



Parkland County

Acheson Industrial

Area Structure Plan

One Parkland: Powerfully Connected

DRAFT VERSION FOR PUBLIC HEARING December 8, 2020

REDLINED AMENDMENTS

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Existing Infrastructure

Transportation: The Plan area is served by ~~four (4)~~ five (5) Provincial Highways: Highway 16, Highway 16A, Highway 60 ~~and~~ Highway 628 ~~and~~ Highway 44. The Canadian National Rail (CNR) mainline runs through the Plan area connecting Edmonton and Vancouver and provides rail spurs that service businesses within the Plan area. The parcels within the Plan area are served by a series of collector, arterial, and local roads. 231 Street borders the Plan area to the east, and is under the jurisdiction of the City of Edmonton.

Alberta Transportation currently has plans to expand or alter Highways in the Plan area, including construction of an overpass to replace Highway 60 and CNR railway crossing, and to realign and expand Highway 628.

The County's *Transportation Master Plan* (expected 2021) and the *Acheson and Big Lake Traffic Impact Assessment* (2018) outline the existing and future road networks.

Utility Services: The Plan area is serviced by ATCO Gas for gas and Fortis Alberta for power. Telus provides telecommunication services including fibre optics to the Plan area. There are also numerous telecommunications towers located across the Plan area which are federally regulated.

Oil & Gas: Most of the existing oil and gas fields are located in the eastern half of the Plan area. The oil produced within the Plan area contains small concentrations of sour gas. These fields are estimated to remain viable until approximately 2040. Setbacks and separation distances of development from existing oil and gas infrastructure are regulated by the Alberta Energy Regulator and enforced through the provincial Subdivision and Development Regulations.

Water and Sanitary Systems: Water is supplied to the Plan area by a water supply pipeline operated by the Capital Region Parkland Water Services Commission (CRPWSC). Within the Plan area, water is distributed through County operated distribution lines that are fed by two County operated water reservoir pump houses. The *Acheson and Big Lake Area Water Servicing Study* (2015) provides details on existing water servicing and future expansion plans.

Sewage from the Plan area is directed to the Alberta Capital Region Wastewater Commission (ACRWC) sewage transmission line that is located just outside the Plan area to the north of Highway 16. To convey sewage to the ACRWC line, the County operates two main sewage trunk lines within the Plan area: the Acheson Trunk and the Bevington Road Trunk. The *Acheson and Big Lake Area Sanitary Sewer Servicing Study* (2015) provides details on the existing sanitary servicing and future plans.

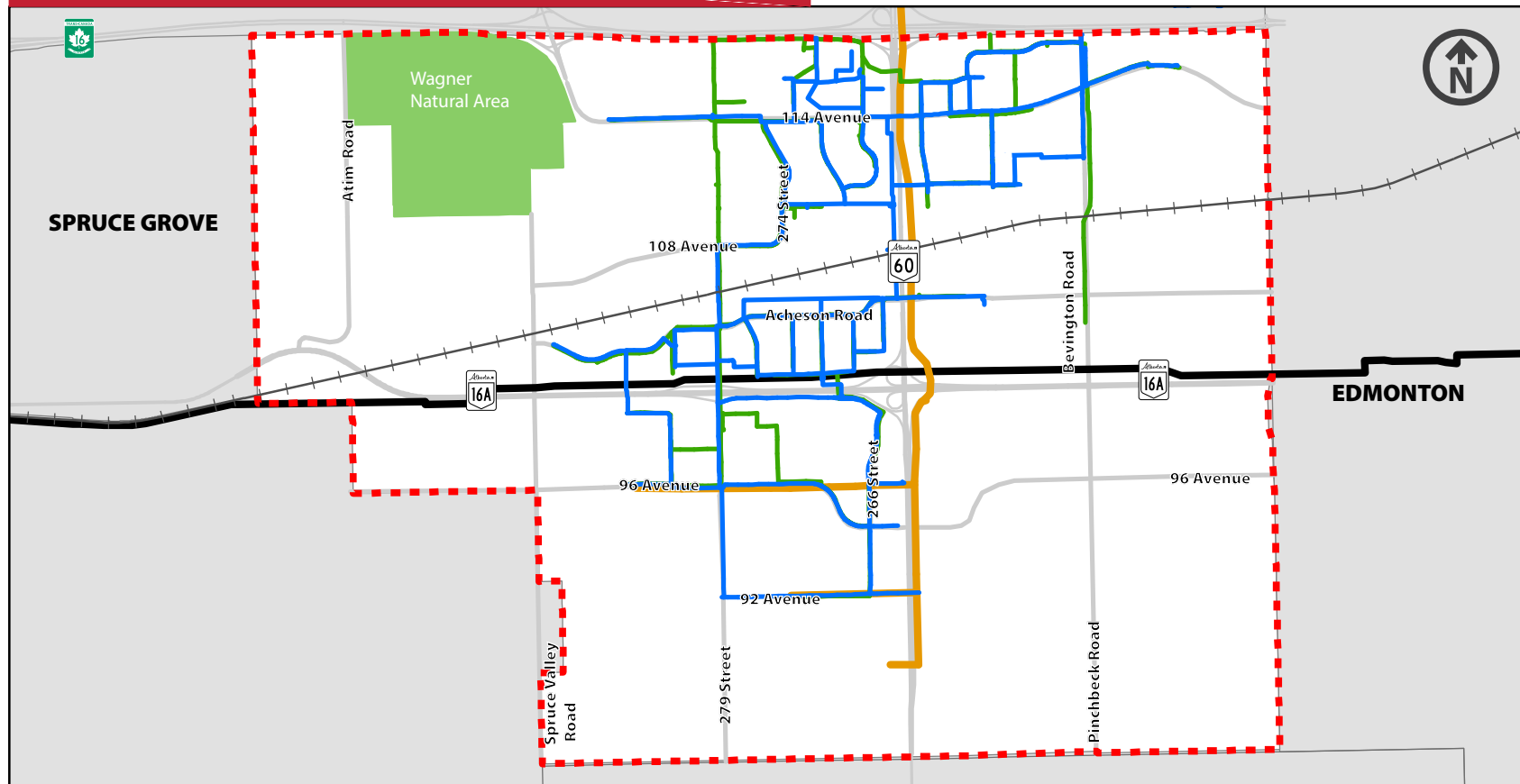
Stormwater Management: Stormwater servicing north of Highway 16A is currently managed through a series of stormwater ponds, roadway ditches, and natural creeks or streams that all convey overland drainage to Big Lake. Stormwater servicing south of Highway 16A is managed through a series of stormwater ponds that collect and convey drainage through a stormwater trunk line to a constructed wetland near Big Lake.

