SEATTLE PUBLIC LIBRARY
UNIVERSITY BRANCH RENOVATION

* **1. PROJECT OBJECTIVES**

2. BUILDING HISTORY + EXISTING CONDITIONS

3. DESIGN PROPOSALS

- SITE PLANTINGS (NEW, EXISTING, AND REMOVED)
- EXTERIOR TRASH ENCLOSURE

APPENDIX

- PREVIOUS BRIEFING SLIDES
- BUILDING PERMIT ARBORIST REPORT (06.21.23)

2019 “LIBRARIES FOR ALL” LEVY

- RENEWAL OF 2012 LIBRARY LEVY
- MAINTAIN/EXPAND COLLECTIONS + SERVICES

PROJECT GOALS

- IMPROVE LIFE SAFETY
- IMPROVE ACCESSIBILITY
- INSTALL ELEVATOR
- MEET LEED GOLD (ELECTRIFICATION)
- EXPAND PROGRAM & SERVICES

EXPANDED PROGRAM + SERVICES

- ADD MEETING/STUDY ROOMS
- INCREASE COMPUTER & RESTROOM ACCESS
- MAINTAIN EXISTING COLLECTIONS

PUBLIC + STAFF SAFETY

- IMPROVE INTERNAL SIGHT LINES
- PROVIDE ADDITIONAL EMERGENCY EXIT

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PROPERTY DATA

Property Name:	University Public Library
Site Address:	5009 Roosevelt Way Northeast
	Seattle, WA 98105
Tax Assessor's File No.:	0825049041
Construction Date:	1910
Original Architect:	Somerville & Coté
Original Builder:	Unknown
Landmark Designation:	2001

NEIGHBORHOOD BUILDINGS

Nearby City of Seattle Landmarks buildings within a quarter-mile radius include the following:

1. Church of the Blessed Sacrament, 1910
5041 9th Avenue

2. University Library, 1909
5009 Roosevelt Way NE

3. Fire Station #17, 1929
1050 NE 50th Street

LANDMARK CONTROLS

- Site
- Exterior of building
- Interior of main floor (excludes lower floor)
- Excludes coverings and movable furniture

CHANGES TO ORIGINAL BUILDING

1933	Light Fixtures altered with Pittsburgh reflectors
1951	New oil burner
1951	Light installed over front entrance
1954	Lights improved
1955	Railings installed on interior and exterior stairs at entrances, 17 car parking lot
1956	Installation of natural gas heating plant
1961	Alter building per plan by architects Durham Anderson & Freed
1982	New conduit, wire service for library remodel
1983	Structural bracing of masonry gable ends and chimney to existing library building
1984	Alter existing library per plans, install fire alarm system, install lighting
1987	Construct accessibility ramp, provide new wiring, and seismic and system upgrading
1999	Install 20 AMP circuit to run existing sump pump
2001	**Landmarks designation**
2015	Window repairs
2016	Exterior fence, accessibility ramp and parking, and exterior handrail lighting
2017	Window repairs, lower floor power operated door

BUILDING HISTORY + EXISTING CONDITIONS

SUMMARY

DESCRIPTION

The Seattle University Branch Library is one of six remaining Carnegie Libraries operated by Seattle Public Libraries. Designed by architects Somervell & Coté, library was constructed in 1908 and first opened in 1910. The architectural style of the University Library is Neo-Classical, with a formal grand entrance and bilateral symmetry. The building's two-story structure was typical for its era, and combined a number of systems and materials. It is considered an unreinforced masonry (URM) building, constructed of reinforced concrete framing with hollow clay tile infill, and finished with cement stucco. Some Mediterranean influence is indicated in the stucco cladding, glazed terra cotta roof tile, and exposed rafter ends. The regular, symmetrical fenestration pattern is characterized by openings with a strong vertical proportion.

The library is located at 5009 Roosevelt Way NE, just north of the City of Seattle in the University District neighborhood. The site is a rectangular corner lot, bounded by Roosevelt Way NE on the east, NE 50th Street on the south, and 9th Ave NE on the west. The building is centrally located within the site, which slopes steeply downward to the east to meet the sidewalk at Roosevelt Way NE. The main entrance faces east with a central, ascending monumental stair. A paved parking lot is located at the west (rear) of the building. The surrounding area is characterized by a diverse mix of residential neighborhoods and commercial businesses.

PROJECT SCOPE

The building does not meet current or pending seismic performance criteria, and the building's Carnegie design and its site relationship presents challenges to providing universal and equitable access. The branch now faces the challenge of serving an increasingly diverse range of patrons while adapting to new norms of learning, research, and public service. While the primary project goals of this project are seismic, accessibility, and energy code compliance, the size and scale of the scope creates the opportunity for a complete building and site renovation to improve the user and staff experience.

UNIVERSITY BRANCH 1910

UNIVERSITY BRANCH 1931

BUILDING HISTORY + EXISTING CONDITIONS

EXISTING PHOTOS - EXTERIOR

EAST ELEVATION (MAIN ENTRY)

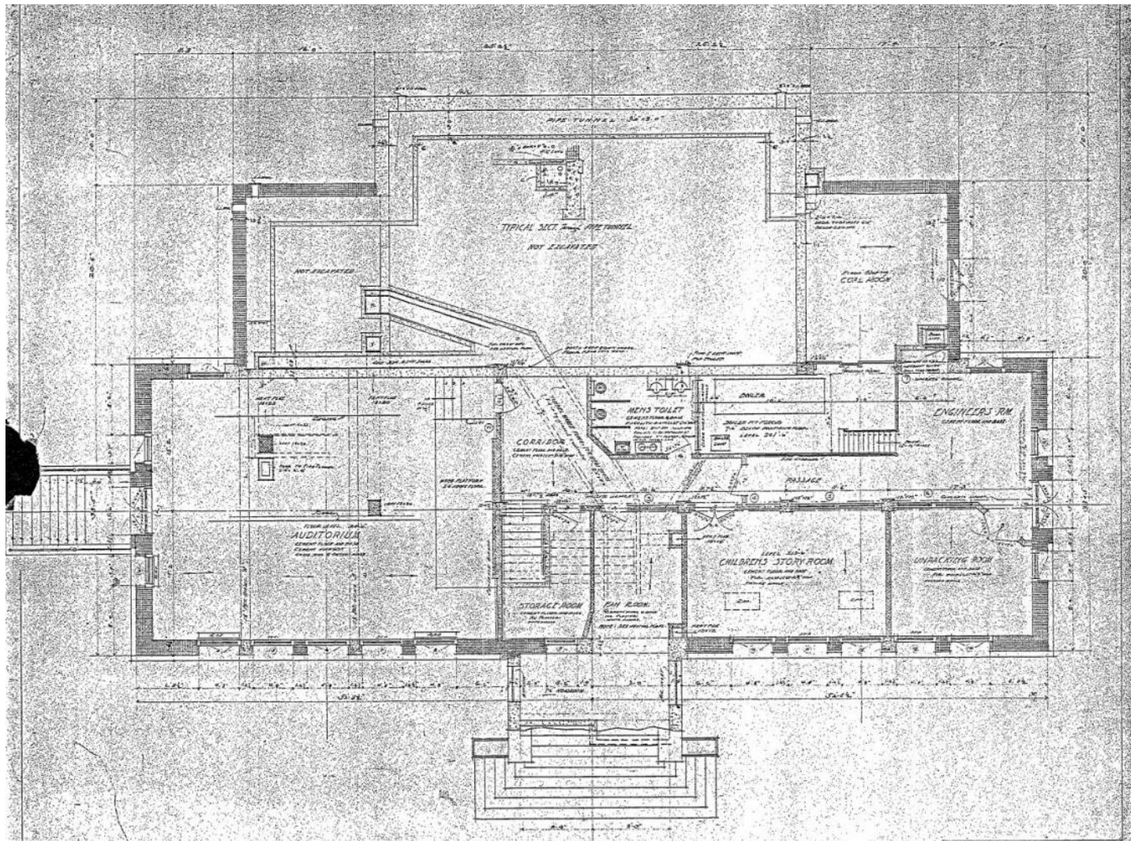
SOUTHEAST SITE + FACADE

SOUTHWEST ENTRY

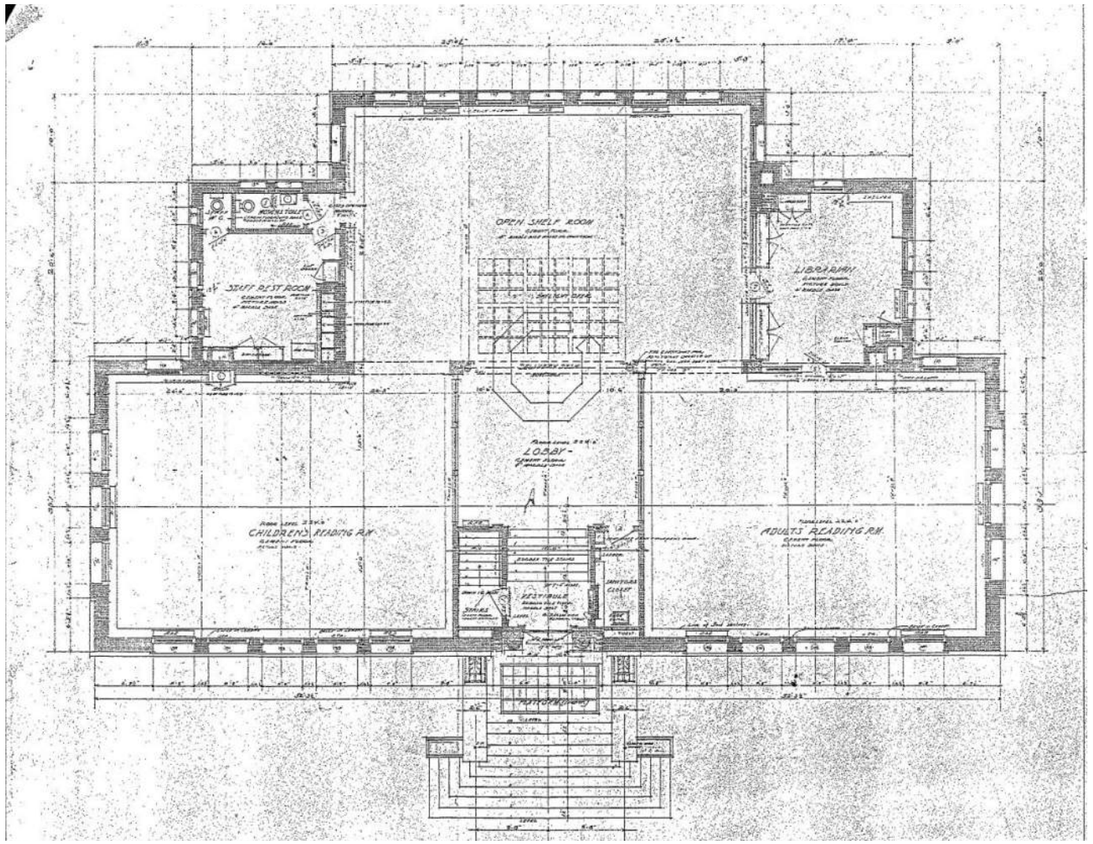
NORTHEAST SITE + FACADE

BUILDING HISTORY + EXISTING CONDITIONS

ORIGINAL DRAWINGS



BASEMENT (LOWER LEVEL) PLAN

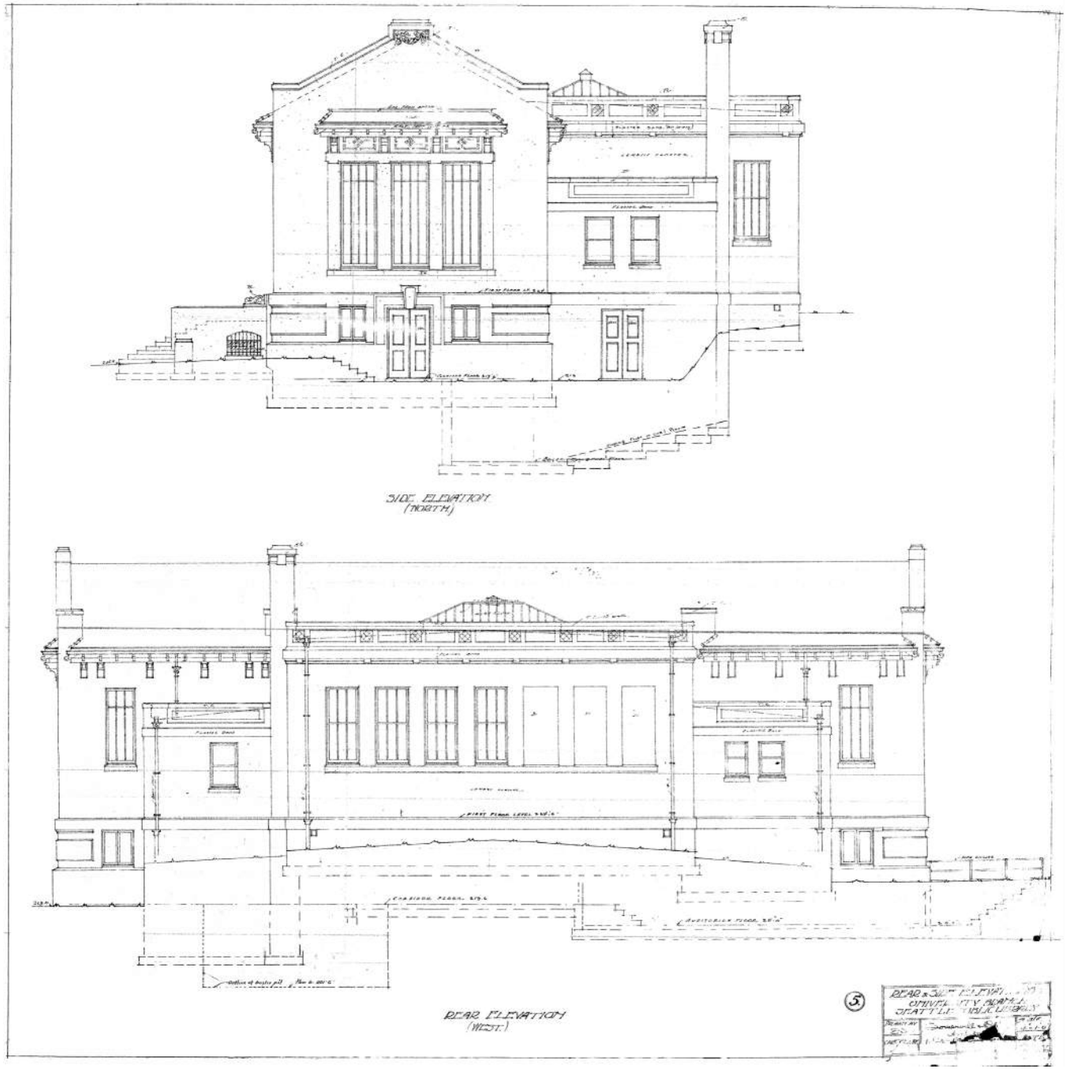


MAIN FLOOR (MAIN LEVEL) PLAN

BUILDING HISTORY + EXISTING CONDITIONS

ORIGINAL DRAWINGS

EAST AND SOUTH ELEVATIONS



NORTH AND WEST ELEVATIONS

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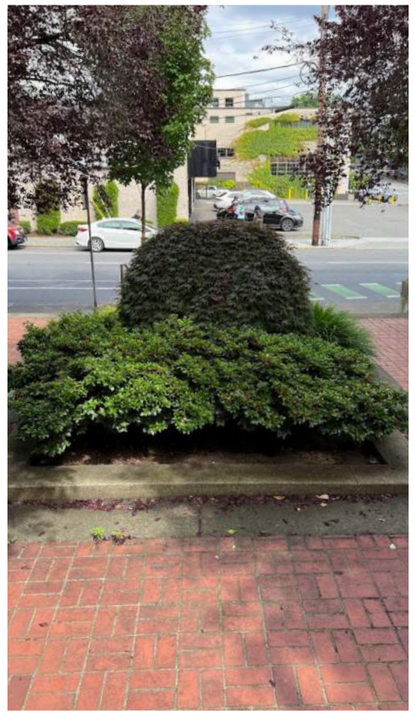
  • PREVIOUS BRIEFING SLIDES

  • BUILDING PERMIT ARBORIST REPORT (06.21.23)



With the addition/renovation of the University Branch Library, an understanding of existing neoclassical elements and how they can be incorporated is important. Modern designs that embrace the solid, monumental characteristics can weave together the existing site elements while improving overall site accessibility and providing additional programmed space for seating and gathering. These site and precedent images demonstrate the potential ways in which to construct new elements that are sensitive to and integrate with existing conditions.

With the insertion of new elements into the site, the consideration of how much to integrate the neoclassical style has been studied. Questions included: should the site embrace the style in both form and materials, or deviate? These precedent images demonstrate potential interventions that balance embracing elements of the existing site, while proposing new materials, forms, or both. The proposed design embraces the weight and character of the existing building and site, while allowing the structural landscape elements to compliment, rather than compete.

INTEGRATING THE PAST + CONTEMPORARY INSERTIONS

SWIFT COMPANY LLC

2

BUILDING EXTERIOR MODIFICATIONS

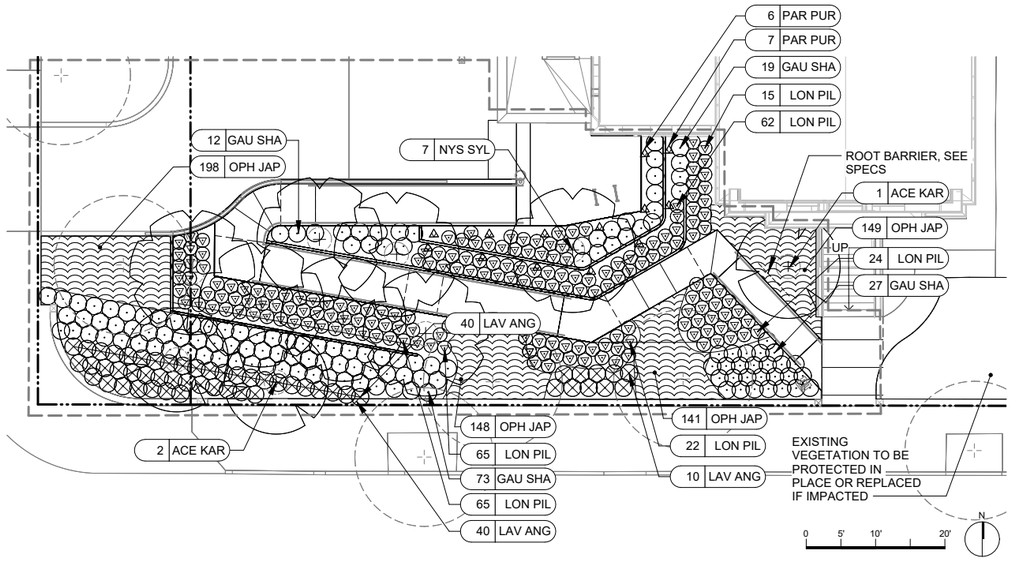
SITE PERSPECTIVES - VIEWS FROM 50TH ST + SOUTH LANDSCAPING

BUILDING EXTERIOR MODIFICATIONS

SITE PERSPECTIVES - VIEWS FROM 50TH ST + SOUTH LANDSCAPING

SWIFT COMPANY LLC

9



1 PLANTING PLAN - AREA A

TREES						
	ACE KAR	3	ACER RUBRUM 'KARPICK'	KARPICK RED MAPLE	B&B, 3"-3 1/2" CAL	
	ACE SUG	2	ACER SACCHARUM	SUGAR MAPLE	B&B, 4 1/2" - 5" CAL	
	NYS SYL	7	NYSSA SYLVATICA	TUPELO	B&B, 3" - 3 1/2" CAL	
	ZEL VIL	1	ZELKOVA SERRATA 'VILLAGE GREEN'	VILLAGE GREEN SAWLEAF ZELKOVA	B&B, 3" - 3 1/2" CAL	
SHRUBS						
	GAU SHA	132	GAULTHERIA SHALLON	SALAL	#3 CONT	30" O.C.
	LAV ANG	53	LAVANDULA ANGUSTIFOLIA	ENGLISH LAVENDER	#3 CONT	30" O.C.
	LIG JAP	12	LIGUSTRUM JAPONICUM	JAPANESE PRIVET	#7 CONT	48" O.C.
	LON PIL	251	LONICERA PILEATA	PRIVET HONEYSUCKLE	#3 CONT	24" O.C.
	PAR PUR	13	PARTHENOCISSUS QUINQUEFOLIA 'PURPLE FALLS'	PURPLE FALLS VIRGINIA CREEPER	#3 CONT	96" O.C.

