Planning & Development Division
Planning & Economic Development Department

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Duluth, Minnesota 55802

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File Number	PLVAR-2508-0010		**Contact**	Jason Mozol, jmozol@duluthmn.gov	
Type	Variance from Shoreland Setbacks		**Planning Commission Date**		December 9, 2025
Deadline for Action	**Application Date**		November 4, 2025	**60 Days**	January 3, 2026
	Date Extension Letter Mailed		November 26, 2025	**120 Days**	March 4, 2026
Location of Subject	Corner of E Palm St and Blackman Ave				
Applicant	City of Duluth, Engineering		**Contact**	Nathan Bruno and Ryan Granlund	
Agent	LHB		**Contact**	Heidi Bringman	
Legal Description	010-2710-05980, 010-0360-00571, 010-2710-06001				
Site Visit Date	June 16, 2025		**Sign Notice Date**		November 25, 2025
Neighbor Letter Date	November 13, 2025		**Number of Letters Sent**		29

Proposal
The applicant proposes to reconstruct and expand the capacity of an existing stormwater basin within the channel of Brewery Creek.

Recommended Action: Staff recommends that Planning Commission approve the variance with conditions.

	Current Zoning	Existing Land Use	Future Land Use Map Designation
Subject	R-2/R-1	Stormwater Pond/Creek	Open Space
North	MU-C	Commercial Uses	Central Business Secondary
South	R-2	Multi-Family Residential	Urban Residential
East	R-1	Creek	Open Space
West	R-1	Single Family Residential	Urban Residential

Summary of Code Requirements:

Sec. 50-37.9.C – General Variance Criteria (paraphrased): Granting of variances of any kind is limited to situations where, due to characteristics of the applicant's property, enforcement of the ordinance would cause the landowner practical difficulties.

Sec. 50-37.9.L – Standards for variances in shorelands: No variance shall be granted that compromises the general purposes or intent of Section 50-18.1.D or results in adverse consequences to the environment. Variances shall include a requirement for the applicant to mitigate the impacts of the variance on shoreland areas

Comprehensive Plan Governing Principle and/or Policies and Current History (if applicable):
Governing Principle #1- Reuse previously developed land- The project is proposed in a location that is currently used for stormwater retention.

Governing Principle #10- Take actions that enhance the environment, economic, and social well-being of the community- This project will mitigate downstream effects from flooding and increase the resilience of the City's stormwater infrastructure.

Future Land Use – Open Space: High natural resource or scenic value, with substantial restrictions and development limitations. Primarily public lands but limited private use is anticipated subject to use and design controls. Examples include: city parks and recreation areas, primary viewsheds, shorelands of the lake and streams, wetlands and floodplains, and high-value habitat.

History: Early development of Central Entrance corridor moved Brewery Creek from its original course to roughly its current location. MNDOT developed Palm St in the 1980's. During that project, Brewery Creek was further channelized and the current stormwater basin was constructed. The basin has gone largely unmaintained since and has filled with sediment and vegetation. In 2022, the City assumed ownership of the basin.

Review and Discussion Items:
Staff finds that:

1) The applicant proposes to reconstruct and expand the stormwater basin to increase its retention capacity and to install "smart" controls that allow for the efficient dewatering of the dead storage volume of the pond, enabling increased storage capacity during storms, by dynamically managing the basin's water levels based on real-time data and weather forecasts. Downstream sections of Brewery Creek in the Hillside neighborhood have repeatedly been damaged by flooding events and this project will contribute to mitigating those impacts.
2) The applicant requests to reduce the required structure setback from 50' to 0' to allow for the installation of pile walls around the perimeter of the basin, a fence above the walls for fall protection and other necessary utility infrastructure.
3) *Variance Criteria #1 (exceptional narrowness, shallowness, or shape):* The existing basin is taking on excess stormwater generated from the adjacent Central Entrance roadway and is no longer adequately sized for large storm events. The rehabilitation and capacity expansion of the existing basin is required to address downstream flooding and erosion control within the Brewery Creek watershed. The location of the parcel is entirely within the Brewery Creek shoreland zone and the size is restricted by development on all sides.
4) *Variance Criteria #2 (circumstances unique to the property, not created by the property owner):* The existing storm water basin was constructed by MNDOT in the early 1980's as part of the Central Entrance highway. The storm water basin was designed to mitigate for the loss of wetland storage as a result of filling wetlands to extend Palm Street as part of the Central Entrance project. At the time, it was determined that increasing the basin to contain the 100-yr storm was not economical and the basin was not designed to modern stormwater treatment standards.
5) *Variance Criteria #3 (circumstances are peculiar to this property and do not apply generally to other land or buildings):* No other parcels in the area contain stormwater ponds that are also part of Brewery Creek. No other locations within this area of the Brewery Creek corridor could be developed with the type of flood infrastructure being proposed in this location. Brewery Creek, although not designated as a special or impaired water, holds significant importance as a natural primary drainage system within Duluth. Its role in managing stormwater is crucial, serving as a conduit for runoff in the Duluth Heights, Central Hillside, and East Hillside neighborhoods. Effective management and treatment of stormwater for Brewery Creek are essential for safeguarding the health of Lake Superior, which is designated as a special and impaired waterbody. By ensuring that stormwater runoff from Brewery Creek is properly managed and treated, pollutants and sediment are minimized, reducing the risk of harm to Lake Superior's ecosystem.
6) *Variance Criteria #4 (proposes to use in a reasonable manner not permitted by code):* Stormwater management is a requirement of modern development. Many adjacent properties include stormwater infrastructure. There are limited opportunities in the Brewery Creek watershed to enhance the stormwater system. On this site, expanding the capacity can only be accomplished by locating structures within the shoreland zone.
7) *Variance Criteria #5 (not impair light/air, increase congestion, or impair public safety or property values).* This

project will not impair neighboring properties access to light or air and will not increase congestion. Effective stormwater management for Brewery Creek will contribute positively to the overall environmental health and resilience within Duluth by mitigating the risk of flooding, erosion, and water quality degradation; benefiting both the community and the surrounding natural areas. The proactive management and treatment of stormwater will support the health and vitality of Brewery Creek and Lake Superior.

8) *Variance Criteria #6 (will not impair intent of this Chapter or alter the essential character of the locality).* This project will alter the appearance of the site from a stormwater basin that is primarily vegetated due to deferred maintenance, to a basin that is largely hardscaped and includes constructed sheet pile structures. The essential character of the area will not be severely altered since the use of the property is not changing. The change in appearance of the stormwater basin is mitigated by vegetative plantings discussed in item 9 below and shown in the attached landscaping plan.
9) *Standards for variances in shorelands (does not compromise intent of shoreland regulations and mitigates impacts).* The basin itself will have direct benefits to the watershed by mitigating downstream flooding and erosion and treating stormwater for pollutants and sedimentation. Reconstruction will also remediate contaminated soils currently in the basin and establish a design that will be easier to remove pollutants in the future. The applicant is also proposing to plant trees and shrubs around the perimeter of the basin and revegetate areas within the basin with plugs and seed mixes of native plants.
10) Staff finds the applicant has demonstrated practical difficulty due to the necessity for this stormwater infrastructure to be located in close proximity to Brewery Creek and impacts are mitigated by vegetative plantings and benefits to local watersheds.
11) The City's Engineering staff held a public meeting with the neighborhood on September 25, 2025. They reported that all feedback received was supportive of this project. No comments from the public, agencies or other City departments were received.
12) Per UDC Section 50-37.1.N, approved variances lapse if the project or activity authorized by the permit or variance is not begun within one-year.

Staff Recommendation:

Based on the above findings, Staff recommends that Planning Commission approve the permit subject to the following conditions:

1) The project must be constructed and limited to the plans submitted with the application.
2) Any alterations to the approved plans that do not alter major elements of the plan may be approved by the Land Use Supervisor without further Planning Commission review; however, no such administration approval shall constitute a variance from the provisions of Chapter 50.

