

LETTER OF TRANSMITTAL

LANDMARK

ENGINEERING SCIENCES, INC.

119 COOLIDGE AVENUE - SUITE 100, WAUKESHA, WISCONSIN 53186-6602

TELEPHONE:: 414-719-2769

LANDMARK-ENGINEERING@LIVE.COM

To: Kyle Weitermann
JBJ Companies, Inc.
W178N9912 Rivercrest Drive, Suite 101
Germantown, WI 53022-4645

Date: October 20, 2025

Project #: 4244.00 – Lot 10, The Oaks subdivision

Description: Engineering Services – Residential Construction
Elmwood Road & Wejegi Drive
Hubertus (Village of Richfield), WI 53033

C: Brian Bence – JBJ Companies
Cindy Schmitt – JBJ Companies

WE ARE SENDING YOU the following items via: ☐ U. S. Mail ☐ UPS ☐ Hand Deliver ☐ Other:
☐ Fax (8 pages) ☒ E-Mail kyle@jbjcompanies.com & brian@jbjcompanies.com & cindy@jbjcompanies.com

Copies/Qty.	Date	Description
1	20 OCT 2025	Report of Field Density Test Results
1	25 APR 2025	Grading Plan - The Oaks Subdivision
1	15-16JUL25	Laboratory Reports – Soil Samples 1 & 2

THESE ARE TRANSMITTED as checked: ☒ For Approval ☐ For Your Use ☐ As Requested
☐ For Review & Comment ☐ Other:

Message:

As requested, we are sending to you the complete field density test report with laboratory test results for Lot 10 of The Oaks subdivision. We performed periodic field density testing on the selected lot between July 22 – September 30, 2025. The purpose for LandMark's field tests is to verify lift compactions at the requested lot location. The required compaction level for the fill soil is 95% of Modified Proctor (ASTM Standard D1557).

The areas tested consisted of Modified Proctor (Sample #1 and Sample #2). Fill material was excavated on-site and placed below the proposed house location. The fill soil lifts tested and/or retested met project specifications for compaction.

We will continue to do field density testing, concrete testing, and site observations, as requested. If you have any additional questions, please call.

We have enjoyed working with you on this project. *Thank you.*

Copy to: file

Signed:



Mark D. Augustine, PE, PLS, CHMM

If enclosures are not as noted, kindly notify us at once.

LandMark Engineering Sciences, Inc.

119 Coolidge Avenue, Suite 100
Waukesha, WI 53186-6602
Phone: 414-719-2769
Email: landmark-engineering@live.com

Report of Field Density Test Results

Project: The Oaks at Schmitt Farms - Phase I

Project #: 4244.00

Report #: 1

Address: between Elmwood Road & Wejegi Drive
Village of Richfield, WI 53033

Client: JBJ Companies, Inc.
W178N9912 Rivercrest Dr, Suite 101
Germantown, WI 53022-4645

Date: 20OCT2025

Test No.	Date	Location	Elev. (feet)	Sample No.	In-Place Moisture (%)	In-Place Density (pcf)	*In-Place Compaction (%)	Remarks
1	22-Jul-2025	Lot 10	1126.4	1	9.6	117.3	89.8%	B
2	24-Jul-2025	Lot 10 (retest)	1126.4	1	11.0	126.2	96.6%	AC
3	25-Jul-2025	Lot 10	1128.0	1	12.3	124.0	94.9%	AD
4	5-Aug-2025	Lot 10	1129.0	1	7.4	125.6	96.2%	A
5								
6								
7								
8								
9								
10								

Elev = Top of Finished Subgrade

*Required Compaction = 95% of Modified Proctor

- A = In-place density complies with specifications
- B = In-place density less than specifications
- C = In-place density after re-compaction
- D = In-place moisture content >2% of optimum
- E = In-place moisture content <2% of optimum

Sample #1

Modified Proctor (ASTM D1557)

Laboratory Report Date: 16-Jul-2025
Maximum Dry Density (rock corrected): 130.6 pcf
Optimum Moisture (rock corrected): 9.4 %
Description: Dark Brown SAND, some Fines, little Gravel
Source: SWMP Pond C2-3 Basin, 2'-4' depth

