

### NO.

MWTC 191 001 MWTC 191 002 MWTC 191 003

## ALIGNMENT

# DETAIL

MWTC	191	D01
MWTC	191	D02
MWTC	191	D03
MWTC	191	D11
MWTC	191	D12
MWTC	191	D13
MWTC	191	D14
MWTC	191	D15
MWTC	191	D16
MWTC	191	D17
MWTC	191	D18
MWTC	191	D21
MWTC	191	D22
MWTC	191	D23
MWTC	191	D24
MWTC	191	D25
MWTC	191	D26
MWTC	191	D27
MWTC	191	D28

GRADING MWTC 191 G01

MWTC 191 G02 MWTC 191 G03 MWTC 191 G04 MWTC 191 G05

## LANDSCAPE

MWTC 191 H01 MWTC 191 H10 MWTC 191 H11 MWTC 191 H12 MWTC 191 H20 MWTC 191 H21 MWTC 191 H22 MWTC 191 H30 MWTC 191 H31 MWTC 191 H32 MWTC 191 H40 MWTC 191 H41

OVERALL LANDSCAPE PLAN FURNISHINGS & FENCING PLAN FURNISHINGS & FENCING PLAN FURNISHINGS & FENCING PLAN FURNISHINGS DETAILS FURNISHINGS DETAILS FURNISHINGS DETAILS LANDSCAPE PLAN

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# PAVEMENT MARKINGS & SIGNAGE

MWTC 191 P01 MWTC 191 P02

PAVEMENT MARKINGS AND REGULATORY SIGNAGE PAVEMENT MARKINGS AND REGULATORY SIGNAGE

				S Engineering and Land Services PERMIT TO PRACTICE
Α	ISSUED FOR TENDER	03-05-19	D.M.	Consultant ISL Engineering
no.	description	date	appd	and Land Services Ltd
	issue data			A1 bar scale 0 5 15 25m Signature 2019-05-05
$\square$				1:500 PERMIT NUMBER: P 4741
				The Association of Professional Engineers
				drawn by designed by
				R. MULLER
no.	description	date	checked	checked by date consultant job no
	revisions			L D. MARTIN JL 03-05-2019 JL 14677

COVER SHEET DRAWING INDEX - CIVIL DRAWING INDEX - ARCHITECTURAL

DRAWING TITLE

REMOVAL REMOVAL TRANSIT CENTRE DECOMMISIONING DETAIL DETAIL TRANSIT CENTRE JOINT DETAILS SURFACE JOINT LAYOUT CITY STANDARD DETAILS STANDARD DETAILS

**GRADING & PLAN / PROFILE GRADING & PLAN / PROFILE GRADING & PLAN / PROFILE** GRADING & PLAN / PROFILE GRADING PLAN

NO.	DRAWING T	ITLE	NO.
<b>UTILITY</b> MWTC 191 U01 MWTC 191 U02 MWTC 191 U03 MWTC 191 U10 MWTC 191 U11 MWTC 191 U12 MWTC 191 U12 MWTC 191 SD01 MWTC 191 SD02 MWTC 191 SD03 MWTC 191 SD04	UTILITY PLAN / PROFILE UTILITY PLAN / PROFILE UTILITY PLAN / PROFILE ELECTRICAL FEATURE LAYOUT ELECTRICAL FEATURE LAYOUT ELECTRICAL FEATURE LAYOUT ELECTRICAL FEATURE LAYOUT STANDARD DETAILS STANDARD DETAILS STANDARD DETAILS		
TYPICAL	X-SECTIONS		
MWTC 191 X01	TYPICAL CROSS SECTIONS		
Professional	AECOM Prime Consultant	ΗΔΤϹΗ	<b>ISL</b> Engineering and Land Services
	Edmonton	ISSUED FOR TENDER	drawing title MILL WOODS TR
2019-05-06 consultant reviewed by B. CAMPBELL	prime consultant job no	) (prime consultant reviewed by	DRAWING IND

## DRAWING TITLE



	NO.			DRAWING TITLE	
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	ARCH MWTC 191 A0.01 MWTC 191 A1.01 MWTC 191 A1.02 MWTC 191 A2.01 MWTC 191 A2.02 MWTC 191 A2.03 MWTC 191 A2.03 MWTC 191 A2.04 MWTC 191 A2.05 MWTC 191 A2.06 MWTC 191 A2.06 MWTC 191 A3.01 MWTC 191 A3.02 MWTC 191 A3.02 MWTC 191 A4.01 MWTC 191 A4.01 MWTC 191 A6.01 MWTC 191 A6.03 MWTC 191 A6.04 MWTC 191 A6.05 MWTC 191 A7.01 MWTC 191 A8.01	- AF	(CF	ITTECTORAL SYMBOLS, LEGENDS, & SCHEDULES SITE PLAN - SCOPE OF WORK SITE PLAN OVERALL FLOOR PLAN OVERALL FLOOR PLAN FLOOR PLAN - HEATED AREA FLOOR PLAN - HEATED AREA FLOOR PLAN - UNHEATED AREA CLERESTORY PLAN ROOF PLAN REFLECTED CEILING PLAN - HEATED AREA REFLECTED CEILING PLAN - HEATED AREA EXTERIOR ELEVATIONS BUILDING SECTIONS PLAN DETAILS SECTION DETAILS PLAN AND SECTION DETAILS INTERIOR ELEVATIONS EINISHES PLAN	
	<b>ARCH</b> NWTC 191 S0.01 MWTC 191 S0.02 MWTC 191 S0.03 MWTC 191 S0.04 MWTC 191 S0.04 MWTC 191 S0.05 MWTC 191 S0.07 MWTC 191 S0.07 MWTC 191 S0.51 MWTC 191 S2.00 MWTC 191 S2.01 MWTC 191 S2.02 MWTC 191 S2.03 MWTC 191 S2.05 MWTC 191 S2.05 MWTC 191 S2.05 MWTC 191 S2.07 MWTC 191 S2.07 MWTC 191 S3.00 MWTC 191 S3.01 MWTC 191 S3.02 MWTC 191 S3.03 MWTC 191 S5.01 MWTC 191 S5.02 MWTC 191 S5.02	- ST	RU	CTURAL GENERAL NOTES - SHEET 1 GENERAL NOTES - SHEET 2 TYPICAL DETAILS - SHEET 1 TYPICAL DETAILS - SHEET 2 TYPICAL DETAILS - SHEET 3 TYPICAL DETAILS - SHEET 3 TYPICAL DETAILS - SHEET 5 3D VIEW - BUILDING 3D VIEW - BUILDING 3D VIEW - WALKWAY OVERALL GRID PLAN PILE LAYOUT PLAN MAIN FLOOR FRAMING PLAN ROOF FRAMING PLANS - SHEET 1 ROOF FRAMING PLANS - SHEET 2 ROOF FRAMING PLANS - SHEET 2 ROOF FRAMING PLANS - SHEET 3 WALKWAY FOUNDATION AND MAIN FLOOR FRAMING PLANS WALKWAY ROOF FRAMING PLANS EXTERIOR ELEVATIONS - SHEET 1 EXTERIOR ELEVATIONS - SHEET 2 EXTERIOR ELEVATIONS - SHEET 3 BUILDING CROSS SECTIONS STEEL SECTIONS - SHEET 3 STEEL SECTIONS - SHEET 3	
A ISS	SUED FOR TENDER description issue data	03–05–19 date	D.M. appd	A1 bar scale 0 5 15 25m	

designed by K. LAU

03-05-2019

date

consultant job no 14677

drawn by R. MULLER

date checked (checked by D. MARTIN

description

revisions

no.

/ May 6, 2019 / J:/14600/14677\_VALLEY\_LINE\_LRT\_OE\_CONSTRUCTION/02\_CADD\20\_DRAFTING\202\_MWTC\212\_DETAILED DESIGN\MWTC 191 002.DWG

NO.	DRAWING TITLE	NO.
<b>ARCH – N</b> MWTC 191 M0.01 MWTC 191 M2.01 MWTC 191 M2.02 MWTC 191 M2.03 MWTC 191 M2.04 MWTC 191 M3.01 MWTC 191 M6.01	<b>AECHANICAL</b> LEGEND & DRAWING LIST FOUNDATION PLAN PIPING PLAN VENTILATION PLAN ROOF PLAN LARGE SCALE PLANS AND SECTIONS SCHEDULES AND DETAILS	
ARCH - E	<section-header><text><text><text></text></text></text></section-header>	
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consultant reviewed by B. CAMPBELL	prime consultant job no	
/		

## DRAWING TITLE

















LOG <b>Gec</b> architecture		
ANSIT CENTRE	VALLEY LINE - STAG	E 1
	MILL WOODS TO DOWNTOWN	
	drawing no. MWTC 191 D14	REV 0 SHT



LOG	<b>Gec</b> architecture	

VALLEY LINE - STAGE 1

MILL WOODS TO DOWNTOWN

REV 0 SHT

drawing no. MWTC 191 D15



FREESTANDING BENCH. SEE ARCHITECTURAL DWG FOR DETAILS.

CONTROL SAWCUT

DECORATIVE SAWCUT

PLANTER CURB & SEAT WALL WITH BENCH TOP. SEE D SERIES

TREE GRATE AND FRAME. SEE D SERIES FOR DETAILS.

FOR CONCRETE DETAILS & H20 SERIES FOR BENCH TOP DETAILS.

LEGEND

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	TREE GRATE AND FRAME. SEE D SERIES F
	CONTROL SAWCUT
	DECORATIVE SAWCUT
KEY PLAN	





BUS STOP TO SEE ARCHIT
PLANTER CL FOR CONCR
TREE GRATE
CONTROL SA
DECORATIV





![](_page_15_Figure_0.jpeg)

![](_page_16_Figure_0.jpeg)

![](_page_16_Figure_1.jpeg)

				ISL Engineering and Land Services	PERMIT TO PRACTICE
Α	ISSUED FOR TENDER	03–05–19	D.M.	Consultant	ISL Engineering
no.	description	date	appd		and Land Services Lia
	issue data			A1 bar scale	Signature
					PERMIT NUMBER: P 4741 The Association of Professional Engineers
				drawn by R. MULLER designed by K. LAU	and Geoscientists of Alberta
no.	description	date	checked	checked by date	consultant job no
	revisions			D. MARTIN 03-05-2019	14677

![](_page_16_Figure_5.jpeg)

![](_page_16_Figure_6.jpeg)

![](_page_16_Picture_7.jpeg)

- COMPRESSIVE STRENGTH OF 35 MPa

- / A276M AND ASTM A955 / A955M INCLUDING ANNEX 1.20R 1.3 WITH A MINIMUM YIELD STRENGTH OF 420MPA

- TO CORRECTLY REPRODUCE OR SUMMARIZE OBSERVATIONS MADE DURING TESTING. IT IS VALID ONLY FOR THE PRECISE LOCATIONS SHOWN, AND IS NOT TO BE CONSTRUED AS GUARANTEEING THE ACTUAL MATERIALS AND CONDITIONS EXISTING THROUGHOUT THE SITE. THE TESTING METHODS USED MAY NOT HAVE DETERMINED THE PRESENCE, ABSENCE OR EXTENTS OF BOULDERS, HARD OR SOFT FORMATIONS, WATER TABLES, ARTESIAN CONDITIONS AND OTHER VARIABLES. IT IS THE RESPONSIBILITY OF OTHERS USING THIS INFORMATION TO ENSURE THAT IT IS ADEQUATE FOR THEIR PURPOSES, OR TO SUPPLEMENT IT WITH ADDITIONAL INFORMATION.

- COMPACTED TO 98% OF SPMDD

- & RAISED MEDIAN
- CAN/CSA A23.1 AND CONTRACT SPECIFICATIONS.

![](_page_17_Picture_19.jpeg)

![](_page_17_Figure_20.jpeg)

T SHOWN ON D12 & D14-18 RAISED ON A CURVE/RADIUS	
	CONCRETE MEDIAN WALL C/W 10mm CHAMFER ON TOP EDGES & SHEET DRAIN STAPLED TO BACK OF WALL.
	VERTICAL CHAMFER ALIGNED WITH BUSWAY COCNRETE JOINTS AND @ 2000 O.C. PER DETAIL 5 ON THIS SHEET.
	4-15M REBAR 10M @ 300 О.С. 300 П
	——————————————————————————————————————
	// ——— 15M @ 300 O.C. [2
	GRANULAR FILL 3-20A COMPACTED TO 98% SPMDD
	BASE FOR TREE PLANTING. CONTRACTOR TO PRESENT STRATEGY
	FOR CONSULTANT ACCEPTANCE PRIOR TO TREE PLANTING
	DRAINAGE PIPE SURROUNDED BY MIN 50mm COARSE SAND
· · · / · · · · · · · · · · · · · · · ·	
	SCALE 1:20
. 10mm	
TOP OF WALL	
CONTINUE CHAMFER DOWN FACE OF WALL	
SCALE 1:1	LAYOUT SHOWN ON D12 & D14-18 ALL PLANTER
m CUF SEC	RBS AND SEAT WALLS ARE MADE OF STRAIGHT GMENTS. NO CURVES OR RADII PRESENT.
CON	CRETE SEAT WALL
A C/W TOP	10mm CHAMFER ON EDGES
2-15 TOP 15M	
	M C/W STD 90° HOOK @ 300 ED 200 INTO WALKWAY
STRI 200	JCTURE W/ HILTI HIT HY -
/ 750n	ED 100mm 10M DOWEL @
750n	ED 100mm 10M DOWEL @ າm O.C.
750n	ED 100mm 10M DOWEL @ nm O.C. -AR FILL 3-20A CTED TO 98% SPMDD
750n	ED 100mm 10M DOWEL @ nm O.C. _AR FILL 3-20A CTED TO 98% SPMDD
750n	ED 100mm 10M DOWEL @ nm O.C. _AR FILL 3-20A CTED TO 98% SPMDD
750n	ED 100mm 10M DOWEL @ hm O.C. _AR FILL 3-20A CTED TO 98% SPMDD
750n	ED 100mm 10M DOWEL @ hm O.C. _AR FILL 3-20A CTED TO 98% SPMDD 
	ED 100mm 10M DOWEL @ hm O.CAR FILL 3-20A CTED TO 98% SPMDD SCALE 1:10
	ED 100mm 10M DOWEL @ hm O.CAR FILL 3-20A CTED TO 98% SPMDD
	ED 100mm 10M DOWEL @ mm O.C. _AR FILL 3-20A CTED TO 98% SPMDD 
TSON GRANUI COMPA	ED 100mm 10M DOWEL @ m O.C. AR FILL 3-20A CTED TO 98% SPMDD SCALE 1:10 SCALE 1:10 VALLEY LINE - STAGE 1 MILL WOODS TO DOWNTOWN
TSON GRANUL COMPANIE ANSIT CENTRE ANSIT CENTRE DETAILS	ED 100mm 10M DOWEL @ m O.C. AR FILL 3-20A CTED TO 98% SPMDD SCALE 1:10 SCALE 1:10 VALLEY LINE - STAGE 1 MILL WOODS TO DOWNTOWN

![](_page_18_Figure_0.jpeg)

![](_page_18_Figure_1.jpeg)

	VALLEY LINE - STAGE 1				
MILL WOODS TO DOWNTOWN					
	drawing no. MWTC 191 D25	REV Sht	0		

NTS

TYP. #3 REBAR EMBEDMENT ANCHOR

— SOIL CELLS OR SUBGRADE. SEE SCALE 1:20

![](_page_19_Figure_0.jpeg)

![](_page_20_Figure_0.jpeg)

![](_page_21_Figure_0.jpeg)

![](_page_22_Figure_0.jpeg)

![](_page_23_Figure_0.jpeg)

![](_page_24_Figure_0.jpeg)

BD.

