



November 19, 2025

Development Permit Application for the proposed construction of a 48-unit
Supportive Living Accommodation
DP088064

Subject Site: 4240 59 Street

Applicant: East Lincoln Properties Corporation

Mailing Address: 4-7935 Edgar Industrial Drive, Red Deer AB, T4P 3R2

Application Summary & Recommendation

The Applicant is seeking a development permit for a 48-unit, three story, Supportive Living Accommodation to be located at 4240 59 Street, Red Deer (Lot 2; Block 1; Plan 1522489).

The parcel is approximately 4.16 acres and zoned as Public Service (Institutional or Government) Zone: PS. Although the parcel is privately owned, it is currently being used as public space, in agreement with the landowner. The site is also subject to the Waskasoo Character Statements overlay.

The application includes onsite services to allow residents to live independently, such as a salon and homecare meeting space.

Administration supports the application.

The Commission's Decision

This report requests the Commission's decision for:

- **Discretionary Use of a Supportive Living Accommodation [9.40.3.20 of the Zoning Bylaw (ZB)]**

Recommended Resolution and Conditions

Administration supports this Development and recommends the following resolution:

RESOLVED that the Development Officer approves the application for a Development Permit for the Discretionary Use of a 48 Unit Supportive Living Accommodation, as shown on the plans dated November 20, 2025, and stamped as "Approved", copies of which form part of this approval (collectively referred to as the "Approved Plans"), on the lands zoned PS, located at 4240 59 Street, legally described as Lot 2; Block 1; Plan 1522489, (the "Site"), subject to the conditions listed below:



1. A Development Permit shall not be deemed completed based on this approval until all conditions except those of a continuing nature have been fulfilled to the satisfaction of the Development Officer.
2. All Development must conform to the conditions of this Development Permit and the Approved Plans, and any revisions thereto, as required pursuant to this Approval. Any revisions to the Approved Plans must be approved by the Development Authority.
3. The Applicant shall repair or reinstate, or pay for the repair or reinstatement, to original condition, any public property, street furniture, curbing, boulevard landscaping and tree planting or any other property owned by The City which is damaged, destroyed or otherwise harmed by development or construction on the site. Repairs shall be done to the satisfaction of The City of Red Deer. In the event that The City undertakes the repairs the Applicant shall pay the costs incurred by The City within 30 days of being invoiced for such costs.
4. Prior to the commencement of any construction, demolition or other work associated with this approval, the Applicant must provide the following documents, plans or drawings (the "Additional Documents") to the Development Officer, which must be consistent with the Approved Plans. The Additional Documents are:
 - a. Revised drawings conforming to the requirements specified in Section 17 of The City of Red Deer Design Guidelines to the satisfaction of the Development Officer, including fire flow and pressure requirements for the building.
 - b. Revised landscape plan to show tree protection fencing detail for the public trees around the property line, as per The City of Red Deer's Contract Specifications (Tree and Shrub Preservation Section 32 93 50 and Drawing 50 08 05). No City trees may be removed.
5. The Applicant must enter into and comply with an access agreement with The City of Red Deer as the driveway passes through a Municipal Reserve parcel prior to connecting to the development. The applicant can contact Carly Cowles, Development Coordinator at carly.cowles@reddeer.ca to initiate the agreement.
6. The Applicant must construct the site access in accordance with the Approved Plans and in compliance with City of Red Deer specifications and standards. Upon completion of the access, the Applicant must arrange an inspection with Engineering Services to confirm compliance. Any deficiencies identified during the inspection must be promptly addressed to the satisfaction of the Development Officer.

To schedule the inspection, the Applicant may contact Carly Cowles at carly.cowles@reddeer.ca. Final approval of the access by Engineering Services is required prior to the issuance of the Completion Report.



7. The Applicant shall, prior to the commencement of any construction, demolition or other work associated with this approval, make application to Engineering Services for water, sanitary and storm service connections for any new service stubs. Costs of services shall be at the expense of the Applicant. Please contact Carly Cowles, Development Coordinator at carly.cowles@reddeer.ca to initiate the agreement.
8. Tree protection must be provided for all trees on the site not removed for construction.
9. All proposed fencing must be designed and constructed to ensure wildlife safety. Fencing shall be a maximum height of 5 feet, constructed of durable materials such as aluminum, metal, or chain link, and must not include any elements that create sharp edges or hazardous projections. Final fence details must demonstrate that wildlife can safely scale the fence into the river valley, to the satisfaction of the Development Officer.

NOTE: Additional approvals further to this Development Permit, including, but not limited to, Safety Codes Permits and Business Licensing, may be required.

Rationale for Recommendation

1. Statutory Compliance with Zoning Regulations

The proposal for a 48-unit Supportive Living Accommodation is a Discretionary Use within the Public Service (PS) Zone, aligning with the zone's intended function for institutional and community-serving uses. The development adheres to the *Zoning Bylaw*, often exceeding the required standards.

2. Alignment with Waskasoo Environmental Character

The design demonstrates a clear commitment to the intent of the Waskasoo Environmental Character Area. It limits the building coverage to just 26% of the parcel. This preservation of open space contributes positively to the area's existing park-oriented nature. The landscaping plan further supports this alignment by using xeriscaping principles and incorporating native, low-maintenance plant material. Environmental commitments, such as the inclusion of roof-mounted solar panels, rainwater harvesting, and the dedication to DarkSky compliant exterior lighting enhance the project's sustainability profile. The addition of 52 trees and 104 shrubs add to the area's park aesthetic.

3. Technical Feasibility and Mitigation of Impacts

The site is confirmed as technically suitable for the proposed facility through supporting studies, submitted plans and analysis by the relevant staff within The City of Red Deer.

4. Neighbourhood Compatibility and Land Use Context

The Supportive Living Accommodation is considered a compatible and appropriate use within its specific neighbourhood context. The site is surrounded by institutional sites (schools) and open spaces, and the provision of seniors housing and care services is considered a community benefit that complements this context. While the site has historically been used informally as open space, the current PS zoning anticipates institutional development on this privately



owned land. The structure's massing and siting, combined with the retained open area, are designed to fit the existing streetscape and prevent undue negative impacts on privacy or views for nearby residential properties.

Subject Site and Surrounding Context

The site is located in the neighbourhood of Waskasoo, one of Red Deer's oldest and most established residential areas. Waskasoo is characterized by its mature tree canopy, large residential lots, and proximity to the Red Deer River valley and Waskasoo Park system. The neighbourhood developed in the early 20th century and retains much of its historic character, with a mix of older single-detached dwellings, infill redevelopment, and apartment buildings (limited to 55 St and 44 Ave).

Surrounding land uses are predominantly residential, with some institutional and open space uses, including:

- extensive parkland and trail systems,
- schools,
- a performing arts theatre,
- an RCMP detachment,
- a Canadian Military Detachment - 41st Signal Regiment

The area has a strong community identity and active resident involvement, particularly regarding redevelopment proposals. Waskasoo's location close to downtown provides excellent access to services and amenities while maintaining a distinct, park-oriented setting.

The site abuts the Gateway Christian School. The land was originally part of the school's parcel and was subsequently subdivided and sold by the school privately for development. Nevertheless, with the landowner's consent, the school has continued to use the land.

Proposal Details

The Applicant is seeking a Development Permit for Lot 2; Block 1; Plan 1522489, for the construction of a Supportive Living Accommodation, intended to house seniors. The proposed development includes:

- a building which is 21.9m wide, 81.5m long (oriented from east to west) and three stories high – for a total height from grade of 11.7m;
- 48 self-contained dwelling units, communal indoor and outdoor spaces, a home-care exam room, and a hair salon;
- balconies for each unit, on the south, north, east and west elevations;
- parking, in the form of 59 above-ground stalls situated to the north of the building;
- a new site access road off of 45 Ave; and
- indoor amenity space on each floor, both in the form of Common Amenity Space available to all residents, and private amenity space by way of the balconies.



The developer is proposing additional Common Amenity Space outside including:

- a 14x24 ft gazebo with seating areas,
- raised planters,
- an edible garden containing raspberry & gooseberry bushes, and
- a patio on the north side of the building, complete with picnic tables.

The total amount of proposed Common Amenity Space is 799.82 m², comprised of:

- 148.76 m² of indoor amenity space, and
- 651.06 m² of outdoor amenity space.

The development commits a total of 3,142.56 m² of the parcel as Landscaped Area, not including hard surfacing. The development will provide 52 new trees, 104 new shrubs, and 50 new ornamental prairie grasses. In addition to these plantings, the application proposes adding a total of 30 landscaping boulders.

As part of the construction, 4 existing trees will be removed. The Applicant hired an arborist who confirmed all impacted trees were poplars:

- one required immediate removal in any event because it has cracking,
- one is considered to be in fair health, and
- the other two considered to be in reasonable health with an anticipated life of 5 years if not removed.

Zoning Bylaw Review

The property is zoned as “Public Service (Institutional or Government) Zone: PS”. Section 9.40.1 indicates the purpose of this zone is to provide land for uses that are public and quasi-public in nature. Supportive Living Accommodation is considered a Discretionary Use in this zone (s.9.40.3.20), meaning it is a “...use of land or Building in a Zone for which a Development Permit may be issued, with or without conditions, by the Development Authority” (s.1.50.2). A Development Authority must exercise discretion to determine whether a discretionary development is appropriate in the circumstances.

The application is for a Supportive Living Accommodation Development Permit, defined in the *Zoning Bylaw* as:

A use that is intended for the permanent Residential living where an operator also provides or arranges for on the Site services to assist residents to live independently or to assist residents requiring full-time care.

Pursuant to s.2.100.1.10, the Development Officer “...may refer to the Municipal Planning Commission any application the Development Officer determines is advisable.” The Development Officer also has discretion pursuant to s.2.100.1.3, in respect of Discretionary Use applications and Permitted Use applications where a variance is required, to notify landowners within 100m of the Boundary of the Site that an application was received and request their comments.



PS Zone Specific Criteria

The regulations in the PS zone impose requirements the proposed development must satisfy. The only specific requirement is pursuant to s.9.40.4, which requires the minimum floor area for each unit to be at least 23.0 m^2 . The smallest unit size for this development, as per the building floor plan, are the one-bedroom studio apartments that are 59.89 m^2 , which exceeds the requirement.

All other regulations noted in the PS zone are subject to Development Authority approval, this means that the Development Authority must consider them in context to the surrounding area. This might include looking at adjacent parcels to determine setbacks, overall site coverage, and the suitability of the site for the proposed development. These regulations include:

- setbacks,
- site plan,
- relationship between Buildings, structures and Open Space,
- architectural treatment of Buildings,
- provision and architecture of landscaped Open Space, and
- Parking layout.

Amenity Space Regulations

Section 3.160.1.2 specifies that Supportive Living Accommodations require a minimum of 15.0m^2 of Common Amenity Space per unit, defined as “an Amenity Space provided for communal use which must be accessible by all occupants of a Development” (s.1.50.2). A 48-unit development therefore requires at least 720 m^2 . The proposed development provides for 799.82 m^2 of amenity space, exceeding the minimum requirement, as follows:

- 148.76 m^2 of indoor Amenity Space, including:
 - lounge areas on the 2nd and 3rd floor,
 - a common room on the main floor,
 - a salon, and
 - a homecare room.
- 651.06 m^2 of outdoor Amenity Space, including:
 - two patios on the north and south of building, and
 - a communal outdoor space which includes benches, raised planters, a metal gazebo, and two lawn bowling courts.

Landscaping Regulations

Landscaped Area is also subject to Development Authority approval rather than any specific percentage or quantity. Landscaped area is “the parts of a Site planted with trees, shrubs or other vegetation including soil, landscape rocks, or bedding material areas associated with plantings” (s.1.50.2).



Based on the amount of Landscaped Area, the “General Landscaping Regulations”, specifically s.3.130.1.7, requires the following minimums:

- 1 tree for every 60.0m² of Landscaped Area,
- 1 shrub for every 30.0m² of Landscaped Area, and
- the ratio of deciduous trees to coniferous trees or shrubs must be approximately 2:1.

While the landscaping plan included in the initial application did not meet these minimums, following public referral and the receipt of comments pertaining to the environmental impact of the project, the Applicant provided an updated landscaping plan (which is included in the MPC package) that includes:

- 52 new trees,
- 104 new shrubs,
- 50 new ornamental prairie grasses, and
- 30 landscaping boulders.

The updated landscaping plan identifies a total of 3,142.56 m² of Landscaped Area which meets the requirements of the *Zoning Bylaw*.

The updated plans were reviewed and satisfy Administrations requirements.

Parking Regulations

Section 3.240, Required Parking Spaces Table, defines the numbers of parking stalls required based on the proposed development and calls for 0.4 stalls per unit for a Supportive Living Accommodation, meaning a minimum of 19 stalls would be required for the 48 units. The proposed development includes 59 stalls.

The proposed development also complies with the requirement in s.3.130.3.1 where Parking of 25 or more motor vehicles on a Site is required at ground level, landscaped islands must be provided in the interior of the Parking area to provide visual relief and break up large areas into smaller cells.

The amount and type of Parking provided in the proposed development therefore appears to satisfy the requirement – subject to the Development Authority’s approval of the Parking layout.

Developed Areas Regulations

Section 3.190.1 in the *Zoning Bylaw* explains the Developed Areas Regulations apply to Developments construction of new Dwelling Units and s.3.190.2 and 3.190.3 establish a hierarchy in the event of a conflict: Character Statements prevail over the Developed Areas Regulations and the Developed Areas Regulation prevail over the Zone regulations. A genuine “conflict” occurs only where the regulations cannot be read harmoniously or would lead to an absurd result.



The Developed Areas Regulations appear largely compatible with the proposed development. One possible issue is the maximum Building Height prescribed in s.3.190.6.2:

The maximum Building Height must be within 1 storey of the existing Principal Building with the least number of storeys on an Abutting Residential Zone Site, except if the Abutting Site with the least number of storeys is within the R-H Zone, then the Zone regulations for maximum Building Height applies.

Section 1.50.2 explains: “Abut or Abutting means physically touching or sharing a common border such as a Boundary”. In that context, the Building Height limitation does not apply as there are no residential-zoned sites physically touching or sharing a border as the bylaw contemplates.

In addition, the abutting land to the east contains a School with a roofline that sits at 10.25 m above grade. While the proposed development is proposed to be 11.665 m from grade.

Waskasoo Character Statement Considerations

The proposed development is within the Waskasoo Environmental Character Area, which contains 17 recommended design elements. Character Statements are intended to set out design parameters for redevelopment within a defined area.

Character Statements include both requirements and recommendations. The former are usually denoted by “shall”, the latter by “should”. When a design parameter is recommended by not mandatory, the Development Authority has discretion based on the circumstances but ought to consider whether the requirement is appropriate.

Sometimes design elements are intended to be entirely at the Development Authority’s discretion; statements beginning with “may”, for example indicate the level of compliance is subject to such discretion.

Terms identified by capitalized first letter are found in the Definitions section of this document.

The applicable Character Statements for this development, including comments specific to this development are provided below:

- I. A conservation development pattern which clusters a development’s built form together into a portion of the overall area allowing the open space of the development to contribute to the existing adjacent open space and be an amenity to the site users including wildlife. For Public Service uses with a residential component like Assisted Living, concepts such as Pocket Neighbourhoods may be considered.**

The total built area is proposed to be 26% of the total parcel. The remaining open space will continue to contribute to the existing adjacent open space and will continue to act as an amenity to wildlife.



The applicant has committed to allowing the school to continue to use the remainder of the property for recreation. The applicant has also contacted the school to possibly provide a snow hill for children in the NE of the property.

2. Mature street character, scenic Vistas viewable from the road, and existing natural features of the area shall be maintained.

Natural features remain intact; all onsite trees removed for construction will be replaced.

The development proposes adding additional trees and shrubs with the landscaping plan having been assessed and supported by The City of Red Deer.

3. Buildings should be designed to include environmentally sustainable design features by incorporating the use of green technologies, Ecological Design, water conservation measures.

The project includes roof mounted solar panels as an alternative power supply.

There will be rain barrels, for water harvesting, for use in the community garden.

The applicant will include LED lighting, low flow water fixtures, high efficiency boilers, heat recovery ventilators, etc.

4. Low maintenance Landscaping with native non-invasive plant material shall be required and the incorporation of both Xeriscaping and Naturescaping is encouraged. The use of herbicides and pesticides is strongly discouraged.

The landscape plan utilizes the concept of Xeriscaping and the applicant has committed to not irrigating any portion of the property.

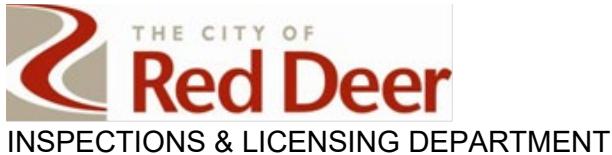
The landscaping plan has been assessed and supported by The City of Red Deer and must comply with all relevant City of Red Deer specifications.

5. Landscaped areas and islands throughout parking and storage areas shall be provided to intercept precipitation, reduce surface heating, provide canopy shading, and enhance the appearance.

The applicant has provided two landscaping islands in the parking area to the satisfaction of The City of Red Deer.

6. Permeable and semi-permeable paving surfaces should be provided to improve ground water recharge and reduce storm water runoff.

The developer has provided roof drainage that is either contained in rain barrels or is absorbed on the landscaped portion of the site. The developer has also provided on-site



storm water management in the parking area that eliminates runoff from the site. Storm water is collected in an oil/grit separate which removes materials from the stormwater before ultimately discharging stormwater into the City's stormwater system. The site drainage has been designed to the satisfaction of The City of Red Deer and meets the intent of the character statement.

7. A system to capture and recycle roof runoff and rainwater should be provided for landscape watering. If this system is proposed, the use of roofing materials that do not yield contaminants is recommended.

There will be rain barrels, for water harvesting, to be used in the garden.

The applicant was made aware of the recommendation to use roofing materials that do not yield contaminants.

8. Adaptive reuse of existing Buildings and structures is encouraged.

Not applicable, no existing structures.

9. All roads north of 59th Street within the character area should maintain their natural boundaries and native vegetation to preserve and enhance the wildlife corridor through this critical area adjacent to the Red Deer River.

The development does not require the changing of roadways.

10. Shared driveways are encouraged. Other reductions in impervious surfaces may be achieved through the elimination of curbing and the use of decorative pervious surfaces for sidewalks, driveways, and trails.

The location of the proposed driveway has been approved by The City of Red Deer and will need to comply with The City of Red Deer Contract Specifications.

11. Disruption of any open space proposed to be disturbed during construction or otherwise not preserved in its natural state shall be shown on development plans and shall be restored with vegetation that is compatible with the natural characteristics of the site.

The landscaping plan has been designed to the satisfaction of The City of Red Deer.

12. Excavated material may be used for the creation of berms or to provide a low fertility soil for the creation of wild flower meadows or similar semi-natural habitats to blend with the more naturalized character of the area.

The applicant has contacted the school to use fill material to provide a snow hill for children in the NE of the property.



13. Existing specimen conifer and deciduous trees shall be identified on a site plan and protected during site construction activities and after by ensuring Buildings, services or Hard Surface areas are not sited too close.

This will be a condition of approval if the application is approved:

- Tree protection must be provided for all trees on the site not removed for construction.

14. New trees planted should be of a similar species than what is currently found in the Waskasoo Environmental Character Area. Edible vegetation such as fruit trees and berry bushes should be included in Landscaping.

This has been provided on the landscape plan, with the following species being provided:

- Mountain Ash.
- Kerr Crab-Apple.
- Courageous Crab-Apple.
- Swedish Columnar Aspen.
- Paper Birch.
- White Spruce.
- Boyne Raspberry.
- Pixwell Gooseberry.
- Red Osier Dogwood.

The landscaping plan and the selected species have been designed to the satisfaction of The City of Red Deer.

15. New development should not adversely affect the character of the streetscape, as a result of being sited too close to the road, of inappropriate or excessive Massing, form or height having a negative impact on abutting properties in terms of shadows and privacy/over look, or causing the loss of landscape features or other factors which may have a negative effect on the streetscape or abutting properties.

The building will not cast shadows on adjacent buildings as the building is located to the north of 59 St with no development to the north of the proposed development.

The developed areas to the east of the proposed site contain multiple institutional buildings that all contribute to the developed feel of the area. The height of these buildings varies, and the neighbouring school is 10.25m in height.

16. Location, style, and amount of fencing proposed around and/or adjacent to open space areas shall have consideration for the movement of wildlife and the prevention of opportunities for wildlife entrapment.



City of Red Deer fencing surrounding the existing Municipal Reserve to the west of the proposed development will be removed by The City of Red Deer.

Existing fence surrounds the property, all new fencing must be designed to comply with the requirements of The City of Red Deer Zoning Bylaw.

In addition, to ensure new fencing considers the movement of wildlife a condition of approval if the application is approved has been added.

- All proposed fencing must be designed and constructed to ensure wildlife safety. Fencing shall be a maximum height of 5 feet, constructed of durable materials such as aluminum, metal, or chain link, and must not include any elements that create sharp edges or hazardous projections. Final fence details must demonstrate that wildlife can safely scale the fence into the river valley, to the satisfaction of the Development Officer.

I 7. In order to reduce ambient light levels which will reduce the impact of light on nocturnal environments, exterior lighting on Buildings or within yards should be pointed down particularly near the Sanctuary.

External lighting will be specified to meet DarkSky approved lighting requirements.

Supporting Reports and Approvals

All reports and approvals have been included in Appendix C. Below is a summary of each:

Historical Resources Approval

Historical Resources Act approval is granted.

Montrose Environmental – Vegetation, Wildlife, and Hydrology Assessment in Support of the Development Permit Application for the Property 4240 59 Street

- **Vegetation** in the proposed development area consists of non-native grasses, has low species diversity, and development will not have a negative impact on native vegetation diversity in the area. The proposed development will not directly impact the riparian zone.
- **Wildlife** could experience indirect impacts such as sensory disturbance, but because the habitat on site is low quality (except for the riparian zone - which the development is not anticipated to affect), the proposed development is not anticipated to disrupt movement corridors or direct impact wildlife.
- **Hydrology** should be unaffected because the proposed development is located outside the floodway and flood fringe area of the Red Deer River. In that context, there are no direct hydrologic and hydraulic impacts associated with the proposal.



Stantec - Riverglen Village Traffic Memo

Traffic generated by a Seniors Supportive Living facility is not expected to have a significant impact on the adjacent and surrounding road network.

Consultation

As part of the procedural review process, the development application DP088064 was circulated to the following internal departments:

- Engineering
- Planning
- Electric, Light & Power
- Emergency Services
- Parks & Public Works

All comments received from internal departments were incorporated into the conditions Administration is proposing MPC adopt if the application is approved.

In addition to the internal review, and in alignment with The City of Red Deer Zoning Bylaw, details of the application were circulated to any property within 100m of the proposed development Site. Any comments received and a summary is found in Appendix D.

Analysis

Zoning, Regulations, and Site Design

The proposal conforms to the intent of the PS Zone, which is to provide land for public and quasi-public uses. A seniors Supportive Living Accommodation is consistent with this purpose, as it provides a community-serving facility that addresses housing and care needs within the city. From a regulatory standpoint:

- **Use and density:** The number of units and overall site coverage fall within what can reasonably be contemplated for a PS-zoned supportive living facility on a parcel of this size.
- **Building height and form:** The building height complies with the zone regulations. The nearest residential dwellings are located across 59 Street to the south and do not abut the site. Abutting lands to the north, east, and west are institutional or open space in nature. As a result, the proposed height and massing are not expected to create undue shadowing, privacy, or overlook impacts on neighbouring residential properties.
- **Amenity space:** The Zoning Bylaw requires a minimum of 15.0 m² of Common Amenity Space per unit for a Supportive Living Accommodation. For 48 units, at least 720 m² is required. The development provides a total of approximately 799.82 m² of Amenity Space (148.76 m² indoor and 651.06 m² outdoor), exceeding the minimum requirement. Indoor common spaces on each floor, together with outdoor amenities such as the gazebo, garden, and patio, provide a range of functional and attractive spaces for residents.



- **Landscaping:** Landscaped Area is subject to Development Authority approval rather than a fixed percentage. Based on the total Landscaped Area, the General Landscaping Regulations trigger minimum tree and shrub counts. The updated landscaping plan proposes 52 new trees, 104 shrubs, ornamental prairie grasses, and landscape boulders, meeting and exceeding the minimums and responding directly to environmental and visual concerns raised through referral. The plan has been reviewed and accepted by Administration.
- **Parking:** The parking requirement for Supportive Living Accommodation is 0.4 stalls per unit, resulting in a minimum of 19 stalls. The development proposes 59 stalls, significantly above the minimum. Parking design includes landscaped islands to break up large, paved areas, as required where 25 or more stalls are provided. Final parking layout is subject to Development Authority approval, but the quantity and general configuration meet the bylaw standards.

The Developed Areas Regulations apply to the construction of new Dwelling Units in this area. There is no conflict between those regulations and the PS Zone provisions in this case. Although the Developed Areas Regulations include a height relationship standard relative to abutting residential sites, that standard does not apply here because there are no residential-zoned parcels that abut (i.e., physically touch or share a boundary with) the subject site. The institutional and open space context surrounding the site allows the building to meet both the zone regulations and the broader intent of the Developed Areas Regulations.

Waskasoo Character Statements and Context

The site lies within the Waskasoo Environmental Character Area, where Character Statements provide detailed design direction intended to preserve the area's naturalized, park-oriented character. Some elements are expressed as requirements ("shall"), while others are recommendations ("should" or "may") that allow for Development Authority discretion.

In this instance, the proposal demonstrates substantial alignment with the Character Statements, including:

- **Open space and natural character:** The development clusters the built form on a portion of the site, preserving a large open area that continues to function as an amenity for both residents and wildlife. The landowner has committed to allowing the adjacent school to continue using the balance of the property for recreational purposes, and to exploring additional features such as a snow hill.
- **Landscaping and environmental design:** The landscape plan incorporates low-maintenance, largely native and non-invasive plant material, edible vegetation (fruit trees and berry bushes), and a naturalized approach consistent with xeriscaping principles. The applicant has committed to not irrigating the property, relying instead on plant selection and design to maintain the landscape.



- **Sustainability features:** The building will incorporate environmentally sustainable design elements, including roof-mounted solar panels, rainwater harvesting for garden use, and energy-efficient building systems consistent with current energy codes and best practices.
- **Parking and site layout:** The provision of landscaped islands and tree planting within the parking area helps intercept precipitation, provide shading, and reduce the visual impact of hard surfaces, in keeping with the Character Statements' direction for parking design.
- **Lighting and fencing:** The proposal includes dark-sky-sensitive exterior lighting and replacement of existing chain link fencing with decorative fencing designed to accommodate wildlife movement and avoid entrapment, consistent with the character guidance.

Where the proposal does not strictly meet all optional or recommended elements—such as the use of permeable paving—the overall site design, extensive landscaping, and retention of significant open space collectively advance the intent of the Waskasoo Character Statements and the Environmental Character Area policies.

Neighbourhood Compatibility and Public Input

From a land-use compatibility perspective, the PS District anticipates a mix of institutional, educational, and community-serving uses. A seniors Supportive Living Accommodation complements this context by providing housing and care services in close proximity to schools, parkland, trails, and the broader Waskasoo neighbourhood. The form and siting of the building, together with the preservation of a substantial open area, help ensure that the development fits within the existing streetscape and maintains the area's park-oriented character.

Historically, the site has functioned as open space through an informal arrangement with the adjacent school, despite being privately owned and zoned for public/institutional use. Public feedback reflects concerns about loss of informal open space, traffic, density, and perceived changes to the neighbourhood character. These concerns are acknowledged. However, the current PS zoning and the Waskasoo ARP both contemplate institutional and quasi-public uses on this parcel, and the proposed supportive living use aligns with that planned function. Traffic analysis, environmental assessment, and geotechnical review indicate that the site can accommodate the proposed development without significant adverse impacts.

