

**REQUEST FOR PROPOSAL
PAVEMENT MANAGEMENT PROGRAM
2025 PROJECTS
Geotechnical Reports
City of Ramsey**

ISSUE DATE
July 9, 2024

PROPOSAL MUST BE RECEIVED BY:
4:00 p.m. on Tuesday, August 6, 2024

EMAIL PROPOSAL TO:
sdamjanovich@cityoframsey.com

or

DELIVER PROPOSAL TO:
City of Ramsey Municipal Center
7550 Sunwood Drive NW
Ramsey, MN 55303
Attn: Stacie Damjanovich
763-433-9895

INTRODUCTION: The City of Ramsey (City) is requesting proposals for the delivery of six (6) geotechnical reports for 2025 projects including;

1. IP 25-02 MSA Sunwood Drive Reconstruction
 - a. Sunwood Drive between Nowthen Blvd (CSAH 5) and Erkiun St.
 - b. Street is approximately 0.20 miles in total length; ADT 1049; Speed Limit 30 mph
 - i. 40-foot wide, includes 2 parking lanes
 - ii. Municipal sewer and water exist under the pavement
 - c. Scope of work includes:
 - i. Five (5) soil borings to a depth of 15-feet per the attached exhibit
 - ii. Five (5) pavement cores
 - iii. A standard geotechnical report including construction feasibility for public utilities and pavement section
 1. MSA Road requires 10-ton pavement design
 - a. Typically, City would do an FDR or SFDR on this type of road
 2. Logs of soil borings with descriptions of nomenclature used for defining the site soils
 3. Estimated subgrade support strength parameters for design of the bituminous roadway and recommendations for soil corrections; Design R-Value estimate
 4. Recommendations for earthwork associated with installation of utilities
 5. Recommendations for management of groundwater for design of structures and pavements
2. IP 25-03 MSA Alpine Drive Reconstruction
 - a. Alpine Drive between Sunfish Lake Blvd (CR 57) and Saint Francis Blvd (TH 47)
 - b. Street is approximately 1.02 miles in total length; ADT 2900; Speed Limit 45 mph
 - i. 45 to 65-foot wide mix of urban and rural, parking lanes both sides
 - ii. Municipal sewer and water exist under the pavement
 - c. Scope of work includes:
 - i. Sixteen (16) soil borings to a depth of 15-feet per the attached exhibit
 - ii. Sixteen (16) pavement cores
 - iii. A standard geotechnical report including construction feasibility for public utilities and pavement section
 1. MSA Road requires 10-ton pavement design
 - a. Typically, City would do an FDR or SFDR on this type of road
 - b. Potential soil corrections expected between Sodium St. and Nowthen Blvd
 2. Logs of soil borings with descriptions of nomenclature used for defining the site soils
 3. Estimated subgrade support strength parameters for design of the bituminous roadway and recommendations for soil corrections; Design R-Value estimate
 4. Recommendations for earthwork associated with installation of utilities
 5. Recommendations for management of groundwater for design of structures and pavements

3. IP 25-04 Dickenson's Mississippi Estates Street Reconstructions
 - a. Subdivision is located generally at Rivlyn Avenue and Tungsten Street
 - i. Streets are approximately 0.26 miles in total length
 1. 32-feet wide, urban section
 2. Municipal sewer and water exist under the pavement
 - a. Project will include replacing watermain
 - ii. Scope of work includes:
 1. Seven (7) soil borings to a depth of 15-feet per the attached exhibit
 2. Seven (7) pavement cores
 - iii. A standard geotechnical report including construction feasibility for public utilities and pavement section
 1. Tungsten Street requires 10-ton pavement design
 2. Rivlyn Avenue requires 7-ton pavement design
 - a. Typically, City would do an FDR or full reconstruction
 3. Logs of soil borings with descriptions of nomenclature used for defining the site soils
 4. Estimated subgrade support strength parameters for design of the bituminous roadway and recommendations for soil corrections; Design R-Value estimate
 5. Recommendations for earthwork associated with installation of utilities
 6. Recommendations for management of groundwater for design of structures and pavements

4. IP 25-05 High Point Street Reconstructions
 - a. Subdivision is generally located east of Ramsey Boulevard
 - i. Streets are approximately 1.67 miles in total length
 1. 30-feet wide, urban section with bituminous curbing
 2. No municipal utilities exist or are proposed
 - ii. Scope of work includes:
 1. Twenty-one (21) soil boring to a depth of 10-feet per the attached exhibit
 2. Twenty-one (21) pavement cores
 - iii. A standard geotechnical report including construction feasibility for public utilities and pavement section
 1. Streets require a 7-ton pavement design
 - a. Typically, City would do an FDR or full reconstruction
 2. Logs of soil borings with descriptions of nomenclature used for defining the site soils
 3. Estimated subgrade support strength parameters for design of the bituminous roadway and recommendations for soil corrections; Design R-Value estimate
 4. Recommendations for earthwork associated with installation of storm sewer pipes and structures
 5. Recommendations for management of groundwater for design of structures and pavements

5. IP 25-06 Sorteberg's Street Reconstructions
 - a. Subdivision is generally located along 159th Lane and Xenolith Street
 - i. Street are approximately 0.54 miles in total length
 1. 31-foot wide, urban section with bituminous curb
 2. No municipal utilities exist or are proposed
 - ii. Scope of work includes:
 1. Eight (8) soil borings to a depth of 10-feet per the attached exhibit
 2. Seven (7) pavement cores
 - iii. A standard geotechnical report including construction feasibility for public utilities and pavement section
 1. Streets require a 7-ton pavement design
 - a. Typically, City would do an FDR or full reconstruction
 2. Logs of soil borings with descriptions of nomenclature used for defining the site soils
 3. Estimated subgrade support strength parameters for design of the bituminous roadway and recommendations for soil corrections; Design R-Value estimate
 4. Recommendations for earthwork associated with installation of storm sewer pipes and structures
 - a. Considerations for infiltration rate within low area at 16021 Xenolith Street
 5. Recommendations for management of groundwater for design of structures and pavements
-
6. 2024 Gravel Roads
 - a. Six (6) gravel roads located across the City
 - i. Streets are approximately 1.90 miles in total length
 - ii. Typically, 24-foot wide rural section
 - b. Scope of work includes:
 - i. Twenty-four (24) soil borings to a depth of 10-feet per the attached exhibit
 - c. A standard geotechnical report including construction feasibility for shallow storm sewer construction and pavement section
 - i. Streets require a 7-ton pavement design
 1. Typical City Street section is 3.5-inch bituminous over 4 to 6-inch class 5
 - ii. Logs of soil borings with descriptions of nomenclature used for defining the site soils
 - iii. Estimated subgrade support strength parameters for design of the bituminous roadway and recommendations for any soil corrections; Design R-Value estimate
 - iv. Recommendations for earthwork associated with installation of storm sewer pipes and structures
 - v. Recommendations for management of groundwater for design of structures and pavements

SOIL BORING REQUIREMENTS: Soil borings to a depth called out above will be taken at stationing shown on the attached "Boring Hole Location" exhibits. Soil borings will alternate between drive lanes as practical. Cores of the existing bituminous pavement will be required. Cores will be taken to verify thickness and structural integrity of the existing pavement and base. Pictures of the cores will be included in the final report. Any additional depth beyond depth called out will be paid per lineal foot. The Contractor must perform sufficient survey work to locate holes approximately 5 feet horizontally and approximately 0.5 feet vertically. The Contractor is responsible for locating all utilities prior to starting boring operations.