TURF AND GROUNDCOVER SCHEDULE

SYMBOL	TAG	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	SPACING
	LAWN					
	LAWN	2602 SF	TURF HYDROSEED	30% FESCUE AND 70% RYE GRASS BLEND	SEED	
	OPH JAP	636	OPHIOPOGON JAPONICUS	GREEN MONDO GRASS	4" POT	1'-0"


SUGAR MAPLE


ZELKOVA


KARPICK RED MAPLE


TUPELO


JAPANESE PRIVET


PRIVET HONEYSUCKLE


SALAL


ENGLISH LAVENDER


VIRGINIA CREEPER


FESCUE AND RYE GRASS TURF

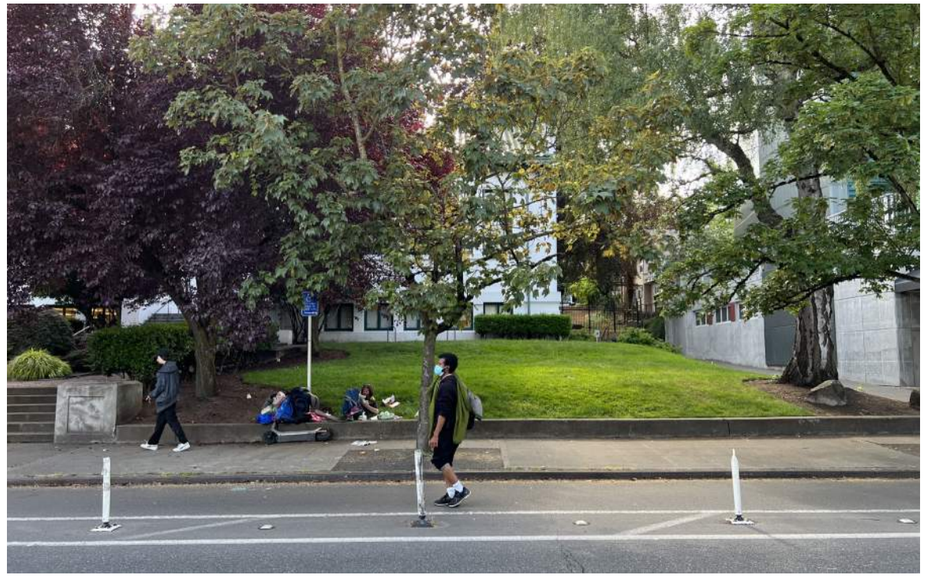

GREEN MONDO GRASS

Plants for the southwest entry approach are chosen to create a lush and textural side yard for the library. Karpick Red Maples and Tupelo trees are chosen for their medium height and scale to fit in close proximity to the existing trees to be retained and reinfoce human scale along the winding pathway. Privet Honeysuckle and Salal are chosen for their robust evergreen character that adds texture and foliage all year round. English Lavender is chosen for its pops of purple flowers for color and texture to complement the evergreen shurbs. Along the site walls, Virginia Creeper is selected as a hardy climbing plant that will soften the appearance of the vertical wall elements. Green Mondo Grass is selected as a groundcover around existing trees to provide a simple, vibrant mat. All trees and shrubs are selected for appropriateness of scale and hardiness. They are also selected to be low maintenance and perform well in high traffic urban environments.

PLANTING - SOUTHWEST ENTRY

BUILDING EXTERIOR MODIFICATIONS

SITE PERSPECTIVES - VIEWS FROM ROOSEVELT + EAST LAWN

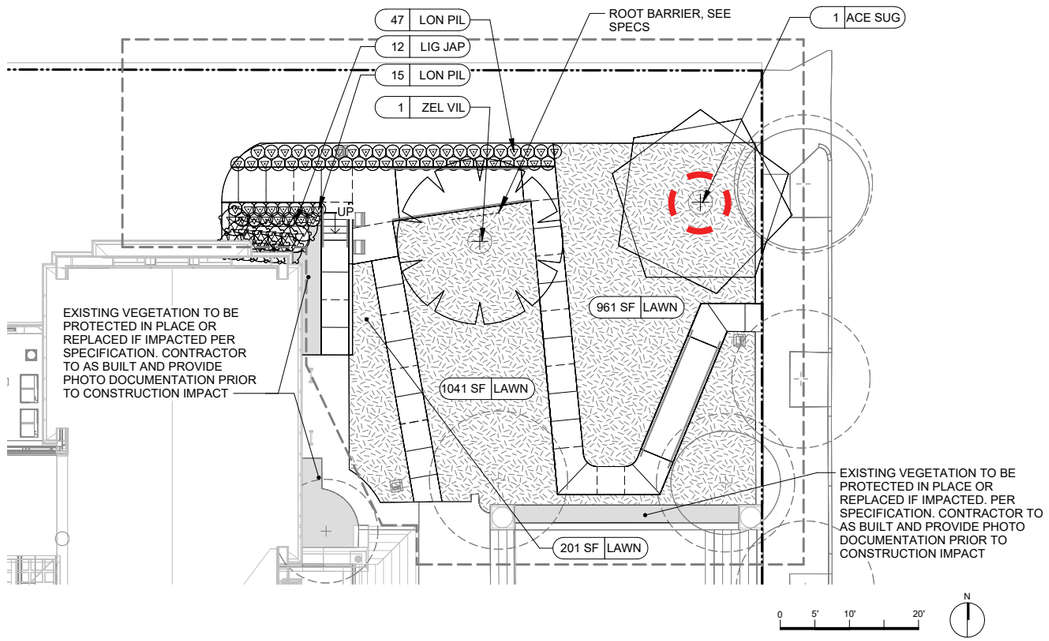


BUILDING EXTERIOR MODIFICATIONS

SITE PERSPECTIVES - VIEWS FROM ROOSEVELT + EAST LAWN

SWIFT COMPANY LLC

17

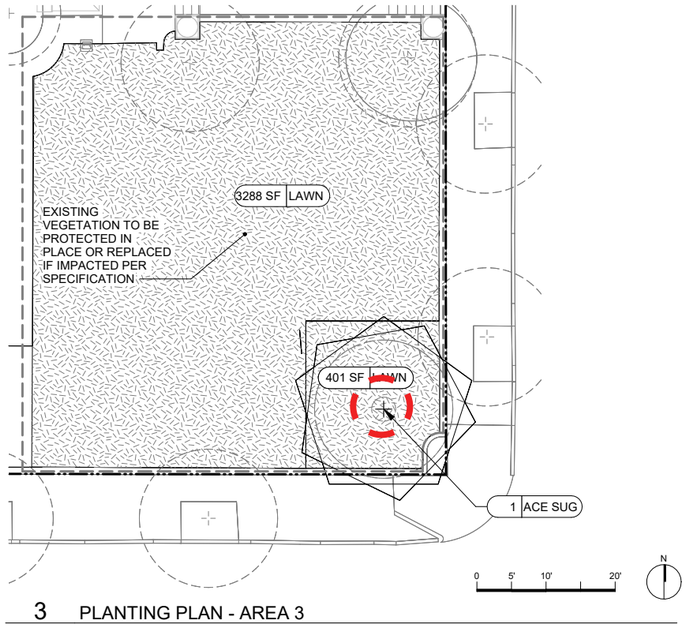


2 PLANTING PLAN - AREA 2

Tree Removal:

The east lawn trees indicated in red were identified in the arborist report as copper beech trees infested with bronze birch borer (see appendix Arborist Report, dated 06.21.2023).

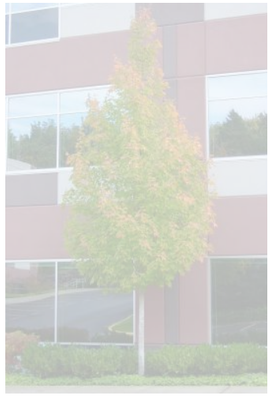
While these (2) trees were identified as 'fair' condition, SDCI adovcated for the removal & replacement of these trees in Corrections Cycle 1, as the new site plantings are sufficient to meet code requirements, and the north tree's existing critical root zone conflicts with required sub-grade stormwater management trenching.



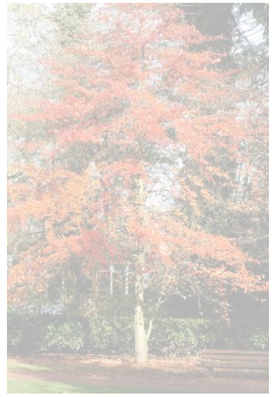
3 PLANTING PLAN - AREA 3

SUGAR MAPLE

ZELKOVA



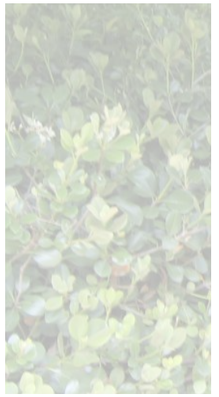
KARPICK RED MAPLE



TUPELO

JAPANESE PRIVET (MATCH EXISTING)

PRIVET HONEYSUCKLE



SALAL

ENGLISH LAVENDER

VIRGINIA CREEPER

FESCUE AND RYE GRASS TURF (MATCH EXISTING)

GREEN MONDO GRASS

Plants for the east lawn are chosen to restore impacts to the existing conditions and maintain the historic character of the lawn. Sugar Maples are chosen as anchor trees to replace the diseased and declining European White Birches on the northeast and southeast corners of the lawn (replacement based on recommendation of SDCI reviewer). Japanese Privet is replanted as needed to maintain the character of the hedges on site. In areas where steep slopes exist along the north edge of the north lawn, Privet Honeysuckle is chosen for its similar character to Japanese Privet for visual consistency. A Zelkova tree is planted as a specimen along the northern ramp to add huma scale to the lawn space and increase canopy cover. All trees and shrubs are selected for appropriateness of scale and hardiness. They are also selected to be low maintenance and perform well in high traffic urban environments.

PLANTING - EAST LAWN

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EXTERIOR TRASH ENCLOSURE

PREVIOUSLY PROPOSED: WELDED BAR GRATE ENCLOSURE

Previous Proposal:
At the April 17th briefing, SHKS proposed a **welded bar grating** assembly for durability and visiblity (sides and top), painted dark (black or dark bronze) to match existing metal site elements, including the existing fence, handrails, and new steel retaining walls.

SPL requested that the assembly be modified to **obscure the dumspters from view** from the street and building and **be located at the north property line wall.**

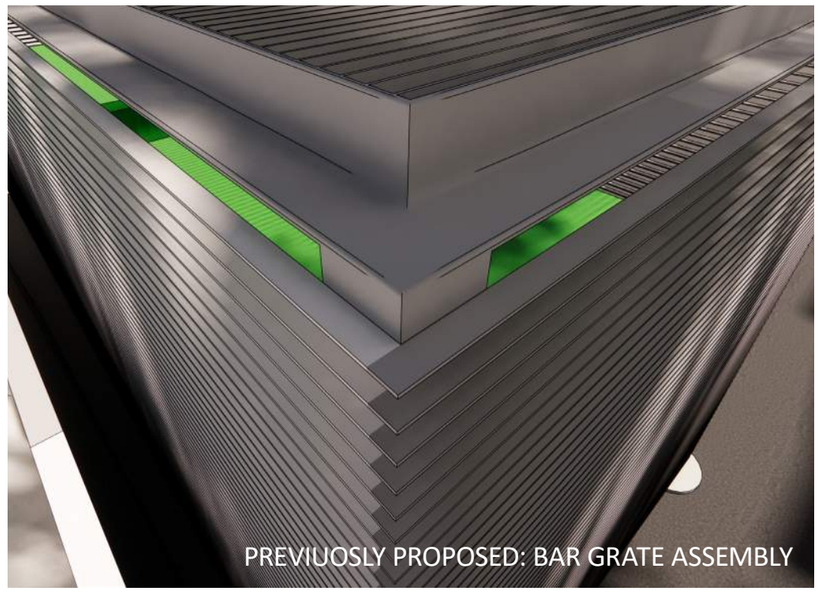
Current Proposal (next slide)
Install a painted metal enclosure, utilizing **steel plate panels** for durability and to visually obscure the dumpsters.

Paint dark (black or dark bronze) to match existing metal site elements, including the existing fence, handrails, and new steel retaining walls. Enclosure top to be welded bar grate top for security.


PREVIUOSLY PROPOSED VIEW FROM NORTH DRIVEWAY


WELDED BAR GRATE


PREVIUOSLY PROPOSED VIEW FROM NORTH DRIVEWAY


PREVIUOSLY PROPOSED: BAR GRATE ASSEMBLY

EXTERIOR TRASH ENCLOSURE

CURRENT PROPOSAL: STEEL PLATE ENCLOSURE W/ METAL GRATE TOP

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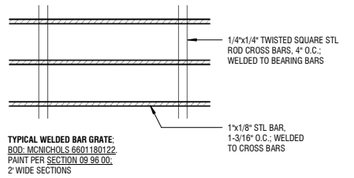
PROPOSED NORTH DRIVEWAY

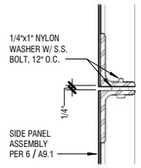
SITE PHOTO: NORTH DRIVEWAY

PROPOSED VIEW FROM BUILDING

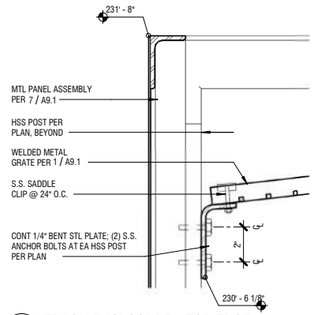
SITE PHOTO W/ PROPOSED ENCLOSURE SIZE



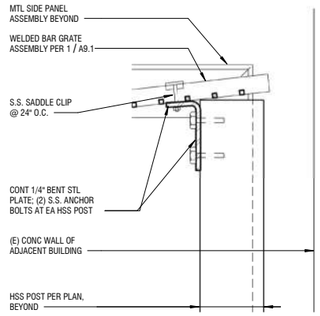
1 WELDED BAR GRATE
6" = 1'-0"



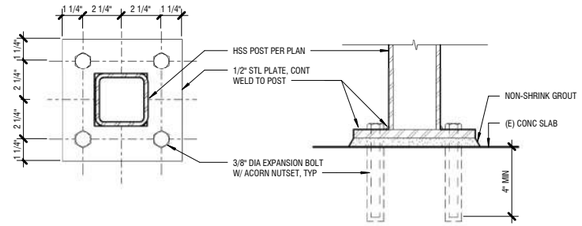
2 TRASH ENCLOSURE - SIDE PANEL
3" = 1'-0"



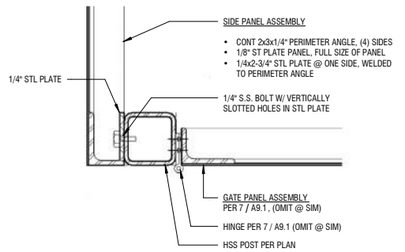
3 TRASH ENCLOSURE - TOP EDGE
3" = 1'-0"



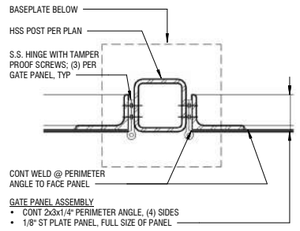
4 TRASH ENCLOSURE - TOP EDGE BACK
3" = 1'-0"



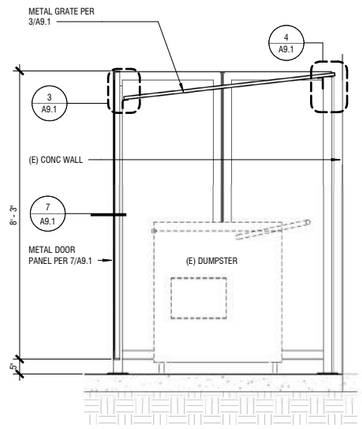
5 TRASH ENCLOSURE - BASE PLATE
3" = 1'-0"



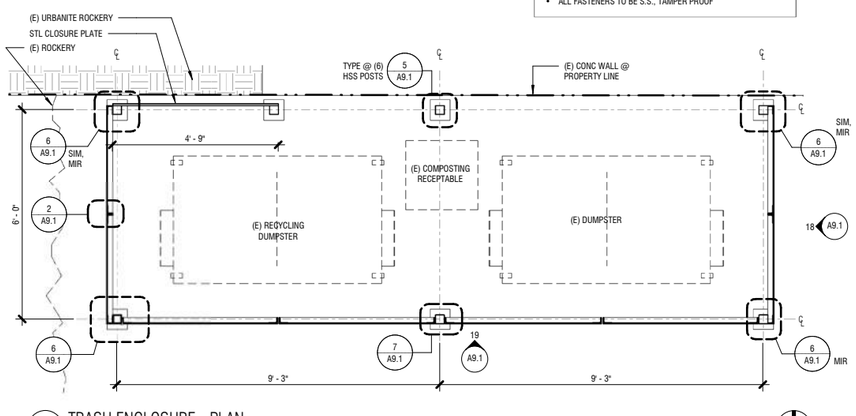
6 TRASH ENCLOSURE - CORNER
3" = 1'-0"



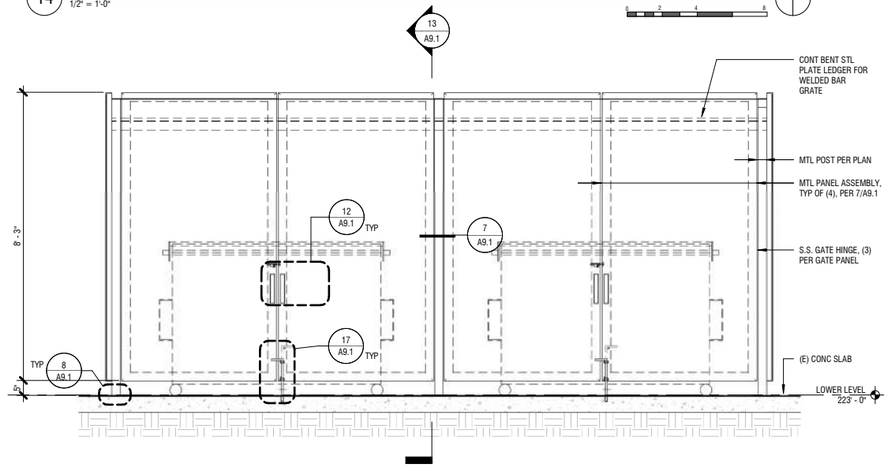
7 TRASH ENCLOSURE - CENTER GATE
3" = 1'-0"



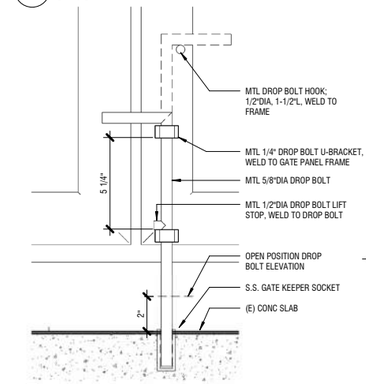
13 TRASH ENCLOSURE - SECTION
1/2" = 1'-0"



14 TRASH ENCLOSURE - PLAN
1/2" = 1'-0"

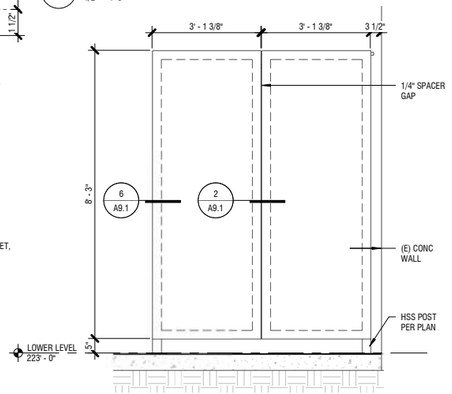


19 TRASH ENCLOSURE - FRONT ELEVATION
1/2" = 1'-0"



12 TRASH ENCLOSURE - HANDLE AND BOLT
3" = 1'-0"

17 TRASH ENCLOSURE - CANE BOLT
3" = 1'-0"



18 SIDE ELEVATION - EAST
1/2" = 1'-0"

TRASH ENCLOSURE GENERAL NOTES:
- PAINT ALL METAL FABRICATIONS PER SECTION 09 90 00 U.N.O.
- GRIND ALL WELDS SMOOTH
- ALL FASTENERS TO BE S.S., TAMPER PROOF

Note: Drawings are not to scale.

