LAND USE ASSESSMENT REPORT

APPLICATION TO REZONE 214 WATERFORD BRIDGE ROAD

RESUBMITTED SEPTEMBER 2024

Jendore Limited 1000-240 Waterford Bridge Road St. John's, NL A1E 1E2 t: 709-747-4209

CONSULTANTS:

Architecture



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Introduction

Jendore Ltd. is proposing a new development for the current empty lot located at 214 Waterford Bridge Road. This new apartment building development will be located between the existing Residence at Littledale facility and Columbus Drive, just south of Blue River Place.

The existing lot for the proposed development is currently zoned for Institutional (INST). It is being requested that this site be re-designated to an Apartment Medium Density (A2) zone.

This Land Use Assessment Report is submitted by Lat49 Architecture Inc. on behalf of Jendore Ltd. for the development of <u>214 Waterford Bridge</u> <u>Road</u> with a 4-storey apartment building that includes a parking sub-level.

A BUILDING USE

The new building proposed for this site is a 4-storey, 85 unit apartment building including one level of underground parking. The target tenant is 55 plus or retirement lifestyle, looking to downsize from a single family home.

The area of the lot to be re-zoned is approximately as follows:

Total Area of Property:

11,355 m² (122,224 ft²)

(See Appendix 11 for the survey report that illustrates property boundaries.)

Please reference the table below for Floor Area and Gross Floor Area (GFA) of the building. Also, note that the GFA was calculated by removing the area of the underground parking and balconies. However, common areas have been included in this calculation.

Floor Area Level 1	Total Floor Area	Floor Area Ratio	Lot Coverage %	Number of Units
3,290 m ²	13,915m ²	1.225	28.97%	85

Underground Parking

The level of below grade parking will service the building tenants and has a total of 63 parking spaces. The below grade parking level has a total area of 3,355 m², of which 2,915 m² is the parking area itself. The remainder of the area consists of mechanical/electrical/utility space and other service spaces.

Seniors Apartment Complex

The 4 storey building includes 85 different units that primarily consists of a 2 bed, 2 bath layout. There are 8 units with a 1 bed, 1 bath layout.

Reference the below table for a breakdown of area:

	Rooms/Units	Circulation	Service Area	Stairs/ Elevator	GrossTotal
Parking	-	-	194 m²	170m²	3355 m ²
Level 1	2058 m ²	211 m ²	420 m ²	125 m ²	3290 m ²
Level 2	2394 m ²	440 m ²	37 m ²	125 m ²	3155 m ²
Level 3	2431 m ²	437 m ²	37 m ²	125 m ²	3155 m ²
Level 4	2397 m ²	437 m²	37 m ²	125m²	3155 m ²
Total	9280 m ²	1525 m ²	725 m ²	670 m ²	16110m ²

B | ELEVATION & BUILDING MATERIALS

The primary roof of the building sits 14.8m above ground level with an additional 1.2m to the top of the parapet. The overall highest elevation of the building is the roof above the gridline "E" at 19.4m. Typical floor to floor heights are 3.6m besides the main floor which is 4m. The ground floor rests 61.16m above sea level. The parking garage is 3.4m deep below this elevation.

The building is mainly clad in contrasting colour and texture GFRC (Glassfiber Reinforced Concrete) panels. A neutral colour palette will be utilized, along with textured panels that include a grooved pattern. The facade also features clay brick elements with a dark coal appearance. The concrete structural frame of the building is made up of its foundation, columns, floor slabs, and shear walls in the elevator shaft and stairwells. A metal stud system is to be used for the partitions.

The building is intended to fit within the Tower Corporate Campus and in conjunction with the Residence at Littledale. The proposed buildings inclusion will augment the overall materiality of the existing structures in the area. The main pedestrian entrance is near the Columbus Drive turn-off. The east side of the building rests on a lower elevation that allows easy car access into the parking garage underneath the building. This same elevation change allows south-east views toward the former Corpus Christi Church, and draws focus to the planned pedestrian trail network that links with existing trails in the area. The level 1 common space, as well as the upper and lower terrace lookouts atop the stepping site to capitalize on this south-east area.

C BUILDING HEIGHT & LOCATION

The proposed development is located off of Columbus Drive between Topsail Road and Bay Bulls Road. The property neighbors the Residence at Littledale on a "Shared Right-of-Way" between Columbus and Waterford Bridge. The 4-storey building fits in with the other low-rise structures in the area as well as the residential community beyond on the upper elevation. The land that makes up 2.806 acre site is subdivided from 214 & 250 Waterford Bride Road.

The site is designed to be integrated within the community that abuts it. The south-west area of the lot serves as a junction point for the surrounding trail network. This will provide scenic pedestrian access to the Village Mall, Hazelwood Elementary, Beaconsfield Junior High, Waterford Valley High, and Bowring Park. Due to the grade of the site, this trail junction will be mitigated with retaining walls that also offer lookout points. The steepest grade on the southern area of the site will include stairs, rendering this location traversable which it currently is not. Many of the existing trees will remain in this area and provide shelter to pedestrians and mitigate wind at this elevation. Therefore, the development intends to augment and integrate with the community that surrounds it.

As the shadow study in Appendix 6 shows, there is no impact on existing buildings or residents by the shadows cast throughout the year. The area primarily affected by shadows is the exterior parking lot outside the main entrance of the proposed building. The furthest reaching shadows occur during the winter solstice. At this time, the shadows cast by the proposed building will reach the tree line to the north of the property. These effects should be minimal as the tree-line area will already have been somewhat shaded from its own effects.

See Appendix 11 for property lines, survey data See Appendix 11 for Shared Right-of Way Agreement

D EXTERIOR EQUIPMENT & LIGHTING

The proposed building will have lighting mounted or integrated into the facade of the building and will have lighting leading to the entrance of the building. The lighting that will be mounted to the exterior of the building can illuminate architectural features and walkways leading to and from the entrances/exits to ensure a high degree of safety whilst not imposing excess light pollution or impact surrounding properties. Pole lighting will be used for the exterior parking lot and the access road. Bollard trail lights will be placed throughout the pathways as necessary to increase visibility and safety.

The lighting for the site will be carefully selected to appropriately light the given area but also be robust enough to last in our local weather conditions. In addition, the lighting of the site is also meant to create a safe environment at the exterior of the building. Given the pedestrian pathways that are to surround the building, proper illumination is necessary to ensure the safety of the public whilst traversing the property in the evening. The selected lighting solutions will be durable enough for the elements, provide a safe quantity of luminosity, and aesthetically highlight the following landscaping plan. The current fixtures will attempt to match the lighting currently install throughout the site and on the Residence at Littledale structure. See Appendix 13 Building and Site lighting fixtures.

E LANDSCAPING & BUFFERING

The landscape design will ensure the overall development fits within the context of the existing built form (such as the Tower Corporate Campus and the Residence at Littledale) as well as within the natural beauty of the Waterford Valley. Current Landscaping design accounts for 54% of the overall site development.

Terracing

There is an existing grade change of +/- 18-metres between the existing gravel pad and the Tower Corporate Campus parking area below. Through a series of retaining walls and landforming, several terraces have been created that will break up the slope, allowing for programming and amenity spaces to be created. These will include sitting areas, social spaces, walking trails, and lookouts that take in the comfortable southern exposure and Waterford Valley views. The extent of retaining and landforming has been reduced in order to save as many mature trees as possible on the existing slope. While detailed engineering is not yet completed, it is envisioned that the retaining walls will not exceed 3.0-metres in height and slopes will not exceed 2H:1V. Guards will be introduced as needed.

Community Connections

The plan introduces several new trail segments that will become important links between key features in the area.

Connection to the Residence at Littledale: A pedestrian connection is aligned with the existing trail adjacent to the Residence at Littledale, allowing residents to safely cross the driveway and enjoy features such as the fountain pond.

Connection to Bowring Park: A connection to Bowring Park is also provided via a set of stairs that meanders down the existing slope at the back of the proposed building, which is broken up into several smaller sections and includes two rest areas. This trail will pass through a new opening in the existing chain link fencing to tie into the existing Grand Concourse trail (the Mundy Pond to Bowring Park Link) that runs adjacent to the Bowring Park overpass.

Connection to the sidewalk on Columbus Drive: An accessible connection is envisioned along the western property boundary via a small pedestrian bridge over an existing drainage swale adjacent to the sidewalk on Columbus Drive. The location for this pedestrian bridge was selected to avoid existing Newfoundland Power poles and to reduce site disturbance.

Exterior Lighting

The exterior lighting to be utilized for the proposed development includes a mix of two types of light fixtures: mid-scale fixtures as required to illuminate parking areas and driveways, and bollard style lighting to provide soft pathway lighting and ambience in key pedestrian garden spaces. The type of fixtures selected will complement those used at the adjacent Residence at Littledale and Tower Corporate Campus to ensure consistency and cohesion between properties.

Note: We are requesting a 1m variance of section 8.8 of the Develop Regulations to allow a 2m buffer from the edge of parking to the lot line at the share right of way (ROW).

See Appendix 4 for the landscaping plan. See Appendix 13 for building and site lighting

F | SNOWCLEARING / SNOW STORAGE

The proposed development will introduce surface parking with 23 parking spaces. The parking area spans the entire face of the north side of the building and then wraps around the corner for access to the parking garage on the eastern side. Void space between this lot and Littledale Lane will allow for snow clearing on the lane, and potentially the lot as well. An area at the north-east corner of the building allows for a snow storage stockpile. Please see Appendix 3 & Appendix 4 to see this area highlighted in red. Pedestrian pathways have ample adjacent space for snow clearing.

G | MUNICIPAL SERVICES

All servicing will be designed in accordance with the City of St. John's Standards and Specifications. Services need to be readily accessible if any maintenance is required, therefore no municipal services and related infrastructure for this development will be ran under buildings on the site, regardless of whether they are existing or are to be newly constructed. Existing municipal distribution servicing located in the development is limited to a 200mm DR18 watermain which will be rerouted around the new building.

Water Service

Water will be supplied to the building by means of connection to the rerouted 200mm PVC DR18 watermain at the northern side of the building. The development will comply with the City of St. John's Water Metering and Premise Isolation policies.

Onsite piping will have the ability using valves to isolate the water service for pressure testing and maintenance purposes. Watermains will be spaced at least 6-meters apart from adjacent piping where possible to mitigate potential impacts to the system during future maintenance. The new exterior piping system will have fully restrained joints as the site has been largely mass filled and as such standard trench excavation into native soil is not applicable. All joints and fittings will be protected against corrosion using a petrolatum system (Denso). Hydrants will be spaced at maximum 90m intervals and be of sufficient quantity to ensure flow requirements as outlined in the Fire Underwriters Survey are met. Hydrants will be fed from the building's mechanical and electrical room in compliance with the City of St. John's premise isolation policy for backflow prevention.

Sanitary Sewer Services

Determination of sanitary flows from the new development will be based upon requirements as outlined in the City of St. John's Department of Planning, Development & Engineering "Development Design Manual". Hydraulic capacity of the sanitary building service will be determined using Manning's formula with a Roughness Coefficient of 0.015 and hydraulic slope of 2%.

Sanitary systems for the site will include a service connection to the building to service the Basement Floor Elevation at approximately 57.46m, a new manhole, and connection into an existing private sanitary manhole near the western side of the existing "Residence at Littledale".

Storm Water Management

Various stormwater management strategies will be used to ensure safe and effective collection and conveyance of stormwater to the receiving system. Strategies used for this site include:

- Locating inlets in low points away from the building.
- Limiting standing water depths to 150mm or less using the City of St. John's inlet capacity rating curves.
- Adequately sizing pipes to avoid surcharging.
- Providing onsite stormwater detention primarily by way of a lined open bottom chamber system, and secondly utilizing a new wet pond feature adjacent to the existing McAuley Convent building to the south. Each method of detention will be equipped with orifice controls to limit flow rates leaving the site to an acceptable level in accordance with the City's net zero stormwater runoff policy.
- Grading designed to allow for controlled emergency overland flow routes while ensuring that neighboring properties are protected from flooding and nuisance runoff issues because of the site development.

The onsite storm sewer system will be modelled using the XPSWMM software following Division 8 of the City of St. John's Development Design Manual.

This review of Municipal Services to the site was provided by RVA. For a site servicing plan, see Appendix 3.

H | OFF-STREET PARKING AND ACCESS

The proposed development will consist of a new 85-unit senior apartment complex. For Residential Developments, Parking Standard for apartment buildings is based on the Apartment classification from Table 8.3 of the Envision Development Regulations. This requirement provides parking minimums per type of dwelling unit, whether studio, one-, two-, or three-bedroom or greater, and accommodation for visitor parking.

The parking requirement calculations for 214 Waterford Bridge Road are shown in Table 1. In total, this development will require a minimum of 96 parking spaces, of which 6% must be accessible. Note: we are requesting parking relief based on the current drawings and counts provided. Given the target demographic of the building, it anticipated that some residents wont have vehicles. In addition, the intent of the facility is that residents can avail of wrap around services provided by the Residence at Littledale, in particular the on site shuttle service in addition to public transit.

The proponent intends to facilitate a shuttle service, for residents of the development, to curb requirements for personal vehicles. The details of the shuttle service are to be developed as the project is further refined and as tenants are onboarded. The intent is to provide a pay for service shuttle to major local transit hubs and public venues. Frequency and occupant loading may be determined based on tenant demand.

Table 1: Parking Requirements

Land Use	Parking Requirement	Units	Minimum Parking	Maximum Parking
Apartments Medium Density	Table 8.3: Envision Development Regulations 2022	85 units	96	126
		Total Parking S	Spaces Requi	red: 96 - 126
		Total Park	ing Spaces Pr	ovided: 86
Overall Lot Area 11,355.0 m ²				

Beyond the parking provided for this development it is also located near many major transit routes and can be easily reached via Metrobus, or simply by walking. Given that the Village Mall is well within walking distance, there is ample opportunity for residents to utilize public transit to access the majority of areas in the city. The main entry plaza may act as a sufficient drop-off area. Given the layout of the front parking lot, buses need not reverse to exit the lot. The underground parking garage may be utilized for some instances of loading.

According to Table 8.14 of the development regulations, there must be 1 bicycle parking space for every 2 units. Given that the proposed development will have 85 units, there must be 43 bicycle spots. Thirty Five (35) of these can be found in the underground parking area and twenty (20) are exterior.

I TRAFFIC

The proposed 4-storey apartment development will consist of a total of 85 residential units. Vehicular access to the site will be provided through two proposed driveways located off the existing two-lane private roadway which stretches between Columbus Drive and Waterford Bridge Road and services the existing The Residence at Littledale retirement home, Sisters of Mercy building and The Tower Corporate Campus. The driveways will be located approximately 55 metres and 145 metres east of Columbus Drive. The private access roadway has a posted speed limit of 30 km/hr.

Based on Land use Code 221 Multifamily Housing (mid-rise) found in the Institute of Transportation Engineers (ITE) Trip Generation Manual, the proposed development is forecast to generate a total of 26 two-way trips (6 inbound and 20 outbound) during the weekday a.m. peak hour. For the weekday p.m. peak hour, the development is forecast to generate a total of 33 two-way trips (20 inbound and 13 outbound). It is anticipated that site generated traffic destined to areas north of the site will utilize Columbus Drive via the existing unsignalized right-in right-out intersection with the private roadway which provides access to the development. Site traffic coming from the north/south via Columbus Drive will be required to access the site through the Bay Bulls Road signalized intersection through to Waterford Bridge Road then to the unsignalized full movement intersection with the private roadway. Site generated traffic destined to and from areas east and west of the site will utilize Waterford Bridge Road.

Given the low volume of traffic forecast to be generated by the site during the weekday a.m. and p.m. peak hours and its dispersion between the two adjacent arterial roadways (i.e. Columbus Drive and Waterford Bridge Road), impacts to overall operations at the adjacent roadway intersections are expected to be minor in nature and requirements for geometric improvements are not anticipated.

See Appendix 9 Traffic Study

J PUBLIC TRANSIT

The proposed development has much opportunity to utilize public transit effectively. The Route 6 Metrobus stop on Waterford Bridge Road #280 is about 200m from the apartment building. The Village Mall is within walking distance of the proposed development, but can also be accessed by route 6. With easy access to the Village Mall Metrobus junction, individuals will have direct access to routes 1, 2, 3, 6, 12, 13, 18, 19, 20, 21, and 22. This essentially gives an individual access to all corners of the city via public transit.

A shuttle service will be provided for residents. See Appendix 14.

K | CONSTRUCTION TIMEFRAME

The construction timeframe for this project is anticipated to be approximately 24 months in length following the design, engineering, and approvals (a process which is currently an estimated 10 months).

Tentative workers parking and laydown areas are illustrated in Appendix 8.

L PUBLIC CONSULTANTION

Public Consultation Narrative

As part of the LUAR process a Public Consultation Meeting was held at former Corpus Christi Parish Hall on October 12th form 6:00-8:00pm. The Cahill Group hand delivered a notification of public consultation to twelve adjacent neighbours, who live on south side Blue River Place. See Appendix 12 for Public Consultation Meeting Notification.

Public Consultant

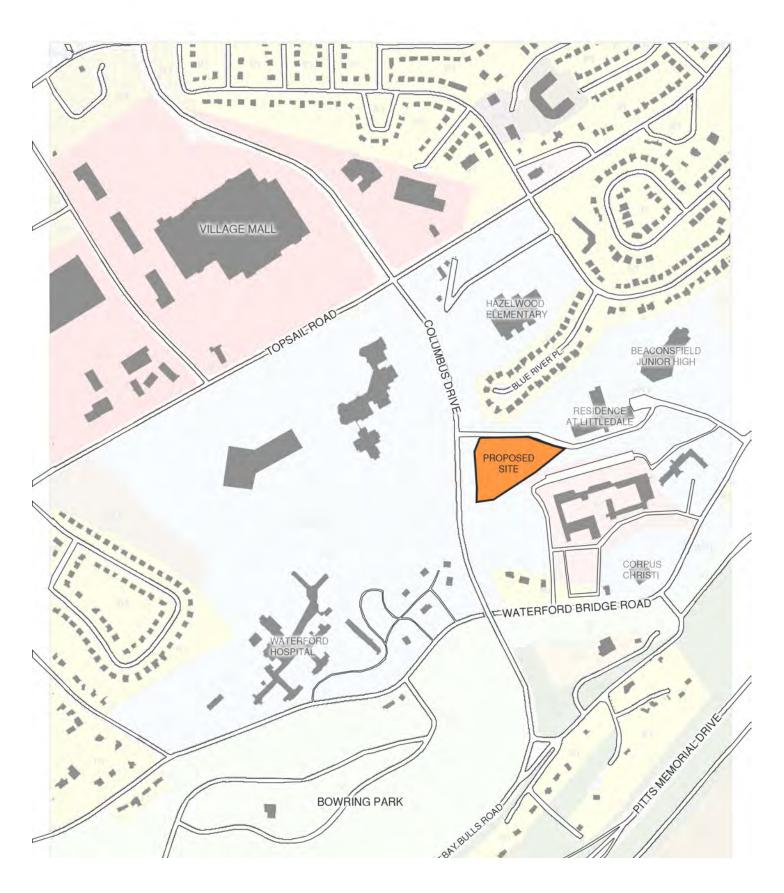
At October 12th Public Consultation meeting two representatives from LAT49 Architecture and two representatives form Cahill Group were present to answer questions and record any public comments/questions. On display at the public meeting were 7-display boards consisting of 5-renderings, 1-architectural site plan and 1- Landscape Plan. See Appendix 12 for Public Consultation Presentation Boards.

Three neighbours from Blue River Place attended the Public Consultation. The neighbours only had general questions regarding construction start dates and completion dates. There were no comments received from the public regarding proposed rezoning or the proposed 85-unit apartment building.

