

PLANT LIST BOTANICAL NAME

CERCIDIPHYLLUM JAPONICUM AMELANCHIER X GRANDIFLORA 'AUTU! CARPINUS CAROLINIANA

SHRUBS

TREES

ARCTOSTAPHYLOS UVA-URSI BUXUS 'GREEN VELVET' MAHONIA AQUIFOLIUM ROSA 'RADCON' SYRINGA 'PABLIN' DWARF KOREAN LILA TAXUS MEDIA 'TAUTONII' VIBURNUM TRILOBUM 'COMPACTUM'

PERENNIALS, GRASSES & GROUNDCOV

ACHILLEA MILLEFOLIUM 'TERRACOTTA' ATHYRIUM FILIX-FEMINA 'LADY IN RED' CALAMAGROSTIS ACUTIFLORA 'KARL FO ECHINACEA PURPUREA 'SOLAR FLARE' RUDBECKIA FULGIDA 'GOLDSTURM' SEDUM SPECTABILE 'AUTUMN JOY' SPOROBOLUS HETEROLEPIS TIARELLA CORDIFOLIA

LANDSCAPE NOTES

1. PLANT MATERIAL AND CONSTRUCTION METHODS SHALL MEET OR EXCEED CANDAIAN LANDSCAPE STANDARDS. ALL OFFSITE LANDSCAPE WORKS TO MEET CITY OF KELOWNA BYLAW 12375 STANDARDS.

2. ALL SOFT LANDSCAPE AREAS SHALL BE WATERED BY A FULLY AUTOMATIC TIMED UNDERGROUND IRRIGATION SYSTEM.

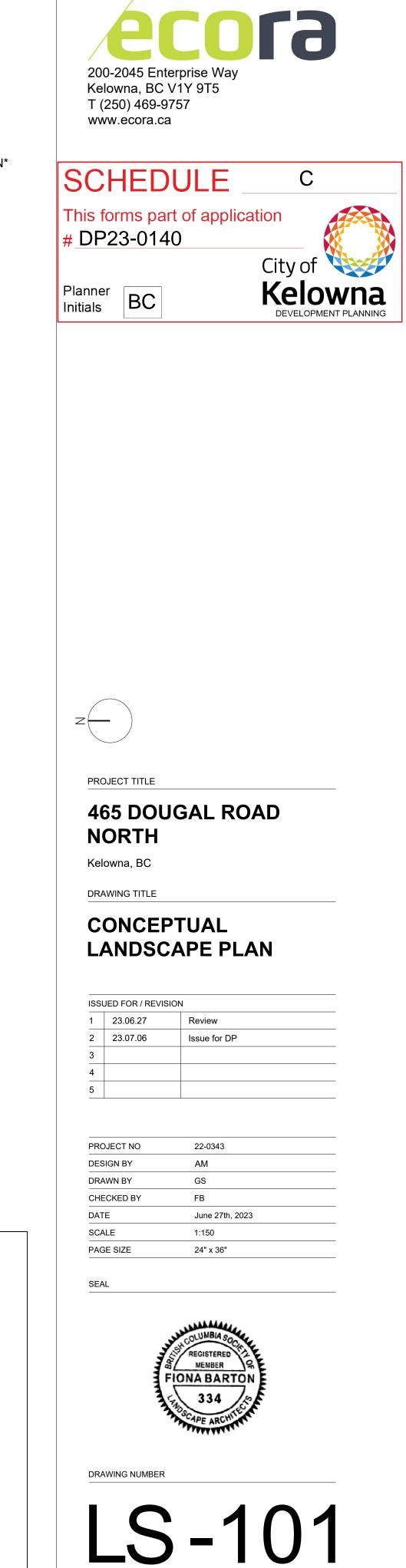
3. TREE AND SHRUB BEDS TO BE DRESSED IN A MINIMUM 75mm NATURAL WOOD MULCH AS SHOWN IN PLANS. DO NOT PLACE WEED MAT UNDERNEATH TREE AND SHRUB BEDS.

4. SHRUB BEDS TO RECEIVE A MINIMUM 300mm DEPTH TOPSOIL PLACEMENT. TREE BEDS TO RECEIVE A MINIMUM 1000mm DEPTH TOPSOIL PLACEMENT. SMALL TREE BEDS TO RECEIVE 1500mm DEPTH TOPSOIL PLACEMENT TO ACHIEVE SOIL VOLUME PER TREE REQUIREMENTS.

5. TURF AREA FROM SOD SHALL BE NO.1 GRADE GROWN FROM CERTIFIED SEED OF IMPROVED CULTIVARS REGISTERED FOR SALE IN B.C. AND SHALL BE TOLERANT OF DROUGHT CONDITIONS. A MINIMUM OF 150mm DEPTH OF GROWING MEDIUM IS REQUIRED BENEATH TURF AREAS. TURF AREAS SHALL MEET EXISTING GRADES AND HARD SURFACES FLUSH.

