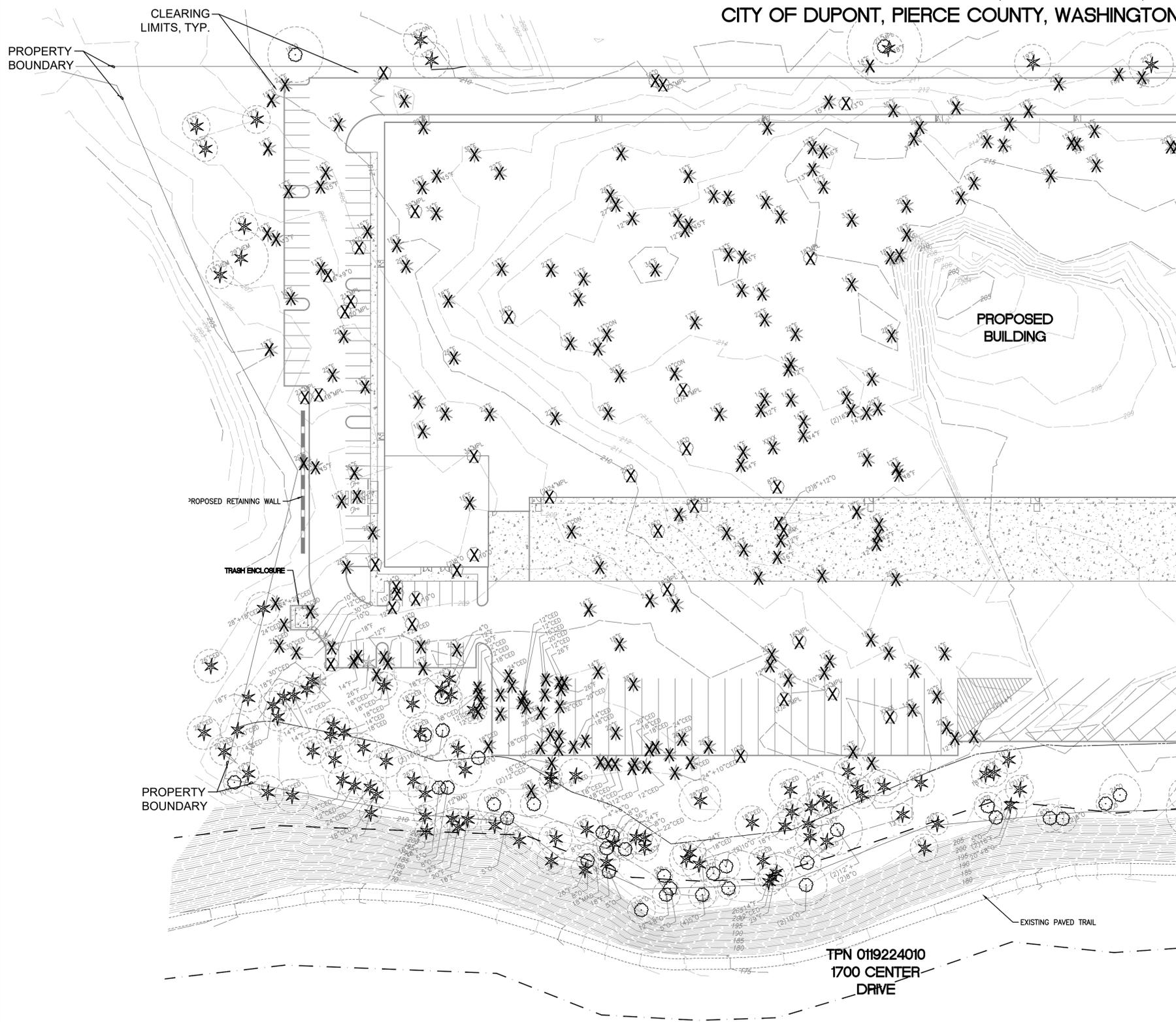
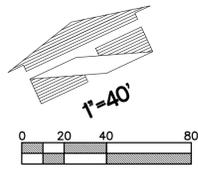


PRELIMINARY TREE RETENTION PLAN

FOR DUPONT - WEST

A PORTION OF THE NW 1/4 OF SECTION 26, TOWNSHIP 19N, RANGE 01E, W.M.
CITY OF DUPONT, PIERCE COUNTY, WASHINGTON

APPROVED FOR CONSTRUCTION
BY: CITY OF DUPONT DATE:
THESE DRAWINGS ARE APPROVED FOR CONSTRUCTION FOR A PERIOD OF 12 MONTHS FROM THE DATE SHOWN HEREON. THE CITY RESERVES THE RIGHT TO MAKE REVISIONS, ADDITIONS, DELETIONS, OR MODIFICATIONS SHOULD CONSTRUCTION BE DELAYED BEYOND THIS TIME LIMITATION. THE CITY, BY APPROVING THESE DRAWINGS, ASSUMES NO LIABILITY IN REGARDS TO THEIR ACCURACY OR OMISSIONS.



LEGEND

	EXISTING TREE TO BE RETAINED PROTECT DURING CONSTRUCTION
	EXISTING TREE TO BE REMOVED

TREE RETENTION

TOTAL PROJECT ACREAGE:	19.65 ACRES
TOTAL # OF HEALTHY TREES:	607 TREES
TREE RET. REQ. (1.5 TREES PER ACRE):	29 TREES
PROJECTED TREE RETENTION:	211 TREES
EXCESS OF TREE RET. OVER TREE REQ.	182 TREES
HEALTHY TREES TO BE REMOVED	396 TREES
SOURCE: WASHINGTON FORESTRY CONSULTANTS TREE RETENTION PLAN, 3/20/2024	

TREE REPLACEMENT

ONE LANDMARK EXISTING OREGON WHITE OAK IS PROPOSED TO BE REMOVED. OREGON OAK REPLACEMENT TREES PROPOSED, SEE PLANT SCHEDULE.

TREE PROTECTION MEASURES

SOURCE: WASHINGTON FORESTRY CONSULTANTS, INC. TREE RETENTION PLAN, 3/20/24

TREES TO BE SAVED MUST BE PROTECTED DURING CONSTRUCTION BY A SIX-FOOT-HIGH TEMPORARY CHAIN LINK FENCING (SEE BELOW), LOCATED 5 FEET OUTSIDE OF THE DRIP LINE OF THE TREES. PLACARDS SHALL BE PLACED ON THE FENCING EVERY 50 FEET INDICATING THE WORDS, "NO TRESPASSING - PROTECTED TREES". THE INDIVIDUAL CRZ IS A RADIUS OF ONE FOOT FOR EACH ONE INCH OF DBH (6 FEET MINIMUM), UNLESS OTHERWISE DELINEATED BY WFCl.

TREE PROTECTION FENCES SHOULD BE PLACED AROUND THE EDGE OF THE CRITICAL ROOT ZONE. THE FENCE SHOULD BE ERRECTED AFTER LOGGING BUT PRIOR TO THE START OF CLEARING. THE FENCES SHOULD BE MAINTAINED UNTIL THE START OF THE LANDSCAPE INSTALLATION.

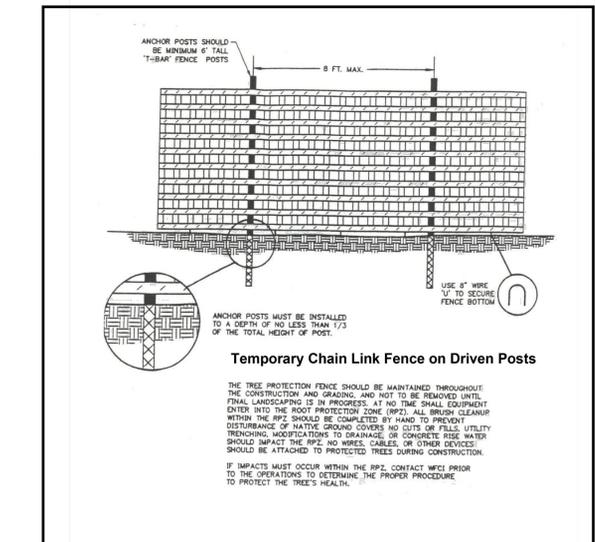
THERE SHOULD BE NO EQUIPMENT ACTIVITY (INCLUDING ROTOTILLING) WITHIN THE CRITICAL ROOT ZONE (CRZ). NO IRRIGATION LINES, TRENCHES, OR OTHER UTILITIES SHOULD BE INSTALLED WITHIN THE CRZ. CUTS OR FILLS SHOULD IMPACT NO MORE THAN 25% OF A TREE'S ROOT SYSTEM. IF TOPSOIL IS ADDED TO THE ROOT ZONE OF A PROTECTED TREE, THE DEPTH SHOULD NOT EXCEED 2 INCHES OF A SANDY LOAM OR LOAMY FINE SAND TOPSOIL AND SHOULD NOT COVER MORE THAN 25% OF THE ROOT SYSTEM.

IF ROOTS ARE ENCOUNTERED OUTSIDE THE CRZ DURING CONSTRUCTION, THEY SHOULD BE CUT CLEANLY WITH A SAW AND COVERED IMMEDIATELY WITH MOIST SOIL. NOXIOUS VEGETATION WITHIN THE CRITICAL ROOT ZONE SHOULD BE REMOVED BY HAND. IF A PROPOSED SAVE TREE MUST BE IMPACTED BY GRADING OR FILLS, THEN THE TREE SHOULD BE RE-EVALUATED BY WFCl TO DETERMINE IF THE TREE CAN BE SAVED WITH MITIGATING MEASURES, OR IF THE TREE SHOULD BE REMOVED.

THE PROPOSED LOCATION AND PAVING OF THE PROPOSED SEQUALITCHEW CREEK TRAIL BISECTS THE CRZ OF MULTIPLE TREES IN TREE RETENTION AREA A. A CERTIFIED ARBORIST SHOULD BE ON-SITE DURING WORK IN THIS AREA TO RE-EVALUATE THE HEALTH OF THE TREES AND ASSESS THE PATH ALIGNMENT TO DETERMINE THE PROPER METHOD TO PROTECT THE ROOTS OF THE SAVE TREES. THE PATH FOLLOWS THE EXISTING GRADE SO LITTLE SOIL DISTURBANCE WILL OCCUR. THE OVERALL IMPACT OF THE TRAIL WITHIN THE CRZ OF THE SAVE TREES IS MINIMAL COMPARED TO THE ENTIRE ROOT ZONES OF THE TREES. IF THE TREES ARE HEALTHY, THEY WILL BE ABLE TO TOLERATE SOME ROOT IMPACT.

ROOT IMPACT COULD BE REDUCED USING ROOT PROTECTION STRATEGIES SUCH AS STRUCTURAL SOIL UNDER THE PATHWAY OR INSTALLING A PASSIVE AERATION UNDER THE PATH. STRUCTURAL SOILS ARE SOILS THAT ARE SPECIALLY DESIGNED TO PROVIDE NUTRIENTS, SPACE, AND POROSITY TO ACCOMMODATE ROOT GROWTH WHILE ALSO ALLOWING FOR COMPACTION TO SUPPORT PAVEMENT WITHOUT SETTLING. THIS WILL PROTECT THE ROOTS OF THE TREE AND ALLOW FOR THE PATHWAY.

THE WORK ON THE PATHWAY SHOULD BE CONFINED ONLY TO THE PATH AREA. TREE PROTECTION FENCES SHOULD BE PLACED ALONG THE SIDES OF THE PATH. THE PATH SHOULD BE CONSTRUCTED WITH STRUCTURAL SOILS AS PROGRESS IS MADE TO PREVENT ROOT COMPACTION AND DAMAGE. THE ON-SITE ARBORIST SHOULD PRESCRIBE ANY PRUNING OR OTHER TREE MAINTENANCE ON A TREE-BY-TREE BASIS TO PROMOTE TREE HEALTH. THE HEALTH OF THE TREES SHOULD BE MONITORED FOR 3 YEARS AFTER THE PATH HAS BEEN CONSTRUCTED.



TREE PROTECTION FENCE DETAIL

DMC 25.120.030:

(5) NO CLEARING, GRADING, TRENCHING, CUTTING, IMPERVIOUS SURFACING, OR OTHER CONSTRUCTION SHALL BE ALLOWED WITHIN THE DRIP LINE OF ANY TREE TO BE RETAINED, OR WITHIN ONE AND ONE-HALF TIMES THE RADIUS OF THE CANOPY IN THE CASE OF OAK TREES TO BE RETAINED, NOR SHALL GRADES BE LOWERED OR RAISED SO NEAR AS TO JEOPARDIZE SAID TREES; UNLESS THERE IS NO OTHER ALTERNATIVE AND THE INTRUSION IS THE MINIMUM POSSIBLE AS DETERMINED BY THE ADMINISTRATOR. TEMPORARY BARRIERS SHALL BE INSTALLED AROUND TREES REQUIRING PROTECTION DURING CONSTRUCTION.

(7) ALL TREES RETAINED BY MEANS OF DMC 25.120.030, INCLUDING THOSE ON SINGLE-FAMILY RESIDENTIAL LOTS, SHALL REMAIN PROTECTED FOR THEIR LIFE, EXCEPT AS NOTED IN SUBSECTION (8) OF THIS SECTION. THE PLAT OR SITE PLAN ON WHICH THE TREE IS LOCATED SHALL CONTAIN THE FOLLOWING NOTE: "THIS PLAT IS ALSO SUBJECT TO AN APPROVED TREE RETENTION PLAN WHICH REQUIRES THAT CERTAIN TREES BE PRESERVED. THAT PLAN, WHICH IS BINDING ON ALL OWNERS, IS ON FILE WITH THE CITY PLANNING DEPARTMENT." TO FURTHER INFORM FUTURE LOT OWNERS, A COPY OF THE APPROVED TREE RETENTION PLAN SHALL BE PROVIDED EACH OWNER AT CLOSING ON EACH LOT.