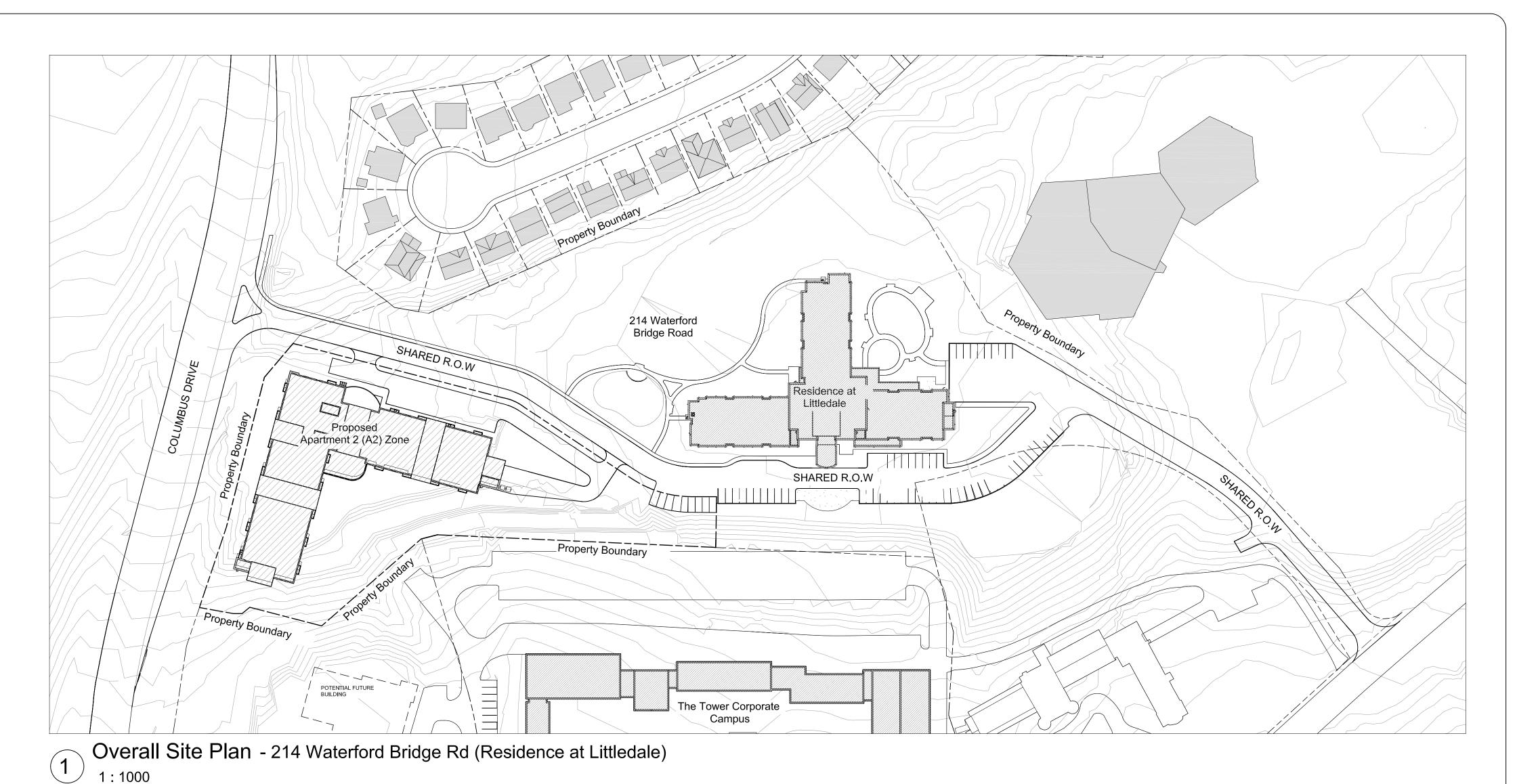
M | MECHANICAL EQUIPMENT

Each apartment will be serviced by an individual unit based HRV system for fresh air. Air conditioning, if implemented is to be determined and will either be an exterior balcony based Minisplit system or a central Variable Refrigerant Flow (VRF) system with internal unit based heat pumps. As we move through the design process the system efficiency and economics will determine which system will be implemented. Either system would be a standard unit that meets CSA and the city noise requirements. It will also be submitted for acceptance by the building inspection department once we apply for building permit. A central based system will be located toward the centre of the roof to mitigate visual connection from the street.

APPENDIX 1 | CONTEXT PLAN



APPENDIX 2 | SITE PLAN



SITE STATISTICS LOT AREA: 11,355.0m2 3,565.0m2 BLDG AREA: APARTMENT 2 (A2) ZONE STANDARDS PROVIDED REQUIRED LOT AREA (min) LOT FRONTAGE (min) 11,355m² 650.0m² 109m 20m BUILDING LINE (min) 6m BUILDING HEIGHT (max) 24m 19.4m SIDE YARD (min) 1m per 4m bldg height 9.9m

40%

30%

96 spaces

16.4m

28.97%

54%

86 spaces

Parking Standards	,
equired Minimum	Required Maximum
Owelling Size	Dwelling Size
Studio 0.8	Studio 1.2
1 Bedroom Dwelling 0.9	1 Bedroom Dwelling 1.2
2 Bedroom Dwelling 1.0	2 Bedroom Dwelling 1.5
3 Bedroom Dwelling 1.2 or Greater	3 Bedroom Dwelling 2.0 or Greater
/isitor parking:	Maximums are cumulative for
O visitor parking spaces for the irst 7 Dwellings; 1 visitor parking space per 7 Dwellings thereafter	building and inclusive of visitor parking

NEW APARTMENT BUILDING: 85 Units

REAR YARD (min)

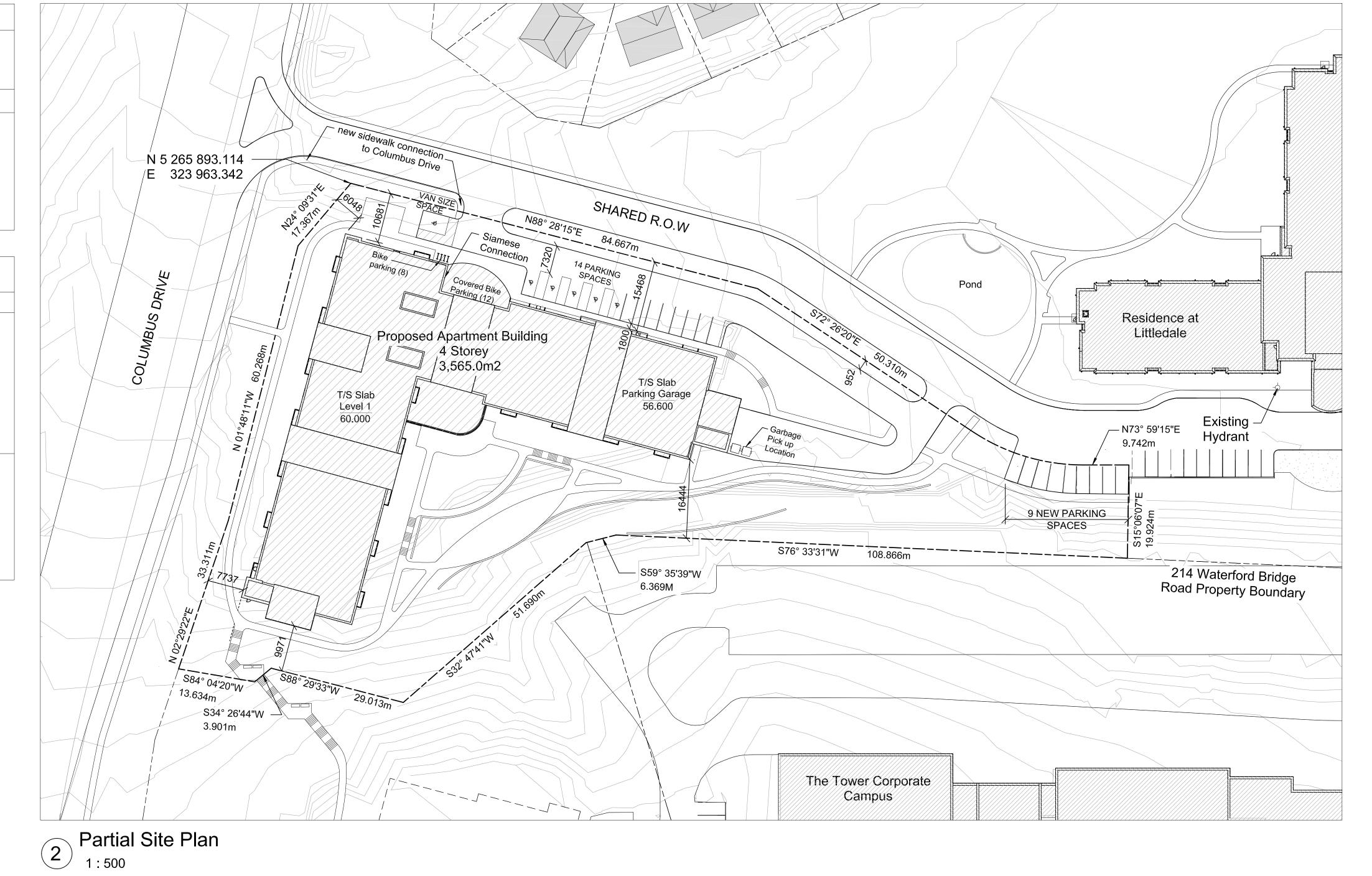
LOT COVERAGE (max)

PARKING SPACES (min)

LANDSCAPING (min)

1 Bedroom Dwellings: 8 x 0.9 Spaces/Dwelling = 7.0 Spaces 2 Bedroom Dwellings: 77 x 1.0 Spaces/Dwelling = 77.0 Spaces Visitor Parking Requirements = <u>11.0 Spaces</u> 95.2 Spaces

REQUIRED PARKING - 96 Spaces PROVIDED PARKING - 86 Spaces (63 Underground + 23 Surface)



Lat49 Architecture Inc. 683 Water Street, 2nd Floor St. John's, NL A1E 1B5 T. 709.753.7132 F. 709.753.6469 Do not scale from this drawing. The Contractor is to verify all dimensions on site before

Mechanical & Electrical: Structural:

Kitchen:

Interior Design:

Landscape:

Revisions. LUAR Revision Sept 16 2024 LUAR Revision May 02 2024 LUAR Revision Jan 23 2024 LUAR Revision Dec 05 2023 LUAR Revision Dec 01 2023 LUAR Revision Oct 23 2023 Issued for Permit Nov 17 2022 Date Description

> Client: Jendore Project: Apartments at

Littledale

Location: Waterford Valley

Site Plan

As indicated Scale: Drawn By: Checked By: J.Bryant Job Number: 21-1668

A-001

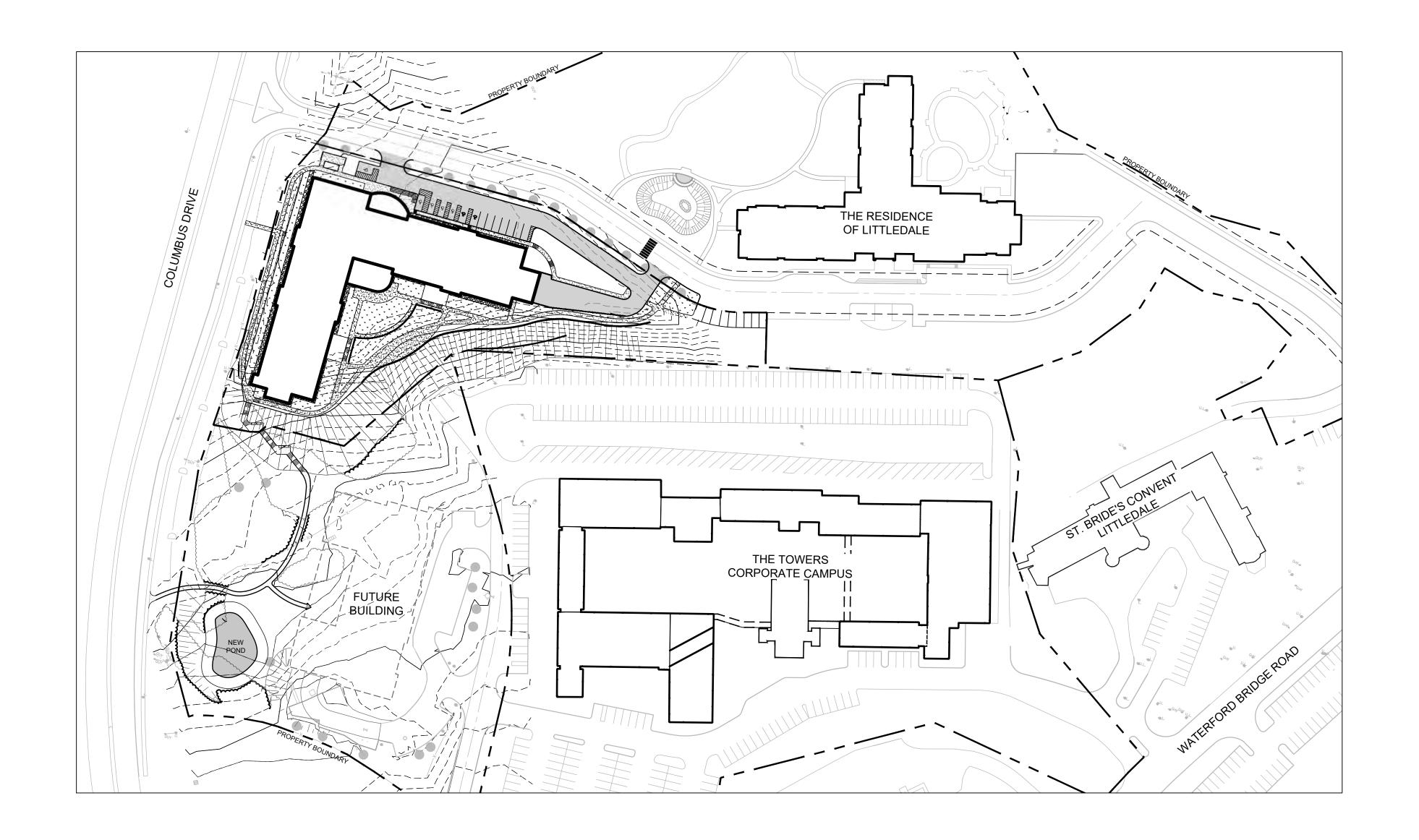
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APPENDIX 3 | SITE SERVICING PLAN

