# **Applicant Submission**

April 12, 2021



#### INTRODUCTION

On behalf of Brenda and Allan Pole, B&A Planning Group has prepared this application for LandUse Redesignation of approximately 2.22 ha (5.47 ac) of lands within the northwest sector of Calgary. The intent of this amendment is to allow for the construction of a place of worship – theNew Beginnings Church – on this site.

The subject site is located on the west boundary of Centre Street. The site is primarily surrounded by farmstead and agricultural uses, with some country residential uses to the northeast. Further to the south are the communities of Livingston and Carrington, which are currently developing. The subject site is municipally addressed as 16795 Centre Street NW and is legally described as a portion of SE ¼ Section 9, Township 26, Range 1, West of the 5th Meridian. The subject site comprises 5.47 acres of land owned by Allan and Brenda Pole.

The subject site is within Cell E of the North Regional Context Study (NRCS, 2010), conceptually identified as part of the future Centre Street Urban Corridor. There is currently no Area Structure Plan in place for this area. To the south of 160 Avenue, multiple communities are currently developing within the Keystone Hills Area Structure Plan, including plans for a dense urban corridor along Centre street which will include future LRT stations. Despite the subject site's proximity to ongoing development and municipal infrastructure, policy planning for Cell E of the NRCS is not anticipated in the near future due to the number of communities already building out in the surrounding area. Therefore this application is being submitted in advance of an Area Structure Plan in place for the area.

## **PROPOSED LAND USE**

The site is currently designated S- FUD (Special Purpose – Future Urban Development); this application redesignates the subject site to a Direct Control District based on S-FUD with a limited set of uses and rules from the S-CI (Special Purpose – Community Institution) district.

The intent of this Direct Control District is to allow for a Place of Worship and other supplementary and complementary uses based on the S-CI land use district, while excluding other unintended land uses that would otherwise be included under the standard S-CI land use district.

The site is intended as a multi-purpose community facility that includes a place of worship, child care services, food service facilities, and rental spaces for a wide range of potential uses by community organizations and others, within one or more buildings. The proposed development is intended to

consist of a church building with 18,500 square feet of total gross floor area. A portion of the building (about 6,300 square feet) will be dedicated for day care use, with an anticipated operational size of 20 staff and 200 children. The remainder of the building will be dedicated for church use with about 200 seats.

Exterior to the building, the site will need to accommodate servicing such as an interim storm pond and wastewater cisterns, as well as parking and a play area.

#### **APPLICATION RATIONALE**

The rationale for allowing this land use amendment to proceed in advance of an Area Structure Plan being in place is as follows:

- **Contextually Appropriate:** a place of worship is a unique use, appropriate in both rural and urban contexts. A church in this location would provide a transition between developing communities and rural areas. When this area develops as an urban corridor in the future, the church can integrate into the fabric of the community over time.
- Alignment with future design: the site design for this proposed place of worship will embraceCentre Street and allow the church to integrate into the future design of the urban corridor.Rather than placing parking in front, the intent is to 'build to the edges' with parking internal to the site. The church building will be oriented to the street and embrace both the east and south property lines. Bringing the church building closer to the street will screen parking and create a more welcoming and pedestrian-friendly built form.

In recognition of the lack of planning policy in place, this application is intended to provide maximum flexibility not only for development on site but also for the future road network in this area. As shown on the Land Use Redesignation Plan, the application assumes future road widening of Centre Street to the same standard as is already developed in Livingston to the south. Additionally, the plan has been revised to allow for a potential 30m road ROW (15m, or half of which is on the subject property) on the south boundary of the site. This is based on discussion with Transportation and analysis of the intersection spacing for potential future road networks in the area. The site design considers multiple potential future transportation network scenarios without conflict.

• **Cost Rationale:** the cost to purchase planned and serviced land within the City is substantial. For this reason, places of worship often locate in rural and suburban areas because these are the only locations that are financially feasible. Allowing this application to move forward at this time offers the best of both worlds – an financially viable site for theNew Beginnings Church and their congregation in the near future, yet in a location that willcontinue to become more accessible and walkable over time.

### TRANSPORTATION AND ACCESS

The subject site will gain access from Centre Street to the east. Centre Street N is a north-south rural road on the northern edge of the City of Calgary. It has a two-lane cross section with a posted speed limit of 80 km/hr.

Centre Street will be widened in the future; while detailed planning has not yet been done for this area, it is assumed that Centre Street will be widened to match the proposed cross-section to the south in Livingston. In order to ensure that any future scenario for widening of Centre Street can be accommodated, the subject site has been sufficiently sized to allow for up to 30 metres of road widening on the west side of Centre Street. A permanent access location has not been indicated at this time; a temporary access condition will be provided in the interim until such time as Centre Street is widened, whereupon the permanent access will be constructed.

A Traffic Impact Assessment for the site was prepared by Urban Systems and has been provided under separate cover. The study was prepared based on the assumption of a temporary site access onto Centre Street N, with plans for relocation onto future local roads as more development occurs near the site. Based on the traffic analysis completed in this study, the proposed access for the project site is expected to operate at acceptable conditions in both the existing and future (10-year) post-development horizons. Therefore, the proposed access does not require additional road improvement to further improve its operational performance.