Revision

Title: PRELIMINARY TREE RETENTION PLAN FOR DUPONT - WEST

For: AVENUE 55, LLC
601 UNION STREET, SUITE 2930
SEATTLE, WA 98101
(206) 707-9696

Scale: Horizontal 1"=40'
Vertical N/A

Designed: J.T.R.
Drawn: J.T.R.
Checked: J.M.V.
Approved: J.M.V.
Date: 3/27/24

Borghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222
borghausen.com

Job Number: 18666
Sheet: L1 of 12

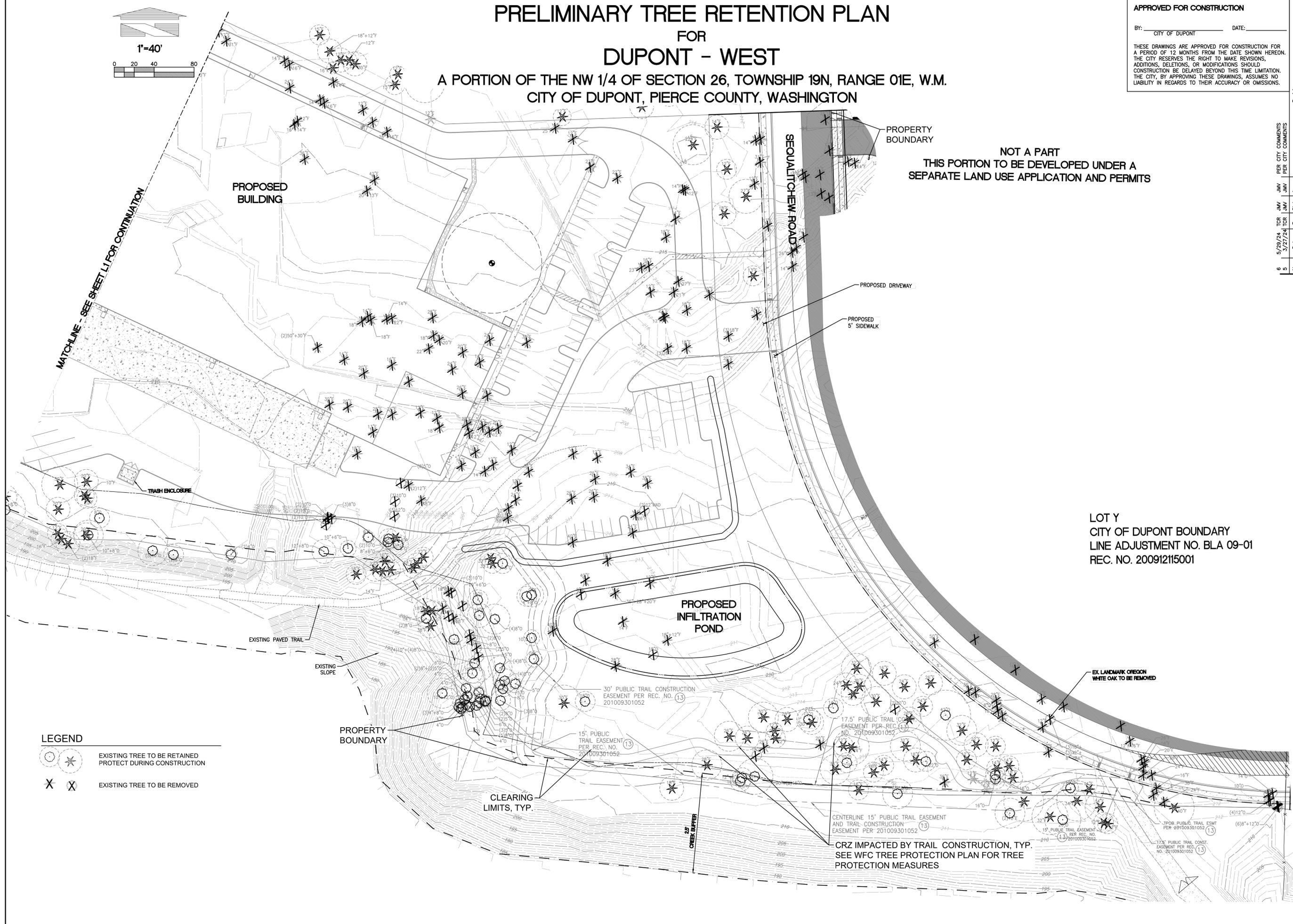
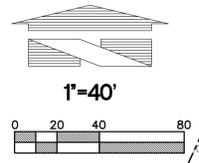
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PRELIMINARY TREE RETENTION PLAN

FOR DUPONT - WEST

A PORTION OF THE NW 1/4 OF SECTION 26, TOWNSHIP 19N, RANGE 01E, W.M.
CITY OF DUPONT, PIERCE COUNTY, WASHINGTON

APPROVED FOR CONSTRUCTION
 BY: CITY OF DUPONT DATE: _____
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NOT A PART
 THIS PORTION TO BE DEVELOPED UNDER A
 SEPARATE LAND USE APPLICATION AND PERMITS

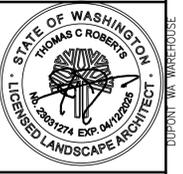
LOT Y
 CITY OF DUPONT BOUNDARY
 LINE ADJUSTMENT NO. BLA 09-01
 REC. NO. 200912115001

- LEGEND**
- EXISTING TREE TO BE RETAINED PROTECT DURING CONSTRUCTION
 - EXISTING TREE TO BE REMOVED

No.	Date	By	Clcd.	Appr.	PER CITY COMMENTS
6	5/29/24	TCR	JMV	JMV	PER CITY COMMENTS
5	3/27/24	TCR	JMV	JMV	PER CITY COMMENTS

Title:
 PRELIMINARY
 TREE RETENTION PLAN
 FOR
 DUPONT - WEST

For:
 AVENUE 55, LLC
 601 UNION STREET, SUITE 2930
 SEATTLE, WA 98101
 (206) 707-9696



Scale:
 Horizontal 1"=40'
 Vertical N/A

Designed: TCR
Drawn: TCR
Checked: JMV
Approved: JMV
Date: 3/27/24

Barghausen Consulting Engineers, Inc.
 18215 72nd Avenue South
 Kent, WA 98032
 425.251.6222
 barghausen.com



Job Number: 18666
Sheet: L2 of 12

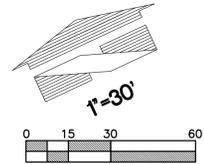
FILE: \\B0005X18666\preliminary\18666-pl.dwg Date: 7/16/24 12:35 PM Scale: 1"=40'

CODE REQUIREMENTS

SITE AREA = 17.72 ACRES
 DMC 25.90.090: 20% OF SITE AREA MUST BE LANDSCAPE
 LANDSCAPE AREA = 8.18 ACRES (46.2%)

DMC 25.90.030: ONE PARKING LOT TREE REQUIRED PER EACH 6
 PARKING SPACES (141 SPACES SHOWN)
 141 / 6 = 24 PARKING LOT TREES REQUIRED, 36 PROVIDED

DMC 25.90.030: LANDSCAPE BUFFER REQUIRED BETWEEN PARKING
 LOTS AND R/W (SEE LANDSCAPE PLAN)



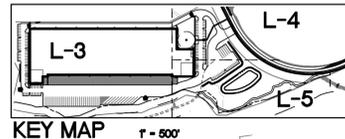
EROSION-CONTROL
 HYDROSEED AREAS
 OF PROPOSED
 GRADING, TYP.

CLEARING
 LIMITS,
 TYP.

PROPERTY
 BOUNDARY

RETAINING WALL

TRASH ENCLOSURE



PRELIMINARY LANDSCAPE PLAN

**FOR
 DUPONT - WEST**

A PORTION OF THE NW 1/4 OF SECTION 26, TOWNSHIP 19N, RANGE 01E, W.M.
 CITY OF DUPONT, PIERCE COUNTY, WASHINGTON

LEGEND

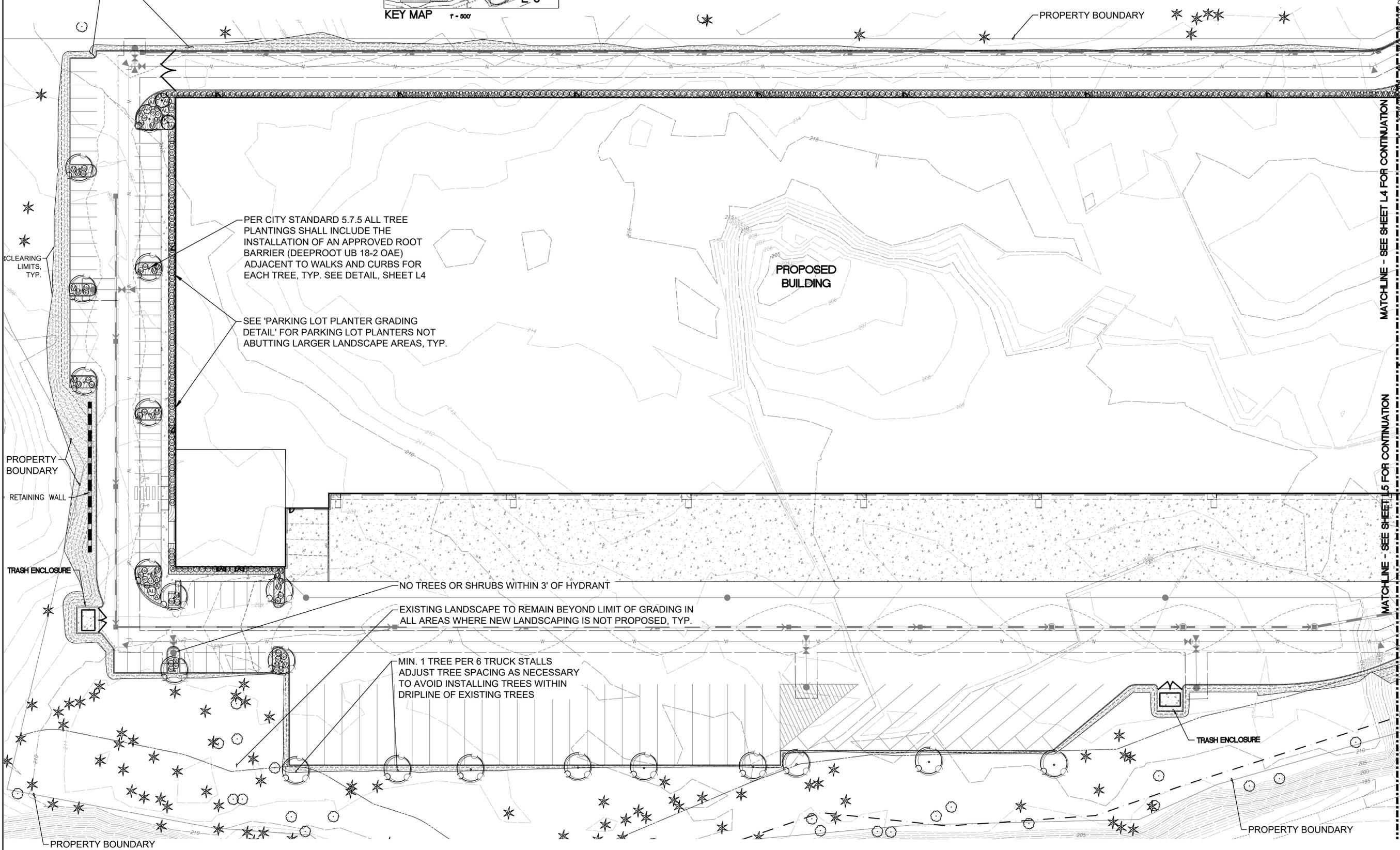


EXISTING TREE TO BE RETAINED
 PROTECT DURING CONSTRUCTION

APPROVED FOR CONSTRUCTION

BY: CITY OF DUPONT DATE:

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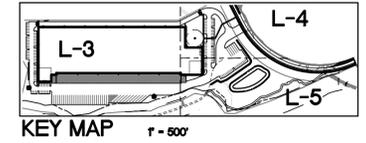
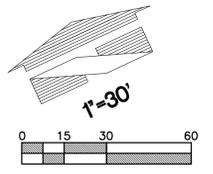
Title: PRELIMINARY LANDSCAPE PLAN FOR DUPONT - WEST	
For: AVENUE 55, LLC 601 UNION STREET, SUITE 2930 SEATTLE, WA 98101 (206) 707-9696	
Scale: Horizontal: 1" = 30' Vertical: N/A	Designed: TCR Drawn: TCR Checked: JMV Approved: JMV Date: 3/27/24
Job Number: 18666 Sheet: L3 of 12 Job Name: Barghausen Consulting Engineers, Inc. Address: 18215 72nd Avenue South, Kent, WA 98032 Phone: 425.251.6222 Website: barghausen.com	

PRELIMINARY LANDSCAPE PLAN

FOR DUPONT - WEST

A PORTION OF THE NW 1/4 OF SECTION 26, TOWNSHIP 19N, RANGE 01E, W.M.
CITY OF DUPONT, PIERCE COUNTY, WASHINGTON

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STREET TREES 40' O.C., TYP.
LOCATE WITHIN R/W
ADJUST LOCATIONS AS
REQUIRED TO ACCOMODATE
SIGHT DISTANCE REQUIREMENTS
FOR DRIVEWAY
SEE DUPONT DETAILS, RIGHT

EXISTING LANDSCAPE TO
REMAIN BEYOND LIMIT OF
GRADING IN ALL AREAS
WHERE NEW LANDSCAPING
IS NOT PROPOSED, TYP.

BERM AND MODERATE
BUFFER PER DMC 25.90.030(3)
BETWEEN PARKING LOT AND
R/W, TREES MAX. 20' O.C.

EROSION-CONTROL
HYDROSEED AREAS OF
PROPOSED GRADING, TYP.

SEE 'PARKING LOT
PLANTER GRADING
DETAIL' FOR PARKING LOT
PLANTERS NOT ABUTTING
LARGER LANDSCAPE
AREAS, TYP.

EXISTING LANDSCAPE TO
REMAIN WITHIN 50' RADIUS
OF EXISTING HISTORICAL
MARKER

CLEARING
LIMITS, TYP.

PROPERTY
BOUNDARY

SEQUALTCHEW ROAD

PER CITY STANDARD 5.7.5 ALL TREE
PLANTINGS SHALL INCLUDE THE
INSTALLATION OF AN APPROVED ROOT
BARRIER (DEEPROOT UB 18-2 OAE)
ADJACENT TO WALKS AND CURBS FOR
EACH TREE, TYP. SEE DETAIL, RIGHT

NO IRRIGATION PROPOSED IN R/W.
STREET TREES TO BE INSTALLED WITH
GATORBAGS OAE AND REFILLED
REGULARLY FOR 1 GROWING SEASON
BY OWNER

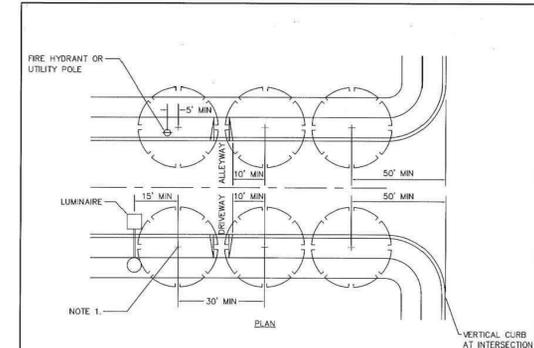
MATCHLINE - SEE SHEET L3 FOR CONTINUATION

MATCHLINE - SEE SHEET L5 FOR CONTINUATION

PROPOSED
BUILDING

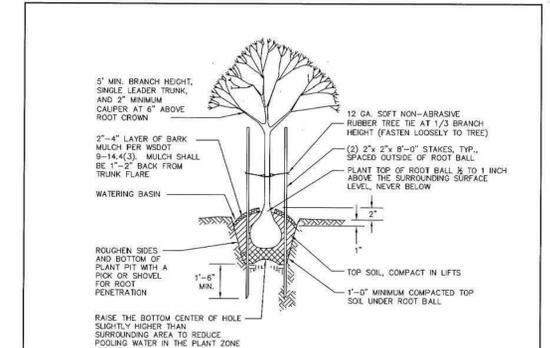
PROPOSED
DRIVEWAY

PROPOSED
SIDEWALK



- GENERAL NOTES:**
- TREES SHALL GENERALLY BE PLANTED IN THE CENTER OF THE PLANTING STRIPS.
 - TREES SHALL BE STAKED IN A MANNER NOT TO OBSTRUCT SIDEWALK TRAFFIC.
 - IN CASE OF BLOCK-OUTS, MIN. CLEAR SIDEWALK WIDTH SHALL BE 5 FEET IN RESIDENTIAL OR 8 FEET IN BUSINESS DISTRICTS.
 - TREES SHALL BE PLANTED A MINIMUM OF 5 FEET FROM UNDERGROUND UTILITIES AND 15 FEET FROM STREET LIGHTS.
 - TREES SHALL NOT BE PLANTED WITHIN THE CLEAR ZONE SIGHT TRIANGLE.
 - FOR ADDITIONAL REQUIREMENTS, SEE SECTION 5.7 OF THE PUBLIC WORKS STANDARDS AND DWG. NO. 5.7-2.