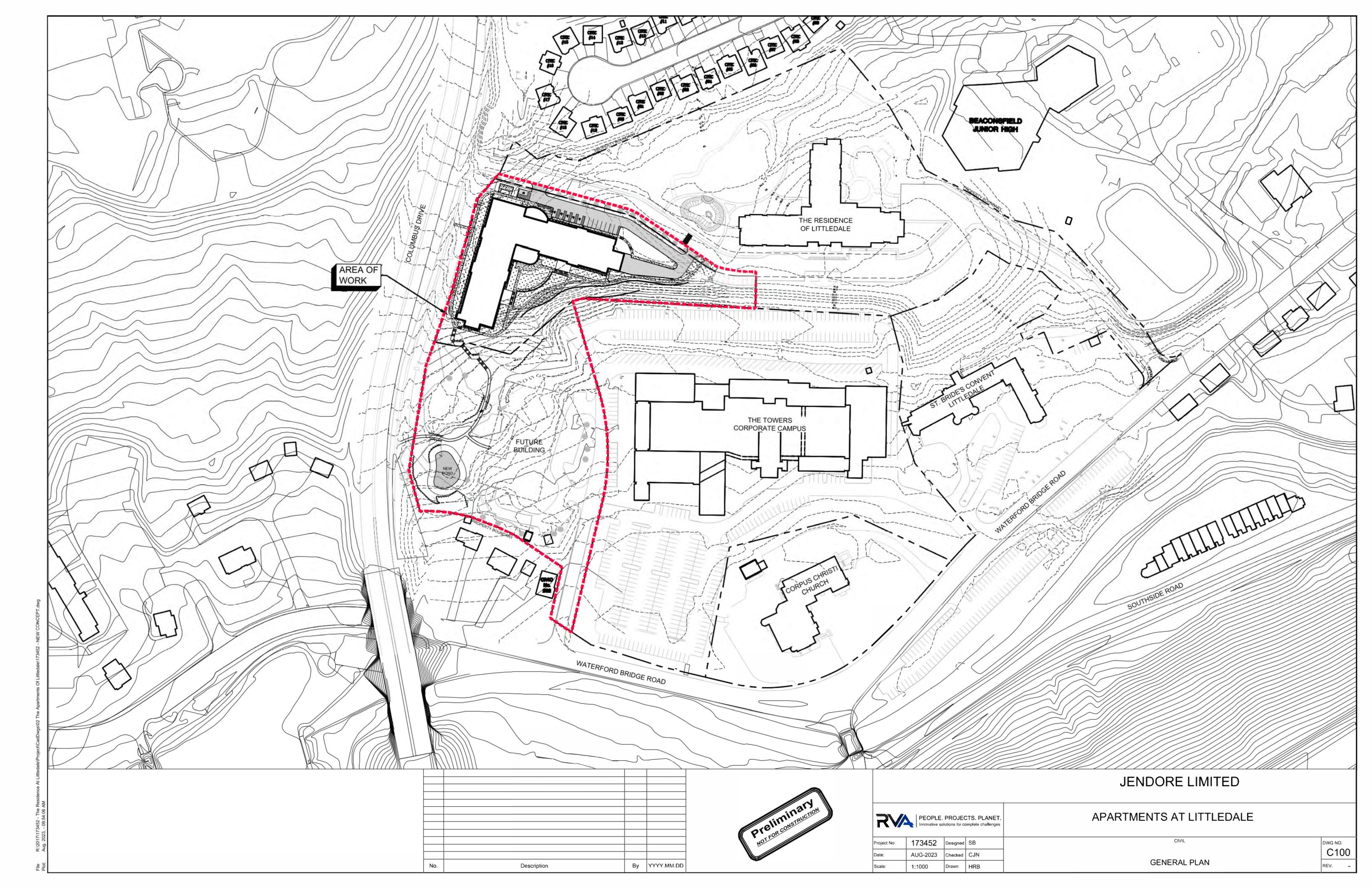
JENDORE LIMITED

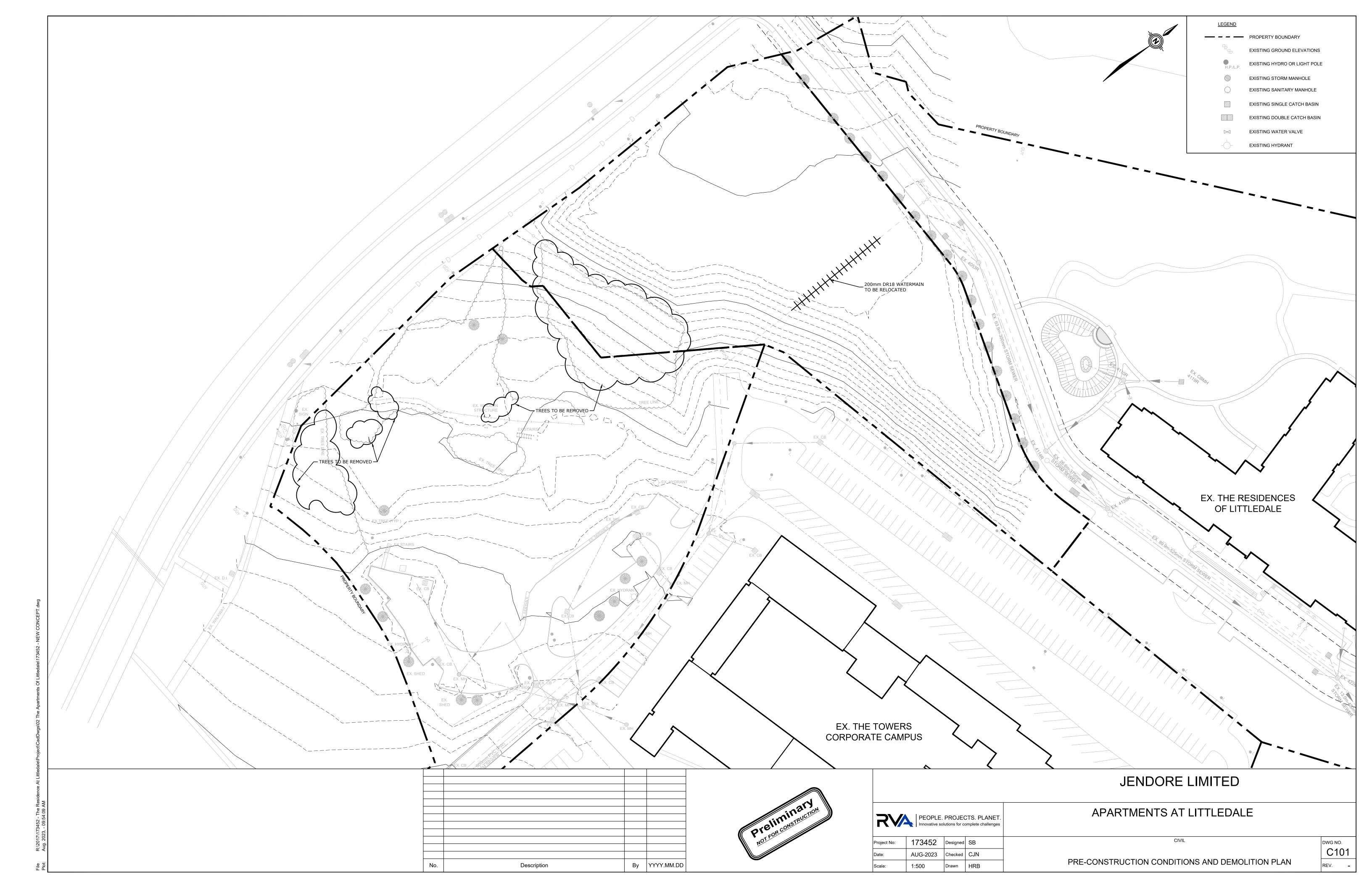
APARTMENTS AT LITTLEDALE

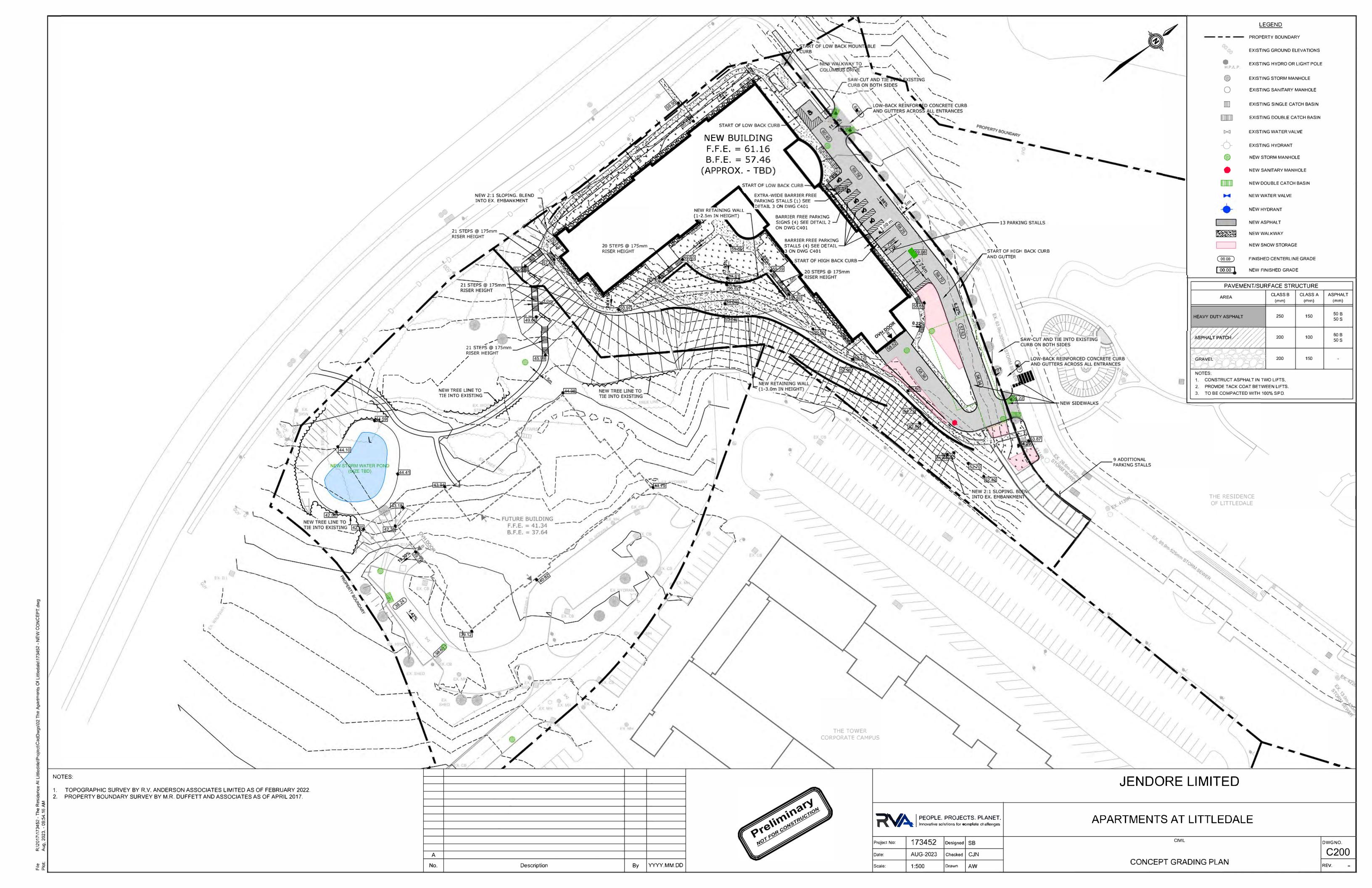
CONTRACT No.

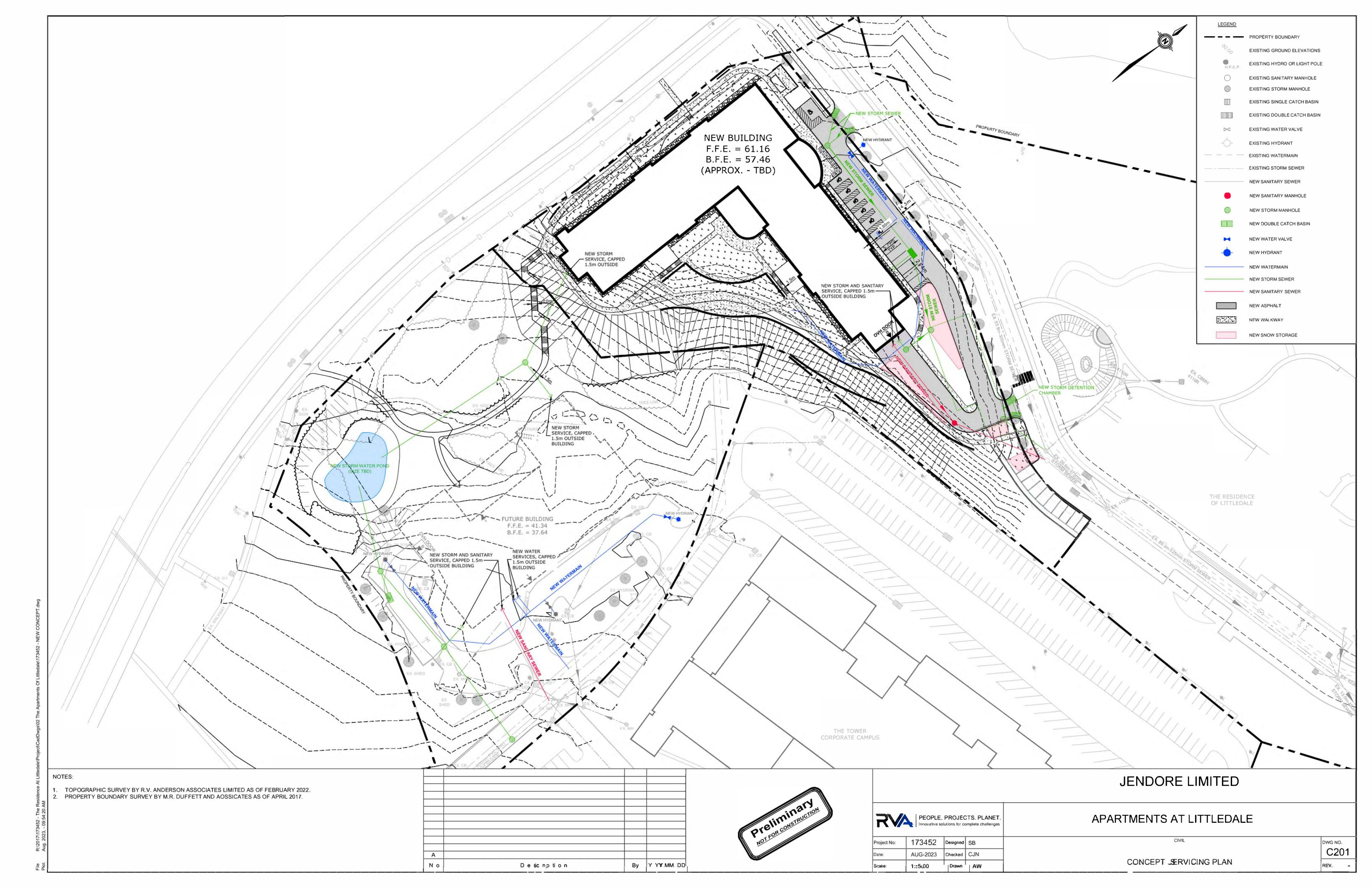


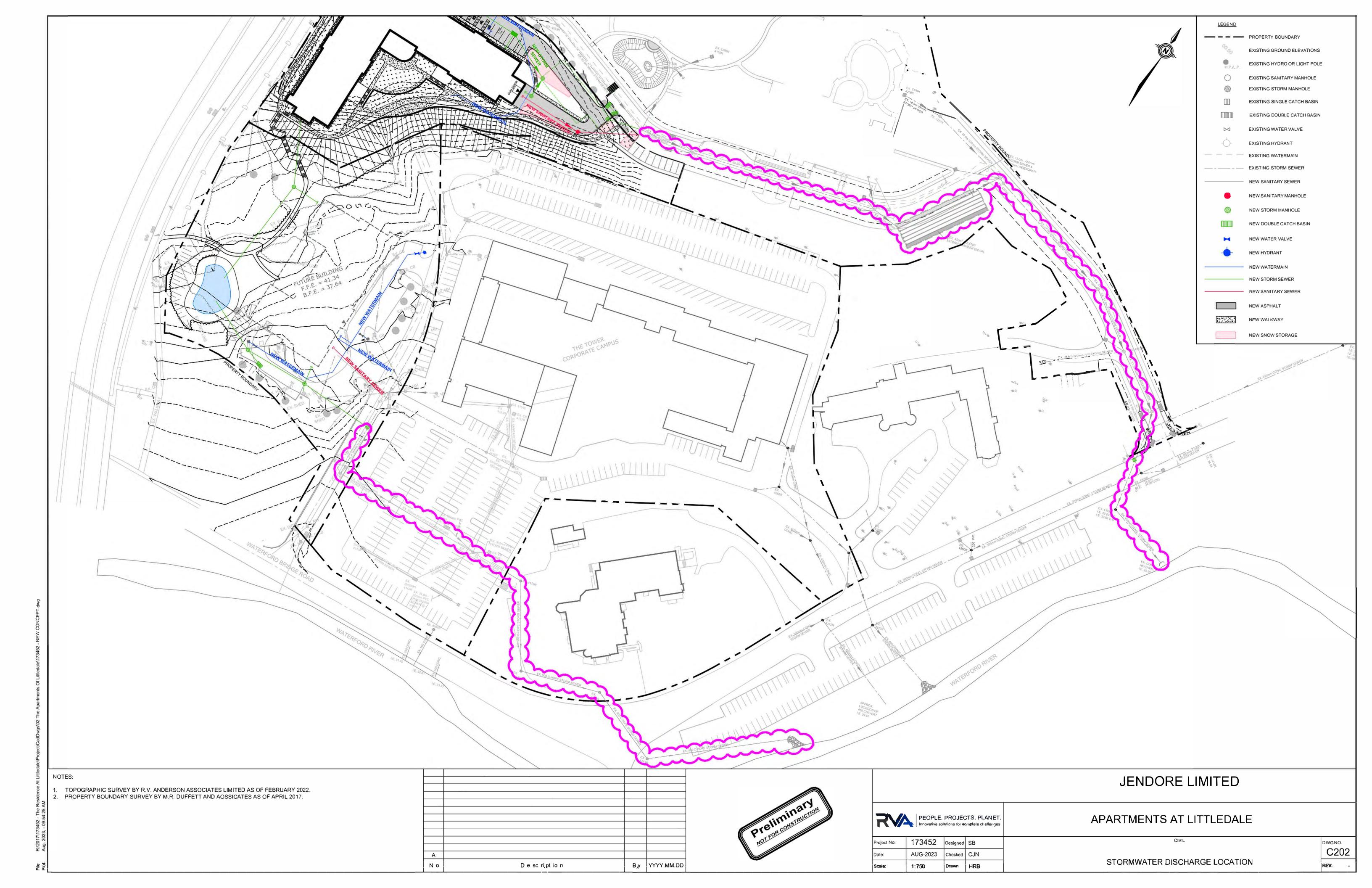




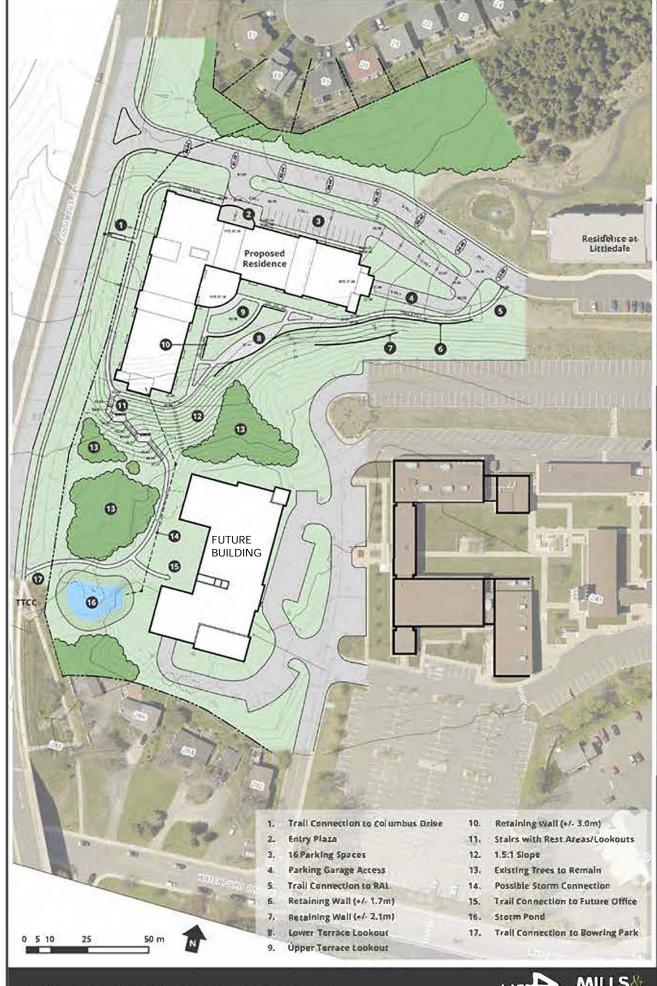


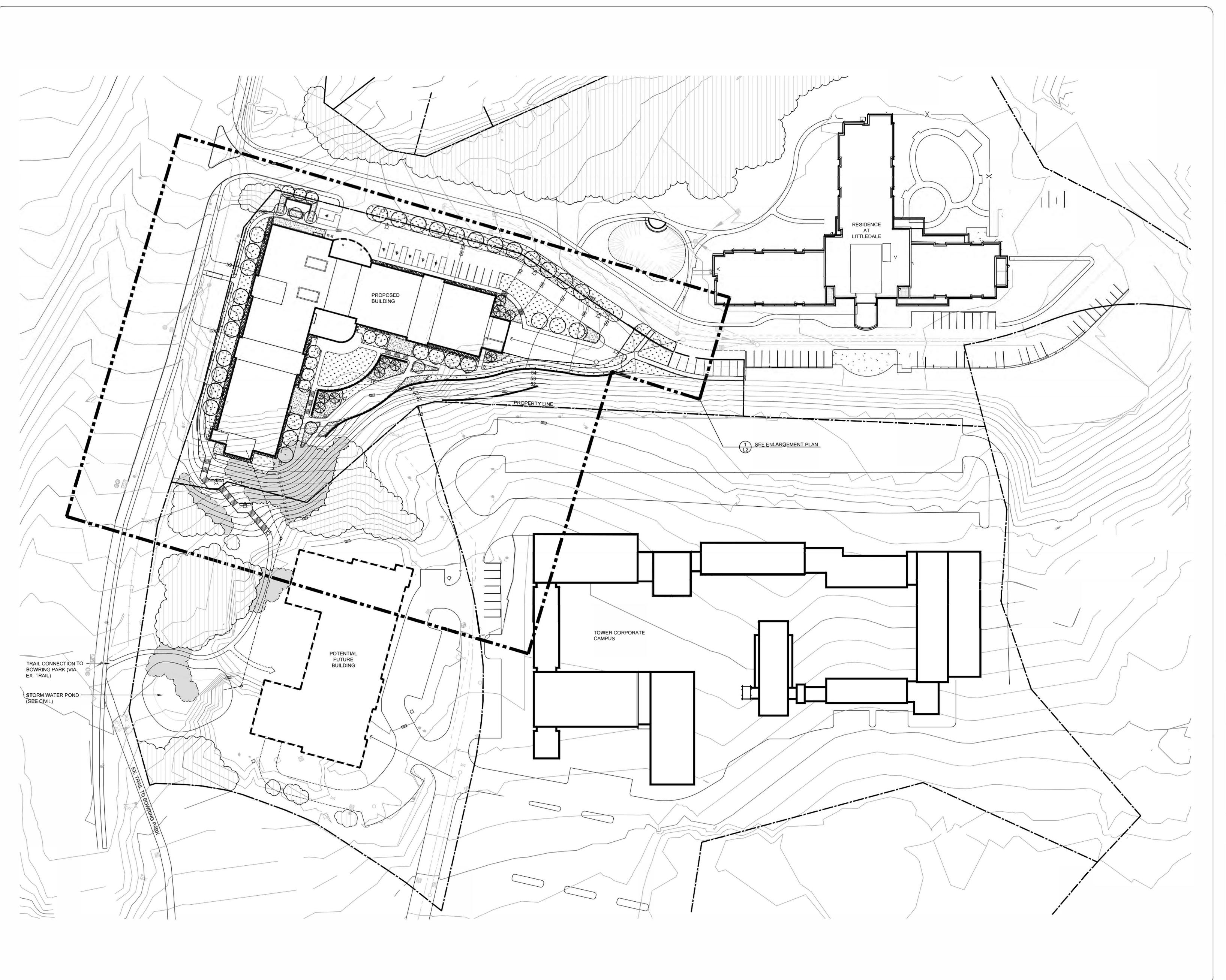






APPENDIX 4 | LANDSCAPE PLAN

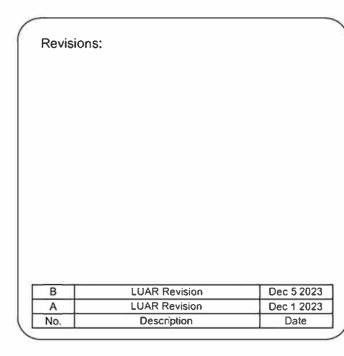








Structural:	·
Civil:	
Landscape:	
MILLS& WRIGHT	95 LeMarchant Road Suite 202 St. John's, NL A1C 2H1 (709) 770-5035 (709) 770-8381 millsandwright.ca
Kitchen:	
Interior Design:	



Jendore Ltd.