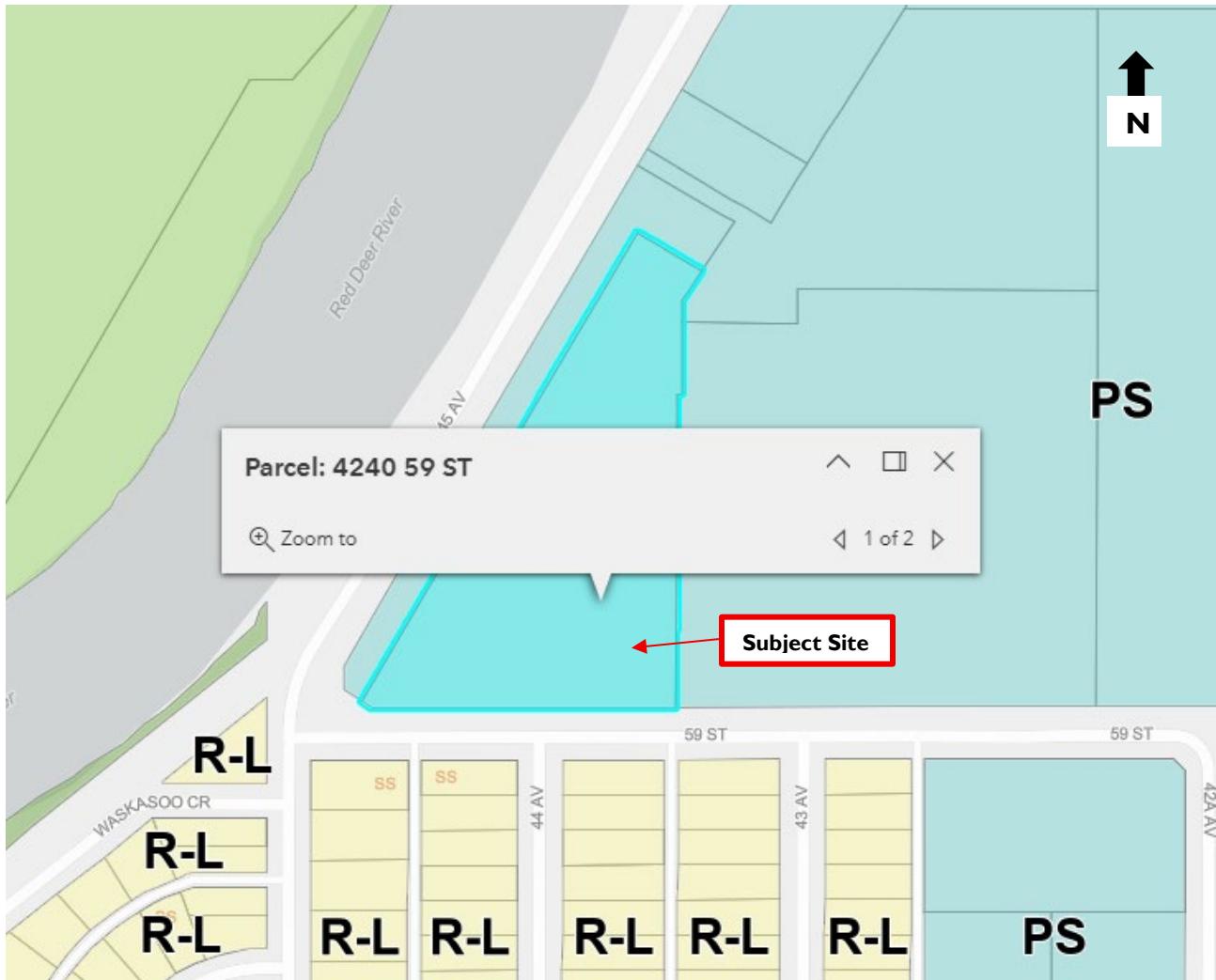
Appendices

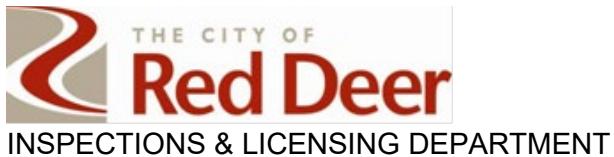
- A - Mapping & Photos
- B – Site Plans and Drawings
- C – Reports and Approvals
- D – Public Consultation
- E – Site History



APPENDIX A – MAPPING AND PHOTOS

Zoning Map





Ortho / Aerial Imagery

Image 1



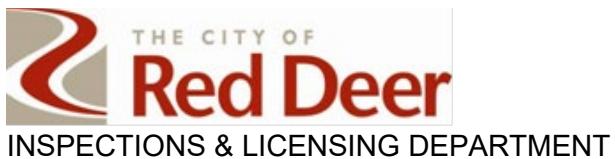


Image 2





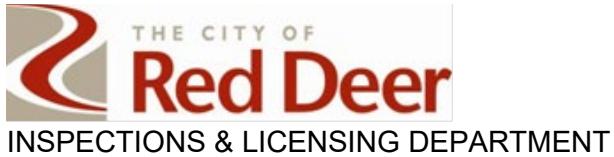
SITE PHOTOS

Facing west / north west from 59 Street.



Facing north from 44 Ave.



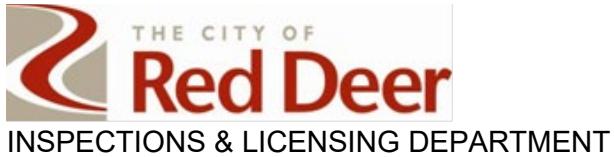


Facing east / northeast from 59 Street.



Facing south from 45 Ave.





Facing south / southeast from 45 Ave.



RIVERGLEN EAST LINCOLN DEVELOPMENTS

JMAA

architecture

ARCHITECT:

JMAA ARCHITECTURE LTD.
#2 5000 - 51 AVENUE
RED DEER, ALBERTA, T4N 4H5
PHONE: (403) 346 - 4542
FAX: (403) 347 - 2015
EMAIL: cgl@jmaa.ca
CONTACTS: Cory Leniuk

ARCHITECTURAL DRAWINGS:

- A0.1 - COVER SHEET
- A1.0 - SITE / CONTEXT PLAN
- A1.1 - SITE PLAN
- A1.2 - FIRE ACCESS PLAN
- A1.4 - LANDSCAPE PLAN
- A1.5 - LANDSCAPE DETAILED PLAN
- A1.6 - LANDSCAPE DETAILED PLAN
- A1.7 - LANDSCAPE DETAILED PLAN
- A1.8 - COMMON AMENITY SPACE
- A2.1 - MAIN FLOOR PLAN
- A2.2 - SECOND FLOOR PLAN
- A2.3 - THIRD FLOOR PLAN
- A2.4 - ROOF PLAN
- A2.5 - MAIN FLOOR DETAILED PLAN
- A2.6 - MAIN FLOOR DETAILED PLAN
- A2.7 - SECOND FLOOR DETAILED PLAN
- A2.8 - SECOND FLOOR DETAILED PLAN
- A2.9 - THIRD FLOOR DETAILED PLAN
- A2.10 - THIRD FLOOR DETAILED PLAN
- A3.1 - ELEVATIONS

SYMBOL LEGEND		ROOM FINISH SCHEDULE
201	- ROOM NUMBERS	2750 [C] CEILING HEIGHT
201A	- DOOR NUMBERS	W [W] CEILING FINISH
W	- WINDOW NUMBERS	W [W] [2] ROOM NUMBER
W3	- WALL TYPES	F [F] [1] BASE
!	- GENERAL NOTES	— CHANGE IN FLOOR MATERIAL
		W1 C1 F1 B1 - FINISH TAGS

DATE	REVISIONS ITEMS
11 AUG 2025	ISSUED FOR DEVELOPMENT PERMIT
24 SEPT 2025	RE-ISSUED FOR DEVELOPMENT PERMIT

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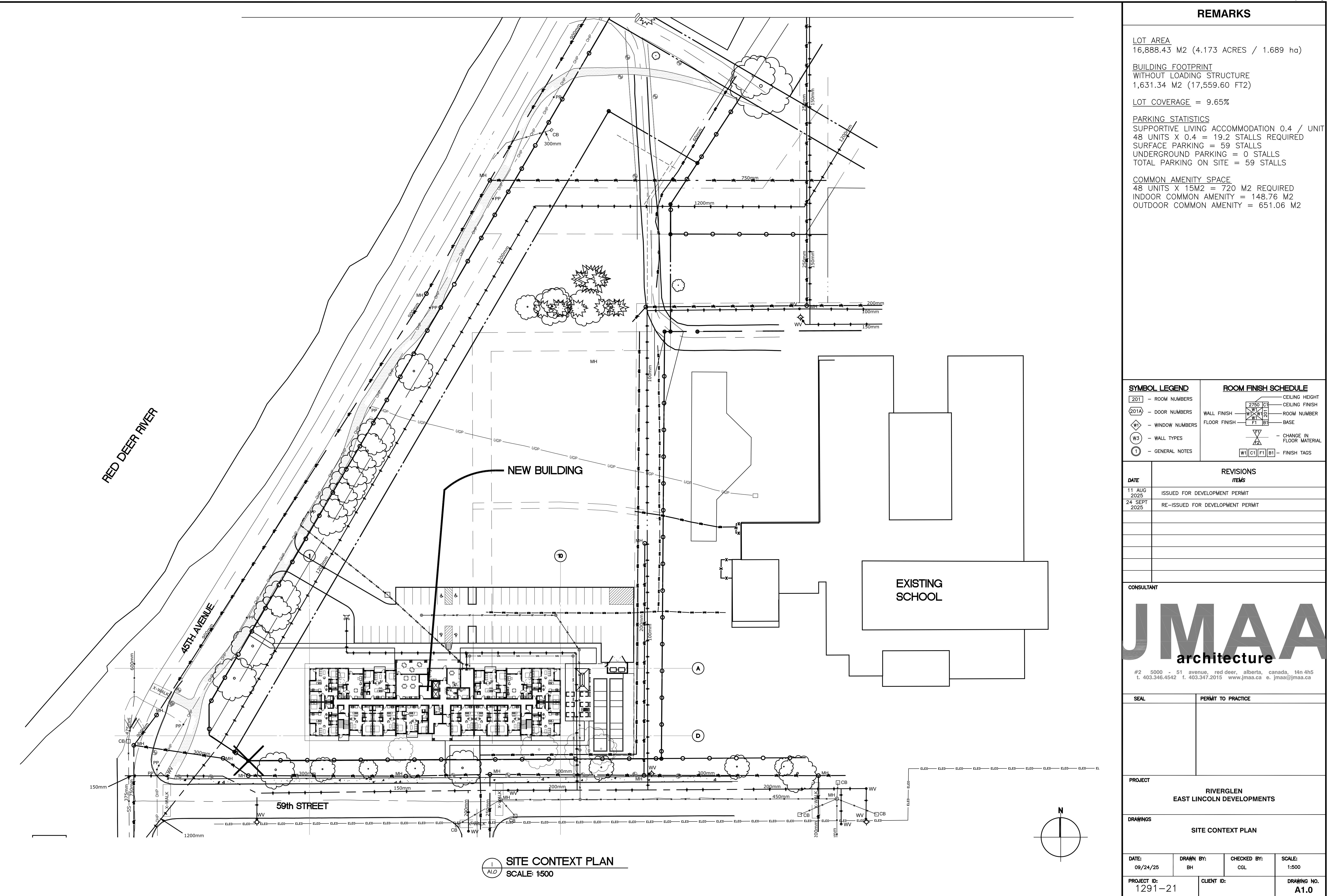
#2 5000 - 51 AVENUE, RED DEER, ALBERTA, CANADA, T4N 4H5
T: 403.346.4542 F: 403.347.2015 E: jmaa@jmaa.ca

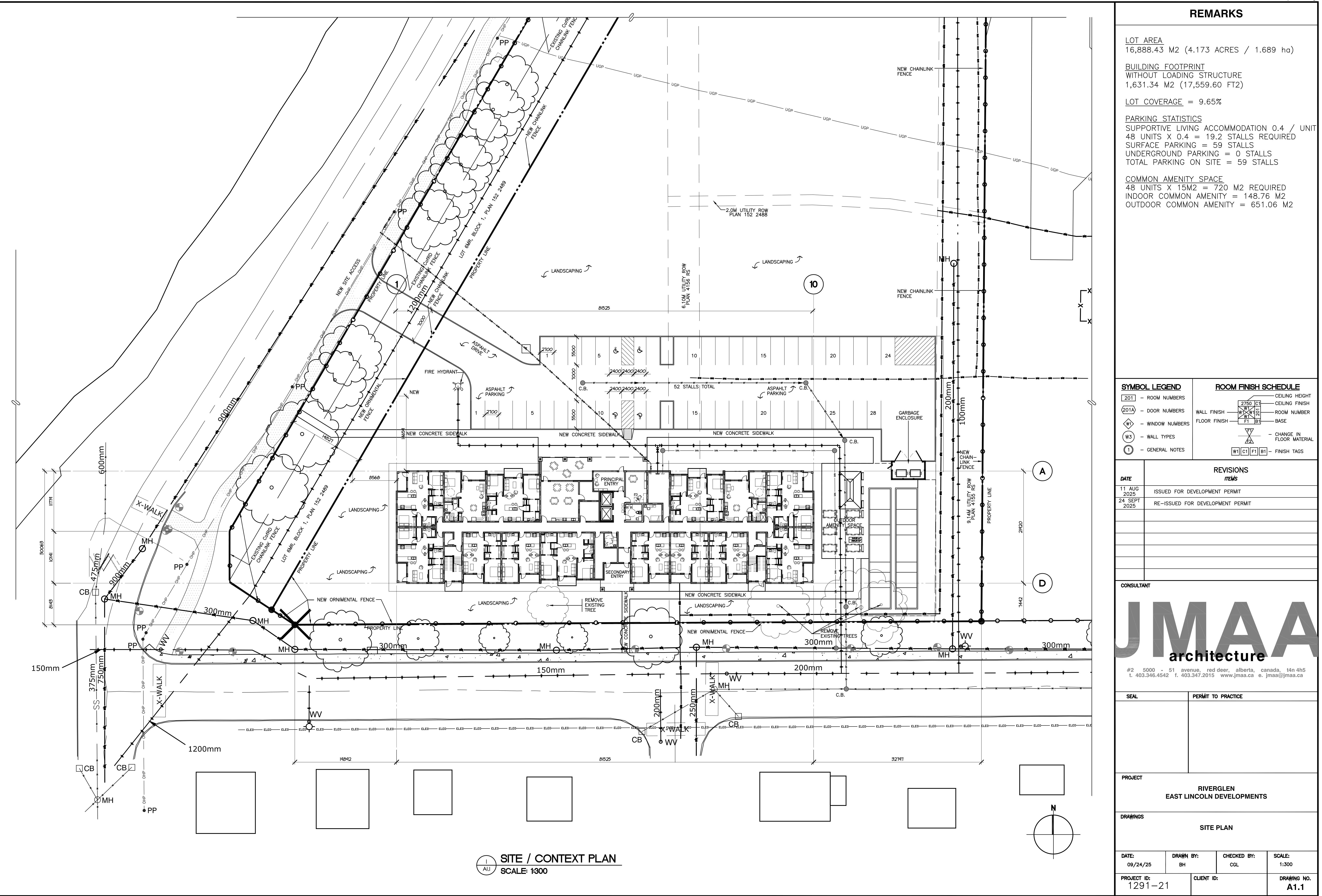
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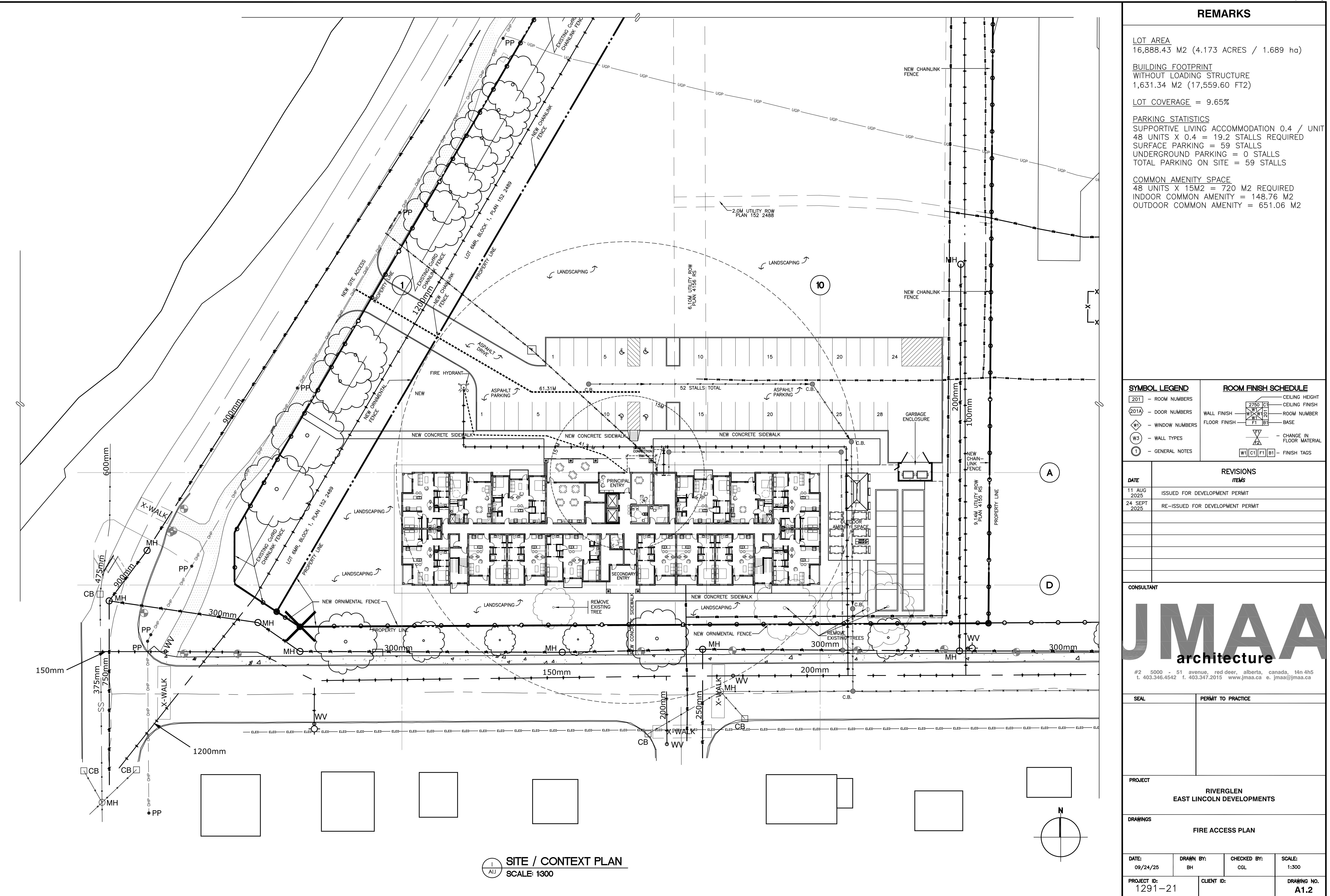
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RIVERGLEN EAST LINCOLN DEVELOPMENTS			

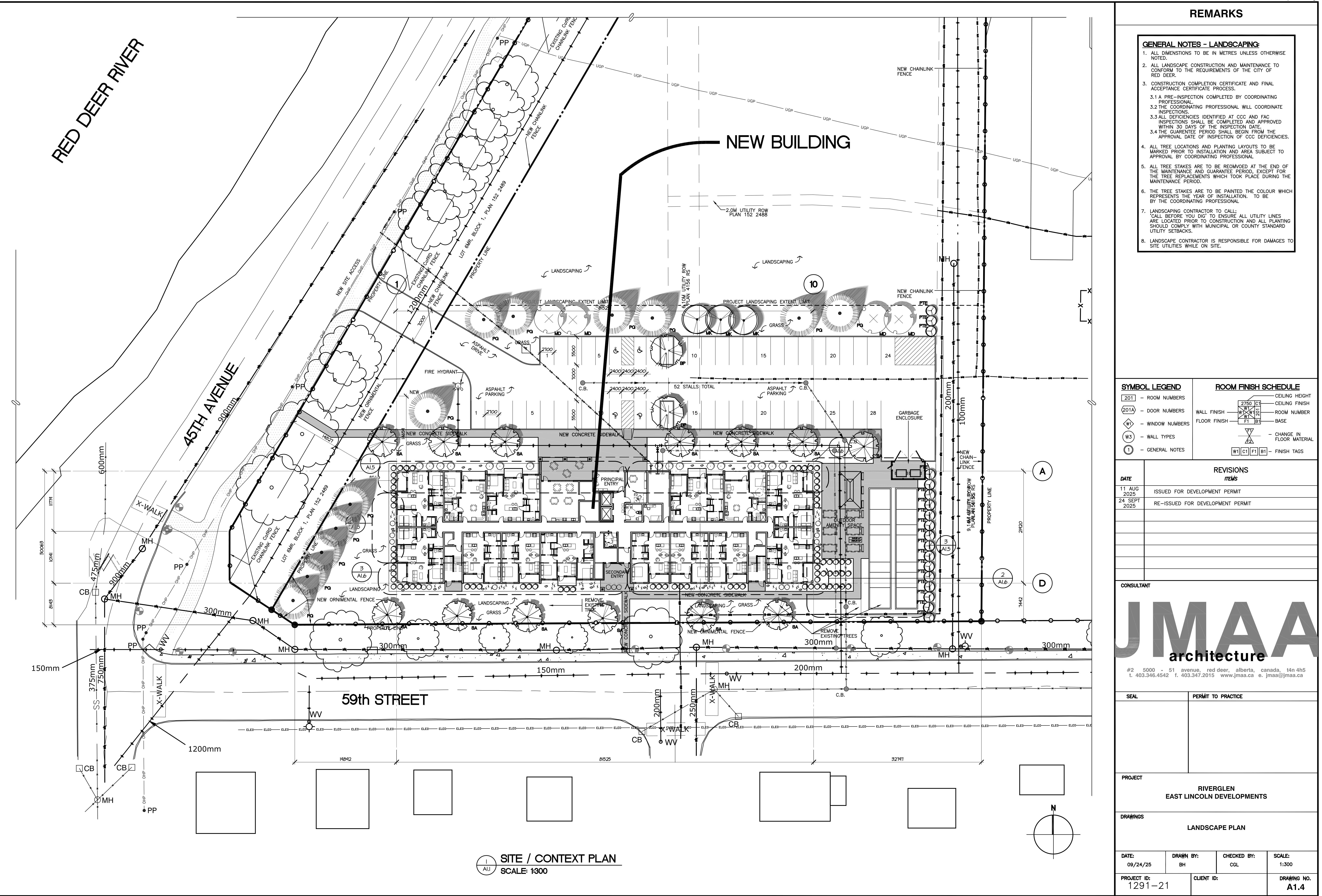
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COVER SHEET			

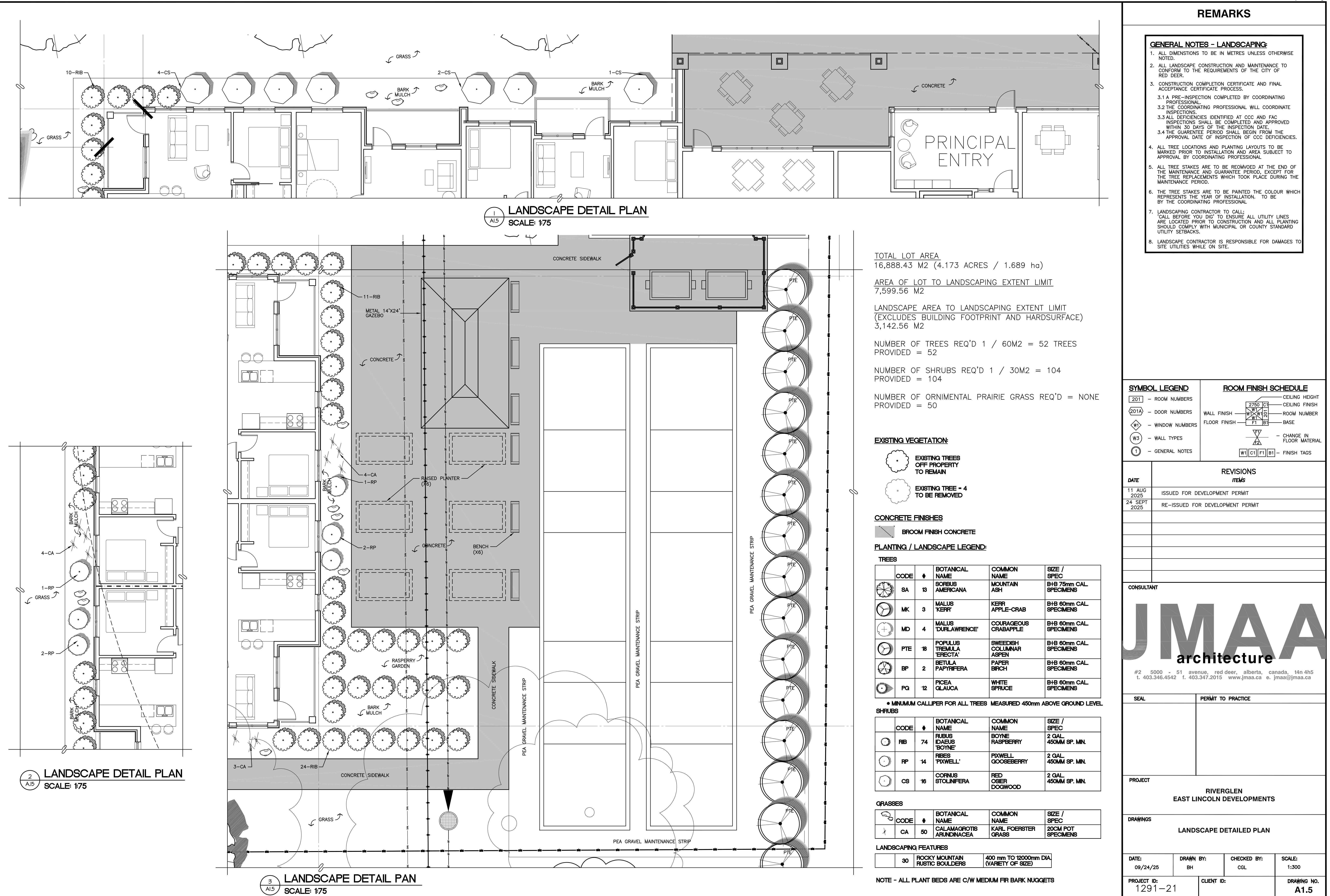
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09/24/25	BH	CLG	N.T.S.
PROJECT ID: 1291-21		CLIENT ID: —	DRAWING NO. A0.1