Sample #2

Modified Proctor (ASTM D1557)

Laboratory report Date: 15-Jul-2025
Maximum Dry Density (rock corrected): 144.4 pcf
Optimum Moisture (rock corrected): 6.6 %
Description: Brown SAND & GRAVEL, some Fines
Source: SWMP Pond C2-3 Basin, 4'-7'

Sample #3

Modified Proctor (ASTM D1557)

Laboratory Report Date: 17-Sep-2025
Maximum Dry Density (rock corrected): 122.9 pcf
Optimum Moisture (rock corrected): 13.1 %
Description: Brown Clayey SILT, little Sand, trace Gravel
Source: Outlot 8

Sample #4

Modified Proctor (ASTM D1557)

Laboratory Report Date: 12-Sep-2025
Maximum Dry Density (rock corrected): 124.4 pcf
Optimum Moisture (rock corrected): 12.2 %
Description: Brown Clayey SILT, little Sand, trace Gravel
Source: Outlot 8

Tested by: UEC - Joseph Schmidt

Reviewed by: MDA



JBJ Companies, Inc.

GRADING PLAN

GRADING PLAN

DATE OF ISSUANCE		April 30, 2025	
NO	REVISION	DATE	
	BID SET	3-21-2025	
1		4-11-2025	
2		4-25-2025	
SURVEY			
	DRAWN	RMB	
	DESIGNED	P.J.H	
	CHECKED	RMB	
	APPROVED	P.J.H	
PROJ. NO.		193006833	