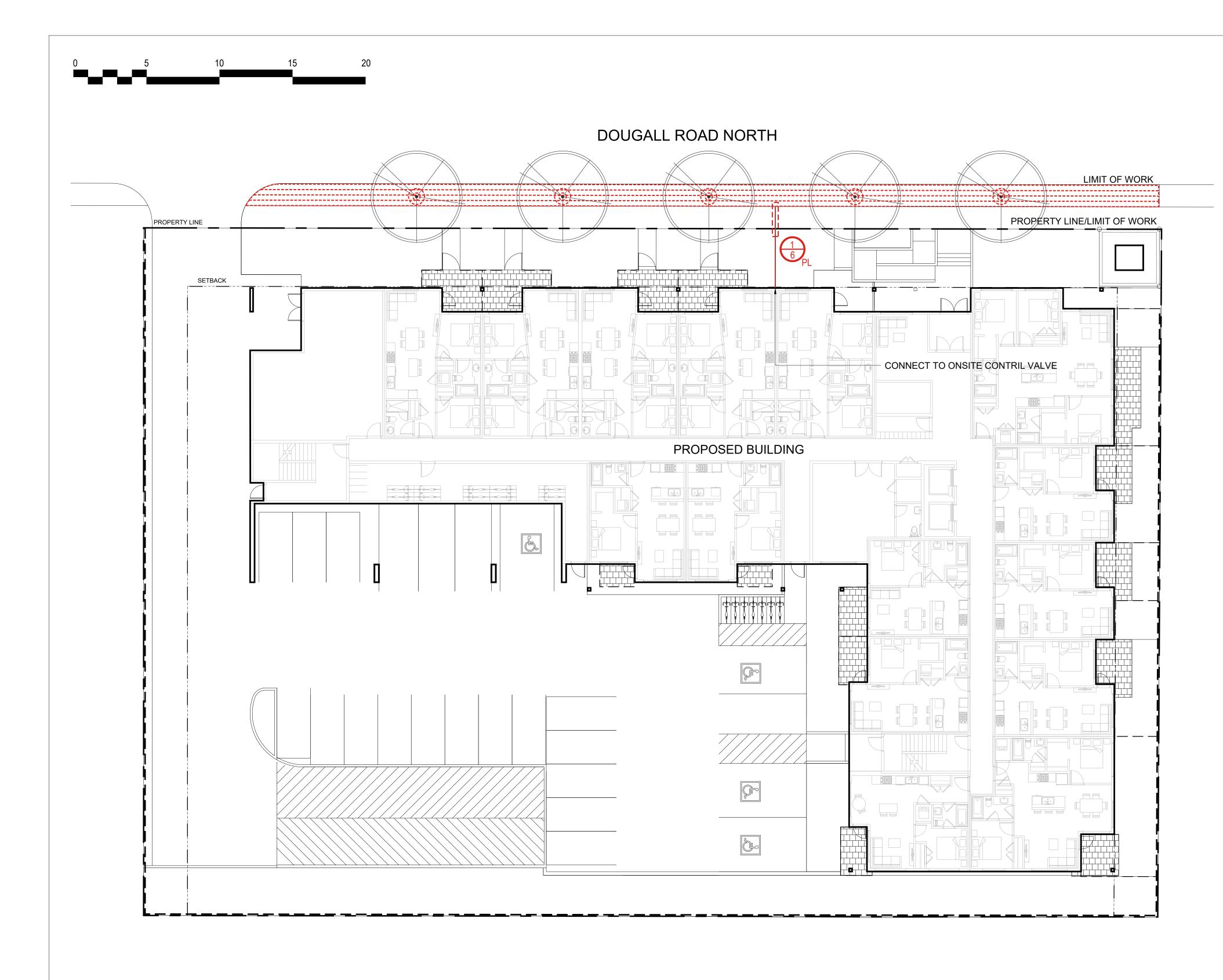
6. SITE GRADING AND DRAINAGE WILL ENSURE THAT ALL STRUCTURES HAVE POSITIVE DRAINAGE AND THAT NO WATER OR LOOSE IMPEDIMENTS WILL BE DISCHARGED FROM THE LOT ONTO ADJACENT PUBLIC, COMMON, OR PRIVATE PROPERTIES.
7. SOIL CELLS WITH FULL DEPTH GROWING MEDIUM UNDER ALL HARDSCAPE AND CRUSHER FINES PAVING IN SETBACK.

