

APPENDIX E

MANITOBA HYDRO UTILITY REVIEW

February 23, 2026

MH Gas File # 2026-0054

Ryan Paulus
KGS Group
3rd Floor – 865 Waverley St
Winnipeg, MB R3T 5P4

Dear Ryan Paulus:

Re: 2026 Street Renewal Program (Wilkes)

Manitoba Hydro (Gas) has reviewed the design submitted by KGS Group for asphalt rehabilitation and other associated work on Wilkes Avenue. The following parameters shall be followed when working in proximity to all natural gas mains. Please ensure that all requirements are communicated to your contractor.

1. Natural Gas Record Drawings

- During the review it was noted that Manitoba Hydro's natural gas plant is incorrectly represented on Wilkes Avenue. Please update your records in accordance with the attached as-built drawings.
- Note: Services not shown and must be traced for location.

2. Special Concerns

- Upon review, it was noted that the proposed asphalt rehabilitation occurs over a 168.3 mm and 355.6 mm high pressure mains on Wilkes Av. A Manitoba Hydro Safety Watch may be required for all construction activities within 1.0 m of any high-pressure mains. It was also noted that the proposed asphalt rehabilitation occurs over 114.3 mm and 219.1 mm distribution pressure mains on Wilkes Av.
- Additionally, it was noted gas mains and service lines may be affected during any culvert replacements on Wilkes Av. A 219.1 mm high pressure, 114.3 mm and 168.3 mm distribution pressure, natural gas mains are present on Wilkes Av where the proposed culvert renewals will occur. All gas mains and service lines must be located before work is to commence on any installation of drainage systems within the proposed construction area.
- The submitted construction description indicates boulevard grading is planned as part of the work package. As these were not included in the submitted drawings, please provide grading plans to David Finnbogason at dfinnbogason@hydro.mb.ca. No reduction of cover over gas lines is permitted unless consent is granted by Manitoba Hydro.

- All excavations within 1.0 m of any natural gas main must be completed by hand or Hydro-excavation. During construction, gas mains should not be undermined or exposed past the 3 o'clock and 9 o'clock positions on the cross section of the pipe.
- Please locate any mains within 1.0 m or underneath the proposed watermains, pavement renewals and culvert replacement, and investigate by hand or soft-digging to determine depth of cover in relation to both existing and proposed grades. Additionally, please determine if any conflicts exist between the 114.3 mm, 168.3 mm, and 219.1 mm gas mains, and the culvert's elevation or construction. Note that all locating and soft-digging requirements listed below are to be upheld.
- The culvert shall maintain a minimum clearance of 300 mm from our existing infrastructure maintaining a minimum cover of 750 mm from the top of all our existing natural gas mains to grade.
- If it is determined that a final minimum depth of cover of 750 mm cannot be maintained for the 114.3 mm and 168.3 mm distribution mains, if any conflicts exist between the culvert's elevation or construction for the 114.3 mm and 168.3 mm distribution main, or if 900 mm depth of cover cannot be maintained for the 219.1 mm steel high pressure main, then contact David Finnbogason at dfinnbogason@hydro.mb.ca to discuss options pertaining to relocations or lowerings as soon as possible. Under normal circumstances, the amount of time required to mobilize for small diameter distribution relocations or lowerings (60.3 mm and 114.3 mm) is approximately 3-5 months. High pressure main relocations/lowerings (168.3 mm) would require approximately 6-12 months to complete due to engineering, approvals, and construction.