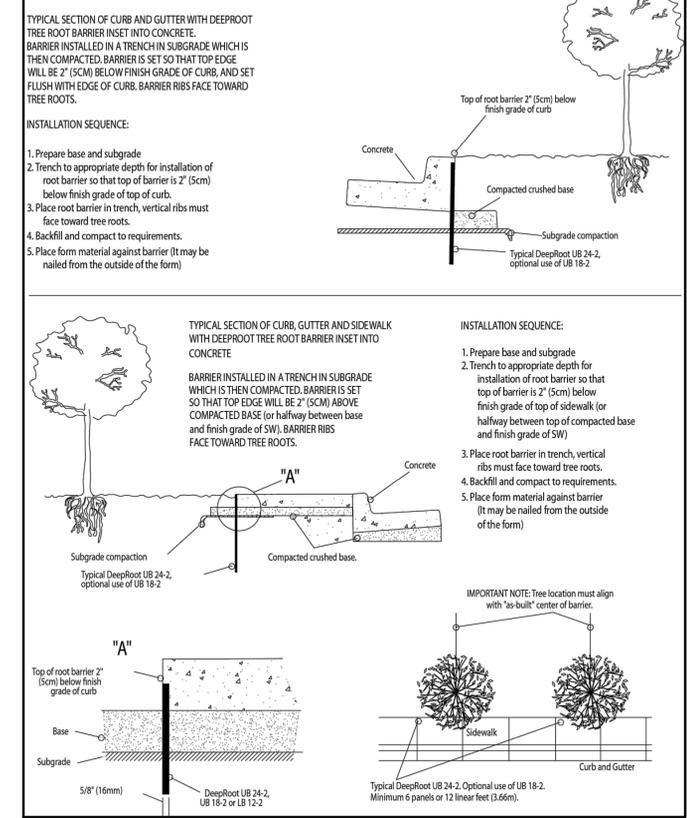
CITY OF DUPONT			
STREET TREE STANDARDS			
APPROVED:	DATE:		DWG. NO.
<i>[Signature]</i>	9/11		5.7-1
CITY OF DUPONT	DRWN:	CHKD:	SCALE:
9/11	L.G.	T.N.	NO SCALE



- GENERAL NOTES:**
- PLANT ALL TREES ONE INCH HIGHER THAN LEVEL AT WHICH GROWN IN NURSERY.
 - TAKE CARE TO AVOID ROOTS WITH STAKES.
 - PLANT PIT SHALL BE AT LEAST 2 TIMES THE WIDTH OF THE ROOT BALL, BUT SHALL BE ONLY AS DEEP AS THE ROOT BALL.
 - ROOT BARRIER SHALL BE INSTALLED A MINIMUM OF 3" EACH SIDE OF CENTER OF ROOT BALL AT OR BELOW HARDSCAPE SURFACE ADJACENT TO CURBS AND PAVED SURFACES. ROOT BARRIER SHALL BE HDG. PANEL EP-2450 (24" X 24"), OR CITY APPROVED EQUAL, INSTALLED PER MANUFACTURERS SPECIFICATIONS.
 - REMOVE ALL TAGS, WIRES, STRING, STRAPS, BURLAP, AND WIRE BASKETS FROM THE ROOT BALL, BEFORE PLANTING.
 - STAKING AND GUYING WIRES SHALL BE REMOVED AFTER (1) YEAR, FOLLOWING INSPECTION FOR WOOD. REPLACE AS REQUIRED.
 - THE CITY SHALL APPROVE ALL STREET TREES AND PLANTING LOCATIONS ON SITE PRIOR TO PLANTING.
 - FOR ADDITIONAL REQUIREMENTS, SEE SECTION 5.7 AND DWG. NO. 5.7-1 OF THE PUBLIC WORKS STANDARDS.

CITY OF DUPONT			
STREET TREE PLANTING AND STAKING DETAIL			
APPROVED:	DATE:		DWG. NO.
<i>[Signature]</i>	9/11		5.7-2
CITY OF DUPONT	DRWN:	CHKD:	SCALE:
9/11	E.S.T.	D.J.M.	NO SCALE

Linear Application of DeepRoot Tree Root Barriers at Time of Installing Concrete Sidewalks and Curbs



No.	Date	By	Clcd.	Appr.	PER CITY COMMENTS
5	5/29/24	TCR	JMV	JMV	PER CITY COMMENTS
6	3/27/24	TCR	JMV	JMV	PER CITY COMMENTS

Job Number 18666

Sheet L4 of 12

For: AVENUE 55, LLC
601 UNION STREET, SUITE 2930
SEATTLE, WA 98101
(206) 707-9696

Scale: Horizontal 1"=30', Vertical N/A

Designed TCR
Drawn TCR
Checked JMV
Approved JMV
Date 3/27/24

Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222
barghausen.com

STATE OF WASHINGTON
THOMAS C. ROBERTS
LANDSCAPE ARCHITECT

PRELIMINARY LANDSCAPE PLAN

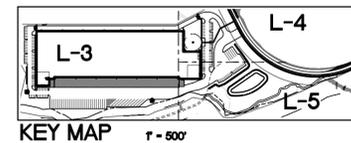
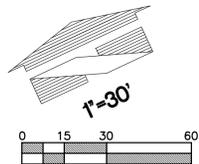
FOR DUPONT - WEST

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UNDERGROUND STORM WATER FACILITY
SEE CIVIL

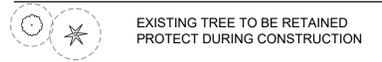
MODERATE BUFFER PER DMC 25.90.030(3) BETWEEN
POND AND R/W, TREES MAX. 20' O.C.

BERM AND MODERATE BUFFER PER DMC 25.90.030(3)
BETWEEN PARKING LOT AND R/W, TREES MAX. 20' O.C.

BERM AND MODERATE BUFFER PER DMC 25.90.030(3)
BETWEEN PARKING LOT AND POND, TREES MAX. 20' O.C.

SEE 'PARKING LOT PLANTER GRADING
DETAIL' FOR PARKING LOT PLANTERS NOT
ABUTTING LARGER LANDSCAPE AREAS, TYP.

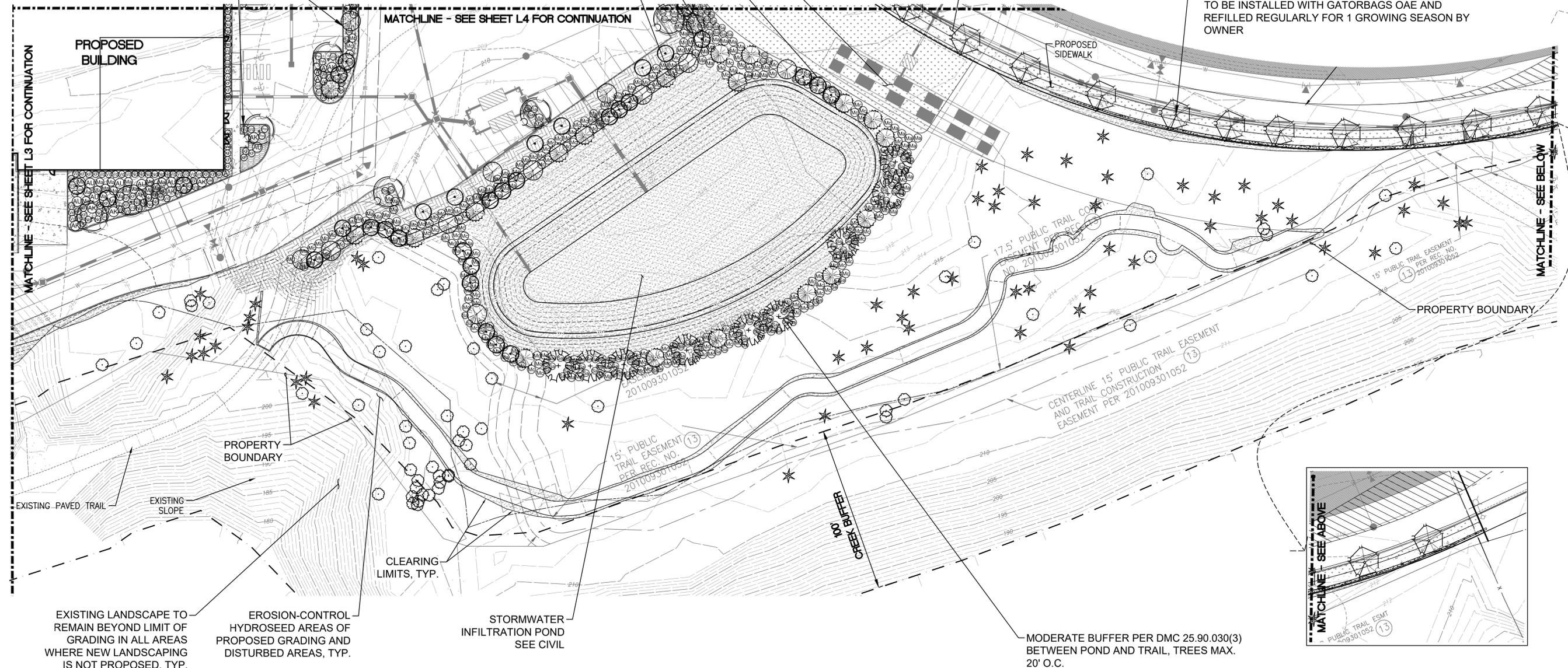
LEGEND



STREET TREES 40' O.C., TYP.
LOCATE WITHIN R/W
ADJUST LOCATIONS AS REQUIRED
TO ACCOMODATE SIGHT DISTANCE
REQUIREMENTS FOR DRIVEWAY
SEE DUPONT DETAILS, SHEET L4

PER CITY STANDARD 5.7.5 ALL TREE PLANTINGS
SHALL INCLUDE THE INSTALLATION OF AN
APPROVED ROOT BARRIER (DEEPROOT UB 18-2
OAE) ADJACENT TO WALKS AND CURBS FOR EACH
TREE, TYP. SEE DETAIL, SHEET L4

NO IRRIGATION PROPOSED IN R/W. STREET TREES
TO BE INSTALLED WITH GATORBAGS OAE AND
REFILLED REGULARLY FOR 1 GROWING SEASON BY
OWNER



Revision	
No.	Date
6	5/29/24
5	3/27/24

Per City Comments
Per City Comments
By: [Signature]
Date: [Signature]



Designed	TCR
Drawn	TCR
Checked	JMV
Approved	JMV
Date	3/27/24

Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222
barghausen.com

Job Number: 18666
Sheet: L5 of 12

PLANT SCHEDULE

FOR

DUPONT - WEST

A PORTION OF THE NW 1/4 OF SECTION 26, TOWNSHIP 19N, RANGE 01E, W.M.
CITY OF DUPONT, PIERCE COUNTY, WASHINGTON

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PLANT SCHEDULE

SYMBOL QTY BOTANICAL / COMMON NAME CONT. SIZE

TREES

	52	ACER CIRCINATUM / VINE MAPLE	B & B	2" CAL
	23	CORNUS KOUSA / KOUSA DOGWOOD	B & B	2" CAL
	45	GLEDTISIA TRIACANTHOS INERMIS 'SKYCOLE' / HONEY LOCUST	B & B	2" CAL
	18	PINUS CONTORTA VAR. CONTORTA / SHORE PINE	B & B	6' MIN. HT.
	9	QUERCUS GARRYANA / OREGON WHITE OAK	B & B	2.5" CAL
	35	THUJA PLICATA 'EXCELSA' / EXCELSA CEDAR	B & B	6' MIN. HT.



TURFGRASS LAWN 42,250 SF
SOD OR HYDROSEED. COUNTRY GREEN LOW GROW SEED MIX OAE, 5 LBS. PER 1,000 SF (220 LBS. PER ACRE)



EROSION-CONTROL HYDROSEED 48,157 SF
WA. ST. D.O.T. EROSION CONTROL MIX OAE, 80-120 LBS. PER ACRE

SYMBOL QTY BOTANICAL / COMMON NAME CONT.

SHRUBS

	44	ABELIA X GRANDIFLORA 'KALEIDOSCOPE' / KALEIDOSCOPE ABELIA	1 GAL.
	31	ARBUTUS UNEDO 'COMPACTA' / DWARF STRAWBERRY TREE	1 GAL.
	72	CORNUS STOLONIFERA 'KELSEY' / DWARF REDTWIG DOGWOOD	1 GAL.
	76	GAULTHERIA SHALLON / SALAL	1 GAL.
	222	MAHONIA AQUIFOLIUM / OREGON GRAPE	1 GAL.
	92	MAHONIA AQ	1 GAL.
	165	MYRICA CALIFORNICA / PACIFIC WAX MYRTLE	1 GAL.
	99	NANDINA DOMESTICA 'GULF STREAM' / DWARF HEAVENLY BAMBOO	1 GAL.
	18	PINUS MUGO 'PUMILIO' / DWARF MUGO PINE	1 GAL.
	25	RHODODENDRON X 'ANAH KRUSCHKE' / RHODODENDRON	1 GAL.
	226	SYMPHORICARPOS ALBUS / SNOWBERRY	1 GAL.
	123	VIBURNUM DAVIDII / DAVID VIBURNUM	1 GAL.

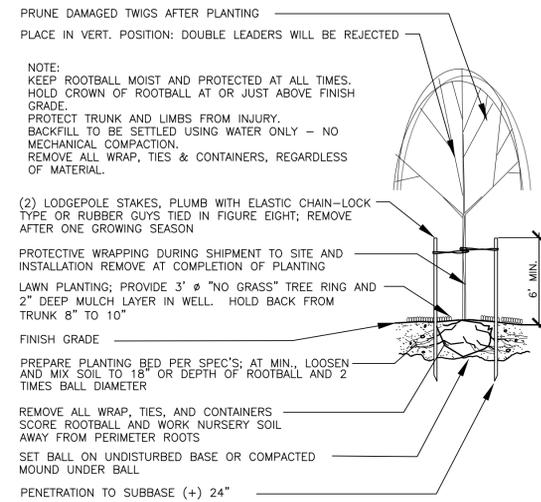
FERNS AND GRASSES

	117	CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER' / FEATHER REED GRASS	1 GAL.
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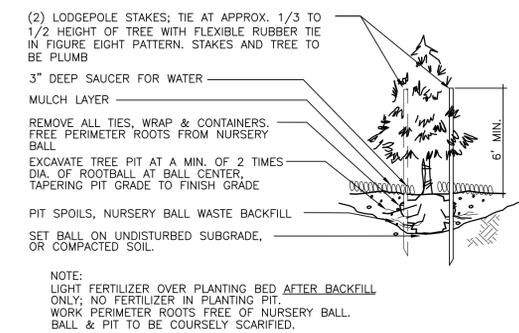
SYMBOL QTY BOTANICAL / COMMON NAME CONT. SPACING

GROUND COVERS

	AS REQ.	ARCTOSTAPHYLOS UVA-URSI 'MASSACHUSETTS' / KINNIKINNICK	1 GAL.	36" o.c.
	AS REQ.	FRAGARIA CHILOENSIS / BEACH STRAWBERRY	1 GAL.	36" o.c.
	AS REQ.	GAULTHERIA SHALLON / SALAL	1 GAL.	48" o.c.
	AS REQ.	RUBUS CALYCINOIDES 'EMERALD CARPET' / CREEPING BRAMBLE	1 GAL.	36" o.c.
	AS REQ.	VINCA MINOR 'BOWLES' / PERIWINKLE	1 GAL.	36" o.c.



