

HANS P. NEUMANN ARCHITECT INC.

1520 Highland Drive North, Kelowna, B.C. V1Y 4K5

Phone: (250) 868-0878 Email: hans@hpna.ca

Principal: Hans P. Neumann, Architect AIBC, B.Arch., B.E.S.

July 28, 2023

Tyler Caswell, Planner 11
City of Kelowna Council
1435 Water Street
Kelowna, B.C. V1Y 1J4

Re: Proposed General Industrial Project @ 2080 Rutland Road North

The proposed project consists of 3 (three) multi-tenant buildings oriented west to east, with principal vehicular entrances off of Rutland Court. Light Single Unit Trucks, pick-ups and passenger vehicles can access and manoeuvre off of Rutland Road North, as the closest entry driveway is 10.8m from the east property line (which matches the adjacent property). The intent is to install "No Trucks" signage at the entrance off of Rutland Road North. Medium Single Unit Trucks, as well as garbage trucks would enter off of Sexsmith Road and travel south through the joint access agreement (SROW) on the west side of Lot 1 (2190 Rutland Road North). These larger vehicles would then exit onto Rutland Court. Central paved parking areas between the buildings have oversized 8.0m drive aisles, allowing efficient and convenient vehicular circulation, as well as visual connection to the internally facing storefront industrial units. Loading and parking is located at the front of the units, with each unit having a front-facing grade-level overhead door. The average unit size is $\pm 1,900$ sq.ft., which would cater to small or medium sized general industrial contractors or uses, complimenting the surrounding area within the I2 zoned neighbourhood.

Professionally designed drought tolerant landscaping would be located at the north and south ends of the property, as well as continuously along the west side of the property, screening the buildings from the adjacent sidewalks. The "short" façade of the buildings faces Rutland Court to break up the massings seen from the street. The enclosed refuse/recycling bins are located within the parking area, out of public view.

The tilt-up concrete building design will have contemporary storefronts with generous energy-efficient glazing. Each unit will have $\pm 22'$ clear ceiling height, with capacity for additional partial mezzanines. The building has been designed in such a manner as to create visual interest around the entire building. Articulation, in addition to color changes on the concrete walls will ensure that there are no long blank walls on the street facing façade.

With regard to CPTED (Crime Prevention Through Environmental Design), the subject property is bounded by other general industrial uses. Recognizing the predominately industrial nature of the area, both employee and customer safety are key considerations. The parking areas will be well lit with clearly defined pedestrian entrances to the buildings, which will also have security lighting along all sides to allow for maximum visibility, and do not have any features that would allow for hiding places.

Sincerely,

HANS P. NEUMANN, Architect AIBC



WEST PROPERTY LINE LOOKING NORTH



EAST PROPERTY LINE LOOKING NORTH



NORTH PROPERTY LINE LOOKING EAST



AERIAL VIEW OF SITE LOOKING NORTH

HANS P. NEUMANN ARCHITECT INC.

1520 HIGHLAND DRIVE NORTH, KELOWNA, B.C. V1Y 4K5 PHONE (250) 868-0878 EMAIL: hans@hpna.ca



PROPOSED INDUSTRIAL DEVELOPMENT
2080 RUTLAND ROAD NORTH, KELOWNA, BC

DRAWING TITLE

RENDERING/SITE PHOTOS

No.	DATE	DESCRIPTION	SCALE:
	NOV 17/23	ISSUED FOR DEVELOPMENT PERMIT	DATE: JUNE 17, 2023
			DRAWN: HPN
			Drawing No.
			DPO
			REVISION No.:

PROJECT DATA

CIVIC ADDRESS: 2080 RUTLAND ROAD NORTH, KELOWNA, BC
 LEGAL DESCRIPTION: PLAN EPP110033, LOT 3, SEC 35, TWP 26, O.D.Y.D.
 CURRENT ZONING: I2 - GENERAL INDUSTRIAL

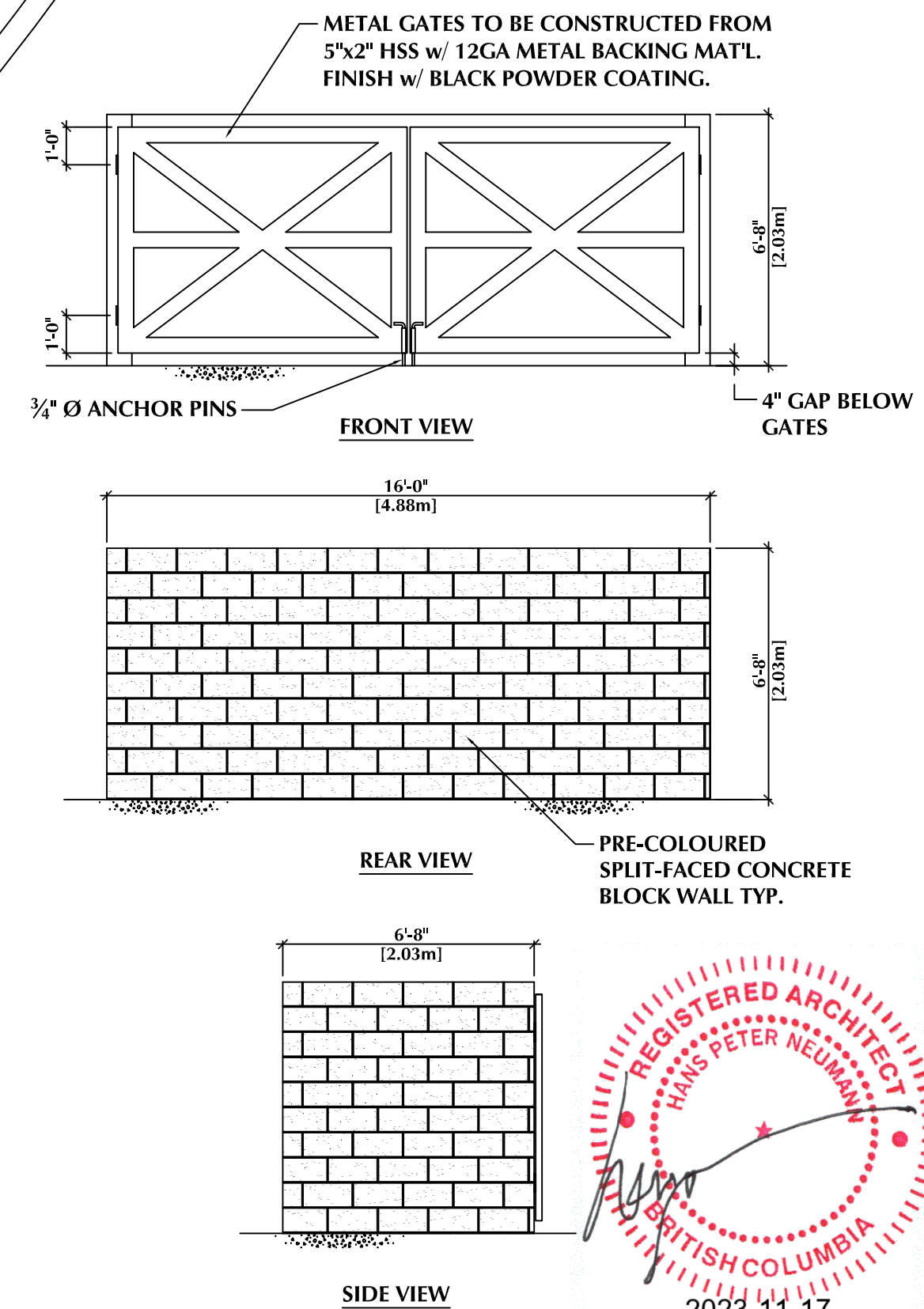
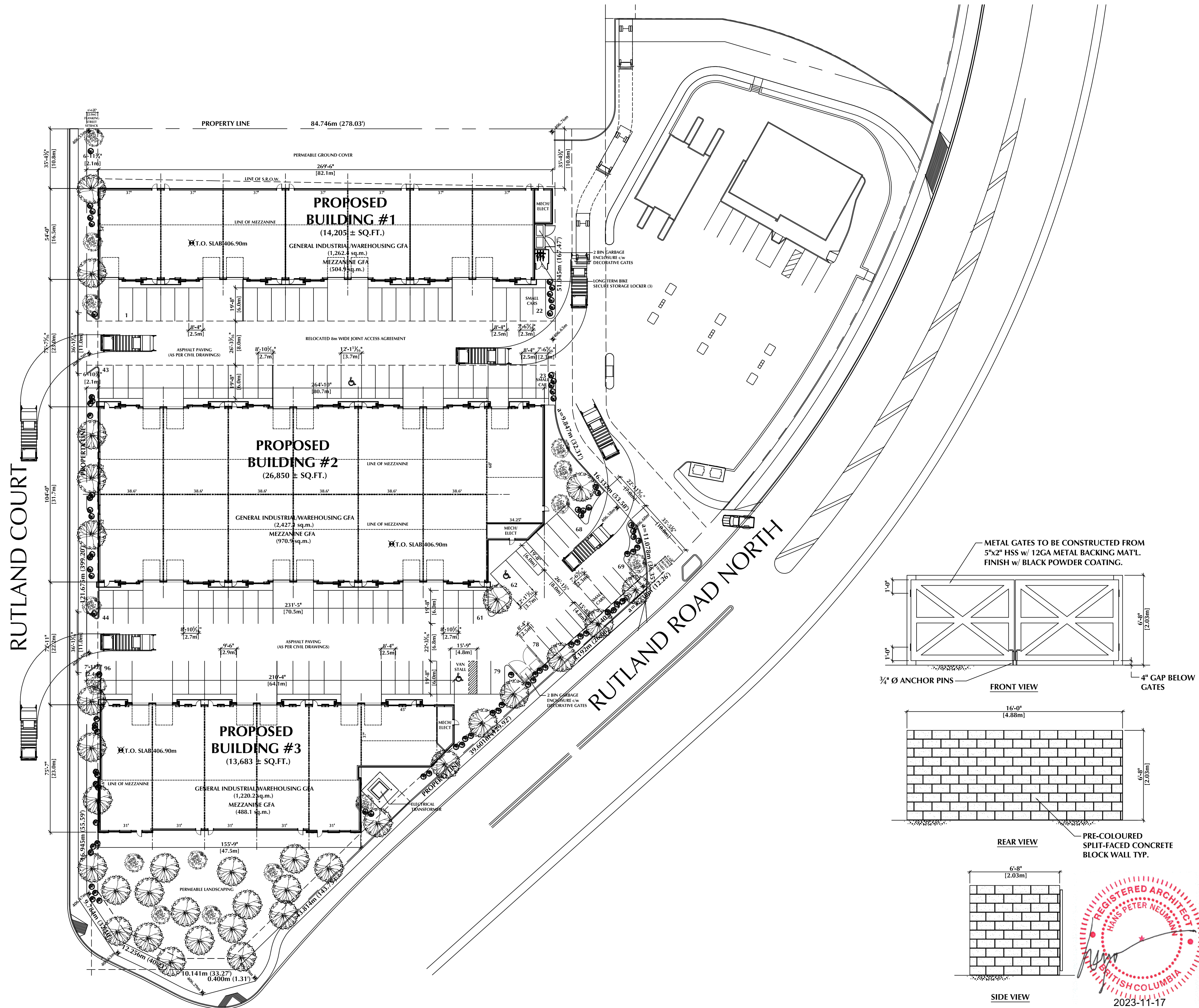
ZONING BYLAW 12375 REQUIREMENTS

SITE AREA = 11,700.0 sq.m. (125,942 sq.ft.)
 BUILDING AREA:
 BUILDING #1 = 1,319.6 sq m. (14,205 sq.ft.)
 BUILDING #2 = 2,494.3 sq m. (26,850 sq.ft.)
 BUILDING #3 = 1,271.2 sq m. (13,683 sq.ft.)
 TOTAL 5,085.2 sq m. (54,738 sq.ft.)
 GROSS FLOOR AREA (GFA):
 BUILDING #1 = 1,767.3 sq m. (19,024 sq.ft.) incl. 40% MEZZANINES
 BUILDING #2 = 3,398.0 sq m. (36,577 sq.ft.) incl. 40% MEZZANINES
 BUILDING #3 = 1,708.3 sq m. (18,389 sq.ft.) incl. 40% MEZZANINES
 TOTAL 6,873.7 sq m. (73,990 sq.ft.)
 OFFICE AREA @ 25% OF GROSS FLOOR AREA: = 1,712.9 sq m. (18,438 sq.ft.)

