90th Street Site Plan

Located in the NE 1/4 Of Section 01, Township 2N, Range 1E, W.M.,
Clark County, Washington

EXISTING CONDITIONS LEGEND

LINETYPES

- ST — STORM SEWER LINE
- OHP — OVER HEAD POWER LINE
- W — WATER LINE LOCATE
- SA — SANITARY SEWER PIPE
- T — TELECOMM UTILITY
- E — UNDERGROUND ELECTRIC
- FENCE
- CENTERLINE
- RIGHT OF WAY
- EDGE OF PAVEMENT
- CURB LINE
- EDGE OF GRAVEL
- SIDEWALK
- PAVEMENT STRIPING
- LOT LINE
- PROPERTY BOUNDARY
- 100 — CONTOUR LINE

SYMBOLS

- CATCH BASIN
- STORM MANHOLE
- CURB INLET
- FIRE HYDRANT
- WATER VALVE
- SAN SEWER MH
- UTILITY POLE
- EXTG WELL
- TEL PEDESTAL
- GUY WIRE
- MAILBOX
- EXTG TREES

Sheet Index

1. Existing Conditions
2. Preliminary Site Plan
3. Photometric Plan
4. Landscape Plan

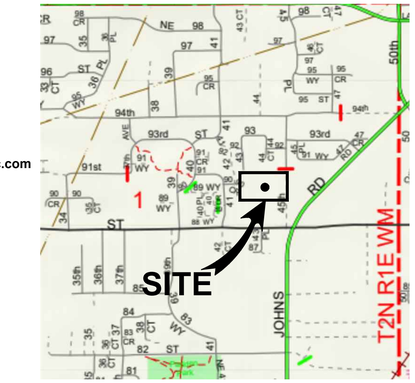
Scale 1" = 30'

30 15 0 30

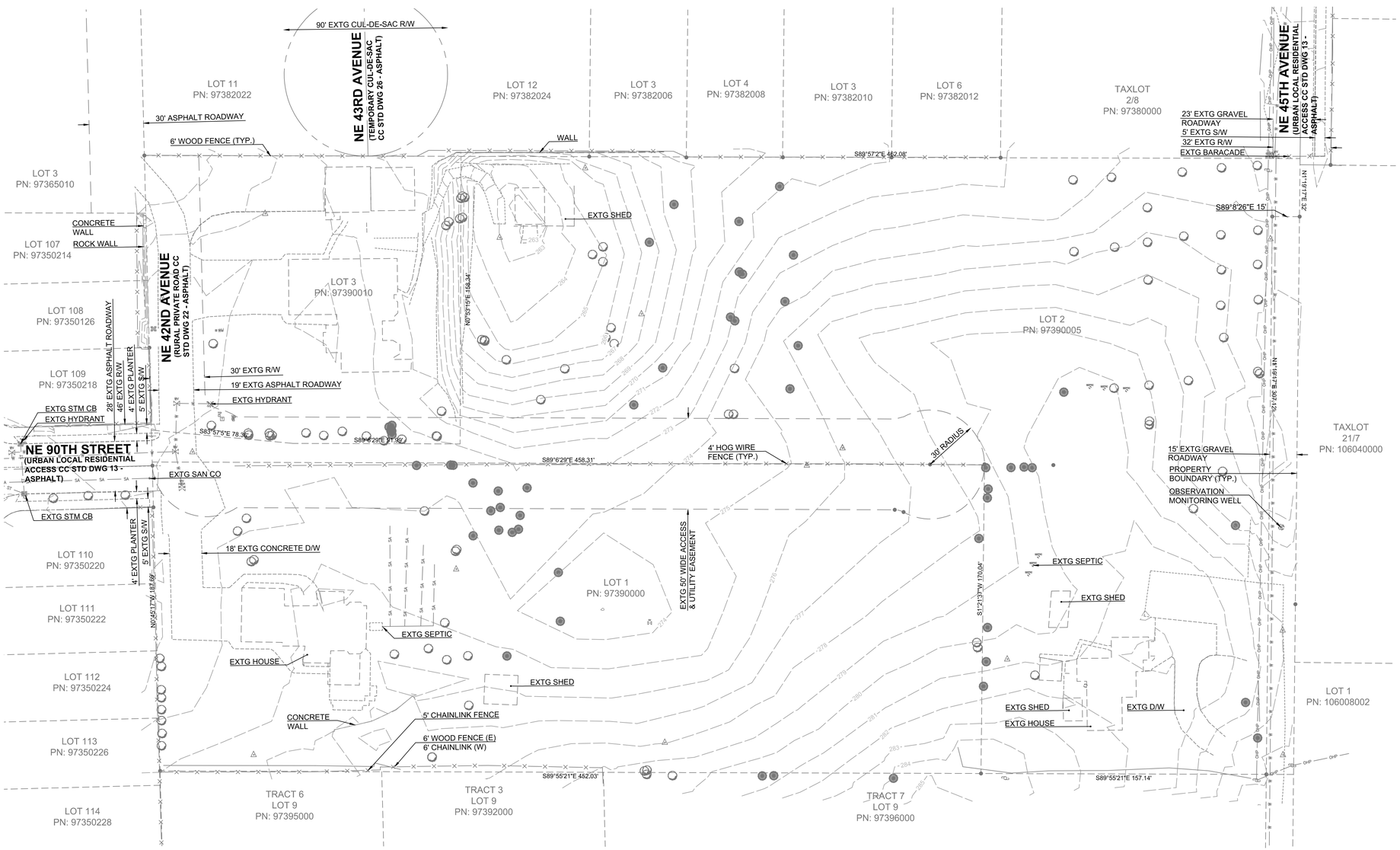
APPLICANT:
Serghei Comarnitchi
2804 NE 65th Ave Suite D
Vancouver, WA 98661
PH: (360) 772-3877
E-mail: serghei@sunlightelectricinc.com

OWNER:
Sunlight Rentals, LLC
4705 NE 66th Ave
Vancouver, WA 98661

CONTACT:
PLS Engineering
Travis Johnson, PE
604 W. Evergreen Blvd.
Vancouver, WA 98660
PH: (360) 944-6519
E-mail: pm@plsengineering.com



VICINITY MAP
NOT TO SCALE



PROJECT NOTES

SITE ADDRESS:
4209 NE 90th Circle Vancouver, WA 98665
9000 NE 45th Ave Vancouver, WA 98665
Parcel Number: 97390000
Parcel Number: 97390005

EXISTING LOT SIZE:
97390005: 104,675 sq. ft. (2.40 AC)
97390000: 77,402 sq. ft. (1.78 AC)

PRESENT USE:
Both parcels currently have residential homes on site with associated driveways. All existing structures will be demolished except for the existing home on parcel 97390000.

ZONING:
The site is currently zoned as R-18 with a UM comprehensive plan designation.

TRANSPORTATION:
C-Tran operates along NE St. Johns Road to the east and has stops within ¼ mile of the site, there are no convenient pedestrian connections.

Parcel 97390005 currently has access from a driveway along NE 45th Ave that connects into NE 88th STreet. Parcel 97390000 has an existing driveway from NE 90th Street.

WATER AND SEWER:
There are two septic systems on site that are proposed to be abandoned. No septic system was surveyed on parcel 97390000 but was located per asbuilt info from Clark County GIS. There is an observation monitoring well located between parcel 97390005 and 106040000 about 290' south of the north property line.

The nearest existing fire hydrant is located 45ft from the centerline of existing NE 90th Street near the SW corner of parcel 97390010.

ENVIRONMENTAL CONSTRAINTS:
There are no known critical areas on site. There are no water courses or bodies, no areas within 100-year floodplain, no designated shoreline areas, no landslide or erosion hazard areas, no significant wildlife or vegetation, no known significant historic resources and no wetlands located on site.

