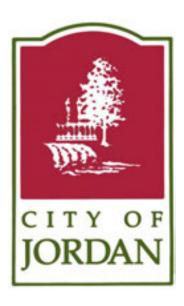


Real People. Real Solutions.

Feasibility Report for **2024 Infrastructure Improvements Project** City of Jordan, MN

January 22, 2024



Prepared by: Bolton & Menk, Inc. 12224 Nicollet Avenue Burnsville, MN 55337





Certification

Feasibility Report

for

2024 Infrastructure Improvements Project

City of Jordan, MN

BMI Project No. 0T1.132551

January 2024

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision, and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

By:

Ryan Peterson, P.E. License No. 42844

Date: January 22, 2024

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1.0 INTRODUCTION

This report examines the proposed infrastructure improvements for the City of Jordan's 2024 Infrastructure Improvement's Project. This project consists of several sub projects that are identified in the City's Capital Improvement Plan (CIP). These projects are scheduled for construction in 2024 in the CIP.

The proposed improvements include a combination of mill and overlay and full depth reclamation. The following streets in the Heritage Hills Area are proposed to receive a 2" mill and overlay:

- 1. Liberty Lane from Minnesota Valley Electric Drive to north cul-de-sac
- 2. Arabian Drive from Minnesota Valley Electric Drive to Lydia Road
- 3. Lydia Road from Hwy 282 to Arabian Drive
- 4. Homestead Drive from Arabian Drive to westerly terminus
- 5. Clover Court from Homestead Drive to southerly cul-de-sac
- 6. Colony Court from Lydia Road to westerly cul-de-sac
- 7. Maple Lane from Lydia Road to westerly terminus

The following streets in the Lowertown Area are proposed to receive a 2" mill and overlay:

1. First Street from West Street N to westerly terminus west of Mertens Street

The following streets in the Lowertown Area are proposed to be full depth reclaimed in place:

- 1. Mertens Street from First Street to Second Street
- 2. Wood Street form First Street to Second Street
- 3. West Street from First Street to Second Street

The resurfacing/street reclamation improvements will also include ADA pedestrian ramp improvements, and spot curb and gutter replacement.

The following alleys are proposed to be improved:

- 1. Alley from 6th Street north towards Hwy 169 and then east to Varner Street
- 2. Alley north of 1st Street and south of 2nd Street from Mertens Street to Rice Street

Four blocks of alley improvements are proposed for the alleys ½ block south of Second Street (Hwy 282) from Mertens Street to Rice Street. Proposed improvements for these four blocks of alley include salvaging the existing aggregate, excavating for the new alley section, reinstalling the aggregate base, and providing a 6" concrete pavement surface. The alleys have minimal longitudinal grade (generally less than 1.0%) and thus concrete pavement is recommended to achieve proper drainage. Storm sewer is recommended for the alley between Wood Street and West Street at a low point that will not surface drain. A storm sewer inlet is proposed at the low point and routed to an existing storm sewer pipe in West Street at 2nd Street via a new storm sewer pipe. West Street is proposed to be reclaimed in place with this project, so constructing the new storm sewer

with the same project will be able to be coordinated.

Another two and a half blocks of alley improvements are proposed ½ block north of 6th Street West from Varner Street to its westerly end where it turns southward to its ultimate terminus at 6th Street West. The improvements for these blocks of alley include salvaging the existing aggregate, excavating for the new alley section, reinstalling the aggregate base, and providing a 6" concrete pavement surface. These alleys will be designed to promote drainage away from existing private property to correct drainage challenges that currently exist. The alleys are very flat, but they will all have positive drainage and will recognize drainage improvement when the improvements are completed.

The above-mentioned project areas can be seen in **Figure 1** below and in Appendix A at the end of this report.

This report will review the existing conditions in the project areas and discuss, in detail, the proposed improvements. It will also provide preliminary cost estimates for the proposed improvements with financial needs from various funding sources including the City's Street Fund, MSA Maintenance Funds, and assessments for alley improvements.

If the City decides to proceed with the proposed infrastructure improvements described in this report, it is anticipated construction would occur during the 2024 construction season as shown in the project schedule found in Section 9 of this report.

2.0 PROJECT INITIATION & BACKGROUND

The 2024 infrastructure Improvements Project was initiated at the October 23, 2023 City Council Meeting after being listed in the city of Jordan's Capital Improvement Program. The feasibility study and report have been completed to identify the infrastructure improvements needed in the proposed project areas, define estimated costs and preliminary assessments associated with the improvements, and document these findings for use by decision makers. This report will also be used as the basis for the final design component of the project. The report complies with the requirements of MN Statute 429 for levying special assessments to benefitting properties.

This report examines the proposed street and pedestrian improvements on the streets identified in the project area. The project areas consist of the Lowertown Area, Heritage Hills Area, and 6 blocks of alleys, in Jordan. The project areas are shown in Figure 1 below.

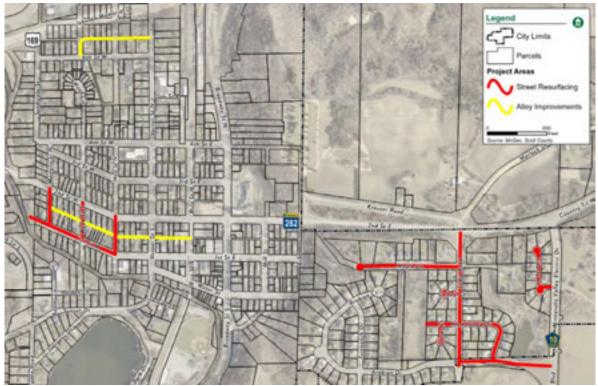


Figure 1: Project Location Map

The project scope involves:

- Bituminous mill and overlay
- Full depth street reclamation and bituminous paving
- Spot replacement of deficient curb and gutter
- Improvements to provide ADA compliance of pedestrian facilities
- Alley improvements

A geotechnical evaluation of the project areas was completed in November 2023 to facilitate evaluation of existing street conditions, included with this report as Appendix D. Additionally, a drone flight was completed to collect imagery and surface data of the project area. Questionnaires were sent to residents adjacent to the project areas in order to collect additional input on project needs. Input from the geotechnical report, City staff, and residents was incorporated into the report recommendations.

3.0 EXISTING CONDITIONS

A. Streets

The street segments in the Lowertown area of the 2024 Infrastructure Improvements Project consist of 0.4 miles of local roads. These local roadways are relatively low volume, low speed roadways serving land uses which are largely single family residential homes. Street widths vary from 33'-40'. Most streets have parking available on both side of the street. Physical characteristics of the streets can be found in Table 1.

Streets in the Lowertown area are starting to deteriorate, consistent with expectations given it has been approximately 20 to 25 years since their reconstruction. Most pavement areas are showing pavement distresses such as longitudinal/lateral cracking and stripping. Some areas with increased deterioration are also displaying significant raveling, block cracking, and alligator cracking.

The street segments in the Heritage Hills area of the 2024 Infrastructure Improvements Project consist of 1.1 miles of local roads. These local roadways are relatively low volume, low speed roadways serving land uses which are largely single family residential homes. Street widths generally are 36'. Most streets are wide enough of parking on both sides of the road, but do not have dedicated parking areas. Physical characteristics of the streets can be found in Table 2.

Streets in the Heritage Hills area are starting to deteriorate, consistent with expectations given it has been approximately 20 to 25 years since their original construction. Most pavement areas are showing pavement distresses such as longitudinal/lateral cracking, stripping, and settlement areas likely from utility trenches during original construction.

A geotechnical exploration was performed on the streets in the project area. The exploration consisted of performing ground penetrating radar (GPR) across all streets and taking pavement cores throughout the project area. The cores were used to understand the existing bituminous thickness, physical deterioration of the existing pavement, and determine the appropriate rehabilitation method. A copy of the geotechnical report can be found in Appendix D.

Street	Street Length in Feet	Street Width in Feet (curb face to face)	Average Bituminous Pavement Thickness in Inches (Per GPR)	Pedestrian Facility (If Present)		
First Street: Dead End to Mertens	225	34	4.2			
First Street: Mertens to West	750	40	4.2	Concrete Walk (both sides)		
Mertens Street: First to Second	330	34	4.9	Concrete Walk (West side)		
Wood Street: First to Second	330	30	5.0	Concrete Walk (both sides)		
West Street: First to Second	330	32	4.7	Concrete Walk (both sides)		

Table 1: Existing Street Characteristics for Lowertown Area

Street	Street Length in Feet	Street Width in Feet (curb face to face)	Average Bituminous Pavement Thickness in Inches (Per GPR)	Pedestrian Facility (If Present)			
Maple Lane: Lydia to cul-de-sac	1,035	36	3.9	None			
Lydia Road: Hwy 282/2 nd Street to southerly terminus	1,515	36	4.0	Concrete Walk (west side)			
Colony Court: Lydia Road to cul-de- sac	180	36	5.4	None			
Homestead Drive: Arabian Drive to westerly terminus	1,090	36	4.2	Concrete Walk (north/west sides)			
Clover Court: Homestead Drive to southerly cul-de-sac	205	36	3.8	None			
Arabian Drive: Lydia Drive to Sand Creek Boulevard	950	36	3.7	Concrete Walk (north side)			
Liberty Drive: Sand Creek Boulevard to northerly cul-de-sac	630	38	5.4	None			

Table 2: Existing Street Characteristics for Heritage Hills Area

B. Pedestrian Facilities

Most streets in the Lowertown area of the project have pedestrian facilities on one or both sides of the street. The existing sidewalks are 5'-6' concrete walk. Pedestrian ramps on the walk are comprised of varying configurations and in varying conditions. Most of the existing pedestrian ramps in the Lowertown area do not comply with current ADA standards.

Streets in the Heritage Hills area of the project are mixed between having sidewalk on one side of the road and no sidewalks at all. Most of the existing pedestrian ramps in the Heritage Hills area do not comply with current ADA standards.

C. Alleys

Six blocks of existing alleys are included in this project. Four blocks of existing alley located ¹/₂ block south of TH 282 (Second St), between Mertens St and Rice St and two more alleys between Varner Street North and 6th Street West, between 6th Street West and Highway 169 west of Varner Street North. The existing alleys are approximately 10' wide and gravel. The exiting gravel requires routine maintenance by public works, particularly after significant rain events. Some drainage issues including standing water have been identified in portions of the existing alley ways. There is a substandard railroad crossing owned by Union Pacific Railroad where the alley between 1st Street and 2nd Street intersects with Rice Street.

4.0 PROPOSED IMPROVEMENTS

A. Street Improvements

The roadways within the 2024 Infrastructure Improvements Project are proposed to be either

milled and overlaid (resurfaced) or full depth reclaimed in place. All of the roads in the Heritage Hills area are proposed to be milled and overlaid. In the Lowertown Area, Mertens Street N, Wood Street S, and West Street N are all proposed to be reclaimed in place and 1st Street W is proposed to be milled and overlaid. All streets proposed to receive a mill and overlay will have 2" of the surface removed with a milling machine across the entire roadway section from curb to curb. The proposed 2-inch pavement replacement surface will occur with a bituminous wearing course. Subgrade improvements and full depth bituminous patching will occur as needed in concentrated areas of overly distressed pavement and settlement areas, which are especially prevalent in the Heritage Hills area. The streets in Lowertown proposed to be reclaimed in place will be reclaimed to a depth of 12" and paved with two lifts of two (2) inch thick bituminous, for a total pavement depth of four (4) inches. The first layer of bituminous pavement will be non-wearing course and the top layer will be a wearing course. These improvements are consistent with the recommendations made in the Geotechnical Report found in Appendix D.

The proposed improvements are also consistent the City's Pavement Management Program which includes resurfacing to preserve the initial roadway investment. The project is intended to improve streets that, if no action were taken, will fall into the much more expensive category of a full-depth reconstruction. Existing curb and gutter along each roadway will be analyzed to identify existing areas of poor drainage and damage as defined by the city's current quality standards. Deficient or settled curb sections will be removed and replaced with new concrete curb and gutter.

B. Pedestrian Improvements

All existing sidewalk pedestrian ramps not adhering to current American with Disabilities Act (ADA) standards will be upgraded to comply with ADA standards. No other expansion of pedestrian facilities is recommended with this project.

C. Alley Improvements

2 Blocks of Alley between Varner St N & 6th Street West, north of Sixth Street West

The alley between Varner Street North and Sixth Street West, $\frac{1}{2}$ block north of Sixth Street West will be surfaced with 6" concrete pavement. The existing alley grades are quite flat, generally less than 1%. Industry standard suggests a minimum 1.00% longitudinal grade for bituminous pavement to properly drain, therefore concrete pavement is recommended. The addition of storm sewer will not be cost effective as positive drainage will be provided. It is proposed for this alley to adhere to the current drainage pattern which surface drains out at the westerly curve in the alley north of 6th Street.

4 Blocks of Alley between Mertens St & Rice St, south of TH 282

The four blocks of alley located ½ block south of TH 282 (Second St), between Mertens St and Rice St are recommended to be surfaced with a 6" concrete pavement. This will require removal of the existing alley gravel, excavation down to a gravel base level, and utilization of the existing gravel for the proposed gravel base, and construction of the concrete pavement surfacing to the finished grade.

The existing alley grades are quite flat, generally less than 1%. Industry standard suggests a minimum 1.00% longitudinal grade for bituminous pavement to properly drain, therefore concrete pavement is recommended. There is one section of alley between Wood Street and West Street that will have a low spot, therefore the addition of storm sewer to the alley is recommended. The storm sewer inlet will be located in the center of the alley with pipe running down the center of it into West Street, connecting into the existing storm sewer at the West/2nd Street intersection. The other alleys in the project area have minimal, but positive drainage, and the addition of storm sewer will not be cost effective as positive drainage will be provided.

Union Pacific Railroad Alley Crossing

The east end of this alley intersects with a T intersection at Rice Street. Just west of Rice Street is a substandard, poorly maintained railroad crossing of a Union Pacific rail line (UPRR). The proposed improvements for this project would include surfacing up to the rails. It is not currently within the project scope to pursue a more substantial crossing improvement involving surfacing between the rails. Surfacing between the rails would require extensive coordination with UPRR and significant cost implications. Outreach to Union Pacific has begun at the time of this report to coordinate on flagging and permitting requirements for surfacing up to the rails. Estimated costs for flagging and permitting have been included in the financing section of this report.

5.0 PUBLIC INPUT

A letter was sent to all residents adjacent to the proposed project areas notifying them of the proposed project. A questionnaire was included with the letter encouraging residents to supply any input they may have on the project including any existing drainage issues they have noticed and any other suggestions they would like to be considered as part of the project. Almost thirty residents returned the questionnaire. The comments generally fit into the below categories with the project team's corresponding review/consideration of each comment listed in italics:

- Concerns regarding damaged and sunken/settled curbs.
 - Damaged and sunken settled curbs will be removed and replaced with the project improving the aesthetics and drainage of the roads scheduled to be improved.
- Drainage concerns in the existing alleys, gravel surface starts holding water and alleys are higher than the adjacent private property preventing water from draining down the alley.
 - The concrete surfacing will prevent the existing gravel from becoming unmaintained
 - *Wherever possible, the alleys will be graded so that the adjacent property is able to drain out through the alley.*
- There were several miscellaneous concerns communicate to the project team:
 - Low spots in pavement milling and paving process should solve the concern
 - Existing landscaping adjacent to alley *area will be left undisturbed if at all possible, if it needs to be disturbed, property owner to be notified in advance*
 - Recommendations for using permeable pavers *permeable pavers require much higher maintenance and the surfaces tend "clog" preventing water from infiltrating – alley will be designed/graded to reduce alley/garage flooding to the extent possible*
 - Concern regarding internet interruptions *goal is for no utility outages with project.*
 - Would like an unused driveway apron to be replaced with city standard curb *that will be able to be accomplished with the project.*

The project team will note these comments and ensure that they can be addressed in the plans and future outreach efforts that will occur including open houses. Staff will reach out to commenters that have unique concerns that need further explanation.

Special assessments are to be used to fund a portion of the alley improvement costs. A public improvement hearing will be held at a council meeting for the alley improvements prior to ordering final plans. This hearing is consistent with the MN Statute 429 process for special assessments. The

council will also conduct a public hearing on the assessments prior to adopting the final assessments.

Additional correspondence will be sent to residents adjacent to the project areas as construction approaches including additional information on the proposed project, preliminary assessments (alley improvements only), what to expect during construction, and an approximate project schedule.

6.0 TRAFFIC & ACCESS

Traffic and driveway access will be maintained on all streets during construction. Traffic control devices (barrels, cones, barricades, etc.) will be utilized to delineate areas with active construction. Flagging may be necessary during milling and paving operations. The milled surface will be maintained as a drivable surface prior to bituminous paving. Areas of full pavement correction will be filled in with compacted aggregate base or barricaded off during non-working hours.

Alleys may have to be closed to traffic during their paving and curing process. Engineering staff will work with the contractor to ensure residents are aware of this and will have to park cars and move garbage service out to the streets while the alleys are under construction. This is likely to be an approximate 3 week time period.

7.0 EASEMENTS AND PERMITS

The permanent proposed improvements will be constructed within the existing prescriptive street right-of-way and easements. Acquisition of permanent right of way (ROW) or easement is not proposed with this project.

A Minnesota Pollution Control Agency (MPCA) – General Storm Water Permit for Construction Activity under the National Pollutant Discharge Elimination System (NPDES) will be acquired for the project. Construction BMPs will be implemented within the project areas as necessary in compliance with the City's stormwater ordinance. Less than 1.0 acres of new impervious area is proposed to be generated by the project and therefore no permanent stormwater management (ponding, etc.) is proposed to be built with the project.

A permit for work in MnDOT ROW and Scott County will be necessary where the streets in both Lowertown and Hertitage Hills areas match into TH 282 and County Road 10/Minnesota Valley Electric Drive for construction of the new pavements.

A permit or approval from the Union Pacific Railroad will be required for any work in their rightof-way including any crossing improvements for improvements to the southern alley adjacent to the connection to Rice Street.

8.0 ESTIMATED COSTS/FINANCING

The estimated project cost to complete the improvements proposed herein are presented below. These costs include estimated construction costs, a 10% contingency, and soft (indirect) costs for finance, legal, administrative, and engineering. Soft costs for the project areas included in the capital improvement plan, generally including the pavement resurfacing and alley improvement areas, are estimated at \$224,300.

These cost estimates are based upon public construction cost information generated by historical bid prices by contractors observed for similar work. Since the consultant has no control over the cost of labor, materials, competitive bidding process, weather conditions, and other factors affecting

the cost of construction, all cost estimates are opinions for general information of the client and no warranty or guarantee as to the accuracy of construction cost estimates is made. It is recommended that costs for project financing should be based upon actual, competitive bid prices with reasonable contingencies.

Location	Total Estimated Cost
Lowertown Area Street Improvements	\$370,000
Heritage Hills Street Improvements	\$945,000
Roadway Improvements Subtotal	\$1,315,000
Concrete Alley Improvements North of 1 st Street	\$305,000
West Street/Alley Storm Sewer	\$45,000
Concrete Alley Improvements North of 6 th Street	\$180,000
Alley Improvement Subtotal	\$530,000
Alley Improvements - Union Pacific Rail Crossing	\$50,000
Estimated Project Total	\$1,895,000

Table 2 – Estimated Cost Summary 2024 Infrastructure Improvements (See Appendix B for Detailed Cost Estimate)

Table 3 – Funding Summary 2024 Infrastructure Improvements Project

ltem	Total Estimated Cost
Street Fund	\$1,315,000
MSA Maintenance Funds	\$420,000
Special Assessments	\$160,000
TOTALS	\$1,895,000

A portion of the alley improvements costs will be assessed. With the guidance of the City's Finance Director and City Administrator, but at the discretion of the City Council, the alley improvements are proposed to be funded with 70% of costs by the City and 30% of costs by special assessments to adjacent private properties. Properties abutting or with access to the proposed improvements are proposed to be assessed. The assessments are on an adjusted front foot basis with benefitting properties paying a respective proportion of 30% of the project costs to be assessed. The proposed assessments are proposed to be assessed over a term and based on the interest rate defined by the City's assessment policy or otherwise established by council resolution at the time of the assessments will be payable over a 10 year period at an interest rate 1.0 percent higher than the rate secured by the City for its bonds on this project.

The preliminary assessment roll can be seen in Appendix C. The proposed assessments and funding summary are based on preliminary estimated projects costs and are expected to be revised at the time of final assessment hearing based on the bids received.

9.0 PROJECT SCHEDULE

The proposed project schedule is shown below:

Council Receives Feasibility (Preliminary Engineering) Report	January 22, 2024
Order the Public Improvement Hearing	January 22, 2024
Conduct the Public Improvement Hearing & Order Final Plans .	February 12, 2024
Approve Plans & Specs; Authorize Ad for Bids	April 8, 2024
Council Reviews Bids, Order Alley Special Assessment Hearing	May 14, 2024
Assessment Hearing; Award Bid	June 10, 2024
Construction	June 2024 – November 2024

10.0 CONCLUSION

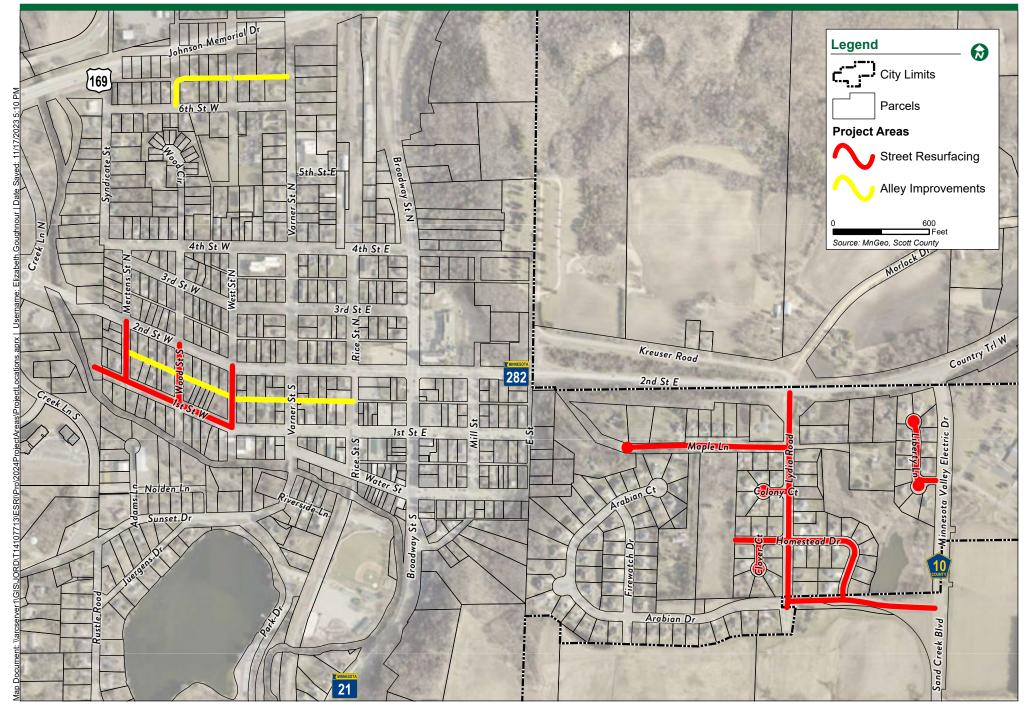
From an engineering standpoint, this project, as proposed, is feasible, cost effective, and necessary. It can best be accomplished by letting competitive bids for the work under one contract in order to complete the work in an orderly and efficient manner. The City, its financial consultant, and the persons assessed will have to determine the economic feasibility of the proposed improvements.

