Kineticor Holdings LP

Kineticor Area Structure Plan

Z0026600

UTILITY SERVICING DESIGN BRIEF

CIMA+ file number: Z0026600
20 July 2025 – Review 001

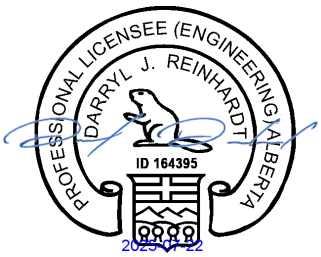
Kineticor Holdings LP

Kineticor Area Structure Plan

Z0026600

UTILITY SERVICING DESIGN BRIEF

Prepared by:



Darryl Reinhardt, P.L. (Eng.)
Engineering License Number: 164395

PERMIT TO PRACTICE
CIMA CANADA INC
RM SIGNATURE:
RM APEGA ID #: 85297
DATE: July 22 2025
PERMIT NUMBER: P8204
The Association of Professional Engineers and Geoscientists of Alberta (APEGA)

Verified by:

Steve Dawe, P. Eng.
Engineering License Number: 85297

300, 6815 – 8 Street NE, Calgary, AB T2E 7H7 CANADA T 403 775-0100 F 403-775-0102

CIMA+ file number: Z0026600
20 July 2025 – Review 001

Table of involved resources

In addition to the signatories of this report, the following individuals have also been involved in the study and writing of the report as technical experts within the project team:

Name	Engineering License Number	Discipline

Register of issues			
Issue No.	Reviewed by	Date	Description of the review
001	Darryl Reinhardt	2025-07-20	Internal Review
001	Sarah Nhung	2025-07-21	Internal Review

Confidentiality and ownership

Table of contents

List of Appendices

1. Introduction

This Utility Servicing Design Brief supports the Kineticor Area Structure Plan (ASP), which outlines the long-term development of a data centre campus within Rocky View County (RVC). This design brief outlines the servicing requirements for the proposed Kineticor ASP area development in Rocky View County, Alberta. The report was prepared by CIMA+ Canada Inc. (CIMA) on behalf of Kineticor Holdings LP and is being submitted for approval to Rocky View County ("RVC") in support of the submission for the proposed Kineticor ASP area by B&A Studios (B&A).

The plan area encompasses approximately 448 hectares (1,107 acres) consisting of 7 quarter sections located north of Highway 566 between Range Roads 281 and 282. This report outlines utility servicing strategies for water, sanitary sewer, stormwater, and shallow utility services.

Servicing of the Kineticor ASP area development will be in accordance with the following:

- Rocky View County Servicing Standards;
- City of Calgary Servicing Standards;
- Alberta Environment and Parks Standards and Guidelines for Municipal Waterwork, Wastewater and Storm Drainage Systems; and
- Alberta Transportation Guidelines.
- Applicable policies from the proposed Kineticor ASP

Figures referenced throughout the report can be found in **Appendix A**

2. General Information and Site Conditions

Legal Land Description (*see* **Figure 1.0**):

- NE 15-26-28-4
- SE 23-26-28-4 (excepting Lot 1 Plan 1612564)
- SW 23-26-28-4
- NW 14-26-28-4
- NE 14-26-28-4
- SE 14-26-28-4
- SW 14-26-28-4

Total: 7 parcels covering the majority of 7 quarter sections.

The plan area is primarily agricultural with existing well sites, pipelines, and natural drainage features. One active farmyard with residential and agricultural structures is present and is serviced by a groundwater well and private sewage system. A Phase I Environmental Site Assessment (ESA) identified no off-site impacts. A Phase II ESA was not recommended. Oil and gas infrastructure is present, owned by Harvest Operations Corp. and Rocky View Gas Co-op Ltd., with environmental liabilities remaining the responsibility of the operators.

The entirety of the plan area generally slopes from the W/SW towards the E/NE. There are two existing drainage courses that run NW to SE across the eastern portions of the site. The elevations within the subject property range from a high of ± 1085.0 m on the southwest corner of SW15 26-28-4 to a low of ± 1019.0 m on the east side of SE23 26-28-4 where the existing drainage channel leaves the site. In general, the west half of the site is notably higher than the east half. Existing contours are shown in **Figure 2.0** *(shows original ground contours at 1.0m and 5.0m intervals)* in **Appendix A**.

Overall grading of the proposed development will be influenced by existing natural areas, the stormwater management plan, and deep utility servicing. It is anticipated that post-development drainage patterns will generally mirror pre-development drainage patterns. Grading of the site post-development will look to minimize significant elevation changes across lots, as typical data center buildings require consistent elevations for all openings around the building. Where feasible, lot grading will direct drainage towards the road right-of-way. Ideally, the overall grade from one lot corner to the opposite corner will be relatively flat at approximately 1-2% percent where possible.

Stormwater from each lot will be directed to the stormwater management facility (SWMF) within the proposed development. The SWMF will be located near the northeast corner of NE14 26-28-4, in alignment with pre-development drainage patterns. Stormwater will be conveyed to the SWMF using two systems: the major system, which includes overland drainage ditches and culverts for overland flow and the minor system, consisting of a small section of storm sewer pipes. Other considerations that influence site grading include slope requirements, stormwater management, pipe coverage, and future development plans.

3. Transportation

WATT Consulting Group (WATT) has prepared a Traffic Impact Assessment (TIA) for the Kineticor ASP area in accordance with the proposed future road network. The TIA, submitted under separate cover, outlines recommendations for the proposed transportation network including two intersections improvements along HWY 566, which will serve as the framework for the detailed design of the future roadways. The proposed roadway network is illustrated in **Figure 3.0** in **Appendix A**.

Local industrial roads within the development will feature a 30m ROW industrial rural cross-section similar to other neighboring developments in the East Balzac development area to the west. Road right-of-way widths and grades will adhere to the following standards and reports:

- Rocky View County Servicing Standards
- Transportation Association of Canada (TAC) manual and
- Guidelines outlined in WATT's TIA

4. Water Distribution System Servicing

Water servicing for the proposed Kineticor ASP development will be provided by the construction of a new potable water reservoir and pump station. The site is located within 4km of the Graham Reservoir and Water Treatment plant. The new potable water reservoir will be constructed in a PUL located in the SW corner of NE15 26-28-4. A dedicated supply line will be constructed from the Graham Reservoir Water Treatment Plant to the new reservoir location, as shown in **Figure 4.0** in **Appendix A**. The proposed pump station and reservoir will be designed to supply the required storage, and pumping capabilities to satisfy the demands of the development as well as meet all required fire safety guidelines. Due to the change in elevation across the subject lands, multiple pressure zones may be required which can be managed through a series of pressure reducing valves located around the site at specific elevations to not exceed minimum or maximum service pressures. Locations of PRVs and pressure zones will be determined at detailed design stage.