The following memo has been developed to outline the proposed utility servicing approach for the proposed New Beginnings Church Land Use Amendment in north Calgary. As City of Calgary infrastructure has not yet been built to this site, a fully contained onsite servicing approach will be utilized for Stormwater, Sanitary Sewer, Potable Water and Fire Protection.

## STORMWATER SERVICING

For the proposed site, the stormwater servicing approach will be a zero-release system up to the 1:100-year storm event. This will be accomplished using a 6,500m2 wet evaporation pond. This pond has been sized based upon analysis of the proposed site plan, in conjunction with City of Calgary rainfall data to ensure adequate volume and surface area are provided within the pond to contain up to the 1:100 year storm event. In a greater than 1:100-year event, emergency spill routes will be provided to the east (to Centre Street) or to the south (following pre-development stormwater flow paths). A summary of the conceptual pond design can be found below:

### Catchment:

- 1.54 ha total
- 0.65 ha pond at HWL
- 0.89 ha site
- 70% impervious assumed for site

City of Calgary wet pond standards used:

- 2m depth permanent/fire storage
- 1m depth active storage/ice cover
- 5:1 side slopes HWL to bottom

#### **Pond Details:**

- 6,494 m2 at HWL
- 14,640 m3 total volume
- 1,934 m3 storage from bottom to intake elevation
- 6,919 m3 storage for permanent
- 5,787 m3 active storage
- 0.4m depth from bottom to allow for silt
- 0.3m above top of silt storage for intake elevation
- 1m ice cover

These details will be further refined through detailed design and stormwater analysis. At detailed design, there will be an opportunity to reduce overall pond volumes through a review of pond side sloping and overall pond grading.

The proposed pond will also be utilized to provide the required fire flows for the site. Based upon Fire Underwriters Survey (FUS) calculations for the proposed site, a total of 840 m3 of available water will be required for fire protection. This will be provided via the permanent water body volume of the pond, with a dry hydrant, tied to pond bottom, providing fire department access to the water. Please refer to the fire protection portion of this memo for further details.

Underground piped connections from the building and parking areas will direct flows to the onsite pond. In the future, once public servicing and ponds become available, this pond will be removed, and flows directed to the available public infrastructure. In order to facilitate this connection, the site will be designed with a set release rate from building and parking areas in mind to ensure future connection to permanent servicing. It is expected this servicing will become available either along the western site extent, or along Centre Street to the east.

# **SANITARY SERVICING**

As public sanitary sewer is not yet available to this site, sanitary servicing for the site will be provided via an onsite sewage holding tank. This tank will be set underground within the site area, with piped connection from the proposed building. On a regular basis, this tank will be emptied into sewage hauling truck for disposal within the City of Calgary. This pumping and trucking approach is an approach utilized on a number of similar facilities, within Rocky View County, as well as rural industrial parks (Frontier Industrial Park and others). The exact size and trucking frequency will be confirmed through the future Development Permit stage, once exact usage, building sizing and programing is established.

When public servicing becomes available, this tank will be decommissioned, and a service connection completed to available public sanitary sewers.

#### **POTABLE WATER**

As public potable water is not yet available to the site, it is proposed that well water be utilized for this site. It is proposed that a potable water well be drilled onsite, and onsite storage and treatment be provided to provide water to the building. Further groundwater testing is to be completed to support an ultimate development permit for this site.

Should there be any issue with available ground water on the site, trucked water and a cistern can also be utilized to provide potable water servicing to the site.

In either case, once public water servicing becomes available within the area, these systems will be decommissioned, and a water connection to the City System installed.

#### **FIRE PROTECTION**

As public water mains are not yet available to the site, it is proposed that the onsite wet pond be utilized to provide required fire flows for the site.

Based upon FUS calculations, a total of 840m3 of fire flow will be required for this site. Please refer to enclosed FUS calculation. This flow volume is based on the following:

- 18,500 sq ft Building
- Steel Frame Construction
- Sprinklered Building
- Zero Exposure Risk (No structures within 45m of proposed building)
- 7,000 L/min required flow rate
- 2 Hour Required Duration

A dry hydrant, tied to the pond bottom, will provide the fire department access to this water supply for connection and use. Factors of safety will also be built into this pond volume/design to ensure adequate water volume availability throughout winter months. In addition, should water levels within the pond does not reach required levels by time of building occupancy, water from the proposed onsite well can be directed to the pond to fill it to the required volumes.

## **CONCLUSION**

This application to redesignate 1.89 ha (4.66 ac) of land to S-CI for the purpose of allowing a Place of Worship is being submitted in advance of detailed policy planning in place for the area.

Therefore, the application must be evaluated based on the merits of its appropriateness for the existing and future context.

A Place of Worship is an appropriate use for the existing context for the reasons we have laid out in our rationale; in addition, consideration given to thoughtful site design will allow this site to integrate into the future urbanization and development of the Centre Street corridor.