All stormwater management facilities in the Plan area comply with the provincial Water Act in accordance with the County's existing fenceline approval No. 00287756-00-00. The *Acheson and Big Lake Area Master Drainage Plan* (2011) provides details on existing and future drainage systems.

This map has been amended with:

- Shifting overlapping servicing lines so they are more visible
- Remove a portion of 108 Avenue that has not been constructed.

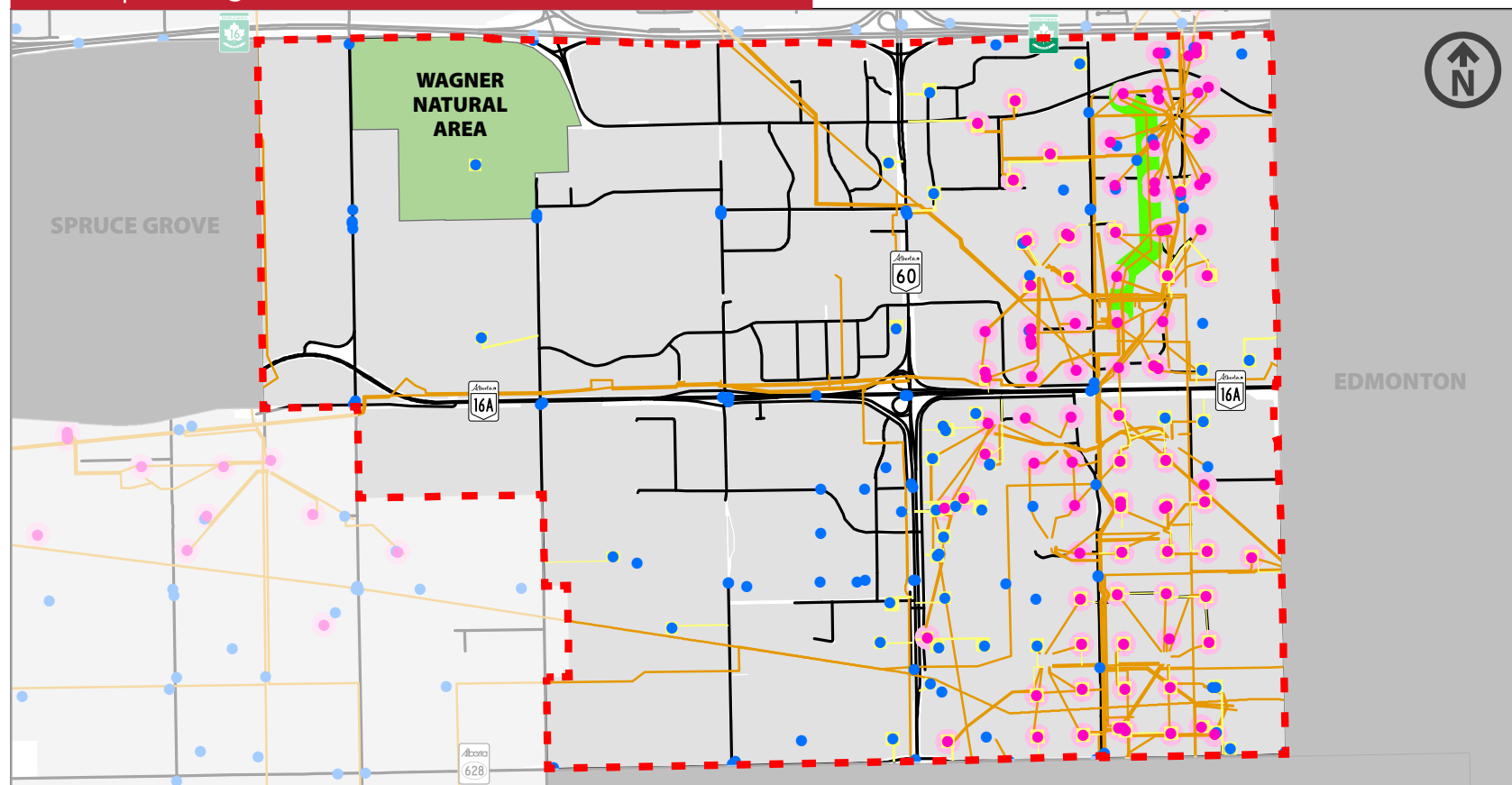
MAP 3 | Existing Infrastructure