PLS ENGINEERING

Existing Conditions Plan For:
90th Street Site Plan
A Site Located In Clark County, Washington

Engineering - Surveying - Planning | 604 W. Evergreen Blvd., Vancouver, WA 98660 | PH (360) 944-6519 | Fax (360) 944-6539

Revisions

1	12/09/2021	
2	03/08/2022	
3		
4		
5		
6		

TRAVIS G. JOHNSON
STATE OF WASHINGTON
40385
REGISTERED PROFESSIONAL ENGINEER
3-8-22

Project No. 3234

SCALE:	H: 1" = 30' V: N/A
DESIGNED BY:	VVP
DRAFTED BY:	VVP
REVIEWED BY:	TGJ

90th Street Site Plan

Located in the NE 1/4 Of Section 01, Township 2N, Range 1E, W.M.,
Clark County, Washington

SITE STATISTICS		
ZONE: R-22		
Gross Site Area	182,077 SQ FT	4.18 AC
Critical Areas	0 SQ FT	0 AC
	REQUIRED	PROPOSED
Density	50 units	74 units
Building Setbacks		
Front	10'	10'
Street	10'	10'
Interior	10'	10'
Rear	20'	20'
Maximum Building Height	4 Stories	3 Stories
Open Space	14,600 SQ FT	22,142 SQ FT
Total Parking Spaces	110 (1.5/unit)	140
Standard Parking Spaces	-	140
Compact Spaces (C)	-	0
ADA Spaces (ADA)	-	5
Total landscaping	15% Site	26% Site

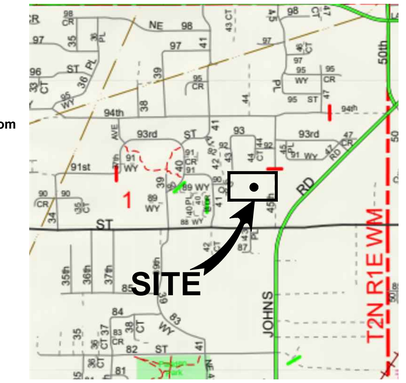
BUILDING LEGEND			
BUILDING #	FLOORS	FOOTPRINT	CONSTRUCTION TYPE
A, B & C	3 - Story	10,322 SQ FT	Type V-A
OFFICE/ CLUBHOUSE	1 - Story	1,800 SQ FT	Type V-A

Legend
- Proposed Asphalt Concrete
- Proposed Cement Concrete
- Proposed Open Space
- (#) Proposed Parking Count

APPLICANT:
Serghei Comarnitchi
2804 NE 65th Ave Suite D
Vancouver, WA 98661
PH: (360) 772-3877
E-mail: serghei@sunlightelectricinc.com

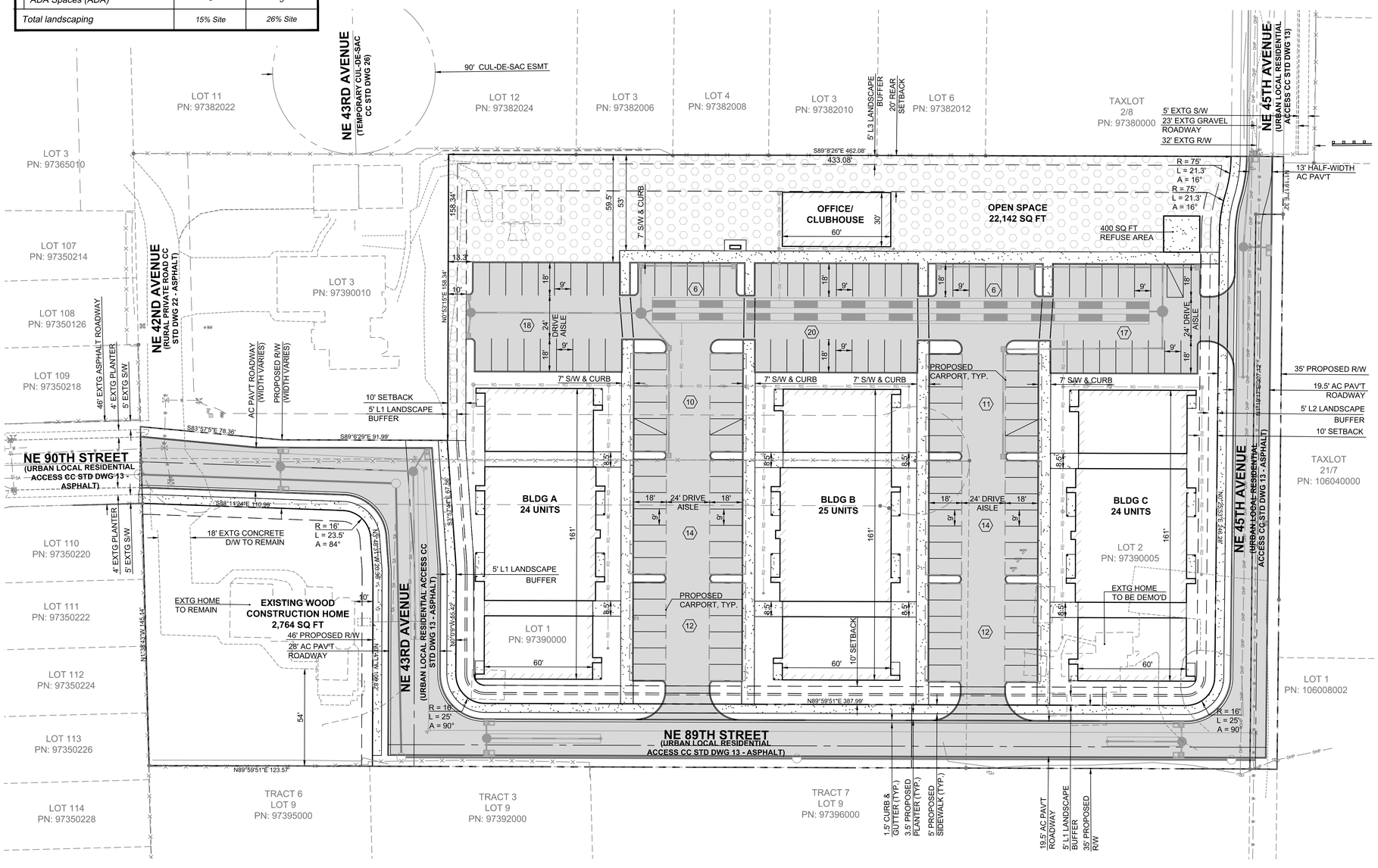
OWNER:
Sunlight Rentals, LLC
4705 NE 66th Ave
Vancouver, WA 98661

CONTACT:
PLS Engineering
Travis Johnson, PE
604 W. Evergreen Blvd.
Vancouver, WA 98660
PH: (360) 944-6519
E-mail: pm@plsengineering.com



VICINITY MAP
NOT TO SCALE

Scale 1" = 30'



PROJECT NOTES

LAND USE:
The applicant is proposing a 73 unit apartment complex and a rezone of the site from R-18 to R-22. One existing residence will remain. The site is located at 4209 NE 90th Circle Vancouver, WA and 9000 NE 45th Ave Vancouver, WA The associated parcel Numbers are 97390000, and 97390005.

Site areas:
97390005: 104,675 sq. ft. (2.40 AC)
97390000: 77,402 sq. ft. (1.78 AC)

TRANSPORTATION:
NE 90th Street, NE 43rd Avenue, NE 89th Street, and NE 45th Avenue are Urban Local Residential Access Streets that are proposed with this development. Full width improvements will meet the standards of drawing 13. Half width improvement will meet the applicable standards in drawing 13 but will include a minimum of 30' ROW with a 20' paved roadway.

C-Tran operates along NE St. Johns Road to the east and has stops within ¼ mile of the site.

UTILITIES:
All buildings will be served by public water and sewer services with connection points within NE 90th Street.

