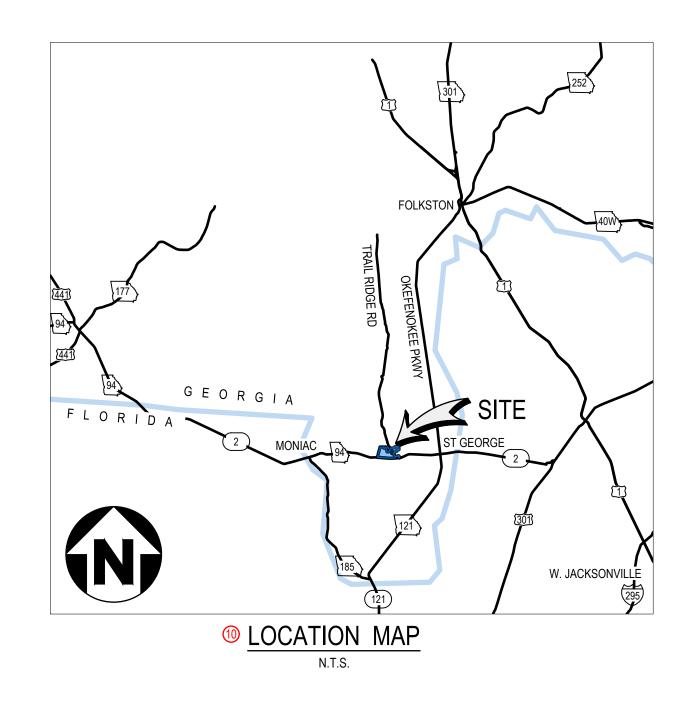
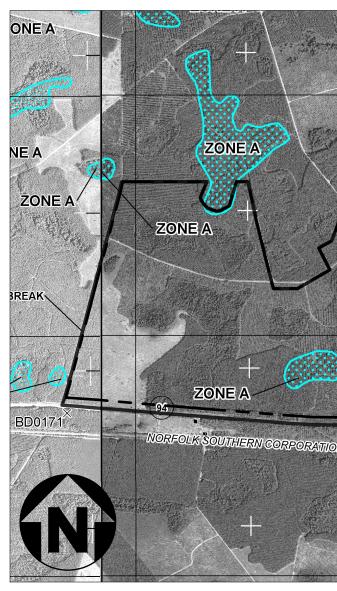


# SAUNDERS DEMONSTRATION MINE



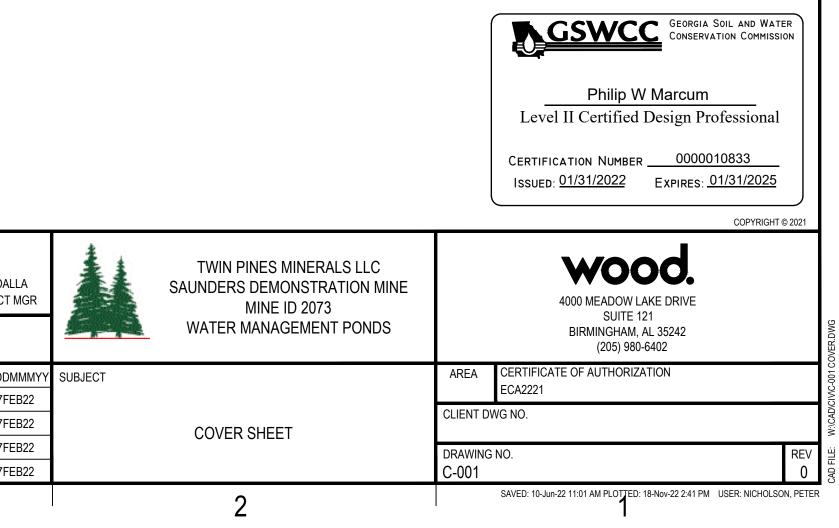
PREPARED FOR: TWIN PINES MINERALS, LLC 2100 SOUTHBRIDGE PARKWAY SUITE 540 BIRMINGHAM, ALABAMA 32091



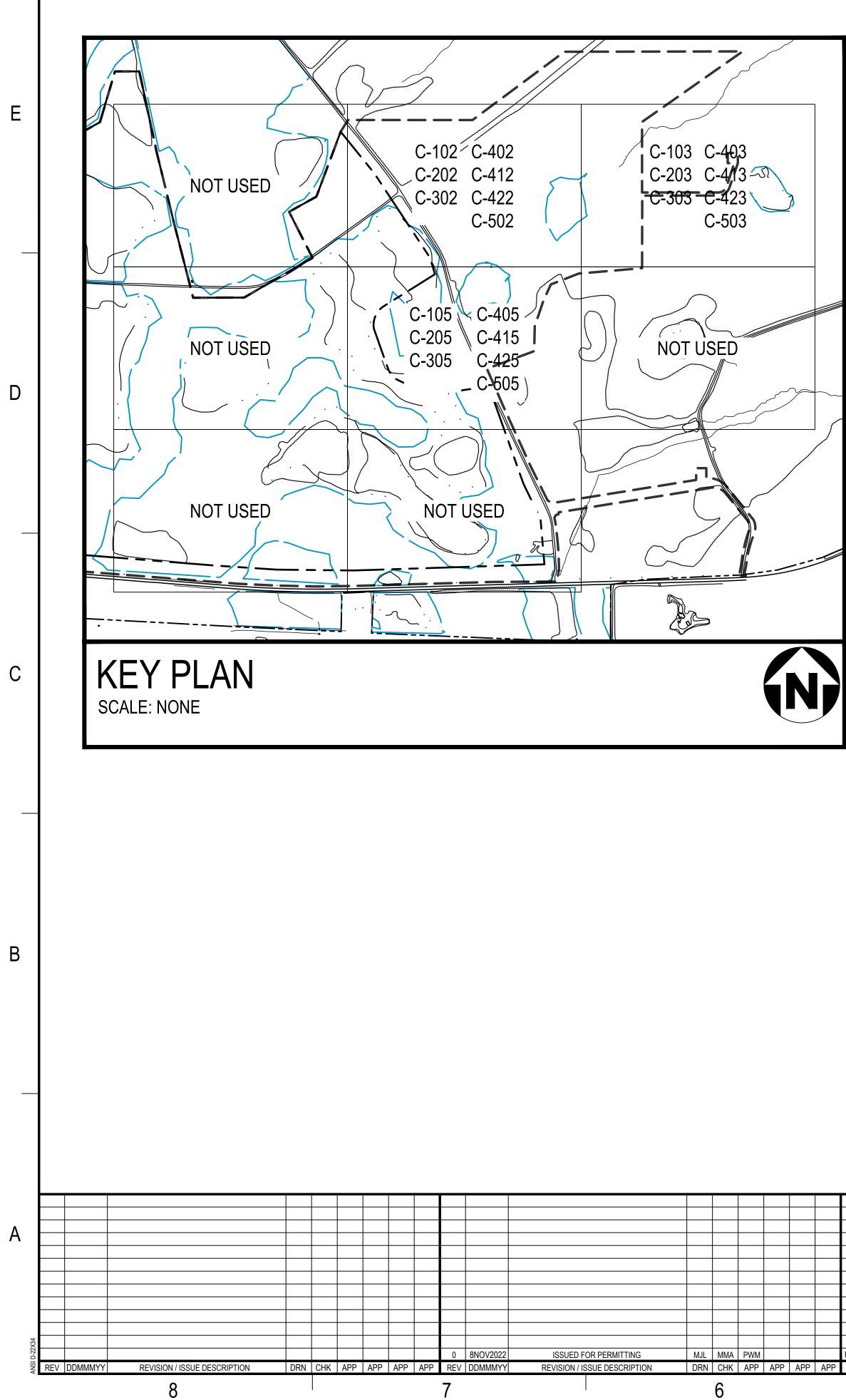


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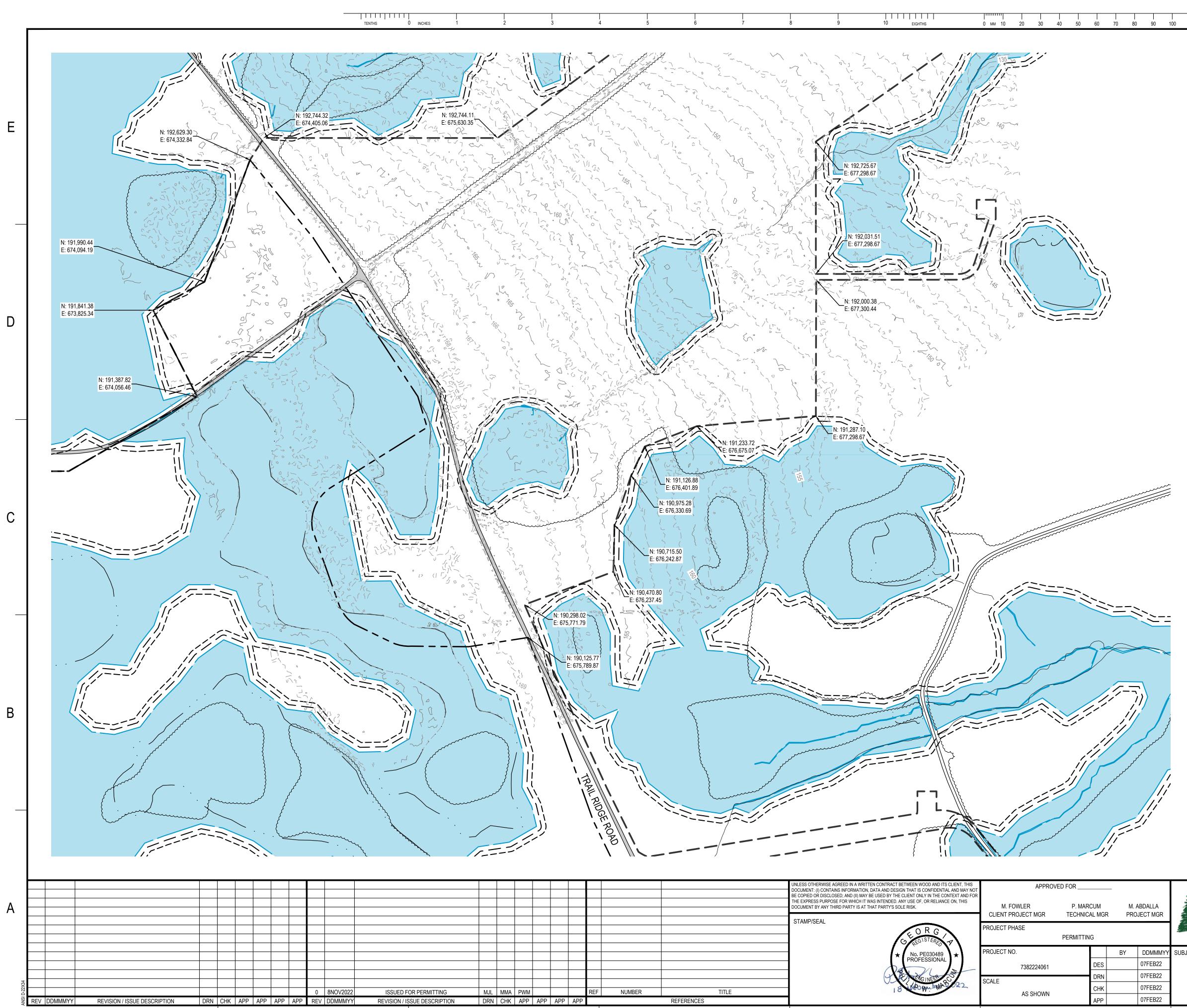


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SHEET NUMBER	DRAWING NUMBER	SHEET TITLE	SHEET NUMBER	DRAWING NUMBER	SHEET TITLE		
	C-001	COVER SHEET		C-521	PUMP STATION PLAN AND SECTION		
	C-002	DRAWING INDEX		C-530	OVERALL EVAPORATOR LAYOUT		
	C-100	OVERALL EXISTING CONDITIONS PLAN		C-532	EVAPORATOR PLAN SHEET 2		
	C-102	EXISTING CONDITIONS PLAN SHEET 2		C-533	EVAPORATOR PLAN SHEET 3		
	C-103	EXISTING CONDITIONS PLAN SHEET 3		C-535	EVAPORATOR PLAN SHEET 5		
	C-105	EXISTING CONDITIONS PLAN SHEET 5		C-571	PROCESS FLOW DIAGRAM SHEET 1		
ſ	C-200	OVERALL SITE PLAN		C-572	PROCESS FLOW DIAGRAM SHEET 2		
	C-202	SITE PLAN SHEET 2		C-601	PERIMETER ROAD PLAN AND PROFILE SHEET 1		
	C-203	SITE PLAN SHEET 3		C-602	PERIMETER ROAD PLAN AND PROFILE SHEET 2		
	C-205	SITE PLAN SHEET 5		C-603	PERIMETER ROAD PLAN AND PROFILE SHEET 3		
	C-300	OVERALL GRADING AND DRAINAGE PLAN		C-604	PERIMETER ROAD PLAN AND PROFILE SHEET 4		
	C-302	GRADING AND DRAINAGE PLAN SHEET 2		C-605	PERIMETER ROAD PLAN AND PROFILE SHEET 5		
	C-303	GRADING AND DRAINAGE PLAN SHEET 3		C-606	PERIMETER ROAD PLAN AND PROFILE SHEET 6		
	C-305	GRADING AND DRAINAGE PLAN SHEET 5		C-611	PUMP HOUSE ROAD PLAN AND PROFILE SHEET 1		
	C-400	OVERALL INITIAL EROSION SEDIMENTATION AND POLLUTION CONTROL PLAN		C-612	PUMP HOUSE ROAD PLAN AND PROFILE SHEET 2		
	C-402	INITIAL EROSION SEDIMENTATION AND POLLUTION CONTROL PLAN SHEET 2		C-621	STORM DRAIN PLAN AND PROFILE		
	C-403	INITIAL EROSION SEDIMENTATION AND POLLUTION CONTROL PLAN SHEET 3		C-631	SITE CROSS SECTIONS SHEET 1		
	C-405	INITIAL EROSION SEDIMENTATION AND POLLUTION CONTROL PLAN SHEET 5		C-632	SITE CROSS SECTIONS SHEET 2		
	C-410	OVERALL INTERMEDIATE EROSION SEDIMENTATION AND POLLUTION CONTROL PLAN		C-633	SITE CROSS SECTIONS SHEET 3		
	C-412	INTERMEDIATE EROSION SEDIMENTATION AND POLLUTION CONTROL PLAN SHEET 2		C-701	LINER DETAILS		
	C-413	INTERMEDIATE EROSION SEDIMENTATION AND POLLUTION CONTROL PLAN SHEET 3		C-711	SITE DETAILS 1		
1	C-415	INTERMEDIATE EROSION SEDIMENTATION AND POLLUTION CONTROL PLAN SHEET 5		C-712	SITE DETAILS 2		
	C-420	OVERALL FINAL EROSION SEDIMENTATION AND POLLUTION CONTROL PLAN		C-713	SITE DETAILS 3		
	C-422	FINAL EROSION SEDIMENTATION AND POLLUTION CONTROL PLAN SHEET 2		C-714	SITE DETAILS 4		
1	C-423	FINAL EROSION SEDIMENTATION AND POLLUTION CONTROL PLAN SHEET 3		C-801	POND CLOSURE PLAN		
	C-425	FINAL EROSION SEDIMENTATION AND POLLUTION CONTROL PLAN SHEET 5		FIG 1	OVERALL GRADING AND WETLANDS EXHIBIT		
	C-431	EROSION SEDIMENTATION AND POLLUTION CONTROL NOTES SHEET 1	L				
	C-432	EROSION SEDIMENTATION AND POLLUTION CONTROL NOTES SHEET 2					
	C-433	EROSION SEDIMENTATION AND POLLUTION CONTROL NOTES SHEET 3					
	C-439	EROSION SEDIMENTATION AND POLLUTION CONTROL CHECKLIST					
	C-441	EROSION SEDIMENTATION AND POLLUTION CONTROL DETAILS SHEET 1					
	C-442	EROSION SEDIMENTATION AND POLLUTION CONTROL DETAILS SHEET 2					
	C-500	OVERALL UTILITY PLAN					
	C-502	UTILITY PLAN SHEET 2					
	C-503	UTILITY PLAN SHEET 3					
	C-505	UTILITY PLAN SHEET 5					
	C-511	UTILITY DETAILS SHEET 1					
	C-512	UTILITY DETAILS SHEET 2					
	C-513	UTILITY DETAILS SHEET 3					
	C-514	UTILITY DETAILS SHEET 4					
	C-515	UTILITY DETAILS SHEET 5					

						GSWCC GEORGIA SOIL AND WATER CONSERVATION COMMISSION
						Philip W Marcum Level II Certified Design Professional
						CERTIFICATION NUMBER 0000010833 ISSUED: 01/31/2022 EXPIRES: 01/31/2025 COPYRIGHT © 2021
		UNLESS OTHERWISE AGREED IN A WRITTEN CONTRACT BETWEEN WOOD AND ITS CLIENT, THIS DOCUMENT: (I) CONTAINS INFORMATION, DATA AND DESIGN THAT IS CONFIDENTIAL AND MAY NOT BE COPIED OR DISCLOSED; AND (II) MAY BE USED BY THE CLIENT ONLY IN THE CONTEXT AND FOR THE EXPRESS PURPOSE FOR WHICH IT WAS INTENDED. ANY USE OF, OR RELIANCE ON, THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK. STAMP/SEAL	M. FOWLER P.	MARCUM M. ABDALLA HNICAL MGR PROJECT MGR	TWIN PINES MINERALS LLC SAUNDERS DEMONSTRATION MINE MINE ID 2073	4000 MEADOW LAKE DRIVE
			PROJECT PHASE PERMI	TTING	WATER MANAGEMENT PONDS	SUITE 121 BIRMINGHAM, AL 35242 (205) 980-6402
		-	PROJECT NO. 7382224061	BY DDMMMYY DES 07FEB22	SUBJECT	AREA CERTIFICATE OF AUTHORIZATION ECA2221
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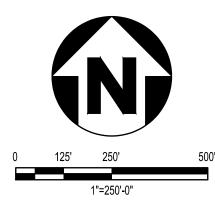
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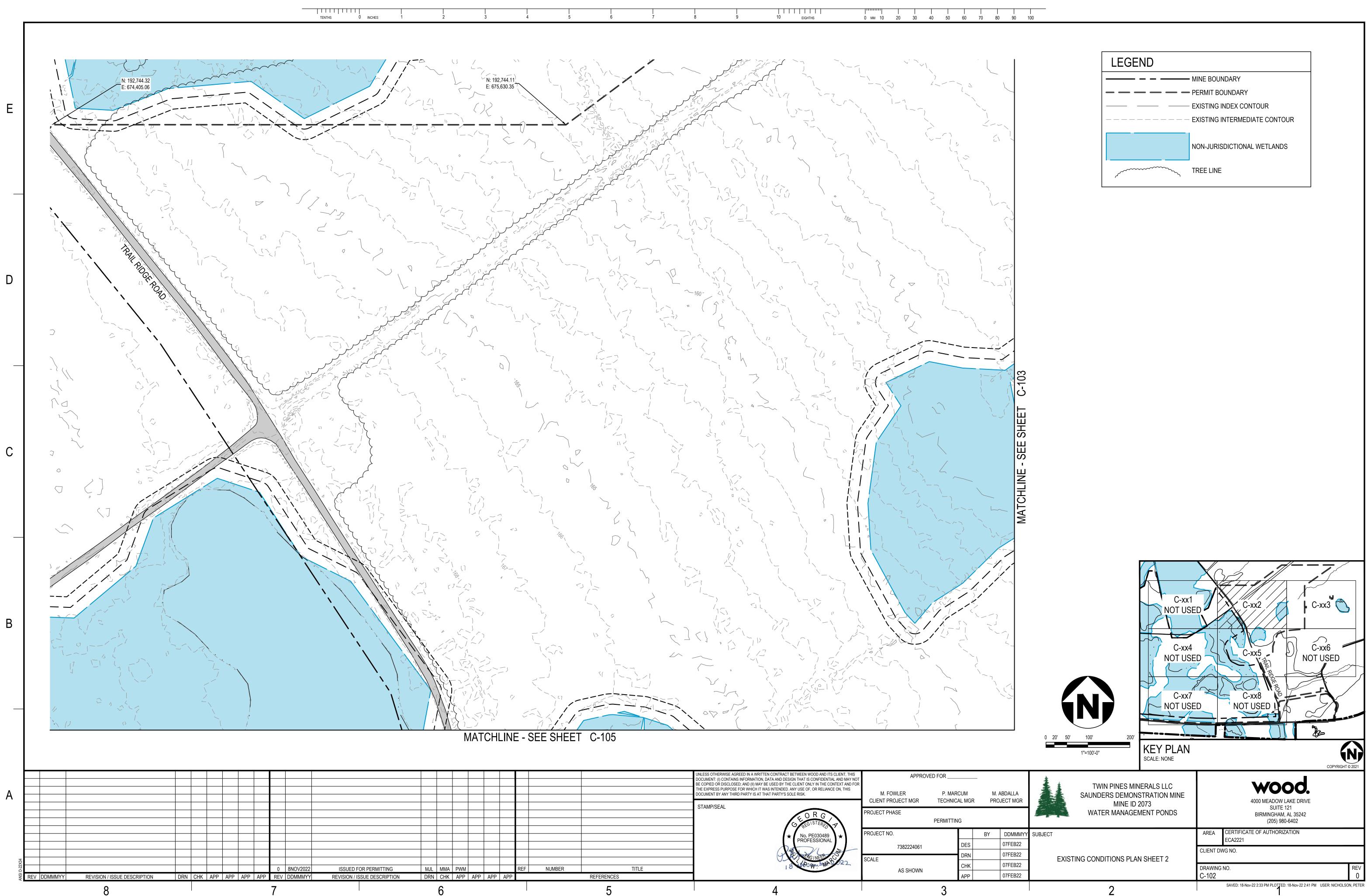
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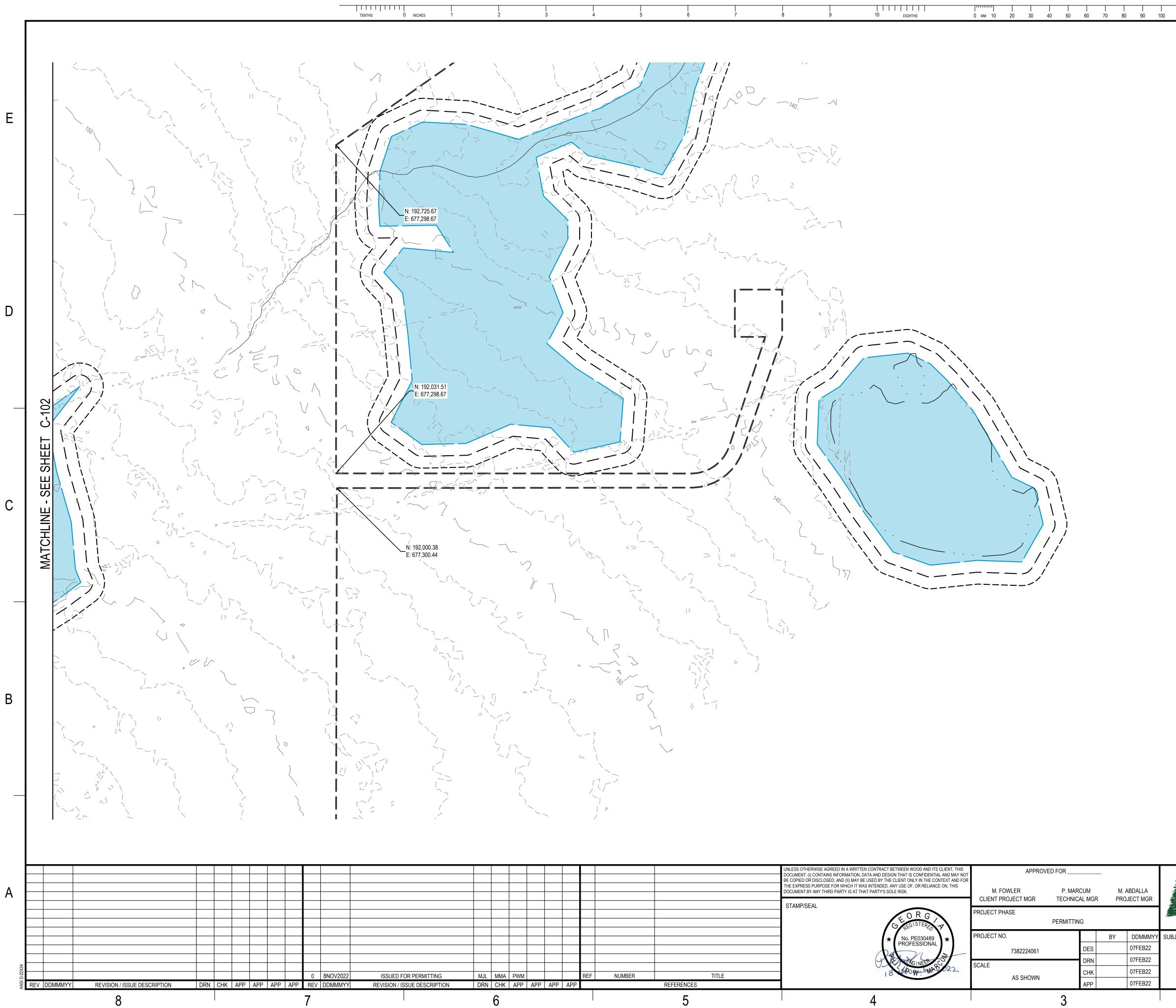
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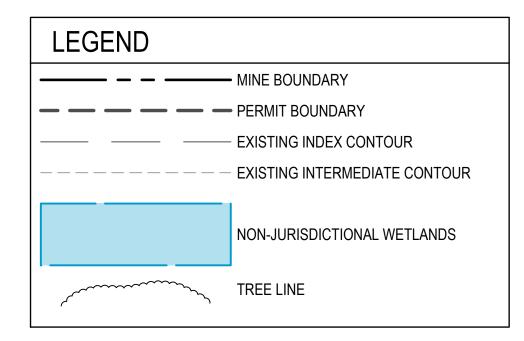


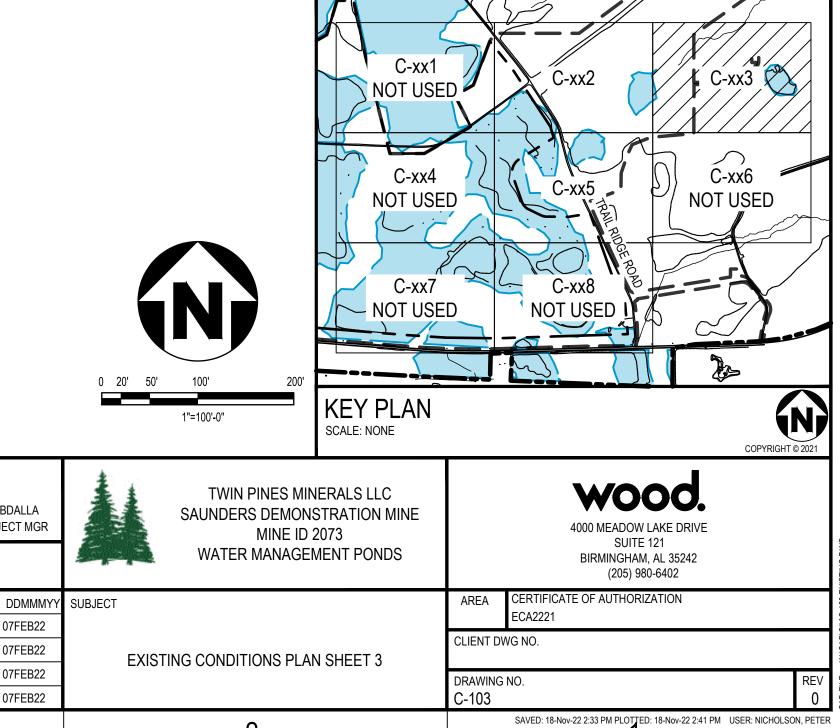
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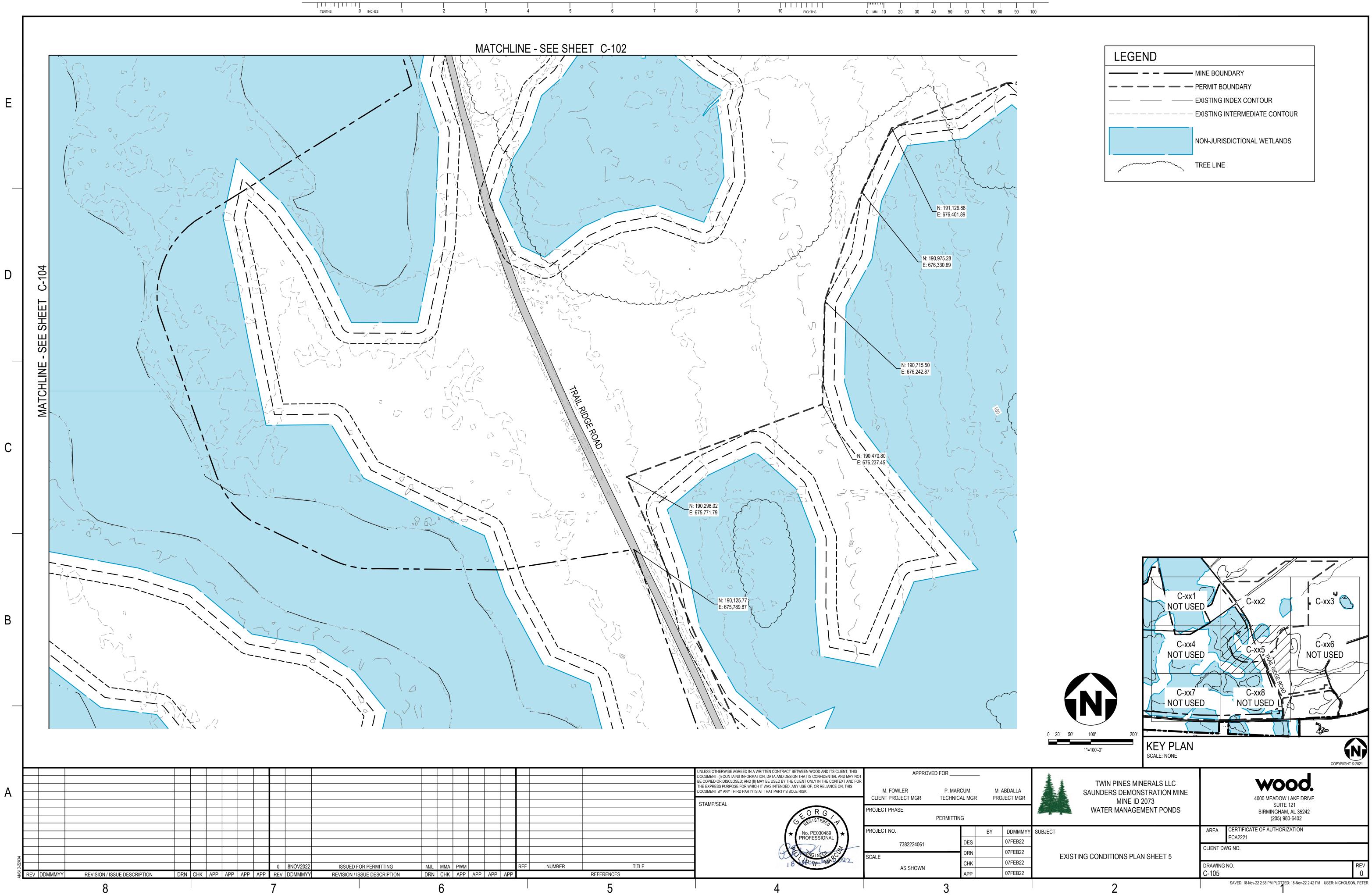


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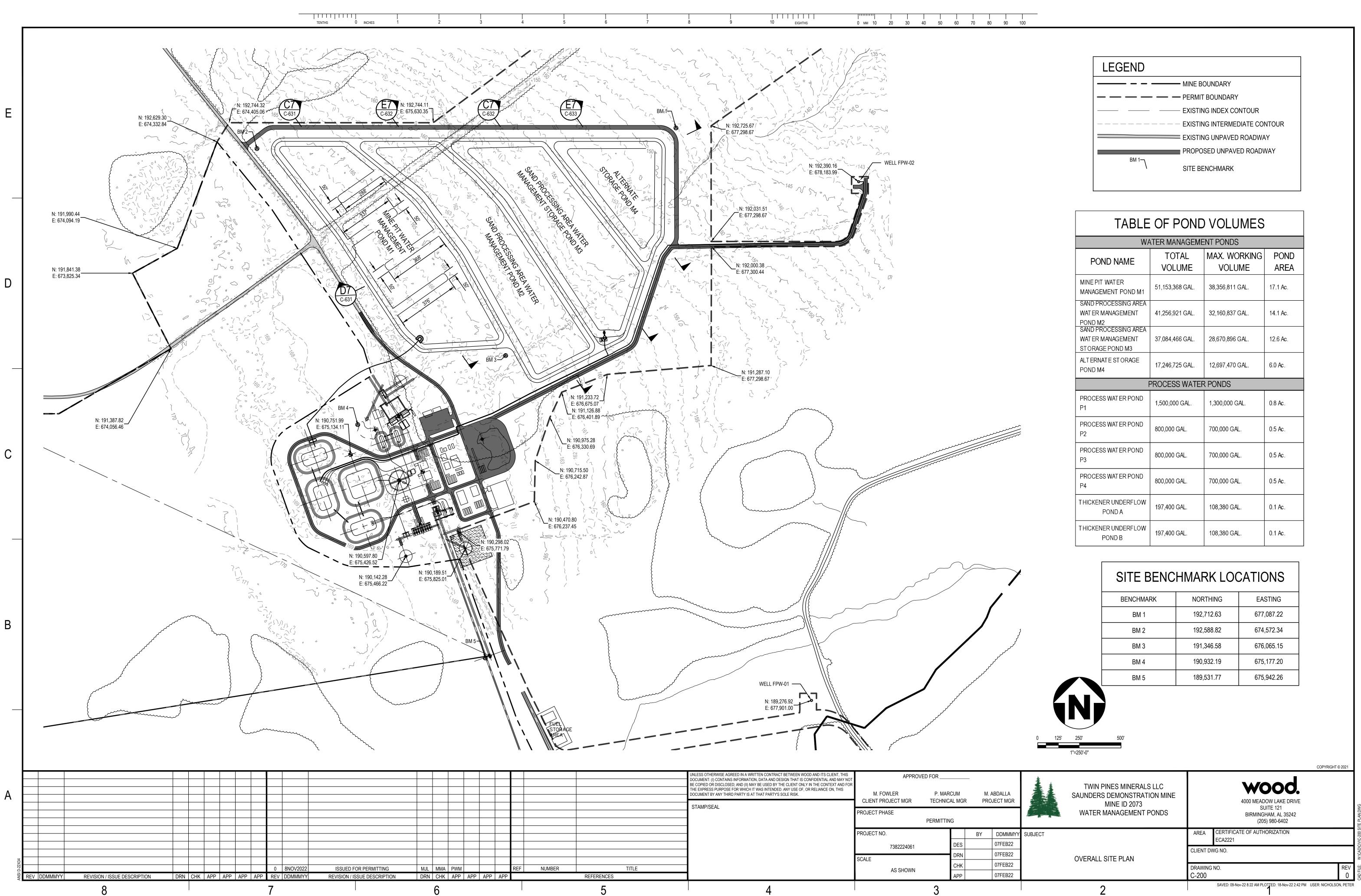






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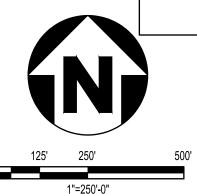
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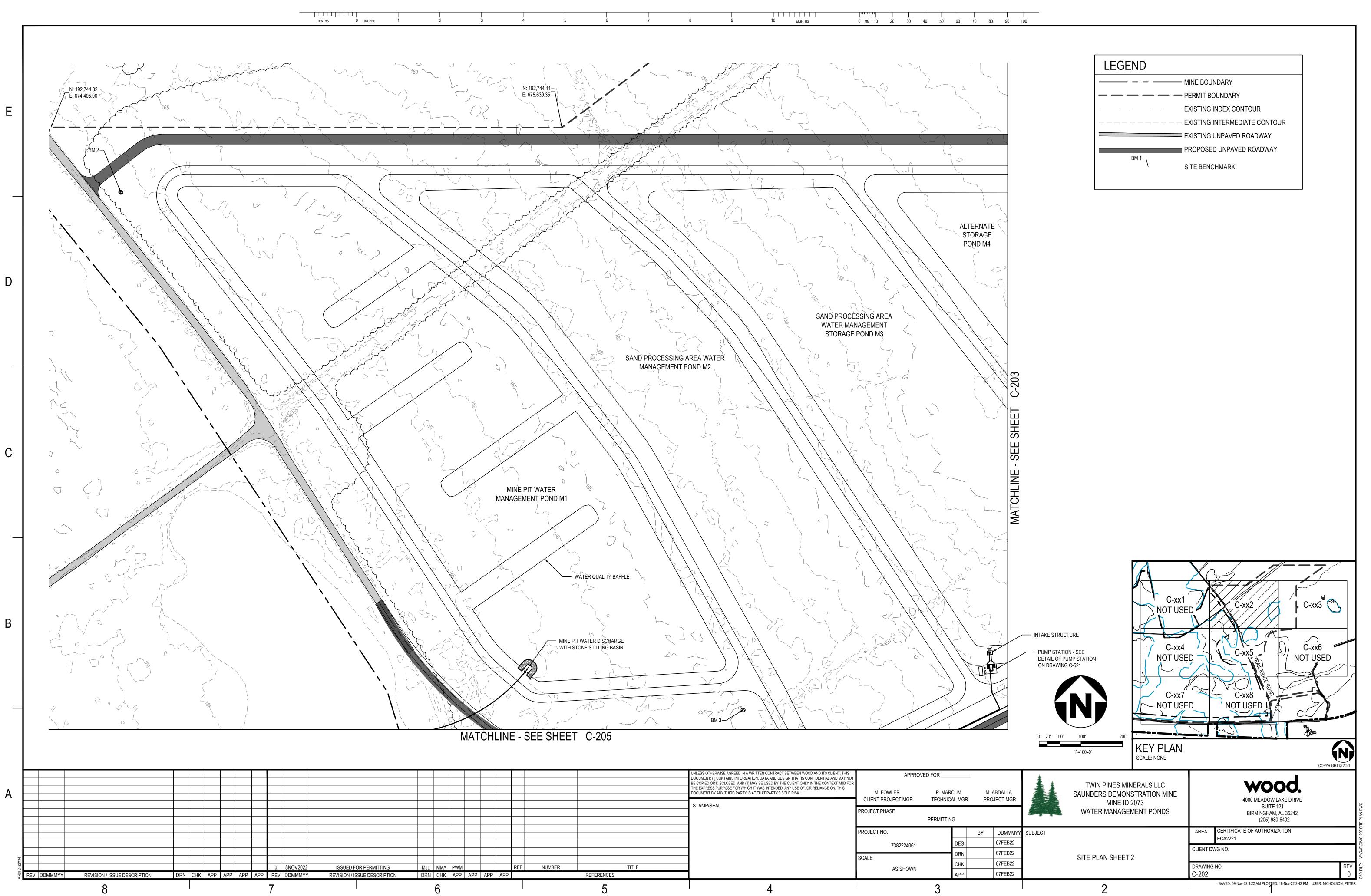


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	PERMIT BOUNDARY
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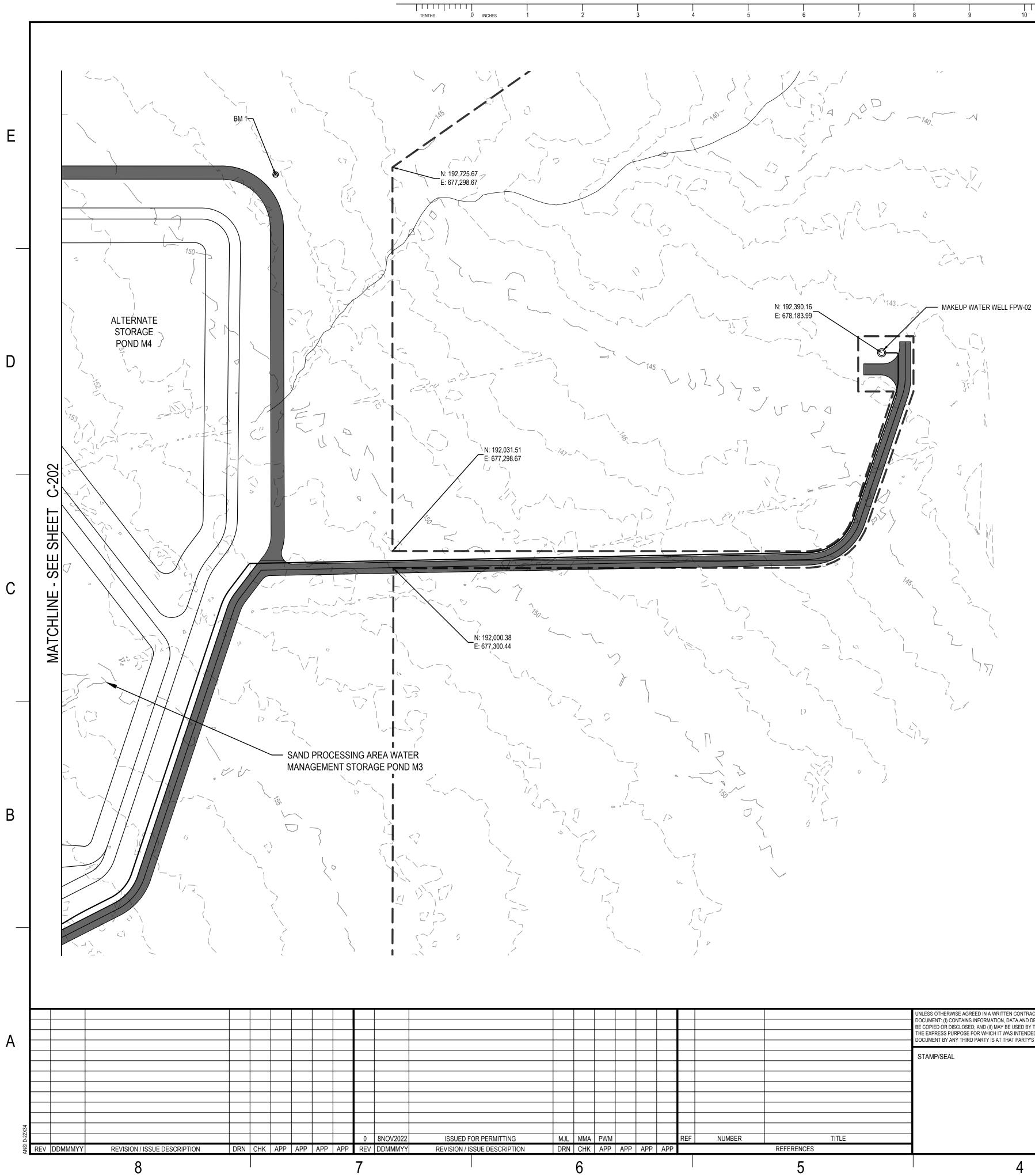
TABLE OF POND VOLUMES										
WA	TER MANAGEME	ENT PONDS								
POND NAME	TOTAL VOLUME	MAX. WORKING VOLUME	POND AREA							
MINE PIT WATER MANAGEMENT POND M1	51,153,368 GAL.	38,356,811 GAL.	17.1 Ac.							
SAND PROCESSING AREA WAT ER MANAGEMENT POND M2	41,256,921 GAL.	32,160,837 GAL.	14.1 Ac.							
SAND PROCESSING AREA WAT ER MANAGEMENT STORAGE POND M3	37,084,466 GAL.	28,670,896 GAL.	12.6 Ac.							
ALTERNATE STORAGE POND M4	17,246,725 GAL.	12,697,470 GAL.	6.0 Ac.							
F	PROCESS WATER									
PROCESS WAT ER POND P1	1,500,000 GAL.	1,300,000 GAL.	0.8 Ac.							
PROCESS WAT ER POND P2	800,000 GAL.	700,000 GAL.	0.5 Ac.							
PROCESS WAT ER POND P3	800,000 GAL.	700,000 GAL.	0.5 Ac.							
PROCESS WAT ER POND P4	800,000 GAL.	700,000 GAL.	0.5 Ac.							
THICKENER UNDERFLOW POND A	197,400 GAL.	108,380 GAL.	0.1 Ac.							
T HICKENER UNDERFLOW POND B	197,400 GAL.	108,380 GAL.	0.1 Ac.							