APPENDIX
REFERENCE SLIDES (PREVIOUS BRIEFINGS)

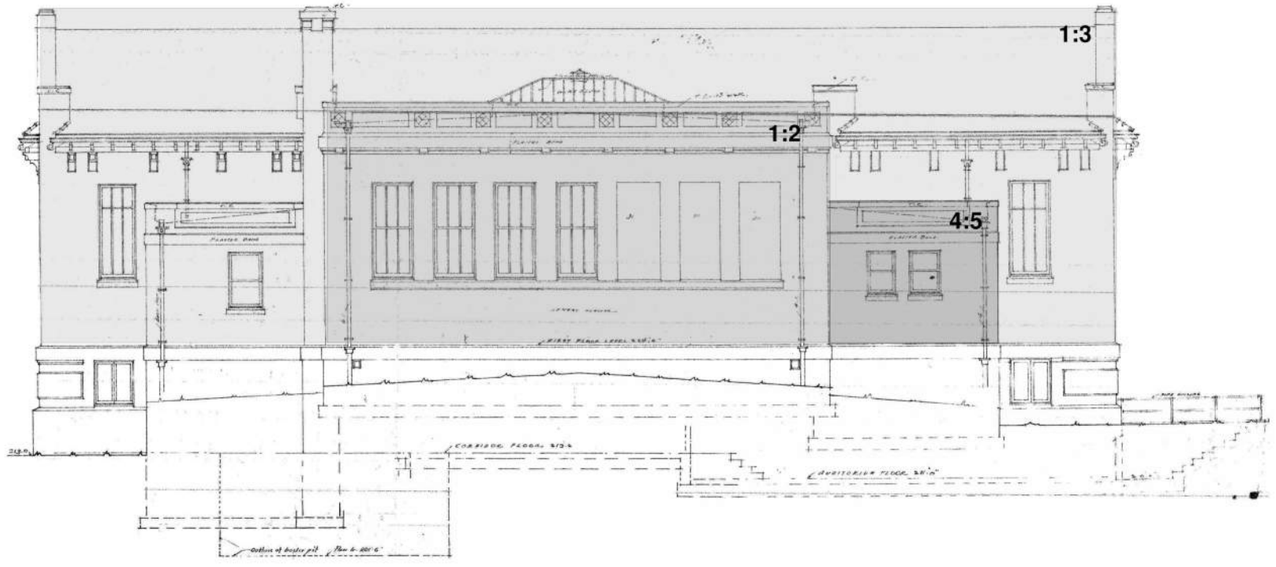
DESIGN PRINCIPLES

LIBRARY ZONES

DESIGN PRINCIPLES

EXISTING BUILDING PROPORTIONS

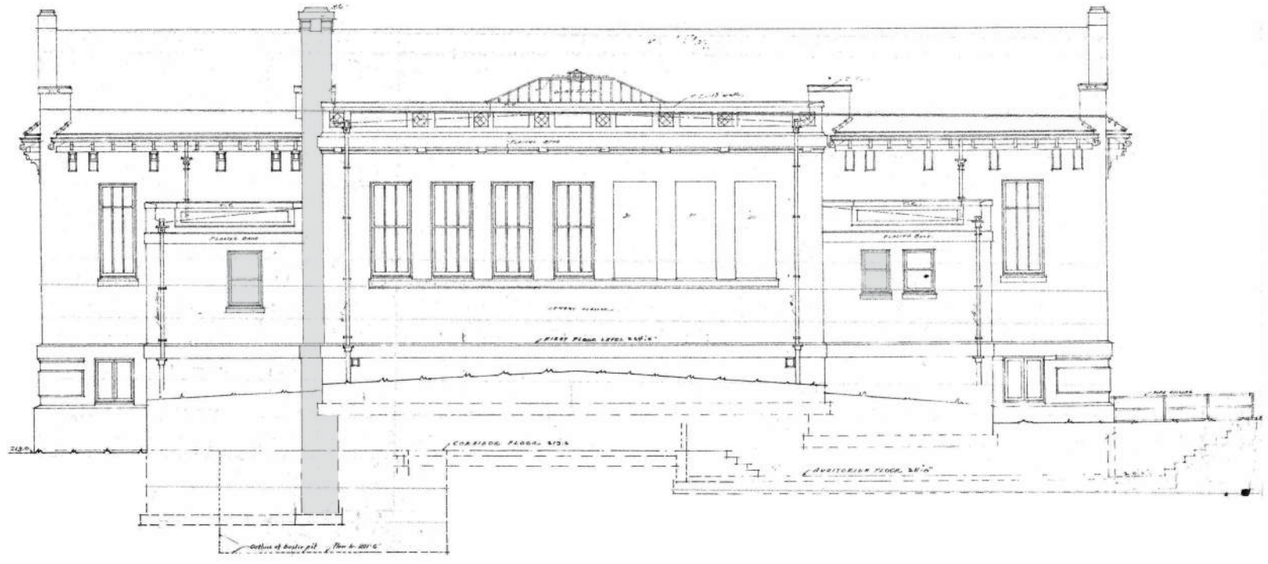
SOUTH ELEVATION



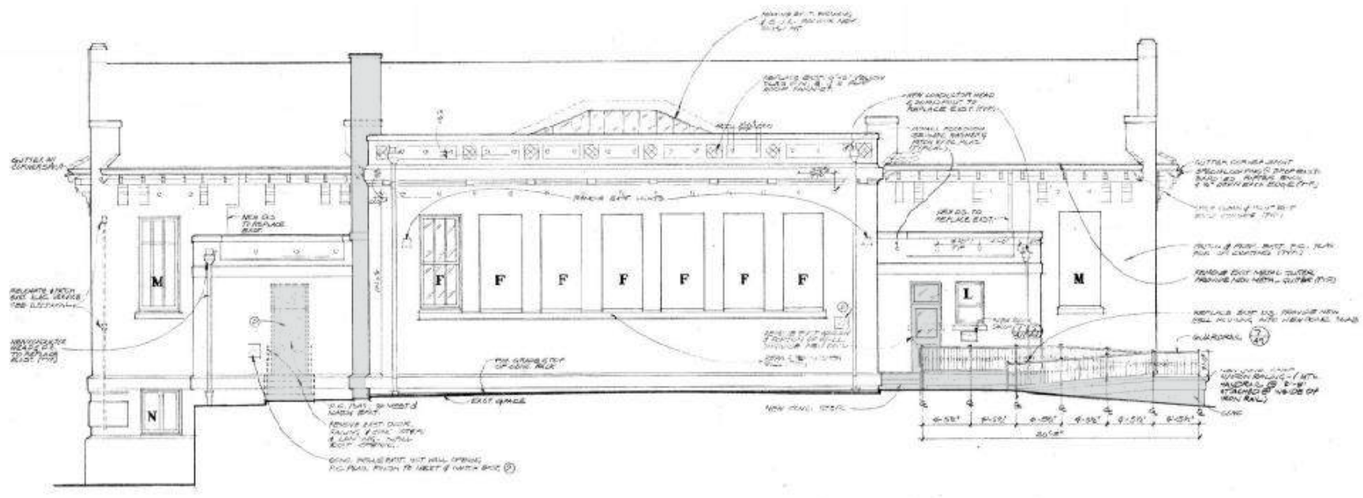
WEST ELEVATION

DESIGN PROPOSALS

WEST ELEVATION - CHANGES OVER TIME



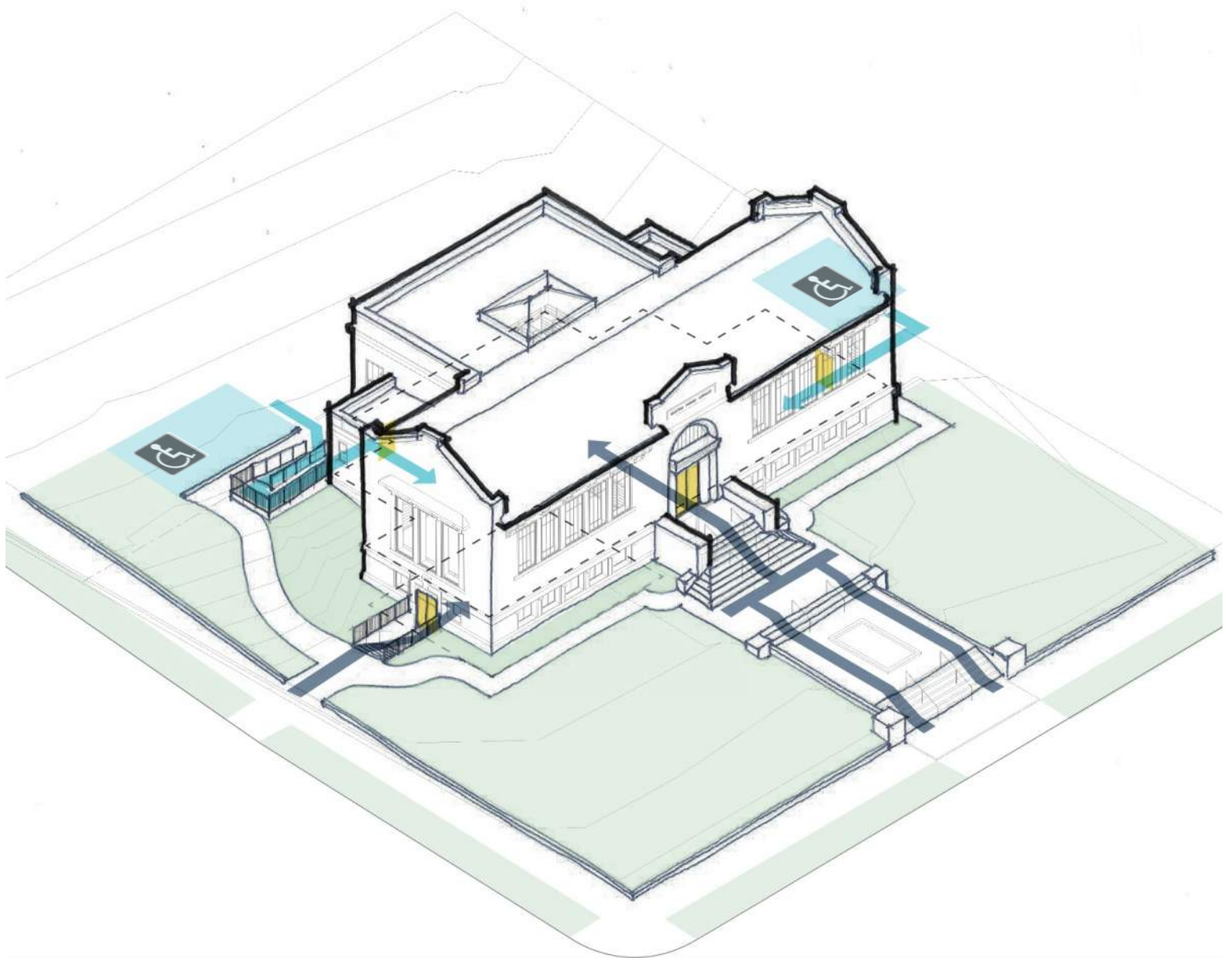
WEST ELEVATION - 1910



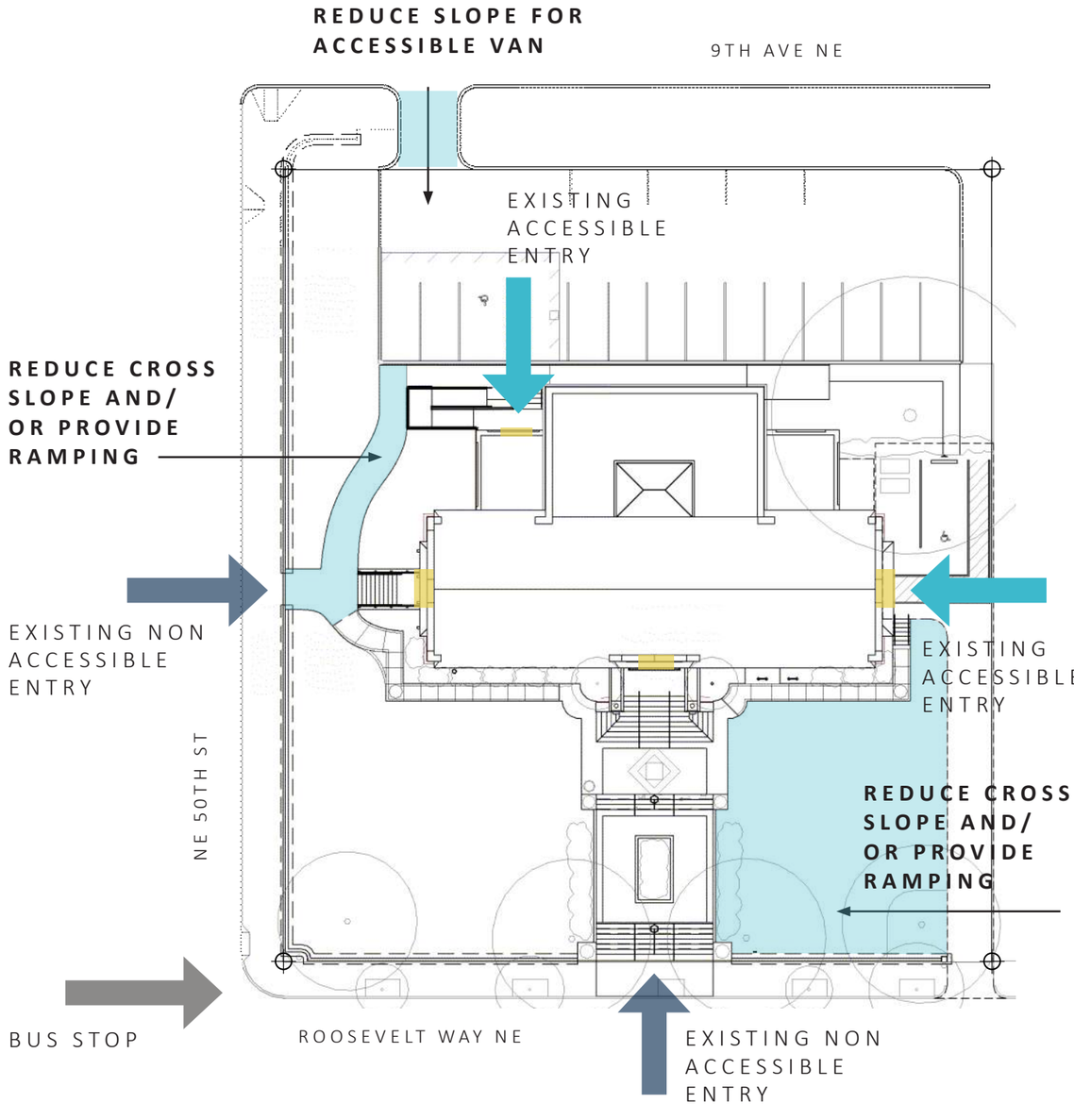
WEST ELEVATION - 1986 RENOVATION

SITE ACCESSIBILITY IMPROVEMENTS

EXISTING SITE & ENTRY ACCESSIBILITY



ACCESSIBLE NON-ACCESSIBLE BUILDING ENTRY



BUILDING EXTERIOR MODIFICATIONS + ADDITIONS

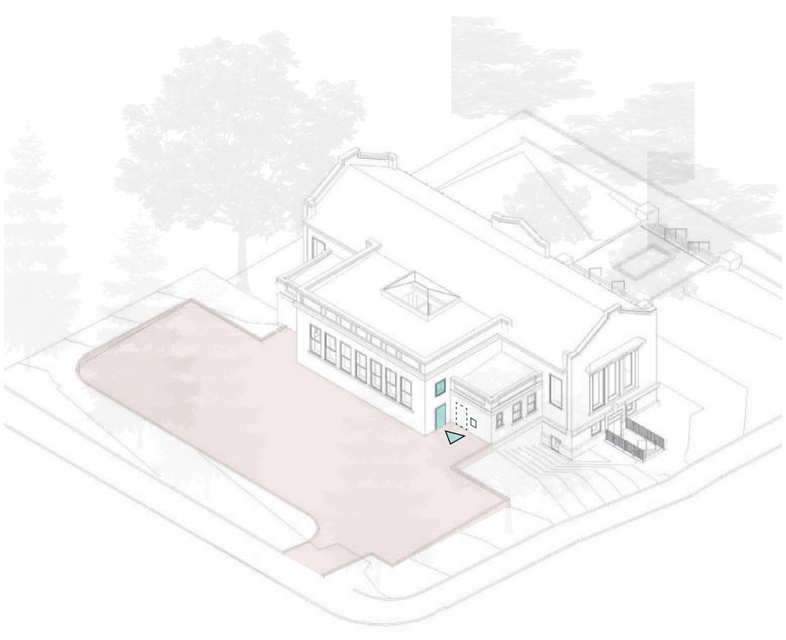
PROPOSED OPTION

LANDMARKS PRESERVATION BOARD FEEDBACK

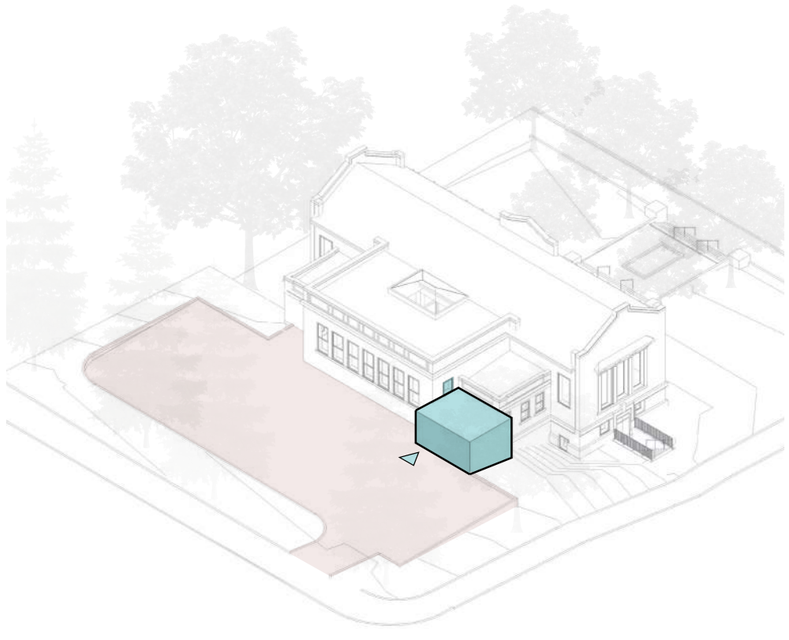
At the Landmarks Preservation Board Meeting on 7/9/22, SHKS Architects presented an overview of existing conditions, project objectives, and design principals for the project. SHKS also presented design options for site accessibility improvements, and programmatic changes that included options for new building additions at the west (rear) side of the building, adjacent to the existing service bays.