The design of the water distribution system will adhere to the following standards:

- Rocky View County Servicing Standards and
- Alberta Environment and Parks Standards and Guidelines for Municipal Waterwork, Wastewater and Storm Drainage Systems

For the development of the Kineticor ASP area, a looped water system will be provided by extending a series of pipes with sizes ranging from 300mm - 400mm from the proposed reservoir/pump station throughout the subject lands. Conceptual pipe sizes are depicted in **Figure 4.1**in **Appendix A**. Actual pipe sizes and alignments will be confirmed through a water network analysis, which will be conducted during the detailed design stage. This analysis will assess the system demands and aid in sizing the reservoir and pump station capacity and identify both immediate needs for phase 1 as well as long-term upgrade phasing that may be required.

All components of the water system—including the feeder main, pump station, reservoir, and distribution mains—will be transferred to Rocky View County upon completion of the required maintenance period and FAC process.

The proposed reservoir, pump station and distribution mains will be designed to service the subject area but can be done so in a way to allow for future upgrades to expand the service area. As development progresses in the Balzac area, further upgrades to the existing water distribution system may be necessary. The Rocky View County Balzac Master Potable Water Plan (Sept 2011, MPE) identified the potential need for a future reservoir and pump station located at the RVC Municipal Campus, as well as a 600mm transmission main along Hwy 566 that extends east beyond the East Balzac ASP boundary. The proposed construction of a reservoir and pump station approximately 8km east of the RVC Municipal Campus could either replace the need for a reservoir at the campus location or supplement the greater Balzac service area. By connecting the future 600mm trunk main along HWY 566 to the proposed Kineticor reservoir, it would provide redundancy and looping for the east Balzac water network.

5. Sanitary Sewer Servicing

Sanitary sewer servicing for the proposed Kineticor ASP area will be provided by the construction of a new sanitary lift station and forcemain. The new forcemain will connect to the existing 600mm diameter East Balzac Sanitary Forcemain that runs from the Balzac area to the wastewater treatment plant in Langdon, AB. The Kineticor ASP area is outside of the anticipated service area for the East Balzac Sanitary Forcemain, however, the three main lift stations along the line and the Langdon Wastewater Treatment Plant have been designed and constructed with potential expansion in mind. At the detailed design stage, an assessment will be completed of the facility to determine if upgrades are required. The existing forcemain runs from the existing lift station near Cross Iron Mills Mall east through the Balzac industrial area, then south along Range Road 290, turning east on Township Road 260 before turning south at Range Road 284, ultimately directing flows to the treatment facility in Langdon, AB. The proposed connection would be approximately at the intersection of TWP 260 and RR284, as shown in **Figure 5.0** in **Appendix A**.

Wastewater servicing within the proposed Kineticor ASP boundary will be by way of an internal gravity pipe system which will convey flows to the new lift station which will then be pumped to the existing 600mm forcemain as noted above. Due to the topography of the site, planned retention of the natural drainage channel and need for irrigation area, a portion of the plan area cannot gravity drain to the lift new station location. Servicing of SW23 26-28-4 will require the construction of a second, smaller, sanitary lift station and forcemain. This forcemain will discharge into the gravity sanitary system

Existing and conceptual pipe sizes and alignments are shown in **Figure 5.1** in Appendix A. Actual pipe sizes, alignments, and details of the pump station and connections will be confirmed through a sanitary capacity network analysis, which will be conducted during the detailed design stage. The wastewater system will be designed according to the following:

- Rocky View County Servicing Standards
- City of Calgary Servicing Standards and
- Alberta Environment and Parks Standards and Guidelines for Municipal Waterwork, Wastewater and Storm Drainage Systems

All components of the sanitary system-including lift stations, forcemains and gravity sewer mains-will be transferred to Rocky View County upon completion of the required maintenance and FAC process.

6. Stormwater Management and Storm Sewer Servicing

Stormwater management for the proposed Kineticor ASP development will be designed as per the Kineticor Master Drainage Plan prepared by CIMA which will be submitted under separate cover. The report describes strategies and drainage concepts for the quantity control and water quality enhancement of runoff from the development.

In general, the stormwater management plan will utilize a combination of controlled run-off/discharge as well as stormwater use through irrigation, evaporation and transpiration. Storm drainage will be conveyed throughout the ASP area via a network of open ditches along the roadways as well as overland drainage easements to a pond located in the corner of NE14 26-28-4. Similar to the sanitary system, it is not feasible for a portion of SW23 26-28-4 to be gravity serviced to the pond. Approximately 2/3 of this area will be ditch drained to the NE corner of the section and will pass through an OGS before discharging into the existing drainage channel at a rate not exceeding predevelopment flow. The remaining 1/3 of this area will be collected via a storm pipe/culvert system (minor system) to the proposed stormwater management facility. The proposed storm pond location for Kineticor ASP area is shown in **Figure 6.0** in **Appendix A**. The stormwater management facility will be designed to handle a 1-in-100 year event. Sizing will also consider storage capacity for capture and reuse throughout the development area. In order to use the storm water for irrigation, a storm pump station will be constructed adjacent to the pond that will provide for irrigation of the green spaces, undeveloped agricultural lands within the plan boundary, and irrigation opportunities to the individual users. Potable water is not permitted to be used for irrigation.

The stormwater management plan will be based on a comprehensive, integrated system that will look at utilizing Best Management Practices (BMP) and Low Impact Development (LID) approaches to minimize water quality degradation.

The stormwater management system will be designed according to the following:

- Rocky View County Servicing Standards
- City of Calgary Servicing Standards and
- Alberta Environment and Parks Standards and Guidelines for Municipal Waterwork, Wastewater and Storm Drainage Systems

The portion of the plan area discharging into the existing drainage channel, including ditches, OGS, and outlet structure, as well as the storm water management facility (pond) will be transferred to Rocky View County upon completion of the required maintenance and FAC process.