SITE BENCHMARK LOCATIONS									
BENCHMARK	NORTHING	EASTING							
BM 1	192,712.63	677,087.22							
BM 2	192,588.82	674,572.34							
BM 3	191,346.58	676,065.15							
BM 4	190,932.19	675,177.20							
BM 5	189,531.77	675,942.26							



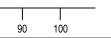


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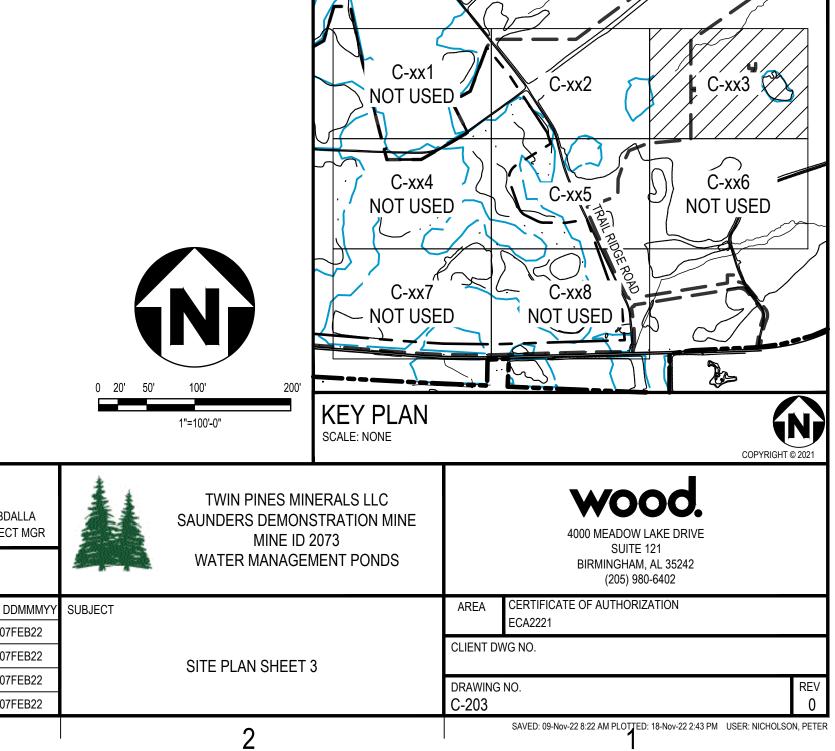


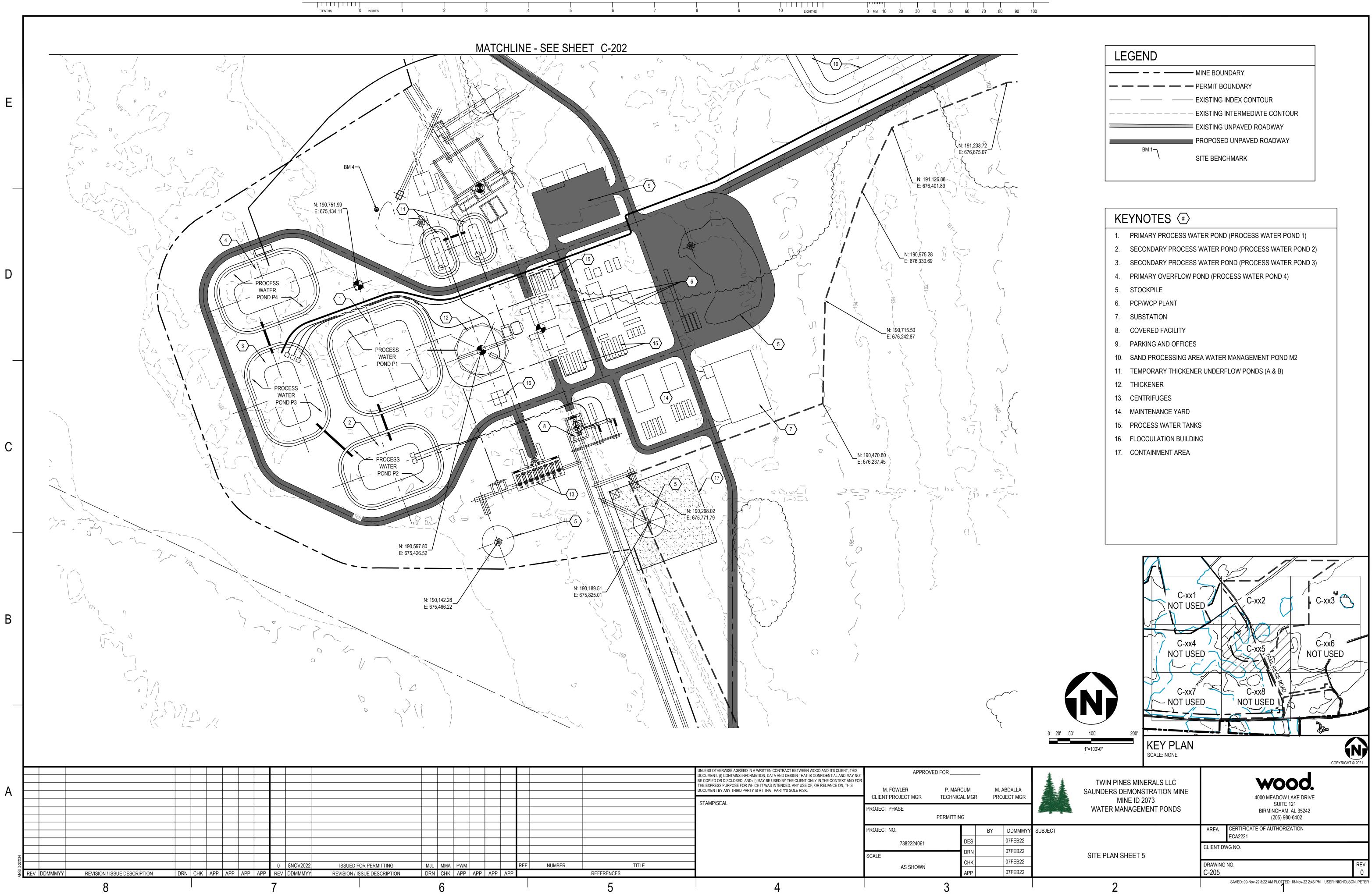
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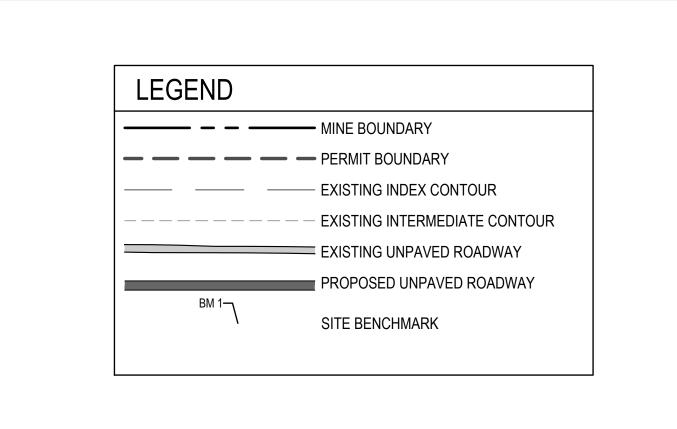
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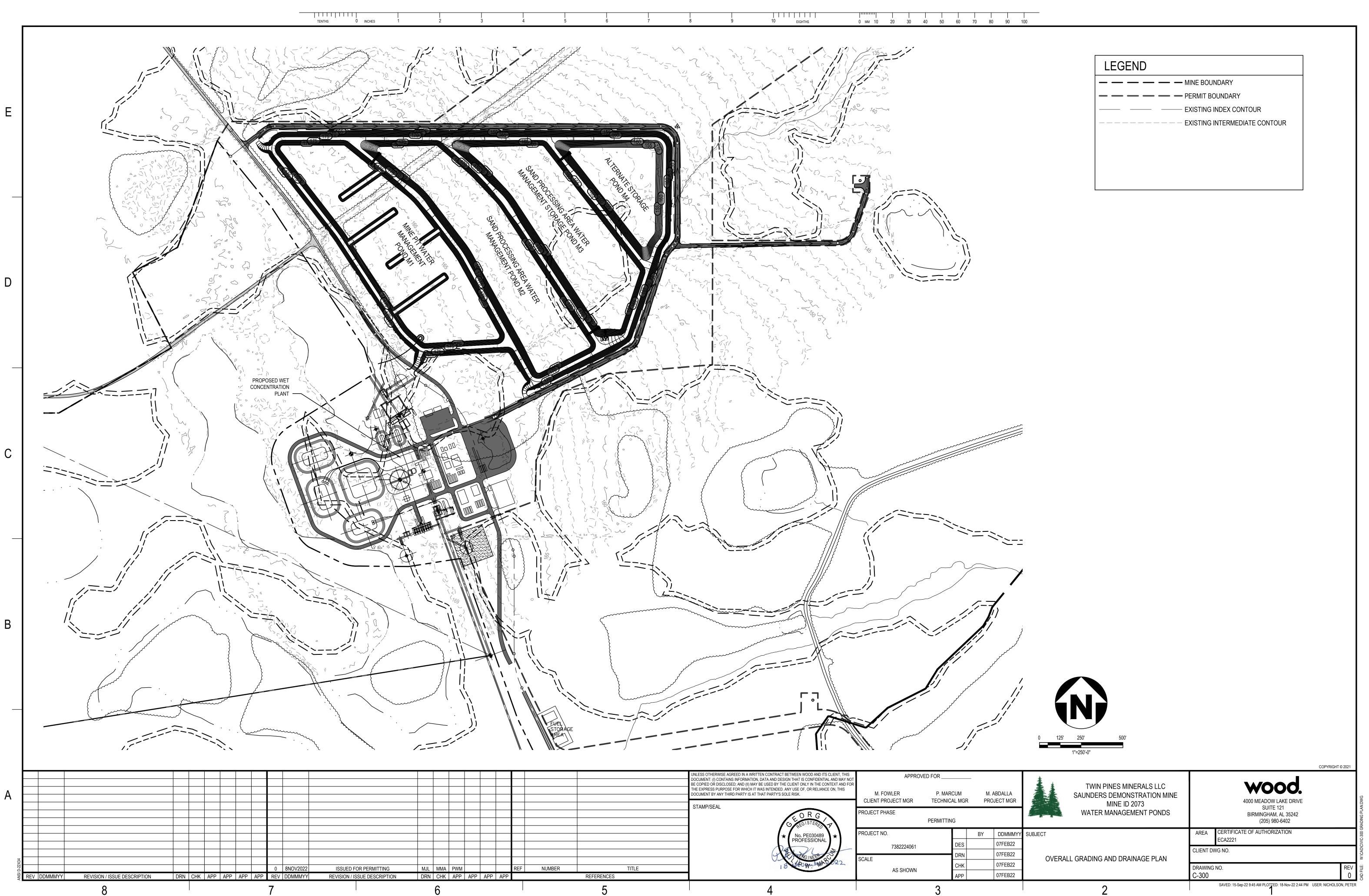


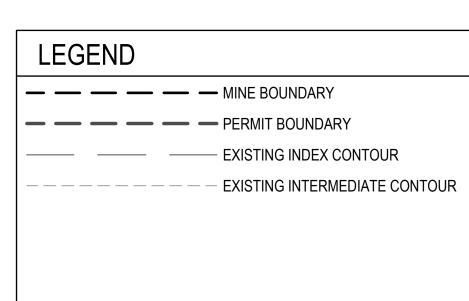


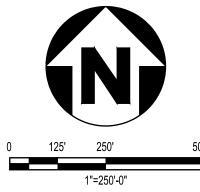
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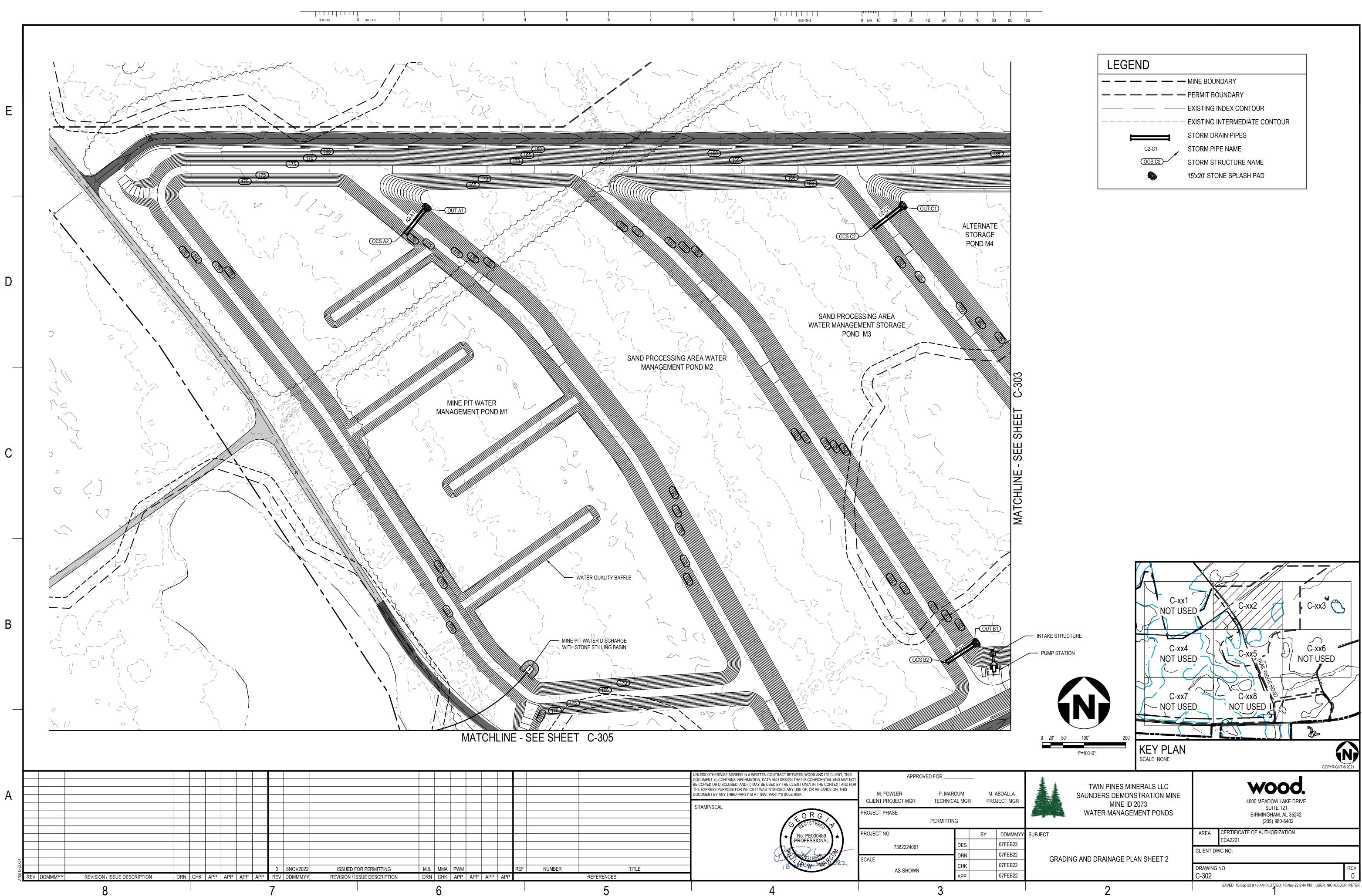
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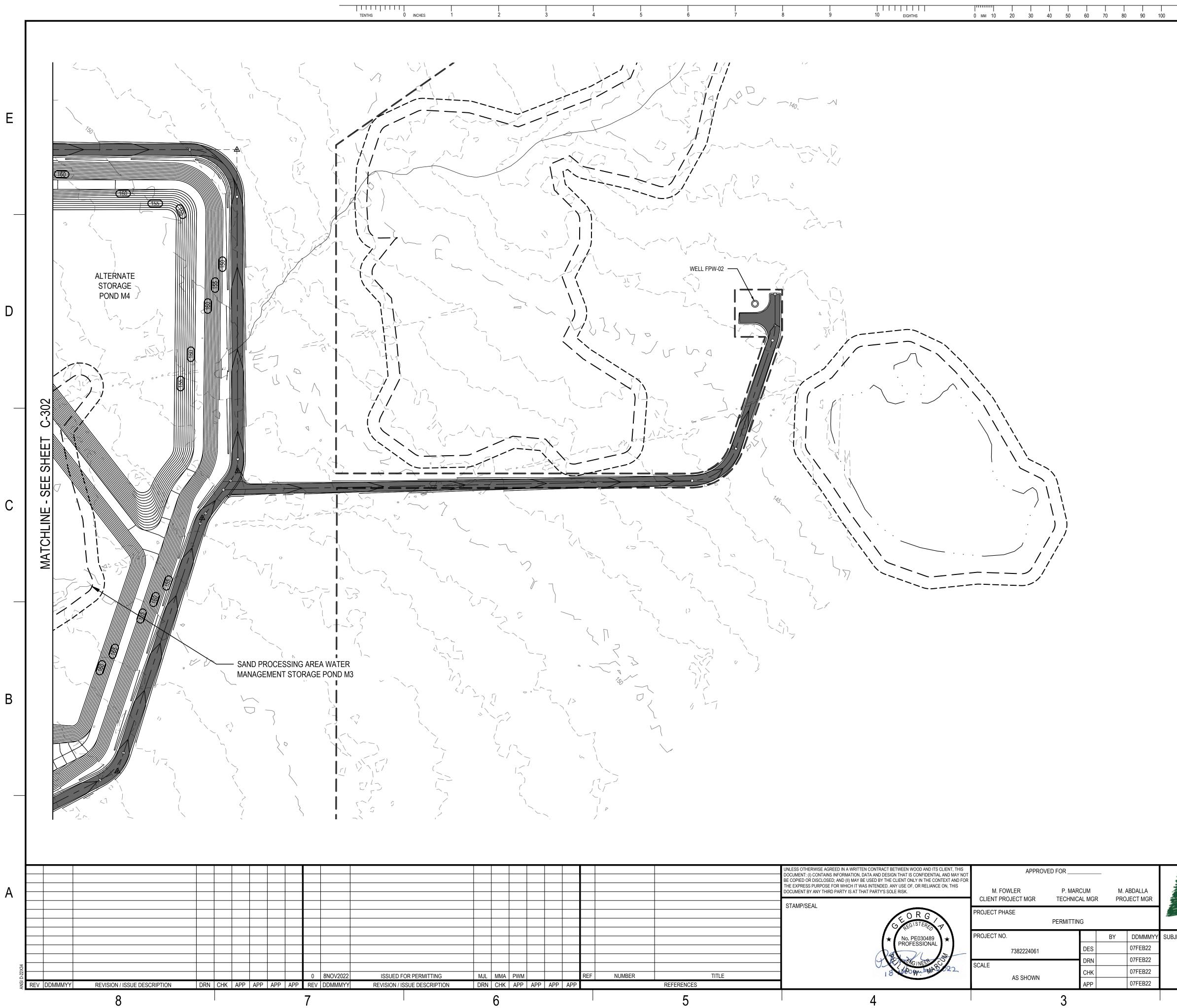






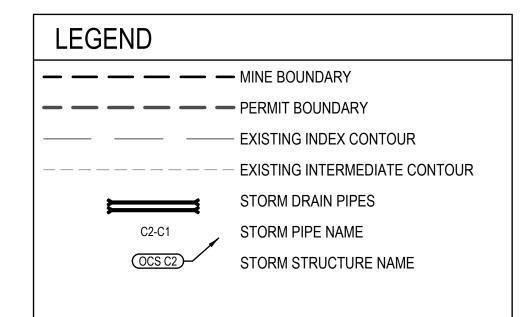


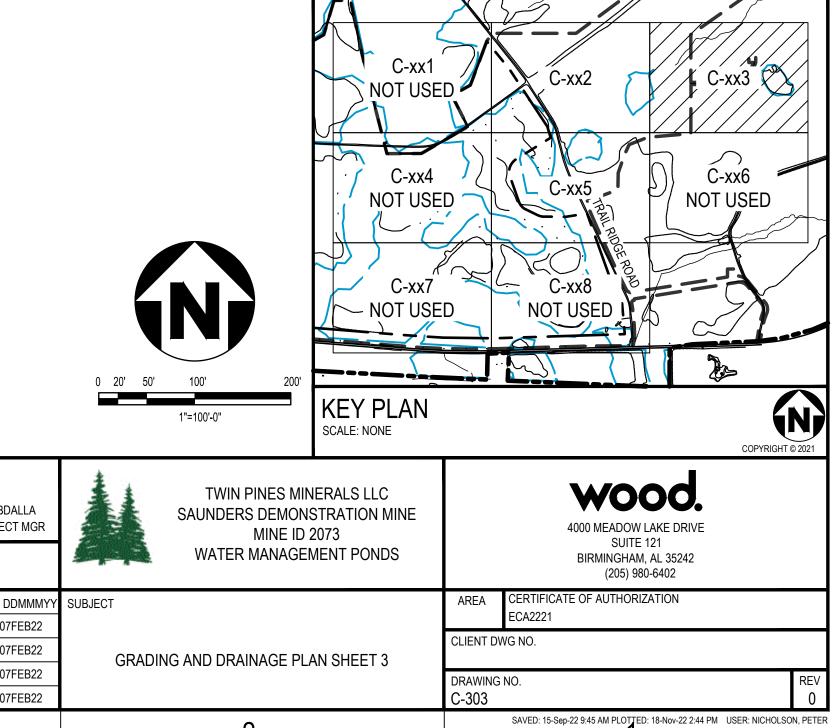
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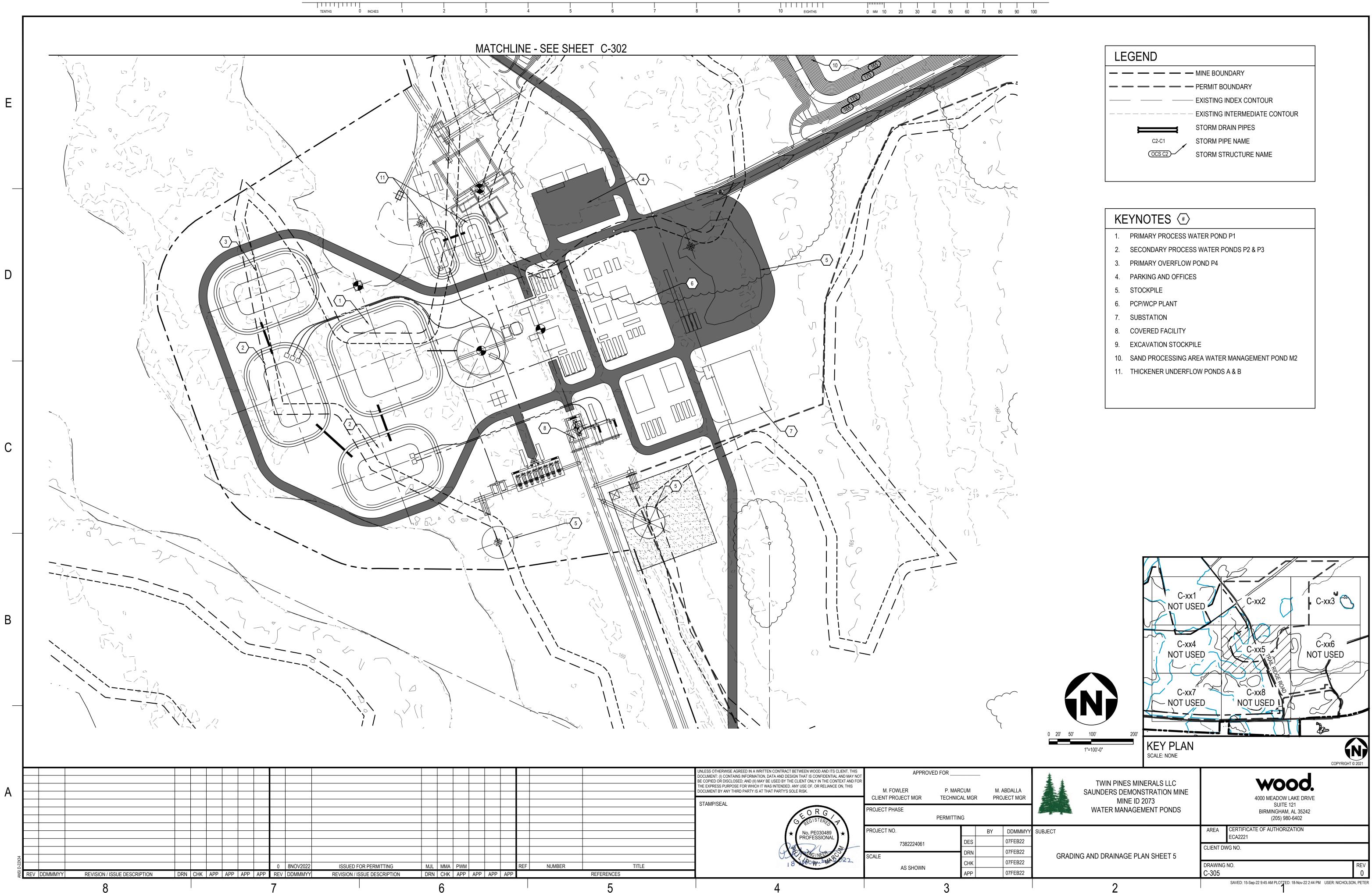


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DTHERWISE AGREED IN A WRITTEN CONTRACT BETWEEN WOOD AND ITS CLIENT, THIS NT: (I) CONTAINS INFORMATION, DATA AND DESIGN THAT IS CONFIDENTIAL AND MAY NOT D OR DISCLOSED; AND (II) MAY BE USED BY THE CLIENT ONLY IN THE CONTEXT AND FOR	APPROVED FOR		







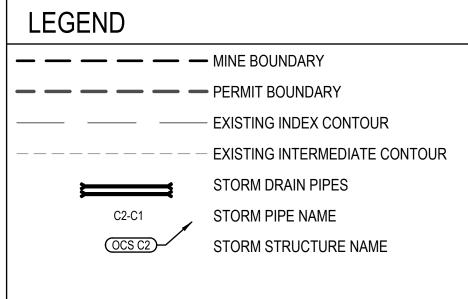


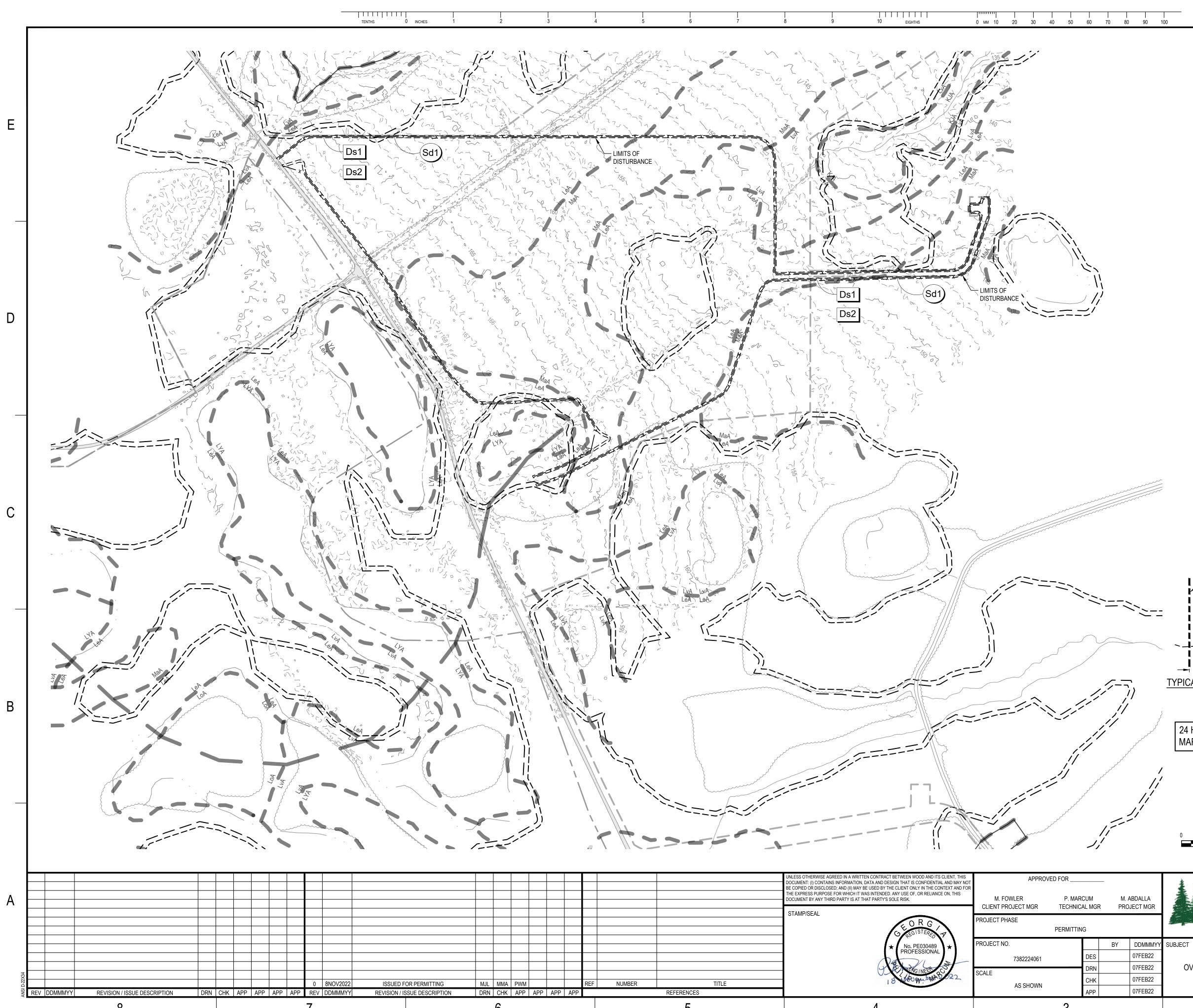
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— — — — — — — — — LIMITS OF DISTURBANCE
× × SILT FENCE

CODE	PRACTICE	MAP SYMBOL	DESCRIPTION
Co	CONSTRUCTION EXIT		A CRUSHED STONE PAD LOCATED AT THE CONSTRUCTION SITE EXIT TO PROVIDE A PLACE FOR REMOVING MUD FROM TIRES THEREBY PROTECTING PUBLIC STREETS.
Ds1	DISTURBED AREA STABILIZATION (MULCHING ONLY)	Ds1	ESTABLISHING TEMPORARY PROTECTION FOR DISTURBED AREAS WHERE SEEDINGS MAY NOT HAVE A SUITABLE GROWING SEASON TO PRODUCE AN EROSION RETARDING COVER.
Ds2	DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)	Ds2	ESTABLISHING A TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDINGS ON DISTURBED AREAS.
(Sd1)	SEDIMENT BARRIER	,+ X-	A BARRIER TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. IT MAY BE SANDBAGS, BALES OF STRAW OR HAY, BRUSH, LOGS AND POLES, GRAVEL, OR A SEDIMENT FENCE. THE BARRIERS ARE USUALLY TEMPORARY.
Sd2	SEDIMENT TRAP TEMPORARY		AN IMPOUNDING AREA CREATED BY EXCAVATING AROUND A STORM DRAIN DROP INLET. THE EXCAVATED AREA WILL BE FILLED AND STABILIZED ON COMPLETION OF CONSTRUCTION ACTIVITIES.