$\square$					)[
		07 05 40		and Land Services	PERMIT TO PRACTICE
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no.	description	date	appd		and Land Services Ltd
	issue data			A1 bar scale	Signature
$\square$					PERMIT NUMBER: P 4741
				drawn by	and Geoscientists of Alberta
				R. MULLER	
no.	description	date	checked	checked by date	) consultant job no
	revisions			D. MARTIN 03-05-2019	14677

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			; OW POINT STA OW POINT ELE	: 1+148.506 V. = 692.499		: HIGH POINT ST HIGH POINT ELI	A: 1+178.623 ∃V. = 692.677			LOW PO	: 21NT STA: 1+22 21NT ELEV. = 69	4.069 2.339					
.676	36 376	560	PVI STA: 1+ PVI ELEV. =	148.515 692.439	.560 166.243	PVI STA: 1-	178.615 692.739	2.616		IV9 IV9 2250 100 23250	STA: 1+224.09 ELEV. = 692.28 1 = 21 147m	0. 00 4.672 192					+ e
VCE: 692	C.S. 1+1	CE: 692	K = 1	2 +	CE: 692 VCS: 1+ VCE: 692	L = 24.7 K = 1	44m 2	VCE: 692		SS: 1+21 SE: 692.3	K = 11	SS: 1+23. DE: 692.3					
										BVG BVG		EVC					+ e
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![](_page_25_Figure_0.jpeg)

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₹	692.96	0.85%		•	,	<u>A</u>	⊕	-1.25%	25% 2.63°	69 69
				BVCS: 4+067\32	BVCE: 693.363		EVCS: 4+096.85 EVCE: 693.303			69
					-					60

![](_page_26_Figure_0.jpeg)

![](_page_27_Figure_0.jpeg)

LANT SCHEI	DULE						FURNISHING	S SCHE	DULE
EES	<u>QTY</u> 32	BOTANICAL NAME Fraxinus americana `Northern Blaze`	COMMON NAME Northern Blaze White Ash	REMARKS Ball & Burlap	<u>SIZE</u> 60mm Cal.		TREE GRATE		
	6	Fraxinus pennsylvanica 'Rugby'	Prairie Spire Ash	Ball & Burlap	60mm Cal.			Make: Model:	URBAN ACCESSO CASCADE
	10	Tilia americana 'Duros'	True North American Linden	Ball & Burlap	60mm Cal.		Carl at half at a stress	FINISH:	CAST GREY IRON
	37	Ulmus americana 'Brandon'	Brandon Elm	Ball & Burlap	60mm Cal.		BIKE SHELTER	2	
RUBS	<u>QTY</u> 284	BOTANICAL NAME Berberis thunbergii `Rose Glow`	COMMON NAME Rose Glow Barberry	<u>REMARKS</u> #2 Container	<u>SIZE</u> 300mm Ht.		<b>30</b>	MAKE: MODEL:	MMCITE AUREA VELO AE-
	272	Caragana pygmaea	Pygmy Caragana	#2 Container	300mm Ht.			FINISH:	PER MANUFACT
	15	Euonymus alatus	Winged Burning Bush	#2 Container	450mm Sp.		BIKE RACK		
	73	Juniperus horizontalis plumosa 'Andorra'	Andorra Juniper	#5 Container	450mm Sp.		Curl.	MAKE:	N/A
	66	Physocarpus opulifolius 'Dart's Gold'	Dart's Gold Ninebark	#2 Container	450mm Ht.		J.	FINISH:	SEE H20 SERIES
	59	Ribes alpinum	Alpine Currant	#2 Container	300mm Ht.		BIKE RACK RE	PAIR STA	TION
NUALS/PERENNIALS	<u>QTY</u> 263	<u>BOTANICAL NAME</u> Hemerocallis x `Stella de Oro`	COMMON NAME Stella de Oro Daylily	REMARKS 150mm Pot	<u>SIZE</u> 2 Years Old		Ĺ	MAKE:	
NAMENTAL GRASSES 2	<u>QTY</u> 2,657	BOTANICAL NAME Calamagrostis x acutiflora `Karl Foerster`	COMMON NAME Karl Foerster Reed Grass	REMARKS PLUG	<u>SIZE</u> 200mm O.C.	SPACING 200mm	Ĩ	FINISH:	POWDERCOAT -
2	174	Carex utriculata	Beaked Sedge	PLUG	200mm O.C.	200mm	LITTER RECEP	PTACLE	
2	2,000	Deschampsia cespitosa	Tufted Hair Grass	PLUG	200mm O.C.	200mm		MAKE:	FORMS + SURFA
2	943	Helictotrichon sempervirens	Blue Oat Grass	PLUG	200mm O.C.	200mm		MODEL: FINISH:	APEX 36 gal. SING STAINLESS STEE
	123	Juncus torreyi	Torrey's Rush	PLUG	200mm O.C.	200mm	EXTERIOR SE	AT WALL E	BENCH
2	1,180	Leymus arenarius 'Blue Dune'	Blue Dune Lyme Grass	PLUG	200mm O.C.	200mm		MAKE:	N/A
2	1,198	Schizachyrium scoparium	Little Bluestem Grass	PLUG	200mm O.C.	200mm		MODEL: FINISH: (BACK NOT SH	N/A SEE H20 SERIES IOWN IN PICTURE)
							EXTERIOR FR	EESTAND	ING BENCH
								Make: Model: Finish:	n/a n/a See arch serie

![](_page_27_Picture_3.jpeg)

![](_page_28_Figure_0.jpeg)

![](_page_29_Figure_0.jpeg)

FREESTANDING BENCH. SEE ARCHITECTURAL DWG FOR DETAILS.
PLANTER CURB & SEAT WALL WITH BENCH TOP. SEE D SERIES FOR CONCRETE DETAILS & H20 SERIES FOR BENCH TOP DETAILS.
STRUCTURAL SOIL CELLS. SEE D SERIES FOR DETAILS.
TREE GRATE AND FRAME. SEE D SERIES FOR DETAILS.
 POST & RAIL FENCE. SEE H40 SERIES FOR DETAILS.
LIGHT STANDARD
EMERGENCY PHONE

![](_page_29_Figure_3.jpeg)

![](_page_30_Figure_0.jpeg)

![](_page_31_Figure_0.jpeg)

![](_page_32_Figure_0.jpeg)

![](_page_32_Figure_2.jpeg)

![](_page_33_Figure_0.jpeg)

NOTES
• THE CONTRACTOR WILL BE RESPONSIBLE ONLY FOR
PROVIDING THE CONCRETE BASE (INCLUDING
THREADED RODS AND REINFORCEMENT), AND
CONDUIT FOR PEDESTRIAN MINILITH.
BASE PLATE DETAIL INCLUDED FOR INFORMATION
ONLY.
• THE CONTRACTOR WILL BE RESPONSIBLE ONLY FOR
ENSURING THE CONCRETE AT THE ACCESS
IDENTIFIER LOCATION IS SMOOTH AND FLAT TO
ALLOW FUTURE SURFACE MOUNT.

![](_page_34_Figure_0.jpeg)

FLANT SUF
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TREES FNQTY 32DTANICAL NAME Fraxinus americana Northern BiazeCOMMON NAME Northern Blaze White AshREMARKS Bial & BuriaSIZE 60m Cal.FP6Fraxinus americana Yaoro'Praire Spire AshBal & Buria60m Cal.TA10Tila americana 'Brandon'Brandon EimBal & Buria60m Cal.UB370Umus americana 'Brandon'Brandon EimBal & Buria60m Cal.SHRUBS BTQTY Brebris thunbergii 'Rose GlowCoMMON NAME Rose Glow BarbergREMARKS si 22 ContaineSIZE 300m H.L.CPQTACargana pagmaeaPigmy Cargana#2 Containe30m H.L.FA15Euonymus alatusMigred Buring Bush#2 Containe450m Sp.L.POA1Juiperus horizontalis plumosa' AndoraAndora Juniperu#2 Containe450m Sp.L.PAMase apipumAlpine Currant#2 Containe80m H.L							
FP6Faxiau gennsylvaria RugbyPraire Spire AdnBal & Burap60mm Cal.TA10Tia americana 'Duros'Tue North American LincoBal & Burap60mm Cal.UB37Umus americana 'Brandon'Bradon ElmBal & Burap60mm Cal.SHRUBS BT204BOTANICAL NAME Brebristhunbergii' Rose GlowCOMMON NAME Rose Glow BarberySZE ContaineSZE 300mm H.CP274Gragana pygmaeaPigny Caragana#2 Containe40mm S.AA101Lonymus alatusMora Juniper#2 Containe40mm S.JA301Juniperus horizontalis plumosa' AndoraAndora Juniper#2 Containe40mm S.PO60Noscarpusopulifolius 'Dati's GoldDati's Gold Ninebark#2 Containe40mm H.RA50Riberapinuo Stati's Stalia de OroSa' Stalia de Oro Dayily#2 Containe52/EriangRNNALS/PERENNIALSGOTSOTANICAL NAME Hemeroalis x 'Stalia de OroCOMMON NAME Stalia de Oro DayilySZE Stalia de Oro Dayily20mm H.CNAMMENTAL GRASSEGTSOTANICAL NAME Hemeroalis x 'Stalia de OroCOMMON NAME Stalia de Oro DayilySZE Stalia de Oro DayilySZE Stalia de OroSZE Stalia de Oro<	TREES FN	<u>QTY</u> 32	BOTANICAL NAME Fraxinus americana `Northern Blaze`	COMMON NAME Northern Blaze White Ash	REMARKS Ball & Burlap	<u>SIZE</u> 60mm Cal.	
TA10Tila american 'Duros'True North American LindenBal & Buila60m Cal.UB370Umus american 'Brandon'Brandon ElmBal & Buila60m Cal.SHRUBS BT0TYBOTANICAL NAME Berberis thunbergii 'Rose GlowCOMMON NAME Rose Glow BarberryREMARKS #2 ContaineSIZE 300m H.t.CP2720Cargana pagmaeaMiged Buring Bush#2 Containe30m H.t.AA150Lonymus alatusMiged Buring Bush#2 Containe450m Sp.PO61Miperus horizontalis plumosa' AndoraAndora Juniperu#2 Containe450m Sp.PO62Miperus horizontalis plumosa' AndoraAndora Juniperu#2 Containe450m Sp.PO63Miperus horizontalis plumosa' AndoraAndora Juniperu#2 Containe450m Sp.PO64Miperus horizontalis plumosa' AndoraAndora Juniperu#2 Containe450m Sp.PO65Miperus horizontalis plumosa' AndoraAndora Juniperu#2 Containe450m Sp.PO61Miperus horizontalis plumosa' AndoraPalorearta#2 Containe450m Sp.PO61Miperus horizontalis plumosa' AndoraAndora Juniperu#2 Containe450m Sp.RAMANSBileMiperus horizontalis plumosa' AndoraPalorearta#2 Containe30m H.t.RAMANSBileMiperus horizontalis plumosa' AndoraSciele Goro Davilis#2 Containe30m H.t.RAMANSBileMiperus horizontalis plumosa' AndoraSciele Goro Davilis' <td>FP</td> <td>6</td> <td>Fraxinus pennsylvanica 'Rugby'</td> <td>Prairie Spire Ash</td> <td>Ball &amp; Burlap</td> <td>60mm Cal.</td> <td></td>	FP	6	Fraxinus pennsylvanica 'Rugby'	Prairie Spire Ash	Ball & Burlap	60mm Cal.	
UB37Umus americana 'Brandon'Brandon ElmBall & BuriesGumm Cal.SHRUBS BTCTAN 244BCTANICAL NAME Berberis thunbergii 'Rose Glow'COMMON NAME 	ТА	10	Tilia americana 'Duros'	True North American Linden	Ball & Burlap	60mm Cal.	
SHRUBS BTQTV 284BOTANICAL NAME Berberis thunbergii 'Rose GlowCOMMON NAME Rose Glow BarberryREMARKS #2 ContainerS12E S00m Ht.CP272Caragana pygnaeaPygny Caragana#2 Container300m Ht.EA15Euonymus alatusVinged Burning Bush#2 Container450m Sp.JA73Juniperus horizontalis plumosa 'Andora'Andora Juniper#2 Container450m Sp.PO66Physocarpus opulfolius 'Dart's Gold'Dart's Gold Ninebark#2 Container300m Ht.RA59Ribes alpinumAlpine Currant#2 Container300m Ht.ANNUALS/PERENNIAS HOQTYBOTANICAL NAME Hemerocaliis x 'Stella de Oro'COMMON NAME Stella de Oro DaylinyREMARKSSIZE SUGmm AtORNAMENTAL GRASSES CK2QTYBOTANICAL NAME Hemerocaliis x 'Stella de Oro'COMMON NAME Stella de Oro DaylinyREMARKSSIZE SUGmm AtSIZE SUGmm AtOLIQ174CarauriculataGatamagrostis x acutifora 'Karl Foerster'COMMON NAME Stella de Oro DaylinySIZE SUGmm AtSIZE SUGmm AtSIZE SUGm AtSIZE<	UB	37	Ulmus americana 'Brandon'	Brandon Elm	Ball & Burlap	60mm Cal.	
CP272Caragan pgmaeaPgmg Yaragana#2 Containe30mm Ht.EA15Euonymus alausWinged Buring Bush#2 Containe450mm Sp.JA73Juniperus horizontalis plumosa 'AndoraAndorra Junipero#5 Containe450mm Sp.PO64Physocarpus opulifolius 'Dari's Gold'Dari's Gold Ninebark#2 Containe450mm Ht.RA59Ribes alpinumAlpine Currant#2 Containe30mm Ht.ANUALS/PERENNALS733Ribes alpinumColMMON NAME Remercalis x 'Stella de Oro'ColMMON NAME Stella de Oro DaviliyREMARKSSIZE Stella de Oro DaviliyORNAMENTAL GRASES725Romandia s x Stella de Oro'ColMMON NAME Stella de Oro DaviliyREMARKSSIZE Stella de Oro DaviliySiZE Stella de Oro D	SHRUBS BT	<u>QTY</u> 284	BOTANICAL NAME Berberis thunbergii 'Rose Glow'	COMMON NAME Rose Glow Barberry	REMARKS #2 Container	<u>SIZE</u> 300mm Ht.	
EA15Euonymus alatusWinged Burning Bush#2 Container450mm Sp.JAJuniperus horizontalis plumosa' AndoraAndorra Juniper#5 Container450mm Sp.PO64Physocarpus opulifolius 'Dart's Gold'Dart's Gold Ninebarks#2 Container450mm Ht.RA59Ribea plinumAlpine Currant#2 Container30mm Ht.ANNALS/PERENNIALS0TYOTANICALNAME Emerocalitis x 'Stella de Oro'COMMON NAME Stella de Oro DaylitySEMARKS3IZE Years old'ORNAMENTAL GRASSES0TY 2,657COTANICAL NAME Calamagrostis x acutifion 'Karl FoersterCOMMON NAME Karl Foerster Reed GrassREMARKSSIZE 200mm OctSponm OctD12174Carex utriculataBeaked SedgePLUG200mn Oct200mnD12174Junics torreyiSile Oct forster Reed GrassPLUG200mn Oct200mnD12174Junics torreyiBile Oct GrassPLUG200mn Oct200mnJ12123Junics torreyiTorrey's RushPLUG200mn Oct200mnJ12134Lemus and tribus Tible DurineBile Dune Lime GrassPLUG200mn Oct200mnS121,188Shizachyrium scopariumLitte Bluestem GrassPLUG200mn Oct200mnS121,198Shizachyrium scopariumLitte Bluestem GrassPLUG200mn Oct200mnS121,198Shizachyrium scopariumLitte Bluestem GrassPLUG200mn Oct200mn	СР	272	Caragana pygmaea	Pygmy Caragana	#2 Container	300mm Ht.	
JA73Juniperus horizontalis plumosa 'Andora'Andorra Juniper#5 Container450mm Sp.PO66Physocarpus opulifolius 'Dart's Gold'Dart's Gold Ninebark#2 Container450mm Ht.RA59Ribes alpinumAlpine Currant#2 Container300mm Ht.ANNUALS/PERENNIALS HOQTY 2630BOTANICAL NAME Hemerocallis x 'Stella de Oro'COMMON NAME Stella de Oro DaylityREMARKS 150mm PotSIZE 27 ears Old'ORNAMENTAL GRASSES CK2QTY 2,657BOTANICAL NAME Clamagrostis x acutifora 'Karl Foerster'COMMON NAME Karl Foerster Reed GrassREMARKS PLUGSIZE 200mm O.C.SPACING 200mm O.C.OLI174Carex utriculataBeaked SedgePLUG200mm O.C.200mmDT22,000Deshampsia cespitosaTufted Hair GrassPLUG200mm O.C.200mmJT2123Juncu torreyiTorrey's RushPLUG200mm O.C.200mmJT21,180Leymus anearius 'Blue Dune'Blue Dune Lyme GrassPLUG200mn O.C.200mmSL21,180Schizachyrium scopariumLitte Bluestem GrassPLUG200mn O.C.200mm	EA	15	Euonymus alatus	Winged Burning Bush	#2 Container	450mm Sp.	
PO66Physocarpus opulifolius 'Dart's Gold'Dart's Gold Ninebark#2 Container450mn Ht.RA59Ribes alpinumAlpine Currant#2 Container300mn Ht.ANNUALS/PERENNIALS HOGTY 233BOTANICALNAME Hemerocallis x 'Stella de Oro'COMMON NAME Stella de Oro DaylityREMARKS 150mn PotSIZE 2 Years OldORNAMENTAL GRASSES CK2GTY 2,657BOTANICALNAME Calamagrostis x acutiflora 'Karl Foerster'COMMON NAME Karl Foerster Reed GrassREMARKS PLUGSIZE 2 Omm O.C.SPACING 200mmCU2174Carex utriculataBeaked SedgePLUG200mn O.C.200mnDT22,000Deschampsia cespitosaTufted Hair GrassPLUG200mn O.C.200mnJT2123Juncus torreyiTorrey's RushPLUG200mn O.C.200mnPF21,180Leynus arenarius 'Blue Dune'Blue Dune Lyme GrassPLUG200mn O.C.200mnSL21,198Schizachyrium scopariumLittle Bluestem GrassPLUG200mn O.C.200mn	JA	73	Juniperus horizontalis plumosa `Andorra`	Andorra Juniper	#5 Container	450mm Sp.	
RA59Ribes alpinumAlpine Currant#2 Containe300mm Ht.ANNUALS/PERENNIALS HOGTY 263BOTANICAL NAME Hemerocaliis x 'Stella de Oro'COMMON NAME Stella de Oro DayliyREMARKS 150mm PodSIZE 2 Years OdORNAMENTAL GRASSES CK2GTY 2,657BOTANICAL NAME Calamagrostis x acutiflora 'Karl Foerster'COMMON NAME Stella de Oro DayliyREMARKS PLUGSIZE 2 Years OdSPACING 200mm O.C.CU2174Carex utriculataBeaked SedgePLUG200mm O.C.200mmDT22,000Deschampsia cespitosaTufted Hair GrassPLUG200mm O.C.200mmJT2943Helicotrichon sempervirensBile Oat GrassPLUG200mm O.C.200mmJT2123Juncus torreyiTorrey's RushPLUG200mm O.C.200mmPF21,180Schizachyrium scopariumBile Dune Lyme GrassPLUG200mm O.C.200mmSL21,198Schizachyrium scopariumLittle Bluestem GrassPLUG200mm O.C.200mm	PO	66	Physocarpus opulifolius `Dart`s Gold`	Dart`s Gold Ninebark	#2 Container	450mm Ht.	
ANNUALS/PERENNIALS HOQTY 263BOTANICAL NAME Hemerocallis x 'Stella de Oro'COMMON NAME Stella de Oro DaylilyREMARKS 150mm PotSIZE 2 Years OldORNAMENTAL GRASSES CK2QTY 2,657BOTANICAL NAME Calamagrostis x acutiflora 'Karl Foerster'COMMON NAME Karl Foerster Reed GrassREMARKS PLUGSIZE 2 00mm O.C.SPACING 200mmCU2174Carex utriculataBeaked SedgePLUG200mm O.C.200mmDT22,000Deschampsia cespitosaTufted Hair GrassPLUG200mm O.C.200mmHS2943Helicotrichon sempervirensBlue Oat GrassPLUG200mm O.C.200mmJT2123Juncus torreyiTorrey's RushPLUG200mm O.C.200mmPF21,180Leymus arenarius 'Blue Dune'Blue Dune Lyme GrassPLUG200mm O.C.200mmSL21,198Schizachyrium scopariumLittle Bluestem GrassPLUG200mm O.C.200mm	RA	59	Ribes alpinum	Alpine Currant	#2 Container	300mm Ht.	
ORNAMENTAL GRASSES CK2QTY 2,657BOTANICAL NAME Calamagrostis x acutiflora 'Karl FoersterCOMMON NAME Karl Foerster Reed GrassREMARKS PLUGSIZE 200mm O.C.SPACING 200mm O.C.CU2174Carex utriculataBeaked SedgePLUG200mm O.C.200mm O.C.200mm O.C.DT22,000Deschampsia cespitosaTufted Hair GrassPLUG200mm O.C.200mm O.C.200mmHS2943Helicotrichon sempervirensBlue Oat GrassPLUG200mm O.C.200mm200mmJT2123Juncus torreyiTorrey's RushPLUG200mm O.C.200mm200mmPF21,180Leymus arenarius 'Blue Dune'Blue Dune Lyme GrassPLUG200mm O.C.200mmSL21,198Schizachyrium scopariumLittle Bluestem GrassPLUG200mm O.C.200mm	ANNUALS/PERENNIALS HO	<u>QTY</u> 263	BOTANICAL NAME Hemerocallis x 'Stella de Oro'	COMMON NAME Stella de Oro Daylily	REMARKS 150mm Pot	<u>SIZE</u> 2 Years Old	
CU2174Carex utriculataBeaked SedgePLUG200mm O.C.200mmDT22,000Deschampsia cespitosaTufted Hair GrassPLUG200mm O.C.200mmHS2943Helicotrichon sempervirensBlue Oat GrassPLUG200mm O.C.200mmJT2123Juncus torreyiTorrey's RushPLUG200mm O.C.200mmPF21,180Leymus arenarius 'Blue Dune'Blue Dune Lyme GrassPLUG200mm O.C.200mmSL21,198Schizachyrium scopariumLittle Bluestem GrassPLUG200mm O.C.200mm	ORNAMENTAL GRASSES CK2	<u>QTY</u> 2,657	BOTANICAL NAME Calamagrostis x acutiflora `Karl Foerster`	COMMON NAME Karl Foerster Reed Grass	REMARKS PLUG	<u>SIZE</u> 200mm O.C.	SPACING 200mm
DT22,000Deschampsia cespitosaTufted Hair GrassPLUG200mm O.C.200mmHS2943Helicotrichon sempervirensBlue Oat GrassPLUG200mm O.C.200mmJT2123Juncus torreyiTorrey's RushPLUG200mm O.C.200mmPF21,180Leymus arenarius 'Blue Dune'Blue Dune Lyme GrassPLUG200mm O.C.200mmSL21,198Schizachyrium scopariumLittle Bluestem GrassPLUG200mm O.C.200mm	CU2	174	Carex utriculata	Beaked Sedge	PLUG	200mm O.C.	200mm
HS2943Helictotrichon sempervirensBlue Oat GrassPLUG200mm O.C.200mmJT2123Juncus torreyiTorrey's RushPLUG200mm O.C.200mmPF21,180Leymus arenarius 'Blue Dune'Blue Dune Lyme GrassPLUG200mm O.C.200mmSL21,198Schizachyrium scopariumLittle Bluestem GrassPLUG200mm O.C.200mm	DT2	2,000	Deschampsia cespitosa	Tufted Hair Grass	PLUG	200mm O.C.	200mm
JT2123Juncus torreyiTorrey's RushPLUG200mm O.C.200mmPF21,180Leymus arenarius 'Blue Dune'Blue Dune Lyme GrassPLUG200mm O.C.200mmSL21,198Schizachyrium scopariumLittle Bluestem GrassPLUG200mm O.C.200mm	HS2	943	Helictotrichon sempervirens	Blue Oat Grass	PLUG	200mm O.C.	200mm
PF2       1,180       Leymus arenarius `Blue Dune`       Blue Dune Lyme Grass       PLUG       200mm O.C.       200mm         SL2       1,198       Schizachyrium scoparium       Little Bluestem Grass       PLUG       200mm O.C.       200mm	JT2	123	Juncus torreyi	Torrey's Rush	PLUG	200mm O.C.	200mm
SL2 1,198 Schizachyrium scoparium Little Bluestem Grass PLUG 200mm O.C. 200mm	PF2	1,180	Leymus arenarius 'Blue Dune'	Blue Dune Lyme Grass	PLUG	200mm O.C.	200mm
	SL2	1,198	Schizachyrium scoparium	Little Bluestem Grass	PLUG	200mm O.C.	200mm