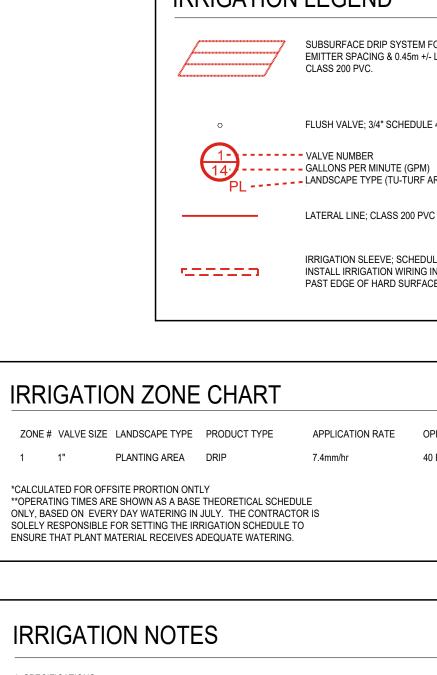
	COMMON NAME	QTY	SIZE/SPACING & REMARKS
	KATSURA TREE	3	5cm CAL.
IMN BRILLIANCE'	AUTUMN BRILLIANCE SERVICEBERRY	4	3cm CAL.
	AMERICAN HORNBEAM	4	4cm CAL.
	KINNIKINNICK	50	#02 CONT. /0.6M O.C. SPACING
	GREEN VELVET BOXWOOD	38	#02 CONT. /1.2M O.C. SPACING
	OREGON GRAPE HOLLY	15	#02 CONT. /1.3M O.C. SPACINO
	RAINBOW KNOCKOUT ROSE	20	#02 CONT. /1.0M O.C. SPACINO
AC (TG)	TOP GRAFTED KOREAN LILAC	3	#02 CONT. /1.0M O.C. SPACINO
	TAUTON YEW	33	#02 CONT. /1.0M O.C. SPACINO
	COMPACT CRANBERRY	19	#02 CONT. /1.5M O.C. SPACING
VERS	TERRACOTTA YARROW	29	#01 CONT. /0.6M O.C. SPACING
Α'	LADY IN RED FERN	31	#01 CONT. /0.9M O.C. SPACINO
,	KARL FOESTER FEATHER REED GRASS	12	#01 CONT. /1.0M O.C. SPACINO
OERSTER'	SOLAR FLARE CONEFLOWER	35	#01 CONT. /0.6M O.C. SPACINO
5'	GOLDSTURM CONEFLOWER	35	#01 CONT. /0.6M O.C. SPACINO
	AUTUMN JOY STONECROP	35	#01 CONT. /0.6M O.C. SPACINO
	PRAIRIE DROPSEED	12	#01 CONT. /1.0M O.C. SPACINO
	FOAMFLOWER	35	#01 CONT. /0.6M O.C. SPACING



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1. SPECIFICATIONS ALL SPECIFICATIONS ESTABLISHED IN THE PROJECT SPECIFICATIONS, AND ALL STANDARDS OR SPECIFICATIONS ESTABLISHED IN THE LATEST EDITION OF THE CANADIAN LANDSCAPE STANDARD, PUBLISHED JOINTLY BY THE CANADIAN NURSERY LANDSCAPE ASSOCIATION (CNLA) AND THE CANADIAN SOCIETY OF LANDSCAPE ARCHITECTS (CSLA). 2. VERIFICATION 2. VERIFICATION SYSTEM DESIGN IS BASED ON (10) G.P.M. & (75) P.S.I. AVAILABLE AT THE POINT OF CONNECTION. VERIFY SAME AND NOTIFY THE OWNER'S REPRESENTATIVE IF SUCH DATA ADVERSELY AFFECTS THE OPERATION OF THE SYSTEM. SUCH NOTICE SHALL BE MADE IN WRITING AND PRIOR TO COMMENCING IRRIGATION WORK. 3. UTILITIES VERIFY LOCATION OF ALL ON-SITE UTILITIES. RESTORATION OF DAMAGED UTILITIES SHALL BE MADE AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE. 4. SCHEMATIC SYSTEM FEATURES ARE SHOWN SCHEMATICALLY FOR GRAPHIC CLARITY. INSTALL ALL PIPING AND VALVES IN COMMON TRENCHES WHERE FEASIBLE AND INSIDE PLANTING AREAS WHENEVER POSSIBLE. 5. WATER SERVICE LINE EXISTING. 6. ELECTRICAL SERVICE BY OTHERS, REFER ELECTRICAL DWGS 7. SLEEVING ADEQUATELY SIZE ALL SLEEVES SHOWN ON PLAN. SLEEVES SHALL BE INSTALLED AT THE NECESSARY DEPTHS PRIOR TO PAVEMENT CONSTRUCTION. SLEEVING SHALL EXTEND 300MM FROM EDGE OF PAVING INTO LAWN OR PLANTING AREA, AND SHALL HAVE ENDS CLEARLY MARKED ABOVE GRADE UNLESS OTHERWISE SHOWN. 8. GRAPHIC CLARITY MAIN LINE & IRRIGATION COMPONENTS SHOW ON PLAN FOR GRAPHIC CLARIFY. CONTRACTOR TO VERIFY ALL MATERIALS IN THE FIELD. VALVE BOXES TO