DECIDUOUS TREE PLANTING/STAKING DETAIL
NOT TO SCALE

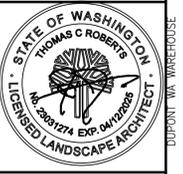


EVERGREEN TREE PLANTING/STAKING DETAIL
NOT TO SCALE

Revision	
No.	Date
6	5/29/24
5	3/27/24
	TCR
	JMW
	JMW
	JMW
	PER CITY COMMENTS
	PER CITY COMMENTS
	Appr.
	By
	Clad.

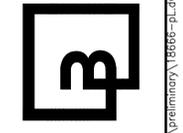
PRELIMINARY
PLANT SCHEDULE
FOR
DUPONT - WEST

For:
AVENUE 55, LLC
601 UNION STREET, SUITE 2930
SEATTLE, WA 98101
(206) 707-9696



Scale:	Horizontal	N/A	Vertical	N/A
Designed	TCR			
Drawn	JMW			
Checked	JMW			
Approved	JMW			
Date	3/27/24			

Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222
barghausen.com



Job Number
18666
Sheet
L6 of 12

LANDSCAPE NOTES AND DETAILS

FOR DUPONT - WEST

A PORTION OF THE NW 1/4 OF SECTION 26, TOWNSHIP 19N, RANGE 01E, W.M. CITY OF DUPONT, PIERCE COUNTY, WASHINGTON

APPROVED FOR CONSTRUCTION

BY: _____ DATE: _____
CITY OF DUPONT

THESE DRAWINGS ARE APPROVED FOR CONSTRUCTION FOR A PERIOD OF 12 MONTHS FROM THE DATE SHOWN HEREON. THE CITY RESERVES THE RIGHT TO MAKE REVISIONS, ADDITIONS, DELETIONS, OR MODIFICATIONS SHOULD CONSTRUCTION BE DELAYED BEYOND THIS TIME LIMITATION. THE CITY, BY APPROVING THESE DRAWINGS, ASSUMES NO LIABILITY IN REGARDS TO THEIR ACCURACY OR OMISSIONS.

LANDSCAPE PLANTING NOTES AND MATERIALS

SCOPE OF WORK

FURNISH ALL MATERIALS, LABOR, EQUIPMENT AND RELATED ITEMS NECESSARY TO ACCOMPLISH TOPSOIL, TREATMENT AND PREPARATION OF SOIL, FINISH GRADING, PLACEMENT OF SPECIFIED PLANT MATERIALS, FERTILIZER, STAKING, MULCH, CLEAN-UP, DEBRIS REMOVAL, AND 30-DAY MAINTENANCE.

QUALIFICATIONS:
LANDSCAPE CONTRACTOR TO BE SKILLED AND KNOWLEDGEABLE IN THE FIELD OF WORK AND HAVE A MINIMUM OF FIVE (5) YEAR'S EXPERIENCE INSTALLING SIMILAR WORK. CONTRACTOR TO BE LICENSED TO PERFORM THE WORK SPECIFIED WITHIN THE PRESIDING JURISDICTION.

JOB CONDITIONS:
IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW THE SITE AND REPORT ANY DISCREPANCIES TO THE OWNER OR THE OWNER'S REPRESENTATIVES. ALL PLANT MATERIAL AND FINISH GRADES ARE SUBJECT TO APPROVAL BY THE OWNER.

PROTECTION:
SAVE AND PROTECT ALL EXISTING PLANTINGS SHOWN TO REMAIN. DO NOT PLANT UNTIL OTHER CONSTRUCTION OPERATIONS WHICH CONFLICT HAVE BEEN COMPLETED. IF AN IRRIGATION SYSTEM IS TO BE INSTALLED DO NOT PLANT UNTIL THE SYSTEM HAS BEEN INSTALLED, TESTED, AND APPROVED BY THE OWNER. HANDLE PLANTS WITH CARE - DO NOT DAMAGE OR BREAK ROOT SYSTEM, BARK, OR BRANCHES. REPAIR AND/OR REPLACE ITEMS DAMAGED AS A RESULT OF WORK, OR WORK NOT IN COMPLIANCE WITH PLANS AND SPECIFICATIONS, AS DIRECTED BY OWNER AT NO ADDITIONAL COST TO THE OWNER.

REPAIR OF EXISTING PLANTINGS:
DURING THE COURSE OF WORK, REPAIR ALL EXISTING PLANTING AREAS BY PRUNING DEAD GROWTH, RE-ESTABLISHING FINISH GRADE AND RE-MULCHING TO SPECIFIED DEPTH.

GUARANTEE:
GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE OF THE JOB BY OWNER.

30-DAY MAINTENANCE:
CONTRACTOR TO PROVIDE OWNER WITH A SCOPE OF WORK AT TIME OF INITIAL PROJECT BID TO PROVIDE LANDSCAPE AND IRRIGATION MAINTENANCE FOR 30 DAYS FOLLOWING STORE OPENING. WORK TO INCLUDE MAINTENANCE AS DESCRIBED BELOW, IN PLANTING AND IRRIGATION MAINTENANCE.

SUBMITTALS:
SUBMIT THE FOLLOWING TO THE LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO THE START OF ANY WORK:

- DOCUMENTATION THAT ALL PLANT MATERIAL HAS BEEN ORDERED.
- TOPSOIL ANALYSIS AND RECOMMENDED AMENDMENTS.
- TREE STAKING AND GUYING MATERIALS.
- ONE (1) QUART SIZE OF TOPSOIL AND MULCH.
- PLANTING SCHEDULE INCLUDING DATES AND TIMES.
- MAINTENANCE INSTRUCTIONS FOR ONE (1) FULL YEAR.

MATERIALS:

PLANT MATERIALS:
PLANT MATERIALS TO BE GRADE NO. 1, SIZED IN ACCORDANCE WITH (AAN) AMERICAN STANDARDS FOR NURSERY STOCK (ANSI Z60.1-2004). PRUNE PLANTS RECEIVED FROM THE NURSERY ONLY UPON AUTHORIZATION BY THE LANDSCAPE ARCHITECT. "B & B" INDICATES BALLED AND BURLAPPED; "CONT." INDICATES CONTAINER; "BR" INDICATES BARE ROOT; "CAL" INDICATES CALIPER AT 6" ABOVE SOIL LINE; "GAL" INDICATES GALLON.

A) SPECIFIED PLANT CANOPY SIZE OR CALIPER IS THE MINIMUM ACCEPTABLE CONTAINER OR BALL SIZE AND ESTABLISHES MINIMUM PLANT CONDITION TO BE PROVIDED.

B) QUALITY:
PLANT MATERIAL TO COMPLY WITH STATE AND FEDERAL LAWS FOR DISEASE INSPECTION. PLANTS TO BE FULLY LIVE, VIGOROUS, WELL FORMED, WITH WELL DEVELOPED FIBROUS ROOT SYSTEMS. ROOT BALLS OF PLANTS TO BE SOLID AND FIRMLY HELD TOGETHER, SECURELY CONTAINED AND PROTECTED FROM INJURY AND DESICCATION. PLANTS DETERMINED BY LANDSCAPE ARCHITECT TO HAVE BEEN DAMAGED; HAVE DEFORMITIES OF STEM, BRANCHES, OR ROOTS; LACK SYMMETRY, HAVE MULTIPLE LEADERS OR "Y" CROTCHES LESS THAN 30 DEGREES IN TREES, OR DO NOT MEET SIZE OR ANSI STANDARDS WILL BE REJECTED. PLANT MATERIAL TO BE FROM A SINGLE NURSERY SOURCE FOR EACH SPECIFIED SPECIES/HYBRID. NURSERY SOURCES TO BE THOSE LOCATED IN THE SAME REGION AS THE JOB SITE.

C) SUBSTITUTION:
NO SUBSTITUTION OF PLANT MATERIAL, SPECIES OR VARIETY, WILL BE PERMITTED UNLESS WRITTEN EVIDENCE IS SUBMITTED TO THE OWNER FROM TWO QUALIFIED PLANT BROKERAGE OFFICES. SUBSTITUTIONS WHICH ARE PERMITTED TO BE IN WRITING FROM THE OWNER AND LANDSCAPE ARCHITECT. THE SPECIFIED SIZE, SPECIES AND NEAREST VARIETY, AS APPROVED, TO BE FURNISHED. SUBSTITUTIONS MAY REQUIRE SUBMITTAL TO REVISED LANDSCAPE PLAN TO CITY FOR APPROVAL.

D) LABEL AT LEAST ONE (1) TREE, SHRUB, AND GROUNDCOVER OF EACH VARIETY WITH A SECURELY ATTACHED WATERPROOF TAG BEARING LEGIBLE DESIGNATION OF BOTANICAL AND COMMON NAMES.

E) DELIVER PLANT MATERIAL AFTER PREPARATION OF PLANTING AREAS HAVE BEEN COMPLETED AND PLANT IMMEDIATELY. IF PLANTING IS DELAYED MORE THAN SIX (6) HOURS AFTER DELIVERY, SET MATERIAL IN SHADE, PROTECT FOR WEATHER AND MECHANICAL DAMAGE, AND KEEP ROOT BALLS MOIST BY COVERING WITH MULCH, BURLAP OR OTHER ACCEPTABLE MEANS OF RETAINING MOISTURE.

SOIL PREPARATION:
TOPSOIL, AMENDMENT, AND BACKFILL, ARE GENERAL REQUIREMENTS FOR ALL LANDSCAPE AREAS, UNLESS NOTED OTHERWISE ON THE PLANS. SOIL AMENDMENTS AND FERTILIZER NOTED BELOW ARE TO BE USED FOR BID PRICE BASIS ONLY. SPECIFIC AMENDMENTS AND FERTILIZERS WILL BE MADE AFTER SOIL SAMPLES ARE LABORATORY TESTED BY THE CONTRACTOR. PROVIDE CHANGE ORDER FOR ADDITIONAL OR REDUCTION OF MATERIALS REQUIRED OR NOT REQUIRED BY THE SOILS REPORT.

SOIL FERTILITY AND AGRICULTURAL SUITABILITY ANALYSIS:
AFTER ROUGH GRADING AND PRIOR TO SOIL PREPARATION, CONTRACTOR TO OBTAIN TWO REPRESENTATIVE SOIL SAMPLES, FROM LOCATIONS AS DIRECTED BY THE LANDSCAPE ARCHITECT, TO A SOIL TESTING LABORATORY. SUBMIT RESULTS TO LANDSCAPE ARCHITECT FOR REVIEW. TESTS TO INCLUDE FERTILITY AND SUITABILITY ANALYSIS WITH WRITTEN RECOMMENDATIONS FOR SOIL AMENDMENT, FERTILIZER, CONDITIONS, APPLICATION RATES, AND POST-CONSTRUCTION MAINTENANCE PROGRAM. TESTS TO BE CONTRACTED WITH AND PAID FOR BY THE CONTRACTOR.

A) TOPSOIL:
CONTRACTOR IS RESPONSIBLE FOR SUPPLYING ALL TOPSOIL AND FOR DETERMINING THE VOLUME OF TOPSOIL REQUIRED PER THE INFORMATION ON PLANS AND NOTED HERE-IN. CONTRACTOR IS RESPONSIBLE FOR ANY NECESSARY WEED CONTROL RESULTING FROM CONTAMINATED OFF SITE SOURCES.

B) TOPSOIL TO CONSIST OF 1/3 BY VOLUME SANDY LOAM, 1/3 BY VOLUME COMPOSTED GARDEN MULCH, AND 1/3 BY VOLUME COARSE WASHED SAND OR EQUIVALENT.

- C) TOPSOIL PREPARATION AND INSTALLATION:
- VERIFY SUBGRADES TO -9 INCHES IN LANDSCAPE AREAS OR AS INDICATED ON PLANS. THIS ACCOMMODATES, TOPSOIL, AMENDMENTS, AND MULCH. 6" IMPORTED TOPSOIL FOR LANDSCAPE BEDS.
 - ERADICATE ANY SURFACE VEGETATION ROOTED IN THE SUB-GRADE PRIOR TO SUB-GRADE PREPARATION.
 - REMOVE SOIL LUMPS, ROCK, VEGETATION AND/OR DEBRIS LARGER THAN 2 INCHES FROM ALL SUB-GRADE PRIOR TO PLACEMENT OF SPECIFIED TOPSOIL.
 - REMOVE ANY ASPHALT EXTENDING BEYOND 6 INCHES FROM CURBS INTO ADJACENT LANDSCAPE AREAS.

- D) TOPSOIL PLACEMENT:
- PROVIDE A TOTAL FINISH COURSE OF 6 INCHES OF TOPSOIL FOR LANDSCAPE AREAS.
 - PLACE ADDITIONAL TOPSOIL AND SOIL MIX AS REQUIRED TO MEET FINISH ELEVATIONS.

MULCH (TOPDRESSING):
ONE-HALF-INCH (1/2") SIZE, TO ONE-QUARTER (1/4"), HEMLOCK/FIR BARK. FINE TEXTURED AND DARK BROWN IN COLOR.

STAKES:
2-INCH DIAMETER BY 8-FOOT MINIMUM LODGEPOLE PINE STAKES.

GUY MATERIAL:
1-INCH WIDE POLYETHYLENE CHAIN LOCK TYPE TIES; OR, 3/8" DIAMETER RUBBER. NO WIRE.

EXECUTION:

CONTAMINANTS:
VERIFY THAT ALL SOIL CONTAMINANTS (E.G., PAINT, SEALANTS, SOLVENTS, OILS, GREASES, CONCRETE/ASPHALT SPOILS, ETC.) HAVE BEEN SATISFACTORY REMOVED FROM ALL PLANTING AREAS. DO NOT BEGIN WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

FINISH GRADES:
FINE GRADE AND REMOVE ROCKS, DEBRIS, AND FOREIGN OBJECTS OVER 2 INCHES DIAMETER FROM TOP SURFACE OF PREPARED LANDSCAPE AREAS. FINISH ELEVATIONS TO BE DEFINED AS 3 INCHES BELOW CURBS, WALKS AND/OR OTHER ADJACENT HARDSCAPE FOR ALL PLANTING BED AREAS AND 1-INCH BELOW CURBS, WALKS AND/OR OTHER ADJACENT HARDSCAPE FOR ALL LAWN AREAS. FINISH GRADE REFER TO GRADES PRIOR TO INSTALLATION OF MULCH OR LAWN. ALL FINISH GRADES TO BE SMOOTH EVEN GRADES, LIGHTLY COMPACTED, AS SHOWN ON THE PLAN AND DETAILED. PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS AND STRUCTURES. SITE CIVIL DRAWINGS IDENTIFY FINAL ELEVATIONS. MOISTEN PREPARED AREAS BEFORE PLANTING IF SOIL IS DRY. WATER THOROUGHLY AND ALLOW SURFACE TO DRY BEFORE PLANTING. DO NOT CREATE MUDDY SOIL.