- - - ASP Boundary
- Existing Water Network
- Existing Sanitary Sewer
- Stormwater Main
- Regional Water Main

This map has been amended with:
- Minor edit to legend heading ("Buffer")

MAP 4 | Existing Oil & Gas Infrastructure



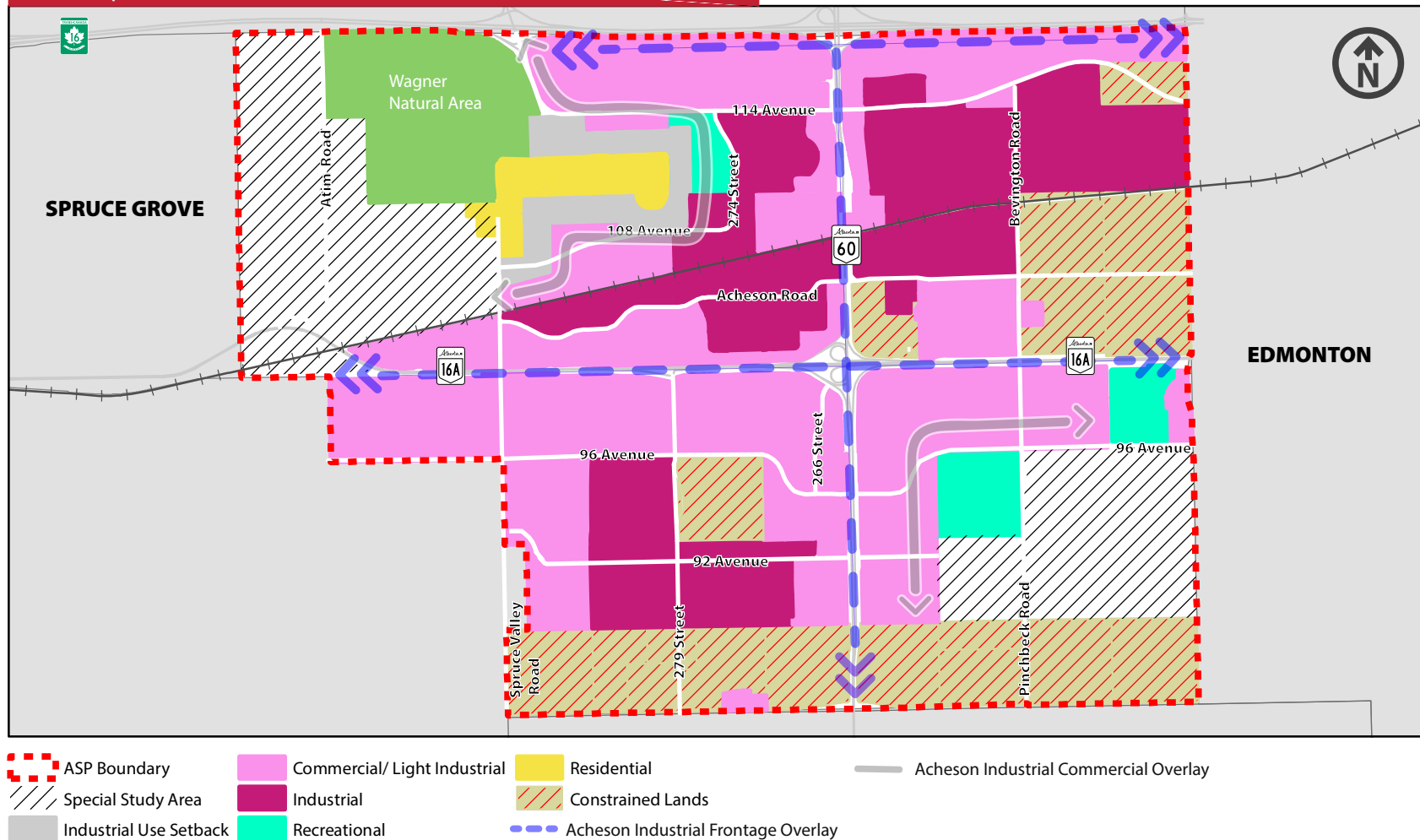
- | | | |
|---|--|--|
|  Acheson ASP Boundary |  Abandoned Wells |  AbaData Pipelines |
|  Well Access/Lease Sites |  Active/Suspended Wells |  100m Buffer (Sour Gas Pipelines) |
| |  100m Buffer (Active/Suspended Wells) |  Road |

