

Report to Development Permit Panel

To: Development Permit Panel

Date: October 30, 2023

From: Wayne Craig

File:

DP 18-824566

Director, Development

Biredior, Bevelopment

Application by SNC Lavalin Inc. for a Development Permit at 12700 and

12800 Rice Mill Road and 12280 and 12300 No. 5 Road

Staff Recommendation

Jan Hor

That a Development Permit be issued at 12700 and 12800 Rice Mill Road and 12280 and 12300 No. 5 Road for works related to the redevelopment of the existing BC Ferries Fleet Maintenance Unit and future subdivision on a site that is designated as an Environmentally Sensitive Area.

for

Re:

Wayne Craig

Director, Development

(604-247-4625)

WC:ke

Att. 12

Staff Report

Origin

SNC Lavalin Inc., on behalf of BC Ferry Services Inc. (BC Ferries), has applied to the City of Richmond for an Environmentally Sensitive Area (ESA) Development Permit to allow for the redevelopment of the existing BC Ferries Fleet Maintenance Unit (FMU) and related components at 12700 and 12800 Rice Mill Road and 12280 and 12300 No. 5 Road. This Development Permit also addresses the future proposed subdivision of the site that is subject to an ESA designation (Attachment 1 – Location Map).

The site is being rezoned from Agricultural (AG1) and Light Industrial (IL) to BC Ferries Fleet Maintenance and Moorage (ZI14) for this project under Bylaw 9940 (RZ 18-824565), to allow for the phased upgrading of the BC Ferries FMU. Rezoning of the subject site is required as the site is split zoned Agriculture (AG1) and Light Industrial (IL) and to allow for the range of uses necessary for the operations of the FMU. The bylaw received third reading on October 21, 2019. In accordance with Bylaw 9940, only the portion of the subject site south of the CN Rail corridor is being rezoned to BC Ferries Fleet Maintenance and Moorage (ZI14).

This Development Permit application proposes habitat compensation and mitigation measures in response to the designated ESA's and Riparian Management Areas (RMA) on the subject site. A qualified environmental professional (QEP) has been engaged and led the assessment, compensation and enhancement strategy outlined in the rezoning that is being built upon and detailed out through this Development Permit application.

A Servicing Agreement is required as a condition of rezoning adoption and includes, but is not limited to, the following improvements:

- SA 20-891044 Infrastructure works to upgrade the servicing connections to the subject site, upgrade the existing water line along Rice Mill Road and install a City sanitary sewer system that the BC Ferries private sanitary system can connect to.
- SA 20-891043 Dike works generally from the southwest portion of the basin to the
 southeast portion of the site (at Highway 99), which provides continuous dike protection for
 this area. Dike implementation and construction will be phased in accordance with the
 parameters of the rezoning considerations and Servicing Agreement to take into account the
 existing operations of the FMU and appropriate dike infrastructure works.

Project Description

The subject site is generally bounded by Rice Mill Road, No. 5 Road, Highway 99 and the Fraser River. Access to the subject site is from Rice Mill Road and from an access road granted by the Ministry of Transportation and Infrastructure (MOTI) running parallel to Highway 99. An existing CN Rail corridor bi-sects the subject site. A majority of the existing FMU facilities and infrastructure that support maintenance activities of vessels moored in the basin are located south of the rail corridor. The portion of the site north of the rail corridor currently contains additional parking, BC Ferries office and private utilities (private sanitary forcemain servicing the BC Ferries FMU only)(Refer to Attachment 2 – Development Data Sheet).

This redevelopment project will replace ageing infrastructure and facilities, improve efficiency of the FMU operation and ensure that this facility will meet the long-term demands of the BC Ferries fleet. A summary of the FMU works and improvements to the subject site are as follows:

- Construction of a new machine shop building (8,114 sq. m or 87,338 sq. ft.) and supporting uses that will service the FMU at the southeast portion of the site.
- Tenant improvements, renovations and building modifications and additions (total floor area of 9,211 sq. m or 99,146 sq. ft.) to a number of existing buildings that will be retrofitted and upgraded.
- Addition of off-street parking, loading and bike parking provisions in accordance with City zoning requirements.
- Grade and elevation increases across the subject site that will occur around existing and
 proposed new buildings and new off-street parking areas in the FMU in accordance with
 the Floodplain Management Strategy and minimum Flood Construction Level (FCL) of
 3.85 m for any new construction on the portion of BC Ferries land to be rezoned to the
 BC Ferries Fleet Maintenance and Moorage (ZI14) zone, consistent with the parameters
 secured through the rezoning.
- Demolition of existing buildings and structures at the southeast portion of the site where the new machine shop building is proposed.
- Compensation and enhancements to the ESA and RMA for the subject site.
- Refer to Attachment 3 for a conceptual site plan of the BC Ferries FMU.

Following third reading of the rezoning bylaw, BC Ferries has decided to proceed with a reduction in the scope of the initial FMU redevelopment works. The BC Ferries redevelopment of the FMU will still facilitate a modern and upgraded facility to meet their future needs, but with an overall reduced scope of new construction when compared to the project scope that was presented as part of the rezoning. The components of the FMU redevelopment outlined as part of the rezoning that are not being pursued at this time are summarized as follows:

- Two new buildings providing various trades/maintenance activities and vessel safety outfitting services is not being constructed at this time. Existing buildings will be retrofitted and modified to accommodate these FMU activities.
- A tower crane to service vessels moored in the basin is not being constructed at this time.

Although the scope of the overall development has been revised, the current project complies with the provisions of the BC Ferries Fleet Maintenance and Moorage (ZI14) zone and associated rezoning considerations. Any additional works and development on the subject site, beyond those covered as part of this Development Permit application, will be reviewed at that time to determine if additional applications are required.

Background

Development surrounding the subject site is as follows:

To the north: Vacant lands zoned Agriculture (AG1). The City's model airplane park is also located to the north and zoned Agriculture (AG1). There is a 5 m designated Riparian Management Area (RMA) associated with an existing watercourse along Rice Mill Road.

To the east: The MOTI Highway 99 corridor that also contains the access road to the BC

Ferries FMU. Further east is a 15 m RMA associated with a watercourse between

the BC Ferries access road and the Highway 99 corridor.

To the south: The Fraser River.

To the west: Properties that are zoned Light Industrial (IL) and Agriculture (AG1) including

two active rezoning applications at 12060 and 12080 No. 5 Road (RZ 22-005648) and 12050 No. 5 Road (RZ 21-941597). Both of these applications are seeking rezoning from Agriculture (AG1) to Light Industrial (IL) zoning consistent with the OCP Industrial land use designation. Further west across No. 5 Road are properties zoned Light Industrial (IL) and Industrial Business Park (IB1).

Rezoning and Public Hearing Results

During the rezoning process, staff identified the following issues to be resolved at the Development Permit stage:

- Compliance with applicable ESA Development Permit guidelines and zoning applicable to the subject site.
- Confirm ESA compensation and enhancement and accompanying plant sizing and species and accompanying legal agreements to secure implementation, monitoring and maintenance.

The Public Hearing for the rezoning of this site was held on October 21, 2019. There was no correspondence received from the public that identified concerns or opposition to the development.

Staff Comments

The proposed scheme attached to this report has satisfactorily addressed the ESA issues and other staff comments identified as part of the review of the subject Development Permit application. In addition, it complies with the intent of the applicable sections of the Official Community Plan and is in compliance with the BC Ferries Fleet Maintenance and Moorage (ZI14) site specific zone

A summary of the ESA and RMA designations that apply to the subject site is as follows (refer to Attachment 4 for a map of the ESA and RMA designations):

- 6.8 ha (16.8 ac) located south of Rice Mill Road and north of the CN Rail corridor that is classified as 'old fields and shrublands' and 'upland forest' type ESA.
- 3.4 ha (8.4 ac) for lands located within 30 m (landside) of the high water mark of the Fraser River that is classified as 'shoreline' type ESA.
- 3.3 ha (8.3 ac) for lands located within 30 m (waterside) of the high water mark of the Fraser River that is classified as 'intertidal' type ESA.

A 5 m RMA exists along the subject site's Rice Mill Road frontage and remediation is addressed in the sections below. No encroachments into the 5 m RMA are proposed in this project. A 15 m RMA exists along the east side of the subject site that will not be impacted by this project.

Analysis

Site Planning

- The current BC Ferries FMU provides moorage and maintenance to vessels docked in the basin. Due to the operational requirements of the FMU, placement of the new building to be constructed and buildings to be retrofitted is focussed in the area on the east side of the basin, south of the CN Rail corridor, where a majority of the existing development is located and close to vessels requiring servicing (refer to Attachment 3).
- For BC Ferries lands north of the CN Rail allowance, there is an existing parking lot and BC
 Ferries project office at the north east corner of this portion of the site. The project office
 will be moved to the FMU operational area south of the CN Rail corridor once the necessary
 building retrofits have been completed to accommodate staff and the existing building will be
 removed/demolished.
- Additional off-street parking areas have been added to portions of the site south of the CN
 Rail corridor and situated away from the designated foreshore ESA to minimize impacts.
- The BC Ferries FMU is currently serviced by a private sanitary forcemain that runs through
 the portion of the property north of the CN Rail corridor. This private sanitary infrastructure
 will need upgrading to service the BC Ferries FMU. The upgraded sanitary alignment has
 been selected to minimize impacts to the ESA and also to ensure no disturbance to the 5 m
 RMA along Rice Mill Road.
- Vehicle access to the BC Ferries FMU will continue to be from the access road located on the MOTI Highway 99 right-of-way that is generally on the east side of the FMU adjacent to the highway. An access permit authorized by MOTI to BC Ferries enables use of this access road.
- Consistent with the associated rezoning application, dike infrastructure works will be undertaken through a Servicing Agreement. Due to the specific operational needs to service and maintain vessels moored in the basin, a majority of the BC Ferries FMU buildings and supporting operations are located outside of the dike infrastructure to be implemented. In response, a Flood Construction Level (FCL) of 3.85 m GSC is required for new construction and elevation/grading around buildings will be raised to meet this FCL, but also take into account the operational needs to access and service vessels moored in the basin and be at a proximate elevation to the water level.

Environmentally Sensitive Area – Shoreline/Intertidal ESA Type (Portion of Site South of the CN Rail Corridor)

• The project QEP undertook a detailed bio-physical inventory and environmental impact assessment for the ESA designated (shoreline and intertidal ESA) portions of the site located south of the CN Rail corridor (Attachment 5). In general, the QEP identified that for areas where land modification and development was proposed for the BC Ferries FMU project, a majority was categorized as existing disturbed/impervious areas with no existing vegetation/habitat (due to existing on-site development). Land modification works within these categorized disturbed/impervious and non-vegetated areas are not considered to impact the ESA. A smaller portion was categorized as poor to low quality habitat being impacted by proposed works and would therefore be addressed as part of the ESA compensation and restoration approach.

- The poor to low quality habitat referenced above was assessed by the QEP to include limited vegetation that was subject to frequent human disturbance with minimal habitat value and wildlife usage.
- The ESA assessment has taken into account changes in relation to the reduced overall
 footprint of new development and land modification resulting from the revised BC Ferries
 project scope outlined at the outset of this report. Furthermore, BC Ferries has decided to not
 include the basin tower crane as part of the FMU redevelopment, which has reduced the
 amount of ESA impacts.
- Habitat compensation and enhancement is provided for along the southeast portion of the subject site that wraps around the east side of the outer edge of the basin along the shoreline and intertidal type ESA's along the water (Attachment 5).
- This compensation strategy was developed to achieve a net gain in ESA quality through enhancement of existing identified poor to low-quality habitat to improve and increase their ecological function, diversity and connectivity.
- The area of ESA disturbance assessed by the QEP in this area is 1,177 sq. m (12,669 sq. ft.). The area of compensation will be 2,976 sq. m (32,033 sq. ft.) in area, resulting in a net gain of 2.5 to 1.
- This net gain of functional habitat will consist of removal of invasive species, soil improvements, and planting of native specie trees/shrubs/groundcovers. The compensation landscape plan also proposes retaining all of the 17 existing trees located on the south east portion of the site adjacent to the Fraser River and planting an additional 25 new trees within the shoreline ESA compensation and enhancement area.
- The project QEP and landscape plans confirm that an irrigation system comprised of sprinklers and houses will be temporarily established in the compensation and enhancement areas and operated on a timer (based on the season) and in accordance the recommendations of the QEP's post-construction monitoring and maintenance plan.

Environmentally Sensitive Area – Old Fields and Shrublands and Upland Forest (Portion of Site North of the CN Rail Corridor)

- The project QEP undertook a detailed bio-physical inventory and environmental impact assessment for the ESA designated (old fields and shrublands; upland forest ESA Types) for portions of the site located north of the CN Rail corridor (Attachment 6). The project QEP identified that the existing vegetated and habitat areas are consistent with the ESA type categorized for this area and also observed significant incursion of invasive plant species (i.e., Himalayan blackberry) into the area. Impacts to the ESA in this area relate to the installation of a new private sanitary forcemain that is generally located outside of the RMA along the north edge of the site and parallel to Rice Mill Road. The footprint and anticipated ESA impact from the new private sanitary forcemain is 1,076 sq. m (11,582 sq. ft.) based on a 3 m wide linear footprint required for this infrastructure.
- The alignment of the private sanitary infrastructure has been selected to minimize impacts to the ESA, reduce tree removals, ensure no disturbance or incursion into the RMA and ensure the system functions effectively.
- Habitat compensation and enhancement is proposed in a number of locations that provide linear habitat corridors and improved ecological habitat that will reduce negative human/wildlife interactions (Attachment 6).

- Generally, these habitat compensation and enhancement corridors are located along the southern edge adjacent to the CN Rail corridor and along Rice Mill Road to provide further ecological benefit to the RMA watercourse in this area.
- The area of ESA disturbance assessed in this area by the QEP is 1,076 sq. m (11,582 sq. ft.). The area of compensation provided in existing ESA designated portions of this area will be 2,432 sq. m. (26,178 sq. ft.) plus an additional 754 sq. m (8,116 sq. ft.) of compensation in an adjacent vegetated area to the east that is outside of the ESA. The total compensation area within and outside of the ESA is 3,186 sq. m (34,294 sq. ft.) resulting in a net gain of 2.9 to 1.
- This net gain of functional habitat will consist of the removal of invasive species, soil improvements, and planting of native specie trees, shrubs and groundcovers in the areas outlined above. A total of 145 new trees will be planted within the landscape compensation areas.
- In addition, the areas to be temporarily disturbed from the private sanitary infrastructure installment (trenching) will be hydro seeded to restore grassed ground cover in the area. This restoration activity is in addition to proposed planted restoration activities described above.
- The project QEP and landscape plans confirm that an irrigation system comprised of sprinklers and houses will be temporarily established in the compensation and enhancement areas and operated on a timer (based on the season) and in accordance with the recommendations of the QEP's post-construction monitoring and maintenance plan.

Summary of ESA Compensation and Enhancement - Entire Subject Site

- A total area of 6,162 sq. m (66,327 sq. ft.) compensation and enhancement planting areas is proposed as part of this Development Permit application for ESA's on the subject site (north and south of the CN Rail corridor). The project QEP has identified that a total disturbance area of 2,253 sq. m (24,251 sq. ft.) resulting in a 2.74 to 1 net gain of ecological habitat that will be secured through this Development Permit (Refer to Attachment 7 for a habitat balance sheet).
- This ESA compensation and enhancement approach and net gain in ecological habitat is equivalent to what was identified through the rezoning application. Based on further work on the compensation plans and reduced amounts of disturbances to the ESA as a result of the change in overall project scope for the BC Ferries FMU project, an improved ratio of 2.74 to 1 of net gain of functional ecological habitat will be implemented for this development (compared to the 2.36 to 1 net gain ratio identified through the previous rezoning application proposal).

Riparian Management Area (5m) - Proposed Compensation Approach

- Identified disturbance activities within the RMA (5 m) along the subject site's Rice Mill Road frontage and the proposed compensation and restoration approach are as follows:
 - O Installation of an upgraded water line that services the BC Ferries FMU in the Rice Mill Road allowance generally along the gravelled and grass road shoulder and removal of two existing culverts within the RMA (5 m). Restoration activities will consist of daylighting of the watercourse from culvert removals and hydro-seeding of all disturbed areas to allow for suitable ground covers to be established in these areas, which will be included as part of the Servicing Agreement works (SA 20-891044).

Removal of one tree located within the RMA at the north east corner of the subject site in relation to a Statutory Right-of-Way required for water services. Compensation will be replacement trees at a 3:1 ratio that will be included in the landscape compensation plantings that will provide equivalent ecological benefit and function within the RMA along Rice Mill Road.

Tree Retention, Removal and Replacement Summary

• Refer to Table 1 that summarizes proposed tree retention, removal and replacement for the BC Ferries FMU redevelopment.

_			
$T\alpha$	h	10	- 1

	Impacted Trees	Required Replacement Trees	Planted Replacement Trees	Cash in Lieu for Replacement Trees
BC Ferries Land North of CN Rail	- 26 trees impacted by private sanitary line - 1 tree impacted in RMA (servicing)	2:1 ratio – 44 trees 3:1 ratio – 15 trees	148 trees (min 8 cm calliper or 4 m ht.)	N/A
BC Ferries Land South of CN Rail	- 62 trees impacted by dike infrastructure - 5 trees impacted by FMU and related works	2:1 ratio – 132 trees 3:1 ratio – 6 trees	25 trees (min 8 cm calliper or 4 m ht.)	N/A
Total	94 trees impacted	197 replacement trees	173 planted trees	24 trees @ \$750 per tree (\$18,000)

- As outlined in *Table 1*, 27 trees are proposed for removal in the area north of the CN Rail corridor due to private sanitary line installation and services required for the project. In the area to the south of the CN Rail corridor, 67 trees are proposed for removal due to dike infrastructure and uses that support the FMU. In total, 94 trees are proposed for removal and will be compensated by 173 replacement tree plantings (148 new trees located in compensation areas north of the CN Rail corridor; 25 new trees located in compensation areas south of the CN Rail corridor). The remaining 24 replacement trees will be provided through a cash-in-lieu contribution secured as a Development Permit consideration for this project.
- The project's QEP and consulting landscape architect has indicated that the number and sizing of planted replacement trees in the ESA compensation and enhancement areas take into account existing vegetation and trees that will be retained. Furthermore, tree sizing and planting density have been developed to account for spacing guidelines for new tree plantings and survivorship of replacement trees to be planted.
- The compensation landscape plans included in this Development Permit application include the planned replacement trees. The project QEP and consulting landscape architect have confirmed that the plant listings include native species and plantings that are appropriate to the surrounding habitat.
- Refer to Attachment 8 that provides the Tree Management Plan for the subject site.

Engineering - Phased Dike Works

- Consistent with the rezoning considerations, the applicant is required to undertake dike infrastructure works in a phased manner and will be secured through a Statutory Right-of-Way and Servicing Agreement (SA 20-891043) for the subject redevelopment.
- Through the Servicing Agreement design review process, the alignment of the Dike has been adjusted at the south west portion of the site to extend Dike protection along the west edge of the basin (refer to Attachment 3 for the general dike alignment). Diking infrastructure works to be completed through the BC Ferries FMU redevelopment adheres to the City's Flood Protection Management Strategy.

External Agency Approvals - Federal and Provincial

- Federal Department of Fisheries and Oceans (DFO) has provided a letter of advice (Attachment 9) for the BC Ferries FMU redevelopment in relation to how to address fish habitat and fish species at risk on the site. Through this letter, DFO has advised that this proposal would not result in serious harm to fish or fish habitat and has identified implementation measures that are required to be adhered to as part of the BC Ferries FMU project and related works.
- Provincial Ministry of Forests has provided a Change Approval (Attachment 10) under the *Water Sustainability Act (WSA)* for works and development to various watercourses on and around the subject site.
- The Federal and Provincial authorizations included the proposed Dike infrastructure works to be completed by BC Ferries through the required Servicing Agreement (SA 20-891043), and did not require any additional environmental compensation to be provided by the applicant.
- The environmental mitigation and compensation measures referenced in the DFO letter of advice and Provincial Change Approval letter are consistent with the compensation being provided and secured through this Development Permit application and associated Servicing Agreement(s) for this project.

Proposed Future Subdivision of BC Ferries Lands Subject to an ESA

- BC Ferries has identified future plans to subdivide the consolidated lands into two lots. One lot is proposed for the lands south of the CN Rail corridor. One lot is proposed for the lands north of the CN Rail Corridor. A draft subdivision plan is contained in Attachment 11.
- As the consolidated subject site is designated an ESA, approval is required for the proposed subdivision of the subject site and is included in this Development Permit proposal.
- A subdivision application will be required to be submitted to the City and reviewed by staff, subject to Council adoption of the rezoning bylaw for the subject site and issuance of this Development Permit. The future subdivision application for the subject site will also require approval from the Ministry of Transportation and Infrastructure (MOTI) as the subject site abuts Highway 99, which is a MOTI controlled highway.
- Consideration of the proposed subdivision would occur after rezoning adoption and issuance of the Development Permit. The subdivision proposal involving lands designated as an ESA is generally supported on the following basis:
 - The subdivision would not have any impacts to the ESA compensation being secured on any portions of the subject site.
 - The property largely functions as two separate parcels as the current CN Rail corridor bisects the site as a whole.

Implementation, Monitoring, Maintenance and Performance Provisions

- A legal agreement will be registered on the consolidated lot to secure the ESA landscape compensation and enhancement areas, forming part of this Development Permit application. This legal agreement will also include ESA compensation post-implementation monitoring and maintenance provisions in accordance with the project QEP's report and recommendations and accompanying landscape plans for the project. The legal agreement will also identify that the ESA compensation and enhancement areas cannot be removed or disturbed. This legal agreement will be registered on title as a Development Permit consideration item to be completed for this project (Attachment 12 Development Permit considerations).
- In accordance with the recommendations of the project QEP, once ESA compensation and enhancement works have been implemented, monitoring will occur over a five-year period to ensure vegetation establishment, survival and growth. During the first three years, monitoring and inspections will occur twice a year (early spring and late summer) and once a year in the final two years of the monitoring period. The QEP will also provide to the City annual reports throughout the monitoring period. The above parameters will be included into the legal agreement to secure the ESA landscape compensation and enhancement areas.
- A Construction and Environmental Management Plan (CEMP) has been developed for the BC Ferries FMU project and is required to be submitted and complied with through the Servicing Agreement and Building Permit processes for the FMU redevelopment.
- Prior to Development Permit issuance, the applicant is required to submit a landscape security for all proposed ESA compensation and enhancement works identified in the plans, based on 100 per cent of the cost estimate provided by the landscape architect (including a 10 per cent contingency).
- In addition, a legal agreement will be registered on the consolidated lot to secure all utilities and services required for the operations of the BC Ferries FMU that are being provided through the portion of land north of the CN Rail corridor or through the existing CN Rail corridor right-of-way itself cannot be removed or modified in such a manner that would impact the utilities and services required by the BC Ferries FMU. This legal agreement will also specify that any utilities or servicing that crosses the CN Rail corridor will need to be secured with the applicable licenses and approvals to be obtained in perpetuity by BC Ferries.

Sustainability Provisions

- For the new machine shop building to be constructed, building mechanical heating, ventilation and air condition systems will utilize energy efficient air sourced heat pumps. Additional measures to be included to improve building energy efficiency are implementation of energy efficient windows, variable speed ventilation systems and occupant sensor controlled LED lighting fixtures. Water conservation improvements are also being incorporated into the buildings' plumbing system.
- For the existing buildings to be retrofitted, building mechanical systems to be added or upgrades will be energy efficient in addition to occupant sensor controlled LED lighting fixtures. Water conservation improvements are also being incorporated into the buildings' plumbing system.
- External lighting is limited to building mounted lighting and pole mounted lighting (i.e., typical street light height) that is downward oriented.