TREES AND SHRUBS:
ARRANGE TREES AND SHRUBS ON SITE IN PROPOSED LOCATIONS PER DRAWINGS. EXCAVATE PIT, PLANT AND STAKE OR GUY, AS CALLED OUT AND DETAILED. ALL TREES, SHRUBS, AND SUPPORTS TO STAND VERTICAL. BACKFILL SHALL BE PIT SPOILS. SETTLE BACKFILL USING WATER ONLY. NO MECHANICAL COMPACTION.

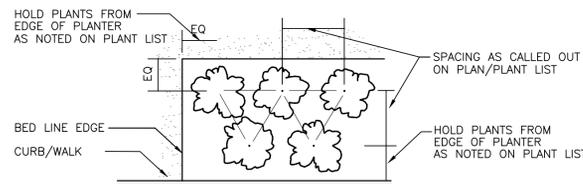
GROUNDCOVERS:
EXCAVATE PITS TO A MINIMUM OF 3 INCHES BELOW, AND TWICE THE ROOT BALL DIAMETER. WATER THOROUGHLY AND TAKE CARE TO ENSURE THAT ROOT CROWN IS AT PROPER GRADE, AS DETAILED.

MULCH:
MULCH ALL LANDSCAPE AREAS. MATCH DEPTH OF EXISTING MULCH. AT A MINIMUM, APPLY SUFFICIENT QUANTITY TO PROVIDE A 4-INCH DEPTH.

UTILITY CLEARANCES:
FIELD ADJUST PLANT LOCATIONS FOR 8-FOOT SEPARATION OF TREES/SHRUBS AND 2-FOOT SEPARATION FOR GROUNDCOVER FROM FIRE HYDRANTS AND UTILITY VAULTS.

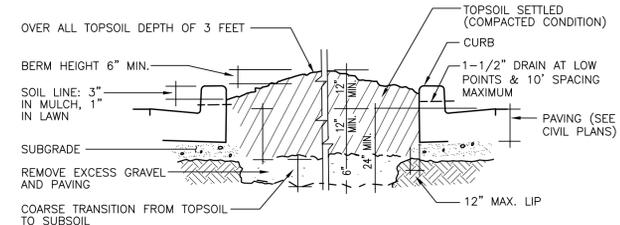
CLEANUP AND PROTECTION:
DURING LANDSCAPE WORK, KEEP ALL PAVEMENT CLEAN AND WORK AREAS IN AN ORDERLY CONDITION. PROTECT LANDSCAPE WORK AND MATERIALS FROM DAMAGE DUE TO LANDSCAPE OPERATIONS AND TRESPASSERS. MAINTAIN PROTECTION DURING INSTALLATION AND MAINTENANCE PERIOD. TREAT, REPAIR, OR REPLACE DAMAGE LANDSCAPE WORK AS DIRECTED BY THE OWNER.

PLANTING MAINTENANCE:
PROVIDE FULL MAINTENANCE BY SKILLED EMPLOYEES OF LANDSCAPE INSTALLERS. CONTRACTOR TO MAINTAIN PLANTINGS THROUGH COMPLETED INSTALLATION, AND UNTIL ACCEPTANCE OF LANDSCAPE INSTALLATION. PLANTING MAINTENANCE TO INCLUDE WATERING, WEEDING, CULTIVATING, TIGHTENING AND REPAIRING OF TREE GUYS, RESETTING PLANTS TO PROPER GRADES OR POSITION, RE-ESTABLISHING SETTLED GRADES; AND MOWING LAWNS WEEKLY AFTER LAWN ESTABLISHMENT. HERBICIDE IS NOT RECOMMENDED FOR ONE YEAR FOLLOWING LANDSCAPE INSTALLATION. INCLUDED IS REPLACEMENT OF DEAD PLANTS AND PLANTS SHOWING LOSS OF 40 PERCENT OR MORE OF CANOPY.



PLANT MATERIAL SPACING DETAIL

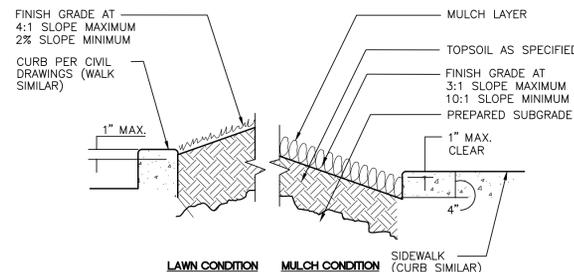
NOT TO SCALE



PARKING LOT PLANTER GRADING DETAIL

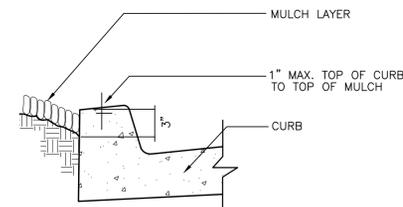
NOT TO SCALE

DEDUCT ALT #1: IF LANDSCAPE CONTRACTOR CAN DEMONSTRATE THAT PLANTER ISLANDS ARE NOT FULL OF NON-SOIL MATERIALS (CONCRETE WASTE, LUMBER, ROAD BASE, GRAVEL), FULL EXCAVATION AND REPLACE WITH 18"-21" OF TOPSOIL CAN BE ELIMINATED AND IN ITS PLACE, 6" OF COMPOST CAN BE PLACED ON SUB-GRADE AND CULTIVATED INTO TOP 12" OF EXISTING SOIL. TOP OF FINISH GRADE AND DEPTH OF MULCH STILL APPLIES



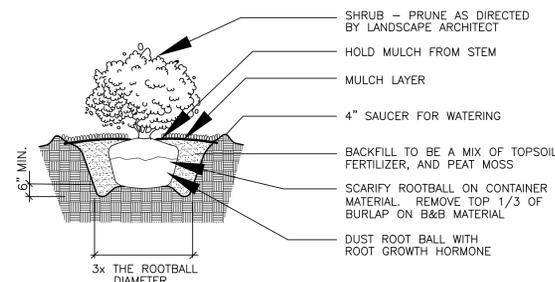
PLANTER SECTION DETAIL

NOT TO SCALE



MULCH AT CURB DETAIL

NOT TO SCALE

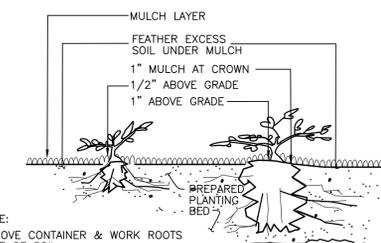


NOTE:
APPLY ADDITIONAL 4 OZ. 8-32-16 FERTILIZER INTO TOP 2" OF PLANTING MIX.

PLANT SHRUB HIGH ENOUGH TO ALLOW POSITIVE DRAINAGE AWAY FROM ROOTBALL. ROUGHEN ALL SURFACES OF PIT.
CUT AND REMOVE BURLAP FROM ROOT BALL

SHRUB PLANTING DETAIL

NOT TO SCALE



NOTE:
REMOVE CONTAINER & WORK ROOTS FREE OF SOIL.
BACKFILL TO BE SETTLED USING WATER ONLY
SEE PLANT LIST FOR PLANT SPACING

LESS THAN 1 GAL (PLANTED BEFORE MULCH)
1 GAL CONTAINER and LARGER (PLANTED BEFORE MULCH)

GROUNDCOVER PLANTING DETAIL

NOT TO SCALE

No.	Date	By	Clcd.	Appr.	PER CITY COMMENTS
6	5/29/24	TCR	JMV	JMV	
5	3/27/24	TCR	JMV	JMV	

Title:
PRELIMINARY
LANDSCAPE NOTES AND DETAILS
FOR
DUPONT - WEST

For:
AVENUE 55, LLC
601 UNION STREET, SUITE 2930
SEATTLE, WA 98101
(206) 707-9696



Scale:	Horizontal	N/A	Vertical	N/A	
Designed	TCR	Checked	JMV	Approved	JMV
Date	3/27/24				

Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222
barghausen.com



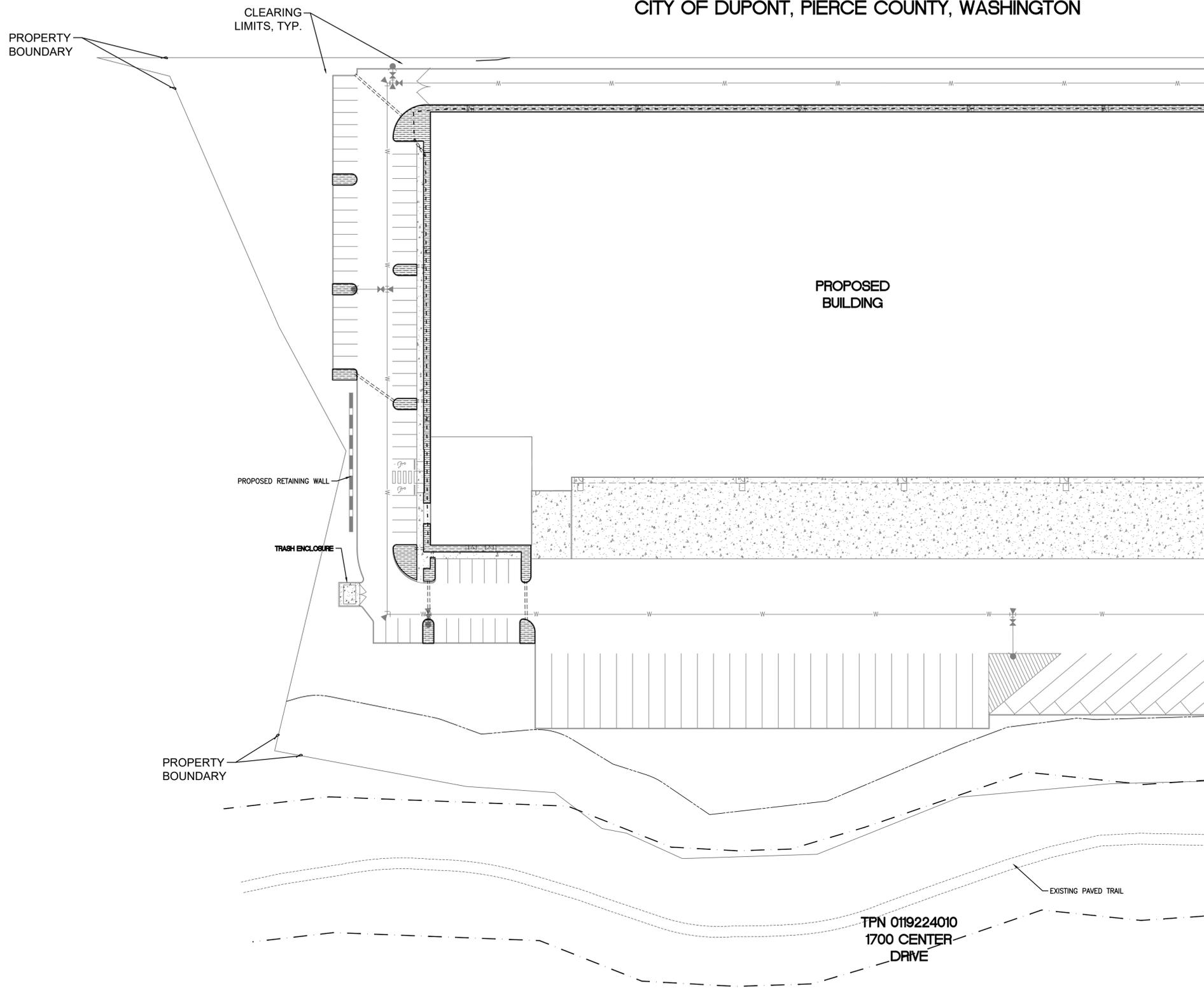
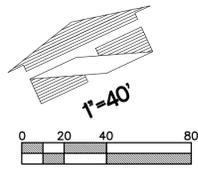
Job Number
18666

Sheet
L7 of 12

PRELIMINARY IRRIGATION PLAN

FOR DUPONT - WEST

A PORTION OF THE NW 1/4 OF SECTION 26, TOWNSHIP 19N, RANGE 01E, W.M.
CITY OF DUPONT, PIERCE COUNTY, WASHINGTON



APPROVED FOR CONSTRUCTION
 BY: CITY OF DUPONT DATE: _____
 THESE DRAWINGS ARE APPROVED FOR CONSTRUCTION FOR A PERIOD OF 12 MONTHS FROM THE DATE SHOWN HEREON. THE CITY RESERVES THE RIGHT TO MAKE REVISIONS, ADDITIONS, DELETIONS, OR MODIFICATIONS SHOULD CONSTRUCTION BE DELAYED BEYOND THIS TIME LIMITATION. THE CITY, BY APPROVING THESE DRAWINGS, ASSUMES NO LIABILITY IN REGARDS TO THEIR ACCURACY OR OMISSIONS.

IRRIGATION CALCULATIONS

MAX. RATE OF FLOW: 30 GPM

ANNUAL WATER USAGE
 TOTAL IRRIGATED AREA (NOT INCL. EROSION CONTROL HYDROSEED)
 = 43,542 SQUARE FEET

TOTAL LANDSCAPE AREA (INCL. EROSION CONTROL HYDROSEED):
 = 119,012 SQUARE FEET

ESTIMATED ANNUAL WATER USAGE (SEE FORMULA BELOW):
 $EWU = (14.49 \times 0.3 \times 43,542 \times 0.62) / 0.81$
 $EWU = 117,351.8 / 0.81$
 $EWU = 144,878.7 \text{ GALLONS PER YEAR}$
 $144,878.7 / 119,012 = 0.97 \text{ GAL/SF PER YEAR (DMC 25.90.040.3)}$

FORMULA: $EWU = (ET \times PF \times HA \times CF) / IE$
 EWU: ESTIMATED WATER USE
 ET: EVAPOTRANSPIRATION RATE = 14.49 INCHES
 PF: PLANT FACTOR VALUE = 0.3
 HA: LANDSCAPE AREA IN SQUARE FEET = 43,542
 CF: CONVERSION FACTOR OF 0.62 (INCHES TO GALLONS PER SQUARE FOOT)
 IE: IRRIGATION EFFICIENCY VALUE = 0.81

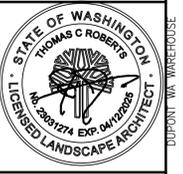
WATER CONSERVATION TECHNIQUES

- PER DMC 25.90.040.1
- MULCH SPECIFIED FOR ALL TREE/SHRUB BEDS
 - LAWN AREAS MINIMAL (14.7% OF LANDSCAPE AREA)
 - DROUGHT-TOLERANT LAWN, SHRUBS SPECIFIED (SEE PLANT SCHEDULE)
 - IRRIGATION SYSTEM PER 25.90.040.1(e)

Revision	No.	Date	By	Clcd.	Appr.	PER CITY COMMENTS
6	5/29/24	TCR	JMV			
5	3/27/24	TCR	JMV			

PRELIMINARY IRRIGATION PLAN FOR DUPONT - WEST

For:
 AVENUE 55, LLC
 601 UNION STREET, SUITE 2930
 SEATTLE, WA 98101
 (206) 707-9696



Scale:
 Horizontal: 1"=40'
 Vertical: N/A

Designed: TCR
 Drawn: TCR
 Checked: JMV
 Approved: JMV
 Date: 3/27/24

Barghausen Consulting Engineers, Inc.
 18215 72nd Avenue South
 Kent, WA 98032
 425.251.6222
 barghausen.com

Job Number: **18666**
 Sheet: **L8** of **12**

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PRELIMINARY IRRIGATION PLAN

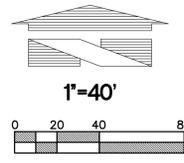
FOR DUPONT - WEST

A PORTION OF THE NW 1/4 OF SECTION 26, TOWNSHIP 19N, RANGE 01E, W.M.
CITY OF DUPONT, PIERCE COUNTY, WASHINGTON

APPROVED FOR CONSTRUCTION

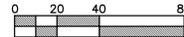
BY: CITY OF DUPONT DATE:

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PROPERTY
BOUNDARY

1"=40'



NO IRRIGATION FACILITIES
WITHIN 50' RADIUS OF
HISTORICAL MARKER

MOUNT CONTROLLER ON EXTERIOR
WALL. INPUT: 117VAC +/-10%, 60
Hz. OUTPUT: 26.5 VAC, 1.5 A.
INSTALL 1" DIAMETER PVC CONDUIT
FOR 24V ELECTRICAL WIRING
FROM THE CONTROLLER TO
LANDSCAPE AREA. PAINT CONDUIT
TO MATCH BUILDING COLOR.