85 Unit
Apartment
Building

Location: Waterford Valley

Overall Landscape Plan

Scale: 1:500

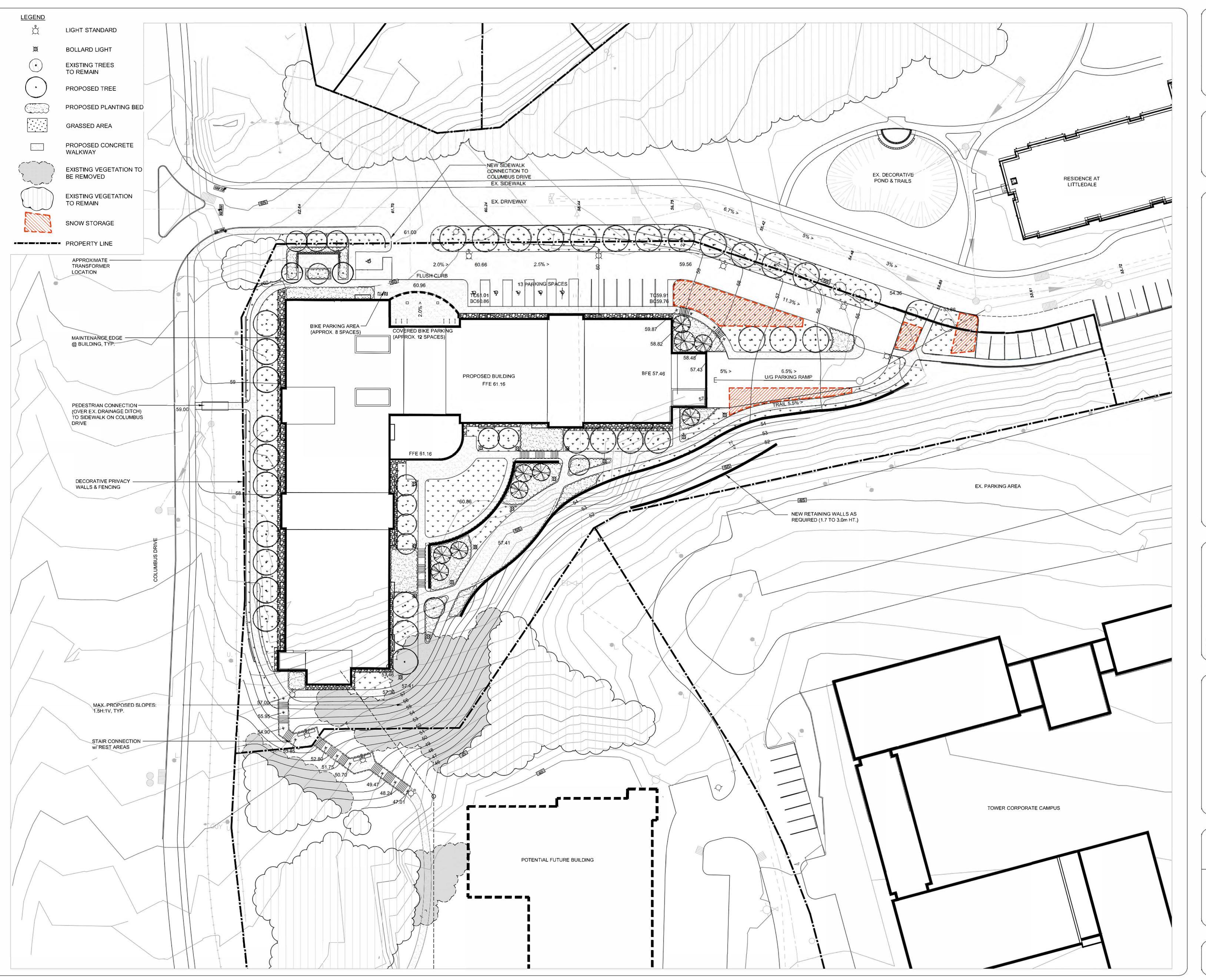
Date: March 2023

Drawn By: J.Waddleton

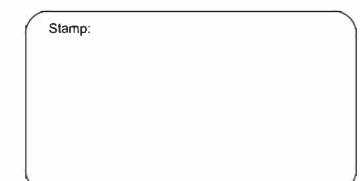
Checked By: M.Mills

Job Number: 21-1668

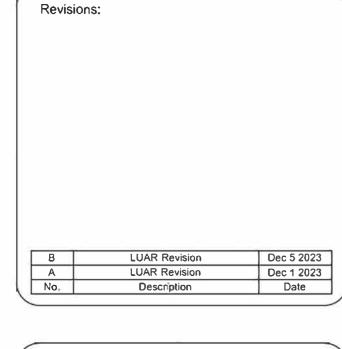
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Mechanical & Efectrical:	
Structural:	
Civil:	
Civii.	
Landscape:	
MILLS& WRIGHT	95 LeMarchant Road Suite 202 St. John's, NL A1C 2H1
WRIGHT LANDSCAPE ARCHITECTURE	(709) 770-5035 (709) 770-8381 millsandwrlght.ca
Kitchen:	i i
Interior Design:	





Location: Waterford Valley

Client:

Enlargement Plan 1:300 March 2023

Scale: 1:300

Date: March 2023

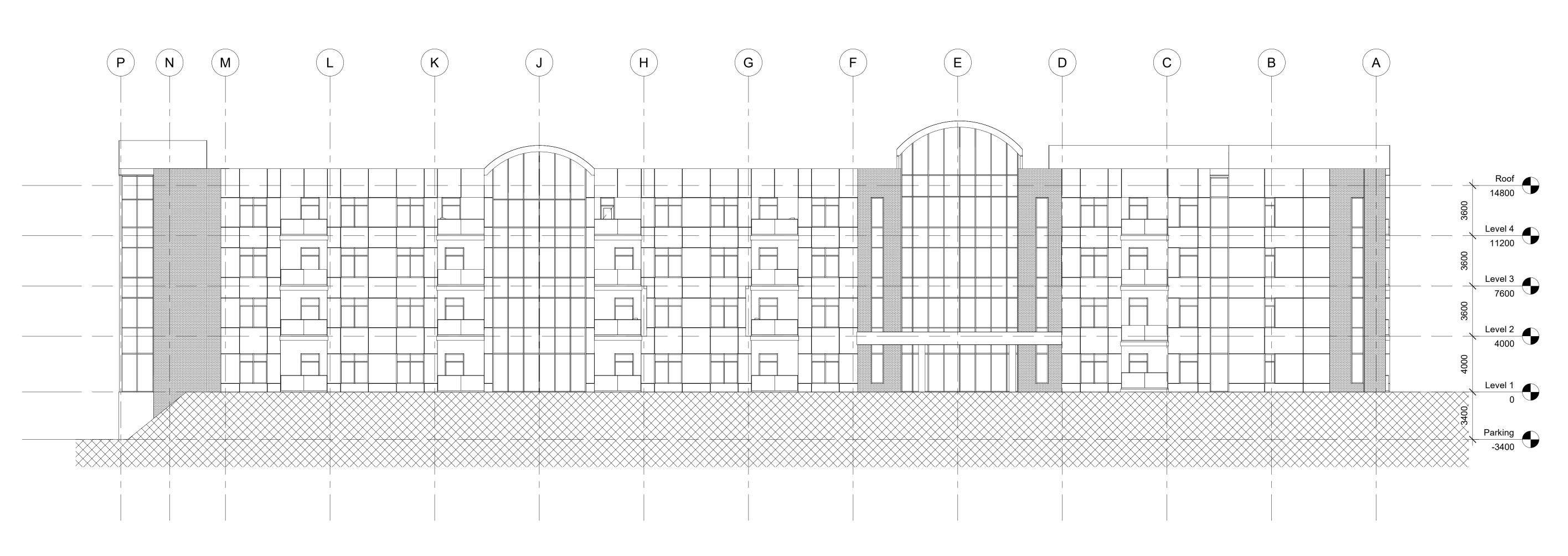
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Checked By: M.Mills

Job Number: 21-1668

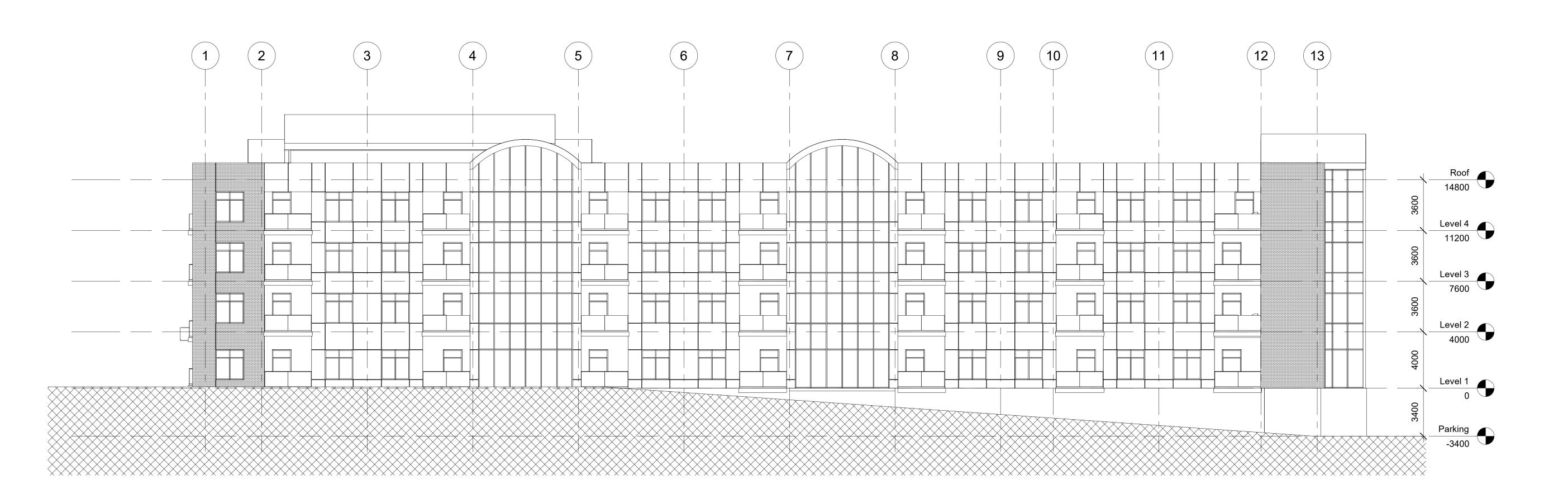
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APPENDIX 5 | DESIGN DRAWINGS



Elevation - North

1: 150



2 Elevation - Wast 1: 150



Stamp:

Mechanical & Electrical:

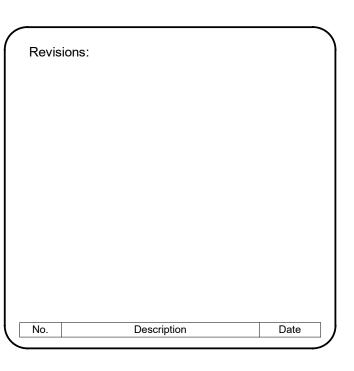
Kitchen:

Interior Design:

Structural:

Civil:

Landscape:



Fred Cahill
Project:
New Residence

Elevations North & West

Scale: 1:150

Date: June 2022

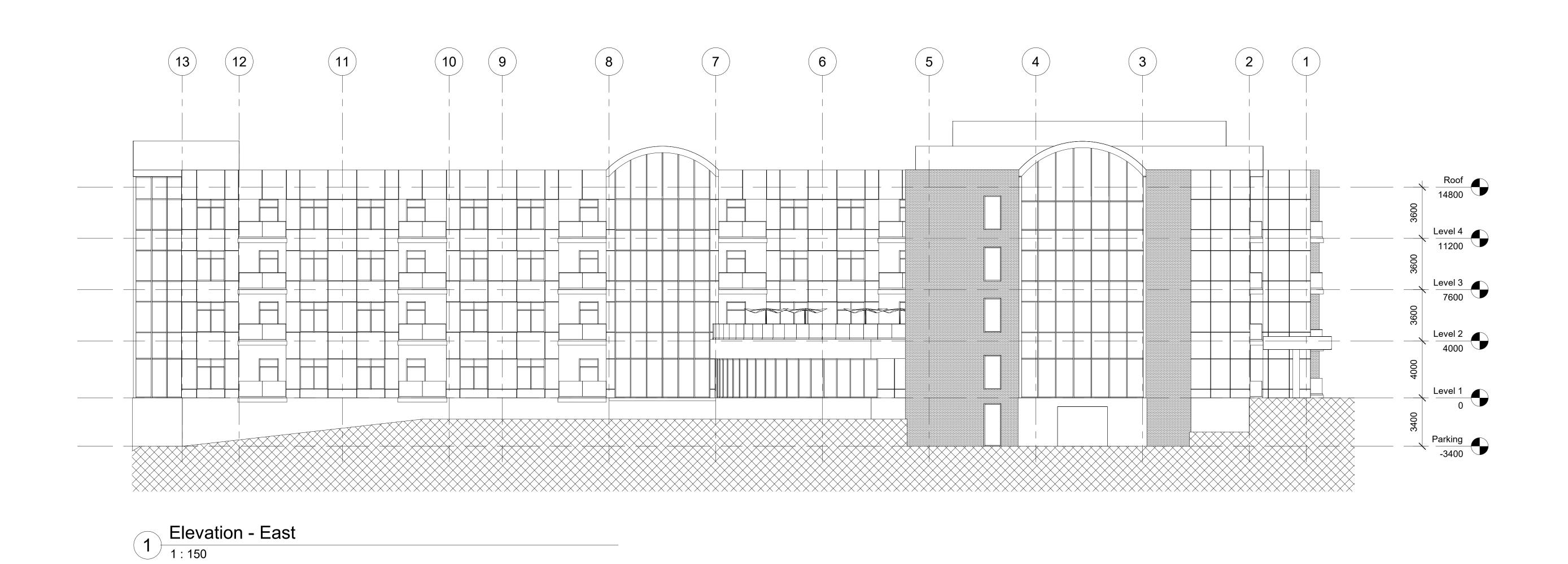
Drawn By: Author

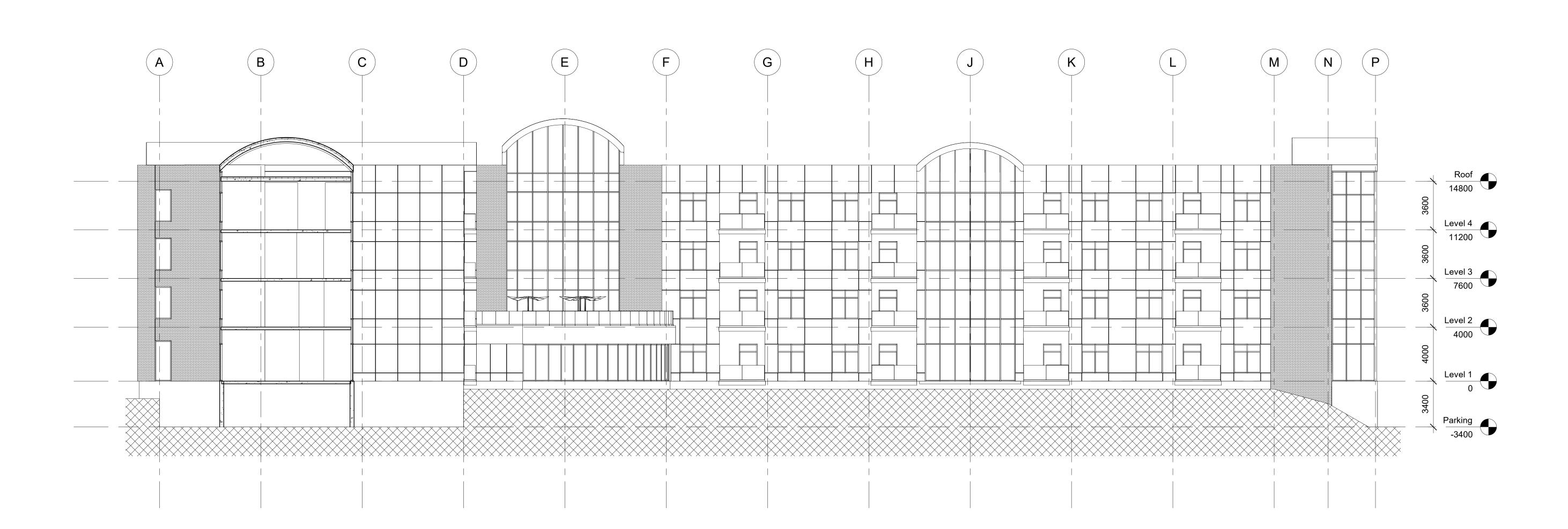
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Job Number: 21-1668