Feedback from the ARC was generally favorable to the site accessibility improvement approach of minimizing walkway slope at the east site, noting that further visualizations of the southeast ramping section to assess visual impacts to the existing building.

The ARC acknowledged the need for expanded program in meeting the library's current and future operational needs, and was generally favorable to the location and overall massing of the proposed building additions. The ARC noted that further study would be needed to assess the massing & material relationships between the addition and existing building.

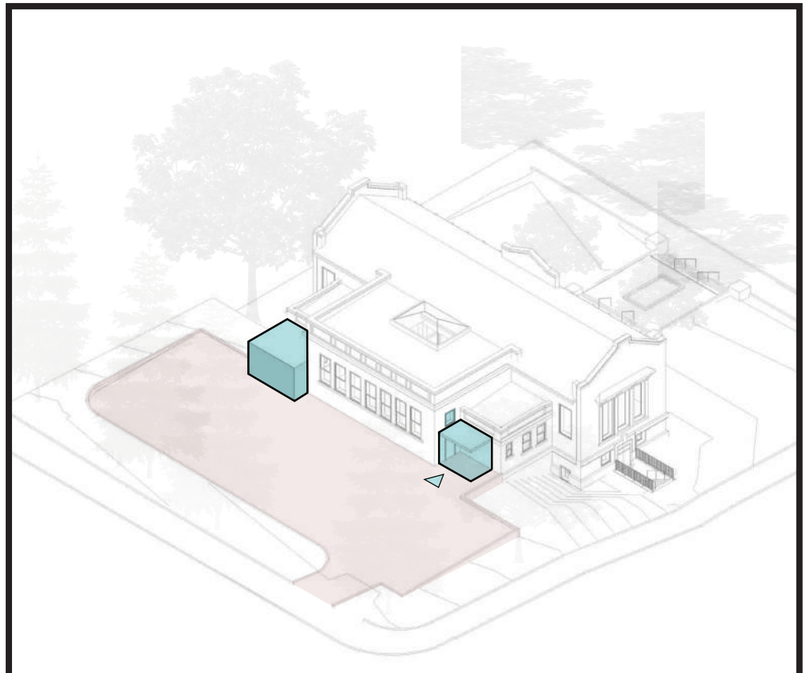


ENTRY OPTION 1:
MODIFIED ENTRY, CENTRAL WORKROOM



ENTRY OPTION 2:
SOUTH ADDITION, WORKROOM

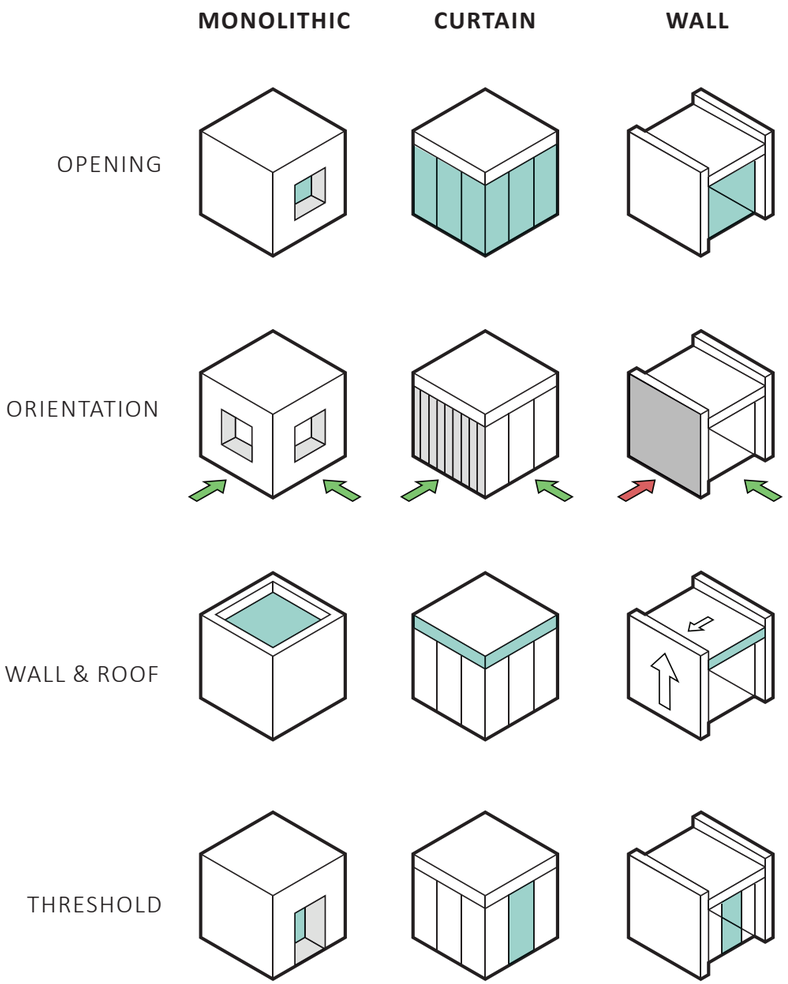
PREFERRED OPTION FOLLOWING
07.15.22 ARC GUIDANCE BRIEFING



ENTRY OPTION 3:
NORTH ADDITION, STUDY ROOMS

BUILDING EXTERIOR MODIFICATIONS + ADDITIONS

BUILDING LANGUAGE - EXISTING BUILDING & PROPOSED ADDITIONS



EXISTING BUILDING LANGUAGE

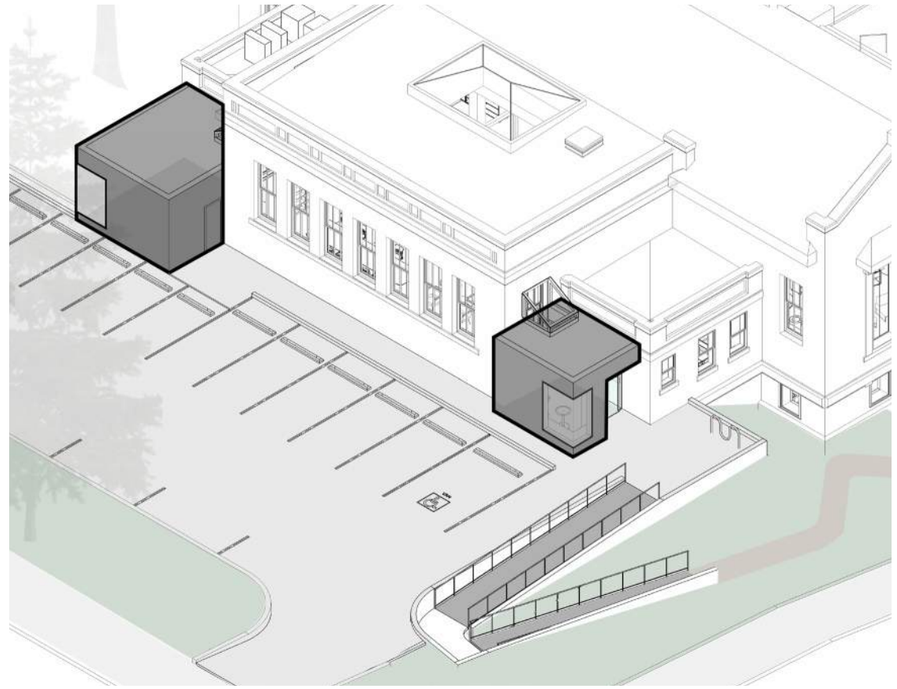
OPENING

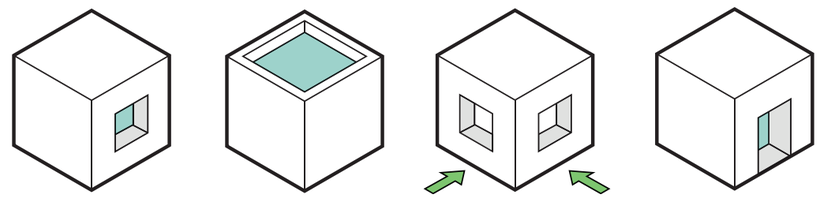
ORIENTATION

WALL & ROOF

THRESHOLD

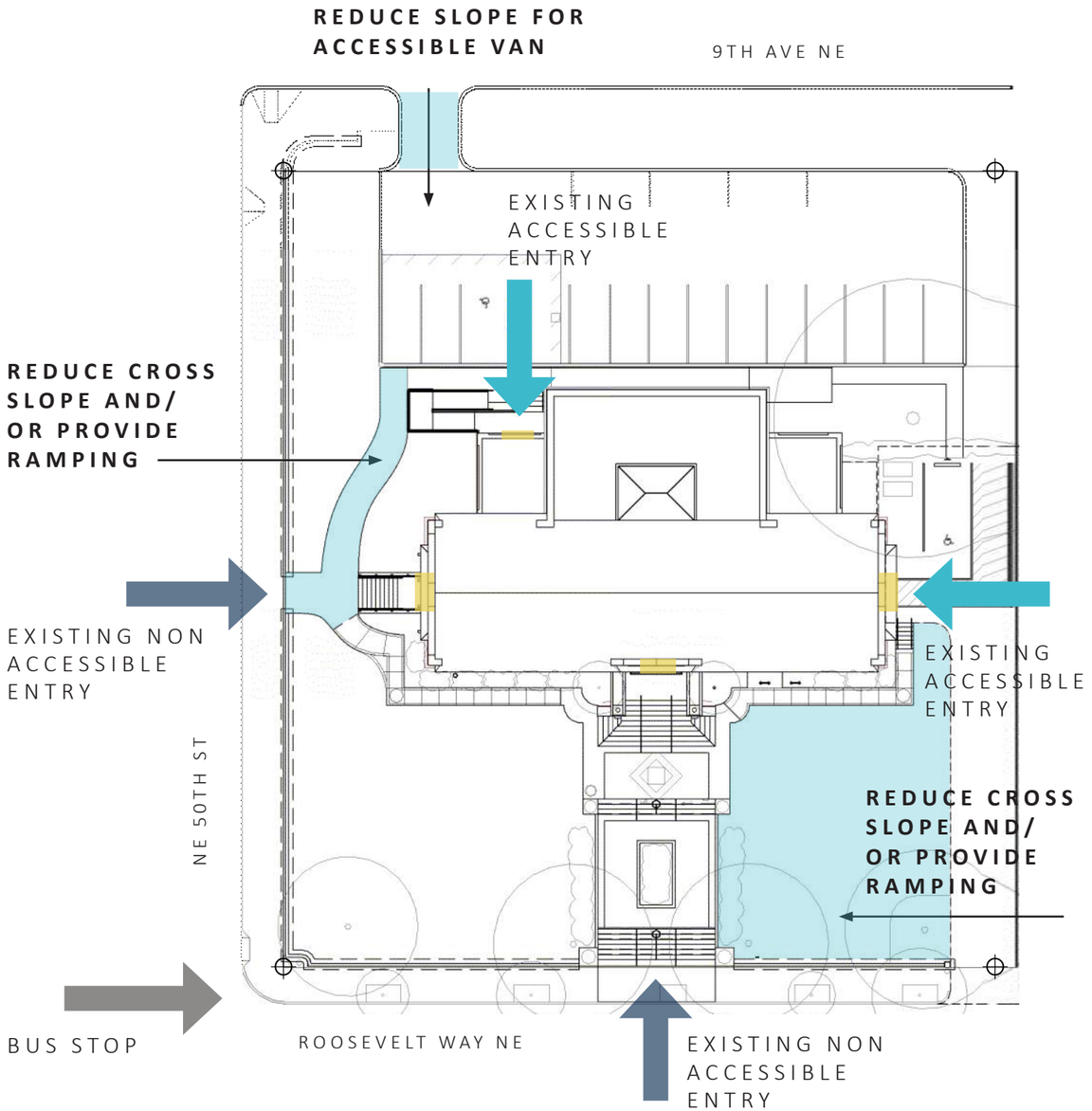
PROPOSED - MONOLITHIC



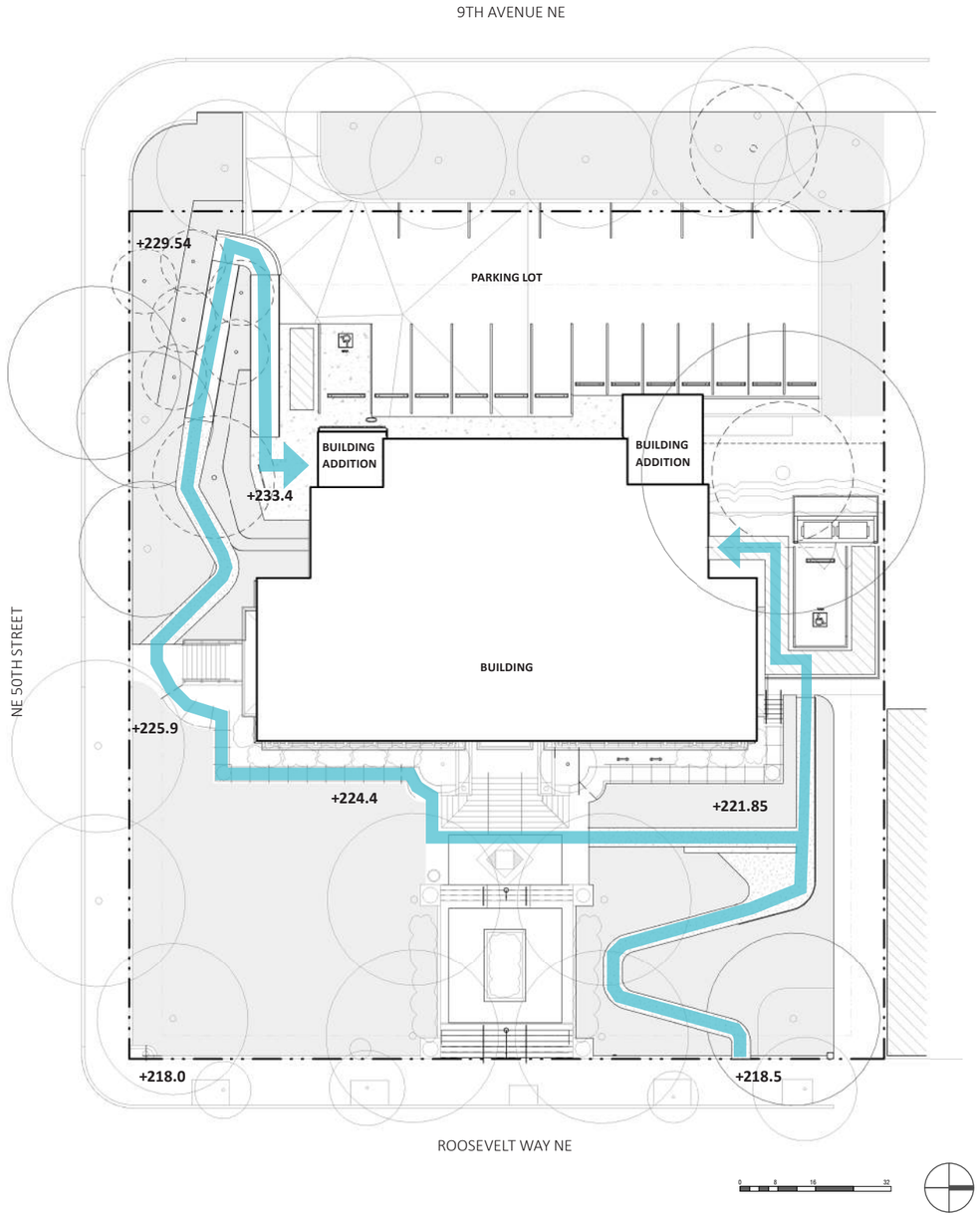


SITE ACCESSIBILITY IMPROVEMENTS

PROPOSED ACCESSIBLE PATH



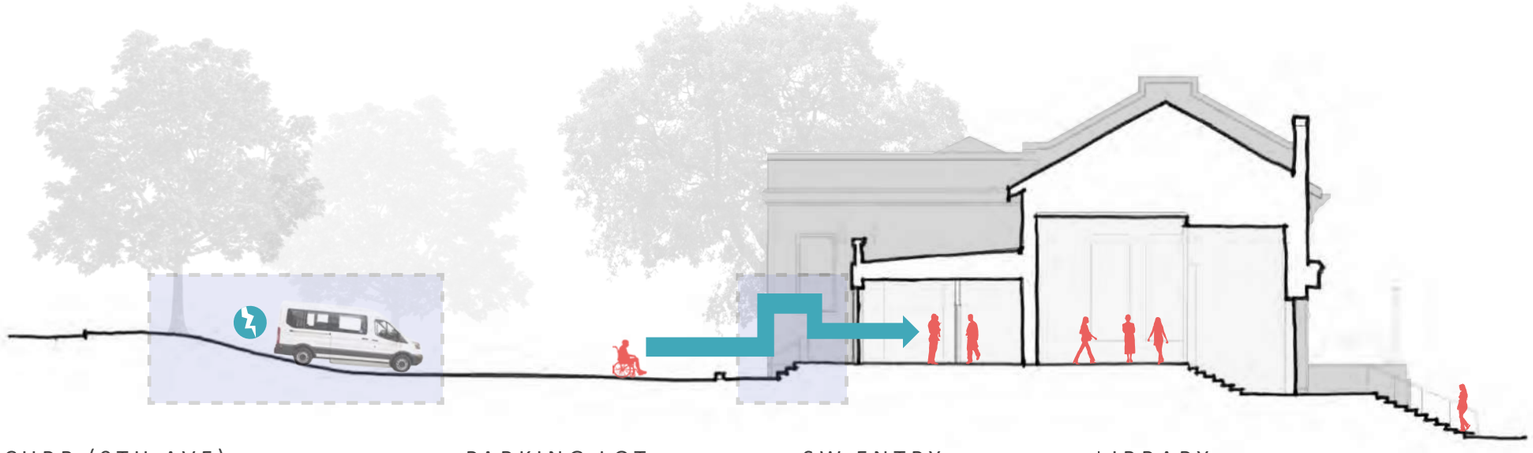
EXISTING ACCESSIBLE PATH



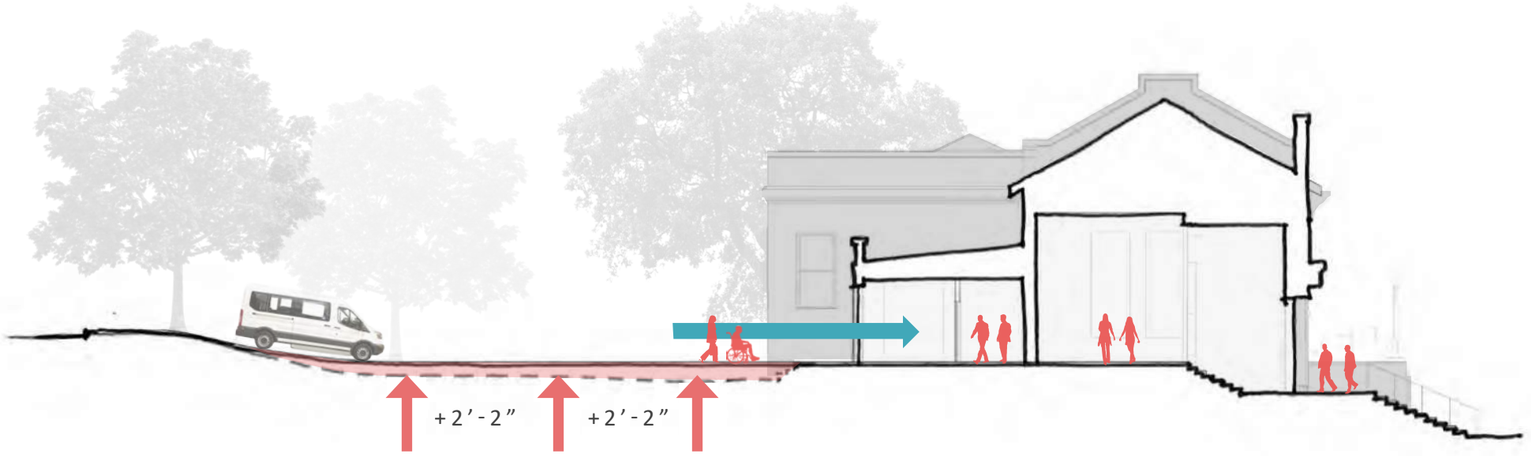
PROPOSED ACCESSIBLE PATH

SITE ACCESSIBILITY IMPROVEMENTS

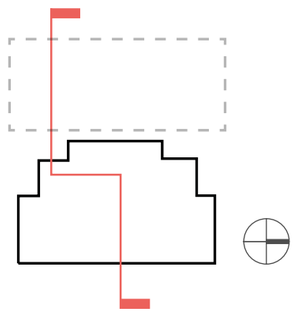
RAISED PARKING

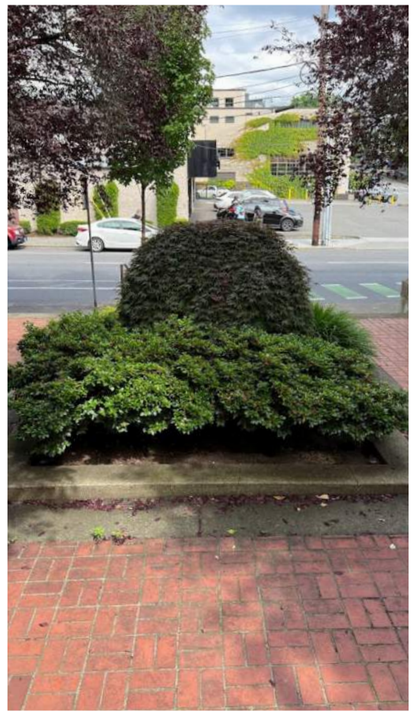


EXISTING CONDITION



RAISED PARKING





With the addition/renovation of the University Branch Library, an understanding of existing neoclassical elements and how they can be incorporated is important. Modern designs that embrace the solid, monumental characteristics can weave together the existing site elements while improving overall site accessibility and providing additional programmed space for seating and gathering. These site and precedent images demonstrate the potential ways in which to construct new elements that are sensitive to and integrate with existing conditions.