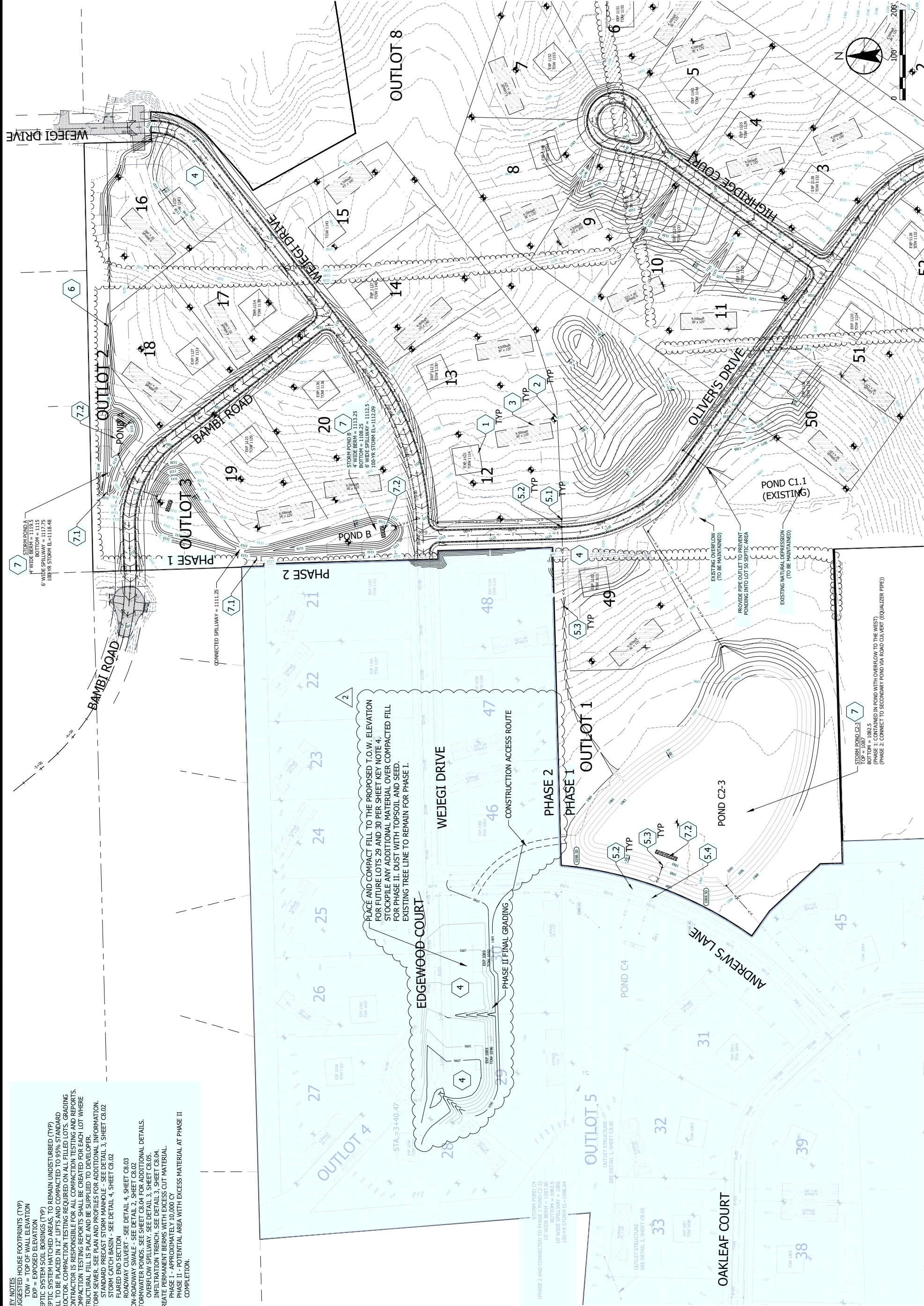
SHEET NUMBER
C3.01



SHEET KEY NOTES

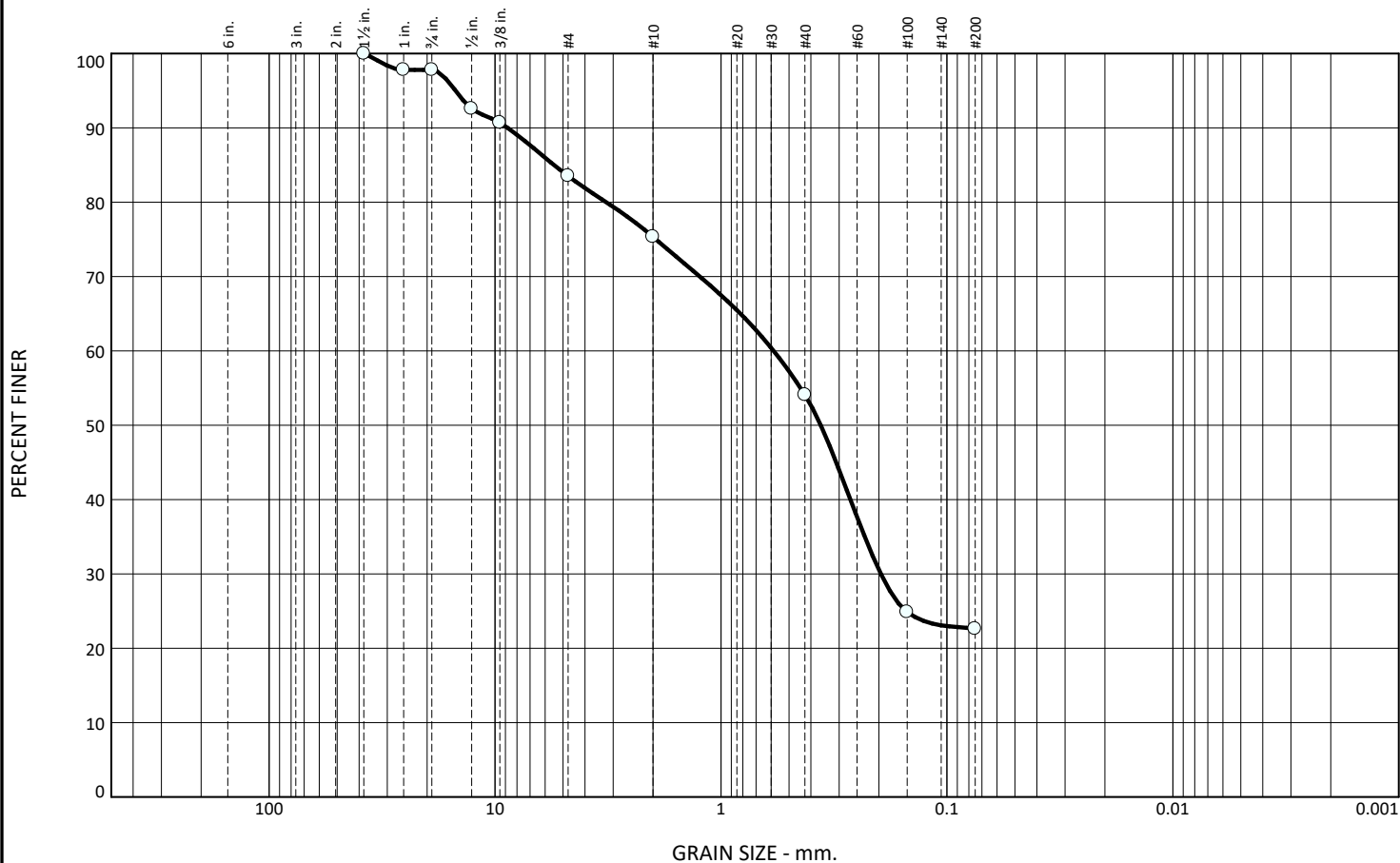
1. SUGGESTED HOUSE FOOTPRINTS (TYP)
- 1.1. TOW = TOP OF WALL ELEVATION
- 1.2. EXP = EXPOSED ELEVATION
2. SEPTIC SYSTEM HATCH BORINGS (TYP)
3. SEPTIC SYSTEM SOILED AREAS, TO REMAIN UNDISTURBED (TYP)
4. FILL TO BE PLACED IN 12" LIFTS AND COMPACTED TO 95% GRADING PROCTOR. COMPACTATION TESTING REQUIRED ON ALL FILLED LOTS. GRADING CONTRACTOR IS RESPONSIBLE FOR ALL COMPACTATION TESTING AND REPORTS. COMPACTATION TESTING REPORTS SHALL BE CREATED FOR EACH LOT WHERE STRUCTURAL FILL IS PLACED AND SHALL BE SUBMITTED TO THE ENGINEER FOR ADDITIONAL INFORMATION.
5. STORM SEWER, SEE PLAN AND PROFILES FOR ADDITIONAL INFORMATION.
- 5.1. STORM PRECAST STORM MANHOLE - SEE DETAIL 3, SHEET C8.02
- 5.2. STORM CATCH BASIN - SEE DETAIL 4, SHEET C8.02
- 5.3. FLARED END SECTION
- 5.4. ROADWAY CURVELET - SEE DETAIL 4, SHEET C8.03
6. NON-ROADWAY SWALE - SEE DETAIL 2, SHEET C8.02
7. STORMWATER POND. SEE SHEET C8.04 FOR ADDITIONAL DETAILS.
- 7.1. OVERFLOW SPILLWAY. SEE DETAIL 3, SHEET C8.05.
8. INfiltration TRENCH - SEE DETAIL 3, SHEET C8.04
- 8.1. CREATE PERMANENT BERMS WITH EXCESS CUT MATERIAL.
- 8.2. PHASE II - APPROXIMATELY 10,000 CY
9. PHASE II - POTENTIAL AREA WITH EXCESS MATERIAL AT PHASE II COMPLETION.