SOIL BORING LOG REQUIREMENTS: A field boring log will be prepared by the Contractor for each boring with a copy included in the final report. The field boring logs will include;

- The project identification number
- Location of the boring referenced by centerline stationing
- Boring log number
- Method of drilling and sampling, diameter of bore hole
- Date, name of driller and crew
- Ground surface elevation and ground water elevation measured to the nearest 0.5 feet
- Definition of all symbols that are not otherwise self-explanatory
- Classification, thickness, color, moisture condition (dry, moist, wet, saturated), composition and degree of compactness
- Field number of any samples taken, type of sample and depth taken
- Depth at which obstacles were encountered in advancing the boring
- Any other unusual conditions encountered during drilling and sampling

SCHEDULE: A written schedule of the work shall be submitted identifying all work components and showing work start and completion dates required to comply with the schedule. Once work has commenced, the Contractor shall continuously pursue completion in accordance with the approved schedule. The final Geotechnical Reports must be delivered to the City by Friday, November 1, 2024.

PROPOSAL SUBMITTAL: An itemized quote shall be submitted for the proposed work using the form at the end of this Request for Proposal (RFP).

COMMUNICATION WITH THE CITY: If any requirements of this RFP are not clearly understood, the Contractor is responsible for contacting the City for further clarification in a prompt manner. Responses to inquiries, if they change or clarify the RFP in a substantial manner, will be forwarded by addenda to the RFP.

SUBMISSION: A signed copy of the attached proposal form is requested by **4:00 P.M. Tuesday, August 6, 2024**. Deliver to the Ramsey Municipal Center, 7550 Sunwood Drive NW, Ramsey MN 55303 to the attention of Stacie Damjanovich, Engineering Administrative Assistant. E-mail quotes will be accepted and may be sent to SDamjanovich@cityoframsey.com.

PROPOSAL UNDERSTANDING: By submitting a proposal, the Contractor agrees to be bound to the terms and conditions herein.

COSTS OF PREPARATION: Under no condition will any costs of preparation of the proposal be reimbursed by the City.

LICENSE AND INSURANCE: By submitting a proposal, the Contractor affirms they shall maintain the following minimum insurance coverage while completing their work as related to this RFP in the following amounts: Commercial General Liability \$1,000,000 per occurrence (written on an occurrence based form bodily injury and property damage); automobile liability \$1,000,000 per occurrence (including hired & non-owned bodily injury and property damage). The City of Ramsey shall be named as an additional insured on the Commercial General Liability insurance. Certificates of Insurance for all of the above insurance shall be filed

with the City prior to the work. The Contractor also affirms they shall be licensed to perform the work in the State of Minnesota, and the work shall comply with all state and local laws.

WORKING HOURS: The work shall be carried out during normal working hours so as not to cause any unreasonable nuisance to affected residents and businesses. Under emergency conditions, this limitation may be waived in writing by the Engineer in conjunction with qualified local authority. Normal working hours for this work are considered to be from 7:00 a.m. to 8:00 p.m., Monday through Friday.

WORK AND STAGING AREAS: The Contractor shall confine their work activities within City owned properties and right of way. No equipment shall be left on City streets outside normal working hours.

SPECIFICATIONS: Work shall be conducted in conformance with the specifications set forth herein and in accordance with the latest edition of the Minnesota Department of Transportation Standard Specifications for Construction which is incorporated by reference to these specifications.

TRAFFIC CONTROL: All traffic control devices and layouts shall conform and be installed in accordance to the latest addition of the Minnesota Temporary Traffic Control Field Manual.

PAYMENT: Payment will be made upon submittal of an invoice to the City on a net 30 day basis following City acceptance of the work. An IC 134 form will be required prior to final payment.

BASIS OF AWARD: The City will award each individual project to the lowest proposal, rather than the lowest combined total of all six proposals.

BASIS OF PAYMENT: Payment shall be made for the work on the basis specified below. The cost of any additional labor, materials, permits, tools and supplies which have not been specifically identified in this section for payment, but required to complete the project as per the plans and specifications shall be considered incidental to the project.

Mobilization – Payment shall be made on a lump sum basis for the mobilization of equipment.

Geotechnical Report – Payment shall be made on a lump sum basis as compensation for all development of the geotechnical report meeting the requirements outlined in this RFP.

Soil Boring – Payment shall be made on a per each basis as compensation for all equipment, material and labor costs required for the soil boring and all required documentation of soil borings as outlined in this RFP. Pavement Cores are incidental to the soil boring pay item.

Soil Boring Additional Depth – Payment shall be made on a per lineal foot basis as compensation for all equipment, material and labor costs required for soil boring at depth beyond depth as stated in the introduction. The cost of meeting any Minnesota Department of Health requirement for abandonment of geotechnical soil bore holes, including holes deeper than 15-feet are incidental to this pay item.

Traffic Control – Payment shall be made on a lump sum basis as compensation for all equipment, material, and labor costs required for the installation and maintenance of traffic control measures (signage, barricades, flashers, flaggers, etc.), as directed by the Engineer, for any local traffic disruptions or temporary closures.

PROPOSAL

This proposal is submitted to the City of Ramsey for Pavement Management Program 2025 Projects Geotechnical Reports. That _____ accepts the terms and conditions herein and agrees to deliver the final Geotechnical Reports to the City by the date(s) listed in the schedule section of this RFP, and to complete all work described herein for the following unit prices:

IP 25-02 SUNWOOD DRIVE RECONSTRUCTION

Item No.	Item Description	Unit	Quantity	Price	Extension
1	Mobilization	LS	1	_____	_____
2	Geotechnical Report	LS	1	_____	_____
3	Soil Borings	EA	5	_____	_____
4	Soil Boring Additional Depth Beyond 15-feet	LF	1	_____	_____
5	Traffic Control	LS	1	_____	_____
Total Proposal (Lines 1-5)					_____

IP 25-03 ALPINE DRIVE RECONSTRUCTION

Item No.	Item Description	Unit	Quantity	Price	Extension
1	Mobilization	LS	1	_____	_____
2	Geotechnical Report	LS	1	_____	_____
3	Soil Borings	EA	16	_____	_____
4	Soil Boring Additional Depth Beyond 15-feet	LF	1	_____	_____
5	Traffic Control	LS	1	_____	_____
Total Proposal (Lines 1-5)					_____