The long-term operation and maintenance of the irrigation infrastructure, including storm pump station, storm irrigation piping, and management of irrigation systems will be the responsibility of a Business Lot Owners Association that will be set up as part of the first phase of subdivision.

7. Shallow Utility Servicing

For the Kineticor ASP area, power and gas will be provided by Altalink and ATCO Gas respectively. Capacity will be reviewed at the detailed design stage and any necessary improvements will be identified.

7.1 Power (Altalink)

The development concept for this site is based on rural right-of-way road cross sections with overhead power combined with utility-right-of-way corridors throughout the site. There are 3 existing 240kv overhead transmission lines along the west boundary of NE15 26-28-4 which can be used for servicing the proposed development. Detailed design will be developed in coordination with Altalink at the subdivision stage.

7.2 Gas (ATCO)

ATCO currently does not have facilities adjacent to the subject lands. There is currently a main distribution line running north up RR290 crossing HWY 566, service distribution lines running north up RR284 ending one mile south of HWY 566, as well as low pressure distribution extending one mile west of Kathyrn along HWY 566. At detailed design stage, it will be determined if these current facilities have capacity to provide service to the Kineticor ASP area.

Alternatively, if service pressure is not available from the existing facilities, there is a high-pressure main line at Kathyrn. With revisions to the existing Kathyrn gate station, or installation of a dedicated new gate station, gas servicing can be provided from the high pressure main in Kathyrn. Detailed design will be developed in coordination with Atco at the subdivision stage.

7.3 Telecommunications (Telus)

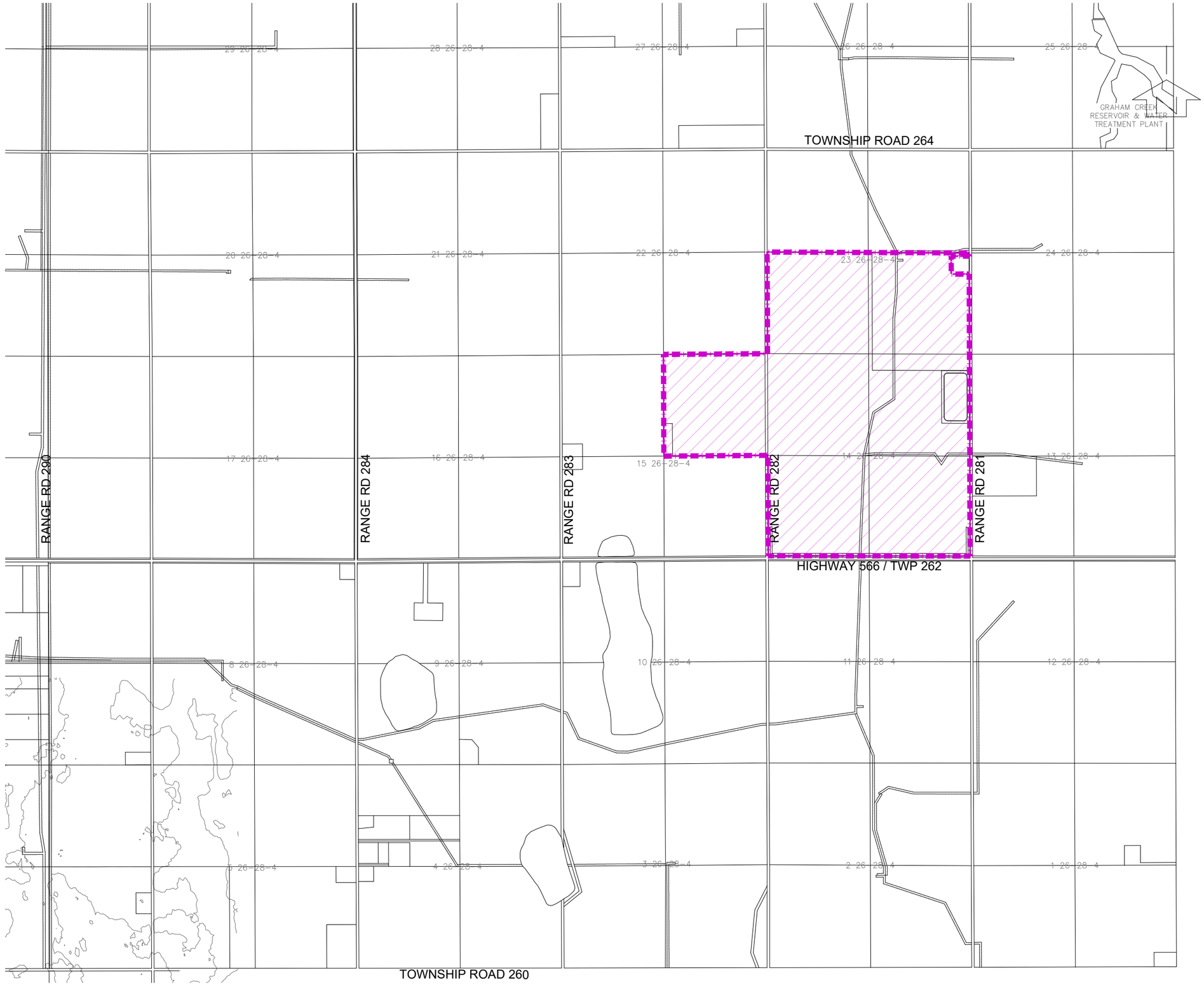
Telus has installed fiber optic communications line within High Plains Industrial Park and is currently extended to the intersection of High Plains Trail and RR290. Along HWY 566, there is a standard copper line utility which will not support the needs of a data center based development. Detailed design will be developed in coordination with Telus at the subdivision stage.

8. Corporate Authorization

This report entitled "Kineticor ASP area Utility Servicing Design Brief" was prepared by CIMA+ Canada Inc. on behalf of Kineticor Holdings LP for submission to Rocky View County. The material applies best judgement based on information available at the time of preparation. Use of this report by a third party and any decisions rendered based on it are the responsibility of the third party. CIMA+ Canada Inc. accepts no responsibility for damages to a third party as a result of decisions or actions based on this report.