2.0 Future Land Use Concept

This map has been amended with:

- Extend Acheson Industrial Commercial Overlay east to accurately reflect location of overlay
- Minor change to reflect existing natural area boundary

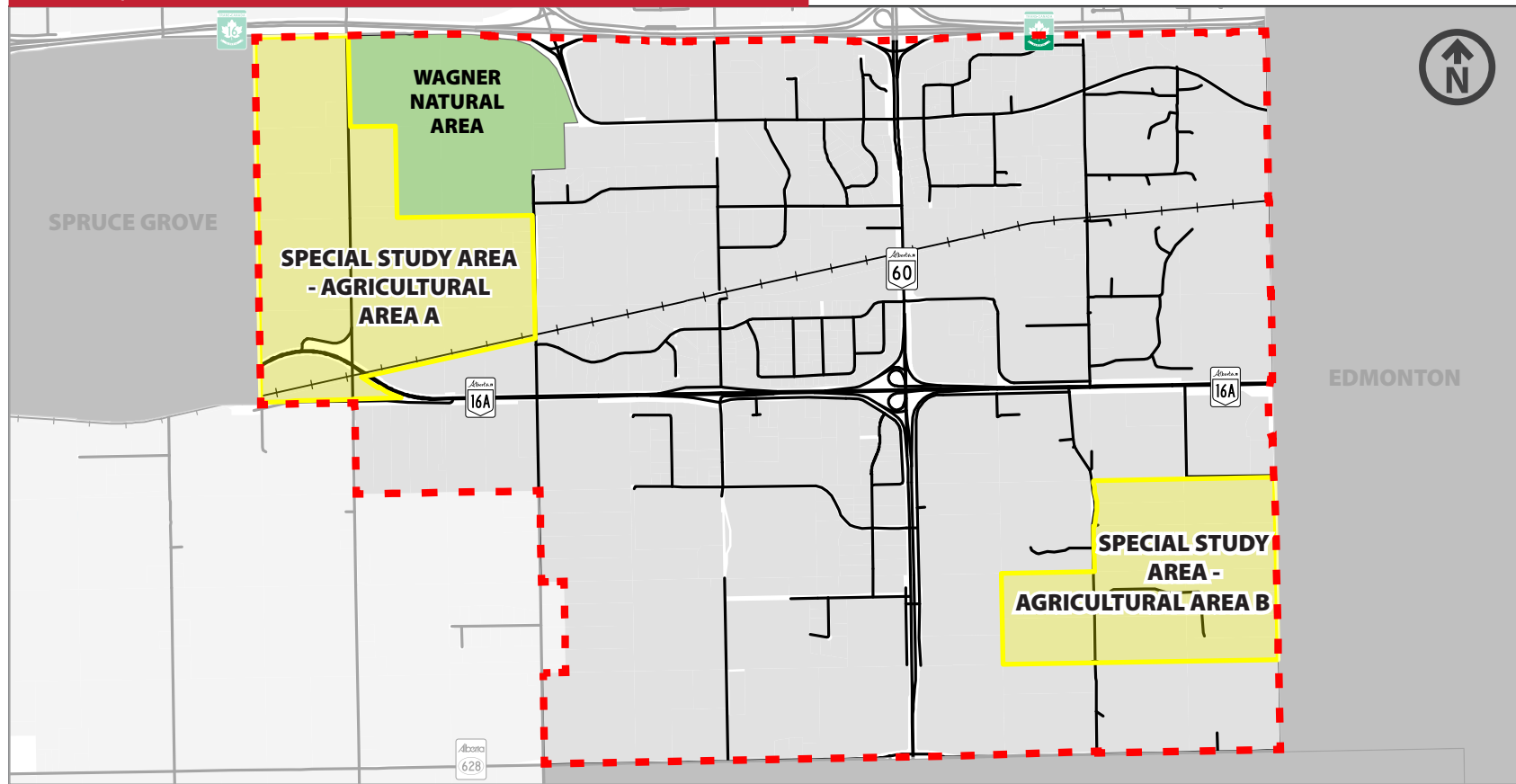
MAP 6 | Future Land Use Concept







This map has been amended with:

- Adjust boundary line of Special Study Area A (to north of rail line) to accurately reflect location.