PLVAR-2511-0014
PLSUP-2511-0065
Variance to Shoreland Setbacks
Special Use Permit
Palm Street Pond

LEGEND

- CONSTRUCTION LIMITS
- SAWING BITUMINOUS PAVEMENT (FULL DEPTH)
- REMOVE PIPE SEWER/CULVERT
- REMOVE MANHOLE OR CATCH BASIN
- REMOVE BITUMINOUS PAVEMENT
- REMOVE BITUMINOUS WALK
- REMOVE CONCRETE WALK
- REMOVE CURB & GUTTER
- CLEARING & GRUBBING
- REMOVE TREE (INCLUDED IN CLEARING & GRUBBING)

SHOW ALL OF THE DITCH

PID 010-0360-00540
322 E CENTRAL ENT

PID 010-2710-05982
326 E CENTRAL ENT

PID 010-2710-05984
328 E CENTRAL ENT

PID 010-2710-05983
332 E CENTRAL ENT

PID 010-0360-00570
330 E PALM ST

PID 010-2710-05986
330 E PALM ST

PID 010-2710-05980

CB0640030
RIM: 1226.24
IE S OUT: 1222.41

CB0640031
RIM: 1226.06
IE N IN: 1220.06
IE W IN: 1217.06
IE SE OUT: 1217.06

SA0640006
RIM: 1226.72
IE NW IN: 1213.00
IE S IN: 1212.80
IE E OUT: 1212.80

CB0640040
RIM: 1222.17
IE N IN: 1215.90
IE S OUT: 1215.90

SA0640007

CB0640038

CB0640039

CB0640041

33.00' R/W

20.00' UTILITY EASEMENT

CONSTRUCTION LIMITS (TYP.)

REMOVE CURB & GUTTER

REMOVE PIPE SEWERS
48" RC PIPE

REMOVE DRAINAGE STRUCTURE
CB0640038

PROTECT CURB (INCIDENTAL)

REMOVE PIPE SEWERS
48" RC PIPE

REMOVE DRAINAGE STRUCTURE
CB0640039

REMOVE CURB AND GUTTER

REMOVE PIPE SEWERS
(15 LF 48" RC PIPE)

RELOCATE OVERHEAD
UTILITY POLE AND
ANCHOR (BY OTHERS)

ADJUST FRAME & RING CASTING

REMOVE PIPE SEWERS
(25 LF 60" RC PIPE)

BURIED FIBER TO BE
RELOCATED BY OTHERS
PRIOR TO CONSTRUCTION

REMOVE BITUMINOUS WALK

REMOVE PIPE SEWERS:
24" RC PIPE

REMOVE DRAINAGE STRUCTURE
CB0640041

24" RC PIPE

PROTECT EXISTING BLOCK
WALLS (INCIDENTAL)

PALM ST

10+00 11+00 12+00 13+00 14+00 15+00 16+00

100+00 101+00 102+00 103+00 104+00 105+00

0 10' 20' 40'

PRELIMINARY
NOT FOR CONSTRUCTION

CITY PROJECT NO. 2208

PALM STREET PERMANENT STORMWATER MANAGEMENT SYSTEM IMPROVEMENTS

EXISTING CONDITIONS & REMOVALS

SHEET NO. 16 OF 43 SHEETS

LHB PROJECT NO. 240078

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LEGEND

- CONSTRUCTION LIMITS
- SAWING BITUMINOUS PAVEMENT (FULL DEPTH)
- REMOVE PIPE SEWER/CULVERT
- REMOVE MANHOLE OR CATCH BASIN
- REMOVE BITUMINOUS PAVEMENT
- REMOVE BITUMINOUS WALK
- REMOVE CONCRETE WALK
- REMOVE CURB & GUTTER
- CLEARING & GRUBBING
- REMOVE TREE (INCLUDED IN CLEARING & GRUBBING)

PID 010-2710-05990
338 E CENTRAL ENT

PID 010-2710-05983
332 E CENTRAL ENT

CB0640042
RIM: 1221.50
IE S OUT: 1217.00

CB0640040
RIM: 1222.17
IE N IN: 1215.90
IE S OUT: 1215.90

CONSTRUCTION LIMITS (TYP.)