MOUNT RAIN SENSOR ON WEATHER
EXPOSED PORTION OF EXTERIOR
WALL AT 8' - 9' HEIGHT.

MATCHLINE - SEE SHEET L8 FOR CONTINUATION

PROPOSED
BUILDING

SEWALTCHEW ROAD

POC

CLEARING
LIMITS, TYP.

IRRIGATION POINT OF CONNECTION WITH NEW
WATER METER AND DOUBLECHECK BACKFLOW
DEVICE. INSTALL PER CITY STANDARD DETAIL.

PROPERTY
BOUNDARY

15' PUBLIC
TRAIL EASEMENT
PER REC. NO.
201009301052

17.5' PUBLIC TRAIL CONST.
EASEMENT PER REC. NO.
201009301052

CENTERLINE 15' PUBLIC TRAIL EASEMENT
AND TRAIL CONSTRUCTION
EASEMENT PER 201009301052

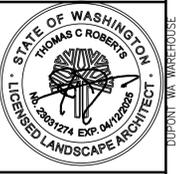
15' PUBLIC TRAIL EASEMENT
PER REC. NO.
201009301052

17.5' PUBLIC TRAIL CONST.
EASEMENT PER REC. NO.
201009301052

Revision	No.	Date	By	Appr.	PER CITY COMMENTS
6	5/29/24	TCR	JMV		PER CITY COMMENTS
5	3/27/24	TCR	JMV		PER CITY COMMENTS

PRELIMINARY
IRRIGATION PLAN
FOR
DUPONT - WEST

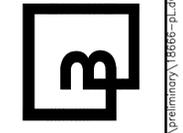
For:
AVENUE 55, LLC
601 UNION STREET, SUITE 2930
SEATTLE, WA 98101
(206) 707-9696



Scale:
Horizontal 1"=40'
Vertical N/A

Designed: TCR
Drawn: TCR
Checked: JMV
Approved: JMV
Date: 3/27/24

Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222
barghausen.com



Job Number
18666

Sheet
L9 of 12

FILE: \\B0005\18666\preliminary\18666-pl.dwg Date: 7/11/24 12:35 PM Scale: 1"=40'

IRRIGATION NOTES AND DETAILS

FOR DUPONT - WEST

A PORTION OF THE NW 1/4 OF SECTION 26, TOWNSHIP 19N, RANGE 01E, W.M.
CITY OF DUPONT, PIERCE COUNTY, WASHINGTON

APPROVED FOR CONSTRUCTION
BY: _____ DATE: _____
CITY OF DUPONT

THESE DRAWINGS ARE APPROVED FOR CONSTRUCTION FOR A PERIOD OF 12 MONTHS FROM THE DATE SHOWN HEREON. THE CITY RESERVES THE RIGHT TO MAKE REVISIONS, ADDITIONS, DELETIONS, OR MODIFICATIONS SHOULD CONSTRUCTION BE DELAYED BEYOND THIS TIME LIMITATION. THE CITY, BY APPROVING THESE DRAWINGS, ASSUMES NO LIABILITY IN REGARDS TO THEIR ACCURACY OR OMISSIONS.

IRRIGATION LEGEND

DESCRIPTION

DRIP IRRIGATION:

HUNTER LANDSCAPE DRIPLINE COMPONENTS

HDL-06-12-250-CV SUB-SURFACE DRIPLINE TUBING 0.6 GPH PRESSURE COMPENSATING EMITTERS WITH CHECK VALVE AT 12" ON-CENTER SPACING - ALL TUBING SHALL BE INSTALLED ON GRADE W/ 9" WIRE STAKES FOUR (4) FEET ON-CENTER. VERIFY THE LAYOUT AND 18" ON-CENTER SPACING IN THE FIELD PRIOR TO STARTING WORK. INSTALL ALL COMPONENTS PER MANUF. SPECIFICATIONS.

USE HUNTER PLD-LOC FITTINGS FOR CONNECTION BETWEEN PVC LATERAL LINES AND INLINE DRIP TUBING

SPRINKLER HEADS:

HUNTER MP ROTATOR WITH PRO-SPRAY POP-UP BODY AND CV DRAIN CHECK VALVE, 4" LAWN, 6" SHRUB

SYMBOL	NOZZLE	PSI	GPM	RADIUS
[Symbol]	HUNTER-60 and 6H H, Q SERIES	30	0.98, 0.51	6'
[Symbol]	HUNTER-1000 8-15 F, TH, TT, H, Q SERIES	35	0.65, 0.48, 0.37, 0.32, 0.16	8'
[Symbol]	HUNTER-1000 8-15 F, TH, TT, H, Q SERIES	35	0.65, 0.48, 0.37, 0.32, 0.16	10'
[Symbol]	HUNTER-1000 8-15 F, TH, TT, H, Q SERIES	35	0.65, 0.48, 0.37, 0.32, 0.16	12'
[Symbol]	HUNTER-2000 13-21 F, TQ, TT, H, Q SERIES	30	1.29, 0.95, 0.74, 0.63, 0.33	15'
[Symbol]	HUNTER ESS15, SS530 SERIES	35	1.41, 0.65	5'x30' 5'x15'
[Symbol]	HUNTER-3000 22-30 F, TQ, TT, H, Q SERIES	35	2.88, 2.19, 1.68, 1.44, 0.69	0.43 22'

- SPRAY IRRIGATION: HUNTER ICV 101/151G REMOTE CONTROL VALVE, IN VALVE BOX, ONE VALVE PER BOX MAXIMUM 2 VALVES PER BOX
 - ⊗ DRIP IRRIGATION: ICZ-101/151-XL REMOTE CONTROL DRIP ZONE KIT WITH FILTER AND PRESSURE REGULATOR MAXIMUM 2 VALVES PER BOX
 - ⊕ HUNTER SOLAR SYNC WIRE RAIN SENSOR COMBO
 - ◇ HUNTER PRO-C CONTROLLER 3 TO 15 STATIONS, (HARDWIRE CONNECTION); PROVIDE GROUND AND BATTERIES PER MANUFACTURER'S SPECIFICATIONS
- P.O.C.**
- ⊗ WILKINS 950 XLT- 1" DOUBLE CHECK VALVE (STATE APPROVED); TEST AND CERTIFICATION BY LICENSED BACKFLOW TESTER
 - ⊗ WILKINS 850 - BALL VALVE, SIZE TO MATCH PIPE
 - ⊗ CARSON INDUSTRIES #1730 (TWO AT P.O.C.) GRADE LEVEL VAULT WITH BOLT LOCK LID
 - ▶ PLASTIC BALL VALVE, MATCH LINE SIZE, IN VALVE BOX
 - ⊙ HUNTER HQ-33DLRC 3/4" QUICK COUPLING VALVE, IN VALVE BOX, PROVIDE TWO KEYS AND SWIVELS

----- MAINLINE - SCH 40 PVC (18" COVER); SIZE PER PLAN, 1-1/2" SIZE MINIMUM

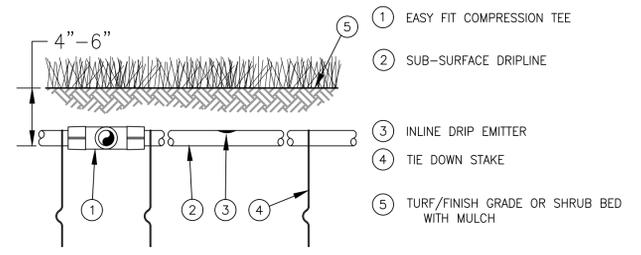
----- LATERAL - SCH 40 PVC (12" COVER); SIZE PER PLAN, 3/4" SIZE MINIMUM

===== SLEEVE - SCH 40 PVC; 24" MINIMUM COVER AT VEHICLE CROSSINGS AND 18" MINIMUM COVER IN LANDSCAPE AREAS, 6" SIZE WHERE IRRIGATION MAINLINE TRAVELS THROUGH PIPE. 4" SIZE WHERE ONLY LATERALS TRAVEL THROUGH PIPE

IRRIGATION SHOWN DIAGRAMMATICALLY FOR PLAN CLARITY. COMMON TRENCH AND PLACE EQUIPMENT IN LANDSCAPE; MANIFOLD GROUPED VALVES IN ADJACENT SHRUB AREAS WHERE FEASIBLE.

SCH 40 PIPE SIZING CHART

PIPE SIZE	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"
FLOW GPM	1-8	8.1-13	13.1-23	23.1-32	32.1-53	53.1-74
GPM (MAX.)						



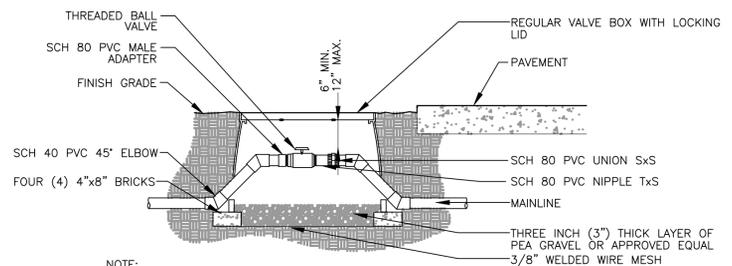
- NOTES:
- PLACE TIE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM, AND FIVE FEET IN CLAY.
 - AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE-DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.
 - INSERTION PLOW AND TRENCHED INSTALLATIONS DO NOT REQUIRE TIE DOWN STAKES.