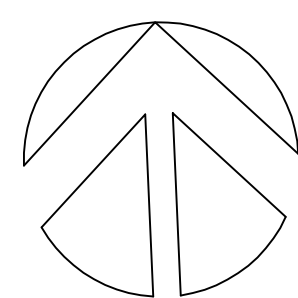
	REQUIRED	PROPOSED
LOT WIDTH (min)	40.0m	84.746m
LOT DEPTH (min)	35.0m	118.32m AVG
LOT AREA (min)	4,000 sq.m.	11,700.0 sq.m.
SITE COVERAGE - BUILDINGS (max)	60%	43.5%
SITE COVERAGE - BUILDINGS, STRUCTURES & IMPERMEABLE SURFACES (max)	90%	80.5%
FLOOR AREA RATIO (max)	1:1.5	1:0.586
BUILDING HEIGHT (max)	16.0m	10.06m/2 STOREYS
SETBACKS (m)		
FRONT (RUTLAND ROAD NORTH)	2.0m	2.025m
SIDE (FLANKING - RUTLAND COURT)	2.0m	2.025m
SIDE (EAST)	0.0m	0.57m
REAR (NORTH)	0.0m	10.80m

PARKING

GENERAL INDUSTRIAL @ 1.0 - 2.5 STALLS/100 sq.m. x 3,191.4 sq.m. (34,353 sq.ft.)	32 STALLS	32 STALLS
MEZZANINES (40%) @ 1.0 - 2.5 STALLS/100 sq.m. x 1,963.9 sq.m. (21,140 sq.ft.)	20 STALLS	20 STALLS
ACCESSORY OFFICES (25%) @ 2.5 - 3.0 STALLS/100 sq.m. x 1,718.4 sq.m. (18,498 sq.ft.)	43 STALLS	44 STALLS
TOTAL REQUIRED =	95 STALLS	96 STALLS
SMALL SIZE PARKING @ 30% MAX	29 STALLS	13 STALLS (13.5%)
ACCESSIBLE PARKING	3 STALLS	3 STALLS
VAN-ACCESSIBLE PARKING	1 STALL	1 STALL
LOADING @ 1/1,900 sq.m. GFA=	4 STALLS	26 STALLS
BICYCLE (LONG TERM) @ 0.05/100 sq.m. GFA x 6,873.7 sq.m. (73,990 sq.ft.) =	3 SPACES	3 SPACES



GARBAGE ENCLOSURE ELEVATIONS
 N.T.S.



HANS P. NEUMANN ARCHITECT INC.

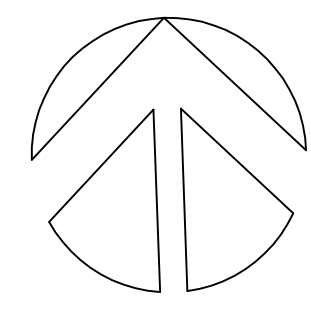
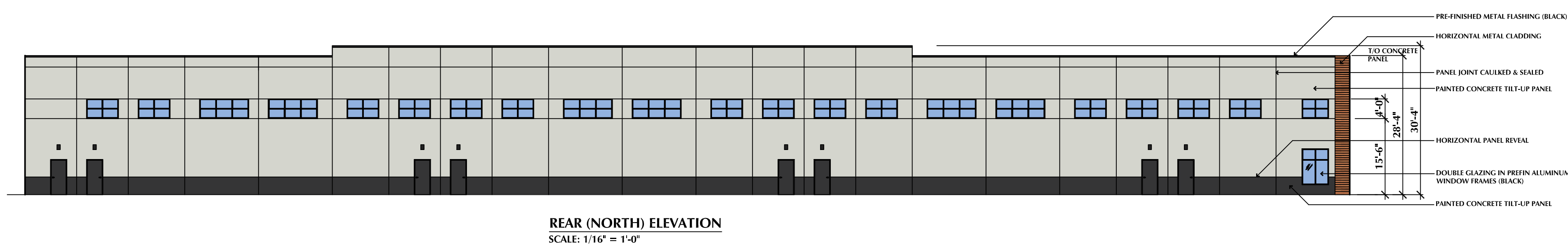
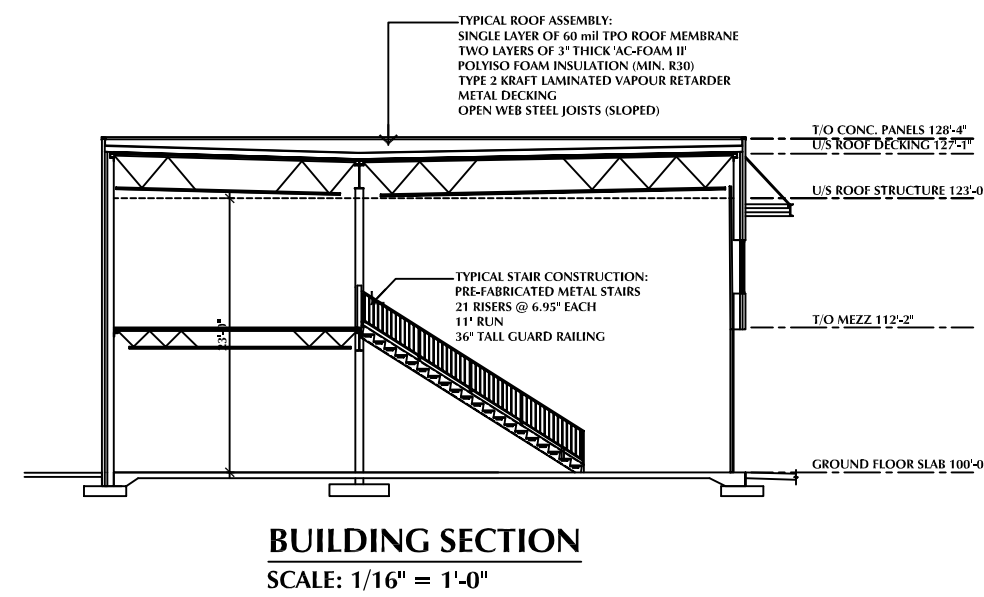
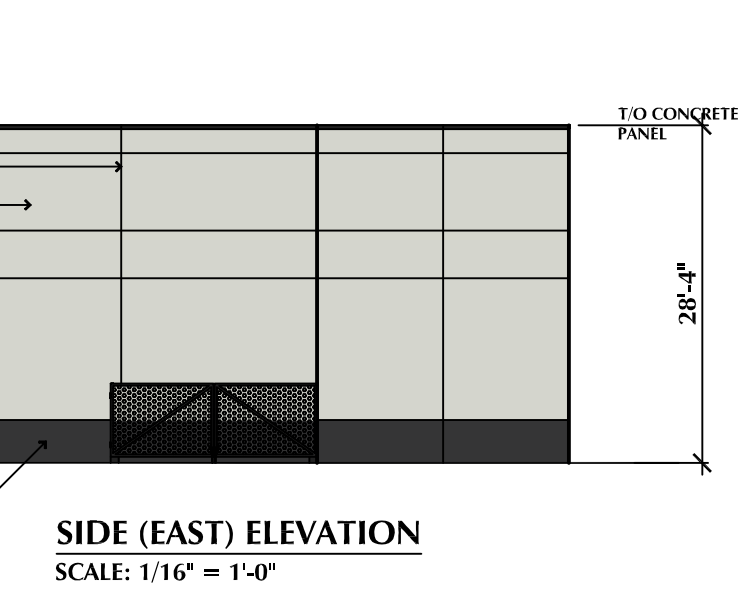
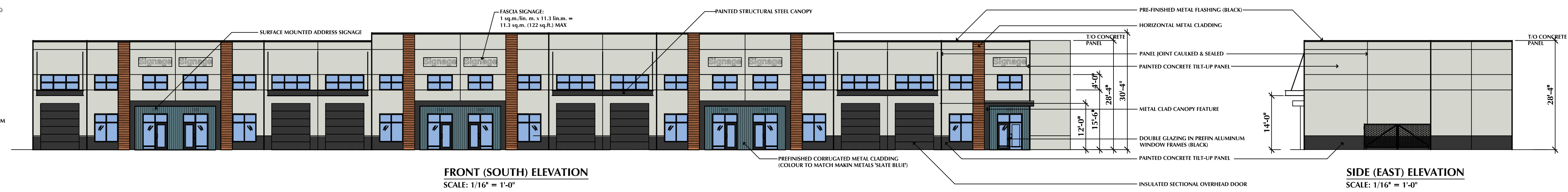
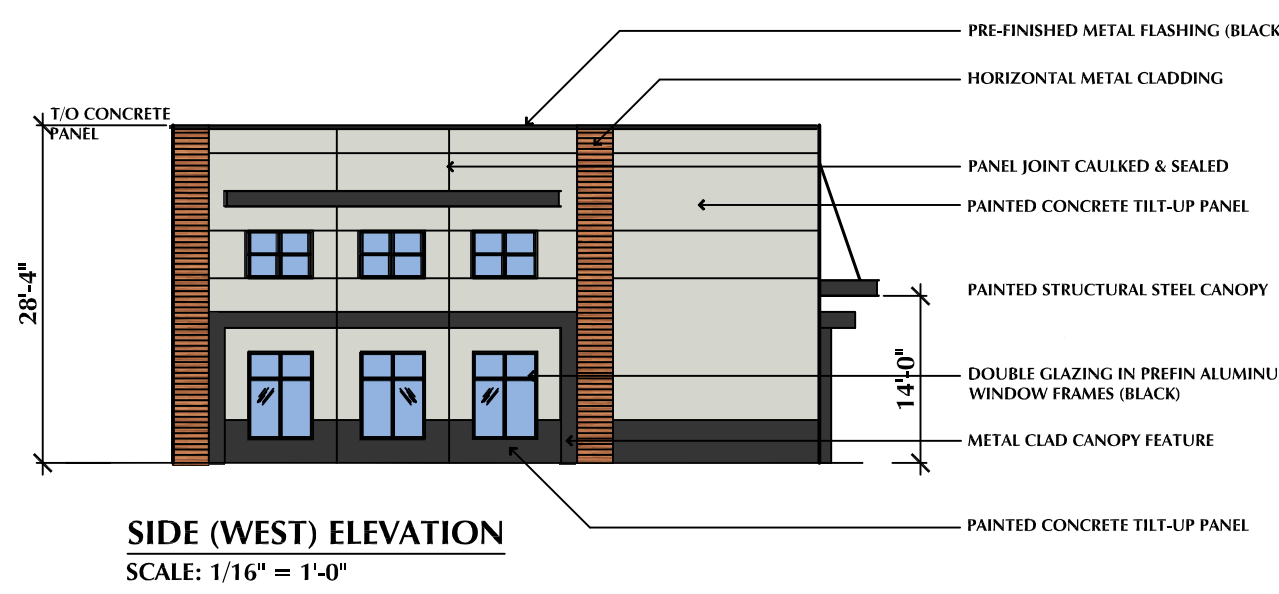
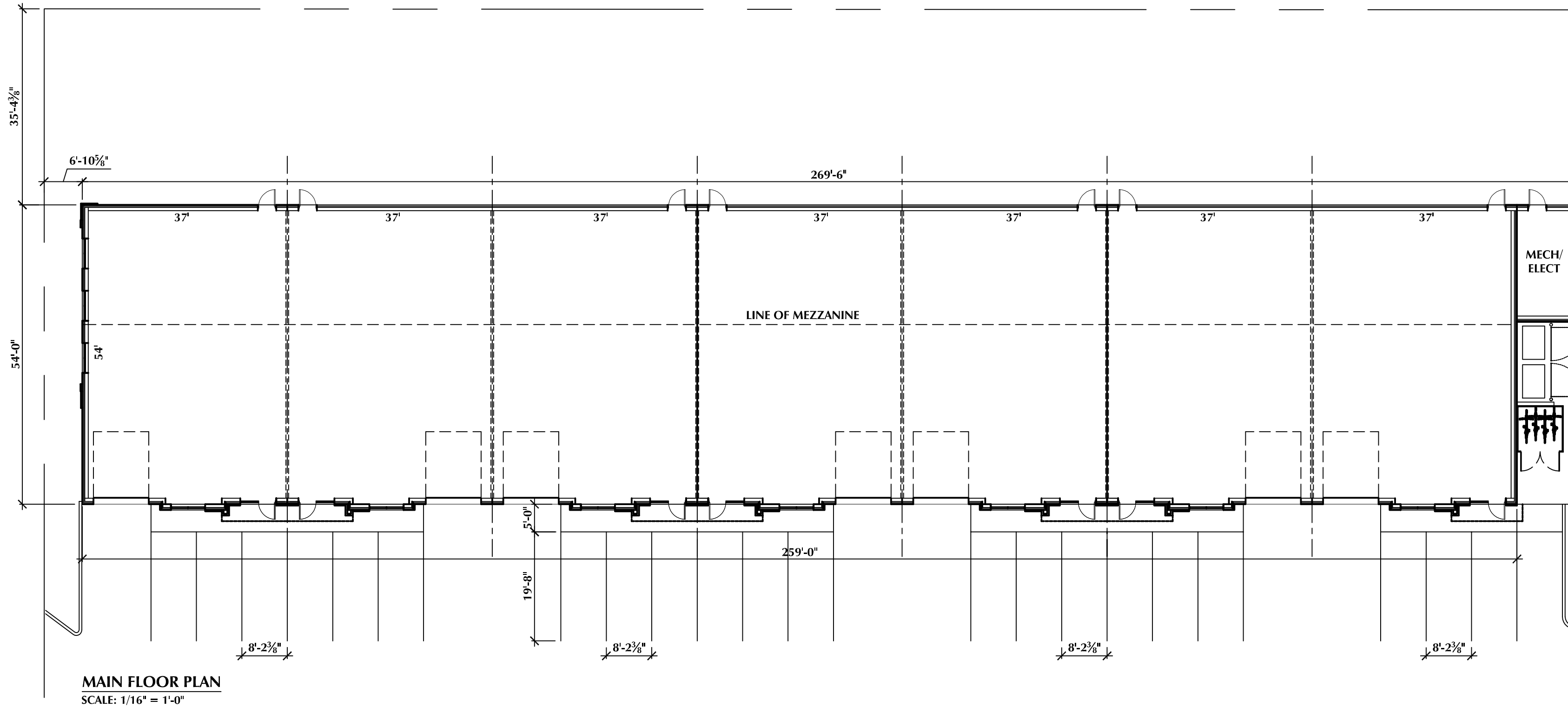
1520 HIGHLAND DRIVE NORTH, KELOWNA, B.C. V1Y 4K5 PHONE (250) 868-0878 EMAIL: hans@hpna.ca

