APPENDIX ‘A’ – GEOTECHNICAL REPORT

Stantec Consulting Ltd.
199 Henlow Bay
Winnipeg MB R3Y 1G4

February 9, 2024

Project/File: 123316853

Richard Weibel
City of Winnipeg
106, 1155 Pacific Avenue
Winnipeg, MB R3E 3P1

Good day Richard,

Reference: 2024 Local Street Renewals Program (Contract 3)

Stantec Consulting Ltd. (Stantec) was retained to undertake a factual pavement coring investigation for the 2024 Local Street Renewals Program (Contract 3) in Winnipeg, Manitoba. Use of this report is subject to the Statement of General Conditions provided in **Appendix A**.

The coring program was conducted from December 1, 2023, to January 24, 2024. Pavement coring was performed by our geotechnical field personnel. The borehole locations are shown on the attached Borehole Location Plan provided in **Appendix B**, and core photographs are provided in **Appendix C**.

EXISTING PAVEMENT THICKNESS

The existing pavement thickness is provided in the following table:

Table 1 – Existing Pavement Thickness

Street	Core ID	Asphalt Thickness (mm)	Concrete Thickness (mm)	Total Pavement Thickness (mm)
Furby St	BH-44	0	165	165
Furby St	BH-45	0	185	185
Furby St	BH-46	0	150	150
Furby St	BH-47	0	165	165
Pritchard Ave	BH-48	0	190	190
Pritchard Ave	BH-49	0	190	190
Pritchard Ave	BH-50	0	190	190
Pritchard Ave	BH-51	0	250	250
Lismore Ave	BH-52	0	155	155
Lismore Ave	BH-53	0	165	165
Mount Auburn Bay	BH-54	0	155	155

Reference: **2024 Local Street Renewals Program (Contract 3)**

Street	Core ID	Asphalt Thickness (mm)	Concrete Thickness (mm)	Total Pavement Thickness (mm)
Mount Auburn By	BH-55	0	175	175
Mount Auburn By	BH-56	0	155	155
Golspie St	BH-57	0	195	195
Golspie St	BH-58	0	170	170
Panet Service Rd	BH-59	0	160	160
Panet Service Rd	BH-60	0	145	145
Panet Service Rd	BH-61	0	205	205
Panet Service Rd	BH-62	0	170	170

LABORATORY TESTING

The following laboratory tests were conducted on select concrete core samples:

- CSA A23.2-14C – *Obtaining and testing drilled cores for compressive strength testing*

Prior to testing the concrete core samples for compressive strength, the cores were conditioned in water at room temperature for 48 hours. The test results are provided in **Appendix D**.

CLOSURE

We appreciate the opportunity to assist you on this project. Please contact the undersigned if you have any questions regarding this report.

Regards,

STANTEC CONSULTING LTD.

Guillaume Beauce P.Eng.
Geotechnical Engineer, Materials Testing Services
Phone: 204-928-7618
Mobile: 204-898-8290
guillaume.beauce@stantec.com

Jason Thompson C.E.T.
Manager, Materials Testing Services
Phone: 204-928-4004
Mobile: 204-981-8445
jason.thompson@stantec.com

Attachment: Appendix A – Statement of General Conditions
Appendix B – Borehole Location Plan
Appendix C – Core Photographs
Appendix D – Concrete Core Compressive Strength Test Results

APPENDIX A

Statement of General Conditions

STATEMENT OF GENERAL CONDITIONS

USE OF THIS REPORT: This report has been prepared for the sole benefit of the Client or its agent and may not be used by any third party without the express written consent of Stantec and the Client. Any use which a third party makes of this report is the responsibility of such third party.

BASIS OF THE REPORT: The information, opinions, and/or recommendations made in this report are in accordance with Stantec's present understanding of the site-specific project as described by the Client. The applicability of these is restricted to the site conditions encountered at the time of the investigation or study. If the proposed site-specific project differs or is modified from what is described in this report or if the site conditions are altered, this report is no longer valid unless Stantec is requested by the Client to review and revise the report to reflect the differing or modified project specifics and/or the altered site conditions.

STANDARD OF CARE: Preparation of this report, and all associated work, was carried out in accordance with the normally accepted standard of care in the state or province of execution for the specific professional service provided to the Client. No other warranty is made.