IP 25-04 DICKENSON'S MISSISSIPPI ESTATES STREET RECONSTRUCTIONS

Item No.	Item Description	Unit	Quantity	Price	Extension
1	Mobilization	LS	1	_____	_____
2	Geotechnical Report	LS	1	_____	_____
3	Soil Borings	EA	7	_____	_____
4	Soil Boring Additional Depth Beyond 15-feet	LF	1	_____	_____
5	Traffic Control	LS	1	_____	_____
Total Proposal (Lines 1-5)					_____

IP 25-05 HIGH POINT STREET RECONSTRUCTIONS

Item No.	Item Description	Unit	Quantity	Price	Extension
1	Mobilization	LS	1	_____	_____
2	Geotechnical Report	LS	1	_____	_____
3	Soil Borings	EA	21	_____	_____
4	Soil Boring Additional Depth Beyond 10-feet	LF	1	_____	_____
5	Traffic Control	LS	1	_____	_____

Total Proposal (Lines 1-5) _____

IP 25-06 SORTEBERG'S STREET RECONSTRUCTIONS

Item No.	Item Description	Unit	Quantity	Price	Extension
1	Mobilization	LS	1	_____	_____
2	Geotechnical Report	LS	1	_____	_____
3	Soil Borings	EA	8	_____	_____
4	Soil Boring Additional Depth Beyond 10-feet	LF	6	_____	_____
5	Traffic Control	LS	1	_____	_____

Total Proposal (Lines 1-5) _____

2024 GRAVEL ROADS

Item No.	Item Description	Unit	Quantity	Price	Extension
1	Mobilization	LS	1	_____	_____
2	Geotechnical Report	LS	1	_____	_____
3	Soil Borings	EA	24	_____	_____
4	Soil Boring Additional Depth Beyond 10-feet	LF	1	_____	_____
5	Traffic Control	LS	1	_____	_____

Total Proposal (Lines 1-5) _____

Contractor Name _____

Owner or representative _____

Phone(s) _____

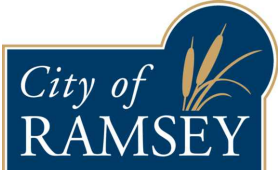
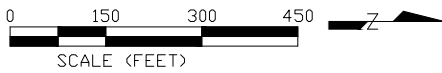
E-mail _____

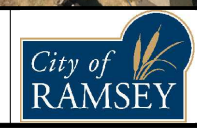
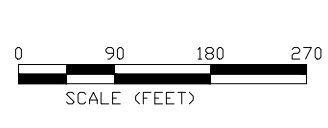
Signature _____

Date _____



IP 25-02 SUNWOOD DRIVE
 (CSAH 5 / ERKIUM STREET)
 SOIL BORING LOCATION MAP



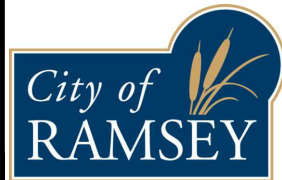
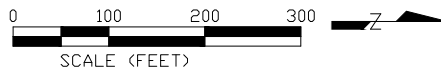


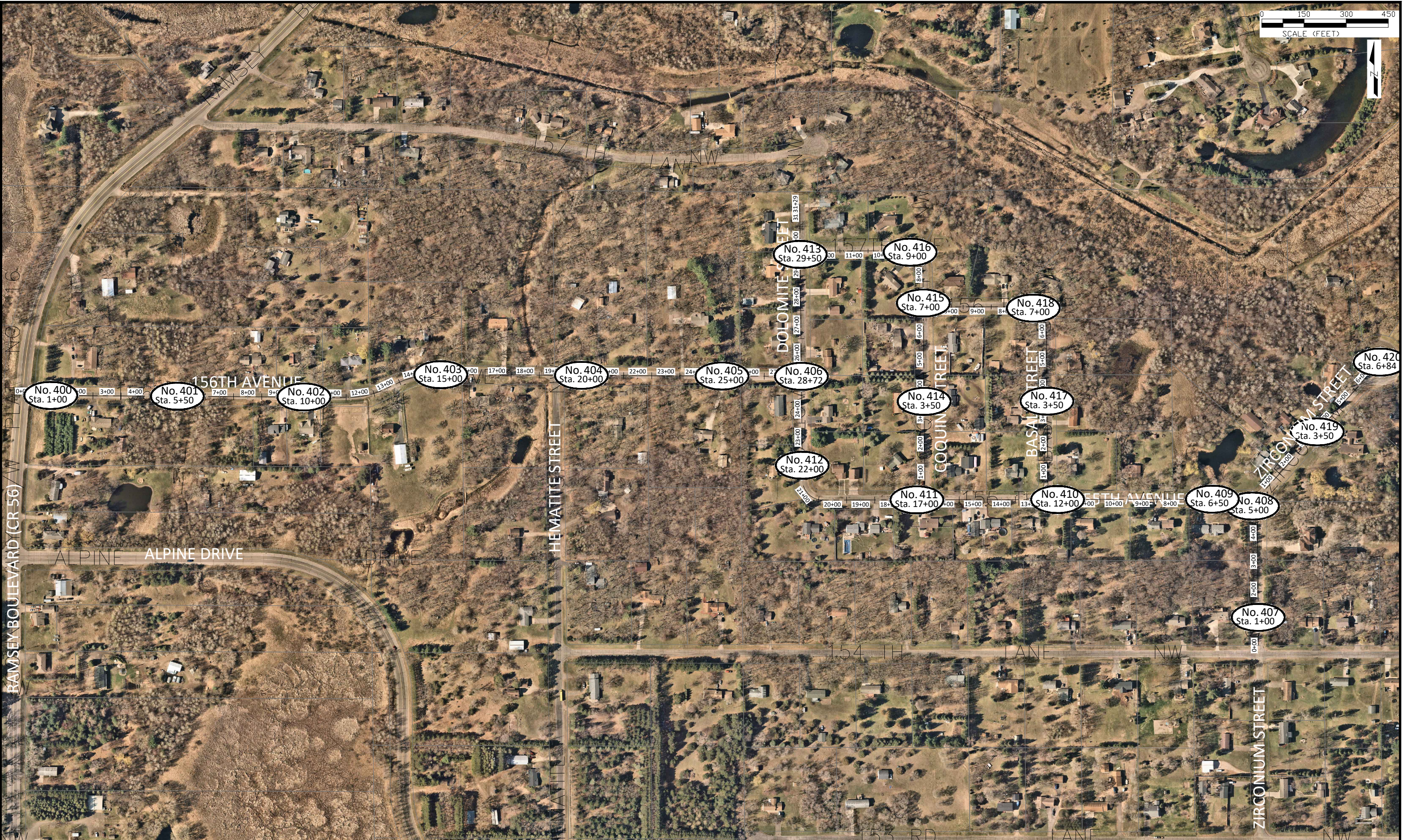
CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