The Asso Land Arch	Alberta ociation of Iscape itects	AECOM Prime Consultant		ΗΔΤC	- <b> </b> <u>/</u> 5	Engineering and Land Services	DIA
Jeff Schu	2019-05-06	<b>Edmonton</b>		ISSUED FOR TENDER	R drowing ti	MILL WW	ODS TR
Consultant reviewed B. CAMPBE	by prime co	nsultant job no	prime	consultant reviewed by		L	ANDSCAP

![](_page_35_Figure_0.jpeg)

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				drawn by D. FRANKLIN designed by J. SCHUREK
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	revisions			D. MARTIN J 03-05-2019 J 14677

![](_page_35_Figure_3.jpeg)

![](_page_35_Picture_4.jpeg)

### PLANT SCHEDULE

TREES FN	<u>QTY</u> 32	<u>BOTA</u> Fraxir
FP	6	Fraxin
ТА	10	Tilia a
UB	37	Ulmus
SHRUBS BT	<u>QTY</u> 284	BOTA Berbe
CP	272	Carag
EA	15	Euony
JA	73	Junipe
PO	66	Physo
RA	59	Ribes
ANNUALS/PERENNIALS HO	<u>QTY</u> 263	<u>BOTA</u> Heme
ORNAMENTAL GRASSES CK2	<u>QTY</u> 2,657	<u>BOTA</u> Calan
CU2	174	Carex
DT2	2,000	Desch
HS2	943	Helicto
JT2	123	Juncu
PF2	1,180	Leymu
SL2	1,198	Schiza

![](_page_35_Picture_7.jpeg)

ANICAL NAME inus americana `Northern Blaze`	COMMON NAME Northern Blaze White Ash	REMARKS Ball & Burlap	<u>SIZE</u> 60mm Cal.	
inus pennsylvanica `Rugby`	Prairie Spire Ash	Ball & Burlap	60mm Cal.	
americana `Duros`	True North American Linden	Ball & Burlap	60mm Cal.	
us americana 'Brandon'	Brandon Elm	Ball & Burlap	60mm Cal.	
ANICAL NAME eris thunbergii `Rose Glow`	COMMON NAME Rose Glow Barberry	REMARKS #2 Container	<u>SIZE</u> 300mm Ht.	
gana pygmaea	Pygmy Caragana	#2 Container	300mm Ht.	
nymus alatus	Winged Burning Bush	#2 Container	450mm Sp.	
perus horizontalis plumosa 'Andorra'	Andorra Juniper	#5 Container	450mm Sp.	
ocarpus opulifolius 'Dart's Gold'	Dart's Gold Ninebark	#2 Container	450mm Ht.	
s alpinum	Alpine Currant	#2 Container	300mm Ht.	
ANICAL NAME erocallis x 'Stella de Oro'	COMMON NAME Stella de Oro Daylily	REMARKS 150mm Pot	<u>SIZE</u> 2 Years Old	
ANICAL NAME magrostis x acutiflora `Karl Foerster`	COMMON NAME Karl Foerster Reed Grass	REMARKS PLUG	<u>SIZE</u> 200mm O.C.	SPACING 200mm
x utriculata	Beaked Sedge	PLUG	200mm O.C.	200mm
hampsia cespitosa	Tufted Hair Grass	PLUG	200mm O.C.	200mm
totrichon sempervirens	Blue Oat Grass	PLUG	200mm O.C.	200mm
us torreyi	Torrey's Rush	PLUG	200mm O.C.	200mm
nus arenarius 'Blue Dune'	Blue Dune Lyme Grass	PLUG	200mm O.C.	200mm
zachyrium scoparium	Little Bluestem Grass	PLUG	200mm O.C.	200mm


		FLANTOUR	IEDULE			
		TREES	QTY BOTANICAL NAME	COMMON NAME	REMARKS SIZE	
ZNA COL	SEED ON TOPSOIL	FN	32 Fraxinus americana 'Northern Blaze'	Northern Blaze White Ash	Ball & Burlap 60mm Cal.	
		тл	<ul> <li>rraxinus pennsylvanica 'Rugby'</li> <li>Tilia americana 'Durce'</li> </ul>	Prairie Spire Ash	Ball & Burlap 60mm Cal.	
	l	J UB	37 Ulmus americana 'Brandon'	Brandon Elm	Ball & Burlap 60mm Cal.	
		SHRUBS	QTY BOTANICAL NAME	COMMON NAME	REMARKS SIZE	
		вт	284 Berberis thunbergii 'Rose Glow'	Rose Glow Barberry	#2 Container 300mm Ht.	
		FA CP	15 Euonymus alatus	Pygmy Caragana	#2 Container 300mm Ht.	
	28 AVENUE FUTURE LRT STOP	JA	<ul><li>73 Juniperus horizontalis plumosa 'Andorra'</li></ul>	Andorra Juniper	#5 Container 450mm Sp.	
		РО	66 Physocarpus opulifolius `Dart's Gold`	Dart`s Gold Ninebark	#2 Container 450mm Ht.	
		RA	59 Ribes alpinum	Alpine Currant	#2 Container 300mm Ht.	
		ANNUALS/PERENNIAL	<u>S</u> <u>QTY</u> <u>BOTANICAL NAME</u> 263 Hemerocallis x Stella de Oro'	COMMON NAME Stella de Oro Daviily	REMARKS SIZE 150mm Pot 2 Years Old	
		ORNAMENTAL GRASS		COMMON NAME	REMARKS SIZE	SPACING
		СК2	2,657 Calamagrostis x acutiflora 'Karl Foerster'	Karl Foerster Reed Grass	PLUG 200mm O.C.	200mm
			2 000 Deschampsia cespitosa	Deaked Sedge	PLUG 200mm O.C.	200mm
		HS2	943 Helictotrichon sempervirens	Blue Oat Grass	PLUG 200mm O.C.	200mm
		JT2	123 Juncus torreyi	Torrey`s Rush	PLUG 200mm O.C.	200mm
		PF2	1,180 Leymus arenarius 'Blue Dune'	Blue Dune Lyme Grass	PLUG 200mm O.C.	200mm
		SL2	1,198 Schizachyrium scoparium	Little Bluestem Grass	PLUG 200mm O.C.	200mm
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(174)CK2						
(320)DT2						
(25)PO			• • \ \			
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			MILL WWODS TRANSI	T CENTRE		ALLEY LINE - STAGE 1
Jeff Schurek	CINOMION    ISSUED FOR TEN	NDER				MILL WOODS TO DOWNTOWN
	- <u> </u>	J	LANDSCAPE DI	AN		
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	issue data			A1 bar scale
				drawn by designed by
	_			D. FRANKLIN J. J. SCHUREK
no.	description	date	checked	(checked by ) (date ) (consultant job no
	revisions			D. MARTIN J 03-05-2019 J 14677

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revisions

date checked checked by

JK

(consultant job no

14677

(consultant reviewed by

B. CAMPBELL

(prime consultant job no

date

03-05-2019

	EX. 150mm WM	EXISTING WATERMAIN, VALVE, REDUCER, TEE, & HYDRANT (INCLUDING	G VALVE)
	450mm STM	CB1 PROPOSED STORM SEWER, MANHOLE, CATCHBASIN MANHOLE & CATC	CHBASIN
	EX. 450mm STM	EXISTING STORM SEWER, MANHOLE, CATCHBASIN MANHOLE & CATCH	BASIN
	FUT. 450mm STM		ASIN
	200mm SAN 0 <sup>S1</sup>	PROPOSED SANITARY SEWER & MANHOLE	
	<i>EX. <u>200mm SAN</u></i> 51 SAN -	EXISTING SANITARY SEWER & MANHOLES	
	FUT. 200mm SAN	FUTURE SANITARY SEWER & MANHOLE	
		EXISTING OVERHEAD POWER, POLES, PED, UNDERGROUND POWER	
		EXISTING LOW, INTERMEDIATE , HIGH PRESSURE GAS LINE	
	TC	EXISTING TELEPHONE LINE, PED, VAULT DUCT LINE	
	SHAW SHAW	EXISTING SHAW LINE	
		+ TO BE ABANDON SEWER	
		PROPOSED POWER, PEDS, STREETLIGHTS	
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	drawing no. MWTC 191 U12





LIGHT STANDARD

EMERGENCY PHONE







0	ISSUED FOR TENDER	03-05-19	JK	<b>Engineering</b> and Land Services Consultant	PERMIT TO PRACTICE ISL Engineering and Land Services Ltd
	issue data			A1 bar scale N.T.S.	Signature Date _2019-05-06 PERMIT NUMBER: P 4741 The Association of Professional Engineers
				drawn by BRT BRT BRT	and Geoscientists of Alberta
no.	description	date	checked	checked by	consultant job no





STORM MANHOLE PLACEMENT INFORMATION								
MANHOLE ID	NORTHING	EASTING	RIM	COVER	DIA.	INVERTS		
ST 12	5925121.809	38000.654	692.806	F80	1200	SE 689.605 NW 689.680 W 690.447 N 690.447		
ST 13	5925133.553	37989.355	692.914	F80	1200	SW 689.778 SE 689.716		
ST1	5925044.263	37768.257	691.882	F80	1200	N 689.113 W 689.013		
ST2	5925095.889	37767.216	692.424	F80	1200	S 689.286 E 689.494 NE 690.556 W 689.386		
ST7	5925053.339	37786.490	692.180	F-80	1200	E 690.110 SW 689.909 NW 689.968		
ST8	5925056.346	37852.975	692.519	F-80	1200	E 689.938 W 690.010 S 690.159 N 690.510 NW 690.907 E 690.902		
ST9	5925060.062	37918.073	692.471	F-80	1200	W 689.860 S 690.430 E 689.785 N 690.413 NE 691.150		
ST10	5925087.596	37977.756	692.360	F80	1200	NE 689.630 SW 689.705 E 690.264 N 690.228 NE 691.000		
ST11	5925111.848	38011.037	692.522	F80	1500	SW 689.589 SE 689.381 NW 689.583		
ST15	5925126.200	37949.074	692.961	F80	1200	W 690.470 S 689.736 E 689.908 N 690.399		
ST 4	5925120.496	37971.796	692.572	F-80	1200	NE 689.826 W 689.856 S 690.470		

SANITARY MANHOLE PLACEMENT INFORMATION									
MANHOLE ID NORTHING EASTING RIM COVER DIA. INVERTS									
S1	5925065.216	37876.696	692.629	F80	1200	E 689.960 N 690.160			
S2	5925066.987	37907.611	692.447	F80	1200	E 689.806 W 689.836			
S3	5925090.807	37969.611	692.339	F80	1200	NE 689.500 SW 689.536			
S4	5925121.155	38007.419	692.618	F80	1200	SW 689.306 SE 689.246 NW 689.678			
S5	5925100.387	38029.067	692.276	F80	1200	NW 689.126 SE 689.096			

CATCH BASIN PLACEMENT INFORMATION									
CB ID	DIA.	COVER	D/S MH	LOG ELEV.	NORTHING	EASTING	LOG to INV		
CB 1	600	2A	CBMH1	691.706	5924970.401	37657.037	2.11		
CB 2	600	2A		691.949	5924973.194	37750.458	1.80		
CB3	600	2A	CBMH 2	691.420	5925017.937	37788.151	1.50		
CB4	600	2A	STB	691.553	5925009.350	37767.208	1.83		
CB5	600	2A	ST2	692.550	5925109.095	37772.884	1.87		
CB6	600	2A	ST L TIE	692.551	5925114.281	37758.143	1.82		
CB7	900	F51	ST7	691.846	5925043.604	37778.140	1.50		
CB8	900	F51	ST7	691.932	5925066.179	37778.630	1.60		
CB9	900	F51	ST8	692.380	5925047.592	37852.535	2.13		
CB10	900	F51	ST8	692.389	5925068.447	37852.187	1.76		
CB11	900	F51	ST9	692.329	5925050.350	37919.729	1.80		
CB12	900	F38	CBMH3	692.932	5925092.411	37907.053	1.90		
CB13	900	F51	ST10	692.165	5925087.759	37991.989	2.61		
CB14	900	F51	ST10	692.151	5925103.809	37975.231	2.61		
CB15	900	F51		692.772	5925124.071	37991.368	1.82		
CB16	600	F38	CBMH4	693.069	5925149.198	37862.745	1.76		
CB17	600	F38	ST15	692.491	5925121.930	37927.388	1.80		
CB18	600	F38	ST15	691.980	5925103.986	37949.732	2.02		
CB19	600	F38	CBMH4	692.910	5925114.132	37886.531	1.77		
CB20	600	F38	ST4	692.343	5925109.684	37886.531	1.76		
CBMH 2	1200	8	ST13	691.168	5925008.611	37967.888	2.8		
CBMH1	1200	4A	STD	691.785	5924958.069	37661.145	2.43		
СВМНЗ	1200	F51	ST9	692.315	5925073.779	37915.442	1.72		
CBMH4	1200	F38	ST14	693.333	5925122.628	37862.214	2.9		





0 no.	ISSUED FOR TENDER ( description	03-05-19 date	JK appd	Engineering and Land Services Consultant	PERMIT TO PRACTICE ISL Engineering and Land Services Ltd
	issue data			A1 bar scale N.T.S.	Date 2019-05-06 PERMIT NUMBER: P 4741
				drawn by BRT designed by BRT	and Geoscientists of Alberta
no.	description revisions	date	checked	Checked by JK 03-05-2019	consultant job no 14677



(drawing no.

MWTC 191 SD03

REV 0

SHT



ISSUED FOR TENDER 03–05–19 JK Consultant description date appd A1 bar scale issue data N.T.S. designed by BRT (drawn by BRT

date checked checked by

JK

(date

03-05-2019

no.

no.

description

revisions

consultant job no 14677

Signature

PERMIT NUMBER: P 4741

The Association of Professional Engineers

and Geoscientists of Alberta

Date \_2019-05-06





2. PRESSURE TEST AND TAP SHALL BE MADE IN PRESENCE OF AN AUTHORIZED REPRESENTATIVE 3. TAP SHALL BE MADE NO CLOSER THAN 600mm FROM THE NEAREST JOINT OR 4. PRIOR TO THE TAP, THE WATER MAIN ISOLATING VALVES MUST BE LOCATED AND CONTINGENCY PLANS MADE FOR THEIR IMMEDIATE SHUT OFF SHOULD A FAILURE OCCUR.