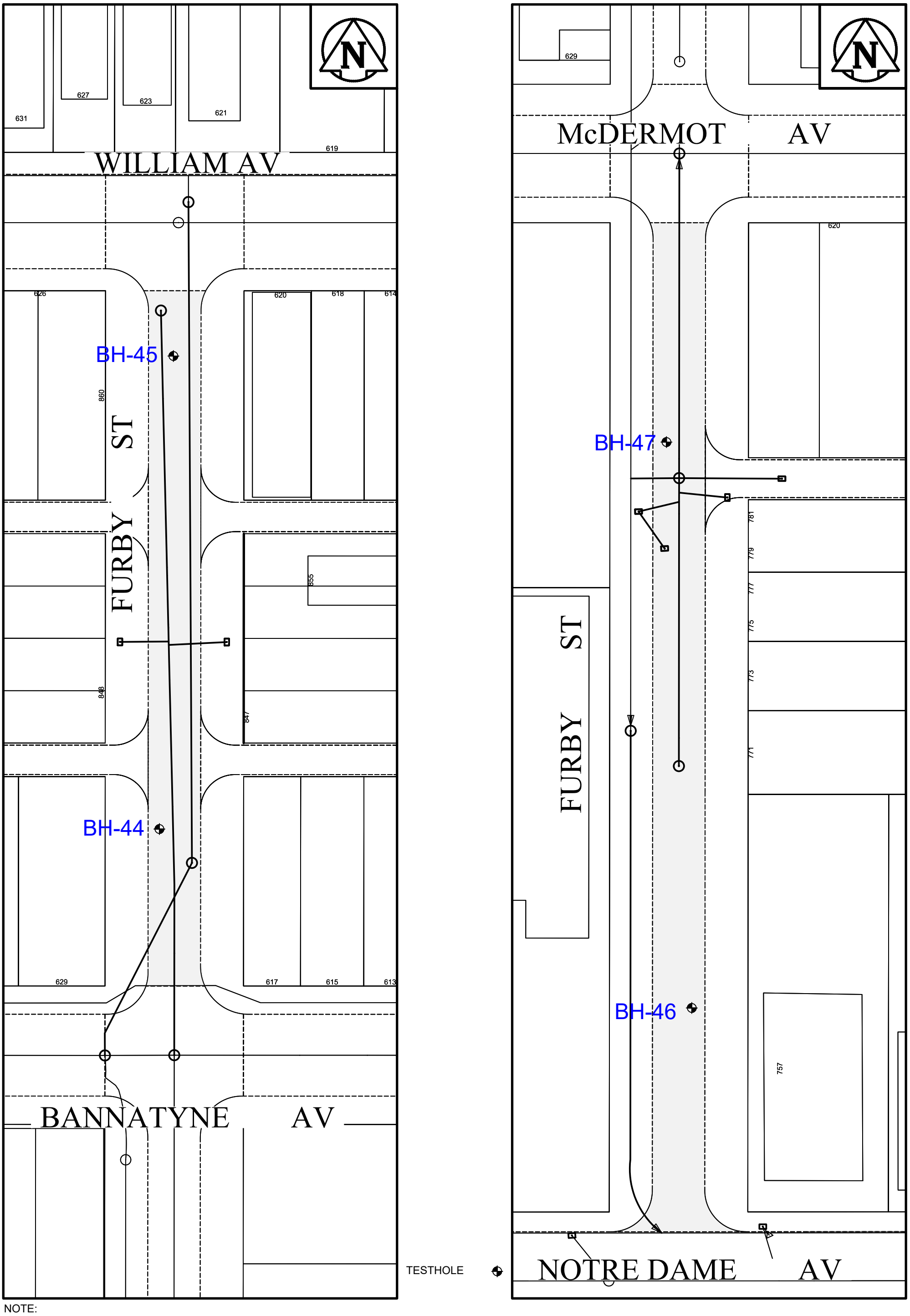
INTERPRETATION OF SITE CONDITIONS: Soil, rock, or other material descriptions, and statements regarding their condition, made in this report are based on site conditions encountered by Stantec at the time of the work and at the specific testing and/or sampling locations. Classifications and statements of condition have been made in accordance with normally accepted practices which are judgmental in nature; no specific description should be considered exact, but rather reflective of the anticipated material behavior. Extrapolation of in situ conditions can only be made to some limited extent beyond the sampling or test points. The extent depends on variability of the soil, rock, and groundwater conditions as influenced by geological processes, construction activity, and site use.

VARYING OR UNEXPECTED CONDITIONS: Should any site or subsurface conditions be encountered that are different from those described in this report or encountered at the test locations, Stantec must be notified immediately to assess if the varying or unexpected conditions are substantial and if reassessments of the report conclusions or recommendations are required. Stantec will not be responsible to any party for damages incurred as a result of failing to notify Stantec that differing site or sub-surface conditions are present upon becoming aware of such conditions.