IP 25-03 ALPINE DRIVE (CSAH 5 / TH 47)
SOIL BORING LOCATION MAP



IP 25-04
 DICKENSON'S MISSISSIPPI ESTATES
 SOIL BORING LOCATION MAP





RAMSEY BOULEVARD (CR 56) W PLAIN NW 16

156TH AVENUE

ALPINE DRIVE

HEMATITE STREET

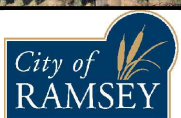
DOLOMITE STREET

COQUIN STREET

BASALT STREET

ZIRCONIUM STREET

ZIRCONIUM STREET

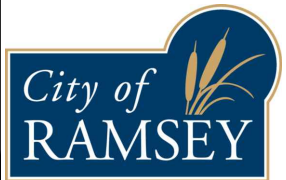
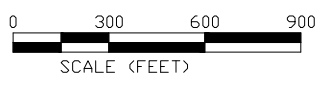


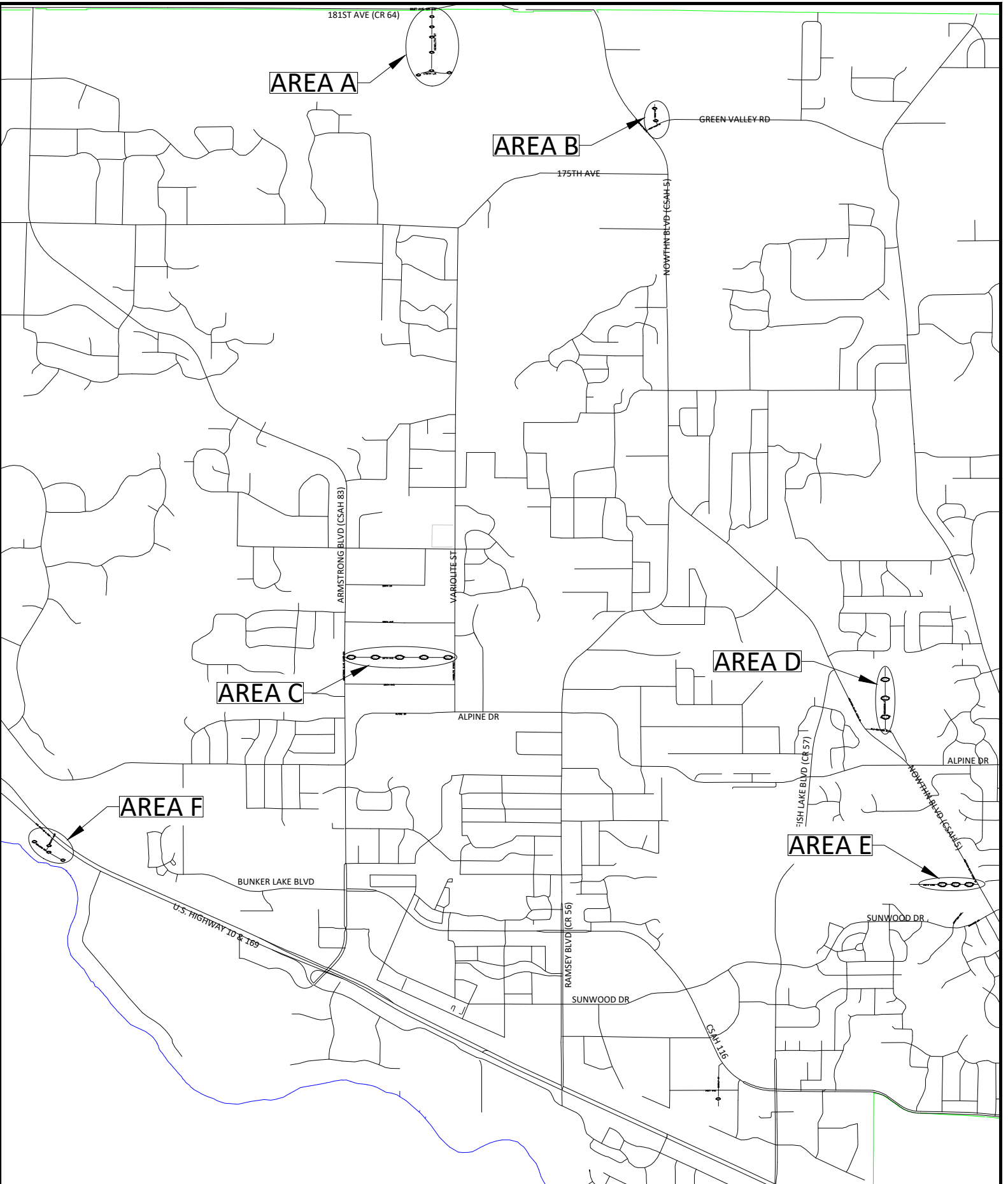
CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

IP 25-05 HIGH POINT STREET RECONSTRUCTION
SOIL BORING LOCATION MAP

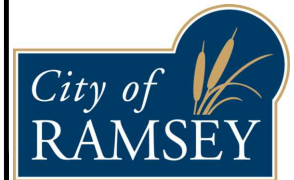
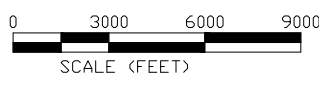


IP 25-06
 SORTEBERG'S
 SOIL BORING LOCATION MAP





2024 GRAVEL ROADS
 SOIL BORING LOCATION MAP
 OVERALL AREA MAP



181ST AVE (CR 64)

No. 01
AREA A

No. 02
AREA A

No. 03
AREA A

No. 04
AREA A

No. 05
AREA A

No. 06
AREA A

No. 07
AREA A

XENOLITH ST

1 1 2
CAROLINE

1 2 3

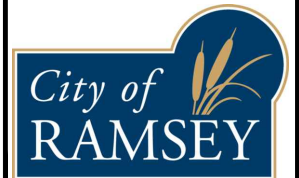
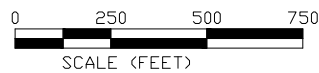
178TH LN