With the insertion of new elements into the site, the consideration of how much to integrate the neoclassical style has been studied. Questions included: should the site embrace the style in both form and materials, or deviate? These precedent images demonstrate potential interventions that balance embracing elements of the existing site, while proposing new materials, forms, or both. The proposed design embraces the weight and character of the existing building and site, while allowing the structural landscape elements to compliment, rather than compete.

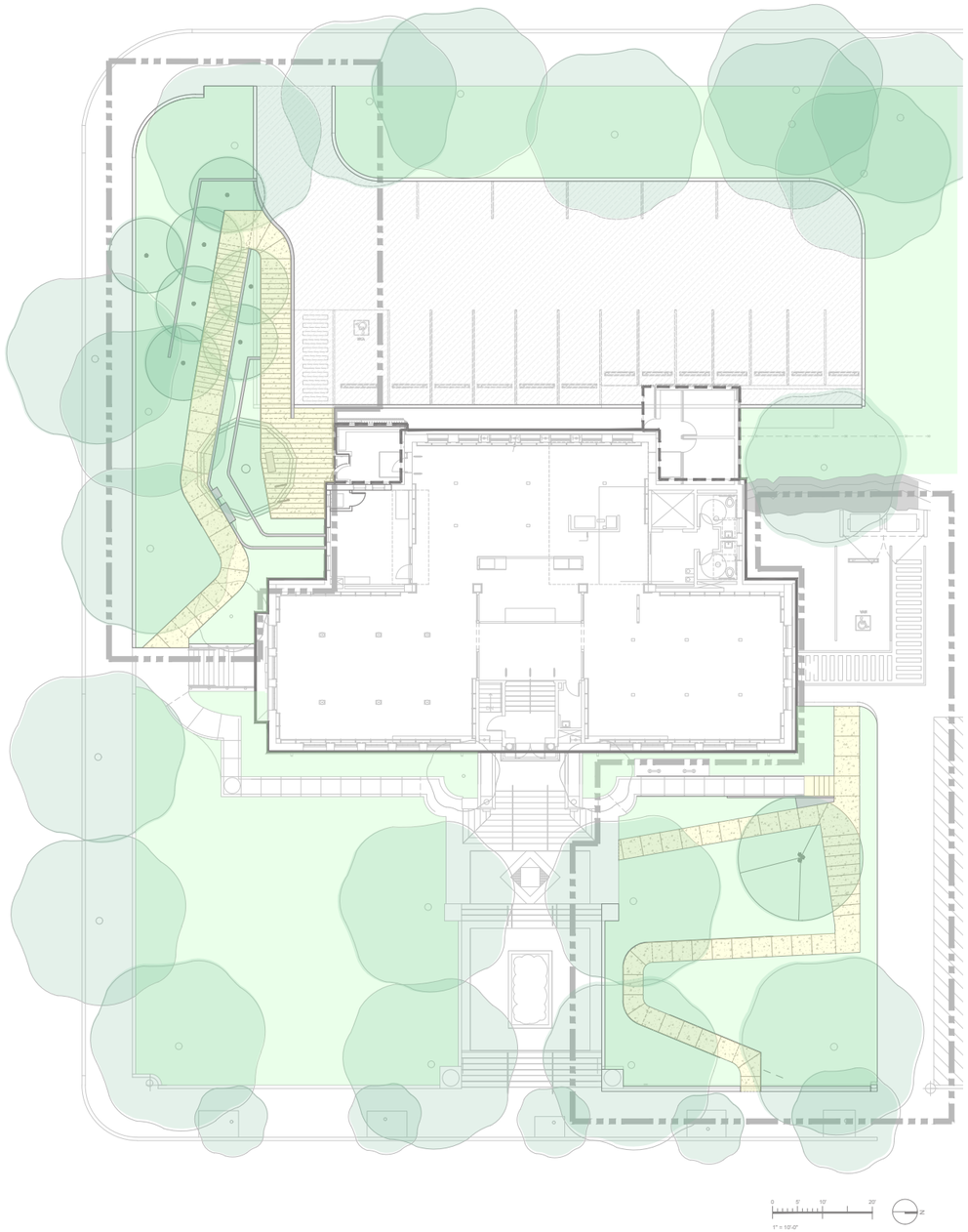
INTEGRATING THE PAST + CONTEMPORARY INSERTIONS

SWIFT COMPANY LLC

2

SPL UNIVERSITY BRANCH | SITE ADA OPPORTUNITIES

OVERALL SITE PLAN



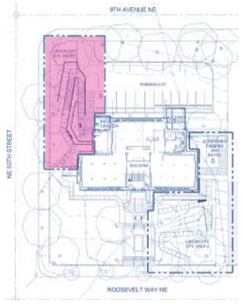
SWIFT COMPANY LLC

3

SPL UNIVERSITY BRANCH | SITE ADA OPPORTUNITIES

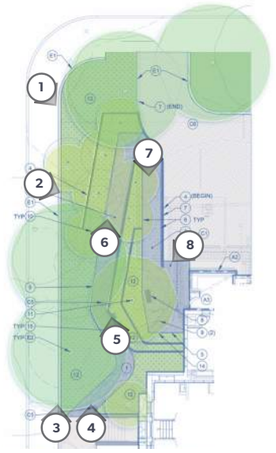
SW SITE AREA - NE 50TH ST ACCESS

KEY MAP



LEGEND

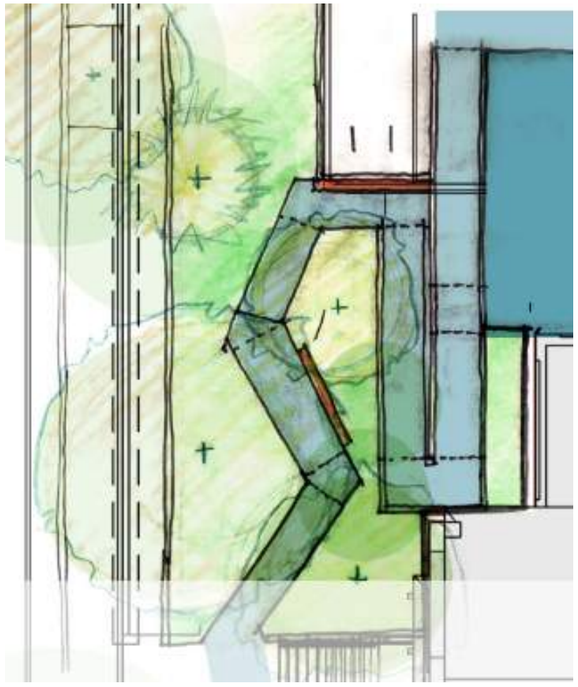
X PERSPECTIVEVIEWS

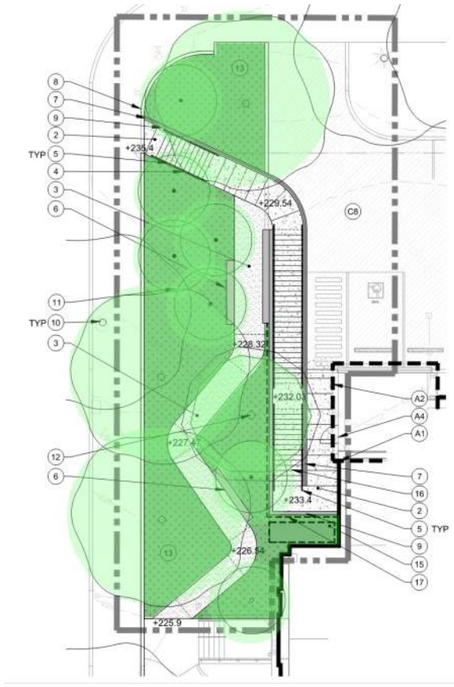


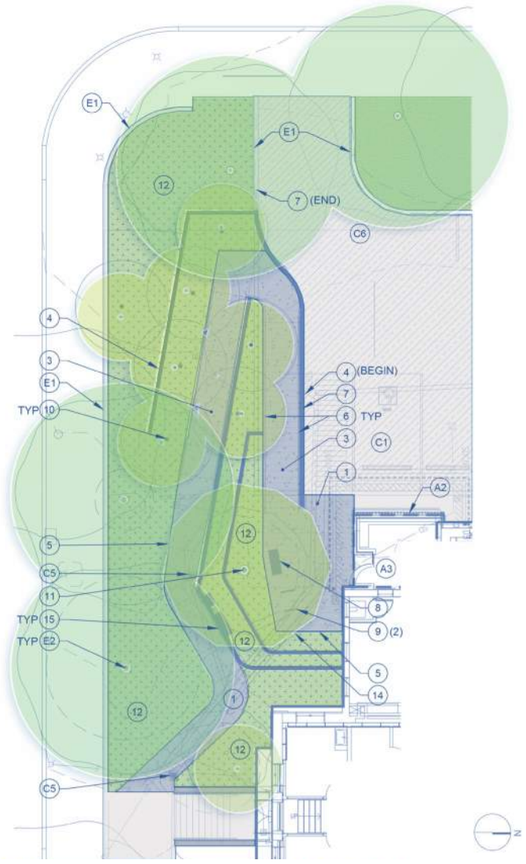
NORTH ELEVATION

SWIFT COMPANY LLC

SW SITE AREA - NE 50TH ST ACCESS - DESIGN EVOLUTION







CURRENT SCHEME ADVANTAGES:

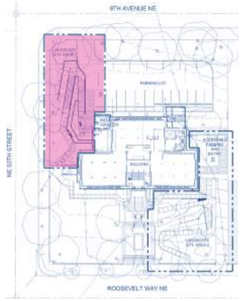
- Pathway trajectory minimizes impact on existing trees.
- Inviting and accessible sloped walk segment starting at mid-block sidewalk
- Terraced walls to reduce individual wall height and eliminate need for guardrail.
- Additional stepped walls to open up the space and make the pathway feel safer and less constrained.
- Harmonized relationship of upper plaza to architectural expansion.

SPL UNIVERSITY BRANCH | SITE ADA OPPORTUNITIES

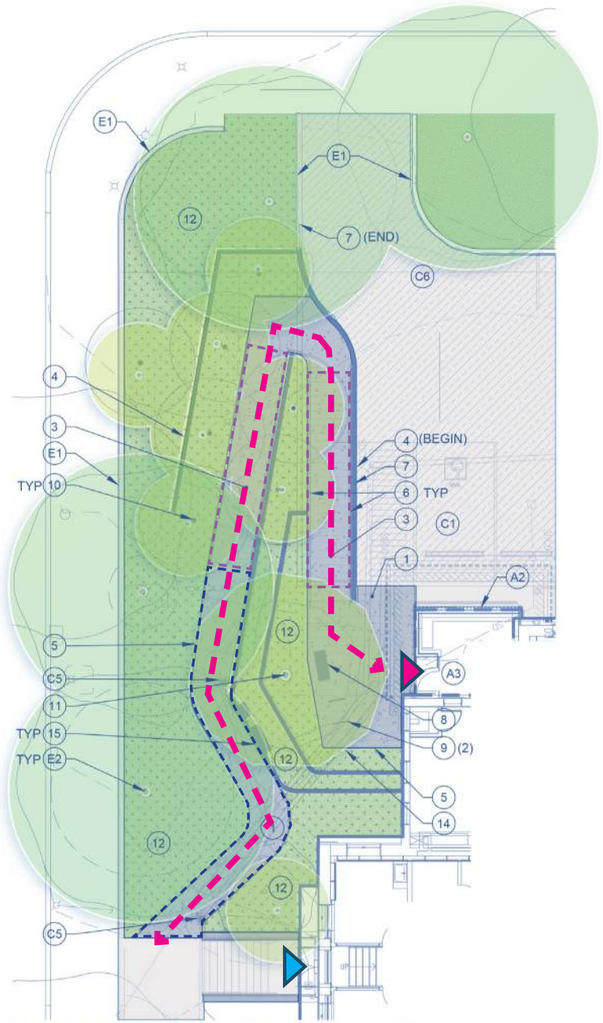
LEGEND

- BUILDING ENTRIES
- ACCESSIBLE BUILDING ENTRIES
- ADA ACCESS ROUTE
- ADA ACCESSABLE RAMP
- SLOPED WALK

KEY MAP



SITE PLAN - NE 50TH ST ACCESS



1 LANDSCAPE MATERIALS PLAN AREA 1

SCALE: 1" = 10'-0"

SITE MATERIAL AND LAYOUT NOTES:

PLANT LEGEND:

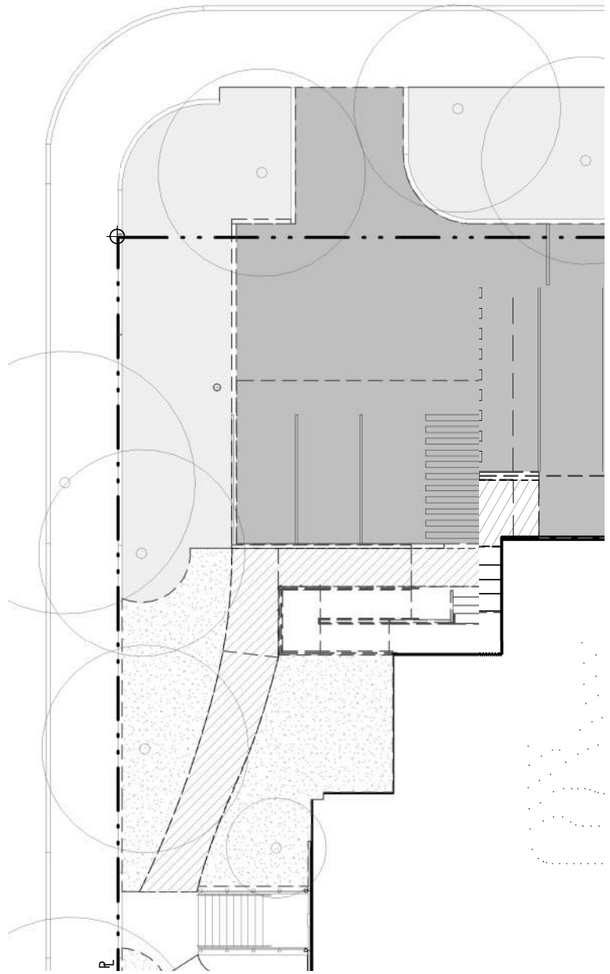
	QTY		QTY
SMALL SHADE TREE OPTIONS:	7	SHRUB AND GROUNDCOVER OPTIONS: GAULTHERIA SHALLON	2,529 SF

0 5' 10' 20'

1" = 10'-0"

