBLAGE OF SEVERAL SYSTEMS FOR A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM. DO NOT SCALE THE CONTRACT DOCUMENTS. COORDINATE EXACT EQUIPMENT LOCATIONS WITH THE ARCHITECTURAL AND STRUCTURAL PORTIONS OF THE CONTRACT DOCUMENTS, AS WELL AS FIELD CONDITIONS, APPROVED SHOP DRAWINGS, AND WORK OF ALL OTHER DIVISION/TRADES.
4. PER NEC, NO CONDUIT RUN SHALL HAVE NAY MORE THAN 360 DEGREES OF TOTAL BENDS BETWEEN EQUIPMENT AND OR HANDHOLES. CONTRACTOR SHALL INSTALL ADDITIONAL HANDHOLES AS NECESSARY TO COMPLY WITH THESE REQUIREMENTS.
5. SEE ELECTRICAL ONE-LINE FOR FURTHER INFORMATION ON CONDUIT AND WIRING.
6. CONTRACTOR SHALL EXCAVATE TRENCH AND PROVIDE 2" CONDUIT FOR THE UNDERGROUND PRIMARY FROM EXISTING PADMOUNT SERVICE LOCATED AT THE SOUTH SHELTER HOUSE TO THE PROPOSED TRANSFORMER LOCATION. TRENCH SHALL BE MINIMUM 36".
7. ALL SECONDARY CONDUCTORS SHALL BE DIRECT BURIED. SECONDARY CONDUCTORS UNDER ROADS SHALL BE IN CONDUIT.



LEGEND

- RV PEDESTAL
- ELECTRICAL HANDHOLE
- LIGHT FIXTURE
- TRAFFIC FLOW ARROWS



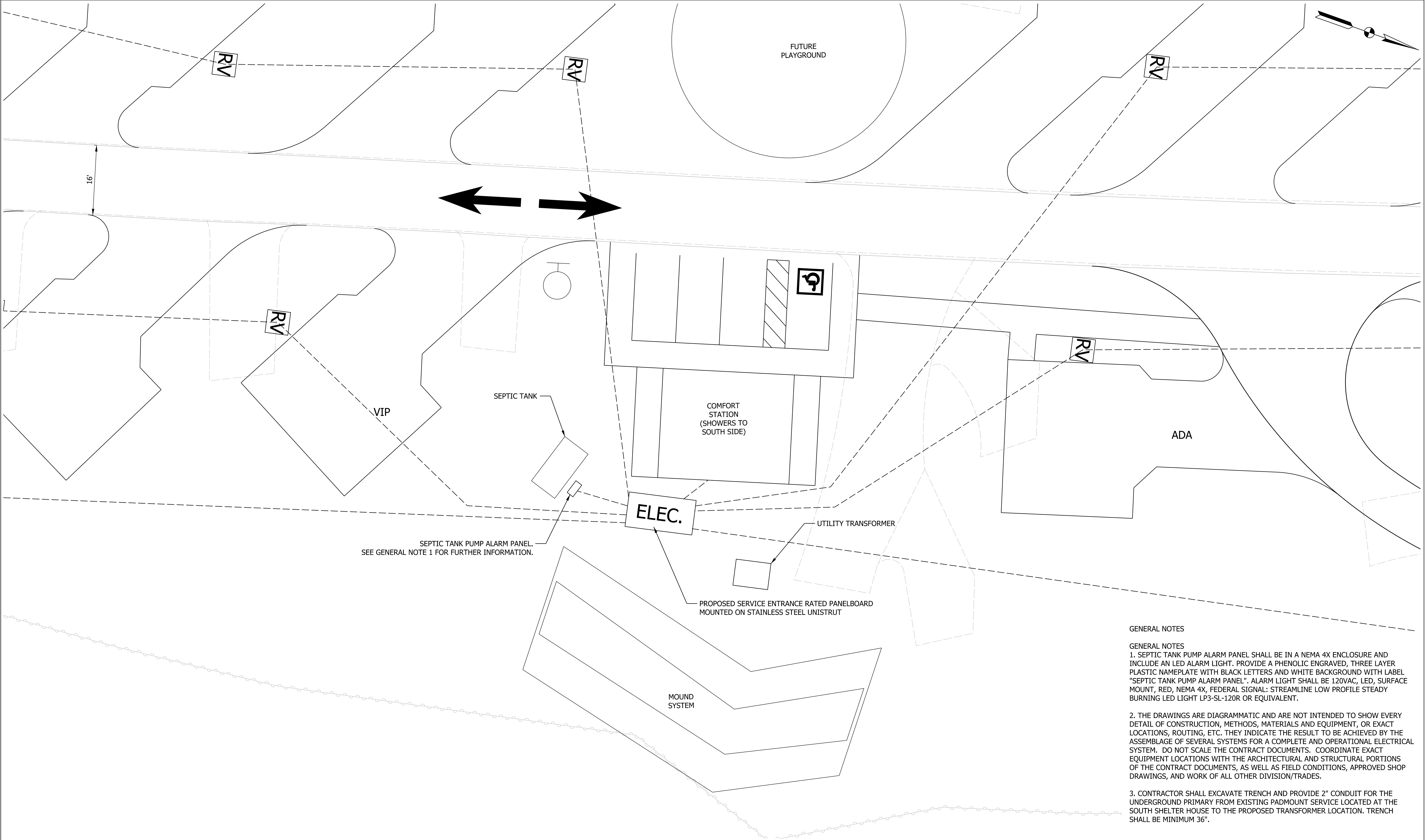
RECOMMENDED FOR APPROVAL	<i>Amanda J. Withers</i>	3/10/2025	DATE
DESIGNED:	LNB	3/10/2025	DRAWN: BTS 3/10/2025
CHECKED:	AW	3/10/2025	CHECKED: LNB 3/10/2025

INDIANA DEPARTMENT
OF NATURAL RESOURCES

ELECTRICAL SITE PLAN

SCALE
1" = 50'

SHEETS
19 of 28
PROJECT
CDC 2409631016



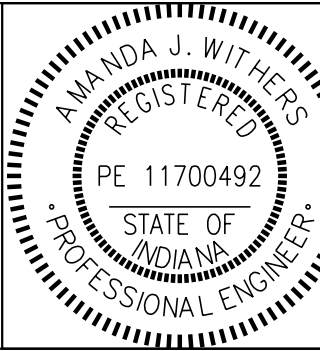
LEGEND

- RV

RV PEDESTAL
- H

ELECTRICAL HANDHOLE
- LIGHT FIXTURE
- ➔

TRAFFIC FLOW ARROWS



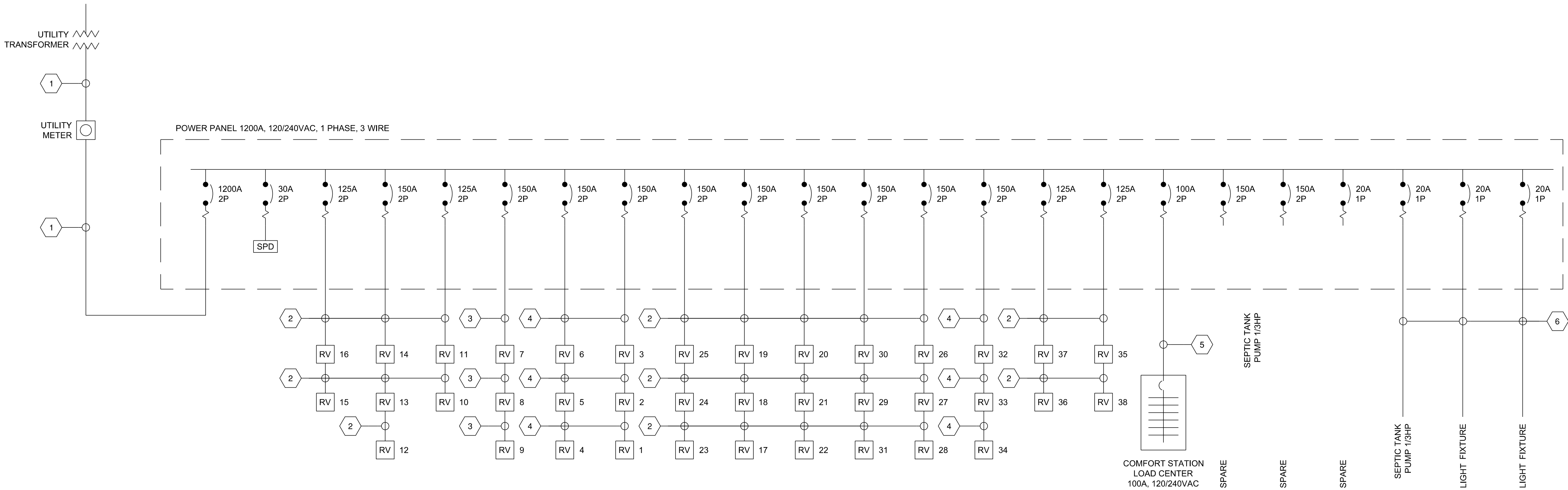
RECOMMENDED FOR APPROVAL	<i>Amanda J. Withers</i>	3/10/2025
DESIGNED:	LNB	3/10/2025
DRAWN:	BTS	3/10/2025
CHECKED:	AW	3/10/2025
CHECKED:	LNB	3/10/2025

INDIANA DEPARTMENT
OF NATURAL RESOURCES

ENLARGED ELECTRICAL SITE PLAN

SCALE
1" = 10'

SHEETS
20 of 28
PROJECT
CDC 2409631016

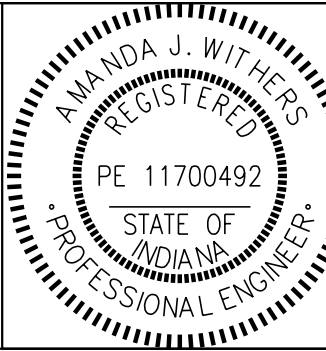


2

ONE-LINE DIAGRAM

N.T.S.

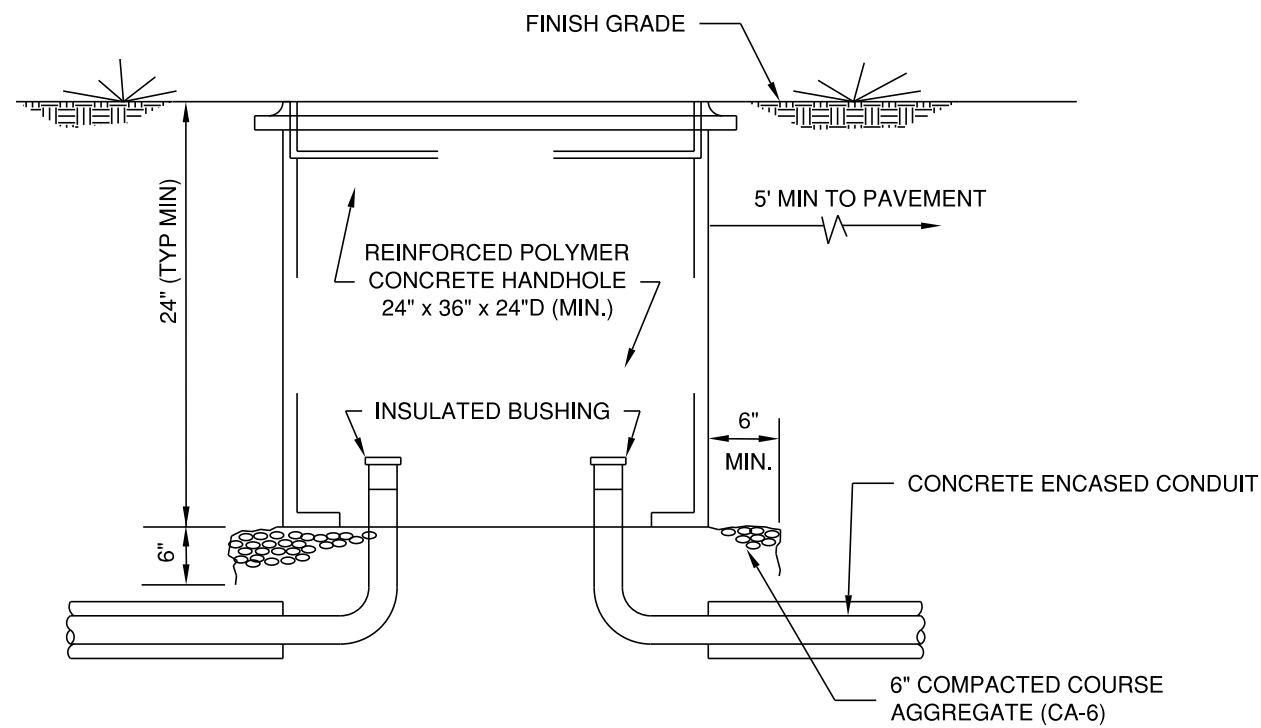
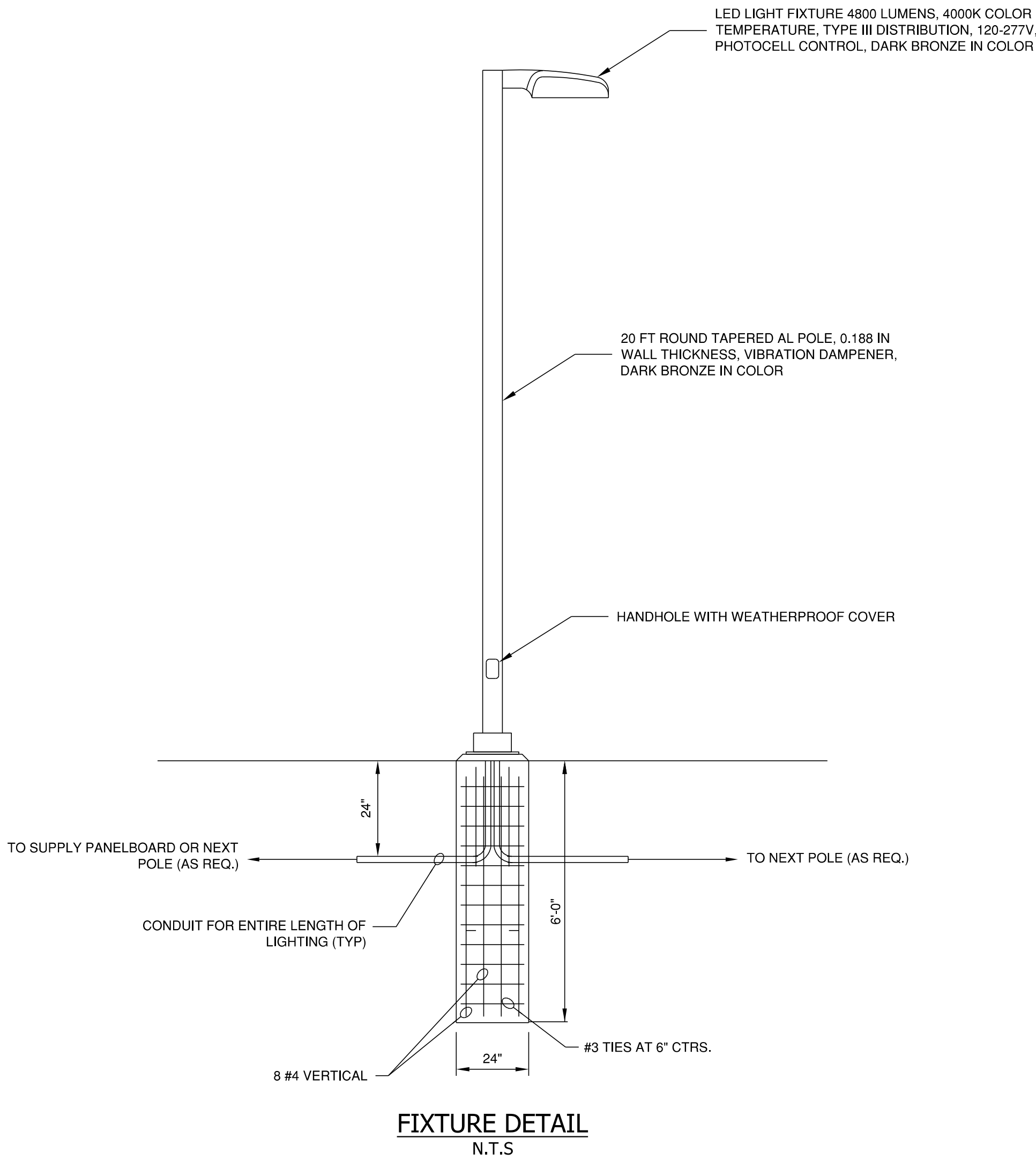
- KEYED NOTES:
- 1. TWO 4" CONDUITS EACH WITH 3 - 600KCMIL, 1 - 600KCMIL GROUNDED SERVICE CONDUCTOR.
 - 2. 3 - #1/0 AWG, 1 - #1/0 NEUTRAL, 1 - #6 GND IN 3" CONDUIT.
 - 3. 3 - #2/0 AWG, 1 - #2/0 NEUTRAL, 1 - #4 GND IN 3" CONDUIT.
 - 4. 3 - #3/0 AWG, 1 - #3/0 NEUTRAL, 1 - #4 GND IN 3" CONDUIT.
 - 5. 3 - #3 AWG, 1 - #8 GND IN 1-1/2" CONDUIT.
 - 6. 2 - #10 AWG, 1 - #10 GND IN 1" CONDUIT.