A

Appendix A
Figures



KINETICOR

ROCKY VIEW COUNTY, ALBERTA

LOCATION PLAN

LEGEND

PROPOSED DEVELOPMENT BOUNDARY

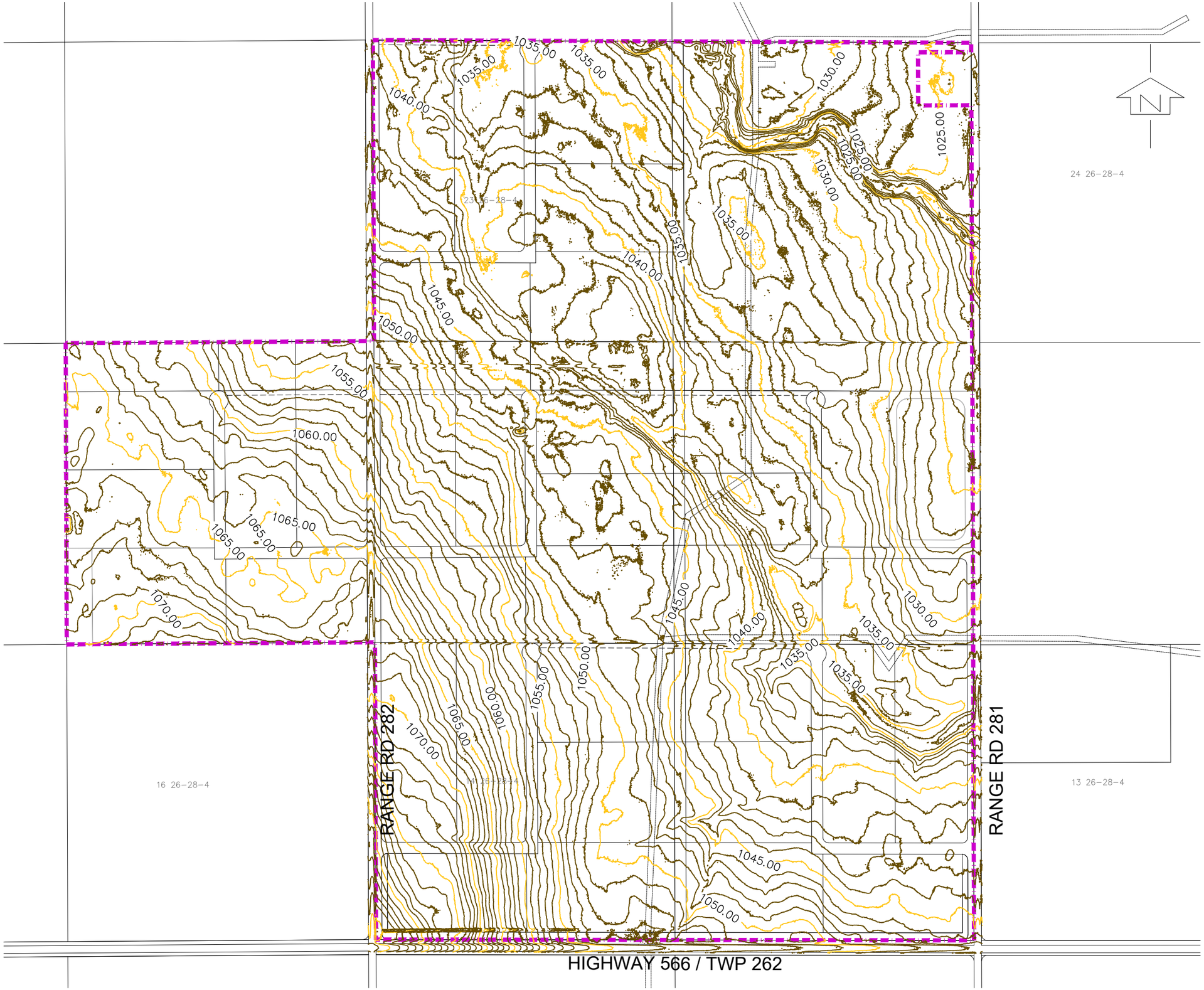
DATE : 2025-07-22	1:30000

CIMA+

PROJECT No : Z0026600	FIGURE 1.0

Saved: 2025-07-22,amber.dewar Plotted: 7/22/2025 12:24 PM

C:\Users\Amber.Dewar\Cima+\Z0026600-Kinetic-Hwy 566 North Calgary Site - Documents_Documents\300_CONC_DES\310_Dess_Dwg\FIGS\Z0026600-REPORT FIGURES.dwg