EXISTING WATERLINE

TAPPING VALVE SLEEVE DETAIL



	Professional	AECOM Prime Consultant	ΗΔΤCΗ	ISL Engineering and Land Services
	2019-05-06	Edmonton	ISSUED FOR TENDER	drawing title MILL WOODS TR
$\Big)$	consultant reviewed by B. CAMPBELL	prime consultant job no	prime consultant reviewed by	





# MILL WOODS TRANSIT CENTRE

ISSUED FOR BID 2019-05-03

# DRAWING LIST - ARCHITECTURAL

A0.01	SYMBOLS, LEGENDS & SCHEDULES
A1.01	SITE PLAN - SCOPE OF WORK
A1.02	SITE PLAN
A2.01	OVERALL FLOOR PLAN
A2.02	OVERALL WALKWAY PLAN
A2.03	FLOOR PLAN - HEATED AREA
A2.04	FLOOR PLAN - UNHEATED AREA
A2.05	CLERESTORY PLAN
A2.06	ROOF PLAN
A3.01	REFLECTED CEILING PLAN - HEATED AREA
A3.02	REFLECTED CEILING PLAN - UNHEATED AREA
A4.01	EXTERIOR ELEVATIONS
A4.02	BUILDING SECTIONS
A6.01	PLAN DETAILS
A6.02	SECTION DETAILS
A6.03	PLAN AND SECTION DETAILS
A6.04	PLAN AND SECTION DETAILS
A6.05	PLAN AND SECTION DETAILS
A7.01	INTERIOR ELEVATIONS
A8.01	FINISHES PLAN

# DRAWING LIST - STRUCTURAL

S0.01	GENERAL NOTES - SHEET 1	M0
S0.02	GENERAL NOTES - SHEET 2	M2
S0.03	TYPICAL DETAILS - SHEET 1	M2
S0.04	TYPICAL DETAILS - SHEET 2	M2
S0.05	TYPICAL DETAILS - SHEET 3	M2
S0.06	TYPICAL DETAILS - SHEET 4	М3
S0.07	TYPICAL DETAILS - SHEET 5	M6
S0.50	3D VIEW - BUILDING	
S0.51	3D VIEW - WALKWAY	
S2.00	OVERALL SITE LAYOUT	
S2.01	PILE LAYOUT PLAN	
S2.02	MAIN FLOOR FRAMING PLAN	
S2.03	ROOF FRAMING PLANS - SHEET 1	
S2.04	ROOF FRAMING PLANS - SHEET 2	
S2.05	ROOF FRAMING PLANS - SHEET 3	
S2.06	WALKWAY FOUNDATION AND MAIN FLOOR FRAMING PLANS	
S2.07	WALKWAY ROOF FRAMING PLANS	
S3.00	EXTERIOR ELEVATIONS - SHEET 1	
S3.01	EXTERIOR ELEVATIONS - SHEET 2	
S3.02	EXTERIOR ELEVATIONS - SHEET 3	
S3.03	BUILDING CROSS SECTIONS	
S5.01	STEEL SECTIONS - SHEET 1	
S5.02	STEEL SECTIONS - SHEET 2	
S5.03	STEEL SECTIONS - SHEET 3	

A ISSUED FOR TENDER	2019-05-03	appd	DIALOG	permit	seal	AECOM Prime Consultant	ΗΔΤϹΗ	Engineering and Land Services
issue data			A1 bar scale AS INDICATED drawn by designed by			Edmonton		drawing title MILL WOODS TRA COVER S
o. description revisions	date	checked	Checked by TZ date 2019-05-03	consultant job no 01255E0800	consultant reviewed by TZ	prime consultant job no	prime consultant reviewed by	

DRAWING LIST - MECHANICAL

10.01 LEGEND & DRAWING LIST I2.01 FOUNDATION PLAN 2.02 PIPING PLAN 12.03 VENTILATION PLAN 12.04 ROOF PLAN 13.01 LARGE SCALE PLANS AND SECTIONS *I*6.01 SCHEDULES AND DETAILS

## DRAWING LIST - ELECTRICAL

E0.01	ELECTRICAL DEMOLITION PLAN
E0.02	ELECTRICAL DEMOLITION PLAN
E1.01	ELECTRICAL SITE PLANS
E1.02	ELECTRICAL SITE PLANS
E2.01	LIGHTING AND POWER PLANS
E2.02	LOW TENSION AND LARGE SCALE PLANS
E3.01	SINGLE LINE DIAGRAMS AND RISERS
E3.02	SCHEDULES
E4.01	ELECTRICAL DETAILS
E4.02	ELECTRICAL DETAILS
E4.03	ELECTRICAL DETAILS
E4.04	ELECTRICAL DETAILS



BUILDING CODE SYNOPSIS	EXTERIOR WALL ASSEMBLIES			DOOR SCHEDULE
<ul> <li><b>ZONING BYLAW COMPLIANCE REVIEW</b>         The current zoning of the site is DC1(999), but the transit centre and walkway land will be transferred to Road Right-of-Way.     </li> <li><b>BUILDING CODE SUMMARY</b>         An appropriate fire and life safety solutions has been achieved by adhering to the Alberta Building Code in all instances except one. The exemption request is to relax the requirement for barrier free accessibility for ETS staff washrooms. ETS has confirmed that bus drivers must be able-bodied to operate any ETS vehicle, thus negating the need for barrier free stalls. A Standata has been released that satisfies this condition.     </li> <li><b>AUTHORITIES HAVING JURISDICTION</b>         1. The City of Edmonton     </li> </ul>	W1 - 120mm THICK ARCHITECTURAL PRECAST CONCRETE PANEL WITH FORM LINER PATTERN - 25mm AIR SPACE - 100mm RIGID INSULATION - AIR/VAPOUR MEMBRANE - 16mm GYPSUM SHEATHING - 152mm STEEL STUD @406mm O.C. - 64mm STEEL STUD @406mm O.C. - 16mm GYPSUM BOARD (R-VALUE OF WALL ASSEMBLY = RSI 4.05)	<ul> <li>W3 -100mm PRECAST CONCRETE PANEL         <ul> <li>25mm AIR SPACE</li> <li>100mm RIGID INSULATION</li> <li>AIR/VAPOUR MEMBRANE</li> <li>STRUCTURAL CONCRETE CURB</li> </ul> </li> <li>W3a -100mm PRECAST CONCRETE PANEL         <ul> <li>25mm AIR SPACE</li> <li>25mm AIR SPACE</li> <li>75mm RIGID INSULATION</li> <li>AIR/VAPOUR MEMBRANE</li> <li>STRUCTURAL CONCRETE CURB</li> <li>(W3a) (UNDER GLAZING WALL IN HEATED WAITING AREA)</li> </ul> </li> </ul>	<ul> <li>-PREFINISHED METAL FLASHING         <ul> <li>25mm AIR SPACE</li> <li>100mm RIGID INSULATION</li> <li>AIR/VAPOUR MEMBRANE</li> <li>16mm GYPSUM SHEATHING</li> <li>152mm STEEL STUD @406mm O.C.</li> <li>16mm GYPSUM BOARD</li> <li>125mm AIR SPACE</li> <li>120mm THICK ARCHITECTURAL PRECAST CONCRETE PANEL WITH FORM LINER PATTERN</li> </ul> </li> </ul>	From Room: MarkTo Room: NumberDOCR PARAMETERSDoc PARAMETERSDoc Hardwa Frame_Glazing MaterialPanel_Glazing MaterialPanel_Glazing MaterialPanel_Glazing Panel_FinishDoor_Hardwa re GroupMarkWidthHeightDoor TypePanel_MaterialPanel_Glazing Panel_FinishPanel_Stazing Panel_FinishDoor_FRRDoor_FRRDoor_Hardwa re GroupCommentsD1011011029152135AHMP2-G5PSP3-G50.75005Card ReaderD1021021039152135AHMP2-G5PSP3-G50.75005Card ReaderD10311110310502340BHMP#-G#PSP#-G#0.75006Flush mounted Door, Card Reader, Paint as per 2/8.01D1041111049152340BHMP#-G#PSP#-G#003Flush mounted Door, Card Reader, Paint as per 2/8.01D1061111069152340BHMP#-G#PSP#-G#003Flush mounted Door, Card Reader, Paint as per 2/8.01D1071111079152340BHMP#-G#PSP#-G#004Flush mounted Door, Card Reader, Paint as per 2/8.01D1061111089152340BHMP#-G#PSP#-G#004Flush mounted Door, Card Reader, Paint as per 2
<ul> <li>2. Safety Codes Council, the Province of Alberta</li> <li>SYNOPSIS SUMMARY PROJECT DESCRIPTION</li> <li>1. Building Area: 320 m<sup>2</sup> (public heated area = 170 m<sup>2</sup>)</li> <li>2. Number of Storeys: 1</li> <li>3. Sprinklered: No</li> <li>4. Fire Alarm System: No</li> <li>5. Occupantcy: Group A, Division 2, One Storey (ABC 2014, 3.2.2.28)</li> <li>6. Occupant Load: Occupant Load based on standing space of 0.6 occupant per sq.m. (ABC 2014 Table 3.1.17.1). 170 / 0.6 = 283 occupants, which would not be possible due to fixed seats, waste receptacles and other objects. However, even with an occupant load of 283 people, the two east and west exit doors at 6.1m per person for doorways (ABC 2014 3.4.3.2) permits a maximum occupant load of 590 people.</li> <li>CONSTRUCTION <ol> <li>ABC 2014 3.2.2.28, Group A, Division 2, One Storey</li> <li>One storey in height</li> <li>No more than 400m<sup>2</sup> if facing one street</li> <li>Combustible or non-combustible construction permitted</li> </ol> </li> <li>EXTING <ul> <li>Roof: 0 hour</li> <li>Public Corridor: 0 hour</li> <li>Mechanical &amp; Electrical Service Rooms: 1 hour (ABC 2014, 3.6.2.1.(2))</li> <li>Janitor Room: 1 hour (ABC 2014, 3.3.1.21)</li> </ul> </li> <li>WASHROOM FACILITIES <ul> <li>The design provides two ETS operator washrooms and two public washrooms.</li> </ul> </li> </ul>	<ul> <li>W1</li> <li>120mm THICK ARCHITECTURAL PRECAST CONCRETE PANEL WITH FORM LINER PATTERN</li> <li>25mm AIR SPACE</li> <li>100mm RIGID INSULATION</li> <li>AIR/VAPOUR MEMBRANE</li> <li>16mm FIRE RATED GYPSUM SHEATHING</li> <li>152mm STEEL STUD @406mm O.C.</li> <li>64mm STEEL STUD @406mm O.C.</li> <li>16mm FIRE RATED GYPSUM BOARD (R-VALUE OF WALL ASSEMBLY = RSI 4.05)</li> <li>W1a)</li> <li>120mm THICK ARCHITECTURAL PRECAST CONCRETE PANEL WITH FORM LINER PATTERN</li> <li>100mm AIR SPACE</li> <li>25mm RIGID INSULATION</li> <li>AIR/VAPOUR MEMBRANE</li> <li>16mm GYPSUM SHEATHING</li> <li>152mm STEEL STUD @406mm O.C.</li> <li>W1b)</li> <li>120mm THICK ARCHITECTURAL PRECAST CONCRETE PANEL WITH FORM LINER PATTERN</li> <li>100mm AIR SPACE</li> <li>25mm RIGID INSULATION</li> <li>AIR/VAPOUR MEMBRANE</li> <li>16mm GYPSUM SHEATHING</li> <li>152mm STEEL STUD @406mm O.C.</li> <li>W1b)</li> <li>120mm THICK ARCHITECTURAL PRECAST CONCRETE PANEL WITH FORM LINER PATTERN</li> <li>100mm THICK PRECAST CONCRETE PANEL</li> <li>25mm AIR SPACE</li> <li>25mm RIGID INSULATION</li> <li>AIR/VAPOUR MEMBRANE</li> <li>16mm GYPSUM BOARD</li> <li>152mm STEEL STUD @406mm O.C.</li> <li>W2)</li> <li>3mm THICK STEEL PLATE PRIMED WITH SUB GIRT SYSTEM</li> <li>25mm AIR SPACE</li> <li>25mm RIGID INSULATION</li> <li>AIR/VAPOUR MEMBRANE</li> <li>16mm GYPSUM BOARD</li> <li>152mm STEEL STUD @406mm O.C.</li> </ul>	<ul> <li>+100mm PRECAST CONCRETE PANEL - 100 AIR SPACE - AIR/VAPOUR MEMBRANE - STRUCTURAL CONCRETE CURB (UNDER GLAZING WALL IN UNHEATED WAITING AREA)</li> <li>CURTAIN WALL ASSEMBLIES</li> <li>CW2 -DOUBLE PANE GLAZING UNIT IN STRUCTURAL STEEL CHANNEL EMBEDDED IN 200mmX 450mm STRUCTURAL CONCRETE CURB AND TO U/S OF STRUCTURE ABOVE</li> <li>-10mm TEMPERED GLASS IN STAINLESS STEEL CHANNEL EMBEDDED IN 200mmX 450mm STRUCTURAL CONCRETE CURB AND TO U/S OF STRUCTURE ABOVE</li> <li>CW1 -10mm TEMPERED GLASS IN STAINLESS STEEL CHANNEL EMBEDDED IN 200mmX 450mm STRUCTURAL CONCRETE CURB AND TO U/S OF STRUCTURE ABOVE</li> <li>PARAPET WALL ASSEMBLIES</li> <li>(PP1) WALL - 20mm THICK CONCRETE LINER PATTERN - 100mm THICK PRECAST CONCRETE PANEL - 25mm AIR SPACE - 100mm RIGID INSULATION - BUILDING PAPER - 16mm GYPSUM SHEATHING - 152mm STEEL STUD @406mm O.C. - 19mm PLYWOOD</li> </ul>	INTERIOR WALL ASSEMBLIES            P1         P1         P1	D10       111       111       110       1111       111       111 <th1< td=""></th1<>
The operator male washroom has two water closets and two urinals. The operator female washroom has two water closets. The two public washrooms are both gender neutral and fully barrier free single use washroom with automatic doors.	- 16mm GYPSUM SHEATHING - 152mm STEEL STUD @406mm O.C. - 16mm GYPSUM BOARD - 3mm THICK STEEL PLATE PRIMED WITH SUB GIRT SYSTEM - 25mm AIR SPACE - 25mm RIGID INSULATION - AIR/VAPOUR MEMBRANE - 16mm FIRE RATED GYPSUM SHEATHING - 152mm STEEL STUD @406mm O.C. - 16mm FIRE RATED GYPSUM BOARD	- ROOFING MEMBRANE <u>CAP</u> - SLOPED PRECAST CONCRETE CAP WITH LINER PATTERN - ROOF MEMBRANE - 19mm PLYWOOD <u>VALL</u> - PREFINISHED METAL FASCIA ON SUB GIRT SYSTEM - 15mm AIR SPACE - 50mm RIGID INSULATION - BUIL DING PAPER	- 92mm C-H STEEL STUD @406mm O.C. - 25mm SHAFT LINER  FURRING WALL ASSEMBLIES  (F1) - 16mm GYPSUM BOARD - 92mm STEEL STUD @406mm O.C. - BATT INSULATION TO FILL STUD CAVITY	WALL MOUNTED ACCESSORIES       BACKING DETAILS       DOOR SCHEDULE ABBREVIATION         Image: CH coar hook       General notes       ABBREVIATION       Material description         Image: G1 log grab bar       I.       Image:
SYMBOL LEGENDS DETAIL NUMBER REFERENCE SIM / TYP / REV PLAN DETAIL REFERENCE DRAWING NUMBER REFERENCE SECTION NUMBER REFERENCE SIM / TYP / REV WALL / DETAIL SECTION REFERENCE	LEVEL NAME LEVEL TAG LEVEL ELEVATION LEVEL ELEVATION LEVEL NAME ROOM TAG LEVEL ELEVATION DOOR NUMBER TAG	<ul> <li>16mm GYPSUM SHEATHING</li> <li>92mm STEEL STUD @406mm O.C.</li> <li>19mm PLYWOOD</li> <li>ROOFING MEMBRANE</li> <li>CAP</li> <li>PREFINISHED METAL FLASHING</li> <li>ROOF MEMBRANE</li> <li>TWO LAYERS OF 19mm SLOPED PLYWOOD</li> </ul> (PP3) WALL <ul> <li>PREFINISHED METAL FASCIA ON SUB GIRT SYSTEM</li> <li>65mm AIR SPACE</li> <li>16mm GYPSUM SHEATHING</li> <li>92mm STEEL STUD @406mm O.C.</li> <li>16mm GYPSUM SHEATHING</li> <li>PREFINISHED METAL FASCIA ON SUB GIRT SYSTEM</li> <li>CAP</li> <li>PREFINISHED METAL FASCIA ON SUB GIRT SYSTEM</li> <li>CAP</li> <li>PREFINISHED METAL FASCIA ON SUB GIRT SYSTEM</li> <li>CAP</li> <li>PREFINISHED METAL FLASHING</li> <li>TWO LAYERS OF 19mm SLOPED PLYWOOD</li> </ul>	ROOF ASSEMBLIES ROOFING MEMBRANE - ROOFING MEMBRANE - MEMBRANE UNDERLAY - 100mm RIGID INSULATION BACK SLOPE INSULATION TO ROOF DRAIN, AS INDICATED ON ROOF PLAN - MINIMUM 2% - AIR VAPOUR MEMBRANE - 16mm GYPSUM SHEATHING - STRUCTURAL DECK (R- VALUE OF ASSEMBLY - RSI 4.05) R2 - TRANSLUCENT ROOF PANEL SYSTEM - STRUCTURAL FRAMING	3. EXTEND REINFORCING ONE STUD SPACE BEYOND EDGES OF ACCESSORY ANCHOR POINTS AND BEYOND EDGES OF MILLWORK, CASEWORK AND TO EQUIPMENT.       To TEMPERED GLASS         M1       900Wx1000Hmm MIRROR       4. INSTALL REINFORCING AT HEIGHTS APPROPRIATE TO SCHEDULED ACCESSORY, FITTING AND EQUIPMENT. REFER TO ACCESSORY MOUNTING HEIGHTS SCHEDULE.       4. INSTALL REINFORCING AT HEIGHTS APPROPRIATE TO SCHEDULED ACCESSORY, FITTING AND EQUIPMENT. REFER TO ACCESSORY MOUNTING         MS       MOP STRIP       4. INSTALL REINFORCING WIDTH EXCEPT of WHERE NOTED OTHERWISE       4. INSTALL REINFORCING AT HEIGHTS SCHEDULED ACCESSORY.         ND       NAPKIN DISPOSAL       Image: Comparison of the structure of t
REFERENCE SIM / TYP / REV ELEVATION NUMBER EXTERIOR ELEVATION REFERENCE DRAWING NUMBER Ref DRAWING NUMBER REFERENCE SIM / TYP / REV INTERIOR ROOM ELEVATION REFERENCE ELEVATION NUMBER 0 REF GO O REF INTERIOR ROOM ELEVATION REFERENCE ELEVATION NUMBER	F1FLOOR ASSEMBLY TAG11WALL / PARTITION ASSEMBLY TAG11CEILING ASSEMBLY CEILING ASSEMBLY TAG CEILING HEIGHT A.F.F.11CEILING ASSEMBLY TAG CEILING HEIGHT A.F.F.11ROOF ASSEMBLY TAG11FINISH TYPE TAG11EQUIPMENT TYPE TAG11ACCESSORY TYPE TAG	FIRE EXTINGUISHER DETAIL	ACCESSORIES LEGEND AND MOUNTIN	G HEIGHTS SCHEDULE
A       ISSUED FOR TENDER       2019-05-03         no.       description       date       appd.         A1       bc         Model       date       appd.         Model       date       appd.         Model       date       appd.         Model       date       appd.         Model       appd.       appd.         Model       appd. <td< td=""><td>DIALOG Consultant Dr scale AS INDICATED by DA designed by MR date 2019-05-03</td><td>onsultant job no 01255E0800</td><td>AECOA Prime Consultant Genoto eviewed by prime consultant job no</td><td>HATCH       Image: Engineering middled service         Image: Image:</td></td<>	DIALOG Consultant Dr scale AS INDICATED by DA designed by MR date 2019-05-03	onsultant job no 01255E0800	AECOA Prime Consultant Genoto eviewed by prime consultant job no	HATCH       Image: Engineering middled service         Image:





	Future LR	T Station	28 Ave.		DASHED LINE INDICATES DIALOG'S SC DIALOG ELECTRICAL'S SCOPE OF WOF PARKING LOTS. THE FOLLOWING TEXT ARCHITECTURAL: • COVERED WALKWAY • HEATED TRANSIT CENTRE BUIL • UNHEATED WAIT AREA • WOOD BENCHES USED THROU STRUCTURAL: • COVERED WALKWAY (EXCLUDI • HEATED TRANSIT CENTRE BUIL • UNHEATED WAIT AREA (EXCLU • STRUCTURAL PILE FOR THE ET • LIGHT STANDARD CONCRETE F MECHANICAL: • ALL MECHANICAL SERVICES IN PLUMBING, AND ROOF WATER ELECTRICAL: • ROADWAY LIGHTING AND DIST • BUILDING LIGHTING AND TRANS • DISTRIBUTED PUBLIC ADDRESS • EMERGENCY PHONES THROUG • CCTV DISTRIBUTED SECURITY • ACCESS CONTROL SYSTEM ON • NETWORK COMMUNICATION SY • LIGHT STANDARDS AND BLOCK PROJECT SITE
		PROPER	RTY LINE LOCATION OF ETS CLOCK TOWER, REFER TO STRUCTURAL DRAWING FOR PILE CAP DETAIL		
		Seql	PROJECT NORTH NORTH A.O.1 SITE SCALE		
A ISSUED FOR TENDER 2019-05-03 no. description date appd.	Consultant		AECOM Prime Consultant	ΗΔΤϹΗ	Engineering and Land Services
A1 bar scale AS INDICATED	ned by		Edmonton		drawing title MILL WOODS TF

PE OF WORK FOR ARCHITECTURE, STRUCTURE AND MECHANICAL DISCIPLINES. ( EXTENDS THROUGHOUT THE PROJECT SITE AND BEYOND INTO THE ADJACENT DESCRIBES DIALOG'S SCOPE OF WORK PER DISCIPLINE.

ING HOUT THE SITE

IG SLAB ON GRADE) )ING ING SLAB ON GRADE) CLOCK TOWER .ES

HE HEATED TRANSIT CENTRE BUILDING. INCLUDING, BUT NOT LIMITED TO HVAC, RAINAGE

IBUTION SYSTEM IT CENTRE SITE LIGHTING SYSTEM, COVERED WALKWAY AND BUILDINGS HOUT THE SITE PAMERA SYSTEM THROUGHOUT BUILDING AND SITE TRANSIT CENTER STEM AND INTERCONNECTION TO LRT STATION HEATER CHANGES ASSOCIATED WITH THREE PARKING LOTS ADJACENT TO





consultant reviewed by TZ

# SITE PLAN GENERAL NOTES



CONSTRUCTION PLAN KEYNOTES







CONSTRUCTION PLAN KEYNOTES
201 STRUCTURAL COLUMN; PAINTED
221 STRUCTURAL CONCRETE CURB
225 LINE OF GLAZING ABOVE
230 LINE OF ROOF ABOVE
232 PRECAST CONCRETE PANEL JOINT WITH
CONTINUOUS SEALANT AND BACKER ROD;
ALIGN WITH GLASS PANEL JOINT; TYPICAL



SIT CENTRE	VALLEY LINE - S	STAGE 1
Y PLAN	drawing no. MWTC 191 A2.05	REV No SHT

CONSTRUCTION PLAN KEYNOTES

201 STRUCTURAL COLUMN; PAINTED

216STRUCTURAL FIN SUPPORT228MECHANICAL EXHAUST GRILLE

230 LINE OF ROOF ABOVE

210 SPIDER FITTING SYSTEM FOR GLAZING SUPPORT

215 PREFINISHED METAL SHROUD FOR MECHANICAL INFRARED HEATER; POWDER COATED WHITE

236 16 GUAGE 75x75mm SQUARE GALVANIZED STEEL RAIN WATER LEADER











<b>BUILDING SECTION &amp; ELEVATION KEYNOTES</b>		
404	PRECAST PANEL JOINTS	
408	VENDING MACHINE (N.I.C.)	
411	REFER TO ELEVATION DETAIL 2/A2.04 FOR PRECAST PANEL HEIGHT	
414	MECHANICAL GRILLE	
418	RECESSED FIRE EXTINGUISHER	



	DETAIL KEYNOTES
601	MITERED GLASS JOINT WITH SILICONE SEALANT
604	PREFINISHED METAL TRIM; CUSTOM COLOR TO MATCH METAL CLADDING
605	100mm THICK TRANSLUSCENT ROOF PANEL SYSTEM
609	GALV. STEEL EMBED FOR PRECAST PANEL SUPPORT BY PRECAST SUPPLIER; SEAL AIR/VAPOUR MEMBRANE AROUND PRECAST ANCHOR; COORDINATE WITH PRECAST SUPPLIER
612	PROVIDE DOUBLE MEMBRANE STRIPPING (MINIMUM 150mm OVERLAP EACH WAY) ON ALL OUTSIDE & INSIDE CORNERS
615	STRUCTURAL FRAMING; PAINTED
616	EMBEDDED STRUCTURAL ANGLE/CHANNEL; ALIGN TOP EDGE OF ANGLE TO SLOPED EDGE OF CONCRETE CURB (TYPICAL AT ALL EXPOSED CORNERS)
617	PREFINISHED ALUMINUM FLASHING
618	STAINLESS STEEL GLAZING CHANNEL; ALLOW FOR 25mm DEFLECTION BETWEEN GLASS AND GLAZING CHANNEL AT THE BASE OF ALL GLAZING WALLS
619	LINE OF BULKHEAD ABOVE
629	STRUCTURAL CONCRETE CURB
632	GALVANIZED STEEL GUTTER WITH ALL JOINTS WELDED & WATER TIGHT. APPLY CONTINUOUS ROOFING MEMBRANE ON ALL SIDES OF GUTTER; TYPICAL FOR ALL GUTTERS
634	STRUCTURAL COLUMN; PAINTED
640	CONTINUOUS SEALANT WITH FOAM BACKER ROD
642	DASHED LINE INDICATES STRUCTURAL PURLIN BELOW
643	EDGE FLASHING BY ROOF PANEL SUPPLIER
644	CONTINUOUS ALUMINUM EDGE CAP; TYPICAL FOR ALL EXPOSED GLASS EDGES
653	PREFINISHED ALUMINUM TRIM
655	TWO LAYERS OF 19mm PLYWOOD
657	16 GUAGE 75x75mm SQUARE GALVANIZED STEEL RAIN WATER LEADER
658	MECHANICAL GRILLE
662	SPRAY FOAM INSULATION TO FILL STUD CAVITY
663	STRUCTURAL PLATE TO SUPPORT SPIDER FITTING





	DETAIL KEYNOTES
602	RIDGE CAP FLASHING BY MANUFACTURER
606	CONTINUOUS GALVANIZED STRUCTURAL STEEL PLATE
607	STRUCTURAL PLATE; PAINTED
608	DOOR OPERATOR
609	GALV. STEEL EMBED FOR PRECAST PANEL SUPPORT BY PRECAST SUPPLIER; SEAL AIR/VAPOUR MEMBRANE AROUND PRECAST ANCHOR; COORDINATE WITH PRECAST SUPPLIER
615	STRUCTURAL FRAMING; PAINTED
616	EMBEDDED STRUCTURAL ANGLE/CHANNEL; ALIGN TOP EDGE OF ANGLE TO SLOPED EDGE OF CONCRETE CURB (TYPICAL AT ALL EXPOSED CORNERS)
617	PREFINISHED ALUMINUM FLASHING
618	STAINLESS STEEL GLAZING CHANNEL; ALLOW FOR 25mm DEFLECTION BETWEEN GLASS AND GLAZING CHANNEL AT THE BASE OF ALL GLAZING WALLS
626	DRAINAGE BOARD
627	LOAD BEARING INSULATION
628	STRUCTURAL ANGLE
629	STRUCTURAL CONCRETE CURB
630	SCHEDULED DOOR FRAME
632	GALVANIZED STEEL GUTTER WITH ALL JOINTS WELDED & WATER TIGHT. APPLY CONTINUOUS ROOFING MEMBRANE ON ALL SIDES OF GUTTER; TYPICAL FOR ALL GUTTERS
633	100mm THICK TRANSLUSCENT ROOF PANEL SYSTEM
634	STRUCTURAL COLUMN; PAINTED
635	STUCTURAL FIN SUPPORT; PAINTED
637	PRECAST CONCRETE PANEL
639	PREFINISHED METAL FLASHING AROUND COLUMN; CUSTOM COLOR TO MATCH STRUCTURAL FRAMING
641	APPLY ROOFING MEMBRANE ON ALL INTERIOR FACES OF GUTTER
643	EDGE FLASHING BY ROOF PANEL SUPPLIER
646	PREFINISHED FLASHING TO MATCH WITH METAL CLADDING
647	ANTI BIRD DETERRENT SYSTEM
651	10mm THICK ISOLATION JOINT WITH FIBRE BOARD AND CONTINUOUS SEALANT ON TOP
652	SLAB ON GRADE
660	ANCHORING SYSTEM BY ROOF PANEL MANUFACTURER
664	PROVIDE FALL ARREST ANCHOR SYSTEM ANCHORED TO EACH STRUCTURAL FRAME ABOVE ROOF; TYPICAL AT ALL GRID LINES

REV **No** Sht








## **GENERAL NOTES:**

- 1. READ THE STRUCTURAL DRAWINGS IN CONJUNCTION WITH THE SPECIFICATIONS AND OTHER CONTRACT DOCUMENTS. CHECK AND VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS BEFORE COMMENCING WITH THE WORK. NOTIFY CONSULTANT OF ANY DISCREPANCIES, OMISSIONS OR ERRORS.
- 2. OPENINGS AND SLEEVES SHOWN ARE LOCATED AND DIMENSIONED FOR DETAILING PURPOSES ONLY. THE EXACT SIZE AND LOCATIONS MUST BE COORDINATED WITH THE CONSULTANT AND TRADES DURING CONSTRUCTION.
- 3. REFER TO THE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR LOCATIONS AND DIMENSIONS OF OPENINGS AND SLEEVES NOT SHOWN ON THE STRUCTURAL DRAWINGS. REPORT ANY DISCREPANCIES TO THE CONSULTANT AND OBTAIN INSTRUCTIONS PRIOR TO PROCEEDING WITH THE WORK.
- 4. REFER TO THE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR THE LOCATION OF PITS, EQUIPMENT BASES, SUMPS, DEPRESSIONS, GROOVES, CURBS, CHAMFERS, SLABS, ETC, NOT SHOWN ON THE STRUCTURAL DRAWINGS.
- 5. THE STRUCTURAL DRAWINGS ARE FOR THE COMPLETED PROJECT. THE CONSTRUCTOR IS RESPONSIBLE FOR THE SAFETY OF WORKERS AND THE STABILITY OF THE STRUCTURE DURING CONSTRUCTION. IN PARTICULAR, THE RESPONSIBILITY CONCERNING THE SAFETY OF WORKERS AND STRUCTURES DURING ALL DEMOLITION WORK IS ASSUMED BY THE CONSTRUCTOR. REPORT ANY POTENTIAL RISKS TO THE CONSULTANT AND OBTAIN INSTRUCTIONS PRIOR TO PROCEEDING WITH THE WORK. CONSTRUCTION LOADS SHALL NOT EXCEED THE LOADS TABULATED IN THE DESIGN NOTES.
- 6. MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE ALBERTA BUILDING CODE 2014.
- 7. 3D VIEWS ON DRAWINGS SHOW A LIMITED AMOUNT OF INFORMATION AND ARE PROVIDED ONLY TO ILLUSTRATE OVERALL CONTEXT. REFER TO PLANS, SECTIONS AND SPECIFICATIONS FOR DETAILED INFORMATION.

## **DESIGN LOADS**:

- 1. LOADS ARE ACCORDING TO THE ALBERTA BUILDING CODE 2014.
- 2. LOADS SHOWN ON DRAWINGS
- .1 UNLESS NOTED OTHERWISE, SPECIFIED LOADS ARE SHOWN ON DRAWINGS.

NORMAL

- 3. IMPORTANCE CATEGORY
- .1 IMPORTANCE CATEGORY
- 4. LATERAL LOADS FROM WIND AND EARTHQUAKE
- .1 WIND LOADS

REFERENCE VELOCITY PRESSURE (q1/50)	0.45 kPa
INTERNAL PRESSURE CATEGORY	2
IMPORTANCE FACTOR	1.0 (ULS)
	0.75 (SLS)

EARTHQUAKE LOADS	
Sa(0.2)	0.10
Sa(0.5)	0.06
Sa(1.0)	0.03
Sa(2.0)	0.01
PGA	0.04
FOUNDATION SITE CLASS	С
Rd	1.5
Ro	1.3
IMPORTANCE FACTOR	1.0
IN ACCORDANCE WITH ABC 2014, SEISMIC	LOADS DO NOT NEED TO BE CONSIDERED

.3 LATERAL LOADS FROM WIND ARE RESISTED BY STEEL BRACING AND STEEL MOMENT FRAMES

5.	SPECIFIED LOADS FOR FLOOR AND ROOF DESIGN (UNLESS NOTED OTHERWISE ON PLANS)	<u>N</u>
.1	MAIN FLOOR AREAS, SLAB ON GRADE LIVE (ASSEMBLY AREAS, CORRIDORS) SUPERIMPOSED DEAD (FINISHES, SERVICES) CONCENTRATED LIVE (TYPICAL)	4.8 kPa 0.5 kPa 9 kN
.2	INTERIOR ROOF LIVE SNOW SUPERIMPOSED DEAD	1.0 kPa 1.46 kPa + DRIFTING. 1.0 kPa
.3	EXTERIOR ROOF LIVE BASIC SNOW AND RAIN SUPERIMPOSED DEAD	1.0 kPa 1.46 kPa 1.0 kPa (HEATED AREAS) 0.50 kPa (UNHEATED AREAS)

THE SUPERIMPOSED DEAD LOADS NOTED ABOVE INCLUDE ALLOWANCES FOR WEIGHTS OF CEILINGS. SERVICES. ROOFING AND OTHER FINISHES

6. WALL CLADDING LOADS

.1 SPECIFIED DEAD LOAD FROM WALL CLADDING GLASS 1.0 kPa

00,000	1.0 10 0
METAL PANEL	1.0 kPa
CONCRETE VENEER	3.0 kPa

## **CAST-IN-PLACE CONCRETE NOTES:**

- 1. CONCRETE
- .1 CONCRETE: CONFORM TO CSA A23.1-14, NORMAL WEIGHT, MEETING THE PERFORMANCE

PROPERTIES LISTED ON DRAWINGS AND THE SPECIFICATIONS UNLESS NOTED OTHERWISE:					
CLASS OF CONCRETE	CLASS OF EXPOSURE	MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS (MPa)	NOMINAL MAXIMUM SIZE OF AGGREGATE (mm)	AIR CONTENT (%)	MINIMUM WATER/ CEMENTING MATERIALS RATIO
EXTERIOR CONCRETE					
PILES	S-2	32	20	4-7	0.45
PILE CAPS AND GRADE BEAMS	C-1 / S-2*	35	20	5-8	0.40
ARCHITECTURAL PRECAST CONCRETE CLADDING	C-1 / S-2*	35	20	5-8	0.40
INTERIOR CONCRETE					
SLABS	N	30	20	-	-

\* MIXES MUST MEET THE REQUIREMENTS OF BOTH CLASSES

- FOR HORIZONTAL ELEMENTS.
- .3 REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR CONCRETE FINISH REQUIREMENTS.
- 2. REINFORCED CONCRETE WORK
- .1 REINFORCED CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF CSA A23.1-14.
- .2 REINFORCING STEEL: BILLET STEEL CONFORMING TO CSA G30.18-09 (R2014) GRADE 400. USE GRADE 400W WHERE WELDING OR GALVANIZING IS NOTED OR REQUIRED.
- .3 REINFORCE SLABS ON GRADE, INCLUDING SIDEWALKS WITH 10M@300 E/W MID UNLESS OTHER REINFORCEMENT IS SHOWN.
- .4 CONCRETE COVER TO REINFORCING STEEL SHALL CONFORM TO THE APPLICABLE REQUIREMENT LISTED BELOW THAT RESULTS IN THE GREATEST AMOUNT OF COVER:

CONCRETE CAST AGAINST EARTH

- CONCRETE CAST-IN FORMS BUT EXPOSED TO EARTH OR WEATHER -SLABS EXPOSED TO DE-ICING CHEMICALS -TOP BARS
- -BOTTOM BARS
- -OTHER SLABS

-TOP BARS -BOTTOM BARS

-BEAMS, GIRDERS, COLUMNS (TO TIES), STIRRUPS -WALLS

CONCRETE NOT EXPOSED TO WEATHER AND NOT IN CONTACT WITH EARTH -SLAB BOTTOM REINFORCING -2 hr OR LESS FIRE RESISTANCE RATING

-SLAB TOP REINFORCING -BEAMS, GIRDERS, COLUMNS (TO STIRRUPS AND TIES) 40 mm OR 1.0 x BAR Ø -WALLS EXPOSED TO FIRE ON BOTH SIDES (VERTICAL REINFORCING) -OTHER WALLS

- .5 MINIMUM CLEAR SPACING BETWEEN BARS = 1.4 x BAR Ø.
- .6 PROVIDE DOWELS OF THE SAME SIZE, NUMBER, AND SPACING WHERE REINFORCING IS SPLICED, UNLESS NOTED OTHERWISE.
- .7 SUBMIT TO THE CONSULTANT FOR REVIEW THE LOCATION OF ALL CONSTRUCTION JOINTS NOT SHOWN ON THE DRAWINGS.
- .8 HORIZONTAL CONSTRUCTION JOINTS SHALL NOT BE MADE IN BEAMS UNLESS SHOWN ON THE DRAWINGS.
- .9 SUBMIT TO THE CONSULTANT FOR REVIEW THE LOCATIONS OF ALL SLEEVES AND OPENINGS NOT SHOWN ON THE DRAWINGS. THE CONSULTANT WILL PROVIDE STRUCTURAL DETAILS AS REQUIRED FOR SLEEVES AND OPENINGS.
- .10 SLEEVES SHALL NOT BE PLACED HORIZONTALLY ALONG OR VERTICALLY THROUGH BEAMS UNLESS REVIEWED BY THE CONSULTANT.
- .11 ALL REINFORCEMENT EMBEDDED WITH ADHESIVE SHALL GET SUFFICIENT EMBEDMENT TO DEVELOP THE FULL CAPACITY OF THE EMBEDDED BAR, UNLESS NOTED OTHERWISE.