RECOMMENDED FOR APPROVAL		<i>Amanda J Withers</i>		3/10/2025	
				DATE	
DESIGNED:	LNB	3/10/2025	DRAWN:	BTS	3/10/2025
CHECKED:	AW	3/10/2025	CHECKED:	LNB	3/10/2025

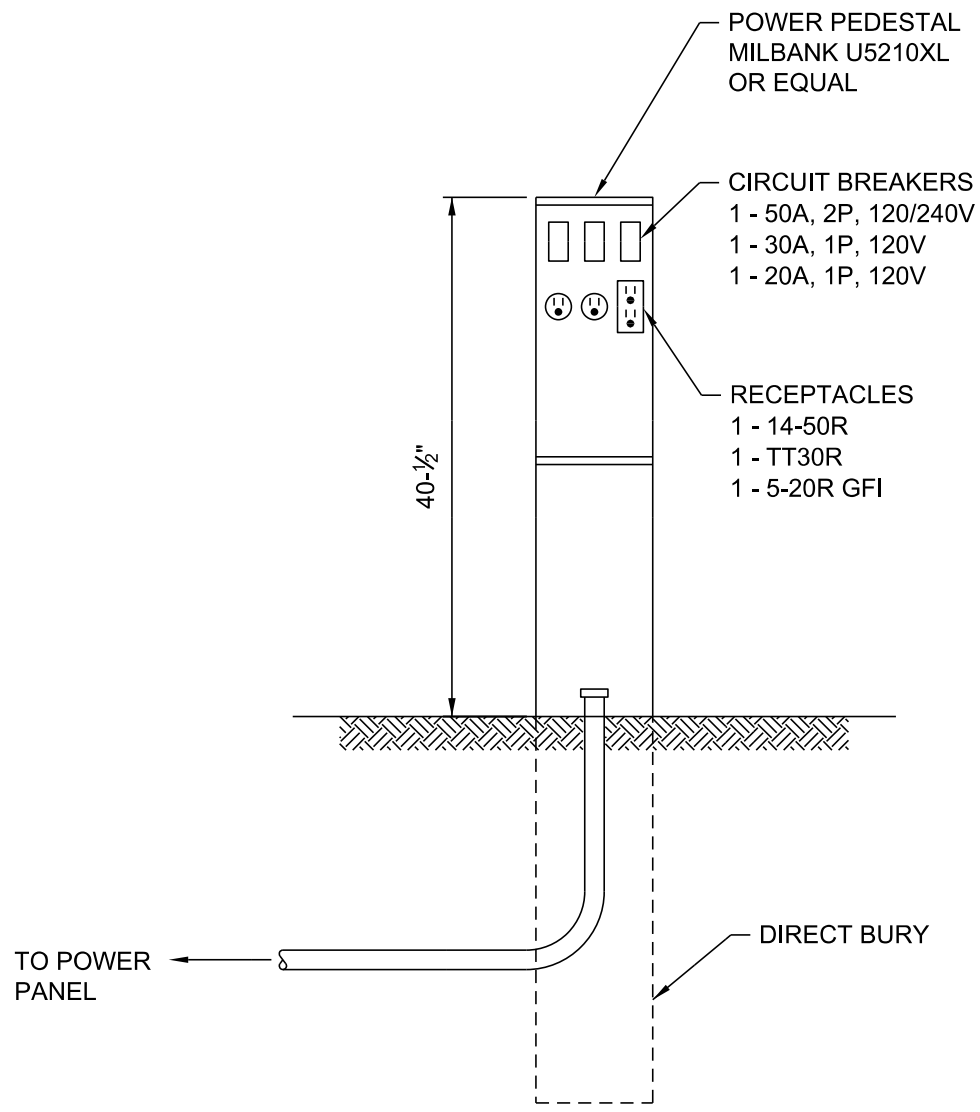
INDIANA DEPARTMENT OF NATURAL RESOURCES	
ELECTRICAL DETAILS	

SCALE			
N.T.S.			
	SHEETS		
	21	of	28
	PROJECT		
	CDC 2409631016		

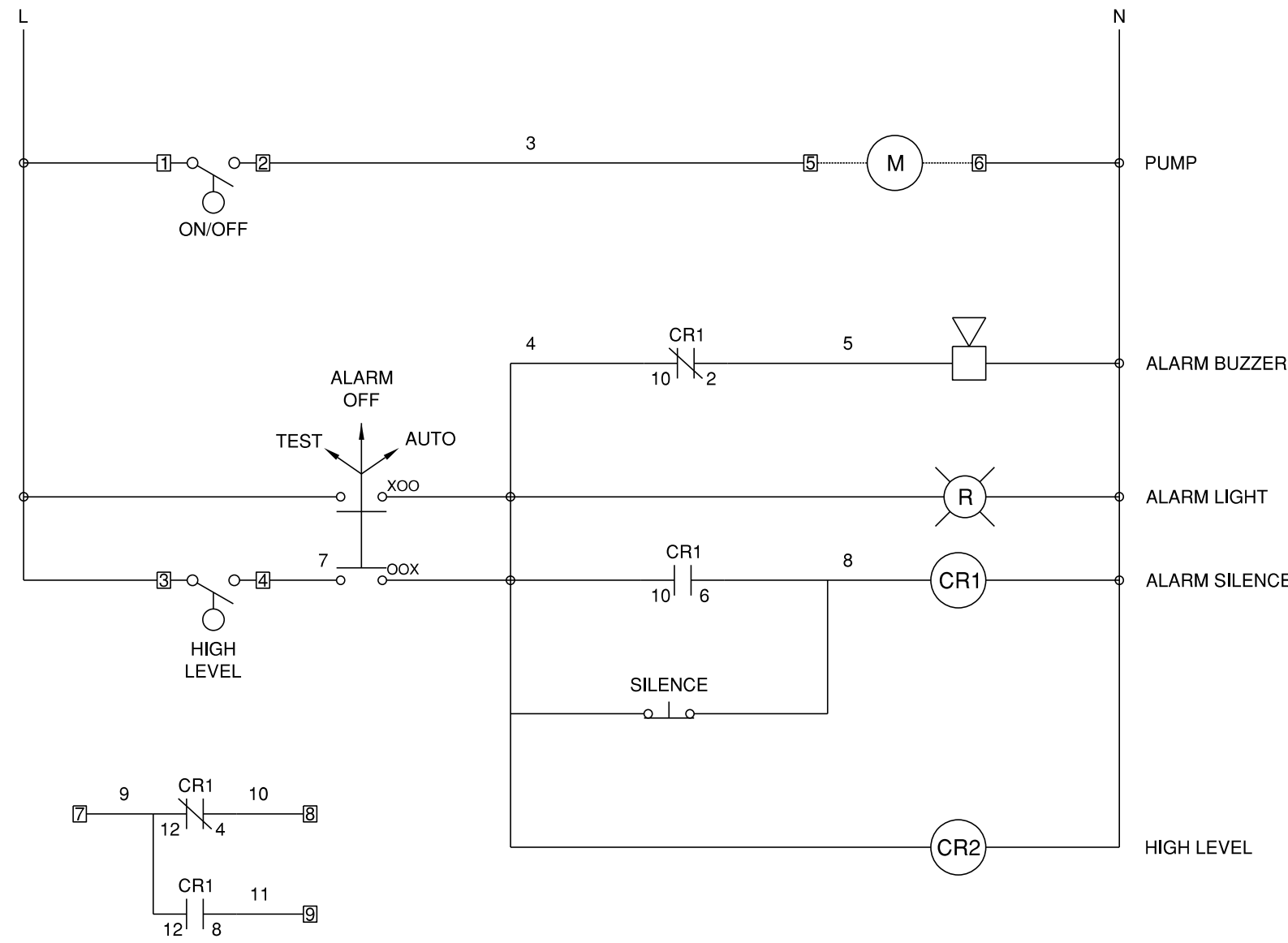


- NOTES**
- COVER TO BE LABELED ELECTRICAL OR CONTROLS AS REQUIRED.
 - HEAVY DUTY HAND HOLE AND COVER TO BE RATED ANSI TIER 22.
 - STAINLESS STEEL INSERTS AND BOLTS.
 - PROVIDE LIFTING RING FOR LID REMOVAL.
 - CONDUIT DIMENSIONS AND LOCATIONS AS SHOWN ARE NOT TYPICAL OF EVERY HANHOLE. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL CONDUIT OPENING DIMENSIONS AND LOCATIONS FOR EACH HANDHOLE.

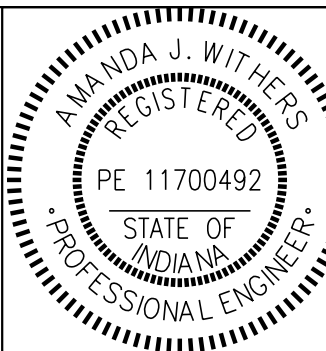
1 **ELECTRICAL HANDHOLE DETAIL**
N.T.S.



CAMPGROUND/RV PEDESTAL DETAIL
N.T.S.



1 **SEPTIC TANK PUMP CONTROL SCHEMATIC**
N.T.S.



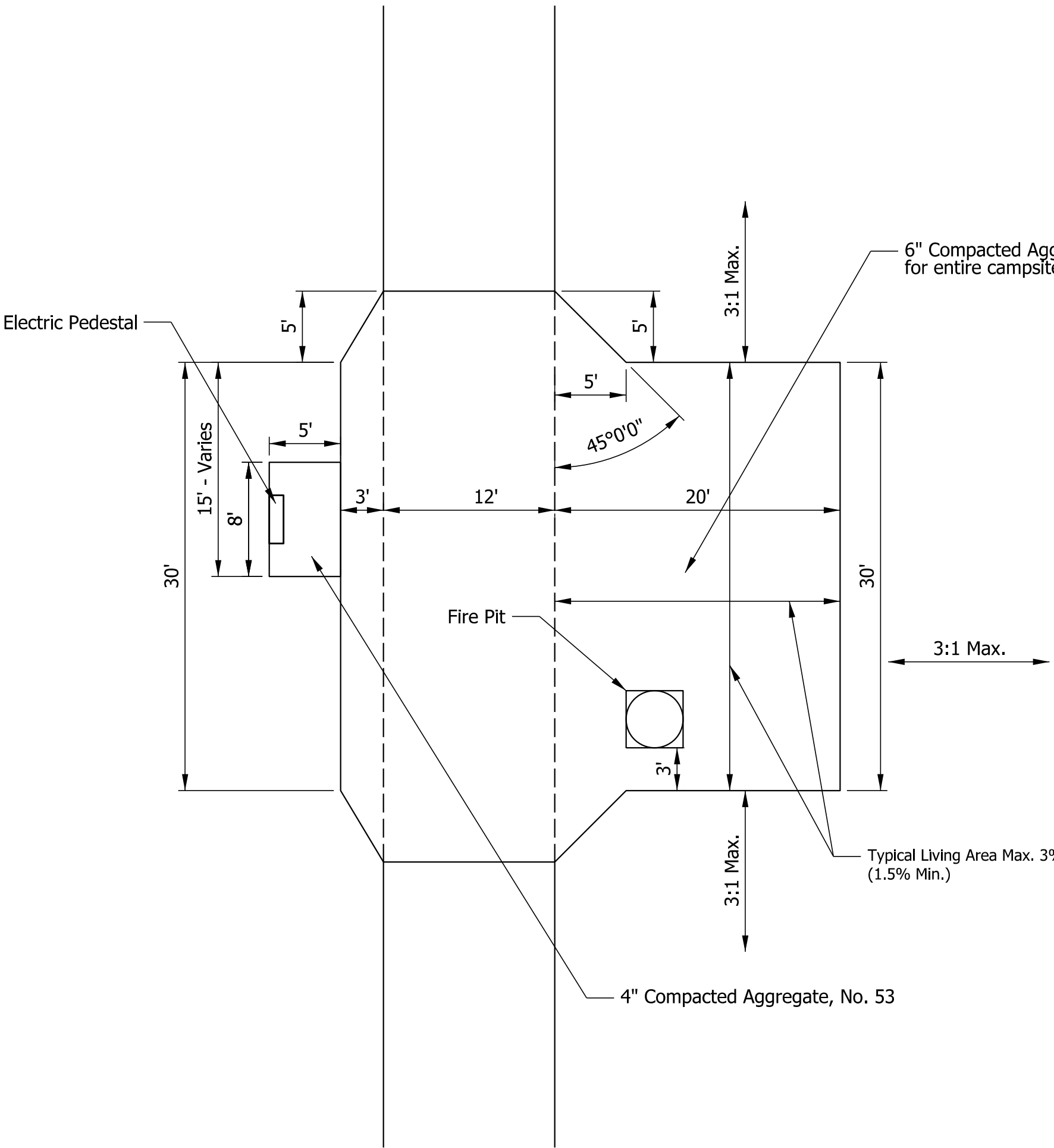
RECOMMENDED FOR APPROVAL	<i>Amanda J Withers</i>	3/10/2025	DATE
DESIGNED:	LNB	3/10/2025	DRAWN:
CHECKED:	AW	3/10/2025	CHECKED:
			LNB
			3/10/2025