BE LOCATED IN PLANTING AREAS. 9. TESTS AND INSPECTIONS SUCCESSFUL COMPLETION OF INSPECTION OR TEST. 10. COMPONENTS ALL INTERIOR POINT OF CONNECTION COMPONENTS TO BE BRASS.

IRRIGATION LEGEND

SUBSURFACE DRIP SYSTEM FOR PLANTING AREAS; NETAFIM TECHLINE CV, 0.4 GPH, 0.45m EMITTER SPACING & 0.45m +/- LATERAL SPACING. SUPPLY & FLUSH MANIFOLDS TO BE 1" CLASS 200 PVC.

FLUSH VALVE; 3/4" SCHEDULE 40 PVC BALL VALVE ---- VALVE NUMBER

LANDSCAPE TYPE (TU-TURF AREA, PL-PLANTING AREA) LATERAL LINE; CLASS 200 PVC PIPE, 1" UNLESS NOTED

> IRRIGATION SLEEVE; SCHEDULE 40 PVC, 3" MIN. OR TWICE THE DIA. OF PIPE CONTAINED. INSTALL IRRIGATION WIRING IN SEPARATE 2" ELECTRICAL CONDUIT. EXTEND SLEEVE 0.3m PAST EDGE OF HARD SURFACE.

7.4mm/hr

APPLICATION RATE OPERATING PRESSURE ZONE FLOW OPERATING TIME 6 GPM 40 PSI

TOTAL RUNTIME PER WEEK = 45 MINS / WEEK (3.5 HRS)

45 MINS / 2X PER WEEK

AT VARIOUS MILESTONES DURING CONSTRUCTION, INSPECTION AND TESTING OF COMPONENTS WILL BE REQUIRED TO ENSURE PERFORMANCE OF IRRIGATION SYSTEM MEETS EXPECTED STANDARDS. PROVIDE EQUIPMENT AND PERSONNEL NECESSARY FOR PERFORMANCE OF INSPECTIONS AND TESTS. CONDUCT ALL INSPECTIONS AND TESTS IN THE PRESENCE OF THE CONTRACT ADMINISTRATOR. KEEP WORK UNCOVERED AND ACCESSIBLE UNTIL

60019 200-2045 Enterprise Way Kelowna, BC V1Y 9T5 T (250) 469-9757 www.ecora.ca SCHEDULE С This forms part of application # DP23-0140 City of Kelowna Planner BC Initials DEVELOPMENT PLANNING

PROJECT TITLE

465 DOUGAL ROAD NORTH

Kelowna, BC

DRAWING TITLE

OFFSITE **IRRIGATION PLAN**

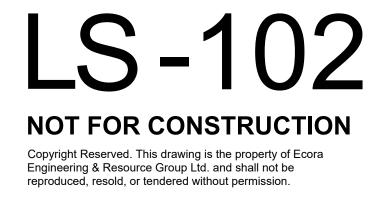
ISSUED FOR / REVISION 1 23.06.27 Review 2 23.07.06 Issue for DP 3 4 5