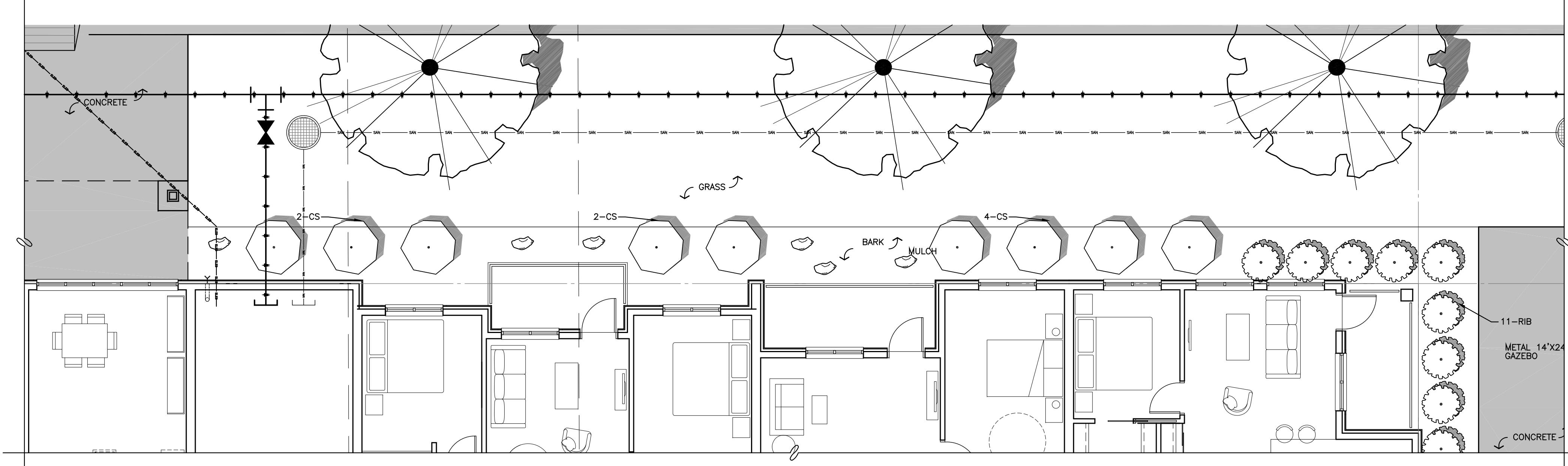




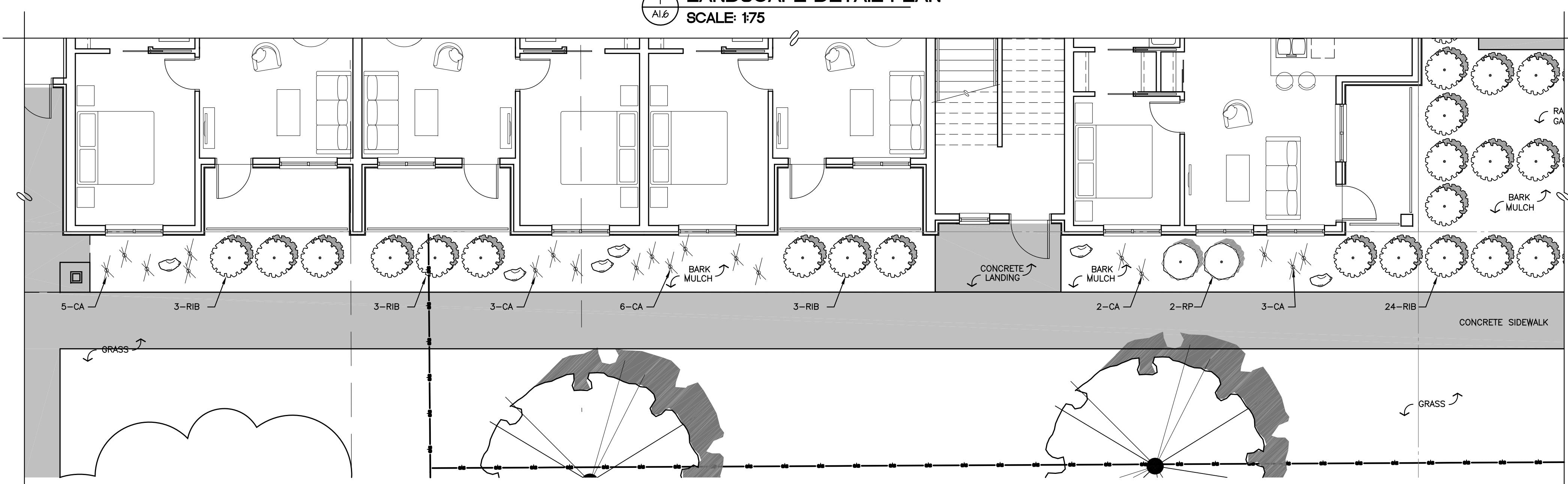




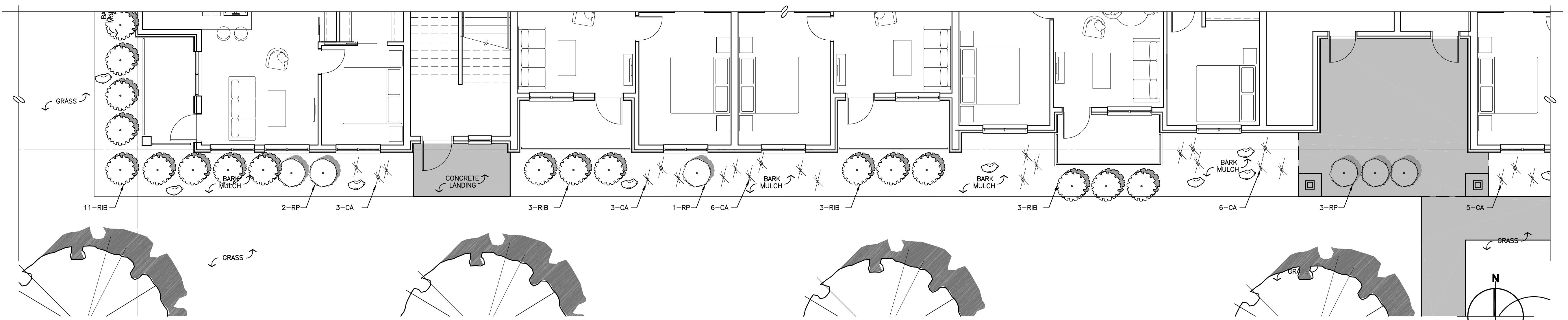
REMARKS																																	
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DATE: 09/24/25 DRAWN BY: BH CHECKED BY: CGL SCALE: 1:300																																	
PROJECT ID: 1291-21 CLIENT ID: DRAWING NO. A1.6																																	



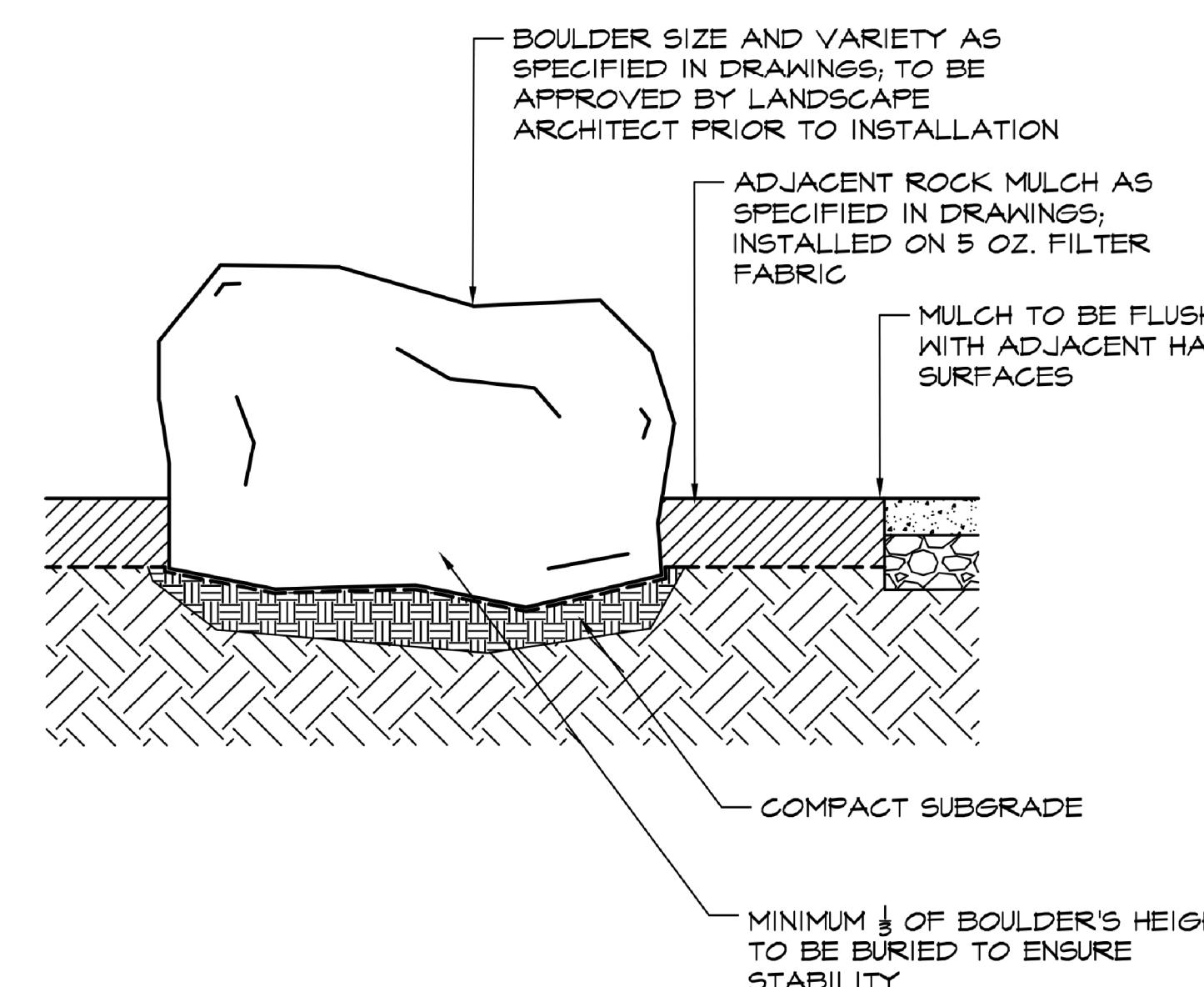
1 A1.6
LANDSCAPE DETAIL PLAN
SCALE: 1:75



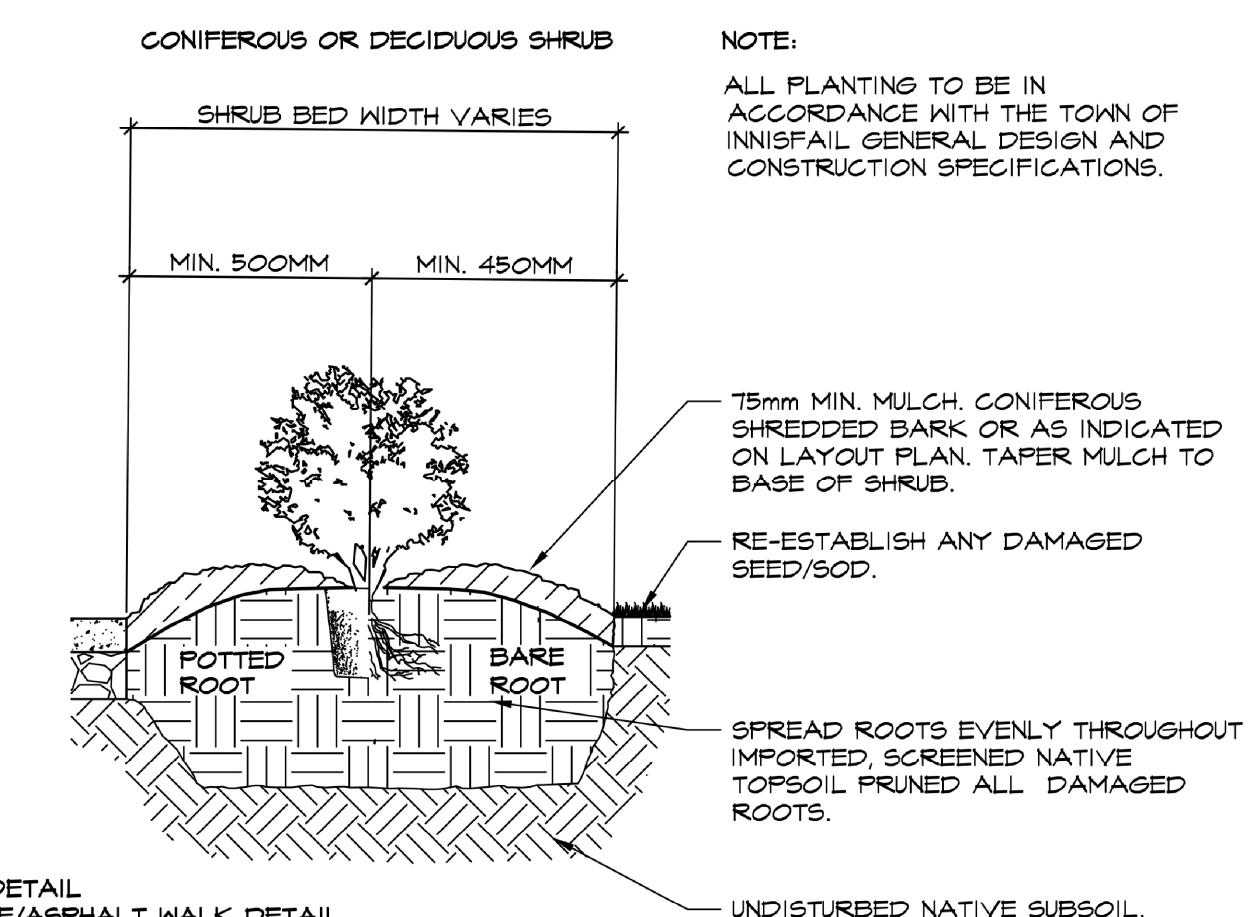
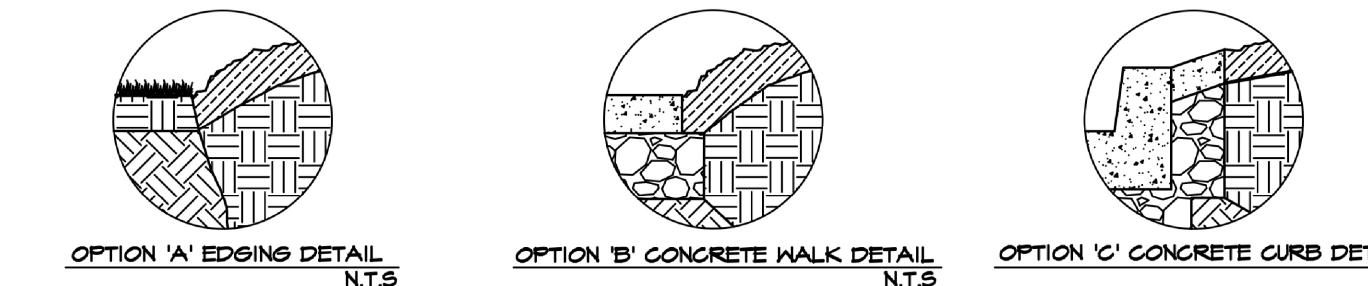
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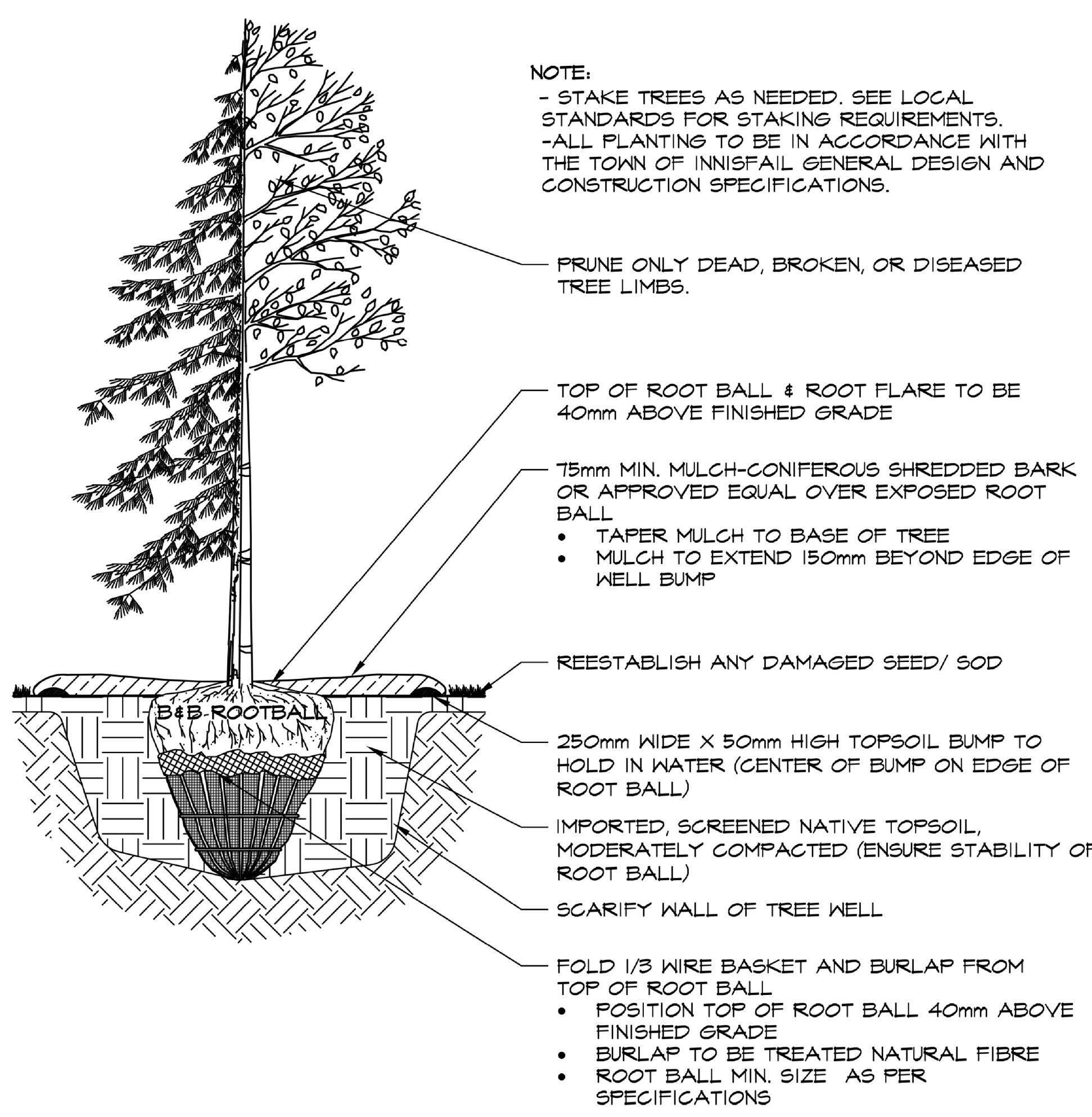
3 A1.6
LANDSCAPE DETAIL PLAN
SCALE: 1:75



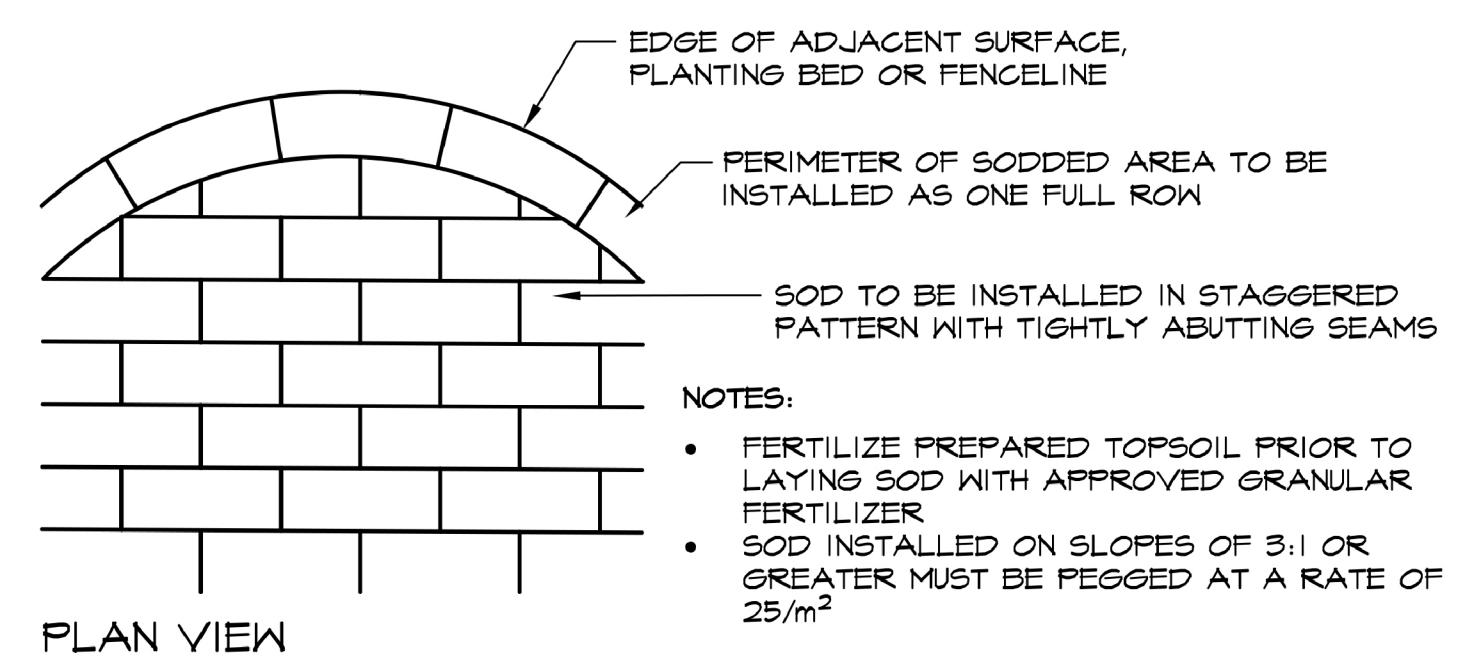
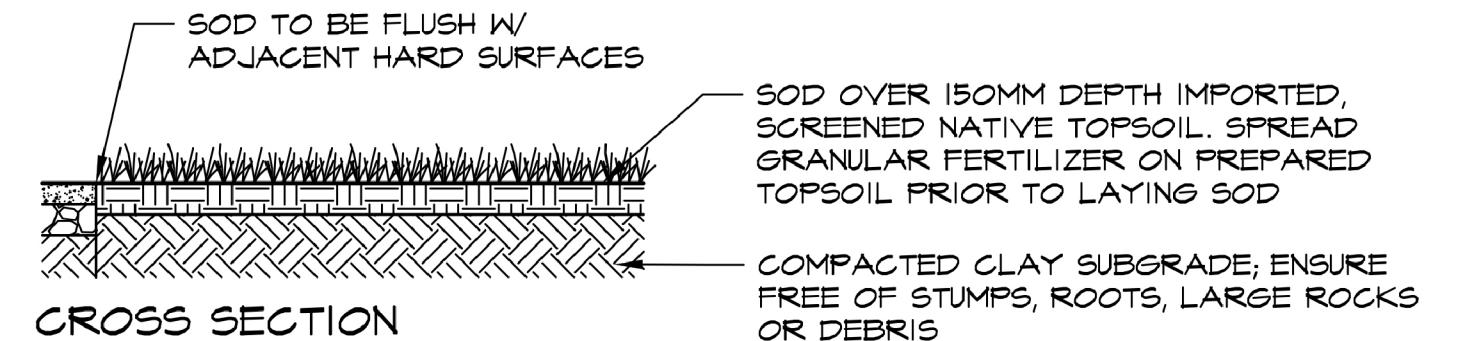
TYPICAL BOULDER INSTALLATION
SCALE: N.T.S



TYPICAL SHRUB PLANTING
SCALE: N.T.S



TYPICAL TREE PLANTING
SCALE: N.T.S



TYPICAL SOD INSTALLATION
SCALE: N.T.S

SEED MIXES:

NATIVE SEED MIX:

- 15% AWNED WHEATGRASS
- 15% ROCKY MOUNTAIN FESCUE
- 15% WESTERN WHEATGRASS
- 5% JUNEGRASS
- 5% WESTERN PORCUPINE GRASS
- 25% SLENDER WHEATGRASS

NO MOW NATURALIZATION SEED MIX:

- 20% NORTHERN WHEATGRASS
- 20% SLENDER WHEATGRASS
- 20% NODDING BROMEGRASS
- 5% TUFTED HAIR GRASS
- 5% TICKLE GRASS
- 10% SLOUGHGRASS
- 10% ALKALI BLUEGRASS
- 10% ANNUAL RYEGRASS

SOD SEED MIX:

- 70-90% KENTUCKY BLUEGRASS
- 0-10% CREEPING RED FESCUE
- 0-30% PERENNIAL RYEGRASS

PLANTING NOTES:

1. CONTRACTORS TO CALL 'CALL BEFORE YOU DIG' TO HAVE EXISTING UTILITIES LOCATED PRIOR TO START OF ANY CONSTRUCTION.
2. CONTRACTOR IS RESPONSIBLE FOR HORDING OF ALL EXISTING TREES WITHIN OR ADJACENT TO THE CONSTRUCTION AREAS.
3. CONTRACTOR IS RESPONSIBLE FOR HAULING OFF ALL EXCESS MATERIALS OFF SITE.
4. CONTRACTOR IS RESPONSIBLE FOR SITE CLEANUP.
5. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO LANSCAPED AREAS AND MUST MAKE ALL NECESSARY REPAIRS.
6. ALL ANCILLIARY WORK NORMALLY ASSOCIATED WITH THIS TYPE OF CONTRACT SHALL BE DEEMED TO BE PART OF THE CONTRACT.
7. ALL QUANTITIES SUBJECT TO CHANGE.
8. CONTRACTOR TO VERIFY ALL DIMENSIONS AND REPORT ANY DISCREPANCIES TO THE COORDINATING PROFESSIONAL.
9. LAYOUT TO BE APPROVED BY THE COORDINATING PROFESSIONAL PRIOR TO CONSTRUCTION STARTING.
10. ALL MEASUREMENTS IN METERS UNLESS OTHERWISE NOTED.
11. CONTRACTOR TO HOLD ROUGH GRADES 450MM BELOW FINISHED GRADE FOR PLANT BEDS, 150MM FOR SEDED AND SODDED AREAS.
12. ALL PLANT MATERIAL TO BE NURSERY GROWN STOCK AND SHALL MEET OR EXCEED THE SPECIFICATIONS OF THE CANADIAN NURSERY TRADES ASSOCIATION FOR SIZES, HEIGHTS, SPREADS, GRADING QUALITY, AND METHOD OF CULTIVATION.
13. NO SUBSTITUTIONS OF MATERIAL PRODUCTS OR QUANTITIES WITH OUT PRIOR CONSENT OF COORDINATING PROFESSIONAL.
14. AREAS TO RECEIVE SEE AND SOD TO HAVE TOPSOIL TO A DEPTH OF 150MM.
15. ALL PLANT MATERIAL AND WORKMANSHIP TO CONFORM TO THE REQUIREMENTS OF THE CITY OF RED DEER LANDSCAPING STANDARDS, AND THE CANADIAN LANDSCAPING STANDARDS, MOST RECENT EDITION.

REMARKS	
GENERAL NOTES - LANDSCAPING:	
1. ALL DIMENSIONS TO BE IN METRES UNLESS OTHERWISE NOTED.	
2. ALL LANDSCAPE CONSTRUCTION AND MAINTENANCE TO CONFORM TO THE REQUIREMENTS OF THE CITY OF RED DEER.	
3. CONSTRUCTION COMPLETION CERTIFICATE AND FINAL ACCEPTANCE CERTIFICATE PROCESS.	
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8. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR DAMAGES TO SITE UTILITIES WHILE ON SITE.	