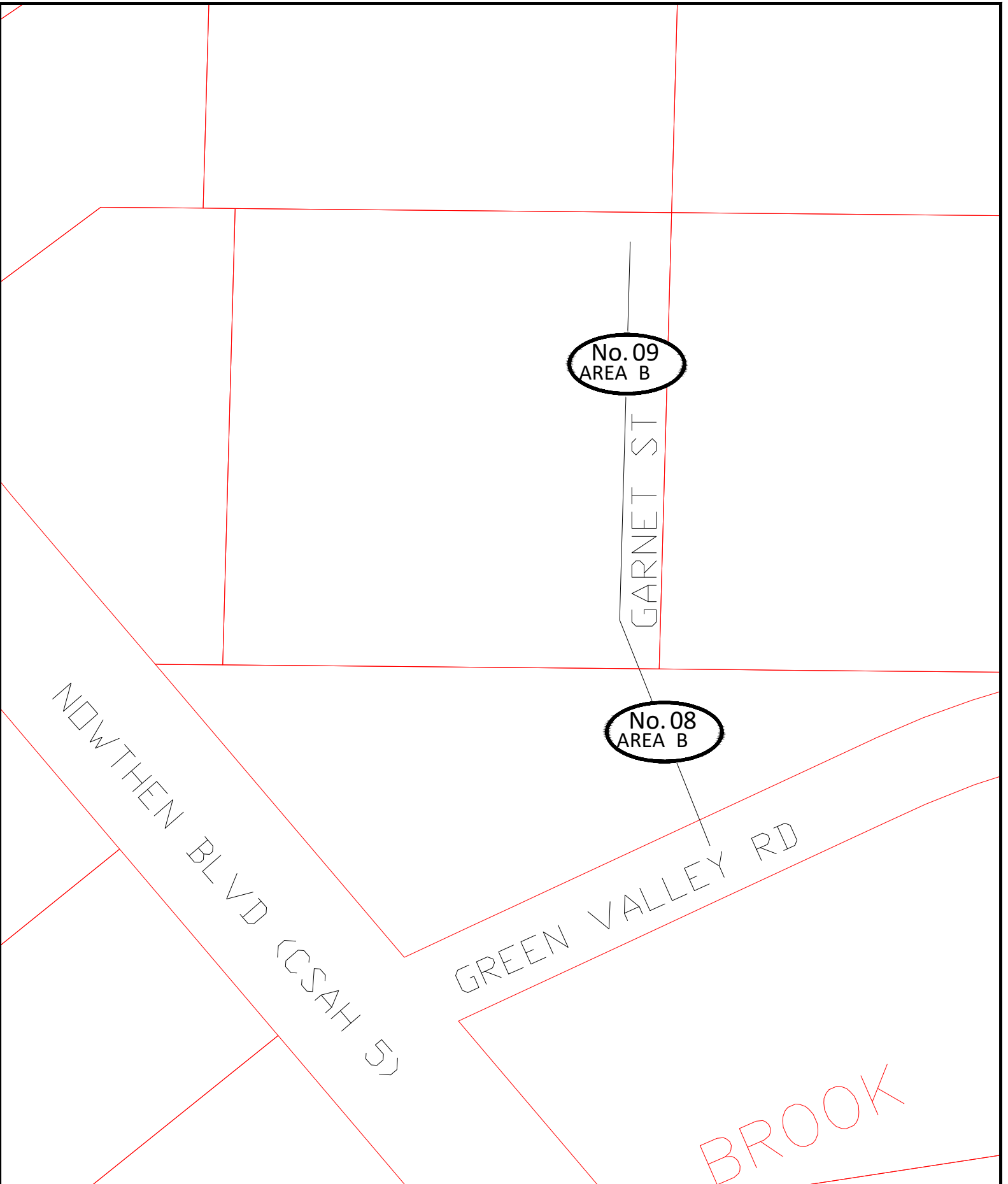
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ACRES

PARK

2024 GRAVEL ROADS
SOIL BORING LOCATION MAP
AREA A





No. 09
AREA B

GARNET ST

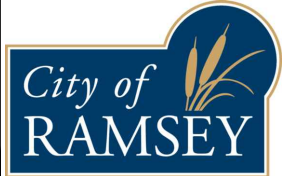
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AREA B

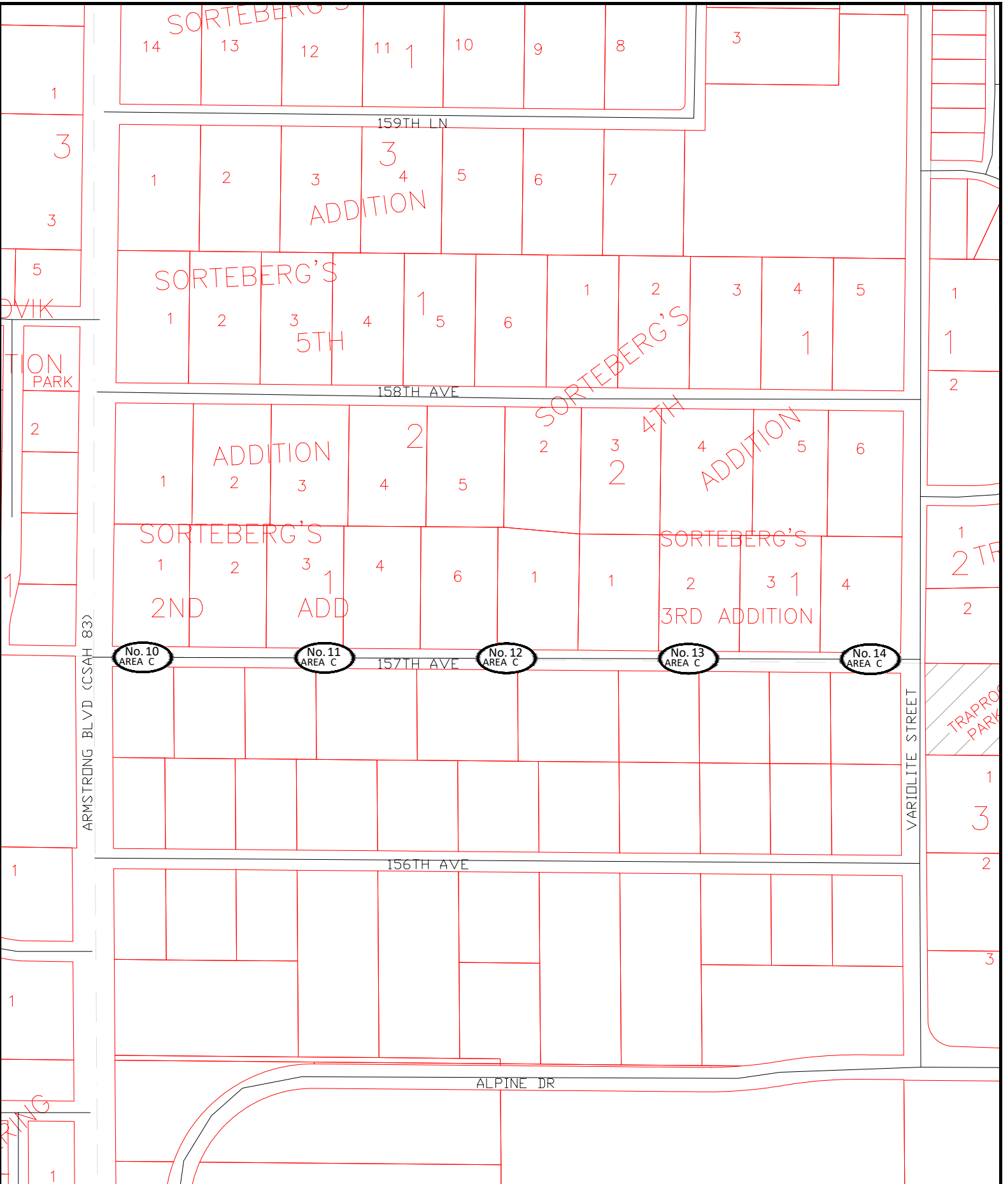
NORTHTHEN BLVD (CSAH 5)