24" RC PIPE

PROTECT CURB (INCIDENTAL)

REMOVE DRAINAGE STRUCTURE
CB0640043

REMOVE DRAINAGE STRUCTURE
CB0640041

PALM ST

ADJUST FRAME & RING CASTING
SA0640008

REMOVE BITUMINOUS WALK

REMOVE CURB AND GUTTER

RELOCATE OVERHEAD
UTILITY POLE AND
ANCHOR (BY OTHERS)

REMOVE PIPE SEWERS
12" RC PIPE

REMOVE PIPE SEWERS
24" RC PIPE

REMOVE PIPE CULVERTS
(2) 51" SPAN RC PIPE-ARCH

REMOVE PIPE SEWERS
15" CP PIPE

ADD REMOVAL ARROWS

PID 010-2604-00010
330 E PALM ST

REMOVE PIPE CULVERTS
51" SPAN RC PIPE-ARCH

REMOVE PIPE SEWERS
12" CP PIPE

REMOVE DRAINAGE STRUCTURE
CB0640083

REMOVE CURB & GUTTER

REMOVE PIPE SEWERS
24" CP PIPE

REMOVE DRAINAGE STRUCTURE
ST0640038

REMOVE PIPE SEWERS
24" CP PIPE

REMOVE DRAINAGE STRUCTURE
CB0640084

REMOVE PIPE SEWERS
24" CP PIPE

REMOVE DRAINAGE STRUCTURE
CB0640085

REMOVE PIPE SEWERS
24" CP PIPE

SA0640010
RIM: 224.61
IE W IN: 1210.41
IE N IN: 1210.41
IE S IN: 1210.41
IE E OUT: 1210.41

CLEARWOOD DRIVE

ST0640054
RIM: 1222.51
IE S IN: 1216.68
IE E OUT: 1216.68

CB06XXXX1
RIM: 1222.04
IE W IN: 1216.46
IE E OUT: 1216.34

BLACKMAN AVE

PID 010-0550-00435
PO BOX 176
COTTON MN 55724

PID 010-0550-00420
PO BOX 176
COTTON MN 55724

PID 010-2710-06002
123 S BLACKMAN AVE

30.00' UTILITY EASEMENT

10.00' UTILITY EASEMENT

0 10' 20' 40'

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PRELIMINARY
NOT FOR CONSTRUCTION

CITY PROJECT NO. 2208

PALM STREET PERMANENT STORMWATER MANAGEMENT SYSTEM IMPROVEMENTS

EXISTING CONDITIONS & REMOVALS

SHEET NO. 17 OF 43 SHEETS

LHB PROJECT NO. 240078

LEGEND

- CONSTRUCTION LIMITS
- SAWING BITUMINOUS PAVEMENT (FULL DEPTH)
- REMOVE PIPE SEWER/CULVERT
- REMOVE MANHOLE OR CATCH BASIN
- REMOVE BITUMINOUS PAVEMENT
- REMOVE BITUMINOUS WALK
- REMOVE CONCRETE WALK
- REMOVE CURB & GUTTER
- CLEARING & GRUBBING
- REMOVE TREE (INCLUDED IN CLEARING & GRUBBING)

PID 010-0550-00150
543 CLEARWOOD DR

PID 010-0550-00170
603 CLEARWOOD DR

CLEARWOOD DRIVE

R/W

66.00'

22+00

111+00

111+20

23+00

24+00

25+00

26+00

27+00

28+00

28+98

CB0640102
RIM: 1222.11
IE SW OUT: 1218.29

CB0640104
RIM: 1222.38
IE W IN: 1217.48
IE NE IN: 1217.48
IE S OUT: 1217.48

CB0640101
RIM: 1222.73
IE E OUT: 1217.63

CB0640103
RIM: 1219.34
IE NE IN: 1215.36
IE S OUT: 1215.26

12" RCP PIPE

CONSTRUCTION LIMITS (TYP.)