- SHEET KEY NOTES**
1. SUGGESTED HOUSE FOOTPRINTS (TYP)
 - 1.1. TOP = TOP OF WALL ELEVATION
 - 1.2. EXP = EXPOSED ELEVATION
 2. SEPTIC SYSTEM SOIL BORINGS (TYP)
 3. SEPTIC SYSTEM HATCHED AREAS, TO REMAIN UNDISTURBED (TYP)
 4. FILL TO BE PLACED IN 12" LIFTS AND COMPACTED TO 95% STANDARD PROCTOR. COMPACTION TESTING REQUIRED ON ALL FILLED LOTS. GRADING CONTRACTOR IS RESPONSIBLE FOR ALL COMPACTION TESTING AND REPORTS. STRUCTURAL FILL IS PLACE AND BE SUPPLIED TO DEVELOPER.
 5. STORM SEWER, SEE PLAN AND PROFILES FOR ADDITIONAL INFORMATION.
 - 5.1. STANDARD PRECAST STORM MANHOLE - SEE DETAIL 3, SHEET C8.02
 - 5.2. STORM CATCH BASIN - SEE DETAIL 4, SHEET C8.02
 - 5.3. FLARED END SECTION
 - 5.4. ROADWAY CULVERT - SEE DETAIL 4, SHEET C8.03
 - 5.5. NON-ROADWAY SWALE - SEE DETAIL 2, SHEET C8.02