Water Purveyor = Clark Public Utilities
Sewer Purveyor = Clark Regional Wastewater District

Stormwater runoff for the proposed development will be routed to a system of underground infiltration trenches and will be 100% infiltrated on site.

ENVIRONMENTAL CONSTRAINTS:
There are no known critical areas on site. There are no water courses or bodies, no areas within 100-year floodplain, no designated shoreline areas, no landslide or erosion hazard areas, no significant wildlife or vegetation, no known significant historic resources and no wetlands located on site.

PLS ENGINEERING

Preliminary Site Plan For:
90th Street Site Plan
A Site Located In Clark County, Washington

Engineering - Surveying - Planning | 604 W. Evergreen Blvd., Vancouver, WA 98660 | PH (360) 944-6519 | Fax (360) 944-6539

Revisions

1	12/09/2021	
2	03/08/2022	
3		
4		
5		
6		

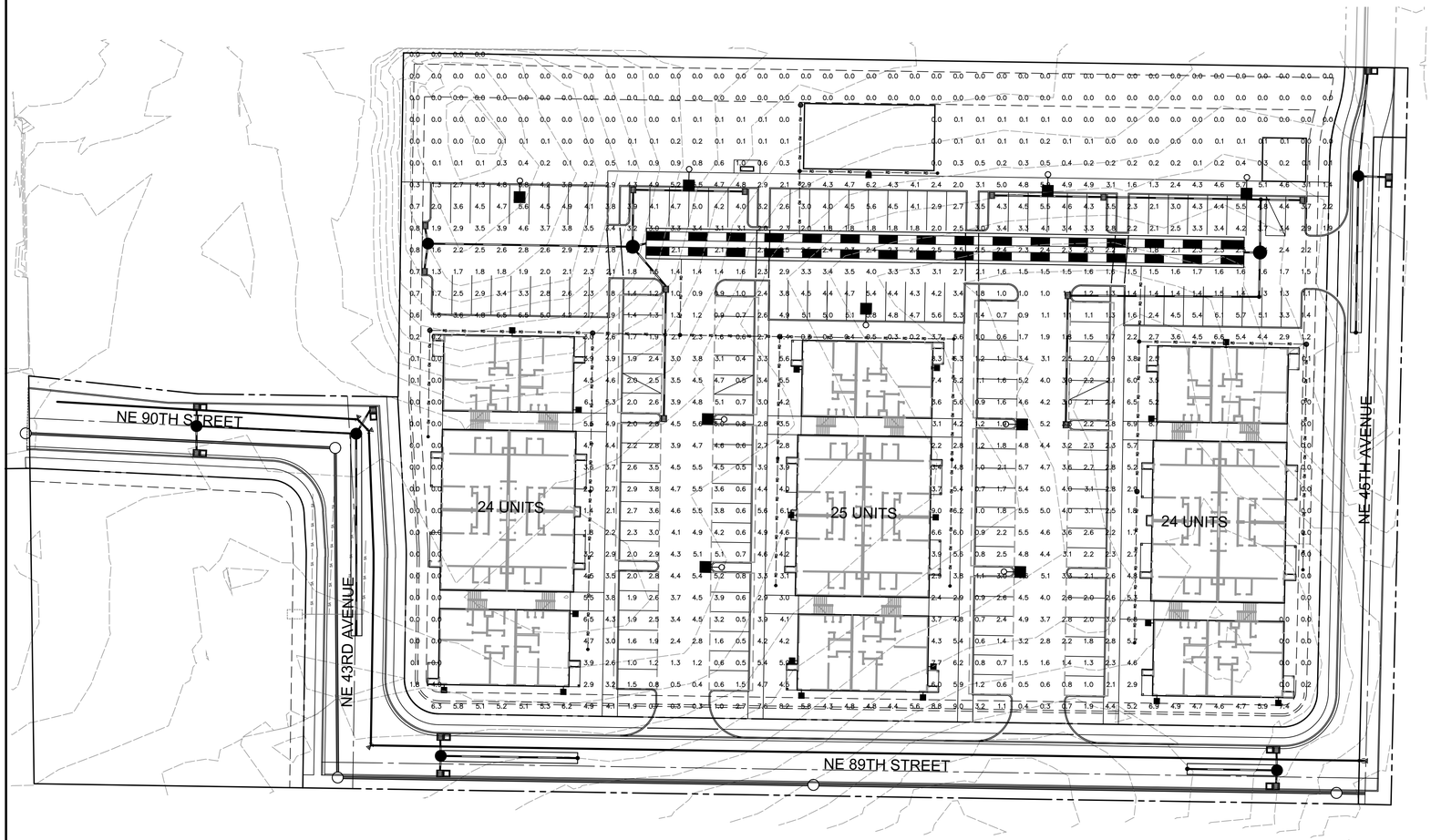
TRAVIS G. JOHNSON, STATE OF WASHINGTON, REGISTERED PROFESSIONAL ENGINEER
3-8-22

Project No. 3234

SCALE:	H: 1" = 30' V: N/A
DESIGNED BY:	VVP
DRAFTED BY:	VVP
REVIEWED BY:	TGJ

90th Street Site Plan

Located in the SW 1/4 Of Section 02, Township 2N, Range 1E, W.M.,
Clark County, Washington



VICINITY MAP
NOT TO SCALE

MANUFACTURER AND CATALOG NUMBER	SYMBOL	QTY	WATTAGE
GLEON-AF-03-LED-E1-SL4-HSS		9	166
MCGRAW-EDISON IST-AF-1200-LED-E1-SL2		19	66.2

Scale 1" = 30'

30 15 0 30

McGraw-Edison

Catalog #		Type
Project		
Comments		Date
Prepared by		

DESCRIPTION

The Galleon™ LED luminaire delivers exceptional performance in a highly scalable, low-profile design. Patented, high-efficiency AccuLED Optics™ system provides uniform and energy conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications. IP66 rated and UL/cUL Listed for wet locations.

SPECIFICATION FEATURES

Construction
Extruded aluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Heavy-wall, die-cast aluminum end caps enclose housing and die-cast aluminum heat sinks. A unique, patent pending interlocking housing and heat sink provides scalability with superior structural rigidity, 3G vibration tested and rated. Optional tool-less hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

Optics
Patented, high-efficiency injection-molded AccuLED Optics technology. Optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics create consistent distributions with the scalability to meet customized application requirements. Offered standard in 4000K (+/- 275K) CCT 70 CRI. Optional 3000K, 5000K and 6000K CCT.

Electrical
LED drivers are mounted to removable tray assembly for ease of maintenance. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V Wye systems only. Standard with 0-10V dimming. Shipped standard with Eaton proprietary circuit module designed to withstand 10kV of transient line surge. The Galleon LED luminaire is suitable for operation in -40°C to 40°C ambient environments. For applications with ambient temperatures exceeding 40°C, specify the HA (High Ambient) option. Light Squares are IP66 rated. Greater than 90% lumen maintenance expected at 60,000 hours. Available in standard 1A drive current and optional 600mA, 800mA and 1200mA drive currents (nominal).

Mounting
STANDARD ARM MOUNT: Extruded aluminum arm includes internal bolt guides allowing for easy positioning of fixture during mounting. When mounting two or more luminaires at 90° and 120° apart, the EA extended arm may be required. Refer to the arm mounting requirement table. Round pole adapter included. For wall mounting, specify wall mount bracket option. QUICK MOUNT ARM: Adapter is bolted directly to the pole. Quick mount arm slide into place on the adapter and is secured via two screws, facilitating quick and easy installation. The versatile, patent pending, quick mount arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8". Removal of the door on the quick mount arm enables wiring of the fixture without having to access the driver compartment. A knock-out enables round pole mounting.

Finish
Housing finished in super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Heat sink is powder coated black. Standard housing colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available.

Warranty
Five-year warranty.