KINETICOR

ROCKY VIEW COUNTY, ALBERTA

ORIGINAL GROUND CONTOURS & EXISTING SITE CONDITIONS

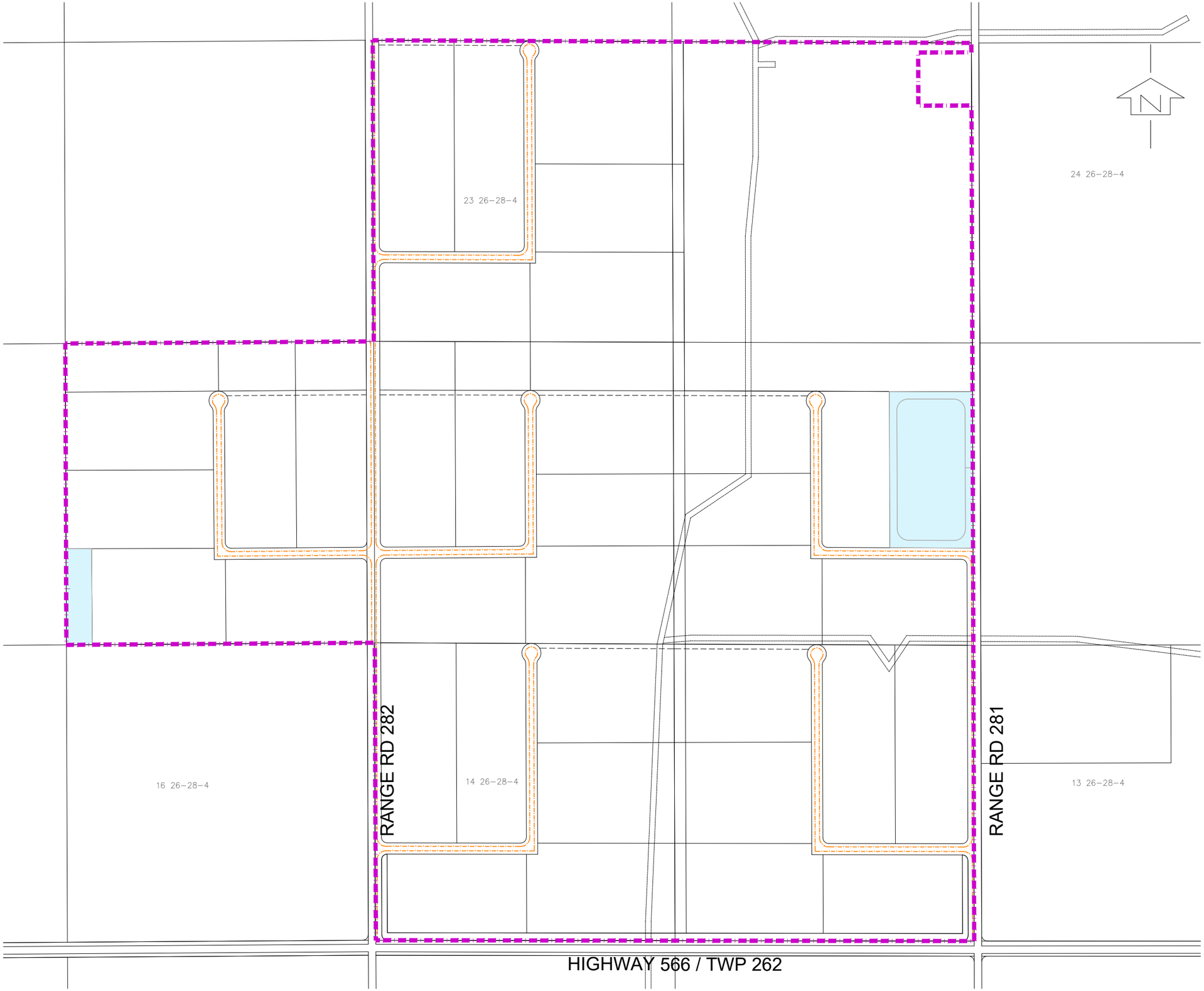
LEGEND

- PROPOSED DEVELOPMENT BOUNDARY
- 1025.00 — EXISTING CONTOUR 5.00 INTERVAL
- EXISTING CONTOUR 1.00 INTERVAL

DATE : 2025-07-22	1:10000

CIMA+

PROJECT No : Z0026600	FIGURE 2.0



KINETICOR

ROCKY VIEW COUNTY, ALBERTA

ROAD NETWORK

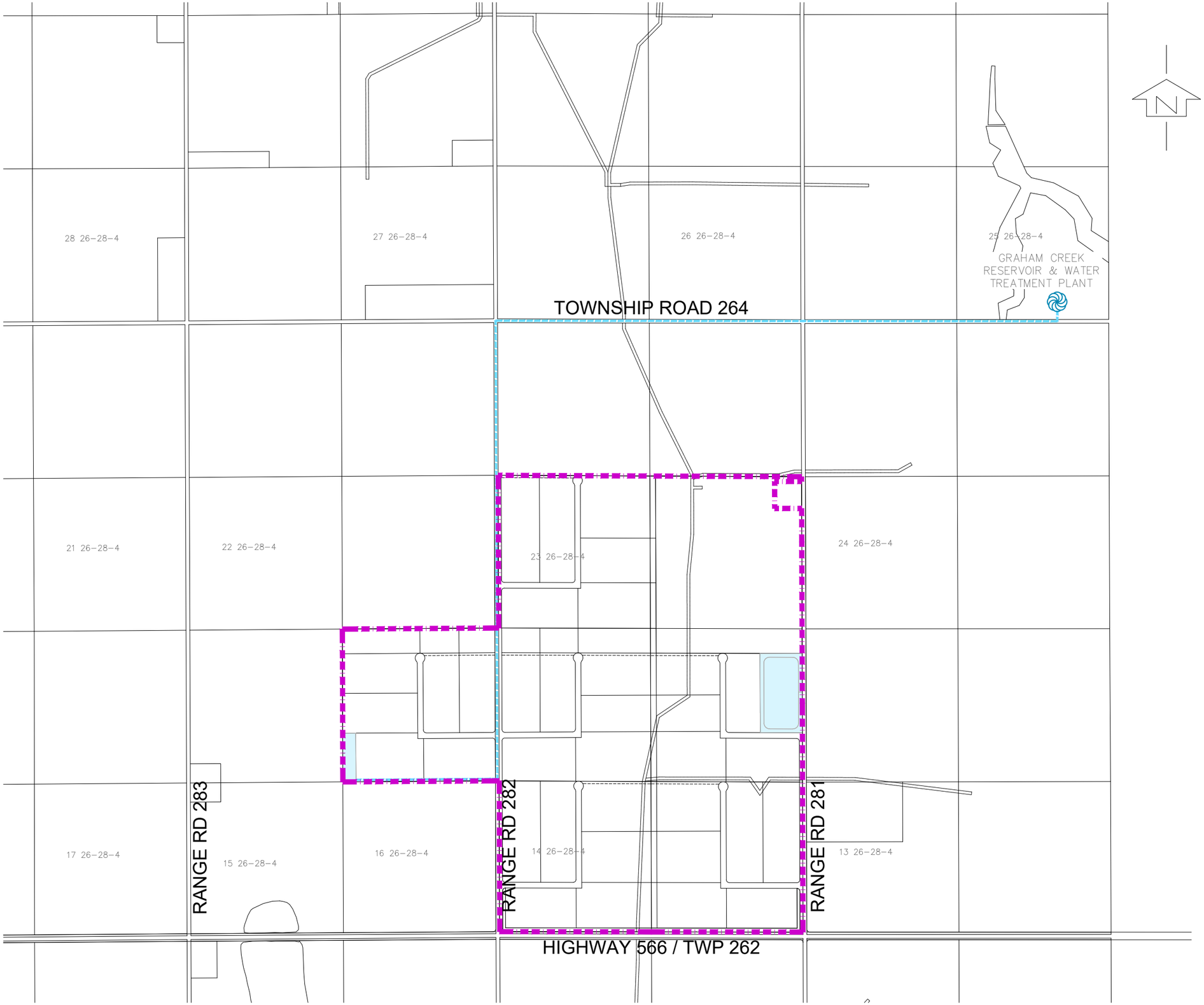
LEGEND

- PROPOSED DEVELOPMENT BOUNDARY
- PROPOSED EDGE OF PAVEMENT
- PROPOSED PUBLIC UTILITY (PUL)