PROPOSED INDUSTRIAL DEVELOPMENT
 2080 RUTLAND ROAD NORTH, KELOWNA, BC

DRAWING TITLE

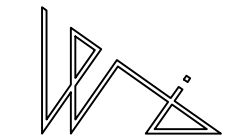
SITE PLAN/ZONING ANALYSIS

No.	DATE	DESCRIPTION	SCALE: 1" = 20'-0"
	NOV 17/23	ISSUED FOR DEVELOPMENT PERMIT	DATE: JUNE 17, 2023
			DRAWN: HPN
			Drawing No.
			DP1
			REVISION No.:



HANS P. NEUMANN ARCHITECT INC.

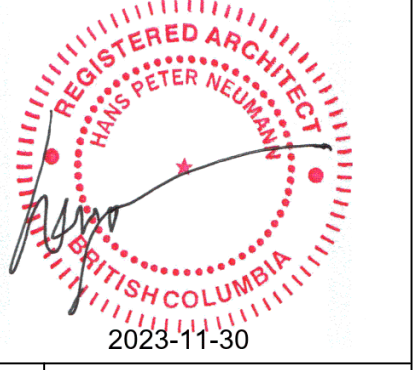
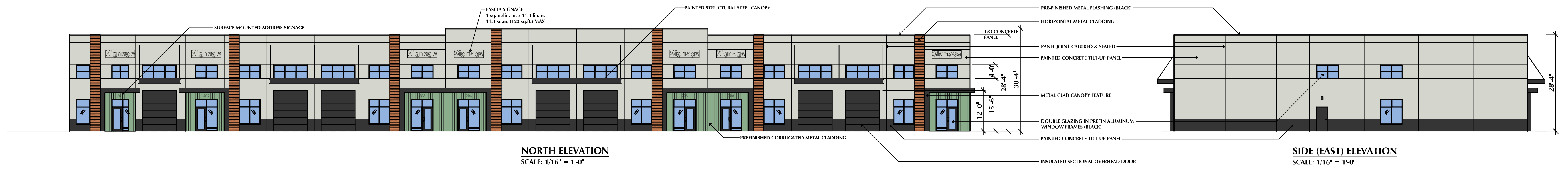
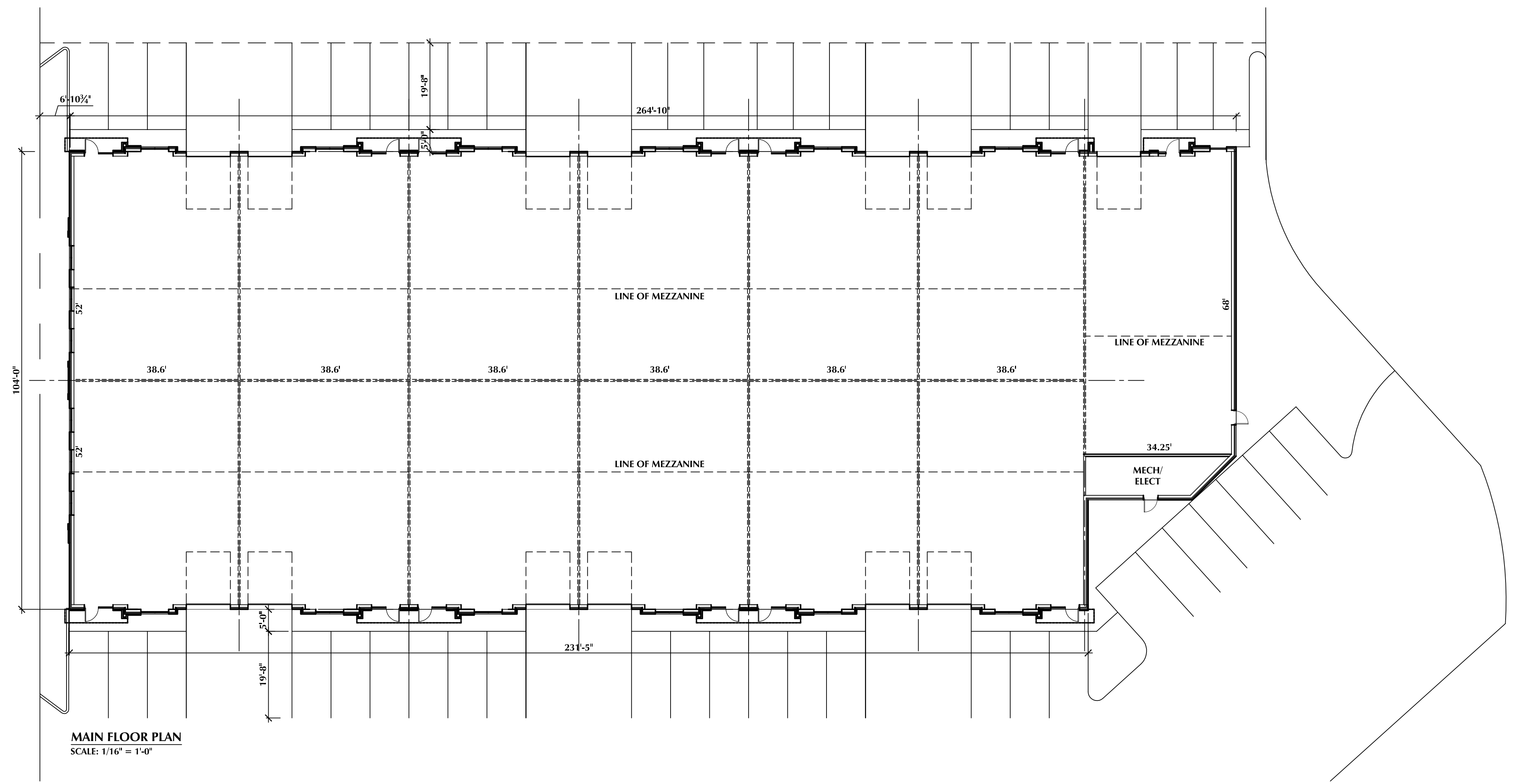
1520 HIGHLAND DRIVE NORTH, KELOWNA, B.C. V1Y 4K5 PHONE (250) 868-0878 FAX (250) 868-0837



PROJECT **PROPOSED INDUSTRIAL DEVELOPMENT**
2080 RUTLAND ROAD NORTH, KELOWNA, BC

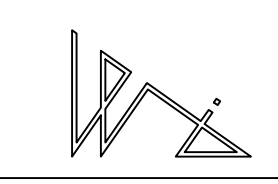
DRAWING TITLE **BUILDING #1 MAIN FLOOR PLAN & ELEVATIONS**

No.	DATE	DESCRIPTION	SCALE: 1/16" = 1'-0"
	NOV 17/23	ISSUED FOR DEVELOPMENT PERMIT	DATE: JUNE 17, 2023
			DRAWN: HPN
			Drawing No. DP2
			REVISION No.:



HANS P. NEUMANN ARCHITECT INC.