GLEON
GALLEON LED

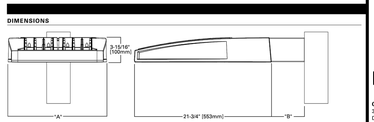
1-10 Light Squares
Solid State LED

AREA/SITE LUMINAIRE

LumenSafe Technology
CLICK TO VIEW

WaveLinx

DIMENSIONS

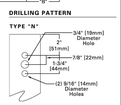


DIMENSION DATA

Number of Light Squares	'A' Width	'B' Standard Arm Length	'B' Optional Arm Length [1]	Weight with Arm (lbs.)	EPA with Arm [2] (Sq. Ft.)
1-4	15-1/2" (394mm)	7" (178mm)	10" (254mm)	33 (15.0 kgs.)	0.96
5-6	21-5/8" (549mm)	7" (178mm)	10" (254mm)	44 (20.0 kgs.)	1.00
7-8	27-5/8" (702mm)	7" (178mm)	13" (330mm)	54 (24.5 kgs.)	1.07
9-10	33-3/4" (857mm)	7" (178mm)	16" (406mm)	63 (28.6 kgs.)	1.12

NOTES: 1 Optional arm length to be used when mounting two fixtures at 90° on a single pole. **2** EPA calculated with optional arm length.

DRILLING PATTERN



CERTIFICATION DATA
3G Vibration Rated
DesignLights Consortium® Qualified*
IP66 Rated
ISO 9001
LM79 / LM80 Compliant
UL/cUL Wet Location Listed

ENERGY DATA
Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120V-277V 50/60Hz
347V, 480V 60Hz
-40°C Min. Temperature
40°C Max. Temperature
50°C Max. Temperature (HA Option)

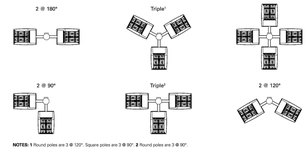
*www.designlights.org

EATON Powering Business Worldwide

TD500020EN
July 23, 2019 2:40 PM

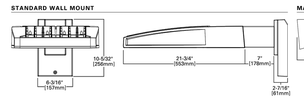
ARM MOUNTING REQUIREMENTS

Configuration	90° Apart	120° Apart
GLEON-AF-01	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-02	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-03	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-04	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-05	10" Extended Arm (Required)	7" Arm (Standard)
GLEON-AF-06	10" Extended Arm (Required)	7" Arm (Standard)
GLEON-AF-07	13" Extended Arm (Required)	13" Extended Arm (Required)
GLEON-AF-08	13" Extended Arm (Required)	13" Extended Arm (Required)
GLEON-AF-09	16" Extended Arm (Required)	16" Extended Arm (Required)
GLEON-AF-10	16" Extended Arm (Required)	16" Extended Arm (Required)

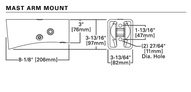


NOTES: 1 Round poles are 3 @ 120°. Square poles are 3 @ 90°. **2** Round poles are 3 @ 90°.

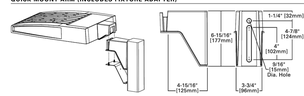
STANDARD WALL MOUNT

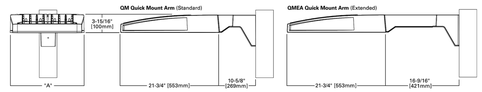


MAST ARM MOUNT



QUICK MOUNT ARM (INCLUDES FIXTURE ADAPTER)





QUICK MOUNT ARM DATA

Number of Light Squares [1,2]	'A' Width	Weight with QM Arm (lbs.)	Weight with QMEA Arm (lbs.)	EPA (Sq. Ft.)
1-4	15-1/2" (394mm)	35 (15.91 kgs.)	38 (17.27 kgs.)	1.11
5-6 [3]	21-5/8" (549mm)	48 (20.91 kgs.)	49 (22.27 kgs.)	
7-8	27-5/8" (702mm)	58 (26.45 kgs.)	N/A	

NOTES: 1 QM option available with 1-8 light square configurations. **2** QMEA option available with 1-8 light square configurations. **3** QMEA arm to be used when mounting two fixtures at 90° on a single pole.

EATON Powering Business Worldwide

Eaton
1121 Highway 74 South
Peachtree City, GA 30269
800-386-4757
www.eaton.com/lighting

Specifications and dimensions subject to change without notice.

TD500020EN
July 23, 2019 2:40 PM

McGraw-Edison

Catalog #		Type
Project		
Comments		Date
Prepared by		

DESCRIPTION

The Impact Elite family of wall luminaires is the ideal complement to site design. Incorporating modular LightSquares technology, the Impact Elite luminaire provides outstanding uniformity and energy-conscious illumination. Combined with a rugged construction, the Impact Elite luminaire is the ideal facade and security luminaire for zones surrounding schools, office complexes, apartments and recreational facilities. UL/cUL listed for wet locations.

SPECIFICATION FEATURES

Construction
Heavy-wall, die-cast aluminum housing and removable hinged door frame for precise tolerance control and repeatability. Hinged door inset for clean mating with housing surface and secured via two captive fasteners. Optional tamper-resistant Torx™ head fasteners offer vandal resistant access to the electrical chamber.

Optics
Choice of 10 patented, high-efficiency AccuLED Optics™ distributions. Optics are precisely designed to shape the light output, maximizing efficiency and application spacing. AccuLED Optics technology creates consistent distributions with the scalability to meet customized application requirements. Offered Standard in 4000K (+/- 275K) CCT and minimum 70 CRI. Optional 3000K, 5000K and 5700K CCT.

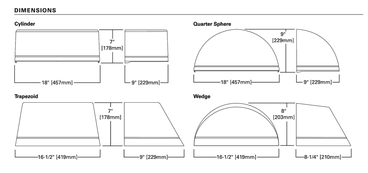
Electrical
LED drivers mount to die-cast aluminum back housing for optimal heat sinking, operation efficacy, and prolonged life. Standard drivers feature electronic universal voltage (120-277V 50/60Hz), 347V 60Hz or 480V 60Hz operation, greater than 0.9 power factor, less than 20% harmonic distortion, and are suitable for operation in -40°C to 40°C ambient environments. All fixtures are shipped standard with 10kV/10kA common – and differential – mode surge protection. LightSquares feature an IP66 enclosure rating and maintain greater than 90% lumen maintenance at 60,000 hours per IESNA TM-21. Emergency egress options for -20°C ambient environments and occupancy sensor available.

Mounting
Gasketed and zinc plated rigid steel mounting attachment fits directly to 4" j-box or wall with the Impact Elite "Hook-N-Lock" mechanism for quick installation. Secured with two captive corrosion resistant black oxide coated allen head set screws concealed but accessible from bottom of fixture.

Finish
Cast components finished in a five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult the McGraw-Edison Architectural Colors brochure for the complete selection.

Warranty
Five-year warranty.