3. High Pressure Natural Gas Main

- Proposed asphalt rehabilitation occurs over an existing 168.3 mm and 355.6 mm high pressure natural gas mains on Wilkes Av near the existing pressure regulating station. A Manitoba Hydro High Pressure Safety Watch is required for all construction activities within 3.0 m of the high-pressure natural gas main.
- Contact "Click before you dig" a minimum of 2 weeks prior to any work commencing within 3.0 m of the high-pressure natural gas main to arrange for the pipeline to be properly located and marked by Manitoba Hydro personnel at **ClickBeforeYouDigMB.com** or **Call 1-800-940-3447**. Upon receiving clearances, the excavator will be provided with the phone number of the appropriate District in order to coordinate a Manitoba Hydro High Pressure Safety Watch.
- Prior to construction at this location, please expose the main by hand or hydro-excavation in order to confirm elevation of the pipe. The elevations & corresponding locations shall be forwarded back to David Finnbogason at dfinnbogason@hydro.mb.ca.
- Once the pipeline depth and location has been confirmed by hand or hydro-excavation, the safety watcher may authorize the limited use of mechanical excavation. A smooth-edged bucket must be used for excavations within 3.0 m of the main.
- A minimum 900 mm of cover shall be maintained in all areas where highway rated equipment will be crossing, traveling or compacting over the 355.6 mm gas mains. Vibratory compaction cannot be used over or within 3.0 m of a high pressure main.

- If highway rated equipment must cross, travel, or compact over the gas main with less than the minimum depth of cover, or if equipment heavier than highway rated load cross the main then submit construction/crossing plans to David Finnbogason at dfinnbogason@hydro.mb.ca. Earth bridging or steel plates must be placed over the main and extend a minimum of 1.0 m on either side at each crossing location when crossing with less than minimum cover.
- When working with less than minimum cover, a minimum 300 mm of granular material shall be bladed into place with tracked equipment offset from the pipeline. Then static compaction equipment would be allowed and built up in layers until minimum cover is achieved.
- Subbase material shall be bladed into place as opposed to being end dumped over the high-pressure gas mains in areas with less than the minimum cover.

4. 219.1 mm Distribution Pressure Natural Gas Main

- Proposed asphalt rehabilitation occurs over an existing 219.1 mm distribution pressure natural gas main. A Manitoba Hydro Safety Watch may be required if any excavations are within 1.0 m of the 219.1 mm natural gas main.
- Contact “Click before you dig” a minimum of 2 weeks prior to any work commencing within 1.0 m of the 219.1 mm distribution pressure natural gas main to arrange for the pipeline to be properly located and marked by Manitoba Hydro personnel at **ClickBeforeYouDigMB.com** or **Call 1-800-940-3447**. Upon receiving clearances, the excavator will be provided with the phone number of the appropriate District in order to coordinate a Manitoba Hydro Safety Watch, if required.
- A minimum 900 mm of cover shall be maintained in all areas where highway rated equipment will be crossing, traveling or compacting over the 219.1 mm gas mains. Vibratory compaction cannot be used over or within 1.0 m of a main.
- If highway rated equipment must cross, travel, or compact over the gas main with less than the minimum depth of cover, or if equipment heavier than highway rated load cross the main then submit construction/crossing plans to David Finnbogason at dfinnbogason@hydro.mb.ca. Earth bridging or steel plates must be placed over the main and extend a minimum of 1.0 m on either side at each crossing location when crossing with less than minimum cover.
- When working with less than minimum cover, a minimum 300 mm of granular material shall be bladed into place with tracked equipment offset from the pipeline. Then static compaction equipment would be allowed and built up in layers until minimum cover is achieved.
- Subbase material shall be bladed into place as opposed to being end dumped over the 219.1 gas main in areas with less than the minimum cover.
- Caution must be used to ensure the integrity of the pipeline coating. Any damages to the coating must be reported to and repaired at no cost by Manitoba Hydro prior to backfilling.