DATE : 2025-07-22	1:10000

CIMA+

PROJECT No : Z0026600	FIGURE 3.0



KINETICOR

ROCKY VIEW COUNTY, ALBERTA

WATER SUPPLY NETWORK

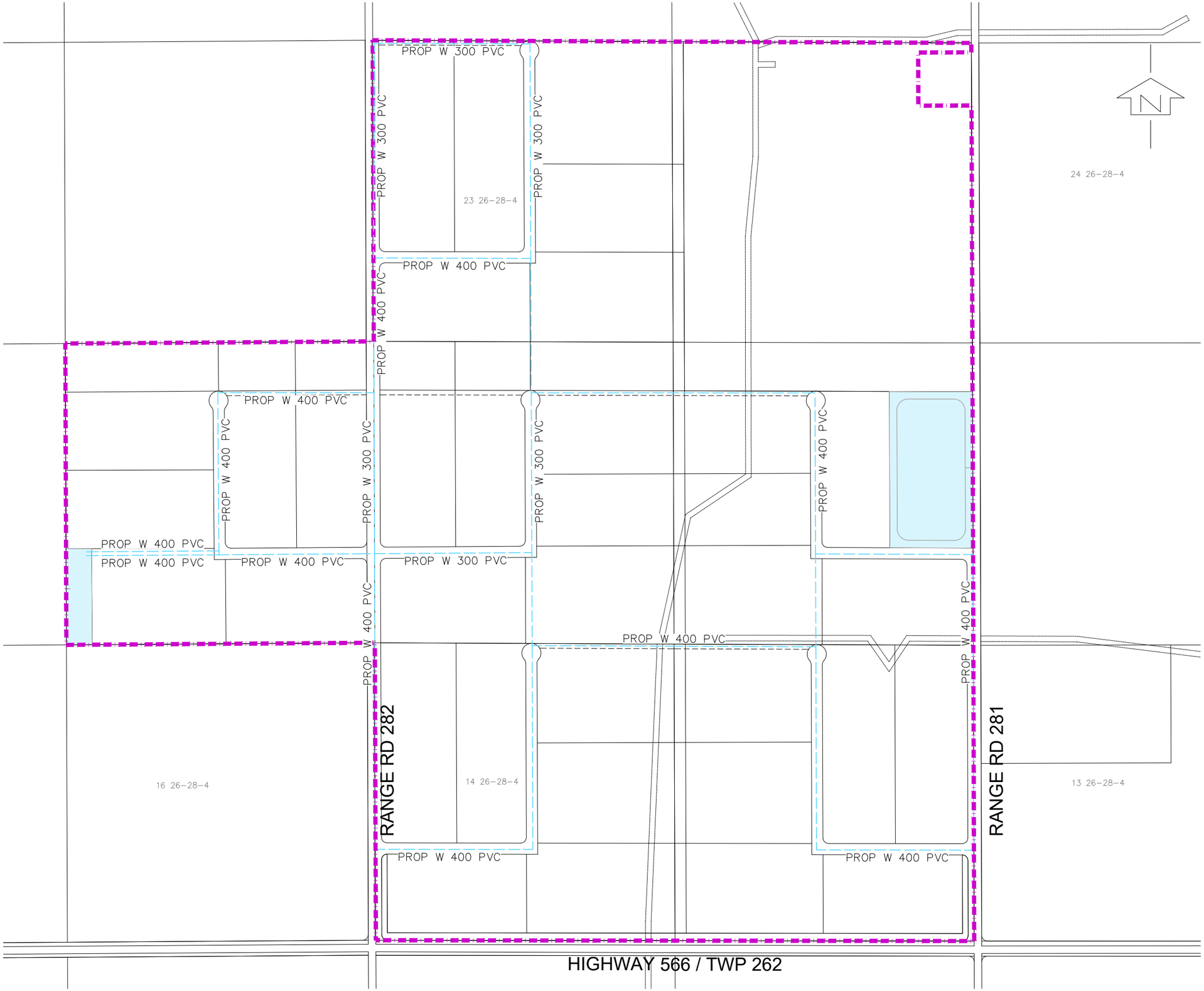
LEGEND

- PROPOSED DEVELOPMENT BOUNDARY
- PROPOSED POTABLE WATER FEEDER MAIN
- PROPOSED PUBLIC UTILITY (PUL)
- EXISTING WATER TREATMENT PLANT