DIMENSIONS



HOOK-N-LOCK MOUNTING

EATON Powering Business Worldwide

*www.designlights.org

TD514030EN
July 23, 2019 4:13 PM

POWER AND LUMENS

1 LightSquare (AF)		Cylinder (ISC) and Quarter Sphere (ISS)						Trapezoid (IST) and Wedge (ISW)					
Drive Current (mA)		350	450	600	800	1000	1200	350	450	600	800	1000	1200
Power (Watts)	120-277V	20.3	25.5	33.4	43.9	55.1	66.2	20.3	25.5	33.4	43.9	55.1	66.2
Current (A)	120V	0.17	0.22	0.29	0.38	0.48	0.56	0.17	0.22	0.29	0.38	0.48	0.56
	277V	0.09	0.10	0.13	0.17	0.21	0.25	0.09	0.10	0.13	0.17	0.21	0.25
Power (Watts)	347V or 480V	23.3	28.7	36.6	49.5	60.7	70.1	23.3	28.7	36.6	49.5	60.7	70.1
Current (A)	347V	0.07	0.08	0.11	0.15	0.18	0.21	0.07	0.08	0.11	0.15	0.18	0.21
	480V	0.05	0.06	0.08	0.11	0.13	0.16	0.05	0.06	0.08	0.11	0.13	0.16
Optics													
T2	Lumens	2,390	3,001	3,915	4,901	5,793	6,592	2,555	3,208	4,185	5,239	6,193	7,047
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U1-G1	B1-U1-G1	B1-U1-G1	B1-U1-G1	B1-U1-G2	B1-U1-G2
T3	Lumens	2,440	3,063	3,996	5,001	5,912	6,728	2,561	3,216	4,195	5,251	6,207	7,063
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U1-G1	B1-U1-G1	B1-U1-G1	B1-U1-G1	B1-U1-G2	B1-U1-G2
T4FT	Lumens	2,414	3,031	3,955	4,950	5,851	6,658	2,589	3,250	4,240	5,308	6,274	7,139
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U1-G1	B1-U1-G1	B1-U1-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2
T4W	Lumens	2,441	3,065	3,999	5,004	5,916	6,732	2,557	3,211	4,189	5,244	6,198	7,053
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U1-G1	B1-U1-G1	B1-U1-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2
SL2	Lumens	2,309	2,899	3,782	4,734	5,596	6,368	2,469	3,100	4,044	5,062	5,983	6,809
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U1-G1	B1-U1-G1	B1-U1-G1	B1-U1-G1	B1-U1-G2	B1-U1-G2
SL3	Lumens	2,271	2,851	3,719	4,656	5,503	6,262	2,419	3,038	3,963	4,961	5,864	6,673
	BUG Rating	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B0-U1-G1	B1-U1-G1	B1-U1-G1	B1-U1-G1	B1-U1-G2	B1-U1-G2
SL4	Lumens	2,158	2,710	3,535	4,425	5,230	5,951	2,286	2,870	3,744	4,686	5,539	6,303
	BUG Rating	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B0-U1-G1	B0-U1-G1	B1-U1-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2
SLL/SLR	Lumens	2,038	2,555	3,334	4,174	4,934	5,614	2,204	2,767	3,610	4,519	5,341	6,078
	BUG Rating	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U1-G1	B1-U1-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2
RW	Lumens	2,435	3,057	3,987	4,992	5,900	6,715	2,521	3,166	4,130	5,170	6,111	6,954
	BUG Rating	B1-U0-G0	B2-U0-G0	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B1-U1-G1	B2-U1-G1	B2-U1-G1	B2-U1-G1	B2-U1-G1	B3-U1-G1

LUMEN MAINTENANCE

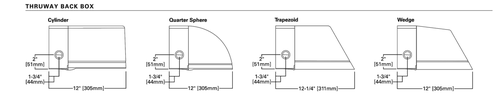
Current	Ambient Temperature	25000 Hours*	50000 Hours*	60000 Hours*	100000 Hours*	Theoretical L70 (Hours)*
Up to 1.2A	Up to 40°C	>95%	>91%	>90%	>83%	20,4000

*Data calculated based on TM-21 calculator.

LUMEN MULTIPLIER

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

THRUWAY BACK BOX



EATON Powering Business Worldwide

Eaton
1121 Highway 74 South
Peachtree City, GA 30269
800-386-4757
www.eaton.com/lighting

Specifications and dimensions subject to change without notice.

TD514030EN
July 23, 2019 4:13 PM

ISC/ISS/IST/ISW
IMPACT ELITE LED

1 LightSquare
Solid State LED

WALL MOUNT LUMINAIRE

CERTIFICATION DATA
UL/cUL Listed
LM79 / LM80 Compliant
IP66 LightSquare
DesignLights Consortium® Qualified*
ISO 9001

ENERGY DATA
Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120-277V/50 & 60Hz, 347V/60Hz, 480V/60Hz
-40°C Minimum Temperature
40°C Ambient Temperature Rating

SHIPPING DATA
Approximate Net Weight:
18 lbs. (8 kgs.)

PLS ENGINEERING

Photometrics Plan For:
90th Street Site Plan
A Site Located In Clark County, Washington

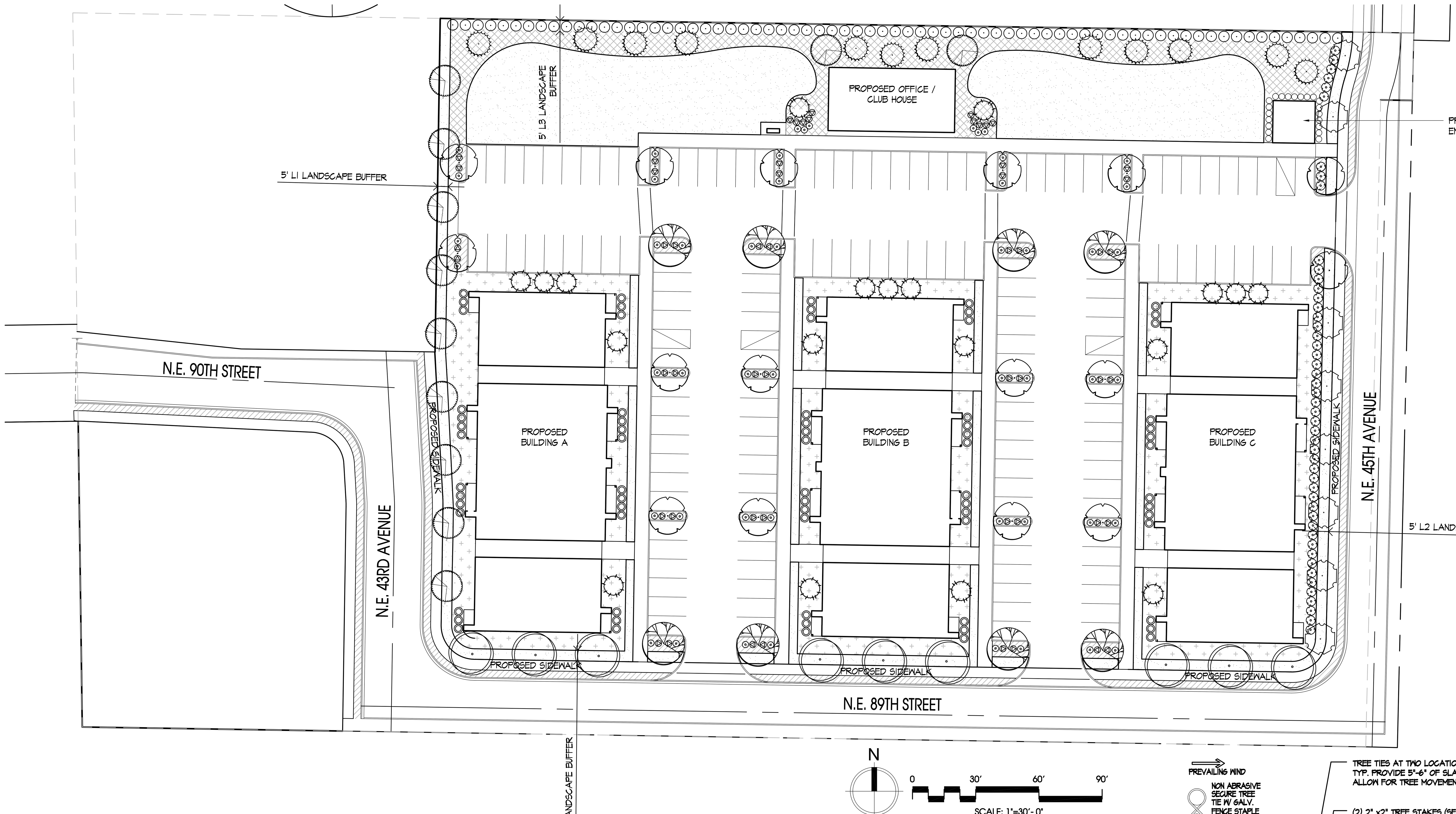
Engineering - Surveying - Planning | 604 W. Evergreen Blvd., Vancouver, WA 98660 | PH (360) 944-6519 | Fax (360) 944-6539

Revisions	
1	12/09/2021
2	
3	
4	
5	
6	

TRAVIS G. JOHNSON
STATE OF WASHINGTON
43929
REGISTERED PROFESSIONAL ENGINEER
2-9-22

Project No.	3234
SCALE:	H: 1" = 30' V: N/A
DESIGNED BY:	VVP
DRAFTED BY:	VVP
REVIEWED BY:	TGJ

3 / 6



<u>Trees and Shrubs in Sight Distance Triangles</u>
All shrubs within sight distance triangles shall be maintained so that foliage height above pavement does not exceed 2.5 feet. Street trees within sight distance triangles shall be limbed up to a height of 10 feet consistent with ANSI A300 standards to provide for sight distance visibility.