INDIANA DEPARTMENT
OF NATURAL RESOURCES

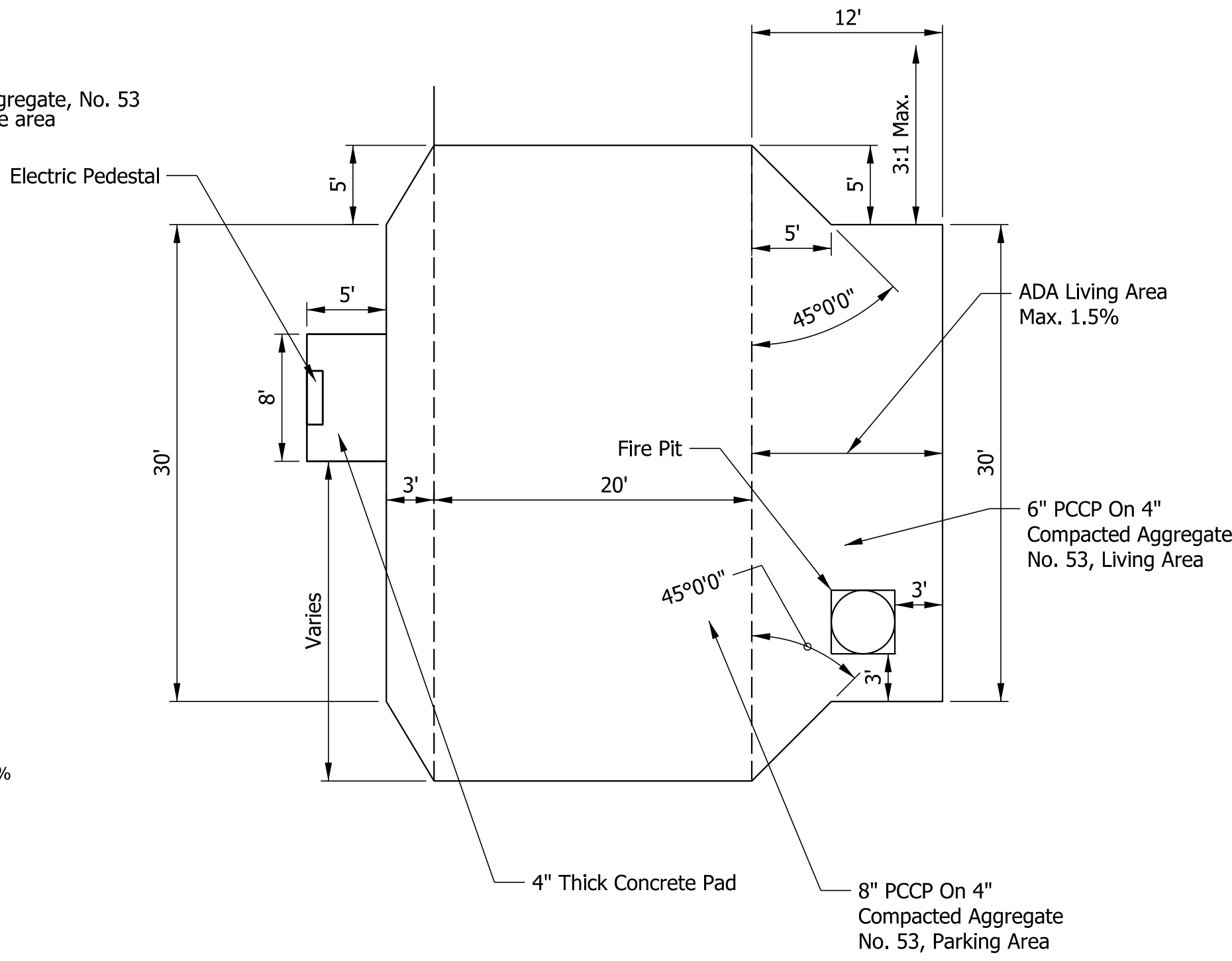
ELECTRICAL
DETAILS

SCALE
N.T.S.

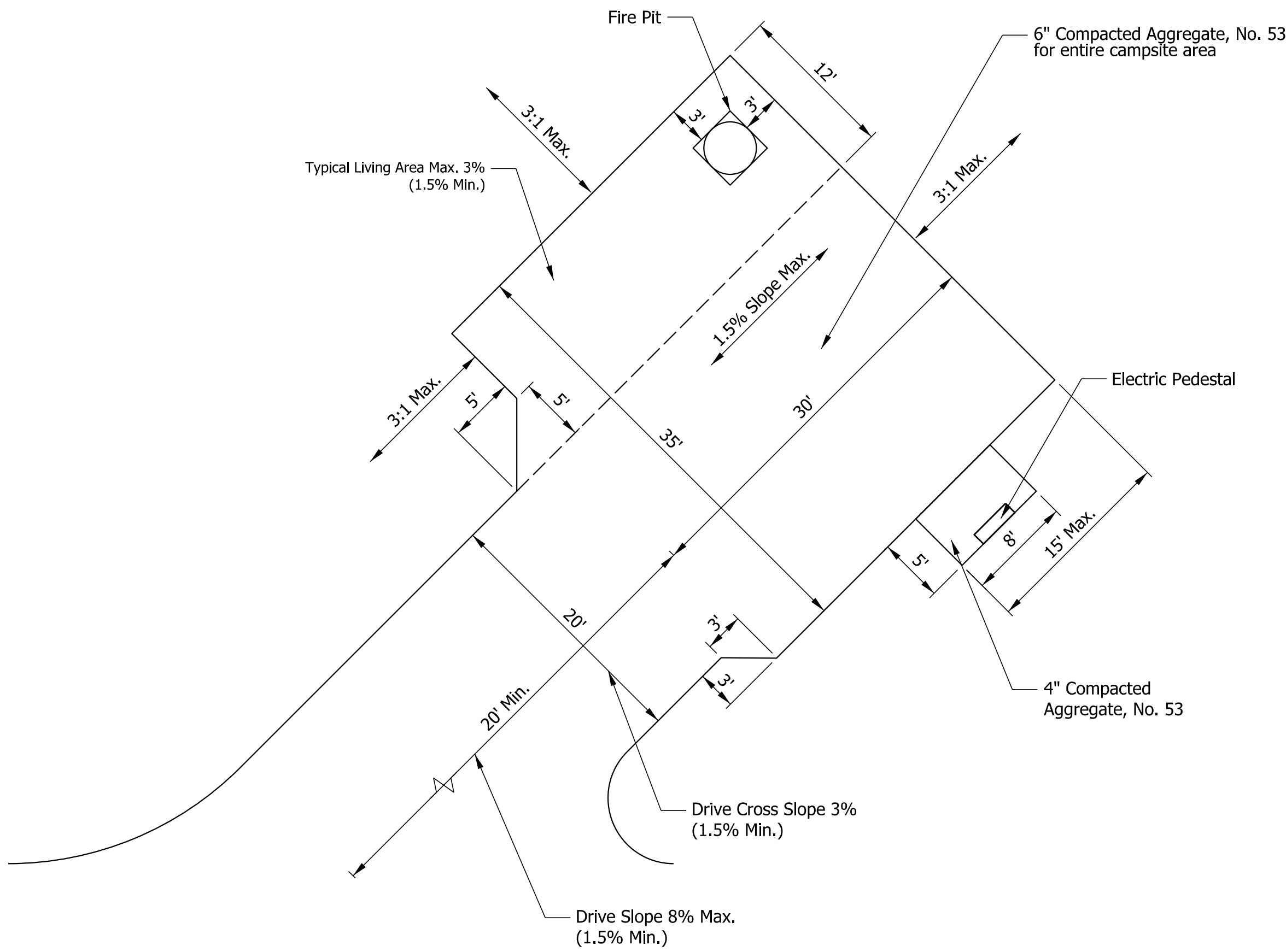
SHEETS		
22	of	28
PROJECT		
CDC 2409631016		



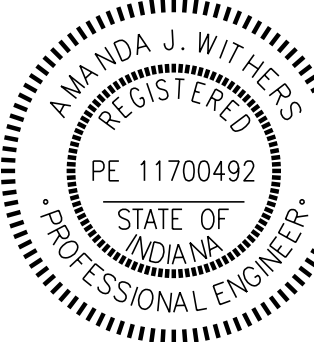
PULL THROUGH



PULL THROUGH - ADA



SPUR

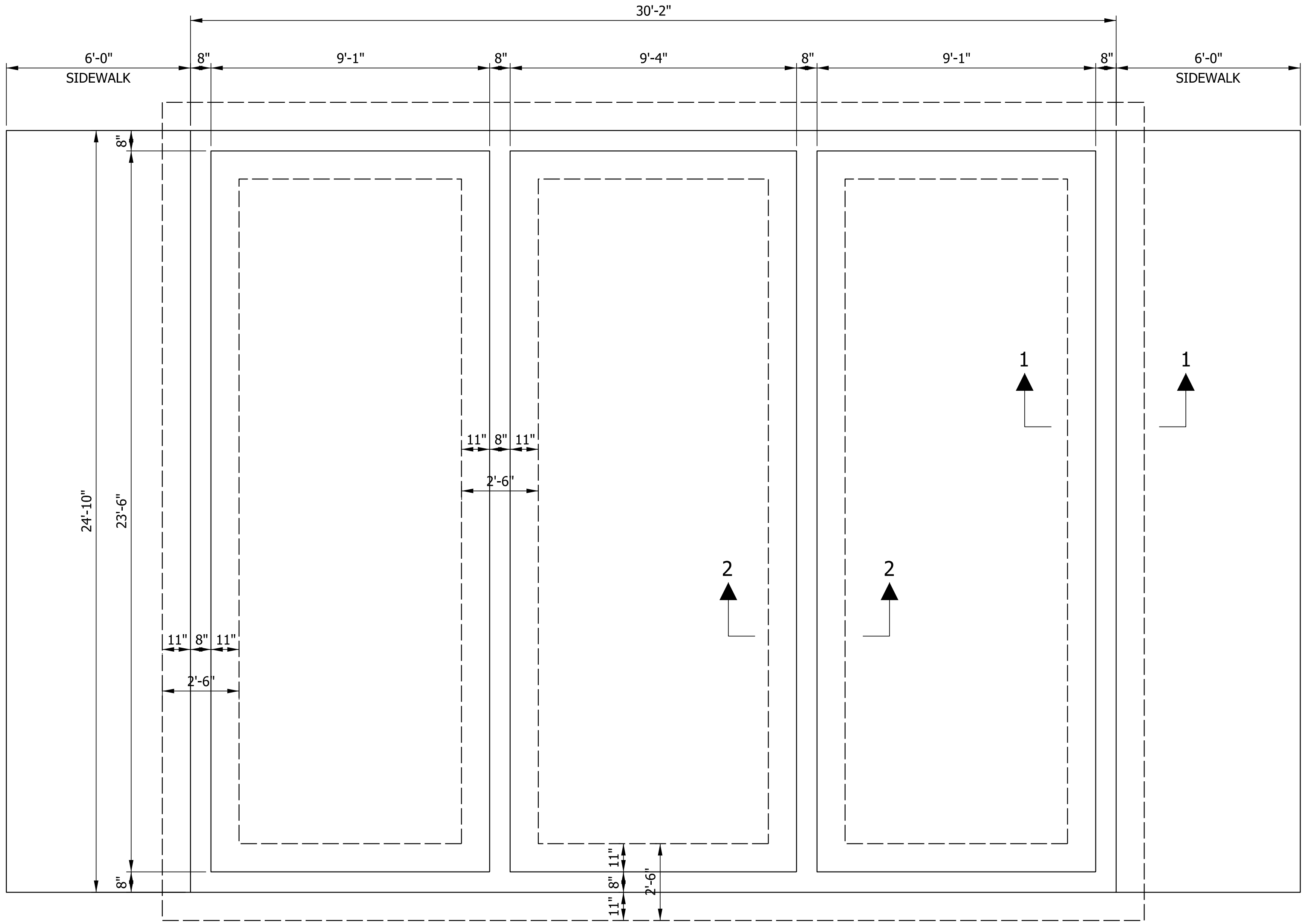


RECOMMENDED FOR APPROVAL	<i>Amanda J. Withers</i>	3/10/2025	DATE
DESIGNED:	LNB	3/10/2025	DRAWN: BTS 3/10/2025
CHECKED:	AW	3/10/2025	CHECKED: LNB 3/10/2025

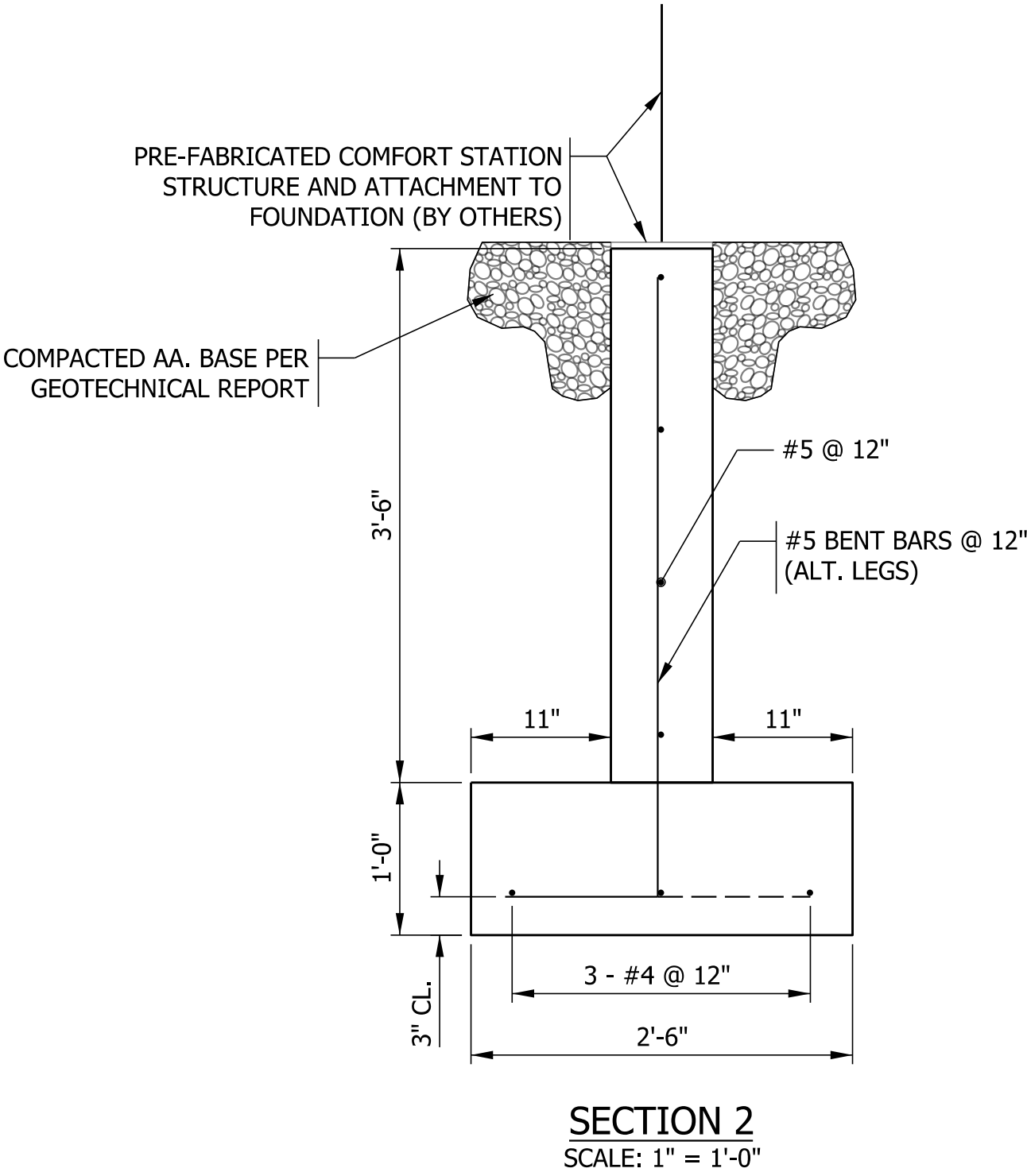
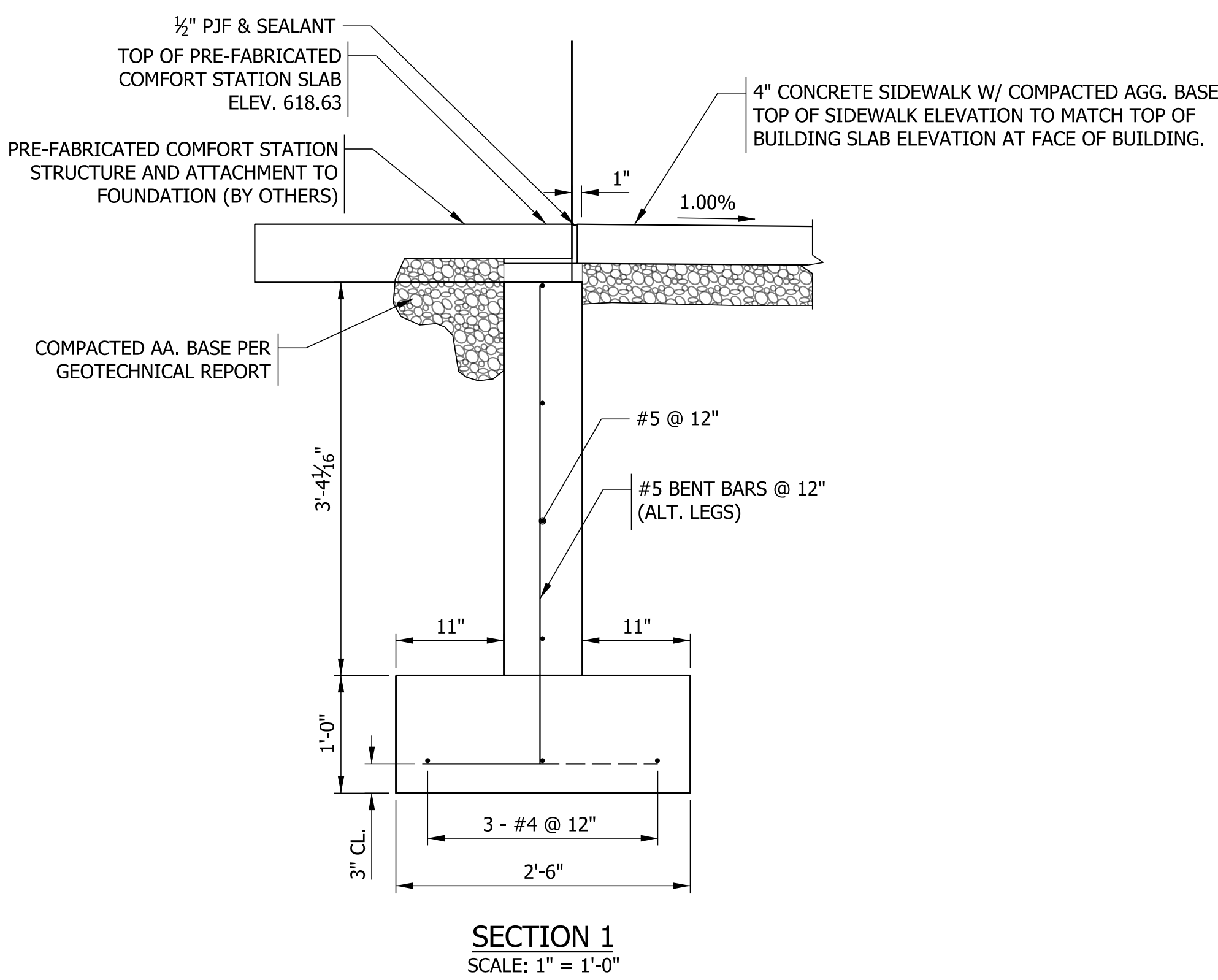
INDIANA DEPARTMENT
OF NATURAL RESOURCES