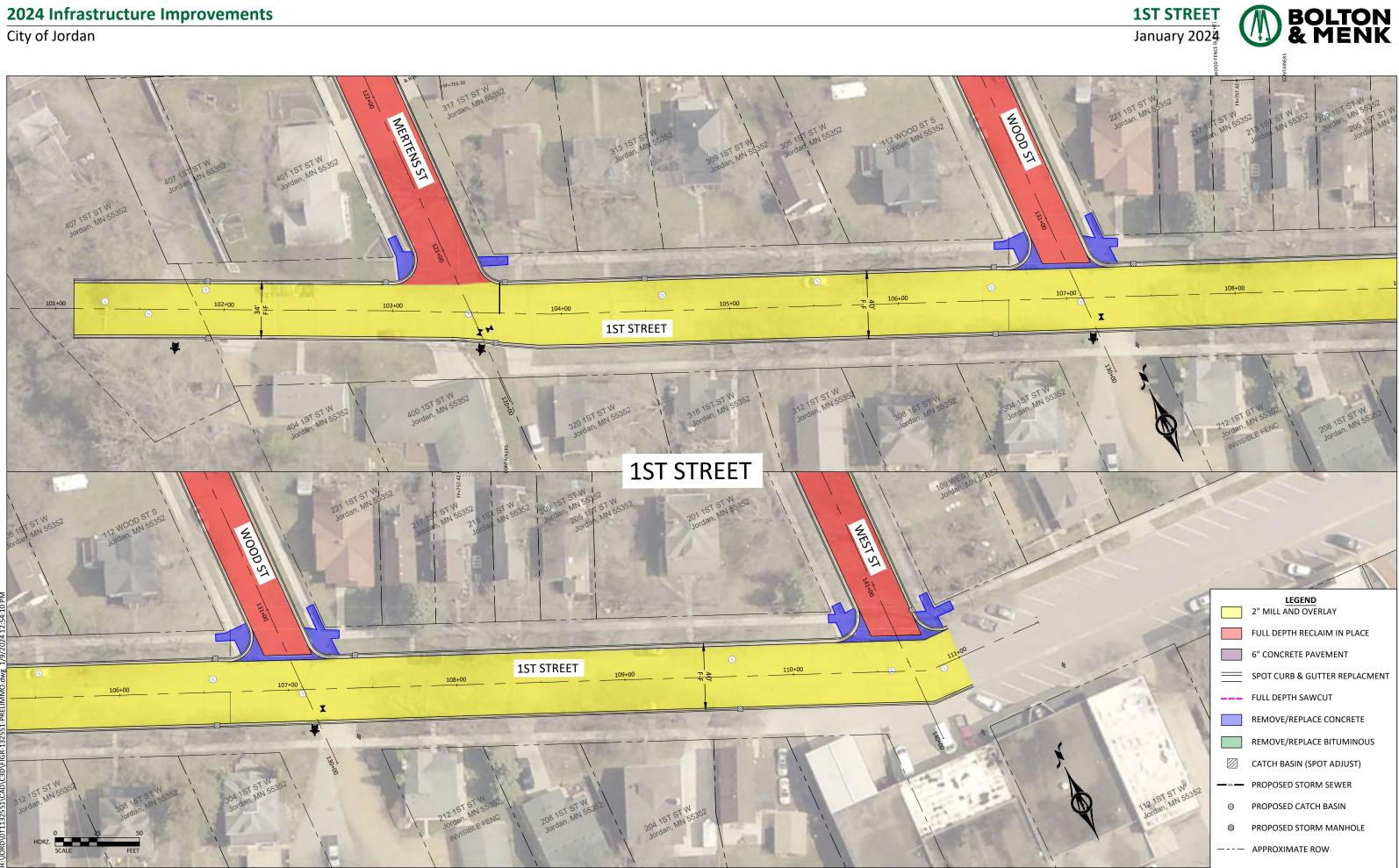
Appendix A: Figures



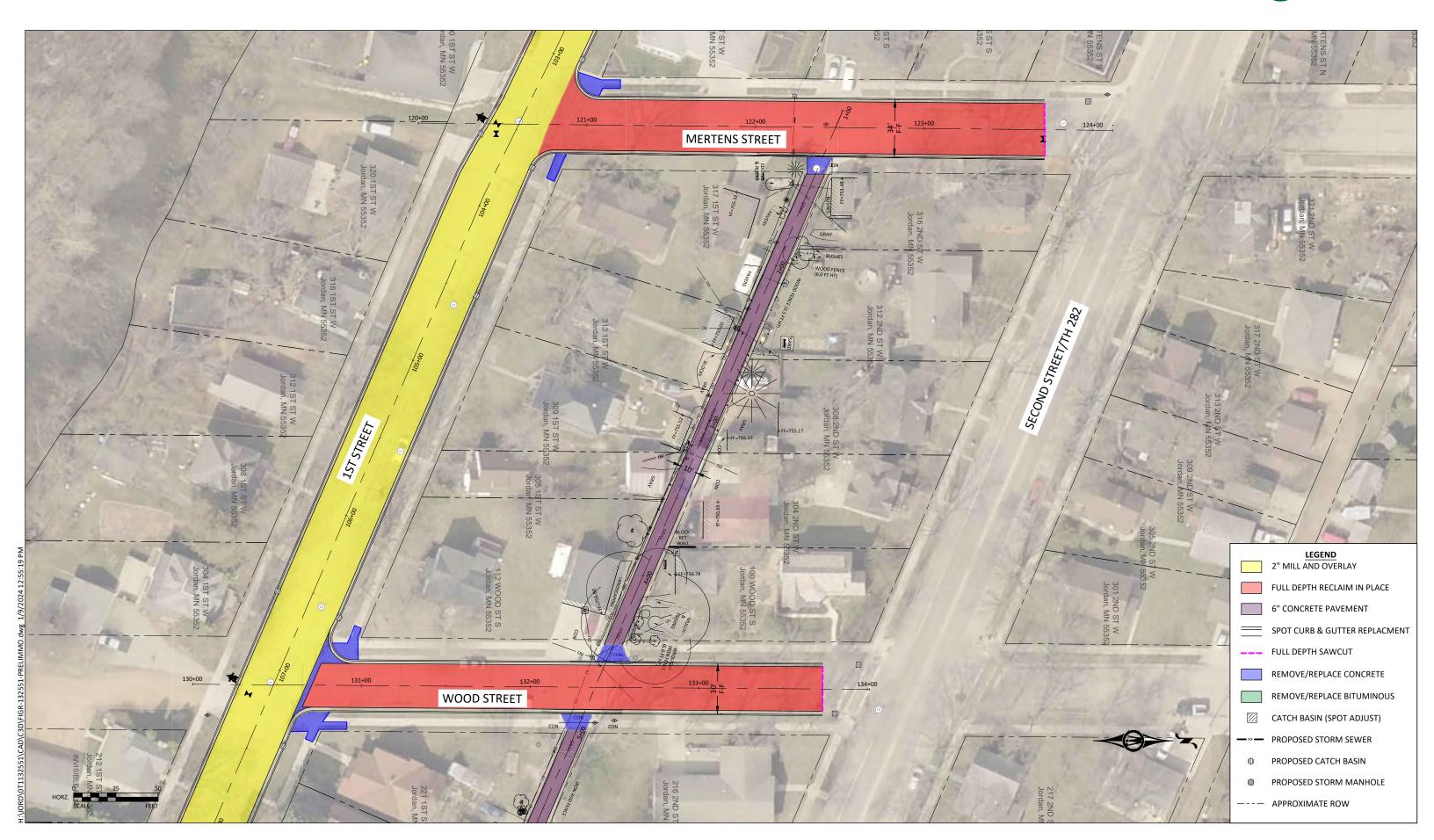
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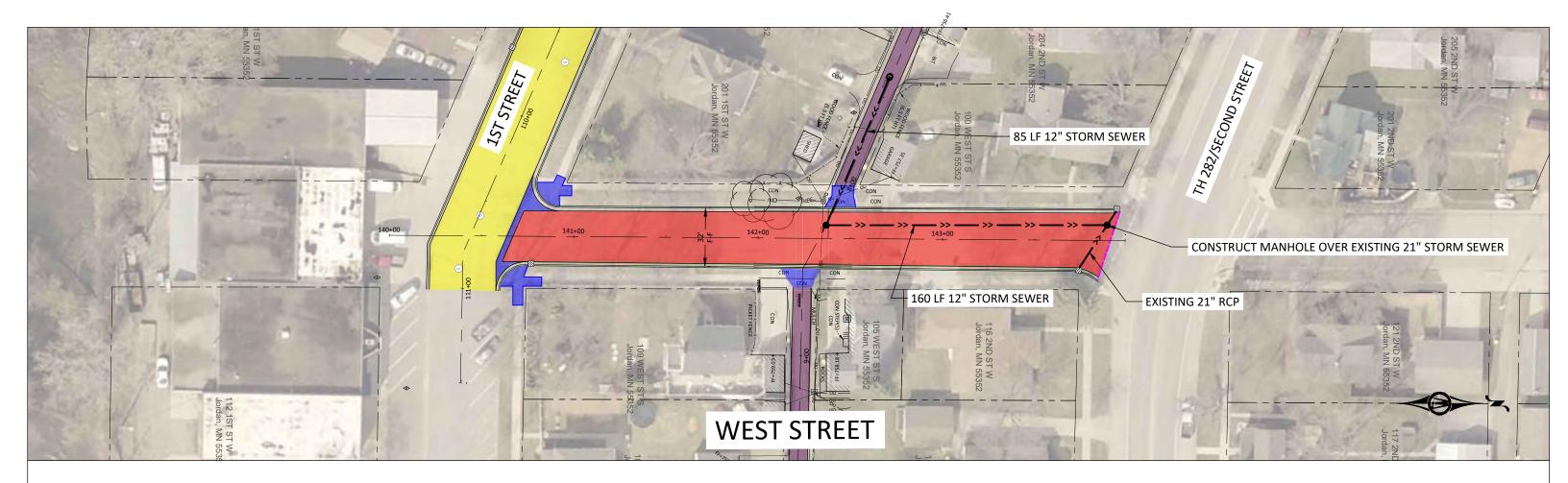
City of Jordan

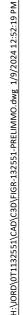






City of Jordan





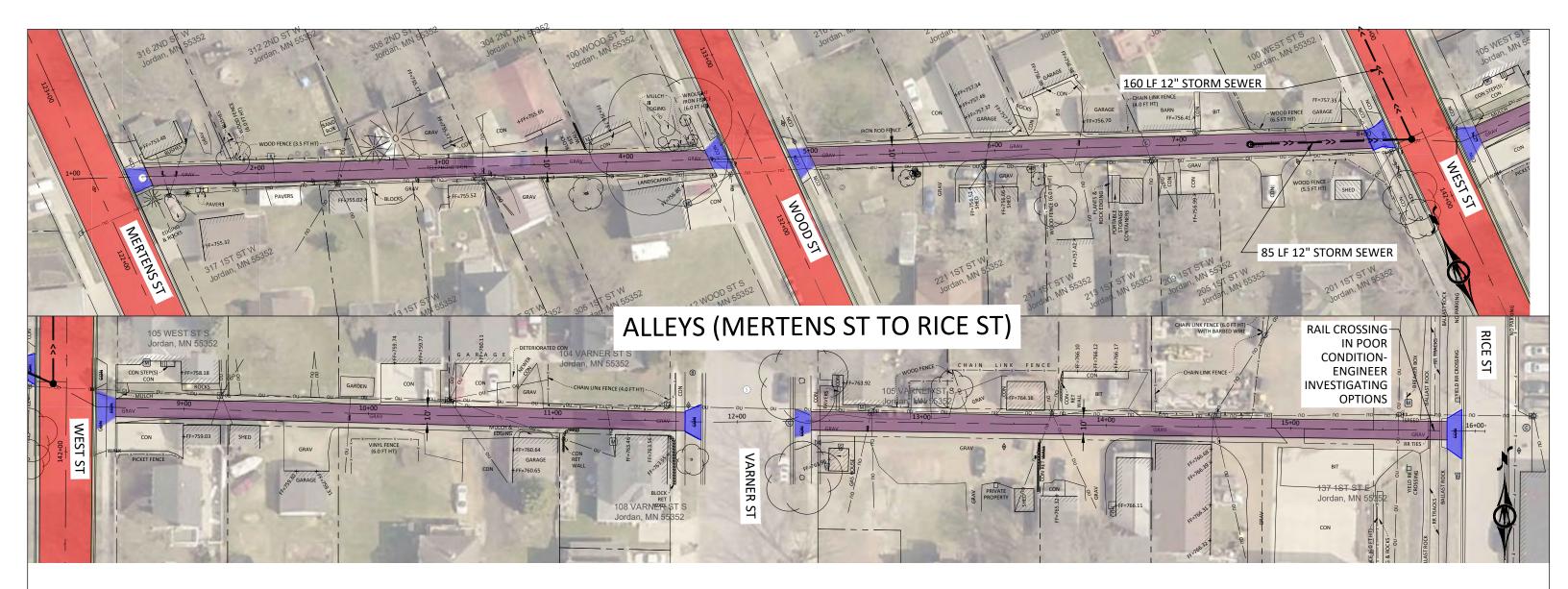
WEST STREET January 2024

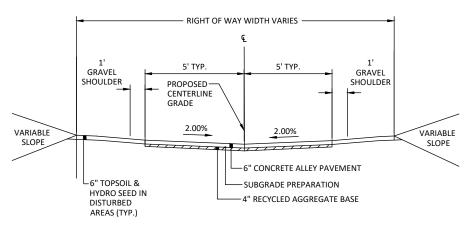


LEGEND 2" MILL AND OVERLAY

FULL DEPTH RECLAIM IN PLACE **6" CONCRETE PAVEMENT** _ SPOT CURB & GUTTER REPLACMENT FULL DEPTH SAWCUT ____ REMOVE/REPLACE CONCRETE REMOVE/REPLACE BITUMINOUS \mathbb{Z} CATCH BASIN (SPOT ADJUST) PROPOSED STORM SEWER PROPOSED CATCH BASIN \mathbb{O} \bigcirc PROPOSED STORM MANHOLE ---- APPROXIMATE ROW

City of Jordan





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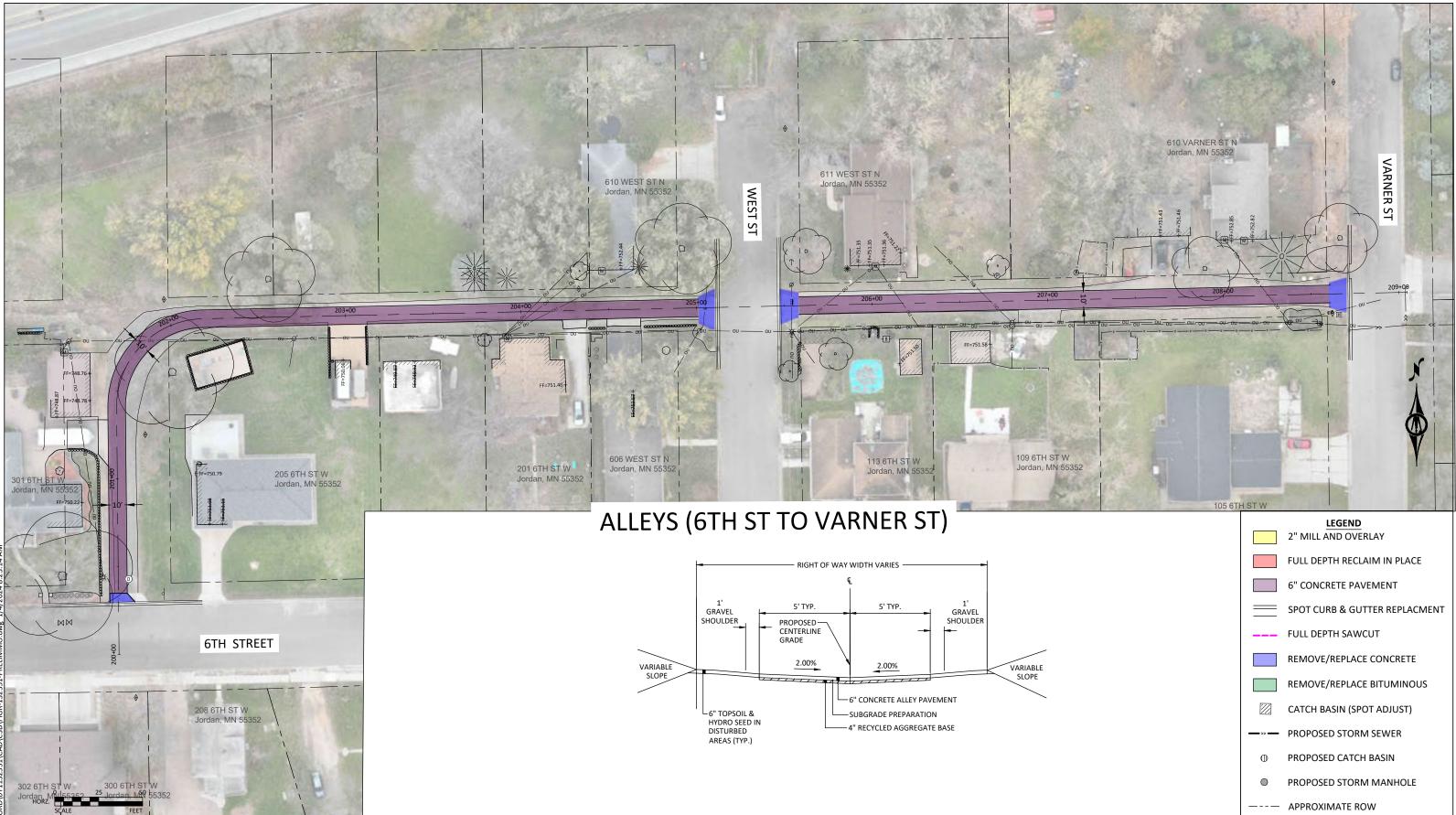




LEGEND 2" MILL AND OVERLAY

- FULL DEPTH RECLAIM IN PLACE
- 6" CONCRETE PAVEMENT
- SPOT CURB & GUTTER REPLACMENT
- FULL DEPTH SAWCUT
- REMOVE/REPLACE CONCRETE
- REMOVE/REPLACE BITUMINOUS
- CATCH BASIN (SPOT ADJUST)
- ----- PROPOSED STORM SEWER
- ① PROPOSED CATCH BASIN
- PROPOSED STORM MANHOLE
- ---- APPROXIMATE ROW

City of Jordan

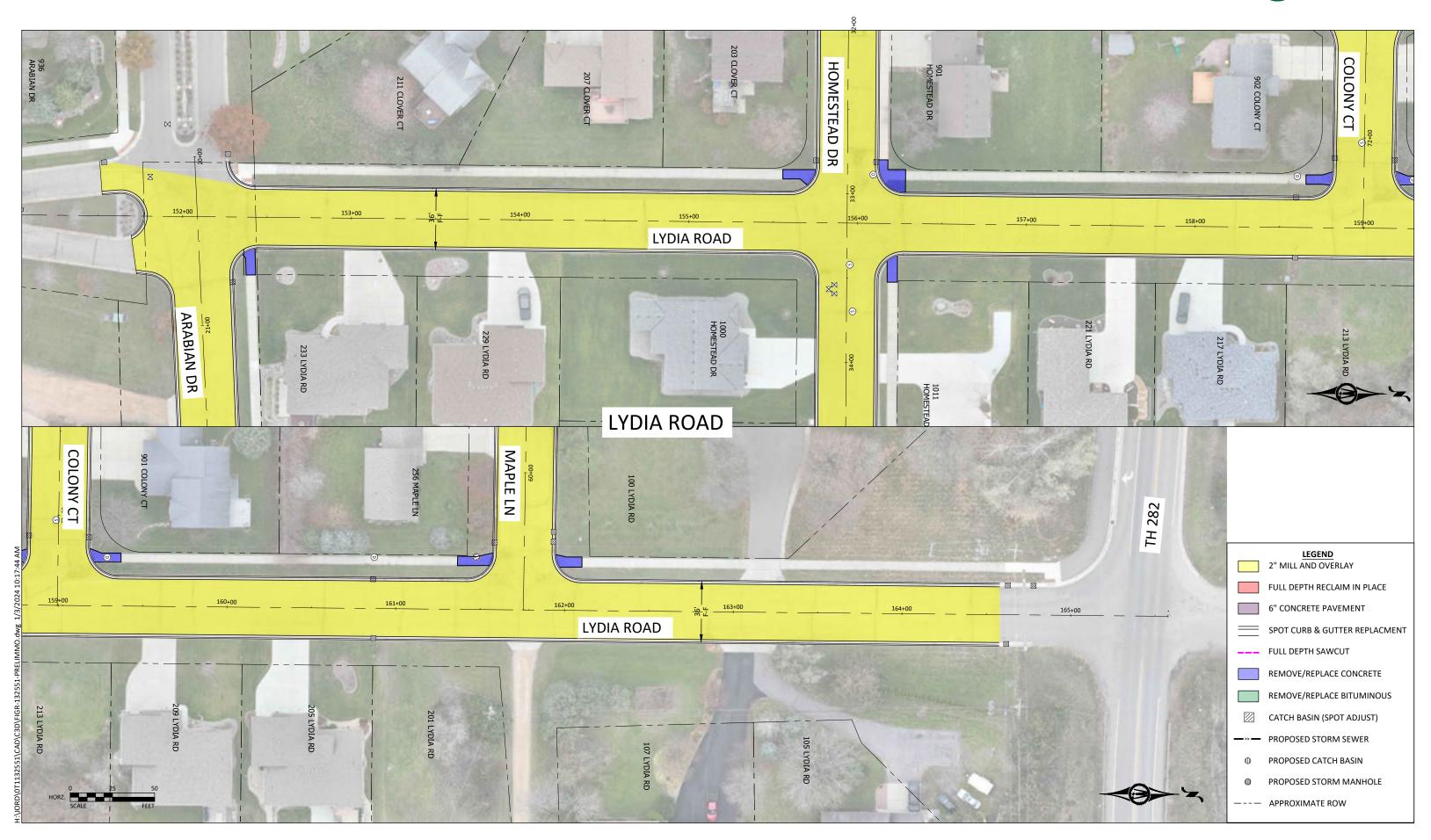


ALLEY IMPROVEMENTS January 2024



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	FULL DEPTH RECLAIM IN PLACE
	6" CONCRETE PAVEMENT
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Ф	PROPOSED CATCH BASIN
0	PROPOSED STORM MANHOLE
	APPROXIMATE ROW