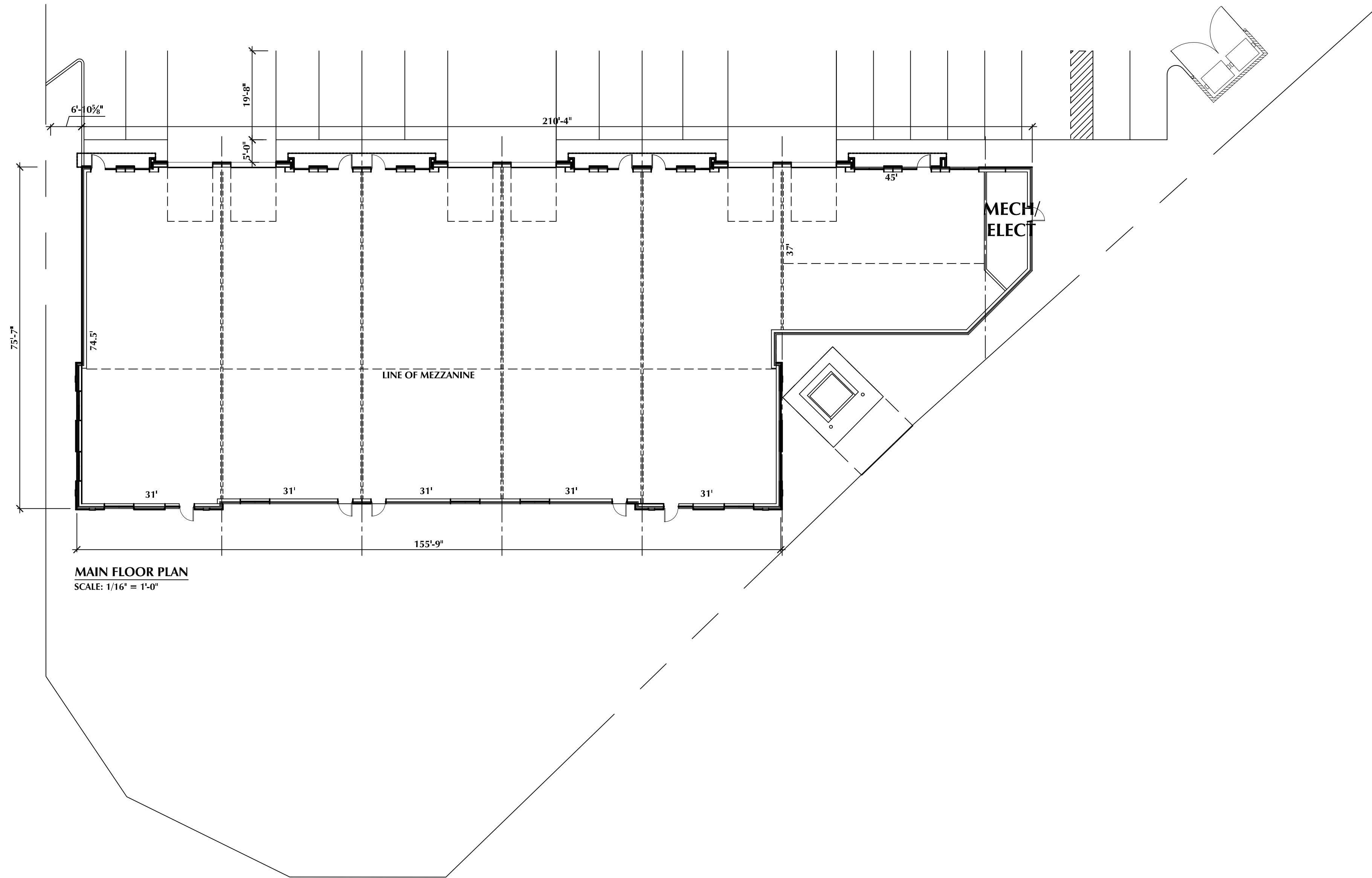
1520 HIGHLAND DRIVE NORTH, KELOWNA, B.C. V1Y 4K5 PHONE (250) 868-0878 FAX (250) 868-0837



PROJECT
PROPOSED INDUSTRIAL DEVELOPMENT
2080 RUTLAND ROAD NORTH, KELOWNA, BC

DRAWING TITLE
BUILDING #2 MAIN FLOOR PLAN & ELEVATIONS

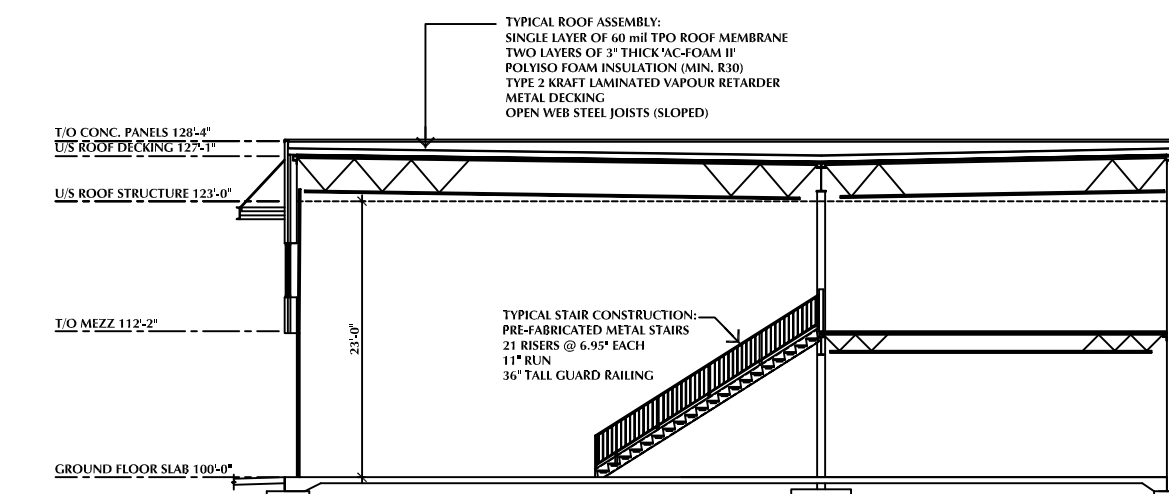
No.	DATE	DESCRIPTION	SCALE: 1/16" = 1'-0"
	NOV 17/23	ISSUED FOR DEVELOPMENT PERMIT	DATE: JUNE 17, 2023
			DRAWN: HPN
			Drawing No.
			DP3
			REVISION No.:



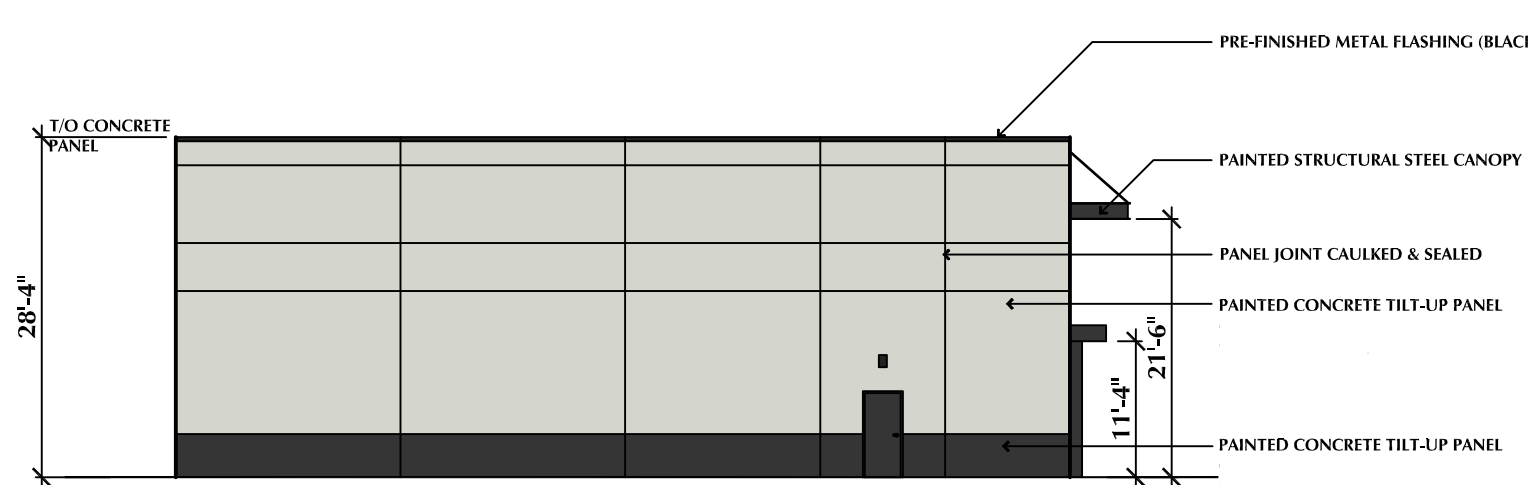
MAIN FLOOR PLAN
SCALE: 1/16" = 1'-0"



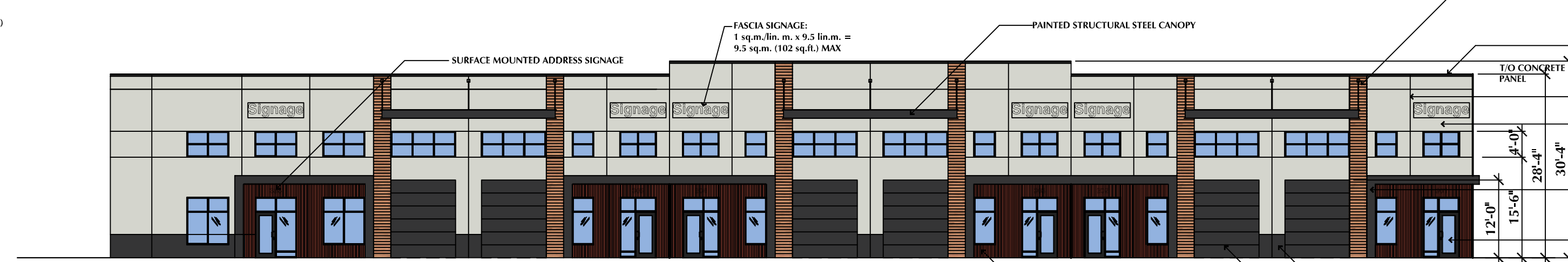
REAR (SOUTH) ELEVATION
SCALE: 1/16" = 1'-0"



BUILDING SECTION
SCALE: 1/16" = 1'-0"



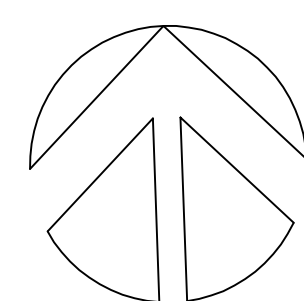
SIDE (EAST) ELEVATION
SCALE: 1/16" = 1'-0"



FRONT (NORTH) ELEVATION
SCALE: 1/16" = 1'-0"



SIDE (WEST) ELEVATION
SCALE: 1/16" = 1'-0"



HANS P. NEUMANN ARCHITECT INC.