## TOTAL LIMITS OF DISTURBANCE = 3.03 ACRES

			SOILS LEGEND
		MAP UNIT SYMBOL	MAP UNIT NAME
		KJA	KINSTON AND JOHNSTON SOILS, 0 TO 2 PERCENT SLOPES, FREQUENTLY FLOODED
	LIMITS OF DISTURBANCE	LeA	LEON FINE SAND, FREQUENTLY, 0 TO 2 PERCENT SLOPES
	SILT FENCE (SEE PLAN)	LoA	LEON FINE SAND, FREQUENTLY PONDED, 0 TO 2 PERCENT SLOPES
2	PROPOSED GRADE	LvA	LYNN HAVEN FINE SAND, 0 TO 2 PERCENT SLOPES
		LYA	LYNN HAVEN, ALLANTON AND KINGSFERRY SOILS, PONDED, 0 TO 1 PERCENT SLOPES
		MaA	MANDARIN FINE SAND, 0 TO 2 PERCENT SLOPES
	(N.T.S.) 24 HOUR CONTACT PERSON: MARK FOWLER: (205) 403-5287		EORGIAOGUA ies Protection Center, Inc Know what's below. Call before you dig. Conservation Commission Philip W Marcum Level II Certified Design Professional Certification Number 0000010833
	1"=250'-0"		ISSUED: <u>01/31/2022</u> EXPIRES: <u>01/31/2025</u>
	*		COPYRIGHT © 202
DALLA CT MGR	TWIN PINES MINERALS LLC SAUNDERS DEMONSTRATION MINE MINE ID 2073 WATER MANAGEMENT PONDS		4000 MEADOW LAKE DRIVE SUITE 121 BIRMINGHAM, AL 35242 (205) 980-6402

OVERALL INITIAL EROSION SEDIMENTATION

AND POLLUTION CONTROL PLAN

(205) 980-6402

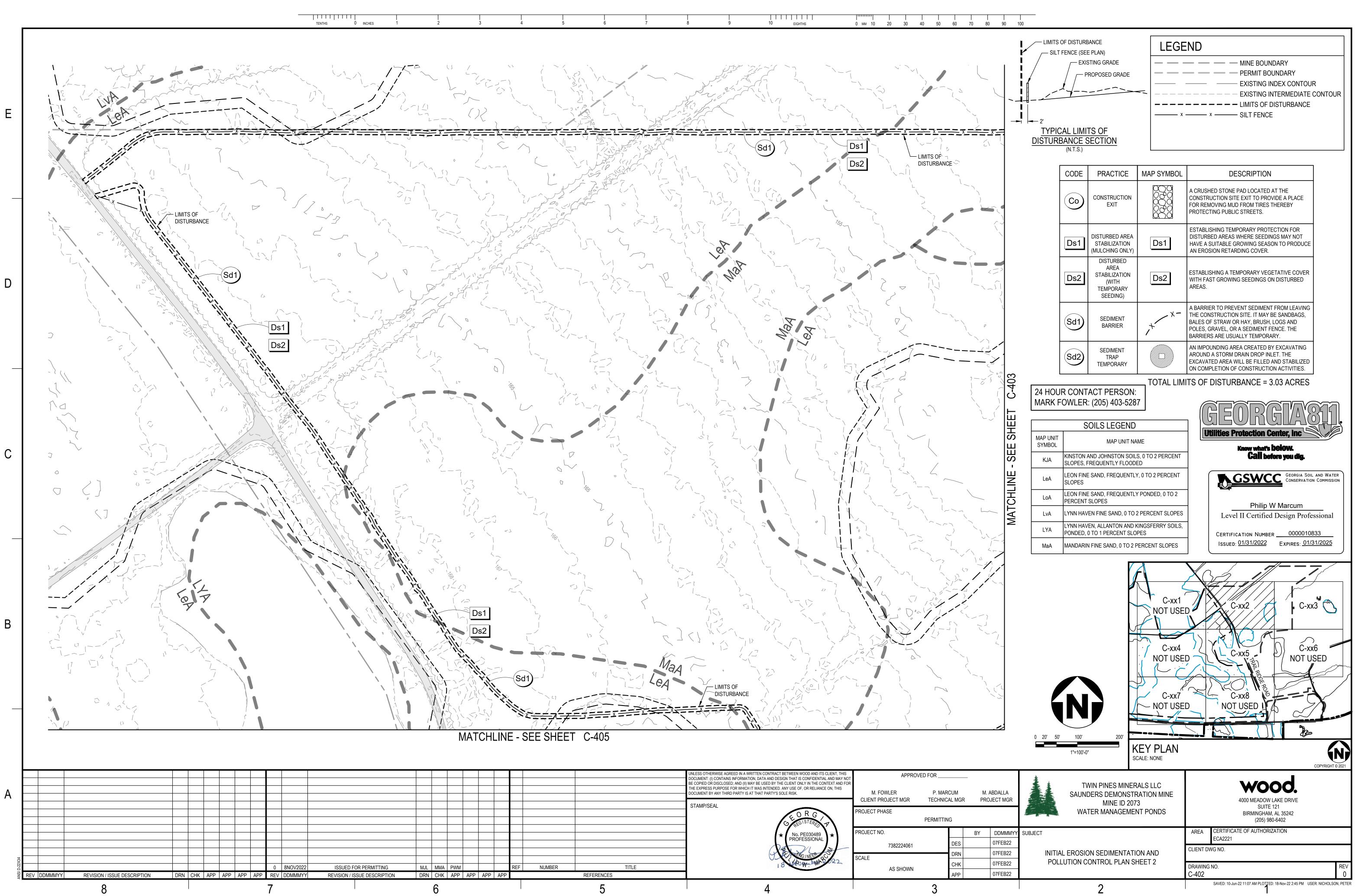
AREA CERTIFICATE OF AUTHORIZATION

ECA2221

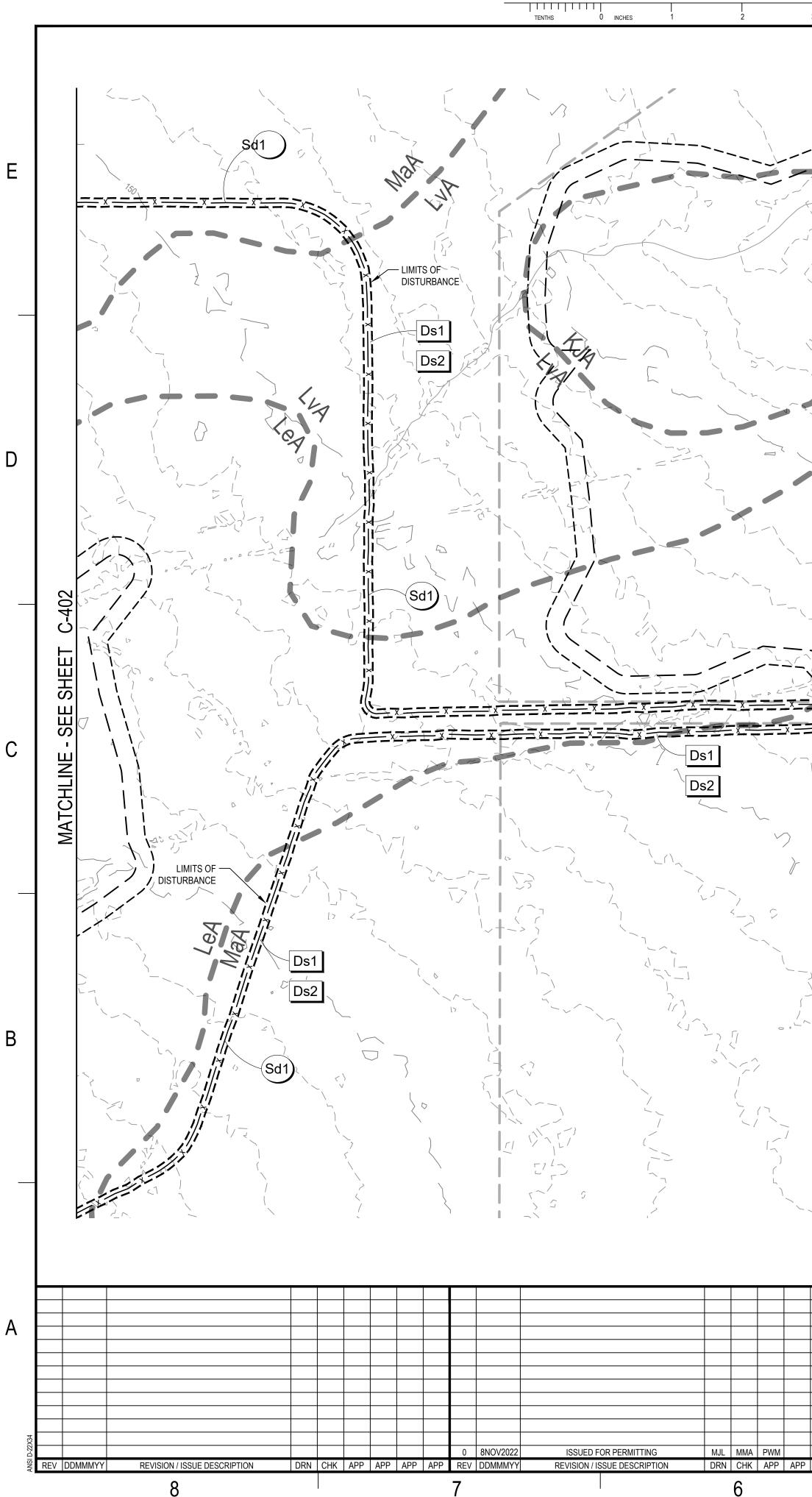
CLIENT DWG NO.

DRAWING NO.

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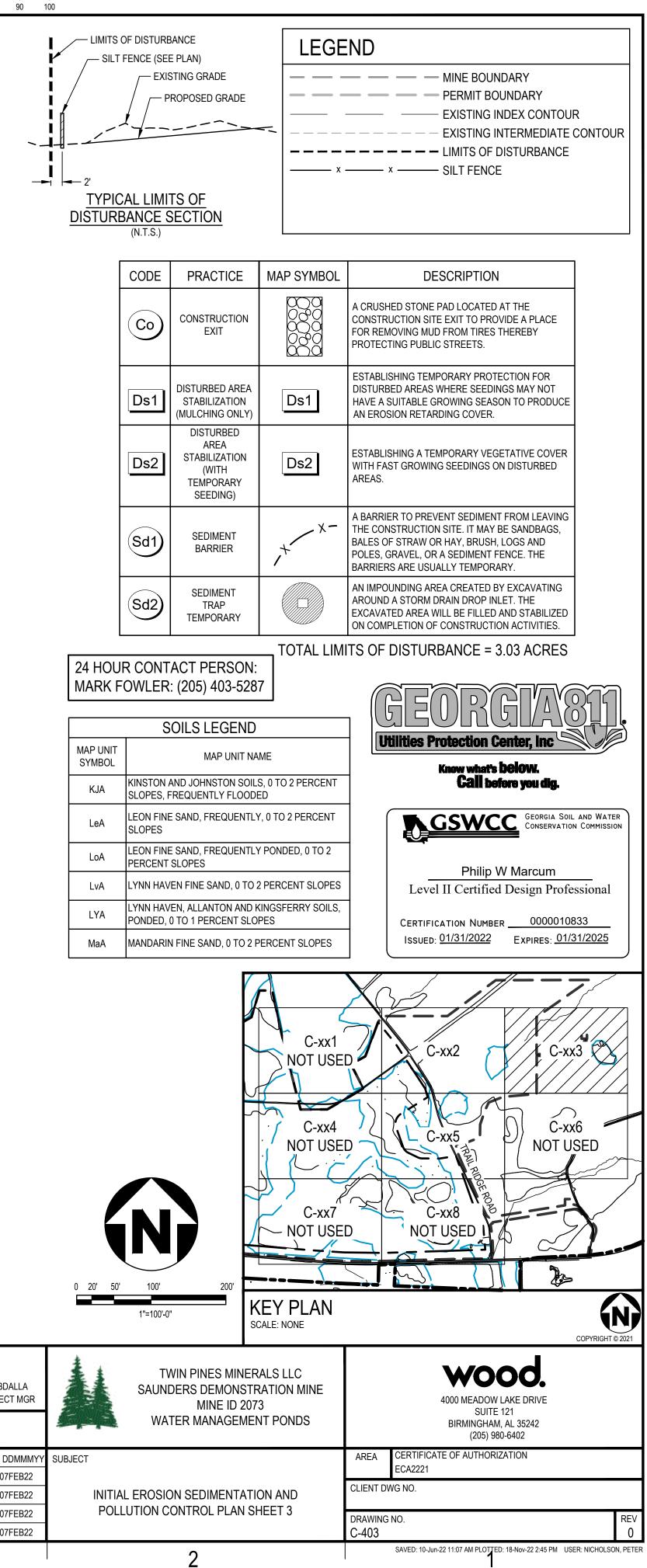


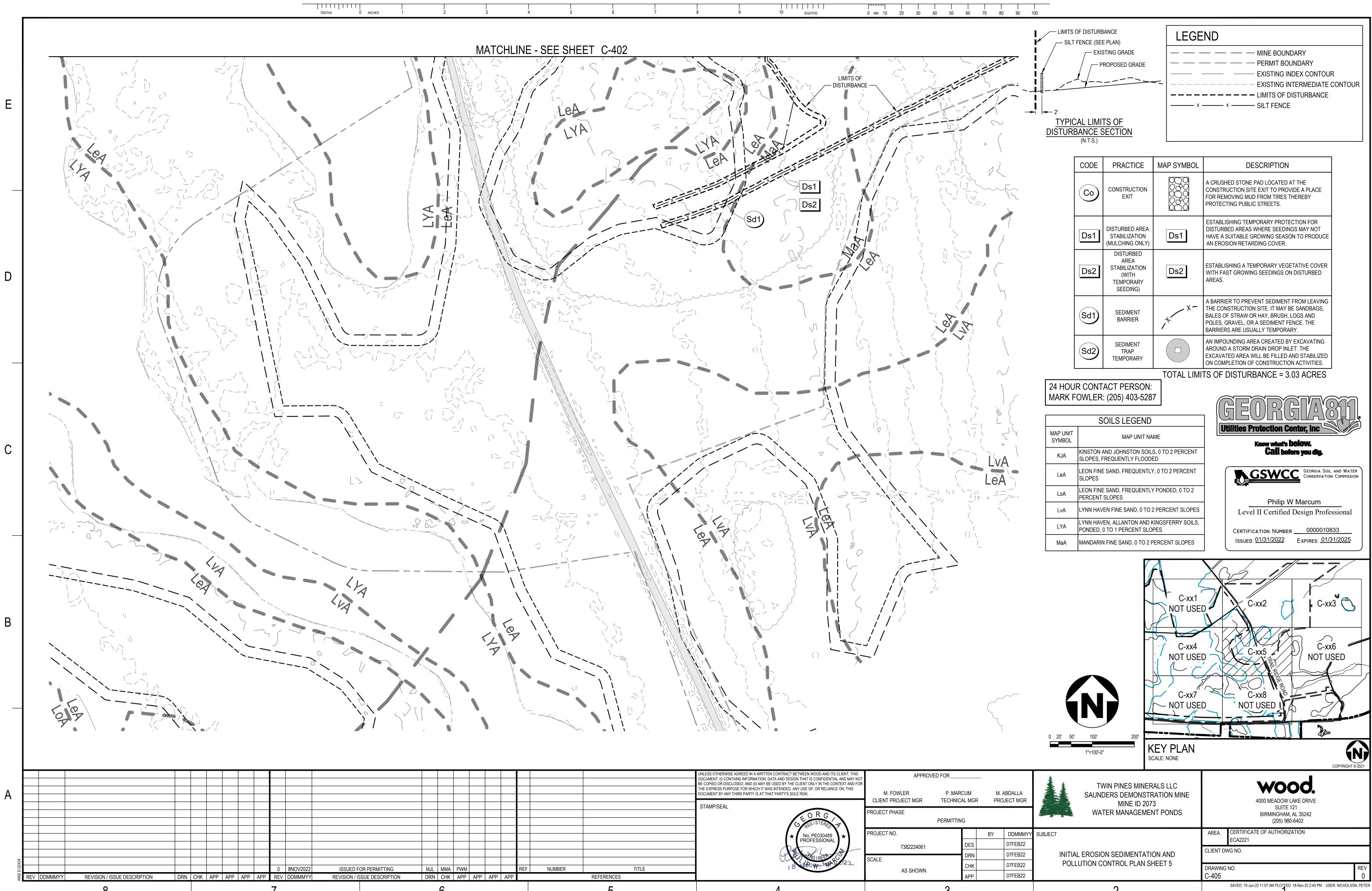
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					DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK.	M. FOWLER CLIENT PROJECT MGR	P. MARCUM TECHNICAL MGR	M. ABDAL PROJECT I
					UNLESS OTHERWISE AGREED IN A WRITTEN CONTRACT BETWEEN WOOD AND ITS CLIENT, THIS DOCUMENT: (I) CONTAINS INFORMATION, DATA AND DESIGN THAT IS CONFIDENTIAL AND MAY NO BE COPIED OR DISCLOSED; AND (II) MAY BE USED BY THE CLIENT ONLY IN THE CONTEXT AND FO THE EXPRESS PURPOSE FOR WHICH IT WAS INTENDED. ANY USE OF, OR RELIANCE ON, THIS	T AFFROM	/ED FOR	



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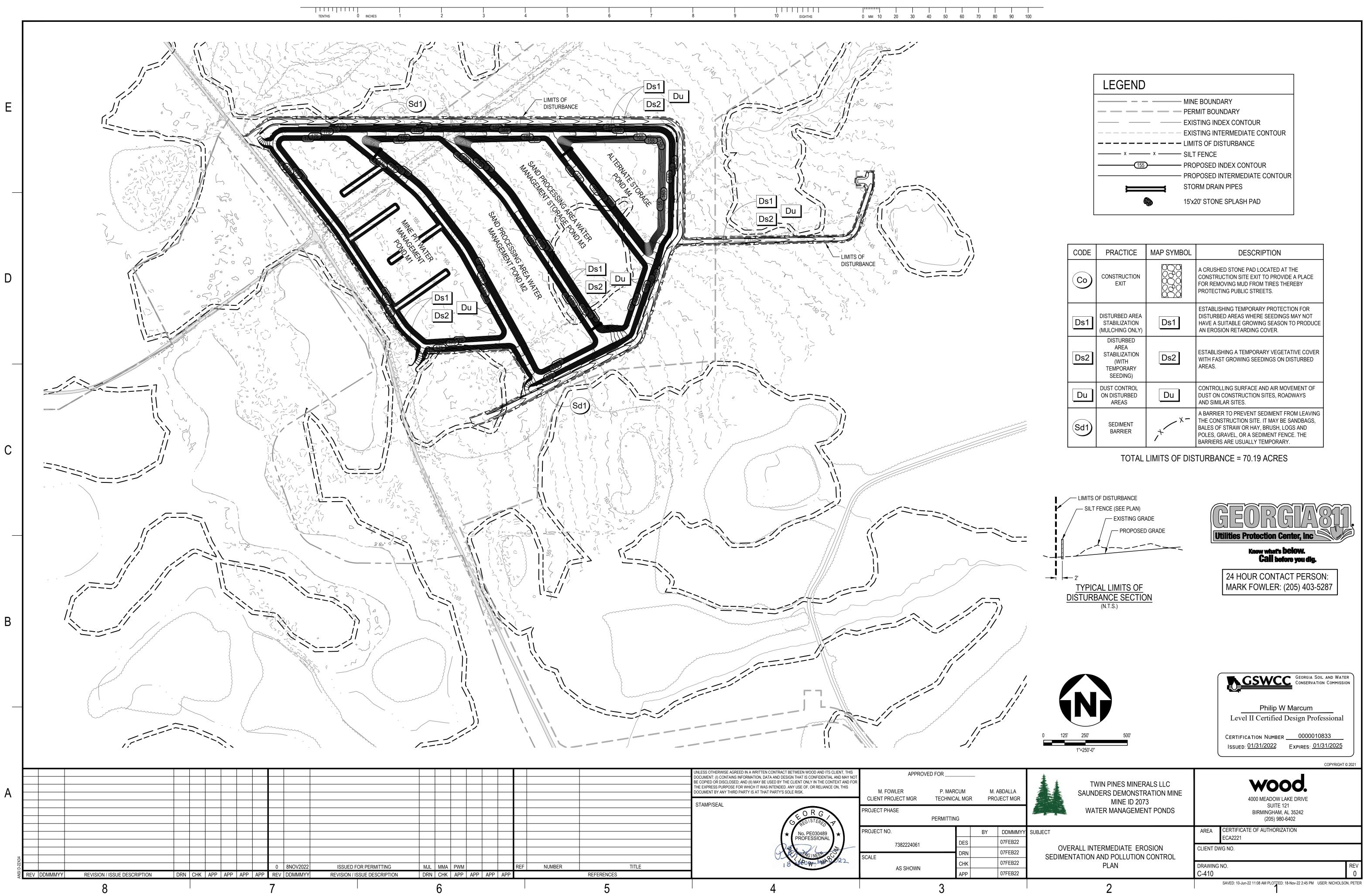
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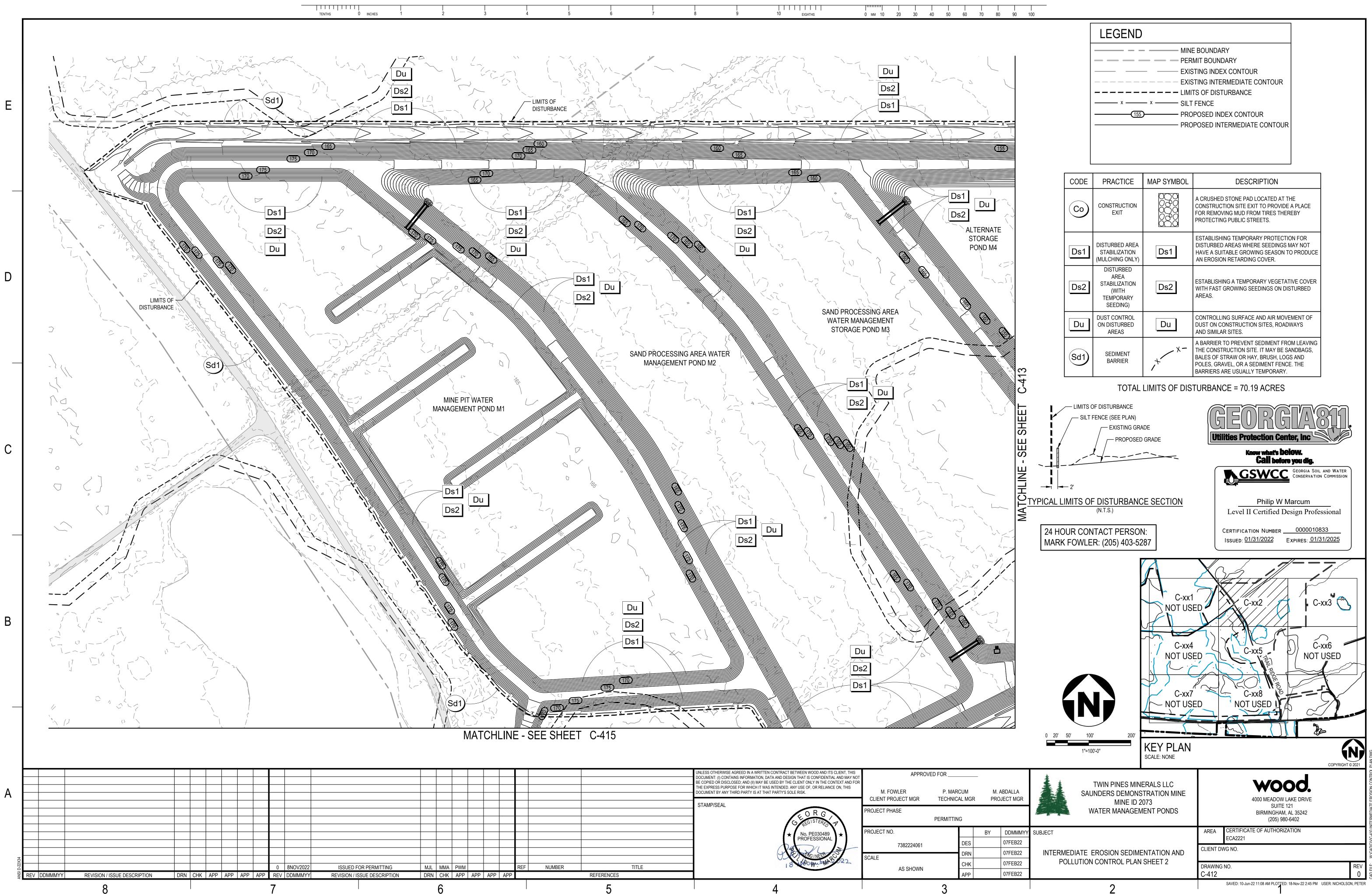
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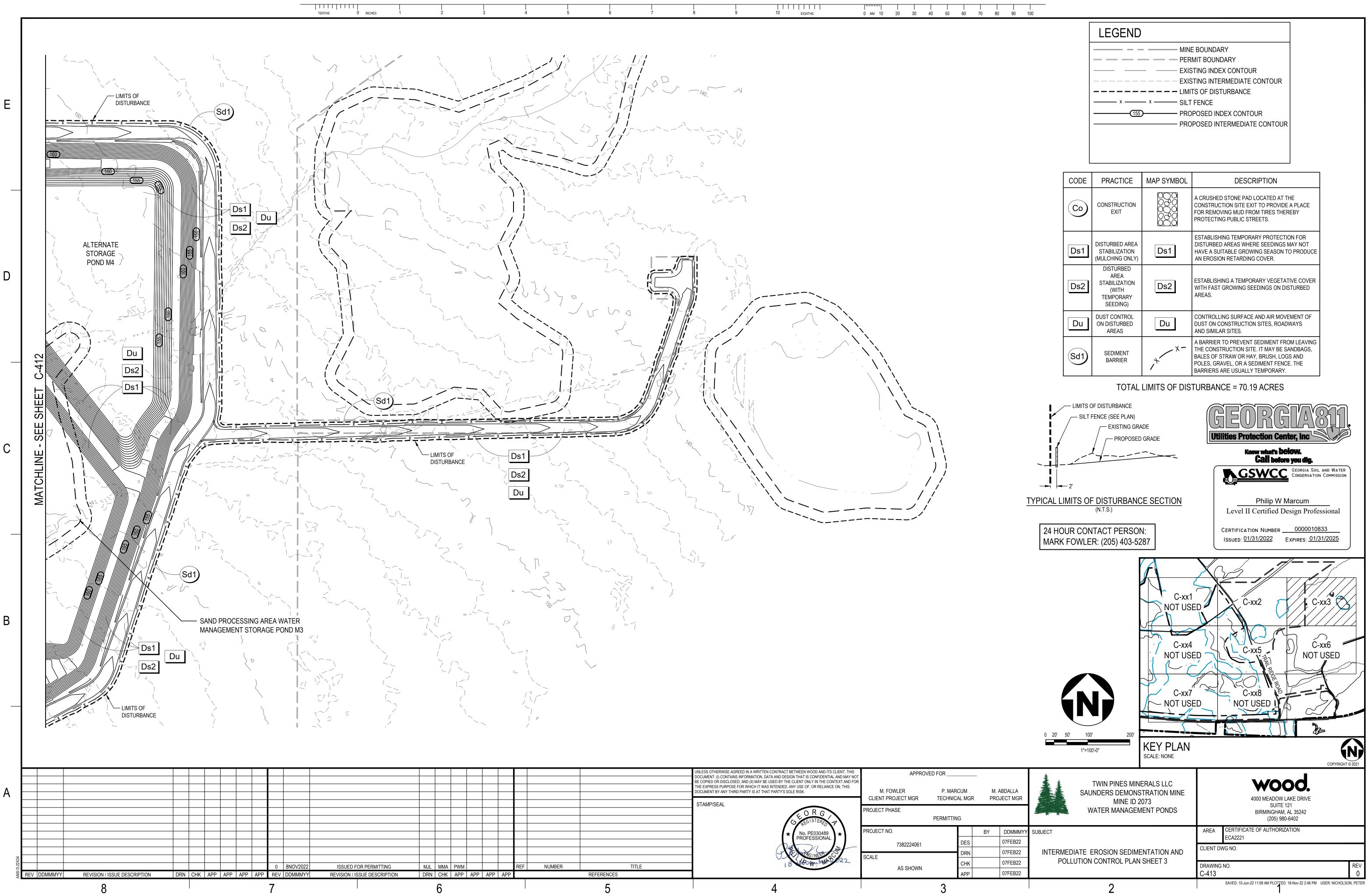
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	<ul> <li>LIMITS OF DISTURBANCE</li> </ul>
x x	- SILT FENCE
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	- PROPOSED INTERMEDIATE CONTOUR
	STORM DRAIN PIPES
	15'x20' STONE SPLASH PAD

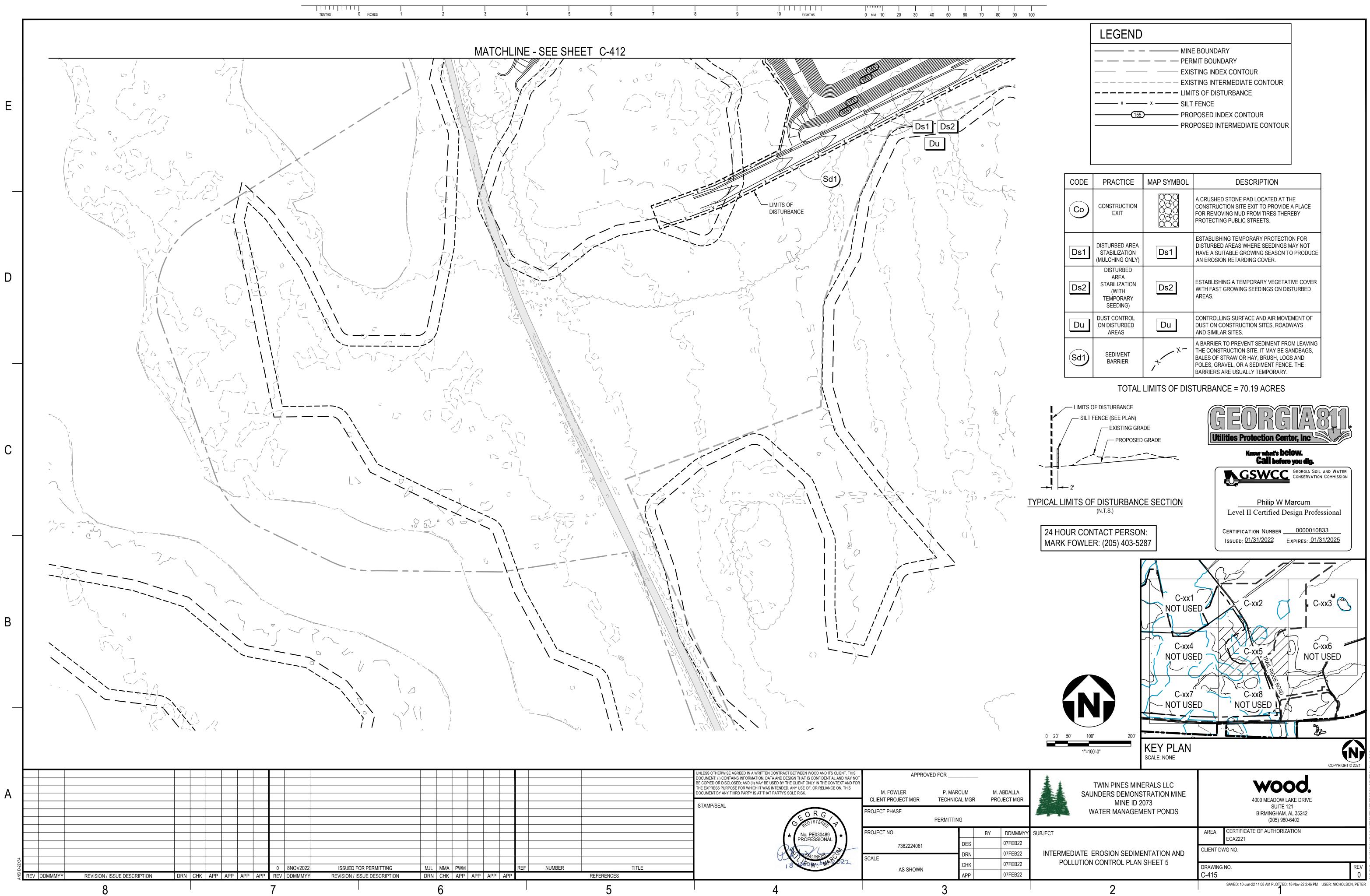
CODE	PRACTICE	MAP SYMBOL	DESCRIPTION
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Ds1	DISTURBED AREA STABILIZATION (MULCHING ONLY)	Ds1	ESTABLISHING TEMPORARY PROTECTION FOR DISTURBED AREAS WHERE SEEDINGS MAY NOT HAVE A SUITABLE GROWING SEASON TO PRODUCE AN EROSION RETARDING COVER.
Ds2	DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)	Ds2	ESTABLISHING A TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDINGS ON DISTURBED AREAS.
Du	DUST CONTROL ON DISTURBED AREAS	Du	CONTROLLING SURFACE AND AIR MOVEMENT OF DUST ON CONSTRUCTION SITES, ROADWAYS AND SIMILAR SITES.
(Sd1)	SEDIMENT BARRIER	,+ ×-	A BARRIER TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. IT MAY BE SANDBAGS, BALES OF STRAW OR HAY, BRUSH, LOGS AND POLES, GRAVEL, OR A SEDIMENT FENCE. THE BARRIERS ARE USUALLY TEMPORARY.



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						THE EXPRESS PURPOSE FOR WHICH IT WAS INTENDED. ANY USE OF, OR RELIANCE ON, THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK.	M. FOWLER CLIENT PROJECT MGR	P. MARCUM TECHNICAL MGR	M. ABDAL PROJECT I
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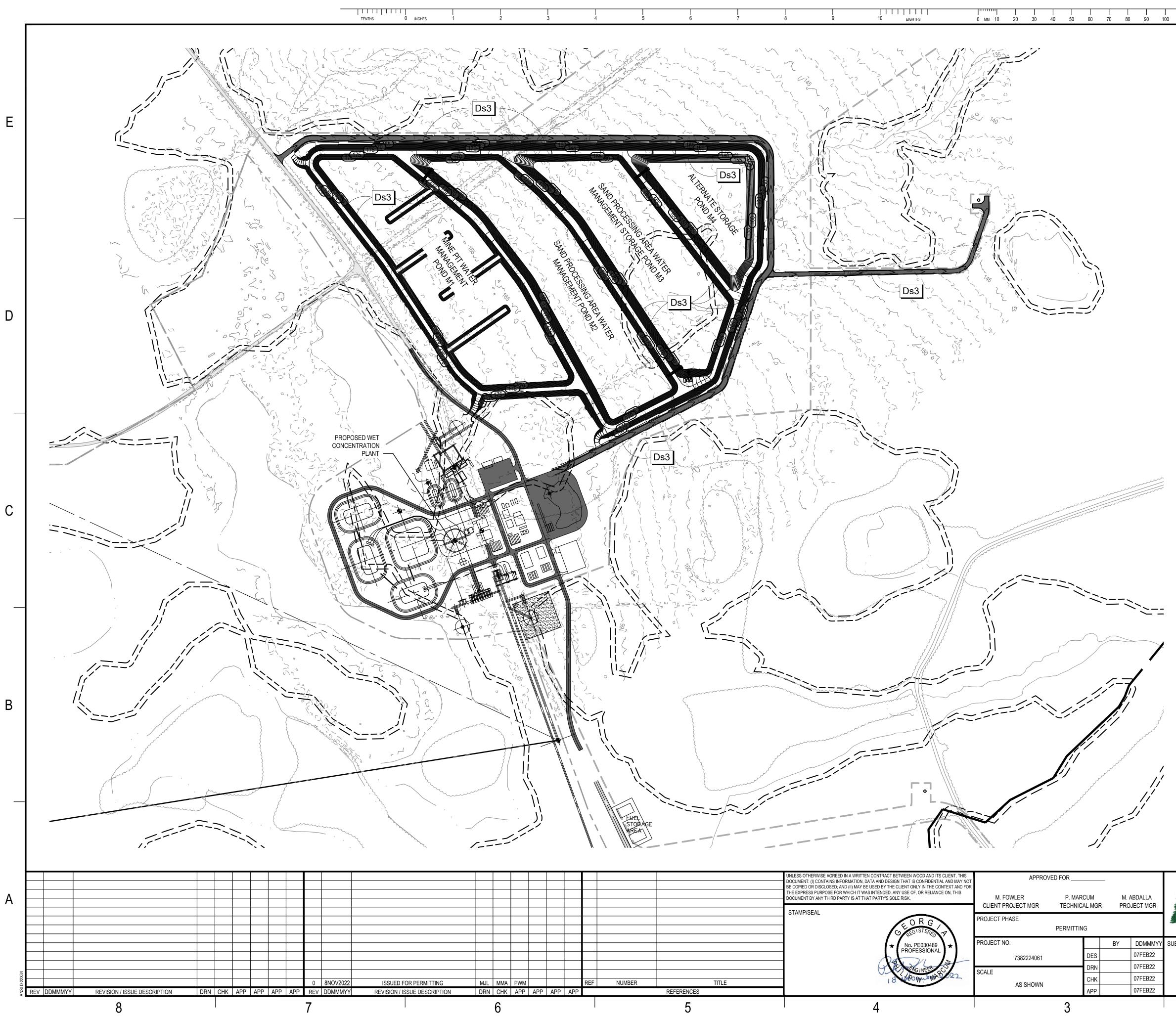


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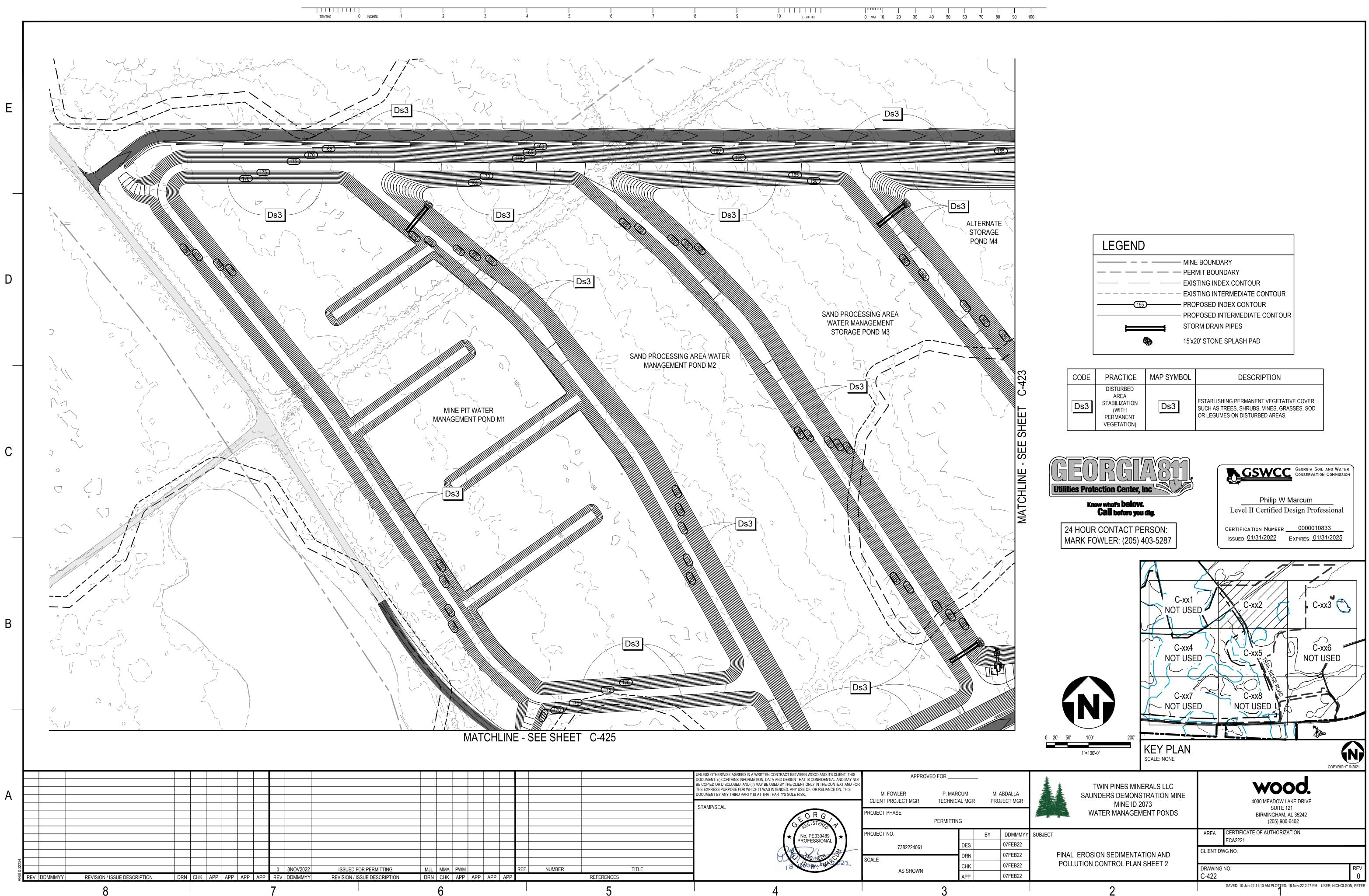
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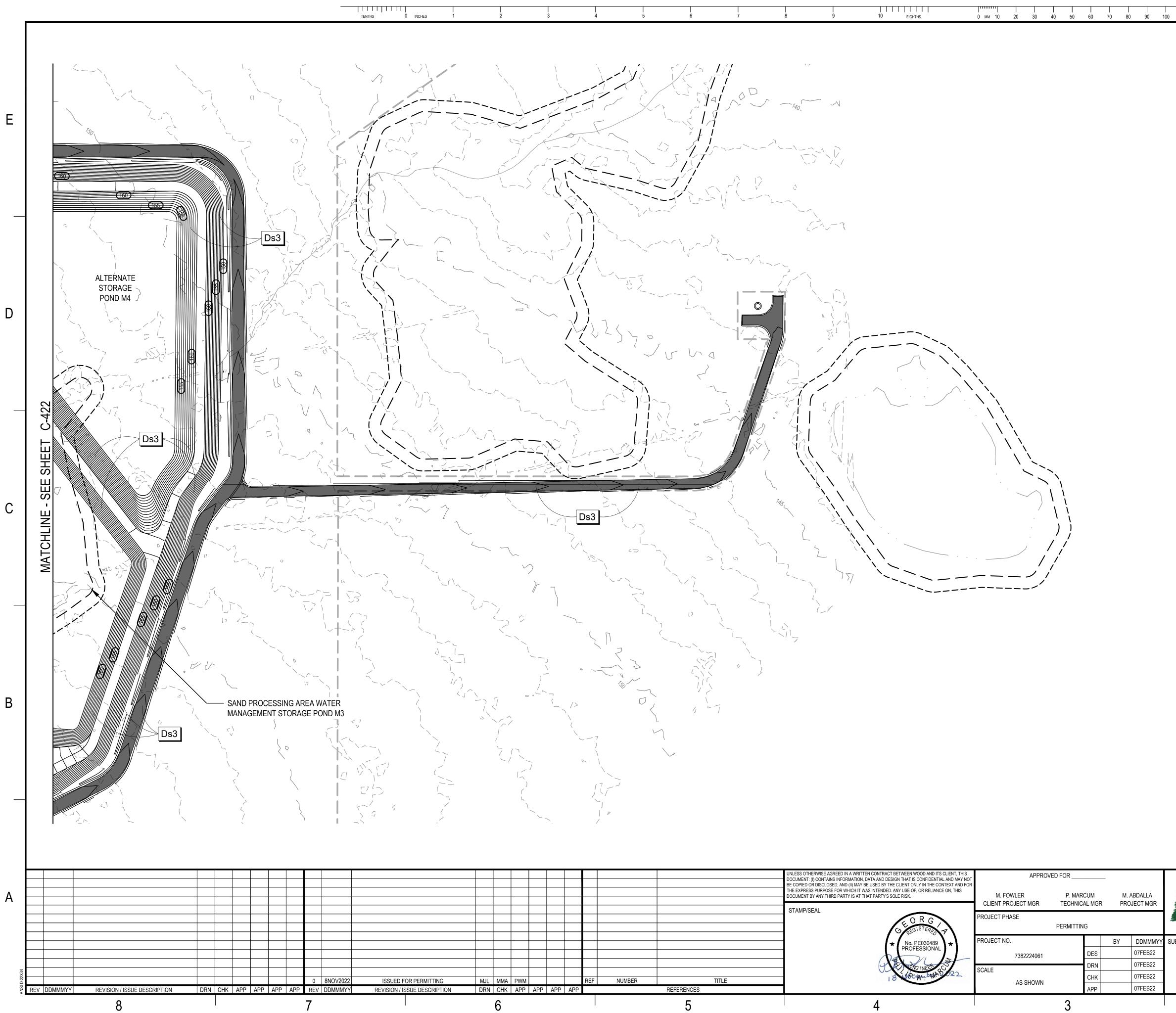