	ISSUED FOR TENDER description	2019-05-03	RR	DIALOG	permit	seal	AECOM Prime Consultant	ΗΔΤϹΗ	ISL Engineering and Land Services
	issue data			A1 bar scale AS INDICATED drawn by LV RR		2019-05-04 P#10020	Edmonton		drawing title MILL WOODS TRA GENERAL NOTE
no	description revisions	date	checked	checked by RR date 2019-05-03	consultant job no	consultant reviewed by RR	prime consultant job no	prime consultant reviewed by	

## 

### .2 FLY ASH CONTENT SHALL NOT EXCEED 40% OF TOTAL CEMENTITIOUS MATERIALS FOR VERTICAL ELEMENTS AND 25%

75 mm

60 mm OR 2.0 x BAR Ø
40 mm OR 1.5 x BAR Ø

40 mm OR 1.5 x BAR Ø

40 mm OR 1.5 x BAR Ø 40 mm OR 1.5 x BAR Ø

40 mm OR 1.5 x BAR Ø

25 mm OR 1.0 x BAR Ø 25 mm OR 1.0 x BAR Ø

50 mm 40 mm OR 1.0 x BAR Ø

# CAST-IN-PLACE CONCRETE NOTES CONT:

3. CONCRETE FORMWORK

- .1 FORMWORK: CONFORM TO CAN/CSA S269.1-16.
- .2 PROVIDE 100 THICK VOID FORM UNDER ALL GRADE BEAMS, STRUCTURAL SLABS ON GRADE AND WHERE SHOWN.
- .3 VOID FORM MATERIALS:
- TYPE 'A' EXPANDED POLYSTYRENE COMPRESSIBLE FILL MATERIAL. FOR USE UNDER PILE CAPS, WALLS AND GRADE BEAMS. TYPE 'B' 6 mm MINIMUM HARD BOARD OVER CRUSHABLE BIODEGRADABLE FILLER OF
  - SUFFICIENT STRENGTH TO SUPPORT THE SLAB CONCRETE AND CONSTRUCTION LOAD UNTIL THE CONCRETE HAS CURED. FOR USE UNDER STRUCTURAL SLABS ON GRADE.
- .4 REFER TO ARCHITECTURAL DRAWINGS FOR CHAMFERS ON CORNERS OF COLUMNS, BEAMS, AND WALLS. USE SQUARE EDGES ON EXPOSED CORNERS UNLESS CHAMFERS OF OTHER SIZE ARE SHOWN ON DRAWINGS.

## STEEL NOTES:

-BOLTS:

- 1. STRUCTURAL STEEL
- .1 DESIGN, FABRICATE, AND ERECT STRUCTURAL STEEL IN ACCORDANCE WITH CSA S16-14 AND THE CISC CODE OF STANDARD PRACTICE FOR STRUCTURAL STEEL
- .2 MATERIAL REQUIREMENTS -W SHAPES: CSA G40.20-13/G40.21-13 (R2018) GRADE 350W OR ASTM A572/A572M-18 GRADE 50 -WWF SHAPES: CSA G40.20-13/G40.21-13 (R2018) GRADE 350W CSA G40.20-13/G40.21-13 (R2018) GRADE 350W CLASS C -HSS SECTIONS: ASTM A500 GRADE C PERMITTED FOR ROUND HSS AND RECT HSS WITH DIMENSION > 310 mm -OTHER STRUCTURAL SHAPES AND PLATES: CSA G40.20-13/G40.21-13 (R2018) GRADE 300W ASTM F3125-18 GRADE A325 OR ASTM A490

-HEADED STUD ANCHORS: ASTM A108-18 TENSILE STRENGTH 414 MPa -ANCHOR RODS: ASTM F1554-18 GRADE 55 WELDABLE -SHOP PRIMER AND

- FIELD TOUCH UP PRIMER: REFER TO SPECIFICATIONS
- .3 DESIGN CONNECTIONS FOR THE LOADS SHOWN ON THE DRAWINGS. USE A MINIMUM OF 2 BOLTS IN EACH BOLTED CONNECTION.
- .4 WELDING SHALL CONFORM TO CSA W59-18 AND BE DONE WITH MATCHING ELECTRODES.
- .5 GROUT UNDER COLUMNS SHALL BE NON-SHRINK, NON-STAIN AND PLACED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. THE MINIMUM COMPRESSIVE STRENGTH OF GROUT SHALL BE 30 MPa AT 4 DAYS.
- .6 REFER TO SPECIFICATIONS FOR REQUIREMENTS FOR STAIRS, LADDERS, HANDRAILS, AND PLATFORMS NOT DETAILED ON THE STRUCTURAL DRAWINGS.
- .7 PROVIDE SUPPORT FOR STEEL DECK AT ALL STEEL COLUMN PENETRATIONS.
- .8 STEELWORK FINISHING IN ACCORDANCE WITH ARCHITECTS DETAILS. NOTE AESS-2 AND AESS-3 IN SOME LOCATIONS.

### 2. STEEL DECKING

- .1 DESIGN, FABRICATE, AND ERECT STEEL DECKING IN ACCORDANCE WITH CAN/CSA S136-16.
- .2 STEEL DECK PROFILES USED AS BASIS OF DESIGN ARE CANAM P-3615 / P-3606 & P-2432, SUBMIT ALTERNATE PROFILES FOR REVIEW & ACCEPTANCE. ENSURE DECK PROFILE IS COMPATIBLE WITH SPECIFIED DECK FASTENERS.
- .3 WELDING SHALL CONFORM TO CSA W59-18.
- .4 USE A DECK THICKNESS SHOWN ON DRAWINGS AS A MINIMUM BASE STEEL THICKNESS. INCREASE THICKNESS IF NECESSARY TO SUPPORT THE LOADS SPECIFIED. LIMIT MAXIMUM LIVE/SNOW LOAD DEFLECTION TO SPAN/360.
- .5 DECK UNITS SHALL BE CONTINUOUS OVER AT LEAST 3 SPANS WHERE STRUCTURAL FRAMING PERMITS.
- .6 THE STEEL DECKING ON THIS PROJECT ACTS AS A DIAPHRAGM FOR THE DISTRIBUTION OF WIND AND SEISMIC FORCES TO THE LATERAL LOAD RESISTING ELEMENTS. UNLESS NOTED OTHERWISE ON THE DRAWINGS, FASTEN THE DECK AS FOLLOWS:

ROOF DECK

-FASTEN TO FRAMING WITH HILTI X-HSN 24 OR X-ENP-19 POWDER-ACTUATED FASTENERS IN A 914/7 PATTERN AND AT 300mm C/C TO FRAMING PARALLEL TO DECK SPAN UNO.

-FASTEN DECK SIDELAPS WITH HILTI S-SLC 01 M HWH OR S-SLC 02 M HWH SIDELAP CONNECTORS AT 300mm C/C UNO.

- -SUBMIT REQUESTS FOR ALTERNATE METHODS OF FASTENING THAT PROVIDE EQUAL OR BETTER DIAPHRAGM SHEAR RESISTANCE AND LESSER FLEXIBILITY IN ACCORDANCE WITH SPECIFICATIONS.
- .7 SHEET STEEL: CONFORM TO ASTM A653-11, GRADE A STRUCTURAL QUALITY GRADE 230. GALVANIZED WITH ZINC COATING OF Z275 AS DESIGNATED BY ASTM A653M-18 UNLESS NOTED OTHERWISE.
- .8 FASTENING FOR THE SUPPORT OR ATTACHMENT OF SECONDARY ELEMENTS INCLUDING CEILINGS & SERVICES ARE NOT PERMITTED INTO STEEL ROOF DECK.

# **POST-INSTALLED FASTENING NOTES:**

- 3. MATERIAL REQUIREMENTS -THREADED RODS

-REINFORCING STEEL -ADHESIVE

# CONSTRUCTION TOLERANCES:

- **GEOTECHNICAL NOTES:**

1. INSTALL POST-INSTALLED FASTENING BY TRAINED PERSONNEL IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS AND SPECIFICATION.

2. USE ADHESIVE ANCHOR SYSTEMS, UNLESS NOTED OTHERWISE.

- ISO 898-1 CLASS 5.8 (400 MPa), UNLESS NOTED OTHERWISE BASIS-OF-DESIGN HILTI CANADA LTD, HAS-E
- REFER TO CONCRETE NOTES

TWO COMPONENT, INJECTABLE ADHESIVE SPECIFICALLY MANUFACTURED FOR USE IN INSTALLING FASTENING INTO EXISTING CONCRETE BASIS-OF-DESIGN HILTI CANADA LTD, HIT HY-200

1. ALL TOLERANCES IN ACCORDANCE WITH CAN/CSA A23.1-14 AND CSA S16-14, UNLESS NOTED OTHERWISE ON DRAWINGS.

1. A GEOTECHNICAL REPORT HAS BEEN PREPARED BY THURBER ENGINEERING TITLED "PROPOSED MILL WOODS TRANSIT CENTRE, 28 AVE & HEWES WAY, EDMONTON, ALBERTA, GEOTECHNICAL INVESTIGATION" DATED NOVEMBER 13, 2018.

2. REFER TO REPORT FOR ALL GEOTECHNICAL GUIDANCE ON CONSTRUCTION, INCLUDING EXCAVATION & BACKFILLING REQUIREMENTS.



	EMBEDME	NT AND LAP	SPLICE TAB	LE
	CONCR	ETE STRENG	GTH = 25 MPa	l
		HORZ TOP E	BARS	
BAR	TENSION	TENSION		COMP
SIZE	LAP	EMBED	COMP LAP	EMBED
10M	500	375	300	200
15M	750	575	450	300
20M	975	750	600	400
25M	1525	1175	750	500
30M	1850	1425	900	600
35M	2150	1650	1025	675
BAR	TENSION	TENSION		COMP
SIZE	LAP	EMBED	COMP LAP	EMBED
10M	400	300	300	200
15M	575	450	450	300
20M	750	600	600	400
25M	1175	900	750	500
30M	1425	1100	900	600
35M	1650	1275	1025	675

	EMBEDME	NT AND LAP	SPLICE TAB	LE
	CONCRE	ETE STRENG	GTH = 30 MPa	I
		HORZ TOP E	BARS	
BAR	TENSION	TENSION		COMP
SIZE	LAP	EMBED	COMP LAP	EMBED
10M	450	350	300	200
15M	675	525	450	275
20M	900	700	600	375
25M	1400	1075	750	450
30M	1675	1300	900	550
35M	1950	1500	1025	625
	HORZ BOTT	OM BARS AN	ND VERT BAF	RS
BAR	TENSION	TENSION		COMP
SIZE	LAP	EMBED	COMP LAP	EMBED
10M	400	300	300	200
15M	525	400	450	275
20M	700	550	600	375
25M	1075	825	750	450
30M	1300	1000	900	550
35M	1500	1175	1025	625

	EMBEDME	NT AND LAP	SPLICE TAB	LE
	CONCRE	ETE STRENG	GTH = 35 MPa	l
		HORZ TOP E	BARS	
BAR	TENSION	TENSION		COMP
SIZE	LAP	EMBED	COMP LAP	EMBED
10M	425	325	300	200
15M	625	475	450	275
20M	825	650	600	375
25M	1300	1000	750	450
30M	1550	1200	900	550
35M	1800	1400	1025	625

HORZ BOTTOM BARS AND VERT BARS

375

500

775

925

LAP EMBED COMP LAP EMBED

300 300

450

600

750

900

BAR TENSION TENSION

400

475

650

1000

1200

35M 1400 1075 1025

SIZE

10M

15M

20M

25M

30M

TABLE NOTES:

1. BASED ON CAN/CSA A23.3-04(R2010).

2. COLUMN AND BEAM BARS ENCLOSED BY MINIMUM STIRRUPS OR TIES UNLESS NOTED OTHERWISE.

3. CLEAR SPACING AT LEAST 2.0 x BAR DIAMETER FOR SLABS OR WALLS; 1.4 x BAR DIAMETER FOR COLUMNS OR ZONES.

4. WHERE BARS OF DIFFERENT DIAMETERS ARE LAPPED, PROVIDE LAP LENGTH BASED ON SMALLER BAR DIAMETER.

# MINIMUM SLAB REINFORCEMENT TABLE

SLAB THICKNESS (mm)	INTERIOR SLABS (As = 0.002*Ag)	EXTERIOR SLABS (As = 0.0025*Ag)
≤ 100	10M @ 450	10M @ 400
100 - 125	10M @ 400	10M @ 320
126 - 150	10M @ 330	10M @ 265
151 - 175	10M @ 285	10M @ 225
176 - 200	10M @ 250	10M @ 400 (T&B)
201 - 250	10M @ 400 (T&B)	10M @ 320 (T&B)
251 - 300	10M @ 325 (T&B)	10M @ 265 (T&B)

TABLE NOTES:

1. PROVIDE MINIMUM REINFORCING EACH WAY IN SLABS AND TOPPINGS WITHOUT SPECIFIED REINFORCING.

2. PROVIDE MINIMUM REINFORCING PERPENDICULAR TO PRINCIPAL REINFORCEMENT IN ALL SLABS. PLACE ALTERNATING TOP AND BOTTOM WHERE TOP REINFORCING SPECIFIED.

MINIMUM WALL REINFORCEMENT TABLE				
WALL THICKNESS (mm)	DIRECTION	REINFORCEMENT		
150	HORIZONTAL	10M @ 330 1 LAYER		
100	VERTICAL	10M @ 450 1 LAYER		
175	HORIZONTAL	10M @ 285 1 LAYER		
175	VERTICAL	10M @ 380 1 LAYER		
200	HORIZONTAL	10M @ 250 1 LAYER		
200	VERTICAL	10M @ 330 1 LAYER		
250	HORIZONTAL	10M @ 400 EACH FACE		
250	VERTICAL	10M @ 500 EACH FACE		
200	HORIZONTAL	10M @ 330 EACH FACE		
500	VERTICAL	10M @ 450 EACH FACE		
350	HORIZONTAL	10M @ 285 EACH FACE		
300	VERTICAL	10M @ 380 EACH FACE		
400	HORIZONTAL	10M @ 250 EACH FACE		
400	VERTICAL	10M @ 330 EACH FACE		

TABLE NOTES:

1. PROVIDE MINIMUM REINFORCING IN WALLS WITHOUT SPECIFIED REINFORCING. HORIZONTAL As<sub>MIN</sub> = 0.002Ag, VERTICAL AS<sub>MIN</sub> = 0.0015Ag.