Conclusions

As the proposed development would meet applicable policies and Development Permit Guidelines, staff recommend that the Development Permit be endorsed, and issuance by Council is recommended.

7· 7

Kevin Eng Planner 3 (604-247-4626)

KE:cas

Att. 1: Location Map

2: Development Data Sheet

3: Overall Site Plan

4: ESA and RMA Site Plan

5: ESA Habitat Types (South of CN Rail Corridor)

6: ESA Habitat Types (North of CN Rail Corridor)

7: ESA Habitat Balance Data (Entire Site)

8: Tree Management Plan

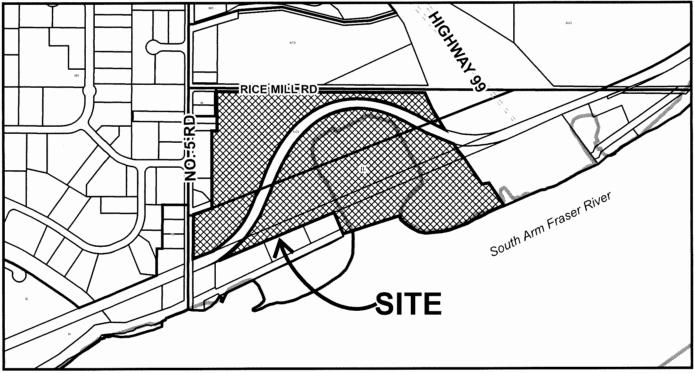
9: DFO Letter of Advice

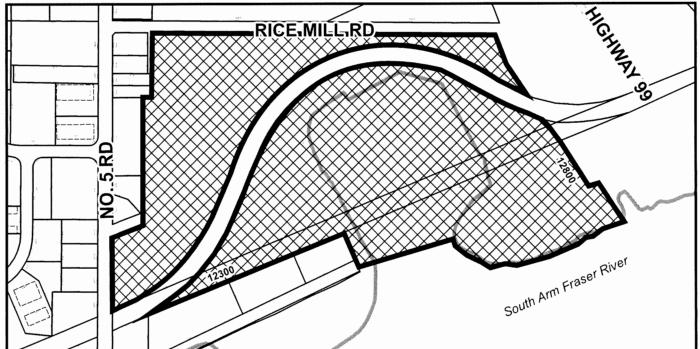
10: Provincial Change Approval Authorization (Water Sustainability Act)

11: Preliminary Subdivision Plan

12: Development Permit Considerations









DP 18-824566

Original Date: 06/20/18

Revision Date: 10/19/23

Note: Dimensions are in METRES



Development Application Data Sheet

Development Applications Department

DP 18-824566 Attachment 2

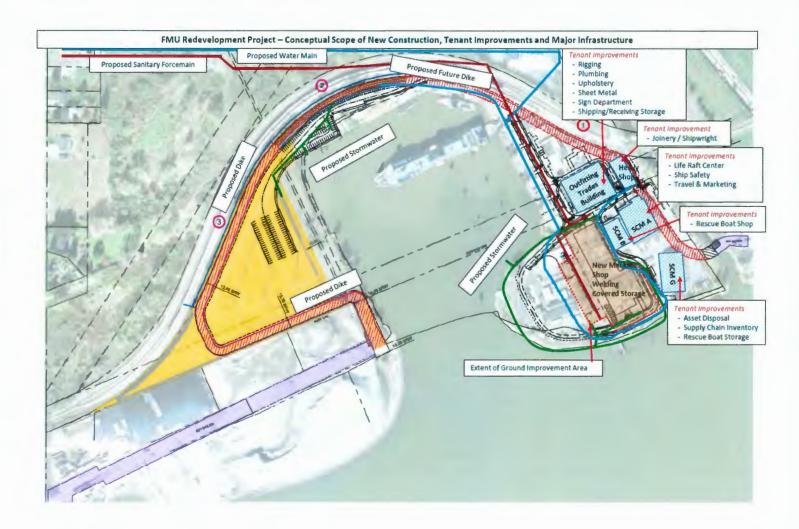
Address: 12700 and 12800 Rice Mill Road and 12280 and 12300 No. 5 Road

Applicant: SNC Lavalin Inc Owner: BC Ferry Services Inc.

	Existing	Proposed	
Site Area:	245,065 m²	No Change	
Land Uses:	BC Ferries Fleet Maintenance Unit – Marine vessel repair and moorage	No change	
OCP Designation:	Industrial	No change	
Zoning:	Agricultural (AG1) and Light Industrial (IL)	Lands north of CN Rail corridor – No change Lands south of CN Rail corridor – BC Ferries Fleet Maintenance and Moorage (ZI14) zone	

	Bylaw Requirement Proposed ZI4 Zone	Proposed	Variance
Floor Area Ratio:	1.0	0.07 (Total new building plus existing retained buildings)	none permitted
Lot Coverage:	Max. 60%	5%	none
Setback – Front Yard (East):	Min. 4.5 m (for new construction)	Approximately 65 m (for new machine shop building)	none
Setback – Side Yard (Exterior):	Min. 3.0 m	N/A	none
Height (m): Buildings	Max. 22.2 m	22.2 m	none
Off-street Parking Spaces	174	192	none
Off-street Parking Spaces – Accessible:	4	5	none
Bicycle Parking Spaces	Class 1 – 22 Class 2 – 22	Class 1 – 22 Class 2 – 22	none

Attachment 3
Overall Site Plan – BC Ferried Fleet Maintenance Unit Redevelopment



ATTACHMENT 4

ESA and RMA Site Plan



Attachment 5

ESA Habitat Types (South of CN Rail Corridor)



Attachment 6

ESA Habitat Types (North of CN Rail Corridor)







HABITAT BALANCE SHEET

Disturbances and Proposed Compensation for Impacts in ESA SH-5 and ESA IT-5 (South of CN Right of Way)

Type of Disturbence/Enhancement	ESA Classification	Habitat Type	Area of Disturbance in ESA (m2)	Area of Compensation (m2)	Compensation Ratio
Building demolition/construction_roads and siking**	Shormer ESA SH-5	Poer to low quality (vegetated)	887	٠	-
Stormwater outfall (southeast)	Submax ESA IT-5	Low quality sheet pile walf	5.0		•
Stormwaler outfall (her/hwest)	Subtrain ESA IT-5	Low quality sheet pile wall	5 0°	-	
General Fill and Parking Lnt***	Shoreline ESA SH-5	Poer to low quality (vegetated)	280	-	
Shore re Enhancement (Soil amendment, removal of myselve species and planting of trees, shrubs and losts)	Shortelyk ESA SH-5	Moderate to bigh qualify (vegetated)		2 975	
	Dis	furbance Summary***	1,177	2,976	2.5:1

*** Includes Segments 7 and 2 of the Proposed dateg. I scholes Segment 1 of the proposed dateg.

**** Compatibility with previous submembro. disturbance to imprimate (Non-Vegrated) were was not encluded in the ESA disturbance was ****

**** Area of disturbance associated with the 2023 date construction anchied from the summary of compensation will be addressed under

Disturbances and Proposed Compensation for Impacts in ESA SH-6 (North of CN Right of Way)

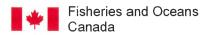
Type of Disturbence/Enhancement	ESA Classification	Habitat Type	Area of Disturbance in ESA (m2)	Area of Compensation (m2)	Compensation Ratio
S mitary force many	Up and forest and field and shubbarnes ESA SH-6	Deturbed (poor to low quality) Shrubland Upland Forest	1 076	-	
Grassed Enhancement Hydrosessing to establish ground cover)	Upland Forest and Shrubland ESA SH-8	Low quality (vergetated)		1 076	٠
Upland Forest and Shruntand Enhancement (Sof amendment remove invasive) plant trees, alrutin and fores	Up indicated of field and should have be seen as the s	Moderate to high quality (vegetated)		3 180	-
		Disturbance Summery	1,076	3,186	3.0:1

Note: Although the 1.514 pill area of sandary time titles will be restored to amore of the below. It was not reducted in the 1.544 consensation were in compression ratio calculation while the ampoint grass hebits does not help contains with the upward 6 and Submission and old Dileto Assegnative of the ESA

ATTACHMENT 8

Tree Management Plan





Pacific Region Ecosystem Management Branch 200 – 401 Burrard Street Vancouver, BC V6C 3S4 Pêches et Océans Canada

Région du Pacifique Direction de la gestion des écosystèmes Pièce 200 – 401 rue Burrard Vancouver (C.-B.) V6C 3S4

October 19, 2023

Your file Votre référence

Our file Notre référence 23-HPAC-00422

British Columbia Ferry Services Inc. Attention: Shane Scroggie Suite 500-1321 Blanshard St Victoria, BC, V8W 0B7

Via email: shane.scroggie@bcferries.com

Subject: Dike Extension, Fraser River, Richmond – Implementation of Measures to Avoid and Mitigate the Potential for Prohibited Effects to Fish and Fish Habitat

Dear Shane Scroggie:

The Fish and Fish Habitat Protection Program (the Program) of Fisheries and Oceans Canada (DFO) received your proposal on March 13, 2023. We understand that you propose to:

- Construct a dike and parking lot that will encroach into riparian habitat on the west bank of Deas Basin and require alteration of approximately 454 m² of riparian habitat (i.e., area within 30 m of top of bank);
- Place riprap to stabilize the dike slope, resulting in a footprint of approximately 50m² below the high water mark;
- Install a 600mm diameter pre-cast concrete pipe outfall to convey drainage from the proposed parking lot; and,
- Remove invasive plants and restore disturbed riparian areas with native grass and herbaceous plants suitable for the site.

Our review considered the following information:

- Request for Review package and supporting documents completed by Shane Scroggie, including:
 - BC Ferries FMU Development Project Construction Environmental Management Plan, prepared by SNC Lavalin Inc., dated April 14, 2023;
 - Environmentally Sensitive Area Environmental Assessment Memo 2023
 Dike Revisions, prepared by SNC Lavalin Inc., dated March 2, 2023; and,
 - BC Ferry Services Inc Fleet Maintenance Unit (FMU) Development Project North and West Dike Design, prepared by SNC Lavalin, dated May 3, 2023.



- Email correspondence between Ryan Stinson (SNC Lavalin Inc.), Mark Toohey (SNS Lavalin Inc.), Keith Dunbar (SNC Lavalin Inc.) and Jason Runtas (DFO) between May 10 and August 25, 2023;
- Virtual MS Teams meeting between Ryan Stinson (SNC Lavalin Inc.), Mark Toohey (SNS Lavalin Inc.), Keith Dunbar (SNC Lavalin Inc.) and Jason Runtas (DFO) on July 10, 2023; and,
- Site visit meeting with Ryan Stinson (SNC Lavalin Inc.), Jason Runtas (DFO), and Arainn McKenzie (DFO) on August 23, 2023.

Your proposal has been reviewed to determine whether it is likely to result in:

- the death of fish by means other than fishing and the harmful alteration, disruption or destruction of fish habitat which are prohibited under subsections 34.4(1) and 35(1) of the *Fisheries Act*; and
- effects to listed aquatic species at risk, any part of their critical habitat or the residences of their individuals in a manner which is prohibited under sections 32, 33 and subsection 58(1) of the *Species at Risk Act*.

The aforementioned outcomes are prohibited unless authorized under their respective legislation and regulations.

To avoid and mitigate the potential for prohibited effects to fish and fish habitat (as listed above), it is important that all proposed measures are implemented as set out in the information that was submitted to the Program in relation to your project. In addition, we recommend implementing the measures listed below. If there is a conflict between the proposed measures as set out in the information that was submitted to the Program and the following measures, the following measures shall prevail.

- Ensure a Qualified Environmental Professional (QEP) is on site for start-up and during any works with the potential to harm fish or degrade fish habitat. The QEP is required to monitor for compliance with regulations and to ensure appropriate implementation of environmental best management practices, including adherence to water quality.
- The removal of or disturbance to riparian vegetation should be kept to a minimum to complete the works; only remove the four (4) mature trees (4353-6, 4353-7,4376, and 4377) identified through correspondence with Ryan Stinson (SNC-Lavalin Inc.).
 - o Avoid tree removal where possible.
 - o Proposed riparian replanting should be conducted as soon as possible.
 - o Monitoring of planted riparian vegetation for survival is recommended for a period of 3 years, minimum, to ensure success.
- Works below the high water mark should be conducted in the dry during low tide and during the least risk to fish instream work window of July 16 February 28.
- Complete the works as quickly as possible once they are started.
- Undertake works during dry weather.
- Equipment is to be operated from the top of the bank.

- Ensure that material such as rock, riprap, or other materials placed on the banks or within the active channel or floodplain of the watercourse is inert and free of silt, overburden, debris, or other substances deleterious to aquatic life.
- Minimize the introduction of sediments (e.g., silts, clays and sand) into the watercourse or downstream reaches of the watercourse.
- Develop and implement an erosion and sediment control plan to avoid and minimize the introduction of sediment into or induced sedimentation in the watercourse.
- Do not deposit any substances deleterious to fish or fish habitat directly or indirectly into the watercourse or downstream reaches of the watercourse.
- Develop and implement a spill prevention and emergency response plan to avoid a spill of deleterious substances into the watercourse.

Provided that you incorporate these measures into your plans, the Program is of the view that your proposal is not likely to result in the contravention of the above mentioned prohibitions and requirements.

Should your plans change or if you have omitted some information in your proposal, further review by the Program may be required. Consult our website (http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html) or consult with a qualified environmental consultant to determine if further review may be necessary. It remains your responsibility to remain in compliance with the *Fisheries Act*, the *Species at Risk Act* and the *Aquatic Invasive Species Regulations*.

It is also your Duty to Notify DFO if you have caused, or are about to cause, the death of fish by means other than fishing and/or the harmful alteration, disruption or destruction of fish habitat. Such notifications should be directed to the DFO-Pacific Observe, Record and Report phone line at 1-800-465-4336 or by email at DFO.ORR-ONS.MPO@dfo-mpo.gc.ca.

Please notify the Program by email at Jason.Runtas@dfo-mpo.gc.ca at least 10 days before starting your project, ensuring your file number and appropriate on-site contact information is included. We recommend that a copy of this letter be kept on site while the work is in progress. It remains your responsibility to meet all other federal, territorial, provincial and municipal requirements that apply to your proposal.

Please note that the advice provided in this letter will remain valid for a period of 1 year from the date of issuance. If you plan to execute your proposal after the expiry of this letter, we recommend that you contact the Program to ensure that the advice remains up-to-date and accurate. Furthermore, the validity of the advice is also subject to there being no change in the relevant aquatic environment, including any legal protection orders or designations, during the 1 year period.

3/4

If you have any questions with the content of this letter, please contact Jason Runtas at our at (778) 954 9458 or by email at <u>Jason.Runtas@dfo-mpo.gc.ca</u>. Please refer to the file number referenced above when corresponding with the Program.

Sincerely,

Arainn McKenzie A/ Senior Biologist

a. McL

Fish and Fish Habitat Protection Program

c.c.: Ryan Stinson, SNC-Lavalin Inc., ryan.stinson@snclavalin.com

ATTACHMENT 10



October 13, 2023

Approval Number: 2010331

Attention: Shane Scroggie British Columbia Ferry Services Inc. 12800 Rice Mill RD Richmond, BC V6W 1A1

Sent via email: Shane Scroggie | British Columbia Ferry Services Inc. | shane.scroggie@bcferries.com

Dear Shane Scroggie,

Re: Change Approval - Changes In and About a Stream on Deas Basin and Rice Mill Road Ditch

A Change Approval for the above application has been granted and a *Water Sustainability Act* Section 11(1) Changes In and About a Stream Approval document verifying this is attached.

You are reminded to submit copies of all interim and final environmental and archaeological reports produced for this project to Tsawwassen First Nation at: referrals@tsawwassenfirstnation.com

This Change Approval does not authorize entry onto private or Crown owned land. Permission of the affected landowner must be obtained and should be in writing for your protection.

This Approval does not constitute authority of any other agency. The holder of this Approval shall have the necessary permits from other agencies concerned prior to the commencement of the works authorized herein. The permit holder is required to adhere to all other applicable Provincial and Federal Regulations.

A copy of this Approval (and associated plans/drawings listed on this Approval) must be available for inspection, upon request, at any location where the authorized changes in and about a stream are being undertaken.

Ministry of Forests

This Approval requires the oversight of an appropriately Qualified Professional. For the purposes of this authorization, that professional must be registered with one of the five professional regulatory bodies named under the *Professional Governance Act* of British Columbia. They must be in good standing and acting under that professional regulatory body's code of ethics and subject to disciplinary action by that professional regulatory body.

The holder of this Approval shall ensure that any proposed development and/or changes do not impact traditional or special sites in accordance with the *Heritage Conservation Act* or the ability of First Nation community members to participate in traditional activities on the land and water.

Archaeological sites (both recorded and unrecorded) are protected under the *Heritage Conservation Act* and must not be altered or damaged without a permit from the Archaeology Branch. The holder of this Approval must advise everyone who will be involved in ground-disturbance and construction that if archaeological materials are encountered, activities must be halted, and the Archaeology Branch contacted at 250-953-3334 for direction.

Section 105 of the *Water Sustainability Act* gives the recipient of this notice the right to appeal my decision. You may file an appeal within 30 days of the date indicated on this letter. Information on filing an appeal can be found on the Environmental Appeal Board website at http://www.eab.gov.bc.ca/.

If you have any questions or concerns regarding the document issued or the content of this letter, please contact the South Coast Office at WaterActReferrals.LowerMainland@gov.bc.ca.

Sincerely,

Caroline Ashekian, RPBio Assistant Water Manager

pc: Mark Toohey | SNC-Lavalin Inc. | mark.toohey@snclavalin.com

Chad Paulin | City of Richmond | envsustainability@richmond.ca

Kristen Endacott | Ministry of Forests | kristenendacott@gov.bc.ca

Cowichan Tribes
Halalt First Nation
Katzie First Nation
Kwantlen First Nation
Lyackson First Nation
Musqueam Indian Band

AL

Job Number: 124844 File Number: 2010331

Penelakut Tribe
Semiahmoo First Nation
Snuneymuxw First Nation
Stz'uminus First Nation
People of the River Referrals Office (PRRO)
Ts'uubaa-asatx First Nation
Tsawwassen First Nation
Tsleil-Waututh Nation



October 13, 2023

Approval Number: 2010331

APPROVAL

WATER SUSTAINABILITY ACT - Subsection 11(1) (Changes in and about a stream)

BRITISH COLUMBIA FERRY SERVICES INC.

is hereby authorized to make changes in and about a stream as follows:

- (a) The names of the streams are Deas Basin and Rice Mill Road Ditch.
- (b) The changes to be made in and about the stream are:
 - 1. Daylighting of Rice Mill Road Ditch by removing two culverts, Culvert 1 and Culvert 2, and recontouring the open channel.
 - 2. Daylighting of one culvert inlet, Culvert 3.
 - 3. Replacement of one 150mm diameter storm sewer outfall pipe tied into vertical sheetpile wall and discharging into southeast corner of Deas Basin with a 600mm diameter pre-cast concrete outfall pipe.
 - 4. Installation of one new 600mm diameter pre-cast concrete storm sewer outfall tied into vertical sheetpile wall in the northwest corner of Deas Basin.
 - 5. Construction of Segment 3 conventional earthen berm dike extension to the Deas Basin throat to 4.9 m GD
 - 6. General fill placement to 3.85 m GD Within the dike extension the existing grade will be raised to 3.85 m GD using general fill
 - 7. Creation and enhancement of approximately 2976 square metres of riparian habitat for restoration.

All works shall occur within Municipal Road Right Of Way on the South side of Rice Mill Road, in the vicinity of Lots 1 and 7, Parcel "B", Sections 7 and 8, Block 3, North Range 5 West and District Lots 6852 and 8018, Group 1, New Westminster District, Plans BCP14018, 27577 and 12534.

- (c) The location of the works are at the following coordinates, as provided by the applicant: 49.1225350, -123.0862890, 49.1227600, -123.0883210, 49.1233800, -123.0829300, 49.1260500, -123.0837800.
- (d) The works authorized in this Approval shall be completed on or before February 28, 2025.
- (e) All works associated with the Effectiveness Monitoring Plan, as outlined in clause (z) below, shall be completed by February 28, 2030, five years after the works are completed.
- (f) Work in the stream and stream channel shall occur only during the period of July 16 to February 28, so that the fisheries interests are protected.
- (g) All works shall be completed within the designed project footprint and in accordance with the following documents. Any major changes to the design must be submitted to the Water Manager for written authorization.
 - 1. BC Ferries Fleet Maintenance Unit (FMU) Development Project Environmental Assessment Environmentally Sensitive Area (ESA) SH5 and IT5 Development Permit Report, dated August 31, 2022, prepared by SNC-Lavalin Inc.
 - 2. BC Ferries Fleet Maintenance Unit (FMU) Development Project Environmental Assessment
 - 3. Environmentally Sensitive Area (ESA) SH6 Development Permit Report, dated August 31, 2022, prepared by SNC-Lavalin Inc.
 - 4. Environmentally Sensitive Area Environmental Assessment Memo 2023 Dike Revisions, dated March 2, 2023, prepared by SNC-Lavalin Inc.
 - 5. Bio-Physical Inventory West of Deas Basin 2023 Dike Revisions, dated February 14, 2023, prepared by SNC-Lavalin Inc.
 - 6. Pathway of Effects Analysis, no date, prepared by SNC-Lavalin Inc.
 - 7. BC Ferries FMU Development Project Construction Environmental Management Plan, dated April 14, 2023, prepared by SNC-Lavalin Inc.
 - 8. Engineered drawings, "FMU Redevelopment Project", drawing no. L2 through L29, dated July 11, 2023, prepared by M2 Landscape Architecture.
 - 9. Engineered drawings, "FMU Redevelopment Project Overall Site", dated February 2022, prepared by SNC-Lavalin Inc.
 - 10. Engineered drawings, "FMU Development Project Overall Site", dated November 2022, prepared by SNC-Lavalin Inc.
 - 11. Engineered drawings, "FMU Development Project Dike Statutory Right Of Way (Proposed)", dated February 2023, prepared by SNC-Lavalin Inc.
 - 12. Engineered drawings, "Typical Cross Section New River Dike", dated February 2008, prepared by Golder Associates.

- 13. Planting plan, "Storm 12800 Rice Mill Road City File SA20-891044 Grading + Drainage Plan", drawing no 891044-20-07, dated October 5, 2020, prepared by SNC-Lavalin Inc.
- 14. Archaeological Resource Chance Find Procedures and Management Guidelines for Upgrades to BC Ferries' Deas Dock Operations Area in Richmond, B.C., no date, prepared by Arrowstone Archaeological Research and Consulting Ltd.
- (h) All work shall be carried out in accordance with the Provincial "Requirements and Best Management Practices for Making Changes In and About a Stream in B.C." (2022). The Provincial guidance document can be found at the following link: https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/working-around-water/wsa-cias-requirements-bmps.pdf
- (i) The holder of this Approval must hire an appropriately Qualified Professional to conduct Environmental Monitoring on all in-stream works authorized under this Approval. The Qualified Professional is responsible for observing the methods of construction and preparing information and reports on the compliance of the construction activities. The Qualified Professional shall:
 - 1. Ensure all best management practices and mitigation measures are in place to avoid and minimize environmental impact on the land and on fish and fish habitat of the stream.
 - 2. Where applicable, assist in the isolation of the stream prior to the commencement of works.
 - Implement and ensure erosion and sediment control measures are constructed, installed, and maintained appropriately for the full duration of instream works.
 - 4. Supervise all instream works authorized under this Approval.
 - 5. When the works involve temporary diversions to isolate the work site,
 - Monitor all diversion works daily to ensure pumps and flow bypasses are in proper working condition;
 - ii) Ensure diversion works that include pump intakes be screened for fish and aquatic species in accordance with the "Interim code of practice: End-of-pipe fish protection screens for small water intakes in freshwater" (Fisheries and Oceans Canada, 2020); and
 - iii) Ensure fish are prevented from entering the works.
 - 6. When the works involve dewatering or isolation of flow and the stream is known or suspected to contain fish and/or amphibians,
 - i. Attend the site prior to conducting any instream works to complete fish and wildlife search and salvage(s);
 - ii. Obtain any permits needed prior to undertaking the salvage(s); and
 - iii. Inspect the extraction area for fish stranding at least once after water levels have declined.