IRRIGATION NOTE

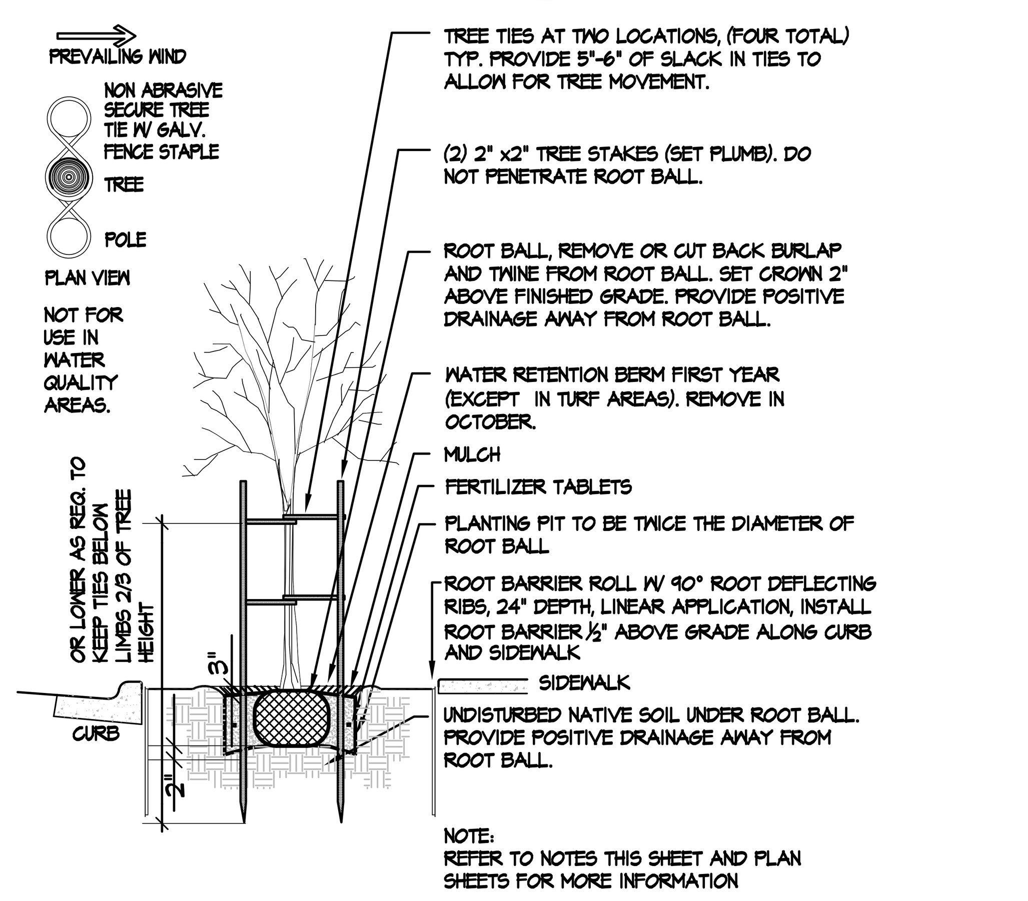
ALL LANDSCAPE AREAS SHALL BE IRRIGATED WITH AN AUTOMATIC DRIP AND/OR SPRAY IRRIGATION SYSTEM. REFER TO CIVIL ENGINEERING PLANS FOR WATER SOURCE.