PLANNING, DESIGN, OR CONSTRUCTION: Development or design plans and specifications should be reviewed by Stantec, sufficiently ahead of initiating the next project stage (property acquisition, tender, construction, etc.), to confirm that this report completely addresses the elaborated project specifics and that the contents of this report have been properly interpreted. Specialty quality assurance services (field observations and testing) during construction are a necessary part of the evaluation of sub-subsurface conditions and site preparation works. Site work relating to the recommendations included in this report should only be carried out in the presence of a qualified geotechnical engineer; Stantec cannot be responsible for site work carried out without being present.

APPENDIX B

Borehole Location Plan

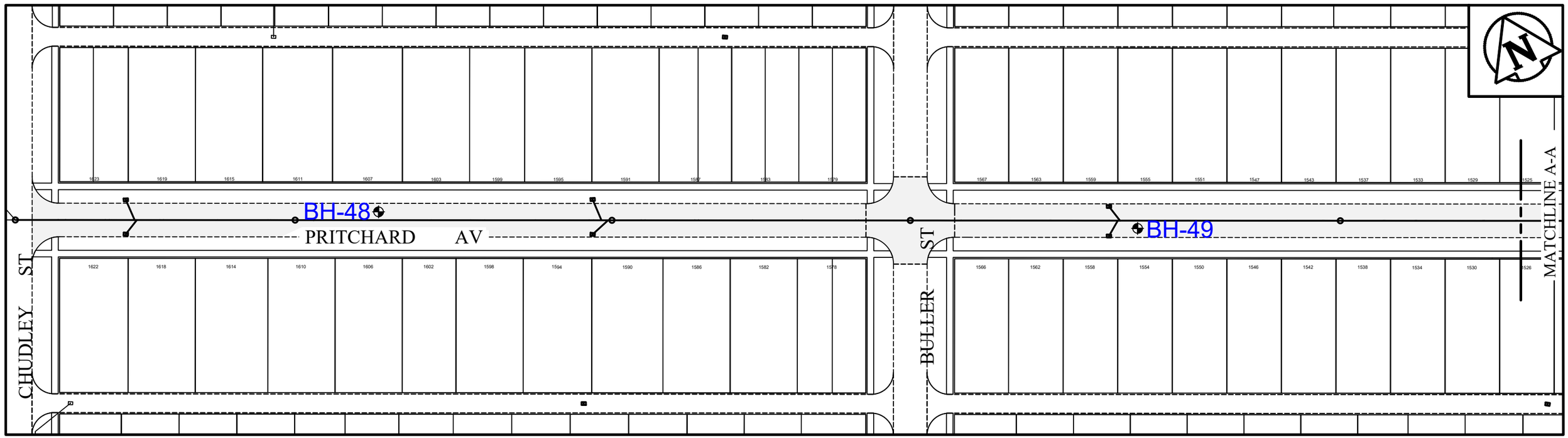


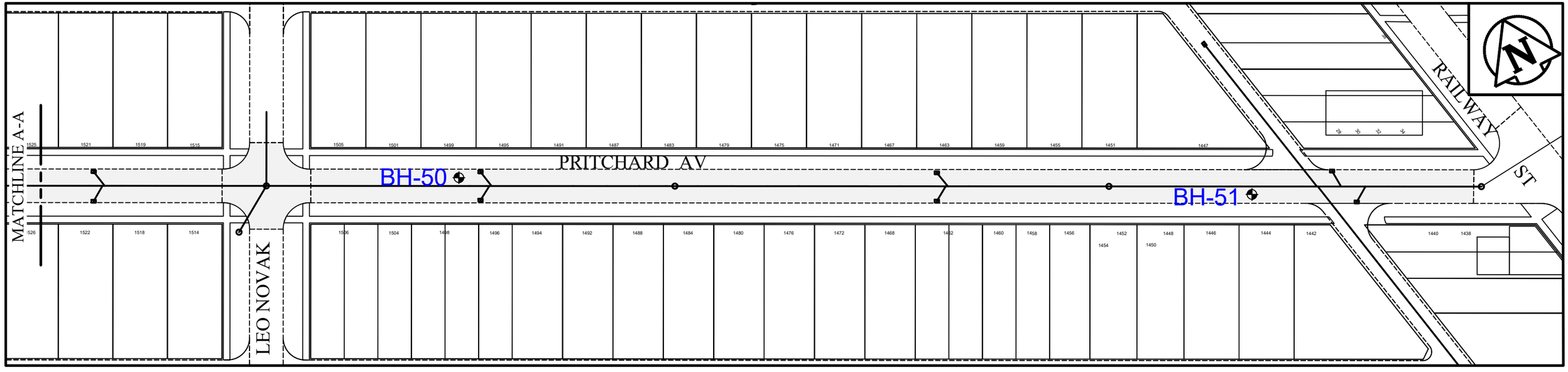
TESTHOLE

NOTE:

- DRILL PAVEMENT CORE ONLY EACH TEST HOLE LOCATION. FOLLOW F.3.5

DATE:	DRAWING NO.:	DRAWN BY:	SCALE:	EXACT LOCATIONS OF TEST HOLES TO BE MARKED IN FIELD BY CONTRACT ADMINISTRATOR.	2024 LOCAL STREET RENEWAL PROGRAM CORING DRAWING - **CONTRACT 3**
10/05/2023	2 of 7	D.PEN	1:500		**FURBY ST** FROM WILLIAM AV TO BANNATYNE AV - MINOR REHAB **FURBY ST** FROM McDERMOT AV TO NOTRE DAME AV - MAJOR REHAB



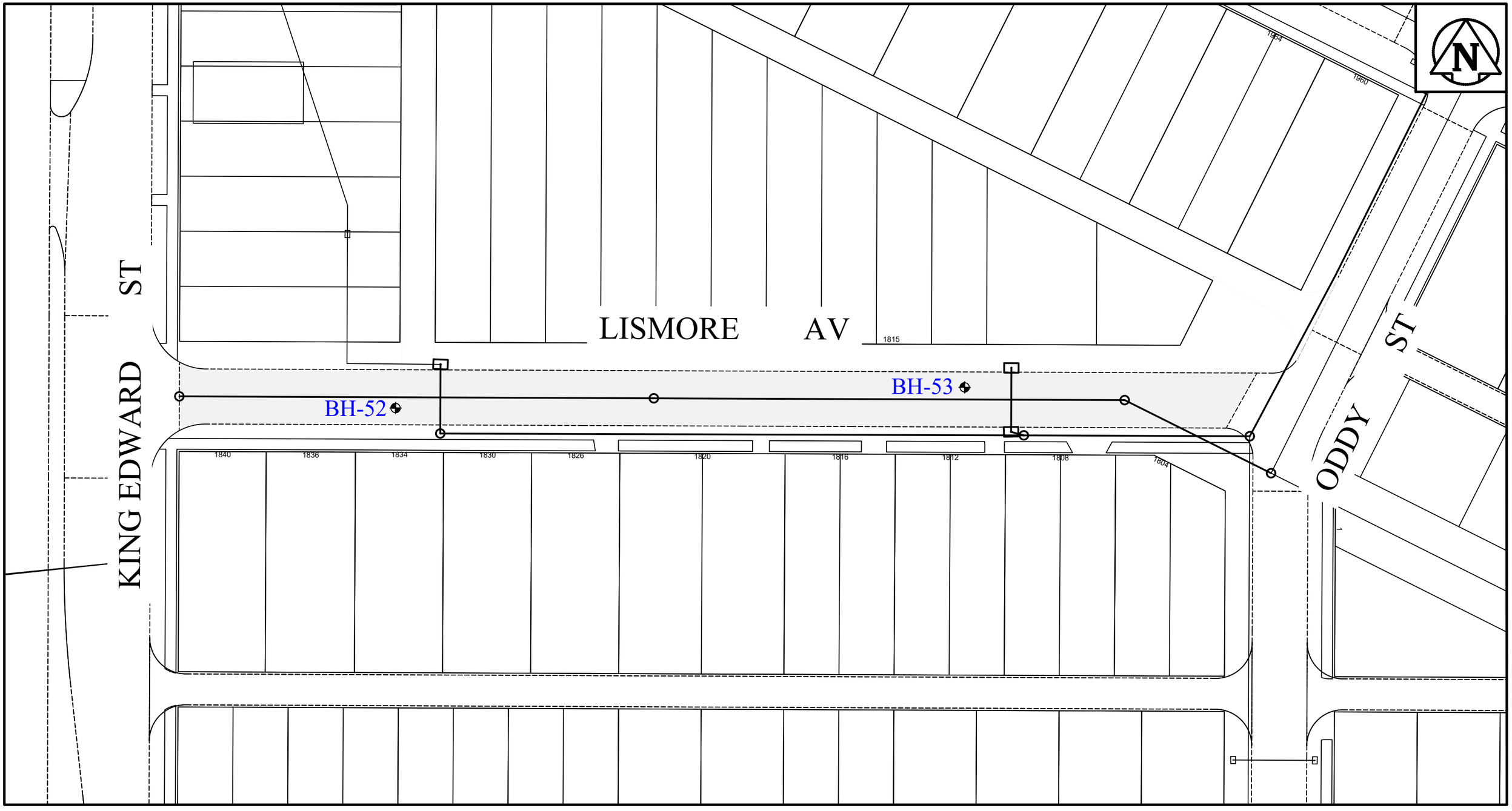


NOTE:
- DRILL PAVEMENT CORE ONLY EACH TEST HOLE LOCATION. FOLLOW F.3.5

DATE:	DRAWING NO.:	DRAWN BY:	SCALE:		
10/05/2023	3 of 7	D.PEN.	1:850.	EXACT LOCATIONS OF TEST HOLES TO BE MARKED IN FIELD BY CONTRACT ADMINISTRATOR.	TESTHOLE