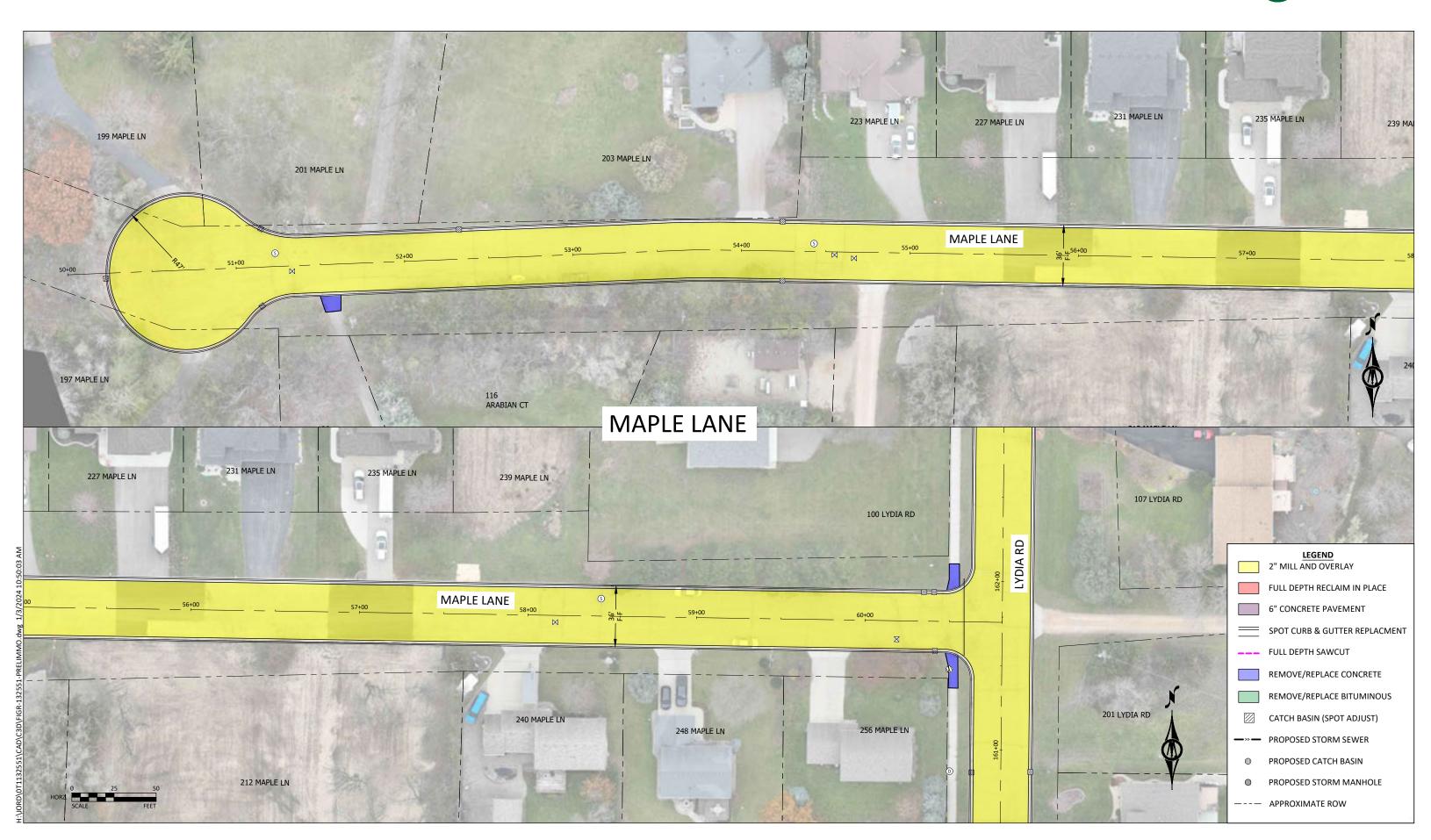
City of Jordan







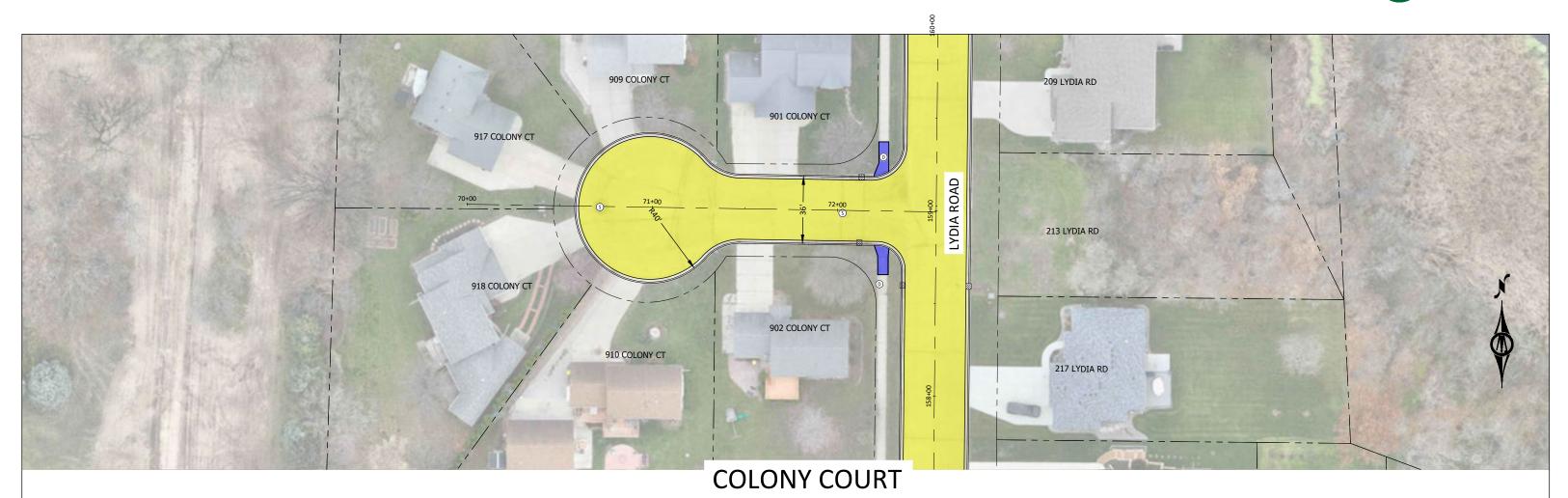
City of Jordan



MAPLE LANE January 2024



City of Jordan



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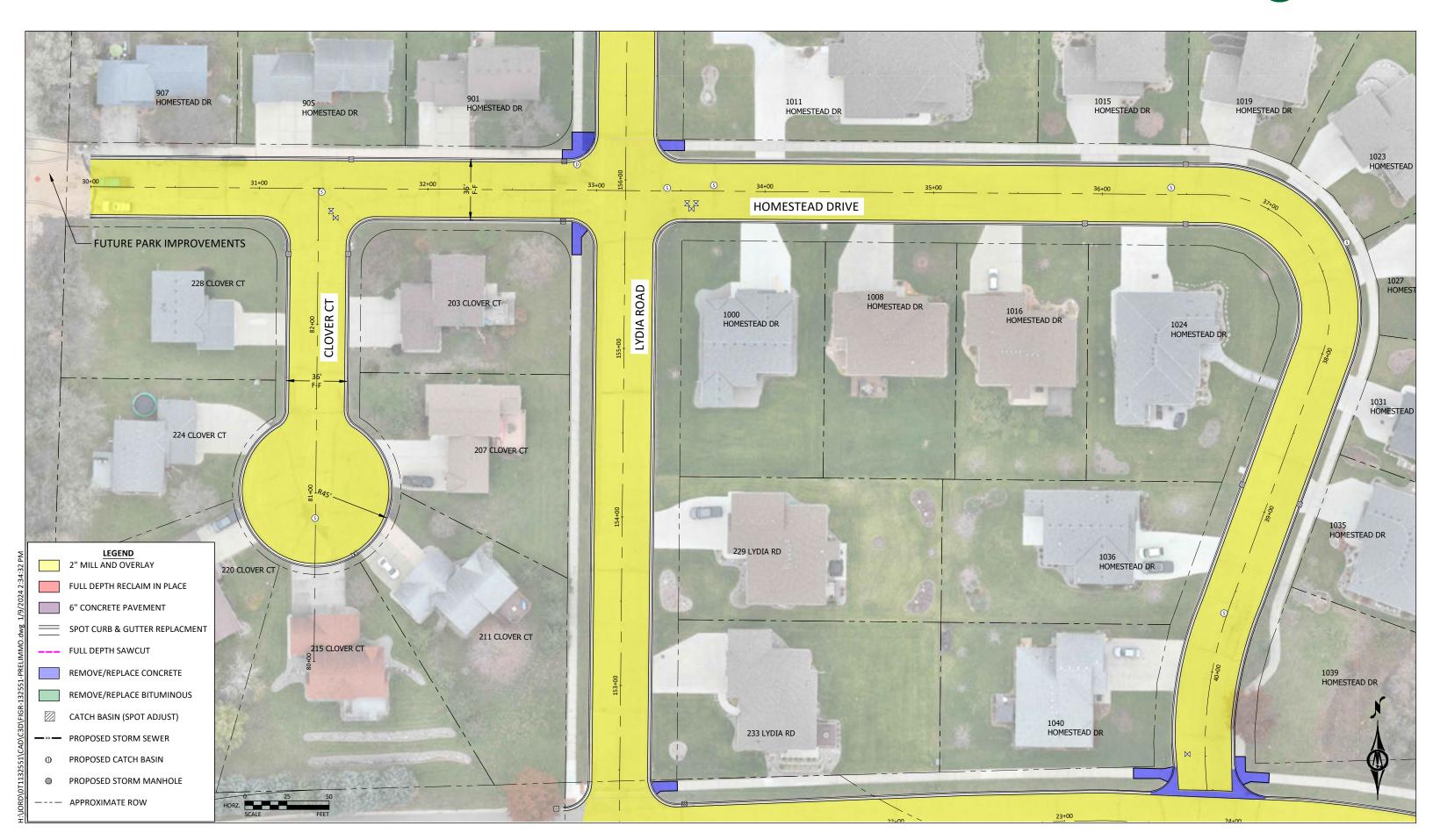
COLONY COURT January 2024