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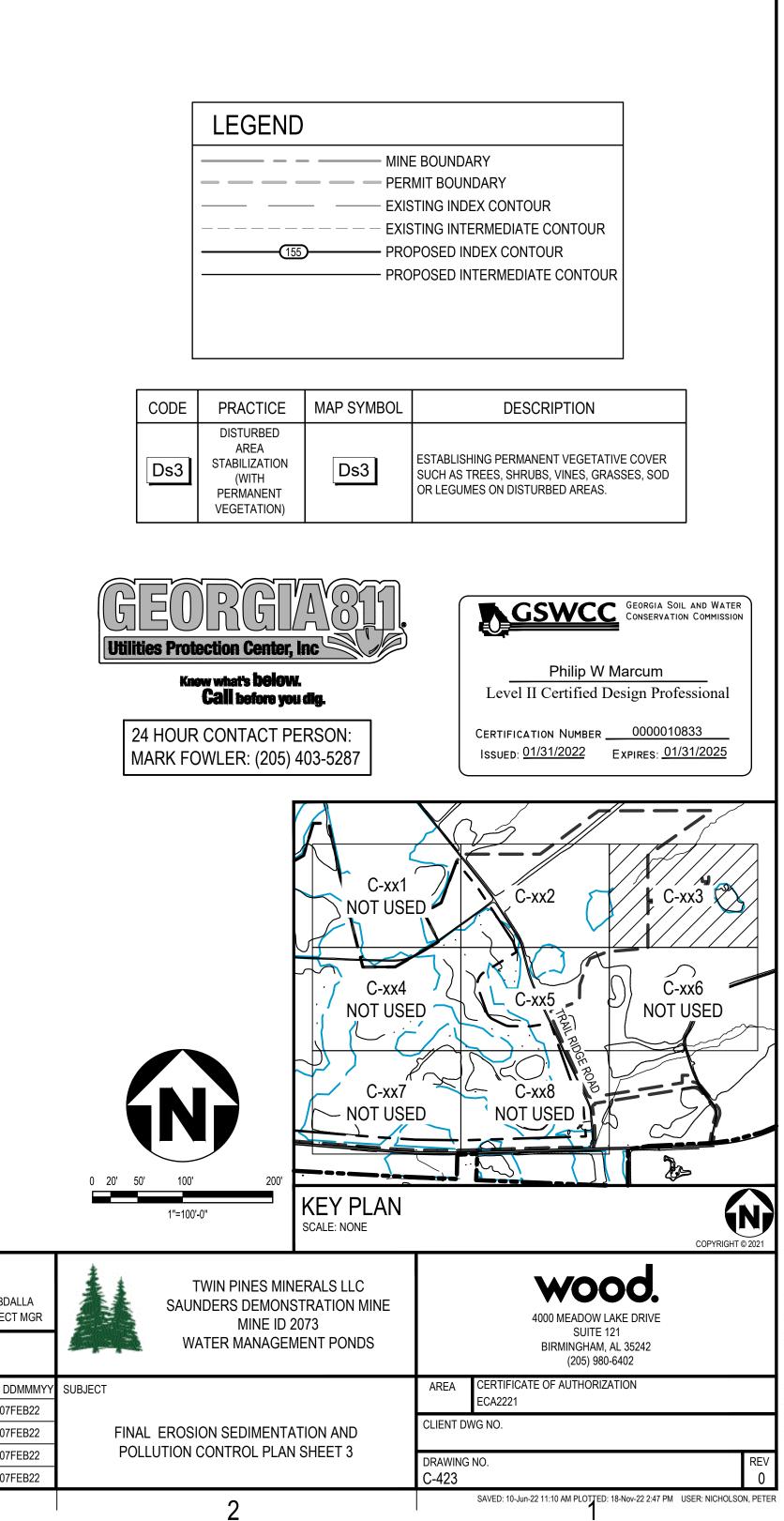
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	COD		MAP SYMBOL	DESCRIPTION		
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		DRGI/		<b>GSWCC</b> <sup>G</sup> Philip W Mar		IR ON
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DMMMYY FEB22	SUBJECT			AREA CERTIFICATE OF AUTHORIZATION ECA2221		
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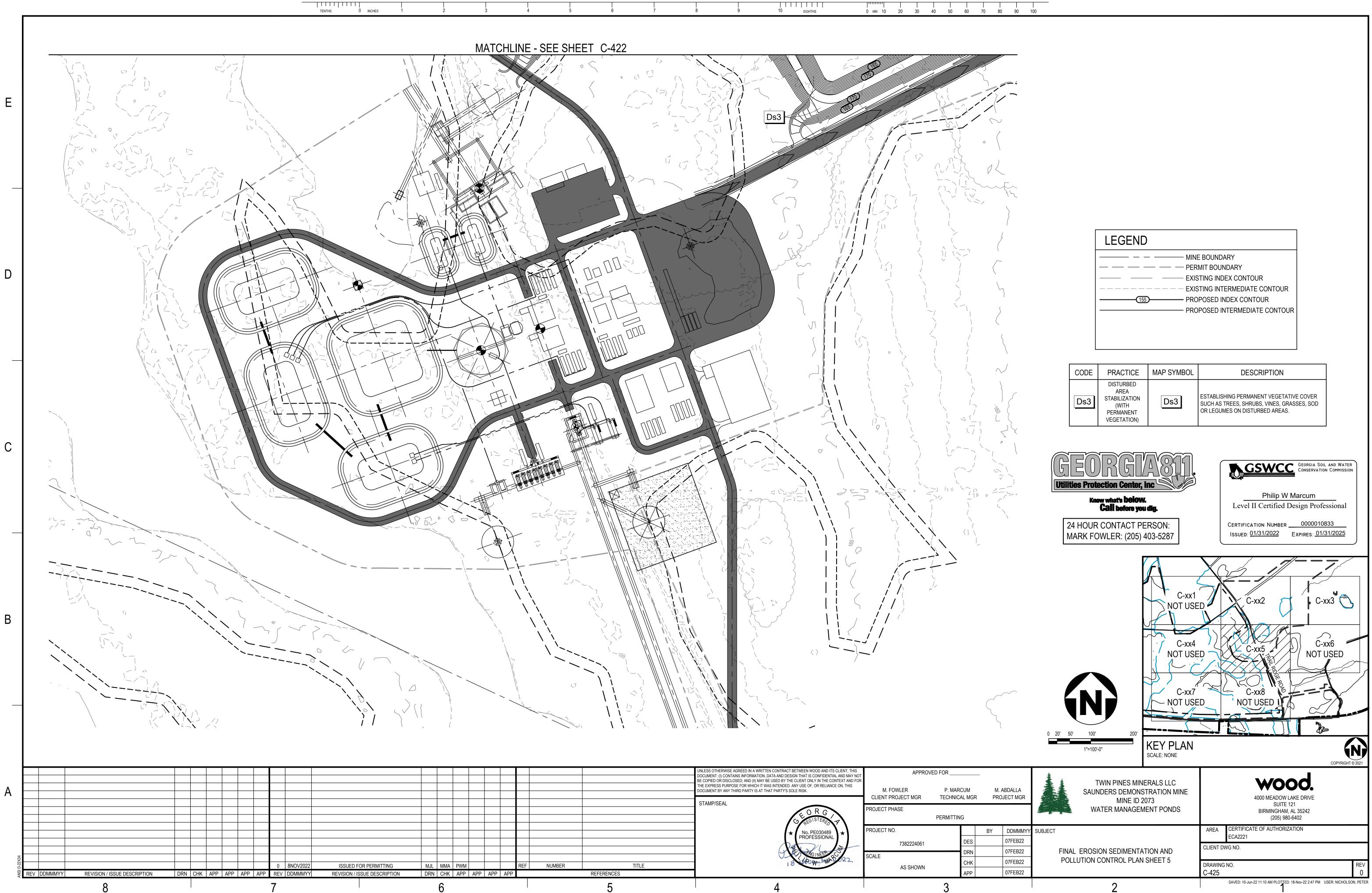


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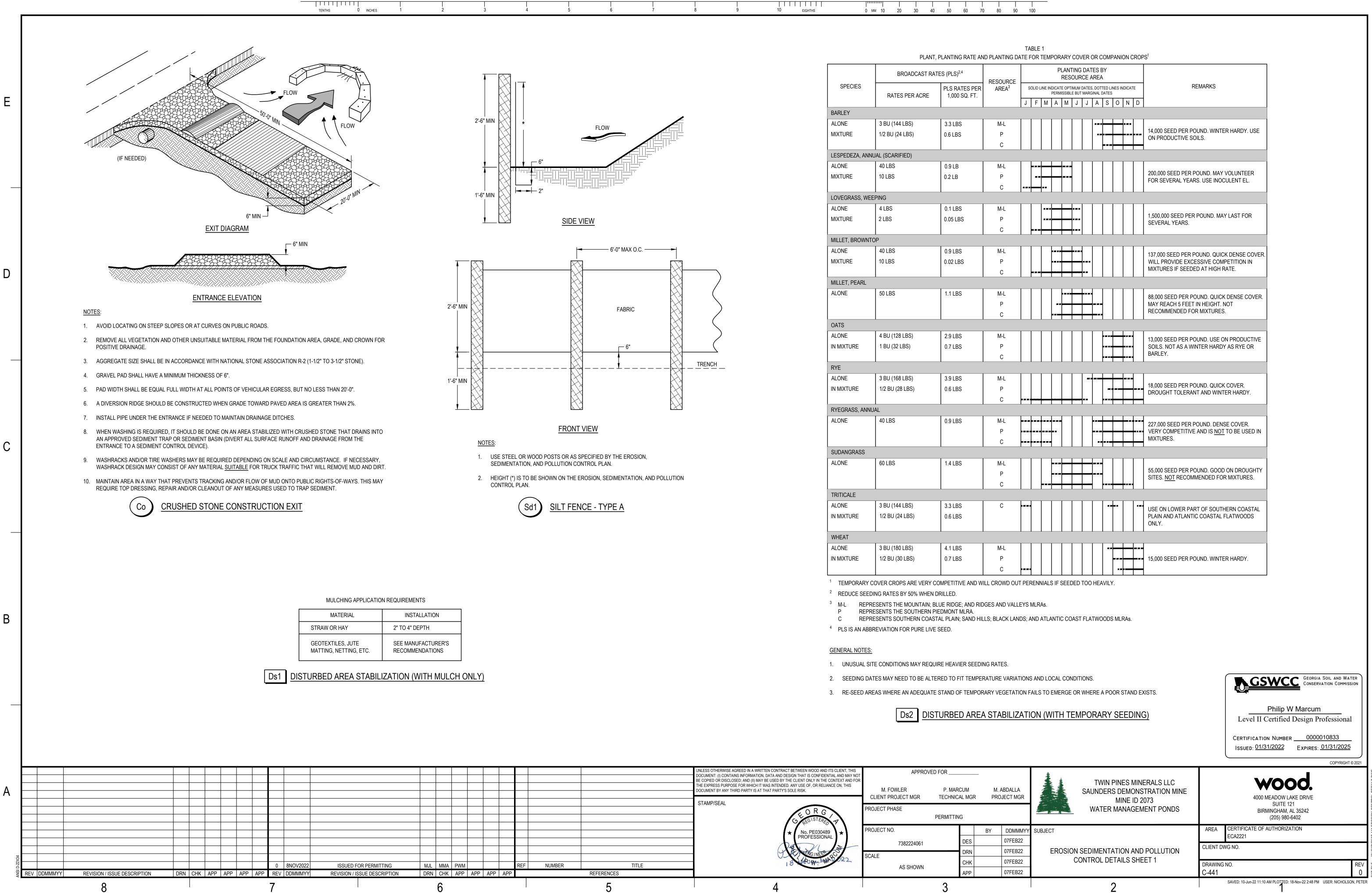
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					THE EXPRESS PURPOSE FOR WHICH IT WAS INTENDED. ANY USE OF, OR RELIANCE ON, THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK.	M. FOWLER	P. MARCUM	М	. Abdalla
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0050150	BROADCAST RA		RESOURCE					ANT RESC								
SPECIES	RATES PER ACRE	PLS RATES PER 1,000 SQ. FT.	AREA <sup>3</sup>			NE IND P	PERMIS		BUT	MARG	INAL	TED LI DATES	S			REMARKS
BARLEY				0	<u>'</u>		<u>^  </u>	141	5			10		1.1		
ALONE	3 BU (144 LBS)	3.3 LBS	M-L	П		- T									<u>г</u>	[
MIXTURE	1/2 BU (24 LBS)	0.6 LBS	P											+		14,000 SEED PER POUND. WINTER HARDY. USE ON PRODUCTIVE SOILS.
LESPEDEZA, ANN			С									┝╼╼				
ALONE	40 LBS	0.9 LB	M-L	ГТ						_	r –	T	T T	T T	<u> </u>	
MIXTURE	10 LBS							7								200,000 SEED PER POUND. MAY VOLUNTEER
MIXTURE	10 LBS	0.2 LB	P C													FOR SEVERAL YEARS. USE INOCULENT EL.
LOVEGRASS, WE	EPING	1 1				<b>I</b>	1				1		1		1	
ALONE	4 LBS	0.1 LBS	M-L									Γ	Γ	Γ		
MIXTURE	2 LBS	0.05 LBS	Р													1,500,000 SEED PER POUND. MAY LAST FOR
			С	╎╎												SEVERAL YEARS.
MILLET, BROWNT	OP												1	-	1	
ALONE	40 LBS	0.9 LBS	M-L			4						Γ		Γ		
MIXTURE	10 LBS	0.02 LBS	P			ļ										137,000 SEED PER POUND. QUICK DENSE COVER WILL PROVIDE EXCESSIVE COMPETITION IN
		0.02 200	C	╎╎												MIXTURES IF SEEDED AT HIGH RATE.
MILLET, PEARL							1	1			1	1	1	1	1	
ALONE	50 LBS	1.1 LBS	M-L	П		<b>-</b> T	-	,				Г	1	Г	Г	
			P													88,000 SEED PER POUND. QUICK DENSE COVER MAY REACH 5 FEET IN HEIGHT. NOT
			C			ļ										RECOMMENDED FOR MIXTURES.
OATS						1					1	1	1	1	1	
ALONE	4 BU (128 LBS)	2.9 LBS	M-L			Т		Т				<b> </b>	-	<b>.</b>	-	
IN MIXTURE	1 BU (32 LBS)	0.7 LBS	Р											╞╍╸	4	13,000 SEED PER POUND. USE ON PRODUCTIVE SOILS. NOT AS A WINTER HARDY AS RYE OR
			С											┝╻┙		BARLEY.
RYE					]	<b>I</b>	1	1			1	1	1	1	1	
ALONE	3 BU (168 LBS)	3.9 LBS	M-L	П		<b>-</b> T						1	-		4	
IN MIXTURE	1/2 BU (28 LBS)	0.6 LBS	Р										<b>_</b>			18,000 SEED PER POUND. QUICK COVER.
			С													DROUGHT TOLERANT AND WINTER HARDY.
RYEGRASS, ANNU	JAL		-				1				I	1	<u> </u>	<u> </u>	1	
ALONE	40 LBS	0.9 LBS	M-L	┝╍╼┝								-	<u> </u>	┿╍╺	<b>+</b>	
			Р												<b>_</b>	227,000 SEED PER POUND. DENSE COVER. VERY COMPETITIVE AND IS NOT TO BE USED IN
			С													MIXTURES.
SUDANGRASS													1	1	1	
ALONE	60 LBS	1.4 LBS	M-L			ļ						-				
			P													55,000 SEED PER POUND. GOOD ON DROUGHTY
			C											<b>_</b>		SITES. <u>NOT</u> RECOMMENDED FOR MIXTURES.
TRITICALE			-								L		<b>I</b>		I	
ALONE	3 BU (144 LBS)	3.3 LBS	C											Γ		
IN MIXTURE	1/2 BU (24 LBS)	0.6 LBS	Ŭ	[]												USE ON LOWER PART OF SOUTHERN COASTAL PLAIN AND ATLANTIC COASTAL FLATWOODS
																ONLY.
WHEAT											1	1	1	1	1	
ALONE	3 BU (180 LBS)	4.1 LBS	M-L										-			
	. , ,	0.7 LBS	P												1	15,000 SEED PER POUND. WINTER HARDY.
IN MIXTURE	1/2 BU (30 LBS)	I 0./ LBO														

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TENTUC		1	2	

							TENTHS	0 INCHES	1	2		3	4	5	6 7	8 9	 10	EIGHTHS		0 MM 10	20 30	40 50	60 70	 80 90
												Ρ	PLANT. PLANTIN	GRATE AND PLAN	TABLE 1 NTING DATE FOR PERMANENT COVER (	R COMPANION CROPS <sup>1</sup>								
		BROADCAS	T RATES (PLS) <sup>1,2</sup>	1	1		G DATES BY										BROADCAST RATI	ES (PI S) <sup>1,2</sup>			PLANTING DA			
	SPECIES	BROADCAS	- i	RESOURCE		RESOUR	RCE AREA		_		REMA	ARKS				PECIES		RE			RESOURCE	AREA		
	SFECIES	RATES PER ACRE	PLS RATES PEF 1,000 SQ. FT.	R AREA <sup>3</sup>	PE	ERMISSIBLE BU	I DATES, DOTTED I T MARGINAL DATE	LINES INDICATE S	-							FECIES		S RATES PER ,000 SQ. FT.	AREA <sup>3</sup>	PEF	RMISSIBLE BUT MA	ES, DOTTED LINES I RGINAL DATES		
_	BAHIA, PENSACOLA														LESPEDEZAS	ERICEA								
	ALONE OR WITH TEMPORARY COVER	60 LBS	1.4 LBS	Р	<b>}++</b>		┝╍┿╍┥╍		WITH A COMPA	ANION CROF	P. WILL SPREAD	D INTO BERML	JDA PASTURES	STABLISH. PLANT AND LAWNS. MIX			60 LBS 1	I.4 LBS	M-L P					350,000 SEED LOVEGRASS, BECOME FULL
	WITH OTHER PERENNIALS BAHIA, WILMINGTON	30 LBS	0.7 LBS	С	<u>}</u>		• • • • • • • • • • • • • • • • • • • •	·┿╍╍┝╍╍┢╍╍	WITH SERICEA	LESPEDEZ	A OR WEEPING	G LOVEGRASS	i.		UNSCARIFIED		75 LBS 1	I.7 LBS	C M-L					INOCULANT.
	ALONE OR WITH TEMPORARY	60 LBS	1.4 LBS	M-L			• • • • • • • • • • • • • • • • • • • •		•								75 LB5	1.7 LBS	P P					MIX WITH TAL
	COVER WITH OTHER PERENNIALS	30 LBS	0.7 LBS	Р					SAME AS ABO	/E					SEED-BEARIN	G HAY	3 TONS	1338 LBS	C M-L			·+		CUT WHEN SE
	BERMUDA, COMMON																		P					
	HULLED SEED ALONE	10 LBS 6	0.2 LBS	P C	│							ER. LOW GRO	WING AND SOD	Forming. Full	LESPEDEZA /	MBRO VIRGATA OR API	PALOW		С					
	WITH OTHER PERENNIALS	LBS	0.7 LBS						SUN. GOOD FC		FIELDS.				SCARIFIED		60 LBS 1	I.4 LBS	M-L		+-+-			300,000 SEED URBAN AREAS
	BERMUDA, COMMON UNHULLED SEED														_				P C					MIX WITH WEE ANNUALS. DO
	WITH TEMPORARY COVER WITH OTHER PERENNIALS	10 LBS 6 LBS	0.2 LBS 0.1 LBS	P					<ul><li>PLANT WITH W</li><li>TALL FESCUE</li></ul>	INTER ANNU	UALS PLANT W	VITH			UNSCARIFIED		75 LBS 1	I.7 LBS	M-L					INOCULATE S
	BERMUDA SPRIGS	LBS	LBS						TALL FESCUE										C					
D	COASTAL, COMMON, MIDLAND, OF TIFT 44		Г. 0.9 CU. FT.	M-L			•••		A CUBIC FOOT OR APPROXIM			ELY 650 SPRIG	S. A BUSHEL CO	NTAINS 1.25 CU.	FT. LESPEDEZA, PLANTS	SHRUB	3'x3'		M-L		1 1 1			PROVIDE WILI
	COASTAL, COMMON OR TIFT 44		OR PLUGS 3'x3'	P C			•••		SAME AS ABO	/E					FLANTS		5.65		P -					
	TIFT 78			c c	+++			·≠−−≠−− ·≠−−≠−−	SOUTHERN CC	ASTAL PLAI	IN ONLY				LOVEGRASS,	WEEDING			С	<u></u>				
	CENTIPEDE	1													ALONE		4 LBS (	).1 LBS	M-L		┿╼╫╸╎	TTT	111	4 500 000 055
		BLOCK	SOD ONLY	Р						ID IN CONCE	ENTRATED FLC	OW AREAS. IRF	RIGATION IS NEI	DED UNTIL FULL	Y WITH OTHER	PERENNIALS	2 LBS (	0.05 LBS	P C					1,500,000 SEE SERICEA LESI
			COD CHEI	С					ESTABLISHED. ATHENS AND A		ANT NEAR PAS	STURES. WINT	ER HARDY AS F	AR NORTH AS	MAIDENCANE									
	CROWNVETECH													D FIRE RESISTAN	SPRIGS		2'x3' SPACING	ALL						FOR VERY WE ALONG RIVER
	WITH WINTER ANNUALS OR COOL SEASON GRASSES	15 LBS	0.3 LBS	M-L P					ATTRACTIVE R	OSE, PINK A	AND WHITE BLO	OSSOMS SPRI	ING TO LATE FA	L. MIX WITH 30 WITH M INOCULAI	FANICGRASS	ATLANTIC COASTAL	20 LBS (	0.5 LBS	P	┝╺╺┝╍╍┝╍			1 1 1	
	FESCUE, TALL								USE FROM NO						_				С					GROWS WELL WINTER COVE
	ALONE	50 LBS 30	1.1 LBS	M-L		-	╎┝╍┿╼	+	227,000 SEED F	PER POUND	. USE ALONE C	ONLY ON BETT	ER SITES. MIX \	VITH PERENNIAL	REED CANAR	Y GRASS	50 LBS 30 1	I.1 LBS	M-L				, <b>.</b>	
С	WITH OTHER PERENNIALS	LBS	0.7 LBS	Р				+	LESPEDEZA OF PLANTINGS. NO	R CROWNVE	ETCH. APPLY T	OP DRESSING	IN SPRING FOL		WITH OTHER			).7 LBS	P					GROWS SIMIL
	<sup>1</sup> REDUCE SEEDING RATES BY 5					II	1 1 1								SUNFLOWER	'AZTEC' MAXIMILLIAN	10 LBS (	).2 LBS	M-L	-	+		1 1 1	
	<ol> <li>PLS IS AN ABBREVIATION FOR</li> <li>M-L REPRESENTS THE MC</li> </ol>			AND VALLEYS M	ILRAs.														P					227,000 SEED GRASSES OR
	P REPRESENTS THE SO C REPRESENTS SOUTH			BLACK LANDS; AN	ND ATLANTIC C	OAST FLAT	WOODS MLR	RAs.									TABL	E 3	C					
	GENERAL NOTES:											TABLE 2			<b></b>	FERTILIZER	REQUIREMENTS FO	OR PERMANENT VE	GETATION				LIME	<u>.</u>
	1. UNUSUAL SITE CONDITIONS I	MAY REQUIRE HE	EAVIER SEEDING R	ATES.							SUGG	ESTED SEEDB	BED DEPTHS		TYPES OF SPECIES	PLANTING YEAR	ANALYSIS OR EQUIVALENT	RA (LBS.//		N TO	OP DRESSING (LBS./ACRE			AGRICULTUR
	2. SEEDING DATES MAY NEED 1	O BE ALTERED	TO FIT TEMPERATU	IRE VARIATIONS	AND LOCAL CO	NDITIONS.				SL	OPE	S	SEEDBED DEPTI	ł		FIRST	(N-P-K)	1500		50-10	0 1/2/			ACRE.
	3. RE-SEED AREAS WHERE AN A	ADEQUATE STAN	ID OF TEMPORARY	VEGETATION FA	ILS TO EMERG	E OR WHEF	RE A POOR S	TAND EXISTS	S.	3:1 OR FL/	ATTER	1" TO 4" DEF	ΥΉ		COOL SEASON GRASSES	SECOND MAINTENANCE	6-12-12 6-12-12 10-10-10	1000 400		 30			·	THE GEORGIA
										2:1 TO 3:1		4" DEPTH			COOL SEASON GRASSES AN	FIRST SECOND	6-12-12 0-10-10	1500 1000		0-50 1	1		•	LIME SPREAD "GROUND LIM
										2:1 OR ST	EEPER		NS EVERY 6" TO	8" HAND-DUG,	LEGUMES	MAINTENANCE	0-10-10	400						CALCITIC OR THE MATERIA LESS THAN 50
												IF NECESSA	IRY		GROUND COVERS	FIRST SECOND MAINTENANCE	10-10-10 10-10-10 10-10-10	0 1300 3/ 1300 3/ 1100		-				NOT LESS THAN SO
В																	00.40.5	ONE21-GRAM F					•	AGRICULTUR
															PINE SEEDINGS	FIRST	20-10-5	SEEDING PLAC CLOSING HOLE						GROUND LIME GROUND SO T A 20-MESH SII
															SHRUB LESPDEZA	FIRST MAINTENANCE	10-10-10 10-10-10	0 700 700 4/		-				THROUGH A 1
															TEMPORARY COVER CROPS SEEDED ALONE	FIRST	10-10-10	500		30 5/				
															WARM SEASON GRASSES	FIRST SECOND	6-12-12 6-12-12	1500 800		50-10 50-10			1/ 2/	APPLY IN SF APPLY IN SF
															WARM SEASON GRASSES	MAINTENANCE	10-10-10	400		30	0 2/		3/	APPLY IN 3
															WARM SEASON GRASSES AN LEGUMES	SECOND	6-12-12 0-10-10 0-10-10	1500 1000		50 6/			4/ 5/	APPLY WHE APPLY TO G
																MAINTENANCE		400					6/	APPLY WHE
															Ds3[	ISTURBED ARE	A STABILIZAT	<u>-ION (WITH P</u>	ERMANE	NT VEGE	TATION)			
F																BE COPIED OR DISCLOSED;	FORMATION, DATA AND DE AND (II) MAY BE USED BY TH	SIGN THAT IS CONFIDENTIA TE CLIENT ONLY IN THE CO	AL AND MAY NOT NTEXT AND FOR		APPRO	VED FOR		
A																THE EXPRESS PURPOSE FC DOCUMENT BY ANY THIRD F	R WHICH IT WAS INTENDED	. ANY USE OF, OR RELIANC		M. FOV CLIENT PRC		P. MAR		M. ABDALLA PROJECT MG
																STAMP/SEAL		EORG		PROJECT PHA				
																1	1	G REGISTERED		PROJECT NO.		PERMITTIN		BY DDMM
																-		No. PE030489 PROFESSIONAL			7382224061		DES	07FEB2
22X34							1000			MU						-	62	S LOO PM SNAP	2022	SCALE			DRN CHK	07FEB2 07FEB2
ANSI D.	EV DDMMMYY REVISION / ISSUE DESCR	RIPTION	DRN CHK APP	APP APP A		OV2022 MMMYY		ED FOR PERMIT N / ISSUE DESC		MJL MMA DRN CHK	PWM APP APP		REF NUI	IBER RI	TITLE EFERENCES	┫					AS SHOWN		APP	07FEB2
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	3	4	5	6	7	8	9	10 EIGHTHS	0 MM 10	20	30	40	60	70	80	9

	BROADCAST	RATES (PLS) <sup>1,2</sup>	RESOURCE					PLAN RES								
SPECIES	RATES PER ACRE	PLS RATES PER 1,000 SQ. FT.	AREA <sup>3</sup>				PERM	TE OPT MISSIBL	LE BU1	T MAR	GINAL	DATES	S			
LESPEDEZA SERICEA				J		М	A	М	J	J	Α	S	0	N	D	
SCARIFIED	60 LBS	1.4 LBS	M-L	Г	Γ		—			г	г	Г	г	Г	r	350,000 SEI
			<u>–</u> Р				┡	╞								LOVEGRAS
			С				╞	╺┿╾╸╸	<b> </b>							BECOME FU
UNSCARIFIED	75 LBS	1.7 LBS	M-L		╞				<b>*</b> ==	<b>.</b>		-				
			Р		┝			┎┢╸═╶╸	<b>*</b> ==	<b>.</b>		_				MIX WITH T
			С		┢			╻┝╸╸╺╴	<b>*</b> **	<b>.</b>		_				
SEED-BEARING HAY	3 TONS	1338 LBS	M-L		╞											CUT WHEN WINTER AN
			Р			-										
			С		4								-			
LESPEDEZA AMBRO VIRGATA OF	R APPALOW			<u> </u>	<u> </u>	-				1		1	1	<u> </u>	<u>.</u>	
SCARIFIED	60 LBS	1.4 LBS	M-L	Г				┯	<b>+</b> -	Γ	Г	Γ	Γ	Г	Γ	300,000 SEI
			Р			<b>+</b>	┝	+	<b>+</b> -							URBAN ARE MIX WITH V
			С				┢	┿╼╼	ſ							ANNUALS.
UNSCARIFIED	75 LBS	1.7 LBS	M-L		┢	·	┥╾╾╸	╺┝╸╸╸	┢╼╼	<b>.</b>		-				INOCULATE
			Р		┢	· <b>∳</b> ==•	d==,	╺┝╸╸╸	┢╺╺	<b>+</b>		-				
			С	_	┢	·∳	┥╾╾╸	╺┝╸╸╸	┢╼╼	<b>॑</b>						
LESPEDEZA, SHRUB				<u> </u>						<u> </u>		<u>.</u>	<u>.</u>	<u> </u>		
PLANTS	3'	x3'	M-L	$\vdash$	⊢	F	Γ	Τ	Γ	Γ	Γ			$\square$	$\vdash$	PROVIDE W
			Р	-	┢──	┢								-		
			С		┢									-		
LOVEGRASS, WEEPING																
ALONE	4 LBS	0.1 LBS	M-L					+	<b>+</b> =							4 500 000 0
			Р			<b>+</b>	┝━	+	┥╸							1,500,000 S SERICEA LI
WITH OTHER PERENNIALS	2 LBS	0.05 LBS	С		┝╺╼╼		F		•-							
MAIDENCANE		_														
SPRIGS	2'x3' SPACING	ALL			·		┥┙┙									FOR VERY
PANICGRASS, ATLANTIC COAST	1					<u> </u>		<u> </u>	L	<u> </u>	<u> </u>	<u> </u>	<u> </u>			ALONG RIV
	20 LBS	0.5 LBS	Р	T				_	_	T.	T	Г	T	r	<u> </u>	
	20 200	0.0 200	C													GROWS WE WINTER CO
									L							
REED CANARY GRASS	50100.20	11100	MI	1	T	T		-		<u> </u>	L		1	1	1	
	50 LBS 30	1.1 LBS	M-L													GROWS SIN
WITH OTHER PERENNIALS SUNFLOWER, 'AZTEC' MAXIMILLI		0.7 LBS	Р		1	1					<b></b>		<b></b> "			
SUNFLOWER, ALTEG WANIWILLI	10 LBS	0.2 LBS	M-L	T	_	T	<b>.</b>			Г	Г					
		U.Z LDO	P.						]							227,000 SEI
			P C						]							GRASSES (
									1							

			_
			-
90 100	90	100	

EED PER POUND. WIDELY ADAPTED. LOW MAINTENANCE. MIX WITH WEEPING ASS, COMMON BERMUDA, BAHIA OR TALL FESCUE. TAKES 2 TO 3 YEARS TO FULLY ESTABLISHED. EXCELLENT ON ROAD BANKS. INOCULATE SEED WITH EL NT.

TALL FESCUE OR WINTER ANNUALS.

IN SEED MIXTURE IS MATURE, BUT BEFORE IT SHATTERS. ADD TALL FESCUE OR ANNUALS.

EED PER POUND. HEIGHT OF GROWTH IS 18 TO 24 INCHES. ADVANTAGEOUS IN REAS. SPREADING-TYPE GROWTH. NEW GROWTH HAS BRONZE COLORATION. WEEPING LOVEGRASS, COMMON BERMUDA, BAHIA, TALL FESCUE OR WINTER B. DO NOT MIX WITH SERICEA LESPEDEZA. SLOW TO DEVELOP SOLID STANDS. TE SEED WITH EL INOCULANT.

WILDLIFE FOOD AND COVER.

SEED PER POUND. QUICK COVER. DROUGHT TOLERANT. GROWS WELL WITH LESPEDEZA ON ROAD BANKS.

WET SITES. MAY CLOG CHANNELS. DIG SPRIGS FROM LOCAL SOURCES. USE VER BANKS AND SHORELINES.

VELL ON COASTAL SAND DUNES, BORROW AREAS AND GRAVEL PITS. PROVIDES COVER FOR WILDLIFE. MIX WITH SERICEA LESPEDEZA EXCEPT ON SAND DUNES.

IMILAR TO TALL FESCUE.

EED PER POUND. MIX WITH WEEPING LOVEGRASS OR OTHER LOW GROWING OR LEGUMES.

TURAL LIME IS REQUIRED AT THE RATE OF 2 TONS PER

TURAL LIME SHALL BE WITHIN THE SPECIFICATIONS OF RGIA DEPARTMENT OF AGRICULTURE.

EAD BY CONVENTIONAL EQUIPMENT SHALL BE LIMESTONE". GROUND LIMESTONE IS OR DOLOMITIC LIMESTONE GROUND SO THAT 90% OF ERIAL WILL PASS THROUGH A 10-MESH SIEVE, NOT IAN 50% WILL PASS THROUGH A 50-MESH SIEVE AND S THAN 25% WILL PASS THROUGH A 100-MESH SIEVE.

TURAL LIME SPREAD BY HYDRAULIC SEEDING ENT SHALL BE "FINELY GROUND LIMESTONE". FINELY LIMESTONE IS CALCITIC OR DOLOMITIC LIMESTONE SO THAT 98% OF THE MATERIAL WILL PASS THROUGH H SIEVE AND NOT LESS THAN 70% WILL PASS H A 100-MESH SIEVE.

IN SPRING FOLLOWING SEEDING.

IN SPLIT APPLICATIONS WHEN HIGH RATES ARE USED.

IN 3 SPLIT APPLICATIONS.

WHEN PLANTS ARE PRUNED.

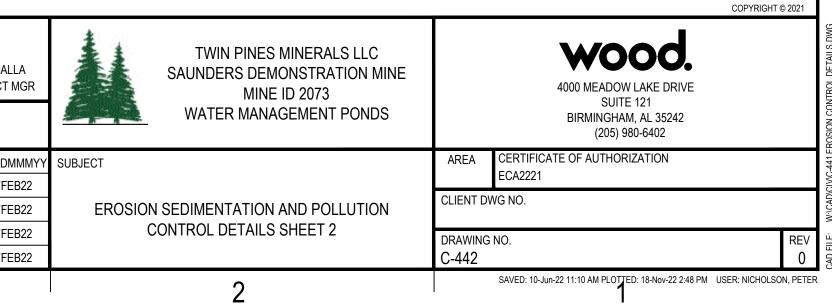
TO GRASS SPECIES ONLY.

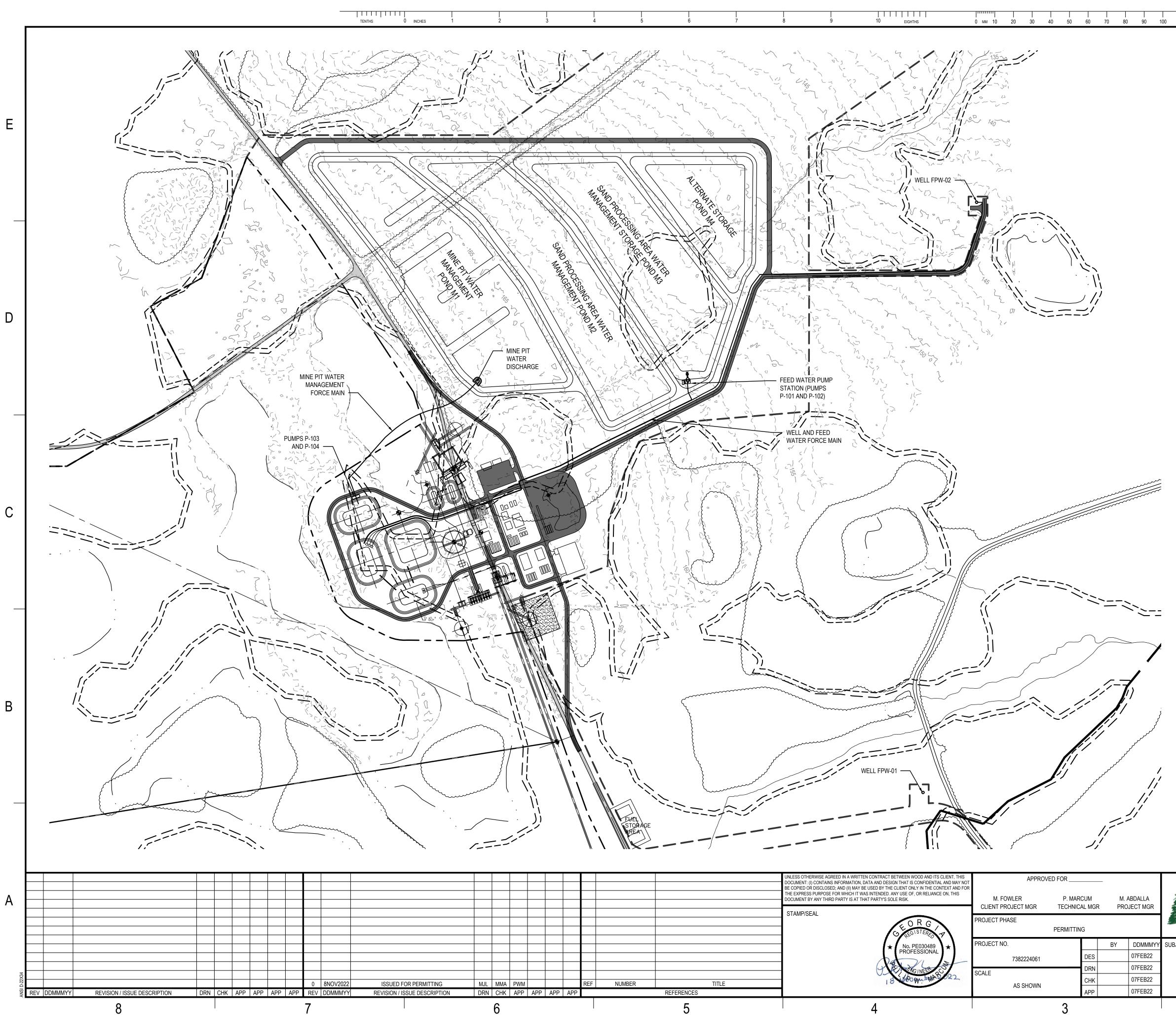
WHEN PLANTS GROW TO A HEIGHT OF 2 TO 4 INCHES.