MAP 7 | Special Study Areas



- | | | | |
|---|----------------------|---|-----------|
|  | Acheson ASP Boundary |  | Road |
|  | Special Study Area |  | Rail Line |

RELEVANT ASP GOALS | SPECIAL STUDY AREA – AGRICULTURAL AREA A

1. Allow continued agricultural and limited development opportunities on Special Study Area – Agricultural Area A lands while respecting the sensitivity and natural characteristics of this area.

2. Undertake future joint planning initiatives with the City of Spruce Grove and stakeholders to explore future compatible land uses.

3. Allow private on-site servicing on Special Study Area – Agricultural Area A lands for developments that comply with existing Land Use Bylaw district regulations.

SPECIAL STUDY AREA – AGRICULTURAL AREA A POLICIES

1. As part of identifying future land uses for Special Study Area – Agricultural Area A, an ecological study of these lands shall be completed to identify the appropriate buffers and transition of land uses from the Wagner Natural Area at the next ASP update.
2. The agricultural districting of Special Study Area – Agricultural Area A under the County's Land Use Bylaw shall be maintained.
3. All new and existing land uses in Special Study Area A shall be required to comply with existing district regulations for AGR – Agricultural Restricted and AGG – Agricultural General as outlined in the County's Land Use Bylaw, and in this ASP.
4. The County ~~may~~ **should** require additional hydrological or hydrogeological studies to be completed to support subdivision or development permit applications that fall in Special Study Area – Agricultural Area A.
5. The County shall require developers in Special Study Area – Agricultural Area A to identify how environmental damage will be mitigated during construction and operation of any development.
6. In consultation with Wagner Natural Area Society, the City of Spruce Grove and landowners, the County should develop appropriate conservation and protection practices for lands in Special Study Area A – Agricultural Area A at the next ASP update.

7. Private on-site servicing on Special Study Area – Agricultural Area A lands may be allowed where existing or proposed development complies with the parcel's existing Land Use Bylaw district regulations. Developers shall be required as part of the subdivision or development process to outline how and why on-site servicing is needed due to existing site constraints, and how it will comply with relevant ASP policies for Special Study Area – Agricultural Area A lands.
8. The County ~~may~~ **shall** undertake additional ecological, biophysical, hydrological and hydrogeological studies it deems appropriate to assess Special Study Area – Agricultural Area A lands and the Wagner Recharge Zone.



6. Protect natural areas through Municipal Reserve, Environmental Reserve or Conservation Reserve designation at the time of subdivision where appropriate.
7. Investigate, at the time of Local Plan and/or subdivision, the potential to establish Environmental or Conservation Reserves and Environmental Reserve Easements to protect areas deemed to have environmental significance in accordance with the *Municipal Government Act* provisions.
8. Conserve the potential and existing wildlife corridor that connects the City of Spruce Grove to the Wagner Natural Area and Big Lake. The County will work with the City of Spruce Grove and landowners to conserve the natural areas that currently exist along this corridor during all stages of development.
9. Land identified to be contaminated will not be accepted by the County as Environmental Reserve, Municipal Reserve or Environmental Reserve Easement, unless deemed appropriate by the County and proper compensation for the liability is received.

Surface and Groundwater Resources

10. Ensure that, at site construction stages (including site clearing, stripping, and grading) developers have installed techniques and controls to minimize erosion and silt depositing into existing watercourses and drainage systems.
11. Require on-site containment systems to be used by all developments in the Plan area to minimize seepage of oil, gas and other materials into the groundwater. Installation and

maintenance costs for all containment systems shall be borne by the developer.

12. Require storm water, for developments in the Wagner Recharge Zone, to be retained on site with post-development release rates not ~~exceeding~~ ~~exceeded~~ that of pre-development flow rates.
13. Ensure that any future development in the Wagner Natural Area Recharge Zone does not remove water from the subsurface drainage system, or alter subsurface water drainage channels during construction, operation or reclamation.
14. Require any future development in the Wagner Recharge Zone to be designed to maintain natural groundwater infiltration and avoid hard surfaces where possible. Developments in these areas shall consider maximizing landscaping, using permeable surface and paving materials, and using green technologies where applicable.
15. Require developers and landowners in the Plan area to comply with all applicable Alberta Environment and Parks regulations and restrictions for Wagner Natural Area Recharge Zone.

Wetlands

16. The County may complete an ~~an~~ overall wetland strategy for the Plan area, determining wetlands for avoidance and/or mitigation priority in an effort to streamline applicable approvals.
17. Require developments to be constructed in a way that protects existing high value wetlands on site and minimizes negative impacts on water quality and wetland habitat and

vegetation.

18. Require all costs associated with remediation or compensation for impacted or removed wetlands to be borne by the developer. Remediation and compensation shall comply with provincial Wetland Policy requirements.