2024 LOCAL STREET RENEWAL PROGRAM CORING DRAWING - **CONTRACT 3**

PRITCHARD AV FROM CHUDLEY ST TO RAILWAY ST - MAJOR REHAB/MINOR REHAB



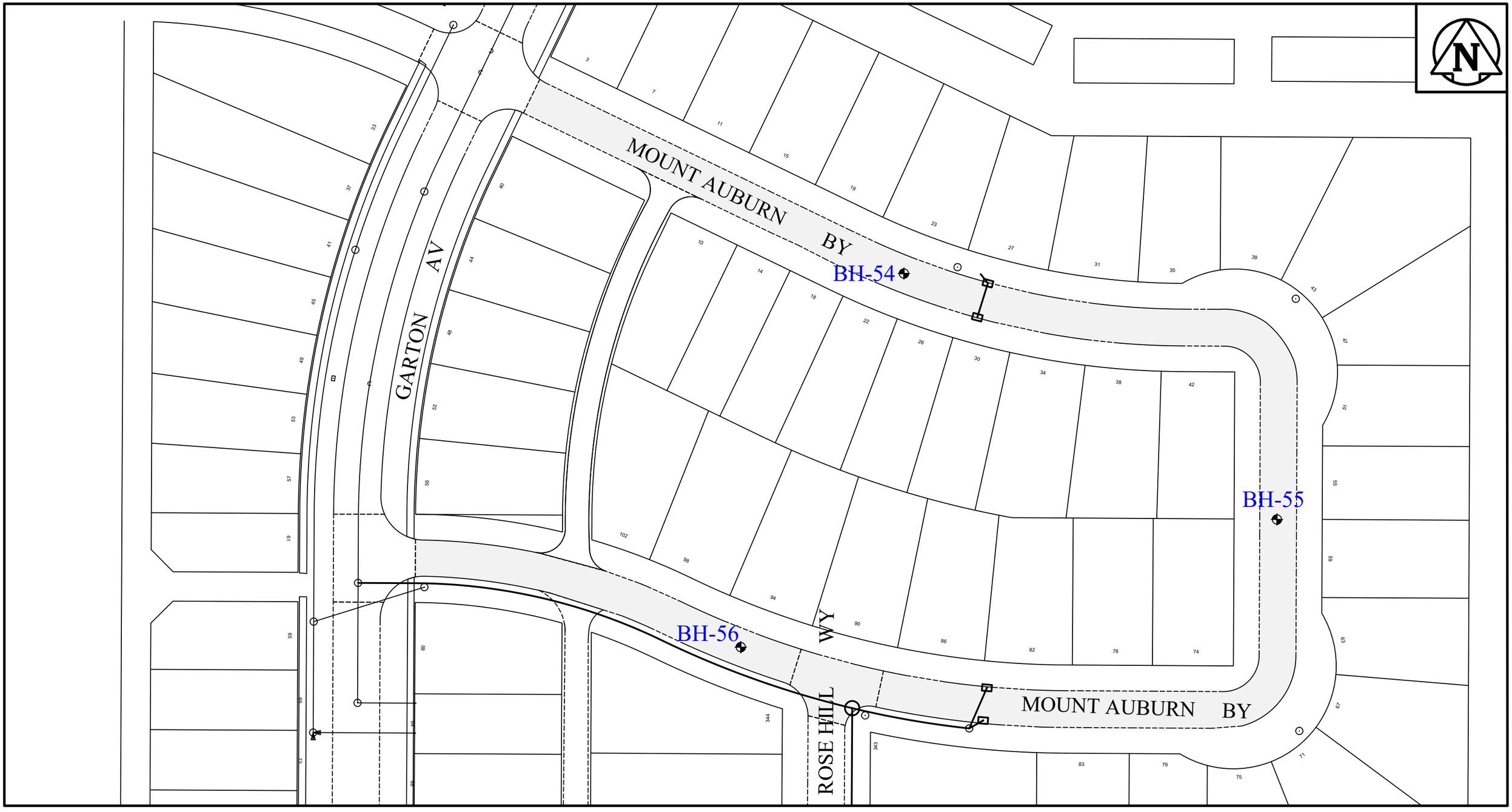
NOTE:

- DRILL PAVEMENT CORE ONLY EACH TEST HOLE LOCATION. FOLLOW F.3.5

DATE:	DRAWING NO.:	DRAWN BY:	SCALE:		
10/05/2023	4 of 7	D.PEN	1:500	EXACT LOCATIONS OF TEST HOLES TO BE MARKED IN FIELD BY CONTRACT ADMINISTRATOR.	TESTHOLE

2024 LOCAL STREET RENEWAL PROGRAM CORING DRAWING - **CONTRACT 3**

LISMORE AV FROM KING EDWARD ST TO ODDY ST



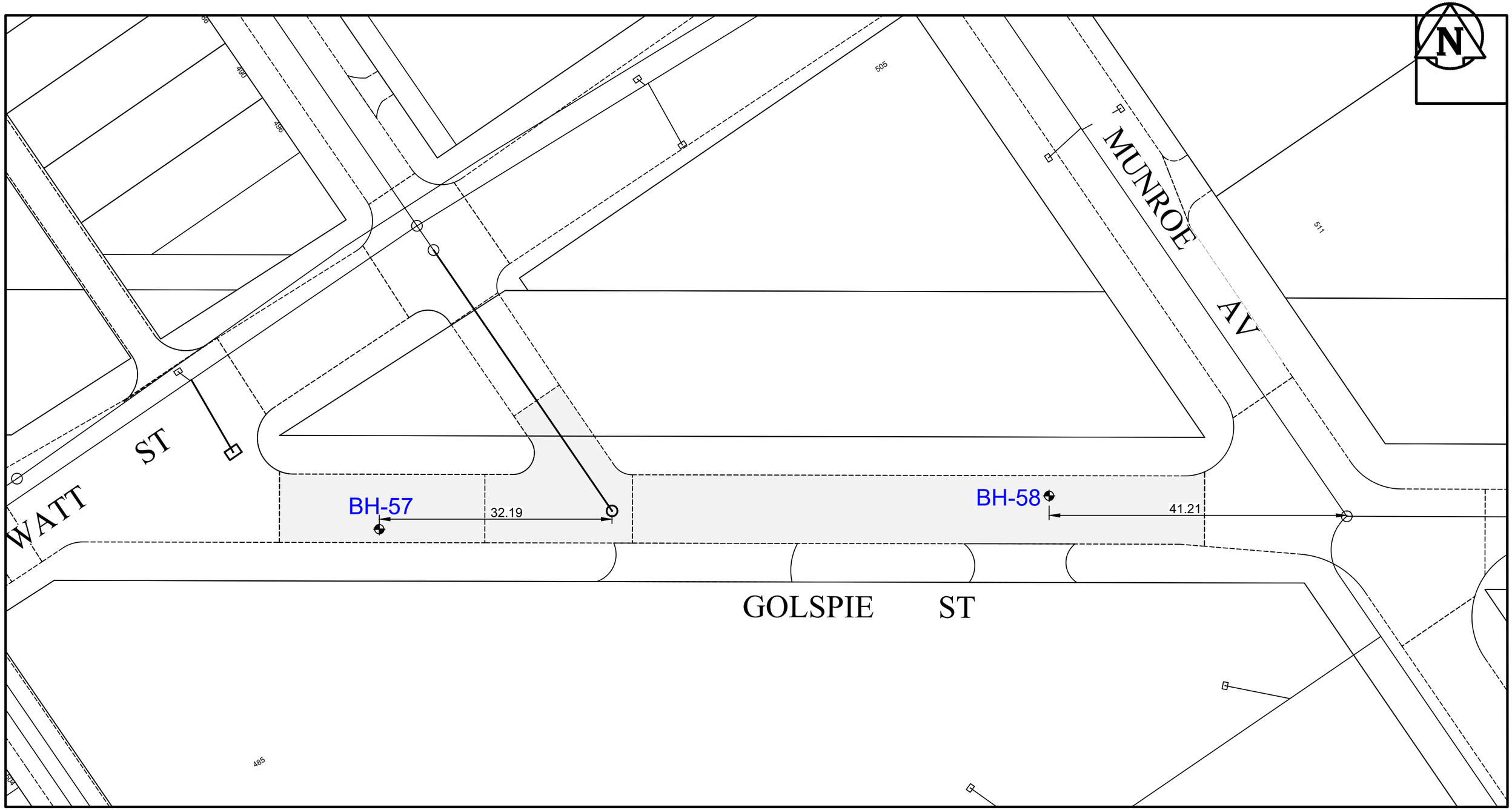
NOTE:

- DRILL PAVEMENT CORE ONLY EACH TEST HOLE LOCATION. FOLLOW F.3.5

DATE:	DRAWING NO.:	DRAWN BY:	SCALE:		
10/05/2023	5 of 7	D.PEN.	1:750	EXACT LOCATIONS OF TEST HOLES TO BE MARKED IN FIELD BY CONTRACT ADMINISTRATOR.	TESTHOLE

2024 LOCAL STREET RENEWAL PROGRAM CORING DRAWING - **CONTRACT 3**

MOUNT AUBURN BY FROM GARTON AV TO GARTON AV - MINOR REHAB NORTH LEG, TBO SOUTH LEG

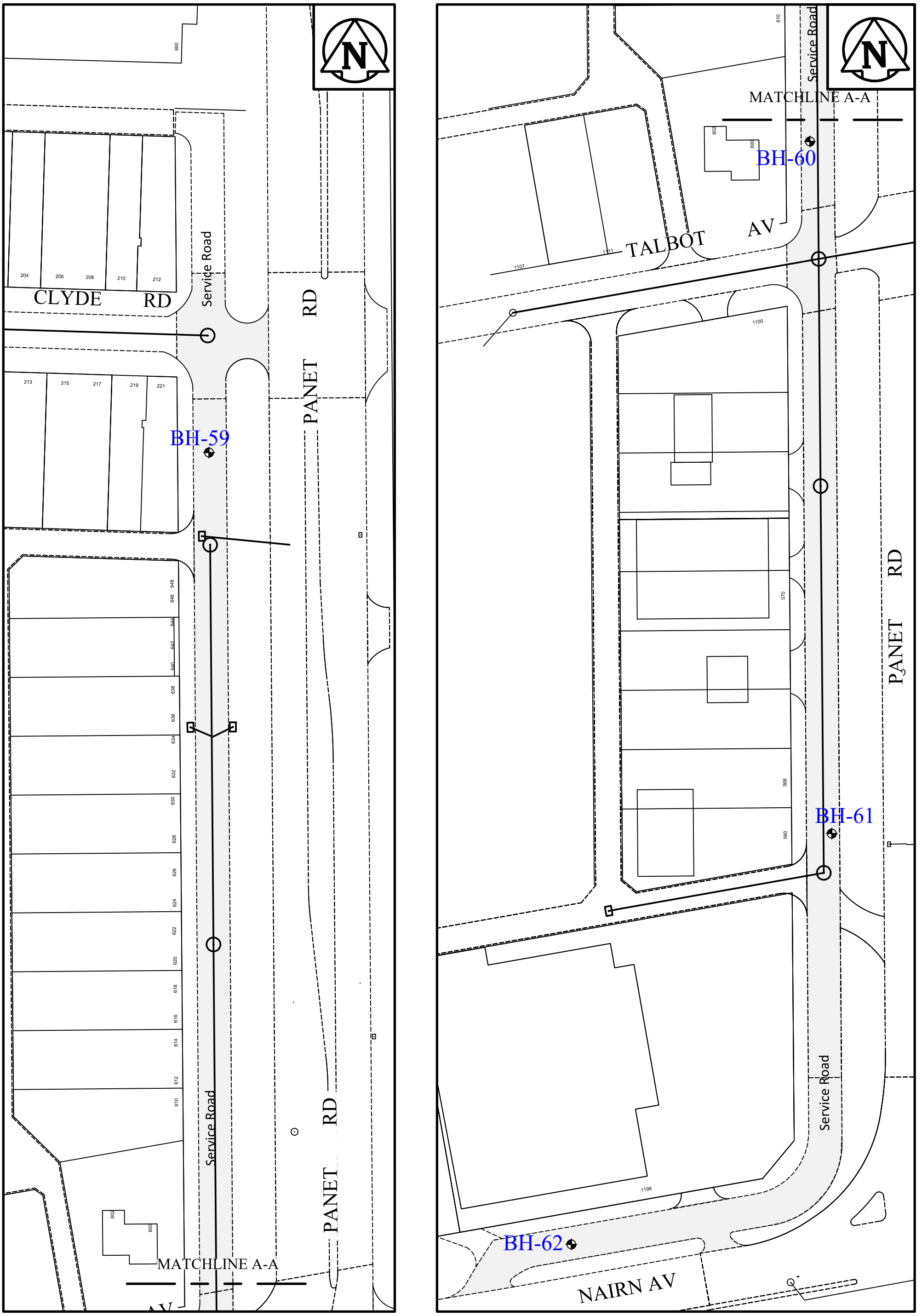


NOTE:
- DRILL PAVEMENT CORE ONLY EACH TEST HOLE LOCATION. FOLLOW F.3.5

DATE:	DRAWING NO.:	DRAWN BY:	SCALE:		
10/05/2023	6 of 7	D.PEN.	1:500	EXACT LOCATIONS OF TEST HOLES TO BE MARKED IN FIELD BY CONTRACT ADMINISTRATOR.	TESTHOLE