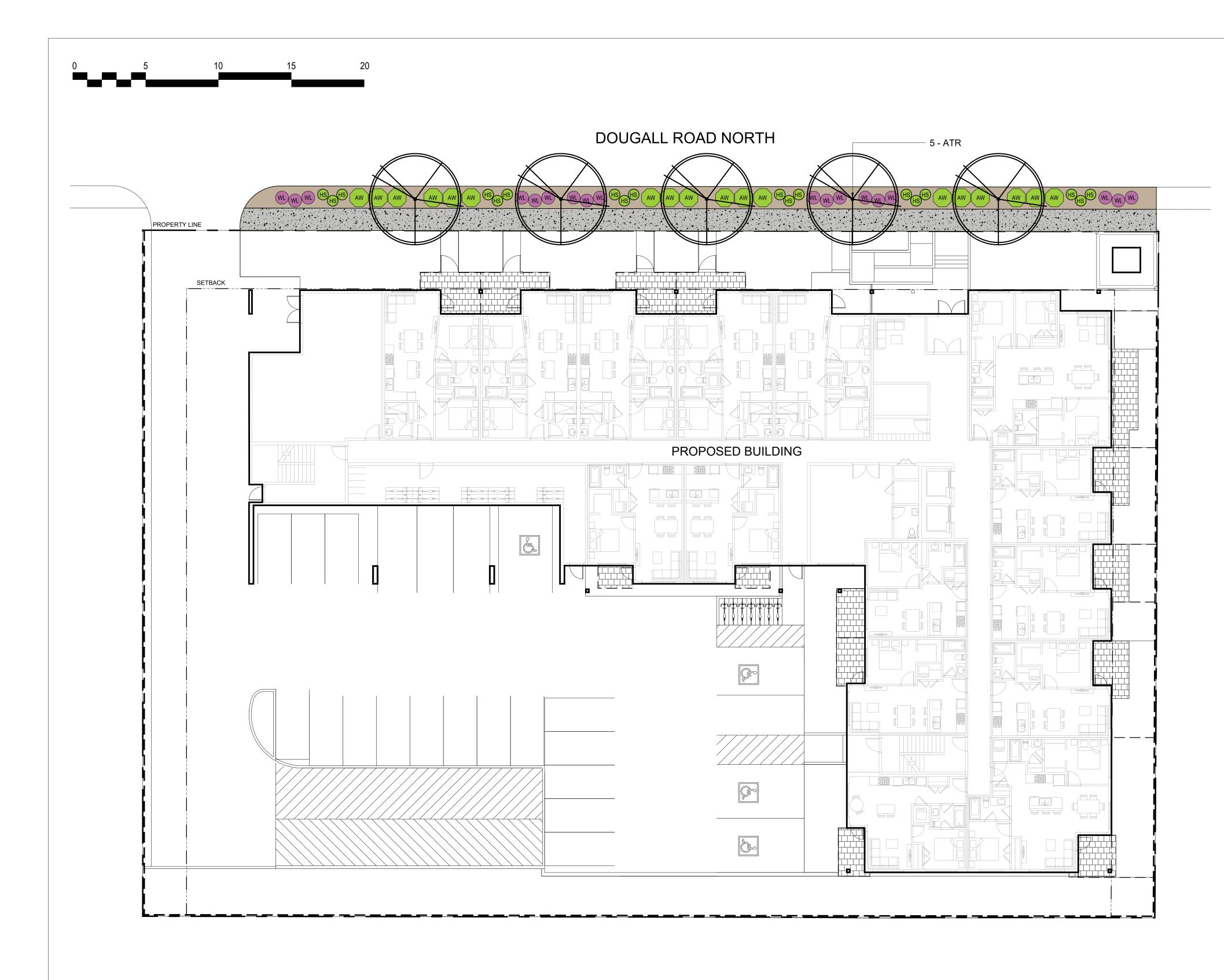
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DRAWN BY	GS		
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DATE	June 27th, 2023		
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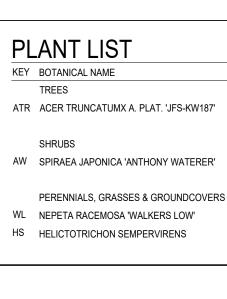
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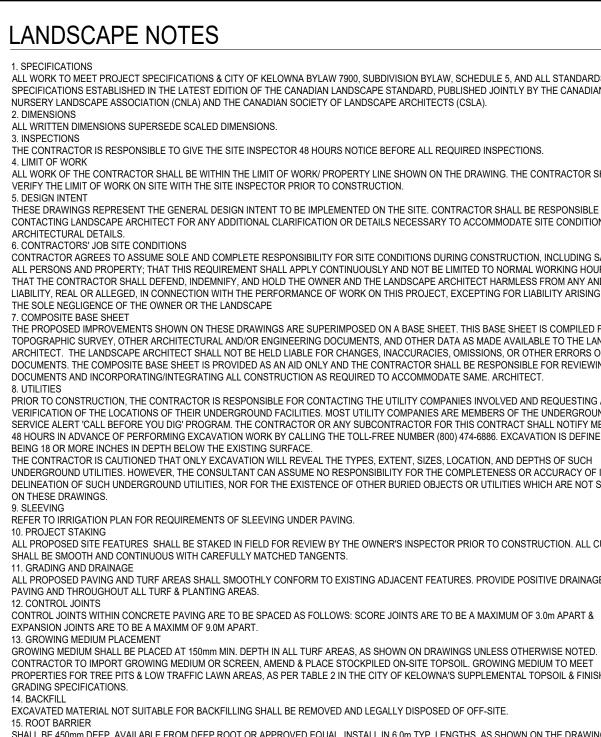


DRAWING NUMBER









COMMON NAME	QTY	SIZE/SPACING & REMARKS
URBAN SUNSET MAPLE	5	5cm CAL.
	10	
ANTHONY WATERER SPIREA	18	#02 CONT. /0.6M O.C. SPACING
CATMINT WALKERS LOW	18	#01 CONT. /0.6M O.C. SPACING
BLUE OAT GRASS	18	#01 CONT. /0.6M O.C. SPACING

ALL WORK TO MEET PROJECT SPECIFICATIONS & CITY OF KELOWNA BYLAW 7900, SUBDIVISION BYLAW, SCHEDULE 5, AND ALL STANDARDS OR SPECIFICATIONS ESTABLISHED IN THE LATEST EDITION OF THE CANADIAN LANDSCAPE STANDARD, PUBLISHED JOINTLY BY THE CANADIAN NURSERY LANDSCAPE ASSOCIATION (CNLA) AND THE CANADIAN SOCIETY OF LANDSCAPE ARCHITECTS (CSLA).