5. Utility Crossings

- Crossings shall be punched, bored, or horizontally directionally drilled (HDD). Open cut or trenched crossings may be authorized under special circumstance but require

- further review and engineering approval from Manitoba Hydro Gas Design. Pipe jacking across any gas main is not permitted unless approved by Gas Design.
- Directional drills, punches, and bored crossing shall maintain 1.0 meters separation between external surfaces of the pipelines or cables and bores and must be drilled beneath the existing Manitoba Hydro pipeline. Crossings above Manitoba Hydro's pipeline are not acceptable.
 - For directional drills, punches, and bored crossings, the clearance space around the third party's pipeline or cable must be kept to a minimum and post installation soil settling of the clearance space must not reduce the support or soil compaction of Manitoba Hydro's pipeline above.
 - The new pipeline or cable shall maintain the same elevation and alignment for the width of the crossing, with no bends or changes in elevation.
 - The crossing shall be made such that the installation crosses Manitoba Hydro's pipeline as close to perpendicular as possible.
 - No joints shall be made directly over or under of the Manitoba Hydro pipeline.
 - Cathodically protected foreign facilities shall be designed and tested to ensure no adverse interference with the existing pipeline cathodic protection.
 - The third party shall soft-dig by hand or hydro-vac a "viewing hole" as per the Manitoba Hydro Safe Excavation and Safety Watch Guidelines to confirm alignment and elevation of drill head during crossing.
 - Caution must be used to ensure the integrity of the pipeline coating. Any damages to the coating must be reported to and repaired at no cost by Manitoba Hydro prior to backfilling.
 - The contractor and all site supervisory personnel and equipment operators shall be informed of the risks associated with working adjacent to, and over this pipeline by the Resident Inspector. New site personnel during construction shall be orientated as to the significance and constraints associated with working over and around a high-pressure natural gas main.

6. Insufficient Cover

- Absolutely no work including concrete cutting or pavement breaking may occur over the pipeline (regardless of size) until depth of cover is determined and a safety watch is on site.

7. Tree Installation

- A minimum 1.9 m of separation shall be maintained in all areas between the center line of new trees and the 114.3 mm, 168.3 mm, 219.1 mm, and 355.6 mm gas mains. Under no circumstances are trees approved to be planted closer.
- The minimum separation may be reduced to 1.0 m if an approved root barrier system is used. For further details on approved products contact David Finnbogason at dfinnbogason@hydro.mb.ca.

8. Tree Removal

- Proposed excavations of trees and roots within 3.0 m of a natural gas main require the roots to be exposed by hand to ensure it does not affect the integrity of the main or the coating on the pipe.

9. Catch Basin Removal and Installation

- Proposed excavations for the removal and installation of catch basins appear to be within 1.0 m of a gas main in which case will require exposure to be completed by hand or Hydro-excavation. Caution must be used when working in the vicinity of the natural gas mains at these locations.
- Deep utilities shall maintain a minimum horizontal clearance from natural gas mains of 1.25 m when running in parallel.
- A minimum horizontal separation of 300 mm from gas mains and 100 mm from service lines must be maintained for any new underground structure installations excluding directionally drilled, punched, and bored crossings. If an underground structure must be installed with less than the minimum horizontal separation, an underground rigid foam barrier shall be placed over the main for protection. Submit plans for barrier installation to David Finnbogason at dfinnbogason@hydro.mb.ca.
- Underground structure installations above natural gas infrastructure should be avoided. Contact David Finnbogason at dfinnbogason@hydro.mb.ca if installations above facilities are required.

10. Sidewalk Renewals

- Excavations shall be limited to removal of the existing concrete sidewalk. All further excavations within 1.0 m of any natural gas main or service must be completed by hand or soft dig methods.

11. Asphalt Overlays and Road Reconstruction

- When excavations for concrete works are required within 1.0 m of any natural gas main, the main must be exposed by hand or soft dig methods to verify the main elevation at intervals to be determined by the site inspector.
- Should a main be exposed to sub-base, the main requires rock wrap and may also require lowering.

12. Please add a “Caution – Gas” note to your drawing set wherever gas mains are present

13. Service Relocations (road reconstruction)

- This project may impact services. Services that are to be exposed in the subgrade must be rock wrapped and lowered during construction or replaced prior to construction. Manitoba Hydro will not be able to complete rock wrapping or lowering of any services unless the lowering is minimal (i.e. < 100-150 mm or < 4-6”).
- Under normal circumstances, the amount of time required to mobilize for this work is approximately 2-3 weeks.
- Please contact Curtis Menzul at 204-360-5286 or cmenzul@hydro.mb.ca for any work required on site.