LEGEND 2" MILL AND OVERLAY

	FULL DEPTH RECLAIM IN PLACE
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	APPROXIMATE ROW

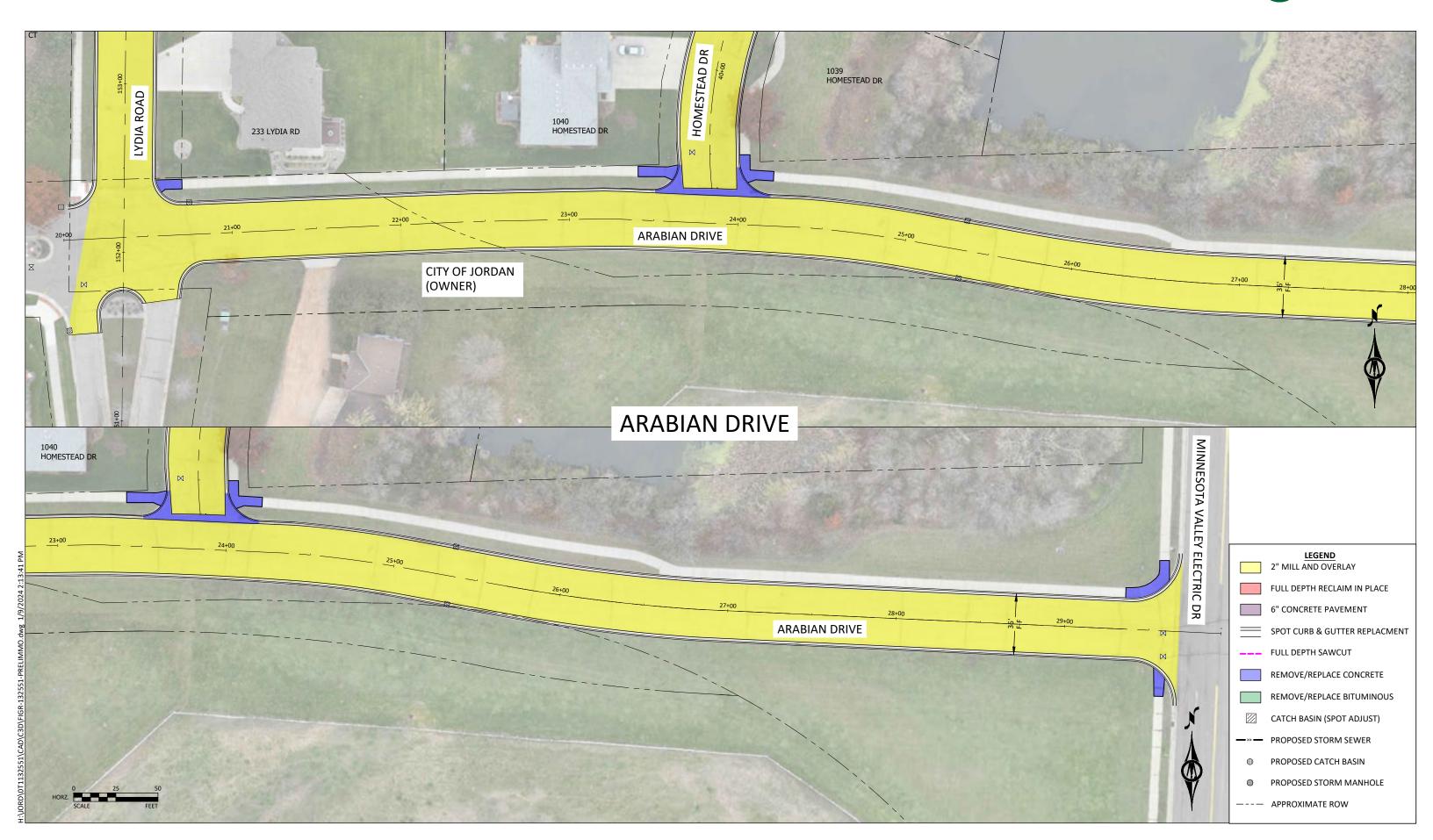
City of Jordan



HOMESTEAD DRIVE AND CLOVER COURT January 2024



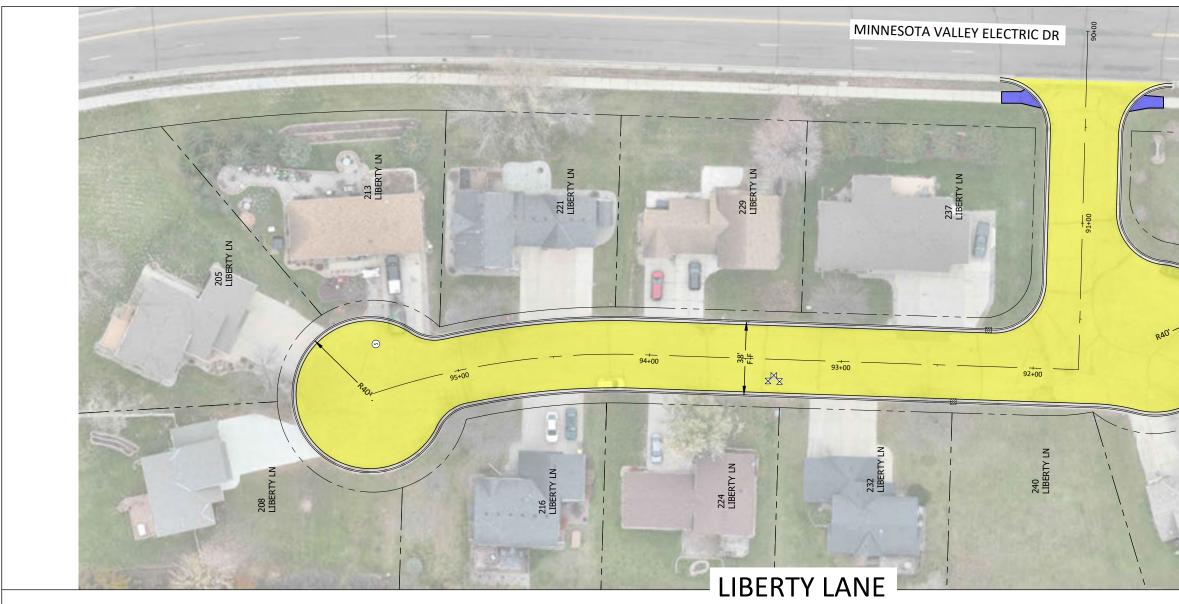
City of Jordan



ARABIAN DRIVE January 2024



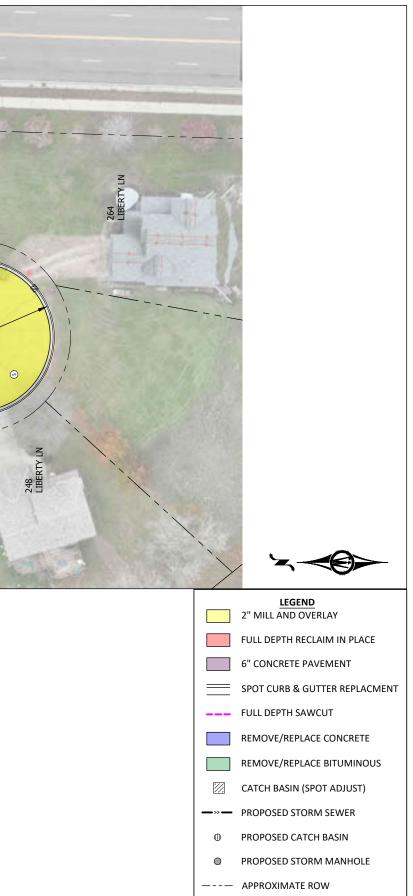
City of Jordan





LIBERTY LANE January 2024





Appendix B: Preliminary Cost Estimate

PRELIMINARY ENGINEER'S ESTIMATE 2024 INFRASTRUCTURE IMPROVEMENTS CITY OF JORDAN, MN BMI PROJECT NO. 0T1.132551



					CAPITAL IMPROVI	EMENT PLAN PROJEC																		
	TOTAL PROJ			TOTAL PROJECT		LOWE				AGE HILLS	MERTENS -	WOOD ALLEY	WOOD -	WEST ALLEY	WEST - VA	ARNER ALLEY	VARNER	- RICE ALLEY	SIXTH-	WEST ALLEY	WEST-VARNE	R ALLEY (NORTH)	ALLEY STO	ORM SEWER
M NO. BID ITEM	ESTIMATE QUANTIT		PRICE	ESTIMATED AMOUNT		CLAIM		ND OVERLAY		ID OVERLAY														
	QUANTI	1		AMOUNT	ESTIMATED QUANTITY	ESTIMATED COST	ESTIMATED QUANTITY	ESTIMATED COST	ESTIMATED QUANTITY	ESTIMATED COST	ESTIMATED QUANTITY	ESTIMATED COST	ESTIMATED QUANTITY	ESTIMATED COST	ESTIMATED QUANTITY	ESTIMATED COST	ESTIMATED QUANTITY	ESTIMATED COST	ESTIMATED QUANTITY	ESTIMATED COST	ESTIMATED QUANTITY	ESTIMATED COST	ESTIMATED QUANTITY	ESTIMATED
1 MOBILIZATION	1	LUMP SUM	\$70,000.00	\$70,000.00	0.1	\$7,000	0.1	\$7,000	0.45	\$31,500	0.05	\$3,500	0.05	\$3,500	0.05	\$3,500	0.05	\$3,500	0.05	\$3,500	0.05	\$3,500	0.05	\$3,50
2 TRAFFIC CONTROL	1	LUMP SUM	\$15,000.00	\$15,000.00	0.1	\$1,500	0.1	\$1,500	0.45	\$6,750	0.05	\$750	0.05	\$750	0.05	\$750	0.05	\$750	0.05	\$750	0.05	\$750	0.05	\$750
3 STORM DRAIN INLET PROTECTION	57	EACH	\$300.00	\$17,100.00	6	\$1,800	8	\$2,400	37	\$11,100									3	\$900	3	\$900	L'	_
4 SALVAGE CASTING (SANITARY/STORM)	1	EACH	\$250.00	\$250.00	1	\$250																	L'	_
5 REMOVE CURB AND GUTTER (SPOT REPLACEMENT)	3620	LIN FT	\$15.00	\$54,300.00	430	\$6,450	200	\$3,000	2630	\$39,450	60	\$900	60	\$900	60	\$900	60	\$900	60	\$900	60	\$900	L'	
6 REMOVE BITUMINOUS PAVEMENT (STREET)	3440	SQ YD	\$12.00	\$41,280.00			200	\$2,400	3190	\$38,280							10	\$120	20	\$240	20	\$240	L'	
7 REMOVE BITUMINOUS PAVEMENT (DRIVEWAY)	430	SQ YD	\$12.00	\$5,160.00					10	\$120	40	\$480	60	\$720	80	\$960	160	\$1,920	60	\$720	20	\$240	L'	
8 REMOVE CONCRETE PAVEMENT (WALK & DRIVEWAY)	570	SQ YD	\$15.00	\$8,550.00	125	\$1,875	15	\$225	190	\$2,850	40	\$600	40	\$600	40	\$600	40	\$600	40	\$600	40	\$600	L'	
9 RECLAIM BITUMINOUS PAVEMENT (IN PLACE)	3000	SQ YD	\$3.50	\$10,500.00	3000	\$10,500																	L'	
0 MILL BITUMINOUS SURFACE (2")	25200	SQ YD	\$2.00	\$50,400.00			3900	\$7,800	21300	\$42,600													1	
1 SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	680	LIN FT	\$4.00	\$2,720.00	250	\$1,000			10	\$40	40	\$160	60	\$240	80	\$320	160	\$640	60	\$240	20	\$80	í	
2 SAWING CONCRETE PAVEMENT (FULL DEPTH) (WALKS AND D	RIVEWAYS) 360	LIN FT	\$6.00	\$2,160.00	50	\$300			70	\$420	40	\$240	40	\$240	40	\$240	40	\$240	40	\$240	40	\$240	í	
3 COMMON EXCAVATION (P)	730	CU YD	\$50.00	\$36,500.00	330	\$16,500					60	\$3,000	60	\$3,000	60	\$3,000	70	\$3,500	90	\$4,500	60	\$3,000	[]	
4 RECYCLE AGGREGATE BASE FROM ALLEY TO STOCKPILE (4") (CU YD	\$50.00	\$12,600.00							38	\$1,900	38	\$1,900	38	\$1,900	42	\$2,100	58	\$2,900	38	\$1,900	[]	
5 SUBGRADE PREPARATION (P)	5250	SQ YD	\$2.00	\$10,500.00	3000	\$6,000	1				340	\$680	340	\$680	340	\$680	370	\$740	520	\$1,040	340	\$680	[]	1
6 BITUMINOUS MATERIAL FOR TACK COAT	2480	GAL	\$5.00	\$12,400.00	260	\$1,300	350	\$1,750	1870	\$9,350													[]	1
L7 BITUMINOUS WEARING COURSE (SPWEA240C)	3410	TON	\$95.00	\$323,950.00	360	\$34,200	470	\$44,650	2580	\$245,100													[]	1
L8 BITUMINOUS NON-WEARING COURSE (SPNWB230C)	360	TON	\$90.00	\$32,400.00	360	\$32,400																		-
L9 BITUMINOUS STREET PATCH (2")	4030	SQ YD	\$30.00	\$120,900.00	500	\$32,400	250	\$7,500	3780	\$113,400					-								· · · · · · · · · · · · · · · · · · ·	-
0 FULL DEPTH BITUMINOUS STREET PATCH	50	SQ YD	\$150.00	\$7,500.00			250	\$7,500	5,66	\$115,400					-		10	\$1,500	20	\$3,000	20	\$3,000	· · · · · · · · · · · · · · · · · · ·	-
	420			-							40	\$1,800	60	\$2,700	80	\$3,600	160	\$1,500	60	\$3,000	20	\$900	<u> </u> '	-
		SQ YD TON	\$45.00	\$18,900.00							40		50	\$2,700	3	\$3,800	160	\$7,200	3		20	\$900	<u> </u> '	-
	21	CU YD	\$40.00	\$12.600.00	-		-		-		38	\$120 \$1,900	38	\$1,900	38	\$1,900	42	\$2,100	58	\$120 \$2,900	38	\$1,900	i'	-
RECYCLE AGGREGATE BASE FROM STOCKPILE TO ALLEY (4") (I CONCRETE CURB & GUTTER- MOUNTABLE DESIGN (SPOT REP		LIN FT	\$40.00	\$23,200.00	-		-		580	\$23,200	30	\$1,900	30	\$1,900	30	\$1,900	42	\$2,100	80	\$2,900	30	\$1,900	i'	-
	ACEIVIENT) 580 360	LIN FT	\$40.00	\$14,400.00					580	\$23,200	60	\$2.400	60	\$2,400	60	\$2,400	60	\$2.400	60	\$2,400	60	\$2,400	'	
						41		4			60	\$2,400	60	\$2,400	60	\$2,400	60	\$2,400	60	\$2,400	60	\$2,400	<u> '</u>	-
26 CONCRETE CURB & GUTTER - DESIGN B618 (SPOT REPLACEM		LIN FT	\$40.00	\$107,200.00	430	\$17,200	200	\$8,000	2050	\$82,000					-								<u> '</u>	-
27 4" CONCRETE WALK	250	SQ YD	\$100.00	\$25,000.00	100	\$10,000			150	\$15,000													<u> </u>	-
28 6" CONCRETE WALK (PEDESTRIAN RAMPS)	325	SQ YD	\$150.00	\$48,750.00	125	\$18,750	-	-	200	\$30,000			-		-								⊢ '	
9 6" CONCRETE ALLEY/DRIVEWAY PAVEMENT	2250	SQ YD	\$90.00	\$202,500.00	-		-	-	-		340	\$30,600	340	\$30,600	340	\$30,600	370	\$33,300	520	\$46,800	340	\$30,600	⊢ '	-
8 CONCRETE DRIVEWAY APRON	240	SQ YD	\$150.00	\$36,000.00							40	\$6,000	40	\$6,000	40	\$6,000	40	\$6,000	40	\$6,000	40	\$6,000	<u> </u>	-
1 7" VALLEY GUTTER	95	SQ YD	\$110.00	\$10,450.00	55	\$6,050			40	\$4,400													L'	_
2 TRUNCATED DOMES	410	SQ FT	\$65.00	\$26,650.00	210	\$13,650			200	\$13,000													L'	_
3 REINSTALL CASTING (SANITARY/STORM)	1	EACH	\$250.00	\$250.00	1	\$250																	ļ'	
4 ADJUST CASTING (SANITARY/STORM)	36	EACH	\$500.00	\$18,000.00			12	\$6,000	23	\$11,500									1	\$500			ļ'	
5 ADJUST VALVE BOX	21	EACH	\$250.00	\$5,250.00	1	\$250	3	\$750	17	\$4,250													L'	
6 CONNECT TO EXISTING STORM SEWER PIPE	2	EACH	\$1,250.00	\$2,500.00																			2	\$2,5
7 12" STORM PIPE	245	LIN FT	\$60.00	\$14,700.00																			245	\$14,
8 CONSTRUCT STORM MH DES H	1	EACH	\$3,500.00	\$3,500.00																			1	\$3,5
9 CONSTRUCT STORM MH DES 48" - 4020	2	EACH	\$4.000.00	\$8,000.00																			2	\$8,0
0 CASTING (STORM MANHOLE)	2	EACH	\$1,000.00	\$2,000.00																			2	\$2,0
1 CASTING (NEENAH R-2535)	1	EACH	\$1,000.00	\$1,000.00			1			1						1		1		1		1	1	\$1,0
	1		\$1,000.00	\$1,000.00	1	\$750	1	\$750	1	\$750								1		-		<u> </u>		\$1,
	3 3630	EACH			400		1 200		1000		170	ćror.	170	ćror.	170	ćror.	100	teer.	200	£010	170	ćror.	·'	+
3 HYDROMULCH & SEED MIX 25-151		SQ YD	\$3.50	\$12,705.00		\$1,400	200	\$700	1900	\$6,650	170	\$595	170	\$595	170	\$595	190	\$665	260	\$910	170	\$595	i'	+
COMMMON TOPSOIL BORROW	640	CU YD	\$40.00	\$25,600.00	70	\$2,800	40	\$1,600	320	\$12,800	30	\$1,200	30	\$1,200	30	\$1,200	40	\$1,600	50	\$2,000	30	\$1,200	'	-
5 IRRIGATION SYSTEM AND DOG FENCE REPAIR ALLOWANCE	1	LUMP SUM	\$15,000.00	\$15,000.00	0.25	\$3,750	0.15	\$2,250	0.6	\$9,000													<u>ا</u> ــــــــــــــــــــــــــــــــــــ	_
			0.070	44 474 000		6405 00T		600.000		4754 000		457.000		450.000		450.000		\$350,700		404.000		\$180,300		A
			SUBTOTAL 10% CONTINGENCY:	\$1,471,000 \$147,100		\$196,000 \$19,600	=	\$98,000 \$9,800		\$754,000 \$75,400		\$57,000		\$58,000 \$5,800		\$59,000 \$5,900		\$70,000		\$84,000	-	\$60,000 \$6,000		\$36,
			NSTRUCTION COST:	\$147,100		\$19,600 \$215,600	-	\$9,800		\$75,400		\$5,700		\$5,800		\$5,900		\$7,000		\$8,400 \$92,400	-	\$6,000		\$3,0
SOFT CO	TS (SURVEY, GEOTECHNICAL, DESIG			\$224,300		\$29,900		\$14,900		\$114,900		\$8,700		\$8,800		\$9,000		\$10,700		\$12,800		\$9,100		\$5,5
	SUBTOTAL: CAPITAL	IMPROVEMENT PL	AN PROJECT AREAS	\$1,843,500		\$245,500	-	\$122,700		\$944,300		\$71,400		\$72,600		\$73,900		\$87,700		\$105,200	-	\$75,100		\$45,
	UNION PACIFIC	RAILALLEY CROSSI	NG IMPROVEMENT	\$50,000																				
			TED PROJECT COST:	\$1,893,500		\$245,500		\$122,700		\$944,300		\$71,400		\$72,600				\$87,700				\$75,100		\$45,1

Appendix C: Preliminary Assessment Roll & Map

PRELIMINARY ASSESSMENT ROLL 2024 INFRASTRUCTURE IMPROVEMENTS CITY OF JORDAN, MN 1/22/2024

PRELIMINARY	SPECIAL ASSESSMENT ROLL: ALL ALLEYS

TOTAL ESTIMATE PROJECT COST - ALL ALLEYS	\$531,000.00	
70% OF TOTAL ESTIMATED PROJECT COST - FUNDED BY CITY	\$371,700.00	
30% OF TOTAL ESTIMATE PROJECT COST - FUNDED BY SPECIAL ASSESSMENTS	\$159,300.00	
TOTAL FRONT FOOTAGE	3895	
ASSESED FRONT FOOT RATE	\$40.90	

PID	Taxpayer Name	Taxpayer Address	Front Footage	Assessment Amoun
220020960	NORTHERN STATES POWER CO & PROPERTY TAX DEPT	414 NICOLLET MALL MPLS, MN 55401	214	\$8,752
220020910	GLASGOW COLLEEN D	105 VARNER ST S JORDAN, MN 55352	70	\$2,863
220020920	SCHMIT DENNIS J & SHARI A	104 2 ST E JORDAN, MN 55352	60	\$2,454
220020930	SCHMIDT ANTHONY D JR	PO 36 JORDAN, MN 55352	50	\$2,045
220020970	BORCHARDT GENE & REBECCA	20625 HARLOW AVE JORDAN, MN 55352	60	\$2,454
220020980	K-MOX INC	18540 LEGENDS CLUB CIR PRIOR LAKE, MN 55372	60	\$2,454
220020990	BOX HOLDINGS LLC	260 MYRICK ST LE SUEUR, MN 56058	101	\$4,131
220021000	CENTERPOINT ENERGY RESOURCE	PO 1475 HOUSTON, TX 77251	20	\$818
220021030	STIER LAURIE MARIE	105 WEST ST S JORDAN, MN 55352	60	\$2,454
220021040	HENNEN MATTHEW J	1949 220TH ST W JORDAN, MN 55352	60	\$2,454
220021050	CASE HANS F	108 2 ST W JORDAN, MN 55352	60	\$2,454
220021070	L J M PROPERTIES LLC	PO 55 JORDAN, MN 55352	120	\$4,908
220021090	NYGAARD JOHN	108 VARNER ST S JORDAN, MN 55352	60	\$2,454
220021110	HIPPEN JEREMY	105 1 ST W JORDAN, MN 55352	120	\$4,908
220021120	LAWRIE TIMOTHY T	109 1 ST W JORDAN, MN 55352	60	\$2,454
220021130	KRAGTHORPE MARK S & GAIL M	109 WEST ST S JORDAN, MN 55352	60	\$2,454
220030130	BARND JESSICA	216 2ND ST W JORDAN, MN 55352	60	\$2,454
220030140	GOSEWISCH DAVID A & LORRAINE	212 2 ST W JORDAN, MN 55352	60	\$2,454
220030150	KRATOCHVIL JOHN	208 2 ST W JORDAN, MN 55352	60	\$2,454
220030160	BOSTON CALEB	204 2 ST W JORDAN, MN 55352	60	\$2,454
220030170	HIEGEL ANN M	100 WEST ST S JORDAN, MN 55352	60	\$2,454
220030180	OLSEN ERIC	201 1ST ST W JORDAN, MN 55352	84	\$3,435
220030190	CORRELL TERRY L & KAREN A	209 1 ST W JORDAN, MN 55352	27	\$1,104
220030200	PIEPER CRUZ	205 1ST ST W JORDAN, MN 55352	33	\$1,350
220030210	GROSAM RYAN	213 1 ST W JORDAN, MN 55352	35	\$1,431
220030220	HUGHES LAURA A	221 1ST ST W JORDAN, MN 55352	89	\$3,640
220030230	NELSON LAURA ANN HUGHES	217 1ST ST W JORDAN, MN 55352	32	\$1,309
220030240	LARIVEE LANDON	316 2ND ST W JORDAN, MN 55352	50	\$2,045
220030250	PILLE KIA A	312 2 ST W JORDAN, MN 55352	71	\$2,904
220030260	HEIMKES WILLIAM	308 2ND ST W JORDAN, MN 55352	60	\$2,454
220030270	NICKLES ELIZABETH & NICKLES WYATT	304 2ND ST W JORDAN, MN 55352	60	\$2,454
220030280	THEIS MICHAEL J	100 WOOD ST S JORDAN, MN 55352	60	\$2,454
220030290	GROTH JOSEPH R	3550 CREEK RD CHASKA, MN 55318	91	\$3,722
220030300	ZANDER JONATHAN M	1013 PRIMROSE LN SHAKOPEE, MN 55379	30	\$1,227
220030310	NEIDERMYER KATELYNN ELIZABETH	309 1ST ST W JORDAN, MN 55352	40	\$1,636
220030320	SWANSON-STRAIT NADINE	313 1ST ST W JORDAN, MN 55352	51	\$2,086
220030330	HJELMELAND ERIC R	317 1 ST W JORDAN, MN 55352	91	\$3,722
220110010	PAULY JAMES J & PAULY MARY JO	611 WEST ST N JORDAN, MN 55352	120	\$4,908
220110020	ANDERSON RICHARD L	610 VARNER ST JORDAN, MN 55352	180	\$7,362
220110030	ROMANN BRANDON L	105 6 ST W JORDAN, MN 55352	130	\$5,317
220110040	GUSS CYNTHIA	109 6 ST W JORDAN, MN 55352	95	\$3,885
220110050	WODTKE BRIAN D	113 6 ST W JORDAN, MN 55352	75	\$3,067
220110190	US WEST INC/CENTURYLINK	PO 2599 OLATHE, KS 66063	60	\$2,454
220110210	BREWER SYDNEY	201 6TH ST W JORDAN, MN 55352	60	\$2,454
220110220	NELSON LARRY II	610 WEST ST N JORDAN, MN 55352	60	\$2,454
220110230	NELSON LARRY II	610 WEST ST N JORDAN, MN 55352	60	\$2,454
220110240	NELSON LARRY II	610 WEST ST N JORDAN, MN 55352	50	\$2,045
220110250	BREWER SYDNEY	201 6TH ST W JORDAN, MN 55352	60	\$2,454
220110251	GUENTHER KAY E	606 WEST ST N JORDAN, MN 55352	50	\$2,045
220110260	JERICH GRANT ALLEN	1757 SEASHELL LN WACONIA, MN 55387	60	\$2,454
220110270	O'LOUGHLIN ALEXIS ANN	205 6TH ST W JORDAN, MN 55352	120	\$4,908
220110330	SMITH GARY LEE	601 3RD ST W JORDAN, MN 55352	138	\$5,644



City of Jordan

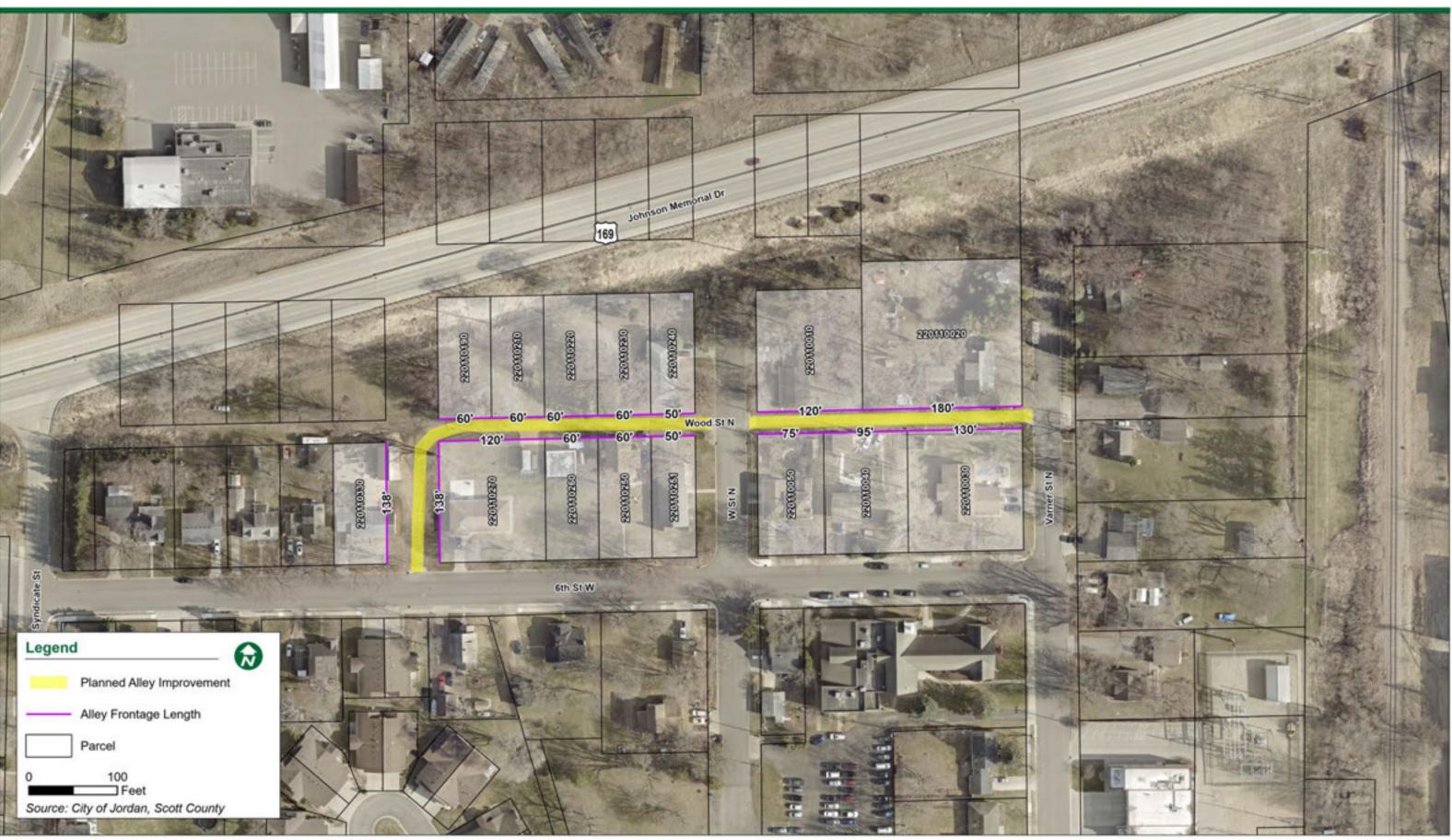








City of Jordan







Appendix D: Geotechnical Report



Braun Intertec Corporation 11001 Hampshire Avenue S Minneapolis, MN 55438
 Phone:
 952.995.2000

 Fax:
 952.995.2020

 Web:
 braunintertec.com

December 11, 2023

Project B2310497

Luke Wheeler, PE Bolton & Menk, Inc. 12224 Nicollet Avenue Burnsville, MN 55337

Re: Geotechnical Evaluation City of Jordan 2024 Infrastructure Improvements Jordan, Minnesota

Dear Mr. Wheeler:

We are pleased to present this Geotechnical Evaluation Report for the 2024 Infrastructure Improvements in the City of Jordan, Minnesota. Our results and recommendations in light of the geotechnical issues influencing design and construction are presented in this letter report, which we request you read in its entirety.

We performed our work in general accordance with our proposal (QTB86958) and the Master Subconsultant Agreement for Professional Services between Bolton & Menk, Inc. and Braun Intertec Corporation.

Purpose and Scope

The purpose of this evaluation was to measure the pavement thicknesses and sample shallow subsurface materials with ground penetrating radar (GPR), coring and hand auger borings; and to use the information gathered to provide recommendations for mill and overlay or reclamation of the project streets. The proposed rehabilitation includes pavement reclamation and resurfacing of the segments shown in Table 1 and Figure 1; a sketch showing exploration locations and project limits is also attached to this letter.

In 2020 we completed similar evaluation on several of these street segments for work originally planned for 2021, which is now included as part of the 2024 project as noted in the following tables.

Bolton & Menk, Inc. Project B2310497 December 11, 2023 Page 2

Table 1. Streets Included in the 2024 Infrastructure	e Improvements Project
--	------------------------

		Approx. Length	
Street	Segment	(feet)	Proposed Work
Arabian Dr	Lydia Rd to CSAH 10	900	Mill and overlay or full-depth reclamation
Clover Ct	Cul-de-sac to Homestead Dr	170	Mill and overlay or full-depth reclamation
Colony Ct	Cul-de-sac to Lydia Rd	140	Mill and overlay or full-depth reclamation
Homestead Dr	West End to Arabian Dr	1010	Mill and overlay or full-depth reclamation
Liberty Ln	CSAH 10 to Cul-de-sac	590	Mill and overlay or full-depth reclamation
Lydia Rd	South End to TH 282	1370	Mill and overlay or full-depth reclamation
Maple Ln	West End to Lydia Rd	1000	Mill and overlay or full-depth reclamation
First St*	West End to West St	940	Mill and overlay
Mertens St*	Second St to First St	350	Full-depth reclamation
West St*	First St to Second St	330	Full-depth reclamation
Wood St*	First St to Second St	250	Full-depth reclamation

*Evaluated in 2020 for the 2021 Infrastructure Project; lengths and termini adjusted to reflect the segments included in the 2024 project

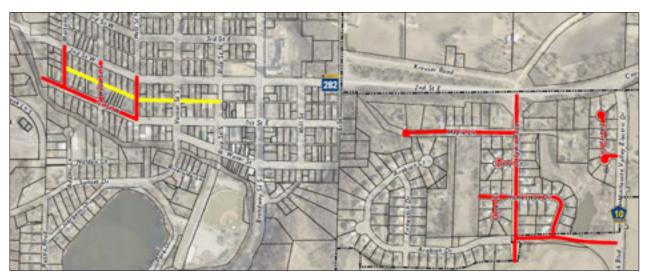


Figure 1. 2024 City of Jordan Infrastructure Improvements Map (Street Resurfacing in Red)

GPR Analysis

We collected GPR data was collected in November 2023 according to GSSI, Inc.'s GPR SIR-20 processor settings at an interval of approximately one scan per lineal foot. We used RADAN 7.0, a software package included in the GSSI RoadScan system, to estimate depths of pavement layers within the data. Where



Bolton & Menk, Inc. Project B2310497 December 11, 2023 Page 3

"ground truth" data (cores and hand auger borings) were performed, we compared the GPR-interpreted layers directly to the measured thicknesses to improve the overall accuracy of the GPR analysis.

Table 2 shows summary statistics of the pavement layer thicknesses, while the attachments present the results graphically. We can provide tabular results electronically at your request.

	Bituminous Thickness (inches)				Aggregate Base Thickness (inches)*					
Street Segment	Avg	Std Dev	Min	Мах	10th Pctle	Avg	Std Dev	Min	Max	10th Pctle
Arabian Dr (Lydia Rd - CSAH 10) (EB)	3.6	0.5	2.3	5.3	3.1	10.2	2.6	5.4	18.3	7.0
Arabian Dr (Lydia Rd - CSAH 10) (WB)	3.8	0.9	1.6	6.3	2.7	8.9	2.4	1.6	15.2	5.8
Clover Ct (Cul-de-sac - Homestead Dr) (SB)	3.8	0.5	3.0	5.9	3.2	13.2	1.6	10.5	17.3	11.5
Colony Ct (Cul-de-sac - Lydia Rd) (WB)	5.4	0.7	3.4	7.8	4.6	7.2	1.0	4.8	11.4	6.0
Homestead Dr (West End - Arabian Dr) (EB)	4.5	0.7	2.5	9.2	3.6	10.7	2.4	4.8	20.4	8.1
Homestead Dr (West End - Arabian Dr) (WB)	4.0	0.8	2.0	8.0	2.8	11.5	1.6	8.4	18.9	9.7
Liberty Ln (CSAH 10 - Cul-de- sac) (NB)	5.3	0.8	3.3	8.2	4.2	13.6	2.0	9.6	19.7	11.2
Liberty Ln (CSAH 10 - Cul-de- sac) (SB)	5.6	0.8	3.6	8.1	4.7	12.6	1.9	8.0	18.8	10.3
Lydia Rd (South End - TH 282) (NB)	4.1	0.7	2.2	6.9	3.2	9.2	2.4	2.4	15.6	6.0
Lydia Rd (South End - TH 282) (SB)	3.9	0.9	2.4	6.8	3.0	10.4	2.1	5.1	18.8	7.6
Maple Ln (West End - Lydia Rd) (EB)	3.8	0.6	2.3	5.9	2.9	6.3	2.2	1.9	13.3	3.3
Maple Ln (West End - Lydia Rd) (WB)	3.9	0.6	2.4	8.3	3.2	7.8	1.7	3.7	13.3	5.9
First St (West End - West St) (EB)	4.2	0.8	1.1	7.1	3.3					
Mertens St (Fourth St - First St) (SB)	4.9	1.4	2.8	9.3	3.6					

Table 2. Statistics of GPR-Estimated Pavement Thicknesses



	Bituminous Thickness (inches)			А		e Base (inches)	Fhicknes *	55		
Street Segment	Avg	Std Dev	Min	Max	10th Pctle	Avg	Std Dev	Min	Мах	10th Pctle
West St (First St - Fourth St) (NB)	4.7	0.7	3.5	8.2	3.8	8.0	1.3	5.6	12.2	6.5
Wood St (Third St - First St) (SB)	5.0	0.5	3.6	6.4	4.4	12.7	0.6	11.4	14.7	11.9

*This represents the granular material directly below the bituminous layer as used throughout this report. **Evaluated in November 2020 for the 2021 Infrastructure Improvements Project; the data summary here only includes the portions proposed for the 2024 project.