STAY ON R/W

EXISTING GRAVEL SURFACE

ABANDONED SANITARY

UTILITY EASEMENT

10.00' UTILITY EASEMENT

8.00' DRAINAGE UTILITY EASEMENT

100.00' DRAINAGE UTILITY EASEMENT

BREWERY CREEK

PID 010-0550-00435
PO BOX 176
COTTON MN 55724

PID 010-0550-00420
PO BOX 176
COTTON MN 55724

PID 010-0550-00440
122 S BLACKMAN AVE

PID 010-0435-00010
ISD 709
709 PORTIA JOHNSON DR

0 10' 20' 40'

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PRELIMINARY
NOT FOR CONSTRUCTION

CITY PROJECT NO. 2208

PALM STREET PERMANENT STORMWATER MANAGEMENT SYSTEM IMPROVEMENTS

EXISTING CONDITIONS & REMOVALS

SHEET NO. 18 OF 43 SHEETS

LHB PROJECT NO. 240078

T.H. 194 (CENTRAL ENTRANCE)

PID 010-0360-00520

PID 010-0360-00530
312 E CENTRAL ENT

PID 010-0360-00540
322 E CENTRAL ENT

PID 010-2710-05982
326 E CENTRAL ENT

PID 010-2710-05984
328 E CENTRAL ENT

PID 010-2710-05983
332 E CENTRAL ENT

PID 010-2710-05990
338 E CENTRAL ENT

PID 010-0550-00130
418 E CENTRAL ENT

CONSTRUCTION LIMITS (TYP.)

DEWATERING PIPE

PALM ST

PALM STREET SMART
STORMWATER
MANAGEMENT SYSTEM

SMART CONTROL
STRUCTURE

PID 010-0550-00435
PO BOX 176
COTTON MN 55724

PID 010-0550-00150
543 CLEARWOOD DR

TRU HOTEL

PID 010-0550-00170
603 CLEARWOOD DR

DEWATERING PIPE

PERMANENT UTILITY EASEMENT

CLEARWOOD DR

S BLACKMAN AVE

PID 010-0360-00600
306 E PALM ST

PID 010-0360-00570
330 E PALM ST

FOREBAY

PID 010-2604-00010
330 E PALM ST

PID 010-2710-05986
330 E PALM ST

REGULAR OUTLET

PID 010-0550-00420
PO BOX 176
COTTON MN 55724

PID 010-0550-00440
122 S BLACKMAN AVE

PID 010-2710-06002
123 S BLACKMAN AVE

PERMANENT UTILITY EASEMENT

PID 010-0550-00450
126 S BLACKMAN AVE

PID 010-0147-00010
201 S BLACKMAN AVE

PID 010-0550-00460
204 S BLACKMAN AVE

PID 010-0147-00025
209 S BLACKMAN AVE

PID 010-0550-00470
214 S BLACKMAN AVE

PID 010-0147-00030
215 S BLACKMAN AVE

PID 010-0550-00480
218 S BLACKMAN AVE

PID 010-0147-00040
219 S BLACKMAN AVE

PID 010-0550-00490

PID 010-0147-00050
303 S BLACKMAN AVE

PID 010-0550-00500

PID 010-0147-00060
309 S BLACKMAN AVE

PID 010-0360-00660

PID 010-0147-00090

PID 010-0360-00720

PID 010-0360-00750

BREWERY CREEK

PID 010-0435-00010
ISD 709
709 PORTIA JOHNSON DR

N

0 30' 60' 120'