14. General:

- Please note that the requirements of Manitoba Hydro’s Safe Excavation and Safety Watch guidelines shall apply. All natural gas pipelines and service lines must be properly located and marked by Manitoba Hydro personnel. This can be arranged by

visiting **ClickBeforeYouDigMB.com** or call **1-800-940-3447**. Construction operations are not to commence unless these conditions are adhered to.

- All excavations within 1.0 m of any natural gas main must be completed by hand or Hydro-excavation.
- A minimum separation of 300 mm from gas mains and 100 mm from service lines must be maintained for any new underground structure installations excluding directionally drilled, punched, and bored crossings. If an underground structure must be installed with less than the minimum separation, an underground rigid foam barrier shall be placed over the main for protection. Submit plans for barrier installation to David Finnbogason at dfinnbogason@hydro.mb.ca.
- A minimum 600 mm of cover shall be maintained in all areas where highway rated equipment will be crossing, traveling or compacting over the 114.3 mm, 219.1 mm, and 355.6 mm gas mains. Vibratory compaction cannot be used over or within 1.0 m of a main.
- A minimum 450 mm of cover shall be maintained in all areas where highway rated equipment will be crossing, traveling or compacting over the gas service lines. Vibratory compaction cannot be used over or within 1.0 m of a service.
- If highway rated equipment must cross, travel, or compact over the gas main with less than the minimum depth of cover, or if equipment heavier than highway rated load cross the main then submit construction/crossing plans to David Finnbogason at dfinnbogason@hydro.mb.ca. Earth bridging or steel plates must be placed over the main and extend a minimum of 1.0 m on either side at each crossing location when crossing with less than minimum cover.
- All construction operations within the vicinity of natural gas pipelines are to take place in a manner so as not to damage or cause detriment to the integrity of the natural gas pipeline. Any damages to the coating must be reported to and repaired at no cost by Manitoba Hydro prior to backfilling.

Manitoba Hydro believes that there should be no problem with this work however; Manitoba Hydro makes no representations or warranties in that regard.

If you have any questions or comments, please contact the undersigned.