PLANTING NOTES

1. ALL BOUNDARIES, EASEMENTS, UTILITIES AND LEGAL ENCUMBRANCES TO BE CONFIRMED WITH OWNER PRIOR TO BEGINNING WORK. PROPERTY LINES AND SURVEY INFORMATION PROVIDED BY PLS ENGINEERING.
2. IN NO WAY IS THIS PLAN TO BE INTERPRETED TO EXCEED THE LEGAL BOUNDARIES OF THE OWNER'S REAL PROPERTY.
3. THE LANDSCAPE DESIGNER ASSUMES NO RESPONSIBILITY FOR THE LOCATION OF BOUNDARIES, UTILITIES AND WETLANDS.
4. THIS PLAN SHALL BE INSTALLED TO MEET ALL APPLICABLE CITY, COUNTY, STATE AND FEDERAL CODES.
5. THIS PLAN SHALL BE CONSIDERED PRELIMINARY UNTIL APPROVED BY ALL GOVERNING AGENCIES. IMPLEMENTATION OF THIS PLAN SHALL NOT PROCEED UNTIL ISSUANCE OF ALL RELATED PERMITS.
6. PLANT QUANTITIES ARE FOR INFORMATION ONLY. IN CASE OF ANY DISCREPANCY, THE PLAN SHALL GOVERN.
7. ALL WORK IS TO BE PERFORMED BY LICENSED CONTRACTORS AND EXPERIENCED WORKERS.
8. THE CONTRACTOR IS TO VERIFY THE LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES PRIOR TO PERFORMING ANY EXCAVATION. CONTRACTOR SHALL REPAIR ANY DAMAGE TO UTILITIES CAUSED BY THE CONTRACTOR'S WORK, AT NO ADDITIONAL COST TO THE OWNER. CONTACT ALL UTILITY PROVIDERS SERVING THE SITE AREA 48 HOURS PRIOR TO ANY EXCAVATION.
9. ALL PLANT MATERIALS SHALL MATCH SPECIFICATIONS PER SPECIES AND SHALL COMPLY WITH ANSI Z60.1 'STANDARD FOR NURSERY STOCK'.
10. THE CONTRACTOR SHALL ADHERE TO THE WASHINGTON ASSOCIATION OF NURSERYMEN'S GUIDELINES FOR PLANTING PRACTICES.
11. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING ELEMENTS ON AND OFF SITE, RESULTING FROM THE CONTRACTOR'S WORK.
12. THE CONTRACTOR IS RESPONSIBLE FOR THE VIABILITY OF ALL PLANT MATERIAL FOR 2 YEARS AFTER COMPLETION OF PLANTING. DISEASED, DYING, OR DEAD PLANT MATERIAL SHALL BE REPLACED BY THE CONTRACTOR DURING THE TWO YEAR PERIOD AND MAINTAINED FOR AN ADDITIONAL 2 YEAR PERIOD.
13. IMMEDIATELY UPON BID AWARD, CONTRACTOR SHALL SECURE THE PLANT MATERIALS AS SPECIFIED FROM AVAILABLE SOURCES. IN THE EVENT THAT PLANT MATERIALS ARE NOT AVAILABLE, CONTACT LANDSCAPE ARCHITECT FOR APPROVED SUBSTITUTIONS. NO SUBSTITUTION FOR PLANT MATERIAL WILL BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT.
14. TOP DRESS ALL SHRUB AND GROUND COVER AREAS (NOT LAWN) WITH 3" OF FIR BARK MULCH. SUBMIT SAMPLE TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO CONSTRUCTION.
15. TREE LOCATIONS MAY BE ADJUSTED IN THE FIELD TO SUIT SITE REQUIREMENTS AS DIRECTED BY THE LANDSCAPE ARCHITECT.
16. THE CONTRACTOR SHALL ENSURE THAT ALL EXCAVATED PLANTING PITS HAVE POSITIVE DRAINAGE. PLANT PITS FULLY FLOODED WITH WATER SHALL DRAIN WITHIN (12) HOURS OF FILLING.
17. FINISH GRADE SHALL BE SET TO ALLOW POSITIVE DRAINAGE
18. ROTOTILL 2" OF COMPOST INTO ALL PLANTED AREAS.
19. INCORPORATE PEAT INTO THE ROOT ZONE OF RHODODENDRONS, AZALEAS AND OTHER ACID LOVING PLANTS.
20. INCORPORATE 10-20-20 FERTILIZER INTO THE ROOT ZONE OF ALL NEW PLANTINGS.
21. RONSTAR, OR APPROVED EQUAL, PREEMERGENT HERBICIDE TO BE APPLIED TO ALL PLANTED AREAS PER MANUFACTURERS INSTRUCTIONS.
22. EXISTING VEGETATION TO BE SPRAYED WITH ROUNDUP, OR APPROVED EQUAL, PER MANUFACTURERS INSTRUCTIONS. SUFFICIENT TIME SHALL BE GIVEN TO ALLOW EXISTING MATERIAL TO DIE. REMOVE EXISTING 27. THE PROPERTY OWNER IS RESPONSIBLE FOR MAINTAINING TURF PLANTED WITHIN THE RIGHT OF WAY.
23. CROWN LAWN AREAS AND GRADE TO PROVIDE POSITIVE DRAINAGE.
24. ROLL LAWN AREA TO INSURE PROPER COMPACTION TO MINIMIZE SETTLING.
25. AMEND SOIL IN LAWN AREAS WITH 80 LBS. OF DOLOMITE LIME AND 40 LBS. OF 10-20-20 SLOW RELEASE FERTILIZER OR EQUIVALENT. PROVIDE A 3" LAYER OF SANDY LOAM TOPSOIL FOR LAWN AND BED AREA.
26. SEED LAWN AREAS WITH GRASS SEED MANUFACTURER'S RECOMMENDATIONS. COVER SEED WITH FINE MULCH APPLIED WITH ROLLER OR HYDROSEED.
27. THE PROPERTY OWNER IS RESPONSIBLE FOR MAINTAINING TURF PLANTED WITHIN THE RIGHT OF WAY.
28. PLANT MATERIAL SHALL BE PLANTED W/ ROOT CROWN 1" ABOVE FINISHED GRADE TO ALLOW POSITIVE DRAINAGE AWAY FROM CROWN.
29. STAKE ALL TREES OVER 6 FT. IN HEIGHT PER DETAILS ON THIS SHEET.
30. REFER TO DETAILS FOR ADDITIONAL INFORMATION.
31. ALL PLANTING SHALL BE IRRIGATED BY AN AUTOMATIC UNDERGROUND SPRINKLER SYSTEM.
32. ALL PLANT MATERIALS FURNISHED ARE TO BE HEALTHY, UNIFORMLY BRANCHED AND WITH WELL DEVELOPED FIBROUS ROOT SYSTEMS.
33. ALL PLANT MATERIALS FURNISHED ARE TO BE FREE FROM DEAD OR BROKEN BRANCHES, LICHENS, SCARS, BROKEN BARK OR WOUNDS. ALL PLANT MATERIALS WILL BE INSECT, WEED, AND DISEASE FREE ACCORDING TO THE REQUIREMENTS OF THE WASHINGTON STATE DEPARTMENT OF AGRICULTURE FOR NURSERY PLANT MATERIALS SOLD FOR WHOLESALE OR RETAIL. ALL PRUNING WOUNDS MUST BE WELL HEALED WITH NO EVIDENCE OF DECAY.
34. FIELD CONFIRM ALL SITE CONDITIONS, AREAS AND SIZES PRIOR TO BIDDING & CONSTRUCTION. DO NOT SCALE FROM PLANS.

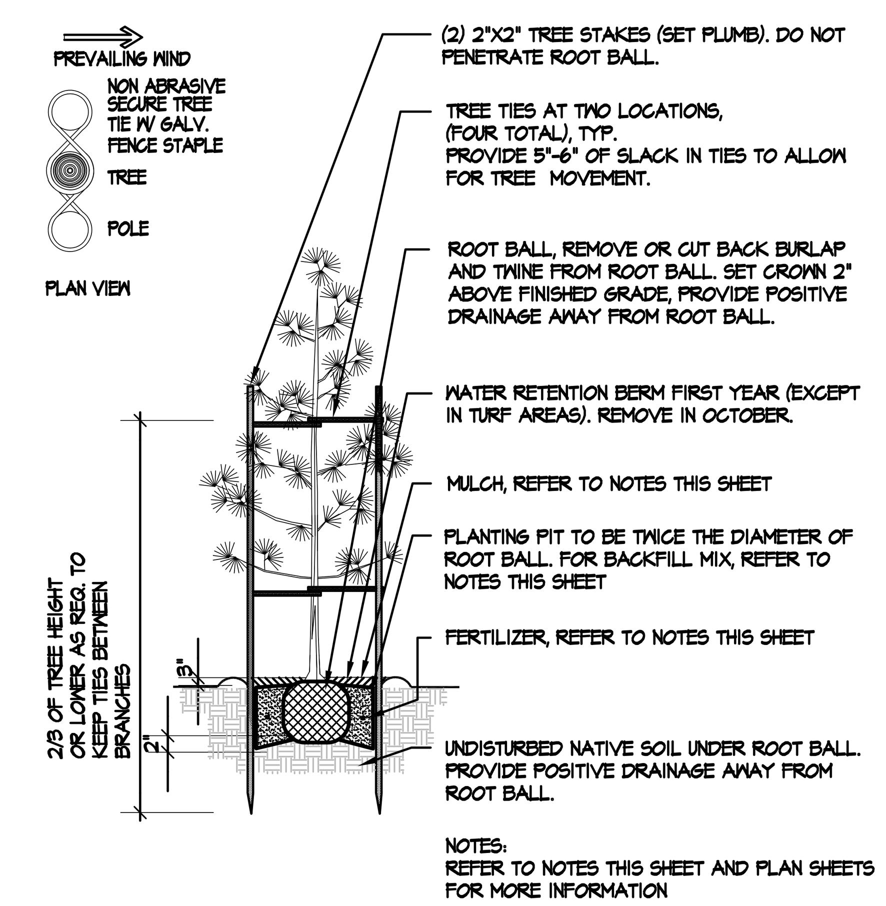
PLANT LEGEND

SYMBOL	BOTANICAL / COMMON NAME	SIZE	QUANTITY
TREES			
	ACER BEURGERIANUM TRIDENT MAPLE	2" cal. MIN.	9
	ACER GRANDIDENTATUM 'SCHMIDT' ROCKY MOUNTAIN GLOW MAPLE	2" cal. MIN.	8
	ACER RUBRUM 'ARMSTRONG' ARMSTRONG MAPLE	2" cal. MIN.	11
	CALOCERDUS DECURRENS INCENSE CEDAR	6' ht. MIN.	12
	CARPINUS BETULUS 'FASTIGIATA' PYRAMIDAL EUROPEAN HORNBEAM	2" cal. MIN.	16
	CUPRESSUS NOOTKATENSIS 'PENDULA' WEEPING ALASKAN CEDAR	6' ht. MIN.	19
	PYRUS CALLERYANA 'REDSPIRE' REDSPIRE ORNAMENTAL PEAR	2" cal. MIN.	8
SHRUBS			
	ESCALLONIA 'COMPAKTA' COMPACT ESCALLONIA	2 GAL.	70
	ILEX X MESERVEAE 'BLUE BOY' BLUE BOY HOLLY	5 GAL.	49
	MYRICA CALIFORNICA PACIFIC WAX MYRTLE	5 GAL.	71
	NANDINA DOM. 'GULF STREAM' GULF STREAM HEAVENLY BAMBOO	2 GAL.	54
	SPIREA X BUMALDA 'GOLDFLAME' GOLDFLAME SPIREA	2 GAL.	50
	THUJA OCCIDENTALIS 'EMERALD' EMERALD ARBORVITAE	5 GAL.	21
GROUNDCOVER			
	ARCTOSTAPHYLOS UVA URSI 'MASS.' MASSACHUSETS KINNICKINNICK	1 GAL.	30" O.C.
	TURF OR GROUNDCOVER PER OWNER		
	LANDSCAPE PER OWNER		
	KINNICKINNICK, COTONEASTER, CREEPING RASPBERRY OR OTHER GROUND COVER/LANDSCAPE, PER OWNER		