DRIPLINE BURIAL

NOT TO SCALE

LANDSCAPE IRRIGATION NOTES

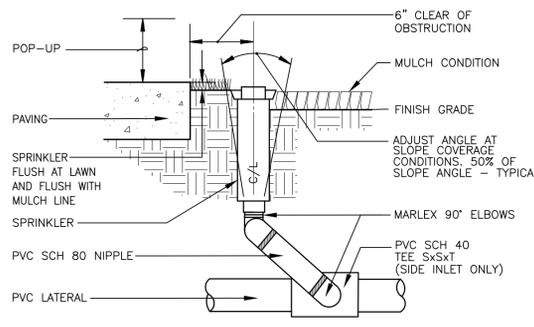
- GENERAL CONTRACTOR AND LANDSCAPE CONTRACTOR TO COORDINATE:
 - INSTALLATION OF 110V ELECTRICAL SERVICE FROM ELECTRICAL SOURCE TO AUTOMATIC CONTROLLER, INCLUDING WIRE HOOK-UP INTO MOUNTED CONTROLLER. IRRIGATION CONTRACTOR WILL MOUNT CONTROLLER PER DESIGN AND COORDINATE WITH GENERAL CONTRACTOR.
 - INSTALLATION OF IRRIGATION/SERVICE METER AND STUB TO IRRIGATION POINT OF CONNECTION, PER UTILITY PLAN(S). PROVIDE STANDARD THREADED STUB-OUT WITH THREADED CAP ON DISCHARGE SIDE OF METER. STUB-OUT TO BE INSTALLED APPROXIMATELY 18 INCHES BELOW FINISH GRADE.
 - VERIFICATION OF STATIC WATER PRESSURE AT POINT-OF-CONNECTION (P.O.C.) CONTRACTOR SHALL NOTIFY OWNER AND BARGHAUSEN CONSULTING ENGINEERS, INC., OF ANY VARIATION IN STATIC PRESSURE OVER 5 PSI GREATER/LESS THAN DESIGN PRESSURE.
 - INSTALLATION OF SLEEVING.
- PROVIDE ALL LABOR, MATERIALS, TRANSPORTATION, AND SERVICES NECESSARY TO FURNISH AND INSTALL A COMPLETE IRRIGATION SYSTEM AS INDICATED ON THE DRAWINGS AND/OR NOTES. PROVIDE A ONE (1) YEAR WARRANTY/GUARANTEE FROM FINAL ACCEPTANCE AGAINST ALL DEFECTS IN MATERIALS, EQUIPMENT, AND WORKMANSHIP.
- COORDINATE IRRIGATION INSTALLATION WITH GENERAL CONTRACTOR, ELECTRICAL CONTRACTOR, LANDSCAPE CONTRACTOR, OWNER, ARCHITECT, AND LANDSCAPE ARCHITECT.
- LANDSCAPE CONTRACTOR TO TEST AVAILABLE WATER PRESSURE PRIOR TO BEGINNING ANY WORK. PROVIDE LANDSCAPE ARCHITECT WITH WRITTEN PSI RESULTS.**
- ALL WORK PER LOCAL CODE. INSTALLATION PER MANUFACTURER'S WRITTEN SPECIFICATIONS.
- CONTRACTOR TO OBTAIN AND PAY FOR ALL PERMITS, FEES, AND REQUIRED CITY INSPECTIONS.
- SUBMITTALS:
 - SUBMIT EACH ITEM LISTED BELOW FOR LANDSCAPE ARCHITECT'S REVIEW AND APPROVAL.
 - PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.
 - CONTROL WIRING PATH DIAGRAM.
 - "AS-BUILT" DRAWINGS.
 - OPERATION AND MAINTENANCE MANUALS.
- PROVIDE AND KEEP UP TO DATE A COMPLETE "AS-BUILT" RECORD SET OF PRINTS WHICH ARE TO BE CORRECTED DAILY AND SHOW EVERY CHANGE FROM THE ORIGINAL DRAWINGS AND NOTES AND EXACT "AS-BUILT" LOCATIONS, SIZES AND KIND OF EQUIPMENT. THIS SET OF DRAWINGS ARE TO BE KEPT ON SITE AND ARE TO BE USED ONLY AS THE RECORD SET. ALL WORK IS TO BE NEAT AND LEGIBLE ANNOTATIONS THEREON DAILY AS THE WORK PROCEEDS, SHOWING WORK AS ACTUALLY INSTALLED. DIMENSION FORM TWO (2) PERMANENT POINTS OF REFERENCE, BUILDING CORNERS, WALKS, OR ROAD INTERSECTIONS, ETC., THE LOCATION OF THE FOLLOWING:
 - CONNECTION TO WATER LINES (P.O.C.),
 - CONNECTIONS TO ELECTRICAL POWER,
 - GATE VALVE, QUICK COUPLERS, AND REMOTE CONTROL VALVE,
 - ROUTING OF MAINLINE (DIMENSION MAXIMUM 100' ALONG ROUTING),
 - ROUTING OF CONTROL WIRING,
 - OTHER RELATED EQUIPMENT AS DIRECTED BY THE LANDSCAPE ARCHITECT.
- PREPARE AND PROVIDE PRIOR TO COMPLETION OF CONSTRUCTION, A THREE RING BINDER CONTAINING THE FOLLOWING INFORMATION:
 - INDEX SHEET STATING CONTRACTOR'S ADDRESS, TELEPHONE NUMBER, FAX, E-MAIL AND A LIST OF EQUIPMENT WITH NAME AND ADDRESS OF LOCAL MANUFACTURER'S REPRESENTATIVES,
 - CATALOG AND PARTS SHEETS ON EVERY MATERIAL AND EQUIPMENT INSTALLED UNDER THIS CONTRACT,
 - GUARANTEE STATEMENT,
 - COMPLETE OPERATING AND MAINTENANCE INSTRUCTIONS ON ALL MAJOR EQUIPMENT.
 - CONSTRUCTION DETAILS FROM THE PROJECT,
 - COMPLETE TROUBLE-SHOOTING GUIDE TO COMMON IRRIGATION PROBLEMS,
 - WINTERIZATION AND SPRING START-UP PROCEDURES,
 - CHART OF APPROXIMATE WATERING TIMES FOR SPRING, SUMMER, AND FALL,
 - A COPY OF THE "AS-BUILT" DRAWINGS AND CONTROLLER CHART.
- ALL VALVES TO BE PLACED IN "CARSON" GRADE LEVEL BOXES WITH BOLT-LOCK LIDS (OR APPROVED EQUIVALENT). SET BOXES 2 INCHES HIGHER THAN FINISH GRADE IN MULCH AREAS AND FLUSH WITH FINISH GRADE IN LAWN AREAS. JUMBO BOX FOR CHECK VALVE, 10" ROUND BOX FOR GATE/QUICK COUPLER/WIRE SPLICES, AND 12" STANDARD FOR CONTROL VALVES. PROVIDE BOX EXTENSIONS AS REQUIRED.
- MAINLINE PIPE TO BE BURIED 18 INCHES, LATERALS 12 INCHES, AND SLEEVES 24" INCHES BELOW FINISH GRADE. NO ROCK OR DEBRIS TO BE BACKFILLED OVER PIPE.
- HEAD AND LINE POSITIONING IS DIAGRAMMATIC ON PLAN. ADJUST IN FIELD AS NECESSARY FOR 100 PERCENT COVERAGE. VALVES TO BE POSITIONED ADJACENT TO PAVEMENT/CURBS, IN SHRUB BEDS WHERE POSSIBLE.
- FAMILIARIZE OWNERS FACILITY OPERATOR WITH IRRIGATION SYSTEM FUNCTION, CONTROLLER PROGRAMMING, SYSTEM OPERATION AND MAINTENANCE REQUIREMENTS.
- SPRINKLERS ON RISERS WILL NOT BE ALLOWED UNLESS NOTED ON PLANS.
- RADIUS REDUCTION TO BE MADE BY USE OF PRESSURE ADJUSTMENT, SCREENS, AND/OR ALTERNATE NOZZLES. IN-NOZZLE ADJUSTMENT IS LIMITED TO 10 PERCENT FOR SPRAY HEADS AND PER MANUFACTURER'S LIMITS FOR OTHER SPRINKLERS. SPRINKLER SPACING NOT EXCEED 60% OF THE DIAMETER OF THE PUBLISHED DATA.
- ALL CONTROL WIRE SPLICES TO BE MADE AT VALVE BOXES WITH WATER TIGHT ELECTRICAL SPLICES, 3M, SCOTT'S LOCK SEAL TACK 3576-78, OR EQUIVALENT.
- EACH VALVE BOX TO CONTAIN A MINIMUM OF TWO (2) SPARE ORANGE CONTROL WIRES FOR JACKETED WIRE. ROUTE SPARE WIRES FROM THE CONTROLLER TO THE LAST VALVE OF EACH MAINLINE BRANCH. COMMON WIRE TO BE WHITE. SINGLE STRAND WIRE TO BE A MINIMUM OF 14 GAUGE.
- ALL ELECTRICAL EQUIPMENT TO BE U.L. TESTED AND APPROVED, AND BEAR THE U.L. LABEL.
- CROSS CONNECTION PROTECTION INSPECTION REQUIRED. THE BACKFLOW DEVICE TO BE TESTED UPON THE ORIGINAL INSTALLATION. THE TESTING TO BE PERFORMED BY A PERSON HOLDING A CURRENT CERTIFICATE AS A BACKFLOW TESTER. THE TEST REPORT TO BE SUBMITTED TO THE LOCAL WATER DISTRICT, OR PURVEYOR, AND OWNER WITH A COPY TO BARGHAUSEN CONSULTING ENGINEERS, INC. CONTRACTOR TO INCLUDE TESTING IN THE SCOPE OF WORK. OWNER IS RESPONSIBLE FOR ANNUAL INSPECTIONS AFTER THE INTIAL INSPECTION.
- CONTRACTOR TO PROVIDE SYSTEM WINTERIZATION/SPRING SERVICE WHEN INSTALLATION HAS BEEN COMPLETED WITHIN 90 DAYS OF NOVEMBER 1 FOR WINTERIZATION, OR MAY 15 FOR SPRING SERVICE. SERVICE TO BE PERFORMED AS NEAR AS PRACTICAL



- NOTE:
- LOCATE VALVE BOXES IN PLANTING AREAS.
 - WRAP VALVE BOX WITH A MINIMUM OF 3 MIL THICK PLASTIC AND SECURE IT USING DUCT TAPE OR ELECTRICAL TAPE.
 - ALL THREADED CONNECTIONS TO BE MADE USING TEFLON TAPE.
 - ALL CHANGES IN ELEVATION SHALL BE MADE USING SCH 40 PVC 45° ELBOWS.

BALL VALVE DETAIL

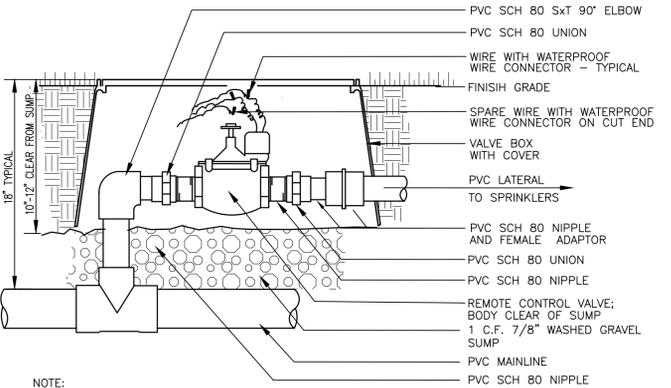
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- NOTE:
- MANUFACTURER'S LIMITS PREVAIL FOR INSTALLATION AND ADJUSTMENTS.
- PROVIDE SWING JOINT RISERS AT WALKS AND CURBS. 24" FLEXIBLE RISERS ACCEPTABLE ELSEWHERE.

POP-UP RISER ASSEMBLY

NOT TO SCALE



- NOTE:
- ONE VALVE PER BOX. PROVIDE EXTRA COILS (18") OF EACH WIRE IN VALVE BOX. COMPACT SOIL AROUND VALVE BOX. USE TEFLON OR FLOWABLE SEALANT IN ALL THREADED FITTINGS, PER MANUFACTURER'S SPEC'S.

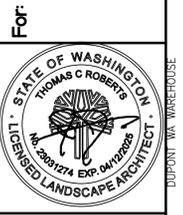
REMOTE CONTROL VALVE ASSEMBLY

NOT TO SCALE

Revision	Date	By	Appr.	Per City Comments	Per City Comments
6	5/29/24	TCR	JMV		
5	3/27/24	TCR	JMV		

PRELIMINARY
IRRIGATION NOTES AND DETAILS
FOR
DUPONT - WEST

For:
AVENUE 55, LLC
601 UNION STREET, SUITE 2930
SEATTLE, WA 98101
(206) 707-9696



Scale:	Horizontal	N/A	Vertical	N/A	
Designed	TCR	Drawn	JMV	Checked	JMV
Approved	JMV	Date	3/27/24		

Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222
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Job Number: **18666**
Sheet: **L10** of **12**

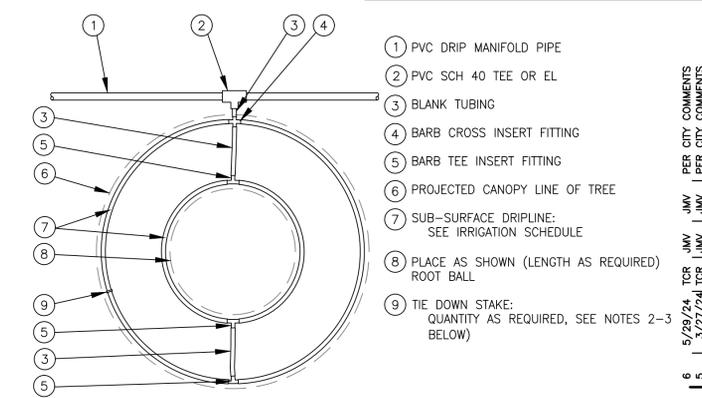
IRRIGATION DETAILS

FOR

DUPONT - WEST

A PORTION OF THE NW 1/4 OF SECTION 26, TOWNSHIP 19N, RANGE 01E, W.M.
CITY OF DUPONT, PIERCE COUNTY, WASHINGTON

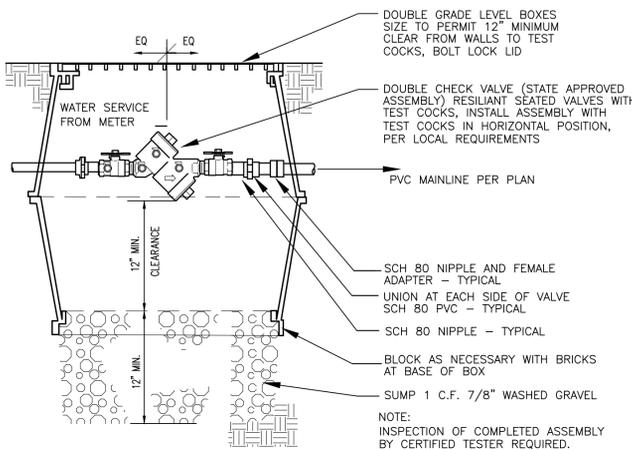
APPROVED FOR CONSTRUCTION
BY: CITY OF DUPONT DATE: _____
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NOTES:
1. DISTANCE BETWEEN LATERAL RINGS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, AND TREE CANOPY. SEE MANUFACTURER DRIPLINE INSTALLATION GUIDE FOR SUGGESTED SPACINGS.
2. PLACE TIE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM, AND FIVE FEET IN CLAY.
3. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE-DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.

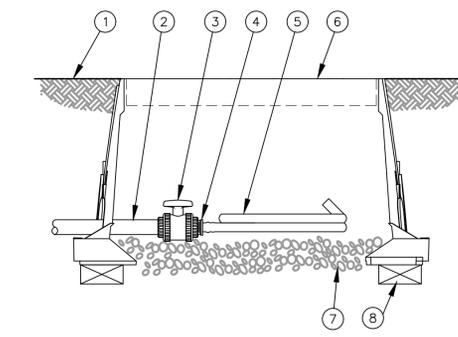
DRIPLINE AROUND TREE

NOT TO SCALE



CHECK VALVE ASSEMBLY DETAIL

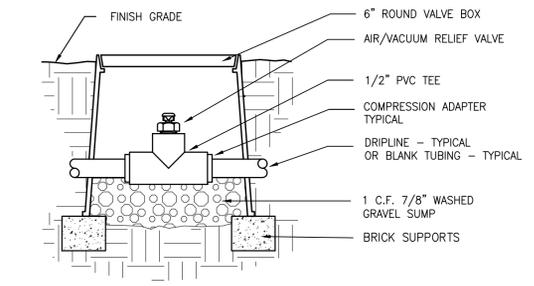
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- 1 FINISH GRADE
- 2 PVC DRIP MANIFOLD PIPE
- 3 PVC 1" X 3/4" TRUE UNION BALL VALVE
- 4 EASY FIT MALE X BARB ADAPTER
- 5 SUB-SURFACE DRIPLINE:
- 6 12-INCH VALVE BOX WITH COVER
- 7 3-INCH MINIMUM DEPTH OF 3/4" WASHED GRAVEL
- 8 BRICK (1 OF 2)

FLUSH POINT WITH BALL VALVE

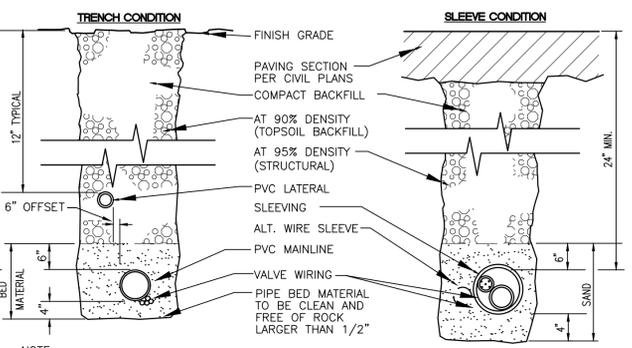
NOT TO SCALE



NOTE:
AIR/VACUUM RELIEF VALVE CANNOT BE CONNECTED LOWER THAN DRIPLINE LATERALS. FOR USE ON ZONES OF 7 GPM OR LESS ONLY (PLUMBED TO TUBING).