A second layer (probable aggregate base) was often not visible in the scans, i.e. it was difficult to identify as a distinct layer. A lack of a visible second layer in the GPR scan does not imply an absence of one within the pavement section and can be the result of several factors. Please refer to Table 3 for aggregate base thickness and subgrade soil description.

The tested street segments generally appeared to have consistent bituminous thicknesses. There were some variations in apparent aggregate thickness that could affect reclamation; for example, about 500 feet east of Lydia Rd on Arabian Dr, the Homestead Dr/Arabian Dr intersection, and about 400 feet of Maple Ln west of Lydia Dr. Consult the attached charts to this letter for variation of pavement section thickness.

Coring and Hand Auger Borings

In November 2023, we conducted a subsurface investigation that included extracting bituminous pavement cores and performing hand auger soil borings at the six locations shown in the attachment to this letter. Within each corehole, we extended manual soil borings (hand auger borings) to depths of about 3 feet below the surface.

Table 3 summarizes the bituminous and aggregate base thicknesses, as well as the subgrade soils encountered. The table also provides comments on the condition of the bituminous materials. Photos of the cores are included in the Appendix, along with a Descriptive Terminology of Soil for interpreting terms and abbreviations used below.



		Depth		
Street Segment	Core	(inches)	Material	Description or Condition
		0-4	HMA	Good condition
Liberty Ln	C-1	4 - 15	Probable agg base	"Sand and gravel" base
		15+	Sandy CL	Sandy CL, brown, moist
		0-4.5	HMA	Good condition
Sand Creek Blvd	C-2	4.5 – 11	Probable agg base	"Sand and gravel" base
		11+	Sandy CL	Sandy CL, brown, moist
		0-3.5	HMA	Good condition
Homestead Drive	C-3	3.5 – 16.0	Probable agg base	"Sand and gravel" base
		16.0+	Sandy CL	Sandy CL, brown, moist
		0 - 4	HMA	Good condition
Maple Ln	C-4	4 - 14	Probable agg base	"Sand and gravel" base
Maple LI	C-4	14 – 16	SM	SM, with gravel, brown, moist. Hand auger
		14 - 10	5101	was refused at 16-inch depth
		0 – 4.25	HMA	Good condition
Lydia Rd	C-5	4.25 – 12.75	Probable agg base	"Sand and gravel" base
		12.75+	Sandy CL	Sandy CL, tr. gravel, brown, moist
		0-4.25	HMA	Debonding; high-severity stripping
Lydia Rd	C-6	4.25 – 15.25	Probable agg base	
			00	"Sand and gravel" base
		15.25+	Sandy CL	Sand and gravel base Sandy CL, tr. gravel, brown, moist
Mortons St (Equith St	C-6	15.25+ 0 - 3.5		-
Mertens St (Fourth St	C-6 (2021		Sandy CL	Sandy CL, tr. gravel, brown, moist
Mertens St (Fourth St to First St)		0 - 3.5	Sandy CL HMA	Sandy CL, tr. gravel, brown, moist Debonding; high-severity stripping
to First St)	(2021	0 - 3.5 3.5 - 19.5	Sandy CL HMA Agg base	Sandy CL, tr. gravel, brown, moist Debonding; high-severity stripping "Sand and gravel" base
to First St) First St (West End to	(2021 Project)	0 - 3.5 3.5 - 19.5 19.5+	Sandy CL HMA Agg base SM	Sandy CL, tr. gravel, brown, moist Debonding; high-severity stripping "Sand and gravel" base Similar to agg base; less gravel
to First St)	(2021 Project) C-7	0 - 3.5 3.5 - 19.5 19.5+ 0 - 3.5	Sandy CL HMA Agg base SM HMA	Sandy CL, tr. gravel, brown, moist Debonding; high-severity stripping "Sand and gravel" base Similar to agg base; less gravel Good condition
to First St) First St (West End to West St)	(2021 Project) C-7 (2021	0 - 3.5 3.5 - 19.5 19.5+ 0 - 3.5 3.5 - 19	Sandy CL HMA Agg base SM HMA Agg base	Sandy CL, tr. gravel, brown, moist Debonding; high-severity stripping "Sand and gravel" base Similar to agg base; less gravel Good condition "Sand and gravel" base
to First St) First St (West End to	(2021 Project) C-7 (2021 Project)	0 - 3.5 3.5 - 19.5 19.5+ 0 - 3.5 3.5 - 19 19+	Sandy CL HMA Agg base SM HMA Agg base SM	Sandy CL, tr. gravel, brown, moist Debonding; high-severity stripping "Sand and gravel" base Similar to agg base; less gravel Good condition "Sand and gravel" base SM, f-m grained, trace gravel, brown, moist

*Performed in 2020 for the 2021 Infrastructure Improvements Project

Generally, the cores were free of substantial material distress (stripping, breakage, cracking) except for the core for Mertens Street from the 2021 Project, which had high-severity stripping and layer debonding.

The aggregate base was a "sand and gravel"-type characterized by SP-SM or SM with gravel. The underlying subgrade was mostly clayey, classifying as sandy lean clay occasionally with small amounts of gravel.



Discussion and Recommendations

Mill and Overlay

The streets in the City of Jordan 2024 project area, except for Mertens Street, generally appear to be suitable for mill and overlay based on their visually assessed bituminous material condition and thickness. A detailed evaluation of pavement surface conditions, which will have the greatest influence on the suitability and service life of the overlay, was outside of the scope of our evaluation. Some areas may require additional milling and/or excavation to reach a suitable surface for overlay placement. This will include distressed areas such as those with fatigue/alligator distress and edge cracks, as well as areas where bottom-up stripping of the pavement is revealed by milling.

Milling should proceed per MnDOT Specification 2232, with bituminous paving in general accordance with MnDOT Specification 2360. We recommend a minimum mill depth of 1 1/2 inches for a 1 1/2-inch overlay with SPWEA240B. Mill and overlay and lift thicknesses should be limited to 2 inches; although a thicker overlay will tend to have a slightly longer service life, the risk of damage to areas of thin pavement increases.

Deeper excavations or larger patch areas that penetrate the aggregate base should match the in-place section that is suggested by the cores and average GPR thicknesses. For edge cracking or other distressed areas where milling will be performed to the full depth of the in-place bituminous layer, we recommend performing the mill to at least 1 foot beyond the edge of the visible distress. Patch areas should also be sized to allow for proper compaction of the replacement materials by the available equipment.

Full-depth Reclamation

According to GPR analysis, average pavement thicknesses varied from approximately 4 to 5 inches of bituminous, with relatively consistent bituminous pavement thicknesses within each street segment.

Hand auger borings revealed a relatively thick "aggregate base," which was a washed sand-and-gravel type material.

Based on this, it appears full-depth reclamation (FDR) can be utilized as proposed to obtain materials for aggregate base for project streets. A reclamation depth of 12 inches appears feasible. Due to the relatively thin bituminous pavements, we do not recommend pre-milling; instead, material should be removed following reclamation to allow for the placement of bituminous pavement. Consult the GPR results for areas where reclaim depth may require adjustment due to the presence of thin aggregate base. Other areas may also be revealed during the reclaim process.



Design Sections – Reclamation Areas

Laboratory tests to determine an R-value for pavement design were not included in the scope of this project. Given most common soils in the top two feet of pavement sections to be sandy lean clay, we recommend using an R-value of 20 for thickness design.

The City of Jordan Standard Details have one set of pavement section thickness and materials requirements for sections designated as local streets, minor collectors, and major collectors. Our recommendations in Table 4 includes this standard. The sections below lack the granular subbase required by the standard but are otherwise structurally viable for up to 400,000 equivalent single axle loads (ESALs) at the assumed R-value and 90+ percent reliability.

Street	Layer	Thickness (inches)	MnDOT Specification/Designation
	Bituminous wear	2 (1 lift)	SPWEA240C
A.II.	Bituminous non-wear	2 (1 lift)	SPNWB230C
All	Aggregate base (Class 5 or 6) and/or reclaim	8	3138

Table 4. Recommended Bituminous Pavement Thickness Design

The above pavement design is based upon a 20-year performance life. This is the amount of time before major rehabilitation is anticipated. This performance life assumes maintenance such as seal coating and crack sealing is routinely performed. The actual pavement life will vary depending on variations in weather, traffic conditions, and maintenance.

Materials Testing

We recommend conducting DCP tests for aggregate base or reclaim and imported granular materials. We recommend Gyratory tests on bituminous mixes to evaluate strength and air voids and density tests to evaluate compaction.

Continuity of Professional Responsibility

Plan Review

We based this report on a limited amount of information, and we made a number of assumptions to help us develop our recommendations. We should be retained to review the geotechnical aspects of the designs and specifications. This review will allow us to evaluate whether we anticipated the design



correctly, if any design changes affect the validity of our recommendations, and if the design and specifications correctly interpret and implement our recommendations.

Construction Observations and Testing

We recommend retaining us to perform the required observations and testing during construction as part of the ongoing geotechnical evaluation. This will allow us to correlate the subsurface conditions exposed during construction with those encountered by the borings and provide professional continuity from the design phase to the construction phase. If we do not perform observations and testing during construction, it becomes the responsibility of others to validate the assumption made during the preparation of this report and to accept the construction-related geotechnical engineer-of-record responsibilities.

General Remarks

This report is for the exclusive use of the addressed parties. Without written approval, we assume no responsibility to other parties regarding this report. Our evaluation, analyses, and recommendations may not be appropriate for other parties or projects.

In performing its services, Braun Intertec used that degree of care and skill ordinarily exercised under similar circumstances by reputable members of its profession currently practicing in the same locality. No warranty, express or implied, is made.

We appreciate the opportunity to be of service to you for this pavement evaluation. If you have any questions about this report, please contact Neil Lund at 952.995.2284.

Sincerely,

BRAUN INTERTEC CORPORATION

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Neil G. Lund, PE Technical Manager, Senior Engineer License Number: 46212 December 11, 2023



Appendix:

Pavement Core and Hand Auger Boring Location Sketch (Two sheets including current and 2021 project) Descriptive Terminology of Soil GPR Charts Core Photo Log



The Science You Build On.

11001 ampshire`Avenue S Minneapolis, MN 55438 952.995.2000 braunintertec.com

Drawn By:

Date Dran:A

Checked By:

Last Modified:

ZS

NGL

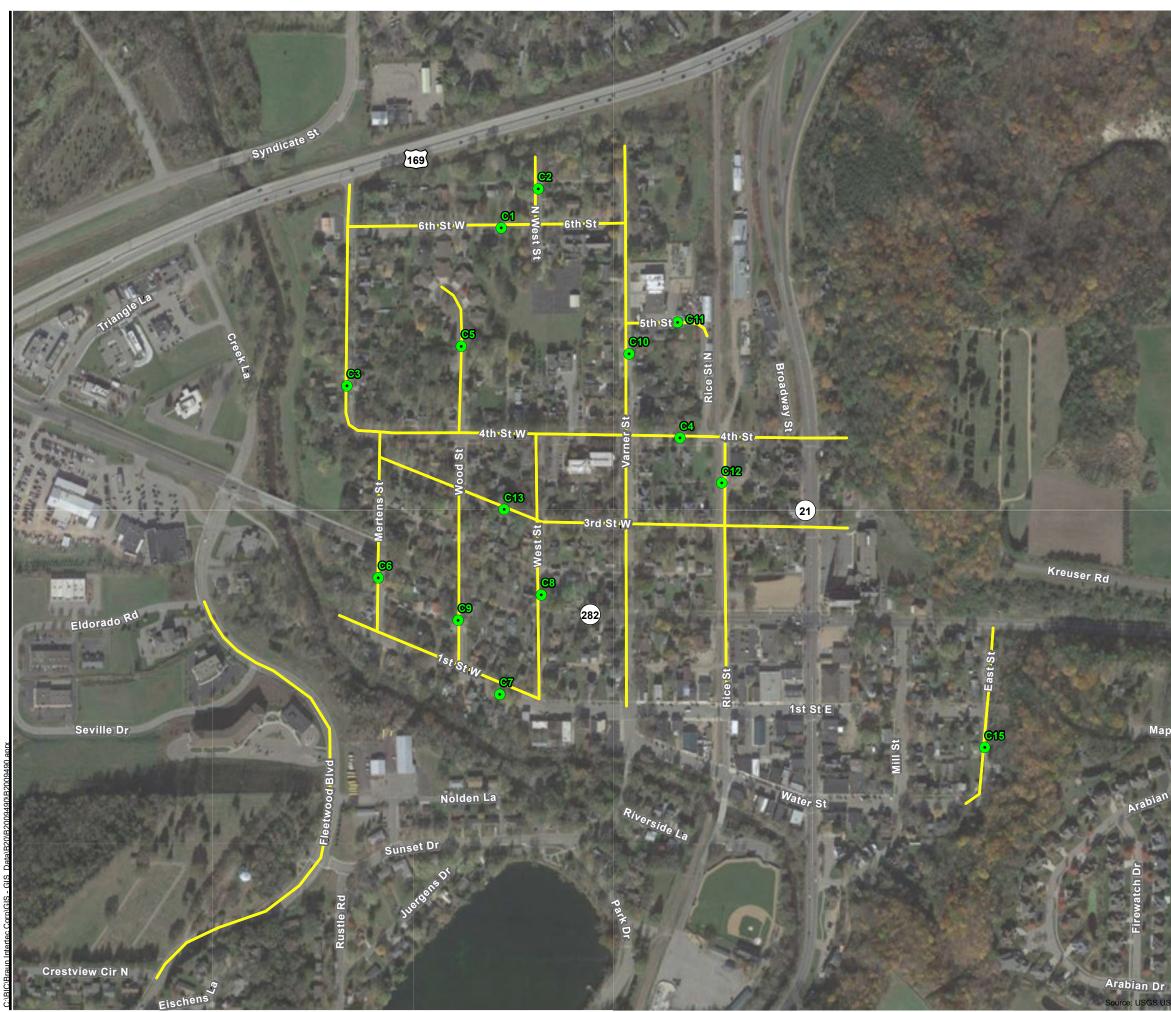
11/27/2023

11/27/2023

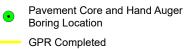


TH 282 and Lydia Dr

Sketch

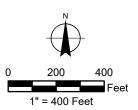






BRAUN

11001 Hampshire Avenue S Minneapolis, MN 55438 952.995.2000 braunintertec.com





 Drawing Information

 Project No:

 B2009490__Corings

 Drawn By:
 JPM

 Drawn Drawn:
 11/25/2020

 Checked By:
 NL

 Last Modified:
 11/25/2020

 Project Information
 11/25/2020

 Checked By:
 NL

 Last Modified:
 11/25/2020

 City of Jordan 2021
 11/25/2020

Infrastructure Improvements

Various Streets

Jordan, Minnesota

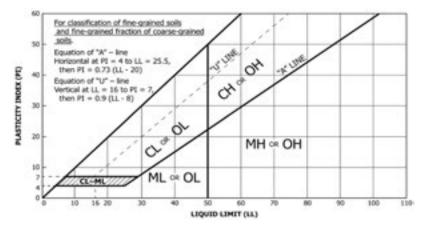
G PR, Core and Hand Auger Boring Location Sketch



Criteria for Assigning Group Symbols and				Soil Classification		
Group Names Using Laboratory Tests ^A				Group Symbol	Group Name ^B	
c	Gravels	Clean Gravels (Less than 5% fines ^c)		$C_u \ge 4$ and $1 \le C_c \le 3^D$	GW	Well-graded gravel ^E
ed o	(More than 50% of coarse fraction			$\rm C_u$ < 4 and/or $\rm (C_c$ < 1 or $\rm C_c$ > 3)^D	GP	Poorly graded gravel ^E
ed Soi retain eve)	retained on No. 4	Gravels wi	th Fines	Fines classify as ML or MH	GM	Silty gravel ^{EFG}
iinec 1% re 10 siev	sieve)	(More than 1	2% fines ^c)	Fines Classify as CL or CH	GC	Clayey gravel ^{EFG}
Coarse-grained Soils (more than 50% retained on No. 200 sieve)	Sands	Clean Sands		$C_u \ge 6$ and $1 \le C_c \le 3^D$	SW	Well-graded sand ¹
e tha No.	(50% or more coarse	(Less than 5	% fines ^H)	$\rm C_u$ < 6 and/or $\rm (C_c$ < 1 or $\rm C_c$ > 3)^D	SP	Poorly graded sand ¹
u c	fraction passes No. 4	Sands with Fines (More than 12% fines ^H)		Fines classify as ML or MH	SM	Silty sand ^{FGI}
)	sieve)			Fines classify as CL or CH	SC	Clayey sand ^{FGI}
		Inorganic	PI > 7 and	l plots on or above "A" line ^J	CL	Lean clay ^{KLM}
s the	Silts and Clays (Liquid limit less than	inorganic	PI < 4 or p	olots below "A" line ^J	ML	Silt ^{KLM}
Fine-grained Soils (50% or more passes the No. 200 sieve)	50)	Organic	ganic Liquid Limit - oven dried Liquid Limit - not dried <0.75		OL	Organic clay KLMN Organic silt KLMO
grain mor∈ . 200		Inorganic	PI plots on or above "A" line		СН	Fat clay ^{KLM}
Fine- % or No.	Silts and Clays (Liguid limit 50 or	inorganic	PI plots b	elow "A" line	MH	Elastic silt ^{KLM}
(50:	(Liquid limit 50 or more)	Organic	Organic Liquid Limit - oven dried Liquid Limit - not dried <0.75		ОН	Organic clay KLMP Organic silt KLMQ
Hig	hly Organic Soils	Primarily org	Primarily organic matter, dark in color, and organic odor		PT	Peat

A. Based on the material passing the 3-inch (75-mm) sieve.

- B. If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.
- C. Gravels with 5 to 12% fines require dual symbols: GW-GM well-graded gravel with silt GW-GC well-graded gravel with clay GP-GM poorly graded gravel with silt
 - GP-GC poorly graded gravel with clay
- D. $C_u = D_{60} / D_{10}$ $C_c = (D_{30})^2 / (D_{10} \times D_{60})$
- E. If soil contains \geq 15% sand, add "with sand" to group name.
- F. If fines classify as CL-ML, use dual symbol GC-GM or SC-SM.
- G. If fines are organic, add "with organic fines" to group name.
- H. Sands with 5 to 12% fines require dual symbols:
 - SW-SM well-graded sand with silt
 - SW-SC well-graded sand with clay
 - SP-SM poorly graded sand with silt
 - SP-SC poorly graded sand with clay
- I. If soil contains \geq 15% gravel, add "with gravel" to group name.
- J. If Atterberg limits plot in hatched area, soil is CL-ML, silty clay.
- K. If soil contains 15 to < 30% plus No. 200, add "with sand" or "with gravel", whichever is predominant.
- L. If soil contains ≥ 30% plus No. 200, predominantly sand, add "sandy" to group name.
- M. If soil contains ≥ 30% plus No. 200 predominantly gravel, add "gravelly" to group name.
- N. $PI \ge 4$ and plots on or above "A" line.
- O. PI < 4 or plots below "A" line.
- P. PI plots on or above "A" line.
- Q. PI plots below "A" line.



Laboratory Tests

 \mathbf{q}_{p}

PL

Ы

- DDDry density, pcfWDWet density, pcf
- P200 % Passing #200 sieve
- MC Moisture content, %
- OC Organic content, %
- Pocket penetrometer strength, tsf Unconfined compression test, tsf
- quUnconfined compressLLLiquid limit
 - Plastic limit
 - Plasticity index

Descriptive Terminology of Soil

Based on Standards ASTM D2487/2488 (Unified Soil Classification System)

Particle Size Identification
Boulders over 12"
Cobbles 3" to 12"
Gravel
Coarse
Fine No. 4 to 3/4" (4.75 mm to 19.00 mm)
Sand
Coarse No. 10 to No. 4 (2.00 mm to 4.75 mm)
Medium No. 40 to No. 10 (0.425 mm to 2.00 mm)
Fine No. 200 to No. 40 (0.075 mm to 0.425 mm)
Silt No. 200 (0.075 mm) to .005 mm
Clay < .005 mm
Relative Proportions ^{L, M}
trace 0 to 5%
little 6 to 14%

with......≥ 15%

Inclusion Thicknesses

lens	0 to 1/8"
seam	1/8" to 1"
layer	

Apparent Relative Density of Cohesionless Soils

Very loose	0 to 4 BPF
Loose	5 to 10 BPF
Medium dense	11 to 30 BPF
Dense	31 to 50 BPF
Verv dense	over 50 BPF

Consistency of	Blows	Approximate Unconfined
Cohesive Soils	Per Foot	Compressive Strength
Very soft	0 to 1 BPF	< 0.25 tsf
Soft	2 to 4 BPF	0.25 to 0.5 tsf
Medium	5 to 8 BPF	0.5 to 1 tsf
Stiff	9 to 15 BPF	1 to 2 tsf
Very Stiff	16 to 30 BPF	2 to 4 tsf
Hard	over 30 BPF.	> 4 tsf

Moisture Content:

Dry: Absence of moisture, dusty, dry to the touch. Moist: Damp but no visible water. Wet: Visible free water, usually soil is below water table.

Drilling Notes:

Blows/N-value: Blows indicate the driving resistance recorded for each 6-inch interval. The reported N-value is the blows per foot recorded by summing the second and third interval in accordance with the Standard Penetration Test, ASTM D1586.

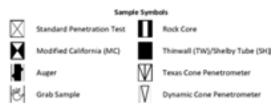
Partial Penetration: If the sampler could not be driven through a full 6-inch interval, the number of blows for that partial penetration is shown as #/x" (i.e. 50/2"). The N-value is reported as "REF" indicating refusal.