- 7. Be granted authority to stop the work authorized under this Approval if deemed necessary to address risks to the environment. The Qualified Professional or their designate must be on site during all phases of construction in and around the stream to ensure this component is upheld.
- 8. Report any spills including detailed information such as time of day, staff involved, nature, cause, and degree of spill, recovery process deployed, and agencies notified.
- 9. In the event of an environmental incident or non-compliance with any of the terms or conditions of this Approval, an appropriately Qualified Professional must immediately mitigate the situation. Within 48 hours, each incident must be reported to the Water Manager at SouthCoastWSAReporting@gov.bc.ca with the Approval number in the subject line. The incident report shall describe mitigation measures employed and a rationale as to why works have resumed, or the next steps required before works may resume. The holder of this Approval must follow the advice of the appropriately Qualified Professional.
- (j) Work must be carried out during favourable weather and low flow.
- (k) Upon commencement of the project, the work shall be pursued to completion as quickly as possible.
- (l) All proposed works shall be completed in isolation of the stream flows.
- (m) All equipment and machinery used in or near the stream channel:
 - 1. Must be in good operating condition and free of leaks, excess oil, and grease;
 - 2. Must have a spill containment kit readily accessible on-site. All staff must be trained in handling and applying a spill kit appropriately to any spills/incidents;
 - 3. Refueling must occur a minimum of 30 metres away from all streams; and
 - 4. Must use environmentally sensitive hydraulic fluids which are non-toxic to aquatic life and are readily or inherently biodegradable.
- (n) Any spill of a substance that is toxic, polluting, or deleterious to aquatic life of reportable quantities must be reported to the Dangerous Goods Incident Report 24-hour phone line at 1-800-663-3456.
- (o) Sediment and Erosion Control measures to prevent the release of silt, sediment or sediment-laden water must be in place before starting works that may result in sediment mobilization. Care shall be exercised during all phases of the work to prevent the release of silt, sediment, sediment-laden water, raw concrete, concrete leachate or any deleterious substances. All control measures must meet or surpass the Provincial "Requirements and Best

Management Practices for Making Changes In and About a Stream in B.C. " (2022) and the "Land Development Guidelines for the Protection of Aquatic Habitat" (Fisheries and Oceans Canada and the Province of British Columbia, 1993).

(p) Discharge and runoff water from the site into any watercourse(s) must comply with the BC Approved Water Quality Guidelines for the Protection of Aquatic Life (https://www2.gov.bc.ca/gov/content/environment/air-land-water/water-quality/water-quality-guidelines/approved-water-quality-guidelines) and/or the applicable Local Government Bylaw(s).

Water quality monitoring must be conducted by an appropriately Qualified Professional or a designate Environmental Monitor on every day in which instream works are being conducted. Measurements must be taken upstream of any works taking place and within the extent of the sedimentation downstream of where instream work is actively occurring. Measurements are to be taken immediately prior to works beginning, and then at regular intervals until the works are completed and may require additional frequency during wet weather conditions. Wet weather conditions will be defined as being equal to or greater than 25 millimetres of rainfall within a 24-hour period.

- (q) All material utilized during construction shall be contoured and placed in a stable area such that it is not able to mobilize and managed to avoid entry into any stream or watercourse.
- (r) Site preparation and construction of the works is to be carried out from the banks of the stream, thus minimizing disturbance to the stream.
- (s) The holder of this Approval shall ensure that instream works are designed and installed so as not to restrict fish passage and/or lead to fish stranding. The works shall not result in depressions that have the ability to trap fish and other aquatic life.
- (t) All temporary works shall be removed on completion of the project, and the stream channel restored to its natural condition.
- (u) Vegetation along the banks of the stream shall be disturbed as little as possible. All disturbed areas must be restored using native vegetation that is suitable for the site conditions.
- (v) The hydraulic capacity of installed culvert(s) must be equivalent to the hydraulic capacity of the stream channel or be capable of passing the 1 in 200year maximum daily flow without the water level at the culvert(s) inlet exceeding the top of the culvert(s).

October 13, 2023 File Number: 2010331

(w) Rock used as riprap shall be clean of any substances deleterious to aquatic life and shall be durable, angular in shape and suitably graded and sized to resist movement by stream flow. Any other engineering material required for the construction of the works shall be clean of any substances deleterious to aquatic life.

- (x) The holder of this Approval must provide a detailed post-construction report no later than December 1 of the year works are completed. The report must be submitted to SouthCoastWSAReporting@gov.bc.ca. The subject line of the email and the report must be labelled with this Approval file number The report shall include a signed statement from an appropriately Qualified Professional summarizing:
 - 1. The in-stream works undertaken;
 - 2. The timing of those works;
 - 3. The total in-stream area directly affected;
 - 4. The volume of gravel or sediment removed (if applicable);
 - 5. The frequency of monitoring, including the name(s) of the designated monitor(s);
 - 6. The water quality reporting (e.g., turbidity, pH)
 - 7. Representative site photographs;
 - 8. Whether or not they observed or were otherwise aware of any noncompliance with the terms and conditions of this Approval; and
 - 9. A description of any environmental incidents, non-compliance, or other difficulties, and how these were addressed and reported.
 - 10. As-built drawings of the installed structures.
- (y) To address the instream and riparian impacts associated with the project, the holder of this Approval must, under the supervision of an appropriately Qualified Professional, create a minimum of 2976 square meters of riparian habitat that is consistent with the Ministry's Environmental Mitigation Policy and Procedures and will form part of the Habitat Compensation Plan.
- The holder of this Approval must retain an appropriately Qualified Professional to develop and implement a 5-year Effectiveness Monitoring Plan that includes:
 - 1. Maintenance and monitoring of plantings (including watering);
 - 2. Replacement of plantings, where necessary, to ensure 100% tree survival and minimum 80% shrub and other vegetation survival rate;
 - 3. Invasive species management; and
 - 4. Monitoring water flow and function of altered channels with proposed adaptive management strategies to address shortfalls.

Annual reports must be submitted by December 1 of each calendar year following completion of construction to

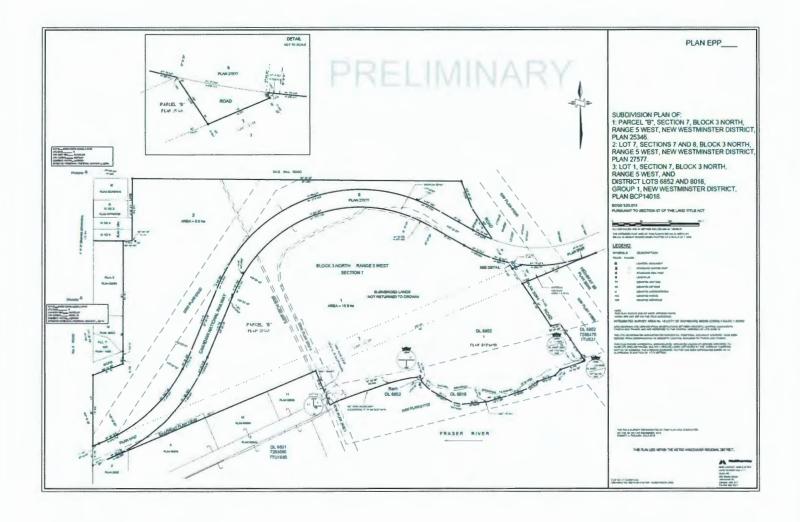
SouthCoastWSAReporting@gov.bc.ca. The reports and subject line of the email must be labelled with this Approval file number.

Sincerely,

Caroline Ashekian, RPBio Assistant Water Manager

Ada

Preliminary Subdivision Plan





Development Permit Considerations

Development Applications Department 6911 No. 3 Road, Richmond, BC V6Y 2C1

Address: 12700 and 12800 Rice Mill Road and 12280 and 12300 No. 5 Road File No.: DP 18-824566

Prior to Development Permit issuance, the following are to be met prior to forwarding this application to Council for approval:

- 1. Registration of a legal agreement at Land Titles Office (LTO) for the consolidated site that includes the following provisions related to the Environmentally Sensitive Area (ESA) compensation and enhancement areas forming part of this Development Permit application:
 - Includes all ESA compensation and enhancement to be provided on the subject site (portion of site north and south of the CN Rail corridor)
 - The ESA compensation and enhancement areas cannot be disturbed, modified or removed.
 - Include the project's Qualified Environmental Professional (QEP) post implementation monitoring and maintenance provisions as follows:
 - o 5 year monitoring period;
 - o During the first 3 years, inspections to occur twice yearly (early spring and late summer) and once a year in the final 2 years of the monitoring period.
 - o QEP responsible for resolving any deficiencies during the monitoring period.
 - o Annual reports to be submitted to the City by the project QEP.
- 2. Registration of a legal agreement at LTO for the consolidated lot to secure all utilities and services for the BC Ferries Fleet Maintenance Unit development on the subject site and that these services and utilities cannot be removed or modified in such a manner that would restrict or not allow access or negatively impact the operations of the BC Ferries FMU. This legal agreement shall also specify that any utilities or servicing that cross the CN Rail corridor will need to be secured with the applicable licenses and approvals in perpetuity by BC Ferries.
- 3. City acceptance of the developer's offer to voluntarily contribute \$18,000 to the City's Tree Compensation Fund for the planting of replacement trees within the City.
- 4. Receipt of a landscape cost estimate (prepared by the landscape architect) and accompanying landscape security, to the satisfaction of the Director of Development, for all proposed ESA compensation and enhancement works identified in the plans, based on 100 percent of the cost estimate plus a 10 percent contingency. To accompany this landscaping security, a legal agreement that sets the terms of release of the security and is consistent with the monitoring

and maintenance recommendations from the project QEP, must be entered into between the applicant and the City.

Prior to Building Permit Issuance, the developer must complete the following requirements:

- Submission of a Construction Parking and Traffic Management Plan to the Transportation Department. Management Plan shall include location for parking for services, deliveries, workers, loading, application for any lane closures, and proper construction traffic controls as per Traffic Control Manual for works on Roadways (by Ministry of Transportation) and MMCD Traffic Regulation Section 01570.
- 2. Obtain a Building Permit (BP) for any construction hoarding. If construction hoarding is required to temporarily occupy a public street, the air space above a public street, or any part thereof, additional City approvals and associated fees may be required as part of the Building Permit. For additional information, contact the Building Approvals Department at 604-276-4285.
- 3. Submission and approval of the Construction and Environmental Management Plan (CEMP) to be prepared by the project QEP.

Signed Copy on File	
Signed	Date



Development Permit

No. DP 18-824566

To the Holder:

BC Ferry Services Inc.

Property Address:

12700 and 12800 Rice Mill Road and

12280 and 12300 No. 5 Road

Address:

c/o Suite 500 - 1321 Blanshard Street

Victoria, BC V8W 0B7

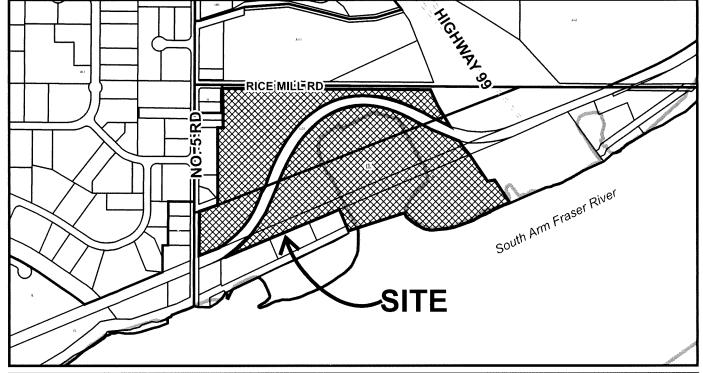
1. This Development Permit is issued subject to compliance with all of the Bylaws of the City applicable thereto, except as specifically varied or supplemented by this Permit.

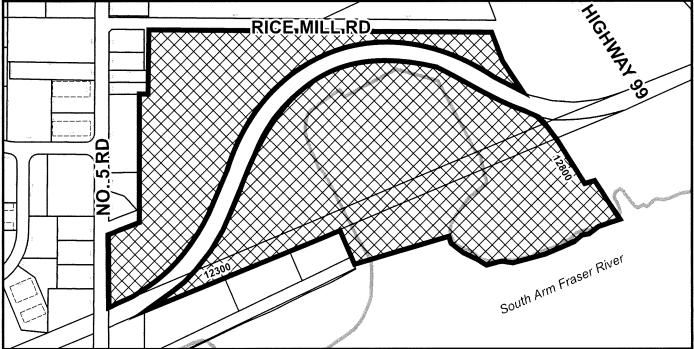
- 2. This Development Permit applies to and only to those lands shown cross-hatched on the attached Schedule "A" and any and all buildings, structures and other development thereon.
- 3. Subject to Section 692 of the Local Government Act, R.S.B.C.: buildings and structures; off-street parking and loading facilities; roads and parking areas; and landscaping and screening shall be constructed generally in accordance with Plans #1 to #30 attached hereto.
- 4. Sanitary sewers, water, drainage, highways, street lighting, underground wiring, and sidewalks, shall be provided as required.
- 5. As a condition of the issuance of this Permit, the City is holding the security in the amount of 100% of the cost estimate, provided by the consulting landscape architect, of the Environmentally Sensitive Area landscaping compensation and enhancement works plus a 10% contingency to ensure that development is carried out in accordance with the terms and conditions of this Permit. Should any interest be earned upon the security, it shall accrue to the Holder if the security is returned. The condition of the posting of the security is that should the Holder fail to carry out the development hereby authorized, according to the terms and conditions of this Permit within the time provided, the City may use the security to carry out the work by its servants, agents or contractors, and any surplus shall be paid over to the Holder. Should the Holder carry out the development permitted by this permit within the time set out herein, the security shall be returned to the Holder. The City may retain the security for up to one year after inspection of the completed landscaping in order to ensure that plant material has survived.
- 6. If the Holder does not commence the construction permitted by this Permit within 24 months of the date of this Permit, this Permit shall lapse and the security shall be returned in full.

Development Permit No. DP 18-824566

To the Holder:	BC Ferry Services Inc.		
Property Address: 12700 and 12800 Rice Mill Road and 12280 and 12300 No. 5 Road			
Address:	c/o Suite 500 - 1321 Blanshard Street Victoria, BC V8W 0B7		
	•		
AUTHORIZING RESOLUT DAY OF ,	ION NO. ISSUED BY THE COUNCIL THE		
DELIVERED THIS D	AY OF , .		
MAYOR			







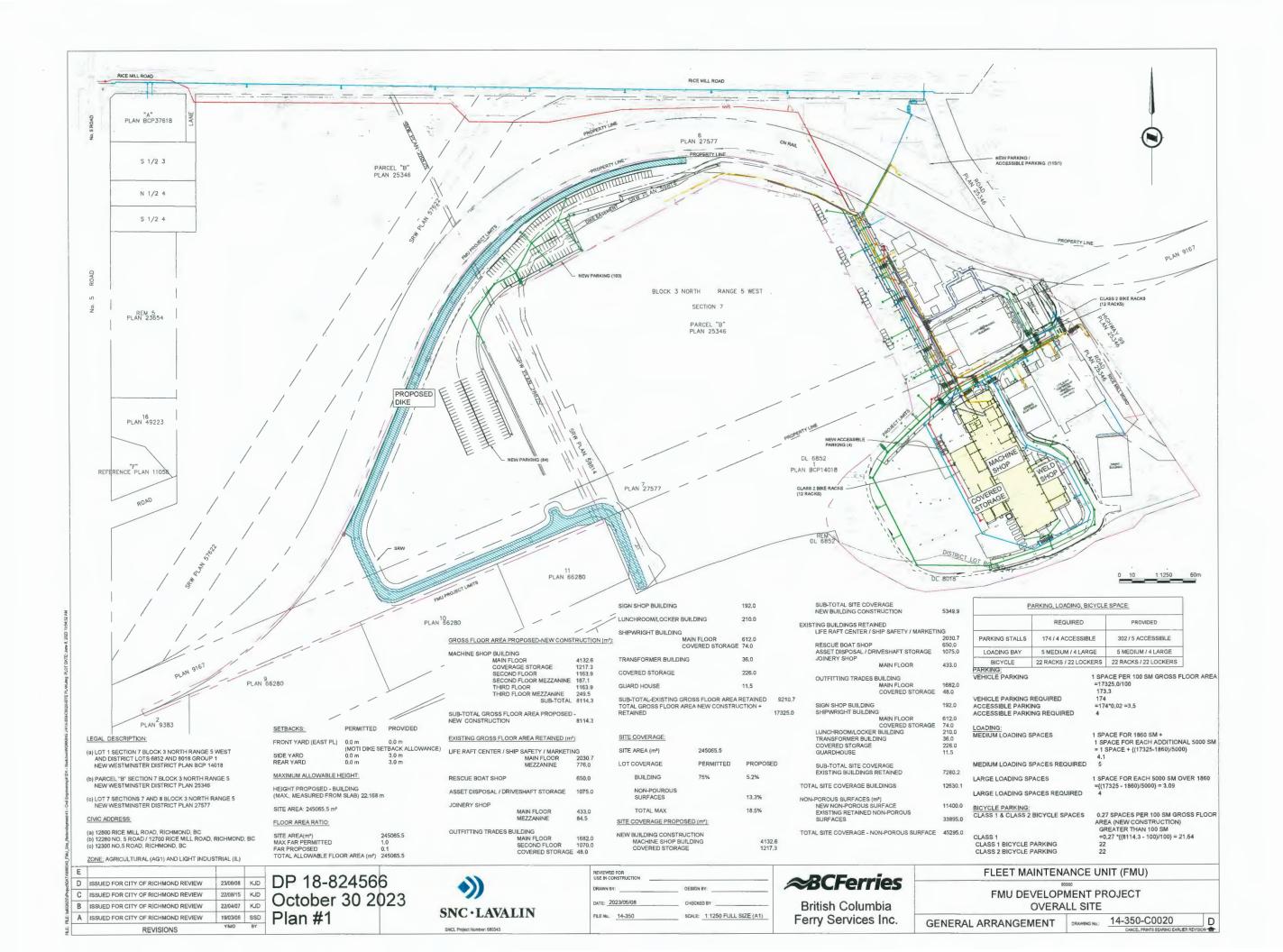


DP 18-824566 SCHEDULE "A"

Original Date: 06/20/18

Revision Date: 10/19/23

Note: Dimensions are in METRES





©Copyright reserved. This drawing and design is the property of M2 Landscape Architects and may not be reproduced or used for other projects without their p



#220 - 26 Lorne Mews New Westminster, British Columbia V3M 3L7 Tel: 604.553.0044 Fax: 604.553.0045 Email: office@m2la.com



SNC · LAVALIN

DP 18-824566 October 30 2023 Plan # 2

_			
_			
Ξ			
8	23-10-17	REV. PER CITY COMMENTS	MM
7	23-05-24	NEW S.P., CITY COMMENTS	1191
6	22-08-19	NEW S.P. STM LAYOUT, CONSULT INFO	MH
5	19-04-16	REV. CITY COMM. ADD CONSUL INFO	MM
4	19-03-23	REV. CLIENT COMM. ADD ADD. INFO	MH
3	19-03-07	REV. PER CITY COMM. AND BAILDOC	MM
2	18-08-08	LANDSCAPE PLAN	MM
1	18-01-12	KEYPLAN	MM
NO.	DATE	REVISION DESCRIPTION	DR.

PROJECT:
FMU REDEVELOPMENT
PROJECT

RICE MILL ROAD, RICHMOND, BC

PROVINCE PROJECT No: 03902

LANDSCAPE KEYPLAN

DATE:	2023-05-23	DRAWING NUMBER:
SCALE:	NTC	
DRAWN:	MM	11
DESIGN:	MM	<u> </u>
CHK'D:	MM	OF

18-045

MASTERPLAN NOTES: 1. PLEASE REFER TO SUBMISSION FOR OVERALL PROJECT BY SNC LAVALIN ADDRESS: 12800 RICE MILL ROAD, RICHMOND, B.C.

2. THIS DOCUMENT IS A COLLABORATION OF MULTIPLE DISCIPLINES AND FIRMS AND INCLUDES INFORMATION ON PROJECT BASE PLAN, ARBORIST INFORMATION, TERRESTRIAL AND RIPARIAN ENVIRONMENTAL CONSULTANTS INFORMATION, AND LANDSCAPE ARCHITECTURAL WORKS.

3. M2 LANDSCAPE ARCHITECTURE IS PROVIDING THIS INFORMATION IN AN INTEGRATED SITE DESIGN PLAN FORMAT FOR REVIEW AND INFORMATION; THE INFORMATION PROVIDED BY OTHERS ARE COPYRIGHTED TO OTHER COMPANIES AND IS REPRODUCED WITH THEIR PERMISSION. ACCURACY OF PROVIDED INFORMATION IS THE RESPONSIBILITY OF THE FIRMS THAT PROVIDE THE INFORMATION.