GREEN VALLEY RD

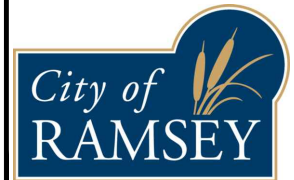
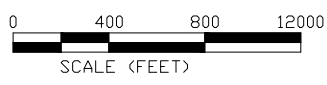
BROOK

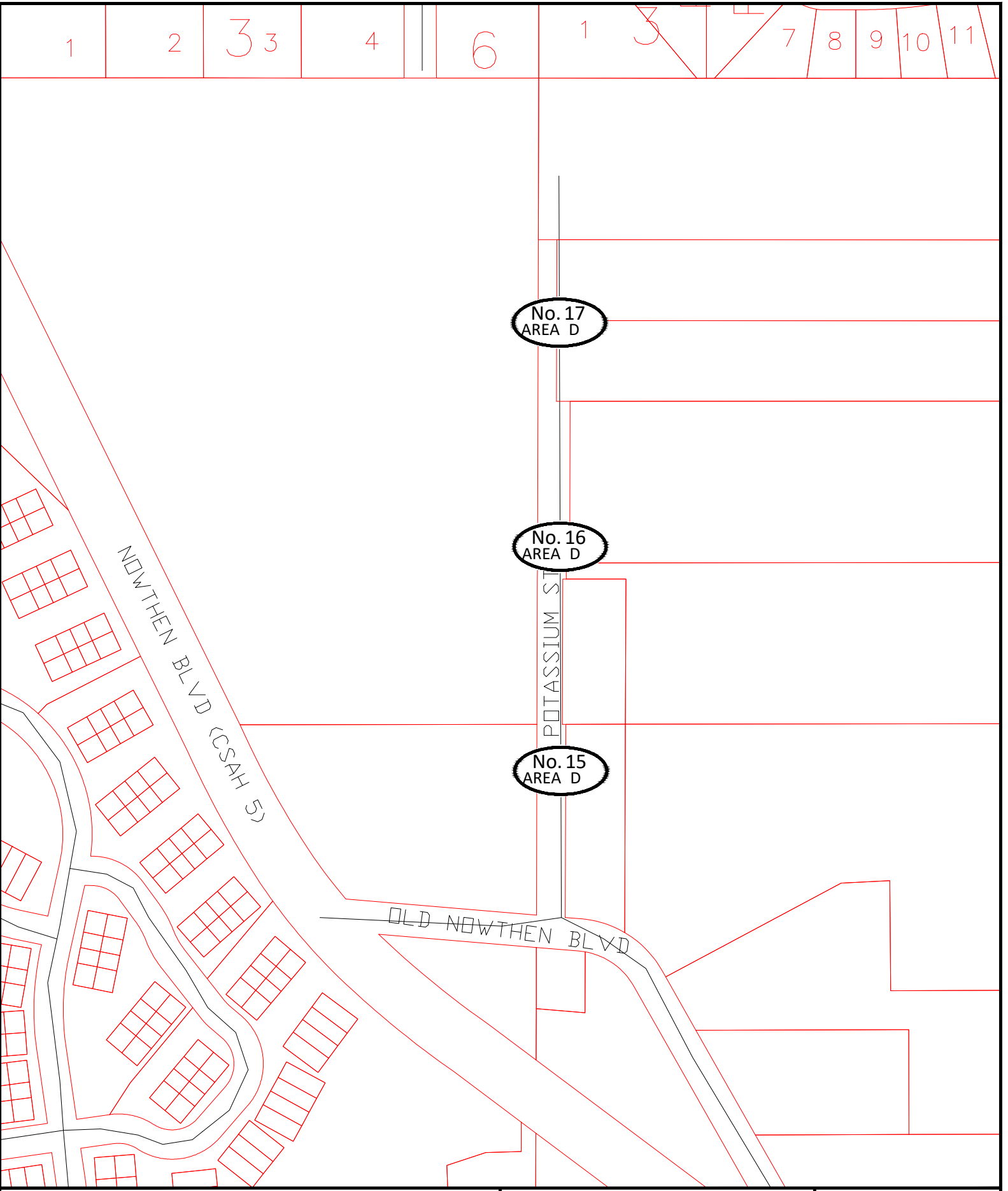
2024 GRAVEL ROADS
SOIL BORING LOCATION MAP
AREA B



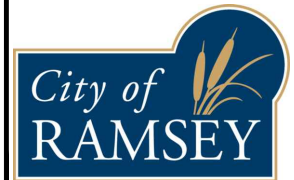
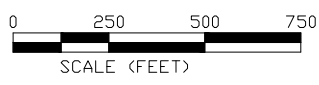


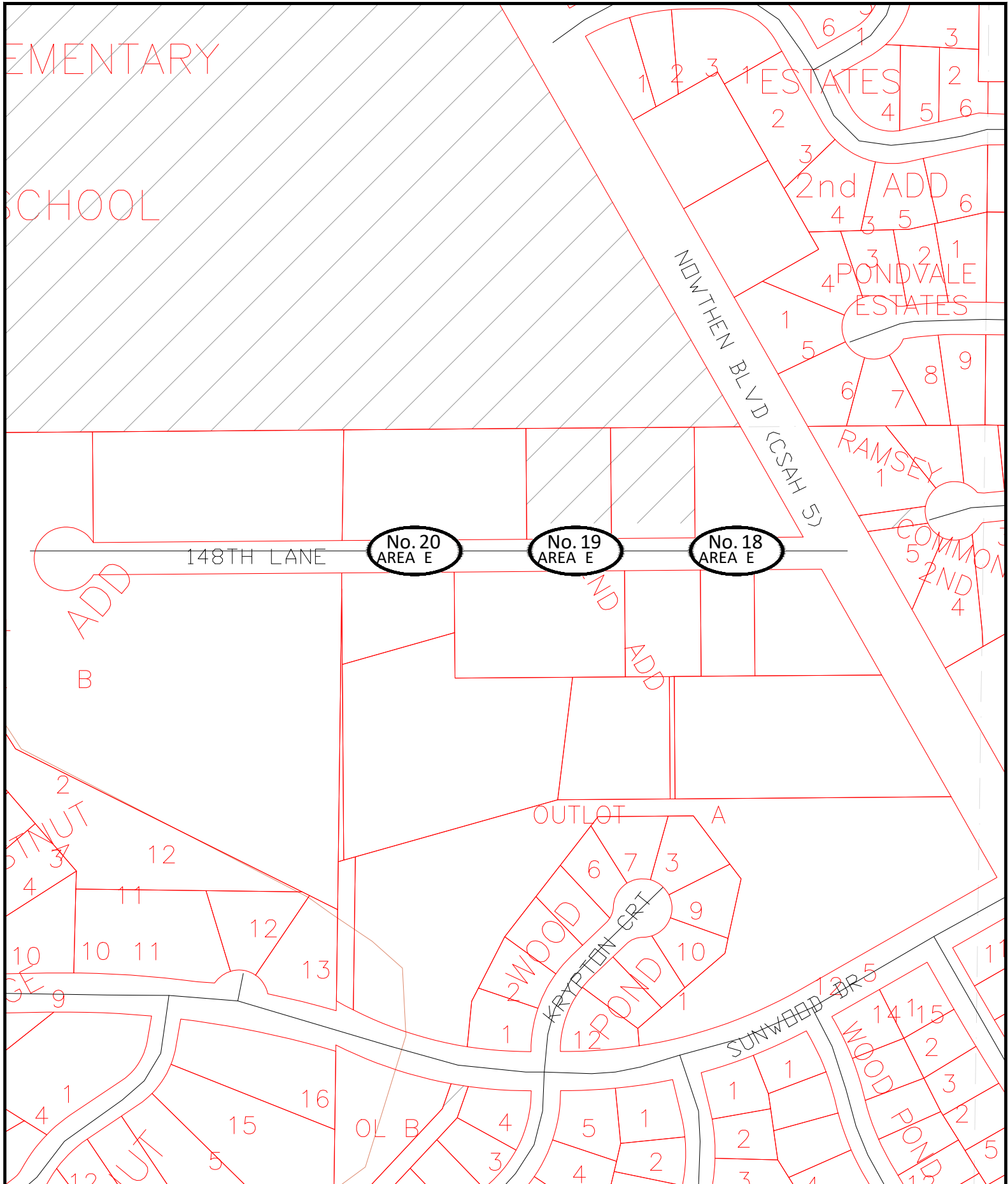
2024 GRAVEL ROADS
SOIL BORING LOCATION MAP
AREA C