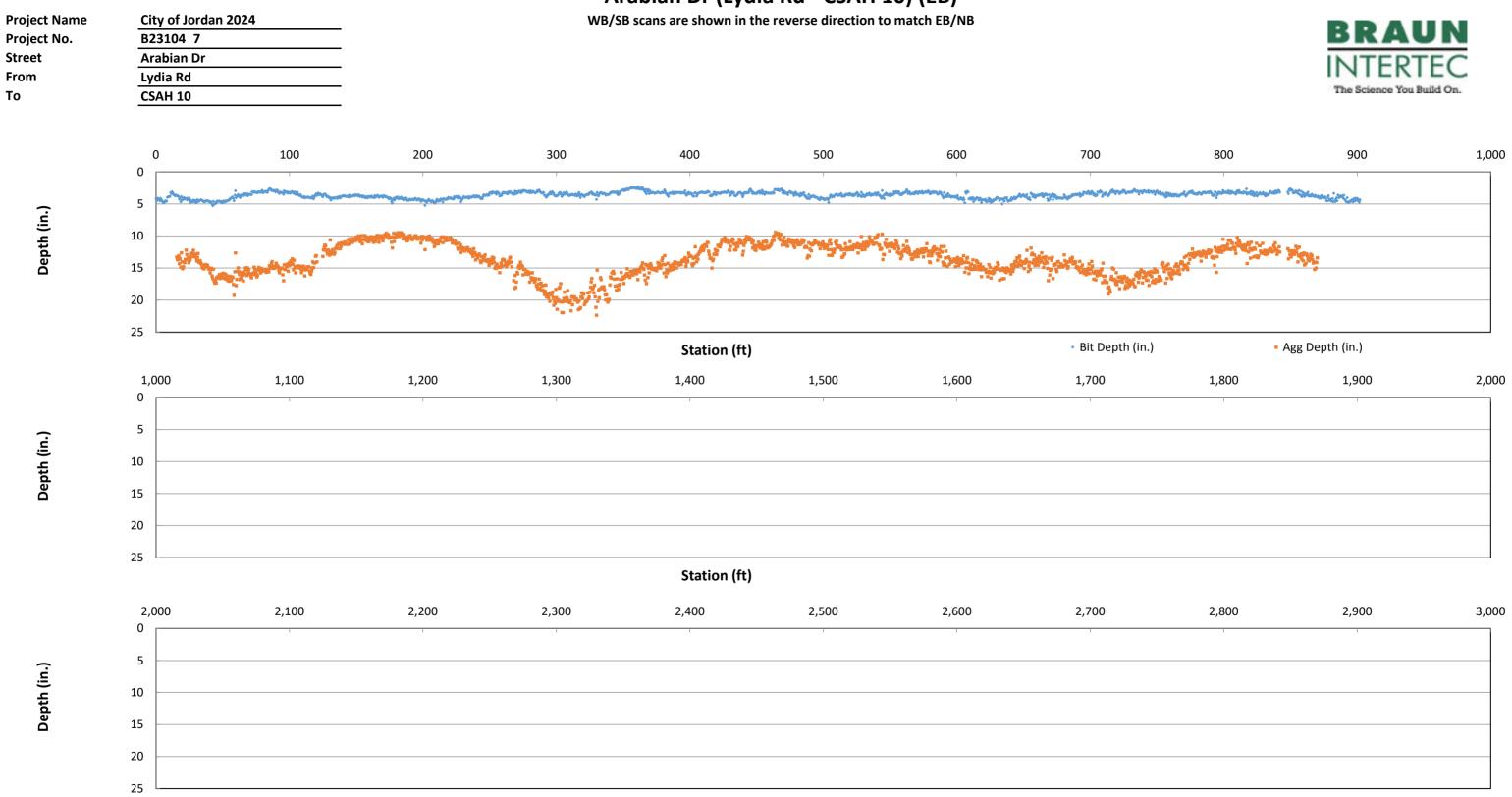
Recovery: Indicates the inches of sample recovered from the sampled interval. For a standard penetration test, full recovery is 18", and is 24" for a thinwall/shelby tube sample.

WOH: Indicates the sampler penetrated soil under weight of hammer and rods alone; driving not required.

WOR: Indicates the sampler penetrated soil under weight of rods alone; hammer weight and driving not required.

Water Level: Indicates the water level measured by the drillers either while drilling (\square), at the end of drilling (\blacksquare), or at some time after drilling (\blacksquare).





Arabian Dr (Lydia Rd - CSAH 10) (EB)

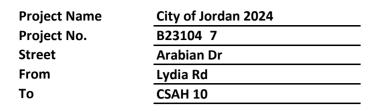
То

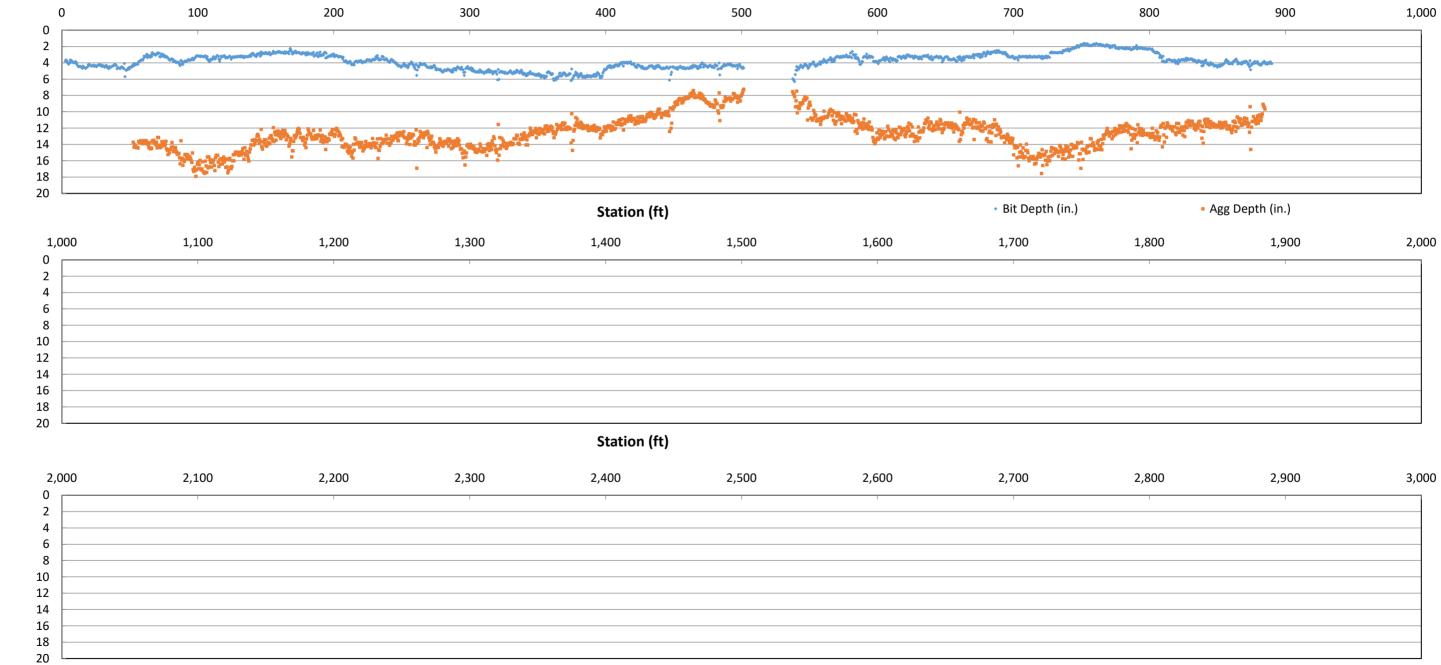


1,800	1,900	2,000
	I	



WB/SB scans are shown in the reverse direction to match EB/NB





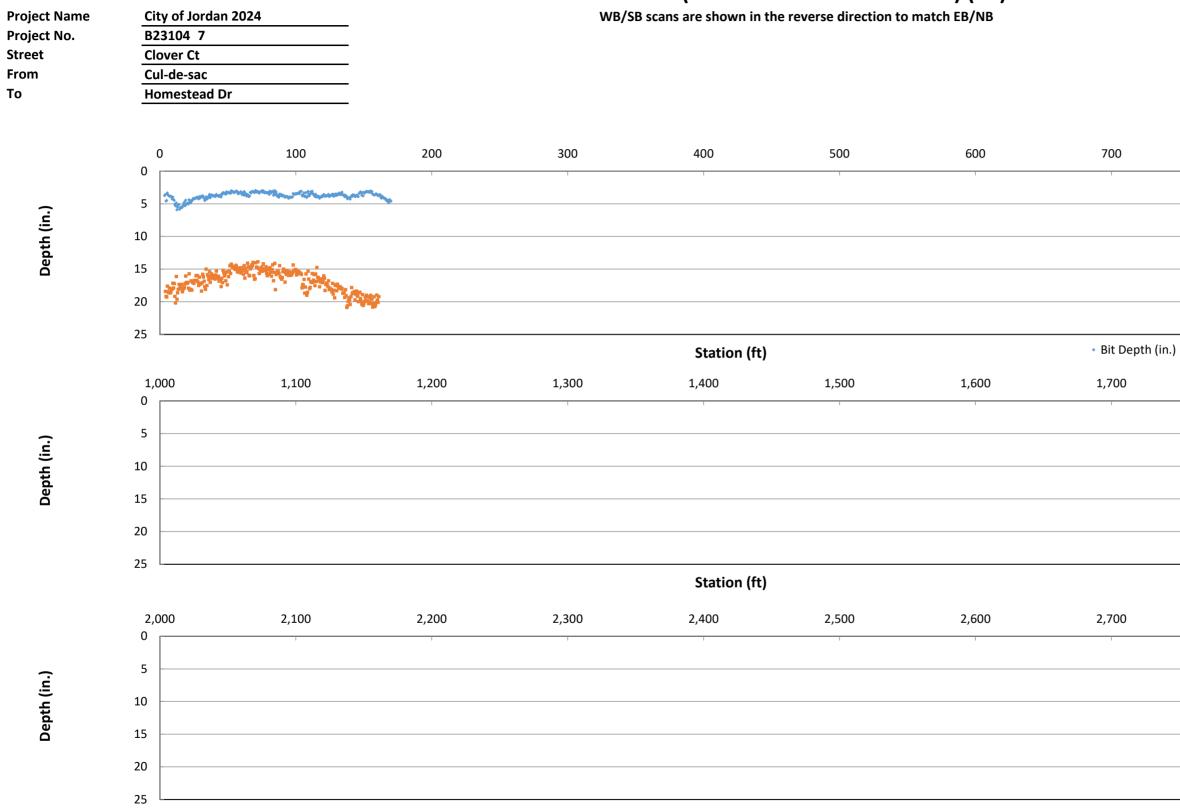


Station (ft)

Depth (in.)



1,800	1,900	2,000
1	1	



Clover Ct (Cul-de-sac - Homestead Dr) (SB)

Station (ft)



800	900	1,000
I	I	

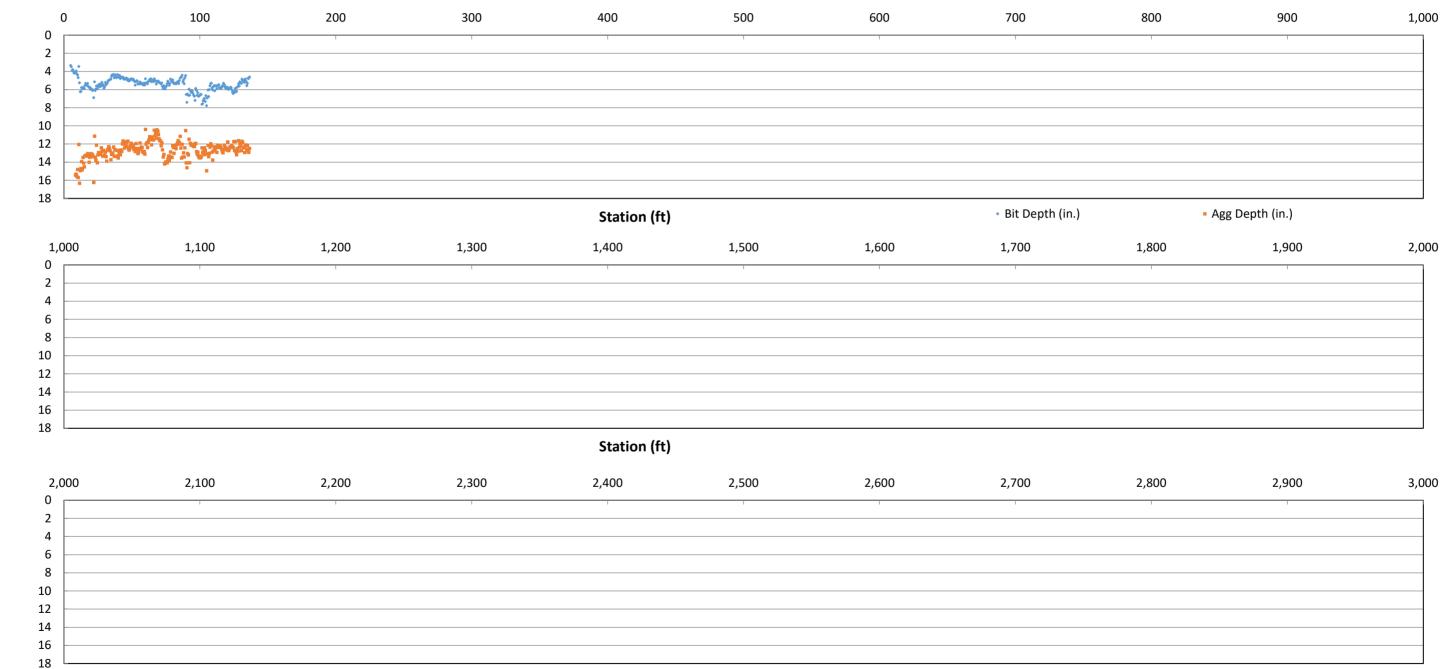
Agg Depth (in.)

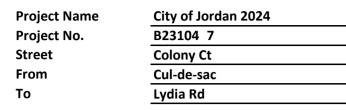
1,800	1,900	2,000
Ι	I	

2,800	2,900	3,000
I	I	

Colony Ct (Cul-de-sac - Lydia Rd) (WB)

WB/SB scans are shown in the reverse direction to match EB/NB

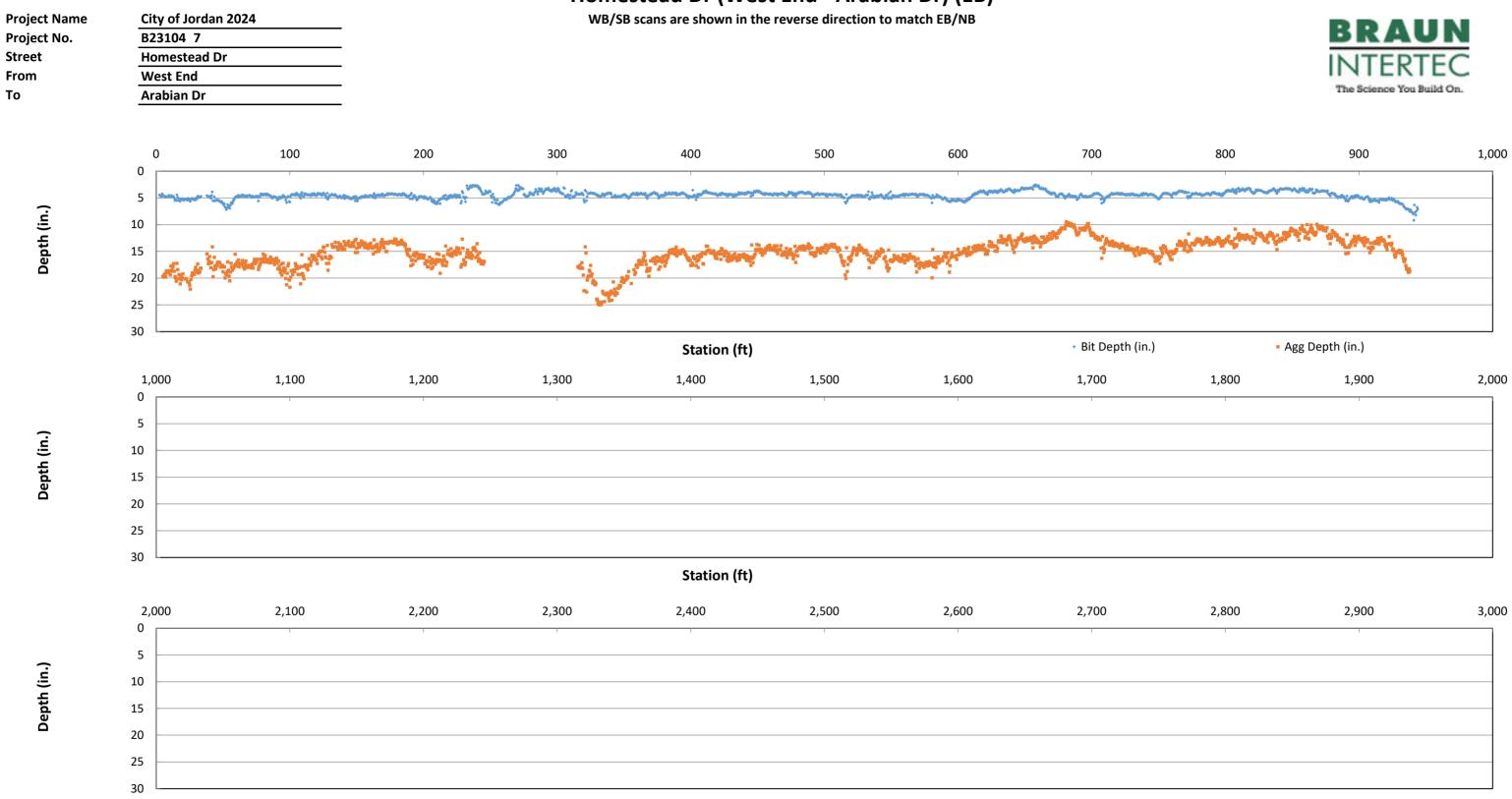






800	900	1,000
1	Ĩ	

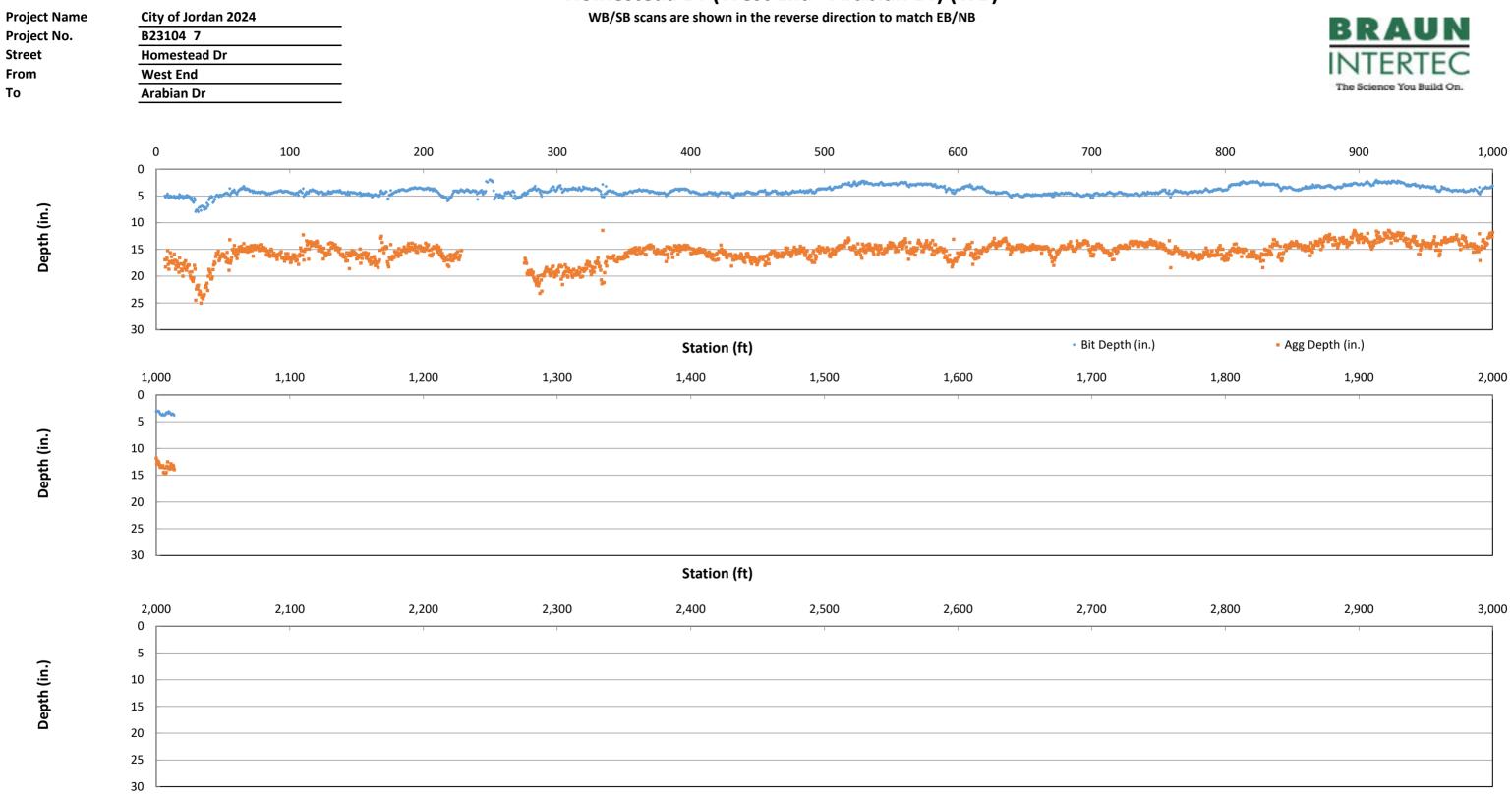
1,800	1,900	2,000
I	Ι	



Homestead Dr (West End - Arabian Dr) (EB)



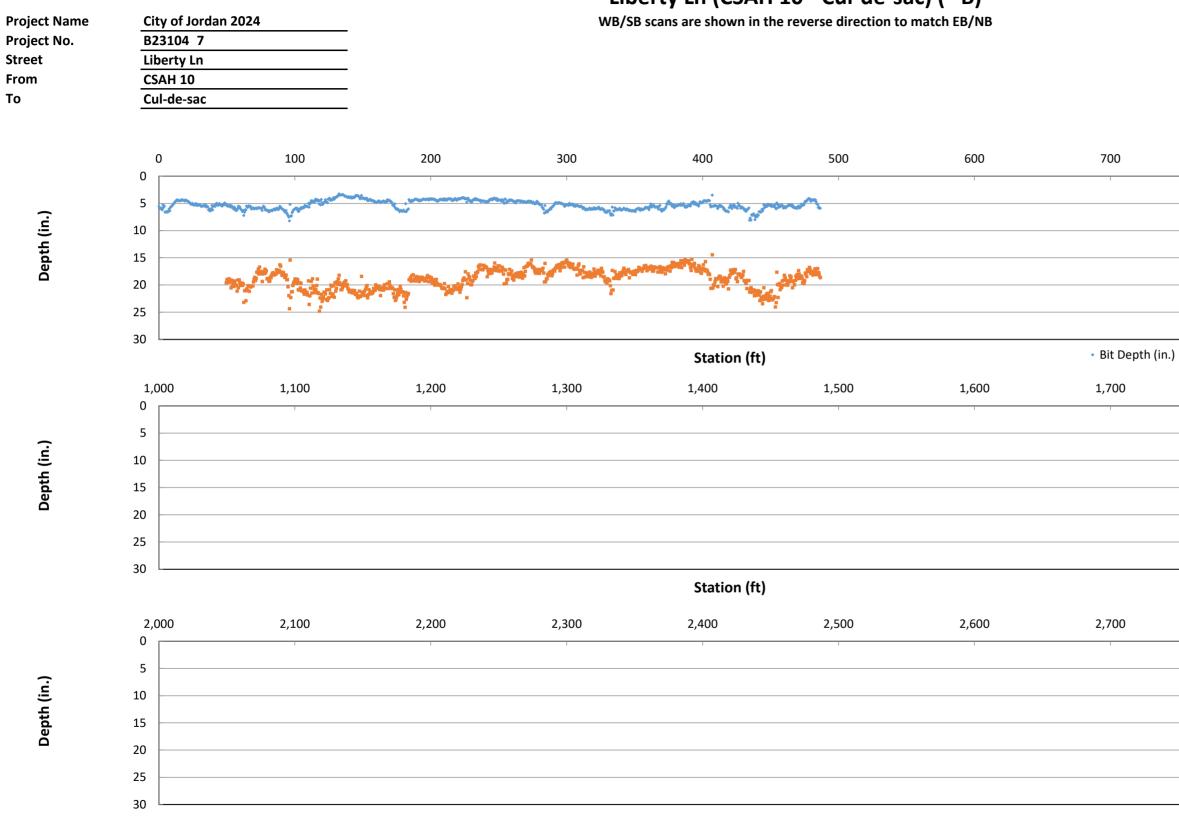
1,800	1,900	2,000
I		



Homestead Dr (West End - Arabian Dr) (WB)