CAMPSITE DETAILS

SCALE	
1/8" = 1'	
SHEETS	
23	of 28
PROJECT	
CDC 2409631016	

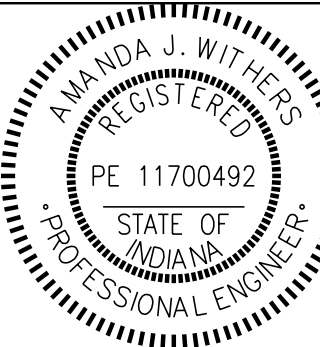


COMFORT STATION FOUNDATION PLAN
SCALE: $\frac{3}{8}$ " = 1'-0"



Plot: 3/10/2025 9:11:37 AM

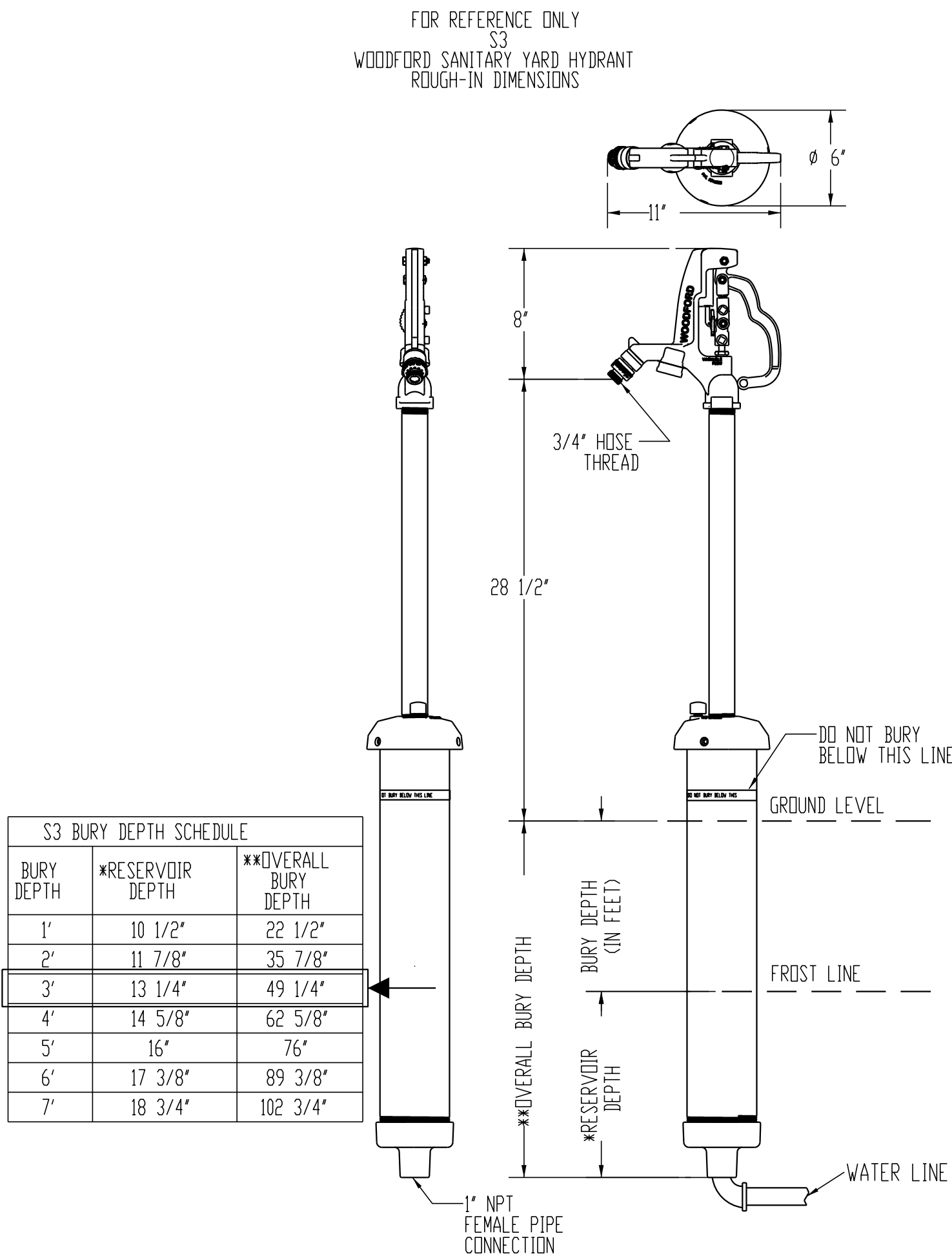
File: J:\IN-DNR\23005799-00_FerdinandSFCamp\Draw\Sheets\ShT_ComfortStation Detail_01.dgn



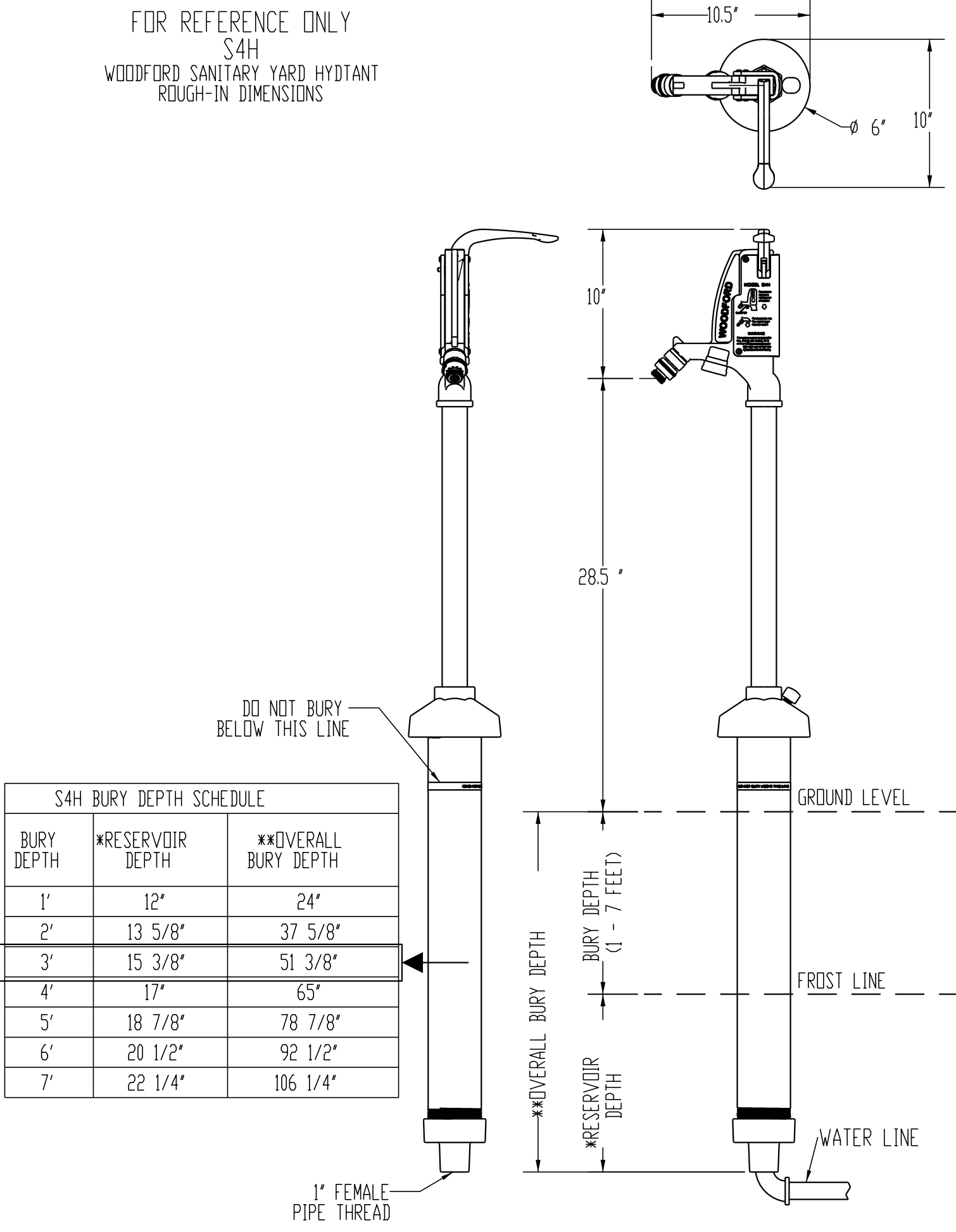
RECOMMENDED FOR APPROVAL	<i>Amanda J. Withers</i>	3/10/2025
DESIGNED:	LNB	3/10/2025
CHECKED:	AW	3/10/2025
DRAWN:	BTS	3/10/2025
CHECKED:	LNB	3/10/2025

INDIANA DEPARTMENT OF NATURAL RESOURCES
COMFORT STATION DETAIL

SCALE AS NOTED	SHEETS 24 of 28
	PROJECT CDC 2409631016

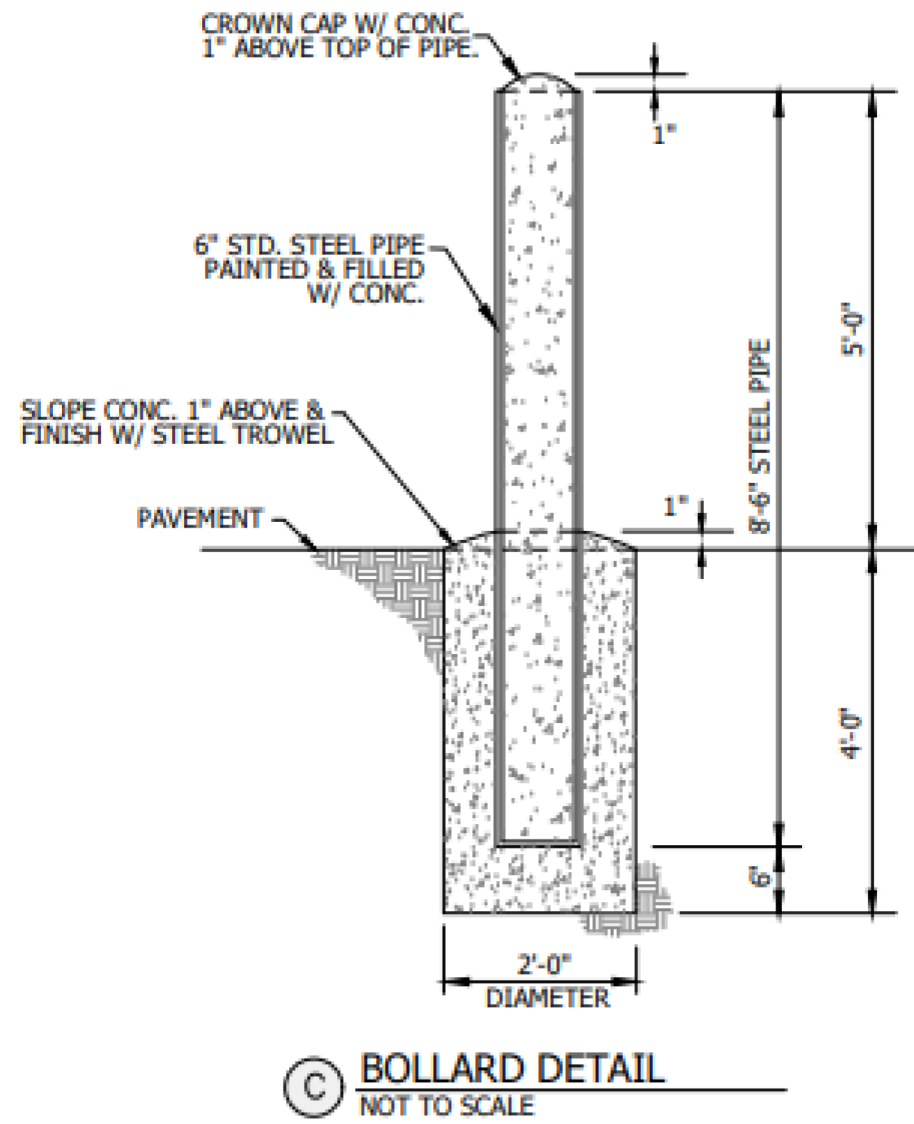


S3 BURY DEPTH SCHEDULE		
BURY DEPTH	*RESERVOIR DEPTH	**OVERALL BURY DEPTH
1'	10 1/2"	22 1/2"
2'	11 7/8"	35 7/8"
3'	13 1/4"	49 1/4"
4'	14 5/8"	62 5/8"
5'	16"	76"
6'	17 3/8"	89 3/8"
7'	18 3/4"	102 3/4"



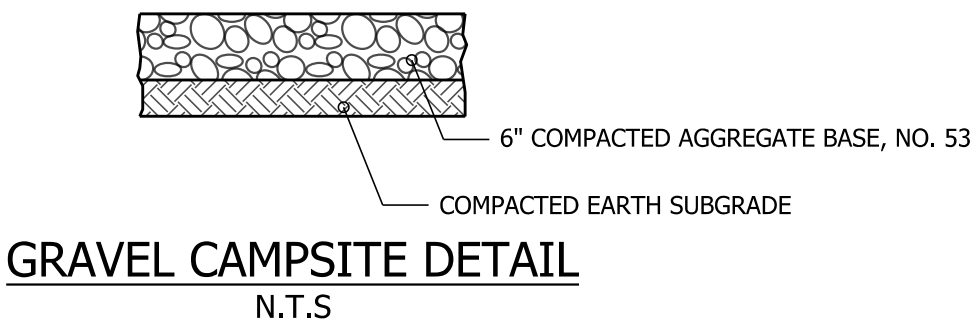
S4H BURY DEPTH SCHEDULE		
BURY DEPTH	*RESERVOIR DEPTH	**OVERALL BURY DEPTH
1'	12"	24"
2'	13 5/8"	37 5/8"
3'	15 3/8"	51 3/8"
4'	17"	65"
5'	18 7/8"	78 7/8"
6'	20 1/2"	92 1/2"
7'	22 1/4"	106 1/4"

YARD HYDRANT DETAIL
N.T.S.