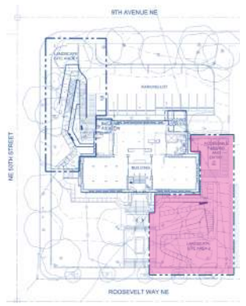
N

EXISTING - NE 50TH ST ACCESS



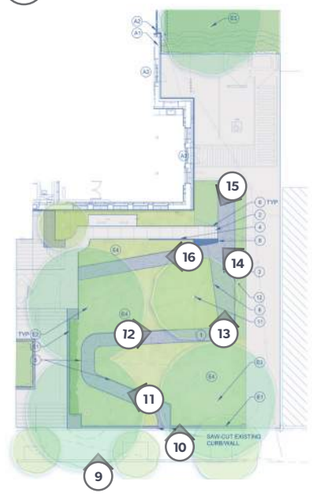
NE SITE AREA - ROOSEVELT WAY NE ACCESS

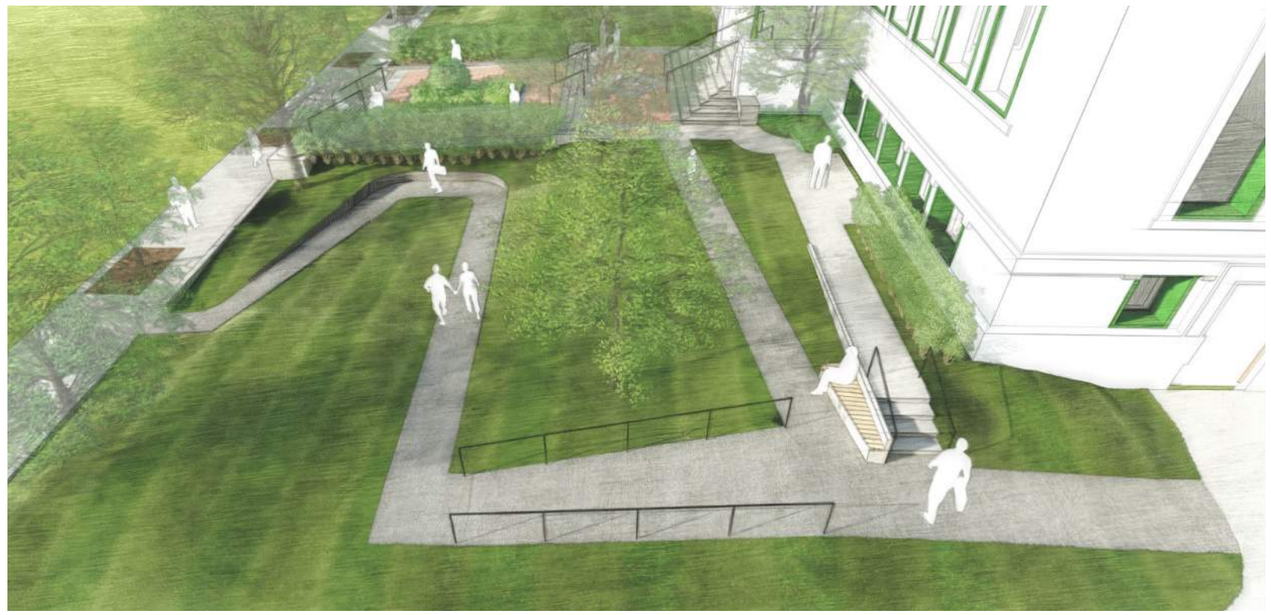
KEY MAP



LEGEND

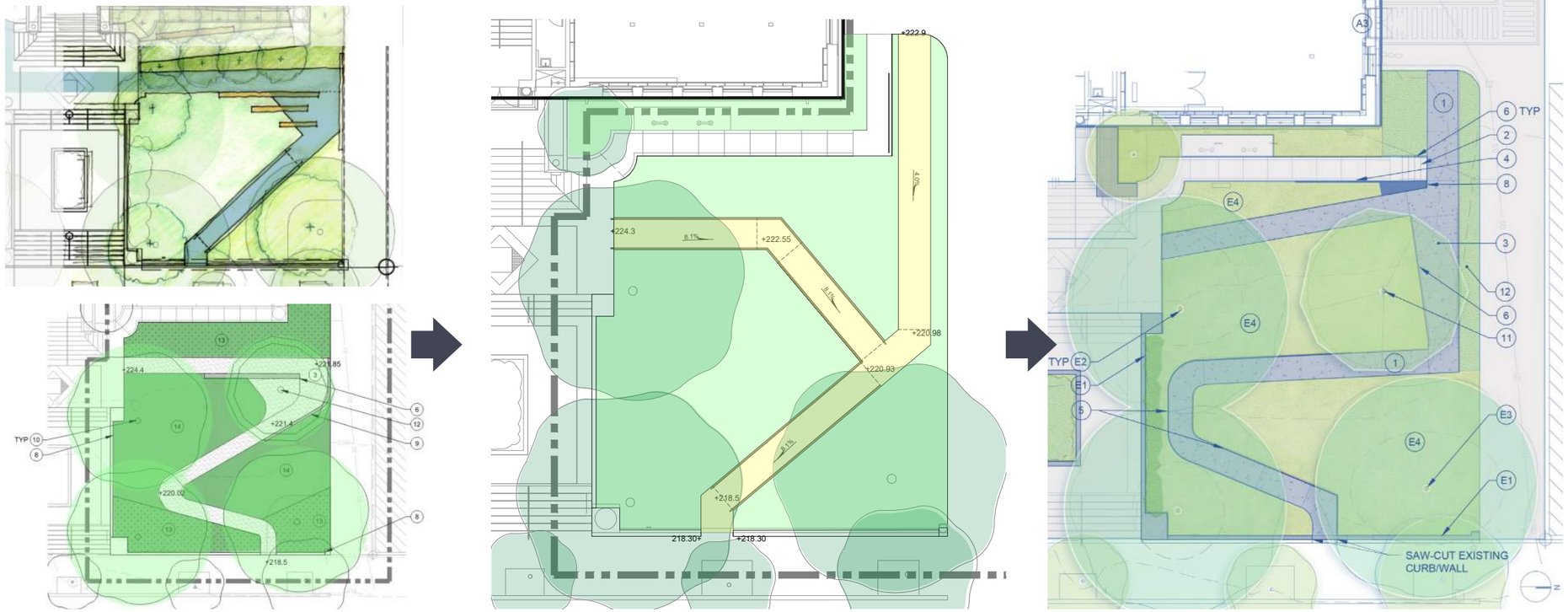
X PERSPECTIVE VIEWS





SOUTH ELEVATION

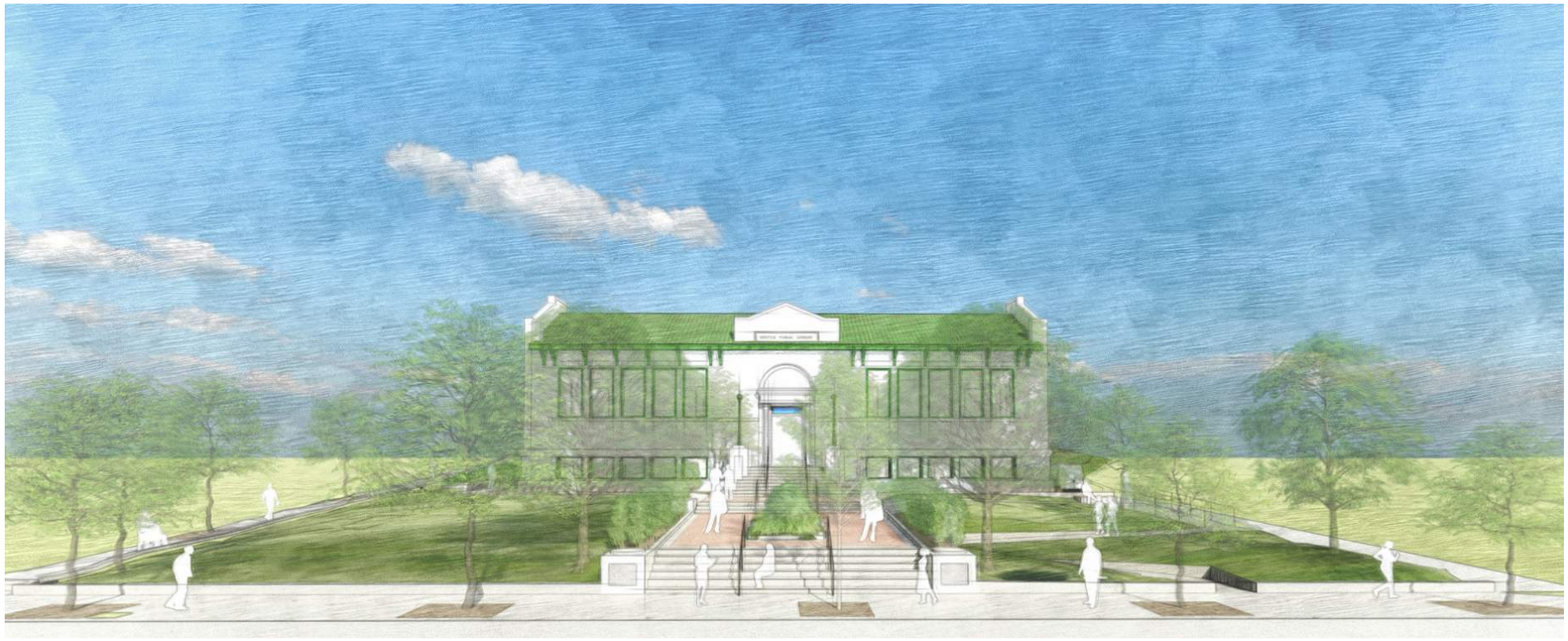
NE SITE AREA - ROOSEVELT WAY NE ACCESS - DESIGN EVOLUTION



CURRENT SCHEME ADVANTAGES:

- Pathway trajectory minimizes impact on existing trees.
- Ramp section with rails location minimizes impact on east elevation to maintain symmetry.
- Sloped walkways make up most of the grade change - gradual and easier to navigate.
- Stair relocation makes site navigation more intuitive.
- ADA access from street to both lower level entry and to south pathway ADA improvements, connecting entire site.

EAST ELEVATION - FRONT LAWN

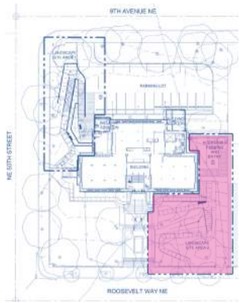


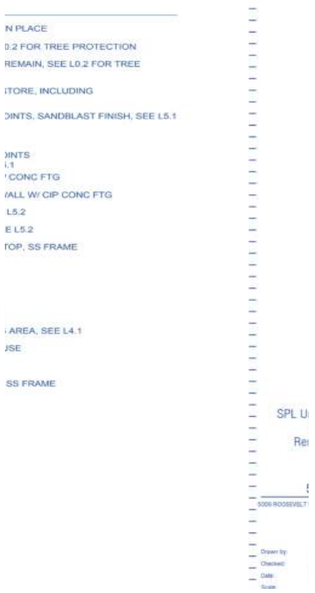
SPL UNIVERSITY BRANCH | SITE ADA OPPORTUNITIES

LEGEND

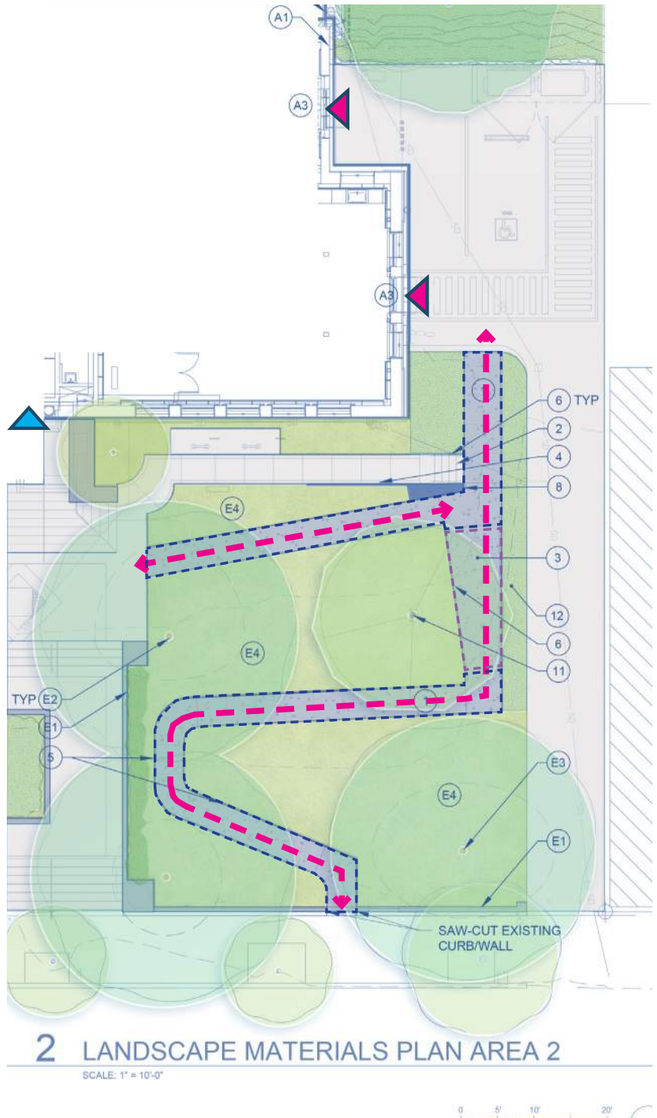
- BUILDING ENTRIES
- ACCESSIBLE BUILDING ENTRIES
- ADA ACCESS ROUTE
- ADA ACCESSABLE RAMP
- SLOPED WALK

KEY MAP



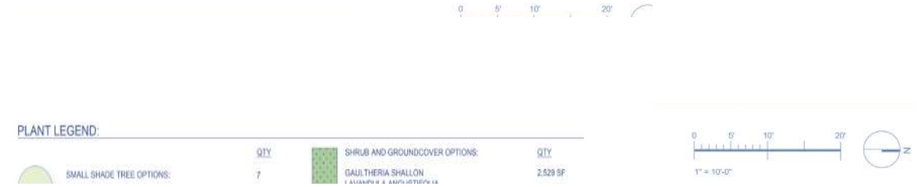


SITE PLAN - ROOSEVELT WAY NE ACCESS

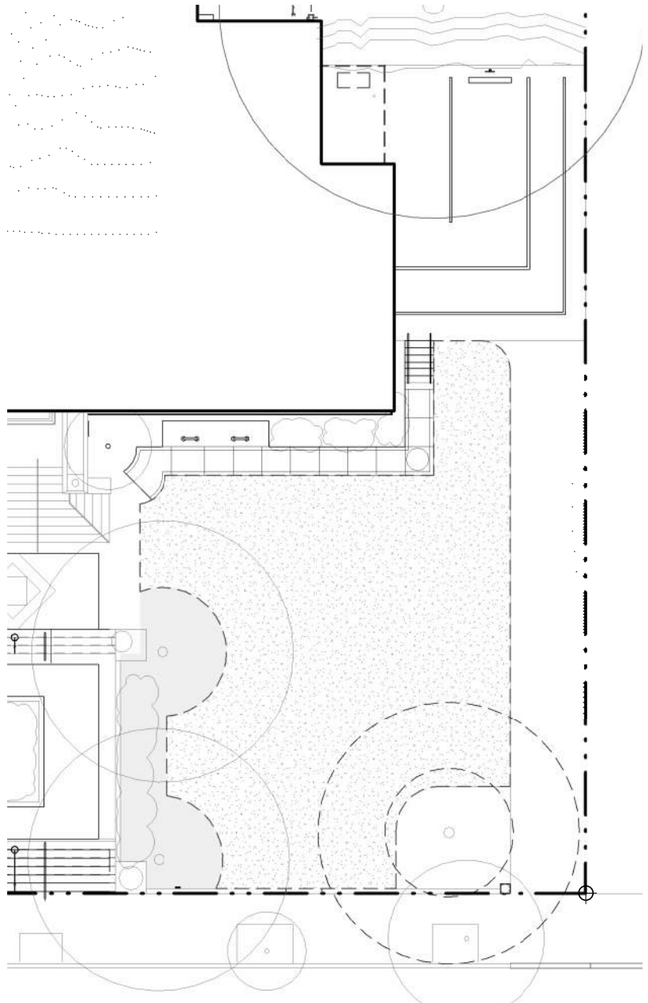


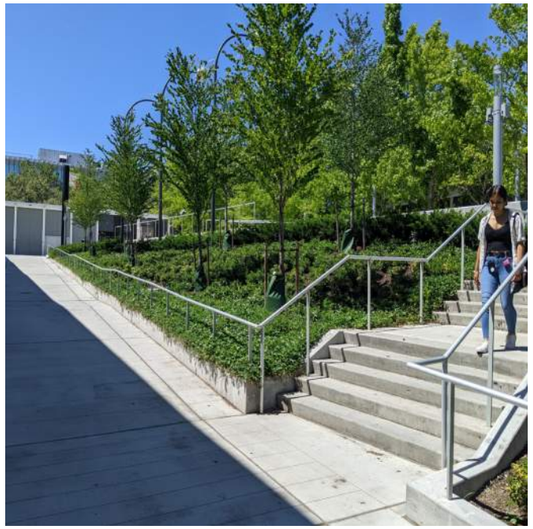
2 LANDSCAPE MATERIALS PLAN AREA 2

SCALE: 1" = 10'-0"



EXISTING - ROOSEVELT WAY NE ACCESS





Due to the negotiation of significant grade changes throughout the site, retaining walls will be required in order to provide improved universal accessibility. Retaining walls will designed to blend as much as possible into the site and be light in their visual impact. Planting will be used in order to minimize visual impact by screening walls where possible.

Concrete walls provide a simple, neutral, solid expression that fits with existing elements.

Although more contemporary, steel walls also provide simple, neutral expressions that allow for more area for planting and negotiation of grading in areas where horizontal space is limited.

SITE MATERIALS

APPENDIX
BUILDING PERMIT ARBORIST REPORT (06.21.23)

Tree Solutions Inc
Consulting Arborists

Project No. TS - 8456

Arborist Report

To:	SHKS Architects c/o Matt Inpanbutr
Site:	University Branch Library - 5041 Roosevelt Way NE
Re:	Tree Inventory
Date:	June 21, 2023
Project Arborist:	George White, ISA Certified Arborist #PN-8908A ISA Qualified Tree Risk Assessor
Reviewed By:	Scott Baker, Registered Consulting Arborist #414 ISA Board Certified Master Arborist #PN- 0670B ISA Qualified Tree Risk Assessor
Referenced Documents:	Tree and Plant Protection Plan L0.2 (Swift Company LLC, 06.23.2023)
Attached:	Table of Trees Tree Site Map

Summary

I inventoried and assessed 17 trees on this lot. Based on city of Seattle Municipal Code (SMC), trees measuring 6-inches or greater in diameter at standard height (DSH) are required to be assessed for development projects. I tagged each tree with an aluminum tree tag. Tree identifier corresponds to the number on each tag.

Of the trees assessed, two met the exceptional tree criteria outlined in the Seattle Director's Rule 16-2008.

No exceptional tree groves were found on-site. The city defines an exceptional grove as eight or more trees each with a diameter measuring 12-inches or greater with continuously overlapping canopies.

There were eight adjacent trees that required documentation for this property. Trees on neighboring properties were documented if they appeared to be greater than 6-inches diameter and their driplines extended over the property line. All trees on adjacent properties were estimated from the subject site or public property such as the adjacent right-of-way. I used an alphabetical tree identifier for trees off-site.

Out of the eight off-site trees, seven are located in the Right-of-Way (ROW) and are under the jurisdiction of the Seattle Department of Transportation (SDOT). Removal or significant pruning of any

SDOT tree will require a permit. SDOT tree numbers are included in the attached Table of Trees and Site Map, but these trees will be referenced in this report using our alphabetical identifiers.

Assignment and Scope of Work

This report documents the visit by George White of Tree Solutions Inc. on April 15th, 2022, to the above referenced site. We were asked to complete a tree inventory and assessment by Matt Inpanbutr of SHKS Architects for project planning purposes.

Observations and Discussion

Site

The 32,000 square foot site fronts Roosevelt Way NE in the University District neighborhood of Seattle. A public library building, and parking lot currently exist on-site.

Understory vegetation consists of a managed landscape of turf grass and small ornamental shrubs.

The soil across the site appears somewhat stripped and compact as a result of consistently removing organic debris from the landscape using rakes and leaf blowers. In a few instances this practice has exposed surface roots (Photo 1). The addition of woodchip mulch across the root zones of these trees would improve growing conditions.

Proposed Plans

The most recent plans propose interior renovations to the existing building, a small addition to the northwest corner of the building, A new concrete path south of the building, and a new ADA access ramp in the northeast corner of the site.

Trees

There are a variety of ornamental tree species on site including Sawara cypress (*Chamaecyparis pisifera*), Lawson cypress (*Chamaecyparis lawsonia*), copper beech (*Fagus sylvatica*), saucer magnolia (*Magnolia x soulangiana*), European white birch (*Betula pendula*), and flowering plum (*Prunus cerasifera*).

There is a dead Lawson cypress immediately adjacent to tree 269. This tree should be removed or reduced to a 20-foot wildlife snag before it becomes unstable due to decay.

Trees 267, 277, and 282 are European white birches, in various stages of decline due to a bronze birch borer (*Agrilus anxious*) infestation. Bronze birch borer (BBB) is a common pest that is affecting birches citywide. BBB generally causes the trees to die back slowly from the top down. There are insecticide treatments available to prevent further infestation, but they must be combined with other plant healthcare strategies such as mulching and supplemental irrigation to be successfully implemented. Out of these three trees, tree 267 is the most affected and is very unlikely to recover (Photo 2).

Tree 280 is a flowering plum with a prominent girdling root (Photo 3). This root should be cut using a hammer and chisel to prevent future issues. If left unchecked, this root can lead to the eventual decline of the tree.

Tree 283 is an exceptional copper beech located on the north side of the library building. The roots of this tree are intwined in the adjacent rockery (Photo 4). The rockery must remain in place if this tree is to be retained.

Off-site tree species include flowering cherry (*Prunus serrulata*), sycamore maple (*Acer pseudoplatanus*), and green ash (*Fraxinus pennsylvanica*).

I have included an annotated survey of the site to serve as the site map and attached a table of trees that has detailed information about each tree.

Discussion—Construction Impacts

Trees Proposed for Removal
One tree (tree 276) is currently proposed for removal because it conflicts with the proposed concrete path south of the existing building.