PRELIMINARY
NOT FOR CONSTRUCTION

CITY PROJECT NO. 2208

PALM STREET PERMANENT STORMWATER MANAGEMENT SYSTEM IMPROVEMENTS

GENERAL LAYOUT

SHEET NO. 2 OF 39 SHEETS

LHB PROJECT NO. 240078

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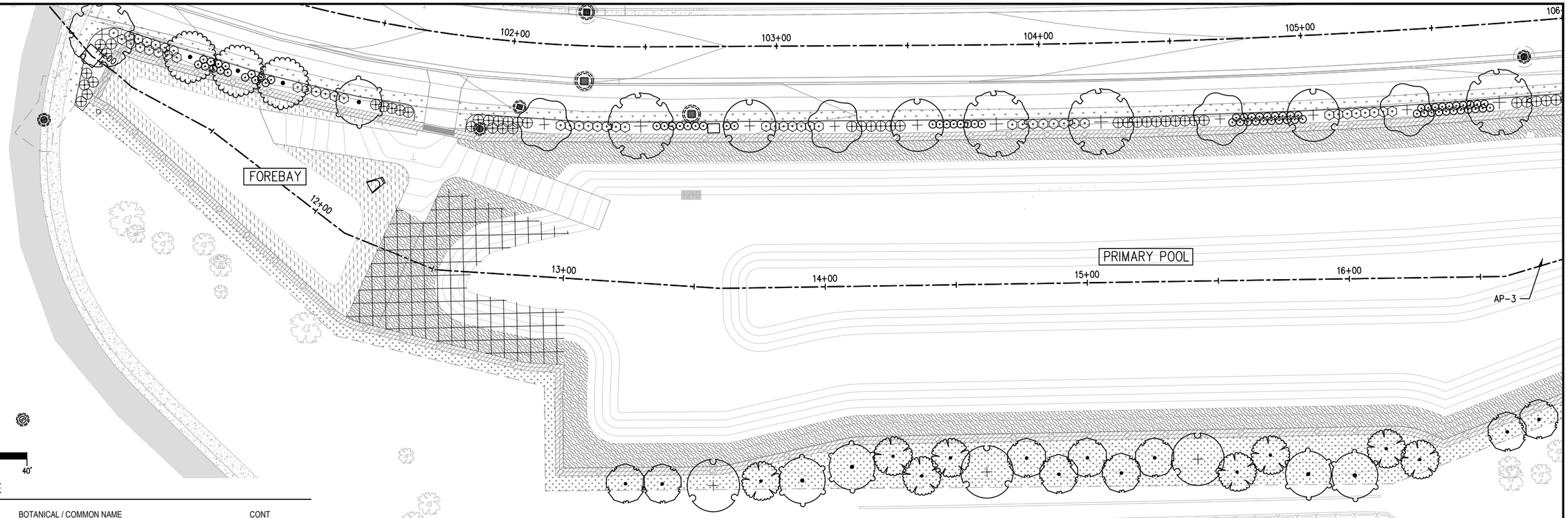