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201	- ROOM NUMBERS	CEILING HEIGHT
201A	- DOOR NUMBERS	WALL FINISH
W1	- WINDOW NUMBERS	W1 W1 W1
W3	- WALL TYPES	F1 B1
1	- GENERAL NOTES	BASE
		CHANGE IN FLOOR MATERIAL
		W1 C1 F1 B1 - FINISH TAGS

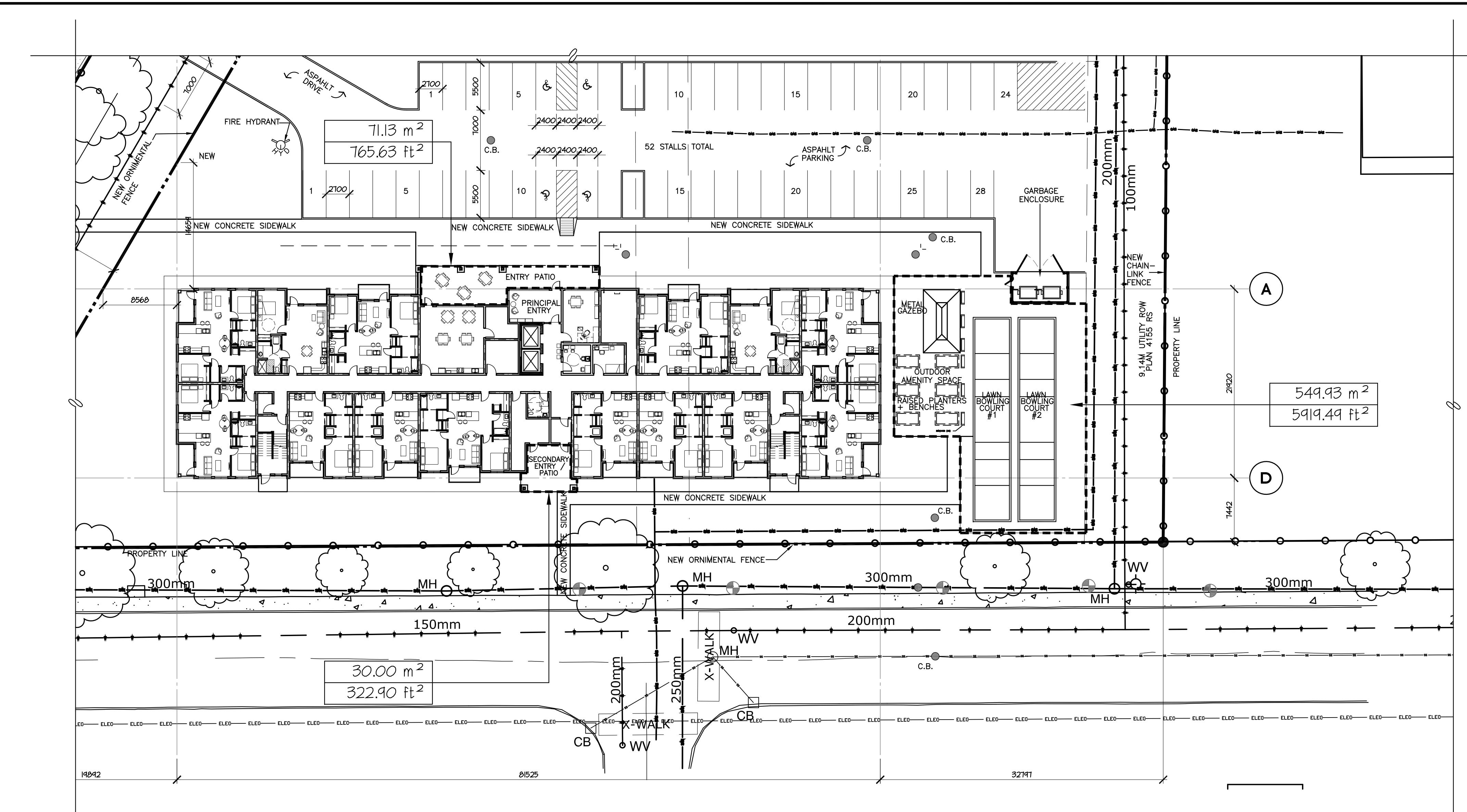
DATE	REVISIONS ITEMS
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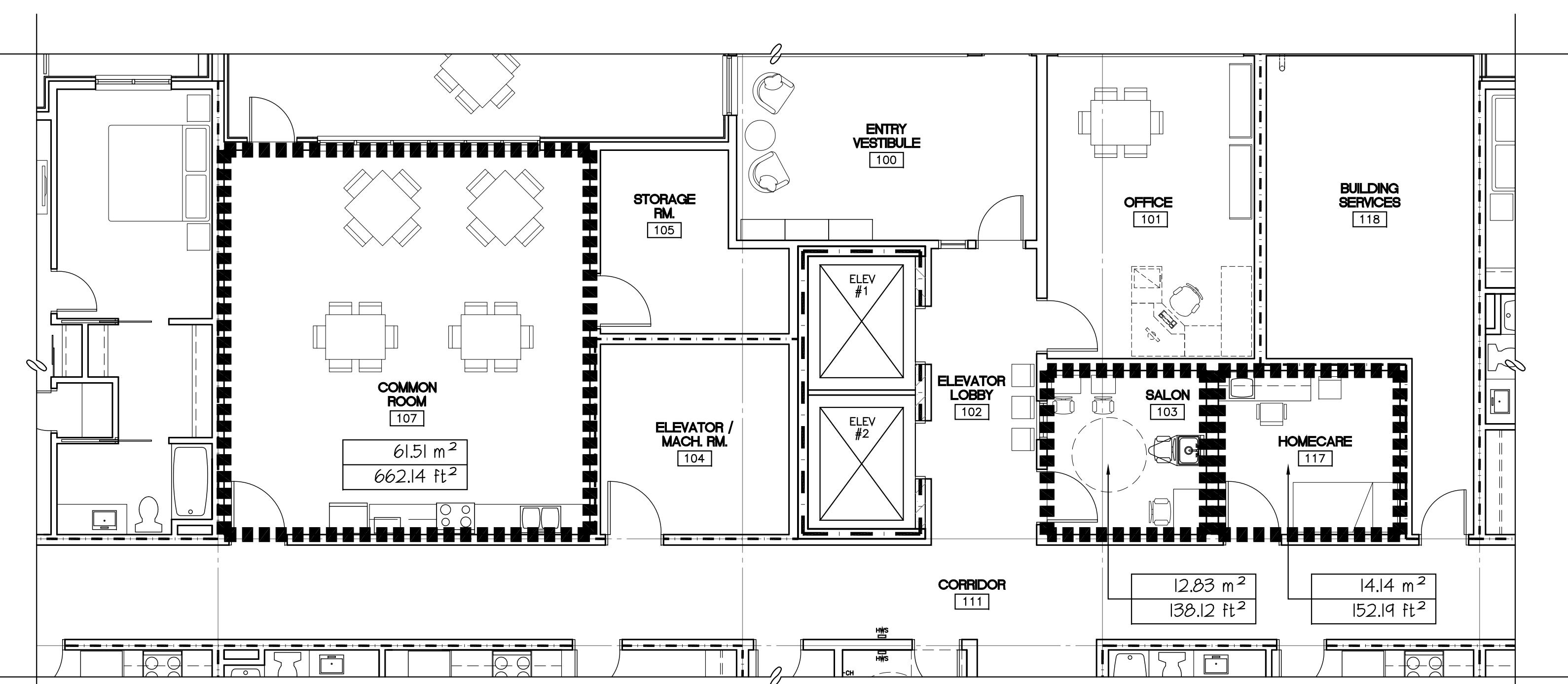
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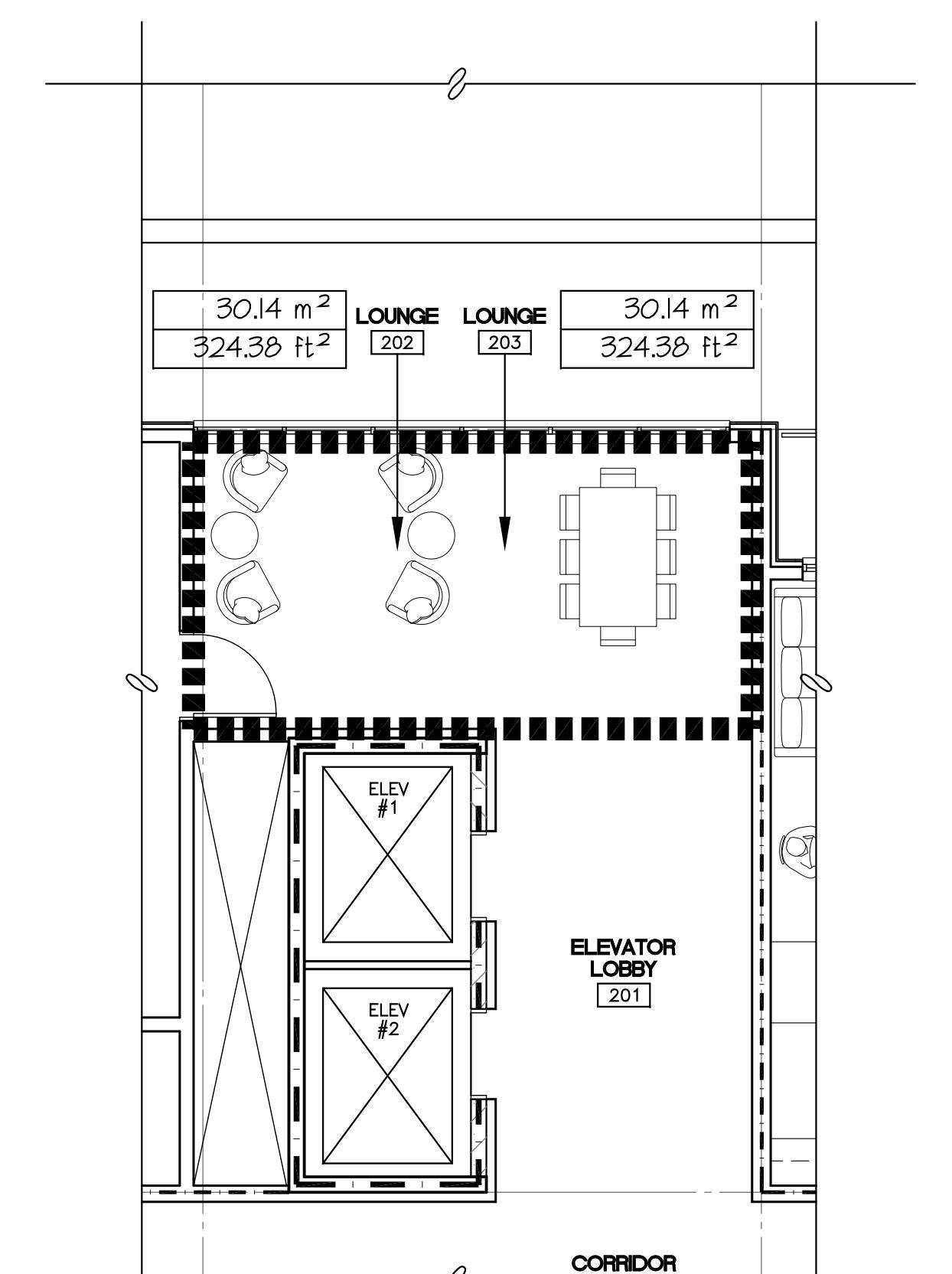
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DRAWINGS	
LANDSCAPE DETAILS	
DATE: 09/24/25 DRAWN BY: BH CHECKED BY: CGL SCALE: AS NOTED	PROJECT ID: 1372-24 CLIENT ID: — DRAWING NO. A1.7



SITE / OUTDOOR AMENITY SPACE



MAIN FLOOR PLAN - INDOOR AMENIT



2ND + 3RD FLOOR PLAN - INDOOR AMENITY
SCALE: 1:75

REMARKS

LOT AREA 16,888.43 M² (4.173 ACRES / 1.689 ha)

BUILDING FOOTPRINT
WITHOUT LOADING STRUCTURE
1,631.34 M² (17,559.60 FT²)

LOT COVERAGE = 9.65%

PARKING STATISTICS
SUPPORTIVE LIVING ACCOMMODATION 0.4 / UNIT
48 UNITS X 0.4 = 19.2 STALLS REQUIRED
SURFACE PARKING = 59 STALLS
UNDERGROUND PARKING = 0 STALLS
TOTAL PARKING ON SITE = 59 STALLS

COMMON AMENITY SPACE
48 UNITS X 15M2 = 720 M2 REQUIRED
INDOOR COMMON AMENITY = 148.76 M2
OUTDOOR COMMON AMENITY = 651.06 M2
TOTAL PROVIDED = 799.82

<u>SYMBOL LEGEND</u>		<u>ROOM FINISH SCHEDULE</u>		
201	- ROOM NUMBERS			
01A	- DOOR NUMBERS			
W1	- WINDOW NUMBERS			
W3	- WALL TYPES			
1	- GENERAL NOTES			
		2750	C1	CEILING HEIGHT
		W1		CEILING FINISH
		W1		ROOM NUMBER
		W1	20	
		F1	B1	BASE
		F1		
		F2		- CHANGE IN FLOOR MATERIAL
		W1	C1	
		F1	B1	- FINISH TAGS

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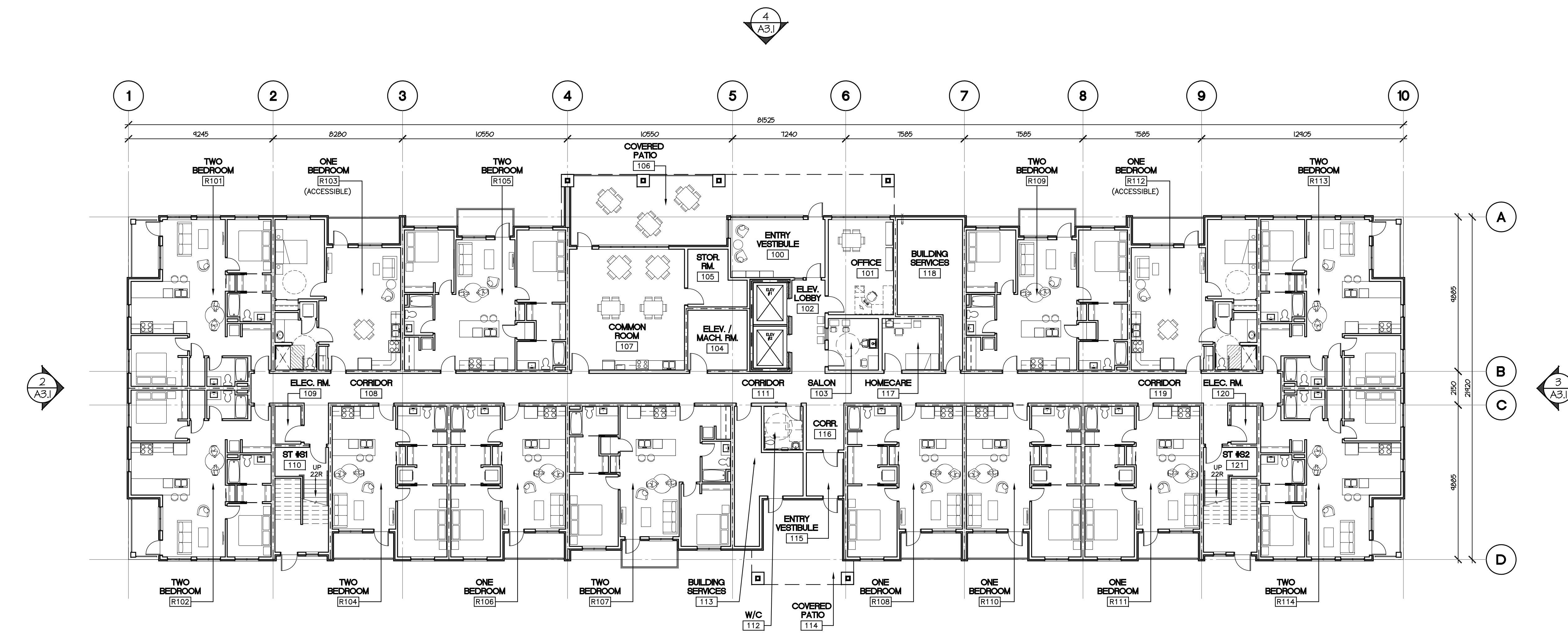
PROJECT

RIVERGLEN

EAST LINCOLN DEVELOPMENTS

DRAWINGS

DATE: 09/24/25	DRAWN BY: BH	CHECKED BY: CGL	SCALE: 1:300
PROJECT ID: 1291-21	CLIENT ID:	DRAWING NO. A1.8	



MAIN FLOOR PLAN
SCALE: 1:150



REMARKS

KEY PLAN

GENERAL NOTES:

1. ALL EXTERIOR DIMENSIONS ARE TO FACE OF SHEATHING & FACE OF CONCRETE FOUNDATION WALL
2. FOR EXTERIOR WALL ASSEMBLY DETAILS, REFER TO BUILDING SECTIONS & SECTION DETAILS.
3. ALL INTERIOR DIMENSIONS ARE TO CENTRE LINE OF WALLS UNLESS NOTED OTHERWISE.
4. ALL INTERIOR PARTITION NOT TAGGED ARE WALL TYPE W1
5. RESILIENT CHANNELS TO BE INSTALLED ON HIGH TRAFFIC SIDE OF WALLS TAGGED.

NOTE:
REFER TO BUILDING SECTIONS, SECTION DETAILS & PLAN DETAILS FOR EXTERIOR WALL CONSTRUCTION TYPES AND CONDITIONS. REFER TO DRAWING A2.6 FOR WALL ASSEMBLY DESCRIPTIONS.

SYMBOL LEGEND

201	- ROOM NUMBERS	2750	- CEILING HEIGHT
201A	- DOOR NUMBERS	C	- CEILING FINISH
W1	- WINDOW NUMBERS	W1	- ROOM NUMBER
W3	- WALL TYPES	W1	- BASE
1	- GENERAL NOTES	F1	- FLOOR FINISH
		B1	- CHANGE IN FLOOR MATERIAL
		W1 C1 F1 B1	- FINISH TAGS

ROOM FINISH SCHEDULE

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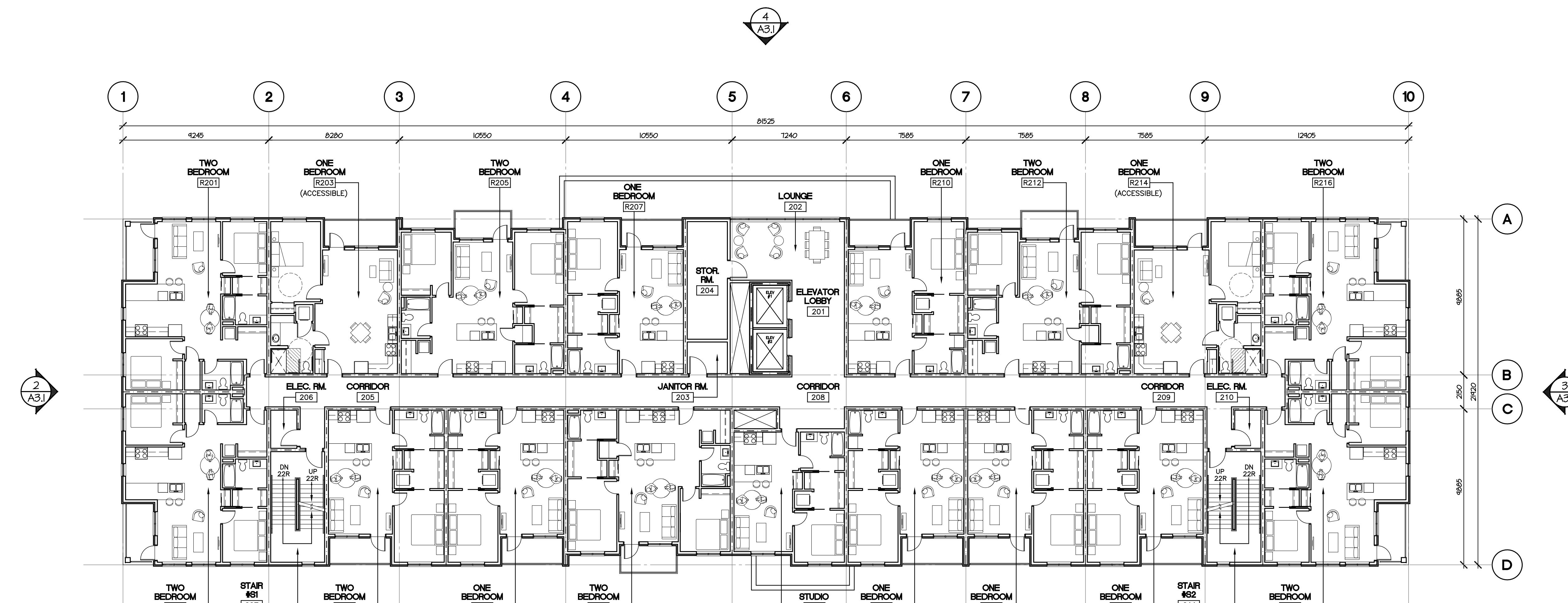
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t. 403.346.4542 f. 403.347.2015 www.jmaa.ca e. jmaa@jmaa.ca

SEAL **PERMIT TO PRACTICE**

PROJECT
RIVERGLEN
EAST LINCOLN DEVELOPMENTS

DRAWINGS
MAIN FLOOR PLAN

DATE: 09/24/25	DRAWN BY: BH	CHECKED BY: CGL	SCALE: 1:150
PROJECT ID: 1291-21	CLIENT ID:	DRAWING NO. A2.1	

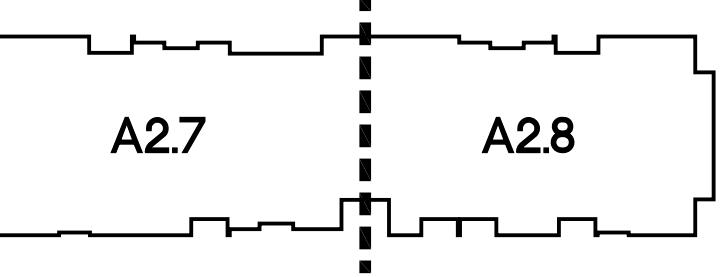


SECOND FLOOR PLAN
SCALE: 1:150

SECOND FLOOR:	
1 STUDIO	1 SUITE
1 BEDROOM	7 SUITES
1 BEDROOM (BARRIER FREE)	2 SUITES
2 BEDROOM	3 SUITES
2 BEDROOM (CORNER UNITS)	4 SUITES
TOTAL	17 SUITES
GROSS AREA:	1,669.90 m ² (17,974.80 sq. ft.)

REMARKS

KEY PLAN



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1 - GENERAL NOTES	B1 [B1] BASE
	W1 C1 F1 B1 - FINISH TAGS

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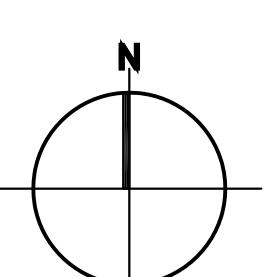
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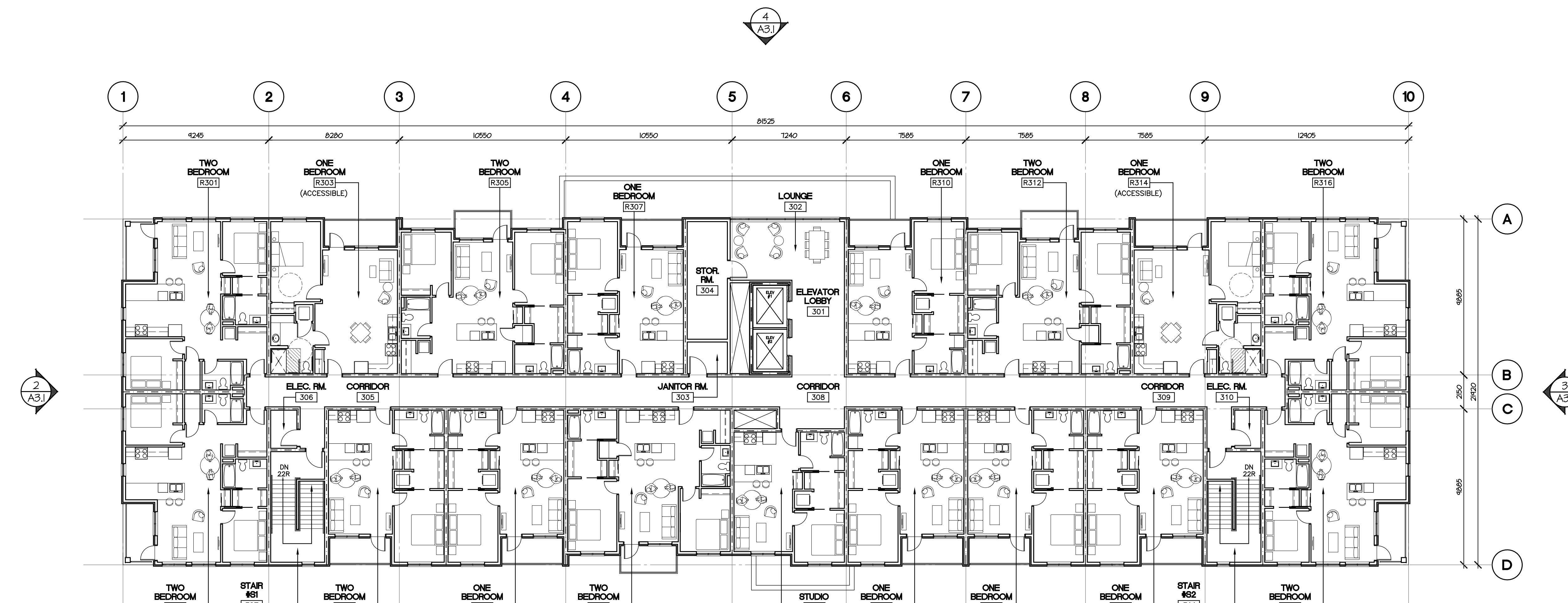
SEAL	PERMIT TO PRACTICE

PROJECT
RIVERGLEN
EAST LINCOLN DEVELOPMENTS

DRAWINGS
SECOND FLOOR PLAN

DATE: 09/24/25	DRAWN BY: BH	CHECKED BY: CGL	SCALE: 1:150
PROJECT ID: 1291-21	CLIENT ID:		DRAWING NO. A2.2



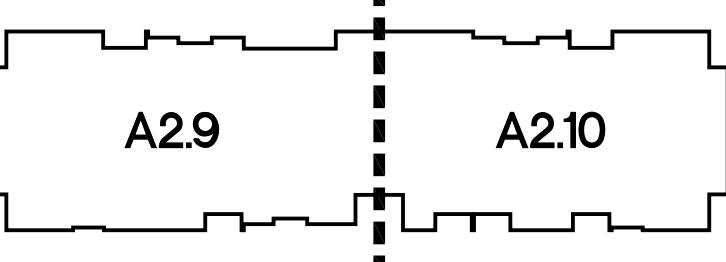


THIRD FLOOR PLAN
SCALE: 1:150

THIRD FLOOR:	
1 STUDIO	1 SUITE
1 BEDROOM	7 SUITES
1 BEDROOM (BARRIER FREE)	2 SUITES
2 BEDROOM	3 SUITES
2 BEDROOM (CORNER UNITS)	4 SUITES
TOTAL	17 SUITES
GROSS AREA:	1,669.90 m ² (17,974.80 sq. ft.)

REMARKS

KEY PLAN



GENERAL NOTES:

1. ALL EXTERIOR DIMENSIONS ARE TO FACE OF SHEATHING & FACE OF CONCRETE FOUNDATION WALL
2. FOR EXTERIOR WALL ASSEMBLY DETAILS, REFER TO BUILDING SECTIONS & SECTION DETAILS.
3. ALL INTERIOR DIMENSIONS ARE TO CENTRE LINE OF WALLS UNLESS NOTED OTHERWISE.
4. ALL INTERIOR PARTITION NOT TAGGED ARE WALL TYPE W1
5. RESILIENT CHANNELS TO BE INSTALLED ON HIGH TRAFFIC SIDE OF WALLS TAGGED.

NOTE:
REFER TO BUILDING SECTIONS, SECTION DETAILS & PLAN DETAILS FOR EXTERIOR WALL CONSTRUCTION TYPES AND CONDITIONS. REFER TO DRAWING A2.6 FOR WALL ASSEMBLY DESCRIPTIONS.