MASTERPLAN TABLE OF CONTENTS:

- INFORMATION PLAN AND TABLE OF CONTENTS
- KEYPLAN SHEET
 CONSULTANT REPORT NOTES
 ENLARGEMENT SHEET A
 ENLARGEMENT SHEET B

- ENLARGEMENT SHEET ENLARGEMENT SHEET ENLARGEMENT SHEET

- ENLARGEMENT SHEET
- ENLARGEMENT SHEET G ENLARGEMENT SHEET H
- L12. ESA COMPENSATION AREA FIGURE 18 SH-5 (SNC) L13. ESA COMPENSATION AREA FIGURE 19 SH-6 (SNC)

- L13. ESA COMPENSATION AREA FIGURE 19 SH-6 (SNC L14. FIGURE 20 ESA OVERLAP AREA (SNC) L15. ESA COMPENSATION AREA SHE MATCHLINES L17. ESA COMPENSATION AREA SHE MATCHLINES L17. ESA COMPENSATION AREA B-C AND C-D L19. ESA COMPENSATION AREA B-C AND C-D L19. ESA COMPENSATION AREA B-C AND C-D L20. ESA COMPENSATION AREA B-C AND C-D L21. ESA COMPENSATION SH-6 EAST F-G RAILROAD L22. ESA COMPENSATION SH-6 EAST F-G RAILROAD L23. ESA COMPENSATION SH-6 E/F RAILROAD L23. ESA COMPENSATION SH-6 C/C2 RAILROAD L23. ESA COMPENSATION SH-6 C/C2 RAILROAD L23.4 ESA COMPENSATION SH-6 C/C2 RAILROAD L23.5 ESA COMPENSATION SH-6 A/A RAILROAD L24. ESA COMPENSATION SH-6 A/A RAILROAD L24. ESA COMPENSATION SH-5 MATCHLINES L25. ESA COMPENSATION SH-5 K-L, L-M L27. ESA COMPENSATION SH-5 K-L, L-M L27. ESA COMPENSATION SH-5 K-L, L-M L27. ESA COMPENSATION SH-5 K-L, L-M L28. ESA COMPENSATION SH-5 K-L

- ESA COMPENSATION SH-5 N-0 ESA COMPENSATION SH-5 O-P
- ESA COMPENSATION PLANT LISTS

ARBORIST



EXISTING TREE

EXISTING TREE REMOVED

ARBORIST SCOPE OF WORK AREA

ARBORIST TREE PROTECTION FENCING (BASED ON ARBORIST REPORT; UTILIZE EXISTING CHAINLINK)

ARCHITECTURE

AREA OF DISTURBANCE PROPOSED BUILDINGS

EXISTING STRUCTURES TO BE REMOVED

STRUCTURES TO BE RETAINED

LANDSCAPE ARCHITECTURE

PROPOSED LANDSCAPE AREA

PROPOSED ESA COMPENSATION AREA 6945 M2 PROPOSED TOTAL

RIPARIAN MANAGEMENT AREAS AND ENVIRONMENTALLY SENSITIVE AREAS (ESA'S)

ENVIRONMENTALLY SENSITIVE AREA IT-5 INTERTIDAL (30M SEAWARD SETBACK)

HIGH WATER MARK 15M RIPARIAN MANAGEMENT AREA

ENVIRONMENTALLY SENSITIVE AREA (SH-5) SHORELINE 30M ABOVE HIGH WATER MARK

ENVIRONMENTALLY SENSITIVE AREA (SH-6)
UPLAND FOREST, OLD FIELDS, AND SHRUBLANDS

5M RIPARIAN MANAGEMENT AREA



5M RIPARIAN MANAGEMENT AREA (RESTORATION AREA) AND SANITARY FORCE MAIN RESTORATION AREA TERRALINK SEED; RIPARIAN / WETLAND REVEGETATION SEED MIX; PRODUCT #22200330, 50-100 LB/ACRE

ARCHITECTURAL DIKE LOCATION



PHASE 1 DIKE LOCATION



PHASE 2 DIKE LOCATION



FUTURE DIKE LOCATION

ARBORIST NOTES

1. PLEASE REFER TO ARBORIST REPORT BY DIAMOND HEAD CONSULTING FOR:

BC FERRIES FMU_FACILITY ARBORIST REPORT 12800 RICE MILL RD, RICHMOND, BC OCTOBER 2, 2023

- 2 THE ARBORIST REPORT IDENTIFIES THREE PHASES OF WORK THAT ARE PHYSICALLY SEPARATEO FROM EACH OTHER: PHASE 2 (MAIN SITE), PHASE 3 (DIKE), AND PHASE 4 (SANITARY LINE)
- 3. TREE FENCING IS REQUIRED IN TWO LOCATIONS:
 - E FENCING IS REOUIRED IN TWO LOCATIONS:

 IN THE PHASE 2 AREA, FENCING IS REOUIRED ALONG THE FRASER RIVER IN THE LOCATION
 OF THE PROPOSED HABITAT PROTECTION ZONE IN OROER TO PROTECT THE MATURE TREES THAT
 WILL BE RETAINED. THE HABITAT PROTECTION ZONE WILL RESULT IN A LARGER, PERMANENT
 TREE PROTECTION ZONE THAN CURRENTLY EXISTS. THE FENCING SHOULD BE INSTALLED IN
 THE LOCATION OF THE EXISTING CHAIN-LINK FENCE AS A MINIMUM.

 IN THE PHASE 4 AREA, FENCING IS REQUIRED WHERE THE NEW SANITARY LINE WILL BE

INSTALLED. THIS FENCING WILL PROTECT MATURE TREES ALONG RICE MILL RO.

- 4.TREE TOTALS FROM PHASE 2 INCLUDE TREES THAT HAVE SINCE BEEN CONFIRMED TO BE OFF-SITE INCLUDING THE ONE HIGH RISK TREE 549. COMPLETE TREE INVENTORIES HAVE NOT BEEN GIVEN AS A RESULT OF CHANGING INFORMATION AND ONGOING REVISIONS. THE REPORT WILL FOCUS DN TREE REMDVALS AND TREE PROTECTION ADJACENT TO DEVELOPMENT. ONE ON-SITE TREE IN THE PHASE 2 SECTION WILL BE REMOVED DUE TO CONFLICTS. A TOTAL OF 94 TREES HAVE BEEN IDENTIFIED FOR REMOVAL DUE TO CONFLICTS.
- 5. TREE REPLACMENT WILL BE AT A 2:1 OR 3:1 RATIO, AS CONFIRMED BY THE CITY OF RICHMOND. WITH 94 TREES TO BE REMOVED, THAT WILL REQUIRE 197 REPLACEMENT TREES. IF TREES CANNOT BE PLANTED ON-SITE, THE CITY WILL DETERMINE THE COMPENSATION FOR THE DEFICIT.
- 6.NO TREES NOTED ON ADJACENT SITES THAT HAVE POTENTIAL TO BE IMPACTED BY WORK ON SITE.

<u>ENVIRONMENTAL NOTES:</u> 1. PLEASE REFER TD BC FERRIES FLEET MAINTENANCE UNIT (FMU) DEVELOPMENT PROJECT ENVIRONMENTAL ASSESSMENT REPORT: ENVIRONMENTALLY SENSITIVE AREA (ESA) SH-5 AND IT-5 DEVELOPMENT PERMIT REPORT BY SNC LAVALIN DATED: AUGUST 16, 2022

ENVIRONMENTALLY SENSITIVE AREA (ESA) SH-6 DEVELOPMENT PERMIT REPORT BY SNC LAVALIN DATED: AUGUST 16, 2022

CONSISTS OF REPORT FOR BOTH RIPARIAN/AOUATIC AND TERRESTRIAL AREAS

- 2. THREE AREAS OF ESA DELINEATED WITHIN THE SITE: SHELLMONT SOUTH SH-6 (UPLAND FOREST. OLD FIELDS AND SHRUBLANDS), SHELLMONT DYKE SH-5 (SHORELINE) AND LULU ISLAND FORESHORE IT-5 (INTERTIOAL). THE PROJECT IS NOT EXPECTED TO AFFECT THE EXISTING CONNECTIVITY OF THE ESA'S.
- 3. THE MAJORITY OF CONSTRUCTION WILL TAKE PLACE ON PREVIOUSLY OEVELDPED LANDS. SPECIFIC PROPOSED CONSTRUCTION WORKS WITHIN THE SITE THAT HAVE THE POTENTIAL TO AFFECT FISH OF WILDLIFE HABITAT ARE: INSTALLATION DF NEW CRANE IN THE EASTERN AREA OF THE DEAS BASIN. CONSTRUCTION OF A PORTION OF THE FLOOD PROTECTION DIKE SYSTEM.
- 4. ND VEGETATION SPECIES AT RISK WERE NOTED AT TIME OF SITE VISIT (PLEASE SEE REPORT FOR FULL DISCUSSION OF SPECIES). TWD WILDLIFE SPECIES AT RISK WERE OBSERVED (DOUBLE CRESTED CORMORANT AND GREAT BLUE HERON). NO NESTING COLONIES ARE PRESENT IN DR NEAR
- 5. UNNAMEO DITCH AT RICE MILL ROAD; NOT CONNECTED TO SLOUGH AT EAST END AND CONNECTED TO CITY OF RICHMOND SEWER DRAINAGE SYSTEM TO THE WEST; NOT CONSIDERED FISH HABITAT DESIGNATED A 5M RMA BY CITY.
- 6. UNNAMED SLOUGH EAST OF SITE; WITH GRAVITY DRAINAGE PUMP SYSTEM; SMALL FISH SPECIES NOTED IN SAMPLING. SALMONIOS AND SPAWNING HABITAT CONSIDERED PODR DUE TO CHANNEL SUBSTRATES. REARING HABITAT MODERATE, DVERWINTERING HABITAT MODERATE TO GOOD. DESIGNATED A 15M RMA BY CITY.
- PLEASE SEE ENVIRONMENTAL REPORT FOR AREA CALCULATIONS OF DISTURBANCE TO ESA'S. GENERALLY, SCOPE OF WORK OF OP AREA WILL HAVE LIMITED IMPACT WITH VEGETATED AREAS. FOOTPRINT WILL OVERLAP APPROX. 9028 M2 OF SHORELINE (MAJORITY OF WHICH IS DEVELOPED PAVED, GRAVELLED INDUSTRIAL LAND). NO VEGETATION SPECIES AT RISK ARE KNOWN TO BE PRESENT ON THE SITE AND THE SITE HAS LIMITED POTENTIAL FOR DCCURRENCES OF PLANT SPECIES OF RISK DUE TO HISTORIC CONTEXT. DP AREA FOOTPRINT DOES NOT OVERLAP SENSITIVE TERRESTRIAL WILDLIFE HABITAT.
- 8. HABITAT COMPENSATION AREAS IS DISCUSSED IN ENVIRONMENTAL REPORT; TOTAL AREA IS 2976 M2 AT SHORELINE, 3186 M2 AT UPLANDS AND 1083 M2 AT SANITARY LINE RESTDRATION; 6945 M2 TOTAL. M2 LANDSCAPE ARCHITECTURE WILL PROVIDE PLANTING PLAN IN COORDINATION WITH SNC. SEE SHEETS L13-L15 FOR SUGGESTED HATCHES FOR PLANTING PLAN. SHELLMONT SOUTH SH-6 (UPLAND FOREST, OLD FIELDS AND SHRUBLANDS), SHELLMONT DYKE SH-5 (SHORELINE) ARE DENOTED AS COMPENSATION AREAS
- 9. AN IRRIGATION SYSTEM COMPRISED OF WATER HOSES AND SPRINKLERS WILL BE TEMPORARILY 9. AN IRRIGATION SYSTEM COMPHISED OF WATER HOSES AND SPRINKLERS WILL BE TEMPORARILY ESTABLISHED IN THE AREA AND OPERATED BY A TIMER (BASED ON SEASON). FOR THE FIRST THREE MONTHS PDST-PLANTING, THE COMPENSATION AREAS WILL BE IRRIGATED DAILY TO PROMOTE OPTIMAL SOIL-WATER BUDGET CONDITIONS FOR ESTABLISHMENT. FOR THE REMAINDER OF THE FIRST YEAR, POST-PLANTING, THE COMPENSATION AREAS WILL BE IRRIGATED WEEKLY DURING SPRING AND SUMMER.



#220 - 26 Lorne Mews New Westminster, British Columbia V3M 317 Tel: 604.553.0044 Fax: 604.553.0045 Email: office@m2la.com



SNC · LAVALIN

DP 18-824566 October 30 2023 Plan #3

_		
_	_	
В	23-10-17	REV. PER CITY COMMENTS
7	23-05-24	NEW S.P., CITY COMMENTS
6	22-08-19	NEW S.P. STM LAYOUT, CONSULT INFO
5	19-04-16	REV. CITY COMM. ADD CONSUL INFO
4	19-03-23	REV. CLIENT COMM. ADD ADD. INFO
3	19-03-01	REV. PER CITY COMM. AND BAILDOC
2	18-08-08	LANDSCAPE PLAN
1	18-07-12	KEYPLAN
NO.	DATE	REVISION DESCRIPTION

FMU REDEVELOPMENT **PROJECT**

> RICE MILL ROAD, RICHMOND, BC

PROVINCE PROJECT No: 03902

LANDSCAPE TOC AND NOTES

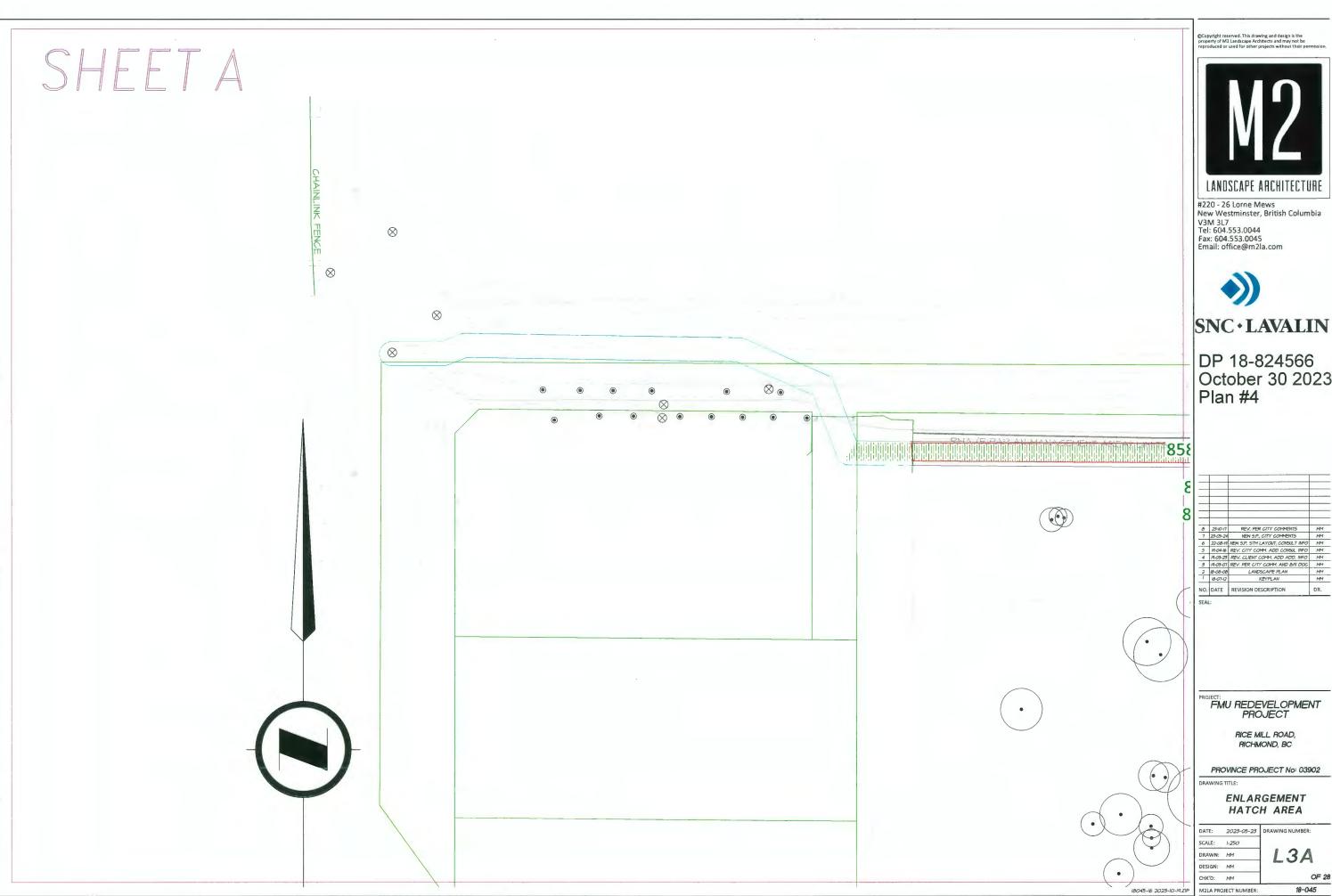
DATE: 2023-05-23 DRAWING NUMBER SCALE: N/SCALE

2

18-045

18045-16 2023-10-19.ZIP

M2LA PROJECT NUMBER:

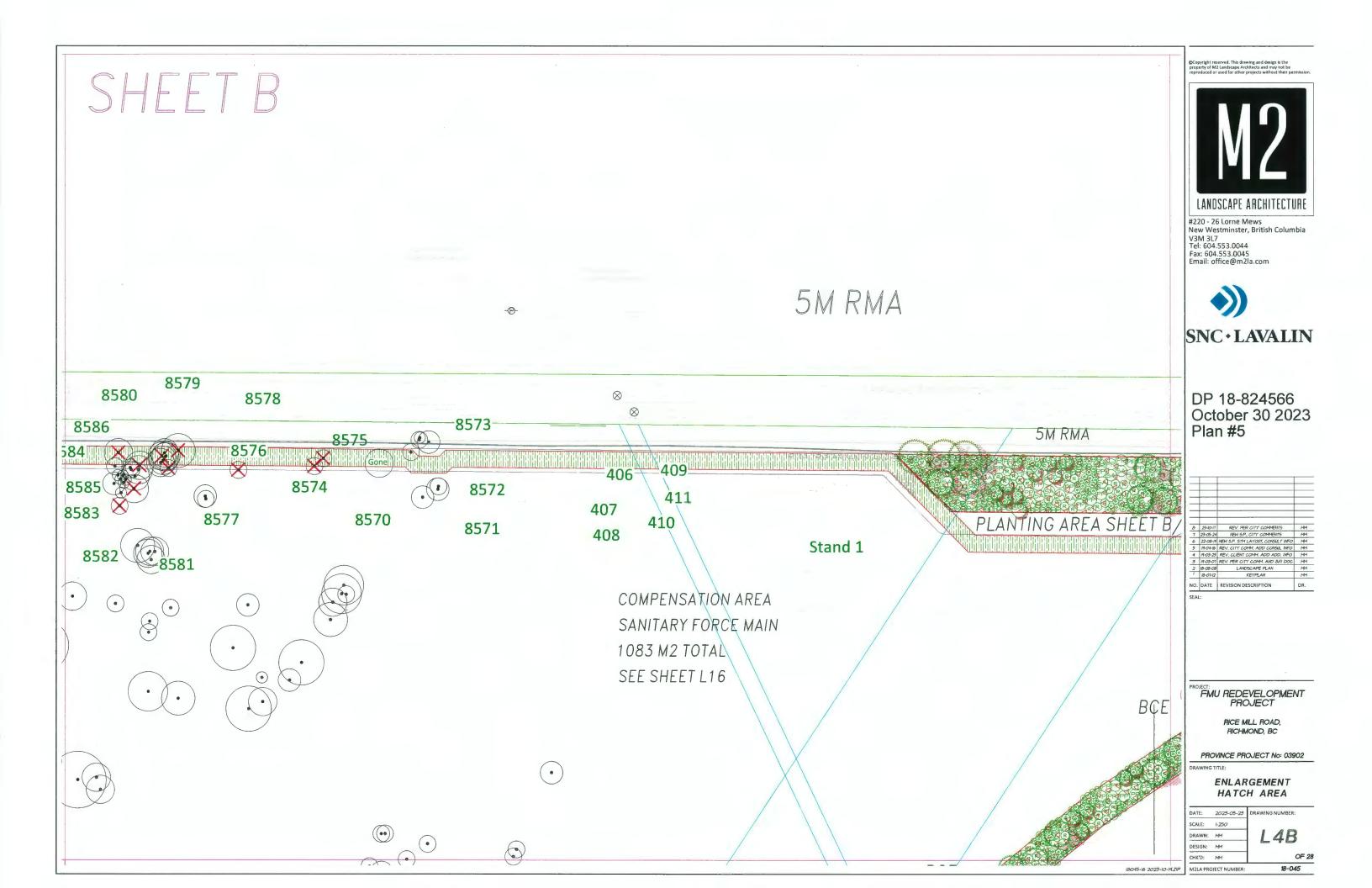


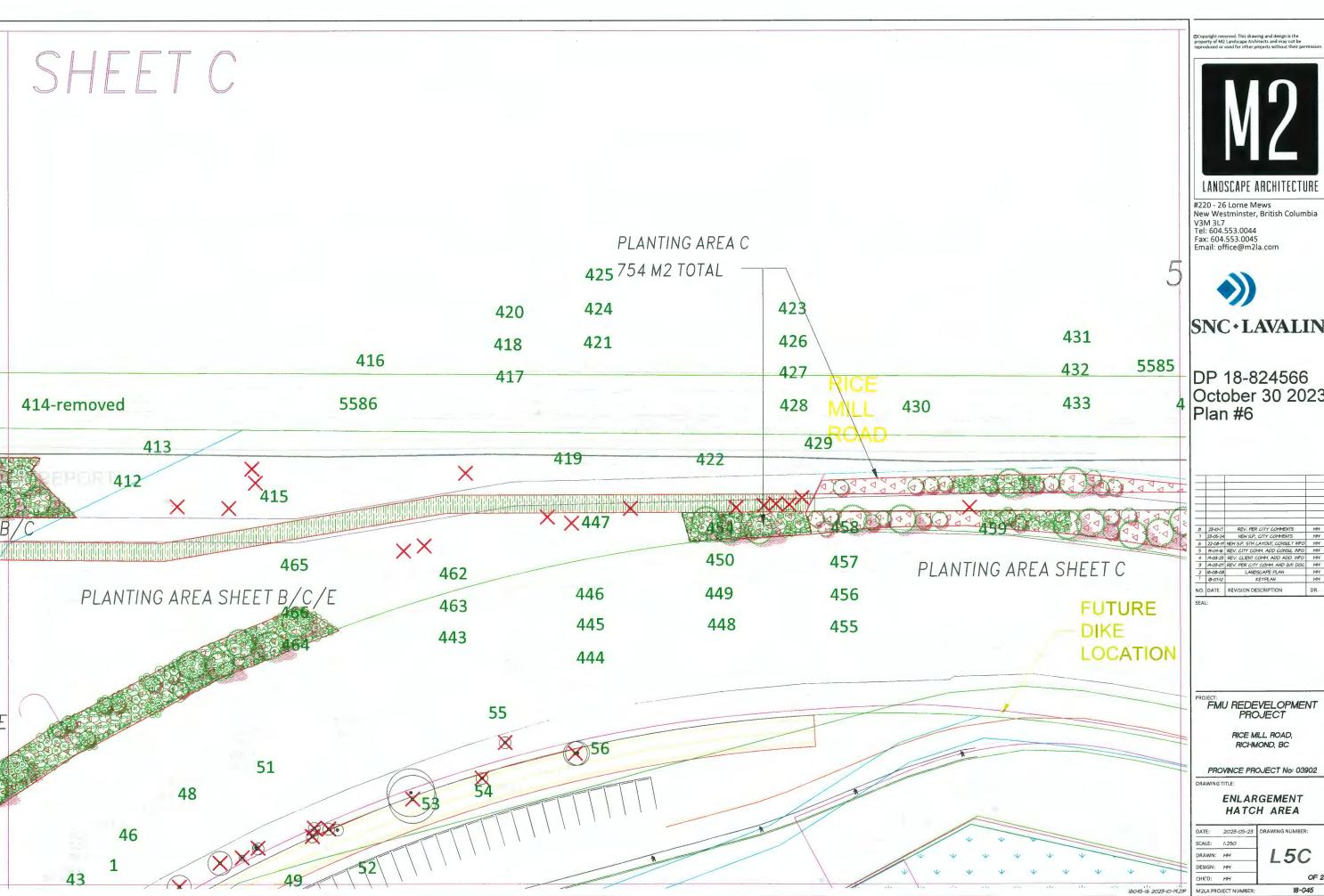


October 30 2023 Plan #4

E			
Ξ			
8	23-10-17	REV. PER CITY COMMENTS	MM
7	23-05-24	NEW S.P., CITY COMMENTS	MM
6	22-08-19	NEW S.P. STM LAYOUT, CONSULT INFO	MM
5	19-04-16	REV. CITY COMM. ADD CONSUL INFO	MM
4	19-03-23	REV. CLIENT COMM. ADD ADD. INFO	MM
3	14-03-07	REV. PER CITY COMM. AND BAILDOC	MH
2	10-00-00	LANDSCAPE PLAN	HM
1	18-07-12	KEYPLAN	MM
NO.	DATE	REVISION DESCRIPTION	DR.