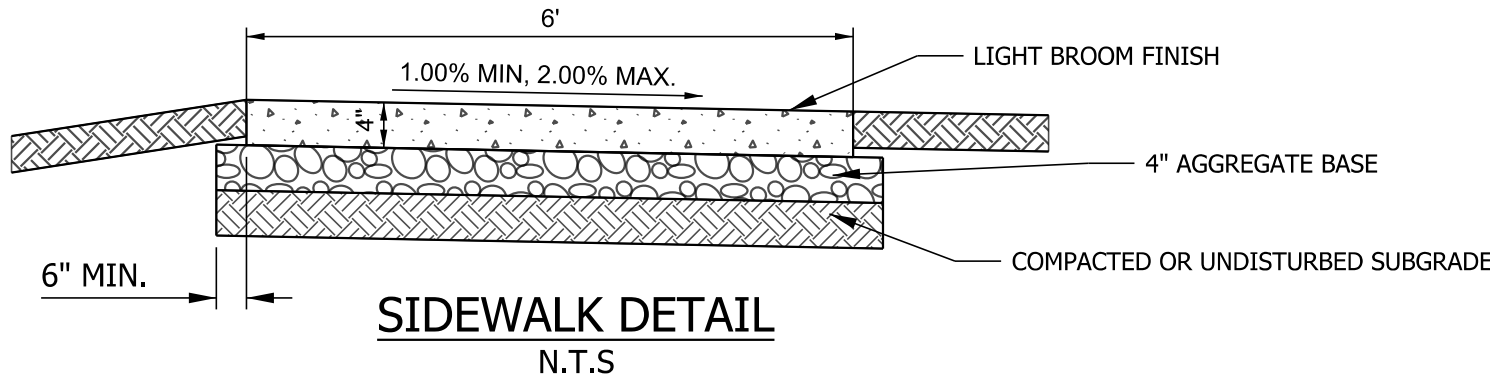


BOLLARD NOTES:

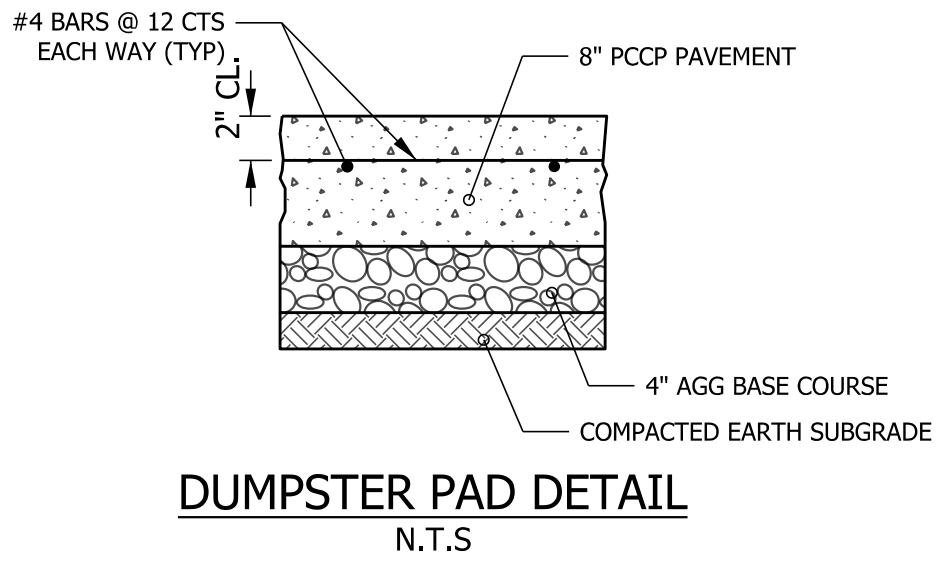
1. PLACE BOLLARDS TO PROTECT THE COMFORT STATION FROM VEHICULAR DAMAGE AT NORTH AND SOUTH ENDS OF PARKING AREA AND SPACED EVERY 5-6 FEET (8 TOTAL)
2. PLACE TWO BOLLARDS AT EACH DUMPSTER PAD LOCATION TO PROTECT DUMPSTERS FROM DAMAGE
3. PLACE A SINGULAR BOLLARD TO MARK EACH PROPOSED 2-INCH GATE VALVE ON THE WATER MAIN
4. PLACE TWO BOLLARDS AT EACH 1-INCH SANITARY YARD HYDRANT (4 TOTAL) NOT ASSOCIATED WITH A CAMPSITE



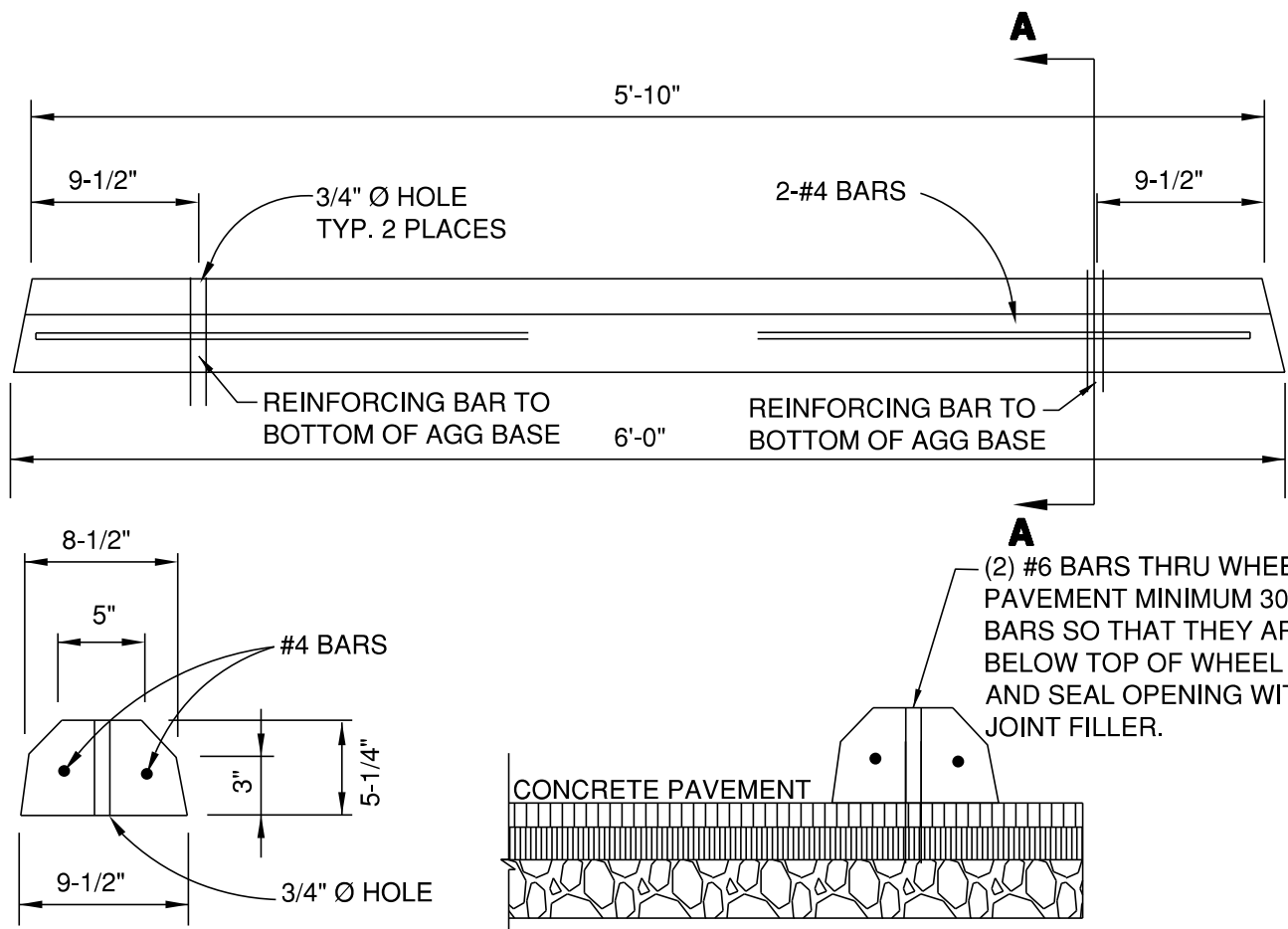
GRAVEL CAMPSITE DETAIL
N.T.S.



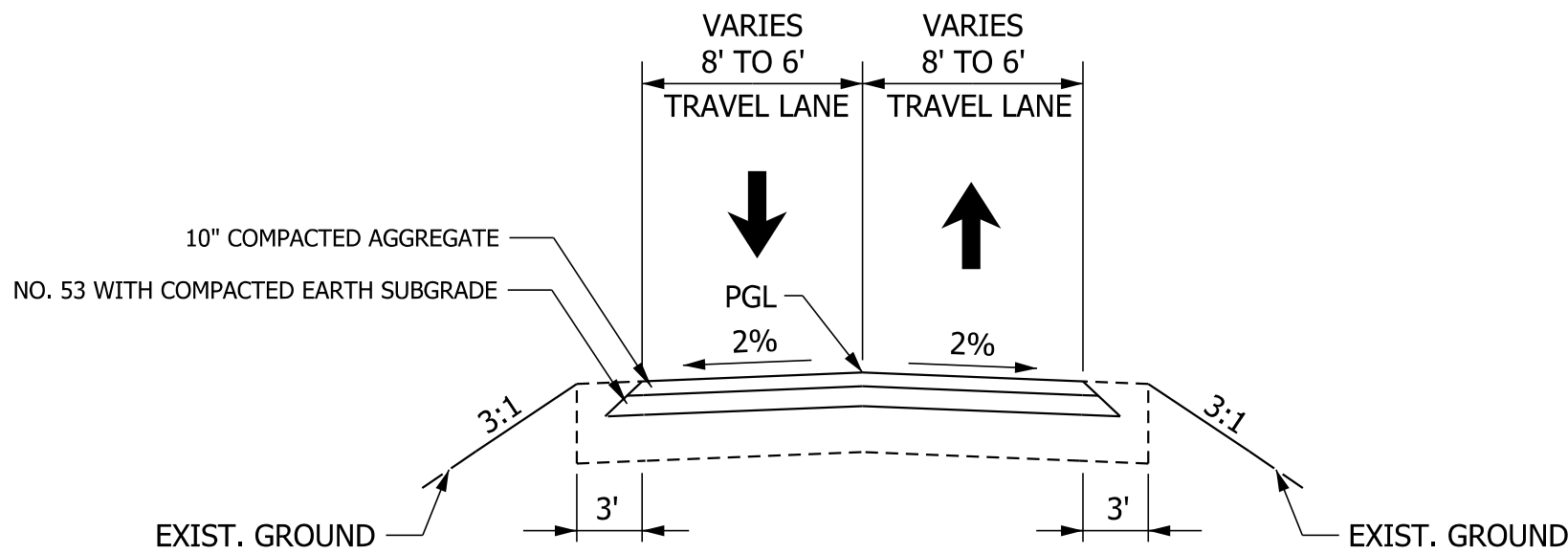
SIDEWALK DETAIL
N.T.S.



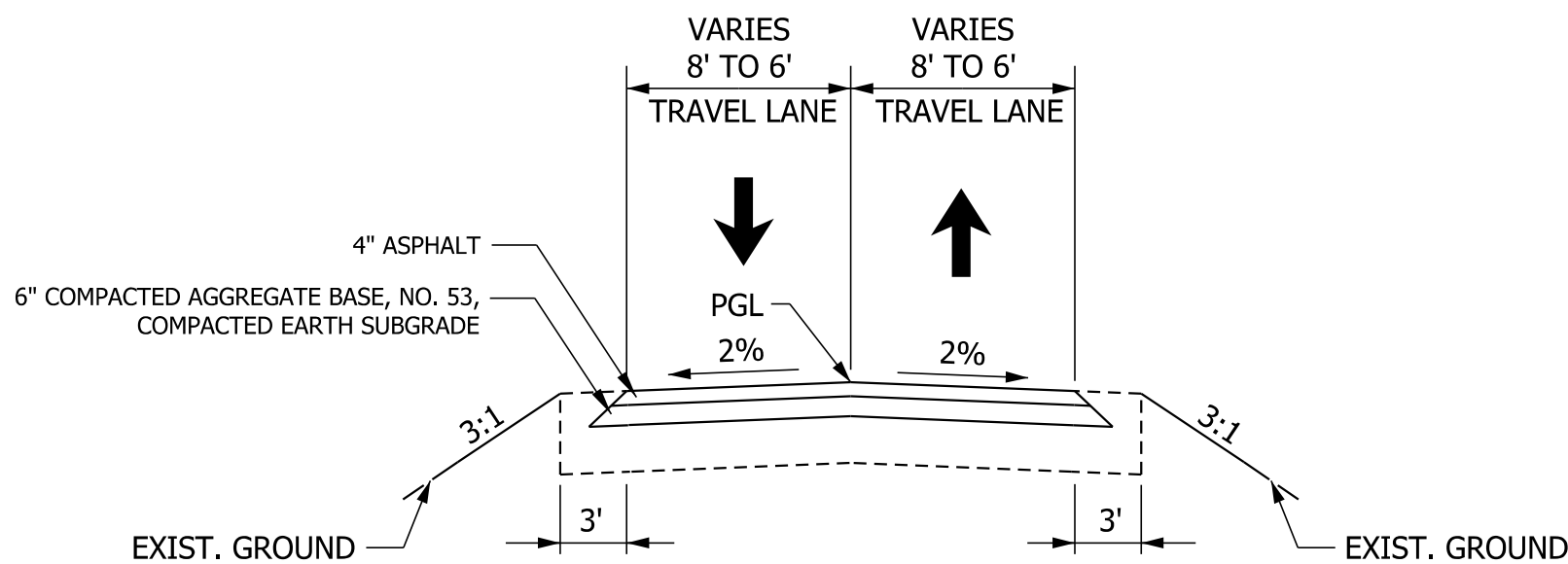
DUMPSTER PAD DETAIL
N.T.S.