SYMBOL LEGEND	ROOM FINISH SCHEDULE
201 - ROOM NUMBERS	2750 C1 CEILING HEIGHT
201A - DOOR NUMBERS	W1 C1 CEILING FINISH
W1 - WINDOW NUMBERS	W1 C1 ROOM NUMBER
W3 - WALL TYPES	F1 C1 FLOOR FINISH
1 - GENERAL NOTES	B1 C1 BASE
	W1 C1 F1 B1 - FINISH TAGS

REVISIONS

ITEMS

11 AUG 2025	ISSUED FOR DEVELOPMENT PERMIT
24 SEPT 2025	RE-ISSUED FOR DEVELOPMENT PERMIT

CONSULTANT

JMAA
architecture

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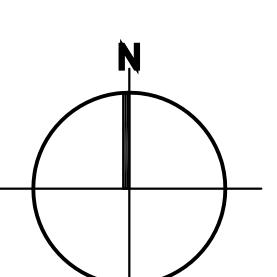
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PROJECT

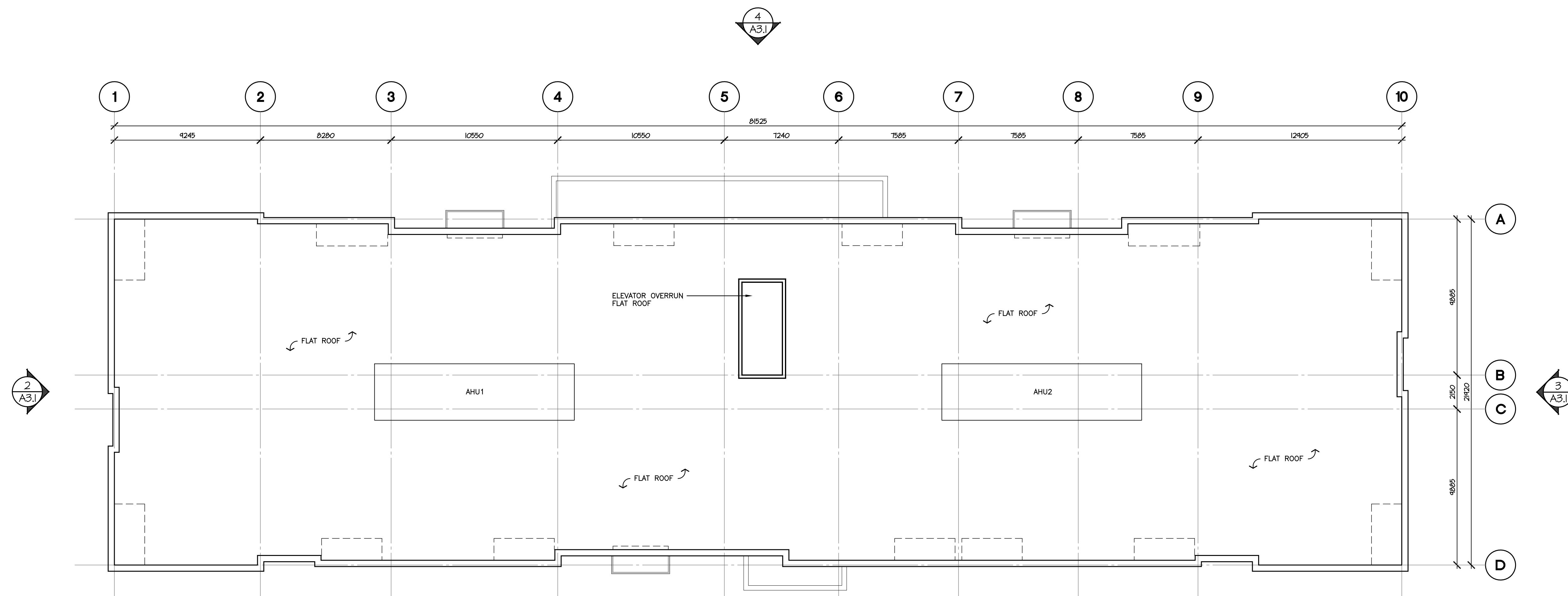
RIVERGLEN
EAST LINCOLN DEVELOPMENTS

DRAWINGS

THIRD FLOOR PLAN



DATE: 09/24/25	DRAWN BY: BH	CHECKED BY: CGL	SCALE: 1:150
PROJECT ID: 1291-21	CLIENT ID:		DRAWING NO. A2.3



ROOF PLAN
A2.4
SCALE: 1:150

REMARKS

GENERAL NOTES:

1. ALL EXTERIOR DIMENSIONS ARE TO FACE OF SHEATHING & FACE OF CONCRETE FOUNDATION WALL.
2. FOR EXTERIOR WALL ASSEMBLY DETAILS, REFER TO BUILDING SECTIONS & SECTION DETAILS.
3. ALL INTERIOR DIMENSIONS ARE TO CENTRE LINE OF WALLS UNLESS NOTED OTHERWISE.
4. ALL INTERIOR PARTITION NOT TAGGED ARE WALL TYPE W1
5. RESILIENT CHANNELS TO BE INSTALLED ON HIGH TRAFFIC SIDE OF WALLS TAGGED.

NOTE:
REFER TO BUILDING SECTIONS, SECTION DETAILS & PLAN DETAILS FOR EXTERIOR WALL CONSTRUCTION TYPES AND CONDITIONS. REFER TO DRAWING A2.6 FOR WALL ASSEMBLY DESCRIPTIONS.

SYMBOL LEGEND		ROOM FINISH SCHEDULE
201	- ROOM NUMBERS	2750 C1 CEILING HEIGHT
201A	- DOOR NUMBERS	W1 CEILING FINISH
W1	- WINDOW NUMBERS	W1-1 ROOM NUMBER
W3	- WALL TYPES	F1 BASE
(I)	- GENERAL NOTES	— CHANGE IN FLOOR MATERIAL
		W1 C1 F1 B1 - FINISH TAGS

REVISIONS

DATE	ITEMS
11 AUG 2025	ISSUED FOR DEVELOPMENT PERMIT
24 SEPT 2025	RE-ISSUED FOR DEVELOPMENT PERMIT

CONSULTANT

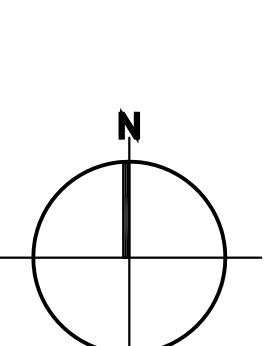
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PROJECT

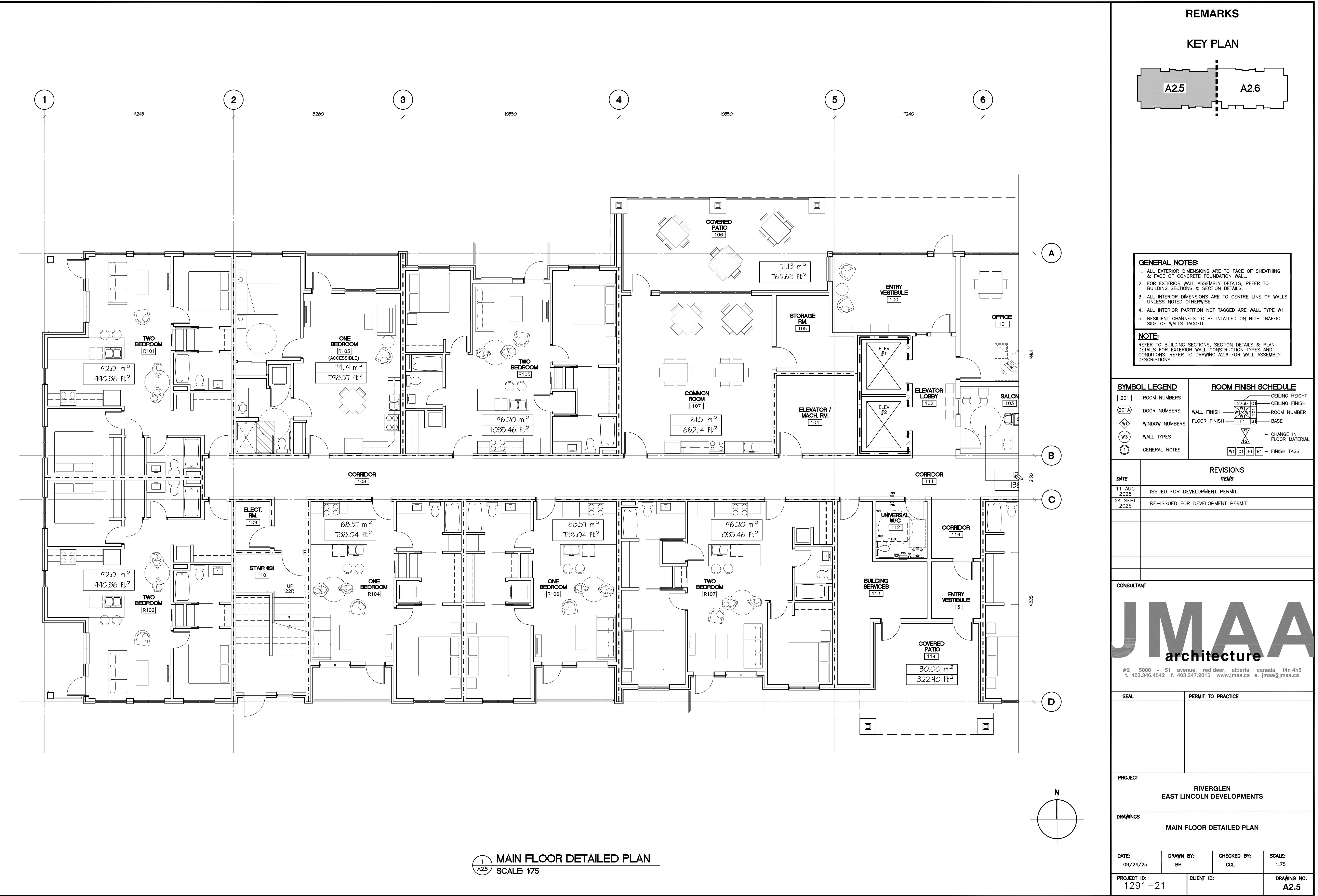
RIVERGLEN
EAST LINCOLN DEVELOPMENTS

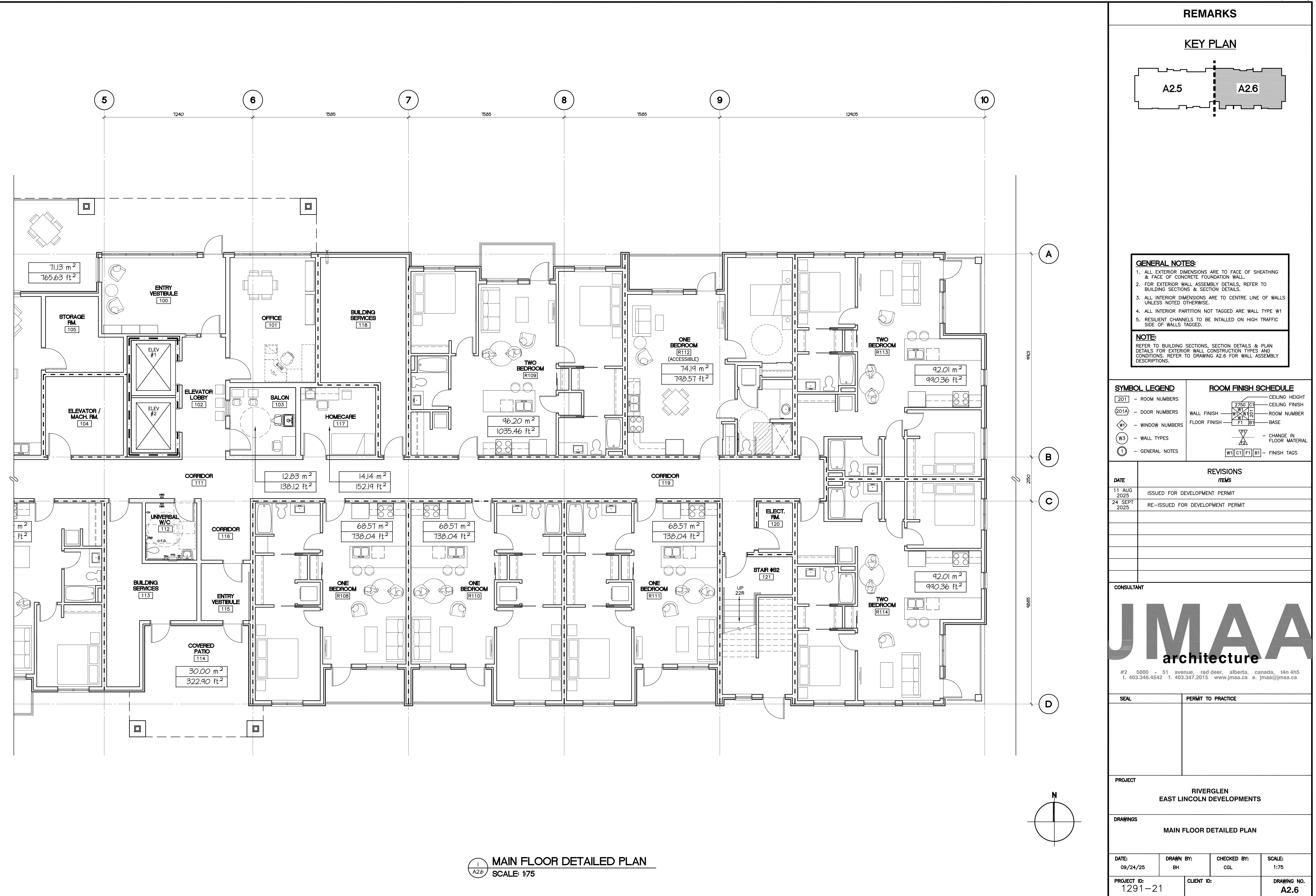


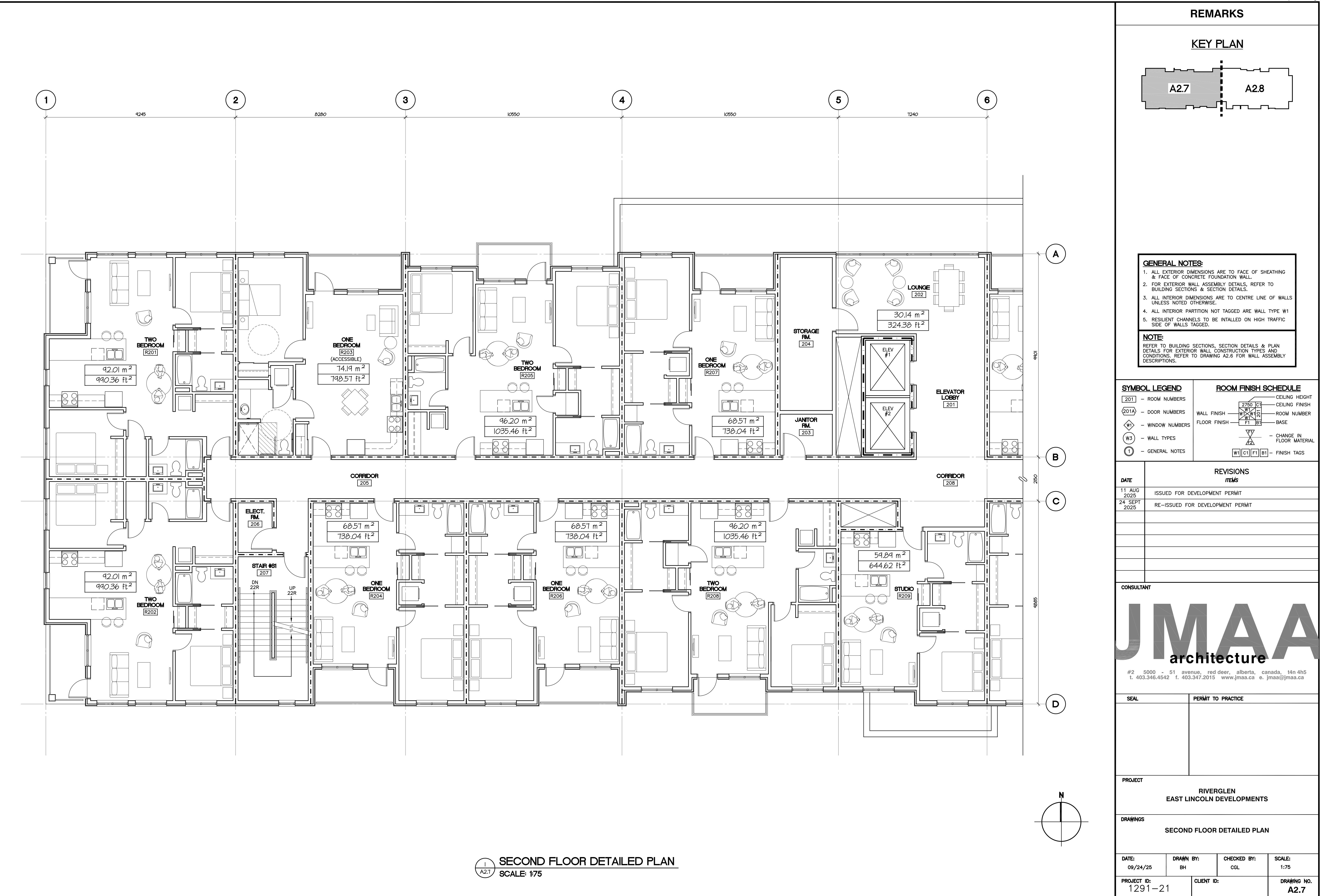
DRAWINGS

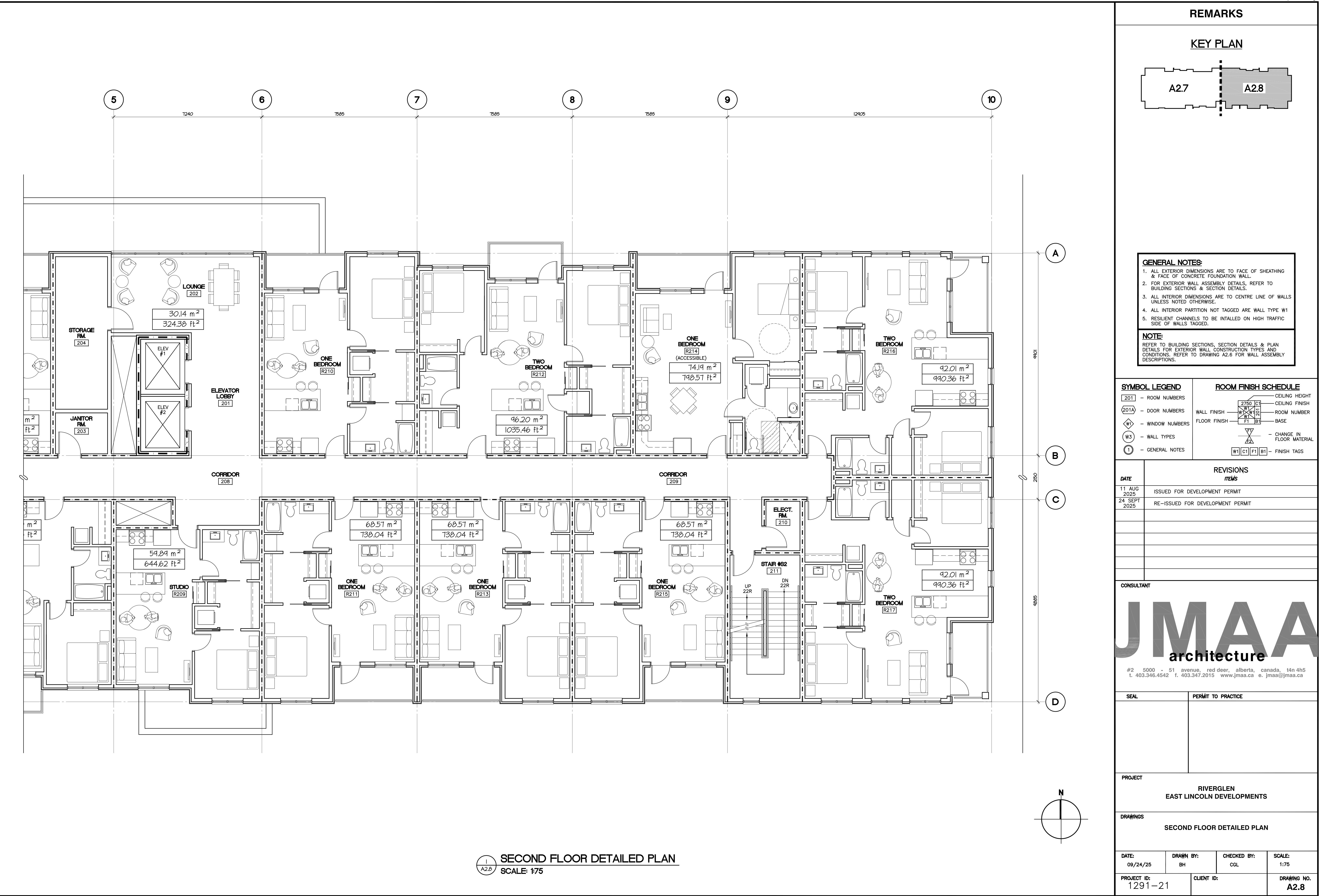
ROOF PLAN

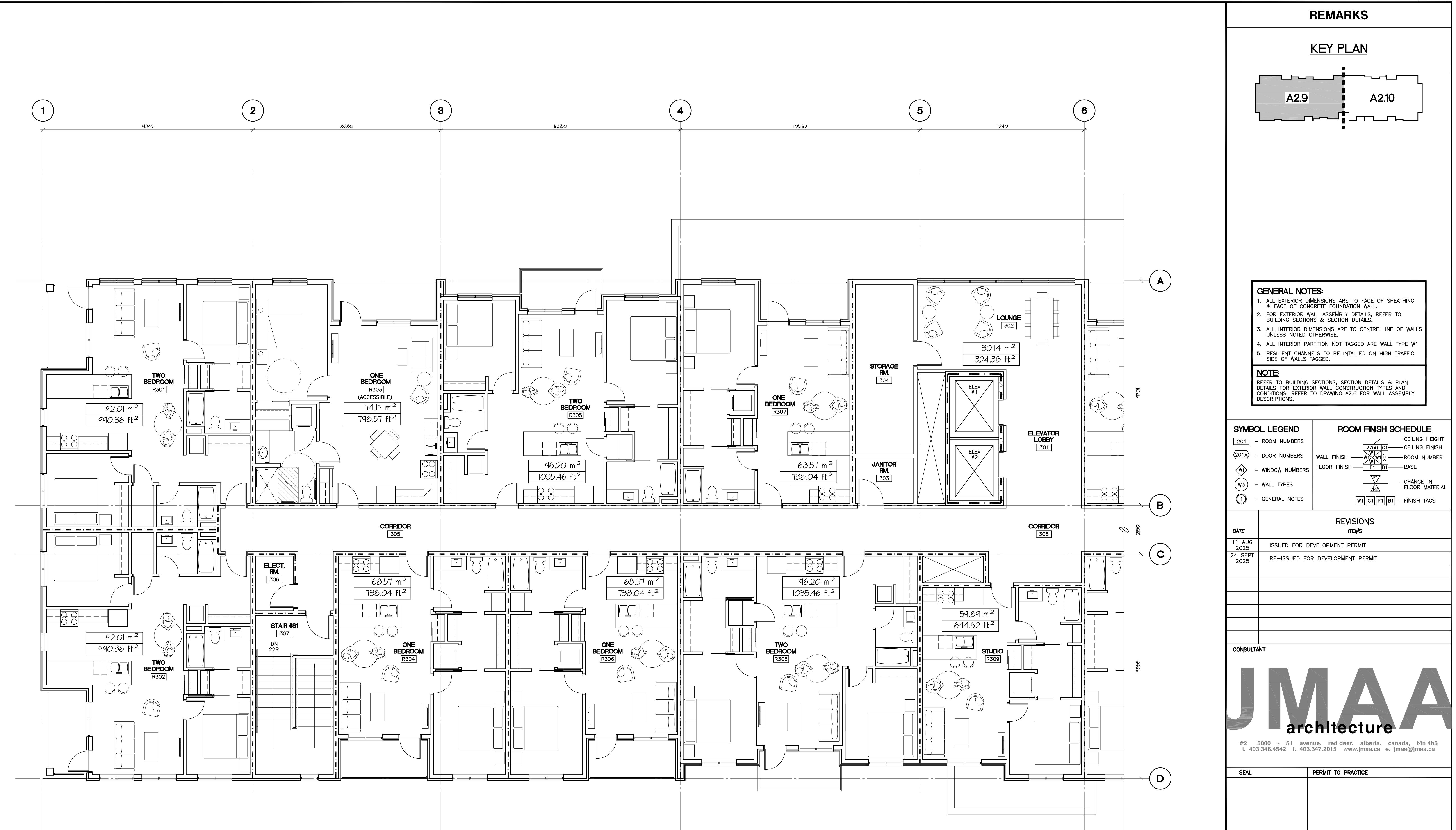
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PROJECT ID: 1291-21	CLIENT ID:	DRAWING NO. A2.4	



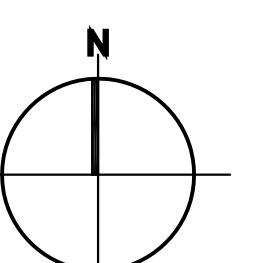






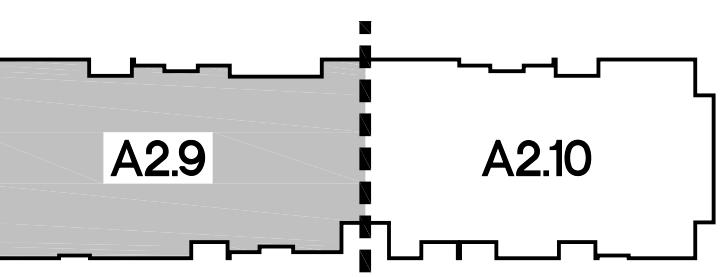


THIRD FLOOR DETAILED PLAN
SCALE: 1:75



REMARKS

KEY PLAN



INTERIOR DIMENSIONS ARE TO FA

RIOR DIMENSIONS ARE TO FACE OF SHEATHING
OF CONCRETE FOUNDATION WALL.

RIOR WALL ASSEMBLY DETAILS, REFER TO
SECTIONS & SECTION DETAILS.

RIOR DIMENSIONS ARE TO CENTRE LINE OF WALLS
NOTED OTHERWISE.

RIOR PARTITION NOT TAGGED ARE WALL TYPE W1

T CHANNELS TO BE INTALLED ON HIGH TRAFFIC
WALLS TAGGED.

Page 10

UILDING SECTIONS, SECTION DETAILS & PLAN
EXTERIOR WALL CONSTRUCTION TYPES AND
REFER TO DRAWING A2.6 FOR WALL ASSEMBLY
S.