2. PLACE 2-15M AT TOP AND 2-20M AT BOTTOM OF EACH WALL UNLESS SHOWN OTHERWISE.

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$\square$				permit	
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1	ISSUED FOR TENDER	2019-05-03	RR	Consultant	
no.	description	date	appd.		
	issue data			A1 bar scale	
				AS INDICATED	
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				drawn by	
		-		LV J ŔR J	
no.	description	date	checked	Checked by Cate Consultant job no	
$\mathbf{t}$	revisions			$RR$ $\int 2019-05-03$	

COMP

200

275

375

450

550

625

# ABBREVIATIONS

ADD'L	ADDITIONAL	LOC'N	LOCATION
AFF	ABOVE FINISHED FLOOR	LP	LOW POINT
		   QH	
ARCH	ARCHITECTURAL	LSV	LONG SIDE VERTICAL
BCE	BOTTOM CHORD EXTENSION	MAX	MAXIMUM
BGL	BELOW GROUND LEVEL	MC	MOMENT CONNECTION
BLI	BOTTOM LOWER LAYER	MECH	MECHANICAI
	DEAM	MEON	
	DEAW		
BOT	BOLLOW	MID	MIDDLE
B/O	BOTTOM OF	MIN	MINIMUM
BTWN	BETWEEN	MIR	MIRRORED
RU	BOTTOMIOWERLAYER	NIC	
		NTO	
		NTS ,	NOT TO SCALE
CANT	CANTILEVER	o/c	ON CENTRE
c/c	CENTRE TO CENTRE	OD	OUTSIDE DIAMETER
Cf	COMPRESSION FORCE, FACTORED	O/F	OUTSIDE FACE
CIP	CAST IN PLACE	0/0	
CJP	COMPLETE JOINT PENETRATION	OWSJ	OPEN WEB STEEL JUIST
CLT	CROSS-LAMINATED TIMBER	PJP	PARTIAL JOINT PENETRATION
C/L	CENTRELINE	PL	PLATE
00	CLEAN OUT	PT	POST TENSIONING
CONC	CONCRETE	REINF	REINFORCE OR REINFORCING
CONN	CONNECTION	REM	REMAINDER
CONT	CONTINUOUS	REQ'D	REQUIRED
C/S	COUNTERSUNK	REV	REVISION
		DHE	
	DEMOLITION	RO	ROUGH OPENING
DET	DETAIL	r/w	REINFORCED WITH
DIA	DIAMETER	SCHED	SCHEDULE
DN	DOWN	SDL	SUPERIMPOSED DEAD LOAD
		SIM	
	DEEP	SUG	SLAB ON GRADE
DWG	DRAWING	SPECS	SPECIFICATIONS
E/E	EACH END	SPMDD	STANDARD PROCTOR
E/F	EACH FACE		MAXIMUM DRY DENSITY
	FLECTRICAL	STAG	STAGGERED
		STD	
EP	EMBEDDED PLATE	STIR	STIRRUP
EQ	EQUAL	STRUCT	STRUCTURAL
E/S	EACH SIDE	T&B	TOP AND BOTTOM
Ε/W	FACH WAY	TCF	TOP CHORD EXTENSION
	EVISTING	TEMD	
EXI	EXTERIOR	It	TENSION FORCE, FACTORED
FD	FLOOR DRAIN	THK	THICK
FDN	FOUNDATION	THRU	THROUGH
FTG	FOOTING	ТJ	TIE JOIST
GALV	GALVANIZED	TU	
GD		1/0	
GL	GRIDLINE	TOC	TOP OF CONCRETE
HEE	HOOK EACH END	TOS	TOP OF STEEL
HEF	HORIZONTAL EACH FACE	TUL	TOP UPPER LAYER
HIF	HORIZONTAL INSIDE FACE	TYP	TYPICAL
		UNO	
HOR	HORIZONTAL	U/S	UNDERSIDE
HP	HIGH POINT	VEF	VERTICAL EACH FACE
D	INTERIOR DIAMETER	VERT	VERTICAL
I/F	INSIDE FACE	Vf	SHEAR FORCE FACTORED
INT	INTERIOR	VUF	VERTICAL OUTSIDE FACE
INV	INVERT	w/	WITH
LG	LONG	WP	WORK POINT
I HF	LEET HAND END	WWF	WEI DED WIRE FARRIC
LLH	LONG LEG HORIZONTAL		
	LONG LEG VERTICAL		



# **SYMBOLS & NOTATIONS**





GRAVEL	
CONCRETE BLOCK	
TRANSFER STRUCTURE	
STEEL	
VOID FORM	
WOOD	
GROUT	
BOTTOM REINFORCING BAR	
TOP REINFORCING BAR	
DENOTES 10M BAR OF LENGTH 600 PLUS THE STANDARD HOOK FOR A 10M BAR	
DENOTES 10M U-BAR WITH 600 LONG LEGS	
LENGTH TO TIE IN WITH BARS E/F OF MEMBER UNO	
DENOTES 10M BAR OF LENGTH 600 PLUS THE STANDARD HOOK	
FOR A 10M BAR ON EACH END	
FALL ARREST ANCHOR	
SLAB STEP	
LOG <b>Gec</b> architecture	
	VALLEY LINE - STAGE 1
S - SHEET 2	MILL WOODS TO DOWNTOWN
	MWTC 191 S0.02





				<b>DIALOG</b> permit
1	ISSUED FOR TENDER	2019-05-03	RR	Consultant
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	issue data			A1 bar scale
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l	revisions			

BAR SIZE	D (mm)	t MIN (mm)
10M	8	4
15M	10	6
20M	12	7
25M	16	10
30M	16	12
35M	18	16



- SLEEVES. PROVIDE REINFORCEMENT AT GROUPS OF SLEEVES CONTAINING FOUR OR MORE INDIVIDUAL SLEEVES
- AS ILLUSTRATED AND PROVIDE ADDITIONAL REINFORCING ON CASE BY CASE AS DIRECTED BY CONSULTANT. 4. THIS DETAIL APPLIES TO OPENINGS SHOWN ON STRUCTURAL DRAWINGS ONLY. NOTIFY CONSULTANT FOR
- ADDITIONAL REINFORCING REQUIRED AT OPENINGS NOT SHOWN ON STRUCTURAL DRAWINGS. 5. OPENINGS AND SLEEVES ARE NOT PERMITTED THROUGH ZONES OR COLUMNS UNO ON STRUCTURAL DRAWINGS.





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MILL WOODS TR	RA
OVERALL SI	T



PILE MARK	ELEVATION AT TOP	EL
P1	99450	
P2	99450	
P3	VARIES	



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		GEND
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	REFER TO S2.02	
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ALL C2 AND C3 COLUMNS AND CONNECTION ARE CLASSIFIED AS EXTERIOR EXPOSURE A FINISHED TO AESS 3.	IS IND	
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BASEPLATE CHOR RODS. ) RN NUTS AT		
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LOG <b>Gec</b> Jarchitecture		
	VALLEY LINE - STAG	E 1
	MILL WOODS TO DOWNTOW	/N
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	&	PIPE RISE AND UNION 2 WAY CONTROL VALVE			FCO - FLOOR CLEANOUT     CO - CLEANOUT     RUNNING TRAP	
		<ul> <li>3 WAY CONTROL VALVE</li> <li>CALIBRATED BALANCING V/</li> <li>SOLENOID VALVE</li> </ul>	VE	₩ —	DRAIN - FLOOR / AREA DRAIN - ROOF HOSE BIBB C/W ISOLATION VALVE. PLUMBING FIXTURE OR FORM TAG	
		<ul> <li>PISTON OPERATED VALVE</li> <li>MOTOR OPERATED VALVE</li> <li>ISOLATION VALE - GENERIC</li> <li>BALL VALVE - HAND OPERA</li> </ul>	ED	MO 1 (M) SAN V	<ul> <li>BACKWATER VALVE</li> <li>METER</li> <li>SANITARY SEWER</li> <li>SANITARY VENT</li> </ul>	
		GLOBE VALVE - HAND OPER GLOBE VALVE - HAND OPER PLUG VALVE - HAND OPER CHECK VALVE - LEFT CHECK VALVE - RIGHT	ED TED ED	ST	STORM SEWER     DOMESTIC WATER COLD     DOMESTIC WATER HOT     DOMESTIC WATER HOT RECIRC.     DOMESTIC WATER TEMPERED	
		<ul> <li>BUTTERFLY VALVE</li> <li>ANGLE VALVE - HAND OPEF</li> <li>PRESSURE REDUCING VALVE</li> <li>PRESSURE REDUCING VALVE</li> </ul>	TED - RIGHT - LEFT	REF-LIQ REF-SUC NOTE: PIPES FOR THE 1:50 FLOOR F	REFRIGERANT LIQUID REFRIGERANT SUCTION PLANS AND 1:25 LARGE SCALE PLANS	
		<ul> <li>STRAINER - RIGHT</li> <li>STRAINER - LEFT</li> <li>SUPERVISED ISOLATION VA</li> <li>BACKFLOW PREVENTER - R</li> <li>BACKFLOW PREVENTER - L</li> </ul>	VE GHT FT	AND SECTIONS FOR THIS PRI THE LINE TYPES AND PIPING LEGEND. PIPE VALVES AND F REALISTICALLY NOT SCHEMA CLARIFICATION.	DJECT ARE SHOWN DOUBLE LINE. DESIGNATIONS ARE AS PER THIS TTTINGS ARE ALSO SHOWN ATICALLY. SEE DRAWING NOTES FOR	
		<ul> <li>PUMP - SCHEMATIC - FLOW</li> <li>PUMP - SCHEMATIC - FLOW</li> <li>PIPE ANCHOR AND GUIDES</li> <li>PRESSURE REGULATOR SAFETY VALVE OR RELIEF V</li> </ul>	IGHT EFT ALVE			
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2019-05-03 PERMIT #P10020	Edmonton		drawing title MILLWOC	)DS TRA PIPING F
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)	consultant reviewed by GK	prime consultant job no	prime consultant reviewed by		



PLUMBING FIXTURE SCHEDULE	COIL SCHEDUL
TAGFIXTUREMANUFACTURERMODELNOTESBF-1BOTTLE FILL STATIONT&SB-1210STAINLESS STEEL BOTTLE FILL STATION MOUNTED ADJACENT TO LAVATORY FAUCET. COLD WATER CONNECTION ONLY.	TAG       MANUFACTURER       LOCATION       EAT (°C)       LAT (°C)       AIRFLOW (L/S)       AIR PD (kPa)       EFT (°C)       LFT (°C)       FLUID FLOW         GHC-1       ENGINEERED AIR       105 JANITOR'S ROOM       -34.00       11.88       425       0.04       60.00       48.80       0.55
FC0FLOOR CLEANOUTWATTSCO-202-RCEPOXY COATED CAST IRON FLOOR CLEANOUT WITH ROUND NICKEL BRONZE TOP AND NO HUB CONNECTION.FD-1FLOOR DRAINWATTSFD-104-A5EPOXY COATED CAST IRON FLOOR DRAIN WITH ANCHOR FLANGE, CLAMPING COLLAR, ROUND HEEL PROOF NICKEL BRONZE STRAINER AND NO HUB	INFRA RED HEATER SC
FD-1     FD-104-EG     EPOXY COATED CAST IRON FLOOR DRAIN WITH ANCHOR FLANGE MEMBRANE CLAMP, NICKEL BRONZE STRAINER, OVAL CAST IRON FUNNEL AND NC HUB OUTLET.	TAG MANUEACTURER MODEL SERVICE LENGTH INPUT KW OUTPUT KW ANGLE HE
B-1       HOSE BIB - INTERNAL - WALL MOUNTED       WATTS       SC8       COCK FAUCET WITH SEPARATE VACUUM BREAKER, CAST BRASS CONSTRUCTION WITH HANDWHEEL.         IB-2       HOSE BIBB - EXTERNAL WALL MOUNTED.       ZURN       Z1320       ECOLOTROL CERAMIC DISC WALL HYDRANT ENCASED NON-FREEZE, ANTI-SIPHON, AUTOMATIC DRAINING.	IRH-1SUPERIOR RADIANT PRODUCTSLXHEATED WAITING AREA914411.7211.720.00°3IRH-2SUPERIOR RADIANT PRODUCTSLXHEATED WAITING AREA1219217.5817.580.00°3
1       SINK - JANITOR - CORNER       FIAT       TSBC-6010       NEO-CORNER SERVICE BASIN, STAINLESS STEEL CAPS ON ALL CURBS, TERRAZZO CONSTRUCTION, 305 DEEP, STAINLESS STEEL DRAIN ASSEMBLY         1       SINK - JANITOR - CORNER       FIAT       TSBC-6010       NEO-CORNER SERVICE BASIN, STAINLESS STEEL CAPS ON ALL CURBS, TERRAZZO CONSTRUCTION, 305 DEEP, STAINLESS STEEL DRAIN ASSEMBLY         1       SINK - JANITOR - CORNER       FIAT       TSBC-6010       NEO-CORNER SERVICE BASIN, STAINLESS STEEL CAPS ON ALL CURBS, TERRAZZO CONSTRUCTION, 305 DEEP, STAINLESS STEEL DRAIN ASSEMBLY         1       SINK - JANITOR - CORNER       FIAT       TSBC-6010       NEO-CORNER SERVICE BASIN, STAINLESS STEEL CAPS ON ALL CURBS, TERRAZZO CONSTRUCTION, 305 DEEP, STAINLESS STEEL DRAIN ASSEMBLY         1       SINK - JANITOR - CORNER       FIAT       TSBC-6010       NEO-CORNER SERVICE BASIN, STAINLESS STEEL CAPS ON ALL CURBS, TERRAZZO CONSTRUCTION, 305 DEEP, STAINLESS STEEL DRAIN ASSEMBLY	
-1       LAVATORY       FRANKE       OV1619-6       STAINLESS STEEL OVAL COUNTER TOP VANITY SINGLE FAUCET HOLE. LAVATORY FAUCET - TOTO TEL105-D10ET. FLEX SUPPLIES, WHEEL HANDLE         (2)       LAVATORY       WALL MOUNT       WITPEOUS CLUMA       AMERICAN STAINLARD	TAG         MANUFACTURER         MODEL         ARRANGEMENT         AIR FLOW (L/S)         OUTPUT (KW)         EFT (°C)         TEMPERATURE
LAVATORY - WALL MOUNT - VITREOUS CHINA AMERICAN STANDARD       MURRO       VITREOUS CHINA WALL HUNG BARRIER FREE BASIN C/W KNEE CONTACT GUARD, JAY R. SMITH 0700-2 CARRIER, OPEN GRID STRAINER, OFF-SET         P-TRAP, FLEX SUPPLIES WITH WHEEL HANDLE STOPS, TOTO TEL 105-D10ET, THERMOSTIC MIXING VALVE.       100 ROOF DRAIN       WATTS       RD-104       EPOXY COATED CAST IRON ROOF DRAIN WITH FLASHING CLAMP WITH INTEGRAL GRAVEL STOP. SELE LOCKING POLYETHYLENE DOME AND NO HUP	UH-1         SIGMA         015H         SUSPENDED AT HIGH LEVEL         189         3.25         60.00         11           UH-2         SIGMA         015H         SUSPENDED AT HIGH LEVEL         189         3.25         60.00         11
AUTOMATIC TRAP PRIMER Jay R. Smith Mfg. Co. 2699 AUTOMATIC TRAP PRIMER, CAST BRONZE, LEAD FREE.	UH-3         SIGMA         015H         SUSPENDED AT HIGH LEVEL         189         3.25         60.00         11
-1 URINAL - WALL MOUNTED - FLUSH VALVE AMERICAN STANDARD WASHBROOK FLOWISE WALL MOUNTED VITREOUS CHINA URINAL C/W HANGER, TOTO TEU1LN12#CP FLUSH VALVE SELF GENERATING AUTOMATIC INFRARED SENSOR.	EXHAUST FAN SCHE
1       WATER CLOSET - FLOOR MOUNTED - FLUSH       AMERICAN STANDARD       RIGHT WIDTH - RIGHT       #3461.01.020, RIGHT HEIGHT ELONGATED, 419 MM HIGH TOILET VITREOUS CHINA, FLOOR MOUNTED, OPERATES IN THE RANGE OF 4.2 L TO 6 L PER FLUSH, SIPHON JET FLUSH ACTION, CONDENSATE CHANNEL.CENTOCO #500STSCC.001, HEAVY DUTY TOILET SEAT, SOLID PLASTIC, OPEN FRONT LES COVER. TOTO TET1LA32#CP, CHROME PLATED, EXPOSED FLUSHOMETER FOR TOP SPUD TOILET, 4.2 L FLUSH OR 6 L FLUSH FACTORY SET FLOW. PROVIDE FLOOR FLANGE, WITH ALL BRASS BOLTS AND WITH RUBBER GASKET.	TAGMANUFACTURERMODELSERVICEAIR FLOW (L/S)STATIC PRESSURE (PA)MOTOR POWER (KW)VOLTEF-1GreenheckLB-10-4111 HEATED WAITING AREA472.093.00.186120EF-2GreenheckLB-10-4111 HEATED WAITING AREA472.093.00.186120
BOILER SCHEDULE	]
AG MANUFACTURER MODEL SERVICE HEATING INPUT (KW) HEATING OUTPUT (KW) MEDIUM FLOW (L/S) EFT (°C) LFT (°C) P.D. (KPA) MOTOR (KW) NOTES	ROOF <u>KEYNOTES</u>
STAINLESS STEEL BURNER AND HEAT EXCHANGER. DURA VENT 3PPS-VKL, 75X125 POL PRO VERTICAL TERMINATION KIT C/W BLACK CAP W/LB2.	30 DHW
2 PEERLESS PF-110 GLYCOL HEAT 32.23 30.00 50% PPG 0.73 48.80 60.00 1.37 1.20 BUILT IN CONDENSATE NEUTRALIZER SYSTEM WITH FLOAT SWITCH PROTECTION. STAINLESS STEEL BURNER AND HEAT EXCHANGER. DURA VENT 3PPS-VKL, 75X125 PO PRO VERTICAL TERMINATION KIT C/W BLACK CAP W/L B2	2. HEATER SITS ON A WALL MOUNTED FRAME PROVID
	$\begin{array}{c} \bullet \\ \bullet $
EXPANSION IANK SCHEDULE	PUMP UMP 6 4. CONNECT TO SERVICES AS SHOW ON PLANS.
TAG     MANUFACTURER     MODEL     SERVICE     LOCATION     ET-TYPE     MEDIUM     VOLUME (L)     MIN TANK ACCEPTANCE (L)     DIAMETER     HEIGHT     NPT FITTING (MM)     NOTES	ET-2 EXPANSION
i-1BELL AND GOSSETTD40VGLYCOL HEATMECHANICAL ROOMBLADDER50% PPG30.309.1035656420PRE-CHARGED TO 83 KPA.I-2AMTROLST-5-CDOMESTIC HOT WATERJANITOR'S ROOMDIAPHRAGMWATER7.573.4025423520PRE-CHARGED TO 82 KPA, SUITABLE FOR POTABLE WATER	JANITOR'S ROOM 1 DOMESTIC WATER HEATER 7 7 DIDE WASTE FITTING TO JANITOD'S SINK
GLYCOL FILL TANK SCHEDULE	
ARK MANUFACTURER MODEL LOCATION WORKING FLUID TOTAL VOLUME (L) (V/PH/HZ)	
JFS-1       AXIOM       MF200       MECHANICAL ROOM       50% PPG       25.00 L       115/60/1       COMPATIBLE WITH GLYCOL SOLUTIONS OF UP TO 50% CONCENTRATION. PUMP SHALL BE CAPABLE OF RUNNING DRY WITHOUT DAMAGE.	FLOOR
DOMESTIC WATER HEATER SCHEDULE	JS-1 ACU SY JANITOR'S SINK CONDE UNIT M
TAG       MANUFACTURER       MODEL       SERVICE       HEATING INPUT (KW)       HEATING OUTPUT (KW)       RECOVERY (L/HR)       STORAGE (L)       GAS/ELECTRIC       NOTES         DWH-1       A.O SMITH       M-1-606SS       DOMESTIC HOT WATER       1.50       1.50       26       23.00       ELECTRIC       C/W WALL MOUNTING BRACKET AND DRIP PAN. ROUTE PRV TO JANITOR'S SINK.	DOMESTIC HOT WATER SCHEMATIC
PUMP SCHEDUI E	M6.01 SCALE: 1:1 BLOCK
AG       MANUFACTURER       MODEL       SERVICE       FLUID FLOW (L/S)       MEDIUM       HEAD (KPA)       MOTOR (RPM)       VOLTAGE (V)       PHASE       FREQUENCY       NOTES         '-1       TACO       0013       GLYCOL HEATING       1.15       50% PPG       33.0       0.12       1750       115       1       60 Hz       MOUNT INLINE ABOVE BOILER ACCESSIBLE FROM THE FROM         20       TACO       0242       CLYCOL HEATING       445       445       445       445       445	FROM BLDG. I GHC-1 G BLDG. <u>KEYNOTES</u> THROU I LESS THAN 4 DIDE DIAMETERS ROOF
P-3       TACO       0013       GLI COL REATING       1.13       50% PPG       53.0       0.12       1750       115       1       60 Hz       MOUNT INLINE ABOVE BOILER ACCESSIBLE FROM THE FROM         P-3       TACO       006-IQST4       DOMESTIC HOT WATER RECIRC.       0.13       WATER       10.1       0.02       3250       115       1       60 Hz       MOUNT ADJACENT TO DOMESTIC WATER HEATER.         P-81       TACO       0013       BOILER CIRCULATION       0.73       50% PPG       51.0       0.12       115       1       60 Hz       MOUNT ADJACENT TO DOMESTIC WATER HEATER.	Image: Second
P-B2 TACO 0013 BOILER CIRCULATION 0.73 50% PPG 51.0 0.12 1750 115 1 60 Hz MOUNT INLINE ABOVE BOILER ACCESSIBLE FROM THE FROM	$ \begin{array}{c} \overrightarrow{0} \\ \overrightarrow{1} \overrightarrow{1} \\ \overrightarrow{1} \\ \overrightarrow{1} \overrightarrow{1} $ \overrightarrow{1} \overrightarrow{1} \overrightarrow{1} \overrightarrow{1}  \overrightarrow{1} \overrightarrow{1} \overrightarrow{1} \overrightarrow{1} \overrightarrow{1}
AIR CONDITIONING SPLIT SYSTEM SCHEDULE	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
TAGMANUFACTURERMODELAREA SERVEDMEDIUMAIR (L/S)CAPACITY (Kw)SEERELECTRICAL VOLT/PHMCANOTESACU-1MITSUBISHIPKA-A18HA4101 COMMUNICATIONSR-410A206515.3208/1/601FAN COIL, PROVIDE WALL T-STAT, WHITE FINISH, CONDENSATE PUMP OR 20 TYPE L COPPER DRAIN TO	5. AIR SEPARATOR
ACU-1CU       MITSUBISHI       PUY-A18NHA       101 COMMUNICATIONS       R-410A       566       5       0       208/1/60       13       CONDENSING UNIT, ROOF MTD. ON CONCRETE SLEEPERS, ULTRA-LOW AMBIENT KIT.	6. 3-WAY CONTROL VALVE.
FIN RADIATION SCHEDULE	$\begin{array}{c c} & -40 \\ & -40$
TAG MANUFACTURER MODEL HEIGHT WIDTH ROWS OUTPUT (kW/M) FLUID TYPE EFT (C) LFT (C) LENGTH NOTES	$\begin{array}{c c c c c c c c c c c c c c c c c c c $
RAD-1 ENGINEERED AIR WF-1A 610 127 2 0.86 50% PP 60 48.8 NOTED STANDARD WHITE COLOUR, HEATING OUTPUT DERATED FOR TEMP. AND FLUID TYPE, TWO ROWS ON 305 CENTERS	$ \begin{array}{c} & & & \\ & & & & \\ & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & $
DIFFUSER AND GRILLE SCHEDULE	SUSPE 25 25 25 25 25 25 25 25 25 25 25 25 25 2
E-1       E.H. PRICE       85 SERIES       CEILING       WHITE       LOUVERED RETURN GRILLE, BLADES PARALLEL TO LONG DIMENSION 45 DEG. FROM HORIZONTAL, COORDINATE FINAL COLOUR WITH ARCHITECTURAL.         E-2       E.H. PRICE       530 SERIES       DUCT AND SOFFIT       COORDINATE       LOUVERED R/A GRILLE, BLADES PARALLEL TO LONG DIMENSION 45 DEG. FROM HORIZONTAL, COORDINATE FINAL COLOUR WITH ARCHITECTURAL.	ARCHI
S-1       E.H. PRICE       SCD       DUCT AND CEILING       WHITE       SQUARE PLAQUE S/A DIFFUSER WHITE COLOR         S-2       E.H. PRICE       530.SERIES       WALL       WHITE       LOUVERED S/A GRILLE, BLADES PARALLEL TO LONG DIMENSION 45 DEG. FROM HORIZONTAL, COORDINATE FINAL COLOUR WITH ARCHITECTURAL.	
	BOILER B-1 BOILER B-1
TAG       MANUFACTURER       MODEL       SERVICE       AIR FLOW (L/S)       STATIC PRESSURE (PA)       MOTOR POWER (KW)       VOLTS/PH/HZ       NOTES	3 GLYCOL HEATING SCHEMATIC
HRV-1   SYSTEMAIR   TOPVEX   E/A O/A FOR BLDG.   424.0 315.0 0.336 208/3/60 CORE - POLYMERIZED PAPER, 20 DRAIN FITTING, ECM MOTORS, FAN SPEED CONTROL - CONSTAN TR1800-208-3CAV-ERV   424.0 315.0 0.336 SPEED, REFER TO MECH. RM. DWG. FOR ACCESS DOOR SIDE.	
LIED FOR BID 2019-05-03 FOR 90% REVIEW 2019-03-22 DIALOG	
DR 60% REVIEW     2019-02-19       Asscription     date       appd.	nsultant
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	©\$ B1-11 L1- CD			R TO 1/E1.02 FOR WALKWA	Y PLAN		
€68 B1-7 € L1-8 L1-9 €		(6) B1-7 E1)	- (6A) B1-13	<u>(L6A)</u> B1-13	E	E 66 B1-13	(L6A) B1-13
L1-8 L1-9		B1-5 L1-8 L1-9 L1-8 L1-8 L1-9			<u>(6A)</u> B1-13	<u>(6</u> A) B1-13	<u>(L6A)</u> B1-13
(16A)		(L6A)	(L6A)	(L6A)	(L6A)	(16A)	
B1-13	B1-13	B1-13	B1-13	B1-13	B1-13	B1-13	B1-13