1,800	1,900	2,000
I	1	



Liberty Ln (CSAH 10 - Cul-de-sac) (B)

Station (ft)

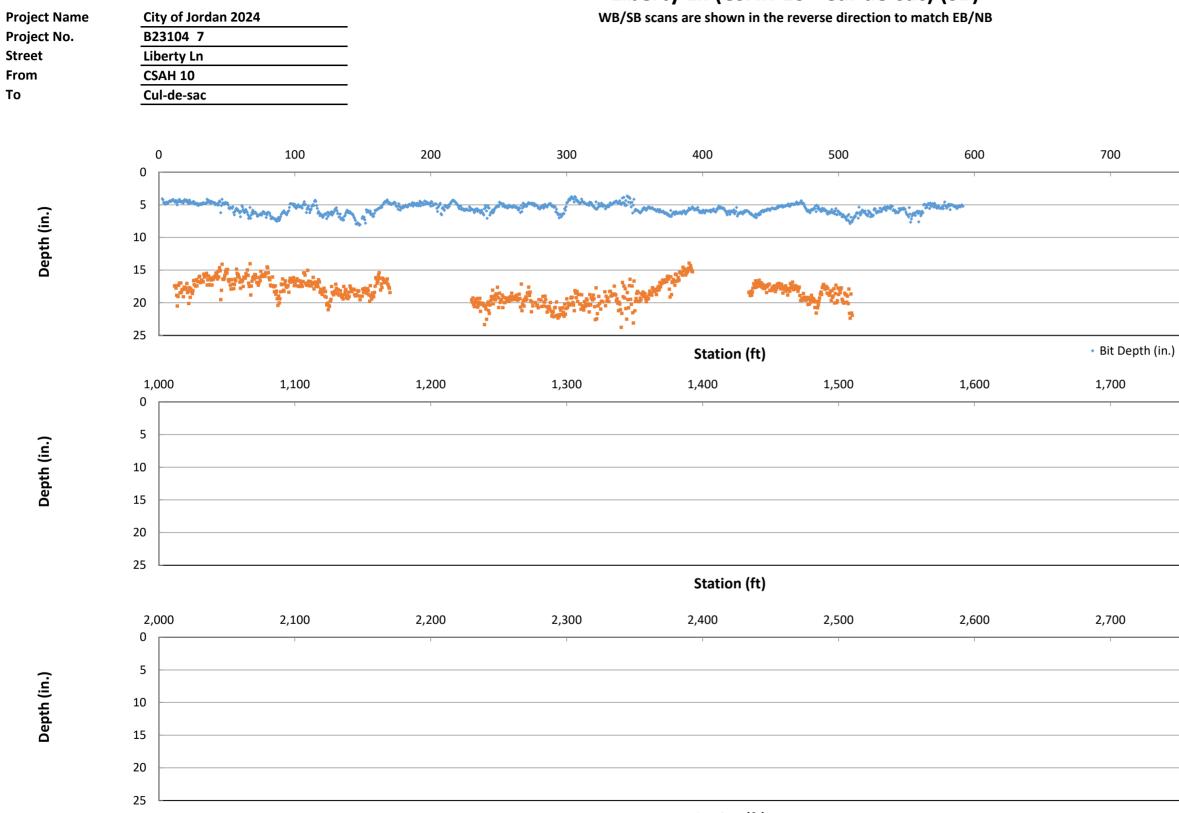


800	900	1,000
I	I	

Agg Depth (in.)

1,800	1,900	2,000
I	I	

2,800	2,900	3,000
T	I	



Liberty Ln (CSAH 10 - Cul-de-sac) (SB)

Station (ft)

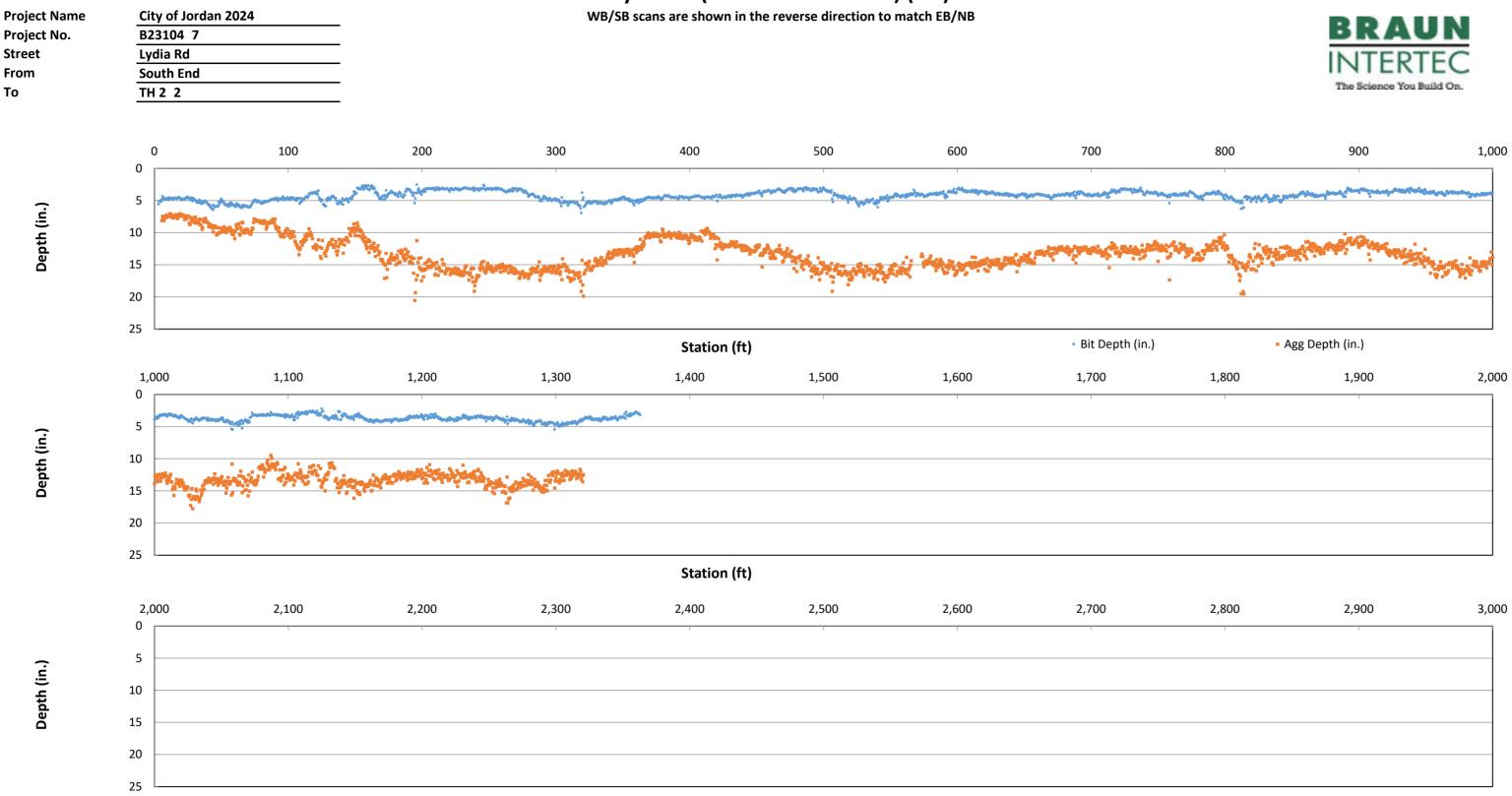


800	900	1,000
I	I	

Agg Depth (in.)

1,800	1,900	2,000
Ι	I	

2,800	2,900	3,000
I	I	



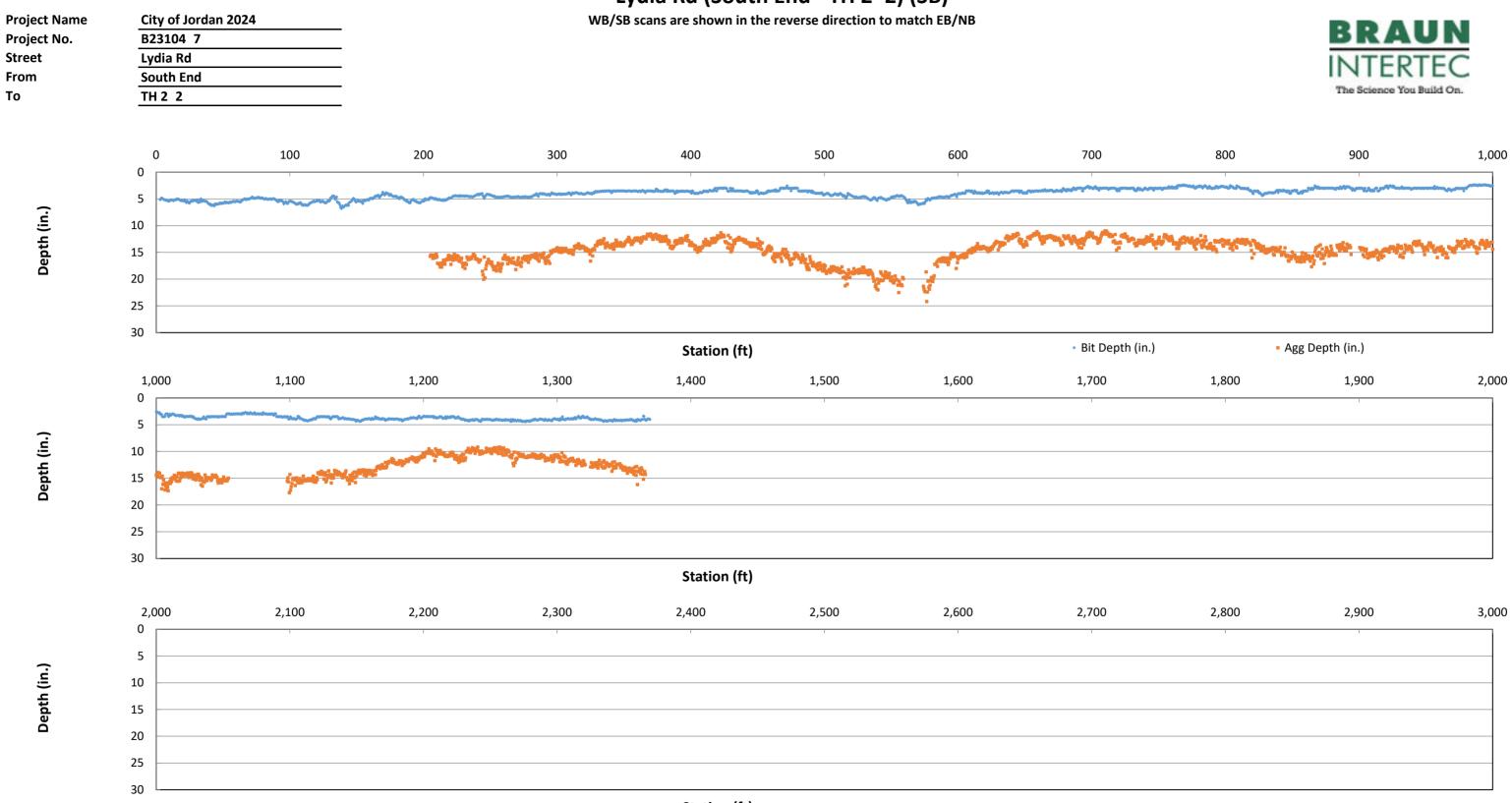
Lydia Rd (South End - TH 2 2) (NB)

From

То



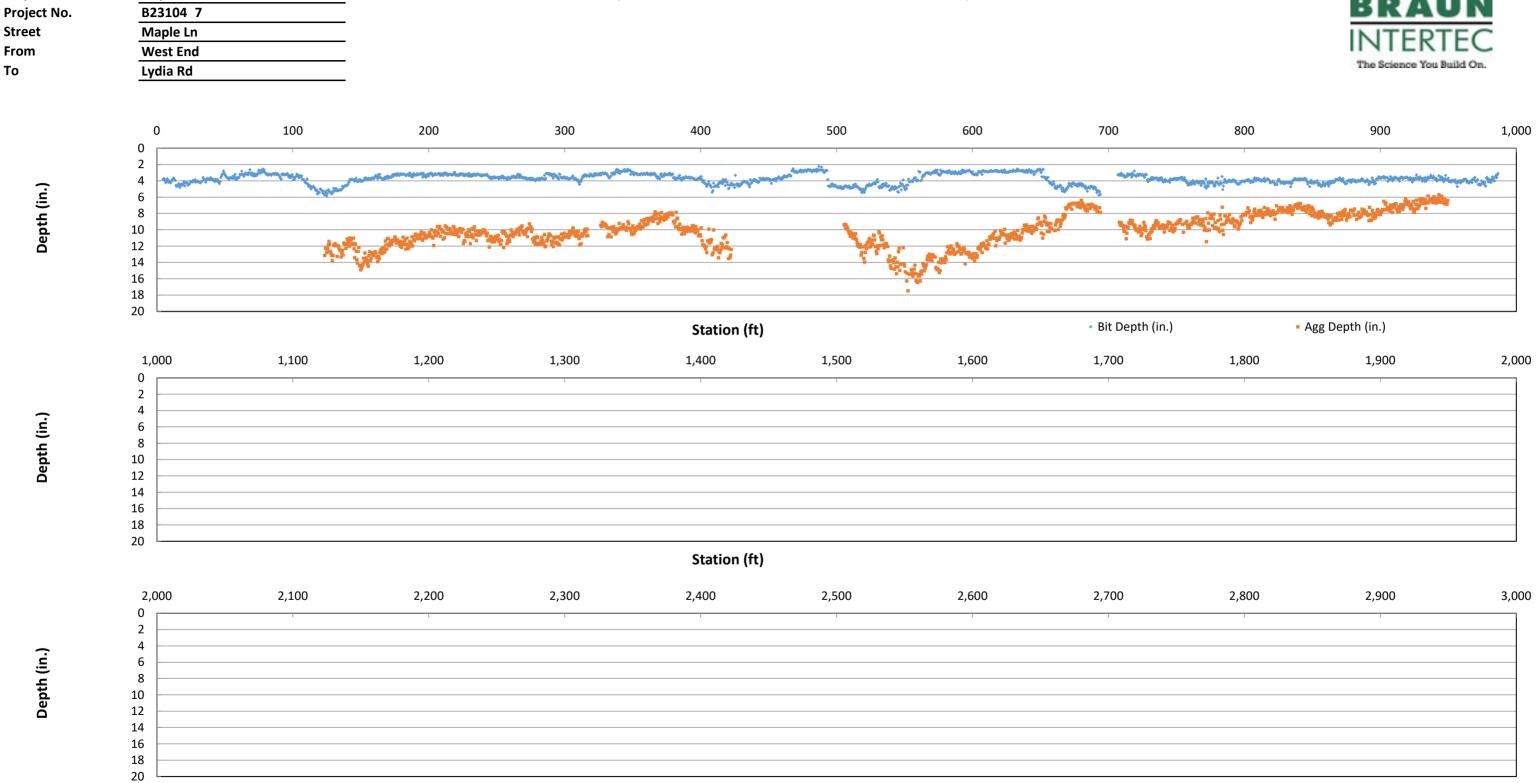
1,900	2,000
I	
	1,900



Lydia Rd (South End - TH 2 2) (SB)



1,900	2,000
I	
	1,900



Maple Ln (West End - Lydia Rd) (EB)

WB/SB scans are shown in the reverse direction to match EB/NB

Station (ft)

Depth (in.)

Project Name

Depth (in.)

Depth (in.)

Street

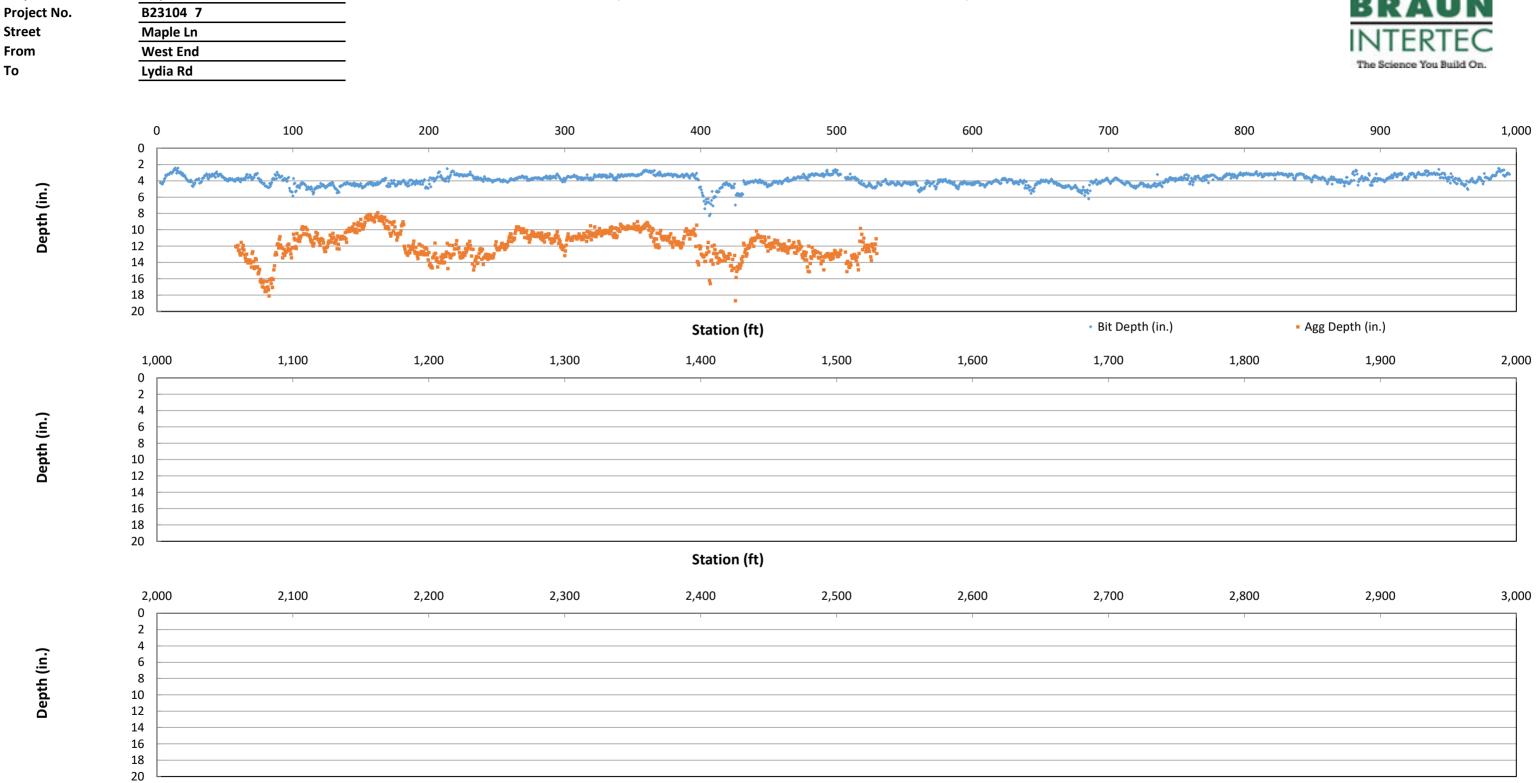
From

То

City of Jordan 2024



1,800	1,900	2,000
I	I	



Maple Ln (West End - Lydia Rd) (WB)

WB/SB scans are shown in the reverse direction to match EB/NB

Station (ft)

Depth (in.)

Depth (in.)

Project Name

Street

From

То

City of Jordan 2024

Depth (in.)



1,800	1,900	2,000
1	I	



0 0 1

2

3

4

5 6

7 8 .

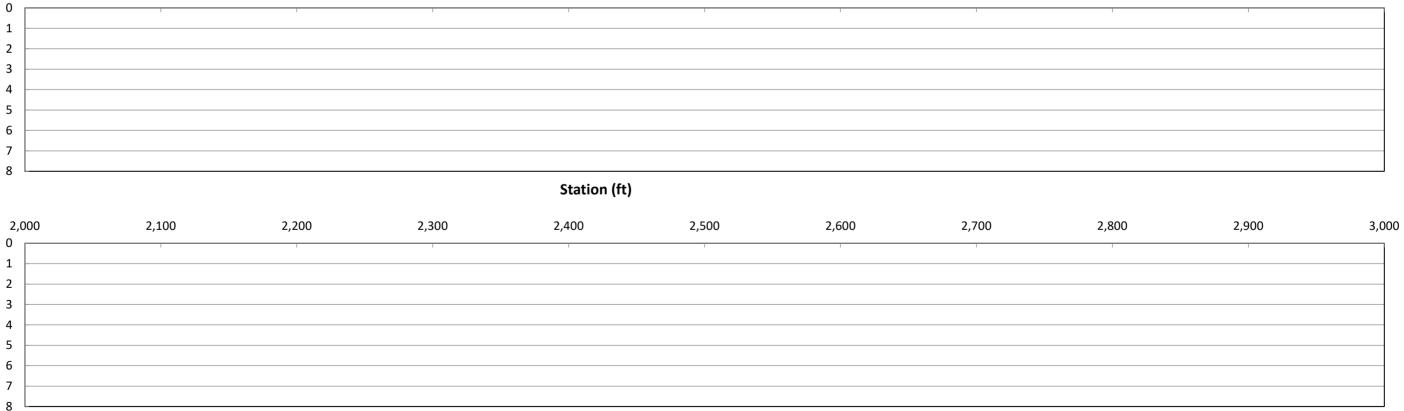
1,000

Depth (in.)

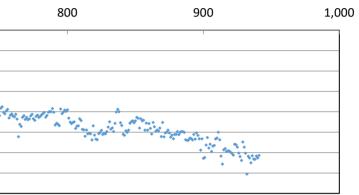
Depth (in.)

Depth (in.)