2024 LOCAL STREET RENEWAL PROGRAM CORING DRAWING - **CONTRACT 3**

GOLSPIE ST FROM WATT ST TO MUNROE AV - MAJOR REHAB



NOTE:

- DRILL PAVEMENT CORE ONLY EACH TEST HOLE LOCATION. FOLLOW F.3.5

TESTHOLE

DATE:	DRAWING NO.:	DRAWN BY:	SCALE:		
10/05/2023	7 of 7	D.PEN.	1:750	EXACT LOCATIONS OF TEST HOLES TO BE MARKED IN FIELD BY CONTRACT ADMINISTRATOR.	2024 LOCAL STREET RENEWAL PROGRAM CORING DRAWING - **CONTRACT 3** **PANET ST SERVICE ROAD** FROM NAIRN AV TO NORTH END - MAJOR REHAB

APPENDIX C

Core Photographs

Figure 1 – Core No. 44 (Furby St)

Figure 2 – Core No. 45 (Furby St)

Figure 3 – Core No. 46 (Furby St)

Figure 4 – Core No. 47 (Furby St)

Figure 5 – Core No. 48 (Pritchard Ave)

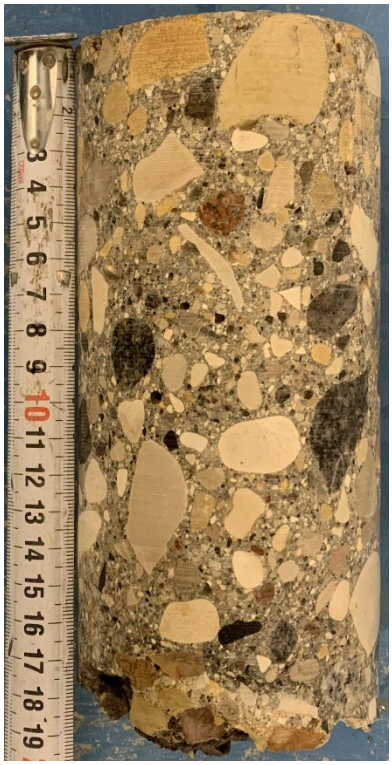


Figure 6 – Core No. 49 (Pritchard Ave)

Figure 7 – Core No. 50 (Pritchard Ave)

Figure 8 – Core No. 51 (Pritchard Ave)

Figure 9 – Core No. 52 (Lismore Ave)

Figure 10 – Core No. 53 (Lismore Ave)

Figure 11 – Core No. 54 (Mount Auburn Bay)

Figure 12 – Core No. 55 (Mount Auburn Bay)

Figure 13 – Core No. 56 (Mount Auburn Bay)

Figure 14 – Core No. 57 (Golspie St)

Figure 15 – Core No. 58 (Golspie St)

Figure 16 – Core No. 59 (Panet Service Rd)

Figure 17 – Core No. 60 (Panet Service Rd)

Figure 18 – Core No. 61 (Panet Service Rd)

Figure 19 – Core No. 62 (Panet Service Rd)

APPENDIX D

Concrete Core Compressive Strength Test Results

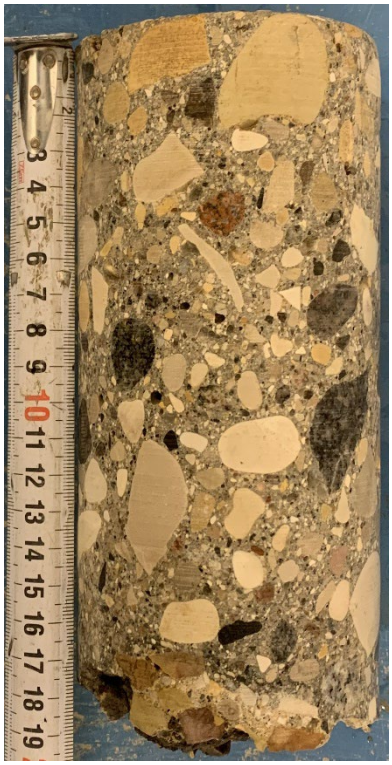
Figure 1 – Core No. 44 (Furby St)

Figure 2 – Core No. 45 (Furby St)

Figure 3 – Core No. 46 (Furby St)

Figure 4 – Core No. 47 (Furby St)

Figure 5 – Core No. 48 (Pritchard Ave)



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