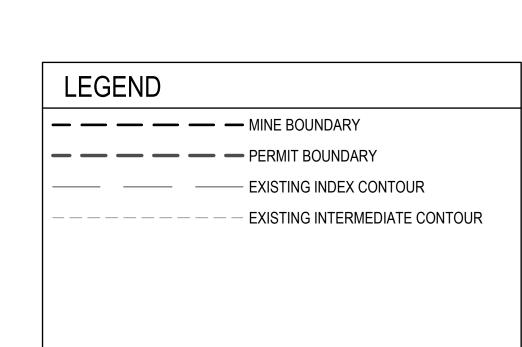
Level II Certified Design Professional

CERTIFICATION NUMBER 0000010833 ISSUED: 01/31/2022 EXPIRES: 01/31/2025



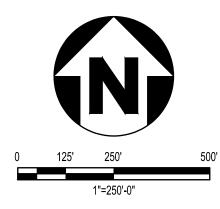


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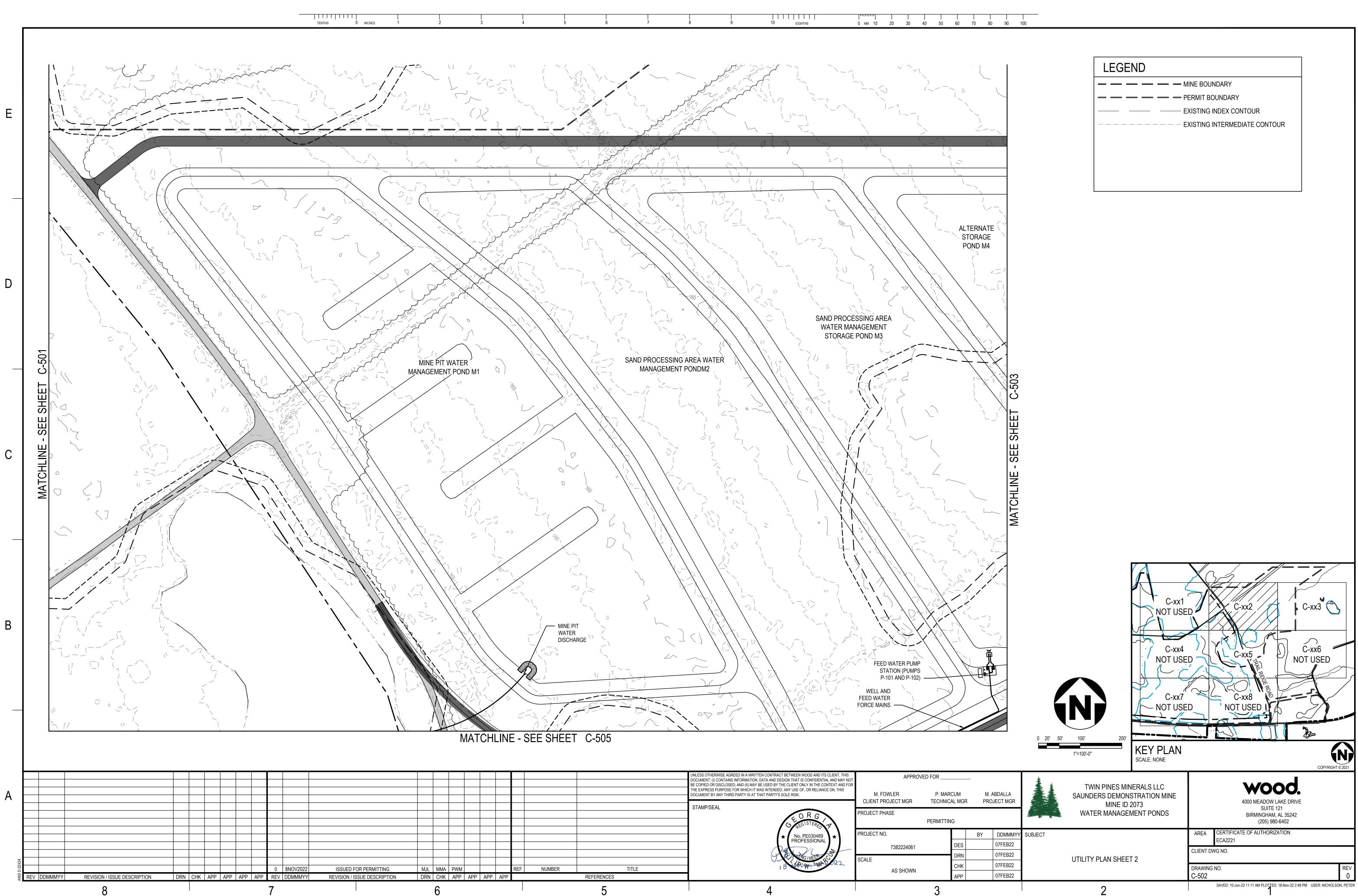


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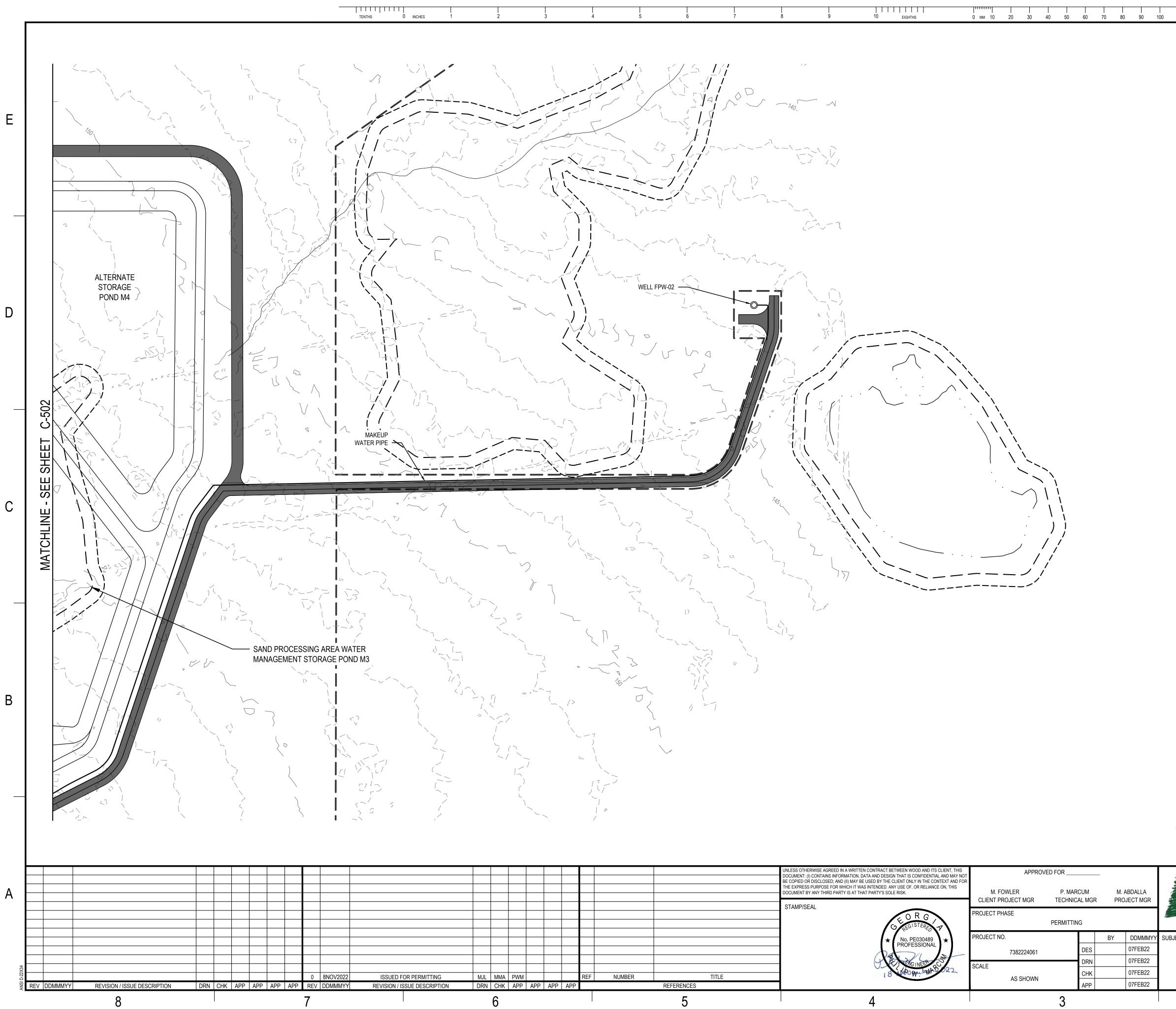


ALLA T MGR		TWIN PINES MINERALS LLC SAUNDERS DEMONSTRATION MINE MINE ID 2073 WATER MANAGEMENT PONDS	4000 MEADOW LAKE DRIVE SUITE 121 BIRMINGHAM, AL 35242 (205) 980-6402						
DMMMYY	SUBJECT		AREA	CERTIFICATE OF AUTHORIZATION					
EB22				ECA2221					
EB22		OVERALL UTILITY PLAN	CLIENT D	NG NO.	N:\CAD\CIV\C				
EB22		OVERALE UTIENT FEAN	DRAWING	NO. REV	_				
EB22			C-500	0	CAD FI				
		2		SAVED: 10-Jun-22 11:11 AM PLOTTED: 18-Nov-22 2:48 PM USER: NICHOLSON, PETE	R				

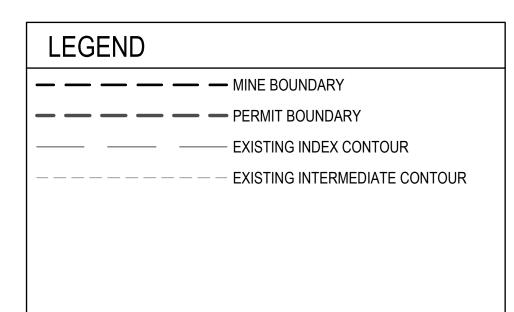
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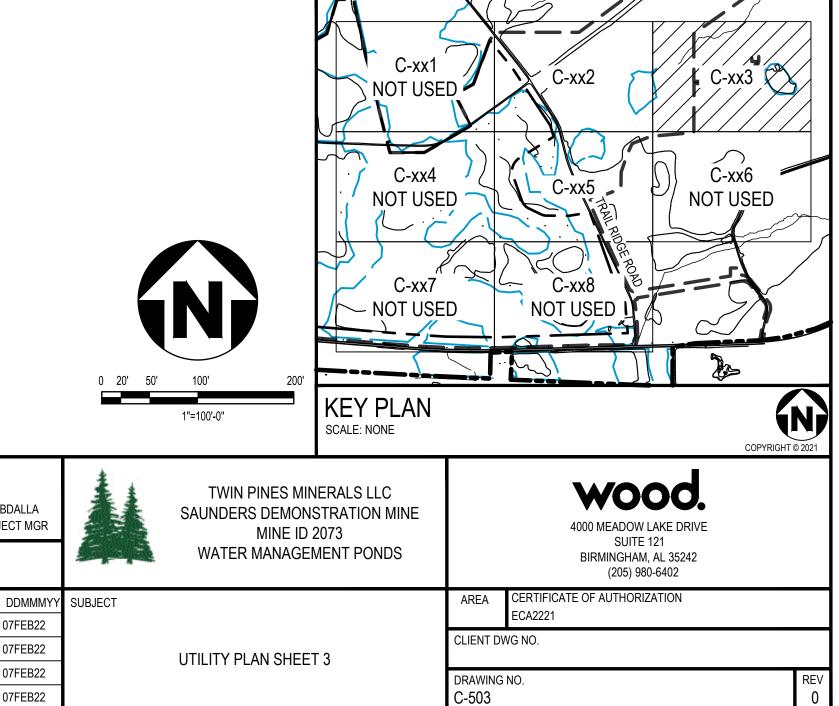


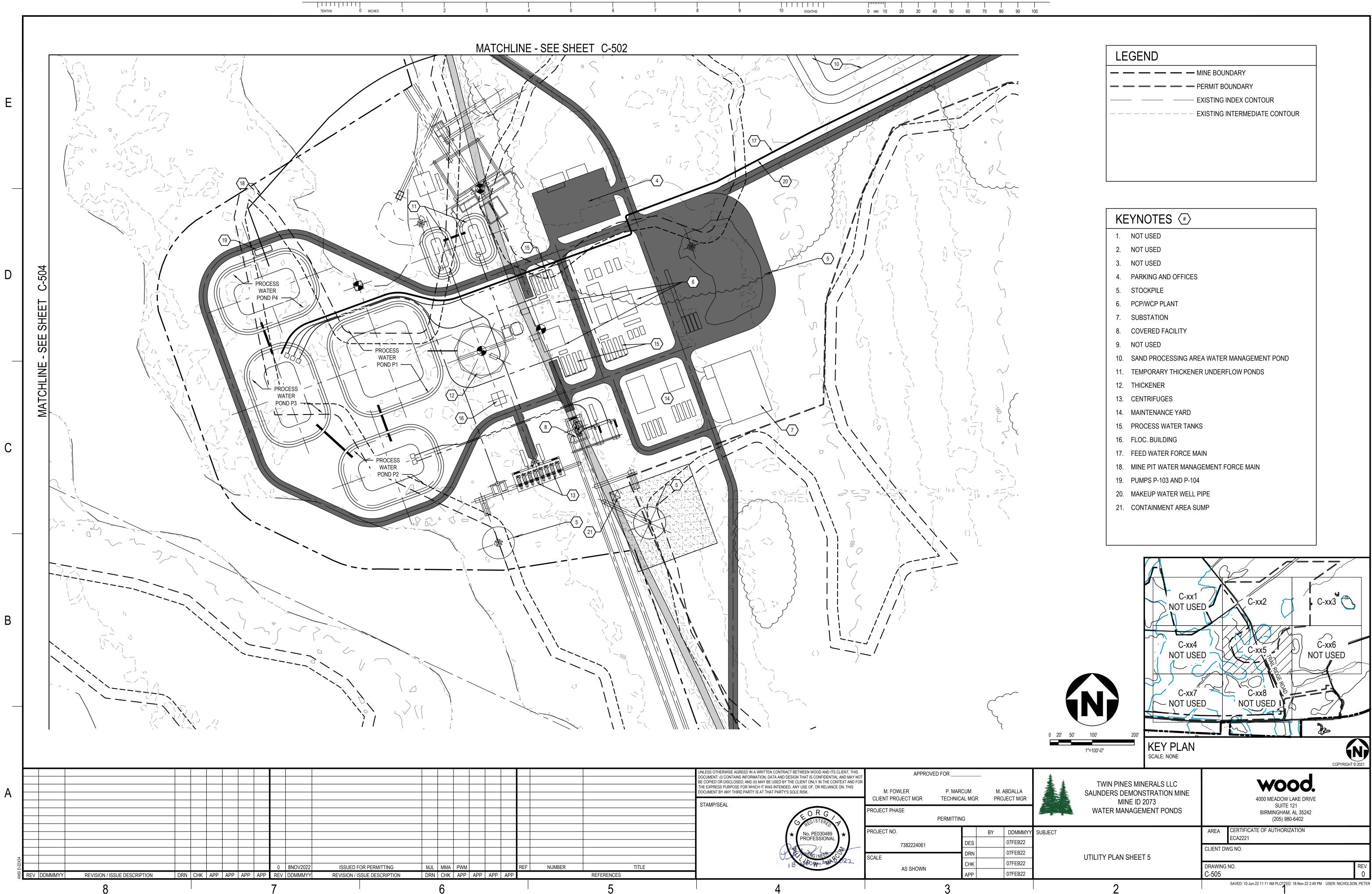
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+					BE COPIED OR DISCLOSED; AND (II) MAY BE USED BY THE CLIENT ONLY IN THE THE EXPRESS PURPOSE FOR WHICH IT WAS INTENDED. ANY USE OF, OR RELIA DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK.	CONTEXT AND FOR	P. MARCUM TECHNICAL MGR	M. ABDAL PROJECT				
					UNLESS OTHERWISE AGREED IN A WRITTEN CONTRACT BETWEEN WOOD AND DOCUMENT: (I) CONTAINS INFORMATION, DATA AND DESIGN THAT IS CONFIDEN		APPROVED FOR					



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					THE EXPRESS PURPOSE FOR WHICH IT WAS INTENDED. ANY USE OF, OR RELIANCE ON, THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK.	M. FOWLER	P. MARCUN	1 1	M. ABDALLA		
					APPROV						

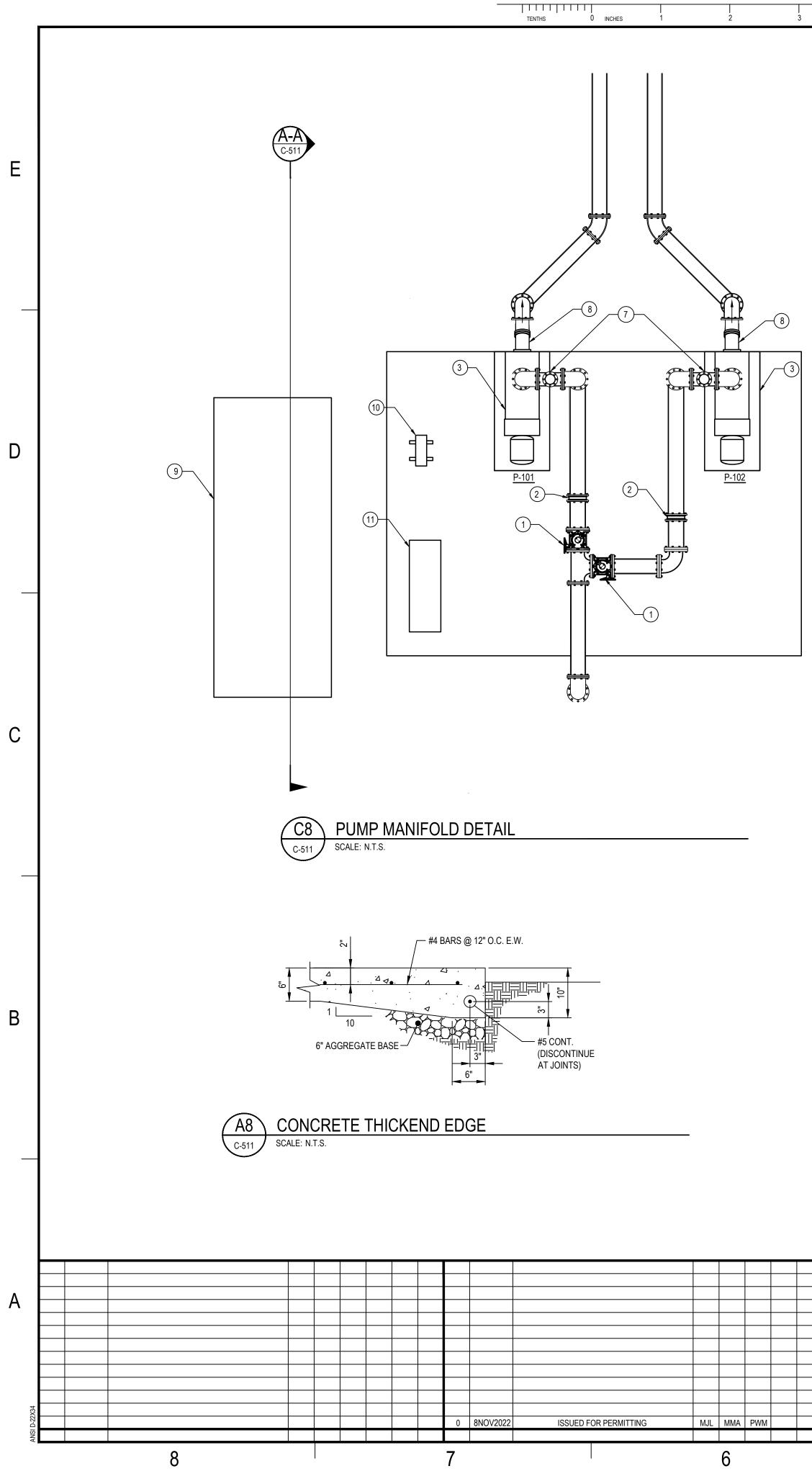




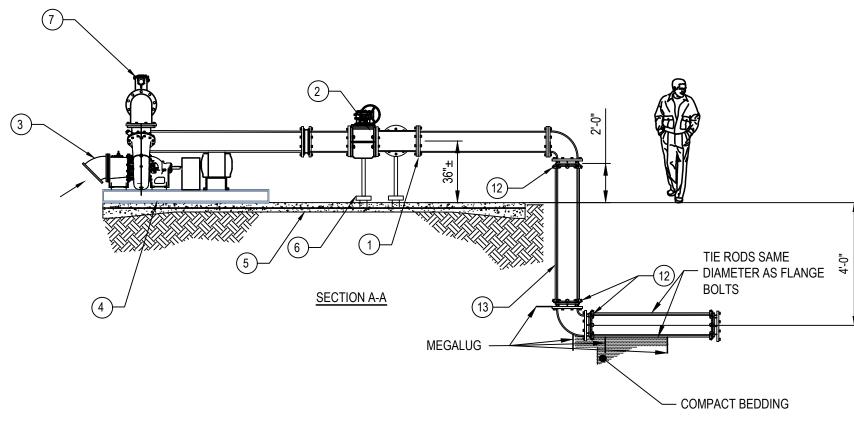


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						PUMP SC	HEDULE								
TAG	AREA SERVING	TYPE	FLOW	HEAD (FT.				PUMP OUTLET	E	LECTRIC	AL	BASIS OF DES	BIGN	DESCRIPTION	NOTES
			(GPM)	WC)	(HP)	SPEED (RPM)	INLET(IN)	(IN)	VOLTS	PH	HZ	MANUFACTURER	MODEL		
P-101	POND MANAGEMENT TRANSFER	BASE MOUNTED SELF PRIMING	2500	45	100	1150	12	12	460	3	60	GORMAN RUPP	112A-B	TO PROCESS PONDS FROM STORMWATER PONDS	1,2,3
P-102	POND MANAGEMENT TRANSFER	BASE MOUNTED SELF PRIMING	2500	45	100	1150	12	12	460	3	60	GORMAN RUPP	112A-B	TO PROCESS PONDS FROM STORMWATER PONDS	1,2,3
P-103	PROCESS POND	BASE MOUNTED SELF PRIMING	2500	25	100	1150	12	12	460	3	60	GORMAN RUPP	112D-В	FROM PROCESS PONDS TO STORMWATER PONDS	1,2,3
P-104	PROCESS POND	BASE MOUNTED SELF PRIMING	2500	25	100	1150	12	12	460	3	60	GORMAN RUPP	112D-В	FROM PROCESS PONDS TO STORMWATER PONDS	1,2,3
1. PROVIDE	WITH SKID		1	1		1		1			1				
1															

2. OWNER TO PROVIDE WITH VFD

3. PUMP TO BE CONTROLLED BY ACOUSTIC LEVEL, SEE DRAWINGS

						COPYF	RIGHT © 2021
 UNLESS OTHERWISE AGREED IN A WRITTEN CONTRACT BETWEEN WOOD AND ITS CLIENT, THIS DOCUMENT: (I) CONTAINS INFORMATION, DATA AND DESIGN THAT IS CONFIDENTIAL AND MAY NOT BE COPIED OR DISCLOSED; AND (II) MAY BE USED BY THE CLIENT ONLY IN THE CONTEXT AND FOR	APPROVE	ED FOR		*		wood	
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 STAMP/SEAL	CLIENT PROJECT MGR	TECHNICAL MGR	PROJECT MGR		MINE ID 2073	4000 MEADOW LAKE DRIVE SUITE 121	
	ROJECT PHASE				WATER MANAGEMENT PONDS	BIRMINGHAM, AL 35242	J
CD ECGISTERES T		PERMITTING				(205) 980-6402	S.DW
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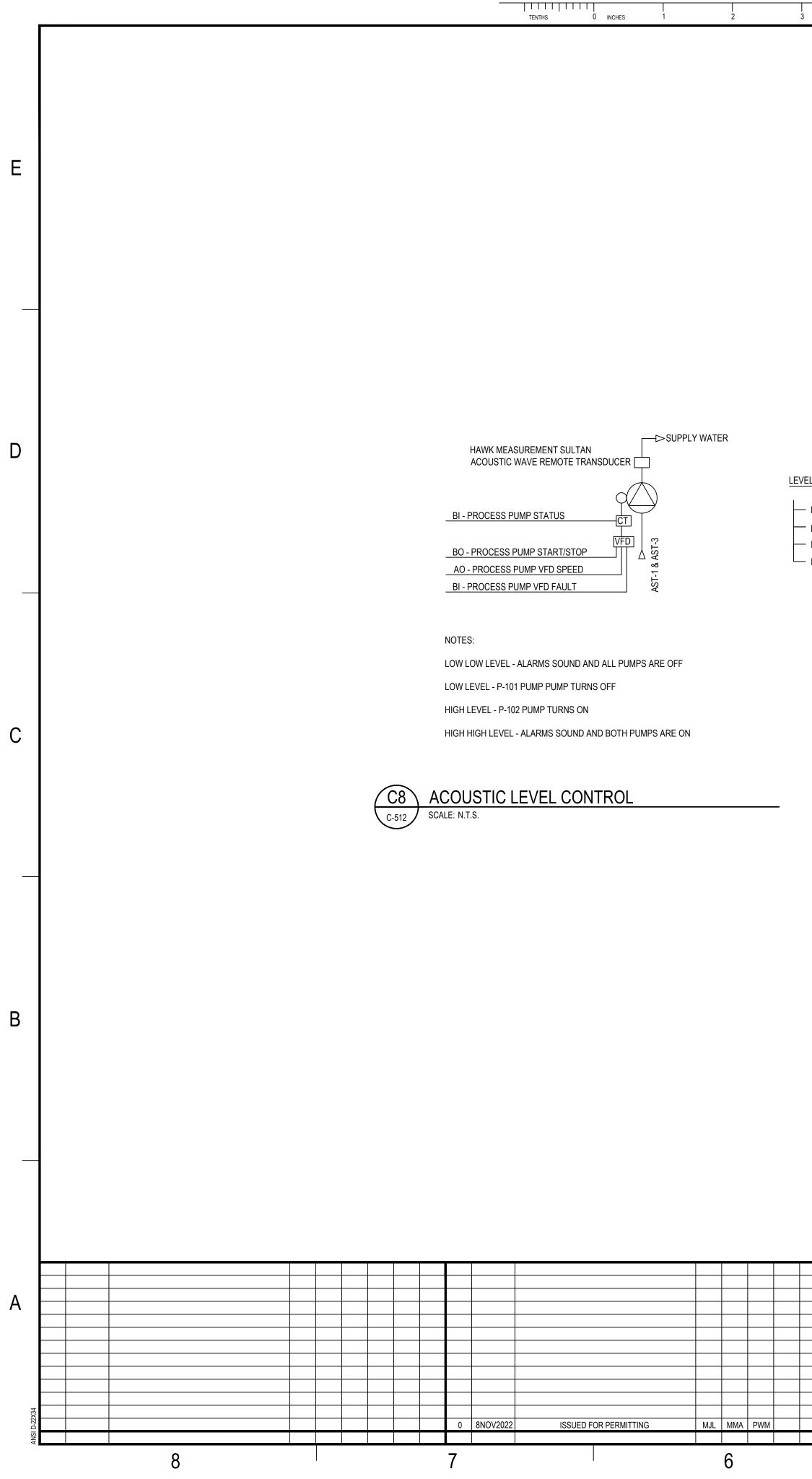
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GENERAL NOTES:

- 1. PIPE SHOWN TO BE 12" DUCTILE IRON CLASS 150
- 2. ALL ELECTRICAL ITEMS TO BE COMPLETED BY OTHERS
- 3. CONTRACTOR TO DIRECT VACUUM AIR RELEASE AWAY FROM ALL ELECTRICAL EQUIPMENT

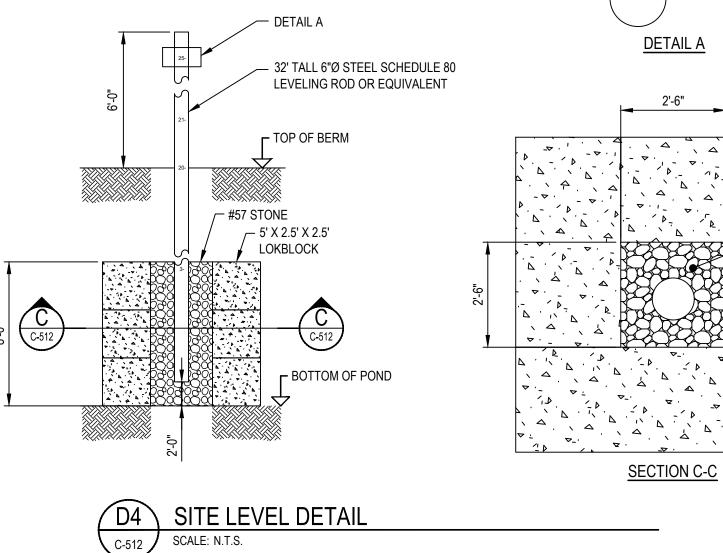
### KEY NOTES

- 1 12" CRISPIN SERIES 800 PLUG VALVES
- 2 12" PRATT LUG CHECK VALVE
- 3 GORMAN RUPP MODEL 112A20-B
- 4 PUMP SKID
- 5 CONCRETE PAD
- 6 CONCRETE TIE ROD BASE
- 7 4" VACUUM AIR RELEASE VALVE
- 8 45 DEGREE ELBOW
- (9) DESIGNATED BACK UP GENERATOR AREA
- (10) VFD IN WEATHER ENCLOSURE MOUNTED ON UNISTRUT
- (11) ELECTRICAL PANEL (DONE BY OTHERS)
- (12) 12" 90 DEGREE DIP BEND
- (13) HDPE



3     4     5     6     7     8     9     10     EIGHTHS     0     MM     10     1     1     1     1     1															
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LEVEL CONTROL

- HIGH HIGH-4.5 ft
- HIGH-4 ft.
- – LOW-3 ft OPERATION
- LOW LOW- 2 ft

TRANSFER SWITCH MAIN BREAKER DISCONNECT GEN. REC. CONTROL PANEL

CONTROL PANEL INFORMATION PLATES

NOTE: THE CONTRACTOR SHALL INCLUDE A SCHEMATIC FOR THE CONTROL PANEL COMPONENTS LAMINATED ON BOTH SIDES PLACED IN A POCKET ATTACHED TO THE INSIDE OF THE PANEL DOOR. THE ABOVE PUMP AND MOTOR INFORMATION PLATE SHALL BE PERMANENTLY AFFIXED TO THE INSIDE OF THE PANEL DOOR.

ALUMINUM PLATE WITH PUMP INFORMATION STAMPED IN PLATE TO BE ATTACHED TO INSIDE OF CONTROL PANEL DOOR IN PLAIN VIEW.

PUMP H.P	
CAPACITY GPM	
TOTAL DYNAMIC HEAD	
OPERATING RPM	
IMPELLER NO.	
VOLTS	
AMPS	
PHASE	
MANUFACTURER	
MODEL NO.	
STN #1 SIN #2	

ALUMINUM PLATE WITH PUMP INFORMATION STAMPED IN PLATE TO BE ATTACHED TO INSIDE OF CONTROL PANEL DOOR IN PLAIN VIEW

## CONTROL PANEL INFORMATION PLATES

NOTE: THE CONTRACTOR SHALL INCLUDE A SCHEMATIC FOR THE CONTROL PANEL COMPONENTS LAMINATED ON BOTH SIDES PLACED IN A POCKET ATTACHED TO THE INSIDE OF THE PANEL DOOR. THE ABOVE PUMP AND MOTOR INFORMATION PLATE SHALL BE PERMANENTLY AFFIXED TO THE INSIDE OF THE PANEL DOOR.



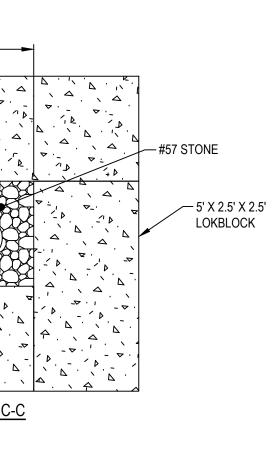
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			BE COPIED OR DISCLOSED; AND (II) MAY BE USED BY THE CLIENT ONLY IN THE CONTEXT AND FOR THE EXPRESS PURPOSE FOR WHICH IT WAS INTENDED. ANY USE OF, OR RELIANCE ON, THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK.	M. FOWLER P. MA			. Abdalla	
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		(205) 980-6402	
	AREA	CERTIFICATE OF AUTHORIZATION ECA2221	
UTILITY DETAILS SHEET 2	CLIENT DV	NG NO.	
	DRAWING C-512	NO.	rev 0
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TWIN PINES MINERALS LLC

SAUNDERS DEMONSTRATION MINE

MINE ID 2073 WATER MANAGEMENT PONDS



FONT TO BE FIELD DETERMINED BY CONTRACTOR

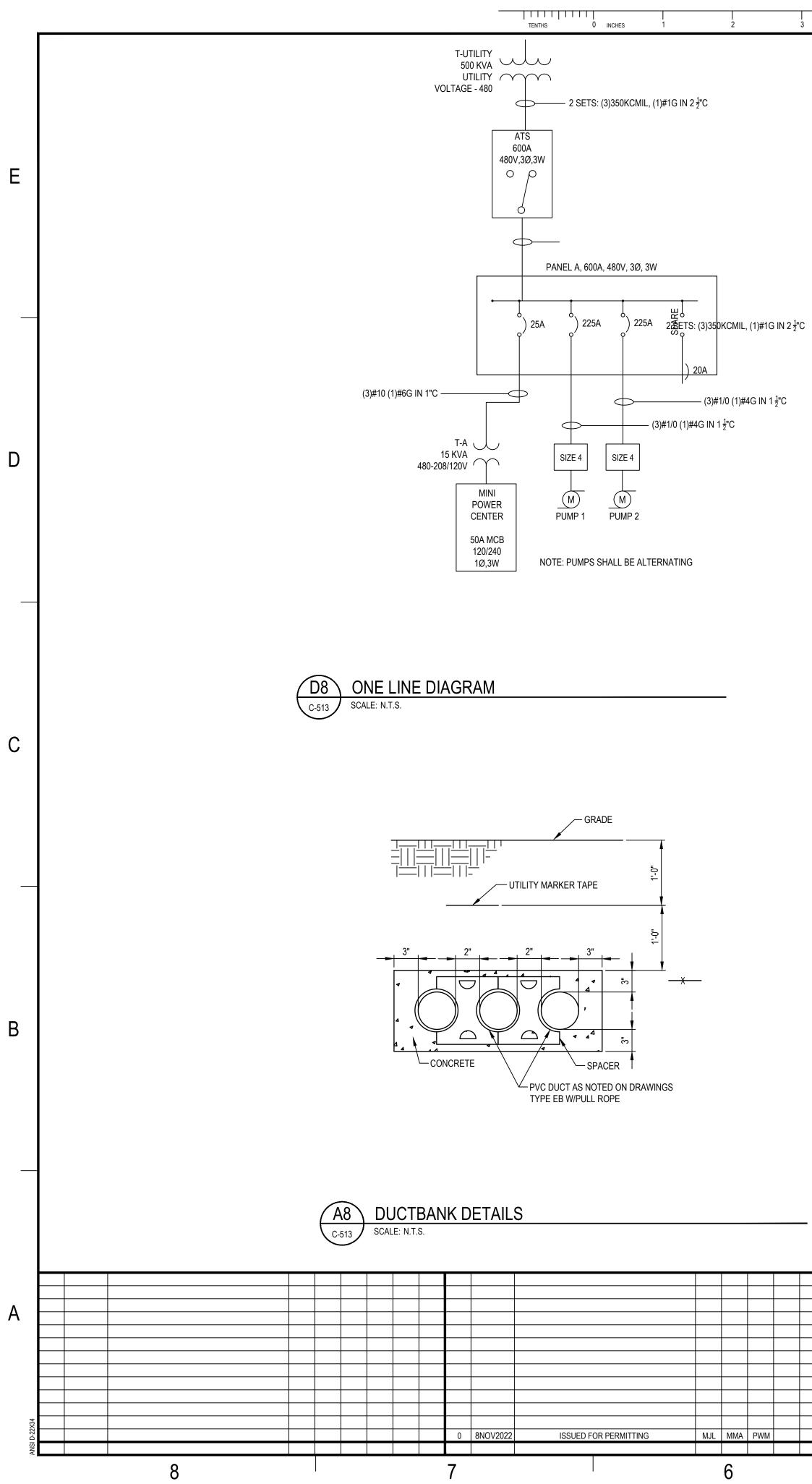
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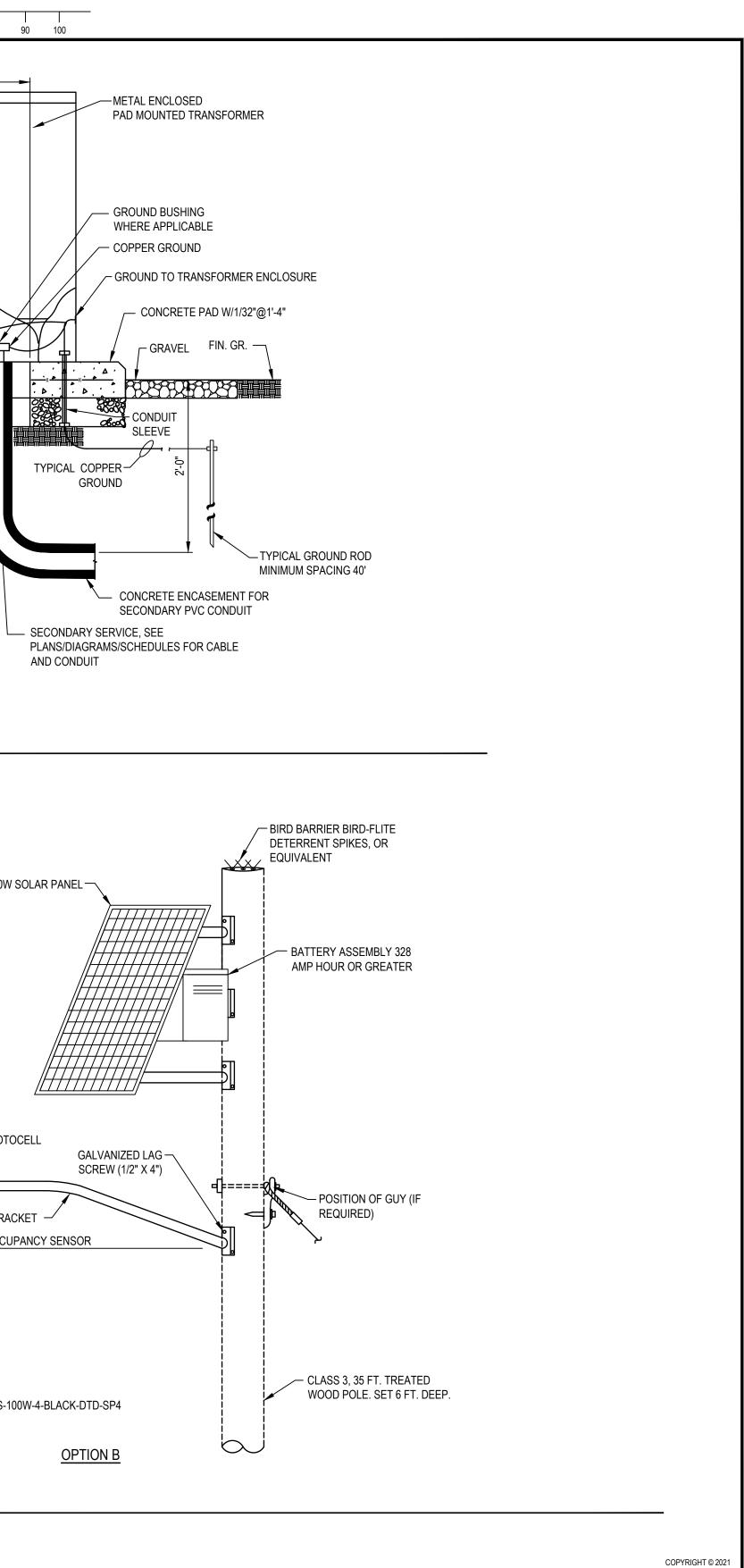
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4000 MEADOW LAKE DRIVE SUITE 121