THE CONTRACTOR IS RESPONSIBLE TO GIVE THE SITE INSPECTOR 48 HOURS NOTICE BEFORE ALL REQUIRED INSPECTIONS.

ALL WORK OF THE CONTRACTOR SHALL BE WITHIN THE LIMIT OF WORK/ PROPERTY LINE SHOWN ON THE DRAWING. THE CONTRACTOR SHALL THESE DRAWINGS REPRESENT THE GENERAL DESIGN INTENT TO BE IMPLEMENTED ON THE SITE. CONTRACTOR SHALL BE RESPONSIBLE FOR

CONTACTING LANDSCAPE ARCHITECT FOR ANY ADDITIONAL CLARIFICATION OR DETAILS NECESSARY TO ACCOMMODATE SITE CONDITIONS OR CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR SITE CONDITIONS DURING CONSTRUCTION, INCLUDING SAFETY OF

ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER AND THE LANDSCAPE ARCHITECT HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM

THE PROPOSED IMPROVEMENTS SHOWN ON THESE DRAWINGS ARE SUPERIMPOSED ON A BASE SHEET. THIS BASE SHEET IS COMPILED FROM THE TOPOGRAPHIC SURVEY, OTHER ARCHITECTURAL AND/OR ENGINEERING DOCUMENTS, AND OTHER DATA AS MADE AVAILABLE TO THE LANDSCAPE ARCHITECT. THE LANDSCAPE ARCHITECT SHALL NOT BE HELD LIABLE FOR CHANGES, INACCURACIES, OMISSIONS, OR OTHER ERRORS ON THESE DOCUMENTS. THE COMPOSITE BASE SHEET IS PROVIDED AS AN AID ONLY AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING THESE DOCUMENTS AND INCORPORATING/INTEGRATING ALL CONSTRUCTION AS REQUIRED TO ACCOMMODATE SAME. ARCHITECT.

PRIOR TO CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE UTILITY COMPANIES INVOLVED AND REQUESTING A VISUAL VERIFICATION OF THE LOCATIONS OF THEIR UNDERGROUND FACILITIES. MOST UTILITY COMPANIES ARE MEMBERS OF THE UNDERGROUND SERVICE ALERT 'CALL BEFORE YOU DIG' PROGRAM. THE CONTRACTOR OR ANY SUBCONTRACTOR FOR THIS CONTRACT SHALL NOTIFY MEMBERS 48 HOURS IN ADVANCE OF PERFORMING EXCAVATION WORK BY CALLING THE TOLL-FREE NUMBER (800) 474-6886. EXCAVATION IS DEFINED AS THE CONTRACTOR IS CAUTIONED THAT ONLY EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATION, AND DEPTHS OF SUCH UNDERGROUND UTILITIES. HOWEVER, THE CONSULTANT CAN ASSUME NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF ITS

DELINEATION OF SUCH UNDERGROUND UTILITIES, NOR FOR THE EXISTENCE OF OTHER BURIED OBJECTS OR UTILITIES WHICH ARE NOT SHOWN

ALL PROPOSED SITE FEATURES SHALL BE STAKED IN FIELD FOR REVIEW BY THE OWNER'S INSPECTOR PRIOR TO CONSTRUCTION. ALL CURVES

ALL PROPOSED PAVING AND TURF AREAS SHALL SMOOTHLY CONFORM TO EXISTING ADJACENT FEATURES. PROVIDE POSITIVE DRAINAGE ON ALL

GROWING MEDIUM SHALL BE PLACED AT 150mm MIN. DEPTH IN ALL TURF AREAS, AS SHOWN ON DRAWINGS UNLESS OTHERWISE NOTED. CONTRACTOR TO IMPORT GROWING MEDIUM OR SCREEN, AMEND & PLACE STOCKPILED ON-SITE TOPSOIL. GROWING MEDIUM TO MEET PROPERTIES FOR TREE PITS & LOW TRAFFIC LAWN AREAS, AS PER TABLE 2 IN THE CITY OF KELOWNA'S SUPPLEMENTAL TOPSOIL & FINISH

EXCAVATED MATERIAL NOT SUITABLE FOR BACKFILLING SHALL BE REMOVED AND LEGALLY DISPOSED OF OFF-SITE.