DATE : 2025-07-22	1:20000

CIMA+

PROJECT No : Z0026600	FIGURE 4.0



KINETICOR

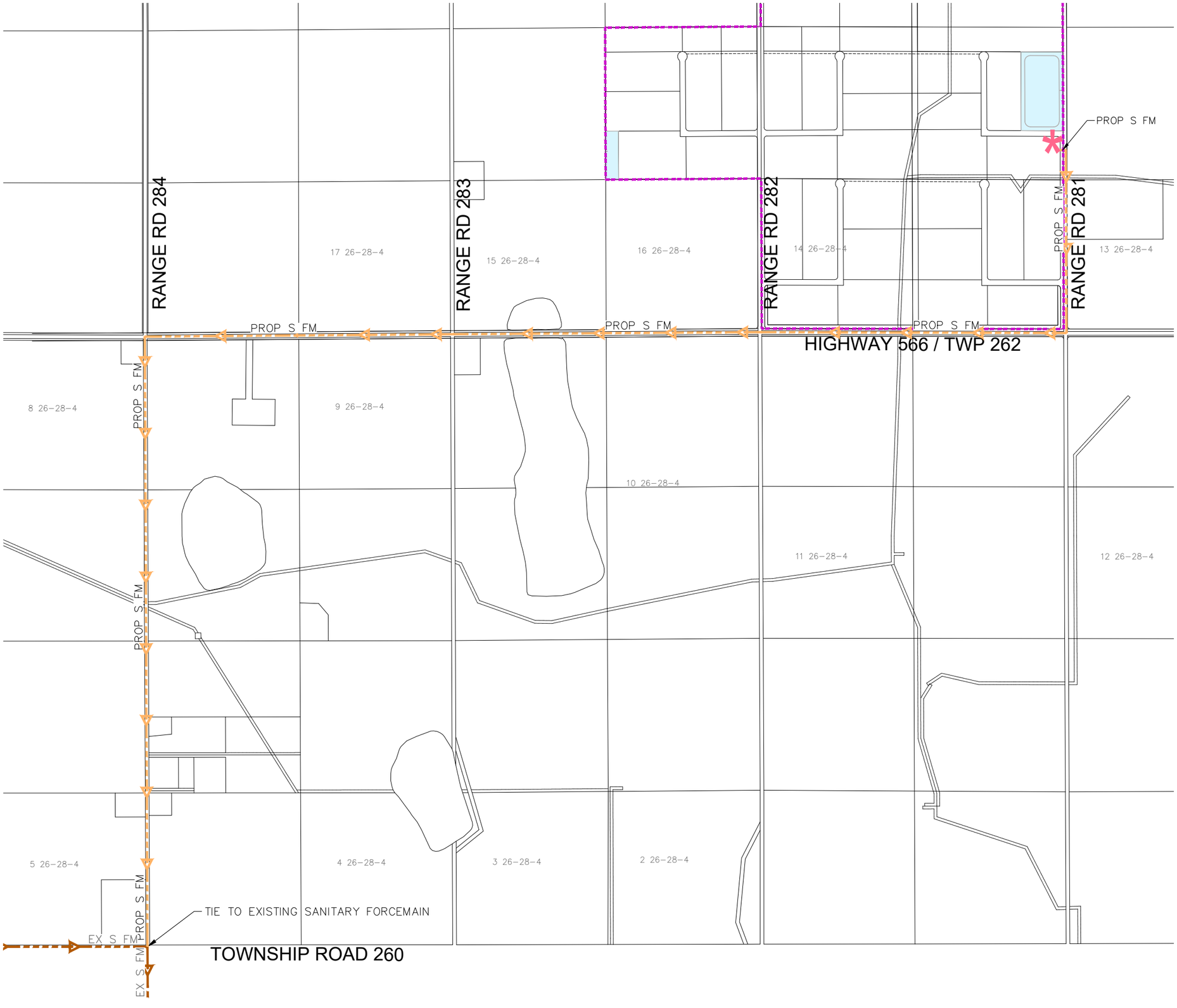
ROCKY VIEW COUNTY, ALBERTA

WATER DISTRIBUTION NETWORK

LEGEND

- PROPOSED DEVELOPMENT BOUNDARY
- PROPOSED WATER
- EXISTING WATER
- PROPOSED PUBLIC UTILITY (PUL)