Tree Protection – Exceptional Trees
All exceptional trees must be protected in accordance with the standards outlined in SMC 25.11.050. This includes the establishment of a Tree Protection Area (TPA) using 6-foot-tall chain-link fencing placed at the outside edge of the tree's Critical Root Zone (CRZ). The CRZ is defined as the area within the dripline radius of the tree. Under specific circumstances, and with approval of the project arborist and the City of Seattle, the tree protection fencing may be reduced to the edge of the Inner Critical Root Zone (ICRZ). The ICRZ is defined as the inner half of the dripline radius. Impacts to the Outer Critical Root Zone (ORCZ- the outer half of the dripline radius) must not exceed one third of the total OCRZ area. The TPA may also be reduced in circumstances where existing hardscapes, foundations, retaining walls or other obstructions clearly confine the tree's roots to a specific area.

No excavation, grading, materials storage, machine, or vehicle access is permitted within the TPA of a retained tree without approval of the project arborist. Under no circumstances are these activities permitted within the IRCZ of a retained exceptional tree.

Tree 282
Tree 282 is an exceptional European white birch located in the northwest corner of the site that is expected to be impacted by proposed construction. A new ADA ramp is proposed to be constructed approximately 14 feet south of this tree within its OCRZ. Tree protection fencing shall be placed at the edge of this proposed path on the south side of the tree. The remainder of the tree protection fencing shall be placed at the outer edge of the CRZ (dripline), or at the edge of existing hardscapes (the existing sidewalk to the east and existing alley to the north).

A small grade cut will be required to install the new ADA ramp. Any excavation for the proposed ramp located within the CRZ (dripline) of tree 282 shall be conducted using the following alternative excavation protocol:

- Use hydro-excavation or pneumatic excavation to cut a trench at the limits of excavation to the depth of the proposed grade cut.
- Use a sharp reciprocating saw or hand saw to cut all exposed roots cleanly.

- Once all exposed roots have been cut, the remainder of the excavation can be conducted traditionally.
- Cut and exposed roots must be immediately covered with soil, wet jute, or plastic sheeting to prevent desiccation until they are backfilled.

Tree 283
Tree 283 is an exceptional copper beech located northeast of the existing building. A small addition to the existing structure, and a trash enclosure are proposed within the CRZ of this tree. The existing parking lot, which extends into the CRZ is also proposed to be rubblelized and resurfaced at a slightly higher grade.

Tree 283 is growing in a confined space which significantly limits the extent of the tree's actual root zone. The roots are generally limited by the existing rockery to the east, the existing foundation to the south, and the compacted soils which support the existing parking lot to the west. Because of the unique growing conditions of tree 283, the tree protection fencing may be placed closer to the tree than what is generally permitted under SMC 25.11.050.

Tree protection fencing around tree 283 shall be installed at the following locations:

- North side: at the north property line.
- East side: at the base of the existing rockery.
- South side: at the edge of the existing building/existing hardscape.
- West side: at the prosed edge of the resurfaced parking lot approximately 15 feet west of the tree).
- A portion of the CRZ extends over a raised planter north of the parking lot. This portion of the CRZ must be protected at the dripline edge.

A small addition to the existing building is proposed approximately 17 feet south of tree 283. The addition will be constructed as a slab-on-grade so as to minimize any below-ground impacts. While the northern edge of this addition sits at the very edge of the tree 283's ICRZ, its footprint is not expected to extend past the edge of the existing hardscape present in that area. In my opinion, the slab foundation can be constructed in the proposed location without measurable impact to the tree's root system and overall health.

Construction of the proposed addition will likely require access to the TPA. Any work that is proposed to occur within the tree protection fencing must be coordinated with the project arborist. Depending on the work conducted, arborist monitoring may be required. Soil protection consisting of a 6-inch layer of arborist woodchip mulch installed before work is conducted within the tree protection area. If machine access is required, half inch plywood, plastic mats, or steel plates must be laid on top of the 6-inch mulch layer to dissipate the load and prevent soil compaction.

The existing parking lot extends into the CRZ of tree 283 and is proposed for demolition and re-surfacing. The existing asphalt surface will be rubblized and covered with approximately 2 feet of fill which will then be asphalted to create the new surface. A small concrete retaining wall is proposed at the edge of the new fill (approximately 15.5 feet west of tree 283) and will require approximately 6 inches of excavation. The excavation for the new retaining wall is just outside of the IRCZ and shall be

conducted by hand or pneumatic excavation. The project arborist should observe this work to document any roots exposed by this excavation.

Existing hardscapes located within the tree protection fencing of tree 183 shall remain in place for the duration of the project as soil protection. Once the parking lot construction is concluded, those unnecessary hardscapes should be demolished and removed to increase permeability. I recommend installing a 4-inch layer of arborist woodchip mulch over this area to improve growing conditions once the asphalt has been removed.

Tree Protection - Additional Trees
All other retained trees should be protected with 6-foot-tall chain-link fencing placed at their dripline edge, at the edges of existing hardscapes, or at the specific limits of disturbance described below prior to construction. Trees in a group shall be protected as a group at their shared dripline edge. I recommend installing a 4-inch layer of arborist woodchip mulch within the tree protection area of each retained tree.

Trees 273-275, and 279-281
Trees 273-275, and 279-281 are all on-site trees which have grade cuts proposed within their driplines related to the construction of new paths/utilities. These trees shall be protected at the limits of disturbance (inside edge of grade cut) with tree protection fencing. The remainder of the fencing shall be placed at the dripline edge or edge of existing hardscapes. All grade cuts conducted within the dripline of any of these trees shall be conducted using the same alternative excavation protocol as described for tree 283. In my opinion, these trees can be successfully retained if protected in the manner described in this report.

Tree Protection - ROW Trees
Trees B-H are located in the ROW and are therefore regulated by SDOT. All unpaved areas within the dripline of the tree must be fenced off per the Seattle Standard Plans for Municipal Construction No. 132a and 132b. Removal or major pruning of any SDOT tree will require an urban forestry permit issued by SDOT.

Tree Protection – Mulch and Supplemental Irrigation
The addition of mulch and provision of supplemental irrigation are highly recommended to alleviate the effects of construction stress on retained trees.

A four-inch layer of uncomposted, woody mulch (arborist woodchips) should be installed within the TPA of each retained tree. Mulch should be kept back 6-inches from the base of tree trunks. Additional mulch depth is recommended where work within the TPA is expected.

Supplemental irrigation should be applied to retained trees three to four times per month during the hot, dry summer months (May-September). Each irrigation event should cover the entire TPA and should wet the soil to a depth of 8 inches below the mulch level. The soil should be inspected after each irrigation event using a moisture-meter, soil sample probe, or hand trowel to insure proper infiltration. Irrigation rates and volumes should then be adjusted as necessary.

Mulch and irrigation should be prioritized for trees that are expected to be impacted by proposed grade cuts.

Additional tree protection specifications can be found in Appendix F.

Recommendations

- Install tree protection fencing consisting of 6-foot-tall chain-link fencing for each retained tree at the locations described in this report.
- Any excavation conducted within the dripline of the retained trees shall be conducted using the alternative excavation protocol described in this report.
- Any work requiring TPA access shall be coordinated with the project arborist. Depending on the scope of the work, extra soil protection and arborist monitoring may be required.
- All pruning should be conducted by an ISA certified arborist and following current and applicable ANSI A300 specifications.[1]
- Any tree work including pruning and removal must be conducted by a Registered Tree Service provider per SMC.25.11.095.
- Obtain urban forestry permits from the Seattle Department of Transportation for the removal or pruning of any street trees.
- Add a 4-inch layer of arborist woodchip mulch to the TPAs of retained trees to improve growing conditions and alleviated construction stress.
- Remove or reduce the dead tree adjacent to tree 269.
- Consider treatment of trees 277 and 282 for bronze birch borer.
- Use a chisel to sever the prominent girdling root at the base of tree 280.

Respectfully submitted,

George White,
Consulting Arborist

[1] Accredited Standards Committee A300 (ASC 300). ANSI A300 (Part 1) Tree, Shrub, and Other Woody Plant Management – Standard Practices (Pruning). Londonderry: Tree Care Industry Association, 2017.

Appendix A **Glossary**

ANSI A300: American National Standards Institute (ANSI) standards for tree care

DBH or DSH: diameter at breast or standard height; the diameter of the trunk measured 54 inches (4.5 feet) above grade (Council of Tree and Landscape Appraisers 2019)

ISA: International Society of Arboriculture

Regulated Tree: A tree required by municipal code to be identified in an arborist report.

Visual Tree Assessment (VTA): method of evaluating structural defects and stability in trees by noting the pattern of growth. Developed by Claus Mattheck (Harris, *et al* 1999)

Appendix B **References**

Accredited Standards Committee A300 (ASC 300). ANSI A300 (Part 1) Tree, Shrub, and Other Woody Plant Management – Standard Practices (Pruning). Londonderry: Tree Care Industry Association, 2017.

Council of Tree and Landscape Appraisers, Guide for Plant Appraisal, 10th Edition, Second Printing. Atlanta, GA: The International Society of Arboriculture (ISA), 2019.

Mattheck, Claus and Helge Breloer, The Body Language of Trees.: A Handbook for Failure Analysis. London: HMSO, 1994.

Seattle Municipal Code 25.09.070. Standards for Trees and Vegetation in Critical Areas.

Seattle Municipal Code 25.11.050. General Provisions for Exceptional Trees.

Sugimura, D.W. "DPD Director's Rule 16-2008". Seattle, WA, 2009

Appendix C **Photographs**

Photo 1. Exposed surface roots at the base of tree 278.

Photo 2. Tree 267, a birch with significant dieback from Bronze Birch Borer (Outlined in red).

Photo 3. A prominent girdling root at the base of tree 280 (Indicated by red arrow).

Photo 4. Roots from tree 283 that have become intwined in the existing rockery

Appendix D **Assumptions & Limiting Conditions**

1 Consultant assumes that the site and its use do not violate, and is in compliance with, all applicable codes, ordinances, statutes, or regulations.

2 The consultant may provide a report or recommendation based on published municipal regulations. The consultant assumes that the municipal regulations published on the date of the report are current municipal regulations and assumes no obligation related to unpublished city regulation information.

3 Any report by the consultant and any values expressed therein represent the opinion of the consultant, and the consultant's fee is in no way contingent upon the reporting of a specific value, a stipulated result, the occurrence of a subsequent event, or upon any finding to be reported.

4 All photographs included in this report were taken by Tree Solutions, Inc. during the documented site visit, unless otherwise noted. Sketches, drawings and photographs (included in, and attached to, this report) are intended as visual aids and are not necessarily to scale. They should not be construed as engineering drawings, architectural reports or surveys. The reproduction of any information generated by architects, engineers or other consultants and any sketches, drawings or photographs is for the express purpose of coordination and ease of reference only. Inclusion of such information on any drawings or other documents does not constitute a representation by the consultant as to the sufficiency or accuracy of the information.

5 Unless otherwise agreed, (1) information contained in any report by consultant covers only the items examined and reflects the condition of those items at the time of inspection; and (2) the inspection is limited to visual examination of accessible items without dissection, excavation, probing, climbing, or coring.

6 These findings are based on the observations and opinions of the authoring arborist, and do not provide guarantees regarding the future performance, health, vigor, structural stability or safety of the plants described and assessed.

7 Measurements are subject to typical margins of error, considering the oval or asymmetrical cross-section of most trunks and canopies.

8 Tree Solutions did not review any reports or perform any tests related to the soil located on the subject property unless outlined in the scope of services. Tree Solutions staff are not and do not claim to be soils experts. An independent inventory and evaluation of the site's soil should be obtained by a qualified professional if an additional understanding of the site's characteristics is needed to make an informed decision.

9 Our assessments are made in conformity with acceptable evaluation/diagnostic reporting techniques and procedures, as recommended by the International Society of Arboriculture.

Appendix E **Methods**

Measuring

I measured the diameter of each tree at 54 inches above grade, diameter at standard height (DSH). If a tree had multiple stems, I measured each stem individually at standard height and determined a single-stem equivalent diameter by using the method outlined in the city of Seattle Director's Rule 16-2008 or the Guide for Plant Appraisal, 10th Edition Second Printing published by the Council of Tree and Landscape Appraisers. A tree is regulated based on this single-stem equivalent diameter value. Because this value is calculated in the office following field work, some trees in our data set may have diameters smaller than 6 inches. These trees are included in the tree table for informational purposes only and not factored into tree totals discussed in this report.

Tagging

I tagged each tree with a circular aluminum tag at eye level. I assigned each tree a numerical identifier on our map and in our tree table, corresponding to this tree tag. I used alphabetical identifiers for trees off-site.

Evaluating

I evaluated tree health and structure utilizing visual tree assessment (VTA) methods. The basis behind VTA is the identification of symptoms, which the tree produces in reaction to a weak spot or area of mechanical stress. A tree reacts to mechanical and physiological stresses by growing more vigorously to re-enforce weak areas, while depriving less stressed parts. An understanding of the uniform stress allows the arborist to make informed judgments about the condition of a tree.

Rating

When rating tree health, I took into consideration crown indicators such as foliar density, size, color, stem and shoot extensions. When rating tree structure, I evaluated the tree for form and structural defects, including past damage and decay. Tree Solutions has adapted our ratings based on the Purdue University Extension formula values for health condition (*Purdue University Extension bulletin FNR-473-W - Tree Appraisal*). These values are a general representation used to assist arborists in assigning ratings.

Health

Excellent - Perfect specimen with excellent form and vigor, well-balanced crown. Normal to exceeding shoot length on new growth. Leaf size and color normal. Trunk is sound and solid. Root zone undisturbed. No apparent pest problems. Long safe useful life expectancy for the species.

Good - Imperfect canopy density in few parts of the tree, up to 10% of the canopy. Normal to less than ¾ typical growth rate of shoots and minor deficiency in typical leaf development. Few pest issues or damage, and if they exist, they are controllable, or tree is reacting appropriately. Normal branch and stem development with healthy growth. Safe useful life expectancy typical for the species.

Fair - Crown decline and dieback up to 30% of the canopy. Leaf color is somewhat chlorotic/necrotic with smaller leaves and "off" coloration. Shoot extensions indicate some stunting and stressed growing conditions. Stress cone crop clearly visible. Obvious signs of pest problems contributing to lesser condition, control might be possible. Some decay areas found in main stem and branches. Below average safe useful life expectancy

Poor - Lacking full crown, more than 50% decline and dieback, especially affecting larger branches. Stunting of shoots is obvious with little evidence of growth on smaller stems. Leaf size and color

reveals overall stress in the plant. Insect or disease infestation may be severe and uncontrollable. Extensive decay or hollows in branches and trunk. Short safe useful life expectancy.

Structure

Excellent - Root plate undisturbed and clear of any obstructions. Trunk flare has normal development. No visible trunk defects or cavities. Branch spacing/structure and attachments are free of any defects.

Good - Root plate appears normal, with only minor damage. Possible signs of root dysfunction around trunk flare. Minor trunk defects from previous injury, with good closure and less than 25% of bark section missing. Good branch habit; minor dieback with some signs of previous pruning. Codominant stem formation may be present, requiring minor corrections.

Fair - Root plate reveals previous damage or disturbance. Dysfunctional roots may be visible around the main stem. Evidence of trunk damage or cavities, with decay or defects present and less than 30% of bark sections missing on trunk. Co-dominant stems are present. Branching habit and attachments indicate poor pruning or damage, which requires moderate corrections.

Poor - Root plate disturbance and defects indicate major damage, with girdling roots around the trunk flare. Trunk reveals more than 50% of bark section missing. Branch structure has poor attachments, with several structurally important branches dead or broken. Canopy reveals signs of damage or previous topping or lion-tailing, with major corrective action required.

Appendix F **Tree Protection Specifications**

The following is a list of protection measures that must be employed before, during and after construction to ensure the long-term viability of retained trees.

1. **Project Arborist:** The project arborists shall at minimum have an International Society of Arboriculture (ISA) Certification and ISA Tree Risk Assessment Qualification.
2. **Tree Protection Area (TPA):** TPA is the area within the dripline of all retained trees. The TPA for non-exceptional trees may be reduced to within the dripline based on the recommendation of the project arborist. The TPA for exceptional trees may be reduced to within the dripline based on the recommendation of the project arborist and approval by the City of Seattle.
3. **Tree Protection Fencing:** Tree protection fencing shall consist of 6-foot tall chain-link fencing installed at the edge of the TPA as approved by the project arborist. Fence posts shall be anchored into the ground or bolted to existing hardscape surfaces.
    a. Where trees are being retained as a group the fencing shall encompass the entire area including all landscape beds or lawn areas associated with the group.
    b. Per arborist approval, TPA fencing may be placed at the edge of existing hardscape within the TPA to allow for staging and traffic.
    c. Where work is planned within the TPA, install fencing at edge of TPA and move to limits of disturbance at the time that the work within the TPA is planned to occur. This ensures that work within the TPA is completed to specification.
    d. Where trees are protected at the edge of the project boundary, construction limits fencing shall be incorporated as the boundary of tree protection fencing.
4. **Access Beyond Tree Protection Fencing:** In areas where work such as installation of utilities is required within the TPA, a locking gate will be installed in the fencing to facilitate access. The project manager or project arborist shall be present when tree protection areas are accessed.
5. **Tree Protection Signage:** Tree protection signage shall be affixed to fencing every 20 feet. Signage shall be fluorescent, at least 2’ x 2’ in size. Signage must include all information in the PDF located here: http://www.seattle.gov/Documents/Departments/SDCI/Codes/TreeProtectionAreaSign.pdf in addition to the contact information for the project manager and instructions for gaining access to the area.
6. **Filter / Silt Fencing:** Filter / silt fencing within, or at the edge of the TPA of retained trees shall be installed in a manner that does not sever roots. Install so that filter / silt fencing sits on the ground and is weighed in place by sandbags or gravel. Do not trench to insert filter / silt fencing into the ground.
7. **Monitoring:** The project arborist shall monitor all ground disturbance at the edge of or within the TPA.
8. **Soil Protection:** Retain existing paved surfaces within or at the edge of the TPA for as long as possible. No parking, foot traffic, materials storage, or dumping (including excavated soils) are allowed within the TPA. Heavy machinery shall remain outside of the TPA. Access to the tree protection area will be granted under the supervision of the project arborist. If project arborist allows, heavy machinery can enter the area if soils are protected from the load. Acceptable methods of soil protection include placing 3/4-inch plywood over 4 to 6 inches of wood chip mulch or use of AlturnaMats® (or equivalent product approved by the project arborist). Compaction of soils within the TPA must not occur.
9. **Soil Remediation:** Soil compacted within the TPA of retained trees shall be remediated using pneumatic air excavation according to a specification produced by the project arborist.