 6. STORMWATER SPILLWAY, SEE SHEET C8.04 FOR ADDITIONAL DETAILS.
 - 7.1. OVERFLOW SPILLWAY, SEE DETAIL 3, SHEET C8.05.
 - 7.2. INFILTRATION TRENCH, SEE DETAIL 3, SHEET C8.04.
 8. CREATE PERMANENT BERMS WITH EXCESS CUT MATERIAL.
 - 8.1. PHASE I - APPROXIMATELY 10,000 CY
 - 8.2. PHASE II - POTENTIAL AREA WITH EXCESS MATERIAL AT PHASE II COMPLETION.



Particle Size Distribution Report

ASTM D422 & D1140



	% +3"		% Gravel		% Sand			% Fines		
			Coarse	Fine	Coarse	Medium	Fine			
☐	0.0		2.2	14.3	8.2	21.2	31.5	22.6		
☒	LL	PL	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
☐	NV	NP	5.4784	0.5846	0.3619	0.1959				

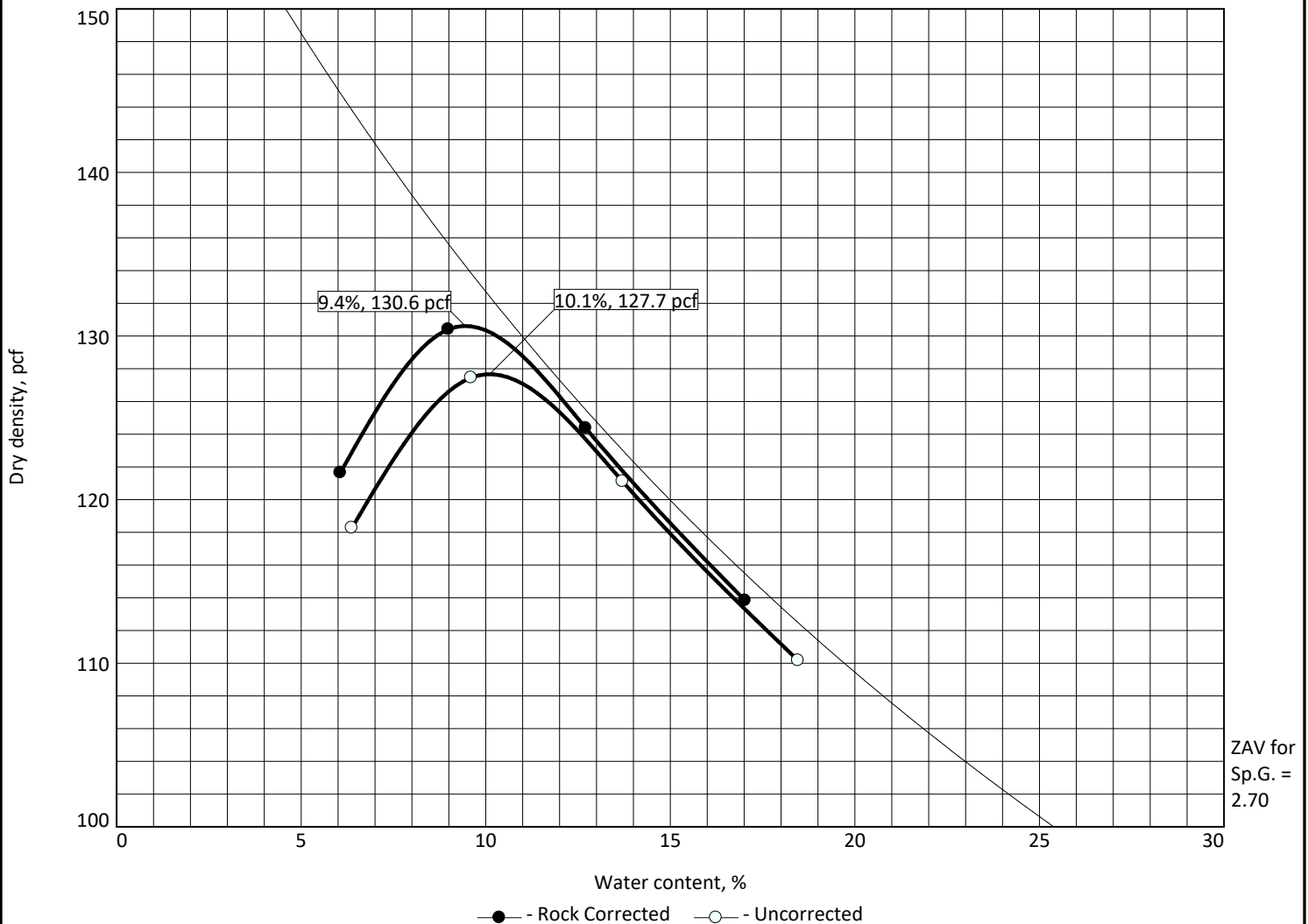
Material Description							Test Date	USCS	NM
☐ Dark Brown SAND, some Fines, little Gravel							07/15/25	SM	16.6