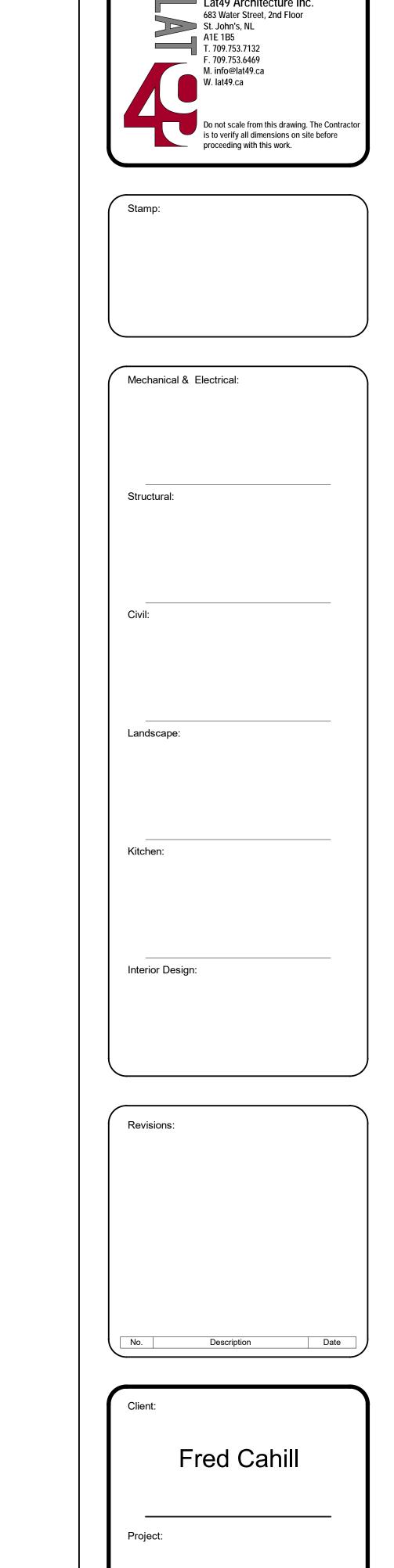
Location: Waterford Valley

A107





2 Elevation - South
1: 150



New Residence

Location: Waterford Valley

Elevations South & East

Scale: 1:150

Date: June 2022

Drawn By: Author

Checked By: Checker

Job Number: 21-1668

A108

APPENDIX 6 | SHADOW STUDY

















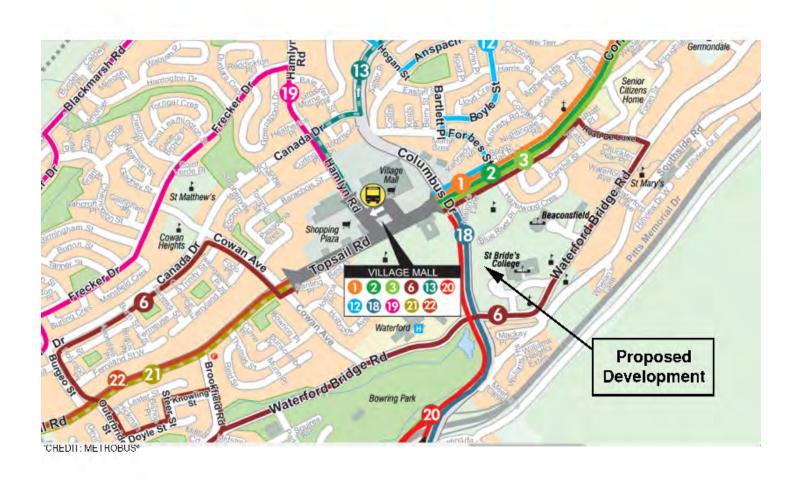




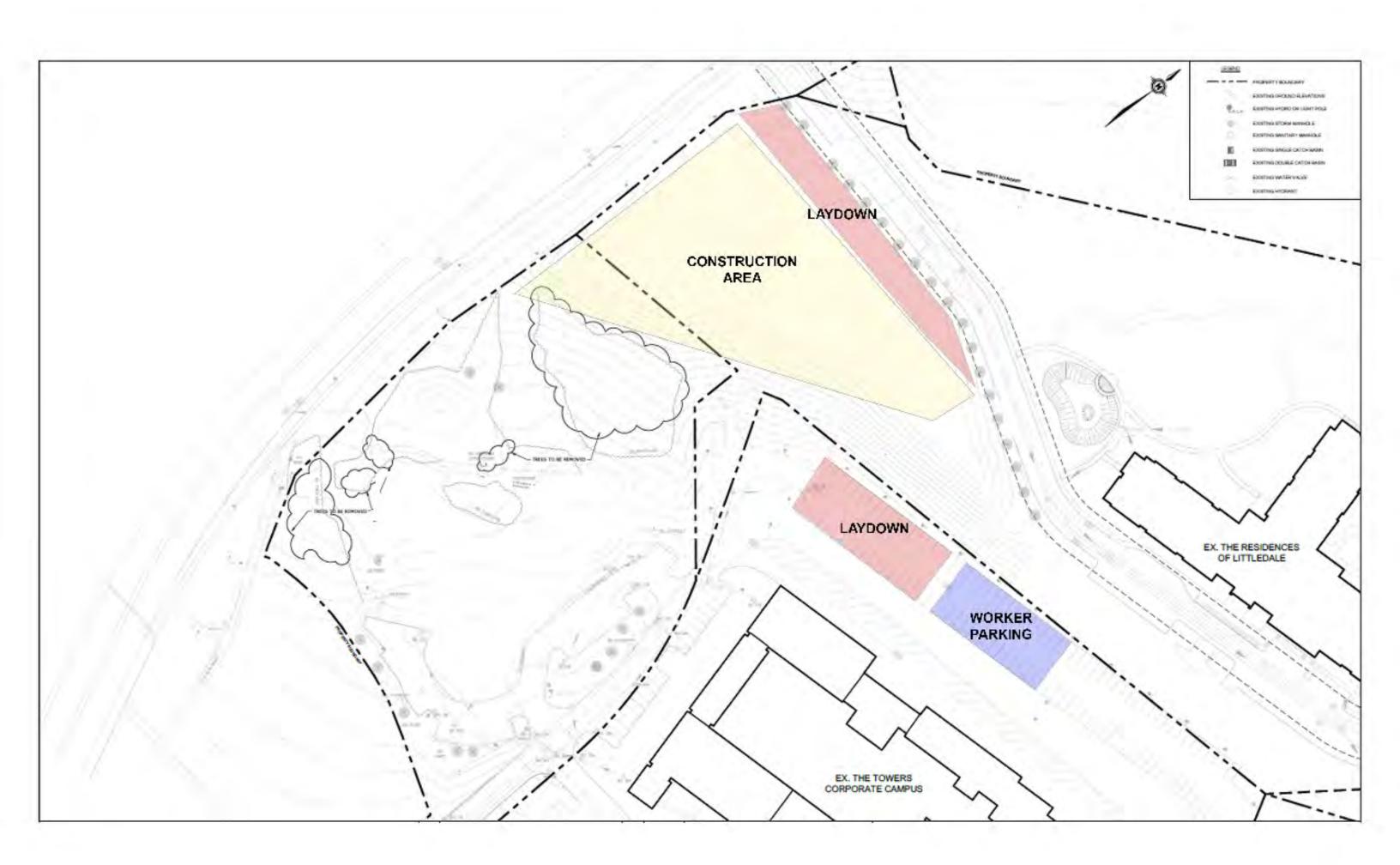




APPENDIX 7 | TRANSIT



APPENDIX 8 | CONSTRUCTION PARKING PLAN



APPENDIX 9 | TRAFFIC STUDY

R.V. Anderson Associates Limited 145 Kelsey Drive, Suite 204 St. John's NL A1B 0L2 Canada T 709 722 0024 F 855 833 4022 rvanderson.com



TECHNICAL MEMORANDUM

To: Ben Collingwood, R.V. Anderson **RVA:** 173452

From: Nick Palomba, P.Eng. R.V. Anderson

Date: May 30, 2023

Subject: New Proposed Development at 214 Waterford Bridge Road – Traffic Impact

Memo

The following memo has been prepared to address comments received from the City of St. John's in regarding traffic information provided as part of the Land Use Report (LUR) for the proposed development located at 214 Waterford Bridge Road in St. John's Newfoundland and Labrador.

1.0 Proposed Development

The development is proposed to consist of a 4-storey apartment development containing 85 units. Vehicular access to the site will be provided through two proposed driveways located off the existing two-lane private internal roadway which stretches between Columbus Drive and Waterford Bridge Road and services the existing The Residence at Littledale retirement home, Sisters of Mercy building and The Tower Corporate Campus. The driveways will be located approximately 55 metres and 145 metres east of Columbus Drive. The private access roadway has a posted speed limit of 30 km/hr.

2.0 Trip Generation & Assignment

Based on Land use Code 221 Multifamily Housing (mid-rise) found in the Institute of Transportation Engineers (ITE) Trip Generation Manual 11th Edition, the proposed development is forecast to generate a total of 26 two-way trips (6 inbound and 20 outbound) during the weekday a.m. peak hour. For the weekday p.m. peak hour, the development is forecast to generate a total of 33 two-way trips (20 inbound and 13 outbound).



Roadway access to the proposed development will utilize two key intersections with the internal private roadway. The first being the unsignalized right-in right-out intersection of the with Columbus Drive, and the second being the full movement unsignalized intersection of Waterford Bridge Road.

It is anticipated that site generated traffic leaving the development and destined to areas north of the site will utilize the Columbus Drive intersection easily utilizing the channelized right turn movement to head north. However, site traffic coming to the site from areas north of the development will be required to travel southbound along Columbus Drive to the signalized intersection of Bay Bulls Road where they can then reach Waterford Bridge Road and subsequently the unsignalized intersection with the private internal roadway.

For site generated traffic travelling both to and from areas south of the development, they will also be required to utilize the route via Columbus Drive – Bay Bulls Road - Waterford Bridge Road – Private Internal Roadway.

Finally, site generated traffic which is destined to and from areas both east and west of the site can travel via Waterford Bridge Road and the unsignalized intersection with the private internal roadway.

The overall site traffic generated by the proposed development is minor in nature and will be distributed over these various inbound and outbound routes choices. The resulting volumes would not adversely impact traffic operations as they represent increases which are less than the daily fluctuations experienced on these classes of roadways.

3.0 Conclusion

In summary, given the low volume of traffic forecast to be generated by the site during the weekday a.m. and p.m. peak hours and its dispersion between the two adjacent arterial roadways (i.e. Columbus Drive and Waterford Bridge Road), impacts to overall operations at the adjacent roadway intersections are expected to be minor in nature and requirements for geometric improvements are not anticipated.

Yours very truly,

Nick Palomba, P.Eng.

Mile Polonle

Vice President, Transportation

APPENDIX 10 | EXTERIOR PERSPECTIVES

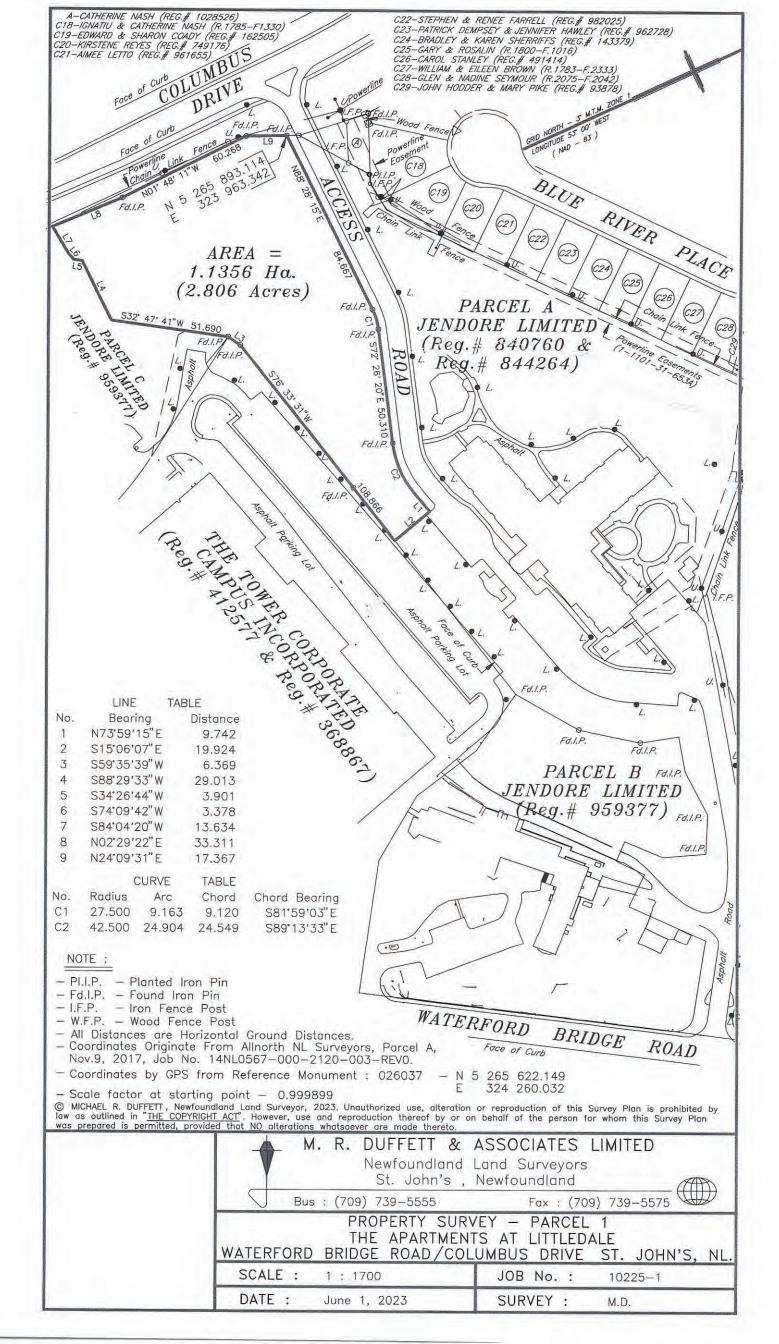


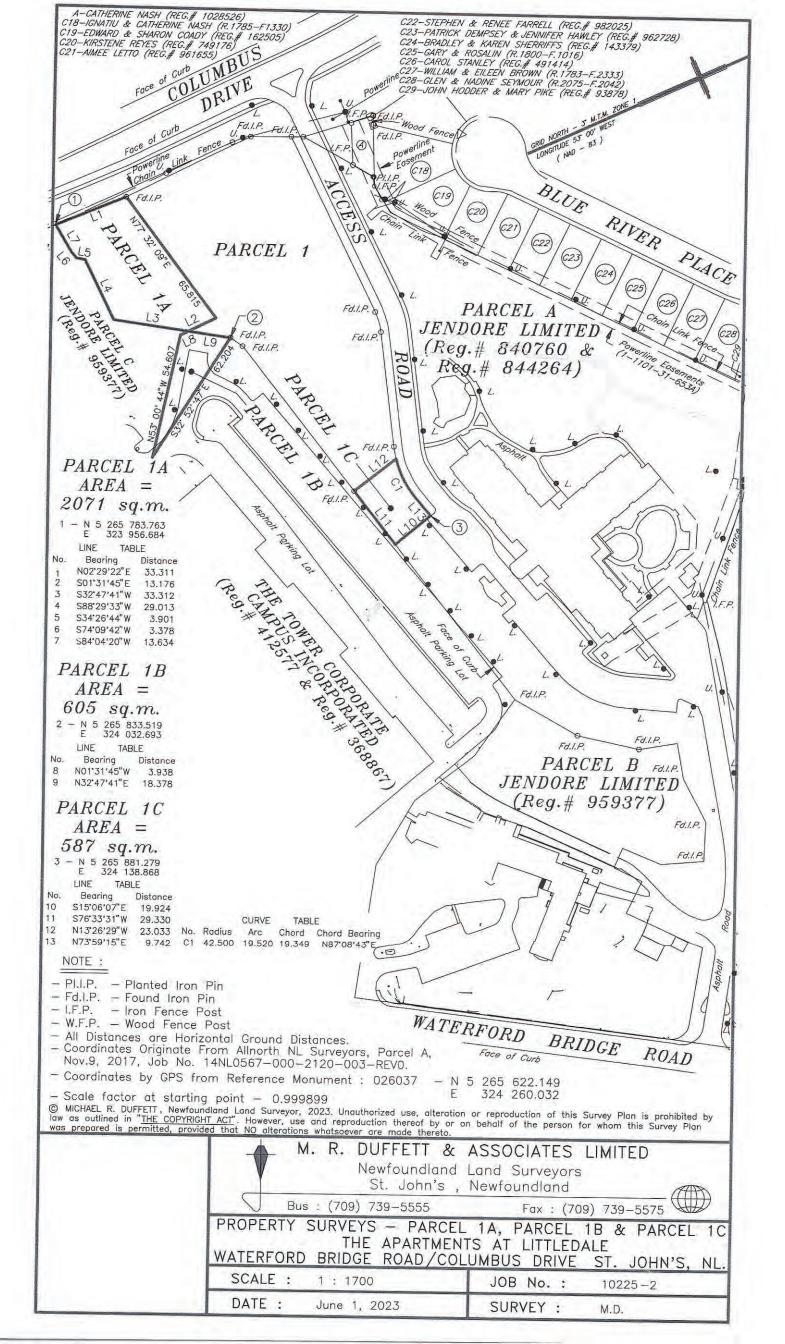


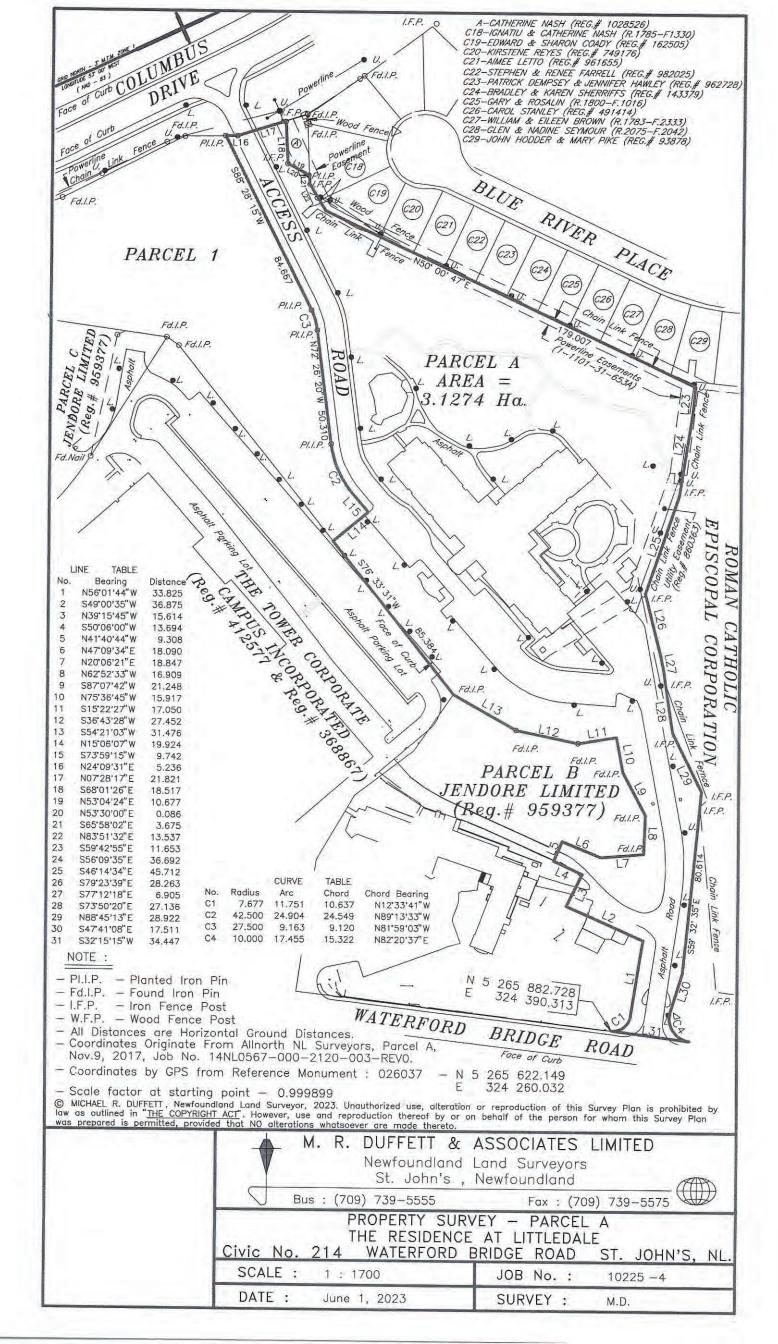


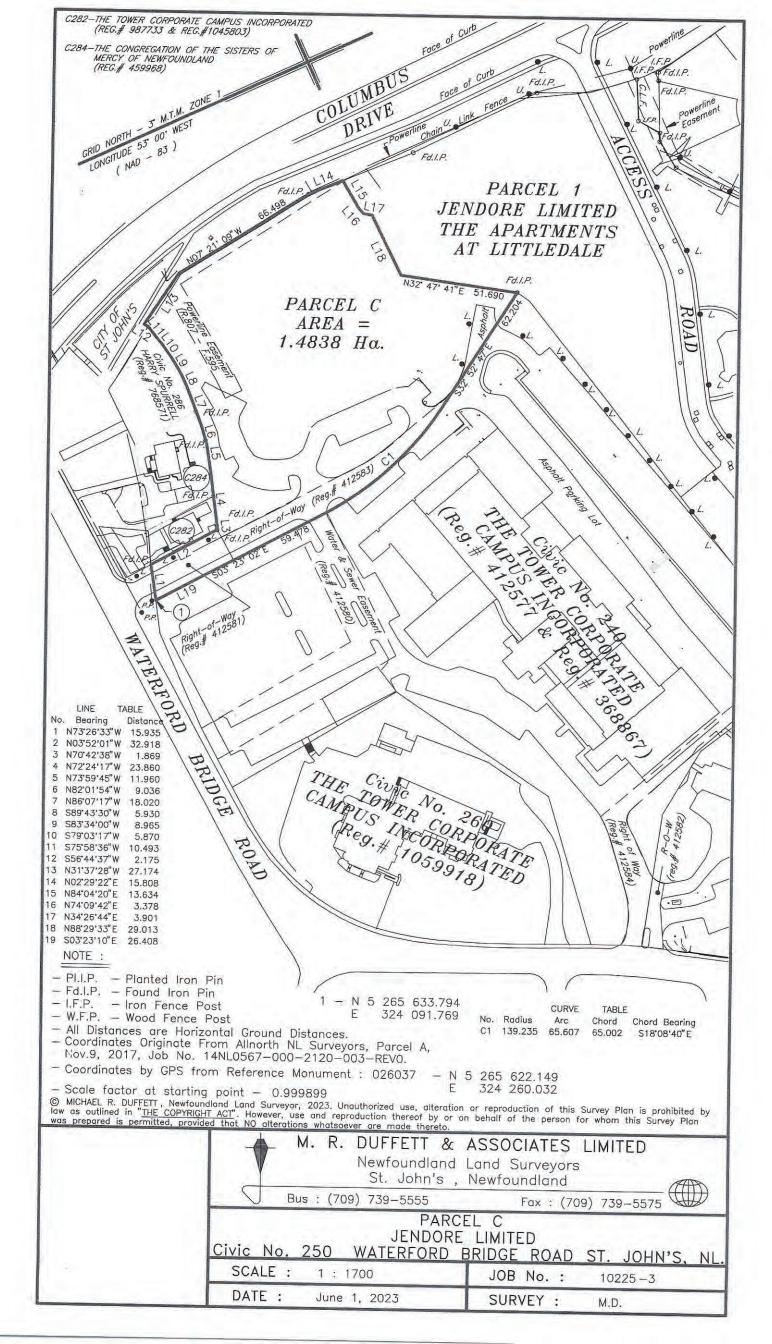


APPENDIX 11 | SURVEY AND RIGHT OF WAY AGREEMENT









THIS GRANT OF RIGHT-OF-WAY made this _____ day of September, 2023,

BETWEEN:

THE RESIDENCE AT LITTLEDALE INC., a body corporate, duly organized and existing under the laws of the Province of Newfoundland and Labrador,

(the "Grantor")

OF THE ONE PART

AND:

THE RESIDENCE AT LITTLEDALE INC., a body corporate, duly organized and existing under the laws of the Province of Newfoundland and Labrador,

(the "Grantee")

OF THE OTHER PART

<u>WHEREAS</u> the Grantor is the owner of ALL THAT piece or parcel of land being on the west side of Waterford Bridge Road, in the City of St. John's, in the Province of Newfoundland and Labrador, and being more particularly described in Schedule "A" hereto annexed (which Schedule "A" forms part and parcel of these presents) and which said piece or parcel of land is referred to herein as "Parcel A";

<u>AND WHEREAS</u> the Grantee is the owner of ALL THAT piece or parcel of land being on the east side of Columbus Drive, in the City of St. John's, in the Province of Newfoundland and Labrador, and being more particularly described in Schedule "B" hereto annexed (which Schedule "B" forms part and parcel of these presents) and which said piece or parcel of land is referred to herein as "Parcel 1";

AND WHEREAS the Grantor has agreed to grant unto the Grantee a right-of-way over the access road located on Parcel A as more particularly described herein;

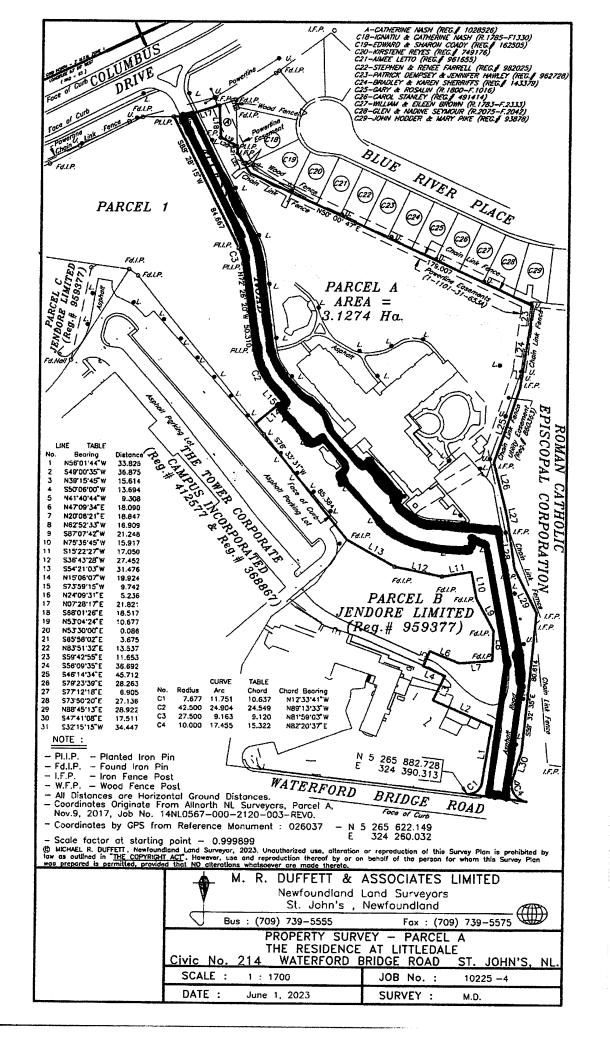
NOW THEREFORE THIS INDENTURE WITNESSETH that for and in consideration of the sum of Ten dollars (\$10.00) and other good and valuable consideration paid by the Grantee to the Grantor on or before the execution of these presents (the receipt and sufficiency of which is hereby acknowledged) the Grantor does hereby agree as follows:

- 1. The Grantor does hereby grant unto the Grantee, its successors and assigns, a free and uninterrupted right-of-way for all purposes for use by the Grantee, its servants, agents, workmen, customers, clients and others, by foot or with cars, trucks or other vehicles, over the access road located upon Parcel A running from Columbus Drive at the western boundary of Parcel A and continuing generally in a easterly direction over that area of Parcel A more particularly outlined on the diagram attached hereto as Schedule "C" (which Schedule "C" forms part and parcel of these presents) and continuing to the eastern boundary of Parcel A adjacent to Waterford Bridge Road (the "Right-of-Way").
- 2. It is a condition of the granting of the Right-of-Way that the Grantee agrees, and the Grantee does hereby covenant and agree, to indemnify and save harmless the Grantor from and against all claims, costs, losses, damages and expenses arising from damage to the Right-of-Way or injury, including death, to any person caused by the use by the Grantee, its servants, agents, workmen, customers, clients and assigns of the Right-of-Way hereby granted.
- 3. The Right-of-Way shall run with and bind Parcel A and shall be for the benefit of and run with Parcel 1 and may be registered at the Registry of Deeds.
- 4. This Agreement shall be binding upon and shall enure to the benefit of the parties hereto and their respective successors and assigns, including successors in title.

[Remainder of page intentionally blank. Signature page follows]

IN WITNESS WHEREOF the parties hereto have executed this Grant of Right-of-Way as of the date first written above.

EXECUTED by the Grantor in the presence of:	THE RESIDENCE AT LITTLEDALE INC.
Commissioner for Oaths (NL) (affix seal or stamp)	Per:
EXECUTED by the Grantee in the presence of:	THE RESIDENCE AT LITTLEDALE INC.
Commissioner for Oaths (NL) (affix seal or stamp)	Per:



APPENDIX 12 PUBLIC CONSULTANT MEETING



Public Consultation Proposed 85 Unit Apartment Building 214 Waterford Bridge Road

You are invited to attend a public consultation session.

The purpose of this public consultation session is to share information and site plans for this proposed project and gather feedback from adjacent property owners.

Date: Thursday, October 12th

Time: 6:00 - 8:00 PM

Location: Former Corpus Christi Parish Hall

We value your feedback. If you are unable to attend the public consultation session but you have any comments or concerns please feel free to contact:

edelaney@cahill.ca

























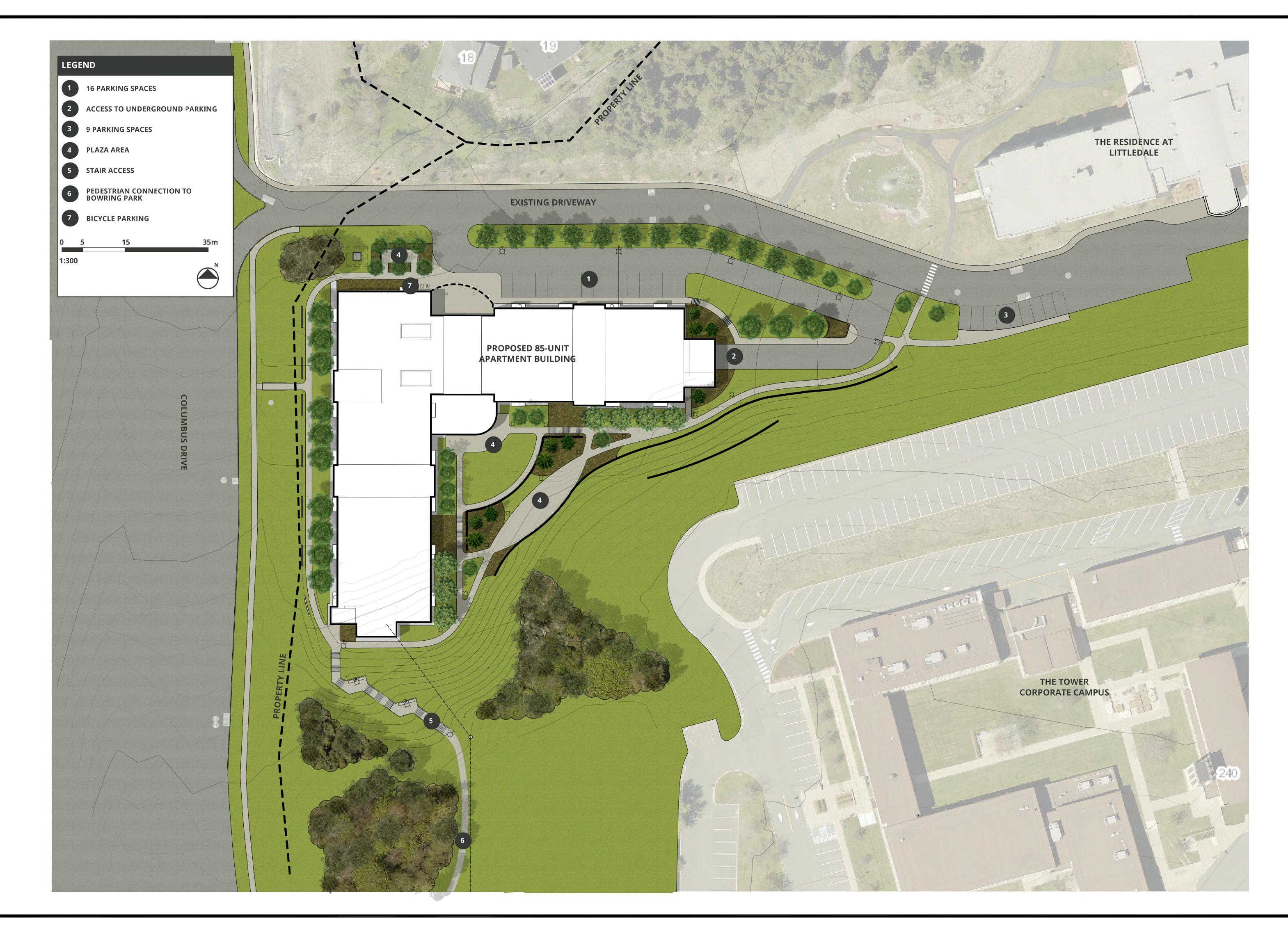










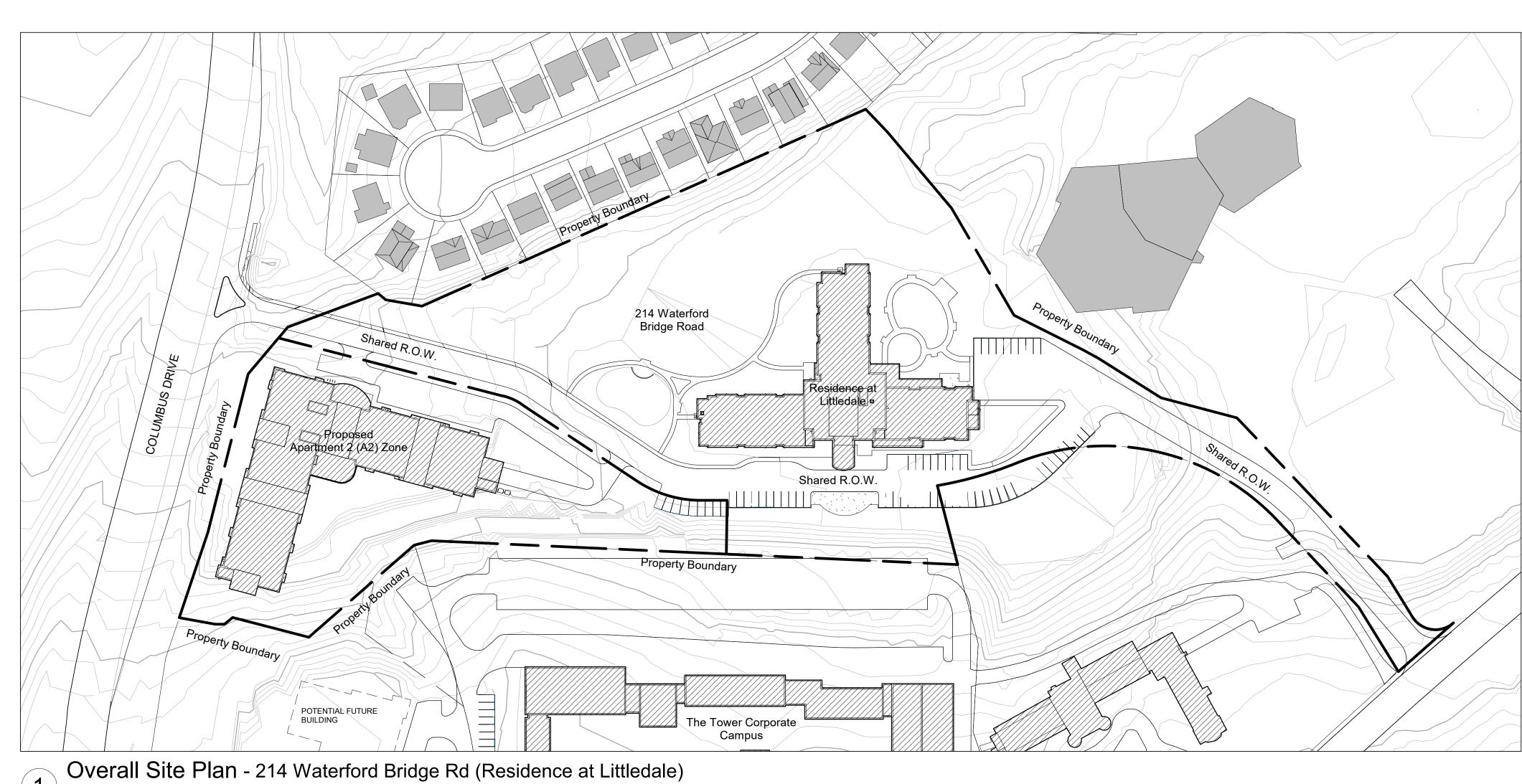








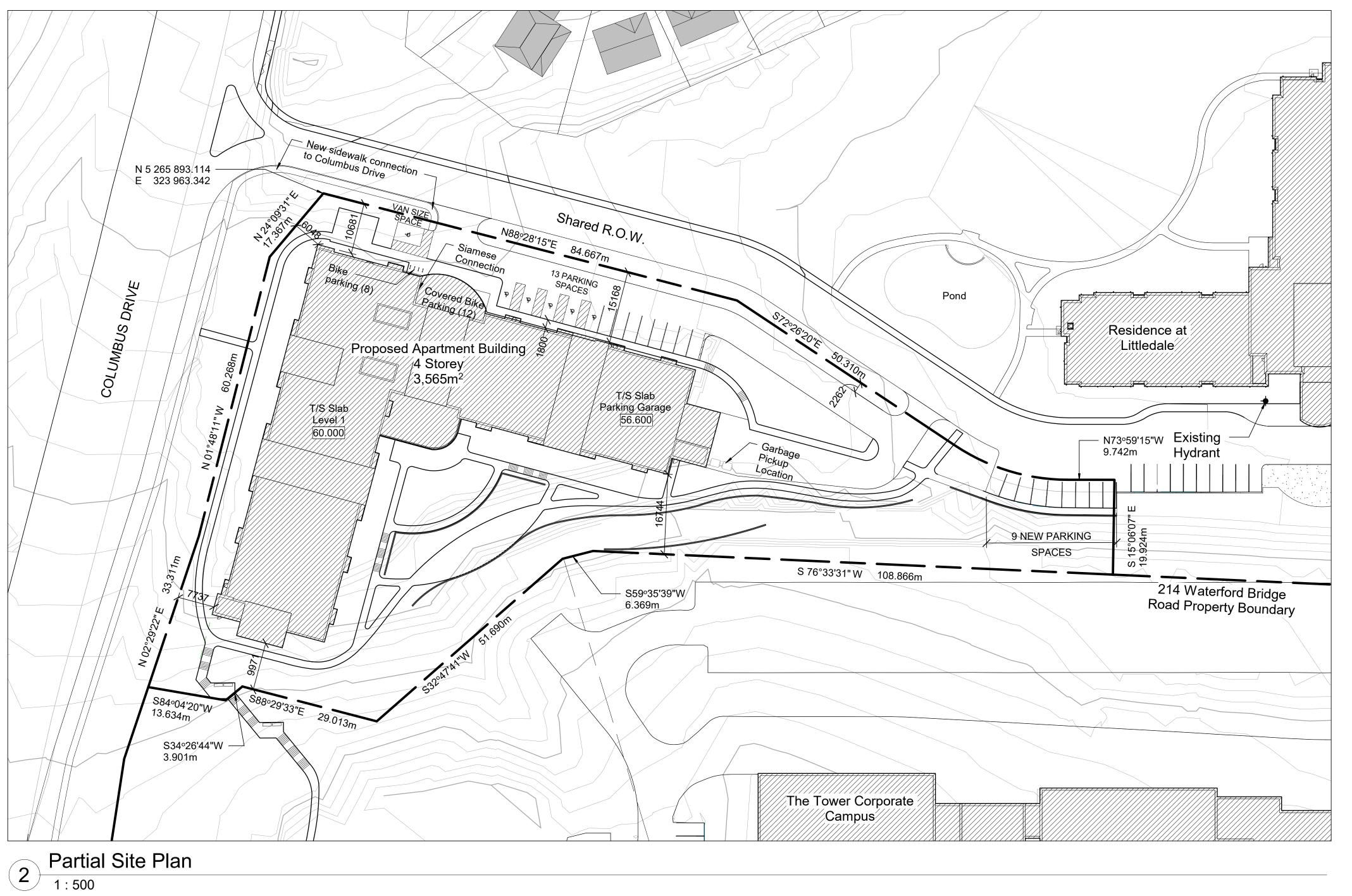




1:1000

SITE	STATISTICS	
LOT AREA: 11,336m ² BLDG AREA: 3,565m ²		
APARTMENT	2 (A2) ZONE STANDAR	DS
	REQUIRED	PROVIDED
LOT AREA (min) LOT FRONTAGE (min) BUILDING LINE (min) BUILDING HEIGHT (max) SIDE YARD (min) REAR YARD (min) LOT COVERAGE (max) LANDSCAPING (min) PARKING SPACES (min)	650.0m ² 20m 6m 24m 1m per 4m bldg height 6m 40% 30% 96 spaces	11,355m ² 89m 6m 19.4m 7.7m 9.9m 28.97% 54% 86 spaces

Required Minimum	Required Maximum	
Dwelling Size Studio 0.8 1 Bedroom Dwelling 0.9 2 Bedroom Dwelling 1.0 3 Bedroom Dwelling 1.2 or Greater	Dwelling Size Studio 1.2 1 Bedroom Dwelling 1.2 2 Bedroom Dwelling 1.5 3 Bedroom Dwelling 2.0 or Greater	
Visitor parking: 0 visitor parking spaces for the first 7 Dwellings; 1 visitor parking space per 7 Dwellings thereafter	Maximums are cumulative for building and inclusive of visitor parking	
NEW APARTMENT BUILDING: 85 L	<u>Jnits</u>	
1 Bedroom Dwellings: 8 x 0.9 Spa 2 Bedroom Dwellings: 77 x 1.0 Spa Visitor Parking Requirements	•	



St. John's, NL A1E 1B5 T. 709.753.7132 Do not scale from this drawing. The Contractor is to verify all dimensions on site before proceeding with this work.