SHALL BE 450mm DEEP, AVAILABLE FROM DEEP ROOT OR APPROVED EQUAL. INSTALL IN 6.0m TYP. LENGTHS, AS SHOWN ON THE DRAWINGS. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

SCHEDULE This forms part of application # DP23-0140 City of Planner BC Initials

200-2045 Enterprise Way . Kelowna, BC V1Y 9T5

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Kelowna

DEVELOPMENT PLANNIN

PROJECT TITLE

465 DOUGAL ROAD NORTH

Kelowna, BC

DRAWING TITLE

OFFSITE LANDSCAPE PLAN

ISSUED FOR / REVISION 23.06.27 Review 2 23.07.06 Issue for DP 3 4 5

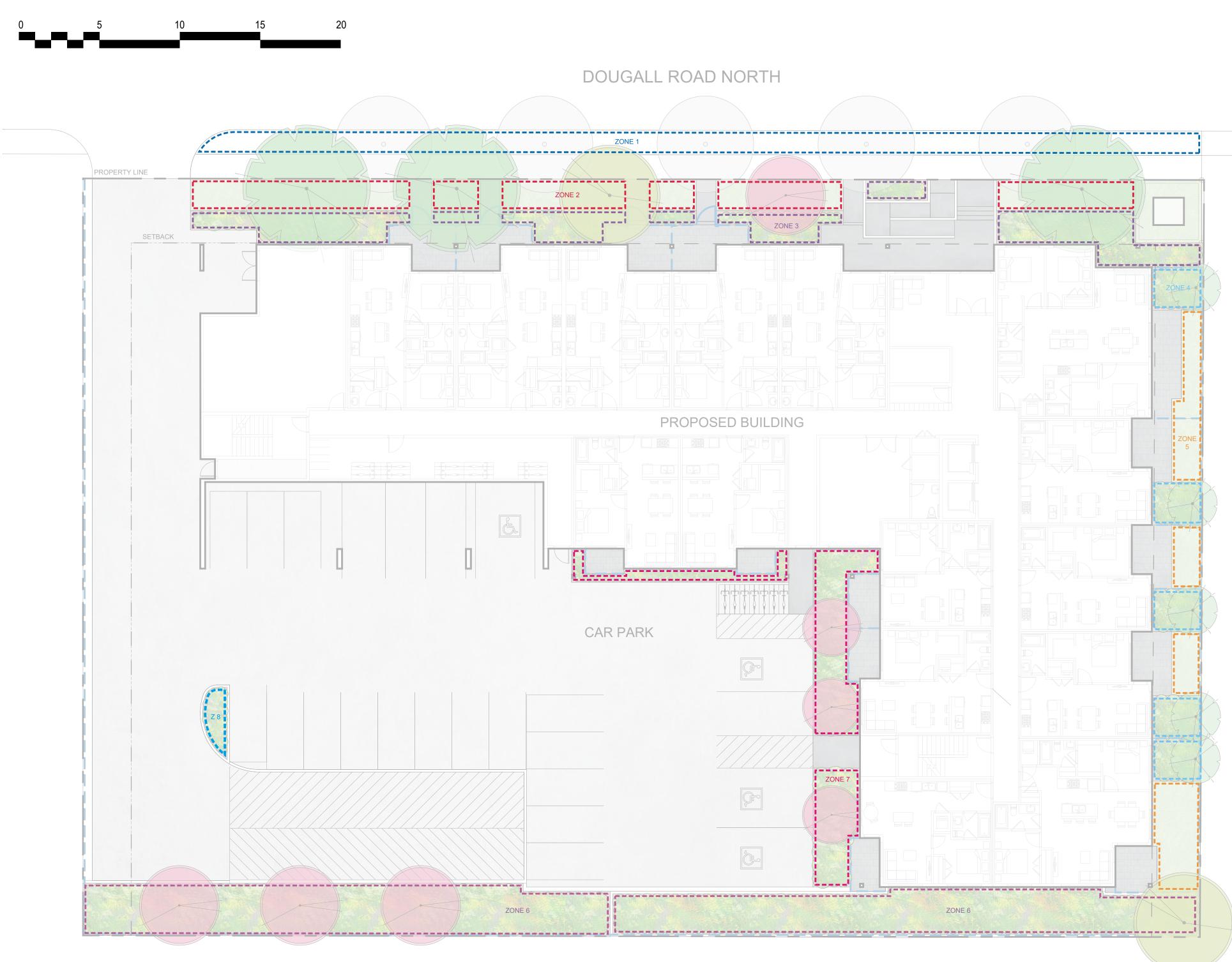
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IRRIGATION NOTES