100 200 300 400 500 600 700 • • ••• disting the in 15 at the star i man a 22 Bit Depth (in.) Station (ft) 1,100 1,200 1,300 1,500 1,600 1,400 1,700







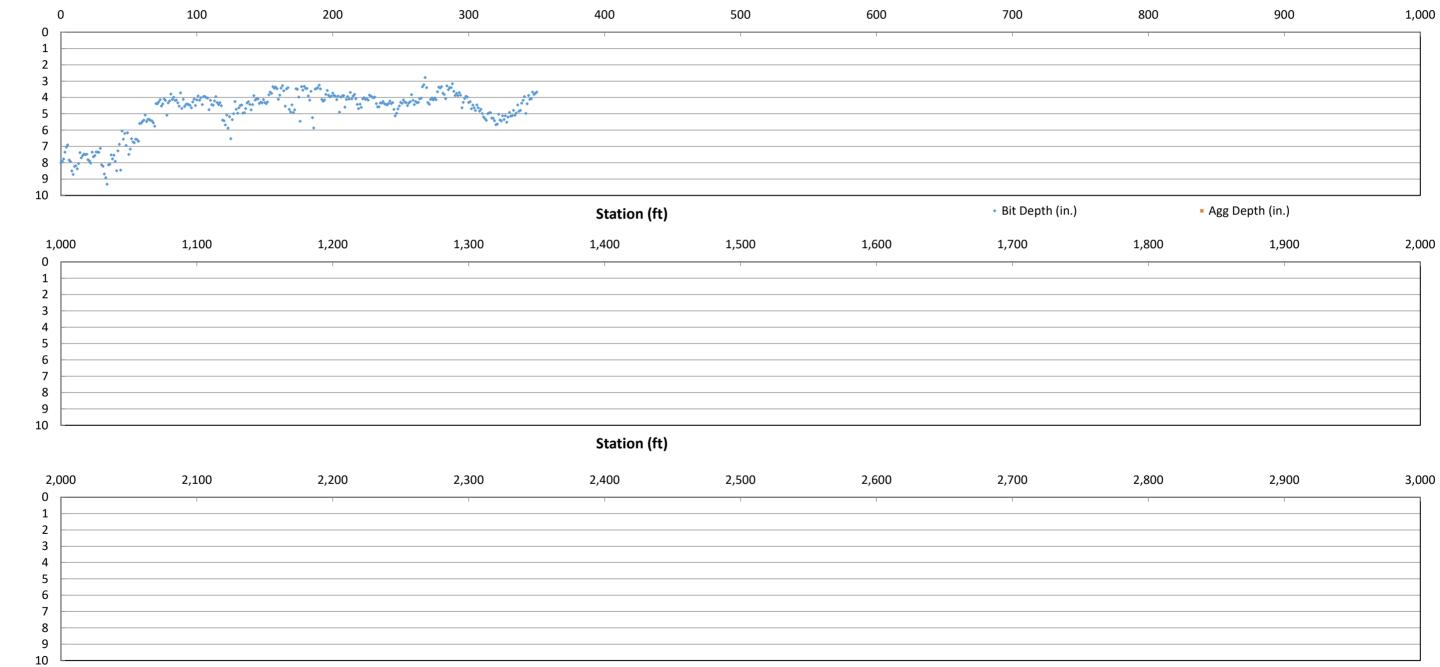
Agg Depth (in.)

1,800	1,900	2,000
I	Ι	

Project Name	City of Jordan 2024
Project No.	B23104 7
Street	Mertens St
From	Fourth St
То	First St

Mertens St (Fourth St - First St) (SB)

Scan from 2021 project - shown in direction or lane indicated





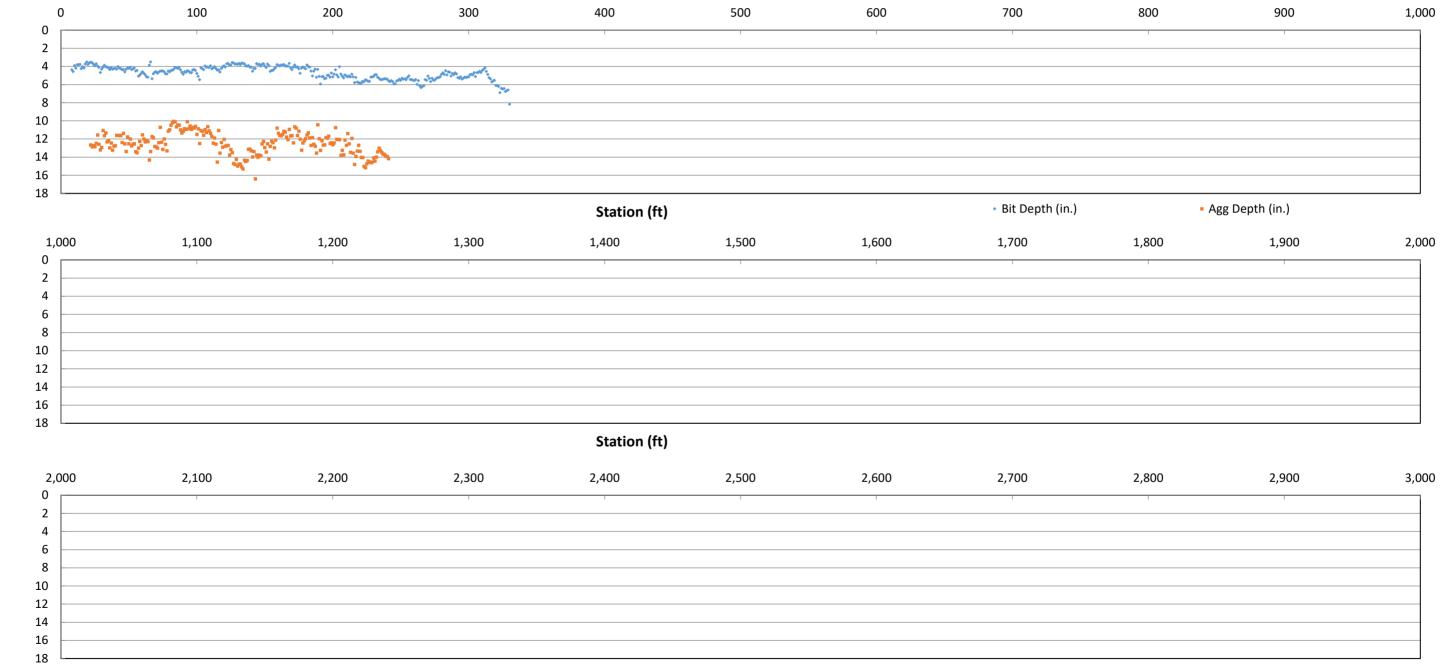
800	900	1,000
1	1	

1,800 1,900	2,000

West St (First St - Fourth St) (B)

Scan from 2021 project - shown in direction or lane indicated

Project Name	City of Jordan 2024
Project No.	B23104 7
Street	West St
From	First St
То	Fourth St



Depth (in.)

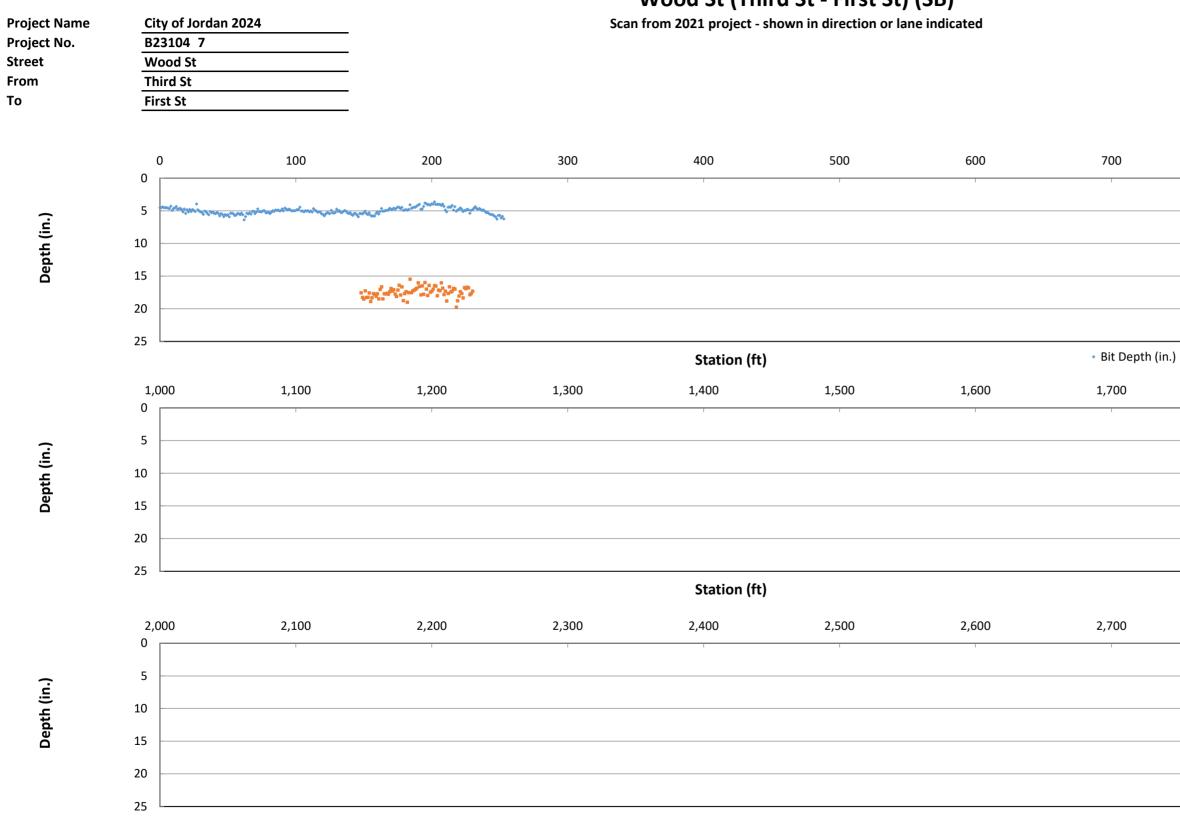
Depth (in.)

Depth (in.)



800	900	1,000
1	Ĩ	

1,800	1,900	2,000
I	Ι	



Wood St (Third St - First St) (SB)

Station (ft)



900	1,000
I	
	900

Agg Depth (in.)

1,800	1,900	2,000
I	I	

2,800	2,900	3,000
I	I	



Core #:	C-1			Project: B2310497
Pavement thickness:	4 inches	Agg base thickness:	11 inches	BRAUN
Facility:	City of Jordan - 2024 Inf	City of Jordan - 2024 Infrastructure Improvements		
Date:	November 2023			INTERTEC
Notes:				



Core #:	C-2			Project: B2310497
Pavement thickness	4 1/2 inches	Agg base thickness:	6 1/2 inches	BRAUN
Facility:	City of Jordan - 2024 In	frastructure Improvement	S	INTERTEC
Date:	November 2023			INTERIEC
Notes:				



Core #:	C-3			Project: B2310497
Pavement thickness:	3 1/2 inches	Agg base thickness:	12 1/2 inches	BRAUN
Facility:	City of Jordan - 2024 Infrastructure Improvements			INTERTEC
Date:	November 2023			INTERIEC
Notes:				



Core #:	C-4			Project: B2310497
Pavement thickness	4 inches	Agg base thickness:	10 inches	BRAUN
Facility:	City of Jordan - 2024 Infrastructure Improvements			INTERTEC
Date:	November 2023			INTERIEC
Notes:				



Core #:	C-5			Project: B2310497
Pavement thickness:	4 1/4 inches	Agg base thickness:	8 1/2 inches	BRAUN
Facility:	City of Jordan - 2024 Int	frastructure Improvement	S	INTERTEC
Date:	November 2023			INTERIEC
Notes:				



Core #:	C-6			Project: B2310497
Pavement thickness	4 1/4 inches	Agg base thickness:	11 inches	BRAUN
Facility:	City of Jordan - 2024 Infrastructure Improvements			INTERTEC
Date:	November 2023			INTERIEC
Notes:				

PRELIMINARY ASSESSMENT ROLL

2024 INFRASTRUCTURE IMPROVEMENTS CITY OF JORDAN, MN

1/22/2024

PRELIMINARY SPECIAL ASSESSMENT ROLL: LOWERTOWN ALLEYS

ASSESED FRONT FOOT RATE	\$43.14
TOTAL FRONT FOOTAGE	2439
30% OF TOTAL ESTIMATE PROJECT COST - FUNDED BY SPECIAL ASSESSMENTS	\$105,210.00
70% OF TOTAL ESTIMATED PROJECT COST - FUNDED BY CITY	\$245,490.00
TOTAL ESTIMATE PROJECT COST - LOWERTOWN ALLEYS	\$350,700.00

PID	Taxpayer Name	Taxpayer Address	Front Footage	Assessment Amount
220020960	NORTHERN STATES POWER CO & PROPERTY TAX DEPT	414 NICOLLET MALL MPLS, MN 55401	214	\$9,231
220020910	GLASGOW COLLEEN D	105 VARNER ST S JORDAN, MN 55352	70	\$3,020
220020920	SCHMIT DENNIS J & SHARI A	104 2 ST E JORDAN, MN 55352	60	\$2,588
220020930	SCHMIDT ANTHONY D JR	PO 36 JORDAN, MN 55352	50	\$2,157
220020970	BORCHARDT GENE & REBECCA	20625 HARLOW AVE JORDAN, MN 55352	60	\$2,588
220020980	K-MOX INC	18540 LEGENDS CLUB CIR PRIOR LAKE, MN 55372	60	\$2,588
220020990	BOX HOLDINGS LLC	260 MYRICK ST LE SUEUR, MN 56058	101	\$4,357
220021000	CENTERPOINT ENERGY RESOURCE	PO 1475 HOUSTON, TX 77251	20	\$863
220021030	STIER LAURIE MARIE	105 WEST ST S JORDAN, MN 55352	60	\$2,588
220021040	HENNEN MATTHEW J	1949 220TH ST W JORDAN, MN 55352	60	\$2,588
220021050	CASE HANS F	108 2 ST W JORDAN, MN 55352	60	\$2,588
220021070	L J M PROPERTIES LLC	PO 55 JORDAN, MN 55352	120	\$5,176
220021090	NYGAARD JOHN	108 VARNER ST S JORDAN, MN 55352	60	\$2,588
220021110	HIPPEN JEREMY	105 1 ST W JORDAN, MN 55352	120	\$5,176
220021120	LAWRIE TIMOTHY T	109 1 ST W JORDAN, MN 55352	60	\$2,588
220021130	KRAGTHORPE MARK S & GAIL M	109 WEST ST S JORDAN, MN 55352	60	\$2,588
220030130	BARND JESSICA	216 2ND ST W JORDAN, MN 55352	60	\$2,588
220030140	GOSEWISCH DAVID A & LORRAINE	212 2 ST W JORDAN, MN 55352	60	\$2,588
220030150	KRATOCHVIL JOHN	208 2 ST W JORDAN, MN 55352	60	\$2,588
220030160	BOSTON CALEB	204 2 ST W JORDAN, MN 55352	60	\$2,588
220030170	HIEGEL ANN M	100 WEST ST S JORDAN, MN 55352	60	\$2,588
220030180	OLSEN ERIC	201 1ST ST W JORDAN, MN 55352	84	\$3,623
220030190	CORRELL TERRY L & KAREN A	209 1 ST W JORDAN, MN 55352	27	\$1,165
220030200	PIEPER CRUZ	205 1ST ST W JORDAN, MN 55352	33	\$1,424
220030210	GROSAM RYAN	213 1 ST W JORDAN, MN 55352	35	\$1,510
220030220	HUGHES LAURA A	221 1ST ST W JORDAN, MN 55352	89	\$3,839
220030230	NELSON LAURA ANN HUGHES	217 1ST ST W JORDAN, MN 55352	32	\$1,380
220030240	LARIVEE LANDON	316 2ND ST W JORDAN, MN 55352	50	\$2,157
220030250	PILLE KIA A	312 2 ST W JORDAN, MN 55352	71	\$3,063
220030260	HEIMKES WILLIAM	308 2ND ST W JORDAN, MN 55352	60	\$2,588
220030270	NICKLES ELIZABETH & NICKLES WYATT	304 2ND ST W JORDAN, MN 55352	60	\$2,588
220030280	THEIS MICHAEL J	100 WOOD ST S JORDAN, MN 55352	60	\$2,588
220030290	GROTH JOSEPH R	3550 CREEK RD CHASKA, MN 55318	91	\$3,925
220030300	ZANDER JONATHAN M	1013 PRIMROSE LN SHAKOPEE, MN 55379	30	\$1,294
220030310	NEIDERMYER KATELYNN ELIZABETH	309 1ST ST W JORDAN, MN 55352	40	\$1,725
220030320	SWANSON-STRAIT NADINE	313 1ST ST W JORDAN, MN 55352	51	\$2,200
220030330	HJELMELAND ERIC R	317 1 ST W JORDAN, MN 55352	91	\$3,925
			SUBTOTAL:	\$105,210

PRELIMINARY ASSESSMENT ROLL

2024 INFRASTRUCTURE IMPROVEMENTS CITY OF JORDAN, MN

1/22/2024

PRELIMINARY SPECIAL ASSESSMENT ROLL: ALL ALLEYS

TOTAL ESTIMATE PROJECT COST - ALL ALLEYS \$531,000.00 \$371,700.00 70% OF TOTAL ESTIMATED PROJECT COST - FUNDED BY CITY 30% OF TOTAL ESTIMATE PROJECT COST - FUNDED BY SPECIAL ASSESSMENTS \$159,300.00 TOTAL FRONT FOOTAGE 3895 ASSESED FRONT FOOT RATE \$40.90

PID	Taxpayer Name	Taxpayer Address	Front Footage	Assessment Amoun
220020960	NORTHERN STATES POWER CO & PROPERTY TAX DEPT	414 NICOLLET MALL MPLS, MN 55401	214	\$8,752
220020910	GLASGOW COLLEEN D	105 VARNER ST S JORDAN, MN 55352	70	\$2,863
220020920	SCHMIT DENNIS J & SHARI A	104 2 ST E JORDAN, MN 55352	60	\$2,454
220020930	SCHMIDT ANTHONY D JR	PO 36 JORDAN, MN 55352	50	\$2,045
220020970	BORCHARDT GENE & REBECCA	20625 HARLOW AVE JORDAN, MN 55352	60	\$2,454
220020980	K-MOX INC	18540 LEGENDS CLUB CIR PRIOR LAKE, MN 55372	60	\$2,454
220020990	BOX HOLDINGS LLC	260 MYRICK ST LE SUEUR, MN 56058	101	\$4,131
220021000	CENTERPOINT ENERGY RESOURCE	PO 1475 HOUSTON, TX 77251	20	\$818
220021030	STIER LAURIE MARIE	105 WEST ST S JORDAN, MN 55352	60	\$2,454
220021040	HENNEN MATTHEW J	1949 220TH ST W JORDAN, MN 55352	60	\$2,454
220021050	CASE HANS F	108 2 ST W JORDAN, MN 55352	60	\$2,454
220021070	L J M PROPERTIES LLC	PO 55 JORDAN, MN 55352	120	\$4,908
220021090	NYGAARD JOHN	108 VARNER ST S JORDAN, MN 55352	60	\$2,454
220021110	HIPPEN JEREMY	105 1 ST W JORDAN, MN 55352	120	\$4,908
220021120	LAWRIE TIMOTHY T	109 1 ST W JORDAN, MN 55352	60	\$2,454
220021130	KRAGTHORPE MARK S & GAIL M	109 WEST ST S JORDAN, MN 55352	60	\$2,454
220030130	BARND JESSICA	216 2ND ST W JORDAN, MN 55352	60	\$2,454
220030140	GOSEWISCH DAVID A & LORRAINE	212 2 ST W JORDAN, MN 55352	60	\$2,454
220030150	KRATOCHVIL JOHN	208 2 ST W JORDAN, MN 55352	60	\$2,454
220030160	BOSTON CALEB	204 2 ST W JORDAN, MN 55352	60	\$2,454
220030170	HIEGEL ANN M	100 WEST ST S JORDAN, MN 55352	60	\$2,454
220030180	OLSEN ERIC	201 1ST ST W JORDAN, MN 55352	84	\$3,435
220030190	CORRELL TERRY L & KAREN A	209 1 ST W JORDAN, MN 55352	27	\$1,104
220030200	PIEPER CRUZ	205 1ST ST W JORDAN, MN 55352	33	\$1,350
220030210	GROSAM RYAN	213 1 ST W JORDAN, MN 55352	35	\$1,431
220030220	HUGHES LAURA A	221 1ST ST W JORDAN, MN 55352	89	\$3,640
220030230	NELSON LAURA ANN HUGHES	217 1ST ST W JORDAN, MN 55352	32	\$1,309
220030240	LARIVEE LANDON	316 2ND ST W JORDAN, MN 55352	50	\$2,045
220030250	PILLE KIA A	312 2 ST W JORDAN, MN 55352	71	\$2,904
220030260	HEIMKES WILLIAM	308 2ND ST W JORDAN, MN 55352	60	\$2,454
220030270	NICKLES ELIZABETH & NICKLES WYATT	304 2ND ST W JORDAN, MN 55352	60	\$2,454
220030280	THEIS MICHAEL J	100 WOOD ST S JORDAN, MN 55352	60	\$2,454
220030290	GROTH JOSEPH R	3550 CREEK RD CHASKA, MN 55318	91	\$3,722
220030300	ZANDER JONATHAN M	1013 PRIMROSE LN SHAKOPEE, MN 55379	30	\$1,227
220030310	NEIDERMYER KATELYNN ELIZABETH	309 1ST ST W JORDAN, MN 55352	40	\$1,636
220030320	SWANSON-STRAIT NADINE	313 1ST ST W JORDAN, MN 55352	51	\$2,086
220030330	HJELMELAND ERIC R	317 1 ST W JORDAN, MN 55352	91	\$3,722
220110010	PAULY JAMES J & PAULY MARY JO	611 WEST ST N JORDAN, MN 55352	120	\$4,908
220110020	ANDERSON RICHARD L	610 VARNER ST JORDAN, MN 55352	180	\$7,362
220110030	ROMANN BRANDON L	105 6 ST W JORDAN, MN 55352	130	\$5,317
220110040	GUSS CYNTHIA	109 6 ST W JORDAN, MN 55352	95	\$3,885
220110050	WODTKE BRIAN D	113 6 ST W JORDAN, MN 55352	75	\$3,067
220110190	US WEST INC/CENTURYLINK	PO 2599 OLATHE, KS 66063	60	\$2,454
220110210	BREWER SYDNEY	201 6TH ST W JORDAN, MN 55352	60	\$2,454
220110220	NELSON LARRY II	610 WEST ST N JORDAN, MN 55352	60	\$2,454
220110230	NELSON LARRY II	610 WEST ST N JORDAN, MN 55352	60	\$2,454
220110240	NELSON LARRY II	610 WEST ST N JORDAN, MN 55352	50	\$2,045
220110250	BREWER SYDNEY	201 6TH ST W JORDAN, MN 55352	60	\$2,454
220110251	GUENTHER KAY E	606 WEST ST N JORDAN, MN 55352	50	\$2,045
220110260	JERICH GRANT ALLEN	1757 SEASHELL LN WACONIA, MN 55387	60	\$2,454
220110270	O'LOUGHLIN ALEXIS ANN	205 6TH ST W JORDAN, MN 55352	120	\$4,908
220110330	SMITH GARY LEE	601 3RD ST W JORDAN, MN 55352	138	\$5,644