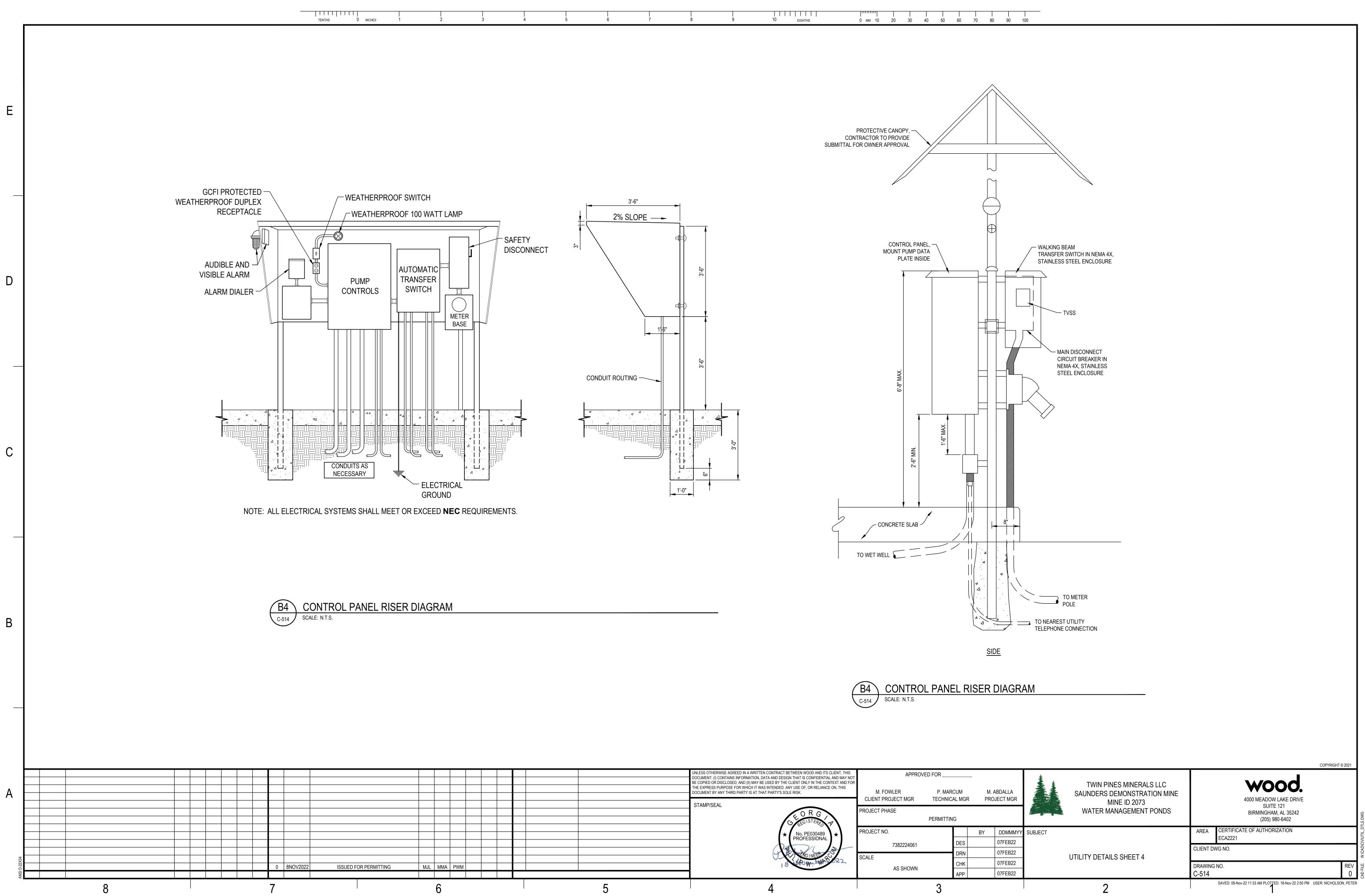
BIRMINGHAM, AL 35242



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				NOTE	E: CONTRACTOR SHALL COOF LINCOLN PEOPLE'S UTILITY 500 KVA, LIQUID-COOLED, P PER THE REQUIREMENTS S	DISTRICT AND IN AD-MOUNTED TR	ISTALL A NEW RANSFORMER	
				D4 PAD-MC C-513 SCALE: N.T.S.	OUNTED TRANSFO	<u>DRMER D</u>	ETAIL	
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		HODEL NO:	BRACKET CUPANCY SENSOR		CLASS 3, 35 FT. TREATE POLE. SET 6 FT. DEEP.			BRACH
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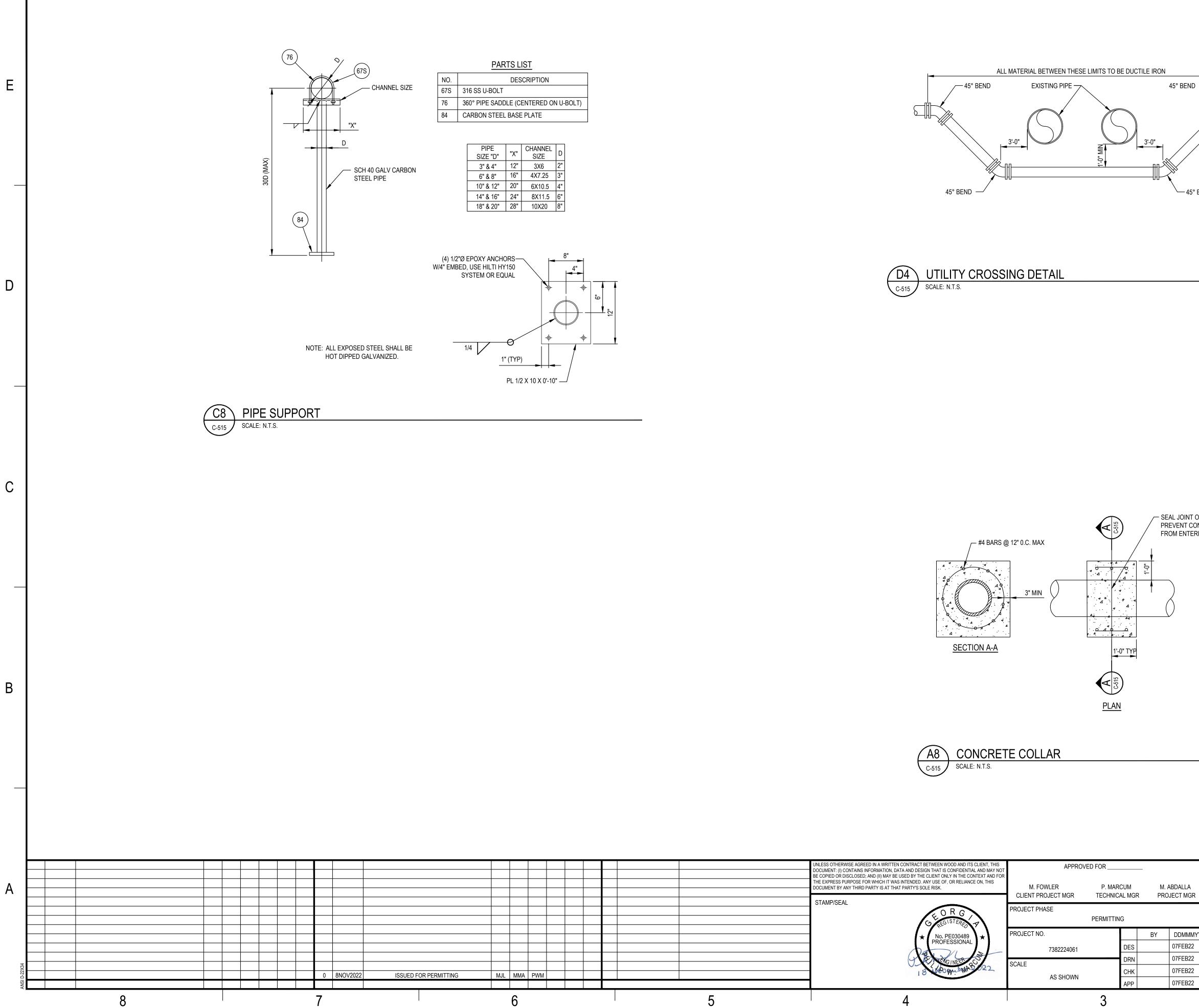


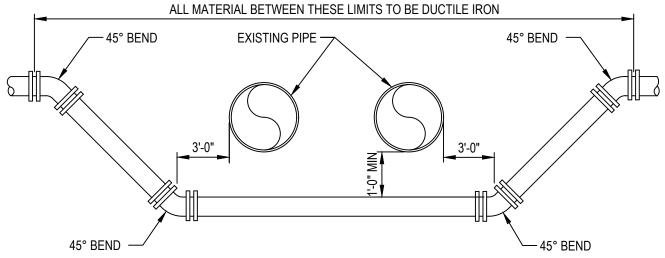
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DMMMYY	SUBJECT		AREA	CERTIFICATE OF AUTHORIZATION			
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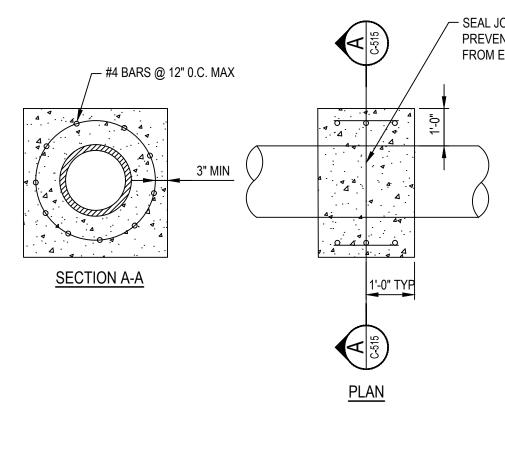
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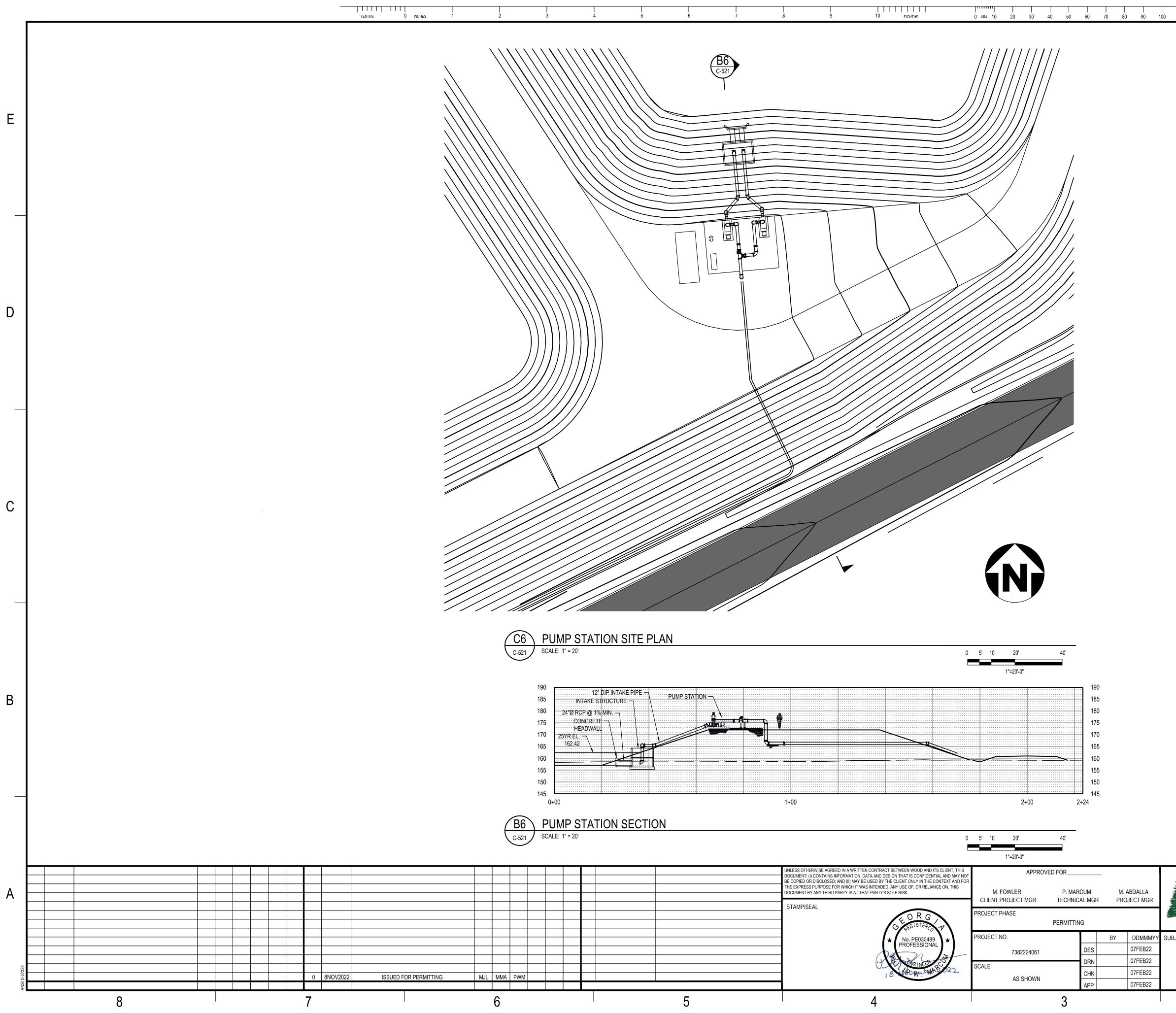




/-- SEAL JOINT OR CRACK TO PREVENT CONCRETE FROM ENTERING PIPE

wood. TWIN PINES MINERALS LLC SAUNDERS DEMONSTRATION MINE 4000 MEADOW LAKE DRIVE SUITE 121 BIRMINGHAM, AL 35242 (205) 980-6402 MINE ID 2073 WATER MANAGEMENT PONDS AREA CERTIFICATE OF AUTHORIZATION BY DDMMMYY SUBJECT ECA2221 07FEB22 CLIENT DWG NO. 07FEB22 UTILITY DETAILS SHEET 5 07FEB22 DRAWING NO. REV 07FEB22 C-515 SAVED: 09-Nov-22 11:33 AM PLOTTED: 18-Nov-22 2:50 PM USER: NICHOLSON, PETER 2

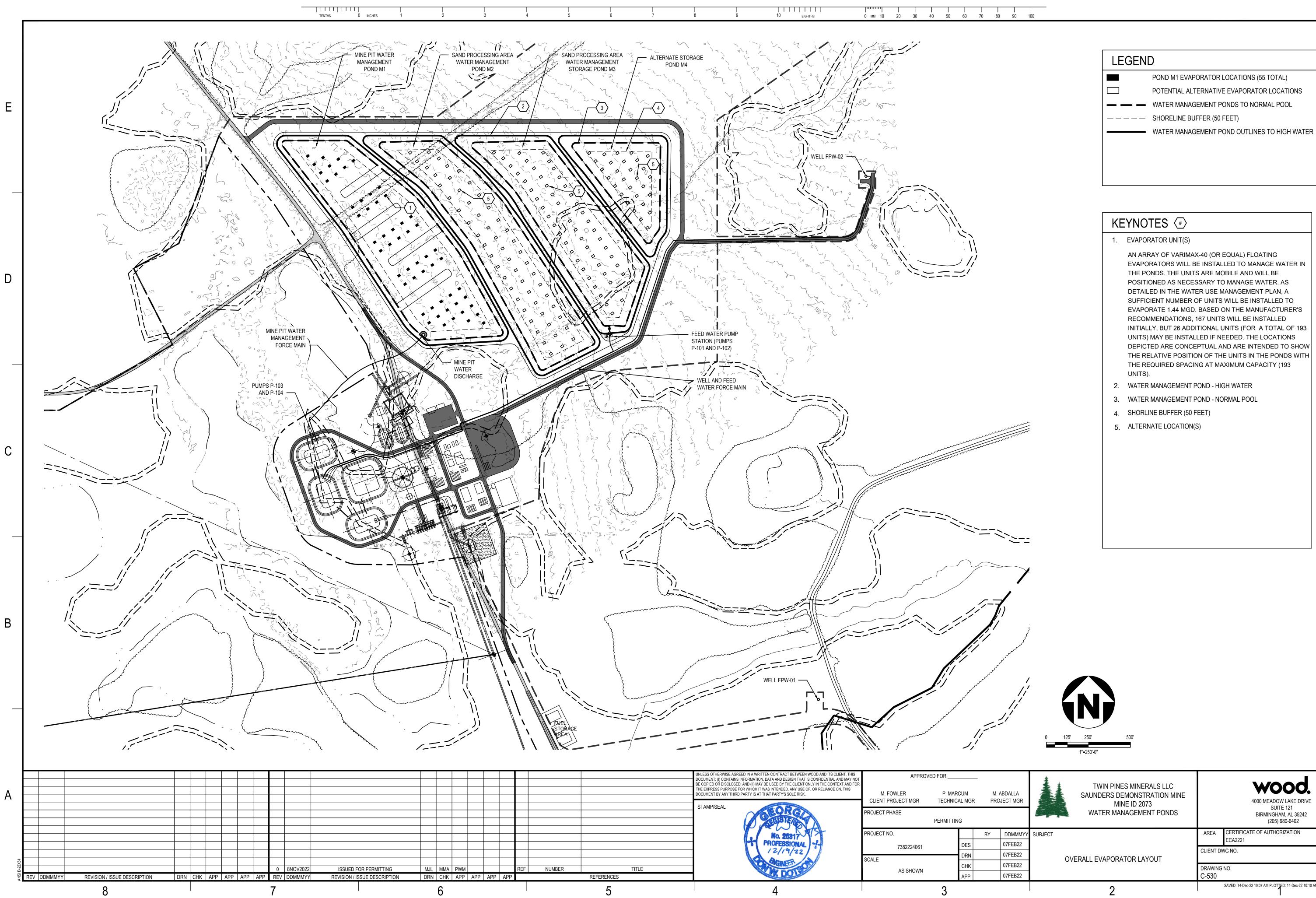
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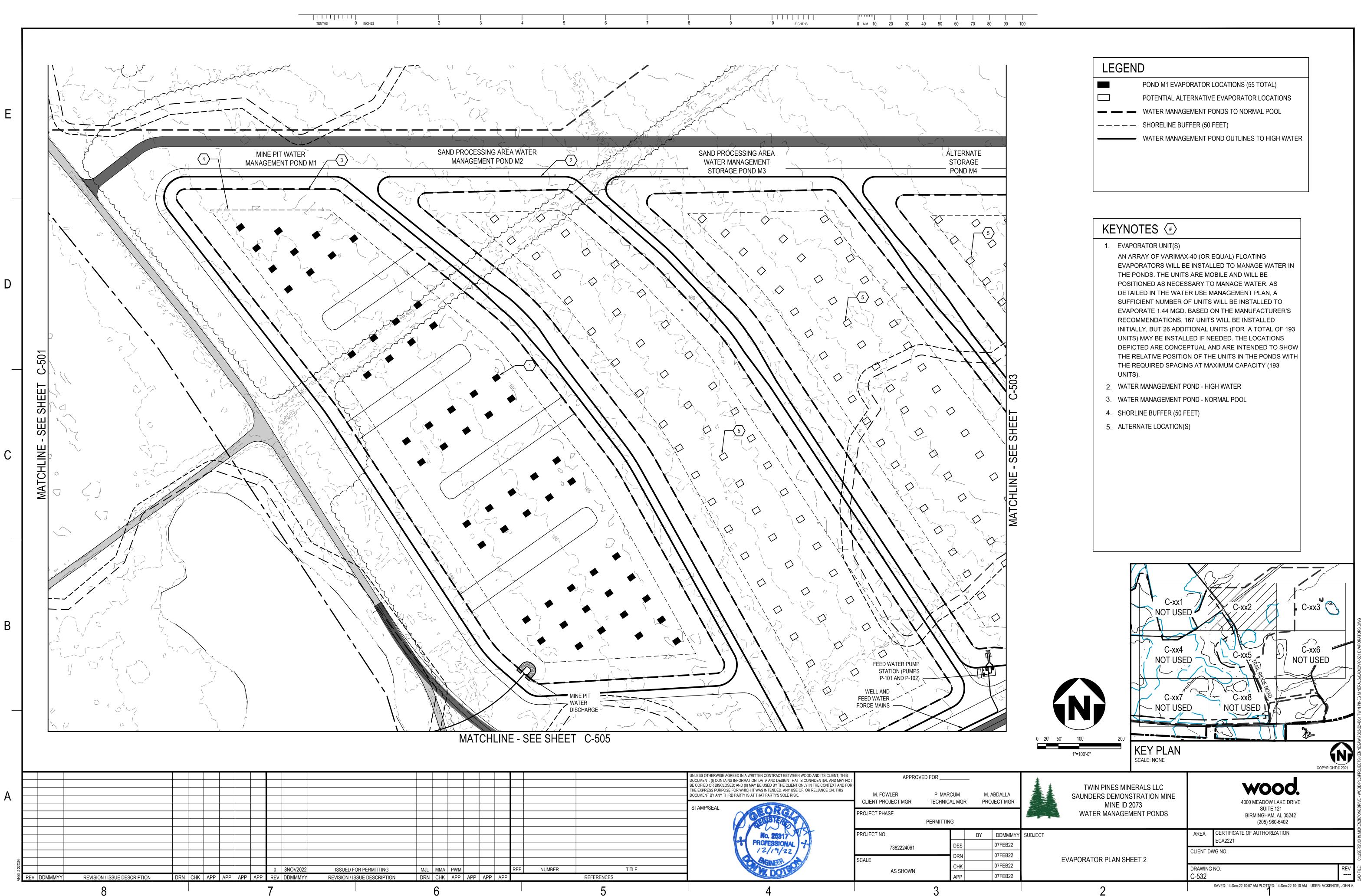
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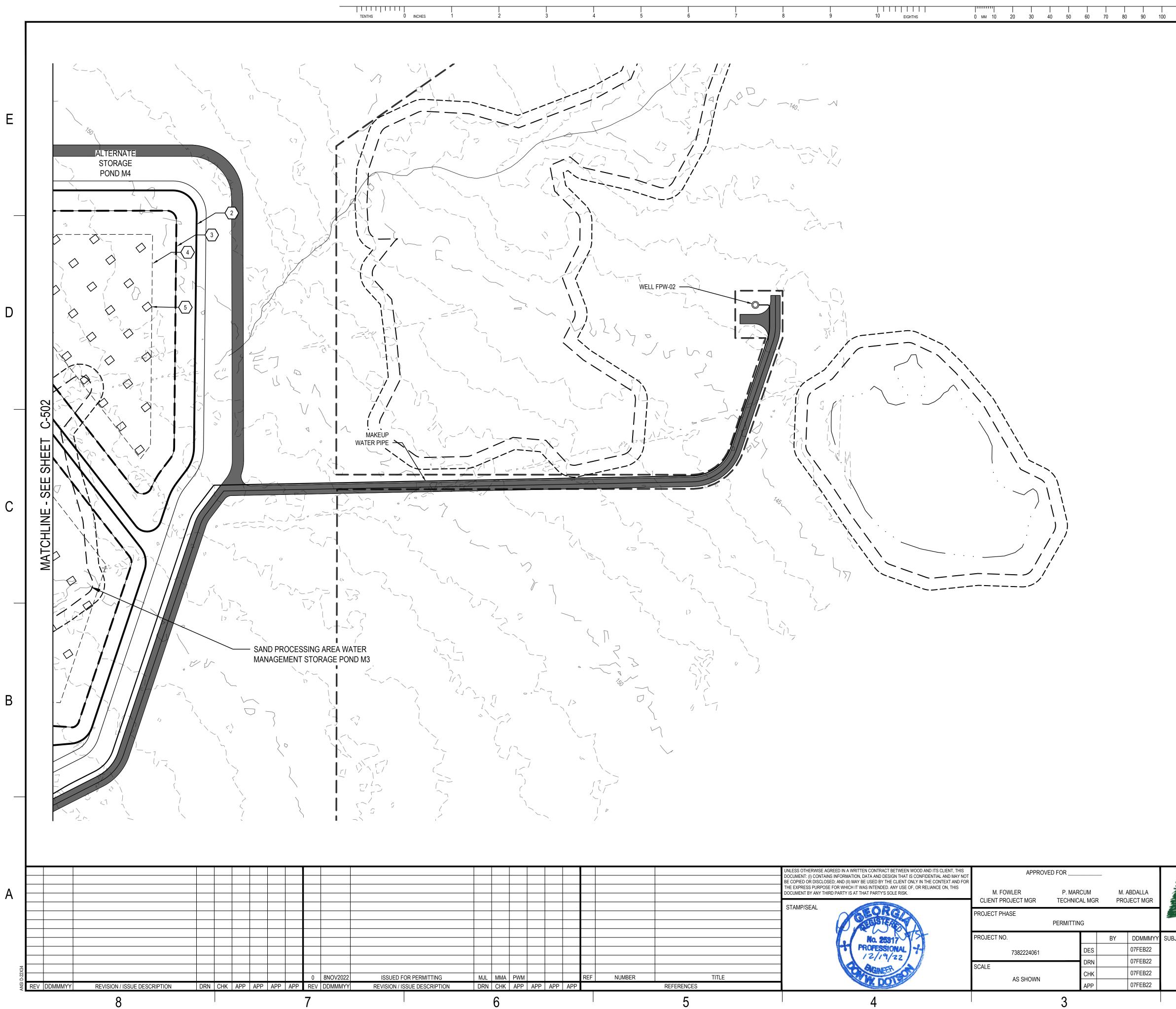
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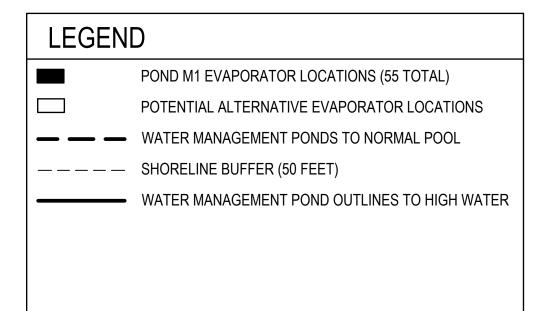


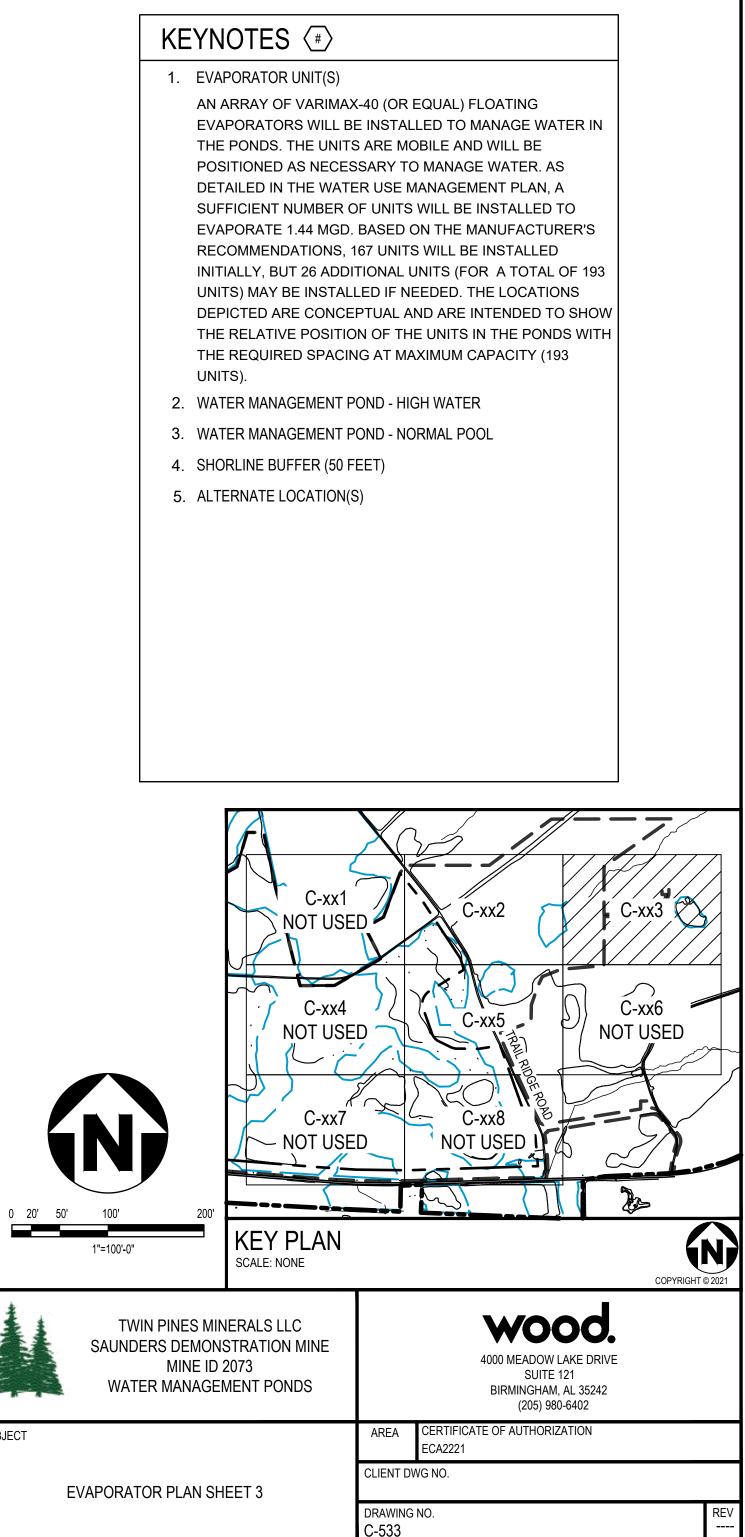
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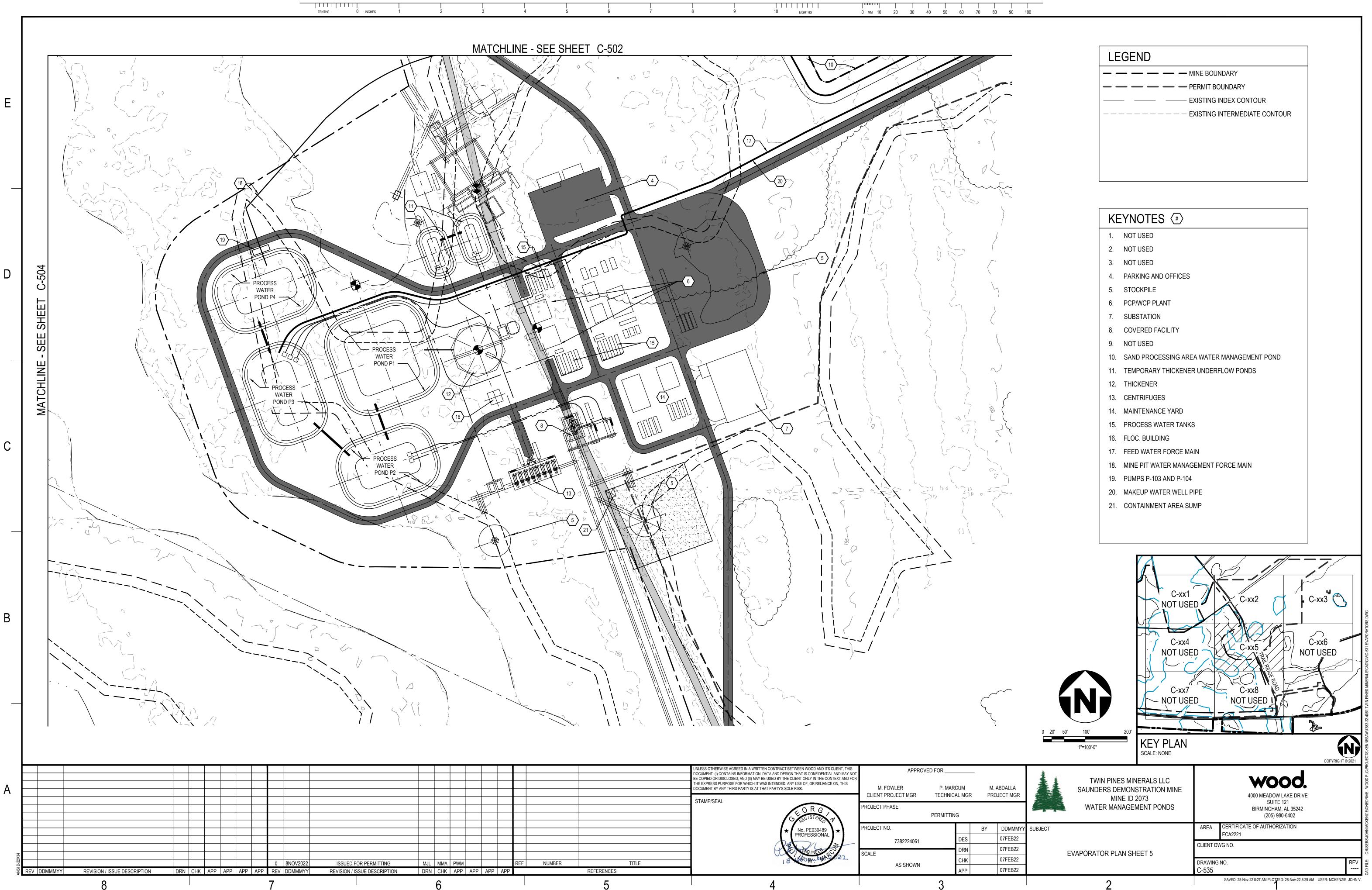
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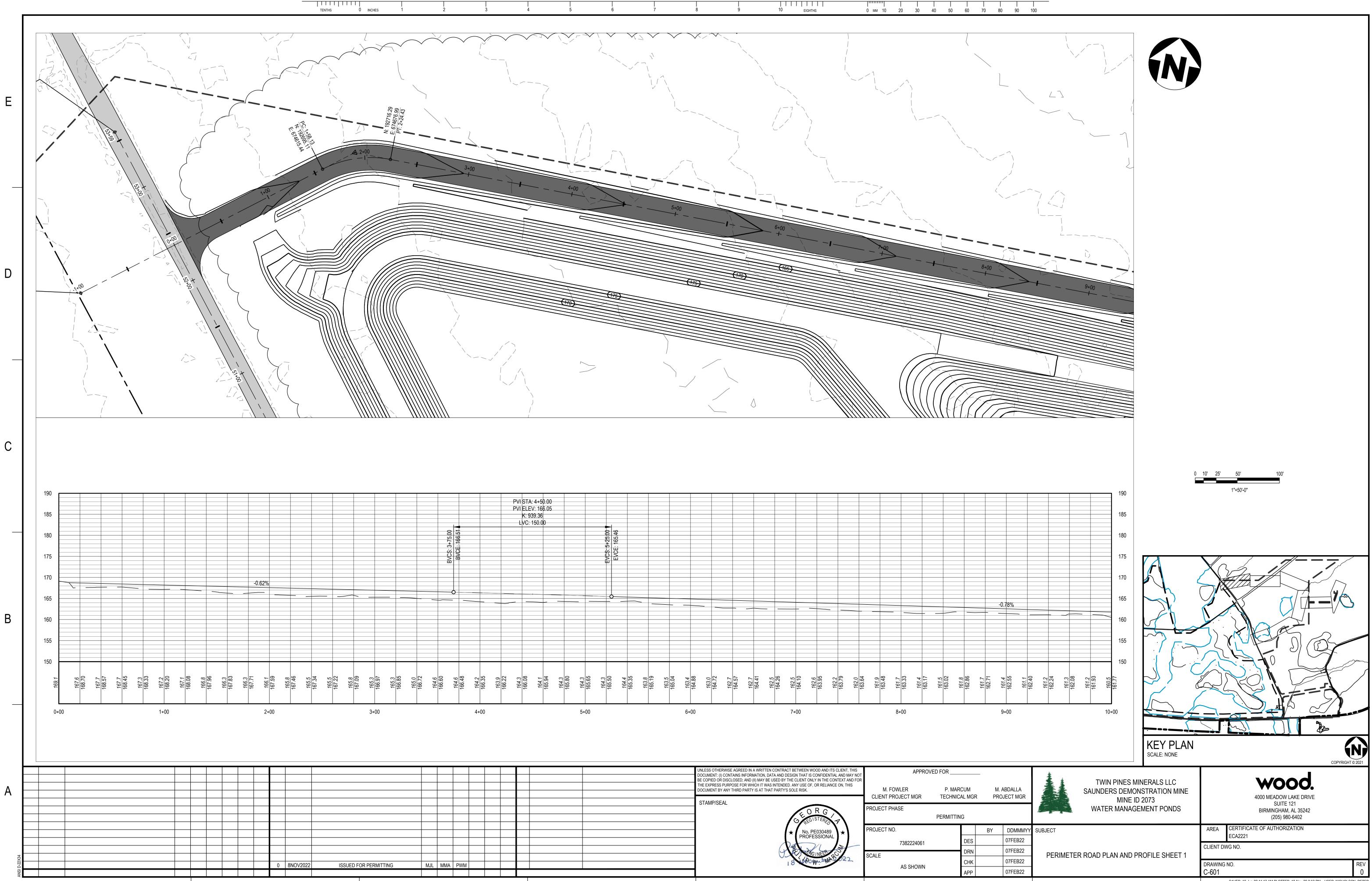