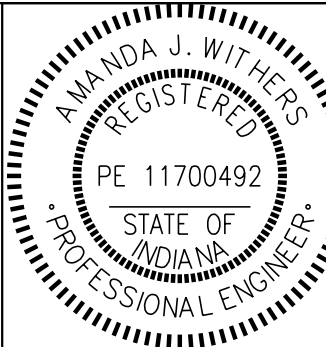
CONCRETE PARKING BLOCK DETAIL
N.T.S.



TYPICAL GRAVEL ROADWAY SECTION



TYPICAL ROADWAY SECTION



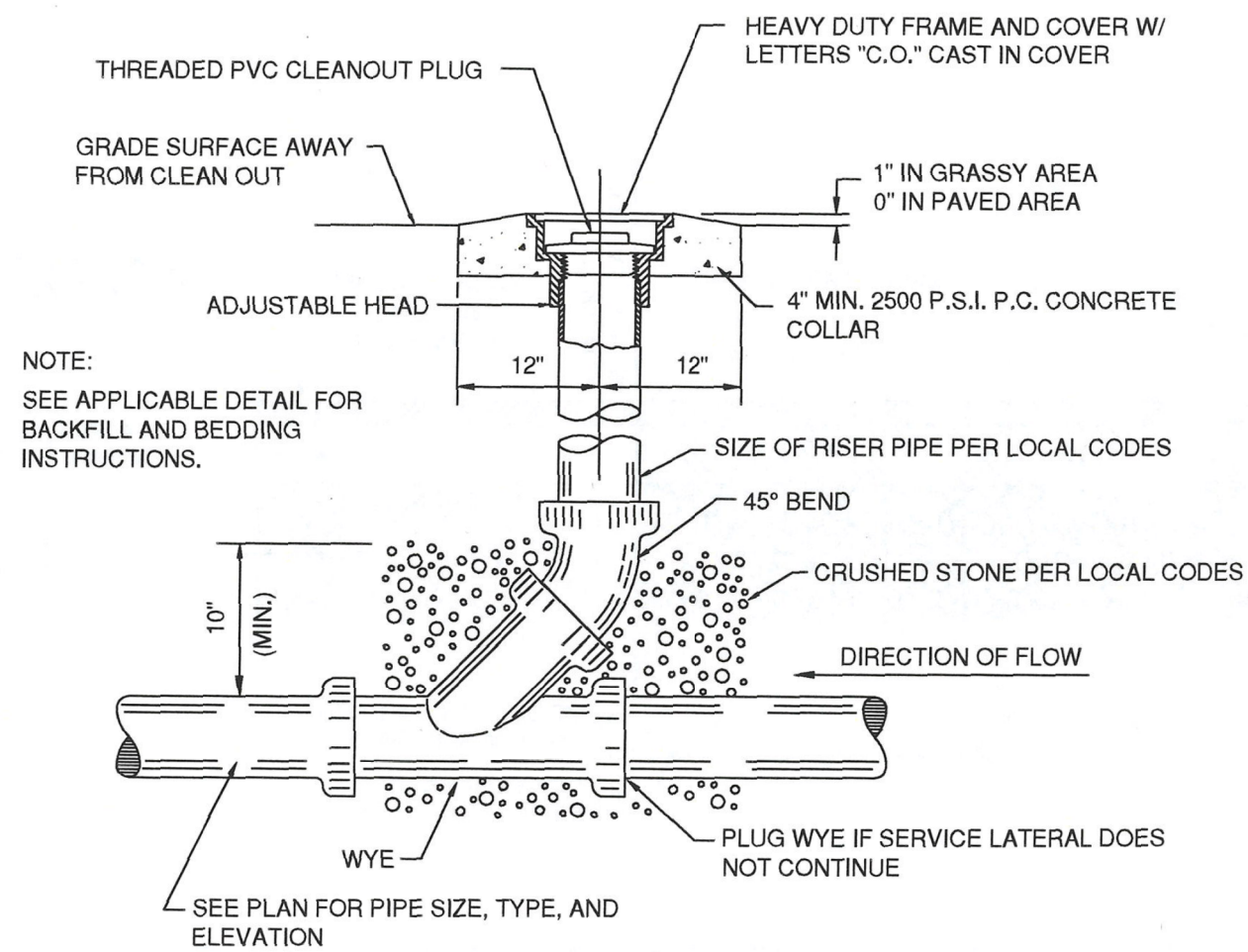
RECOMMENDED FOR APPROVAL	<i>Amanda J. Withers</i>	3/10/2025
DESIGNED:	LNB	3/10/2025
DRAWN:	BTS	3/10/2025
CHECKED:	AW	3/10/2025
CHECKED:	LNB	3/10/2025

INDIANA DEPARTMENT
OF NATURAL RESOURCES

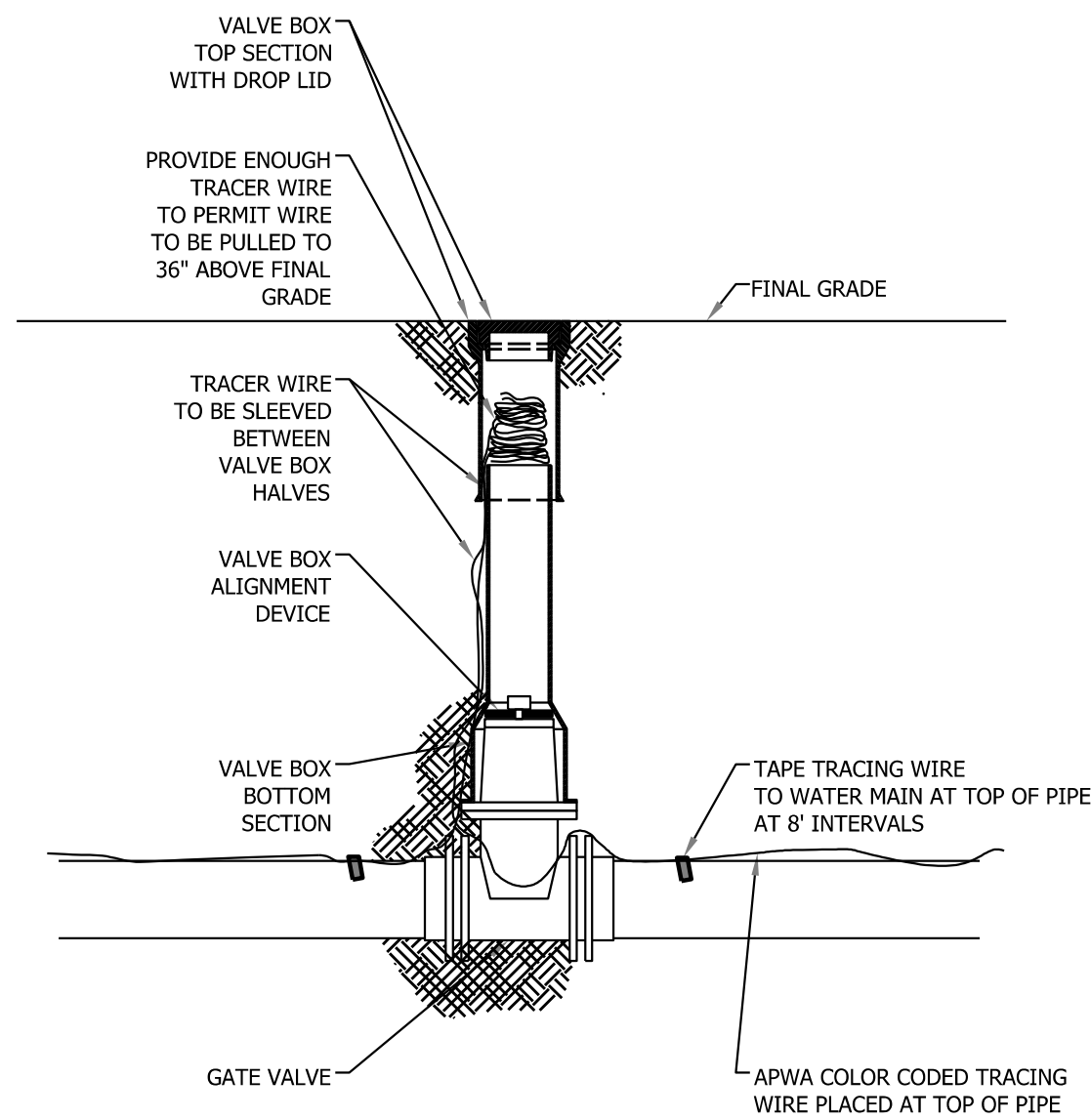
SITE DETAILS

SCALE
N.T.S.

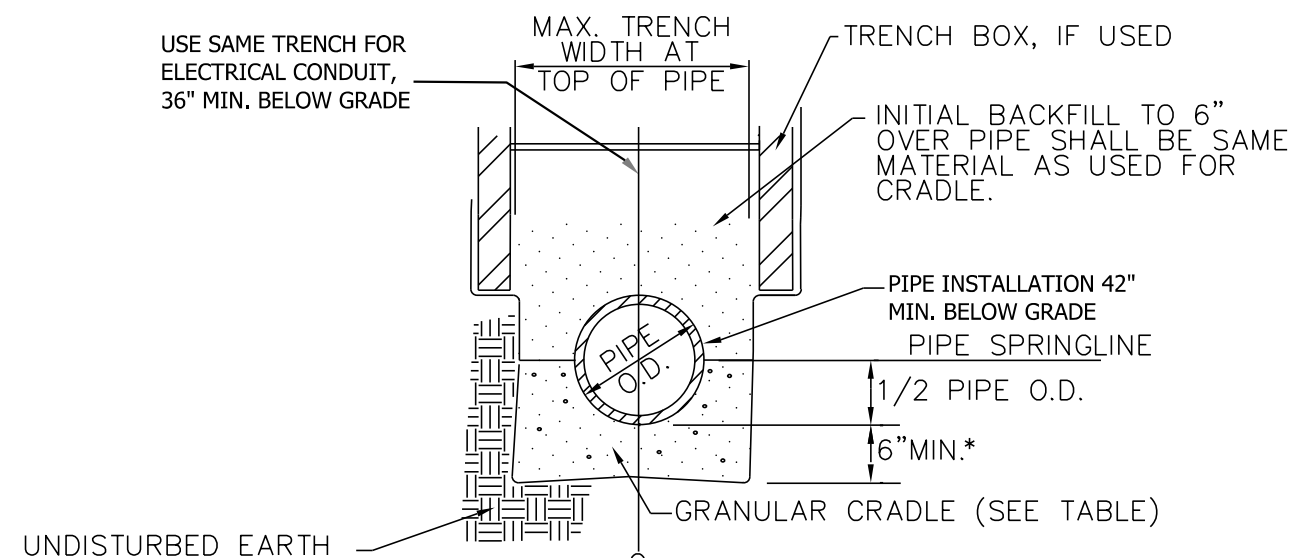
SHEETS		
25	of	28
PROJECT		
CDC 2409631016		



A1 TYPICAL CLEANOUT DETAIL
N.T.S.



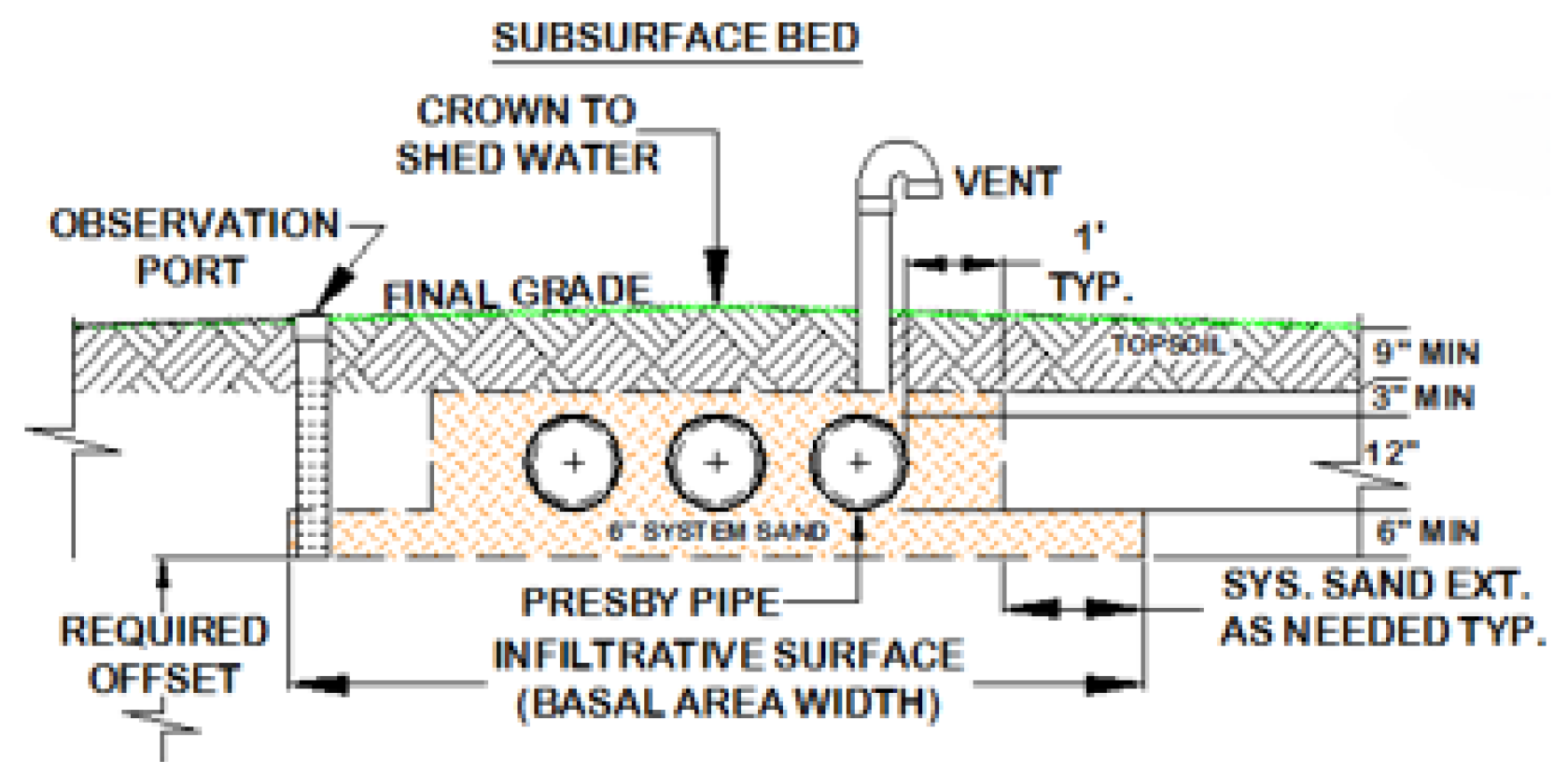
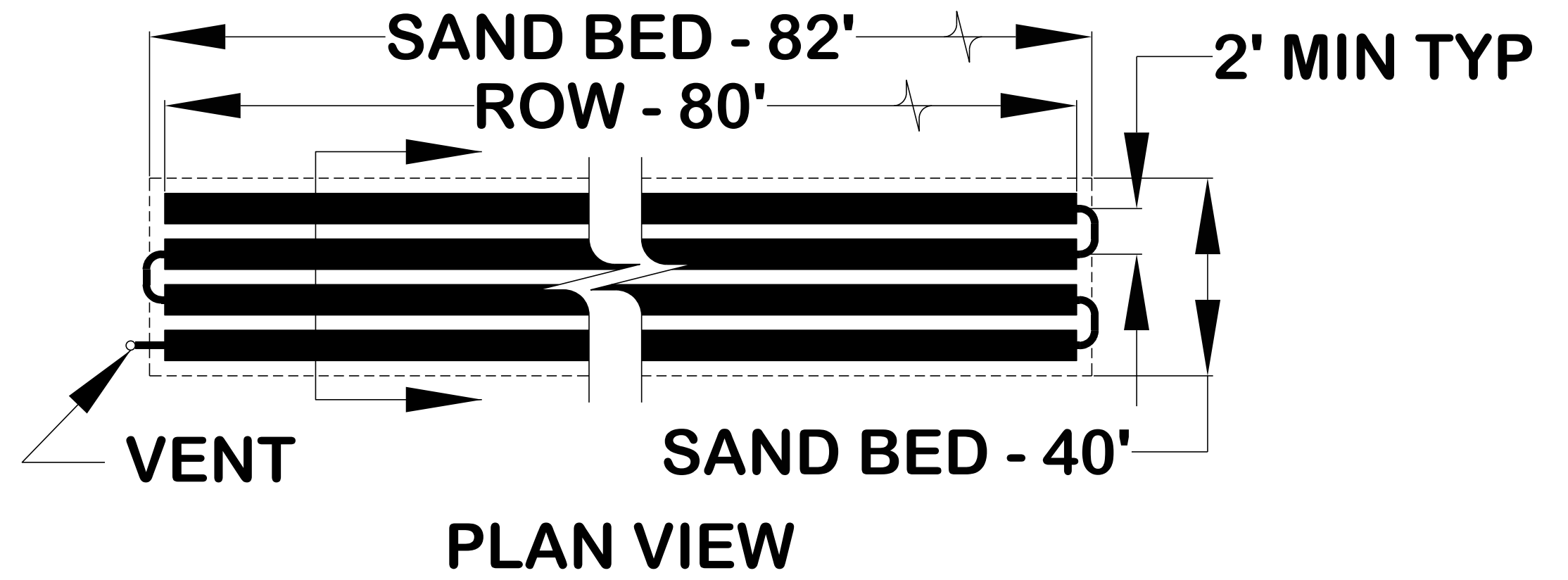
TRACER WIRE DETAIL
NOT TO SCALE