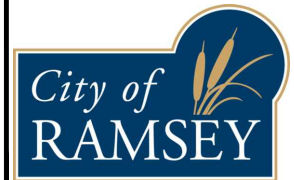
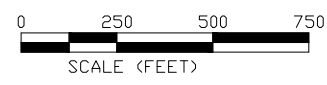


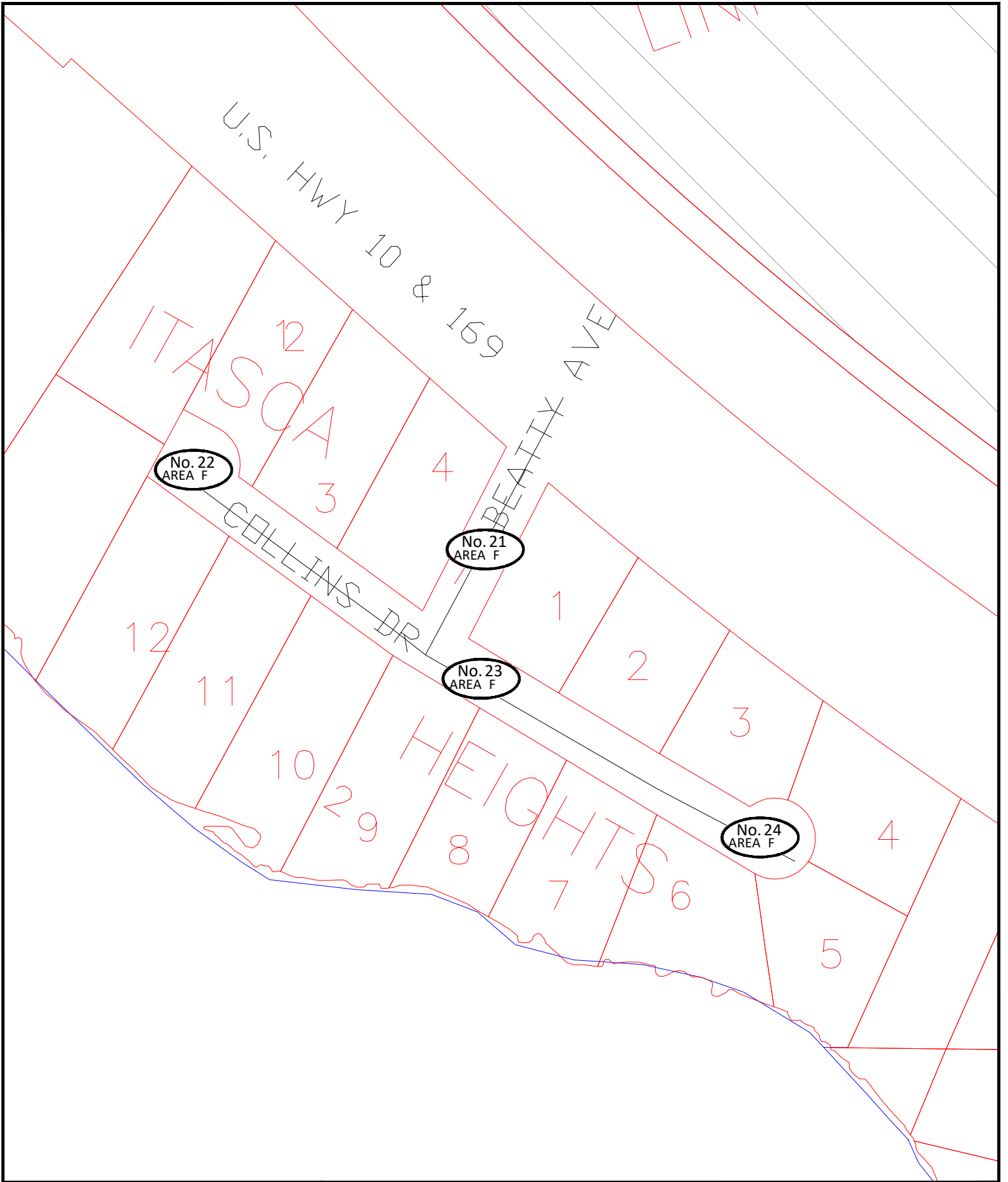
2024 GRAVEL ROADS
SOIL BORING LOCATION MAP
AREA D



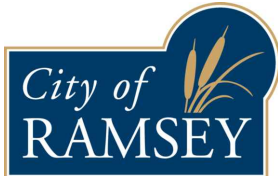
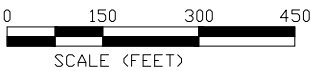


2024 GRAVEL ROADS
SOIL BORING LOCATION MAP
AREA E





2024 GRAVEL ROADS
SOIL BORING LOCATION MAP
AREA F



25-02 MSA Sunwood Drive (CSAH 5 / Erkium Street) Reconstruction

Street Segment Summary

Street	Segment Description	Length (feet)	Section (Urban / Rural)	2023 PASER	Year Built	Maint. 1	Maint. 2	Maint. 3	Avg HMA (inches)	Avg Agg. Base (inches)	Avg Section (inches)
Sunwood Drive	Nowthen Boulevard (CSAH 5) / Erkium Street	1065	Urban	4	1993	SC 1998	SC 2006	SC 2013	4.2	2.2	6.4
<i>Sunwood Drive Total Length</i>		<i>1065</i>	<i>0.2 mi.</i>								