	DATE:	2023-05-23	DRAWING NUMBER:
	SCALE:	1:250	
	DRAWN:	MM	134
	DESIGN:	MM	
	CHK'D:	MM	OF 2
-19.ZIP	M2LA PRO	JECT NUMBER:	18-045





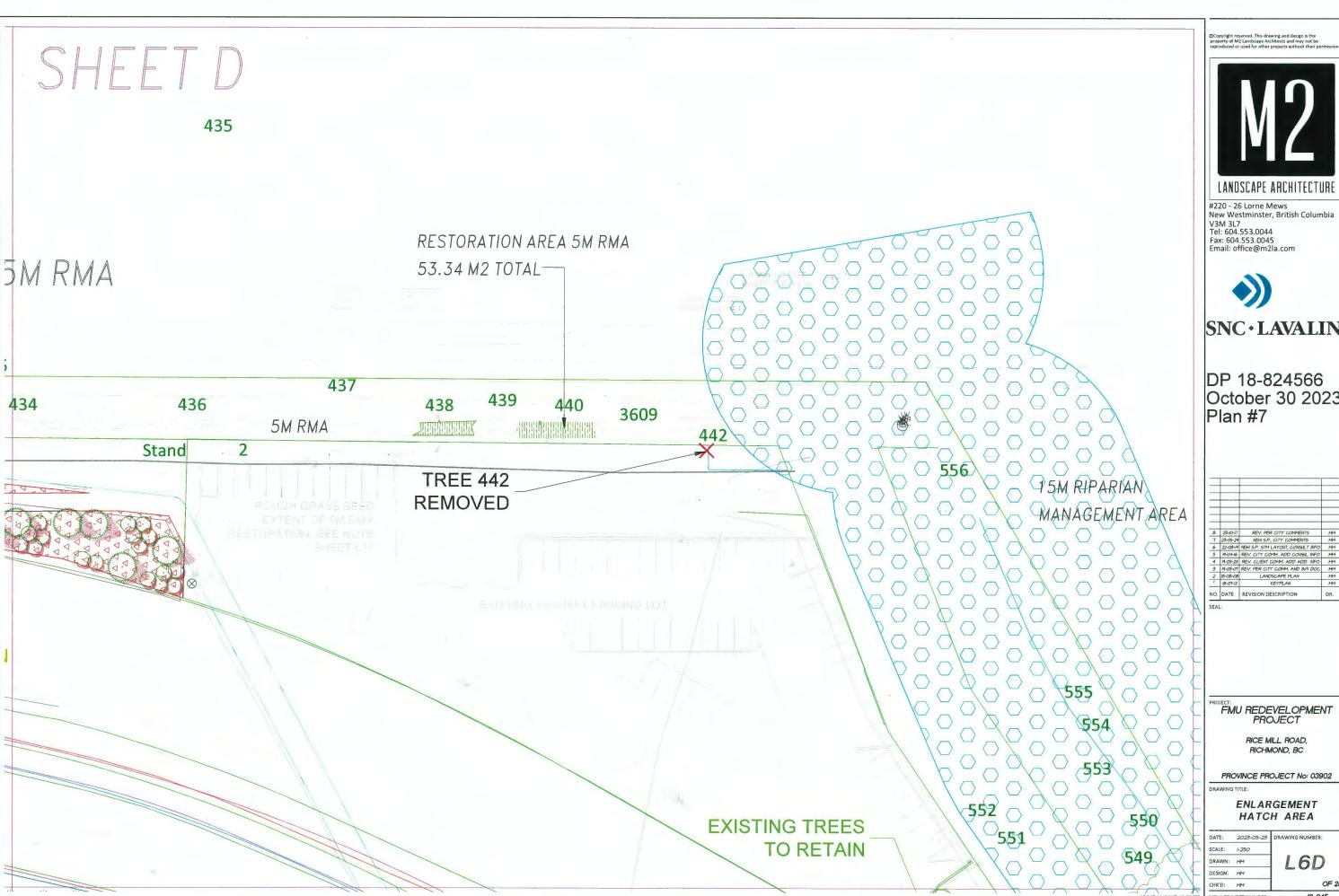


SNC · LAVALIN

DP 18-824566 October 30 2023

_			
_			
8	23-10-17	REV. PER CITY COMMENTS	MM
7	23-05-24	NEW S.P., CITY COMMENTS	MM
6	22-08-19	NEW S.P. STM LAYOUT, CONSULT INFO	MM
5	19-04-16	REV. CITY COMM. ADD CONSUL INFO	MM
4	19-03-23	REV. CLIENT COMM, ADD ADD. INFO	MM
3	19-03-01	REV. PER CITY COMM. AND BAILDOC	MM
2	18-08-08	LANDSCAPE PLAN	MM
1	18-01-12	KEYPLAN	ММ
NO.	DATE	REVISION DESCRIPTION	DR.

,	MZLA PRO	JECT NUMBER:	18-045
0	HK'D:	MH	OF 2
[ESIGN:	MM	
	DRAWN:	MM	L5C
41	CALE:	1:250	
•	DATE:	2023-05-23	DRAWING NUMBER:





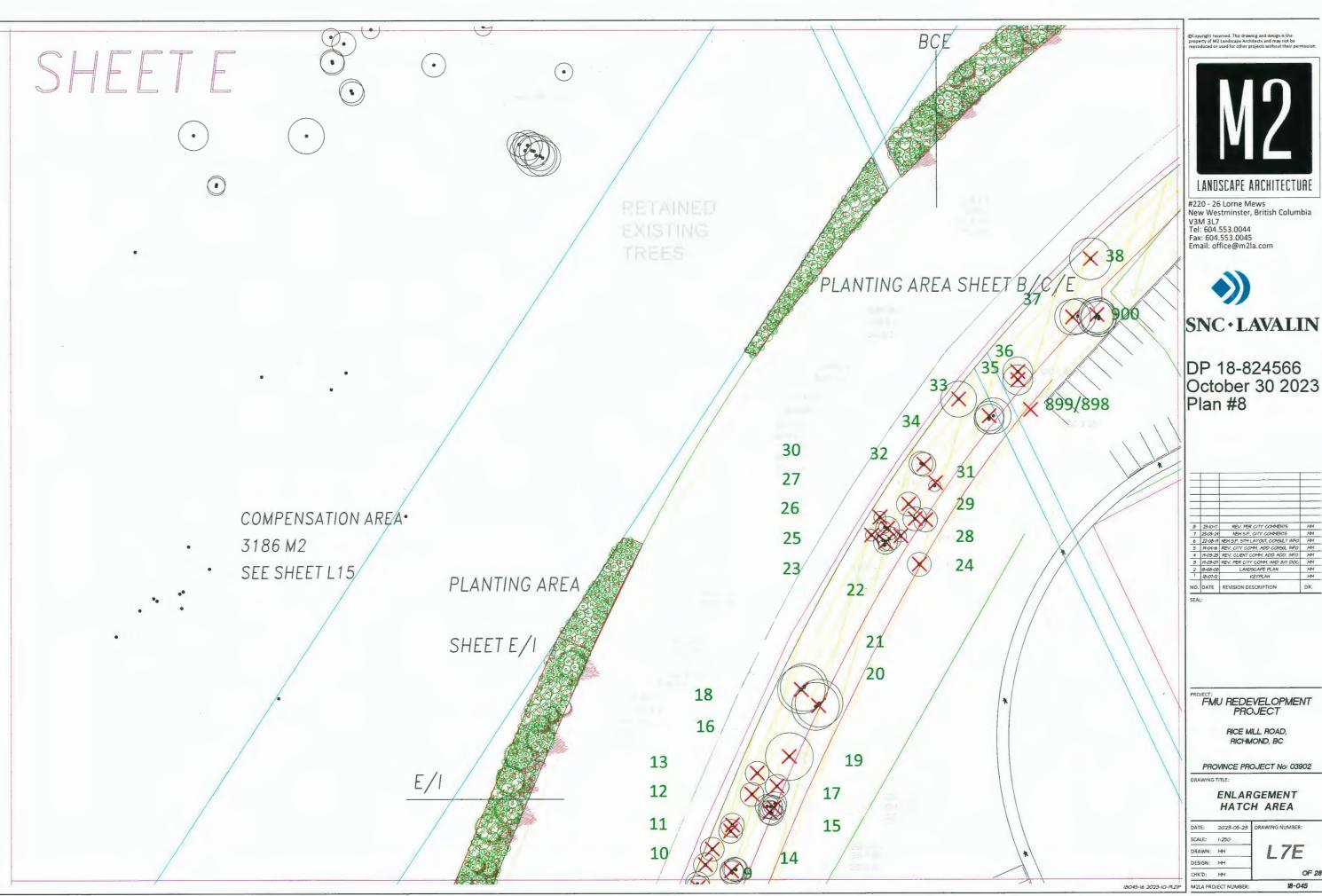
SNC · LAVALIN

DP 18-824566 October 30 2023

_			
8	23-10-17	REV. PER GITY COMMENTS	MM
7	23-05-24	NEW S.P., CITY COMMENTS	MM
6	22-08-14	NEW S.P. STM LAYOUT, CONSULT INFO	MM
5	19-04-16	REV. CITY COMM. ADD CONSUL INFO	MM
4	19-03-23	REV. CLIENT COMM. ADD ADD. INFO	HM
3	14-03-07	REV. PER CITY COMM. AND B/II DOC	HH
2	18-08-08	LANDSCAPE PLAN	MM
7	18-01-12	KEYPLAN	MM
NO.	DATE	REVISION DESCRIPTION	DR.

PROVINCE PROJECT No: 03902

DATE:	2023-05-23	DRAWING NUMBER:
SCALE:	1:250	
DRAWN:	MM	1.6D
DESIGN:	MH	
CHK'D:	MM	OI

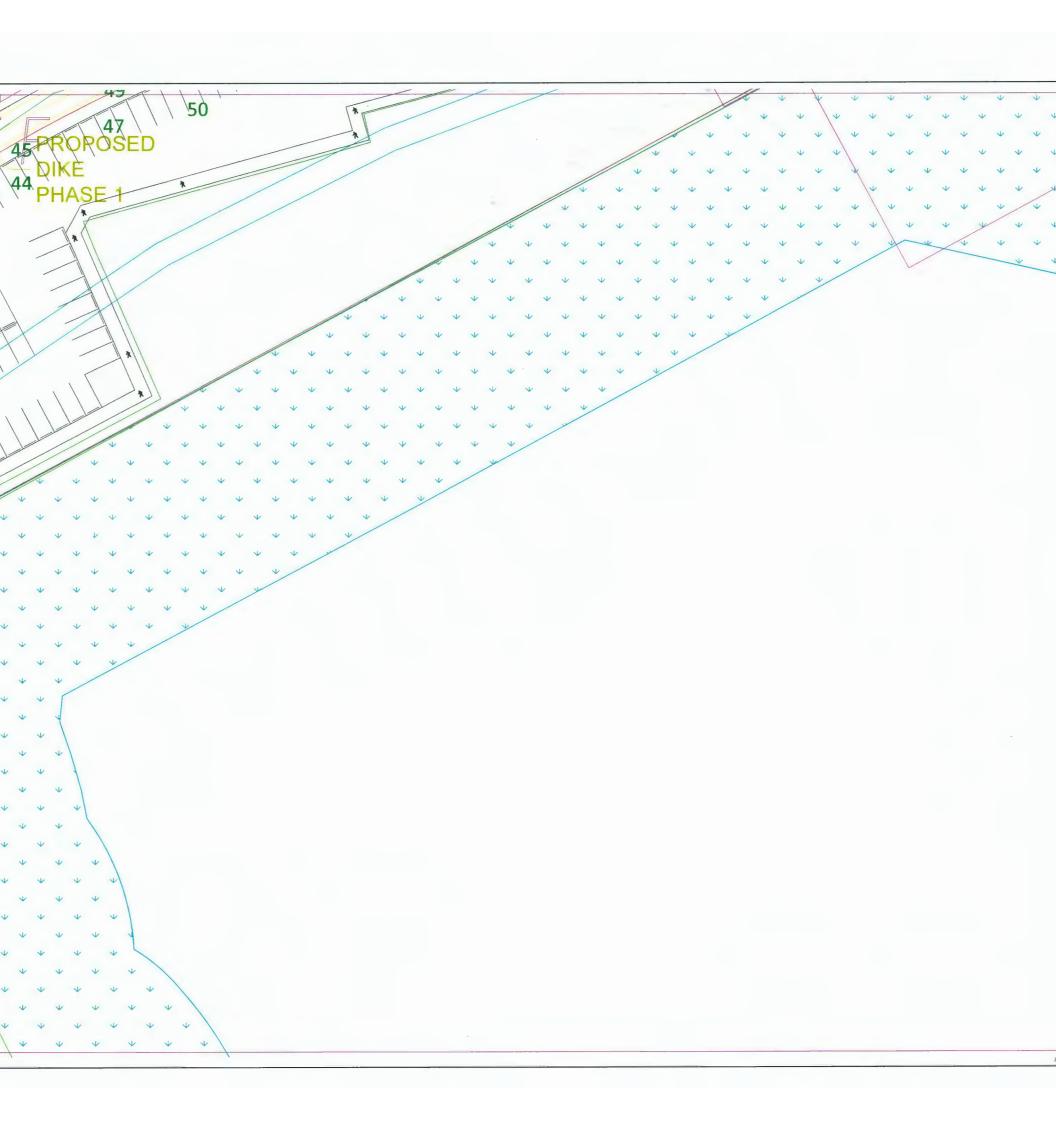




DP 18-824566 October 30 2023

_			
=			
8	23-10-11	REV. PER CITY COMMENTS	MM
7	23-05-24		MM
6	22-08-19	NEW S.P. STM LAYOUT, CONSULT INFO	MM
5	14-04-16	REV. CITY COMM. ADD CONSUL INFO	MM
4	14-03-23	REV. CLIENT COMM. ADD ADD. INFO	HM
3	19-03-07	REY. PER CITY COMM. AND BAI DOC	MM
2	18-08-08	LANDSCAPE PLAN	1-19-1
Ť	15-01-12	KEYPLAN	MM
NO.	DATE	REVISION DESCRIPTION	DR.

	DATE:	2023-05-23	DRAWING NUMBER:
	SCALE:	1:250	
	DRAWN:	MH	17F
	DESIGN:	MH	
	CHK'D:	MM	OF:
0-19.ZIP	M2LA PRO	JECT NUMBER:	18-045









#220 - 26 Lorne Mews New Westminster, British Columbia V3M 3L7 Tel: 604.553.0044 Fax: 604.553.0045 Email: office@m2la.com



SNC · LAVALIN

DP 18-824566 October 30 2023 Plan #11

_			
_			_
8	23-10-17	REV. PER CITY COMMENTS	MM
7	23-05-24	NEW S.P., CITY COMMENTS	MM
6	22-08-19	NEW S.P. STM LAYOUT, CONSULT INFO	HH
5	14-04-16	REV. CITY COMM. ADD CONSUL INFO	HM
4	14-03-23	REV. CLIENT COMM. ADD ADD. INFO	HH
3	14-03-01	REV. PER CITY COMM. AND BAIL DOC	MH
2	18-08-08	LANDSCAPE PLAN	MM
Į	10-01-12	KEYPLAN	MM
NO.	DATE	REVISION DESCRIPTION	DR.

FMU REDEVELOPMENT PROJECT

RICE MILL ROAD, RICHMOND, BC

PROVINCE PROJECT No: 03902

DATE:	2023-05-23	DRAWING NUMBER:
SCALE:	1:250	
DRAWN:	HM	1 10H
DESIGN:	MM	
CHK'D:	MM	OF
	Inches Landa and American	10 045



©Copyright reserved. This drawing and design is the property of M2 Landscape Architects and may not be reproduced or used for other projects without their permis-



#220 - 26 Lorne Mews New Westminster, British Columbia V3M 3L7 Tel: 604.553.0044 Fax: 604.553.0045 Email: office@m2la.com



SNC · LAVALIN

DP 18-824566 October 30 2023 Plan #12

В	23-10-17	REV. PER CITY COMMENTS	HM
7	23-05-24	NEW S.P., CITY COMMENTS	MM
6	22-08-19	NEW S.P. STM LAYOUT, CONSULT INFO	MM
5	19-04-16	REV. CITY COMM. ADD CONSUL INFO	HH
4	14-03-23	REV. CLIENT COMM. ADD ADD. INFO	MH
3	19-03-07	REV. PER CITY COMM. AND BAILDOC	MH
2	10-00-00	LANDSCAPE PLAN	MH
1	15-07-12	KEYPLAN	191
NO.	DATE	REVISION DESCRIPTION	DR.

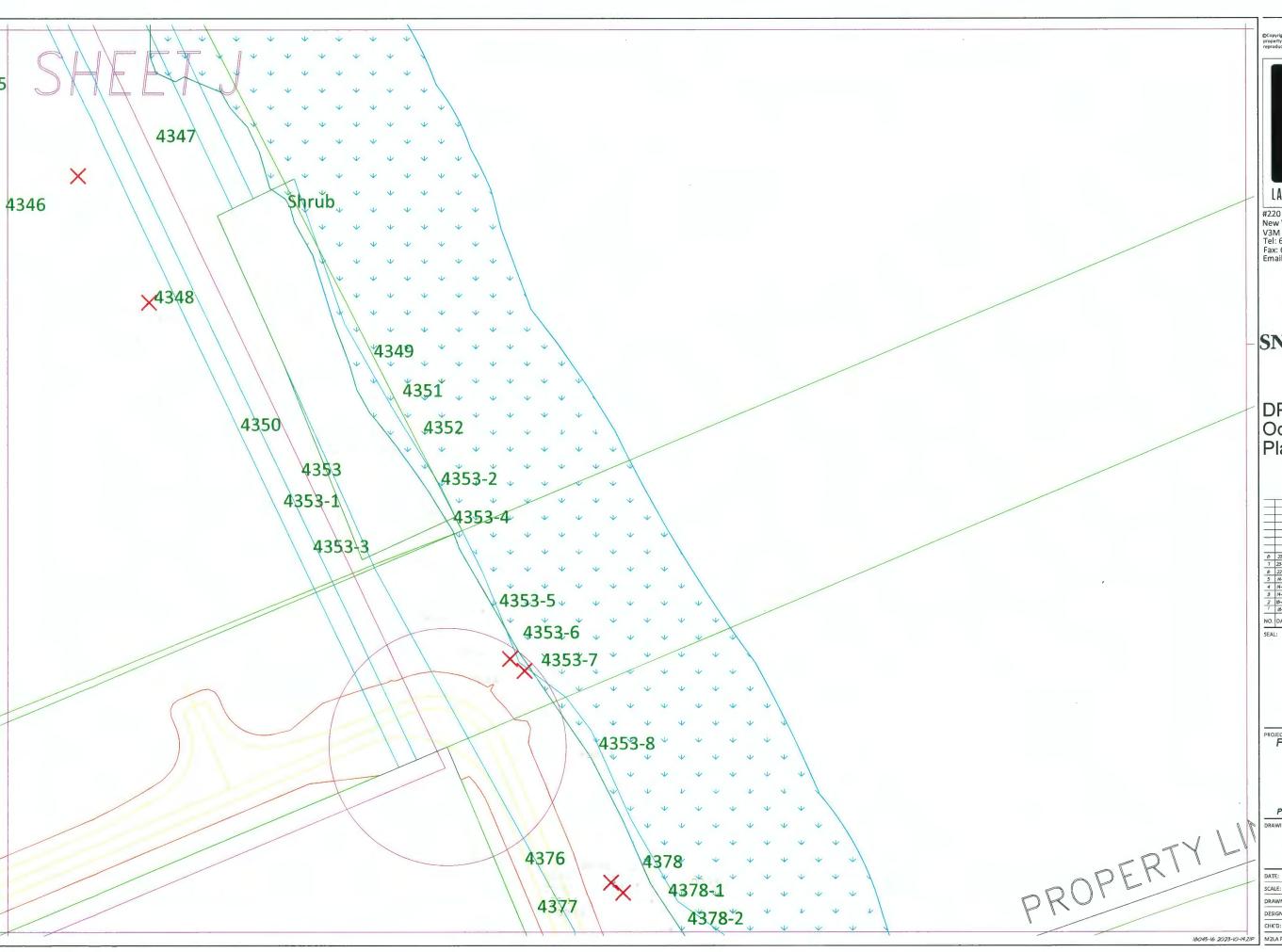
FMU REDEVELOPMENT PROJECT

> RICE MILL ROAD, RICHMOND, BC

PROVINCE PROJECT No: 03902

DRAWINGT

	HECT NUMBER	10	045
CHK'D:	ММ		OF 28
DESIGN:	MM		•
DRAWN:	MM	L11	
SCALE:	1:250		
DATE:	2023-05-23	DRAWING NUMBI	ER:



©Copyright reserved. This drawing and design is the property of M2 Landscape Architects and may not be reproduced or used for other projects without their permissi



#220 - 26 Lorne Mews New Westminster, British Columbia V3M 3L7 Tel: 604.553.0044 Fax: 604.553.0045 Email: office@m2la.com



-SNC · LAVALIN

DP 18-824566 October 30 2023 Plan #13

_			
=			
_			
8	29-10-17	REV. PER CITY COMMENTS	HH
7	23-05-24	NEW S.P., CITY COMMENTS	MM
6	22-08-14	NEW S.P. STM LAYOUT, CONSULT INFO	MM
5	19-04-16	REV. CITY COMM. ADD CONSUL INFO	MM
4	14-03-23	REV. CLIENT COMM. ADD ADD. INFO	MM
3	19-03-01	REV. PER CITY COMM. AND BAILDOC	MM
2	18-08-08	LANDSCAPE PLAN	MM
1	18-07-12	KEYFLAN	MM
NO.	DATE	REVISION DESCRIPTION	DR.

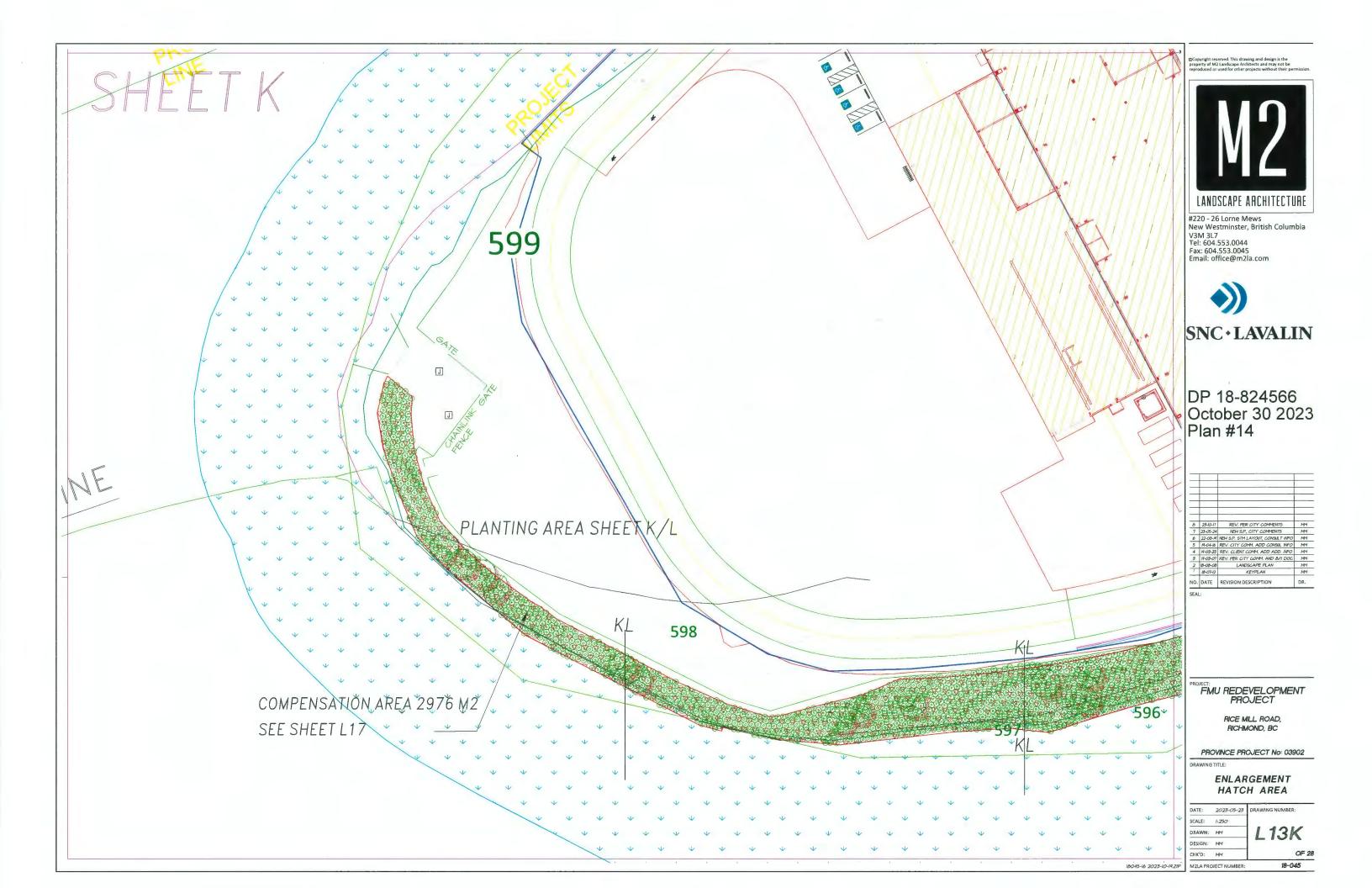
FMU REDEVELOPMENT PROJECT

> RICE MILL ROAD, RICHMOND, BC

PROVINCE PROJECT No: 03902

DRAWING TITLE:

DATE:	2023-05-23	DRAWING NUMBER:
SCALE:	1:250	
DRAWN:	ММ	1 12.1
DESIGN:	MM	0
CHK'D:	ММ	OF 28
MATE A DRO	NECT NI IMPER-	18-045





(DCopyright reserved. This drawing and design is the property of M2 Landscape Architects and may not be reproduced or used for other projects without their perm



#220 - 26 Lorne Mews New Westminster, British Columbia V3M 3L7 Tel: 604.553.0044 Fax: 604.553.0045 Email: office@m2la.com



SNC · LAVALIN

DP 18-824566 October 30 2023 Plan #15

_			
_			-
=			
8	23-10-17	REV. PER CITY COMMENTS	MM
7	23-05-24	NEW S.P., CITY COMMENTS	MM
6	22-08-14	NEH S.P. STM LAYOUT, CONSULT INFO	HM
5	19-04-16	REV. CITY COMM. ADD CONSUL INFO	MH
4	14-03-23	REV. CLIENT COMM. ADD ADD. INFO	MM
3	14-03-07	REV. PER CITY COMM. AND BAILDOC	MM
2	18-08-08	LANDSCAPE PLAN	HM
1	15-07-12	KEYPLAN	MH
NO.	DATE	REVISION DESCRIPTION	DR.