- NOTES:
1. FLEXIBLE PIPE MATERIAL IS P.V.C. SOLID WALL PIPE.
 2. TYPE OF MATERIAL AND COMPACTION FOR GRANULAR CRADLE AND INITIAL BACKFILL SHALL MEET PROJECT SPECIFICATIONS AND ASTM D2321 (LATEST REVISION)

GRANULAR CRADLE (FROM TRENCH BOTTOM TO SPRINGLINE)	
TRENCH BOTTOM CONDITION	TYPE OF CRADLE
DRY, FIRM	CA-6
WET OR SOFT	CA-7

FLEXIBLE WALL WATERMAIN PIPE
WATERMAIN EMBEDMENT DETAIL
NOT TO SCALE

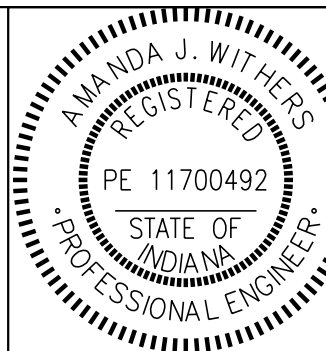


NOTES:

1. NUMBER OF ROWS - 7.
2. ROW LENGTH - 80' AND SAND BED LENGTH - 82'.
3. SYSTEM SAND BED AREA WILL VARY WITH NATIVE SOIL LOADING RATE.
4. DEPTH OF TOPSOIL (MIN 9") IN ACCORDANCE WITH STATE RULES.
5. A MINIMUM OF 6" OF SYSTEM SAND BELOW , 3" OVER AND 6" BETWEEN PEI PIPES
6. PROVIDE DISTRIBUTION BOX WITH 2" 90 DEGREE TURNDOWN



PRESBY MOUND SYSTEM
N.T.S.



RECOMMENDED FOR APPROVAL	<i>Amanda J. Withers</i>	3/10/2025	DATE
DESIGNED:	LNB	3/10/2025	DRAWN: BTS 3/10/2025
CHECKED:	AW	3/10/2025	CHECKED: LNB 3/10/2025

INDIANA DEPARTMENT
OF NATURAL RESOURCES

PROCESS DETAILS

SCALE	
N.T.S.	
SHEETS	
26 of 28	
PROJECT	
CDC 2409631016	

STAINLESS STEEL SUMP PUMPS
DS SERIES

The Myers DS Series Stainless Steel Sump Pumps are designed for basement sumps, but are also ideal for dewatering duties in a variety of applications. This versatile pump features stainless steel construction for extreme resistance to corrosive environments and will provide years of superior service.

APPLICATIONS

Basement sumps, dewatering, and utility.

FEATURES

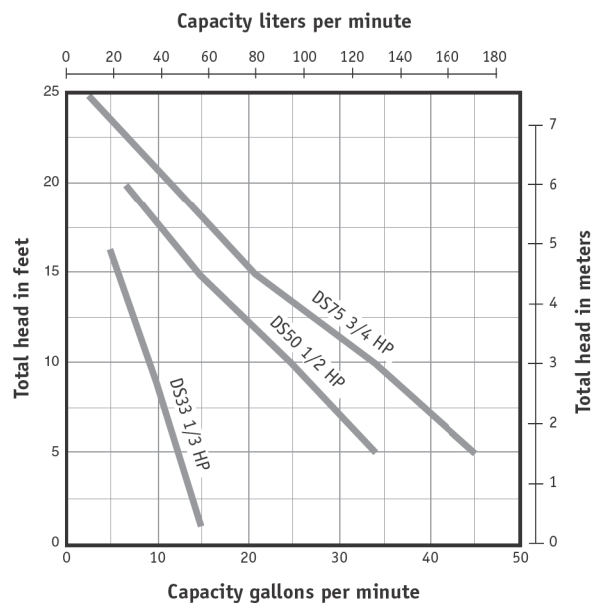
- Versatile Performer:** Ideal for dewatering in construction sites, ponds, pits, tanks and water extraction from foundations and flooded basements.
- Stainless Steel Tough:** Stainless steel housing and volute case resist corrosion and withstand the harshest conditions.
- Powerful Start Ups:** High-torque, permanent split capacitor (PSC) motor; no relays or starting switches to wear out.
- Double Protected Motor:** Long-life carbon/ceramic seal and additional lip seal protect motor against water leakage.
- Extended Service:** Fully lubricated bearings and shaft seal for longer service life.
- Smooth Operation:** Impeller is designed for clog resistance and effectively handles solids up to 3/4" in diameter.

SPECIFICATIONS

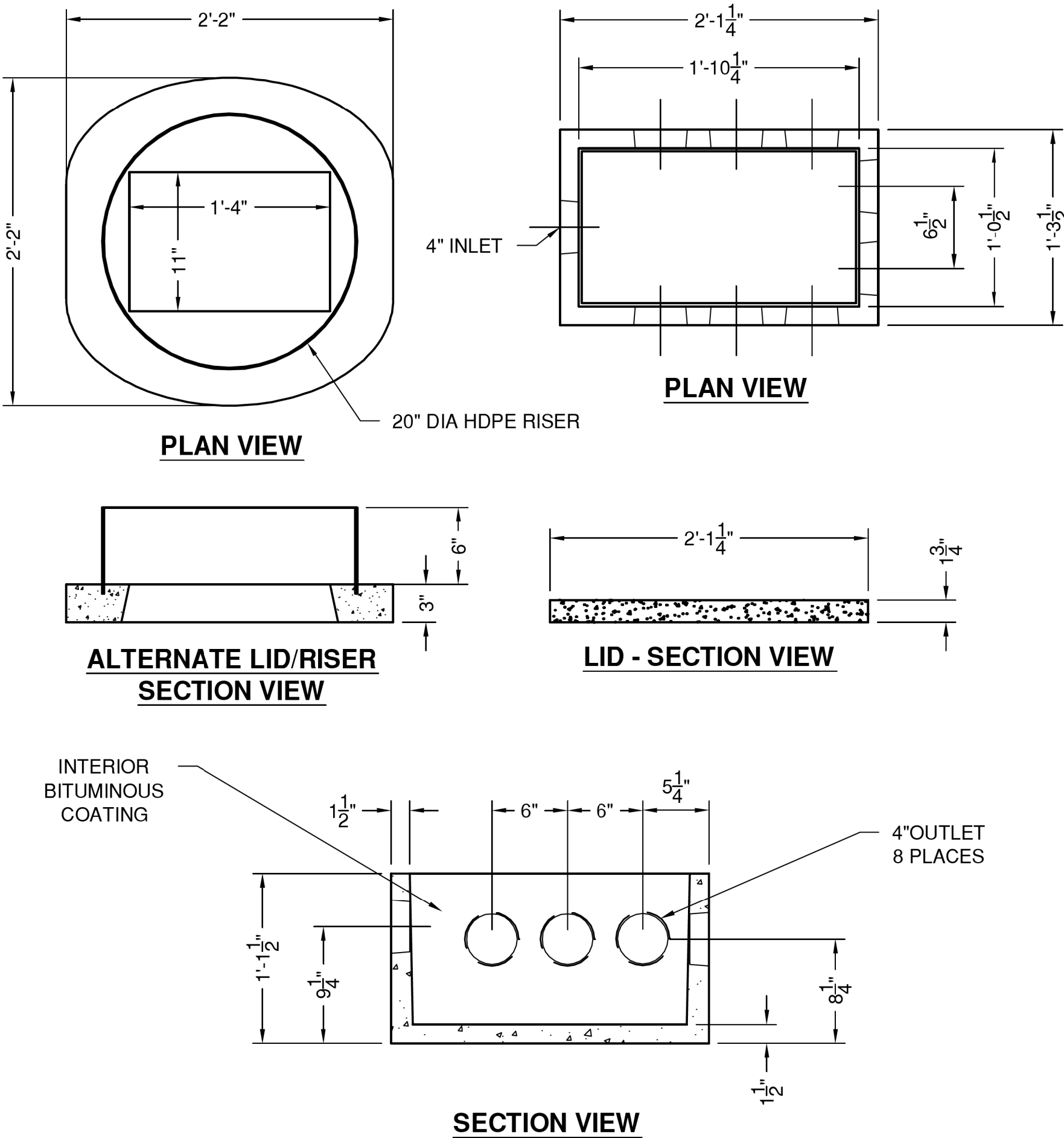
- Capacities:** Up to 45 GPM (170.3 LPM)
- Shut-Off Head:** Up to 26' (98.4 m)
- Operation:** On = 13.5" (342.9 mm); Off = 6.75" (171.5 mm)
- Solids Handling:** 3/4" (19 mm)
- Liquids Handling:** Drain water
- Continuous Liquid Temp.:** DS50P1 = 131°F (55°C)
- Motor/Electrical Data:** 1/3 HP, 2.7A; 1/2 HP, 4.8A; 3/4 HP, 6.4A; 115V; 60Hz, permanent split capacitor type, 3450 RPM
- Fittings Included:** 1-1/4" NPT x 1-1/4" NPT 90° discharge elbow, 1-1/4" NPT x 1-1/2" adapter.
- Acceptable pH Range:** 5-9
- Shaft Seal:** Dual lip with ceramic shaft seal
- Housing:** Stainless steel
- Power Cord:** 15', SJTW, 18/3
- Discharge NPT:** 1-1/4"
- Min. Sump Diameter:** 14"



MD10BSSE (08-01-23)

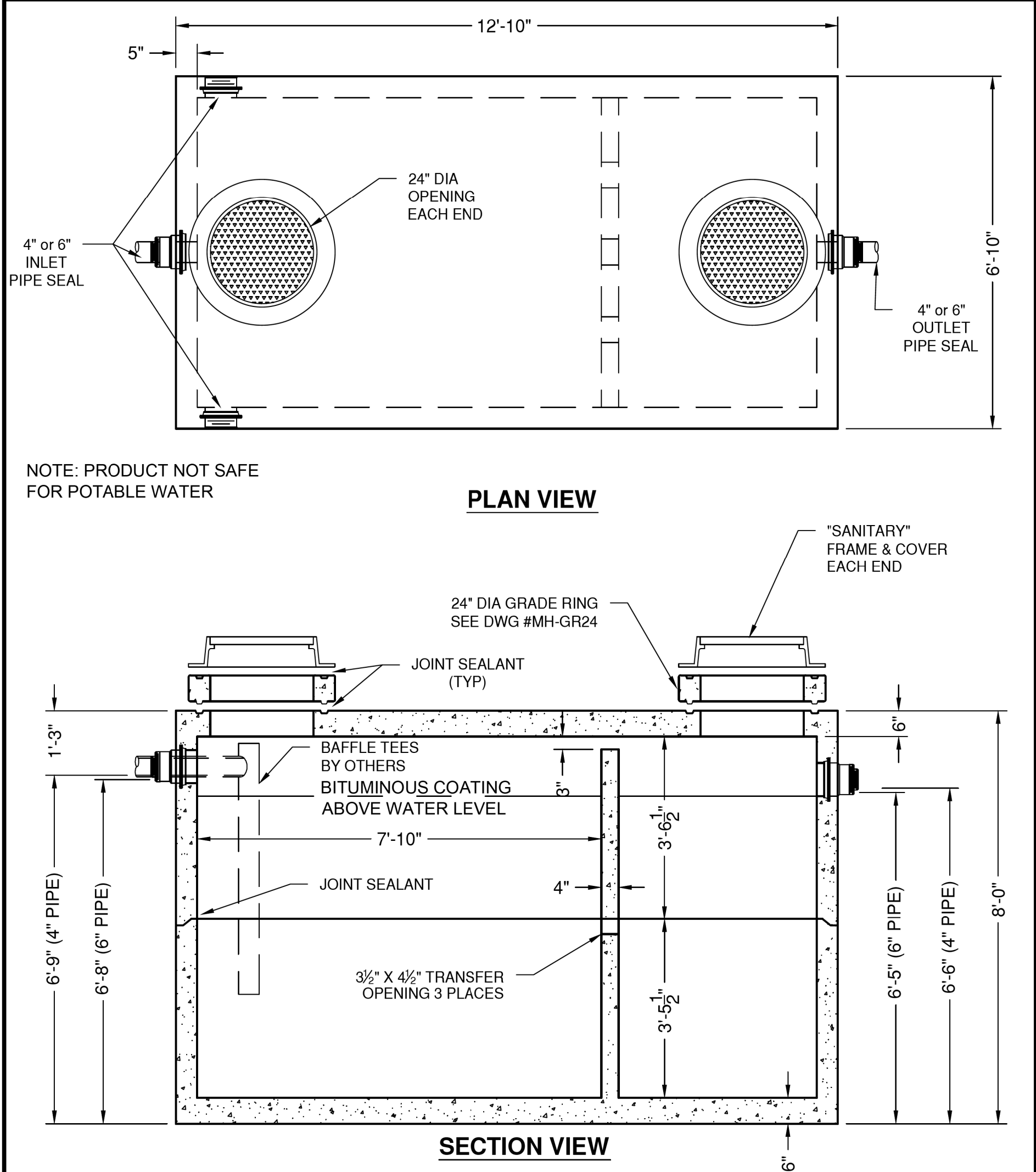


CATALOG NUMBER	HP	VOLTS	PHASE	AMPS	DISCHARGE NPT	SWITCH TYPE	CORD LENGTH	APPROX. WT. LBS
DS50P1	1/2	115	1	4.8	1-1/4"	Tethered Automatic*	15'	16