Local Plans

19. Local Plans shall identify all Environmentally Significant Areas (Wagner Natural Area), kettle depressions, drainage courses, wetlands and recharge zones. Developers shall identify how the natural habitat, vegetation, soil and water (quality and quantity) of these areas will be protected and impacts minimized. Existing wetlands shall be identified and classified by a qualified authenticating professional.
20. Local Plans shall determine, through consultation with the Province of Alberta, whether wetlands are Crown owned land.
21. Where applicable, the location of Municipal Reserves, Environmental Reserves and Conservation Reserves shall be indicated in all proposed Local Plans.
22. Phase 1 and, if required, Phase 2 Environmental Site Assessment must be completed as part of the Local Plan preparation.
23. A hydrological, geological, hydrogeological or environmental assessment **may be** required as part of the Local Plan preparation or subdivision and/or development application near or within **Environmentally Significant Areas** and in the

Wagner Recharge Zone, as shown in **Map 5 – Environmental Features**.

24. A biophysical assessment and additional technical assessments **may should** be required as part of the Local Plan preparation or subdivision and/or development application for any developments on, or adjacent to environmentally significant areas, kettle depressions, drainage courses, wetlands or recharge zones.
25. The County **may will** require an additional development setback from the top of bank for Morgan Creek and other significant watercourses at the Local Plan stage. Development setbacks may be determined through the use of the County's Riparian Setback Matrix Model or other model acceptable to the County.

Environmentally Significant Area means geographic areas with important or unique environmental characteristics within Parkland County as identified in the County's Environmental Conservation Master Plan (2014).

Supporting Studies

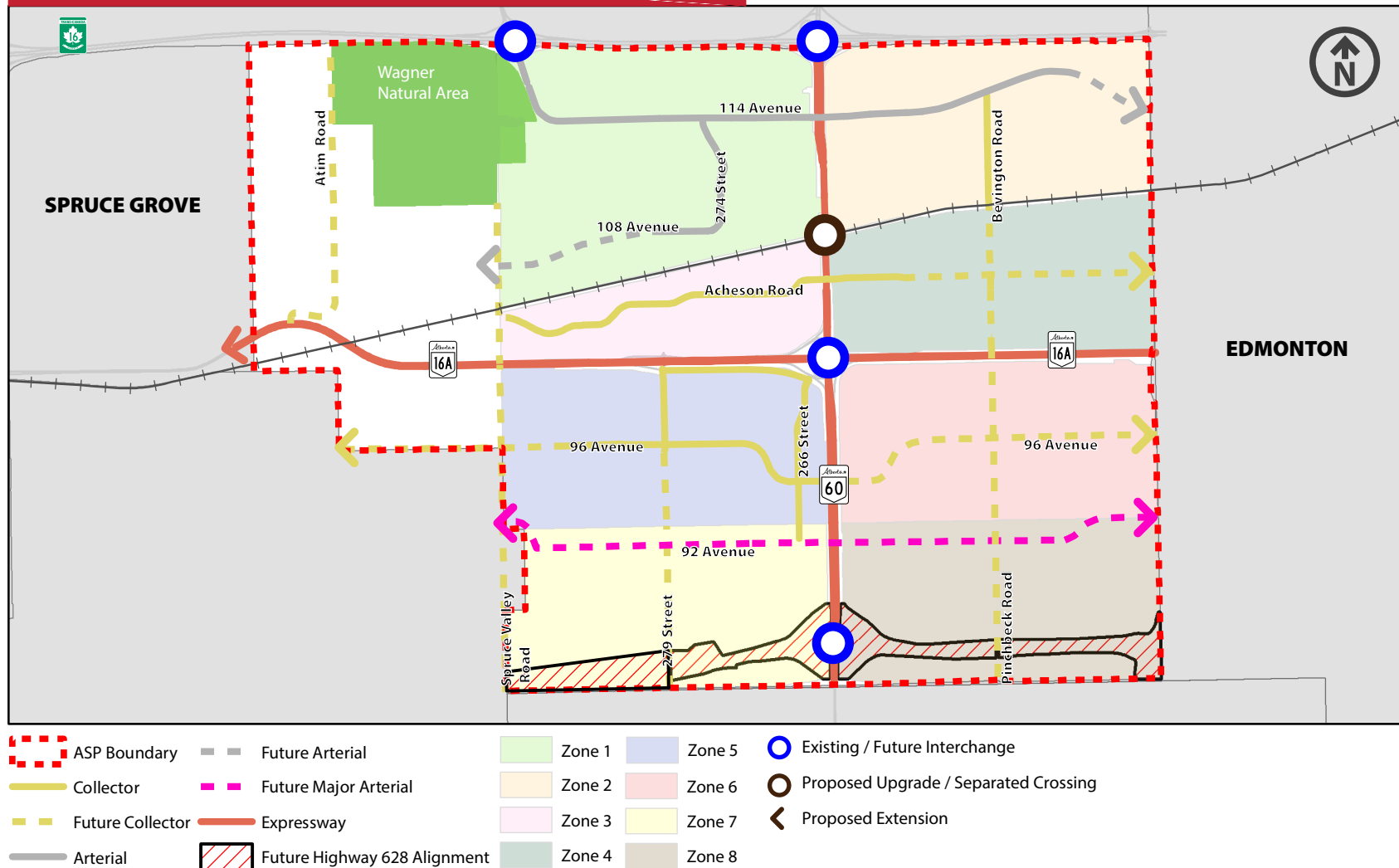
Environmental Conservation Master Plan, 2014 (non-statutory plan)