Project No. 25029-1 Client: Landmark Engineering Services, Inc. Project: Proposed Subdivision Elmwood Road Richfield, WI ☐ Depth: 2'-4' Sample Number: 1	Remarks:
	

Figure

Tested By: Joseph Schmitz Checked By: Joseph Schmitz

REPORT OF MOISTURE DENSITY RELATIONSHIP



Test specification: ASTM D 1557-12 Method B Modified
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
2'-4'	SM	A-2-4(0)	16.6	2.7	NV	NP	9.3	22.6

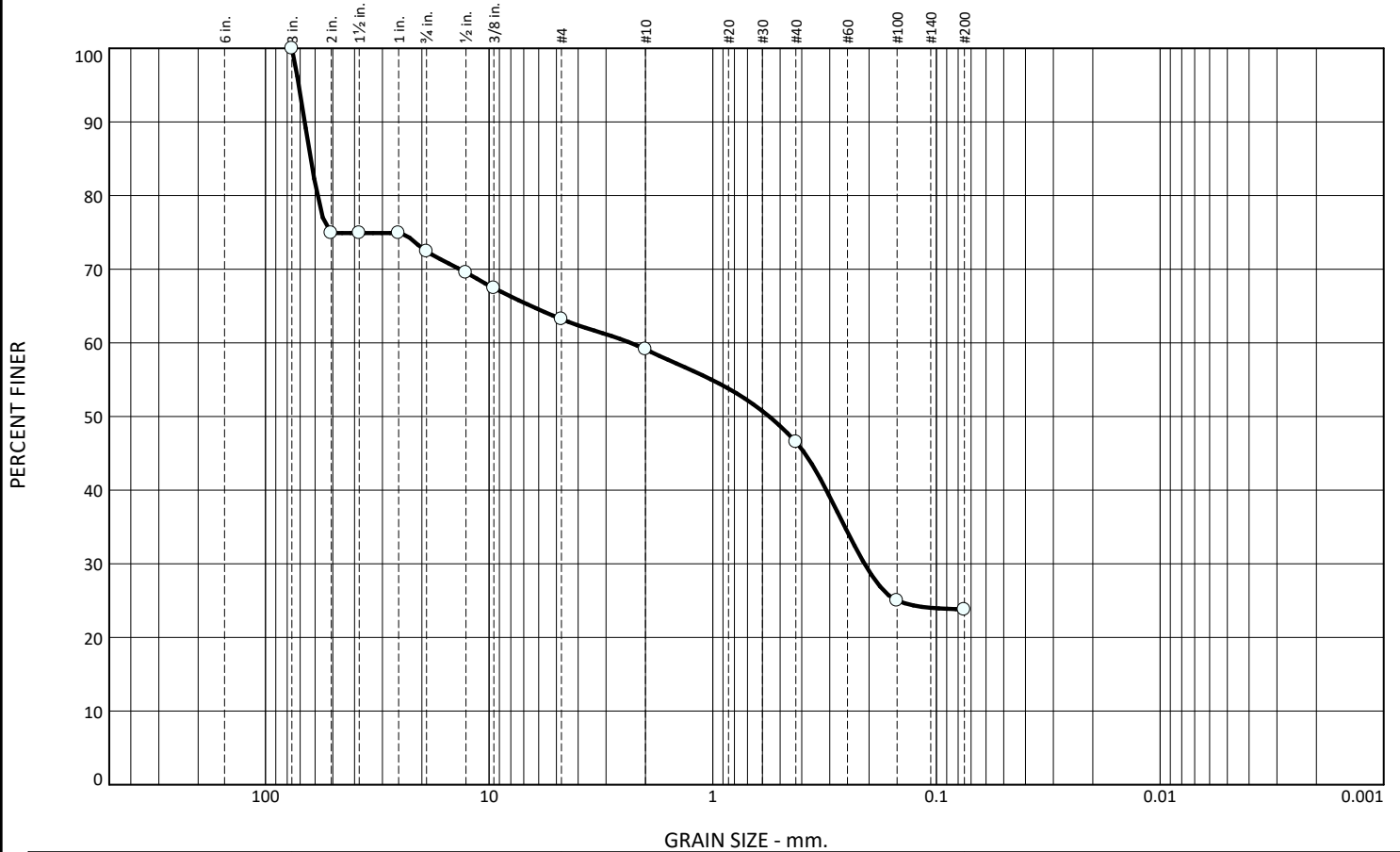
ROCK CORRECTED TEST RESULTS		UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 130.6 pcf		127.7 pcf	Dark Brown SAND, some Fines, little Gravel
Optimum moisture = 9.4 %		10.1 %	
Project No. 25029-2 Client: Landmark Engineering Services, Inc. Project: Proposed Subdivision Elmwood Road Richfield, WI Date: 07/16/25 ☐ Sample Number: 1			Remarks:
			
			Figure

Figure

Tested By: Joseph Schmitz Checked By: Joseph Schmitz

Particle Size Distribution Report

ASTM D422 & D1140



GRAIN SIZE - mm.									
% +3"	% Gravel		% Sand			% Fines			
	Coarse	Fine	Coarse	Medium	Fine				
0.0	27.6	9.2	4.1	12.6	22.7	23.8			
LL	PL	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
NV	NP	62.7590	2.3265	0.5591	0.2095				