FMU REDEVELOPMENT PROJECT

> RICE MILL ROAD, RICHMOND, BC

PROVINCE PROJECT No: 03902

DRAWING TITLE

DATE:	2023-05-23	DRAWING NUMBER:
SCALE:	1:250	
DRAWN:	HM	1141
DESIGN:	ММ	
CHK'D:	ММ	OF:
1431 4 DDG	DIFCT NUMBER.	18-045





#220 - 26 Lorne Mews New Westminster, British Columbia V3M 3L7 Tel: 604.553.0044 Fax: 604.553.0045 Email: office@m2la.com



SNC · LAVALIN

DP 18-824566 October 30 2023 Plan #16

_			
_			_
_			-
8	23-10-17	REV. PER CITY COMMENTS	HM
7	23-05-24	NEW S.P., CITY COMMENTS	MM
6	22-08-19	NEW S.P. STM LAYOUT, CONSULT INFO	HPH
5	14-04-16	REV. CITY COMM. ADD CONSUL INFO	HH
4	14-03-23	REV. CLIENT COMM. ADD ADD. INFO	MM
3	19-03-07	REV. PER CITY COMM. AND BAIL DOC	MM
2	15-05-08	LANDSCAPE PLAN	MM
1	18-07-12	KEYPLAN	MH
NO.	DATE	REVISION DESCRIPTION	DR.

PROJECT: FMU REDEVELOPMENT PROJECT

RICE MILL ROAD, RICHMOND, BC

PROVINCE PROJECT No: 03902

DATE:	2023-05-23	DRAWING NUMBER:
SCALE:	1:250	
DRAWN:	194	I 15M
DESIGN:	PRH	
CHK'D:	194	OF 28
MAZI A DRO	IECT NILINADED	18-045



©Copyright reserved. This drawing and design is the property of MZ Landscape Architects and may not be reproduced or used for other projects without their pr



#220 - 26 Lorne Mews New Westminster, British Columbia V3M 3L7 Tel: 604.553.0044 Fax: 604.553.0045 Email: office@m2la.com



SNC · LAVALIN

DP 18-824566 October 30 2023 Plan #17

			_
B	23-10-17	REV. PER CITY COMMENTS	MM
7	23-05-24		MM
6	_	NEW S.P. STM LAYOUT, CONSULT INFO	MH
5	19-04-16	REV. CITY COMM. ADD CONSUL INFO	MM
4	19-03-23	REV. CLIENT COMM. ADD ADD. INFO	MM
3	19-03-01	REV. PER CITY COMM. AND BAILDOC	MM
2	18-08-08	LANDSCAPE PLAN	MM
1	18-07-12	KEYPLAN	MM
NO.	DATE	REVISION DESCRIPTION	DR.

FMU REDEVELOPMENT PROJECT

RICE MILL ROAD, RICHMOND, BC

PROVINCE PROJECT No: 03902

DATE:	2023-05-23	DRAWING NUMBER:
SCALE:	1:250	
DRAWN:	MM	1 16N
DESIGN:	MM	
CHK'D:	MM	OF:
		10.045



PLA	NT	SCHEDULE	PLANTING AREA C	M2 JOB NUMBER: 18-04
KEY	QTY	BOTAMCAL NAME	COMMON NAME	PLANTED SIZE / REMARKS
5	21	CRATABBIS DOUBLASS PINS CONTORTA	BLACK HANTHERIN SHORE PINE	BCH CAL B48 44 m7; 84 B
9400	19	SALTHERIA SHALLON	544.64	FI POTI IN O.C.
PP.	10	PHYSOCARPUS CAPITATIS	FACIFIC INVE-BARK	II2 POT
R	20	RABAS PARVIELORAS	THI-BLESSON'	*2 POT, 40CH
SA	10	SAMBLIGIS RACEHOSA	BURESHRY	FIZ POT, 40CH
51	36	SYN-PHORICARPOS ALBIS	SICHBERRY	#2 POT, BOCH
PERMI	AL.			
A2	22	ANAPHALIS HARBARITACEA	PEARLY EVERLASTINS	4 POT
	30	LIPPING POLYPHYLLIS	LARGE LEAF LIPPE	FQ POT

		SCHEDULE	PLANTING AREA M	M2 JOB HUMBER: 18-0
KEY	QTY	MOTANICAL NAME	COMMON NAME	PLANTED SIZE / REMARKS
7	12	CRATABBIS DOMBLASII	BLACK WANTHORN	SCH CAL: BIB
3	4	PN6 CONTORTA	SHORE PRIC	4H HT; BIB
6	DO.	BAILTHERIA SHALLON	SHA	FIZ POTI, IH O.C.
PP	le	PRYSOCARPUS CAPITATIO	PACFIC MIE-BARK	P2 POT
R.	45	RIBIS PARYFLORS	THE-ELEDERRY	FZ POT ₁ 400H
SA	13	SAHBICUS RACEHOSA	ELECTRONY'	R2 POT, 40CH
SY	76	SYMPHORICARPOS ALBIS	SHOHEBARY	12 POT, BOOM
PEREN	IAL			
1.7	52	LIPPAD POLYPHYLUS	LARGE LEAF LIPINE	FG POT

			CENTIFIED DISEASE FREE NURSERY, PROVIDE	
PLA	NT	SCHEDULE	PLANTING AREA E/I	M2 JOB NUMBER: 1
KEY	QTY	BOTANICAL NAME	COMMON NAME	PLANTED SIZE / REMARKS
0	14	CRATABOS DOMILASII PNUS CONTORTA	BLACK MATHORN SHORE PAE	8CH CAL; 848 44 NT; 848
0	100	BALINERIA SHALLON	SALAL	*2 POT; M O.C.
-	32	PHYSOCARDUS CAPITATUS	PACIFIC NING-BARK	to Pot
R	58	RAME PARVIRLAND	MHELEBRICKY	43 POT; 400H
SA	20	SAMBLUS RACEMOSA	ELDEROSHIY'	12 POT; 40CH
SY	R5	STHENORICARPOS ALBIS	SICHESTRY	FQ. POT; BOOM
FEREN				
	6	ANAPHALIS MARBARITACEA	PEARLY EVERLASTING	# POT
L	64	LIPPAS POLTPHILLIS	LARGE LEAF LIPINE	12 POT

SY				
	(R)	STHEMORICARPOS ALBIS	SICHESTRY	FJ. PUT; BOCH
FEREN!	AL.			
A2	6	ANAPHALIS HARBARITACEA	PEARLY EVERLASTING	# POT
L	61	LIPPINS POLTPHILLIS	LARGE LEAF LIPHE	12 POT
AYORTH	L PRO	THE LANDSCAPE ARCHITECT PRIOR TO	IF SEARCH TO INCLIDE LONER HARLAND AND PRASER Y HARDAS ANY SUBSTITUTIONS TO THE SPECIFIED HATERSY DELIVERY FOR REGULES! TO SUBSTITUTE. SUBSTITUTIONS A	E. INAPPROVED SUBSTITUTIONS HILL BE

		BOTANICAL NAME	COMMON HAME	PLANTED BIZE / REMARKS
ME	_			
. 7	26	CRATABISIS DOMISLASIV	BLACK HANTHORN	SCH CAL: BIB
4.)	15	PINUS CONTORTA	SHORE PINE	4H HT; BAB
9400	3			
6	207	BALLTHERIA SHALLON	SALAL	*2 POT; IM O.C.
PP	61	PHYSOCARPUS CAPITATUS	PACIFIC HORE-BARK	12 PCT
R	99	RUBUS PARYIPLORUS	TMHOLESSORY	F2 POT: 40CM
SA	24	SAMBLES RACESTOSA	BLOGREGARY	12 POT, 400H
51	164	STHERORICARPOS ALBJS	SICHEERRY	FZ PCT; SOCH
PERENA.	AL.			
L2	10	LIPPING POLYFRINGER	LARGE LEAF LIPTHE	#2 POT

HEARISHEITS AND OTHER FLANT HA LANDSCAPE ARCHTECT AT SCIENCE OF AFFROVAL PROHITIE LANDSCAPE AR	AND CLEMENTS IN ARE THE YEMMAN ACLEPTARE SATES. * REPERTO SPECEFALATION FOR DEPOSED CLEMENT INSULIN, RECURRENCEN. * SEALON AND REVENA HAVE THE MERCHAN AVAILAGE FOR COTTONING MICHAEL STATES OF SAMPLY, ANGLA OF REALON TO RELIEF LOMEN HAND, AND AND PRACES VALLEY. * REPORTATIONS COTTAIN HANTITE CHARGES PROCE TO DELIVERY FOR REPORTED OF THE SEPTION HANDLESS HAMPRONDES SERVITATIONS HALL BE EAVES PROCE TO DELIVERY FOR REPORTED OF SERVININE. SUBSTITUTION AND SALECT TO BULLYONG APPE
	PROVIDED FROM CERTIFIED DISEASE FREE NURSERY, PROVIDE CERTIFICATION UPON REQUEST,

		SCHEDULE	PLANTING AREA K/L	M3 JOH HUMBER: 18-0
KEY (TYP	BOTANICAL NAME	COMMON HAME	PLANTED BIZE / REMARKS
PP.				
\times	. 6	ACER HACROPIMILIEM	BIGLEAF HAPLE	BCH CALIBIB
74E-	20	COTONS NOTALLII	PACIFIC DOGMOOD	BOH CALIBIB
 34 	4	CRATABBIS DOUBLASII	BLACK HAHTHORN	BOH CAL BEB
4	4	HALIS FISCA	PACIFIC GRABAPPLE	BOH CALIBEB
9600	,			
AR	4172	AROMA HELANOCARPA	CHOICEMENTY	#2 POT: SECH
CC	643	CORNAS SERICEA	RED CEMER DOSHOOD	#2 PCT; SOCH
0	470	HOLODISCUS DISCOLOR	OCEANBRRAY	#2 FOT, M O.C. TRIANSSLAR SPACING
500	491	REBS PARMINUMS	THE-FELLERENCY	ग्ये लिया
5	159	SALIX LASLANDIRA	PACIFIC HILLON	L2H H1; BHB
PERDM.	AL.			
F	307	FRASARIA CHILDRONS	COASTAL STRANGERRY	a POT
8	570	LATHTRUS JAPONICAS	BEACH FEA	न्य मन
NTA STA EAGLED ANDSCAL PPROVA	HEART FE ARC	IS. BOTH PLANT SIZE AND CONTAINER SI AND OTHER PLANT HATENIAL REGURESHE CHITECT AT SCHICE OF SIPPLY. AREA O M THE LANDSCAPE ARCHITECT PRIOR TO	PROMS TO THE BIC LANDSCAPE STANDARD, LATTIST EDI- ZE ARE THE HINNMA ACCEPTABLE SIZES. * RISTER TO S HIS. * SEALCH AND REVION MIKE PLANT HANTSTALLA. F SEALCH TO INCLIDE LOWER MAINLAND AND FRANCE! MACING ANY SUBSTITUTIONS TO THE SPECIFED HANTSR SELVINEY FOR REGISETT TO SUBSTITUTION SERVING.	SPECIFICATIONS FOR DEPINED CONTAINER WALLABLE FOR OPTIONAL REVISA BY VELLEY. S (INSTITUTIONS OBTAIN HRITTEN ALL DIAPPROVED SUBSTITUTIONS MILL BE

PLANT LISTS FOR ESA SH-5 AND SH-6 PER AREA NTS



FIGURE 13: PROPOSED SHORELINE ENHANCEMENT AREA ESA NTS



FIGURE 13: PROPOSED UPLAND FOREST AND



FIGURE 12: AREAS IN ESA SH-5 AND IT-5 OVERLAPPING WITH PROPOSED DEV. NTS

Ocopyright reserved. This drawing and design is the property of M2 Landscape Architects and may not be reproduced or used for other projects without their



#220 - 26 Lorne Mews New Westminster, British Columbia V3M 3L7 Tel: 604.553.0044 Fax: 604.553.0045 Email: office@m2la.com



SNC · LAVALIN

DP 18-824566 October 30 2023 Plan #18

B	24 (0.17	REV. PER CITY COMMENTS
1		HEN S.P., CITY COMMENTS
6	22-08-14	NEW S.P. STH LAYOUT, CONSULT INFO
5	19-04-16	REV. CITY COMM. ADD CONSUL INFO
4	14-03-23	REV. CLIENT COMM. ADD ADD. INFO
3	19-03-01	REV. PER CITY COMM. AND BAIL DOC
2	18-08-08	LANDSCAPE PLAN
1	18-01-12	KEYPLAN
NO.	DATE	REVISION DESCRIPTION

PROJECT: FMU REDEVELOPMENT PROJECT

RICE MILL ROAD, RICHMOND, BC

PROVINCE PROJECT No: 03902

FIGURES AND PLANT LISTS

DATE:	2023-05-23	DRAWING NUMBER:
SCALE:	1:250	
DRAWN:	MM	1 17
DESIGN:	MM	- "
CHK'D:	MM	OF 28

18-045

A SH-5	SHRUBLAND AREA ESA SH-6
	NTS

PLAN	T SCHEDULE	SH-S PLANT MATERIAL	M2 JOB NUMBER: 18-045
KEY QT	Y BOTANICAL HAME	COMMON NAME	PLANTED BIZE / REMARKS
DREE			
(.4)	CRATAESIS DOUSLAGII	BLACK HAMTHORN	BOM CAL: BIB
3015	PNUS CONTORTA	SHORE PILE	4H HT, 56B
6 64	BALL THERE A SHALLON	SALAL	₹ POT; IH O.C.
PP 14	PHYSICIARRUS CAPITATUS	PACIFIC MINE-BARK	*2 POT
R 20	RUBUS PARVIFLORUS	THIMBLEBERRY	*2 POT, 40CH
5A 4	SAMBLICUS RACISMOSA	ELDERSERRY	12 PUT; 40CH
97 47	SYMPHORICARPOS ALBIS	SICHEERRY	#2 POT; BOCH
PERDINAL.			
A2 2	ANAPHALIS HARBARITACEA	PEARLY EVERLASTING	PL POT
12 24	LUPINIS POLYPRYLLUS	LARGE LEAF LUPINE	#2 POT
CATA STAND MEASUREMEN LANDSCAPE APPROVAL I REJECTED.	IRDS, BOTH PLANT SIZE AND CONTAINER TS AND OTHER PLANT MATERIA, RECURS MICHITECT AT SOURCE OF SUPPLY, AREA ROM THE LANDSCAPE ARCHITECT PRIOR!	SOE ARE THE HIMMAN ACCEPTABLE SIZES. ** **********************************	LATEST EDMON. COMINIÈR SIZES SPECPED AS PE ROPER TO SPECPICAMONS FOR OPPINED COMINER ANTERIA, ANALABLE FOR OPPINAL REVERT PO DI PRAGET VALLEY. I SUSSMITTANOS, ORTAN HOTTES ED HATERIAL OMPRIANCE SISTIMITANOS HIL DE STIMITANOS ANZ SUBJECT TO BE L'AMOSCAPE.
			PROVIDE CERTIFICATION UPON REQUEST.

PLA	NT	SCHEDULE	SH-S PLANT MATERIAL	M2 JOB HUMBER: 18-045
KEY	QTY	BOTANICAL HAME	COMMON NAME	PLANTED BIZE / REMARKS
ALC:				
CX	6	ACER HACKSHITLLIM	BIGLEAF HAPLE	BCH CALI BIB
74.	16	CORNES NUTTALLII	PACIFIC DOSHOOD	BOH CAL BEB
. 19	4	CRATABBIS DOUBLASII	BLACK HAMTHORN	BOH CAL: BEB
-	34	HALUS PUSCA	PACIFIC CRABAPPLE	BOM CAL: BIB
AR	412	ARDMA HELANOCARPA	CHOKETERRY	12 POT/35CH
cc.	643	CORNE SPRICEA	RED OSIER DOGMOOD	FZ POT: SOON
0	470	HTL 00/50/6 DISCOLOR	CCEANSPRAY	12 PUT: IH OG, TRIANGLAR SPACE
RH	46	RIBIG PARVIPLORIS	THEHERERY	P2 POT
5	68	SALIX LAGAMORA	PACIFIC HILLON	L2H HT: B4B
PROPA	4.84			
F	501	FRASARIA CHI (19615	COASTAL STRAHBERRY	#i POT
-	3710	LATHYBUS JAPONICAS	BEACH PEA	F2 POT

TOTAL PLANT LISTS FOR ESA SH-5 AND SH-6 NTS

414-removed



#220 - 26 Lorne Mews New Westminster, British Columbia V3M 3L7 Tel: 604.553.0044 Fax: 604.553.0045 Email: office@m2la.com



SNC · LAVALIN

DP 18-824566 October 30 2023 Plan #19

_			-
_			-
_		DD / DTD / DD / COLD FINT	ММ
8	23-10-17		MM
7	23-05-24		
6	22-08-19	NEW S.P. STM LAYOUT, CONSULT INFO	MM
5	14-04-16	REV. CITY COMM. ADD CONSUL INFO	MM
4	14-03-23	REV. CLIENT COMM. ADD ADD. INFO	MH
3	19-03-07	REV. FER CITY COMM. AND BAILDOC	MH
2	18-08-08	LANDSCAPE PLAN	MM
ŧ	18-01-12	KEYPLAN	HH
NO.	DATE	REVISION DESCRIPTION	DR.

			_
8	23-10-17	REV. PER CITY COMMENTS	MM
7	23-05-24	NEW S.P., CITY COMMENTS	MM
6	22-08-19	NEW S.P. STM LAYOUT, CONSULT INFO	MM
5	14-04-16	REV. CITY COMM. ADD CONSUL INFO	MM
4	14-03-23	REV. CLIENT COMM. ADD ADD. INFO	MH
3	19-03-07	REV. FER CITY COMM. AND BAILDOC	MH
2	18-08-08	LANDSCAPE PLAN	MH
ł	18-01-12	KEYPLAN	HH
NO.	DATE	REVISION DESCRIPTION	DR.

FMU REDEVELOPMENT PROJECT

RICE MILL ROAD, RICHMOND, BC

PROVINCE PROJECT No: 03902

ENLARGEMENT PLANTING AREA B/C

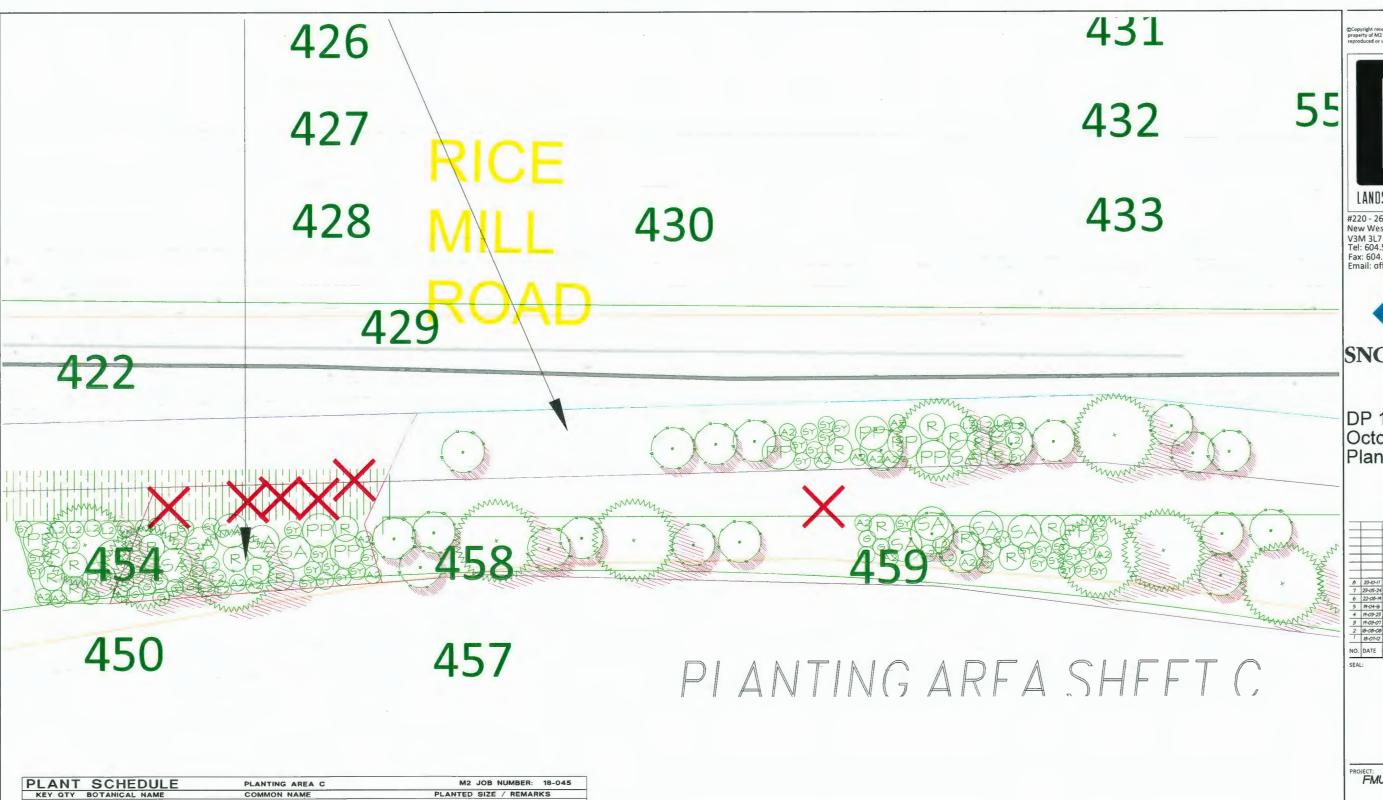
DATE:	2023-05-23	DRAWING NUMBER:
SCALE:	1:100	
DRAWN:	MM	1 18
DESIGN:	MM	a= 10
CHK'D:	MM	0

PLA	NT	SCHEDULE	PLANTING AREA B/C	M2 JOB NUMBER: 18-045
KEY	QTY	BOTANICAL NAME	COMMON NAME	PLANTED SIZE / REMARKS
TREE				
	10	CRATAEGUS DOUGLASII	BLACK HAWTHORN	8CM CAL; B&B
-	10	PINUS CONTORTA	SHORE PINE	4M HT; B4B
SHRUB	C.F.			
6	122	GAULTHERIA SHALLON	SALAL	#2 POT; IM O.C.
PP	28	PHYSOCARPUS CAPITATUS	PACIFIC NINE-BARK	#2 POT
R	47	RUBUS PARVIFLORUS	THIMBLEBERRY	#2 POT; 40CM
SA	20	SAMBUCUS RACEMOSA	ELDERBERRY	#2 POT; 40CM
5Y	88	SYMPHORICARPOS ALBUS	SNOWBERRY	#2 POT; 30CM
PERENN	IAL			
L2	51	LUPINUS POLYPHYLLUS	LARGE LEAF LUPINE	#2 POT

NOTES: * PLANT SIZES IN THIS LIST ARE SPECIFIED ACCORDING TO THE BC LANDSCAPE STANDARD, LATEST EDITION. CONTAINER SIZES SPECIFIED AS PER CNTA STANDARDS. BOTH PLANT SIZE AND CONTAINER SIZE ARE THE MINIMUM ACCEPTABLE SIZES. * REFER TO SPECIFICATIONS FOR DEFINED CONTAINER MEASUREMENTS AND OTHER PLANT MATERIAL REQUIREMENTS. * SEARCH AND REVIEW: MAKE PLANT MATERIAL AVAILABLE FOR OPTIONAL REVIEW BY LANDSCAPE ARCHITECT AT SOURCE OF SUPPLY. AREA OF SEARCH TO INCLUDE LOVER MAINLAND AND FRASER VALLEY. * SUBSTITUTIONS: OBTAIN MRITTEN APPROVAL FROM THE LANDSCAPE ACHITECT ROAD TO MAKING TO MAKING ANY SUBSTITUTIONS TO THE SCHIEFD MATERIAL LIMPARPOVED SUBSTITUTIONS WILL BE REJECTED. ALLOW A MINIMUM OF FIVE DAY'S PRIOR TO DELIVERY FOR REQUEST TO SUBSTITUTE. SUBSTITUTIONS ARE SUBJECT TO BC LANDSCAPE STANDARD - DEFINITION OF CONDITIONS OF AVAILABILITY.