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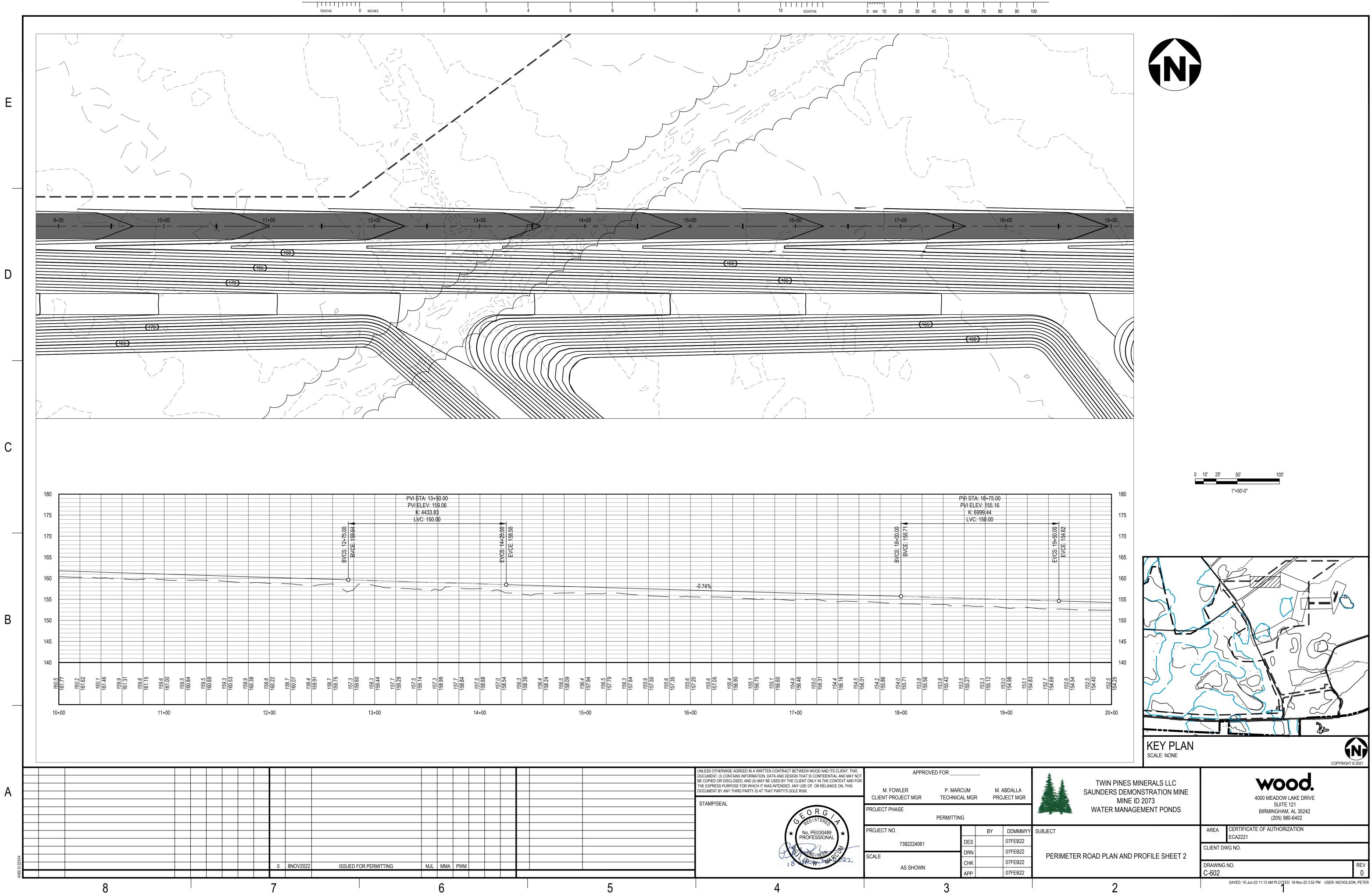
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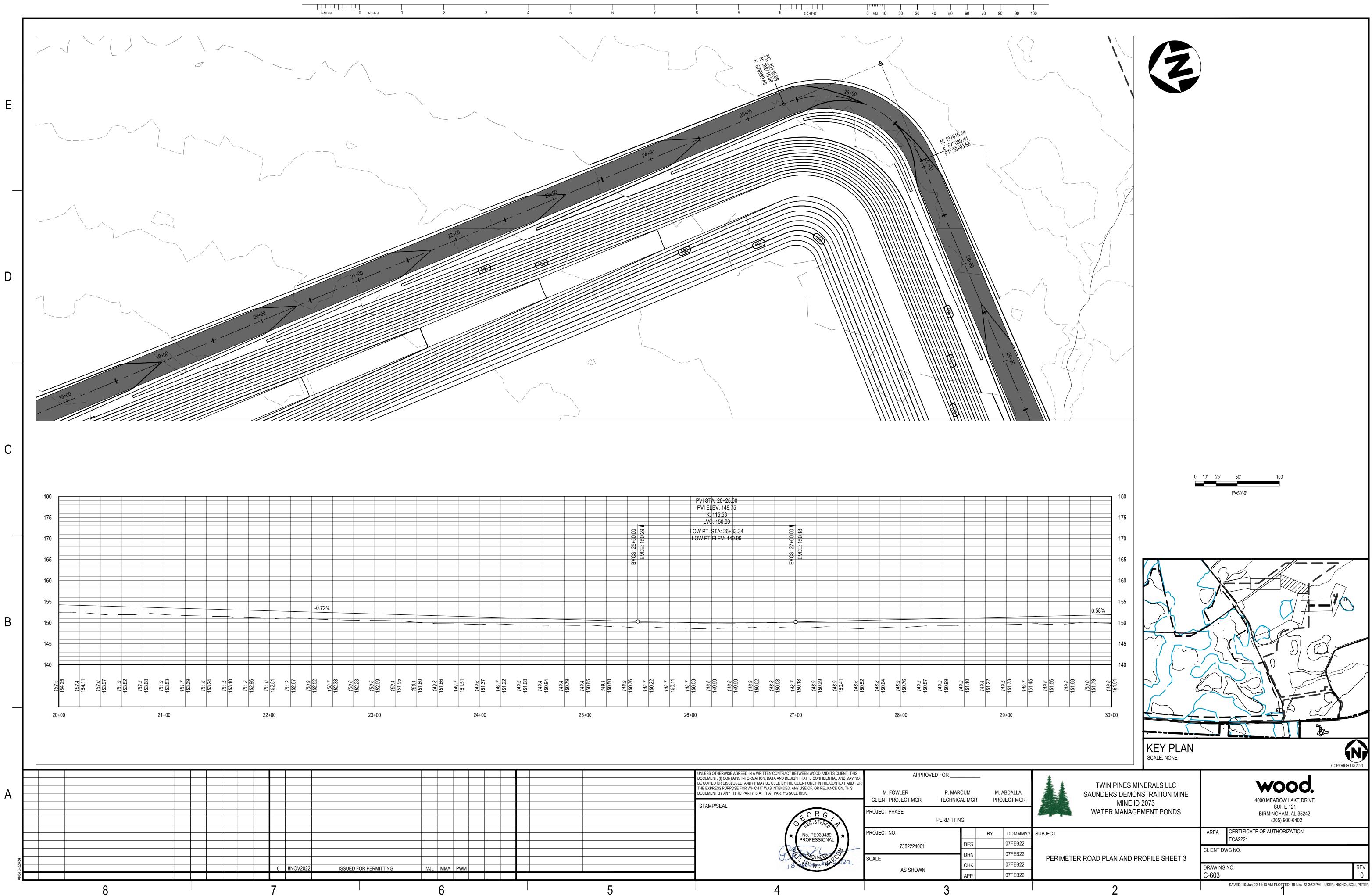
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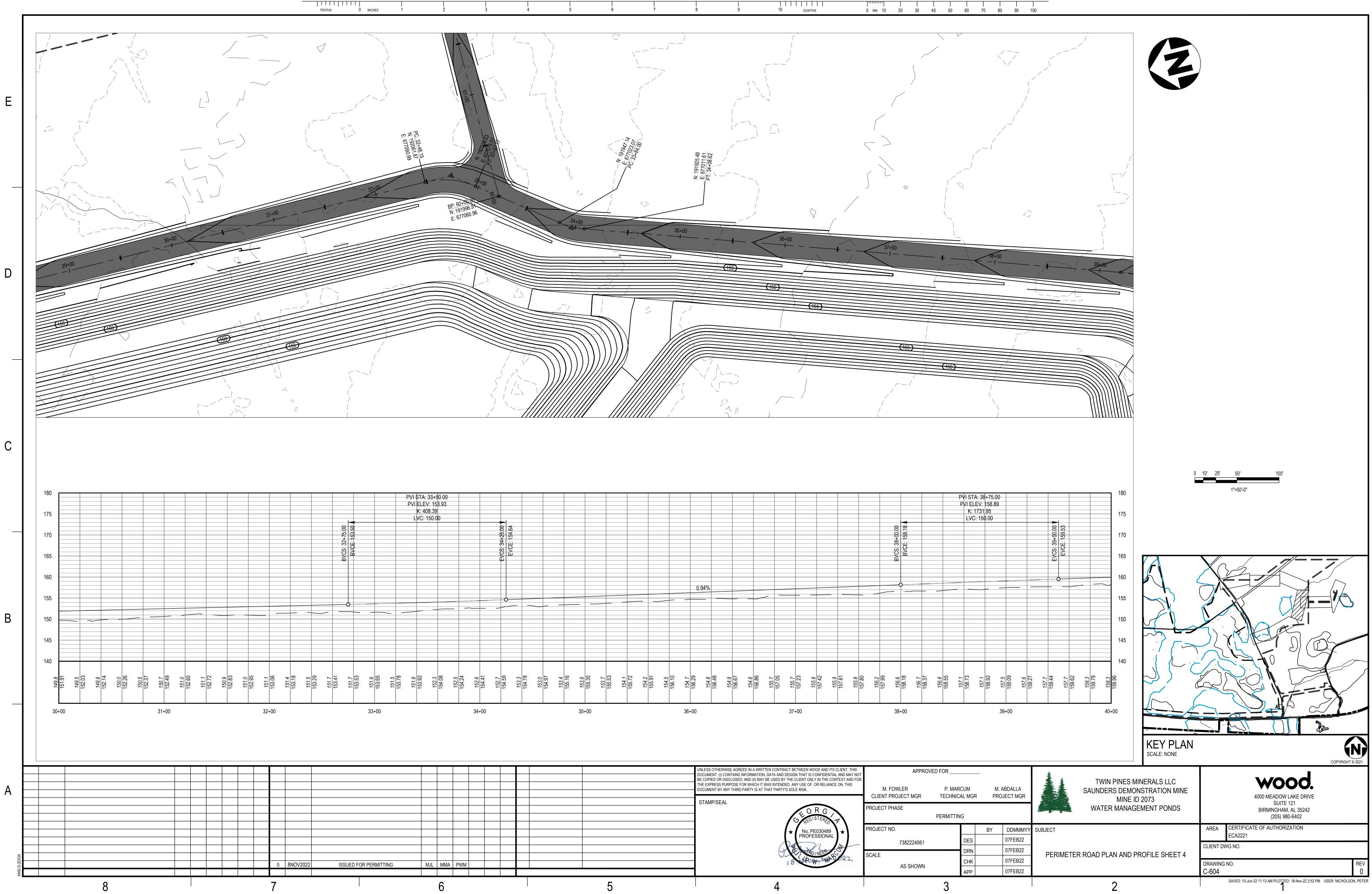


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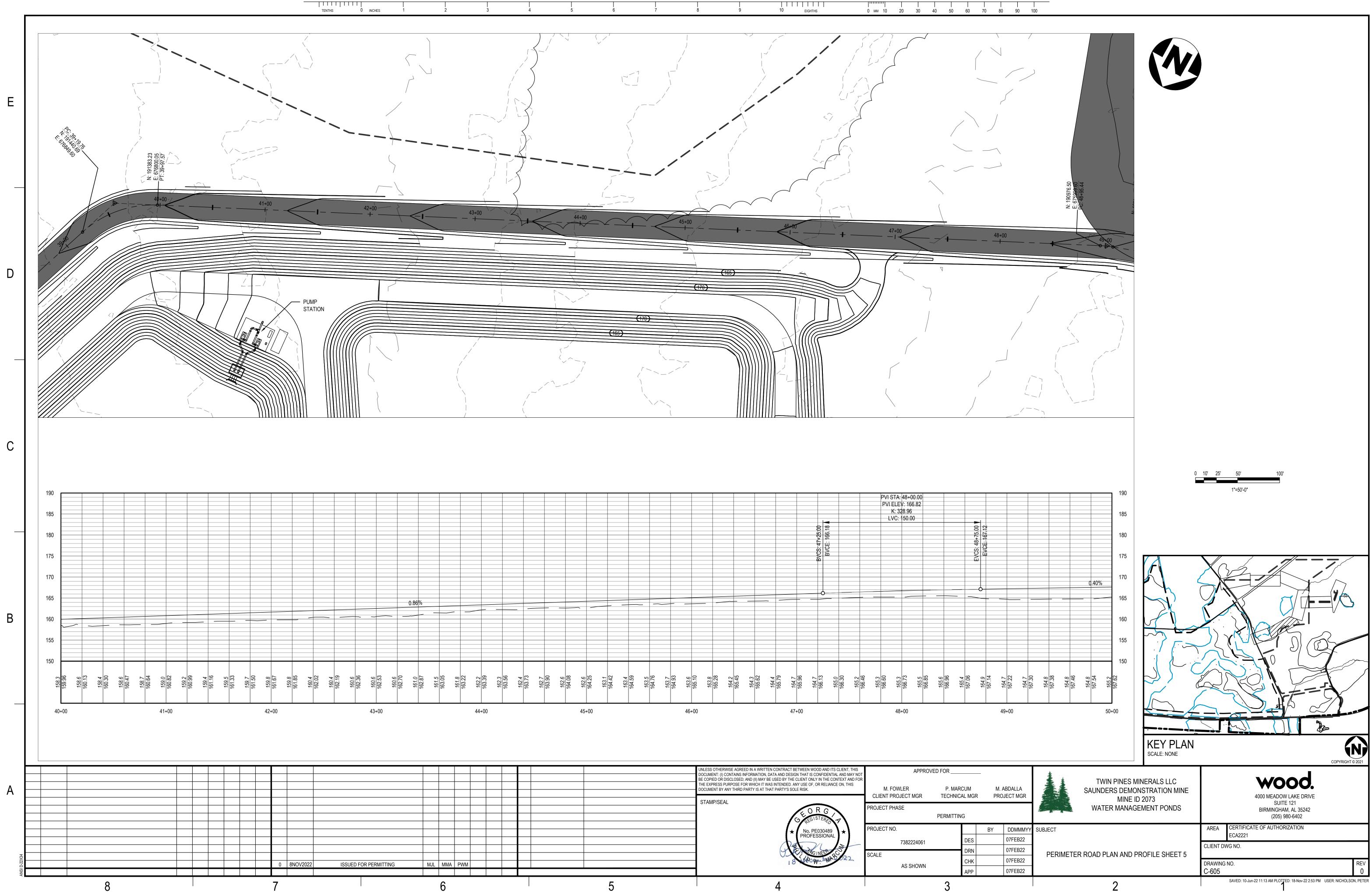
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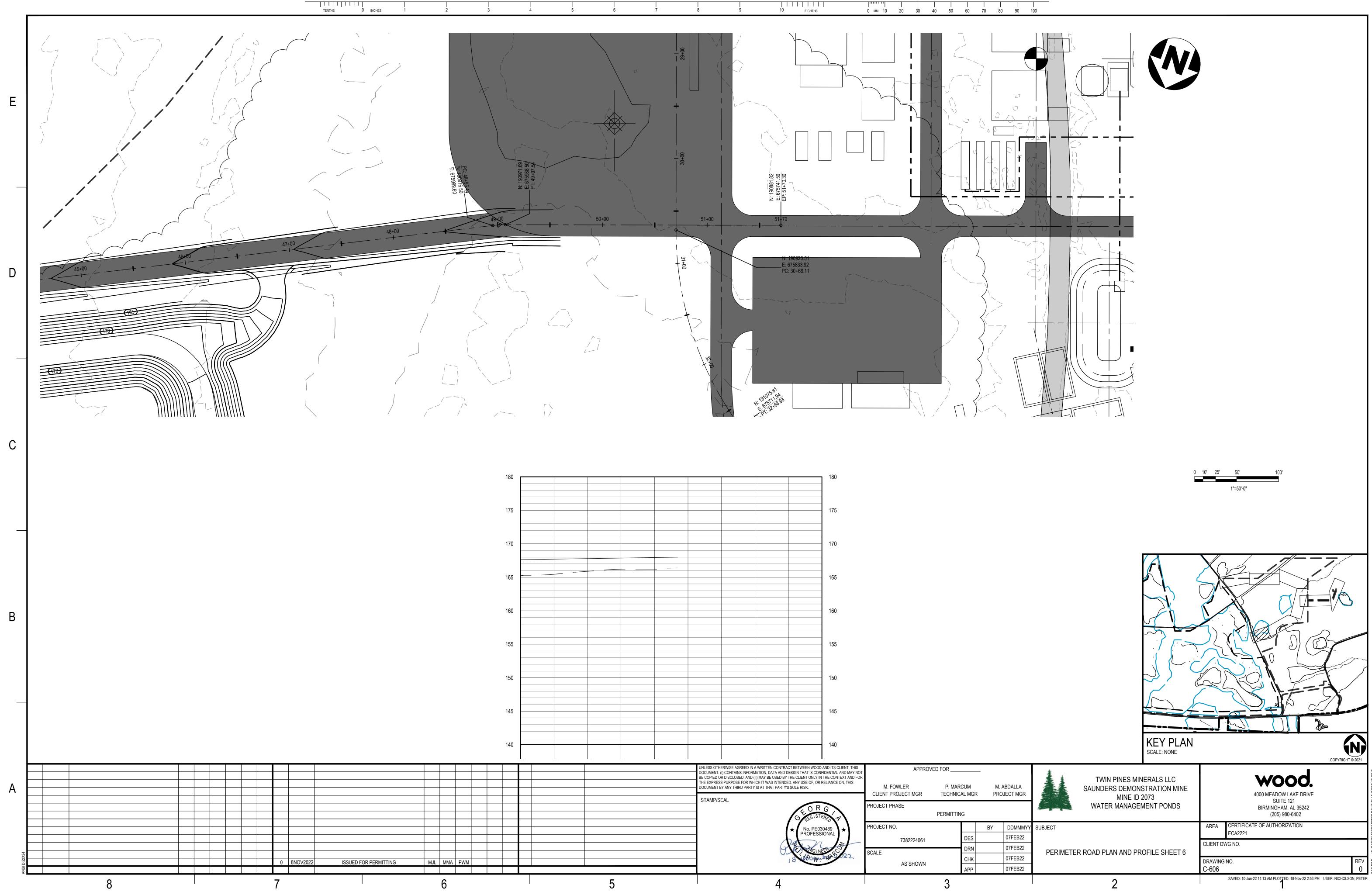
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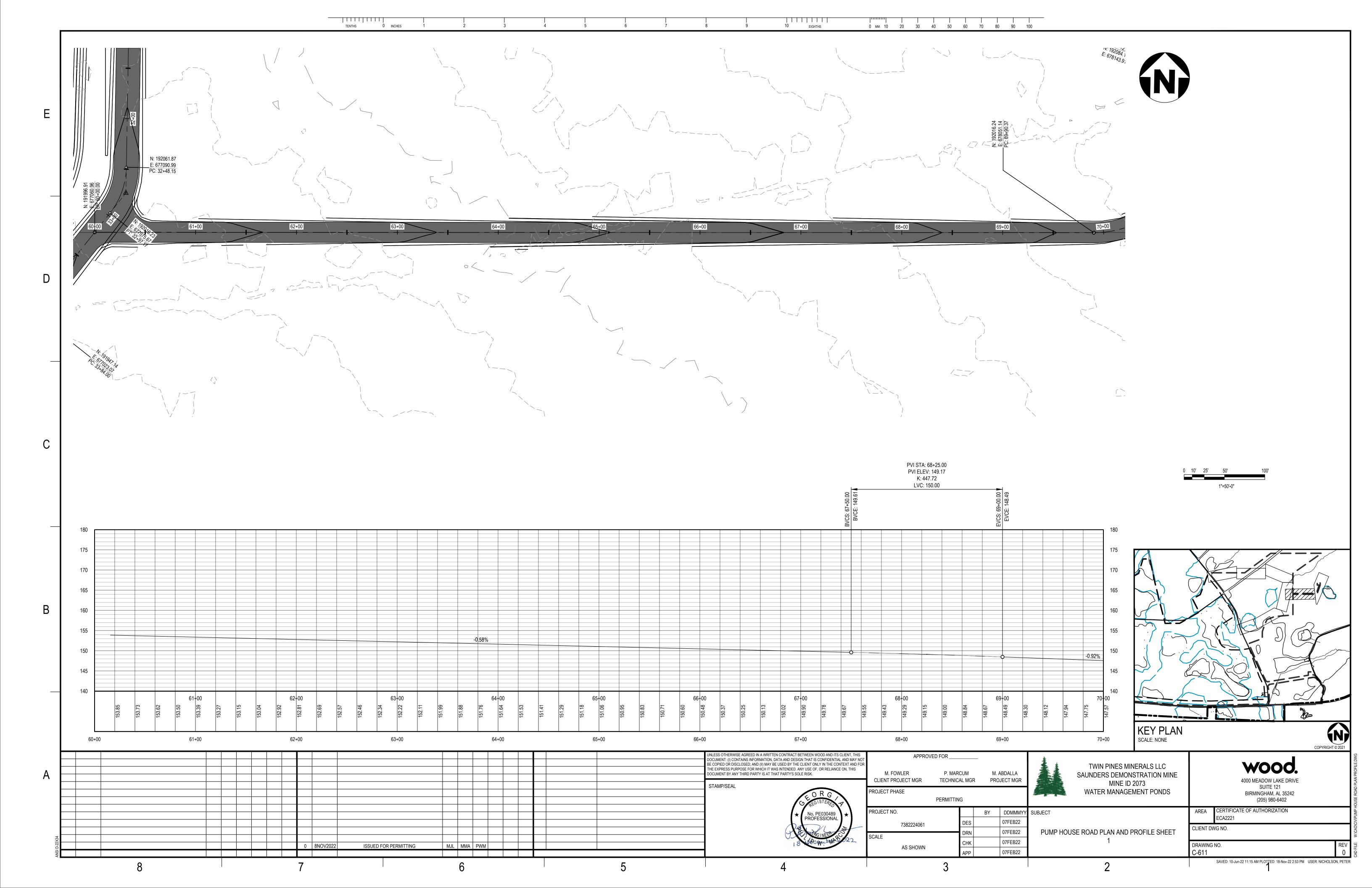


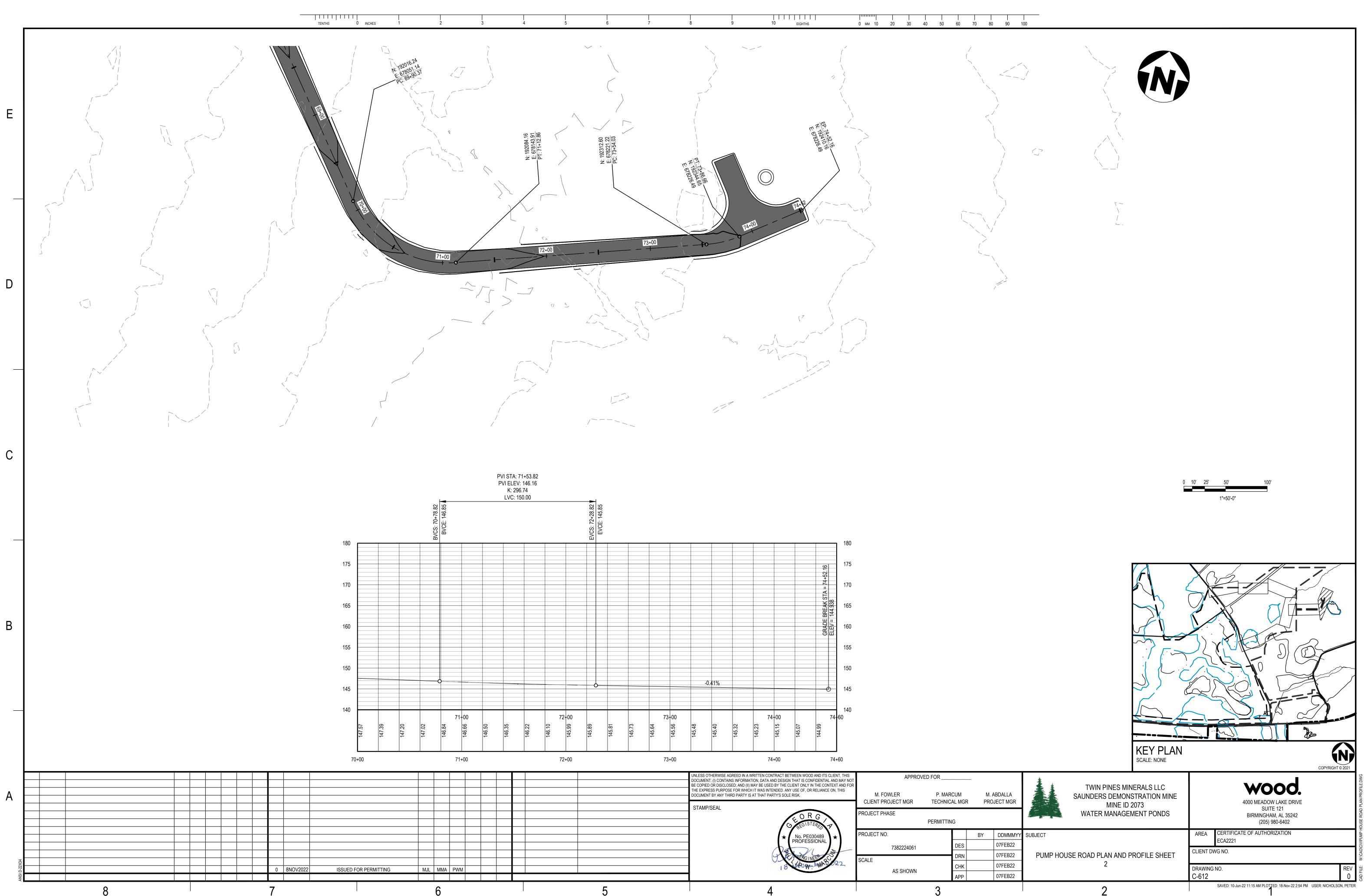


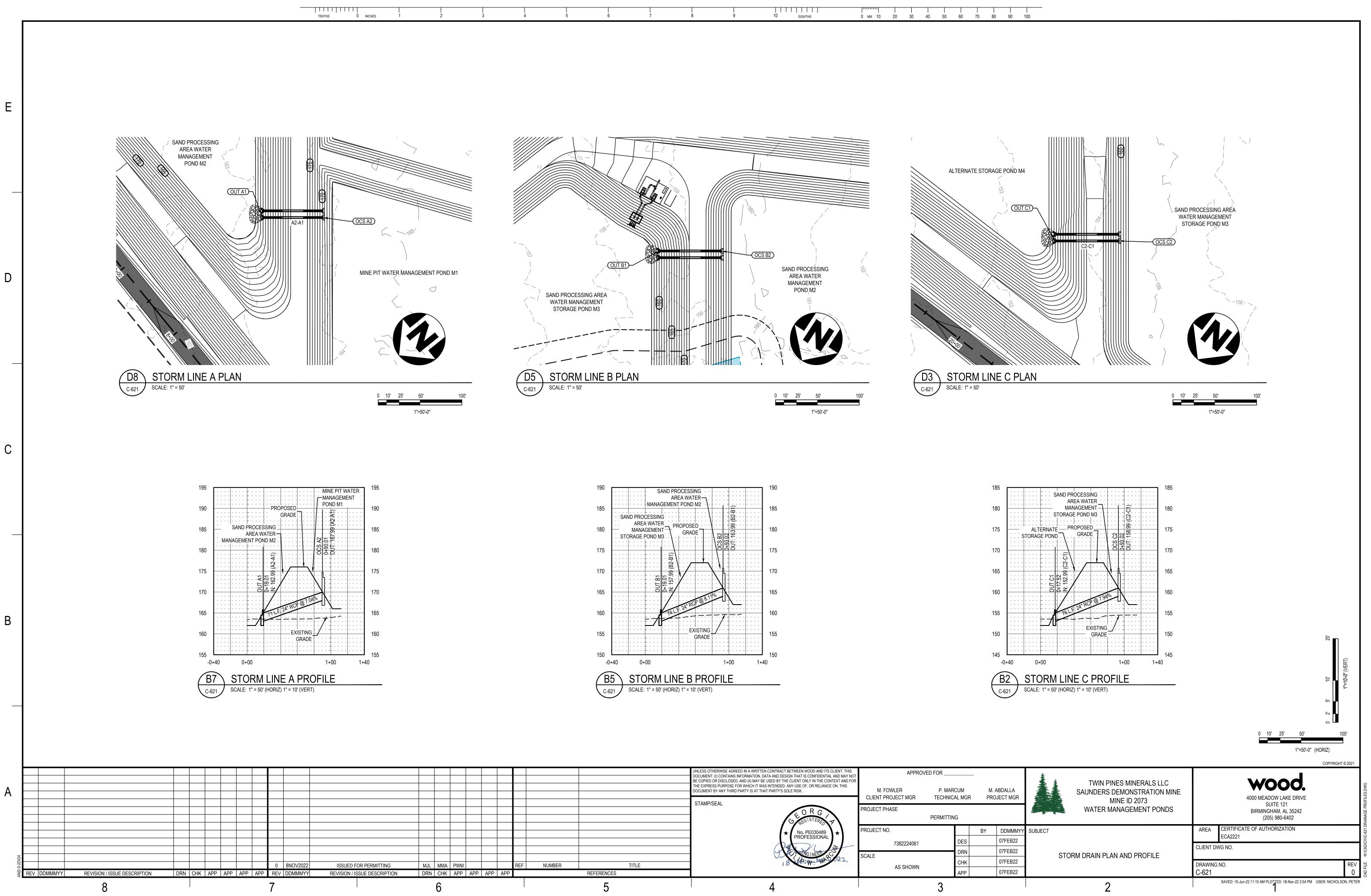
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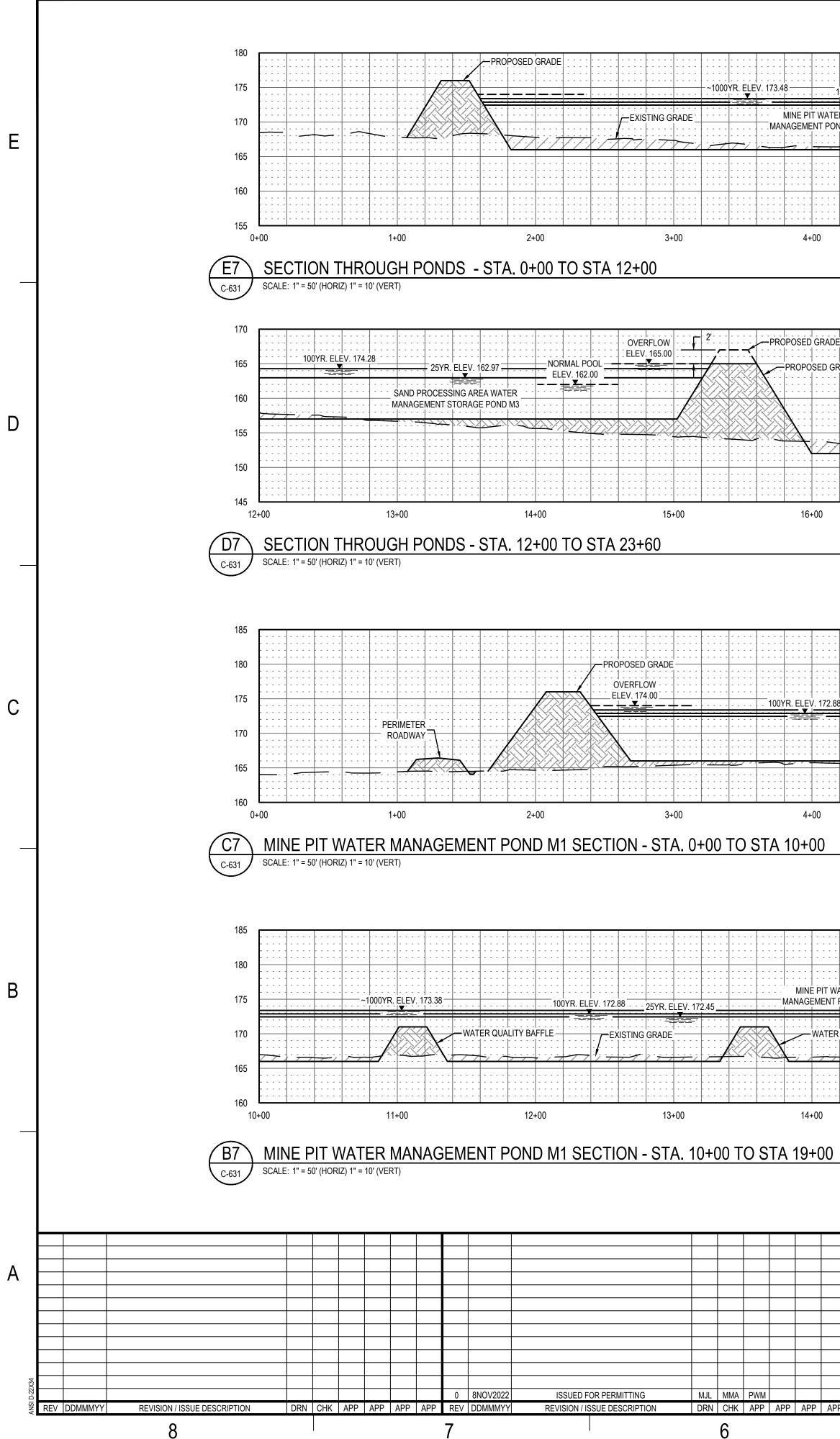








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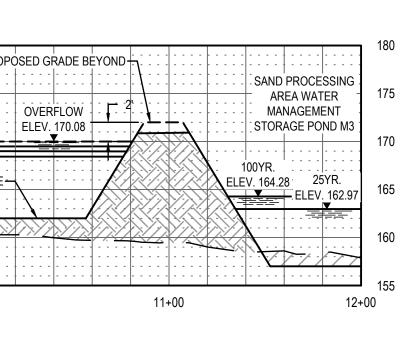
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DMMMYY	SUBJECT		AREA	CERTIFICATE OF AUTHORIZATION	
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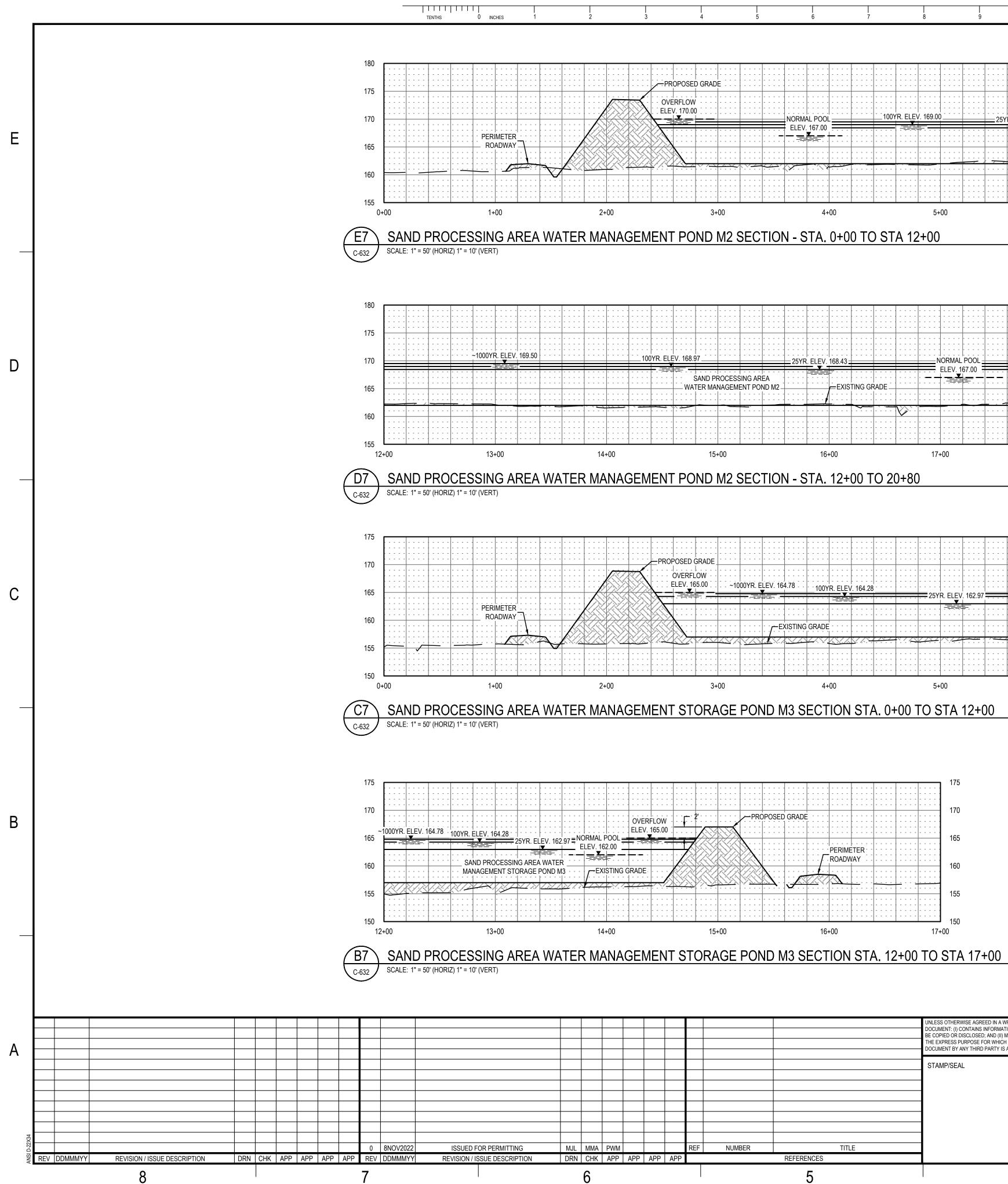
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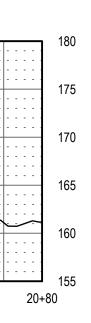
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P APP APP	REF NUMBER	TITLE		PROJECT NO. 7382224061 SCALE AS SHOWN	DES DRN CHK APP	BY         DDMMMYY           07FEB22         07FEB22           07FEB22         07FEB22           07FEB22         07FEB22	SUBJECT SITE CROSS SECTIONS SHEET 2	AREA       CERTIFICATE OF AUTHORIZATION       Image: Certificate of authorization       Image: Certificate of authorization         CLIENT DWG NO.       Client of authorization       Image: Certificate of authorization       Image: Certificate of authorization         DRAWING NO.       REV       Image: Certificate of authorization       Image: Ceritate of authorization       Image: Ceritate
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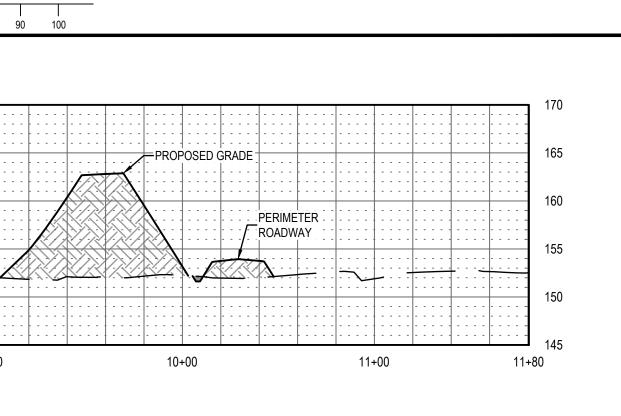
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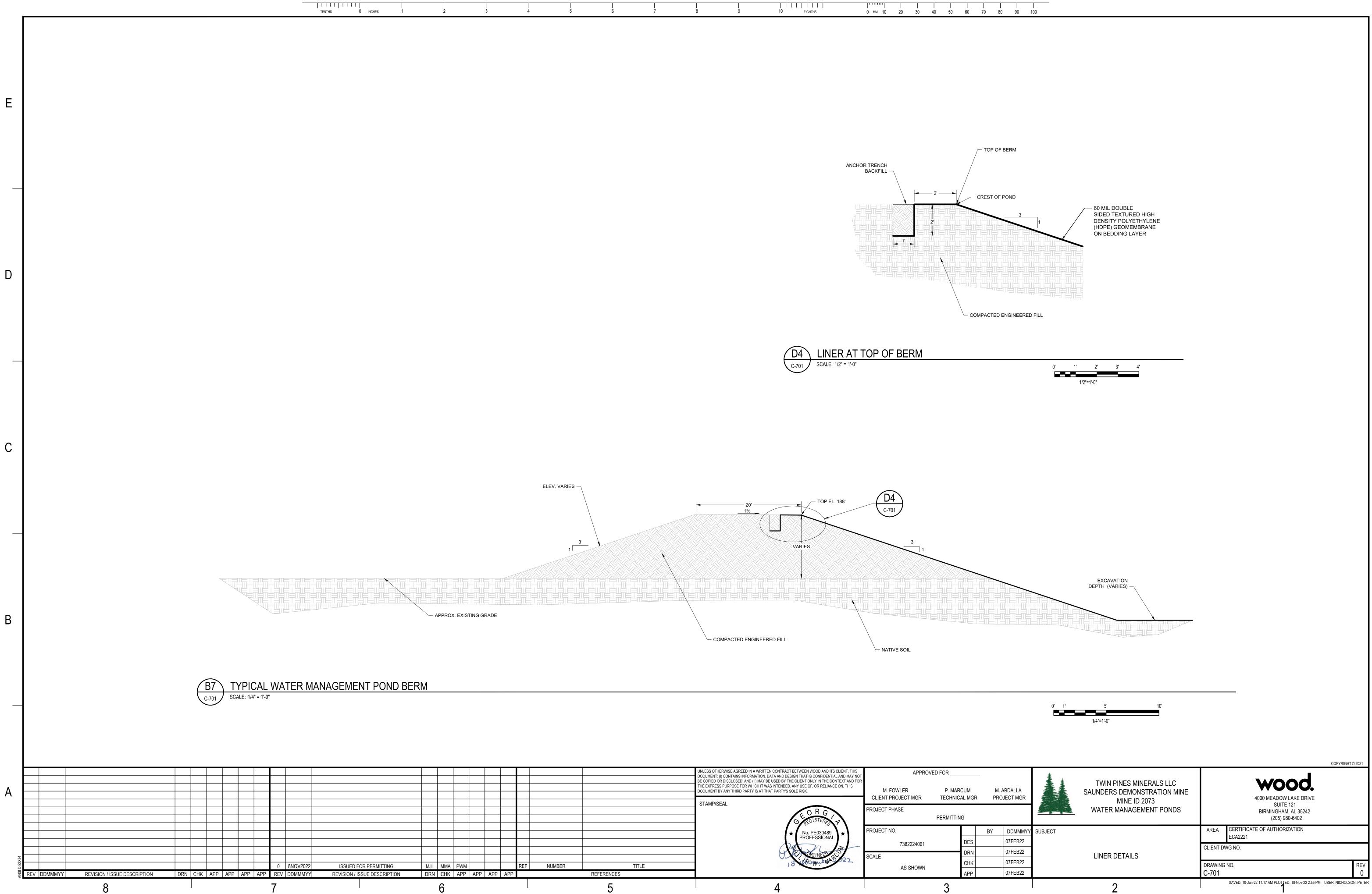