SYMBOL LEGEND

SYMBOL LEGEND		ROOM FINISH SCHEDULE	
201	— ROOM NUMBERS		
01A	— DOOR NUMBERS		
W1	— WINDOW NUMBERS		
W3	— WALL TYPES		
1	— GENERAL NOTES		
		2750	CEILING HEIGHT
		C1	CEILING FINISH
	WALL FINISH	W1	ROOM NUMBER
		W1	
		W1	
		W1	
	FLOOR FINISH	20	
		F1	BASE
		B1	
		F1	— CHANGE IN
		F2	FLOOR MATERIAL
		W1	FINISH TAGS
		C1	
		F1	
		B1	

REVISIONS

CONSULTANT

JMA architecture

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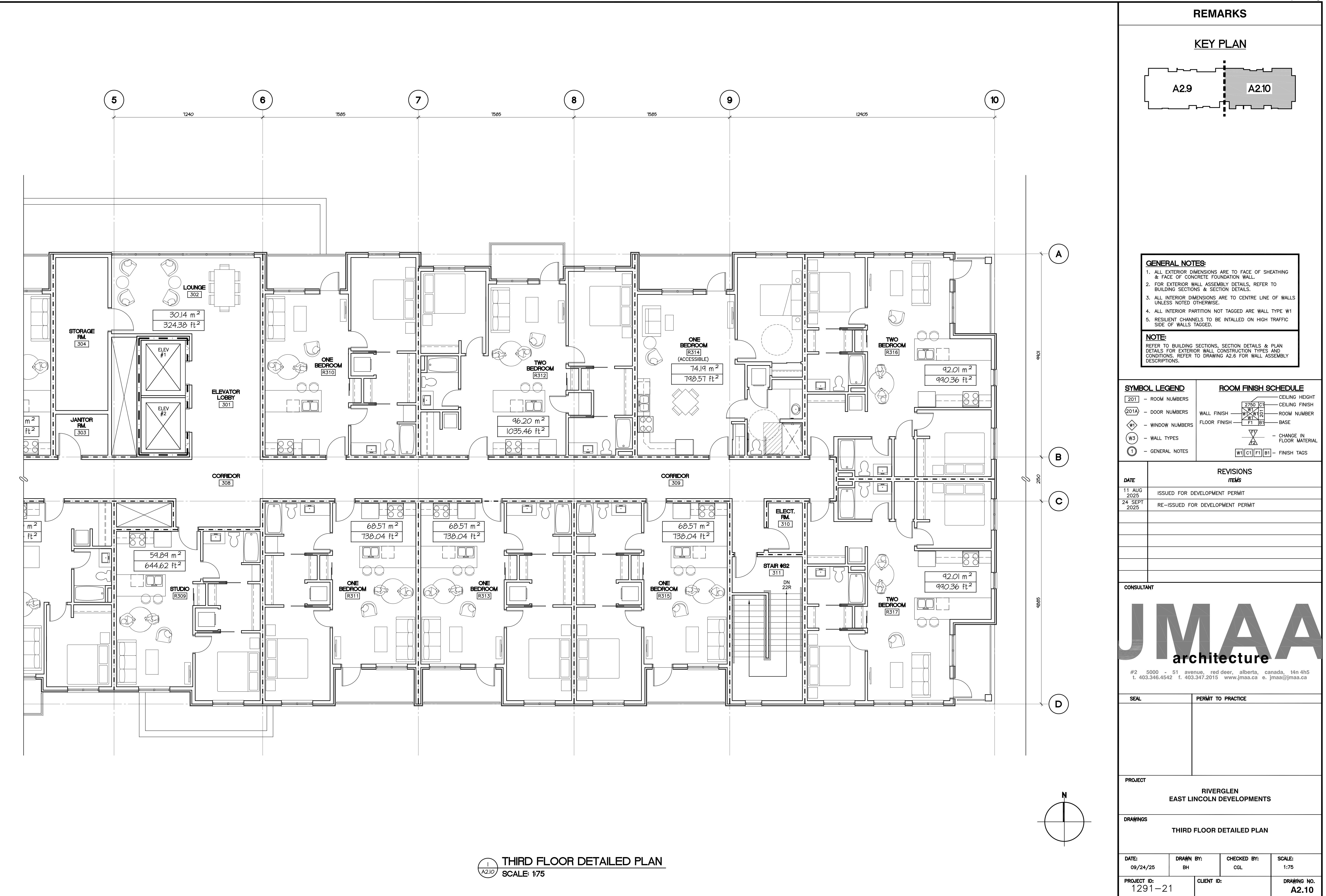
PROJECT

**RIVERGLEN
EST LINCOLN DEVELOPMENTS**

DRAWINGS

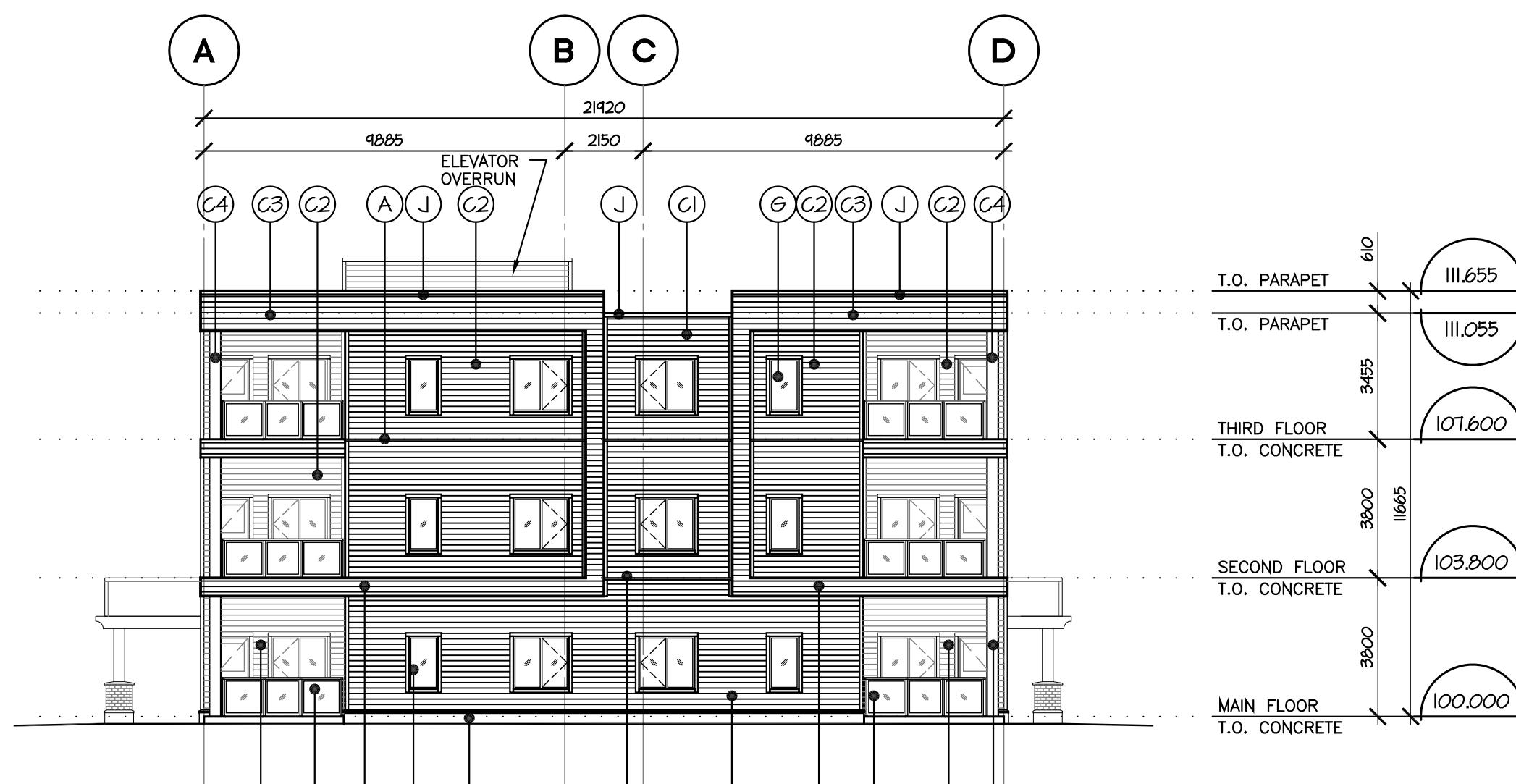
THIRD FLOOR DETAILED PLAN

DATE: 09/24/25	DRAWN BY: BH	CHECKED BY: CGL	SCALE: 1:75
PROJECT ID: 1291-21	CLIENT ID:	DRAWING NO. A2.9	

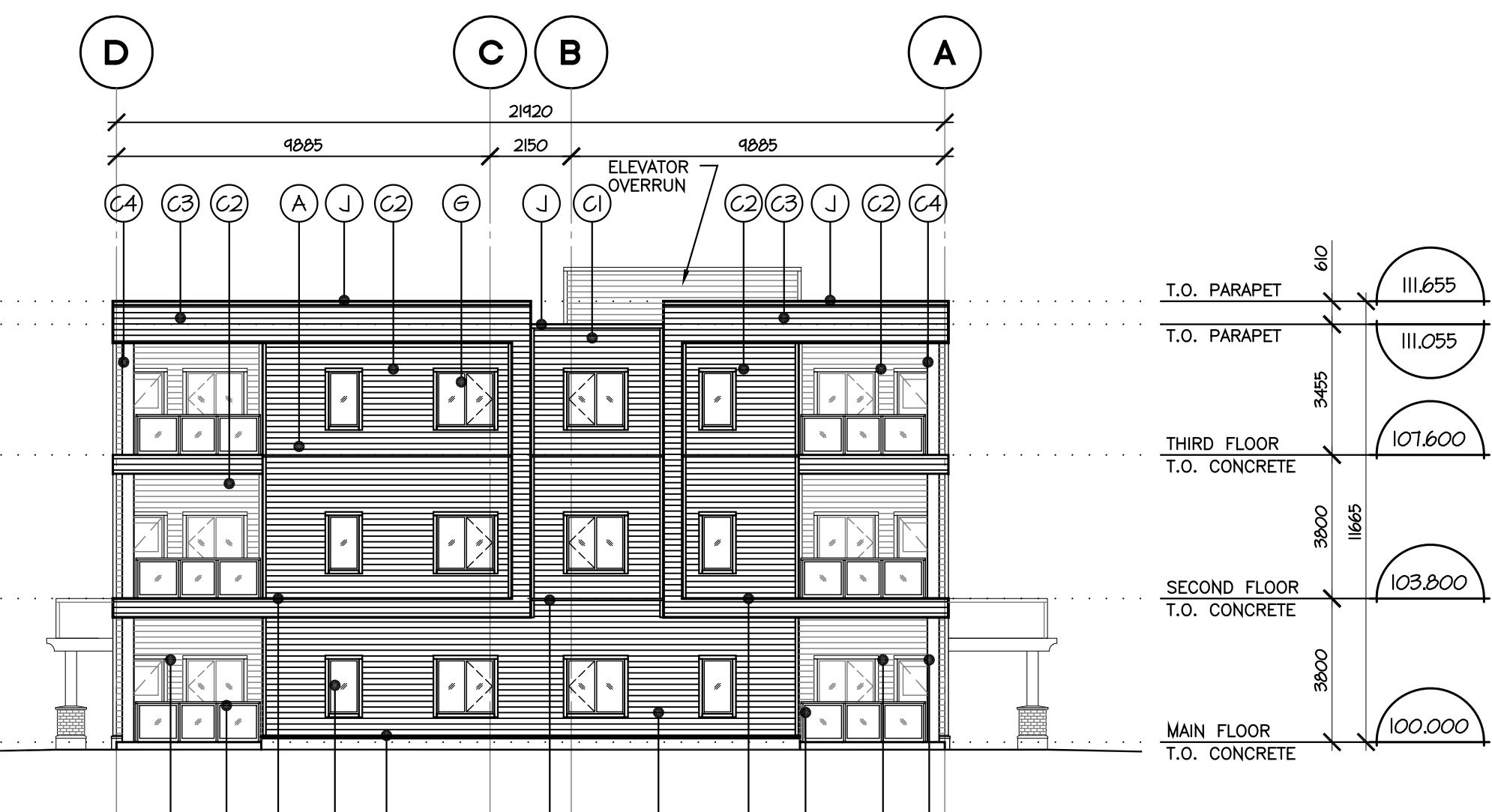




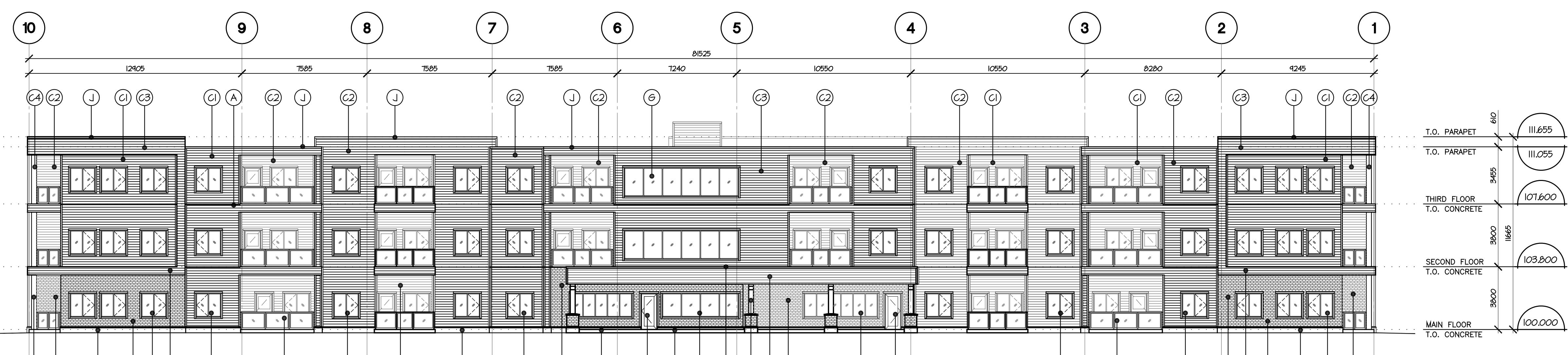
SOUTH ELEVATION
A3.1
SCALE: 1:150



WEST ELEVATION
A3.1
SCALE: 1:150



EAST ELEVATION
A3.1
SCALE: 1:150



NORTH ELEVATION
A3.1
SCALE: 1:150

REMARKS

EXTERIOR FINISH SCHEDULE

- (A) PREFINISHED METAL THRU WALL FLASHINGS
- (B) BRICK VENEER
- (C) JAMES HARDIE BOARD, C/W INTERIOR & EXTERIOR PREFABRICATED CORNER TRIMS COLOR #1
- (C) JAMES HARDIE BOARD, C/W INTERIOR & EXTERIOR PREFABRICATED CORNER TRIMS COLOR #2
- (C) METAL PLANK SIDING ACCENT CLOUR #1
- (C) METAL PLANK SIDING ACCENT CLOUR #2
- (D) ALUMINUM DECK RAILINGS - BLACK
- (E) WOOD COLUMNS / BEAMS - STAINED
- (F) HOLLOW METAL INSULATED DOORS C/W INSULATED PRESS STEEL FRAMES - PAINTED
- (G) PVC WINDOWS - WHITE
- (H) ALUMINUM ENTRY DOORS
- (I) STEEL HAND & GUARD RAILS, PRIMED & PAINTED, ALL WELDS GROUND SMOOTH
- (J) METAL CAP FLASHINGS
- (K) CONCRETE FACED INSULATED PANELS

SYMBOL LEGEND

201	- ROOM NUMBERS	ROOM FINISH SCHEDULE
201A	- DOOR NUMBERS	CEILING HEIGHT
W1	- WINDOW NUMBERS	CEILING FINISH
W3	- WALL TYPES	WALL FINISH
(I)	- GENERAL NOTES	W1 W1 F1 B1

W1 C1 F1 B1 - FINISH TAGS

REVISIONS ITEMS

DATE	ITEMS
11 AUG 2025	ISSUED FOR DEVELOPMENT PERMIT
24 SEPT 2025	RE-ISSUED FOR DEVELOPMENT PERMIT

CONSULTANT

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PROJECT

RIVERGLEN
EAST LINCOLN DEVELOPMENTS

DRAWINGS

ELEVATIONS

DATE: 09/24/25	DRAWN BY: BH	CHECKED BY: CGL	SCALE: 1:150
PROJECT ID: 1291-21	CLIENT ID:		DRAWING NO. A3.1



- Foundation and Geotechnical Engineering
- Soil Investigation and Site Assessment
- Slope Stability Reports
- Environmental Audits
- Material Testing: Soil, Asphalt, and Concrete

Condominium Development

4240 - 59 Street

Red Deer, Alberta



File No: 4240-59 Street, Red Deer

August 22, 2023



- Foundation and Geotechnical Engineering
- Soil Investigation and Site Assessment
- Slope Stability Reports
- Environmental Audits
- Material Testing: Soil, Asphalt, and Concrete

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Lateral Earth Pressure	13
Floor Slab	15
Asphalt Pavement	19
Foundation Concrete	21
Building Code Considerations	22
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Appendix	24



- Foundation and Geotechnical Engineering
- Soil Investigation and Site Assessment
- Slope Stability Reports
- Environmental Audits
- Material Testing: Soil, Asphalt, and Concrete

August 22, 2023

East Lincoln Properties
#4, 7935 Edgar Industrial Drive
Red Deer, Alberta

File #: 4240-59 Street, Red Deer

Attn: Tanya Kure

Re: Geotechnical Investigation
4240-59 Street
Red Deer, Alberta

At your request, we conducted a geotechnical investigation at the suggested residential development on July 27, 2023.

The existing site was grass covered, fairly flat with a small hill in the central portion of the east side and an abandoned baseball diamond to the southwest. The site gradient was slightly sloping from the North to the South. It is our understanding that the proposed development will consist of a four-story structure with an underground parkade to the west and along 45 Avenue. Also a three-story apartment condominium with no underground parkade but only slab-on-grade construction will be constructed along the south portion of the site by 59 Street. In addition, parking with corresponding roadways will be incorporated in the central to north and east areas of the site with a storm retention pond in the mid portion. The storm retention pond must be properly constructed to prevent any retained water seeping into surrounding structures.

The purpose of this investigation was to determine the general extent and nature of the subsurface materials encountered along with some basic engineering properties of the subsurface soil. Environmental studies are beyond the scope of this report.

Field Investigation

Nine (9) test holes were opened at this site within the site. Three holes were completed in the vicinity of the suggested four-story unit with parkade, three holes in the three storey building footprint as well as three holes in the roadway / parking areas. The test holes were opened by using a drilling rig with continuous flight augers. The approximate locations of the test holes are shown on the attached site plan (Dwg. #1).

The holes were advanced incrementally by augering approximately 1.6 meters into the ground and withdrawing soil on the auger vanes. All samples retained were carefully sealed to prevent moisture loss and subsequently taken to our Soil Mechanics Laboratory for further analysis.

Where allowable, the in-situ strength of the soil was determined in the field by conducting a series of standard penetration tests and obtaining the corresponding blow count - N values. Where cohesive materials were encountered, pocket penetrometer tests were performed.

Subsurface Features

A) Subsoil Conditions

The soil profiles, as logged at the borehole locations, are shown on drawing No.'s 2 through 10 inclusive, Appendix A. Results of field and laboratory tests are shown on the borehole logs.

The soil profile in the test hole areas consisted of a layer of topsoil overlying a fill layer, sandy silt till deposit, gravel layer as well as native clay till with a siltstone / shale stratum below. A description of the following soil types encountered should be read in conjunction with review of the borehole logs.

Topsoil / Fill

Grass covered the site at the time of our geo technical investigation. The black organic topsoil varied in thickness from 125 to 600 millimeters. In some locations about 200 to 300 millimeters of silty sand / clayey silt fill was noted mixed with topsoil, was encountered below the topsoil layer. Thicker layers of topsoil and / or fill material could be encountered across the site. They must be removed from the construction area to expose the native soil below.

Sandy Silt Till

The brown native silt till was slightly sandy, then became silty with cream mineral deposits and rusting. It appeared to be loose to firm with localized compact layers. The sandy silt till was non-plastic in nature. Isolated damp silt layers were noted at borehole #1 area. Localized sandy silt till and damp interlayers were noted at borehole #2 and #8 locales. Any silty soil or clayey soil encountered in the footing zone should be removed to expose the underlying compact to dense native gravel deposit.

Gravel

The gravel deposit was encountered below the silt till in all the borehole locations. It varied in thickness between 1.6 to 3.0 meters in the test hole #1 to #3 locales and between 0.7 to 3.0 meters in the test hole #4 to #9 locations. The gravel deposit found at different elevations consisted of mostly pitrun gravel material ranging from pebbles to large cobble sizes. It was non-plastic in nature, slightly sandy and dry in the upper region with some sloughing. As drill depth increased, the gravel deposit contained large cobbles to occasional boulders, water and sloughing was encountered as well. The gravel deposit appeared to be compact to very dense in consistency across the deposit. It can easily be disturbed during excavation and must be recompacted to 98% Standard Proctor Dry Density prior to footing construction.

It should be noted that the parkade slab elevation should be kept as high as possible above the static water table and within the gravel deposit. Also, proper drainage should be provided in and around the parkade area to prevent water seeping into the structure.

Clay Till

The dark brown to olive brown, native clay till deposit extended below the gravel and rested on the siltstone and shale bedrock stratum below. It was medium to low in plasticity, firm to very stiff in consistency in the test hole #1 to #6 locations and soft to firm in the test hole #8 and #9 locales where it was encountered at a shallower elevation. Pebbles to stones, rusting, coal and bedrock fragments and laminations of clay shale in deep elevations identified this glacial till deposit.

It must be noted that the clay till deposit could be encountered at shallower elevations as excavation continues eastward as was the case in the test hole #8 and #9 locations.

The on-site clay soil could have some potential to swell. It is imperative any clay or silty sand soil encountered within the footing zone must be removed to expose the underlying dense native gravel deposit.

Siltstone / Shale

The siltstone / shale was encountered at varied elevations in each of the boreholes. In general, it was found at depths of about 4.0 to 7.0 meters below the existing site grade and extended to the bottom of each of the #1 to #6 drilled hole locations. The siltstone / shale bedrock was weathered in the upper region. As drilled depth increased, it transformed to very dense to hard in consistency. Augering was experiencing difficulty as drilled depths increased.

Sporadic clayey silt till was encountered at the upper region of bedrock in a few locations. One should be aware that the interbedded till may contain wet interlayers / water.

B) Groundwater

Signs of underground water were detected at the time of site testing on July 27, 2023. Underground water was detected at 4.6 meters, 4.3 meters, 3.4 meters, 3.7 meters, and 3.4 meters at the test hole #1, #2, #3, #4 and #5 locations, respectively.

Slotted PVC standpipes were installed in boreholes #1, #3, #5 and #9 locations for monitoring the groundwater level. On August 2, 2023, the water table measurement was recorded and summarized in the table below based on the reference elevation.

Location	Groundwater Level Upon Completion of Drilling (mbg)	Groundwater Level Aug. 2 From Existing Site Grade (m)	Groundwater Level Aug. 14 From Existing Site Grade (m)
Hole 1	Dry	5.0	5.0
Hole 3	3.4	4.2	4.08
Hole 5	3.4	3.6	3.7
Hole 9	Dry	Dry	Dry

Mbg = Meters Below Grade

It should be noted that the water conditions were observed in a relatively short term and may not represent stabilized groundwater readings. Hence the actual groundwater condition at the time of construction could vary from those recorded during this investigation.

Recommendations**A) Footings**

- 1) Pad and pier, spread footings or strip footings are feasible for use as a foundation for the proposed addition.
- 2) All footings must be directly supported by the native, undisturbed gravel deposit. As the gravel can be easily disturbed during excavation all gravel must be re-compacted to 98% S.P.M.D.D. prior to construction of the footing and the parkade floor slab. Gravel compacted to 98% S.P.M.D.D. may be designed based on the following end bearing resistance values.

END BEARING RESISTANCE FOR FOOTINGS

Building	Soil Type	ULS (kPa)		SLS (kPa)
		Ultimate Resistance	Factored Resistance	
Phase 1 (4 Story) & Phase 2 (3 Story)	Natural Pitrun Gravel below 2.7m from existing site grade.	430	215	172

The “factored” resistance has been calculated by reducing the ultimate values above by a geotechnical resistance factor of 0.5, in accordance with the building code. The serviceability bearing resistance value given above is based on limiting the settlement to less than 25mm and is applicable to footings to a maximum dimension of 1.2m wide or 1.5m x 1.5m.

- 3) With regards to the native gravel deposit being encountered at varied elevations and potential disturbed or on-site fill material that could be detected within the footing zone, over-excavation to expose the underlying dense natural pitrun gravel deposit is required.

Any over-excavated areas should be backfilled with gravel and properly compacted in 250 millimeter lifts to at least 98% Standard Proctor Maximum Dry Density. Compaction tests should be taken during backfill operations to verify the degree of compaction achieved and if any additional compaction is warranted.

- 4) The bearing surface of each footing base should be excavated in a manner as to minimize disturbance of the natural subgrade soil. Foundation bearing surfaces must be trimmed of all loose soil, lumps and / or softened soil.
- 5) All footing soil must be inspected by our personnel to ensure the recommended soil bearing capacity can be achieved prior to concrete placement.

- 6) If construction is carried out during the winter, the foundation excavation must be protected against snow / ice accumulation freezing of the subsoil at the footing grade. Under no circumstances shall concrete be placed on frozen soil.
- 7) Footing beneath exterior walls of heated portions of the building should have a minimum of 1.6 meters of soil cover, while footings in any unheated areas should have at least 2.3 meters of soil cover.
- 8) All side slopes of temporary excavations must be properly designed and adequately braced or cutback to conform to the Occupational Health & Safety Regulations, and to prevent any undermining of neighboring properties and structures.
- 9) Adequate subsurface drainage must be installed to prevent any potential water seepage into the basement from surface and all subsurface locations. This includes all fill locations, utility service trenches possible spring areas and / or varying water table elevations / locations, etc.
- 10) Site classification for seismic site response is E for this specific site.

B) Driven Steel Piles

By virtue of our findings at the deeper test hole locations, driven steel pipe piles or H piles can be used for the support of structural loads. The driven steel piles may be designed as end bearing piles. All end bearing piles must be driven to practical refusal in the very dense to hard siltstone / shale bedrock material.

- 1) All piles should be embedded at least two meters or more into the bedrock. For piles driven to practical refusal into the bedrock and achieving the minimum required embedment depth, the factored ULS end bearing resistance may be determined by multiplying the cross-sectional area of the pile at the tip by 0.35 F_y . F_y is the yield strength of the steel. The maximum permissible value of F_y should be supplied by the manufacturer.
- 2) All open-ended steel pipe piles or H piles must be driven to practical refusal under an imparted energy of 32,600 Joules. For preliminary design, practical refusal criteria can be taken as 8 blows per 25 millimeters over the last 150 millimeters. Our representative will determine the actual refusal criteria required during pile driving operations, when the pile, weight, driving energy, pile details and load carrying capacities are determined / known.
- 3) Practical pile refusal depths are roughly estimated in the upper regions of the siltstone /shale strata and will vary at different pile locations across the site. Test piles should be installed to ensure the steel piles can be driven to the required depths due to changes in siltstone / shale elevations and varying soil deposits encountered in the test hole locations. As hard driving is anticipated, thicker pile walls / larger pile cross sections should be contemplated.

In the event that premature refusal of the piles is met due to encountering very dense material, cobbles or boulders above the target depth, the pile records should be reviewed by the geotechnical and structural engineer to determine if the piles have adequate capacities in compression and uplift. Additional piles might be required.

- 4) If open ended steel pipe piles are used, it is suggested to fill the piles with concrete after installation. Concrete filling of open pipe will add strength to the section, reduce the corrosion potential inside the pipe and help facilitate pile cap connections. Corrosion of the pipe in a partially saturated medium must be considered in selecting wall thickness.
- 5) The minimum allowable pile spacing should be taken as three pile diameters. Where groups of piles are to be installed, the piles should be installed at the center with outer piles installed last. The elevations of the tops of the piles that are already installed should be monitored as adjacent piles are driven in order to determine if heaving of the piles already installed has occurred. Piles that have heaved must be re-driven. Heave of adjacent piles is a concern for close pile spacing and should be monitored throughout the driving. All piles indicating heave of greater than about 5 millimeters should be re-driven to at least the original embedment depths.