Regards,

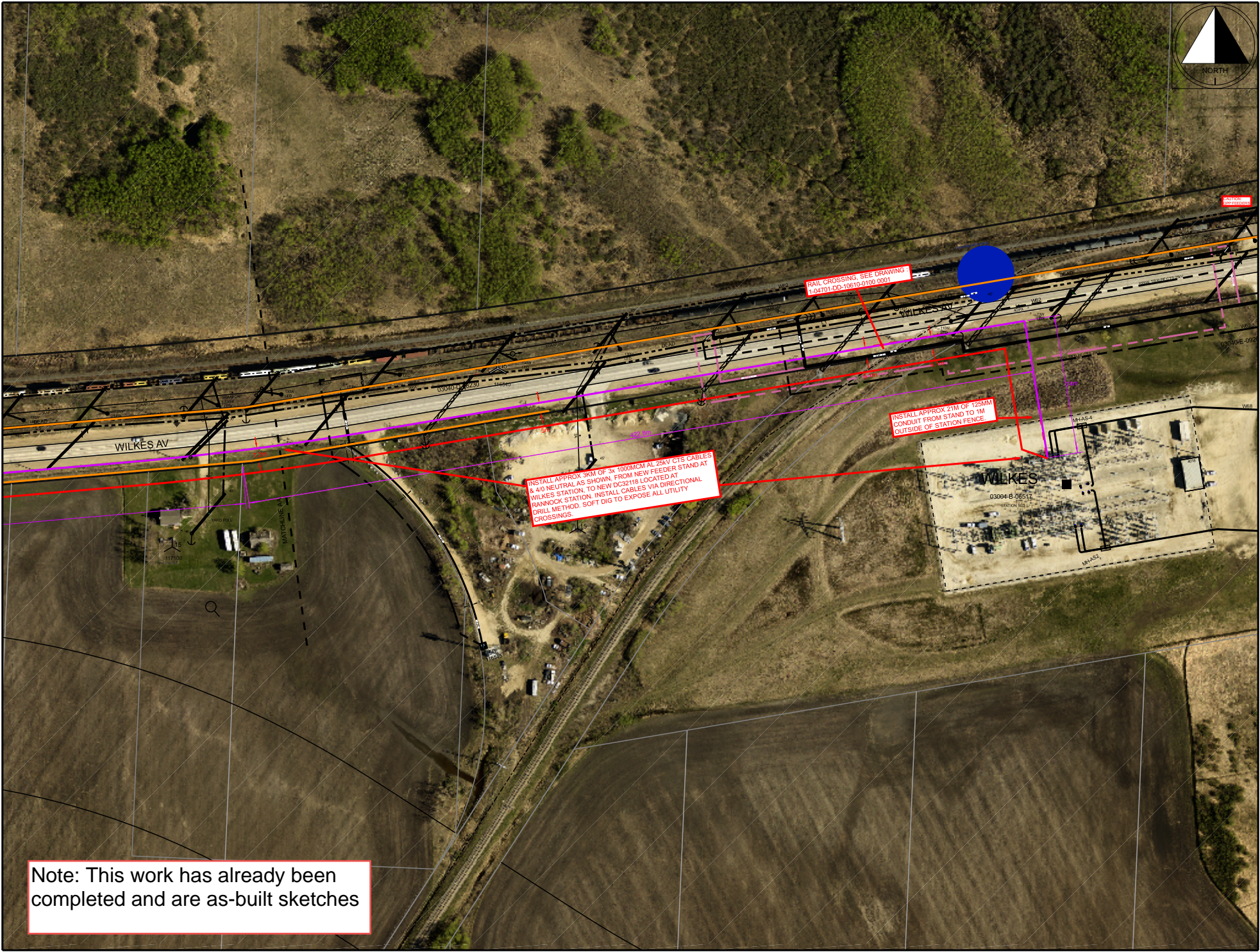


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Nadine Gosselin, Damage Prevention – Sutherland Ave, Manitoba Hydro
Aaron Dueck, District Service Worker – Henlow Bay, Manitoba Hydro
Aldo Garofalo, Gas Operations MTCE – Sutherland Ave, Manitoba Hydro