Current Wetland Inventory (Discover Parkland GIS)

Acheson / Big Lake Area Master Drainage Plan, 2011

This map has been amended with:
 - Arrow on Highway 16A (west side) removed

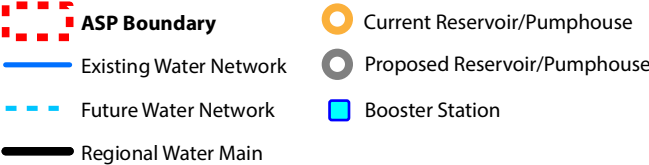
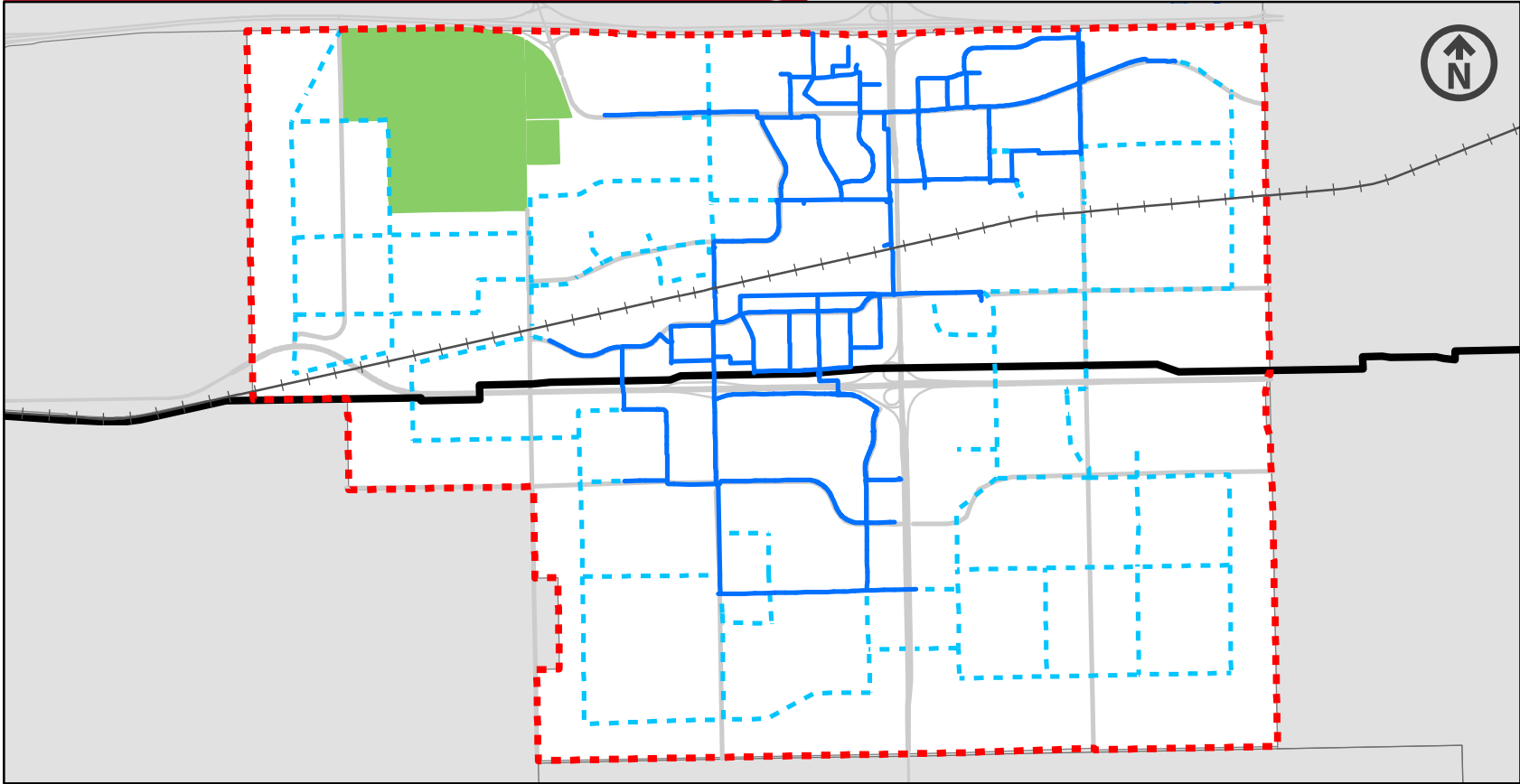
MAP 8 | Transportation Network



Note: Road network shown is conceptual and is subject to refinement at the Local Plan stage. For detailed transportation plans, see Acheson and Big Lake Traffic Impact Assessment (2018).