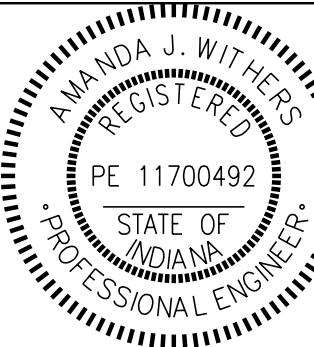
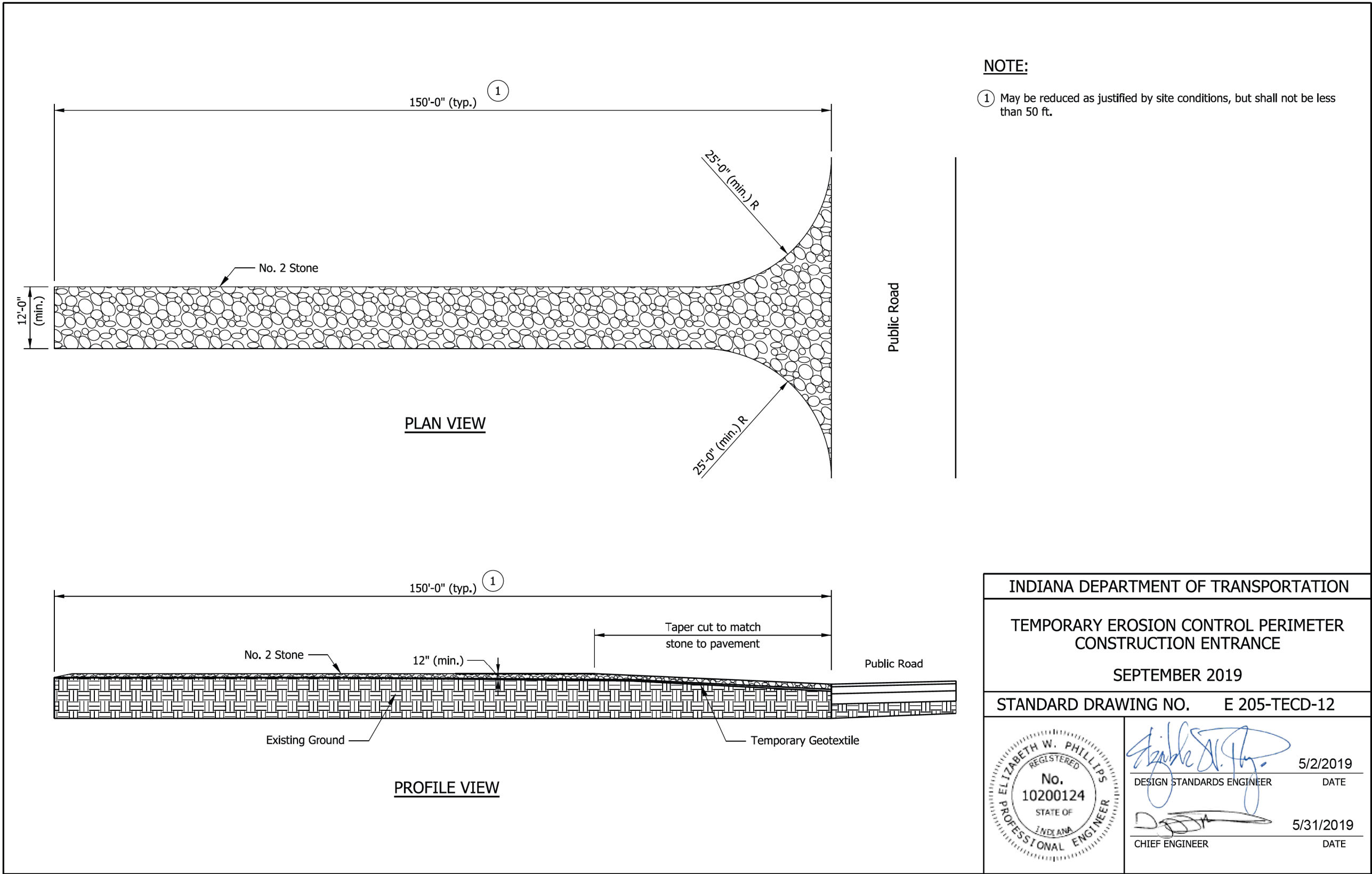
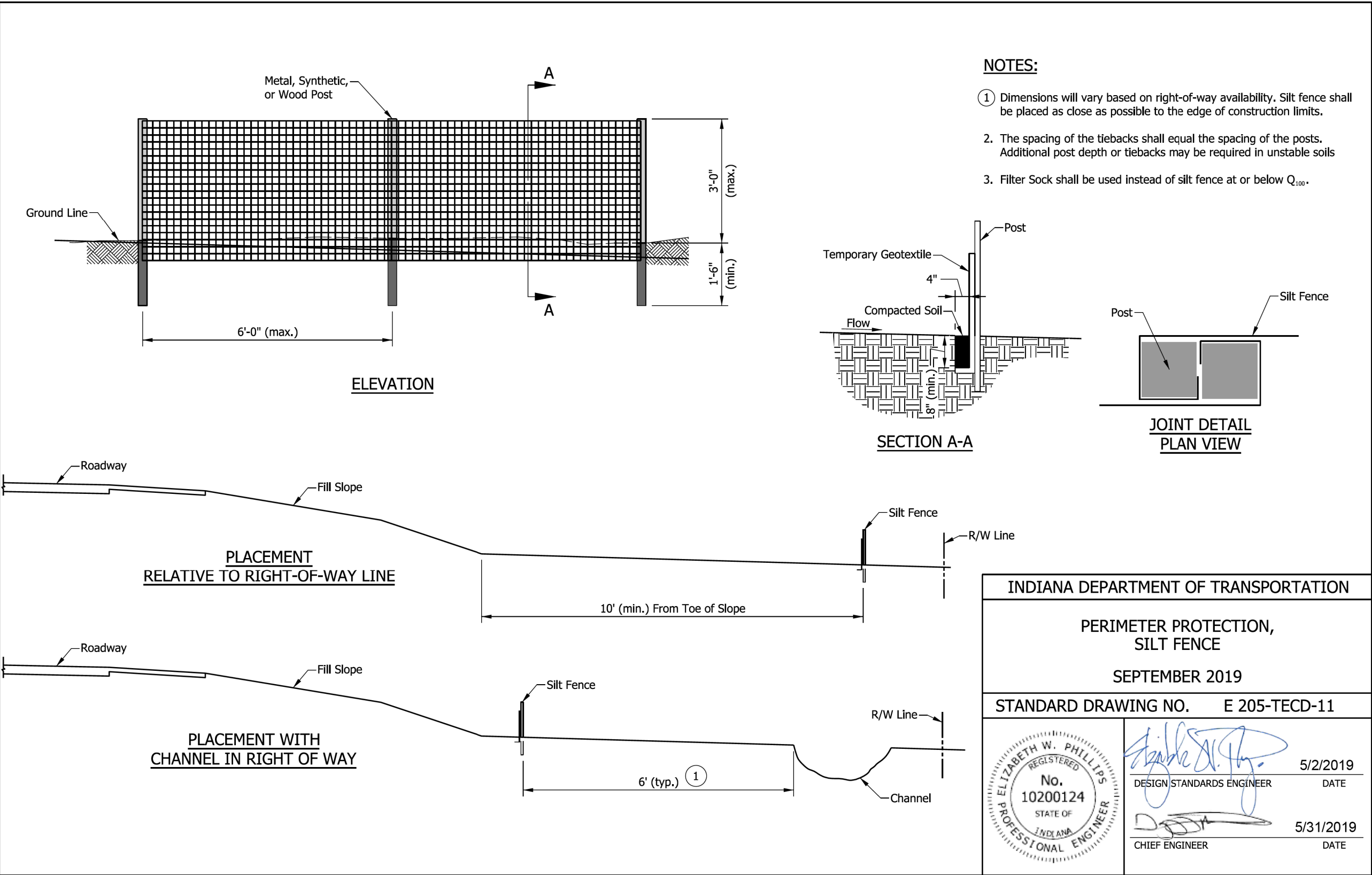
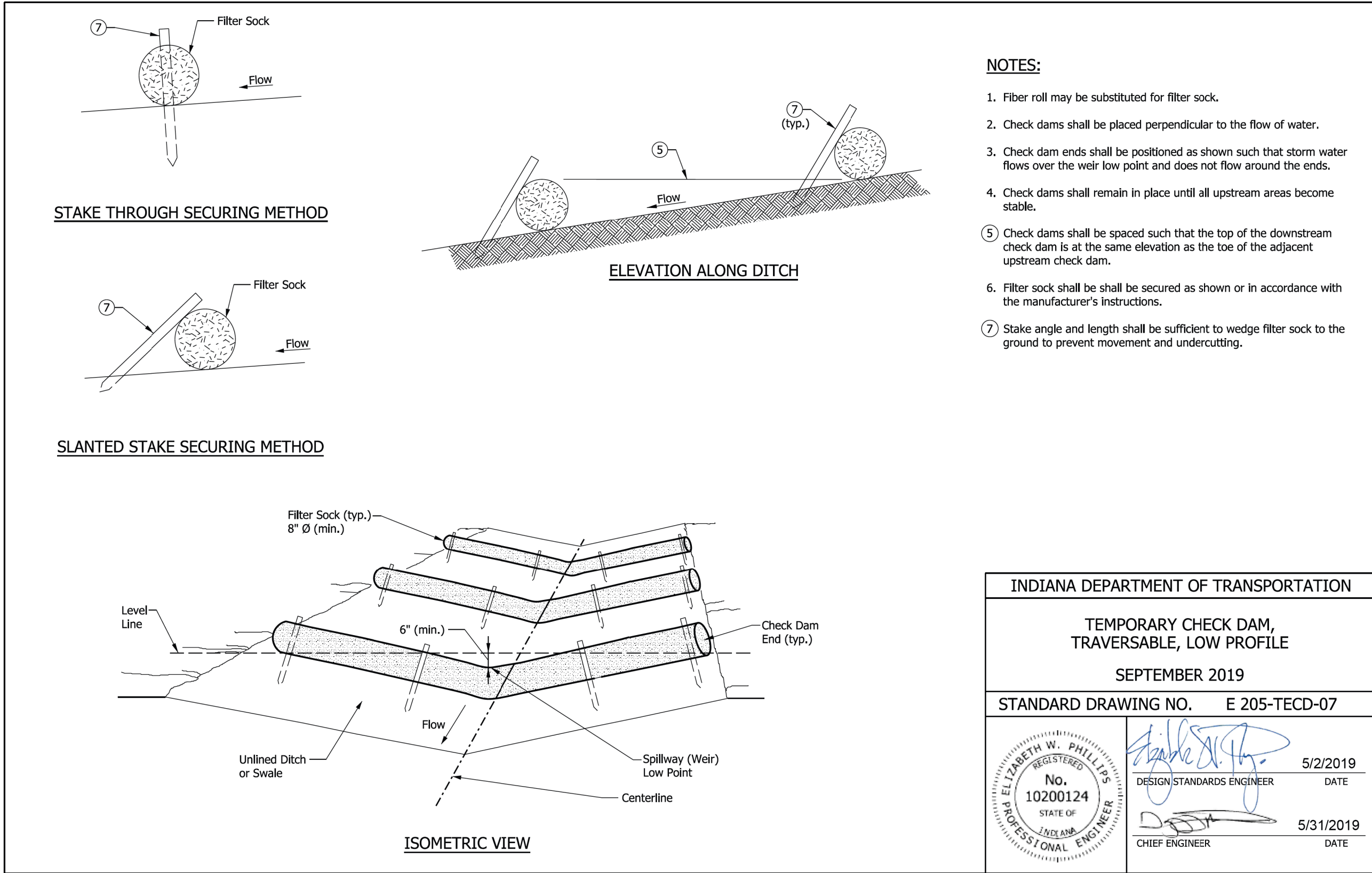


<div><div>S & M PRECAST, INC.</div><div>"NPCA" CERTIFIED PLANT 16700 SIMA GRAY RD, HENRYVILLE, IN 47126 Phone: (812) 246-6258 Fax: (812) 294-4862</div></div>	SPECIFICATIONS		WEIGHT: BASE 175#, LID 61#	
	CONCRETE: 4500 PSI @ 28 DAYS		DISTRIBUTION BOX #9 INDIANA	
	REINFORCEMENT: ASTM A-615, GR 60			
	LOAD DESIGN: NON-TRAFFIC 18" MAX COVER			
			DATE: 2-1-17	
		DWG #ST-IN-DB9		

- NOTES:
1. PROVIDE PENTAIR MYERS PUMP DS50P1 AS SHOWN OR APPROVED EQUAL THAT DOES NOT EXCEED MAXIMUM 40 GPM (AES MOUND SYSTEM LIMIT).
 2. SEE ELECTRICAL SHEETS FOR SEPTIC TANK PUMP ALARM PANEL.
 3. PROVIDE AND INSTALL DISTRIBUTION BOX AS SHOWN OR APPROVED EQUAL.
 4. PROVIDE AND INSTALL A TRAFFIC-RATED CPRECAONCRETE TWO COMPARTMENT SEPTIC TANK WITH MINIMUM CAPACITY OF 2,320 GALLONS.
 5. ACCESS FOR PUMP MAINTENANCE AND REPAIR SHALL BE PROVIDED AS PART OF THE SEPTIC TANK DESIGN THROUGH A RISER TO THE SURFACE.
 6. 2-INCH FORCEMAIN TO THE DISTRIBUTION BOX WILL TERMINATE IN A 90-DEGREE BEND DOWN INTO THE D-BOX SET A MINIMUM OF 2-INCHES ABOVE THE BOTTOM OF THE BOX AND WITH A SMALL HOLE DRILLED ON TOP OF THE 90-DEGREE BEND PER AES SYSTEM MANUFACTURERS' RECOMMENDATION.



<div><div>S & M PRECAST, INC.</div><div>"NPCA" CERTIFIED PLANT 16700 SIMA GRAY RD, HENRYVILLE, IN 47126 Phone: (812) 246-6258 Fax: (812) 294-4862</div></div>	SPECIFICATIONS		WEIGHT: BOT 15,935# TOP 15,390#	
	CONCRETE: 4500 PSI @ 28 DAYS		SEPTIC TANK 3000 GALLON-2 COMP TRAFFIC	
	REINFORCEMENT: ASTM A-615, GR 60			
	LOAD DESIGN: AASHTO HS-20			
			DATE: 10-11-16 DWG #ST-3000-2	



RECOMMENDED FOR APPROVAL	<i>Amanda J. Withers</i>	3/10/2025	DATE
DESIGNED:	LNB	3/10/2025	DRAWN: BTS 3/10/2025
CHECKED:	AW	3/10/2025	CHECKED: LNB 3/10/2025

INDIANA DEPARTMENT OF NATURAL RESOURCES	SCALE N.T.S.	SHEETS 28 of 28
TEMPORARY EROSION CONTROL DETAILS		PROJECT CDC 2409631016