DATE : 2025-07-22	1:10000
PROJECT No : Z0026600	FIGURE 4.1



KINETICOR

ROCKY VIEW COUNTY, ALBERTA

SANITARY FORCEMAIN NETWORK

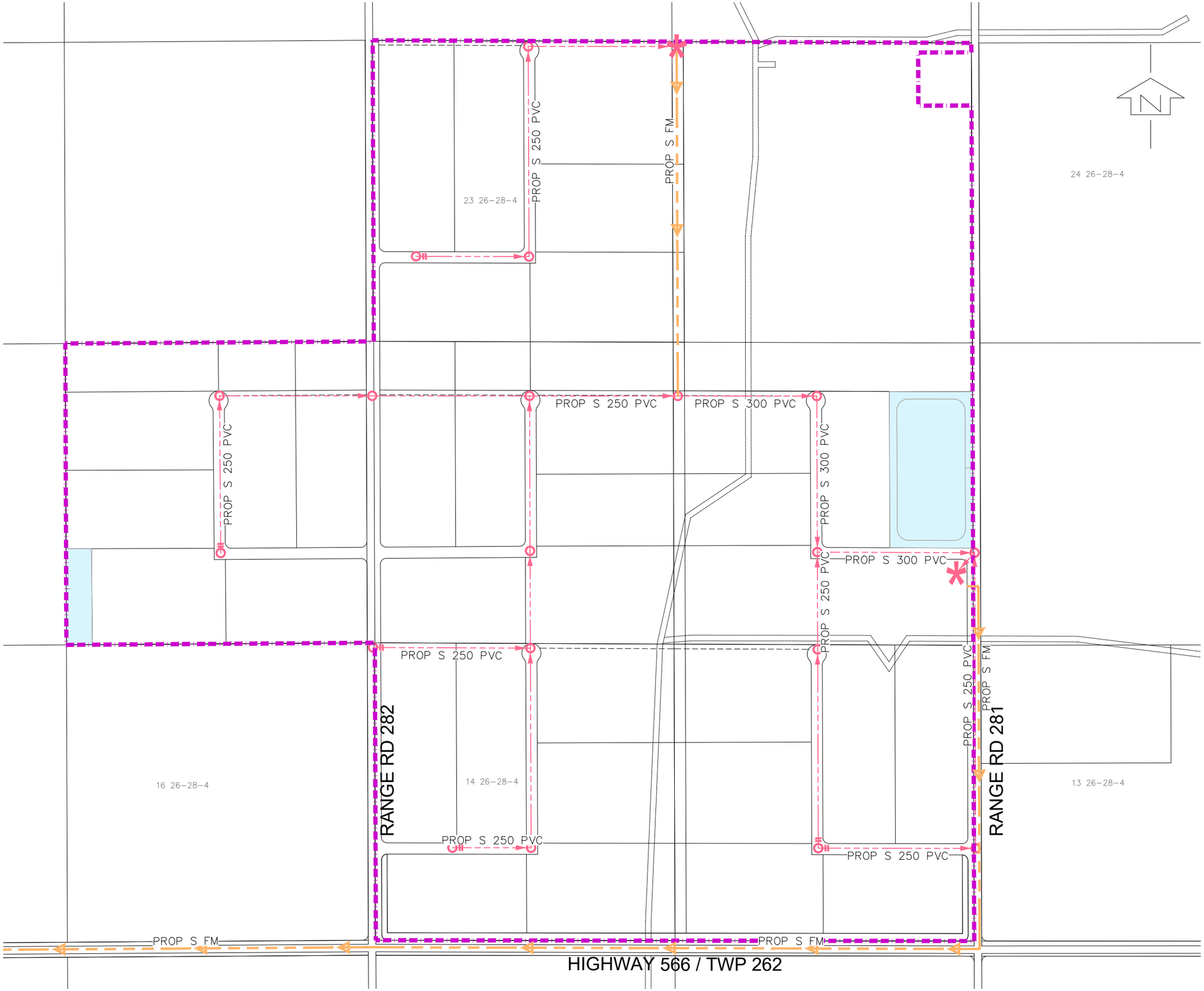
LEGEND

- PROPOSED DEVELOPMENT BOUNDARY
- PROPOSED SANITARY FORCEMAIN
- EXISTING 600 SANITARY FORCEMAIN
- PROPOSED SANITARY LIFT STATION
- PROPOSED PUBLIC UTILITY (PUL)

DATE : 2025-07-22	1:20000

CIMA+

PROJECT No : Z0026600	FIGURE 5.0



KINETICOR

ROCKY VIEW COUNTY, ALBERTA

SANITARY SEWER NETWORK

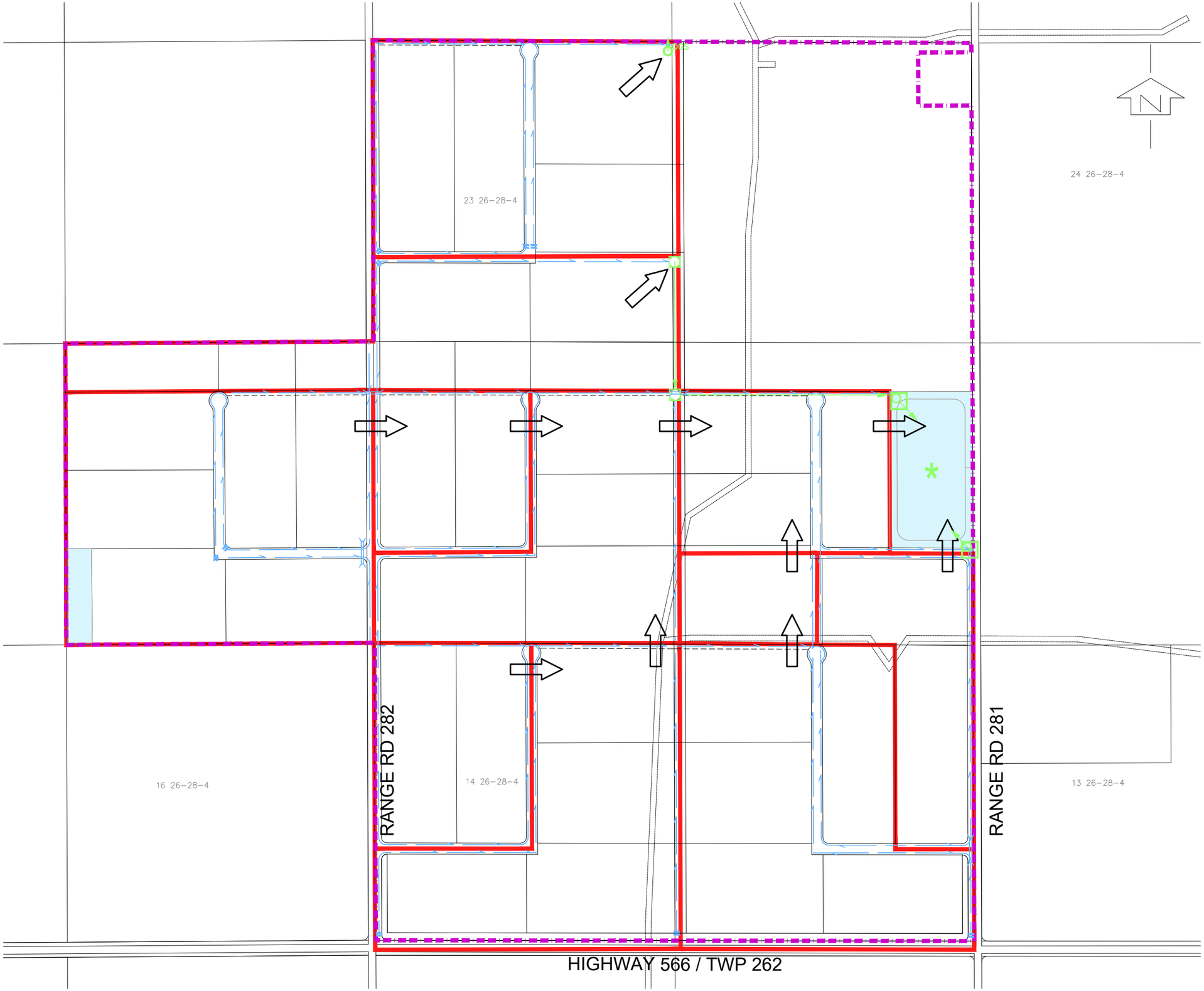
LEGEND

- PROPOSED DEVELOPMENT BOUNDARY
- PROPOSED SANITARY MANHOLE
- PROPOSED SANITARY LIFT STATION
- PROPOSED SANITARY SEWER
- PROPOSED SANITARY FORCEMAIN
- PROPOSED PUBLIC UTILITY (PUL)

DATE : 2025-07-22	1:10000

CIMA+

PROJECT No : Z0026600	FIGURE 5.1



KINETICOR

ROCKY VIEW COUNTY, ALBERTA

STORMWATER MANAGEMENT PLAN

LEGEND

- PROPOSED DEVELOPMENT BOUNDARY
- CATCHMENT BOUNDARY
- PROPOSED STORM 1-S MMANHOLE
- PROPOSED OIL GRIT SEPARATOR
- PROPOSED STORM
- PROPOSED DRAINAGE DITCH
- PROPOSED DITCH HIGH POINT
- EXISTING DRAINAGE DITCH
- PROPOSED STORM CULVERT
- PROPOSED STORMWATER POND
- FLOW DIRECTION
- PROPOSED PUBLIC UTILITY (PUL)

DATE : 2025-07-22	1:10000

CIMA+

PROJECT No : Z0026600	FIGURE 6.0