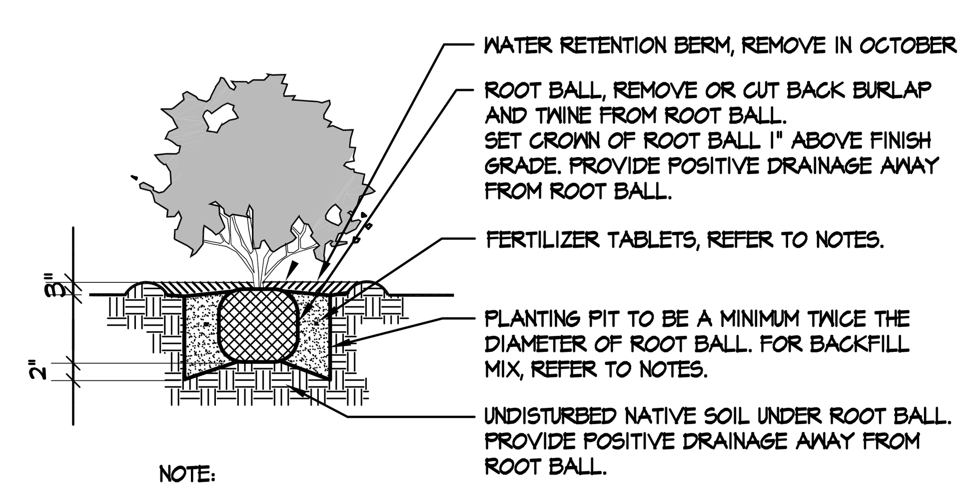
NOTE:
REFER TO NOTES THIS SHEET AND PLAN SHEETS FOR MORE INFORMATION

(A) B & B Tree Planting Detail
Not To Scale — SECTION / PLAN VIEW



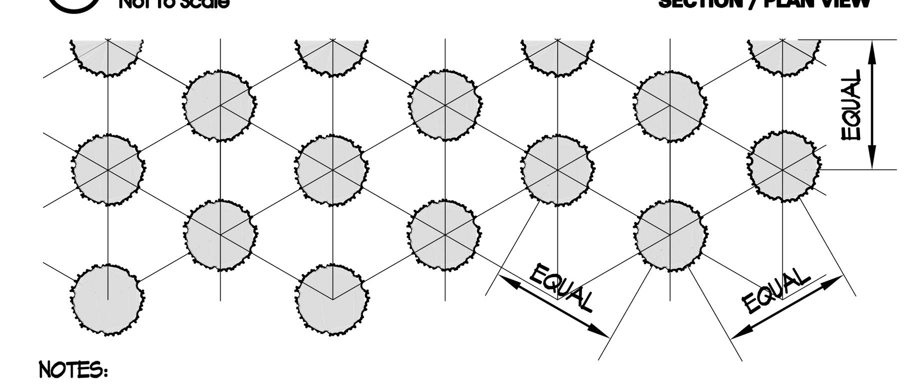
NOTES:
REFER TO NOTES THIS SHEET AND PLAN SHEETS FOR MORE INFORMATION

(B) B & B Tree Planting Detail: Evergreen under 8' Height
Not To Scale — SECTION / PLAN VIEW



NOTE:
REFER TO NOTES AND PLANS PRIOR TO BIDDING AND CONSTRUCTION.

(C) B & B Shrub Planting Detail
Not To Scale — SECTION



NOTES:

ALL GROUND COVER SHALL BE PLANTED AT EQUAL TRIANGULAR SPACING AS SPECIFIED IN PLANTING LEGEND.

GROUND COVER TO BE LOCATED ONE HALF OF SPECIFIED SPACING DISTANCE FROM ANY HARD SURFACE, UNLESS OTHERWISE SPECIFIED.

(D) Ground Cover Planting Detail
Not To Scale — PLAN VIEW

Planning Solutions, Inc.
Creating Solutions to Complex Issues
4400 NE 77th Avenue
Suite 275
VANCOUVER, WA 98662
VOICE: 360-750-9000 FAX: 360-713-6102
www.planningsolutionsinc.com

PRELIMINARY
NOT FOR CONSTRUCTION
SUBJECT TO APPROVAL

90TH STREET SITE PLAN

4209 NE 90th Circle & 9000 NE 45th Avenue
Vancouver, Washington

DRAWN: VH	CHECKED: CB
SCALE: 1" = 30'-0"	DATE: 9.20.21
JOB #: 21-1678	
ISSUED FOR: PLR	
REVISIONS:	
1	
2	
3	
4	
5	
6	

SHEET NAME:
PRELIMINARY LANDSCAPE PLAN

SHEET #:
L1

SHEET 1 OF 1

© COPYRIGHT 2021, PLANNING SOLUTIONS, INC. NO PART OF THIS DRAWING MAY BE COPIED OR REPRODUCED WITHOUT WRITTEN PERMISSION OF PLANNING SOLUTIONS, INC.

DISCLAIMER AND LIMITATIONS: ANY WORK CONTAINED HEREIN INCLUDING BUT NOT LIMITED TO PLANS AND DOCUMENTS ARE INSTRUMENTS OF SERVICE INTENDED FOR USE SOLELY WITH RESPECT TO THIS PROJECT. ALL WORK SHALL BE CONSIDERED CONCEPTUAL AND SUBJECT TO CHANGE. THESE INSTRUMENTS OF SERVICE SHALL BE CONSIDERED A WORK IN PROGRESS WHERE UNKNOWN FACTORS EXIST AND JURISDICTIONAL REQUIREMENTS HAVE NOT BEEN VERIFIED. DUE TO THE HIGH DEGREE OF UNCERTAINTY ASSOCIATED WITH A CONCEPTUAL DESIGN, THESE INSTRUMENTS OF SERVICE SHALL NOT BE USED AS THE BASIS FOR A FINANCIAL EVALUATION OR CONSTRUCTION COST ESTIMATING. NO ASSURANCES ARE OFFERED OR IMPLIED AS TO THE OVERALL FEASIBILITY OF THE PROJECT. ALL WORK SHALL BE SUBJECT TO REVIEW AND FINAL APPROVAL BY ALL APPROPRIATE FEDERAL, STATE AND LOCAL AGENCIES AND SHALL CONTAIN THE PROFESSIONAL SEAL AND SIGNATURE OF ALL REQUIRED DESIGN PROFESSIONALS PRIOR TO ANY USE OF THESE DOCUMENTS. PLANNING SOLUTIONS, INC. AND ITS CONSULTANTS SHALL BE DEEMED THE AUTHORS AND OWNERS OF THEIR RESPECTIVE INSTRUMENTS OF SERVICE AND SHALL RETAIN ALL COMMON LAW, STATUTORY AND OTHER RESERVED RIGHTS, INCLUDING COPYRIGHTS.