- 6) All piles should be checked for plumbness and potential damage due to driving at the end of installation. An out-of-plumb tolerance of two percent is typically specified for driven steel piles. Care will be required in the set-up and driving of the piles to meet these objectives.
- 7) Pile driving may result in significant vibrations which may be unacceptable for adjacent structures. In areas where this is a concern, continuous monitoring of vibrations induced in adjacent structures is recommended in order to assess potential damage and the need for modification of procedures. A detailed damage survey of nearby structures is recommended prior to pile driving,
- 8) If driven piles are installed in frozen ground, the zone of frost should be pre-drilled. Predrilling pilot holes should be no greater than 75 percent of the pile diameter.
- 9) Frost heave forces will also act on the underside of pile caps and grade beams. An upward heaving pressure in the order of 1000 kPa or greater could be encountered. The potential of frost heaving forces can be greatly reduced by the placement of compressible material or by providing a void of at least 100 millimeters between the underside of the concrete cap or grade beam and soil.
- 10) The finished grade adjacent to foundation walls should be properly sloped away to prevent the surface runoff from infiltrating and collecting in the void space or in the compressible medium.

If water is allowed to accumulate in the void space or the compressible medium becomes saturated, frost heaving pressures will become evident.

- 11) The steel pipes should be inspected prior to installation to confirm that the appropriate material specifications are satisfied and to check that no protrusions on the shaft of at the pile tip exist that could result in voids along the shaft as the pile is driven.
- 12) In the pile design, a structural engineer should be consulted to ensure that the foundation is adequate to support the vertical, horizontal and dynamic loading.
- 13) Site classification for seismic site response for the subject property is E.

14) In accordance with the Alberta Building Code, full time inspection by our geotechnical personnel is necessitated to confirm that piles are installed in accordance with design assumptions and that the and that the driving criteria to reach load carry capacities are satisfied. A complete driving record of blows per 300 millimeters of penetration for each pile should be obtained and reviewed by the pile designer.

C) Lateral Earth Pressure

- 1) Lateral earth pressures will act on foundation walls, retaining structures and temporary trench bracing (if used) at this site. The lateral pressures are dependent on the soil type behind the wall, the wall orientation, exposure to frost action, the slope of the backfill away from the wall, and compaction effort used.
- 2) For the general case of a permanent vertical wall with horizontal backfill, lateral earth pressures may be computed using the following equation:

$$P = KQ + KrH$$

Where:

P = Lateral earth pressure at depth H below ground level (KPa)

Q = Surcharge loading at the ground surface (KPa.)

K = Coefficient of lateral earth pressure

r = Total unit weight of soil backfill compacted to at least 95 % Standard Proctor Maximum Dry Density (KN/m³)

H = depth below ground level (meters)

- 3) Recommended designed values for these parameters will depend on the type of backfill used.

Recommended designed values are given below:

Lateral Earth Pressure Parameter		
Type of Backfill	Total Unit Weight (KN/m³)	Coefficient of Lateral Earth Pressure K
Clay	20	0.6
Free draining granular material	22	0.4

The values given above are for backfill compacted to 95 % Standard Proctor Maximum Dry Density. If the density of the backfill is increased, the lateral pressures acting on the wall should be reviewed.

The preceding relationship makes no allowance for hydrostatic pressures to build up behind the wall because a weeping drain system is expected to be in place. If a perimeter drain system is not installed, the earth pressures acting on the wall should be reviewed to include expected hydrostatic forces.

The following should also be considered in the wall design:

- 1) All side slopes of temporary excavations must be braced or cut back to conform with the Occupational Health and Safety Regulations
- 2) All backfill material placed against and along the wall perimeters should be moderately compacted to 92 % Standard Proctor Maximum Dry Density. Care must be exercised during compaction to prevent any damage of foundation walls. Compaction tests should be conducted to confirm the percentage of compaction achieved.
- 3) Applicable surcharge and hydrostatic loading should be considered in the foundation or retaining wall design.
- 4) It is imperative that steps be taken to prevent any water that infiltrates the backfill soil from accumulating behind the wall. If water is allowed to permeate the soil behind the wall, large additional pressures will be applied to the wall. Therefore, proper site grading must be provided to shed all surface water from the underground structure area. Preferably, backfill soil can be free draining granular material placed against the retaining walls and above the weeping drainpipes.
- 5) The finished backfill soil should be covered with a protective apron at least 300 millimeters wider than the backfill soil area. The intent of the perimeter protective apron is to intercept excess surface soil moisture which would cause backfill soil saturation and swelling. The apron will also shield the foundation soil from evaporation which would lead to desiccation and differential movement.

This protective apron can be of any durable paving material, concrete, asphalt or flagstone. The protective perimeter aprons must be properly graded to direct all surface water away from the foundation and retaining walls.

D) Floor Slab**a) Phase 1 (Parkade Slab)**

Grade-supported floor slabs may be considered by utilizing support from gravel and properly prepared subgrade soil. Proper preparation of subgrade soil includes the following.

- 1) Remove any soft soil / large boulders to expose the underlying native pitrun gravel.
- 2) It is advisable the parkade slab should be maintained as high as possible above the static groundwater level.
- 3) When over-excavation is complete, the exposed over-excavation bottom must be inspected by our personnel for approval. The exposed approved subgrade, free of organic material / debris, must then be compacted to 98% (S.P.M.D.D.) to support the radon rock.
- 4) In bringing the underside of slab to design grade, granular material can be used. The crushed gravel / radon rock should be compacted in 150-millimeter lifts. Each lift should be compacted to at least 98% (S.P.M.D.D.). Compaction tests must be conducted to verify soil compaction achieved and if any additional compaction is warranted.
- 5) Groundwater can potentially flow towards the underground parkade slab and the ramp slab areas. Proper dewatering and permanent measures should be provided to eliminate potential groundwater seeping beneath the underground parkade slab, and the ramp slab.
- 6) Any potential of groundwater pressure building up in the gravel below the ramp, parkade slab, and against the basement walls needs to be addressed. Groundwater levels in this site could potentially fluctuate as high as 1.0 meter above the recorded groundwater elevation. High groundwater fluctuation will likely occur during extreme periods of prolonged and heavy precipitation or snowmelt, etc.
- 7) Properly designed interior subfloor lateral drains are prudent to assist the drainage of granular materials below the floor slabs. The subfloor drainage system should be installed at an elevation below the floor slab or at the base of the footing. The rigid perforated pipes beneath the parkade slab should drain towards the interior sumps at a cross fall of at least one percent grade from which it should be pumped well away from the building.
- 8) Full water-proofing or tanking the underground parkade is advised. This will require installation of water stops between the walls and footing connections, waterproofing all the foundation walls, and provision of adequate subfloor drainage system beneath the parkade and ramp slab to resist seepage and buoyant forces.

- 9) All slab subgrade soil and granular fill material must be permanently protected from freezing, snow, excessive drying, rain and the ingress of free water, during and after the construction period to prevent any foundation movement.
- 10) Underground utilities and pipes etc. should be properly designed and supported to prevent any differential movement and damage.
- 11) The above recommendations are for a continuously heated building with light floor loading.

b) Phase 2 (Slab-on-grade Construction – with no parkade)

Grade-supported floor slabs may be considered by utilizing support from gravel and properly prepared subgrade soil. Proper preparation of subgrade soil includes the following.

- 1) Remove any organics, fill material, soft / dry soil to expose the underlying native sandy silt till deposit.
- 2) When over-excavation is complete, the exposed over-excavation bottom must be inspected by our personnel for approval. The exposed approved subgrade, free of organic material / debris, must then be proof rolled to 98% (S.P.M.D.D.) to support the inorganic crushed gravel / radon rock compactable to the specified 98% Standard Proctor Maximum Dry Density. Any soft areas detected must be removed and replaced with granular material compacted to 98% S.P.M.D.D.
- 3) In bringing the underside of slab to design grade, granular material can be used. An initial lift of 200 millimeters could be required in soft areas. Each lift should be compacted to not less than 98% Standard Proctor Maximum Dry Density. Compaction tests must be conducted to verify soil compaction achieved and if any additional compaction is warranted.
- 4) All slabs must be directly supported by at least a 200-millimeter-thick layer of radon rock as required. The gravel must be compacted to at least 98% S.P.M.D.D.
- 5) All slab subgrade soil and granular fill material must be permanently protected from snow, excessive drying, rain, and the ingress of free water, during and after the construction period to prevent any foundation movement.
- 6) Underground utilities and pipes etc. should be properly designed and supported to prevent any differential movement and damage.
- 7) The above recommendations are for a continuously heated building with light floor loading.

d) Parkade Ramp

With respect to the construction of the depressed ramps, the following recommendations should be followed to promote drainage and to reduce the potential for frost action below the ramp.

- 1) It is recommended that rigid insulation (Styrofoam SM or equivalent) be placed vertically along the sides of the retaining walls to reduce the depth of frost penetration.
- 2) Rigid insulation should also be placed horizontally below the ramp slab to reduce potential frost penetration.
- 3) Measured groundwater levels at this site are expected to fluctuate and rise higher. This high groundwater fluctuation could occur during periods of prolonged and extreme precipitation, snow melt and / or flooding, etc. Proper measures should be provided to prevent groundwater rising up and getting trapped beneath the ramp slab.
- 4) A drain (catch basin) should be properly designed and installed at the lowest point of the ramp area to collect and remove surface water and underground water collected beneath the granular layer located below the ramp slab.
- 5) Heat tracing must be provided to reduce the risk of the drain icing up during freezing conditions.
- 6) Heating coils embedded in the concrete slab should be considered to reduce icing of the ramp slab.

E) Asphalt Pavement

The following asphalt pavement structures based on the test hole information is proposed. The following procedures are recommended.

- 1) Remove all organic soil, deleterious material within the paved road and parking lot areas to expose the underlying inorganic fill and /or native soil.
- 2) Amid site stripping and over-excavation, our personnel should be on-site to examine the exposed excavated soil.
- 3) When over-excavation is complete, the bottom of the exposed over-excavation must be re-inspected by our personnel for approval. The exposed approved subgrade, free of organic material, must then be compacted with heavy vibratory equipment to a minimum compaction of 95% Standard Proctor Maximum Dry Density is required.
- 4) Compaction tests must be conducted to verify compaction of the over-excavated bottom. Any soft/organic subgrade soil encountered must be sub-excavated and replaced with pitrun gravel compacted to 95% Standard Proctor Maximum Dry Density.
- 5) In raising the asphalt pavement to higher elevation, free draining pitrun gravel approved by our personnel can be used. The free draining pitrun gravel, or approved inorganic on-site fill material placed in 200-millimeter lifts must be compacted to not less than 95% Standard Proctor Maximum Dry Density.
- 6) After subgrade preparation work has been completed and compaction tests have been conducted, the following proposed flexible asphalt pavement sections can be constructed.

Car and Light Truck Traffic	
Design Traffic (ESAL)	1×10^5
Compacted hot asphalt	75 mm
Compacted base gravel	100 mm
Compacted pitrun gravel	250 mm

Heavy Truck Traffic	
Design Traffic (ESAL)	5×10^5
Compacted hot asphalt	100 mm
Compacted base gravel	100 mm
Compacted pitrun gravel	400 mm

The thickness of the subbase given above is considered to be the minimum requirement assuming no subgrade improvement is required. If required, the thickened granular layer used for subgrade improvement, and the subbase layer can be placed together. Increasing the thickness of the sub-base layer will provide support for construction traffic and paving activities.

- 7) All gravel has to be compacted to not less than 98% Standard Proctor Maximum Dry Density.

7) All gravel supporting the asphalt pavement has to be compacted to not less than 98% Standard Proctor Maximum Dry Density. Likewise, the hot asphalt has to be compacted to a minimum of 96% Marshall Density (75 blows each face).

8) The proposed pavement design sections are based on the assumption that the pavement will be constructed on a stable, prepared subgrade with a California Bearing Ratio of 4.0. This is indicative of a relatively low level of subgrade support as expected during spring thaw when subgrade soils will exist in a weakened condition. As previously discussed, subgrade problems may be encountered depending on local weather and groundwater conditions at the time of construction. If soft subgrade conditions are encountered, it is assumed that the subgrade will be improved with coarse gravel to support construction traffic and paving activities.

ASPHALTIC CONCRETE

Stability (KN minimum)	8.5
Flow (mm)	2-4
Air Voids (percent)	3-5
VMA (minimum percent)	14.5
Asphalt (penetration grade)	150-200 (A)

9) Aggregate materials for base and sub-base gravel should be composed of sound, hard, durable particles free from organic and other foreign material.

RECOMMENDED AGGREGATE SPECIFICATIONS

	ATU Specifications
Asphalt Gravel	Designation 1, Class 12.5
Crushed Base Gravel	Designation 2, Class 20
Sub-base Gravel	Designation 6, Class 80

10) Copies of these ATU aggregate specifications is provided in Appendix A. Based on availability of local materials at the time of tendering or construction, other materials could be considered upon review by the geotechnical engineer.

11) The road surface should be sloped and graded to remove all surface water as rapidly as possible. To minimize the occurrence of surface water ponding on the roadway, finished surface grades and cross slopes in the order of 2% are recommended. Allowing water to pond on the pavement surface will lead to infiltration of water into the subgrade which could result in weakening of the subgrade soils and damaging of asphalt pavement.

F) Foundation Concrete

Considering the subsoil conditions at the site, the soluble sulphate test results from soil samples retrieved at borehole #1, #2 and #5 locations indicated a water-soluble concentration between 0.035 to 0.038%. In accordance with current CSA standards, the degree of sulphate exposure may be considered negligible, and the use of sulphate resistant hydraulic cement is not required for concrete in contact with local soil. It is advisable that water-soluble sulphate concentration tests should be completed on any imported fill to verify the sulphate resistant requirements for concrete elements in contact with fill material.

Concrete elements exposed to de-icing salts or other substances containing chlorides should be designed in accordance with an exposed concrete classification pertaining to concrete exposed to chloride attack. As well, subsurface concrete could be subject in seasonal saturated conditions. Air-entrainment should be provided in all concrete exposed to freeze-thaw cycles to enhance its durability. In accordance with clause 4.1.1.1 of CSA A23.1-19, where more than one exposure condition applies to concrete elements, the concrete shall be designed to meet the highest specified 28-day compressive strength, the lowest water to cementing materials ratio, the highest range in air content, and the most stringent cement type requirement.

It should be recognized that there may be structural and other considerations which may necessitate additional requirements for concrete mix design.

G) Alberta Building Code Considerations

In accordance with the Alberta Building Code, the construction of all foundations (inclusive of all piles and shallow foundations) should be monitored by our representative under the direction of a qualified geotechnical engineer, to verify the subsurface conditions and to conform construction procedures are implemented as recommended in this report.

The engineering design recommendations presented in this report are based on the assumption that an adequate level of inspection will be provided during construction and that all construction will be conducted by a qualified contractor that is experienced in foundation and earthwork construction.

An adequate level of inspection is considered to be:

- For footing foundation:
 - confirm soil bearing capacity by our personnel as recommended in the geotechnical report.
- For pile foundation:
 - verify the soil bearing strength and to document the installation and configuration of each pile by our representative.
- For earthworks:
 - full-time monitoring and soil compaction testing.
- For concrete construction:
 - testing of plastic / hardened concrete, mortar, and grout.
- For asphalt pavement:
 - testing of asphalt qualities and asphalt compaction.

Smith Dow & Associates Limited provides services required for Schedules A, B and C - B of the Alberta Building Code.

It should be noted that the Alberta Building Code Letters of Assurance Schedule B, and subsequently Schedule C - B, can only be signed and submitted by Smith Dow & Associates Limited if our firm is retained to undertake field reviews and field testing (inclusive of soil compaction testing, concrete testing, mortar testing, asphalt testing, etc.) as are warranted for this project and if satisfactory completion of all geotechnical aspects of construction is satisfied by Smith Dow & Associates Limited.

Closure

The report reflects the base judgement of Smith Dow & Associates Ltd. considering the information available at the time of preparation which was based on the amount and locations of the test holes drilled and subsequent soil samples that were retrieved. Although caution was taken in gathering the information therein, the results obtained are only advisory for the use of our client. Should conditions encountered during construction appear to be different from those shown by the test holes, this office should be notified immediately in order that we may reassess our recommendations based on the new findings.

Foundation inspections and verification of soil compaction must be performed as recommended in this report. A contingency amount should be included in the construction budget to allow for the possibility of variation in soil conditions which may result in modification of the design and/or changes in construction procedures.

This report has been prepared for the exclusive use of East Lincoln Properties, #4, 7935 Edgar Industrial Drive, Red Deer, Alberta and their agents for specified application to the proposed development at 4240 – 59 Street, Red Deer, Alberta. It has been prepared in accordance with generally accepted soil and foundation engineering practices. This report is for advisory purposes only. No other warranty, expressed or implied, is made.

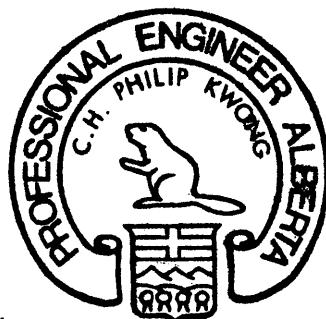
Any use which a third party makes of this report, or any reliance on or decisions to be made on it, are the responsibility of such third parties. Smith Dow & Associates Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions taken based on this report.

Regards,

Smith Dow and Associates Ltd. (Red Deer)



Philip Kwong (P. Eng.)

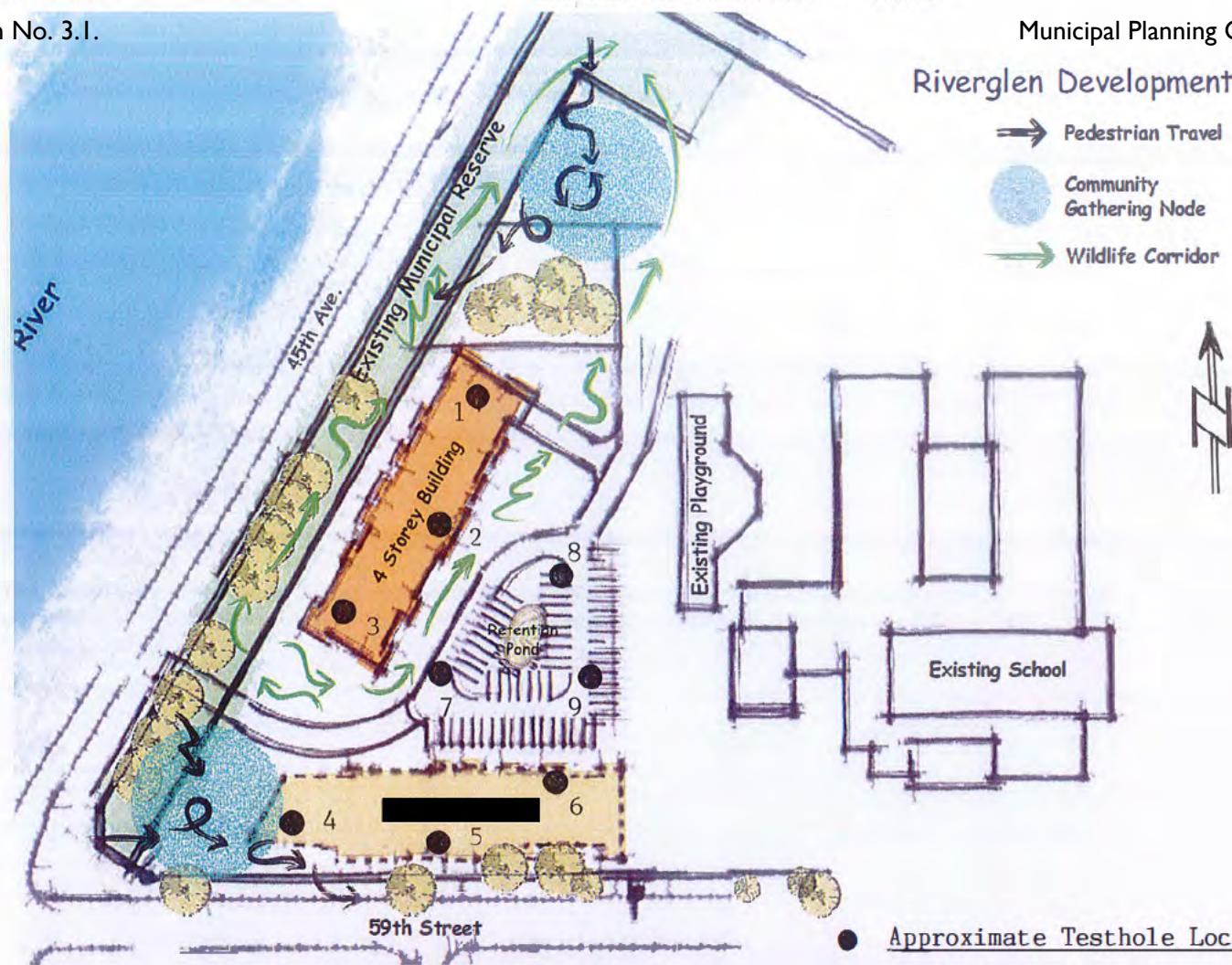


APPENDIX - A

Item No. 3.1.

Municipal Planning Commission
Page 72

Riverglen Development





SMITH DOW & ASSOCIATES LTD.
-----Engineering Consultants-----

**Project: Proposed Condominium Dev.
4240 - 59 Street
Red Deer, Alberta**

	FILL
	TOPSOIL
	SAND
	SILT

	CLAY
	PEAT
	GRAVEL
	SILTSTONE

TILL	Q - Unconfirmed Strength, kN/m ²
COAL	d - Dry Unit Weight, kN/m ³
WATER	S - Sulphate Concentration, %
LIMITS	N - Penetration Resistance, blows

Tube	/
Penetrometer	X
No Recovery	

TEST HOLE LOG AND LAB DATA

DWG # 2



SMITH DOW & ASSOCIATES LTD.
-----Engineering Consultants-----

**Project: Proposed Condominium Dev.
4240 - 59 Street
Red Deer, Alberta**

	FILL
	TOPSOIL
	SAND
	SILT

	CLAY
	PEAT
	GRAVEL
	SILTSTONE

	TILL	Q - Unconfirmed Strength, kN/m ²
	COAL	d - Dry Unit Weight, kN/m ³
	WATER	S - Sulphate Concentration, %
	LIMITS	N - Penetration Resistance, blows

Tube	/
Penetrometer	X
No Recovery	

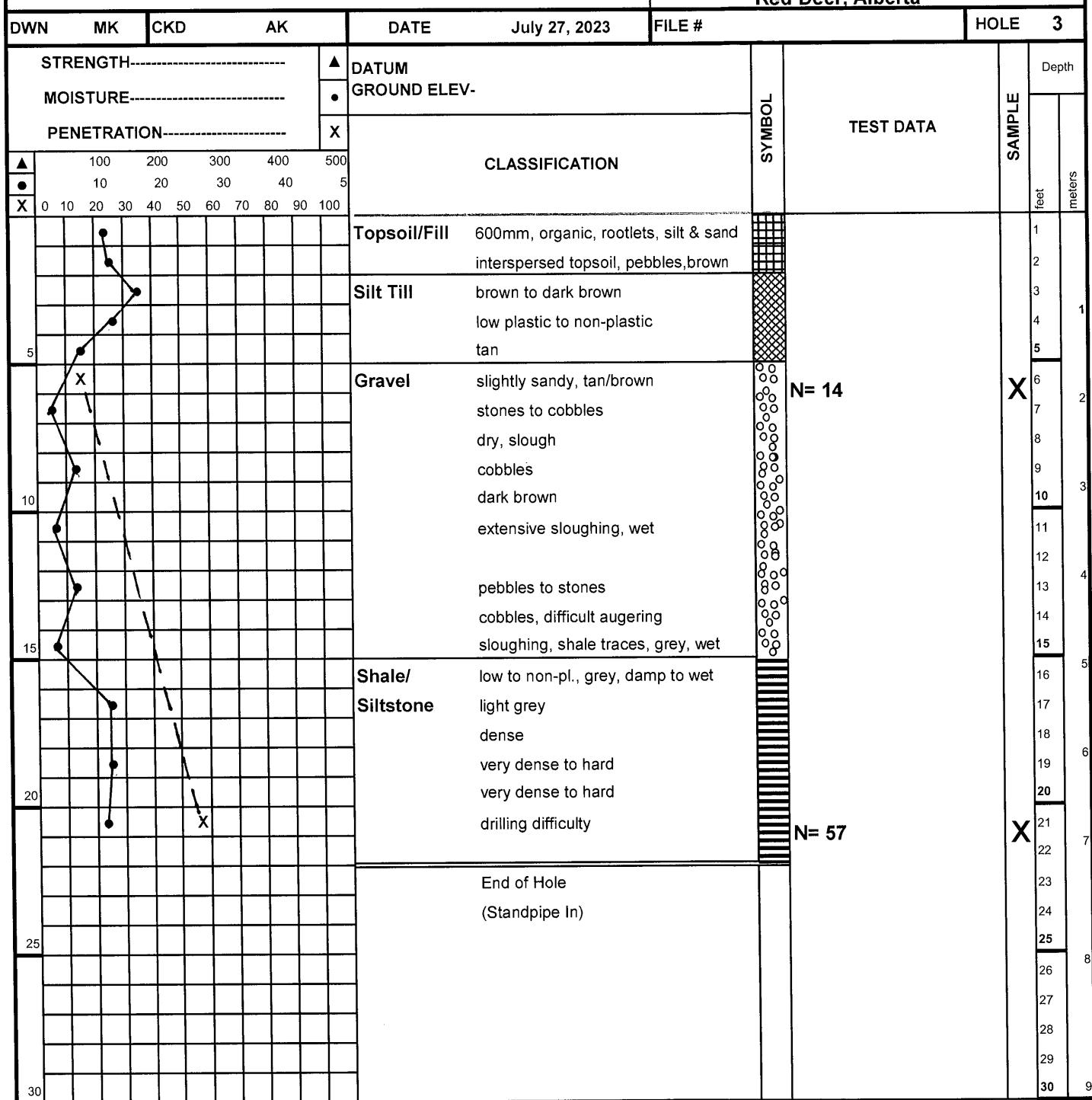
TEST HOLE LOG AND LAB DATA

DWG # 3



SMITH DOW & ASSOCIATES LTD.
-----Engineering Consultants-----

Project: Proposed Condominium Dev.
4240 - 59 Street
Red Deer, Alberta



FILL
TOPSOIL
SAND
SILT

CLAY
PEAT
GRAVEL
SILTSTONE

TILL	Q - Unconfirmed Strength, kN/m ²
COAL	d - Dry Unit Weight, kN/m ³
▲ WATER	S - Sulphate Concentration, %
↔ LIMITS	N - Penetration Resistance, blows

Tube	/
Penetrometer	X
No Recovery	

TEST HOLE LOG AND LAB DATA

DWG # 4



SMITH DOW & ASSOCIATES LTD.
-----Engineering Consultants-----

**Project: Proposed Condominium Dev.
4240 - 59 Street
Red Deer, Alberta**

	FILL
	TOPSOIL
	SAND
	SILT

CLAY
PEAT
0-0 0-0
GRAVEL
SILTSTONE

 TILL	Q - Unconfirmed Strength, kN/m ²
COAL	d - Dry Unit Weight, kN/m ³
 WATER	S - Sulphate Concentration, %
 LIMITS	N - Penetration Resistance, blows

Tube	/
Penetrometer	X
No Recovery	

TEST HOLE LOG AND LAB DATA

DWG # 5



SMITH DOW & ASSOCIATES LTD.
-----Engineering Consultants-----

**Project: Proposed Condominium Dev.
4240 - 59 Street
Red Deer, Alberta**

	FILL
	TOPSOIL
	SAND
	SILT

TILL	Q - Unconfirmed Strength, kN/m ²
COAL	d - Dry Unit Weight, kN/m ³
WATER	S - Sulphate Concentration, %
LIMITS	N - Penetration Resistance, blows

Tube	/
Penetrometer	X
No Recovery	

TEST HOLE LOG AND LAB DATA

DWG # 6



SMITH DOW & ASSOCIATES LTD.
-----Engineering Consultants-----

**Project: Proposed Condominium Dev.
4240 - 59 Street
Red Deer, Alberta**

Red Deer, Alberta

DWN	MK	CKD	AK	DATE	July 27, 2023	FILE #	HOLE	6					
STRENGTH-----				▲	DATUM		TEST DATA	Depth					
MOISTURE-----				●	GROUND ELEV-								
PENETRATION-----				X									
▲	100	200	300	400	500	CLASSIFICATION		SAMPLE					
●	10	20	30	40	5								
X	0	10	20	30	40	50	60	70	80	90	100	feet	meters
5	Topsoil/Grass sand fill concrete /debris @ 450mm											1	2
10	Sandy Silt Till cream mineral deposit, dark brown low plastic, stiff to firm, pebbles slightly sandy, coal specks											3	4
15	Gravel tan/brown, dry sloughing, pitrun gravel cobbles to stones non-plastic brown											5	6
20	Clay Till olive bedrock frag's & rusting golden brown to olive, very stiff											7	8
25	Siltstone/ Shale light blueish grey dense to very dense medium grey very dense augering difficulty darker grey, very hard hard, siltstone laminated, carbonaceous traces siltstone											10	11
30	End of Hole (Standpipe In)											12	13

The figure is a soil profile log. The left side shows a vertical profile from 0 to 30 meters, with horizontal lines at 5, 10, 15, 20, 25, and 30 meters. On the left, there are three rows of symbols: a triangle for strength, a circle for moisture, and an 'X' for penetration. A grid is overlaid on the profile. The right side contains a table with soil descriptions and N-values. The first layer is Topsoil/Grass sand fill with concrete/debris at 450mm. The second layer is Sandy Silt Till with a cream mineral deposit, dark brown, low plastic, and pebbles. The third layer is Gravel with tan/brown, dry soil, sloughing, pitrun gravel, cobbles to stones, non-plastic, and brown soil. The fourth layer is Clay Till with olive bedrock frag's & rusting, golden brown to olive, and very stiff soil. The fifth layer is Siltstone/Shale with light blueish grey, dense to very dense, medium grey, very dense, augering difficulty, darker grey, very hard, hard, siltstone, laminated, carbonaceous traces, and siltstone. The N-values are 7, 30, and 66. The table also includes columns for depth in feet and meters.