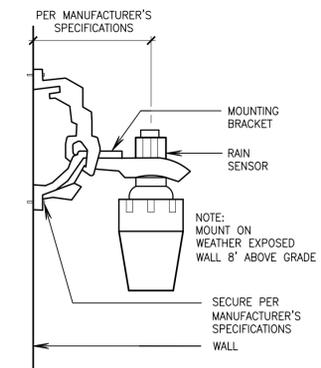
1/2" AIR/VACUUM RELIEF VALVE DETAIL

NOT TO SCALE



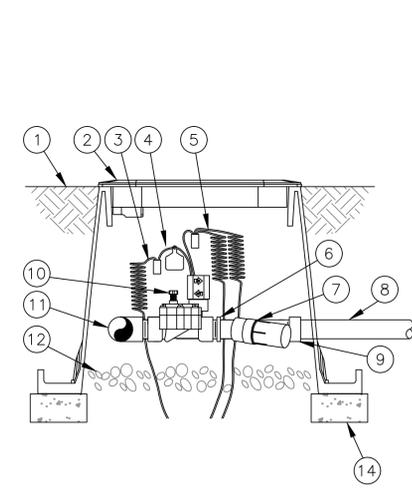
SLEEVE/TRENCHING DETAIL

NOT TO SCALE



RAIN SENSOR DETAIL

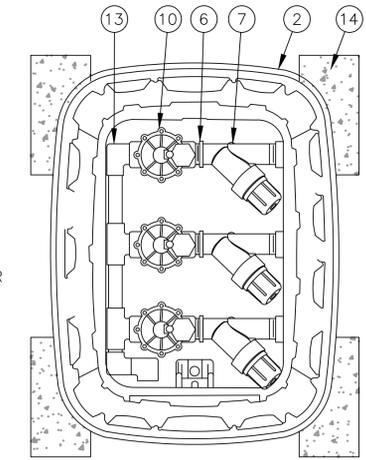
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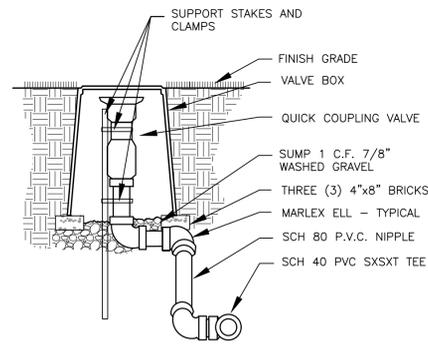
SIDE VIEW

DRIP IRRIGATION VALVE

NOT TO SCALE

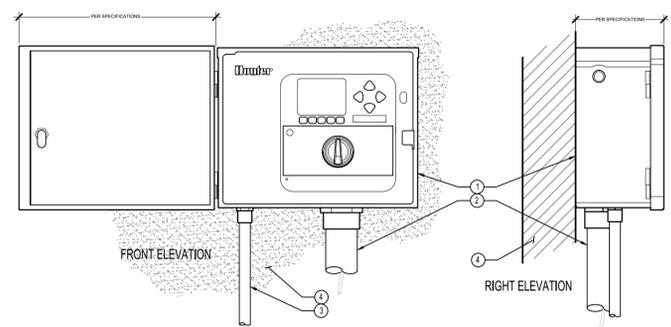


TOP VIEW



QUICK COUPLING VALVE DETAIL

NOT TO SCALE

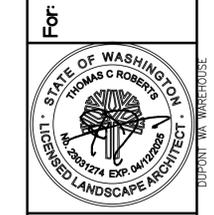


IRRIGATION CONTROLLER, WALL MOUNT

NOT TO SCALE

Revision
6 5/29/24 TCR JMW PER CITY COMMENTS
5 3/27/24 TCR JMW PER CITY COMMENTS
No. Date By Ctd. App.
Title: PRELIMINARY IRRIGATION DETAILS FOR DUPONT - WEST

For: AVENUE 55, LLC
601 UNION STREET, SUITE 2930
SEATTLE, WA 98101
(206) 707-9696



Scale: Horizontal N/A, Vertical N/A
Designed: TCR, Drawn: TCR, Checked: JMW, Approved: JMW, Date: 3/27/24

Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222
barghausen.com

Job Number: 18666
Sheet: L11 of 12

IRRIGATION DETAILS

FOR

DUPONT - WEST

A PORTION OF THE NW 1/4 OF SECTION 26, TOWNSHIP 19N, RANGE 01E, W.M.
CITY OF DUPONT, PIERCE COUNTY, WASHINGTON

APPROVED FOR CONSTRUCTION

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Revision

PRELIMINARY
IRRIGATION DETAILS
FOR
DUPONT - WEST

Title:

AVENUE 55, LLC
601 UNION STREET, SUITE 2930
SEATTLE, WA 98101
(206) 707-9696

For:



Scale:

Horizontal N/A
Vertical N/A

Designed: TCR

Drawn: TCR

Checked: JMV

Approved: JMV

Date: 3/27/24

Job Number

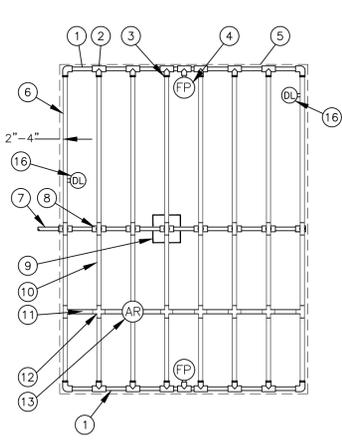
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Sheet

L12 of 12

18666

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- 1 PVC EXHAUST HEADER
- 2 PVC SCH 40 TEE OR EL (TYPICAL)
- 3 BARB X MALE FITTING
- 4 FLUSH POINT (TYPICAL) SEE RAIN BIRD DETAIL 'FLUSH POINT WITH BALL VALVE'
- 5 PERIMETER OF AREA
- 6 PERIMETER DRIPLINE PIPE TO BE INSTALLED 2"-4" FROM PERIMETER OF AREA
- 7 PVC SUPPLY PIPE FROM CONTROL ZONE KIT (SIZED TO MEET LATERAL FLOW DEMAND)
- 8 PVC SUPPLY MANIFOLD
- 9 CONNECTION FROM SUPPLY MANIFOLD TO DRIPLINE (TYPICAL) - SEE INSET A

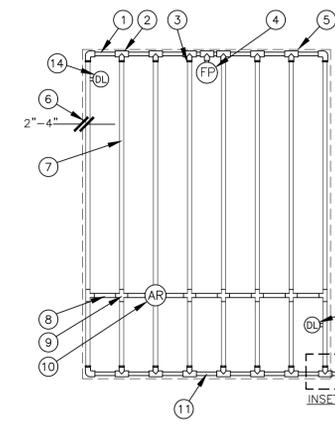
- 10 SUB-SURFACE DRIPLINE
- 11 BLANK TUBING
- 12 BARB X BARB INSERT TEE OR CROSS
- 13 1/2" AIR RELIEF VALVE
- 14 BARB X FEMALE FITTING
- 15 3/4" PVC NIPPLE, LENGTH AS NECESSARY
- 16 DRIPLINE INDICATOR. SEE DETAIL FOR ADDITIONAL INFORMATION

Inlet Pressure psi	12' Spacing		18' Spacing		24' Spacing	
	Nominal Flow (gph)					
15	273	185	314	250	424	322
20	318	169	353	294	508	368
30	360	230	413	350	586	414
40	395	255	465	402	652	474
50	417	285	528	420	720	488
60	460	290	596	455	780	514

NOTES:
1. DISTANCE BETWEEN LATERAL ROWS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. SEE IRRIGATION SCHEDULE FOR SPACING.
2. LENGTH OF LONGEST DRIPLINE LATERAL SHOULD NOT EXCEED THE MAXIMUM LENGTH SHOWN IN THE ACCOMPANYING TABLE.
3. AIR RELIEF VALVE TO BE INSTALLED AT HIGH POINT OF AREA.
4. WHEN USING 17MM INSERT FITTINGS WITH DESIGN PRESSURE OVER 50PSI, IT IS RECOMMENDED THAT STAINLESS STEEL CLAMPS BE INSTALLED ON EACH FITTING.

DRIPLINE CENTER FEED LAYOUT

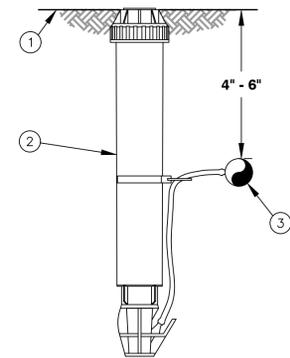
NOT TO SCALE



- 1 PVC EXHAUST HEADER
- 2 PVC SCH 40 TEE OR EL (TYPICAL)
- 3 BARB X MALE FITTING
- 4 FLUSH POINT (TYPICAL) SEE RAIN BIRD DETAIL 'FLUSH POINT WITH BALL VALVE'
- 5 PERIMETER OF AREA
- 6 PERIMETER DRIPLINE PIPE TO BE INSTALLED 2"-4" FROM PERIMETER OF AREA
- 7 SUB-SURFACE DRIPLINE
- 8 BLANK TUBING
- 9 BARB X BARB INSERT TEE OR CROSS
- 10 1/2" AIR RELIEF VALVE
- 11 PVC SUPPLY HEADER
- 12 PVC DRIP MANIFOLD FROM CONTROL ZONE VALVE KIT (SIZED TO MEET LATERAL FLOW DEMAND)
- 13 PVC SCH 40 RISER PIPE
- 14 DRIPLINE INDICATOR. SEE DETAIL FOR ADD'L INFO

DRIPLINE END FEED LAYOUT

NOT TO SCALE

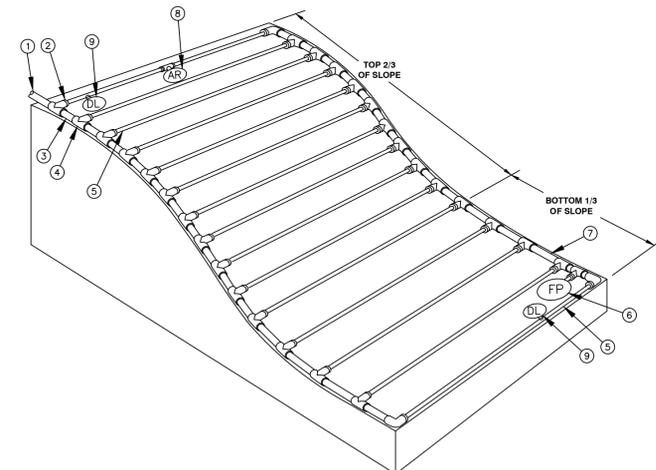


- 1 FINISH GRADE/TURF
- 2 OPERATION INDICATOR
- 3 SUB-SURFACE DRIPLINE. SEE IRRIGATION SCHEDULE

NOTE:
1. INSERT BARB TRANSFER FITTING DIRECTLY INTO DRIPLINE TUBING.
2. VAN NOZZLE MAY BE SET TO CLOSED, OR IF IT IS DESIRED TO SEE SPRAY FROM THE NOZZLE, SET THE ARC TO 1/4 PATTERN. THE FLOW FROM THE NOZZLE, 0.3 GPM, SHOULD BE ACCOUNTED FOR IN THE SYSTEM DESIGN.

DRIP IRRIGATION DRIPLINE INDICATOR

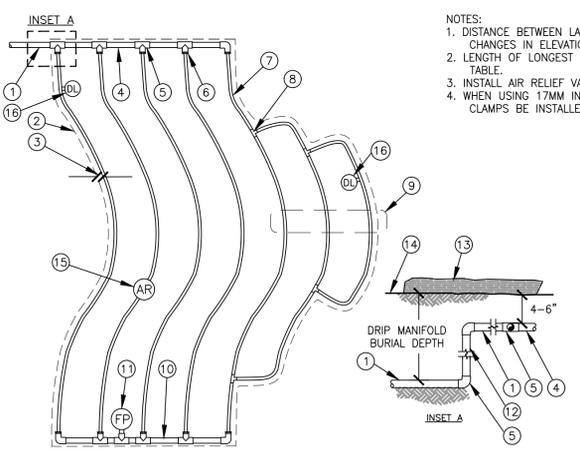
NOT TO SCALE



- 1 PVC EXHAUST HEADER
- 2 PVC SCH 40 TEE OR EL (TYPICAL)
- 3 BARB X MALE FITTING
- 4 FLUSH POINT (TYPICAL) SEE RAIN BIRD DETAIL 'FLUSH POINT WITH BALL VALVE'
- 5 PERIMETER OF AREA
- 6 PERIMETER DRIPLINE PIPE TO BE INSTALLED 2"-4" FROM PERIMETER OF AREA
- 7 SUB-SURFACE DRIPLINE
- 8 BLANK TUBING
- 9 BARB X BARB INSERT TEE OR CROSS
- 10 1/2" AIR RELIEF VALVE
- 11 PVC SUPPLY HEADER
- 12 PVC DRIP MANIFOLD FROM CONTROL ZONE VALVE KIT (SIZED TO MEET LATERAL FLOW DEMAND)
- 13 PVC SCH 40 RISER PIPE
- 14 DRIPLINE INDICATOR. SEE DETAIL FOR ADD'L INFO

DRIPLINE SLOPED LAYOUT

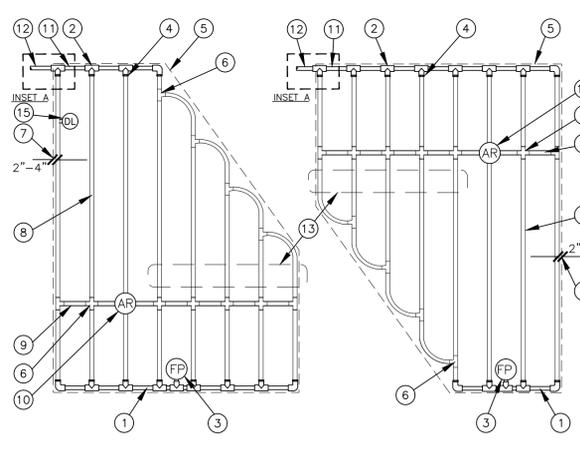
NOT TO SCALE



- 1 PVC SUPPLY PIPE FROM RAIN BIRD CONTROL ZONE KIT (SIZED TO MEET LATERAL FLOW DEMAND)
- 2 PERIMETER OF AREA
- 3 PERIMETER DRIPLINE PIPE TO BE INSTALLED 2"-4" FROM PERIMETER OF AREA
- 4 PVC SUPPLY MANIFOLD
- 5 PVC SCH 40 TEE OR EL (TYPICAL)
- 6 BARB X MALE FITTING
- 7 SUB-SURFACE DRIPLINE. SEE IRRIGATION SCHEDULE
- 8 ARB X BARB INSERT TEE
- 9 TOTAL LENGTH OF SELECTED DRIPLINE SHOULD NOT EXCEED LENGTH SHOWN IN TABLE
- 10 PVC FLUSH HEADER
- 11 FLUSH POINT. SEE DETAIL
- 12 PVC RISER PIPE
- 13 TURF OR MULCH
- 14 FINISH GRADE
- 15 1/2" AIR RELIEF VALVE. SEE DETAIL
- 16 DRIPLINE INDICATOR. SEE DETAIL FOR ADD'L INFO

DRIPLINE ODD CURVES LAYOUT

NOT TO SCALE

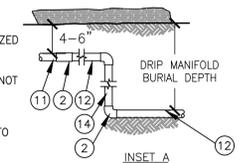


- 1 PVC EXHAUST HEADER
- 2 PVC SCH 40 TEE OR EL (TYPICAL)
- 3 FLUSH POINT (TYPICAL) SEE DETAIL
- 4 BARB X MALE FITTING
- 5 PERIMETER OF AREA
- 6 BARB X BARB INSERT TEE OR CROSS
- 7 PERIMETER DRIPLINE PIPE TO BE INSTALLED 2"-4" FROM PERIMETER OF AREA
- 8 SUB-SURFACE DRIPLINE. SEE IRRIGATION SCHEDULE
- 9 BLANK TUBING
- 10 1/2" AIR RELIEF VALVE. SEE DETAIL
- 11 PVC SUPPLY MANIFOLD
- 12 PVC SUPPLY PIPE FROM CONTROL ZONE KIT (SIZED TO MEET LATERAL FLOW DEMAND)
- 13 TOTAL LENGTH OF SELECTED DRIPLINE SHOULD NOT EXCEED LENGTH SHOWN IN TABLE
- 14 PVC SCH 40 RISER PIPE
- 15 DRIPLINE INDICATOR. SEE DETAIL FOR ADD'L INFO

DRIPLINE IRREGULAR SHAPED LAYOUT

NOT TO SCALE

NOTES:
1. DISTANCE BETWEEN LATERAL ROWS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. SEE MANUFACTURER DRIPLINE INSTALLATION GUIDE FOR SUGGESTED SPACINGS.
2. LENGTH OF LONGEST DRIPLINE LATERAL SHOULD NOT EXCEED THE MAXIMUM LENGTH SHOWN IN THE ACCOMPANYING TABLE.
3. AIR RELIEF VALVE TO BE INSTALLED AT HIGH POINT OF AREA.
4. WHEN USING 17MM INSERT FITTINGS WITH DESIGN PRESSURE OVER 50PSI, IT IS RECOMMENDED THAT STAINLESS STEEL CLAMPS BE INSTALLED ON EACH FITTING.



DUPONT WA WAREHOUSE

18666 PRELIMINARY 18666-PL.dwg Date: 3/27/24 12:35 PM Scale: 1"=10'