- SPECIFICATIONS IN THE CITY OF KELOWNA BYLAW 7900 (PART 6, SCHEDULE 5).
- 2. THE IRRIGATION SYSTEM SHALL MEET THE REQUIREMENTS, REGULATIONS, AND BYLAWS OF THE WATER PURVEYOR.
- TO THE CITY.
- CXXONSIDERATION SOIL TYPE, SLOPE, AND MICROCLIMATE. 5. DRIP LINE AND EMITTERS SHALL INCORPORATE TECHNOLOGY TO LIMIT ROOT INTRUSION.
- 6. IRRIGATION SLEEVES SHALL BE INSTALLED TO ROUTE IRRIGATION LINES UNDER HARD SURFACES AND FEATURES.
- 7. IRRIGATION PIPE SHALL BE SIZED TO ALLOW FOR A MAXIMUM FLOW OF 1.5m /SEC.



LANDSCAPE MAXIMUM WATER BUDGET (WB) = 253 cu.m. / year

ESTIMATED LANDSCAPE WATER USE (WU) = 213 cu.m. / year

WATER BALANCE = 40 cu.m. / year *REFER ATTACHED IRRIGATION APPLICATION FOR DETAILED CALCULATIONS

IRRIGATION LEGEND

ZONE #1: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 94sq.m.

MICROCLIMATE: SOUTHEAST EXPOSURE, PARTIALLY SHADED BY TREES ESTIMATED ANNUAL WATER USE: 31 cu.m.

ZONE #2: LOW VOLUME POP-UP SPRAYHEADS FOR TURF AREAS

TOTAL AREA: 86 sq.m. MICROCLIMATE: NORTHWEST EXPOSURE, PARTIALLY SHADED BY BUILDING AND TREES ESTIMATED ANNUAL WATER USE: 74 cu.m.

ZONE #3: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 87 sq.m.

- MICROCLIMATE: SOUTHEAST EXPOSURE, PARTIALLY SHADED BY TREES ESTIMATED ANNUAL WATER USE: 42 cu.m.
- ZONE #4: LOW VOLUME POP-UP SPRAYHEADS FOR TURF AREAS
- TOTAL AREA: 34 sq.m. MICROCLIMATE: SOUTHEAST EXPOSURE, PARTIALLY SHADED BY TREES & BUILDINGS
- ESTIMATED ANNUAL WATER USE: 29 cu.m. ZONE #5: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS
- TOTAL AREA: 52 sq.m. MICROCLIMATE: SOUTH WEST EXPOSURE, PARTIALLY SHADED BY BUILDING AND TREES
- ESTIMATED ANNUAL WATER USE: 45 cu.m. ZONE #6: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS
- TOTAL AREA: 202 sq.m. MICROCLIMATE: NORTHWEST EXPOSURE, PARTIALLY SHADED BY TREES ESTIMATED ANNUAL WATER USE: 115 cu.m. ZONE #7: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 63 sq.m.
- MICROCLIMATE: SOUTH WEST EXPOSURE, PARTIALLY SHADED BY BUILDING AND TREES ESTIMATED ANNUAL WATER USE: 36 cu.m.
- ZONE #8: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 6sa.m. MICROCLIMATE: NORTHWEST EXPOSURE, PARTIALLY SHADED BY TREES ESTIMATED ANNUAL WATER USE: 6 cu.m.

1. IRRIGATION PRODUCTS AND INSTALLATION METHODS SHALL MEET OR EXCEED THE REQUIREMENTS OF THE WATER USE REGULATION BYLAW NO. 10480 AND THE SUPPLEMENTARY

3. THE IRRIGATION SYSTEM SHALL BE EQUIPPED WITH AN APPROVED BACKFLOW PREVENTION DEVICE, WATER METER, AND SHUT OFF VALVE LOCATED OUTSIDE THE BUILDING ACCESSIBLE

4. AN APPROVED SMART CONTROLLER SHALL BE INSTALLED. THE IRRIGATION SCHEDULING TIMES SHALL UTILIZE A MAXIMUM ET VALUE OF 7" / MONTH (KELOWNA JULY ET), TAKING INTO

8. A FLOW SENSOR AND MASTER VALVE SHALL BE CONNECTED TO THE CONTROLLER AND PROGRAMMED TO STOP FLOW TO THE SYSTEM IN CASE OF AN IRRIGATION WATER LEAK.



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PROJECT TITLE

465 DOUGAL ROAD NORTH

Kelowna, BC

DRAWING TITLE

WATER CONSERVATION PLAN

ISS	JED FOR / REVIS	ION	
1	23.06.27	Review	
2	23.07.06	Issue for DP	
3			
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