10. **Canopy Protection**: Where fencing is installed at the limits of disturbance within the TPA, canopy management (pruning or tying back) shall be conducted to ensure that vehicular traffic does not damage canopy parts. Exhaust from machinery shall be located 5 feet outside the dripline of retained trees. No exhaust shall come in contact with foliage for prolonged periods of time.
11. **Duff/Mulch:** Apply 6 inches of arborist wood chip mulch or hog fuel over bare soil within the TPA to prevent compaction and evaporation. TPA shall be free of invasive weeds to facilitate mulch application. Keep mulch 1 foot away from the base of trees and 6 inches from retained understory vegetation. Retain and protect as much of the existing duff and understory vegetation as possible.
12. **Excavation:** Excavation done within the TPA shall use alternative methods such as pneumatic air excavation or hand digging. If heavy machinery is used, use flat front buckets with the project arborist spotting for roots. When roots are encountered, stop excavation and cleanly sever roots. The project arborist shall monitor all excavation done within the TPA.
13. **Fill:** Limit fill to 1 foot of uncompacted well-draining soil, within the TPA of retained trees. In areas where additional fill is required, consult with the project arborist. Fill must be kept at least 1 foot from the trunks of trees.
14. **Root Pruning:** Limit root pruning to the extent possible. All roots shall be pruned with a sharp saw making clean cuts. Do not fracture or break roots with excavation equipment.
15. **Root Moisture:** Root cuts and exposed roots shall be immediately covered with soil, mulch, or clear polyethylene sheeting and kept moist. Water to maintain moist condition until the area is back filled. Do not allow exposed roots to dry out before replacing permanent back fill.
16. **Hardscape Removal:** Retain hardscape surfaces for as long as practical. Remove hardscape in a manner that does not require machinery to traverse newly exposed soil within the TPA. Where equipment must traverse the newly exposed soil, apply soil protection as described in section 8. Replace fencing at edge of TPA if soil exposed by hardscape removal will remain for any period of time.
17. **Tree Removal:** All trees to be removed that are located within the TPA of retained trees shall not be ripped, pulled, or pushed over. The tree should be cut to the base and the stump either left or ground out. A flat front bucket can also be used to sever roots around all sides of the stump, or the roots can be exposed using hydro or air excavation and then cut before removing the stump.
18. **Irrigation:** Retained trees with soil disturbance within the TPA will require supplemental water from June through September. Acceptable methods of irrigation include drip, sprinkler, or watering truck. Trees shall be watered three times per month during this time.
19. **Pruning:** Pruning required for construction and safety clearance shall be done with a pruning specification provided by the project arborist in accordance with American National Standards Institute ANSI-A300 2017 Standard Practices for Pruning. Pruning shall be conducted or monitored by an arborist with an ISA Certification.
20. **Plan Updates:** All plan updates or field modification that result in impacts within the TPA or change the retained status of trees shall be reviewed by the senior project manager and project arborist prior to conducting the work.
21. **Materials:** Contractor shall have the following materials on-site and available for use during work in the TPA:
    - **Sharp and clean bypass hand pruners**
    - **Sharp and clean bypass loppers**
    - **Sharp hand-held root saw**
    - **Reciprocating saw with new blades**
    - **Shovels**
    - **Trowels**
    - **Clear polyethylene sheeting**
    - **Burlap**
    - **Water**

LEGAL DESCRIPTION

THE WEST 180 FEET OF THE EAST 210 FEET OF TEH NORTH 160 FEET OF THE SOUTH 190 FEET OF TEH NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, TOWNSHIP 25 NORTH, RANGE 4 EAST, E.M., CITY OF SEATTLE, KING COUNTY, WASHINGTON.

(KING COUNTY ASSESSOR DESCRIPTION IS INCORRECT. NORTH LINE OF SUBJECT PROPERTY CALCULATED PER PLAT OF A.B. GRAHAM'S UNIVERSITY ADDITION TO THE CITY OF SEATTLE, RECORDED IN VOL. 17 OF PLATS, PG. 47, RECORDS OF KING COUNTY)

NOTES

1) NO TITLE RESEARCH PROVIDED AT THIS TIME. CALCULATED BOUNDARY MAY CHANGE UPON RECEIPT OF TITLE.
2) FIELD WORK CONDUCTED IN AUGUST, 2015.
3) BASIS OF BEARING: WASHINGTON STATE PLANE COORDINATE SYSTEM, NORTH ZONE (NAD83).
4) UNDERGROUND UTILITIES SHOWN HEREON, IF ANY, WERE DELINEATED FROM SURFACE EVIDENCE AND/OR UTILITY COMPANY RECORDS. CRITICAL LOCATIONS SHOULD BE VERIFIED PRIOR TO DESIGN AND CONSTRUCTION.
5) UNDERGROUND DRAINAGE LINES SHOWN PER DATA PROVIDED BY LPD ENGINEERING PLLC ON SEPT. 4, 2015.
6) ESTIMATED 1/2-FOOT CONTOURS IN WESTERN PARKING LOT SHOWN FOR ILLUSTRATIVE PURPOSES.

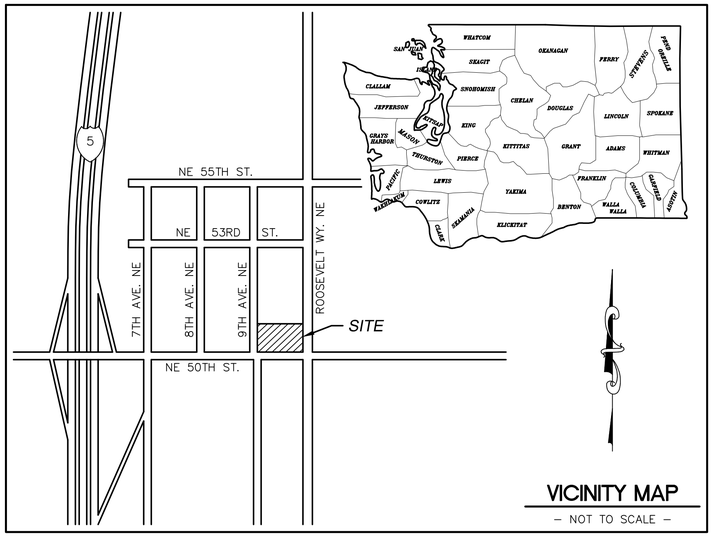
Tree Solutions
Tree Inventory

Arborist: GW

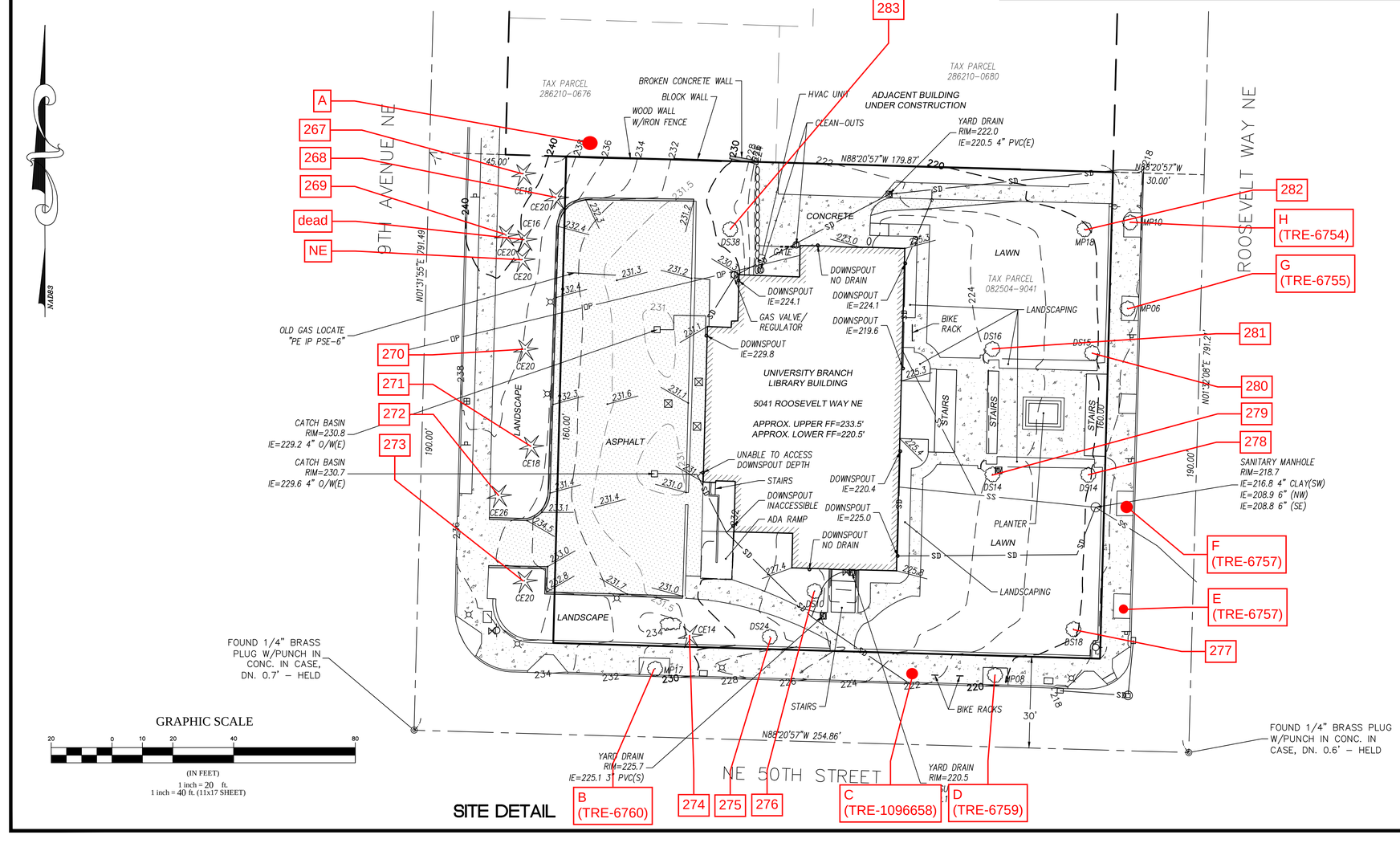
This map documents the site visit of GW of Tree Solutions Inc. on 4.7.2022. All regulated on-site trees were tagged and assigned a numerical identifier. All overhanging off-site trees that appeared to be of regulated size were assigned an alphabetical identifier. Off-site trees were not tagged. The approximate locations of regulated trees that did not appear on the provided survey are indicated with red circles. Trees on the provided survey that no longer exist are labeled "NE" for Not Existing.

●:Approximate location of regulated tree not found on survey

NE: Not Regulated



VICINITY MAP
– NOT TO SCALE –



SITE DETAIL

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.
1 inch = 40 ft. (11x17 SHEET)

LEGEND

- SUBJECT BOUNDARY LINE
- RIGHT-OF-WAY CENTERLINE
- RIGHT-OF-WAY LINE
- ADJACENT BOUNDARY LINE
- SECTIONAL BREAKDOWN LINE
- DP OVERHEAD POWER LINE
- UP BURIED POWER LINE
- G GAS LINE
- DT OVERHEAD TELEPHONE LINE
- UT BURIED TELEPHONE LINE
- W WATER LINE
- SS SANITARY SEWER
- SD STORM DRAIN
- DITCH LINE/FLOW LINE
- ROCK RETAINING WALL
- VEGETATION LINE
- CHAIN LINK FENCE
- WOOD FENCE
- X BARBED WIRE/WIRE FENCE

TRANSFORMER	FIRE HYDRANT
LIGHT STANDARD	GATE VALVE
POWER VAULT	WATER METER
UTILITY BOX	FIRE STAND PIPE
UTILITY POLE	CATCH BASIN, TYPE I
POLE GUY WIRE	CATCH BASIN, TYPE II
GAS VALVE	SIGN
GAS METER	BOLLARD
TELEPHONE VAULT	MAIL BOX
TELEPHONE RISER	234.21 SPOT ELEVATION

NOTE:
ALL ELEVATIONS SHOWN ARE ABOVE MEAN SEA LEVEL (AMSL) AND ARE REFERENCED TO THE NAVD88 DATUM.

TREE LEGEND

DECIDUOUS TREE
AL12 ← TRUNK DIAMETER (IN)
TYPE

EVERGREEN TREE
DF18
195.2
HEIGHT AGL IF MEASURED

AL=ALDER
MP=MAPLE
DS=DECIDUOUS
MA=MADRONA
OK=OAK
CH=CHERRY

CE=CEDAR
DF=DOUGLAS FIR
HE=HEMLOCK
PI=PINE
EVG=EVERGREEN

NOTE:
TREE DRIP LINES ARE NOT TO SCALE. TREE SYMBOLS REFERENCE TRUNK LOCATION ONLY. TRUNK DIAMETERS WERE APPROXIMATED AT 3.5' TO 4' ABOVE GROUND LEVEL. TREES SHOWN ARE FOR REFERENCE ONLY AND OTHER TREES AND VEGETATION MAY EXIST.

SITE INFORMATION

TAX LOT NUMBER	?082504-9041
SITE ADDRESS	5041 ROOSEVELT WAY NE SEATTLE, WA 98105
SITE CONTACT	MATT INPANBUTR
PHONE NUMBER	206-675-9151
ZONING	LR2 (CITY OF SEATTLE)
TOTAL LOT AREA	28,778± S.F.(0.66 AC.)

NAVD 88

BENCHMARK IS "SNV-004" BRASS CAP IN BACK OF SIDEWALK AT EAST SIDE OF ROOSEVELT WAY APPROX. 50 FEET NORTH OF CENTERLINE OF NE 55TH STREET. ELEV.= 202.58 FEET

SURVEY REFERENCE

1) RECORDS OF SURVEY, KING COUNTY RECORDING #'S 20150629900005, 20030123900003 AND 8703059008.
2) A.B. GRAHAM'S UNIVERSITY ADDITION TO THE CITY OF SEATTLE, RECORDED IN VOL. 17 OF PLATS, PG. 47, RECORDS OF KING CO.

CAUTION!

UNDERGROUND UTILITIES EXIST IN THE AREA AND UTILITY INFORMATION SHOWN MAY BE INCOMPLETE. STATE LAW REQUIRES THAT CONTRACTOR CONTACT THE ONE-CALL UTILITY LOCATE SERVICE AT LEAST 48 HOURS BEFORE STARTING ANY CONSTRUCTION.

1-800-424-5555

DUNCANSON
Company, Inc.
145 SW 155th Street, Suite 102
Seattle, Washington 98166
Phone 206.244.4141
Fax 206.244.4455

SHKS ARCHITECTS
1050 N 38TH STREET
SEATTLE, WA 98107

REVISIONS

NO.	DATE	DESCRIPTION	BY

SEATTLE PUBLIC LIBRARY
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FLD. CREW:	PN/KB
FLD. BOOK:	379/52
DRAWN BY:	JMB
JOB #:	15400
DATE:	9/10/15

JONATHAN MARLO DUNCANSON
STATE OF WASHINGTON
41277
REGISTERED
PROFESSIONAL LAND SURVEYOR
9/10/2015

SV1

1 OF 1

Tree Solutions Inc
Consulting Arborists

Table of Trees

5041 Roosevelt Way NE, Seattle, WA

Arborist: GW
Date of Inventory: 4/15/2022
Table Revised: 6/21/2023

DSH (Diameter at Standard Height) is measured 4.5 feet above grade, or as specified in the Guide for Plant Appraisal, 10th Edition , published by the Council of Tree and Landscape Appraisers.
DSH for multi-stem trees are noted as a single stem equivalent, which is calculated using the method defined in the Director's Rule 16-2008.
Letters are used to identify trees on neighboring properties with overhanging canopies.
Dripline is measured from the center of the tree to the outermost extent of the canopy.

							Dripline Radius (feet)							
Tree ID	**Scientific Name**	**Common Name**	**DSH** (inches)	**DSH Multistem**	**Health Condition**	**Structural Condition**	**N**	**E**	**S**	**W**	**Exceptional Threshold**	**Exceptional by Size**	**Notes**	**Proposed Action**
267	*Betula pendula*	European white birch	16.9		Poor	Good	25.7	23.7	15.7	16.7	*24.0*	-	Bronze birch borer infestation, dieback to 8"	Retain
268	*Chamaecyparis pisifera*	Sawara cypress	19.3		Good	Good	13.8	13.8	13.8	14.8	*26.9*	-	Codominant at 30 feet, 3 feet from retaining wall	Retain
269	*Chamaecyparis lawsoniana*	Lawson cypress	20.9		Good	Good	12.9	9.9	10.9	10.9	*30.0*	-	Corrected lean, sidewalk conflicts, adjacent to standing snag	Retain
270	*Chamaecyparis lawsoniana*	Lawson cypress	22.1		Good	Good	13.4	14.9	11.9	16.9	*30.0*	-	Codominant at 40 feet, 6 feet from retaining wall	Retain
271	*Chamaecyparis pisifera*	Sawara cypress	16.0		Good	Good	10.7	5.7	6.2	10.7	*26.9*	-	2 feet from sidewalk, evidence of sidewalk repair, seam from old wound at base with good reaction wood	Retain
272	*Chamaecyparis lawsoniana*	Lawson cypress	25.0		Good	Fair	13.5	12.0	13.0	14.0	*30.0*	-	Codominant with narrow union and included bark at 12 feet, 6 inches from sidewalk	Retain
273	*Thuja plicata*	Western redcedar	24.3		Good	Good	17.0	16.0	19.0	18.5	*30.0*	-	On top of retaining wall on north and east sides	Retain
274	*Chamaecyparis lawsoniana*	Lawson cypress	13.9		Good	Good	9.1	8.1	10.1	10.1	*30.0*	-	1 foot from retaining wall	Retain
275	*Fagus sylvatica*	European beech	23.6		Good	Good	24.0	23.0	26.0	28.0	*30.0*	-	Retaining wall at base, old stem removed at base	Retain
276	*Magnolia x soulangiana*	Saucer magnolia	12.2	7.7,9.5	Good	Good	9.5	20.5	22.0	10.0	*16.0*	-	Codominant at base, asymmetric canopy	Remove
277	*Betula pendula*	European white birch	18.3		Fair	Good	26.4	27.8	16.8	27.8	*24.0*	-	Bronze birch borer infestation, top dieback to to 3 inches, growing on top of retaining wall	Retain
278	*Prunus cerasifera*	Cherry plum	16.6		Good	Good	16.7	19.7	17.7	15.7	*21.0*	-	Exposed surface roots	Retain
279	*Prunus cerasifera*	Cherry plum	17.2	9.4,14.4	Good	Good	21.2	20.7	19.7	21.7	*21.0*	-	Exposed surface roots	Retain

Table of Trees

5041 Roosevelt Way NE, Seattle, WA

Arborist: GW
Date of Inventory: 4/15/2022
Table Revised: 6/21/2023

Tree ID	Scientific Name	Common Name	DSH (inches)	DSH Multistem	Health Condition	Structural Condition	N	E	S	W	Exceptional Threshold	Exceptional by Size	Notes	Proposed Action
280	*Prunus cerasifera*	Cherry plum	15.3		Good	Good	17.1	16.6	22.6	16.1	*21.0*	-	Exposed surface roots, girdling root, measured at narrowest point below union	Retain
281	*Prunus cerasifera*	Cherry plum	19.8		Good	Good	20.8	20.3	24.8	26.3	*21.0*	-	Exposed surface roots	Retain
282	*Betula pendula*	European white birch	24.3		Fair	Good	26.0	22.0	25.0	28.5	*24.0*	Exceptional	Bronze birch borer infestation, dieback to 2 inches, exposed surface roots.	Retain
283	*Fagus sylvatica*	European beech	36.6		Good	Good	30.0	29.5	35.5	37.0	*30.0*	Exceptional	Excellent copper beech, roots entwined in rockery	Retain
Off-site Trees														
A	*Prunus serrulata*	Flowering cherry	8.5	6,6	Good	Good	10.4	15.4	17.4	12.4	*23.0*	-	Asymmetric canopy to south, ivy on trunk	Retain
B (TRE-6760)	*Fraxinus pennsylvanica*	Green ash	16.7		Good	Good	20.7	18.2	19.7	18.7	*30.0*	-	Significant epicormic spouting, SDOT tree	Retain
C (TRE-1096658)	*Acer pseudoplatanus*	Sycamore maple	11.5		Good	Good	12.5	15.0	10.5	13.0	*24.0*	-	Old wound at base healed over, SDOT tree	Retain
D (TRE-6759)	*Acer pseudoplatanus*	Sycamore maple	8.7		Good	Good	8.9	8.4	9.4	11.9	*24.0*	-	Big seam on south side with reaction wood and internal decay, SDOT tree	Retain
E (TRE-6757)	*Acer pseudoplatanus*	Sycamore maple	9.3		Good	Good	13.4	11.4	15.4	14.4	*24.0*	-	SDOT tree	Retain
F (TRE-6756)	*Acer pseudoplatanus*	Sycamore maple	8.5		Good	Good	15.4	13.9	18.4	15.9	*24.0*	-	SDOT tree	Retain
G (TRE-6755)	*Acer pseudoplatanus*	Sycamore maple	7.5		Fair	Fair	13.3	14.3	10.3	6.3	*24.0*	-	Several tearouts, uncorrected lean, suppressed by plum, SDOT tree	Retain
H (TRE-6754)	*Acer pseudoplatanus*	Sycamore maple	9.2		Fair	Good	16.4	19.4	19.4	16.4	*24.0*	-	SDOT tree	Retain