1520 HIGHLAND DRIVE NORTH, KELOWNA, B.C. V1Y 4K5 PHONE (250) 868-0878 FAX (250) 868-0837



PROJECT

PROPOSED INDUSTRIAL DEVELOPMENT
2080 RUTLAND ROAD NORTH, KELOWNA, BC

DRAWING TITLE

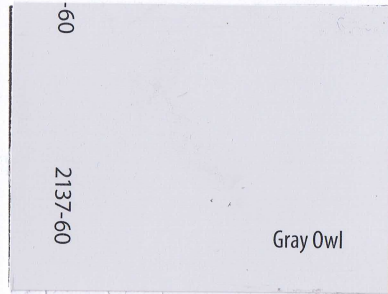
BUILDING #3 MAIN FLOOR PLAN & ELEVATIONS

No.	DATE	DESCRIPTION	SCALE: 1/16" = 1'-0"
	NOV 17/23	ISSUED FOR DEVELOPMENT PERMIT	DATE: JUNE 17, 2023
			DRAWN: HPN
			Drawing No.
			DP4
			REVISION No.:

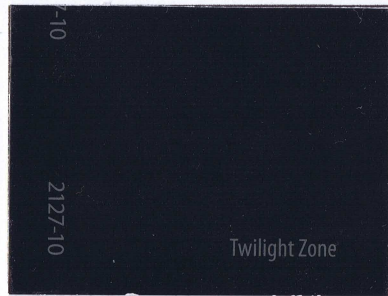
COLOUR BOARD

GENERAL INDUSTRIAL (I2) BUILDINGS

2080 RUTLAND ROAD NORTH, KELOWNA, BC



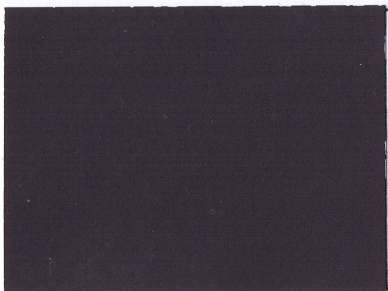
PAINTED TILT-UP CONCRETE WALL PANELS
TO MATCH *BENJAMIN MOORE*
2137-60 'GRAY OWL'



PAINTED TILT-UP CONCRETE WALL PANELS
TO MATCH *BENJAMIN MOORE*
2127-10 'TWILIGHT ZONE'



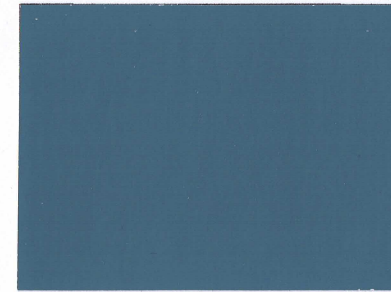
HORIZONTAL METAL CLADDING 'WOODGRAIN'



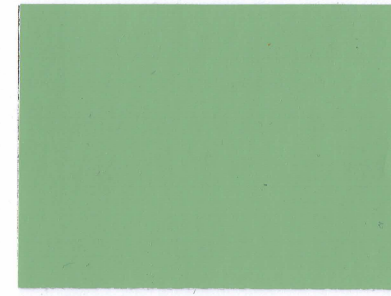
EXTERIOR METAL CLADDING
COLOUR TO MATCH *GALVALUME*
'CHARCOAL GREY'



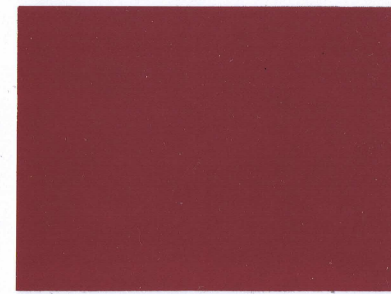
EXTERIOR METAL FLASHINGS, PRESSED STEEL
DOORS & FRAMES, ALUMINUM WINDOW
FRAMES 'BLACK'



VERTICAL 7/8" CORRUGATED METAL CLADDING
TO MATCH *MAKIN METALS LTD.*
'SLATE BLUE'



VERTICAL 7/8" CORRUGATED METAL CLADDING
TO MATCH *MAKIN METALS LTD.*
'MIST GREEN'



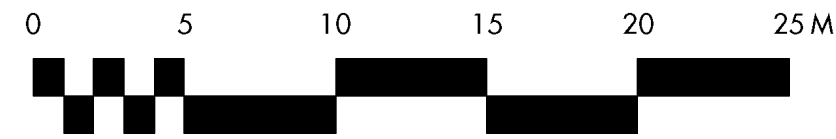
VERTICAL 7/8" CORRUGATED METAL CLADDING
TO MATCH *METALWORKS CANADA*
QC 9259 'TERRA COTTA'



2023-11-30



HANS P. NEUMAN ARCHITECT INC.
1520 HIGHLAND DRIVE NORTH, KELOWNA, BC V1Y4K5
PHONE: (250) 868-0878 EMAIL: hans@hpna.ca



NOTES

1. PLANT MATERIAL AND CONSTRUCTION METHODS SHALL MEET OR EXCEED CANADIAN LANDSCAPE STANDARDS. ALL OFFSITE LANDSCAPE WORKS TO MEET CITY OF KELOWNA BYLAW 7900 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. TREE AND SHRUB BEDS TO RECEIVE A MINIMUM 300mm DEPTH TOPSOIL PLACEMENT.
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 LIQUID WEFEMENTS WILL BE DISCHARGED FROM THE LOT ONTO ADJACENT PUBLIC, COMMON, OR PRIVATE PROPERTIES.
7. FOR CONFORMANCE WITH DEVELOPMENT PERMIT LANDSCAPE REQUIREMENTS, THE PRIME CONTRACTOR AND/OR CONSULTANTS RESPONSIBLE FOR SITE SERVING AND UTILITIES SHALL ENSURE THAT ALL BUILDING PERMIT SUBMITTALS ARE COORDINATED WITH LANDSCAPE ARCHITECTURAL SUBMITTALS.
8. HYDROSEEDING DRYLAND SEED AREAS:

DRYLAND SEED MIXTURE	BY WEIGHT	BY SPECIES
BLUE BUNCH WHEAT GRASS	40%	22%
ROUGH FESCUE	25%	20%
IDAHO FESCUE	15%	19%
PERENNIAL RYEGRASS	10%	7%
SANDBERG BLUEGRASS	5%	13%
JUNE GRASS	4%	18%
CANADA BLUEGRASS	1%	1%

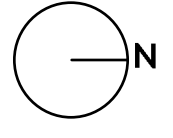
 HYDROSEEDING APPLICATION RATE
 NATIVE SEED DRYLAND SEED MIXTURE 125KG/HECTARE
 FERTILIZER 18-18-2-20% SULPHUR COATED UREA 300KG/HECTARE
 MULCH CANFOR ECOFIBRE PLUS TAC 2,800KG/HECTARE
 TACKIFIER GUAR 3% OF MIX

THE PRECEDING HYDROSEEDING MIXTURE IS TO BE APPLIED TO THE DRYLAND SEED AREA AS SHOWN ON THE DRAWING. SEED MIX TO BE CERTIFIED #1 GRADE BY AGRICULTURE CANADA. REFER MANUFACTURER'S SPECIFICATIONS FOR PRODUCT DELIVERY, STORAGE & PROTECTION.

PLANT LIST

QUANTITIES ESTIMATED ONLY. NOT FOR PRICING

BOTANICAL NAME	COMMON NAME	QTY	SIZE/SPACING & REMARKS
TREES			
ACER SACCHARINUM 'SILVER QUEEN'	SILVER QUEEN MAPLE	4	5cm CAL
CRATAEGUS AMBIGUA	RUSSIAN HAWTHORN	7	3cm CAL
LIRIODENDRON TULIPIERA 'FASTIGIATA'	COLUMNAR TULIP TREE	10	5cm CAL
PARROTIA PERSICA	PERSIAN IRONWOOD	7	4cm CAL
TIJIA AMERICANA 'BOULEVARD'	BOULEVARD LINEN	7	5cm CAL (OFFSITE)
SHRUBS			
CORNUS ALBA 'SIBIRICA VARIEGATA'	SIBERIAN VARIEGATED DOGWOOD	25	#02 CONT. /2.5M O.C. SPACING
ERICAMERIA NAUSEOSA	RABBITRUSH	10	#02 CONT. /2.0M O.C. SPACING
EUCONYMIUS ALATUS COMPACTA	DWARF BURNING BUSH	70	#02 CONT. /1.5M O.C. SPACING
MAHONIA AQUIFOLIUM	OREGON GRAPE HOLLY	15	#02 CONT. /1.5M O.C. SPACING
PICEA PLUNGENS 'GLOBOSA'	GLOBE BLUE SPRUCE	40	#02 CONT. /2.0M O.C. SPACING
SPRAEA TRILOBATA 'FAIRY QUEEN'	FAIRY QUEEN SPIREA	105	#02 CONT. /1.2M O.C. SPACING
SYMPHORICARPOS ALBUS	SNOWBERRY	25	#02 CONT. /1.2M O.C. SPACING
PERENNIALS, GRASSES & GROUNDCOVERS			
ACHILLEA FILIPENDULINA 'MOONSHINE'	MOONSHINE YARROW	62	#01 CONT. /0.9M O.C. SPACING
ANDROPOGON GERARDI	RIG BLUESTEM	35	#01 CONT. /1.2M O.C. SPACING
CALLAHAGROSTIS ACUTICORA 'KARL FOERSTER'	KARL FOERSTER FEATHER REED GRASS	51	#01 CONT. /1.0M O.C. SPACING
HEMEROCALLIS 'RUBY STELLA'	RUBY STELLA DAYLILY	51	#01 CONT. /1.0M O.C. SPACING
MISCANTHUS SINENSIS 'GRACILLIMUS'	MAIDEN GRASS	35	#01 CONT. /1.2M O.C. SPACING
NERITA X FASSENI 'WALKER'S LOW'	WALKER'S LOW CATMINT	22	#01 CONT. /1.5M O.C. SPACING
PENNSETUM ORIENTALE 'KARLEY ROSE'	KARLEY ROSE FOUNTAIN GRASS	22	#01 CONT. /1.5M O.C. SPACING
RUBRICKIA RULIGDA 'GOLDSTURM'	GOLDSTURM CONEFLOWER	22	#01 CONT. /1.5M O.C. SPACING