ALL PLANT MATERIAL MUST BE PROVIDED FROM CERTIFIED DISEASE FREE NURSERY. PROVIDE CERTIFICATION UPON REQUEST.

18045-16 2023-10-19.ZIP M2LA PROJECT NUMBER:



PLA	NT	SCHEDULE	PLANTING AREA C	M2 JOB NUMBER: 18-04
KEY	QTY	BOTANICAL NAME	COMMON NAME	PLANTED SIZE / REMARKS
TREE				
1.	39	CRATAEGUS DOUGLASII	BLACK HAWTHORN	BCM CAL; B&B
-(·)	16	PINUS CONTORTA	SHORE PINE	4M HT; B&B
SHRUB				
6	13	GAULTHERIA SHALLON	SALAL	#2 POT; IM O.C.
PP	10	PHYSOCARPUS CAPITATUS	PACIFIC NINE-BARK	#2 POT
R	20	RUBUS PARVIFLORUS	THIMBLEBERRY	#2 POT; 40CM
SA	10	SAMBUCUS RACEMOSA	ELDERBERRY	#2 POT; 40CM
SY	36	SYMPHORICARPOS ALBUS	SNOWBERRY	#2 POT; 30CM
PERENNI	AL			
A2	22	ANAPHALIS MARGARITACEA	PEARLY EVERLASTING	#I POT
L2	20	LUPINUS POLYPHYLLUS	LARGE LEAF LUPINE	#2 POT

MEASUREMENTS AND OTH FLANT SIZE AND CONTAINER SIZE AND LOWINDIRE SIZE AND THE MINIMUM ACCESS TABLE SIZES. "REPER TO SPECIFICATIONS FOR DESTRUCTION FOR DESTRUCTION FOR DESTRUCTION FOR DESTRUCTION FOR DESTRUCTION FOR MEASUREMENTS AND OTHER FLANT MATERIAL AVAILABLE FOR OFTIONAL REVIEW BY LANDSCAPE ARCHITECT AT SOURCE OF SUPPLY. AREA OF SEARCH TO INCLIDE LOWER MAINLAND AND FRASER VALLEY. "SUBSTITUTIONS OBTAIN WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT PRIOR TO MAKING ANY SUBSTITUTIONS TO THE SPECIFIED MATERIAL, UNAPPROVED SUBSTITUTIONS WILL BE REJECTED. ALLOW A MINIMUM OF FIVE DAYS PRIOR TO DELIVERY FOR REQUEST TO SUBSTITUTE. SUBSTITUTIONS ARE SUBJECT TO BC LANDSCAPE STANDARD - DEFINITION OF CONDITIONS OF AVAILABILITY.

ALL PLANT MATERIAL MUST BE PROVIDED FROM CERTIFIED DISEASE FREE NURSERY. PROVIDE CERTIFICATION UPON REQUEST.



#220 - 26 Lorne Mews New Westminster, British Columbia V3M 3L7 Tel: 604.553.0044 Fax: 604.553.0045 Email: office@m2la.com



SNC · LAVALIN

DP 18-824566 October 30 2023 Plan #20

=			
_			
_			
8	23-10-17	REV. PER CITY COMMENTS	MM
7	23-05-24	NEW S.P., CITY COMMENTS	MM
6	22-08-19	NEW S.P. STM LAYOUT, CONSULT INFO	MM
5	19-04-16	REV. CITY COMM. ADD CONSUL INFO	HH
4	19-03-23	REV. CLIENT COMM. ADD ADD. INFO	2494
3	19-03-07	REV. PER CITY COMM. AND BAIL DOC	MM
2	18-08-08	LANDSCAPE PLAN	MM
ß	18-07-12	KEYPLAN	MM
NO.	DATE	REVISION DESCRIPTION	DR.

FMU REDEVELOPMENT PROJECT

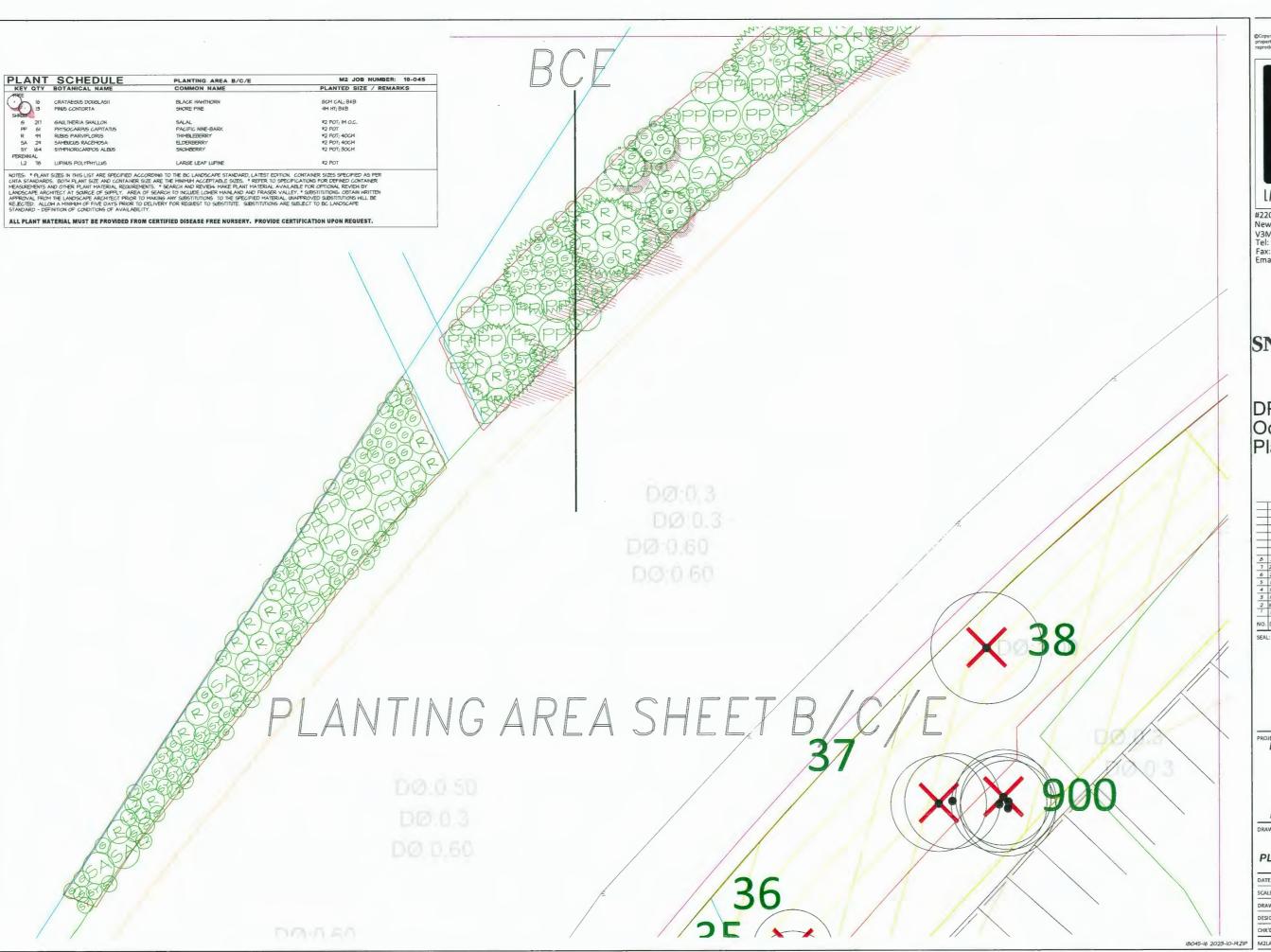
RICE MILL ROAD, RICHMOND, BC

PROVINCE PROJECT No: 03902

ENLARGEMENT PLANTING AREA C

DATE:	2023-05-23	DRAWING NUMBER:
SCALE:	1:100	
DRAWN:	ММ	L 19
DESIGN:	мм	
CHK'D:	MM	OF 2

18045-16 2023-10-19.ZIP MZLA PROJECT NUMBER:



©Copyright reserved. This drawing and design is the property of M2 Landscape Architects and may not be reproduced or used for other projects without their permit



#220 - 26 Lorne Mews New Westminster, British Columbia V3M 3L7 Tel: 604.553.0044 Fax: 604.553.0045 Email: office@m2la.com



SNC · LAVALIN

DP 18-824566 October 30 2023 Plan #21

			_
=			
8	23-10-11	REV. PER CITY COMMENTS	ММ
7	23-05-24	NEW S.P., CITY COMMENTS	HH
6	22-08-19	NEW S.P. STM LAYOUT, CONSULT INFO	MM
5	19-04-16	REV. CITY COMM. ADD CONSUL INFO	MM
4	19-03-23	REV. CLIENT COMM. ADD ADD. INFO	MM
3	14-03-07	REV. PER CITY COMM. AND BAILDOC	HH
2	15-05-05	LANDSCAPE PLAN	HM
7	18-01-12	KEYPLAN	HM
NO.	DATE	REVISION DESCRIPTION	DR.

FMU REDEVELOPMENT
PROJECT

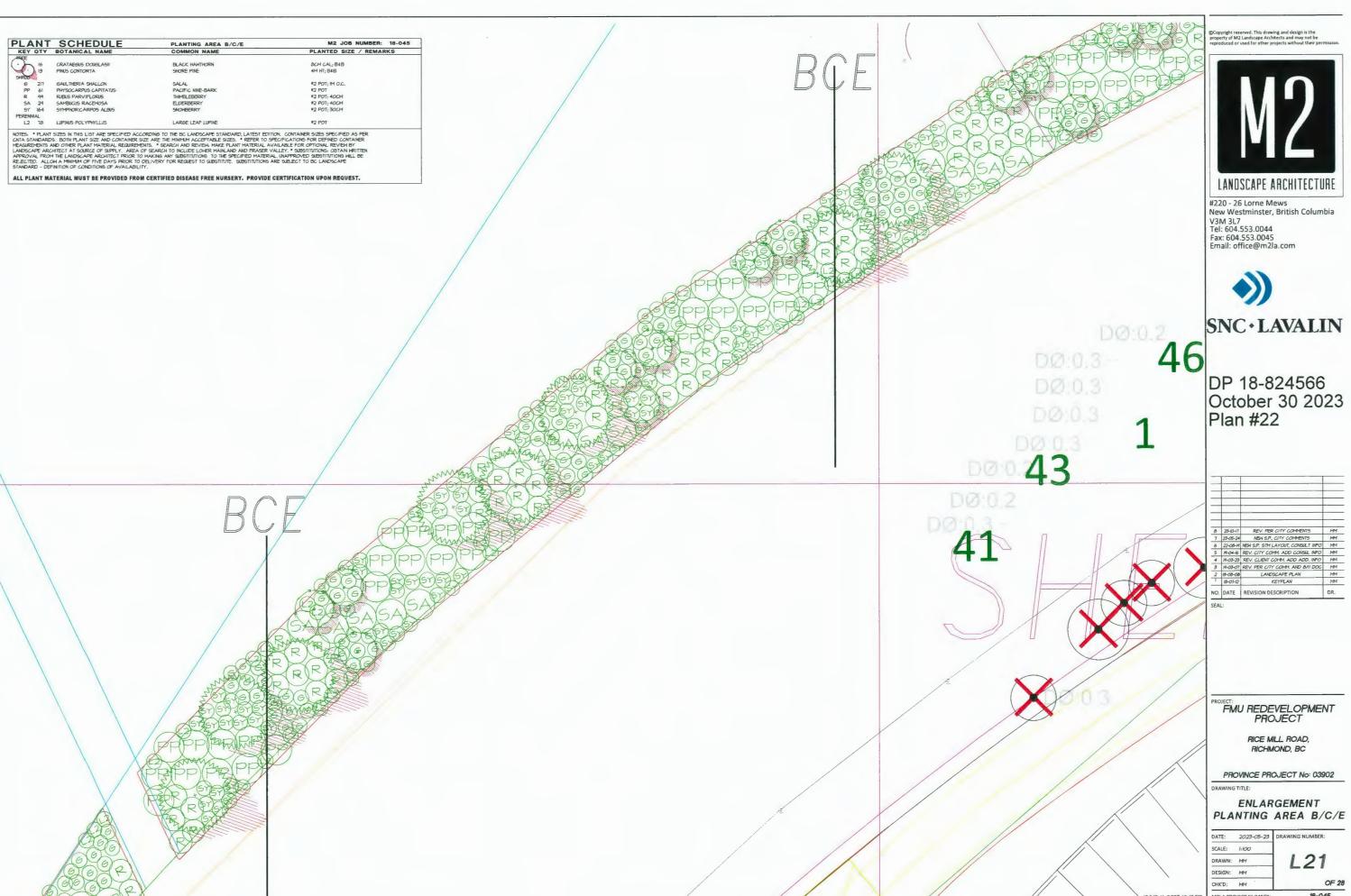
RICE MILL ROAD, RICHMOND, BC

PROVINCE PROJECT No: 03902

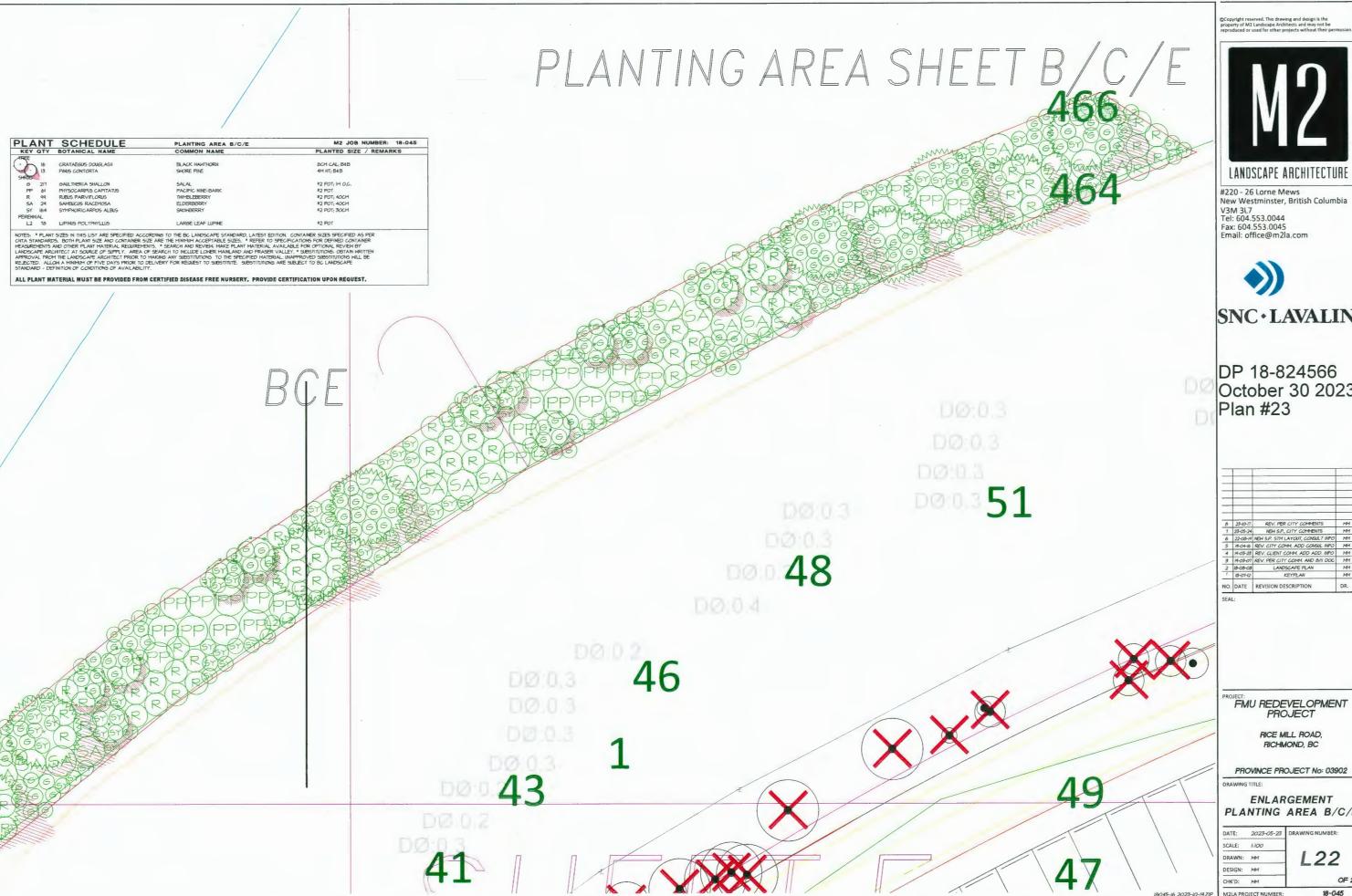
DRAWING TITLE:

ENLARGEMENT PLANTING AREA B/C/E

DATE:	2023-05-23	DRAWING NUMBER:
SCALE:	1:100	
DRAWN:	MM	120
DESIGN:	MM	
CHK'D:	MM	OF
MZI A PRO	DIFCT NUMBER:	18-045



	DJECT NUMBER:	18-045
CHK'D:	MY	OF
DESIGN:	MM	
DRAWN:	MM	121
SCALE:	1:100	
DATE:	2023-05-23	DRAWING NUMBER:





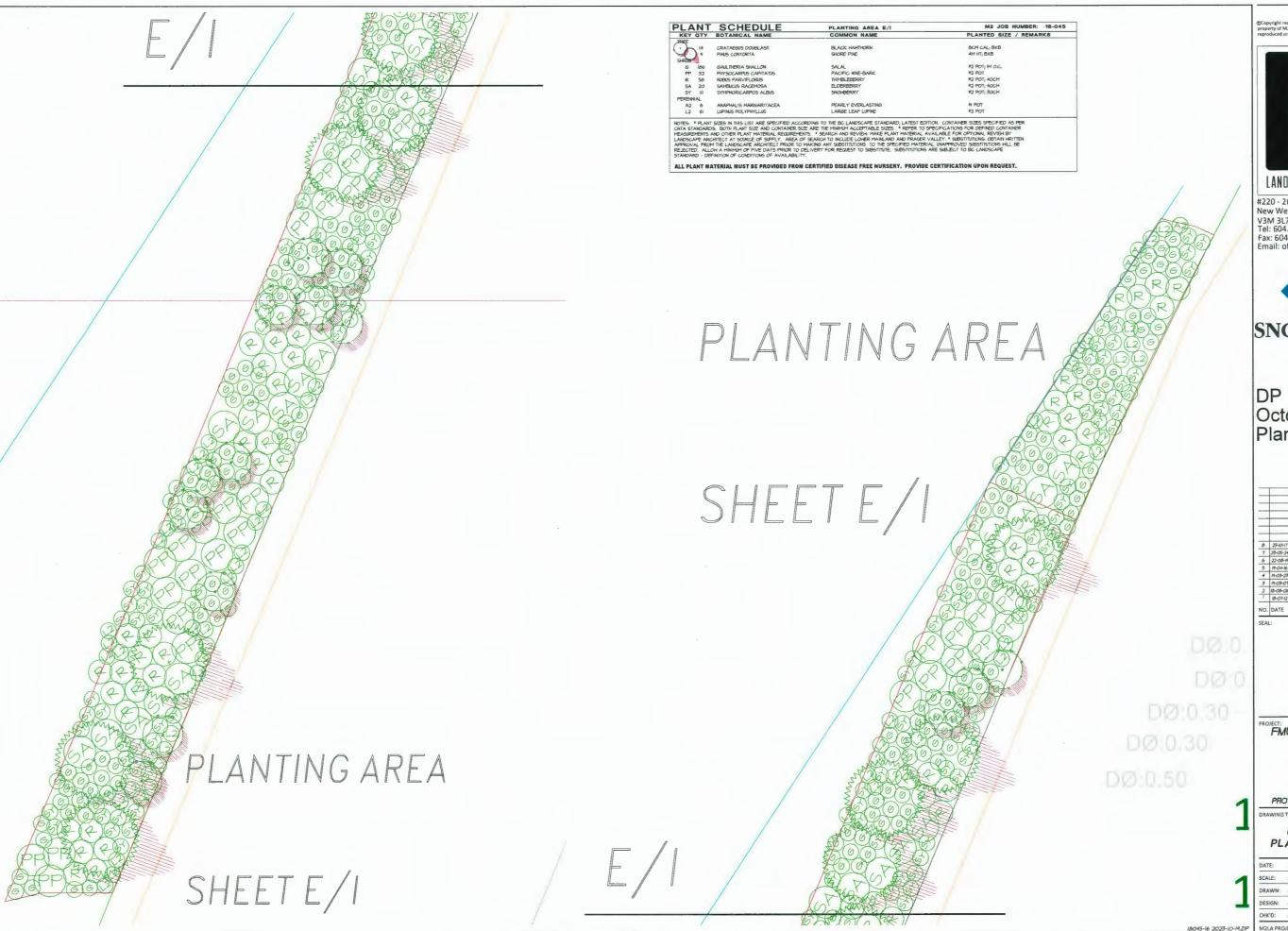
SNC · LAVALIN

DP 18-824566 October 30 2023

_			
8	23-10-17	REV. PER CITY COMMENTS	MM
7	23-05-24	NEW S.P., CITY COMMENTS	MM
6	22-08-19	NEW S.P. STM LAYOUT, CONSULT INFO	MM
5	14-04-16	REV. CITY COMM. ADD CONSUL INFO	MM
4	14-03-23	REV. CLIENT COMM, ADD ADD. INFO	MH
3	14-03-01	REV. PER CITY COMM. AND B/II DOC	MM
2	15-08-08	LANDSCAPE PLAN	MM
1	10-01-12	KEYPLAN	HH
NO	DATE	REVISION DESCRIPTION	DR.