Mechanical & Electrical:

Structural: Civil: Landscape: Interior Design:

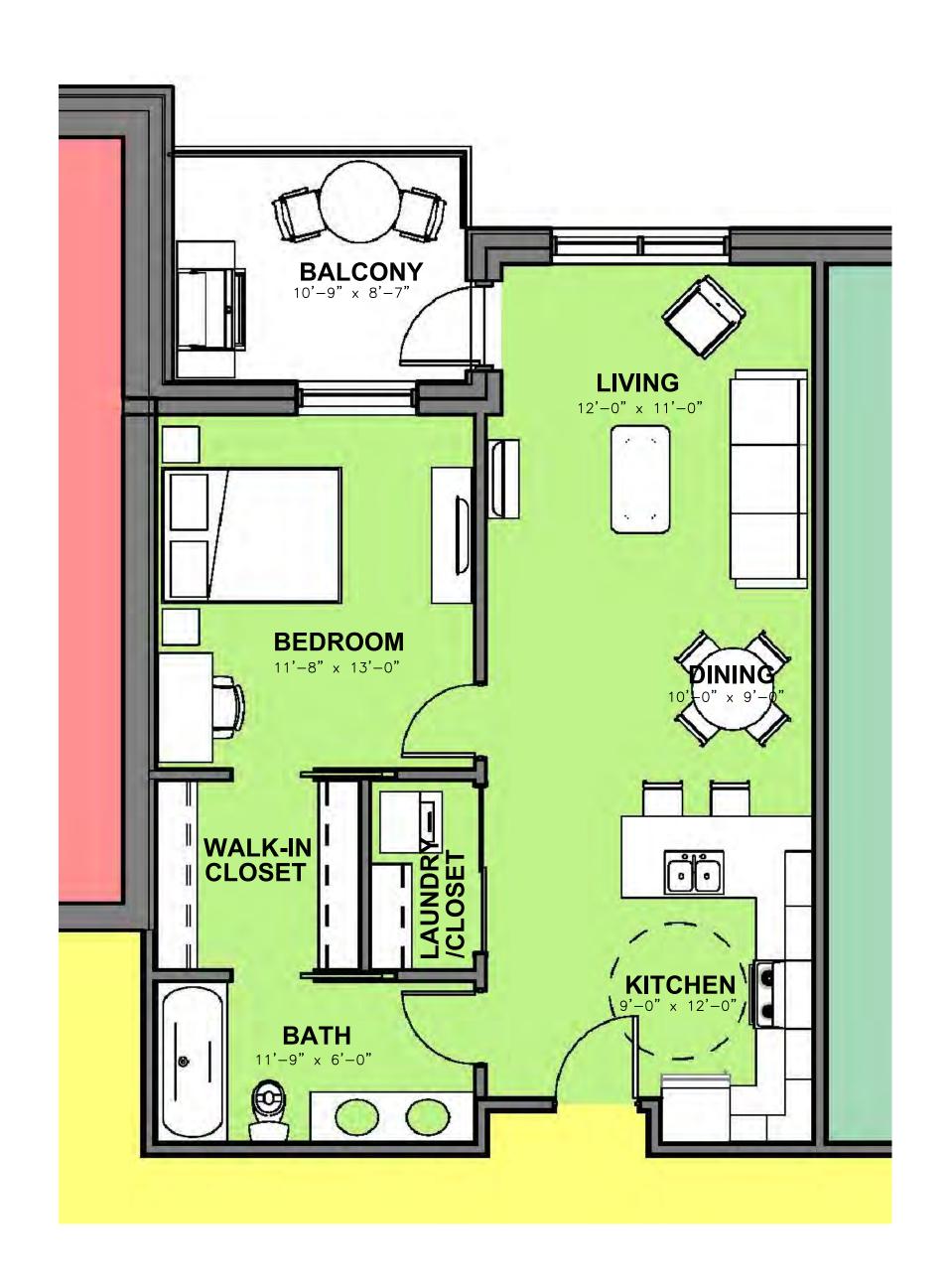
May 02 2024
Jan 23 2024
Dec 05 2023
Dec 01 2023
Oct 23 2023
Nov 17 2022
Date LUAR Revision LUAR Revision LUAR Revision LUAR Revision LUAR Revision Issued for Permit

Client: Jendore Apartments at Littledale Location: Waterford Valley

> Site Plan As indicated Drawn By: Checked By: J.Bryant Job Number: 21-1668

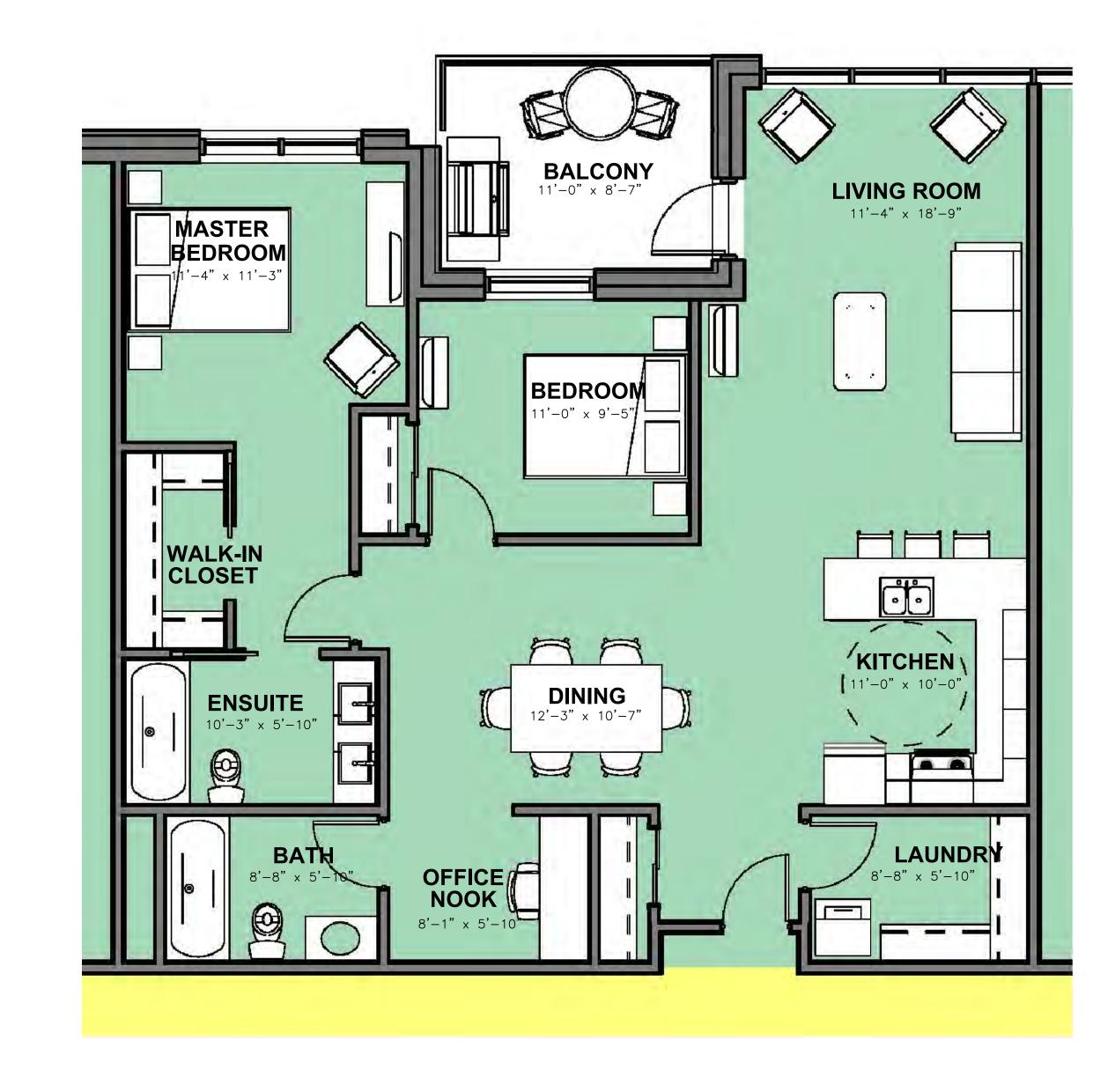
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RF



1-BEDROOM SUITE

AREA: 70.0 m2 (753.0 sqft)



2-BEDROOM SUITE

AREA: 114.0 m2 (1227.0 sqft)







APPENDIX 13 | BUILDING AND SITE LIGHTING FIXTURES











Date
Quote #
Project Name
Туре

2SRBK - Wall Mount

Description:

2SRBK is a surface mounted cylinder available with a wide beam or narrow beam distribution pattern. 2SRBK has an up/down light. Various sizes available.



Name	Engin	e	Lumens -	сст	Electrical	Mount	ting Lens Patte	ern Optic	ons Finish
	Name	Light Engine		Light Engine Source Lumens(LED)(Color Temp		E	lectrical
	2SRBK-6-15	6X15	18W LED/Side		4756	30K	3000K	UN	V 120-277V
	2SRBK-8-15	8X15	29W LED/Side		6470	35K	3500K	HĽ	√ 347-480V
	2SRBK-8-18	8X18	40W LED/Side		11500	40K	4000K		
						50K	5000K		
		(Contact for custom	C	Contact for custom	C	ontact for custom		
	Mounting		Lens		Light Pattern		Options	ı	inishes
WM	Wall mount	CG	Clear glass lens	NB	Narrow beam	DM	0-10V dimming	Standard	
				MB	Medium beam	WL	Wet location	BL	Black
		PR	Prismatic lens (K12)	IVID	Medidiii Dediii	***	Weelocaton	WH	White
				WB	Wide beam	PC	Button photocell	SG	Silver Grey

TS	screws		
	screws	CC	Custom Color
RGBW	Programmable color changing LEDs		See website for custom colors. Contact factory for
AEL	Quartz restrike		physical samples.
	(relay)	CH	Chrome
MEL	Quartz restrike (no relay)	ANO	Anodized aluminum
	RGBW AEL	screws RGBW Programmable color changing LEDs AEL Quartz restrike (relay) MEL Quartz restrike (no	screws CC RGBW Programmable color changing LEDs AEL Quartz restrike (relay) CH MEL Quartz restrike (no

ΤP

Tamperproof hardware



Bronze

Custom

[•] IES files available upon request

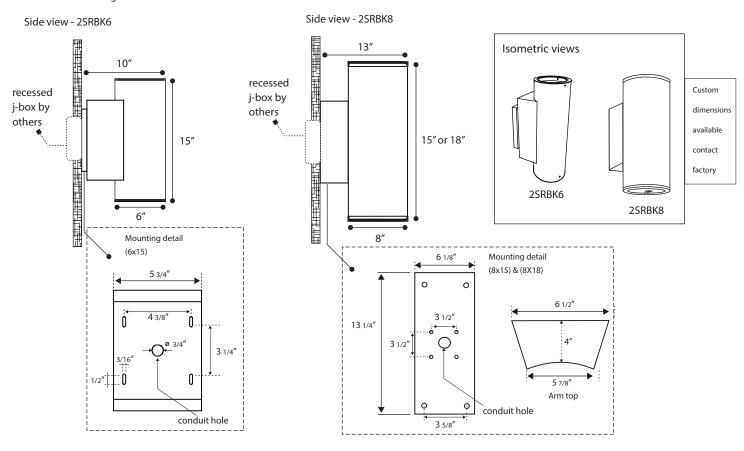
[•] Std - Standard Offering





Dimensions & Mounting:

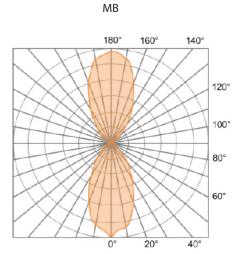
Please note that drawings are not to scale.



Listing:

Complies to CSA and UL standards.

Polar Graph:





DESCRIPTION

The classic lines and sophisticated construction of Vision Site LED luminaire makes it an ideal complement to site design. Offering LED technology across the VXS and VXM, the Vision Site luminaire provides true family scaling in both physical form and lumen capability for architectural site lighting applications. UL/cUL listed for use in wet locations.

Catalog #	Туре
Project	
Comments	Date
Prepared by	

SPECIFICATION FEATURES

Construction

HOUSING: Heavy-wall one-piece, die-cast aluminum housing has precise tolerance control and repeatability in manufacturing. Housing features a partition wall that isolates driver components for cooler operation. Integral aluminum heat sink provides superior thermal heat transfer in +40°C ambient environments. DOOR: One-piece, die-cast aluminum construction with toolless release latch. Door swings down and is retained on two catch hinges. GASKET: Continuous gasket provided to seal housing to optic tray. LENS: Downlight lens is LED board integrated acrylic overoptics, each individually sealed for IP66 rating. HARDWARE: Tool-less release door latch is stainless steel/ aluminum construction, painted to match housing and allows access to internal housing and electrical components.

Optics

Choice of twelve patented, highefficiency AccuLED Optics™ distributions. Optics are precisely designed to shape the light output, maximizing efficiency and application spacing. AccuLED Optics technology creates consistent distributions with the scalability to meet customized application requirements. Offered Standard in 4000K (+/- 275K) CCT and minimum 70 CRI. Optional 3000K CCT and 5000K CCT. For the ultimate level of spill light control, an optional house-side shield accessory can be field or factory installed. The house-side shield is

designed to seamlessly integrate with the SL2, SL3 or SL4 optics.

Electrical

LFD drivers mount to die-cast aluminum back housing for optimal heat sinking, operation efficacy, and prolonged life. Standard drivers feature electronic universal voltage (120-277V 50/60Hz), 347V 60Hz or 480V 60Hz operation, 480V is compatible for use with 480V Wye systems only. Greater than 0.9 power factor, less than 20% harmonic distortion, and is suitable for operation in -40°C to 40°C ambient environments. All fixtures are shipped standard with 10kV/10kA common and differential - mode surge protection. LightBARs feature and IP66 enclosure rating and maintain greater than 95% lumen maintenance at 60,000 hours per IESNA TM-21. Occupancy sensor and dimming options available.

Mounting

ARM: One-piece extruded aluminum arm available in standard 5" lengths (VXS) and 6" and 10" (VXM). Internal bolts guides allow easy positioning of fixture during installation to pole or wall surface. STRUCTURAL MOUNT: Die-cast aluminum cleat factory mounted to luminaire and finished in luminaire color. Stainless steel structural rod measures 1/2" in diameter and is provided in luminaire finish color or optional natural finish. Product works in conjunction with dedicated accessory arms (order seperately). Invue poles

are provided pre-drilled when structural mount option drill pattern is specified. See Invue poles section for complete selection. Additional mounting accessories available.

Finish

Housing is finished in five-stage super premium TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. LightBAR cover plates are standard white and may be specified to match finish of luminaire housing. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult Outdoor Architectural Colors brochure for a complete selection. Options to meet Buy American Act requirements

Warranty

Five-year warranty.



VXS/VXM VISION SITE LED

1 - 6 LightBARS Solid State LED

Invue

ARCHITECTURAL AREA/SITE LUMINAIRE







CERTIFICATION DATA

UL/cUL Listed ISO 9001 IP66 LightBARs LM79 / LM80 Compliant 1.5G Vibration Tested DesignLights Consortium® Qualified*

ENERGY DATA

Electronic LED Driver

>0.9 Power Factor <20% Total Harmonic Distortion 120-277V/50 & 60Hz, 347V/60Hz, 480V/60Hz -40°C Minimum Temperature

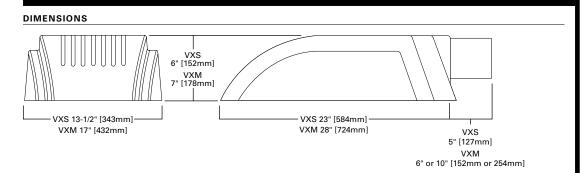
-40°C Minimum Temperature 40°C Ambient Temperature Rating

EPA

Effective Projected Area: (Sq. Ft.) VXS Single: 1.18 w/Arm VXS Single Structural: 1.27 w/Arm VXM Single: 1.89 w/Arm VXM Single Structural: 2.09 w/Arm

SHIPPING DATA Approximate Net Weight: VXS: 35 lbs. (15.91 kgs.)

VXS: 35 lbs. (15.91 kgs.) **VXM**: 51 lbs. (23.18 kgs.)





ORDERING INFORMATION

Sample Number: VXS-E04-LED-E-T3-GM

Product Family 1, 2, 3	Number of LightBARs 4,5	Lamp Type	Voltage	Distribution	Color 8
VXS=Vision Site Small VXM=Vision Site Medium BAA-VXS=Vision Site Small Buy American Act Compliant ³¹ BAA-VXM= Vision Site Medium Buy American Act Compliant ³¹	E01=(1) 21 LED LightBAR E02=(2) 21 LED LightBARs E03=(3) 21 LED LightBARs E04=(4) 21 LED LightBARs E05=(5) 21 LED LightBARs E06=(6) 21 LED LightBARs F01=(1) 7 LED LightBARs F02=(2) 7 LED LightBARs F03=(3) 7 LED LightBARs F04=(4) 7 LED LightBARs F04=(4) 7 LED LightBARs F05=(5) 7 LED LightBARs F06=(6) 7 LED LightBARs	LED=Solid State Light Emit- ting Diode	E1=Universal (120-277V) 347=347V 480=480V ⁷	T2=Type II T3=Type III T4=Type IV 5MQ=Type V Square Medium 5WQ=Type V Square Wide 5XQ=Type V Square Extra Wide RW=Rectangular Wide SL2=Type II with Spill Control SL3=Type III with Spill Control SL4=Type IV with Spill Control SLL=90° Spill Light Eliminator Left SLR=90° Spill Light Eliminator Right	AP=Grey BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White RALxx=Custom Color

Structural Options 3,9

PRCPS=Strut Rod and Clevis Set for Square Pole (Painted to match fixture. Does not include arm) 10

PRCCS=Stainless Strut Rod and Clevis Set for Square Pole (Clevis painted to match fixture. Does not include arm) 10 PRCPR=Strut Rod and Clevis Set for Round Pole

(Painted to match fixture. Does not include arm) 11 PRCCR=Stainless Strut Rod and Clevis Set for Round Pole (Clevis painted to match fixture. Does not include arm) 11

Wall Mount

WRCP=Strut Rod and Clevis Set

(Painted to match fixture. Does not include arm) 12 WRCS=Stainless Steel Strut Rod and Clevis Set

(Clevis painted to match fixture. Does not include arm) 12

Options (Add as Suffix)

PC=Button Type Photocontrol (Specify Voltage) R=NEMA Twistlock Photocontrol Receptacle

PER7=NEMA 7-Pin Twistlock Photocontrol Receptacle

2L=Two Circuits 13

LCF=LightBAR Cover Plate Matches Housing Finish

7030=70 CRI / 3000K CCT 14

7050=70 CRI / 5000K CCT 14

8030=80 CRI / 3000K CCT 14

L90=Optics Rotated Left 90°

R90=Optics Rotated Right 90°

ICB=Integral Cold Weather Battery Pack (Specify 120 or 277V) 15

LWR-LW=LumaWatt Pro Wireless Sensor, Wide Lens for 8' - 16' Mounting Height 16 LWR-LN=LumaWatt Pro Wireless Sensor, Narrow Lens for 16' - 40' Mounting Height 16

HSS=Factory Installed House Side Shield 17

MS/DIM-L08=Motion Sensor for Dimming Operation, Maximum 8' Mounting Height 18, 19, 20, 21, 22

MS/DIM-L20=Motion Sensor for Dimming Operation, 9' - 20' Mounting Height 18, 19, 20, 21, 23 MS/DIM-L40W=Motion Sensor for Dimming Operation, 21' - 40' Mounting Height (Wide Range) 18, 19, 20, 21, 24

Accessories (Order Separately) 32

OA/RA1016=NEMA Photocontrol - Multi-Tap OA/RA1027=NEMA Photocontrol - 480V

OA/RA1201=NEMA Photocontrol - 347V

MA1253=10kV Circuit Module Replacement LB/HSS=Field Installed House Side Shield 26

VXS Mounting Accessories (Order Separately)

MA1071-XX=5" Arm for Square Pole

MA1073-XX=Direct Mount for Square Pole

MA1074-XX=5" Arm for Round Pole

MA1076-XX=Direct Mount for Round Pole

MA1077-XX=Wall Bracket with 5" Arm MA1200-XX=Direct Wall Mount Kit

MA1101-XX=Single Tenon Adapter for 2-3/8" O.D. Tenon

MA1102-XX=2@180° Tenon Adapter for 2-3/8" O.D. Tenon

MA1103-XX=3@120° Tenon Adapter for 2-3/8" O.D. Tenon

MA1104-XX=4@90° Tenon Adapter for 2-3/8" O.D. Tenon

MA1105-XX=2@90° Tenon Adapter for 2-3/8" O.D. Tenon

MA1106-XX=3@90° Tenon Adapter for 2-3/8" O.D. Tenon MA1107-XX=2@120° Tenon Adapter for 2-3/8" O.D. Tenon MA1108-XX=Single Tenon Adapter for 3-1/2" O.D. Tenon MA1109-XX=2@180° Tenon Adapter for 3-1/2" O.D. Tenon MA1110-XX=3@120° Tenon Adapter for 3-1/2" O.D. Tenon

MA1111-XX=4@90° Tenon Adapter for 3-1/2" O.D. Tenon MA1112-XX=2@90° Tenon Adapter for 3-1/2" O.D. Tenon

MA1113-XX=3@90° Tenon Adapter for 3-1/2" O.D. Tenon MA1114-XX=2@120° Tenon Adapter for 3-1/2" O.D. Tenon

VXM Mounting Accessories (Order Separately)

MA1050-XX=6" Arm for Square Pole

MA1051-XX=10" Arm for Square Pole 27

MA1052-XX=6" Arm for Round Pole

MA1053-XX=10" Arm for Round Pole 27 MA1054-XX=Wall Bracket with 6" Arm 28

MA1056-XX=Direct Mount for Square Pole

MA1057-XX=Direct Mount for Round Pole MA1201-XX=Direct Wall Mount Kit 28

MA1231-XX=Structural Mount Wall Mount Arm 29

MA1017-XX=Single Tenon Adapter for 2-3/8" O.D. Tenon MA1018-XX=2@180° Tenon Adapter for 2-3/8" O.D. Tenon MA1019-XX=3@120° Tenon Adapter for 2-3/8" O.D. Tenon MA1045-XX=4@90° Tenon Adapter for 2-3/8" O.D. Tenon MA1048-XX=2@90° Tenon Adapter for 2-3/8" O.D. Tenon MA1115-XX=3@90° Tenon Adapter for 2-3/8" O.D. Tenon MA1116-XX=2@120° Tenon Adapter for 2-3/8" O.D. Tenon MA1010-XX=Single Tenon Adapter for 3-1/2" O.D. Tenon MA1011-XX=2@180° Tenon Adapter for 3-1/2" O.D. Tenon MA1012-XX=3@120° Tenon Adapter for 3-1/2" O.D. Tenon MA1013-XX=4@90° Tenon Adapter for 3-1/2" O.D. Tenon MA1014-XX=2@90° Tenon Adapter for 3-1/2" O.D. Tenon MA1015-XX=2@120° Tenon Adapter for 3-1/2" O.D. Tenon

MA1016-XX=3@90° Tenon Adapter for 3-1/2" O.D. Tenon

WOLC-7P-10A=WaveLinx Outdoor Control Module (7-pin) 30

NOTES. 1. Customer is responsible for engineering pole analysis to confirm pole and fixture compatibility for all applications. Refer to our pole white paper WP513001EN for additional support information. 2. DesignLights Consortiun and Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details. 3. Arm not included. Order separately.