PROJECT TITLE
**2080 RUTLAND ROAD
 LOT 3**
 Kelowna, BC

DRAWING TITLE
**CONCEPTUAL
 LANDSCAPE PLAN**

ISSUED FOR / REVISION

NO.	DATE	REVISION
1	23.11.10	Review
2		
3		
4		
5		

PROJECT NO: 23-0803
 DESIGN BY: FB
 DRAWN BY: NVM
 CHECKED BY: FB
 DATE: NOV. 10, 2023
 SCALE: 1:250
 PAGE SIZE: 24x36

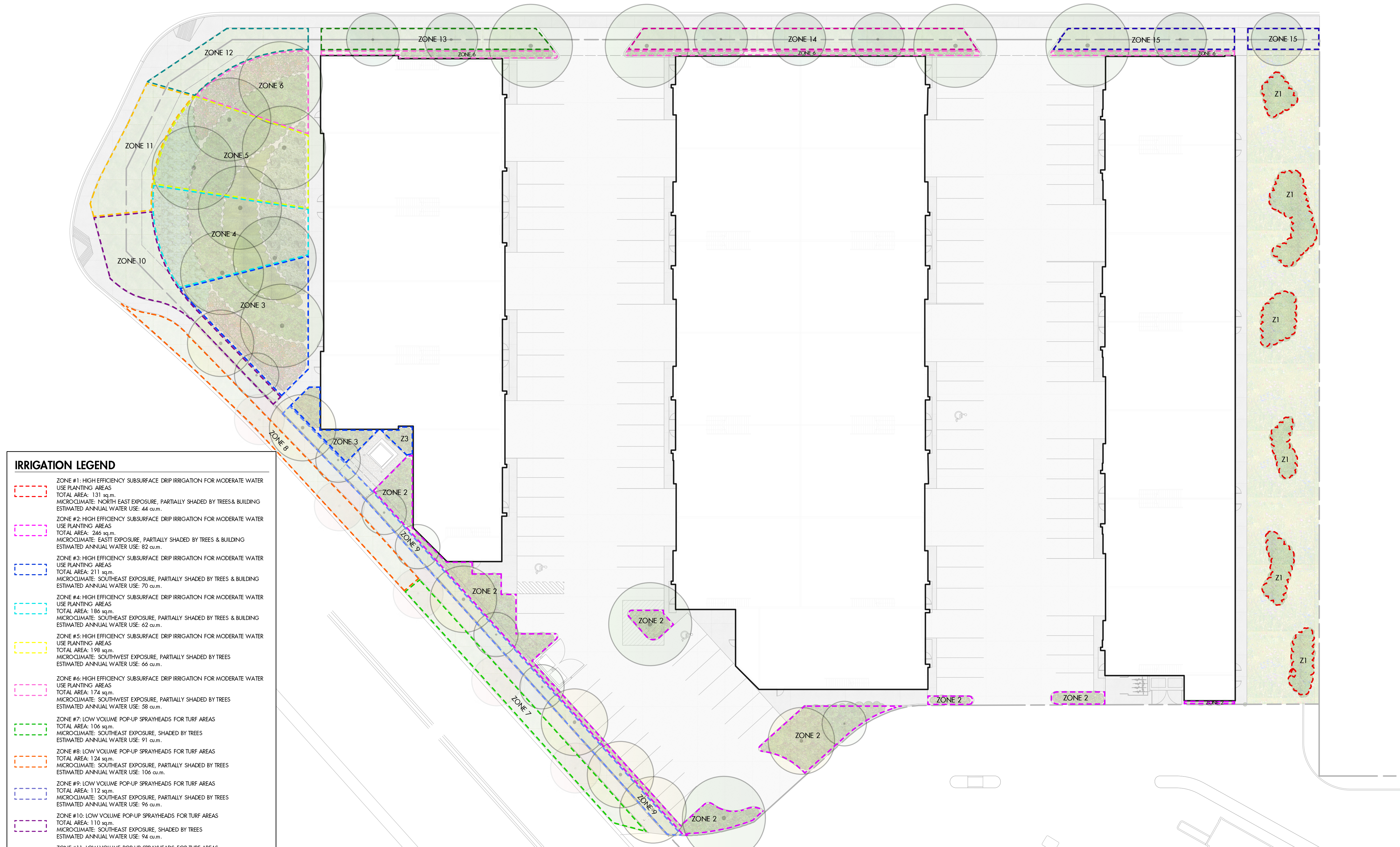
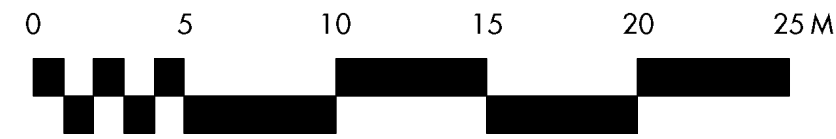
SEAL



DRAWING NUMBER

L1/2

NOT FOR CONSTRUCTION
 Copyright Reserved. This drawing is the property of Ecora Engineering & Resources Group Ltd. and shall not be reproduced, resold, or rendered without permission.



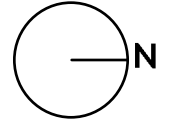
IRRIGATION LEGEND	
	ZONE #1: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 131 sq.m. MICROCLIMATE: NORTH EAST EXPOSURE, PARTIALLY SHADED BY TREES & BUILDING ESTIMATED ANNUAL WATER USE: 44 cu.m.
	ZONE #2: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 246 sq.m. MICROCLIMATE: EAST EXPOSURE, PARTIALLY SHADED BY TREES & BUILDING ESTIMATED ANNUAL WATER USE: 82 cu.m.
	ZONE #3: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 211 sq.m. MICROCLIMATE: SOUTHEAST EXPOSURE, PARTIALLY SHADED BY TREES & BUILDING ESTIMATED ANNUAL WATER USE: 70 cu.m.
	ZONE #4: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 186 sq.m. MICROCLIMATE: SOUTHEAST EXPOSURE, PARTIALLY SHADED BY TREES & BUILDING ESTIMATED ANNUAL WATER USE: 62 cu.m.
	ZONE #5: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 198 sq.m. MICROCLIMATE: SOUTHWEST EXPOSURE, PARTIALLY SHADED BY TREES ESTIMATED ANNUAL WATER USE: 66 cu.m.
	ZONE #6: HIGH EFFICIENCY SUBSURFACE DRIP IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 174 sq.m. MICROCLIMATE: SOUTHWEST EXPOSURE, PARTIALLY SHADED BY TREES ESTIMATED ANNUAL WATER USE: 58 cu.m.
	ZONE #7: LOW VOLUME POP-UP SPRAYHEADS FOR TURF AREAS TOTAL AREA: 106 sq.m. MICROCLIMATE: SOUTHEAST EXPOSURE, SHADED BY TREES ESTIMATED ANNUAL WATER USE: 91 cu.m.
	ZONE #8: LOW VOLUME POP-UP SPRAYHEADS FOR TURF AREAS TOTAL AREA: 124 sq.m. MICROCLIMATE: SOUTHEAST EXPOSURE, PARTIALLY SHADED BY TREES ESTIMATED ANNUAL WATER USE: 106 cu.m.
	ZONE #9: LOW VOLUME POP-UP SPRAYHEADS FOR TURF AREAS TOTAL AREA: 112 sq.m. MICROCLIMATE: SOUTHEAST EXPOSURE, PARTIALLY SHADED BY TREES ESTIMATED ANNUAL WATER USE: 96 cu.m.
	ZONE #10: LOW VOLUME POP-UP SPRAYHEADS FOR TURF AREAS TOTAL AREA: 110 sq.m. MICROCLIMATE: SOUTHEAST EXPOSURE, SHADED BY TREES ESTIMATED ANNUAL WATER USE: 94 cu.m.
	ZONE #11: LOW VOLUME POP-UP SPRAYHEADS FOR TURF AREAS TOTAL AREA: 106 sq.m. MICROCLIMATE: SOUTHWEST EXPOSURE, PARTIALLY SHADED BY TREES ESTIMATED ANNUAL WATER USE: 91 cu.m.
	ZONE #12: LOW VOLUME POP-UP SPRAYHEADS FOR TURF AREAS TOTAL AREA: 80 sq.m. MICROCLIMATE: SOUTHWEST EXPOSURE, PARTIALLY SHADED BY TREES ESTIMATED ANNUAL WATER USE: 69 cu.m.
	ZONE #13: LOW VOLUME POP-UP SPRAYHEADS FOR TURF AREAS TOTAL AREA: 82 sq.m. MICROCLIMATE: SOUTHWEST EXPOSURE, SHADED BY TREES ESTIMATED ANNUAL WATER USE: 70 cu.m.
	ZONE #14: LOW VOLUME POP-UP SPRAYHEADS FOR TURF AREAS TOTAL AREA: 123 sq.m. MICROCLIMATE: WEST EXPOSURE, PARTIALLY SHADED BY TREES ESTIMATED ANNUAL WATER USE: 105 cu.m.
	ZONE #15: LOW VOLUME POP-UP SPRAYHEADS FOR TURF AREAS TOTAL AREA: 91 sq.m. MICROCLIMATE: WEST EXPOSURE, PARTIALLY SHADED BY TREES ESTIMATED ANNUAL WATER USE: 78 cu.m.

IRRIGATION NOTES

1. IRRIGATION PRODUCTS AND INSTALLATION METHODS SHALL MEET OR EXCEED THE REQUIREMENTS OF THE WATER USE REGULATION BYLAW NO. 10489 AND THE SUPPLEMENTARY 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.
3. THE IRRIGATION SYSTEM SHALL BE EQUIPPED WITH AN APPROVED BACKFLOW PREVENTION DEVICE, WATER METER, AND SHUT OFF VALVE LOCATED OUTSIDE THE BUILDING ACCESSIBLE TO THE CITY.
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 CONSIDERATION 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.
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.