**IP 25-03 MSA Alpine Drive (CR 57 / TH 47) Reconstruction
Street Segment Summary**

Subdivision	Street	Segment Description	Length (feet)	Section (Urban / Rural)	2023 PASER	Year Built	Maint. 1	Maint. 2	Maint. 3	Avg HMA (inches)	Avg Agg. Base (inches)	Avg Section (inches)
MSA Alpine Drive	Alpine Drive	CR 57 / Pt 500 feet east of CR 57	510	Urban	6	1991	SC 1995	SC 2002	SC 2017	5.1	n/a*	n/a*
	Alpine Drive	Pt 500 feet east of CR 57 / CSAH 5	1944	Urban	5	1991	SC 1995	SC 2002	SC 2017	5.1	n/a*	n/a*
	Alpine Drive	CSAH 5 / Junkite Street	1297	Urban & Rural	5	1980	SC 1989	OL 2002	SC 2009	4.3	n/a*	n/a*
	Alpine Drive	Junkite Street / TH 47	1621	Urban	5	1980	SC 1989	OL 2002	SC 2009	4.3	n/a*	n/a*
MSA Alpine Drive (CR 57 / TH 47) Total Length			5372	1.017 mi.	* GPR Inconsistency with apparent base thickness, value could not be determined							

**IP 25-04 Dickenson's Mississippi Estate Street Reconstructions
Street Segment Summary**

Subdivision	Street	Segment Description	Length (feet)	Section (Urban / Rural)	2023 PASER	Year Built	Maint. 1	Maint. 2	Maint. 3	Avg HMA (inches)	Avg Agg. Base (inches)	Avg Section (inches)
Dickenson's Mississippi Estate	Tungsten Street	Rivlyn Avenue / Riverdale Drive	393	Urban	4	1990	SC 1996	SC 2003	SC 2013	3.4	n/a*	n/a*
	Rivlyn Avenue	West cul-de-sac / East Edge of Plat	992	Urban	4	1990	SC 1996	SC 2003	SC 2013	2.7	3.7	6.4
Dickenson's Mississippi Estate Total Length			1385	0.262 mi.	* GPR No Base visible, value could not be determined							

**IP 24-05 High Point Street Reconstructions
Street Segment Summary**

Subdivision	Street	Segment Description	Length (feet)	Section (Urban / Rural)	2023 PASER	Year Built	Maint. 1	Maint. 2	Maint. 3	Maint. 4	Maint. 5	Avg HMA (inches)	Avg Agg. Base (inches)	Avg Section (inches)
Section 22 Unplatted	156th Avenue	CR 56 / West Edge of Plat High Point	2587	Urban (Bit. Curb)	5	1989	SC 1996	OL 2001	SC 2007	SC 2014		2.5	4.8	7.2
<i>Section 22 Unplatted Total Length</i>			<i>2587</i>	<i>0.49 mi.</i>										
High Point	155th Avenue	NW PC Dolomite Street / Zirconium Street	1607	Urban (Bit. Curb)	3	1979	SC 1985	SC 1993	OL 2001	SC 2007	SC 2014	4.3	4.2	8.5
	156th Avenue	Coquina Street / NW PC Basalt Street & 156th Avenue	411	Urban (Bit. Curb)	5	1979	SC 1985	SC 1993	OL 2001	SC 2007	SC 2014	3.5	n/a*	n/a*
	156th Avenue	West Edge of Plat / Dolomite Street	211	Urban (Bit. Curb)	5	1979	SC 1985	SC 1993	OL 2001	SC 2007	SC 2014	2.5	4.8	7.3
	157th Avenue	Dolomite Street / NW PC Coquina Street & 157th Avenue	440	Urban (Bit. Curb)	4	1979	SC 1985	SC 1993	OL 2001	SC 2007	SC 2014	4.1	4.4	8.5
	Basalt Street	155th Avenue / NW PC 156th Avenue & Basalt Street	681	Urban (Bit. Curb)	5	1979	SC 1985	SC 1993	OL 2001	SC 2007	SC 2014	3.7	2.5	6.2
	Coquina Street	155th Avenue / NW PC 157th Avenue & Coquina Street	844	Urban (Bit. Curb)	4	1979	SC 1985	SC 1993	OL 2001	SC 2007	SC 2014	3.6	3.7	7.3
	Dolomite Street	NW PC 155th Avenue & Dolomite Street / North Edge of Plat	1079	Urban (Bit. Curb)	4	1979	SC 1985	SC 1993	OL 2001	SC 2007	SC 2014	3.9	3.9	7.8
	Zirconium Street	155th Avenue / Cul-de-sac	763	Urban (Bit. Curb)	4	1979	SC 1985	SC 1993	OL 2001	SC 2007	SC 2014	3.4	n/a*	n/a*
	Zirconium Street	South Edge of Plat / 155th Avenue	211	Urban (Bit. Curb)	3	1979	SC 1985	SC 1993	OL 2001	SC 2012		3.4	n/a*	n/a*
<i>High Point Total Length</i>			<i>6247</i>	<i>1.183 mi.</i>	<i>* GPR Base not visible, value could not be determined</i>									
High Point & Section 22 Unplatted Total Length			8834	1.673 mi.										

**IP 25-06 Sorteberg's Street Reconstructions
Street Segment Summary**

Subdivision	Street	Segment Description	Length (feet)	Section (Urban / Rural)	2023 PASER	Year Built	Maint. 1	Maint. 2	Maint. 3	Avg HMA (inches)	Avg Agg. Base (inches)	Avg Section (inches)
Sorteberg's	159th Lane	CSAH 83 / Xenolith Street	1929	Urban (Bit Curb)	4	1979	OL 1994	SC 2001		3.3	4.1	7.4
	Xenolith Street	159th Lane / 161st Avenue	898	Urban (Bit Curb)	4	1979	OL 1994	SC 2001		3.7	6.6	10.3
Dickenson's Mississippi Estate Total Length			2827	0.535 mi.								

2024 Gravel Road Segment Summary				
Area	Street	Segment Description	Length (feet)	Length (miles)
A	178th Lane	Cul-de-sac East / Xenolith Street	462	0.09
	178th Lane	Cul-de-sac West / Xenolith Street	371	0.07
	Xenolith Street	178th Lane / 181st Avenue (CR 64)	1525	0.29
Area A Total			2358	0.45
B	Garnet Street	Green Valley Road / North Termini	508	0.10
Area B Total			508	0.10
C	157th Avenue	Armstrong Boulevard (CSAH 83) / Variolite Street	2709	0.51
Area C Total			2709	0.51
D	Potassium Street	Old Nowthen Boulevard / North Termini	1516	0.29
Area D Total			1516	0.29
E	148th Lane	Nowthen Boulevard (CSAH 5) / Cul-de-sac West	1671	0.32
Area E Total			1671	0.32
F	Beatty Avenue	U.S. Highway 10 & 169 / Collins Drive	360	0.07
	Collins Drive	Cul-de-sac West / Cul-de-sac East	927	0.18
Area F Total			1287	0.24
2024 Gravel Road Total Length			10049	1.90