This map has been amended with:
- Add roadway name labels
- Labeling of Wagner Natural Area

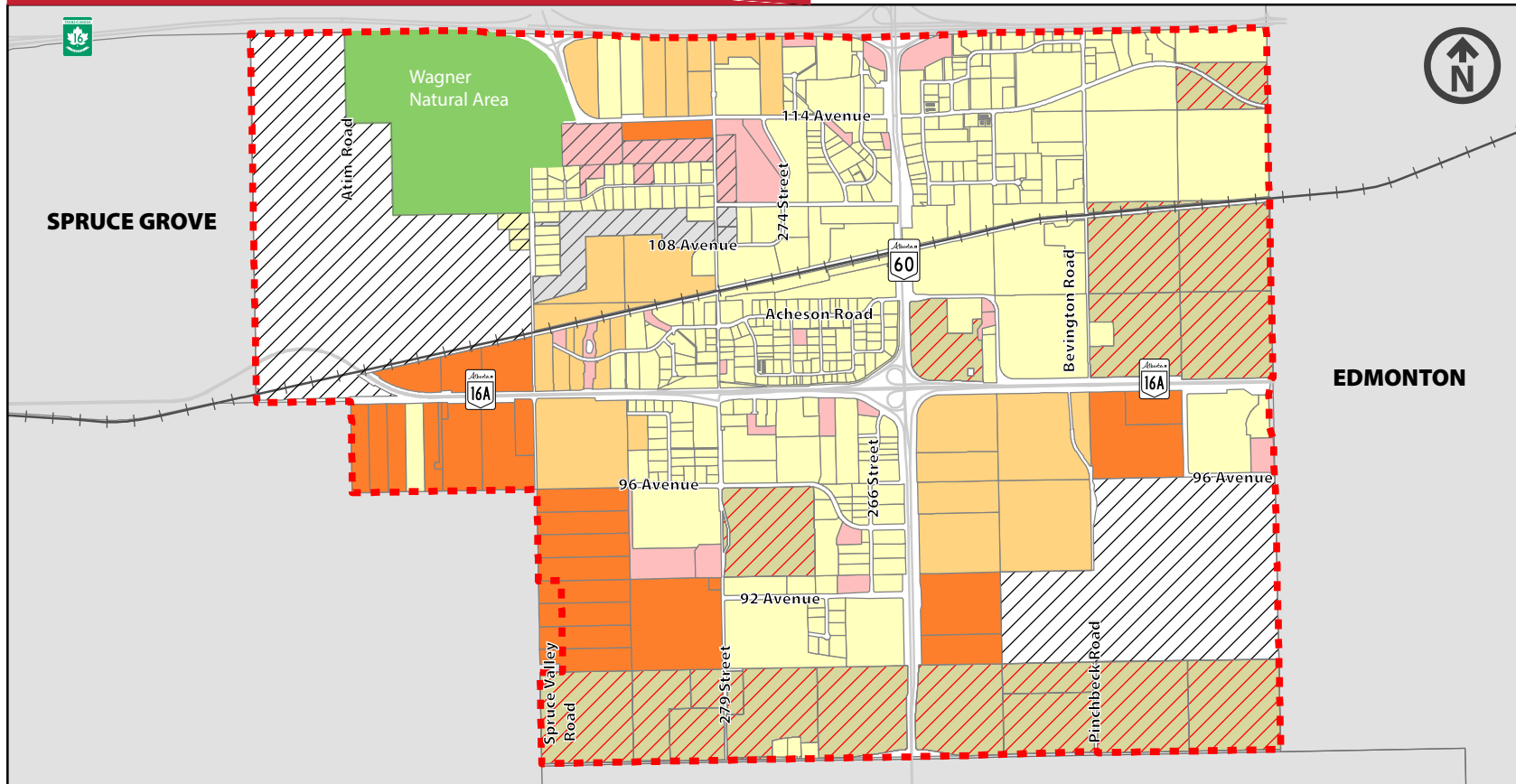
MAP 9 | Water Infrastructure Network



Note: Final servicing alignments are conceptual and are subject to refinement at the Local Plan stage.

This map has been amended with:

- Remove mislabeled "Long Term Development" orange colour outside of Plan Area
- Change pattern identifying Special Study Areas to clearly distinguish from Industrial Use Setback
- Remove Industrial Use Setback from Municipal Reserve parcels in Osborne Acres
- Accurately reflect 200.0m Industrial Use Setback
- Include two County-owned parcels under "Parkland County Land" label

MAP 12 | Development Phasing



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