WATER CONSERVATION CALCULATIONS

LANDSCAPE MAXIMUM WATER BUDGET (WMB) = 1,633 cu.m. / year
 ESTIMATED LANDSCAPE WATER USE (WU) = 1,140 cu.m. / year
 WATER BALANCE = 493 cu.m. / year
 *REFER ATTACHED IRRIGATION APPLICATION FOR DETAILED CALCULATIONS



PROJECT TITLE
**2080 RUTLAND ROAD
 LOT 3**
 Kelowna, BC

DRAWING TITLE
**WATER CONSERVATION/
 IRRIGATION PLAN**

ISSUED FOR / REVISION		
1	23.11.10	Review
2		
3		
4		
5		

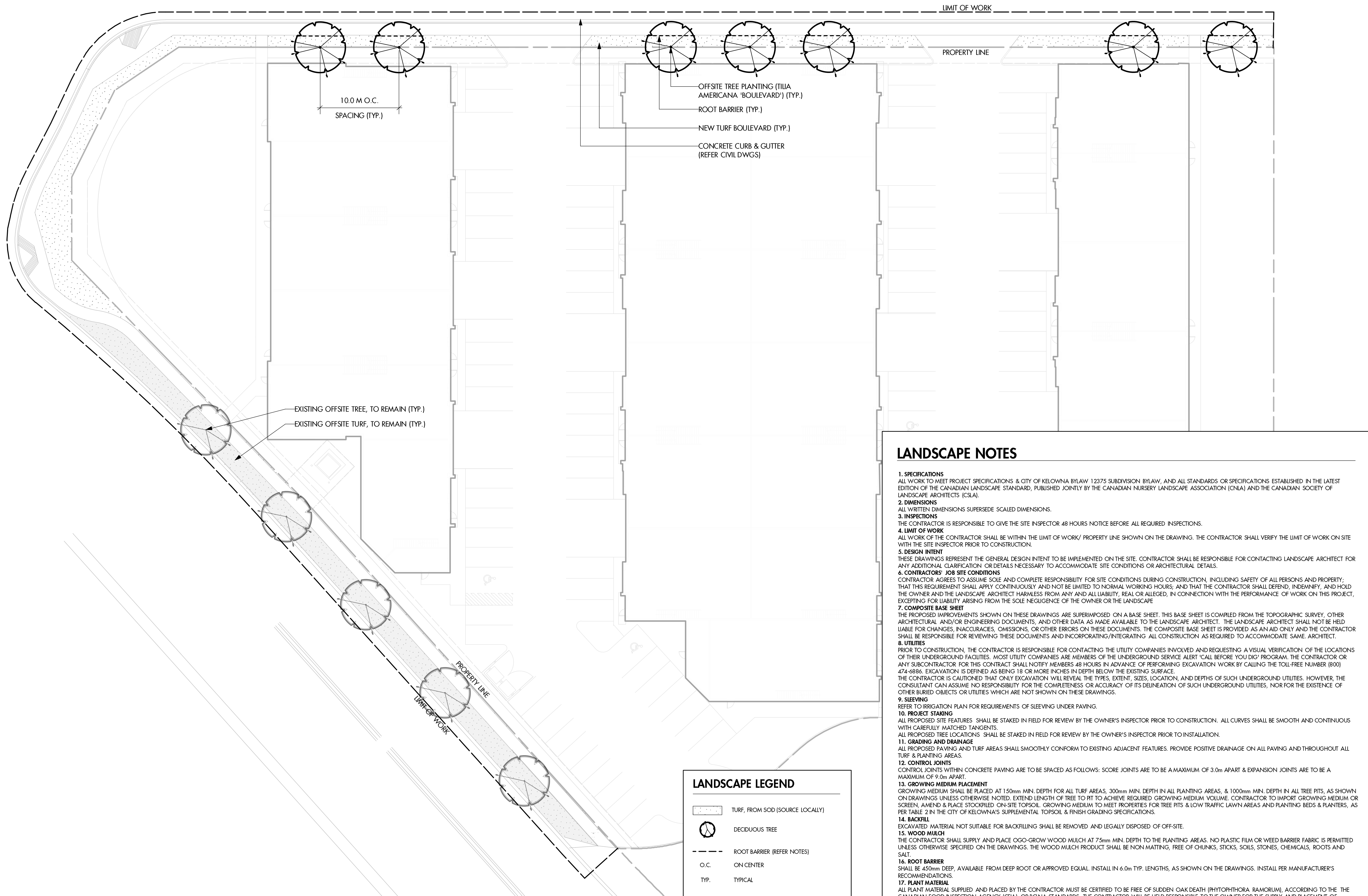
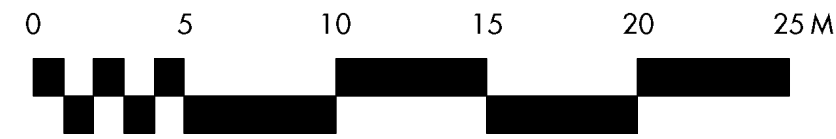
PROJECT NO.	23-0803
DESIGN BY	FB
DRAWN BY	NM
CHECKED BY	FB
DATE	NOV. 10, 2023
SCALE	1:250
PAGE SIZE	24x36

SEAL



DRAWING NUMBER
L2/2

NOT FOR CONSTRUCTION
 Copyright Reserved. This drawing is the property of Ecora Engineering & Resources Group Ltd. and shall not be reproduced, resold, or rendered without permission.



LANDSCAPE NOTES

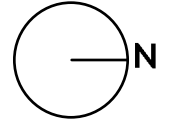
- SPECIFICATIONS**
ALL WORK TO MEET PROJECT SPECIFICATIONS & CITY OF KELOWNA BYLAW 12375 SUBDIVISION BYLAW, AND ALL STANDARDS OR SPECIFICATIONS ESTABLISHED IN THE LATEST EDITION OF THE CANADIAN LANDSCAPE STANDARD, PUBLISHED JOINTLY BY THE CANADIAN NURSERY LANDSCAPE ASSOCIATION (CNLA) AND THE CANADIAN SOCIETY OF LANDSCAPE ARCHITECTS (CSLA).
- DIMENSIONS**
ALL WRITTEN DIMENSIONS SUPERSEDE SCALED DIMENSIONS.
- INSPECTIONS**
THE CONTRACTOR IS RESPONSIBLE TO GIVE THE SITE INSPECTOR 48 HOURS NOTICE BEFORE ALL REQUIRED INSPECTIONS.
- LIMIT OF WORK**
ALL WORK OF THE CONTRACTOR SHALL BE WITHIN THE LIMIT OF WORK/ PROPERTY LINE SHOWN ON THE DRAWING. THE CONTRACTOR SHALL VERIFY THE LIMIT OF WORK ON SITE WITH THE SITE INSPECTOR PRIOR TO CONSTRUCTION.
- DESIGN INTENT**
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 ARCHITECTURAL DETAILS.
- CONTRACTORS' JOB SITE CONDITIONS**
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 SOLE NEGLIGENCE OF THE OWNER OR THE LANDSCAPE ARCHITECT.
- COMPOSITE BASE SHEET**
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.
- UTILITIES**
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) 474-6899. EXCAVATION IS DEFINED AS BEING 15 OR MORE INCHES IN DEPTH BELOW THE EXISTING SURFACE. 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 ON THESE DRAWINGS.
- SLEEVING**
REFER TO IRRIGATION PLAN FOR REQUIREMENTS OF SLEEVING UNDER PAVING.
- PROJECT STAKING**
ALL PROPOSED SITE FEATURES SHALL BE STAKED IN FIELD FOR REVIEW BY THE OWNER'S INSPECTOR PRIOR TO CONSTRUCTION. ALL CURVES SHALL BE SMOOTH AND CONTINUOUS WITH CAREFULLY MATCHED TANGENTS.
ALL PROPOSED TREE LOCATIONS SHALL BE STAKED IN FIELD FOR REVIEW BY THE OWNER'S INSPECTOR PRIOR TO INSTALLATION.
- GRADING AND DRAINAGE**
ALL PROPOSED PAVING AND TURF AREAS SHALL SMOOTHLY CONFORM TO EXISTING ADJACENT FEATURES. PROVIDE POSITIVE DRAINAGE ON ALL PAVING AND THROUGHOUT ALL TURF & PLANTING AREAS.
- CONTROL JOINTS**
CONTROL JOINTS WITHIN CONCRETE PAVING ARE TO BE SPACED AS FOLLOWS: SCORE JOINTS ARE TO BE A MAXIMUM OF 3.0m APART & EXPANSION JOINTS ARE TO BE A MAXIMUM OF 9.0m APART.
- GROWING MEDIUM PLACEMENT**
GROWING MEDIUM SHALL BE PLACED AT 150mm MIN. DEPTH FOR ALL TURF AREAS, 300mm MIN. DEPTH IN ALL PLANTING AREAS, & 1000mm MIN. DEPTH IN ALL TREE PITS, AS SHOWN ON DRAWINGS UNLESS OTHERWISE NOTED. EXTEND LENGTH OF TREE TO PIT TO ACHIEVE REQUIRED GROWING MEDIUM VOLUME. 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 AND PLANTING BEDS & PLANTERS, AS PER TABLE 2 IN THE CITY OF KELOWNA'S SUPPLEMENTAL TOPSOIL & FINISH GRADING SPECIFICATIONS.
- BACKFILL**
EXCAVATED MATERIAL NOT SUITABLE FOR BACKFILLING SHALL BE REMOVED AND LEGALLY DISPOSED OF OFF-SITE.
- WOOD MULCH**
THE CONTRACTOR SHALL SUPPLY AND PLACE OGO-GROW WOOD MULCH AT 75mm MIN. DEPTH TO THE PLANTING AREAS. NO PLASTIC FILM OR WEED BARRIER FABRIC IS PERMITTED UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS. THE WOOD MULCH PRODUCT SHALL BE NON-MATTING, FREE OF CHUNKS, STICKS, SOILS, STONES, CHEMICALS, ROOTS AND SALT.
- ROOT BARRIER**
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.
- PLANT MATERIAL**
ALL PLANT MATERIAL SUPPLIED AND PLACED BY THE CONTRACTOR MUST BE CERTIFIED TO BE FREE OF SUDDEN OAK DEATH (PHYTOPHTHORA RAMORUM), ACCORDING TO THE THE CANADIAN FOOD INSPECTION AGENCY (CFIA) OR BCNA STANDARDS. THE CONTRACTOR WILL BE HELD RESPONSIBLE TO THE OWNER FOR THE SUPPLY AND PLACEMENT OF DISEASED PLANTS RESULTING FROM HIS NEGLIGENCE.
PLANT MATERIAL AND PRODUCTS SHALL BE AVAILABLE FOR OPTIONAL INSPECTION BY THE LANDSCAPE ARCHITECT AT SOURCE OF SUPPLY. THE CONTRACTOR SHALL PROVIDE A (1) YEAR REPLACEMENT GUARANTEE ON ALL PLANT MATERIAL TO THE OWNER FROM THE DATE OF SUBSTANTIAL PERFORMANCE.
- SUBSTITUTIONS**
THE CONTRACTOR SHALL NOT SUBSTITUTE PLANT MATERIAL OR PRODUCTS WITHOUT THE WRITTEN CONSENT OF THE LANDSCAPE ARCHITECT. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL AND REPLACEMENT OF ANY UNAPPROVED SUBSTITUTIONS.
- QUANTITIES**
THE QUANTITIES SHOWN ON THE LABELS ARE NOT TO BE CONSTRUED AS THE COMPLETE AND ACCURATE LIMITS OF THE CONTRACT. FURNISH AND INSTALL ALL PLANTS SHOWN SCHEMATICALLY ON THE DRAWINGS.
- TREE LOCATIONS**
ALL PROPOSED TREE LOCATIONS SHALL BE STAKED IN FIELD FOR REVIEW BY THE OWNER'S INSPECTOR PRIOR TO INSTALLATION.

LANDSCAPE LEGEND

	TURF, FROM SOD (SOURCE LOCALLY)
	DECIDUOUS TREE
	ROOT BARRIER (REFER NOTES)
	O.C. ON CENTER
	TYP. TYPICAL

PLANT LIST

BOTANICAL NAME	COMMON NAME	QTY	SIZE/SPACING & REMARKS
TREES			
TILIA AMERICANA 'BOULEVARD'	BOULEVARD LINEN	7	5m CAL.