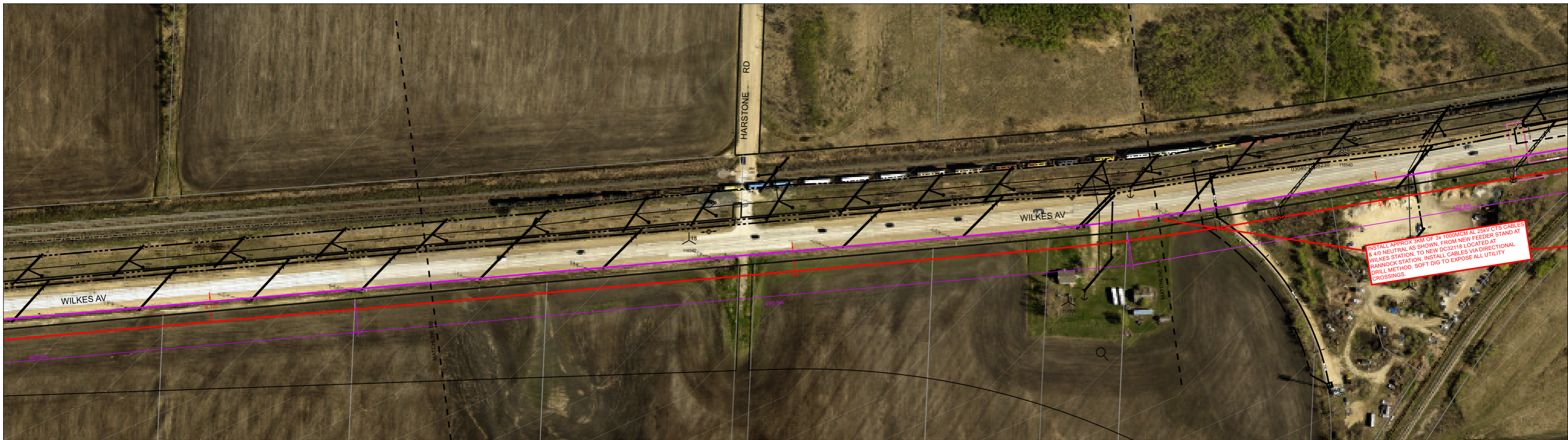
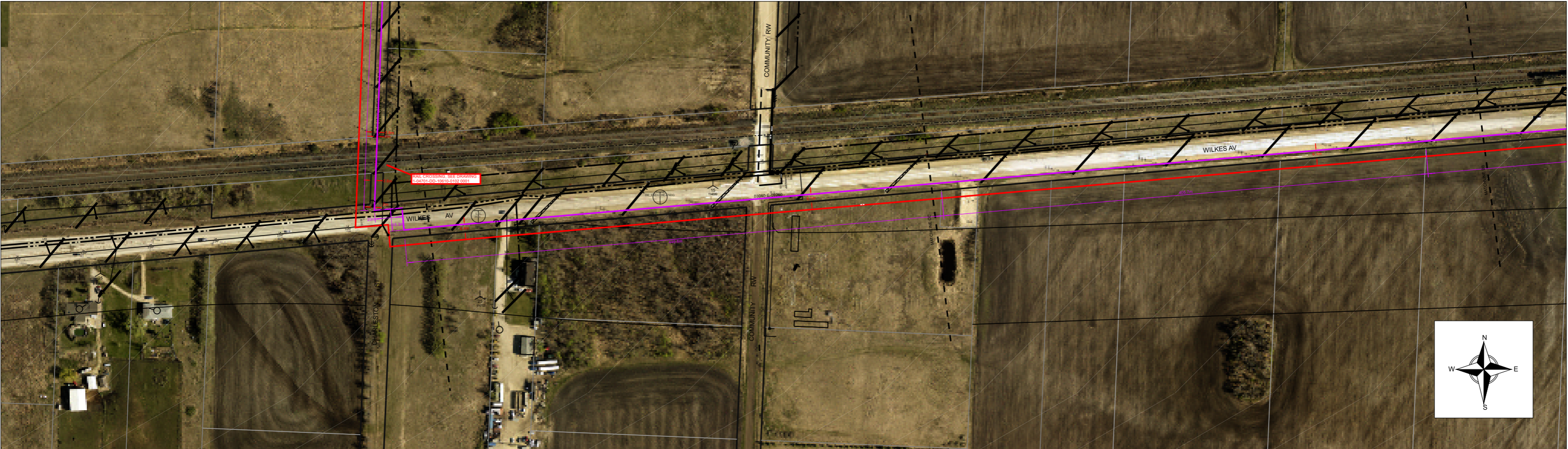


RAIL CROSSING, SEE DRAWING
1:4/701-DD-10610-0100 0001

INSTALL APPROX 21M OF 125MM²
CONDUIT FROM STAND TO 1M
OUTSIDE OF STATION FENCE.

INSTALL APPROX 3KM OF 3x 1000MCM AL-25KV CTS CABLES
& 4/0 NEUTRAL AS SHOWN FROM NEW FEEDER STAND AT
WILKES STATION, TO NEW 0032116 LOCATED AT
RANNOCK STATION. INSTALL CABLES VIA DIRECTIONAL
DRILL METHOD. SOFT DIG TO EXPOSE ALL UTILITY
CROSSINGS.

Note: This work has already been
completed and are as-built sketches



Note: This work has already been completed and are as-built sketches