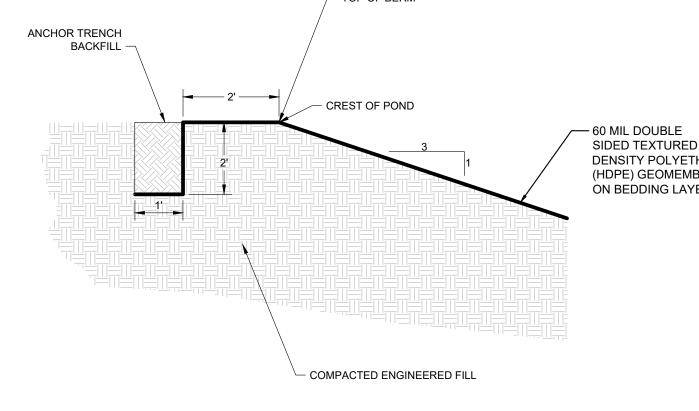
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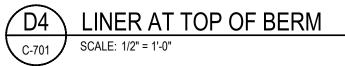
											COPY	PYRIGHT © 2021
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				THE EXPRESS PURPOSE FOR WHICH IT WAS INTENDED. ANY USE OF, OR RELIANCE ON, THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK.	M. FOWLER	P. MARCUM	M. ABDALLA	SAL	UNDERS DEMONSTRATION MINE			
				STAMP/SEAL	CLIENT PROJECT MGR	TECHNICAL MGR	PROJECT MGR		MINE ID 2073	1	4000 MEADOW LAKE DRIVE SUITE 121	L L
					PROJECT PHASE				WATER MANAGEMENT PONDS	1	BIRMINGHAM, AL 35242	
						PERMITTING					(205) 980-6402	
					PROJECT NO.		BY DDMMMYY	SUBJECT		AREA	CERTIFICATE OF AUTHORIZATION	
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						DRN	07FEB22			CLIENT D	DWG NO.	
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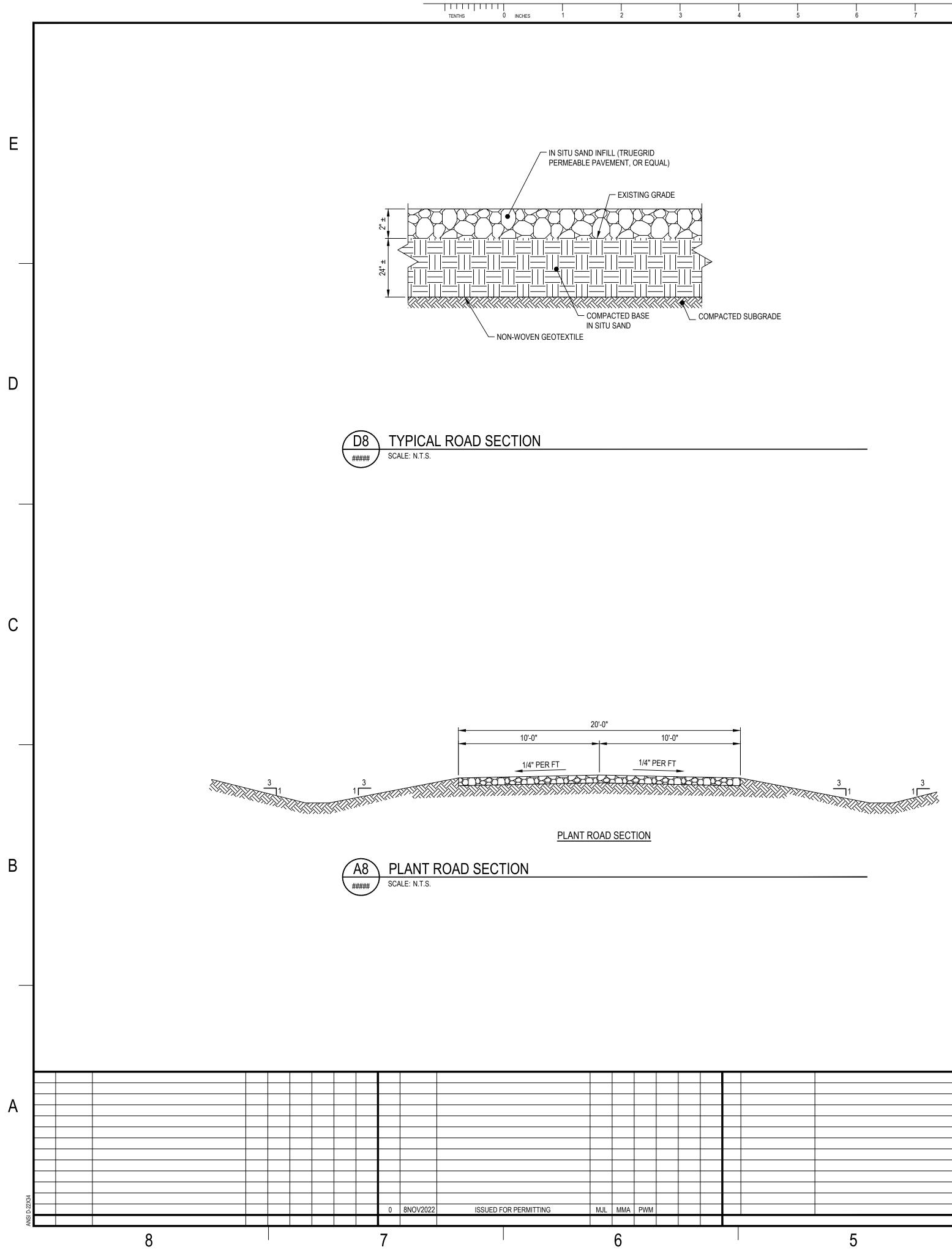


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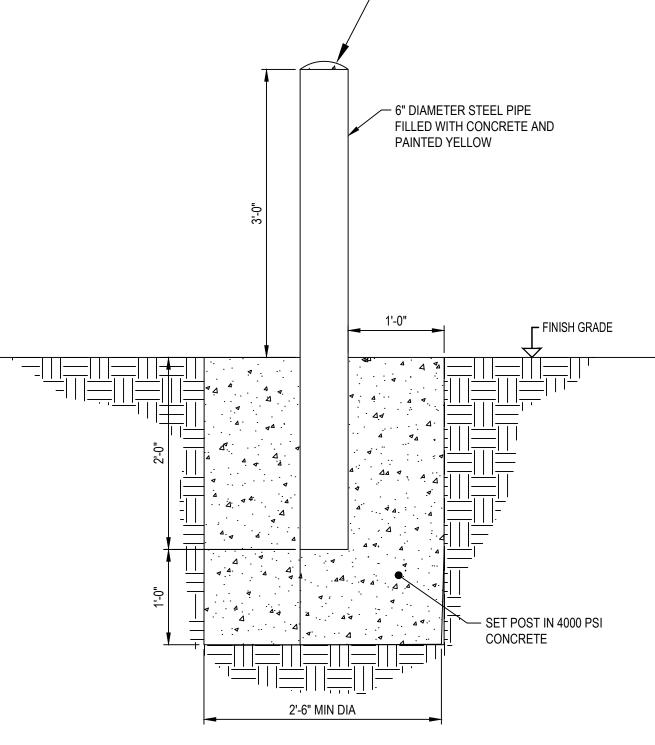




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							CLIENT PROJECT MGR	TECHNICAL MO	ir Pf	ROJECT
					STAMP/SEAL	COR G	PROJECT PHASE	PERMITTING		
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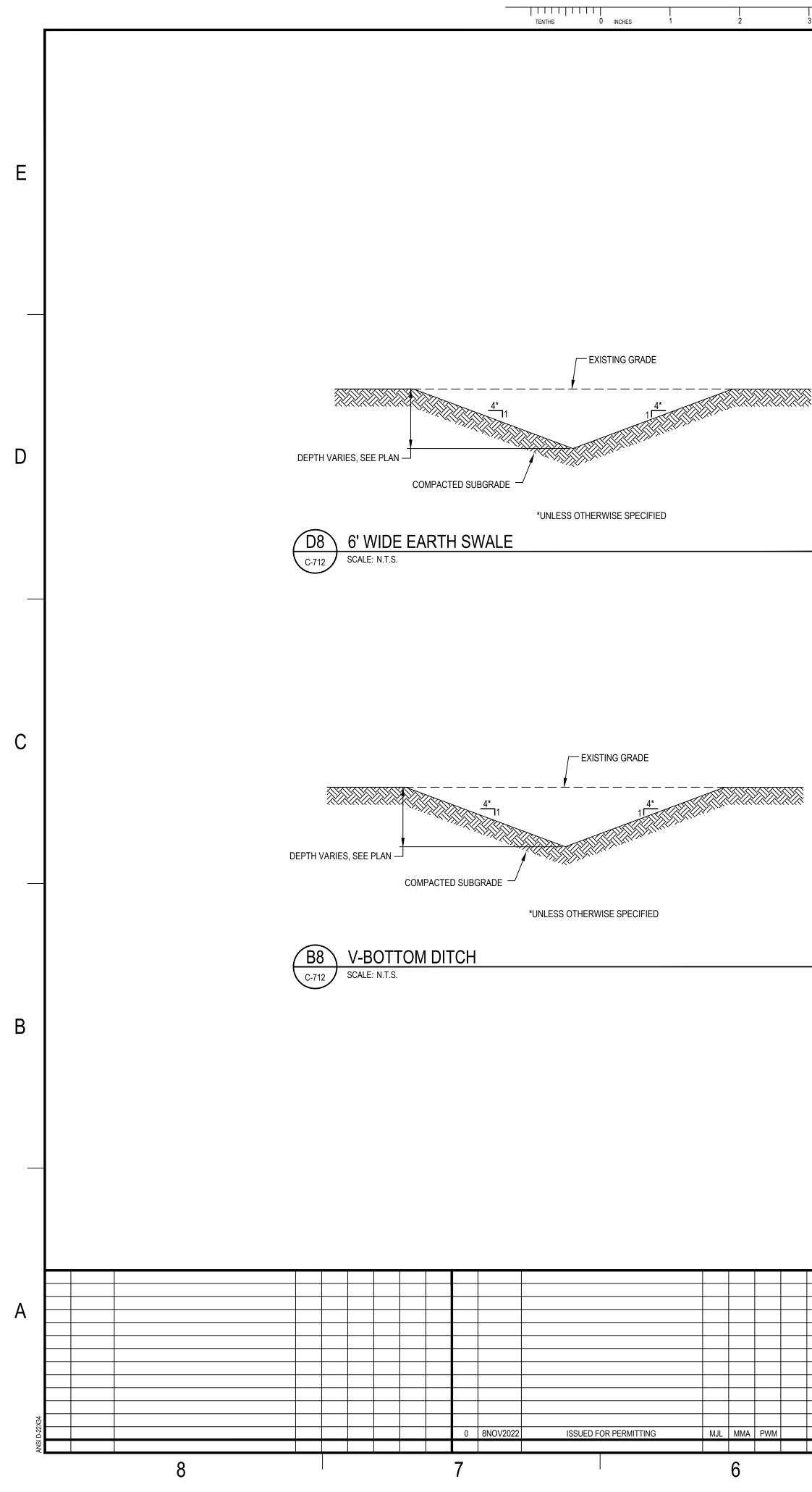


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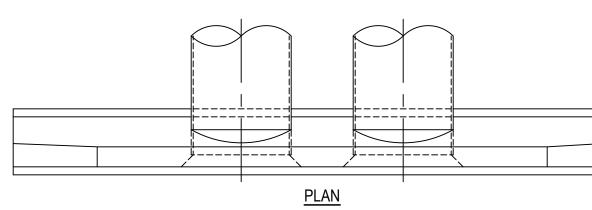


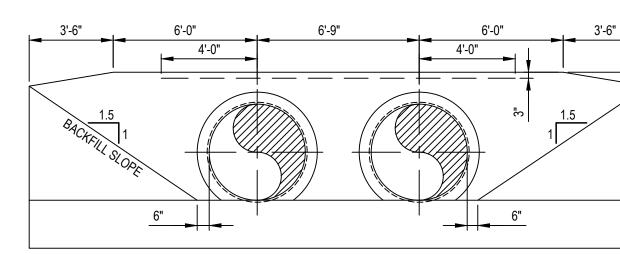
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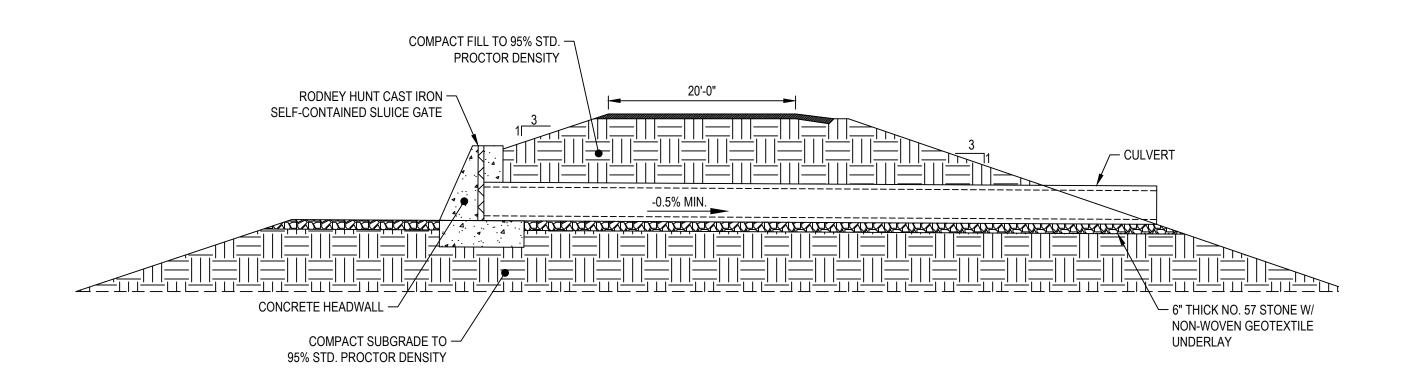


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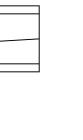


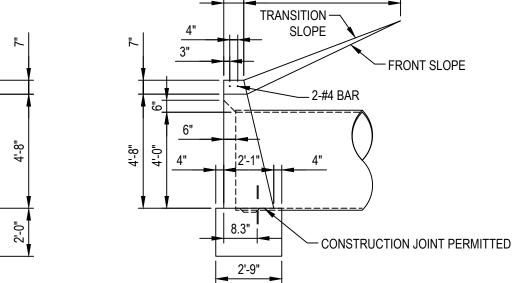


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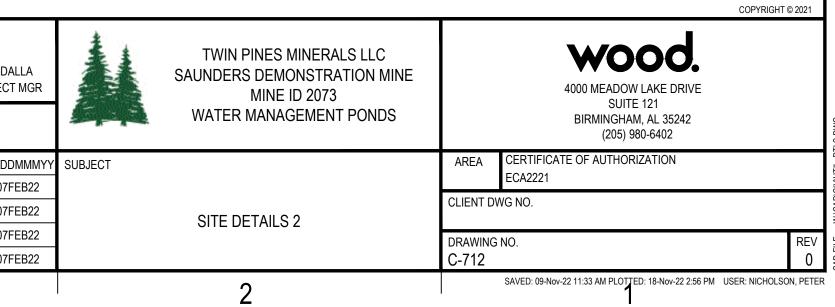


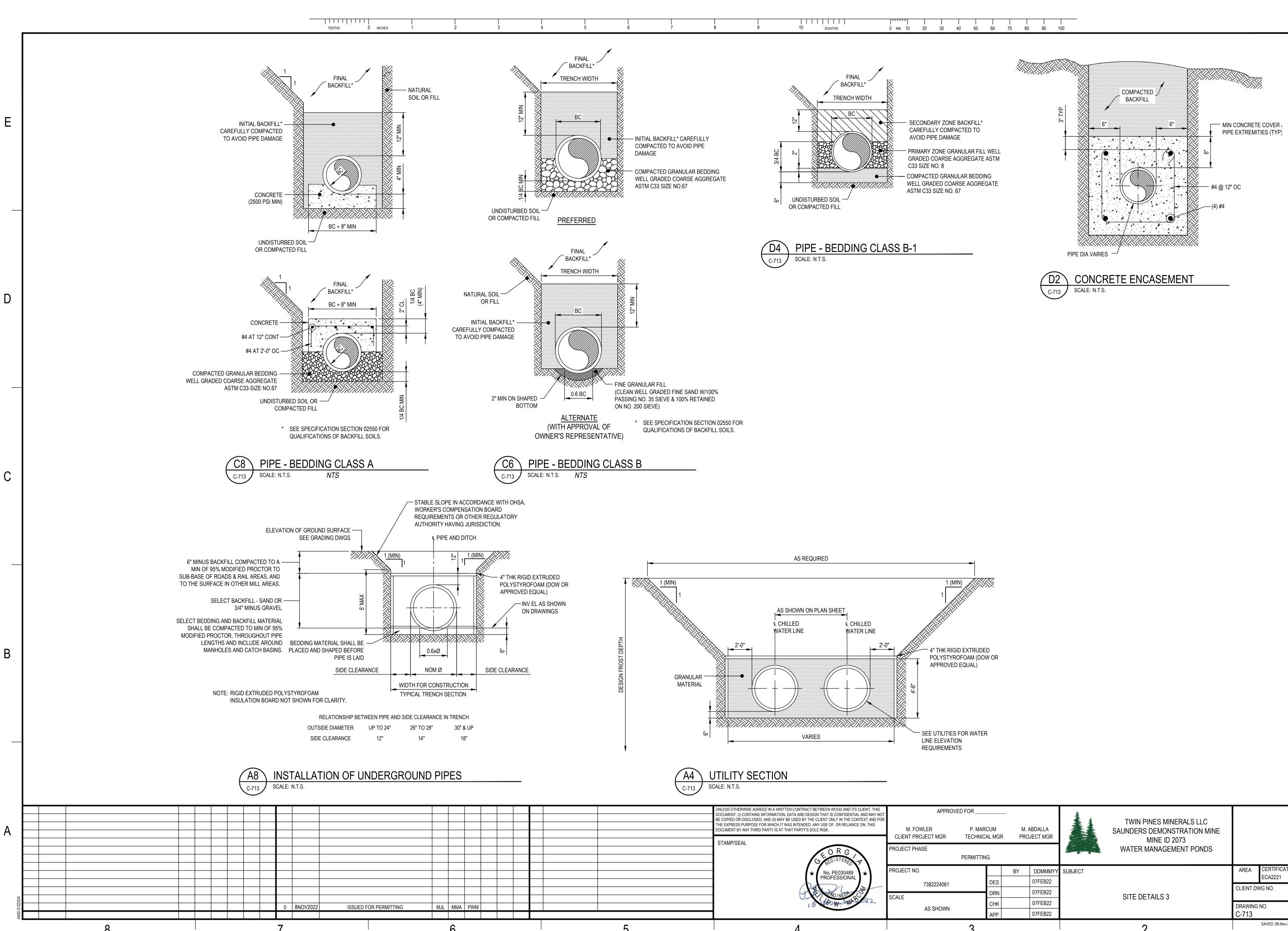




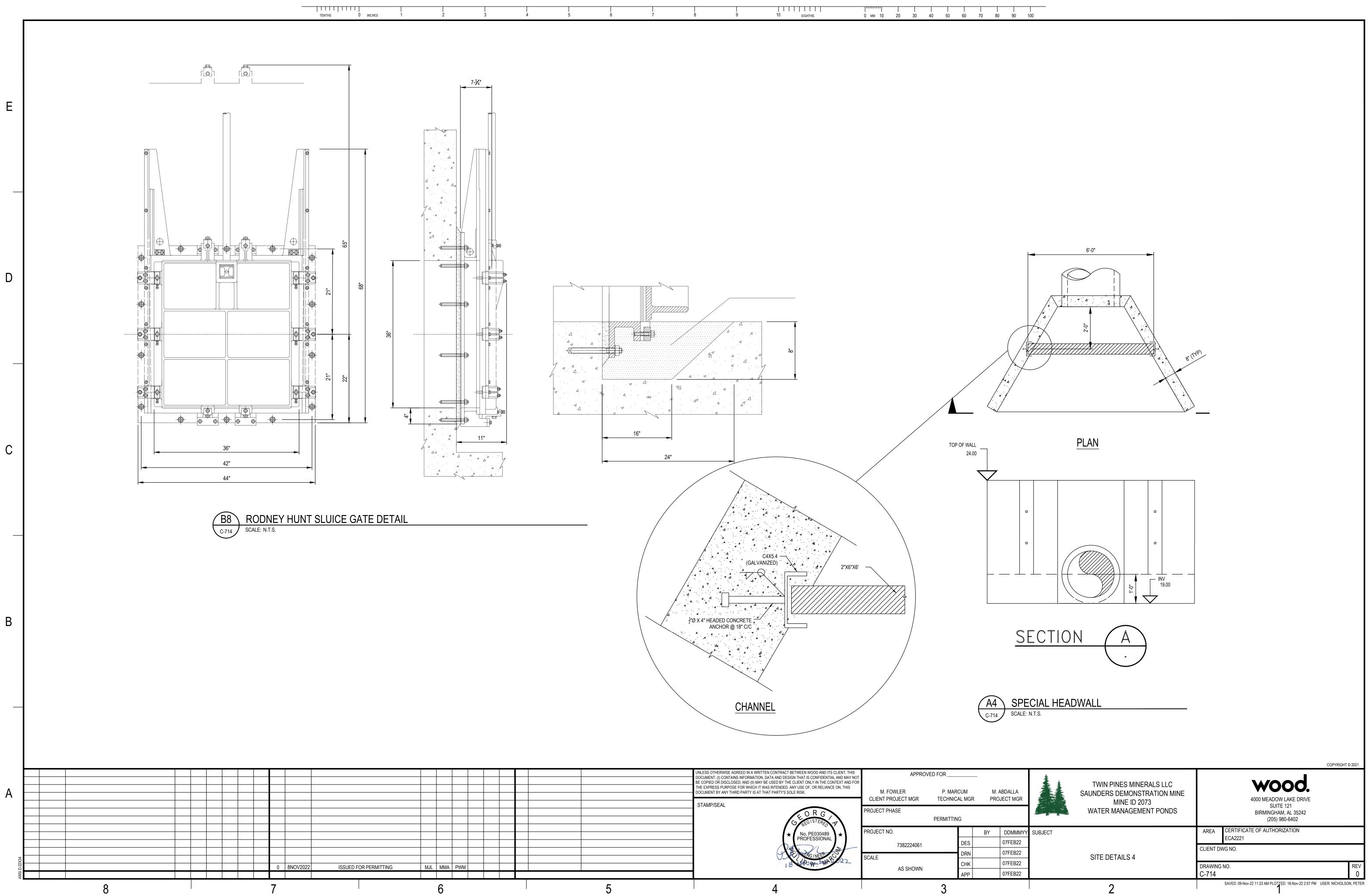
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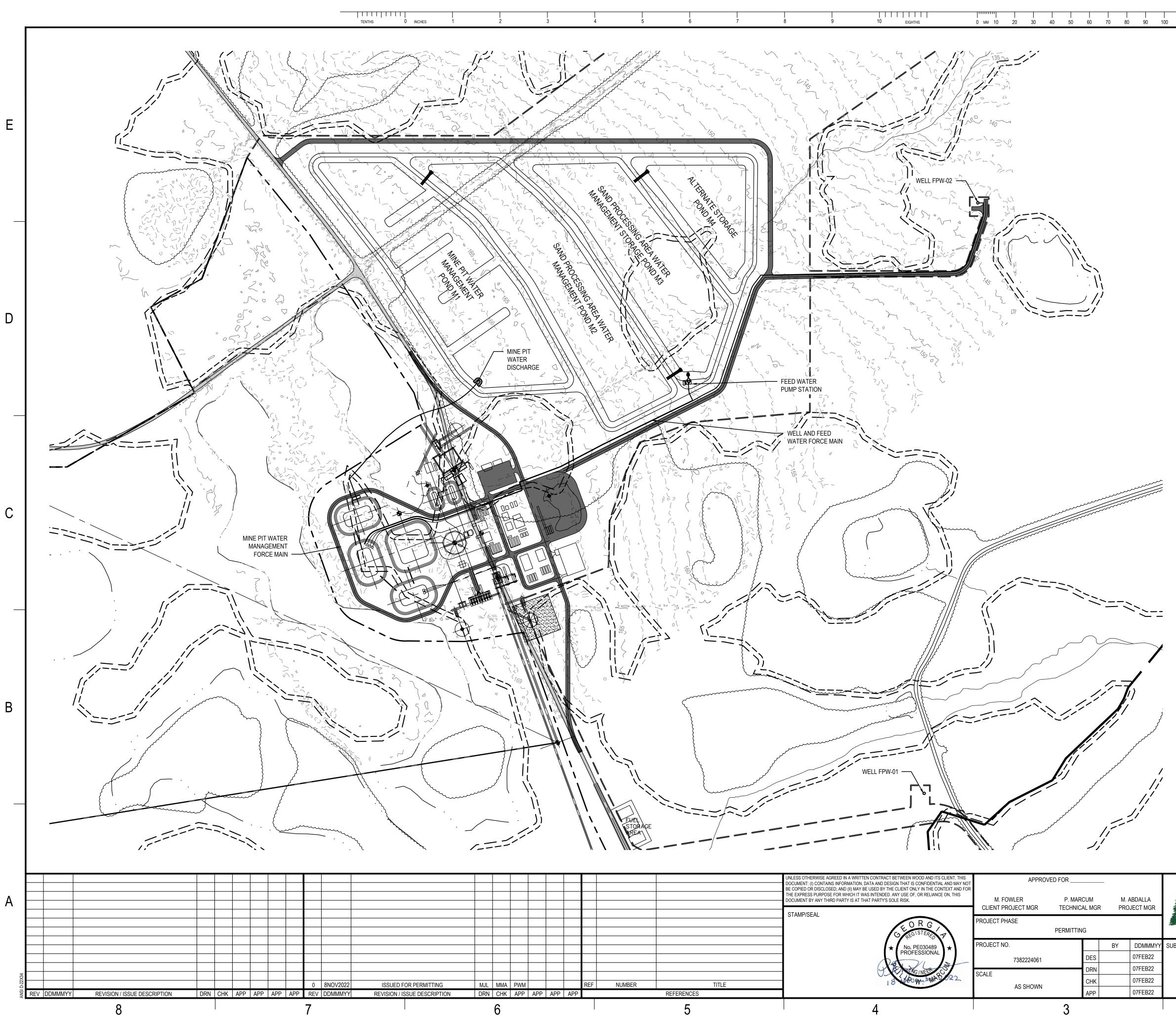




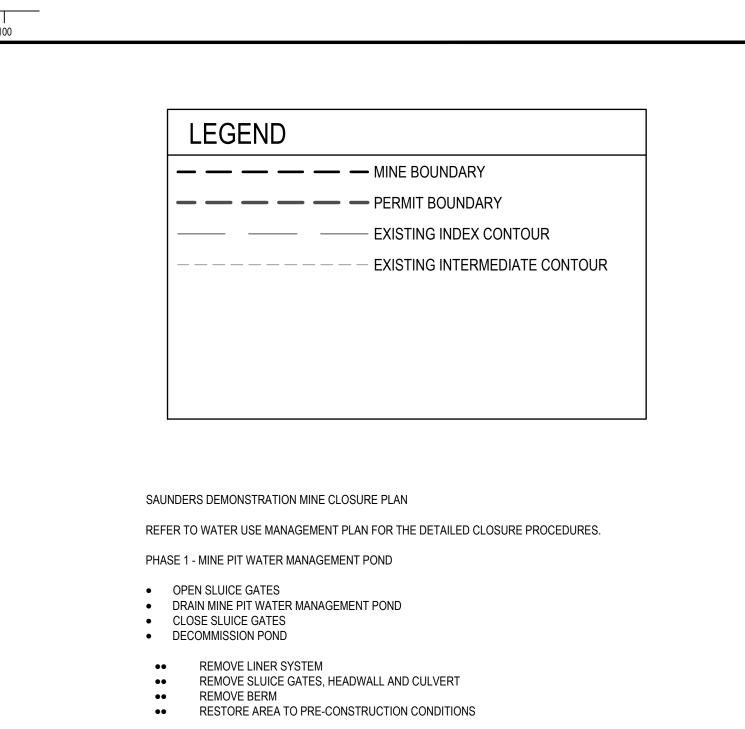
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DALLA CT MGR		TWIN PINES MINERALS LLC SAUNDERS DEMONSTRATION MINE MINE ID 2073 WATER MANAGEMENT PONDS		4000 MEADOW LAKE DRIVE SUITE 121 BIRMINGHAM, AL 35242 (205) 980-6402	
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PHASE 2 - SAND PROCESSING AREA WATER MANAGEMENT POND (1)

- OPEN SLUICE GATES
- DRAIN SAND PROCESSING AREA WATER MANAGEMENT POND (1)
- CLOSE SLUICE GATES
- DECOMMISSION POND
- •• REMOVE LINER SYSTEM
- •• REMOVE SLUICE GATES, HEADWALL AND CULVERT
- •• REMOVE BERM •• RESTORE AREA TO PRE-CONSTRUCTION CONDITIONS

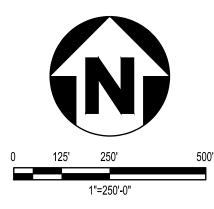
PHASE 3 - ALTERNATE STORAGE POND

- PUMP ANY STANDING WATER INTO SAND PROCESSING AREA WATER MANAGEMENT POND (2)
   DECOMMISSION POND
- •• REMOVE LINER SYSTEM •• REMOVE BERM

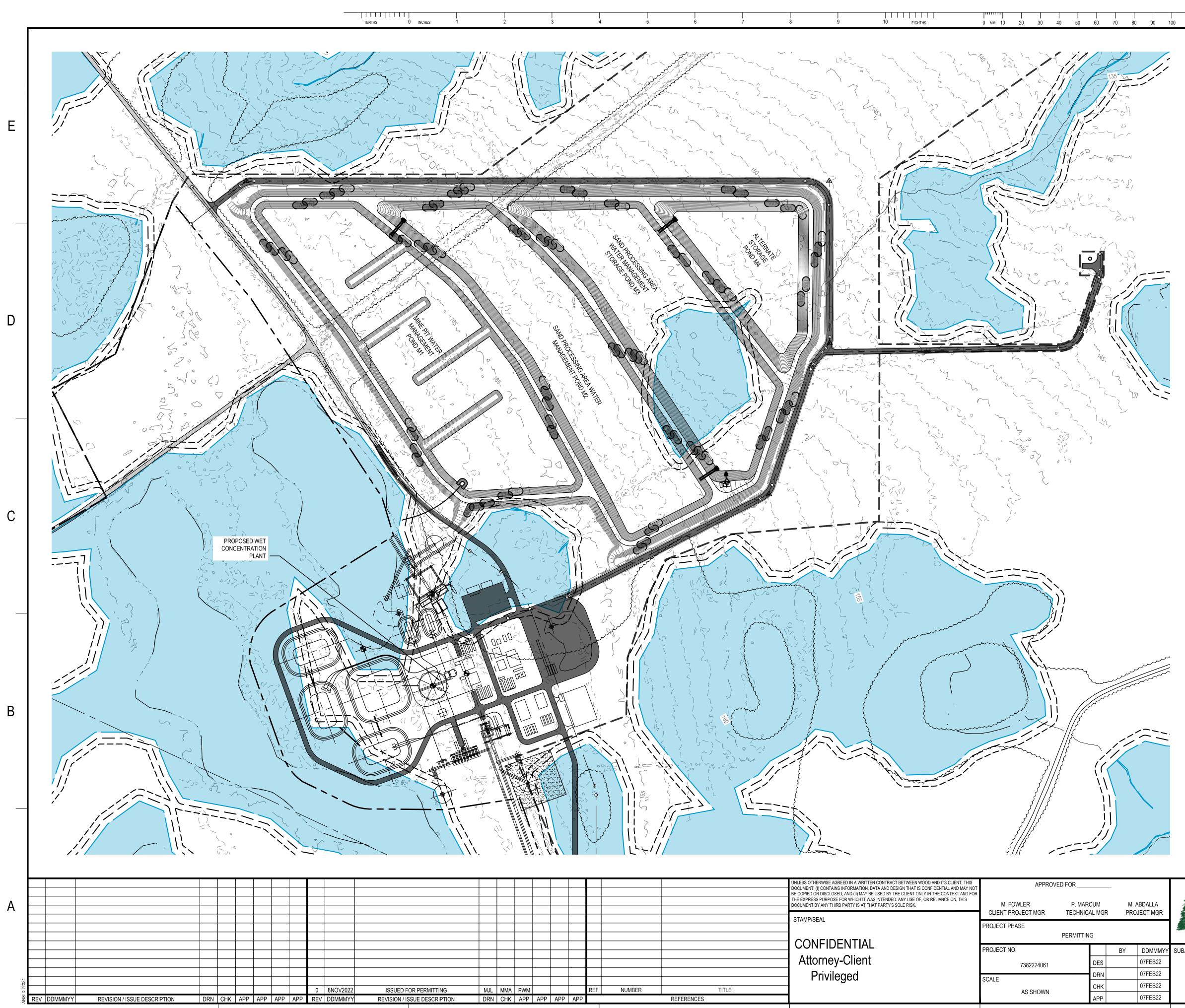
•• RESTORE AREA TO PRE-CONSTRUCTION CONDITIONS

PHASE 4 - SAND PROCESSING AREA WATER MANAGEMENT POND (2)

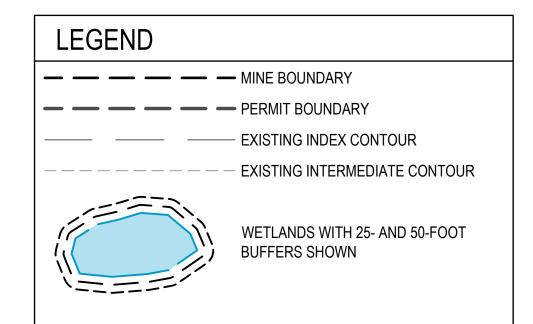
- OPEN SLUICE GATES
- DRAIN SAND PROCESSING AREA WATER MANAGEMENT POND (2)
- CLOSE SLUICE GATES DECOMMISSION POND
- •• REMOVE LINER SYSTEM
- •• REMOVE SLUICE GATES, HEADWALL AND CULVERT
- REMOVE BERM •• •• RESTORE AREA TO PRE-CONSTRUCTION CONDITIONS



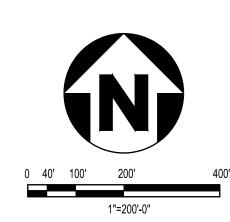
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LA /IGR		TWIN PINES MINERALS LLC SAUNDERS DEMONSTRATION MINE MINE ID 2073 WATER MANAGEMENT PONDS		4000 MEADOW LAKE DRIVE SUITE 121 BIRMINGHAM, AL 35242 (205) 980-6402			POND CLOSURE PLAN.DWG	
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					CONFIDENTIAL Attorney-Client	M. FOWLER P. MARCUI					TWIN PINES MINERALS LLC SAUNDERS DEMONSTRATION MINE MINE ID 2073 WATER MANAGEMENT PONDS	4000 MEADOW LAKE DRIVE SUITE 121 BIRMINGHAM, AL 35242 (205) 980-6402		3 AND WETLANDS
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