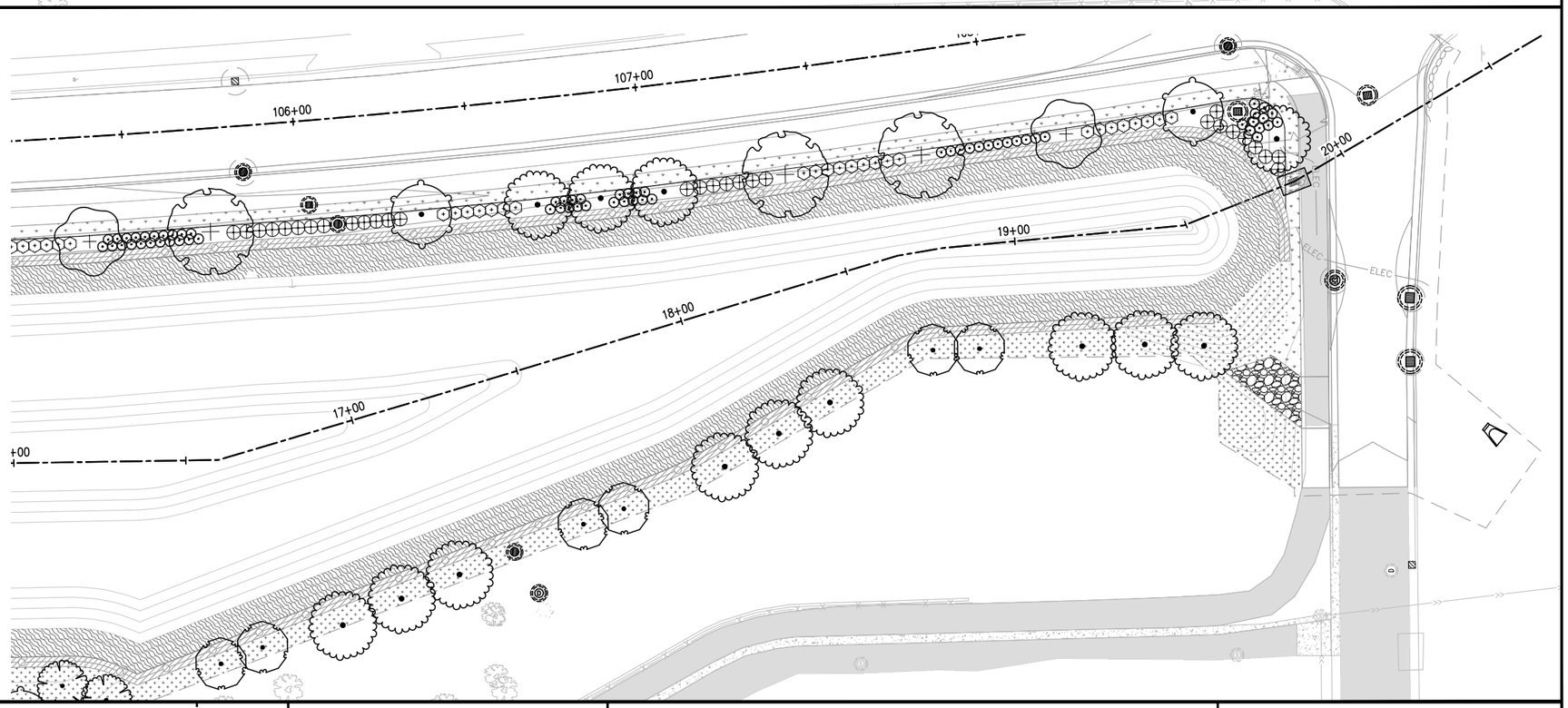

PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	CONT
TREES				
	AX	6	Aesculus x 'Bergeson' / Prairie Torch® Buckeye	2" CAL.
	AH	5	Alnus hirsuta 'Harbin' / Prairie Horizon® Manchurian Alder	2" CAL.
	AG	13	Amelanchier x grandiflora 'Autumn Brilliance' / Autumn Brilliance Apple Serviceberry	1.5" CAL.
	BR	16	Betula nigra / River Birch	2" CAL.
	CM	8	Crataegus x mordenensis 'Toba' / Toba Hawthorn	1.5" CAL.
	QB	7	Quercus bicolor / Swamp White Oak	2" CAL.
	UA	7	Ulmus x `Accolade` / Accolade Elm	2" CAL.

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	SIZE
SHRUBS				
	CK	114	Cornus sericea 'Kelseyi' / Kelsey's Dwarf Red Twig Dogwood	#5 CONT.
	SP3	68	Salix purpurea 'Nana' / Dwarf Purple Osier Willow	#5 CONT.
	SW	75	Symphoricarpos x doorenbosii 'White Hedge' / White Hedge Snowberry	#5 CONT.

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	CONT
GROUND COVERS				
	AT	14,151 sf	Aquatic/Transitional Ledge / Seed and Plugs	See Details
	SB	4,434 sf	Shrub Bed w/ Living Mulch	See Specifications
	TS	4,295 sf	Turf Sod	See Specifications
	SS2	13,734 sf	Upland / Seed and Plugs	See Details
	SS	7,340 sf	Wet Ditch Seed Mix / 2575.608 Seed Wet Ditch	See Specifications
	WS	3,164 sf	Willow Stake/Bundle Zone	See Details

PRELIMINARY
NOT FOR CONSTRUCTION

CITY PROJECT NO. 2208

PALM STREET PERMANENT STORMWATER MANAGEMENT SYSTEM IMPROVEMENTS

LANDSCAPE PLANS

SHEET NO. LA02 OF [illegible] SHEETS

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LHB PROJECT NO. 240078