3. Arm not included. Order separately.
4. Standard 4000K CCT and greater than 70 CRI.
5. 21 LED LightBAR powered at 350mA, 7 LED LightBAR powered at 1A.
6. Avialable with VXM only.
7. Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
8. Custom and RAL color matching avialable upon request. Consult your customer service representative for more information.
9. Add as suffix in the order shown.
10. Compatible with 5" MA1071 arm only (VXS). Compatible with 10" MA1051 arm only (VXM).
11. Compatible with 5" MA1074 arm only (VXS). Compatible with 10" MA1053 arm only (VXM).
12. Wall mount structural options do not include arm assembly (See accessories). Compatible with 5" MA1071 arm only (VXM).
13. Low-level output varies by bar count. Consult factory. Requires two or more light bars.
14. Extended lead times apply. See website for IES files.

14. Extended lead times apply. See website for IES files.

15. Available with E01-E02 and F01-F02 configurations only (VXS). Available with E01-E04 and F01-F04 configurations only (VXM). Specify 120V or 277V. LED cold weather integral battery pack is rated for minimum operating temperature -4°F (-20°C). Operates one light bar for 90-minutes. Not available in all configurations, consult factory. Rated for use in 25°C ambient.

16. LumaWatt wireless sensors are factory installed only requiring network components LWP-EM-1, LWP-GW-1, and LWP-PoE8 in appropriate quantities. See www.cooperlighting.com/lighting for LumaWatt application

information.

17. Only for use with SL2, SL3 and SL4 distributions. Not available with L90 or R90 options.

18. Consult factory for more information.

19. Utilizes internal step-down transformer when 347V or 480V is selected.

20. The FSIR-100 accessory is required to adjust parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Cooper Lighting Solutions for more information.

21. Not available with HA option.

22. Approximately 22' detection diameter at 8' mounting height.

23. Approximately 40' detection diameter at 20' mounting height.

24. Approximately 100' detection diameter at 40' mounting height.

Approximately 10° detection diameter at 40° mounting height.
 Replace XX with color designation.
 One required for each LightBAR. Not available with L90 or R90 options.
 Use when mounting fixture head at 90° increments.
 For use in downlighting applications only.
 Includes arm only. Must specify WRCP or WRCS in fixture ordering logic. Downlighting applications only.
 Includes arm only. Must specify WRCP or WRCS in fixture ordering logic. Downlighting applications only.
 Includes arm only. Must specify WRCP or WRCS in fixture ordering logic. Downlighting applications only.
 Nequires 7-pin NEMA twistlock photocontrol receptacle. The WOLC-7 cannot be used in conjunction with additional sensors or controls.
 Only product configurations with this designated prefix are built to be compliant with the Buy American Act of 1933 (BAA). Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
 Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.



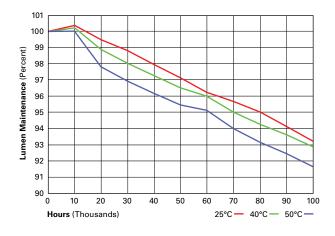
POWER AND LUMENS BY BAR COUNT (21 LED LIGHTBAR)

Number of Li	ghtBARs	E01	E02	E03	E04	E05	E06
Drive Current 350mA Drive Current					ve Current		
Power (Watts	;)	25W	52W	75W	97W	127W	150W
Current @ 12	0V (A)	0.22	0.44	0.63	0.82	1.07	1.26
Current @ 27	7V (A)	0.10	0.20	0.28	0.36	0.48	0.56
Power (Watts	;)	31W	58W	82W	99W	132W	159W
Current @ 34	7V (A)	0.11	0.19	0.28	0.29	0.39	0.48
Current @ 48	0V (A)	0.09	0.15	0.20	0.21	0.30	0.36
то	Lumens	3,064	6,128	9,192	12,255	15,319	18,383
T2	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
Т3	Lumens	3,084	6,168	9,252	12,336	15,420	18,504
13	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3
T.	Lumens	3,022	6,044	9,066	12,088	15,110	18,132
T4	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3
5MQ	Lumens	3,224	6,448	9,672	12,896	16,120	19,344
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2
5WQ	Lumens	3,184	6,368	9,551	12,735	15,919	19,103
5000	BUG Rating	B2-U0-G1	B3-U0-G1	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3
5XQ	Lumens	3,181	6,361	9,542	12,722	15,903	19,083
574	BUG Rating	B2-U0-G2	B3-U0-G2	B3-U0-G3	B4-U0-G3	B4-U0-G4	B4-U0-G4
CLO	Lumens	3,055	6,110	9,165	12,220	15,275	18,331
SL2	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3
SL3	Lumens	3,036	6,072	9,108	12,145	15,181	18,217
SL3	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3
SL4	Lumens	2,954	5,908	8,862	11,816	14,771	17,725
3L4	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3
RW	Lumens	3,124	6,248	9,372	12,496	15,620	18,744
nvv	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G4	B4-U0-G4	B4-U0-G4
SLL/SLR	Lumens	2,782	5,565	8,347	11,130	13,912	16,695
OLL/OLK	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G4

LUMEN MAINTENANCE

Ambient Temperature	25,000 Hours*	50,000 Hours*	60,000 Hours*	100,000 Hours	Theoretical L70 (Hours)
25°C	> 99%	> 97%	> 96%	> 93%	> 450,000
40°C	> 98%	> 97%	> 96%	> 92%	> 425,000
50°C	> 97%	> 96%	> 95%	> 91%	> 400,000

^{*} Per IESNA TM-21 data.



LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
10°C	1.02
15°C	1.01
25°C	1.00
40°C	0.99



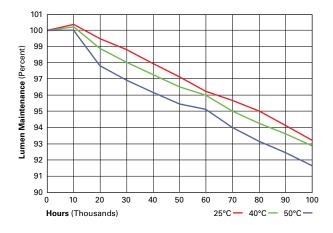
POWER AND LUMENS BY BAR COUNT (7 LED LIGHTBAR)

Number of L	ightBARs	F01	F02	F03	F04	F05	F06
Drive Currer	ive Current 1A Drive Current						
Power (Watt	ts)	26W	55W	78W	102W	133W	157W
Current @ 1	20V (A)	0.22	0.46	0.66	0.86	1.12	1.31
Current @ 2	77V (A)	0.10	0.21	0.29	0.37	0.50	0.58
Power (Watt	ts)	32W	60W	85W	105W	137W	164W
Current @ 3	47V (A)	0.11	0.19	0.28	0.30	0.41	0.49
Current @ 4	80V (A)	0.09	0.15	0.21	0.22	0.31	0.37
T2	Lumens	2,529	5,059	7,588	10,117	12,646	15,176
12	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
Ta	Lumens	2,546	5,092	7,638	10,183	12,729	15,275
Т3	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
T4	Lumens	2,495	4,990	7,484	9,979	12,474	14,969
14	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3
5MQ —	Lumens	2,662	5,323	7,985	10,646	13,308	15,969
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2
5WQ	Lumens	2,628	5,257	7,885	10,513	13,142	15,770
5WQ	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2
5XQ	Lumens	2,626	5,251	7,877	10,502	13,128	15,754
370	BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G4
SL2	Lumens	2,522	5,044	7,566	10,088	12,610	15,132
SLZ	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3
SL3	Lumens	2,506	5,013	7,519	10,026	12,532	15,039
SL3	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3
SL4	Lumens	2,439	4,877	7,316	9,755	12,193	14,632
JL4	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3
RW	Lumens	2,579	5,158	7,737	10,316	12,894	15,473
n v v	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G4	B4-U0-G4
SLL/SLR	Lumens	2,297	4,594	6,891	9,188	11,485	13,782
OLL/OLK	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G3

LUMEN MAINTENANCE

Ambient Temperature	25,000 Hours*	50,000 Hours*	60,000 Hours*	100,000 Hours	Theoretical L70 (Hours)
25°C	> 99%	> 97%	> 96%	> 93%	> 450,000
40°C	> 98%	> 97%	> 96%	> 92%	> 425,000
50°C	> 97%	> 96%	> 95%	> 91%	> 400,000

^{*} Per IESNA TM-21 data.



LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
10°C	1.02
15°C	1.01
25°C	1.00
40°C	0.99

MOUNTING VARIATIONS AND EPAS

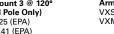
Wall Mount

Arm Mount Single VXS 1.18 (EPA) VXM 1.89 (EPA)

Arm Mount 2 @ 1809 VXS 2.20 (EPA) VXM 3.69 (EPA)

Arm Mount 2 @ 90° VXS 1.72 (EPA) VXM 2.90 (EPA)







Arm Mount 4 @ 90° VXS 2.35 (EPA) VXM 4.03 (EPA)



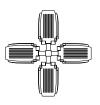




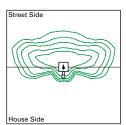


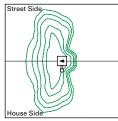


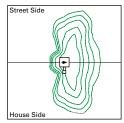




OPTIC ORIENTATION





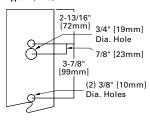


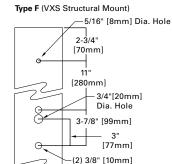
Standard Optics Rotated Left @ 90° [L90]

Optics Rotated Right @ 90° [R90]

POLE DRILLING PATTERNS AND MOUNTING OPTIONS

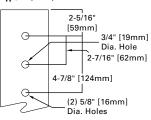
Type E (VXS)



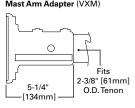


Dia. Holes

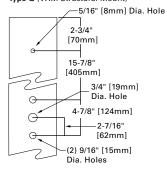
Type M (VXM)



Mast Arm Adapter (VXM)

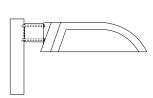


Type G (VXM Structural Mount)



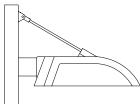
MOUNTING OPTIONS AND ACCESSORIES

Extruded Arm

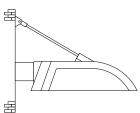


Structural Pole Mount

(Round or Square Pole)



Structural Wall Mount

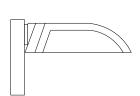


Mast Arm Adapter (VXM)

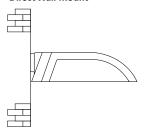


Direct Mount

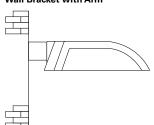
(Round or Square Pole)



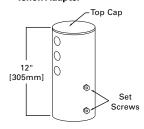
Direct Wall Mount



Wall Bracket with Arm



Tenon Adapter





Cooper Lighting Solutions 1121 Highway 74 South Peachtree City, GA 30269 P: 770-486-4800 www.cooperlighting.com

0-10V (DIM)

The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

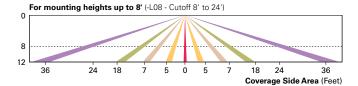
Photocontrol (PC, R and PER7)

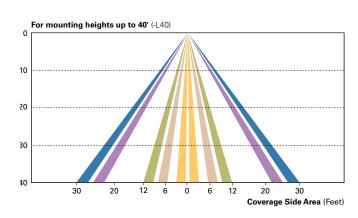
Optional button-type photocontrol (PC) and photocontrol receptacles (R and PER7) provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PER7 receptacle.

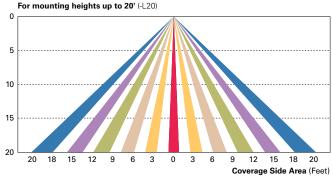
Dimming Occupancy Sensor (MS/DIM-LXX)

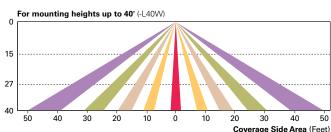
These sensors are factory installed in the luminaire housing. When the MS/DIM-LXX sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes.

These occupancy sensors includes an integral photocell that can be activated with the FSIR-100 accessory for "dusk-to-dawn" control or daylight harvesting - the factory preset is OFF. The FSIR-100 is a wireless tool utilized for changing the dimming level, time delay, sensitivity and other parameters. A variety of sensor lens are available to optimize the coverage pattern for mounting heights from 8'-40'.



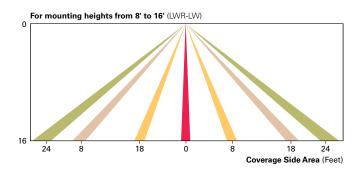


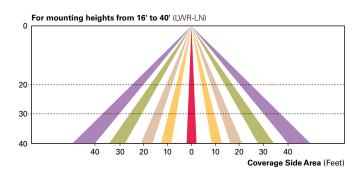




LumaWatt Pro Wireless Control and Monitoring System (LWR-LW and LWR-LN)

The Eaton's LumaWatt Pro powered by Enlighted is a connected lighting solution that combines a broad selection of energy-efficient LED luminaires with a powerful integrated wireless sensor system. The sensor controls the lighting system in compliance with the latest energy codes and collects valuable data about building performance and use. Software applications turn the granular data into information through energy dashboards and specialized apps that make it simple and help optimize the use of building resources, beyond lighting.





WaveLinx Wireless Outdoor Lighting Control Module (WOLC-7P-10A)

The 7-pin wireless outdoor lighting control module enables WaveLinx to control outdoor area, site and flood lighting. WaveLinx controls outdoor lighting using schedules to provide ON, OFF and dimming controls based on astronomic or time schedules based on a 7 day week.





1610 Sismet Road, Mississauga, Ontario L4W 1R4, Canada Toll Free: 1.877.765.3722 Fax: 905.457.1115 www.soleracorp.com



Date
Quote #
Project Name
Туре

SRB6D & SRB8D-Bollard

Description:

Cast aluminum bollard with several head assemblies. HBD (cast aluminum louvers) is standard. Other head assemblies include:

- DCR Double cone reflector
- ILO Internal louvers
- PRF Prismatic refractor

Specify CONC for concrete shaft.



HBD Assembly

Name	Engine	Lumens	CCT	Electrical	Mounting	Lens	Pattern	Options	Finish
] -] -	-	-	-	-	-	-	-

Name	Li	ght Engine	Source Lumens(LED)(5000K)	Color Temp	Electrical
SRB6D	6D	36 LED (Max)	4672	3000K	UNV 120-277V
SRB8D		42PLT		3500K	HLV 347-480V
	8D	48 LED (Max)	6240	4000K	TT Tri-Tap (HID)
		100 MH		5000K	MT Multi-Tap (HID)
		42PLT 30 LPS			

Contact for custom Contact for custom Contact for custom

Mounting		Lens	Lens Light Patterr		Options		Finishes	
ABT	Anchor, bolts & template	Type of lens varies according to head assembly.	TY5	Type V (Std)	MS	Motion sensor	BL	Black
		HBD head assembly comes	PL (clear polycarbonate TY3 Ty	To a III (and a fa	SD	Step dimming	WH	White
		with CPL (clear polycarbonate lens)		Type III (certain head assemblies)			SG	Silver Grey
		DCR, ILO & PRF head assemblies come with CG (clear glass lens) For better illustration of head assemblies see {page 2}	180	180 degree (certain head assemblies)	TP	Tamperproof hardware	BZ	Bronze
					TS	Tamperproof screws	CONC	Concrete (shaft only)
					PC	Button photocell	CC	Custom Color
					SF	Single fuse		
					GFR	Ground fault receptacle		

- Lumens are based on max wattage & 5000K CCT
- IES files available upon request
- Std Standard Offering

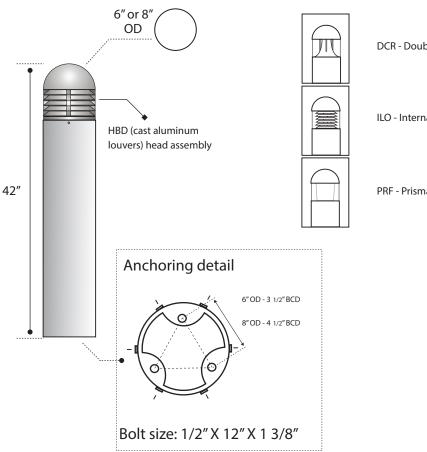






Dimensions & Mounting:

Please note that drawings are not to scale.



DCR - Double cone reflector

ILO - Internal louvers

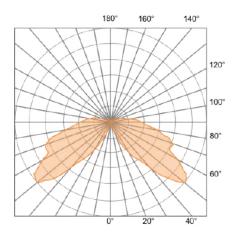
PRF - Prismatic refractor

Listing:

Complies to CSA and UL standards.

Polar Graph:

TY5





APPENDIX 14 | SHUTTLE SERVICE



Jendore Limited

P.O. Box 7194 St. John's, NL A1E 3Y4 Canada

Tel 709 747-4209 Fax 709 368-3502

May 1, 2024

City of St. John's - Planning, Engineering and Regulatory Services John J. Murphy Building (City Hall Annex), 4th floor. PO Box 908 St. John's, NL A1C 5M2

Attention: Ann-Marie Cashin, MCIP

Re: On-Demand Paid Shuttle Service for 214 Waterford Bridge Road and the Residence at Littledale

Dear Ann-Marie Cashin,

In the recent review of the Land Use Report (LUR) for 214 Waterford Bridge Road that is in progress, there was clarity required around transit and shuttle service. Jendore confirms that there is a plan to have an on demand paid shuttle service for residents that will be shared between the 214 Waterford Bridge Road property and the Residence at Littledale that is adjacent to it.

Kind Regards,

Do lahill

David Cahill, P. Eng, MBA