PLANTING AREA B/C/E

	DATE:	2023-05-23	DRAWING NUMBER:
	SCALE:	1:100	
١	DRAWN:	MH	122
	DESIGN:	MH	
	CHK'D:	MH	OF.
,	M2LA PRO	DJECT NUMBER:	18-045





#220 - 26 Lorne Mews New Westminster, British Columbia V3M 3L7 Tel: 604.553.0044 Fax: 604.553.0045 Email: office@m2la.com



SNC · LAVALIN

DP 18-824566 October 30 2023 Plan #24

8	23-10-17	REV. PER CITY COMMENTS	ММ
7	23-05-24	NEW S.P., CITY COMMENTS	MM
6	22-08-19	NEW S.P. STM LAYOUT, CONSULT INFO	MM
5	19-04-16	REV. CITY COMM. ADD CONSUL INFO	MM
4	14-03-23	REV. CLIENT COMM. ADD ADD. INFO	MM
3	19-03-07	REV. PER CITY COMM. AND BAILDOC	MM
2	18-08-08	LANDSCAPE PLAN	MM
1	18-07-12	KEYPLAN	HH
NO.	DATE	REVISION DESCRIPTION	DR.

FMU REDEVELOPMENT PROJECT

RICE MILL ROAD, RICHMOND, BC

PROVINCE PROJECT No: 03902

ENLARGEMENT PLANTING AREA E/I

	DATE:	2023-05-23	DRAWING NUMBER:
4	SCALE:	1:100	
1	DRAWN:	MM	123
1	DESIGN:	MM	
	CHK'D:	MH	OF 28
1 2/12	MATE A DRO	DIECT NUMBER.	18-045



NOTES: P.LANT SIZES IN THIS LIST ARE SPECIFIED ACCORDING TO THE BIC LANDSCAPE STANDARD, LATEST EDITION. CONTAINER SIZES SPECIFIED AS FIRE CHAIR STANDARDS. BOTH PLANT SIZE AND CONTAINERS SIZE ARE THE NIMMA ACCEPTABLE SIZES. REPERT OF SPECIATIONS FOR DETINED CONTAINER MEASUREMENTS AND DITHER PLANT MATERIAL, REQUIREMENTS. SEARCH AND REVIEW. MAKE PLANT MATERIAL AVAILABLE FOR OPTIONAL REVIEW BY LANDSCAPE ACCOUNTED AND STANDARD OF STANDARD STANDA

ALL PLANT MATERIAL MUST BE PROVIDED FROM CERTIFIED DISEASE FREE NURSERY. PROVIDE CERTIFICATION UPON REQUEST.

©Copyright reserved. This drawing and design is the property of M2 Landscape Architects and may not be



#220 - 26 Lorne Mews
New Westminster, British Columbia
V3M 3L7
Tel: 604.553.0044
Fax: 604.553.0045
Email: office@m2la.com



SNC · LAVALIN

DP 18-824566 October 30 2023 Plan #25

_			
_			_
_			
8	23-10-17	REV. PER CITY COMMENTS	ММ
7		NEW S.P. CITY COMMENTS	MM
6		NEW S.P. STM LAYOUT, CONSULT INFO	MH
5	19-04-16	REV. CITY COMM. ADD CONSUL INFO	MM
4	14-03-23	REV. CLIENT COMM. ADD ADD. INFO	MH
3	14-03-07	REV. PER CITY COMM. AND 8/11 DOC	MH
2	10-08-08	LANDSCAPE FLAN	MH
1	18-07-12	KEYPLAN	MH
NO.	DATE	REVISION DESCRIPTION	DR.

56

FMU REDEVELOPMENT PROJECT

> RICE MILL ROAD, RICHMOND, BC

PROVINCE PROJECT No: 03902

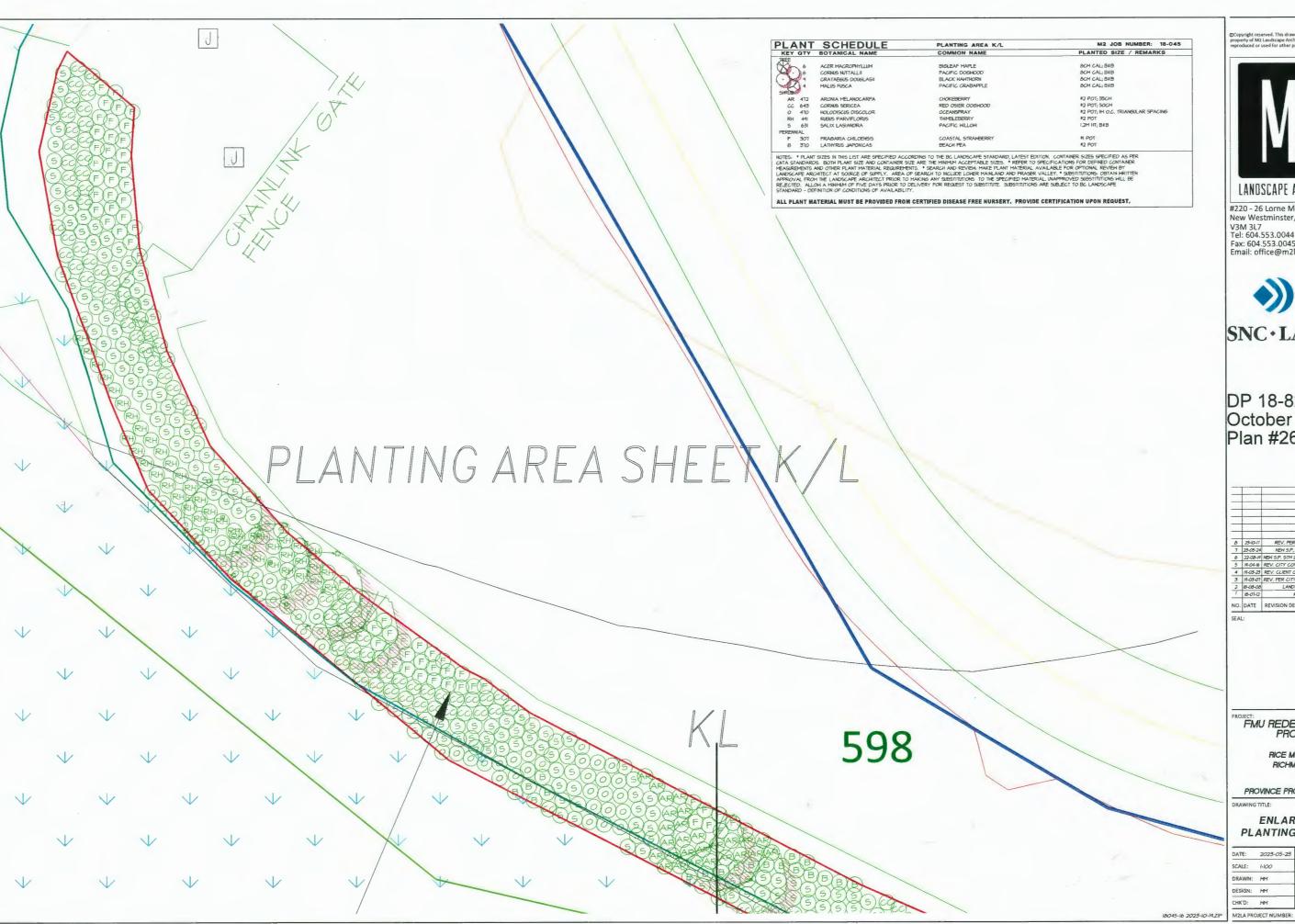
DRAWING TITLE

18045-16 2023-10-19.ZIP MZLA PROJECT NUMBER:

ENLARGEMENT PLANTING AREA M

DATE:	2023-05-23	DRAWING NUMBER:
SCALE:	1:100	
DRAWN:	MH	124
DESIGN:	MM	
CHK'D:	MM	OF

PLANTING AREA SHEET M





#220 - 26 Lorne Mews New Westminster, British Columbia V3M 3L7 Tel: 604.553.0044 Fax: 604.553.0045 Email: office@m2la.com



SNC · LAVALIN

DP 18-824566 October 30 2023 Plan #26

_			
\equiv			
_			
8	23-10-17		M
7		NEW S.P., CITY COMMENTS	M
6	22-08-19	NEW 5.P. STM LAYOUT, CONSULT INFO	M
5	14-04-16	REV. CITY COMM. ADD CONSUL INFO	H
4	19-03-23	REV. CLIENT COMM. ADD ADD. INFO	H
3	19-03-01	REV. PER CITY COMM. AND BAI DOC	м
2	18-08-08	LANDSCAPE PLAN	M
1	18-01-12	KEYPLAN	M
NO.	DATE	REVISION DESCRIPTION	DR.

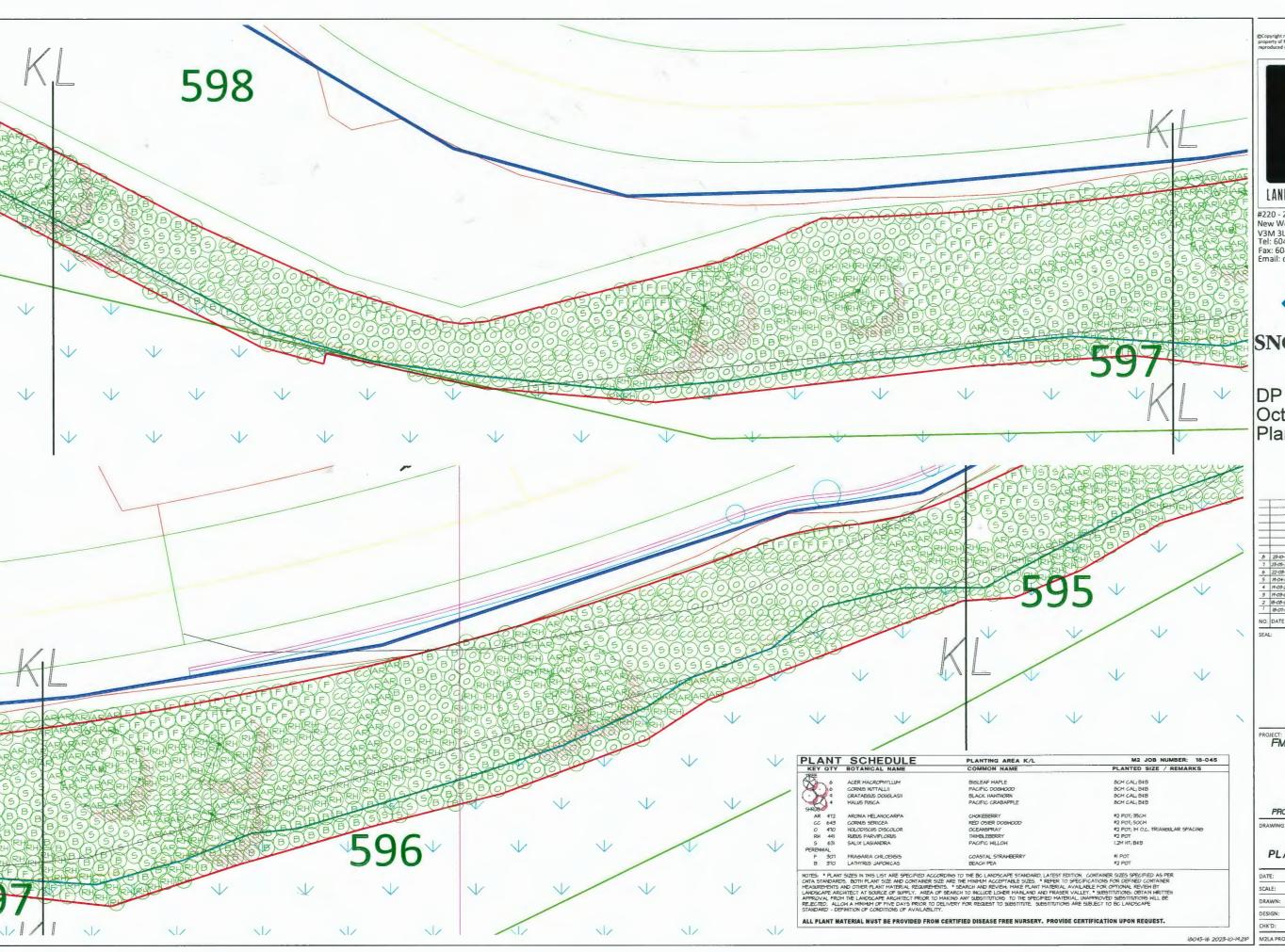
FMU REDEVELOPMENT PROJECT

RICE MILL ROAD, RICHMOND, BC

PROVINCE PROJECT No: 03902

ENLARGEMENT PLANTING AREA K/L

DATE:	2023-05-23	DRAWING NUMBER:
SCALE:	1:100	
DRAWN:	MM	125
DESIGN:	MM	
CHK'D:	MM	OF 2
1424 A DDG	DIECT AN INABER.	19_045





#220 - 26 Lorne Mews New Westminster, British Columbia V3M 3L7 Tel: 604.553.0044 Fax: 604.553.0045 Email: office@m2la.com



SNC · LAVALIN

DP 18-824566 October 30 2023 Plan #27

23-10-17	REV. PER CITY COMMENTS	HH
23-05-24	NEW S.P., CITY COMMENTS	HM
22-08-19	NEW S.P. STM LAYOUT, CONSULT INFO	MM
19-04-16	REV. CITY COMM. ADD CONSUL INFO	MM
14-03-23	REV. CLIENT COMM. ADD ADD. INFO	MM
19-03-07	REV. PER CITY COMM. AND BAI DOC	HH
18-08-08	LANDSCAPE PLAN	HH
18-01-12	KEYPLAN	MM
	23-05-24 22-08-19 19-04-16 19-03-23 19-03-01 18-08-08	13-05-24 NEH S.P., CITY COMMENTS 22-08-14 NEH S.P., STIN LAYOUT, CONSULT INFO 14-04-16 REV. CITY COMM. ADD COMSUL INFO 14-03-23 REV. CLIENT COMM. ADD ADD. INFO 14-03-07 REV. FER CITY COMM. AND BAIL DOG 18-06-06 LANDSCAFE PLAN

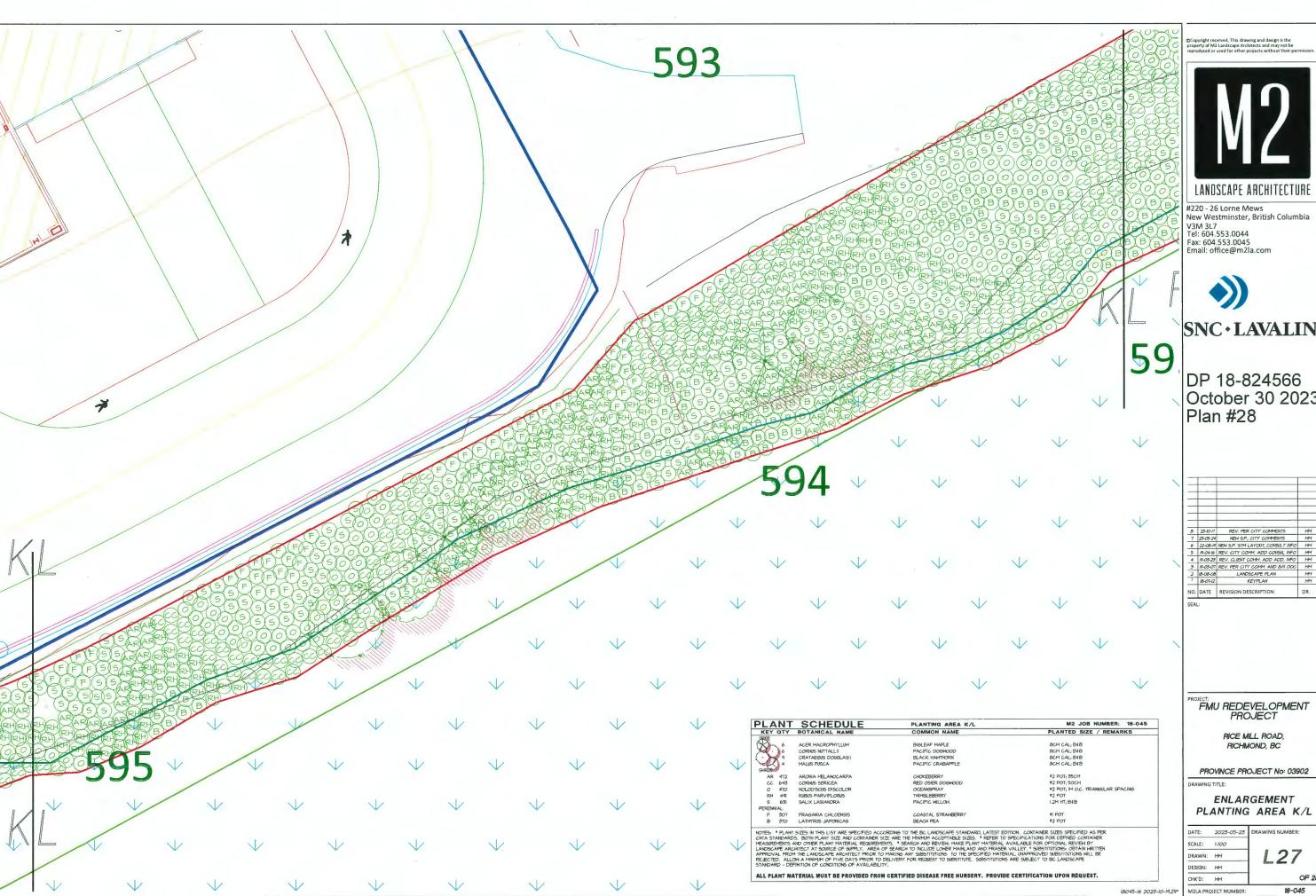
FMU REDEVELOPMENT PROJECT

RICE MILL ROAD, RICHMOND, BC

PROVINCE PROJECT No: 03902

ENLARGEMENT PLANTING AREA K/L

14.ZIP	M2LA PRO	DJECT NUMBER:	18-045
	CHK'D:	ММ	OF 28
	DESIGN:	MM	
	DRAWN:	MM	126
	SCALE:	1:100	
	DATE:	2023-05-23	DRAWING NUMBER:





LANDSCAPE ARCHITECTURE

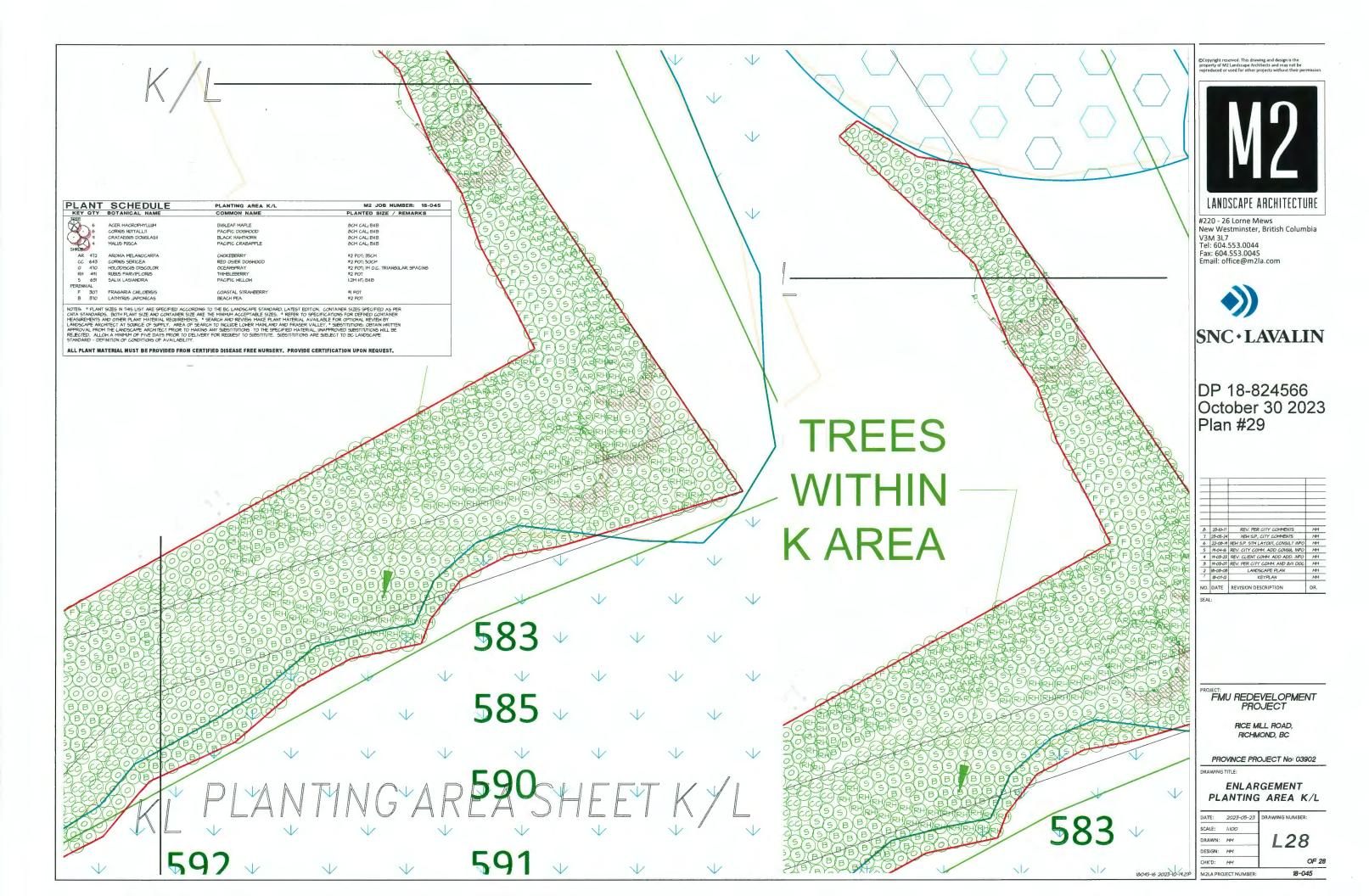
SNC · LAVALIN

DP 18-824566 October 30 2023

			-
-			
8	23-10-17	REV. PER CITY COMMENTS	MM
7	23-05-24	NEW S.P., CITY COMMENTS	MM
6	22-08-19	NEW S.P. STM LAYOUT, CONSULT INFO	MM
5	19-04-16	REV. CITY COMM. ADD CONSUL INFO	MM
4	19-03-23	REV. CLIENT COMM. ADD ADD. INFO	191
3	19-03-07	REV. PER CITY COMM. AND B/II DOC	MM
2	18-08-08	LANDSCAPE PLAN	MM
1	18-01-12	KEYFLAN	MM

PLANTING AREA K/L

DATE:	2023-05-23	DRAWING NUMBER:
SCALE:	1:100	
DRAWN:	MM	127
DESIGN:	MM	/
CHK'D:	MM	OF 28



Arborist Note:

Excavation for proposed saniatry main to be conducted under arborist supervivion where within 1.5m of TPZ's of retained trees.



4378-3

LEGEND '

--- CRITICAL ROOT ZONE

---- NO-BUILD ZONE

SURVEYED TREE TO BE RETAINED

UN SURVEYED TREE TO BE RETAINED.

X TREE TO BE REMOVED

- This plan is provided for context only, and is not certified as to the accuracy of the location of features or dimensions that are shown on this plan. Please refer to the original survey plan and engineering plans.

DP 18-824566 October 30 2023 Plan #30

REFERENCE DRAWINGS

Page #

1 of 7