	FILL
	TOPSOIL
	SAND
	SILT

A geological key consisting of four entries, each with a unique symbol in a square followed by the word in capital letters. The symbols are: a diagonal hatching for CLAY, a cross-hatching for PEAT, a circle with a cross inside for GRAVEL, and horizontal lines for SILTSTONE.

 TILL	Q - Unconfirmed Strength, kN/m ²
 COAL	d - Dry Unit Weight, kN/m ³
 WATER	S - Sulphate Concentration, %
 LIMITS	N - Penetration Resistance, blows

Tube	/
Penetrometer	X
No Recovery	

TEST HOLE LOG AND LAB DATA

DWG # 7



SMITH DOW & ASSOCIATES LTD.
-----Engineering Consultants-----

**Project: Proposed Condominium Dev.
4240 - 59 Street
Red Deer, Alberta**

DWN	MK	CKD	AK	DATE	July 27, 2023	FILE #	HOLE	7					
STRENGTH-----				▲	DATUM		TEST DATA	SAMPLE	Depth				
MOISTURE-----				●	GROUND ELEV-								
PENETRATION-----				X									
▲	100	200	300	400	500	CLASSIFICATION		feet	meters				
●	10	20	30	40	5								
X	0	10	20	30	40	50	60			70	80	90	100
5													
10													
15													
20													
25													
30													
Topsoil/Grass 120mm organic/fill 400mm interspersed topsoil												1	
Sandy Silt Till dark brown to tan non to low plastic, compact tan, occ. pebbles, coal traces compact, pebbles, moist												2	
Gravel coal traces, stones to cobbles tan/brown, dry dry, free-draining non-plastic												3	1
End of Hole (Standpipe In)												4	
												5	
												6	
												7	
												8	
												9	
												10	
												11	
												12	
												13	4
												14	
												15	5
												16	
												17	
												18	
												19	6
												20	
												21	
												22	7
												23	
												24	
												25	8
												26	
												27	
												28	
												29	
												30	9

	FILL
	TOPSOIL
	SAND
	SILT

A vertical geological column diagram. It features a top section with horizontal lines and a bottom section with vertical lines. The top section contains the word 'CLAY' above a horizontal line, 'PEAT' below it, and 'GRAVEL' below that. The bottom section contains the word 'SILTSTONE' above a horizontal line. To the left of the top section, there is a vertical column of symbols: a diagonal line, a cross-hatch, a circle with a dot, and a circle with a cross.

 TILL	Q - Unconfirmed Strength, kN/m ²
 COAL	d - Dry Unit Weight, kN/m ³
 WATER	S - Sulphate Concentration, %
 LIMITS	N - Penetration Resistance, blows

Tube	/
Penetrometer	X
No Recovery	

TEST HOLE LOG AND LAB DATA

DWG # 8



SMITH DOW & ASSOCIATES LTD.
-----Engineering Consultants-----

**Project: Proposed Condominium Dev.
4240 - 59 Street
Red Deer, Alberta**

	FILL
	TOPSOIL
	SAND
	SILT

TILL	Q - Unconfirmed Strength, kN/m ²
COAL	d - Dry Unit Weight, kN/m ³
WATER	S - Sulphate Concentration, %
LIMITS	N - Penetration Resistance, blows

Tube	/
Penetrometer	X
No Recovery	

TEST HOLE LOG AND LAB DATA

DWG # 9



SMITH DOW & ASSOCIATES LTD.
-----Engineering Consultants-----

**Project: Proposed Condominium Dev.
4240 - 59 Street
Red Deer, Alberta**

	FILL
	TOPSOIL
	SAND
	SILT

	CLAY
	PEAT
	GRAVEL
	SILTSTONE

TILL	Q - Unconfirmed Strength, kN/m ²
COAL	d - Dry Unit Weight, kN/m ³
WATER	S - Sulphate Concentration, %
LIMITS	N - Penetration Resistance, blows

Tube	/
Penetrometer	X
No Recovery	

TEST HOLE LOG AND LAB DATA

DWG # 10

TABLE 3.2.3.1, SPECIFICATIONS FOR AGGREGATE

Designations:

Asphalt Concrete Mix Type I - 90% (98% 1 face)

Asphalt Concrete Mix Types - 60-
Other Asphalt Concrete Mix Types - 60-

N2. Designation 2 Class 16 Material is for ASBC

N3. For crushed aggregates other than all Designation 5 and Designation 9 materials, a tolerance of three percent in the amount passing the maximum size sieve will be permitted provided all oversize material passes the next larger standard sieve size.

Designation 7 - Cement Stabilized Base Course Aggregate
Designation 8 - Fill - Run Gravel, I.M.

March 20, 2025

 Version 1.0
 Ref. 36199-510

Tanya Kure
EAST LINCOLN PROPERTIES CORP.
 4, 7935 Edgar Industrial Drive
 Red Deer, AB T4P 3R2

**Subject: Vegetation, Wildlife, and Hydrology Assessment in Support of the Development Permit
 Application for the Property 4240 59 Street, Red Deer, Alberta**

Dear Tanya Kure:

1 INTRODUCTION

East Lincoln Properties Corporation retained Montrose Environmental Solutions Canada (Montrose, formerly Matrix Solutions Inc.) to complete the vegetation, wildlife, and hydrology assessment in support of the development permit application of the proposed development located in 4240 59 Street, Red Deer, Alberta. This letter report presents the findings of the assessments and potential impacts (if any) of the proposed development on the vegetation, wildlife, and hydrology aspects of the environment.

The report is structured in three separate sections documenting various activities completed for each assessment and findings of the assessment.

2 VEGETATION ASSESSMENT

Section 2 provides information on information reviewed, evaluation and conclusion drawn based on the findings of the vegetation aspect of the overall assessment.

2.1 Information Reviewed

The following information was reviewed:

1. The City of Red Deer Land Use Bylaw 3357/2006
2. Waskasoo Area Redevelopment Plan Bylaw 3567/2016
3. Municipal Development Plan Bylaw 3404/2008
4. Geotechnical Investigation, 4240-59 Street, Red Deer, Alberta. Prepared by Smith Dow and Associates Ltd. (2023)

2.2 Evaluation

This evaluation focused on the potential impacts to the green space and the riparian zone along the Red Deer River with respect to the East Lincoln Properties proposed development of a seniors supportive living accommodation.

There are no guidelines related to vegetation resources that are included in the Land Use Bylaw 3357/2006. The Municipal Development Plan Bylaw 3404/2008 states that the City of Red Deer “shall continue to use the Natural Area/Ecospace Classification and Prioritization System as one of the key elements in land use planning” (The City of Red Deer 2024). Bylaw 3404/2008 also states that lands adjacent to water courses require a strip of land dedicated as environmental reserve to provide a buffer and public access if the lands are subdivided.

The subject property is located approximately 25 m east of the Red Deer River within the City of Red Deer. The subject property is privately owned, fenced, undeveloped, and is a flat area with non-native grasses. The property has low species diversity. In the past the subject property was part of the adjacent school site and was used for recreational school activities (AEP 2012). The subject property is not within any vegetation species at risk ranges (Government of Canada 2021) or any historical rare plant occurrences (ACIMS 2022). There are no wetlands within the subject property according to the ABMI and AMWI datasets (AMBI 2021) or based on imagery review. The loss of this area would not negatively impact the native vegetation species diversity in the area.

Based on the development plans proposed by East Lincoln, the Red Deer River riparian zone will not be directly impacted. The project will avoid the riparian area and will also avoid the Municipal Reserve (MR) that is on the east side of 45 Avenue. The avenue and the MR are at least 30 m in width from the west edge of 45 Avenue and will provide a buffer to the riparian zone. The potential development will result in a change of stormwater management. Based on the borehole drilling report done by Smith Dow & Associates (2023), there is a gravel layer underlying the development area. This layer varies in depth from 0.5 to 4.5 m thick.

2.3 Conclusions

The following conclusions are drawn based on the evaluation:

- Vegetation in the proposed development area consists of non-native grasses, has low species diversity, and will not have a negative impact on native vegetation diversity in the area.
- The proposed application will not directly impact the riparian zone.

3 WILDLIFE ASSESSMENT

Section 3 provides information on information reviewed, evaluation and conclusion drawn based on the findings of the wildlife aspect of the overall assessment.

3.1 Information Reviewed

The following information was reviewed:

1. The City of Red Deer Land Use Bylaw 3357/2006
2. Waskasoo Area Redevelopment Plan Bylaw 3567/2016
3. Municipal Development Plan Bylaw 3404/2008
4. Geotechnical Investigation, 4240-59 Street, Red Deer, Alberta (Smith Dow & Associates Ltd. 2023)
5. Google Maps (street view) – Imagery at site was reviewed to look at topography and barriers to movement

6. Fish and Wildlife Internet Mapping Tool (FWIMT; AEP 2023) - FWIMT data were reviewed to determine if historical observations of wildlife species at risk (SAR) and wildlife habitat features (e.g., nests, leks, burrows, and dens) are within 1 km of the site (AEP 2023)
7. Landscape Analysis Tool (LAT; AEP 2021a). Provincial wildlife sensitivity data layers (AEP 2021b) were reviewed to identify provincially designated sensitive wildlife ranges, zones, and water bodies that overlap the site are within 1 km.

3.2 Current Site Conditions and Evaluation

The subject property is located entirely within the sensitive raptor range (bald eagle) and the sharp-tailed grouse survey area (AEP 2023). No other provincially designated wildlife sensitivity areas overlap the subject property or are within 1 km. Wildlife SAR that have been historically observed within 1 km of the subject property as noted in the FWIMT data including American white pelican, bank swallow, common yellowthroat, ferruginous hawk, and pileated woodpecker (AEP 2023).

There is habitat for wildlife species in the area, mainly focused along the river. Raptor and other species could nest in the treed areas along the river and other species may use this area as a travel corridor. However, based on the proposed development, the riparian area will not be directly impacted. The project will avoid the riparian area and will also avoid the MR that is on the east side of 45 Avenue.

The main area for development is a flat area with tame grass which appears to have previously served as a playground area for the Gateway Christian School (AEP 2012). Imagery at the subject property from Google Street View and Google Maps indicates that the school yard is currently surrounded with a chain link fence along the sides that parallel the road and river (i.e., west and south sides). The fence is not entirely continuous and while it would be a partial obstacle to movement by medium and large mammals, it would not stop movement of small animals (e.g., snakes and amphibians). The area with tame grass that makes up most of the subject property can provide habitat for animals to forage and move across; however, it is very open, lower quality and may be avoided due to predation risk.

3.3 CONCLUSION

The following conclusions are drawn based on the findings of the wildlife assessment:

- The proposed development will not directly impact the riparian zone. Wildlife can experience indirect impacts such as sensory disturbance, depending on the development plan.
- Certain types of development could impact wildlife movement.
- Overall, the habitat on site is low quality, with the exception of the riparian zone. Given the project will avoid that area, impacts from development on the site are expected to be low.

4 HYDROLOGY ASSESSMENT

Section 4 provides information on information reviewed, evaluation and conclusion drawn based on the findings of the hydrology aspect assessment of the overall assessment.

4.1 Information Reviewed

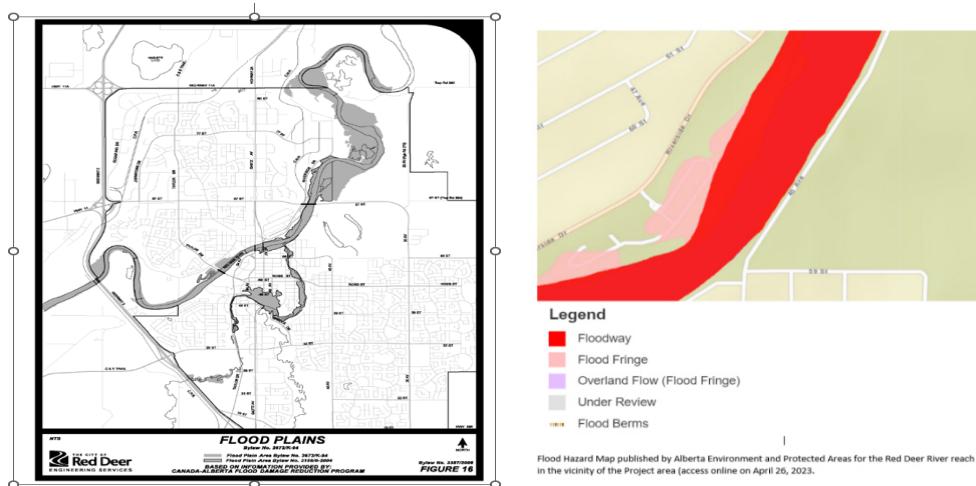
The following information was reviewed:

1. The City of Red Deer Land Use Bylaw 3357/2006

2. Waskasoo Area Redevelopment Plan Bylaw 3567/2016
3. Municipal Development Plan Bylaw 3404/2008
4. Flood hazard map of the Red Deer River prepared by Alberta Environment and Protected Areas and available online ([Flood Awareness Map Application](#)).

4.2 Current Site Conditions and Evaluation

The proposed development is located on the right bank (looking downstream) of the Red Deer. The subject area is not located in the floodway or flood fringe as indicated in the City of Red Deer Land Use Bylaw Flood Plain Maps and the flood hazard map available on the Government of Alberta website ([Flood Awareness Map Application](#)). The “red” coloured area represents floodway and “pink” coloured area represents flood fringe. As seen on this graph, the proposed development area is located outside these zones. As a result, the proposed development area is not subject to flooding potential during the floods in the Red Deer River. The proposed development will have no direct hydrologic and hydraulic impact as a result of the location of the subject area near the Red Deer River



GRAPH A City of Red Deer Land Use Bylaw Flood Plain Maps and Flood Hazard Map obtained from the Government of Alberta Website ([Flood Awareness Map Application](#))

4.3 Conclusion

The following conclusions are drawn based on the findings of the hydrology assessment

- The proposed development is located outside the floodway and flood fringe area of the Red Deer River and will not have any flooding potential during the floods in the Red Deer River.
- The proposed development will have no direct hydrologic and hydraulic impact as a result of the location of the subject area near the Red Deer River.

5 CLOSURE

We trust that this letter report suits your present requirements. If you have any questions or comments, please call any of the undersigned at 403.237.0606.

Yours truly,

Montrose Environmental Solutions Canada Inc.



Kelly Ostermann
 Principal Environmental Scientist



Delanie Player, P.Biol., R.P. Bio.
 Principal Wildlife Biologist



Manas Shome, Ph.D., P. Eng.
 Principal Water Resources Engineer

MS/eh
 Attachments

CONTRIBUTORS

Name	Job Title	Role
Kelly Ostermann M.Sc., P.Ag.	Principal Environmental Scientist	Authenticating Professional for Vegetation Assessment
Delanie Player	Principal Wildlife Biologist	Authenticating Professional for Wildlife Assessment
Manas Shome, Ph.D., P. Eng.	Principal Water Resources Engineer	Authenticating Professional for Hydrology Assessment

DISCLAIMER

Montrose Environmental Solutions Canada Inc. (Montrose) certifies to East Lincoln Properties Corp. (the Client) that the conclusions in this report are the professional opinions of Montrose at the time of the report and concerning the scope described in the report. The opinions are based on the site conditions observed on the date set out in the report and information obtained during the performance of the scope and do not contemplate subsequent changes in site conditions or information or changes in applicable law or standards subsequent to the date of the report. Montrose has exercised a customary level of skill, care, and diligence in using information received from the Client and/or third parties in the preparation of the report, however assumes no responsibility or liability for the consequences of any error or omission contained in such information. This report was prepared solely for the use of the Client in relation to the specific scope, location, and purpose for which Montrose was retained and is not intended to be used for any variation or extension of the scope or any other project or purpose. Any other use or reliance on the report by the Client or any use or reliance by any third party without the prior express written consent of Montrose is at the sole risk and responsibility of the user and Montrose makes no representation or warranty with respect to any unauthorized use and expressly disclaims any legal duty of care to any such person. Neither Montrose nor its affiliates are responsible for damages, losses, fines, penalties, or other harm incurred by such unauthorized user as a result of decisions made or actions taken based on this report. This report may not be read or reproduced except in its entirety.

VERSION CONTROL

Version	Date	Issue Type	Filename	Description
V0.1	11-Mar-2025	Draft	36199-510 R 2025-03-11 draft V0.1	Issued to client for review
V1.0	20-Mar-2025	Final	36199-510 R 2025-03-20 final V1.0	Issued as final

6 REFERENCES

Alberta Biodiversity Monitoring Institute (AMBI). 2021. *ABMI Wetland Inventory – Metadata*. Edmonton, Alberta. November 2021.

Alberta Conservation Information Management System (ACIMS). 2022. *Element (Species and Ecological Communities) Data*. Updated June 2022.

<https://www.albertaparks.ca/albertaparksca/management-land-use/alberta-conservation-information-management-system-acims/download-data/>

Alberta Environment and Parks (AEP). 2023. *Fish and Wildlife Internet Mapping Tool (FWIMT)*. Accessed in January 2023.

https://geospatial.alberta.ca/FWIMT_Pub/Viewer/?TermsOfUseRequired=true&Viewer=FWIMT_Pub

Alberta Environment and Parks (AEP). 2021a. *Landscape Analysis Tool (LAT)*. Electronic Disposition System, Accessed February 2021.

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Alberta Environment and Parks (AEP). 2021b. *Wildlife Sensitivity Maps - Data Sets*. Updated January 8, 2021. https://www.alberta.ca/wildlife-sensitivity-maps.aspx?utm_source=redirection#toc-0

Government of Canada. 2021. *Species at Risk Public Registry, Species List*. Modified January 8, 2021.

<https://species-registry.canada.ca/index-en.html#/species?ranges=2&underConsiderationId=2&sortBy=commonNameSort&sortDirection=asc&pageSize=10>

Smith Dow & Associates Ltd. 2023. *Condominium Development, 4240 - 59 Street, Red Deer, Alberta*. Red Deer, Alberta. August 22, 2023.

The City of Red Deer. 2024. *City of Red Deer Land Use Bylaw 3357/2006. Residential Districts and Regulations*. 2024. <https://www.reddeer.ca/city-government/bylaws/land-use-bylaw/>



HRA Number: 4835-25-0026-001

May 12, 2025

Historical Resources Act Approval

Proponent: East Lincoln Properties
4, 7935 Edgar Industrial Drive, Red Deer, AB T4P 3R2

Contact: Ms. Tanya Kure

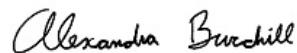
Agent: Sandstone Palaeontology Consulting
Contact: Emily Frampton

Project Name: Riverglen Seniors Supportive Living Development

Project Components: Residential Development
Access Road
Other - Aboveground parking lot

Application Purpose: Requesting HRA Approval / Requirements

Historical Resources Act approval is granted for the activities described in this application and its attached plan(s)/sketch(es) subject to Section 31, "a person who discovers an historic resource in the course of making an excavation for a purpose other than for the purpose of seeking historic resources shall forthwith notify the Minister of the discovery." The chance discovery of historical resources is to be reported to the contacts identified within [Standard Requirements under the Historical Resources Act: Reporting the Discovery of Historic Resources](#).



Alexandra Burchill
Regulatory Approvals Coordinator
Historic Resources Management
Branch
Alberta Arts, Culture and Status
of Women

Proposed Development Location:

MER	RGE	TWP	SEC	LSD List
4	27	38	21	7

Documents Attached:

Document Name	Document Type
Project drawings	Illustrative Material



To: City of Red Deer
File: 113678532

From: Lindsay Haskins, P.Eng.
Stantec Consulting Ltd
Date: March 14, 2025

Reference: City of Red Deer – Riverglen Village Traffic Memo

1 INTRODUCTION

This traffic memorandum intends to evaluate the potential traffic impacts of the proposed development of a 1.682 hectare site located at the northeast quadrant of the intersection of 59 Street and 45 Avenue in the City of Red Deer. The site location is illustrated in **Figure 1**.

Figure 1 – Site Location



2 LAND USE

The zoning for the site is PS – Public Service (institutional or Government) District zoning, which allows for a variety of discretionary uses including assisted living facility and institutional service facility.

The proposed development consists of seniors supportive living accommodation, with a total of 48 residential units and 59 surface parking stalls.

March 14, 2025

City of Red Deer

Page 2 of 2

Reference: City of Red Deer – Riverglen Village Traffic Memo

3 TRIP GENERATION

The expected trip generation for the development was estimated using the ITE Trip Generation Manual 11th Edition (Land Use 254 – Assisted Living). The resulting traffic projected to be generated by the site is presented in **Table 1**.

Table 1 – Trip Generation for Proposed Assisted Living Facility

Time Period	Trip Rate	Total Trips
AM Peak Hour	0.18 / bed	9 trips per hour
PM Peak Hour	0.24 / bed	12 trips per hour
Daily	2.6 / bed	125 trips per day

As shown in Table 1, the site is not expected to generate a significant amount of traffic and is unlikely to have any impact on the adjacent road network.

Typically, a Transportation Impact Assessment (TIA) is required for a development if it is anticipated to generate 100 or more trips in the peak hour. At only 12 trips/hour, this site is not expected to require further analysis.

4 CONCLUSIONS

Based on the information reviewed, the traffic generated by the development of a Seniors Supportive Living facility will not have a significant impact on the adjacent and surrounding road network.

We trust that this will meet your requirements, should you have further questions or comments please feel free to contact the undersigned.

Sincerely,

Stantec Consulting Ltd.

Lindsay Haskins P. Eng.

Senior Transportation Engineer, Aberta TPTE Team Lead
Phone: 780 969 2001
Lindsay.Haskins@stantec.com



Permit Number: P0258



APPENDIX E – SITE HISTORY

Subdivision

- In 2014, Chinook's Edge School Division applied to subdivide their land into several lots. The subdivision authority notified adjacent owners of the application and provided them with an opportunity to submit written comments.
- The City's subdivision authority was required to refuse the subdivision application because Alberta Environment and Sustainable Resource Development did not grant the City permission to consider a variance of the 300 metre setback from a non-operating landfill located to the east of the site.
- Chinook's Edge then appealed the refusal. Because the appeal involved provincial regulations concerning the setback from a non-operating landfill, the appeal was heard by the Municipal Government Board (MGB).
- The MGB heard Chinook's Edge's appeal and on August 12, 2014 granted approval of the subdivision application. The subdivision plan was subsequently registered in May 2015 as Plan 152 2489.
- The MGB is a provincial body. They advertised the public hearing and also provided opportunity for affected persons, such as adjacent landowners, to provide written comments or address the board directly during the hearing.

Area Redevelopment Plan (ARP)

- On February 1, 2016, the Waskasoo Area Redevelopment Plan (ARP) was adopted.
- The ARP identifies the parcel for PS – Public Service uses and includes the area as part of the Environmental Character Area.
- Section 5.6 Recommended Design Elements lists things to be considered when developing in this area; it does not preclude development.
- The development of the ARP included public participation where members of the community had influence on the development of the plan.
- The adoption of the ARP as a statutory plan by Council included a Public Hearing where landowners and members of the public could submit comments for consideration or address Council directly during the public hearing.



Sale of Land

- Chinook's Edge sold the subject lot to the Red Deer Public School District.
- The Red Deer Public School District subsequently sold it to the landowner in 2020.
- The City is not a party to private land negotiations and transactions between the school division and the private landowner.

Defeated Rezoning (Land Use Bylaw Amendment) Application

- In 2023, the landowner applied to rezone the parcel from PS—Public Service District to R3 – Residential (Multiple Family) District along with a related amendment to the Waskasoo ARP so that they could pursue the development of two apartment buildings.
- During the preparation of the Council report, City administration sent two different referrals to the community where they were able to provide comments on the proposed rezoning.
- The rezoning and ARP bylaws were defeated by Council on May 3, 2023. The land retained its “PS – Public Service District” zoning.
- The defeated Land Use Bylaw amendment included a mandatory public hearing where landowners and members of the public could submit comments for consideration or address Council directly during the public hearing.

New Zoning Bylaw Definitions

- In May 2024 Council adopted the new Zoning Bylaw to replace the older Land Use Bylaw. When the new Zoning Bylaw was adopted it had many new zones and defined uses. One such example that applies to this property: in the old zoning, the use Assisted Living Facility was listed as a discretionary use. After the adoption of the new Zoning Bylaw, the property was rezoned to the Public Service (Institutional or Government) Zone, which instead listed the new defined use Supportive Living Accommodation as a discretionary use.
- The difference between the old Assisted Living Facility use and the current Supportive Living Accommodation use lies in the scope of care permitted. The change was proposed by Administration when Council was adopting the new bylaw to better align the defined uses in the bylaw with provincial definitions for Supportive Living. The change primarily altered the old definition that was restrictive to dependent care and now allows the use to include independent care homes where supportive living services are being provided. This change added flexibility to the Zoning Bylaw to facilitate the construction of both dependent (previously allowed) and independent (expanded in new definition) supportive housing. The flexibility was added to the bylaw to better accommodate housing for people who do not require dependent care, but may require services such as food services, housekeeping, health, or accommodation services to maintain their independence.



INSPECTIONS & LICENSING DEPARTMENT

- For a historical understanding, in the older Land Use Bylaw, Assisted Living Facility means a building, or a portion of a building operated for the purpose of providing live-in accommodation for six or more persons with chronic or declining conditions requiring professional care or supervision or ongoing medical care, nursing or homemaking services or for persons generally requiring specialized care but may include a Secured Facility as an accessory component of an Assisted Living Facility. An Assisted Living Facility does not include a Temporary Care Facility. The use Assisted Living Facility is no longer in force and is not a listed use in the current Zoning Bylaw.
- In the new Zoning Bylaw, Supportive Living Accommodation means a use that is intended for the permanent Residential living where an operator also provides or arranges for on the Site services to assist residents to live independently or to assist residents requiring full-time care.
- The adoption of the new Zoning Bylaw included significant public consultation and also included a mandatory public hearing where landowners and members of the public could submit comments for consideration or address Council directly during the public hearing.