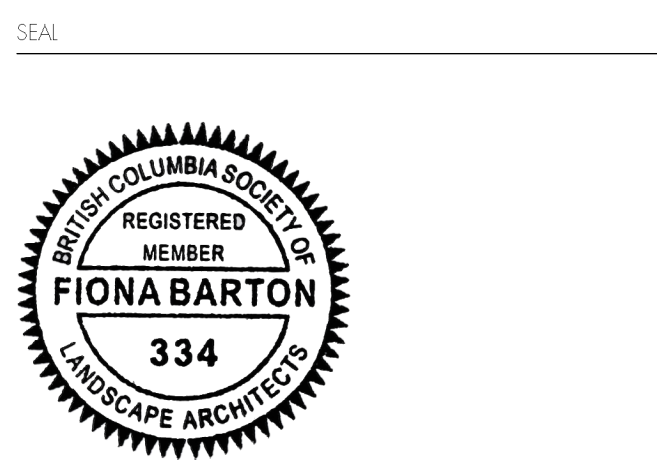


PROJECT TITLE
2080 RUTLAND ROAD LOT 3
 Kelowna, BC

DRAWING TITLE
OFFSITE LANDSCAPE PLAN

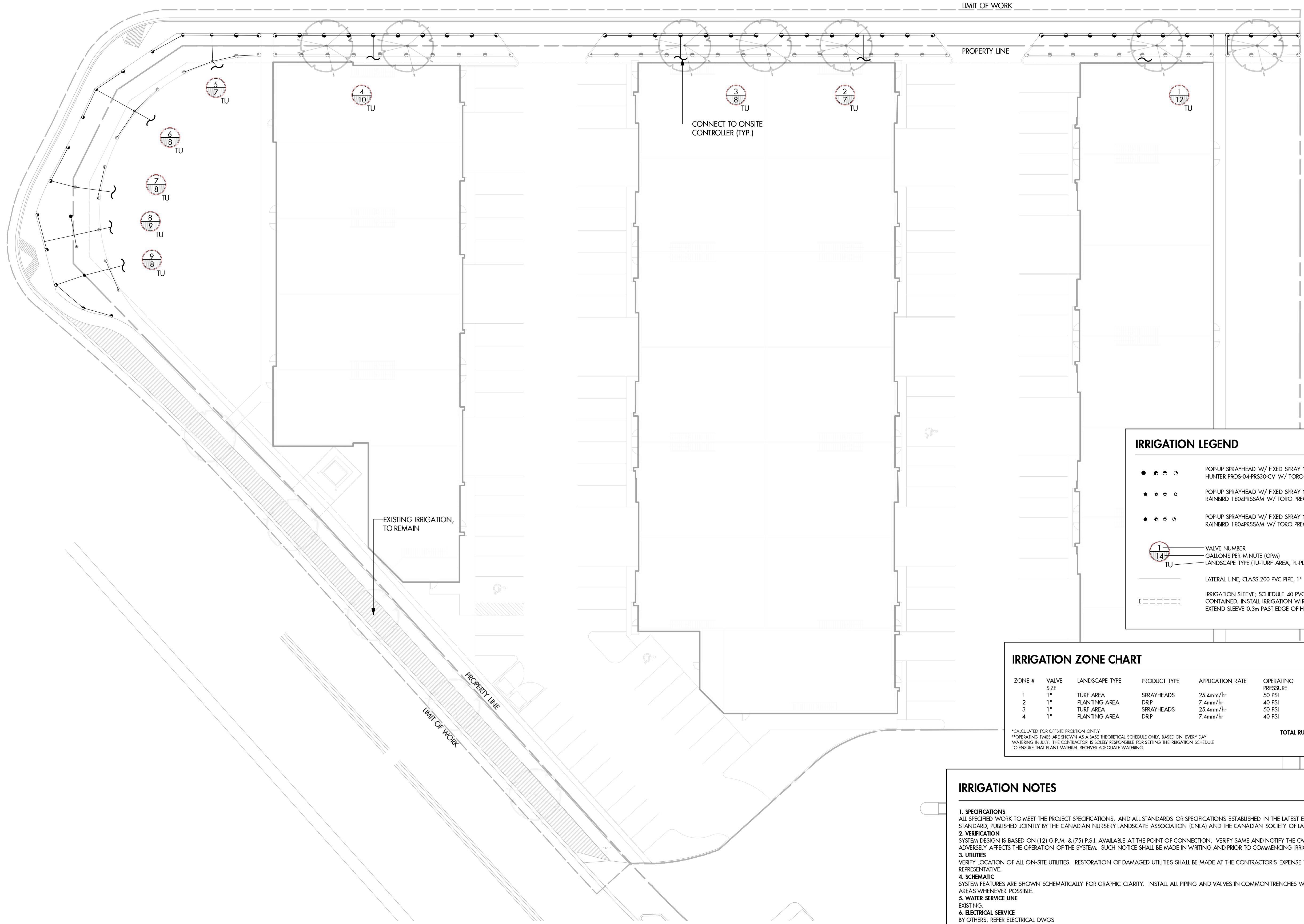
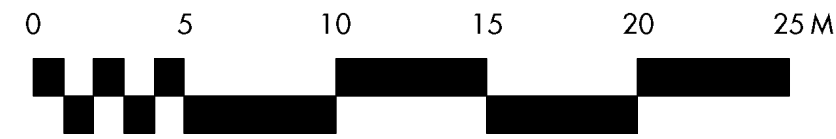
ISSUED FOR / REVISION	DATE	BY
1	23.11.10	Review
2		
3		
4		
5		

PROJECT NO.	23-0803
DESIGN BY	FB
DRAWN BY	NM
CHECKED BY	FB
DATE	NOV. 10, 2023
SCALE	1:250
PAGE SIZE	24x36



DRAWING NUMBER
L1/2

NOT FOR CONSTRUCTION
 Copyright Reserved. This drawing is the property of Ecora Engineering & Resources Group Ltd. and shall not be reproduced, resold, or rendered without permission.



IRRIGATION LEGEND

- ● ● ● POP-UP SPRAYHEAD W/ FIXED SPRAY NOZZLES (10' RADIUS); HUNTER PROS-04-PRS30-CV W/ TORO PRECISION SERIES NOZZLES
- ● ● ● POP-UP SPRAYHEAD W/ FIXED SPRAY NOZZLES (12' RADIUS); RAINBRD 1804PRSSAM W/ TORO PRECISION SERIES NOZZLES
- ● ● ● POP-UP SPRAYHEAD W/ FIXED SPRAY NOZZLES (15' RADIUS); RAINBRD 1804PRSSAM W/ TORO PRECISION SERIES NOZZLES
- ①-14 TU VALVE NUMBER
GALLONS PER MINUTE (GPM)
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.

IRRIGATION ZONE CHART

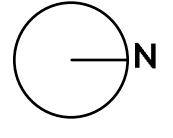
ZONE #	VALVE SIZE	LANDSCAPE TYPE	PRODUCT TYPE	APPLICATION RATE	OPERATING PRESSURE	ZONE FLOW	OPERATING TIME
1	1"	TURF AREA	SPRAYHEADS	25.4mm/hr	50 PSI	7 GPM	20 MINS / 3X PER WEEK
2	1"	PLANTING AREA	DRIP	7.4mm/hr	40 PSI	1 GPM*	45 MINS / 2X PER WEEK
3	1"	TURF AREA	SPRAYHEADS	25.4mm/hr	50 PSI	10 GPM	20 MINS / 3X PER WEEK
4	1"	PLANTING AREA	DRIP	7.4mm/hr	40 PSI	2 GPM*	45 MINS / 2X PER WEEK

*CALCULATED FOR OFFSITE PRIORITON ONLY
 **OPERATING TIMES ARE SHOWN AS A BASE THEORETICAL SCHEDULE ONLY, BASED ON EVERY DAY WATERING IN JULY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR SETTING THE IRRIGATION SCHEDULE TO ENSURE THAT PLANT MATERIAL RECEIVES ADEQUATE WATERING.

TOTAL RUNTIME PER WEEK = 300 MINS / WEEK (5 HRS)

IRRIGATION NOTES

- SPECIFICATIONS**
ALL SPECIFIED WORK TO MEET 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).
- VERIFICATION**
SYSTEM DESIGN IS BASED ON (12) 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.
- 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.
- SCHEMATIC**
SYSTEM FEATURES ARE SHOWN SCHEMATICALLY FOR GRAPHIC CLARITY. INSTALL ALL PIRING AND VALVES IN COMMON TRENCHES WHERE FEASIBLE AND INSIDE PLANTING AREAS WHENEVER POSSIBLE.
- WATER SERVICE LINE**
EXISTING.
- ELECTRICAL SERVICE**
BY OTHERS, REFER ELECTRICAL DWGS
- 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.
- GRAPHIC CLARITY**
MAIN LINE & IRRIGATION COMPONENTS SHOW ON PLAN FOR GRAPHIC CLARITY. CONTRACTOR TO VERIFY ALL MATERIALS IN THE FIELD. VALVE BOXES TO BE LOCATED IN PLANTING AREAS.
- TESTS AND INSPECTIONS**
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 SUCCESSFUL COMPLETION OF INSPECTION OR TEST.
- COMPONENTS**
ALL INTERIOR POINT OF CONNECTION COMPONENTS TO BE BRASS.



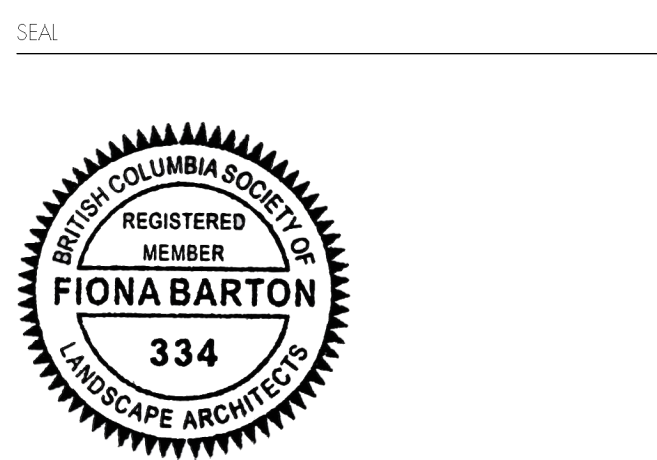
PROJECT TITLE
2080 RUTLAND ROAD LOT 3
 Kelowna, BC

DRAWING TITLE
OFFSITE IRRIGATION PLAN

ISSUED FOR / REVISION

NO.	DATE	REVISION
1	23.11.10	Review
2		
3		
4		
5		

PROJECT NO: 23-0803
 DESIGN BY: FB
 DRAWN BY: NVM
 CHECKED BY: FB
 DATE: NOV. 10, 2023
 SCALE: 1:250
 PAGE SIZE: 24x36



DRAWING NUMBER
L2/2

NOT FOR CONSTRUCTION
 Copyright Reserved. This drawing is the property of Ecora Engineering & Resources Group Ltd. and shall not be reproduced, resold, or rendered without permission.