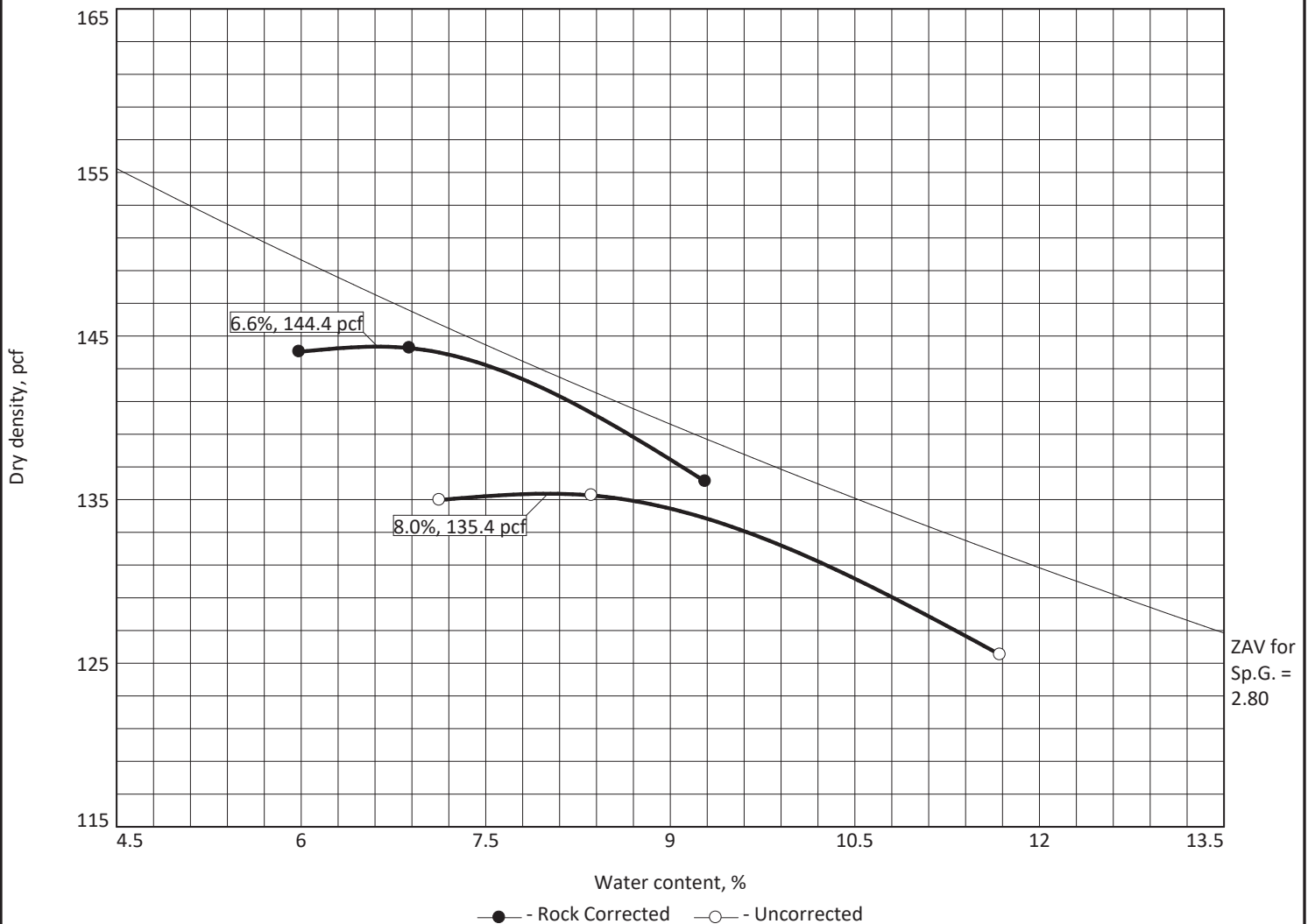
Material Description							Test Date	USCS	NM
Brown SAND and GRAVEL, some Fines							07/15/25	SM	8.9

Project No. 25029-3 Client: Landmark Engineering Services, Inc. Project: Proposed Subdivision Elmwood Road Richfield, WI ☐ Depth: 4'-7' Sample Number: 2	Remarks: 
	

Figure

Tested By: Joseph Schmitz Checked By: Joseph Schmitz

REPORT OF MOISTURE DENSITY RELATIONSHIP



Test specification: ASTM D 1557-12 Method C Modified
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in.	% < No.200
	USCS	AASHTO						
4'-7'	SM	A-1-b	8.9	2.8	NV	NP	27.6	23.8

ROCK CORRECTED TEST RESULTS		UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 144.4 pcf		135.4 pcf	Brown SAND and GRAVEL, some Fines
Optimum moisture = 6.6 %		8.0 %	
Project No. 25029-4Client: Landmark Engineering Services, Inc. Project: Proposed Subdivision Elmwood Road Richfield, WIDate: 07/15/25 Sample Number: 2			Remarks:
UEC			
			Figure

Tested By: Joseph Schmitz

Checked By: Joseph Schmitz