	KEINOTES
007	STUB UP DIRECTLY INTO CONNECTOR INSIDE PEDESTAL. HOME RUN UNDERNEATH FLOOR TO SOURCE.
009	MOTORIZED DOOR SYSTEM C/W HAND SWIPE ON PEDESTAL. REFER TO 3/E2.02. HOME RUN UNDERNEATH FLOOR TO SOURCE.
010	MOTORIZED SLIDING DOOR SYSTEM C/W HAND SWIPE ON MULLION. REFER TO 4/E2.02. HOME RUN UNDERNEATH FLOOR TO SOURCE.







			-			
	PANEL NUMBER: B1		-	SECURITY SYSTEM CABLE SC	HEDULE	
PROJECT: MILL WOODS TRANSI			NO. DEVICE	TYPE NO. OF NOTES	CABLE	RELAY ROOM
SUPPLY FROM: MOUNTING: Surface	PHASES: 3 WIRES: 4 CIRCUITS: 84	MAINS TYPE: BREAKER MAINS: 400 A	DOOR	CARD CARD ACCESS READER SYSTEM ONLY	COMPOSITE ACCESS CONTROL CABLE OVERALL JACKETED. SEE DOOR INPUT/OUTPUTS.	PANELNUMBERNUMBERROOM NAMENUMB1-L1L1-1104JANITOR RM.BB1-L1L1-2105PUBLIC WCB1B1+L1L1-2106DUBLIC WCB1
			2 CARD READ	ER CARD DIRECT CARD ACCESS READER WIEGAND SYSTEM ONLY	UNDER 250' - 3P STP #22 AWG SHIELDED FROM COMPOSITE CABLE OVER 250' - 3P STP #18 SHIELDED	B1-L1         L1-3         100         POBLIC WC         B1           B1-L1         L1-4         107         FEMALE STAFF WC         B1           B1-L1         L1-5         108         MALE STAFF WC         B1
	BRK	BRK	3 ARMING CAU RM2-LPH	RD READER CARD RS485 CARD ACCESS READER PORT SYSTEM ONLY	3P STP #18 SHIELDED	B1-L1         L1-6         109         KIOSK         B1           B1-L1         L1-7         110         SECURITY RM.         B1
B1-1     LTG.     EXIT LIGHTS       B1-3      SPARE	SIZE         A         B         C           15 A         0.01         0.40	SIZE     CIRCUIT DESCRIPTION     TYPE     CCT NO.       20 A     IT ROOM     REC.     B1-2       20 A     IT ROOM     REC.     B1-4	4 DOOR CONT READER DO	TACT CARD DOOR 1 CARD ACCESS NOR INPUT 1 SYSTEM ONLY	1P #22 AWG FROM COMPOSITE CABLE	B1-L1L1-8111HEATED WAITING AREABB1-L1L1-9111HEATED WAITING AREAB
B1-5     LTG.     WAITING AREA INDOOR LIGHTING       B1-7     LTG.     WAITING AREA INDOOR LIGHTING	15 A         0.00         0.40         0.75         0.40           15 A         0.86         0.20         0.75         0.40	20 A         IT ROOM         REC.         B1-4           20 A         IT ROOM         REC.         B1-6           20 A         IT ROOM         REC.         B1-8	5 DOOR CONT CARD READ	TACT NON DOOR 1 DOUBLE DOOR CA ER DOOR INPUT 1 BE WIRED IN SERI	N 4C #22 AWG STRANDED	B1-L1         L1-10         CANOPY         B1           B1-L1         L1-11         UNHEATED WAITING AREA         B1
B1-9LTGSERVICE INDOOR LIGHTINGB1-11LTGMISC. INDOOR LIGHTING	15 A         0.46         0.80            15 A           0.54         0.80	20 A         IT ROOM U/S OF TRAY         REC.         B1-10           20 A         IT ROOM U/S OF TRAY         REC.         B1-12		DOOR 1 CARD ACCESS	UNDER 250' - 1P #18 AWG SHIELDED	B1-L1L1-12WALKWAY WEST COLUMNB1B1-L1L1-13WALKWAY EAST COLUMNB1
B1-13       LTG.       WAITING AREA OUTDOOR LIGHTING         B1-15       LTG.       BUS BAY LIGHTING         D1 17       LTC.       DUS BAY LIGHTING	15 A         0.37         0.60	20 A     TICKET VENDING MACHINE     OTH.     B1-14       20 A     FEMALE STAFF WC HAND DRYER     REC.     B1-16       20 A     MALE STAFF WC HAND DRYER     REC.     B1-16		OUTPUT SYSTEM ONLY	FROM COMPOSITE CABLE OVER 250' - 1P #16 AWG SHIELDED	B1-L1L1-14BUS BAY AREA NORTHB1B1-L1L1-15BUS BAY AREA SOUTHB1
B1-17 LTG. BUS BAY LIGHTING B1-19 LTG. BUS BAY LIGHTING B1-21 OTH. SIGNAGE LIGHTING	20 A         0.91         1.20           15 A         0.35         1.20	20 AMALE STAFF WC HAND DRYERREC.B1-1820 AFEMALE PUBLIC WC HAND DRYERREC.B1-2020 AMALE PUBLIC WC HAND DRYERREC.B1-22	7 BARRIER FF H/C BYPASS	REE DOOR OUTPUT 1 CARD ACCESS SYSTEM ONLY	1P #18 AWG SHIELDED	B1-L1L1-16BUS BAY AREA ISLANDB1B1-L1L1-17SIGNAGEB1
B1-23    LTG.    WALKWAY LIGHTING      B1-25    LTG.    WALKWAY LIGHTING	20 A         0.41         1.00           20 A         0.41         0.60         100	20 ACONVENIENCE RECEPTACLESREC.B1-2420 ACONVENIENCE RECEPTACLESREC.B1-26	8 DOOR CONT	TROL RELAY OUTPUT 1 CARD ACCESS SYSTEM ONLY	1P #18 AWG SHIELDED FROM COMPOSITE CABLE	B1-L1 L1-18 BACK OF BUILDING
B1-27 SPARE B1-29 SPARE B1-31 SPARE	15 A         0.00         0.40           15 A         0.00         1.00           15 A         0.00         1.00	20 AHOUSEKEEPING RECEPTACLESREC.B1-2815 ADOOR OPERATOROTH.B1-3015 ADOOR OPERATOROTH.B1-32	9 SLIDING DO	OR SOLENOID DOOR 1 CARD ACCESS OUTPUT 1 SYSTEM ONLY	1P #18 AWG SHIELDED FROM COMPOSITE CABLE	
B1-33 SPARE B1-35 SPARE	15 A         0.00         1.00         0.00         1.00           15 A         0.00         1.00         0.00         1.00	15 ADOOR OPERATOROTH.B1-3215 ADOOR OPERATOROTH.B1-3415 ADOOR OPERATOROTH.B1-36	10 REQUEST T	O EXIT INPUT 1 CARD ACCESS SYSTEM ONLY	2P #22 AWG FROM COMPOSITE CABLE	Camera ID Camera Name Location
B1-37          SPACE           B1-39          SPACE	0.00         1.20	20 AKIOSK/SECURITY RECEPTACLESREC.B1-3820 ASNACK/DRINK VENDING MACHINEREC.B1-40	11 SIREN	OUTPUT 1	2C #18 AWG SHIELDED STRANDED	1 MIL-CAM-05-01 Northwest Heated Shelter
B1-41 SPACE B1-43 Other DOMESTIC WATER HEATER 'DWH-1' B1-45 REC CLYCOL EILL TANK 'CES.1'	0.00         0.80           20 A         1.50         0.25            15 A         0.40         1.00	20 A     SNACK/DRINK VENDING MACHINE     REC.     B1-42       15 A     EMERGENCY PHONES     OTH.     B1-44       15 A     EMERGENCY PHONES     REC.     B1-46	12 STROBE	OUTPUT 1	4C #18 AWG SHIELDED STRANDED	2MIL-CAM-05-02Northeast Heated Shelter3MIL-CAM-05-03Public Washroom Doors
31-43         REC.         BETCOL FILE TANK GF3-T           31-47         MTR.         DWH RECIRC PUMP 'P-3'           31-49	15 A         0.40         1.00         0.10         0.00           15 A         4.18         0.00         0.10         0.10         0.00	SMART FARE READERS          B1-48             SMART FARE READERS          B1-50	13 SIREN STRO	DBE COMBO OUTPUT 1	ONE (1) 4C #18 AWG STRANDED	4 MIL-CAM-05-04 Heated Waiting Area
1-51MTR.HEAT RECOVERY VENTILATOR1-53	55 A 4.18 0.00 4.18 0.60	SMART FARE READERSB1-5215 AWAYFINDING SIGNOTH.B1-54	14 LED INICATO	DR OUTPUT 1	ONE (1) 2C #18 AWG STRANDED	6MIL-CAM-05-06Comm Room
31-55     MTR.     GLYCOL HEATING PUMP 'P-1'       31-57     MTR.     GLYCOL HEATING PUMP 'P-2'       31     50     MTR.	15 A         0.10         0.20	15 A         CLOCK TOWER         OTH.         B1-56           15 A         PA CABINET         OTH.         B1-58           15 A         PANS DANEL         OTH.         B1-60	15 KEYPAD	NON 1 READER	6C #22 AWG STRANDED	<ul> <li>7 MIL-CAM-05-07 West Bus Entrance</li> <li>8 MIL-CAM-05-08 Soutwest Busway</li> </ul>
1-59 MTR. BOILER RECIRC PUMP P-BT 1-61 MTR. BOILER RECIRC PUMP 'P-B2' 1-63 MTR. INFRARED HEATER FAN 'IR-1'	15 A         0.10         0.30           15 A         0.10         0.30	ISA         BINS PANEL         OTH.         B1-60           B1-62         B1-64	16 WINDOW CO	ONTACT INPUT 1	4C #22 AWG STRANDED	9 MIL-CAM-05-09 North Central Busway
31-65 MTR. INFRARED HEATER FAN 'IR-2' 31-67 MTR SPLIT SYSTEM CONDENSING UNIT AND FAN	15 A         0.30           N         20 A         1.45	B1-66 B1-68	17 GLASS BRE	AK DETECTOR INPUT 2 1 ALARM POINT 1 TAMPER POINT	6C #22 AWG STRANDED	10MIL-CAM-05-10South Central Busway11MIL-CAM-05-11Northeast Busway
B1-69         IMPLO         COIL         `CU-1,FC-1`           B1-71         Othe         EXHAUST 'EF-1,EF-2' AND DAMPERS           B1-72         MTR         UNIT HEATERS 'I'H 1 UH 2'	1.45 0.60	B1-70 B1-72	18 MOTION DE	TECTOR INPUT 2 1 ALARM POINT 1 TAMPER POINT	6C #22 AWG STRANDED	12 MIL-CAM-05-12 Southeast Busway
31-73 MTR. UNIT HEATERS UH-1,0H-2 31-75 31-77 31-77		B1-74 B1-76 B1-78	19 LOW TEMP.	SENSOR INPUT 1 1 ALARM POINT	4C #22 AWG STRANDED	13MIL-CAM-05-13East Bus Entrance14MIL-CAM-05-14Southeast Corner Bus Shelte
31-79 31-81	0.00 0.00 0.00 0.00	SPACE          B1-80            SPACE          B1-82	20 PANIC ALAF	RM INPUT 1 1 ALARM POINT	6C #22 AWG STRANDED	15 MIL-CAM-05-15 Northwest Corner Bus Shelte
B1-83  T	Older         0.00           Total Load:         15.20 kVA         14.69 kVA         14.89 kVA	SPACE B1-84	21 WIRELESS F RECEIVER	PANIC INPUT 1 1 ALARM POINT	6C #22 AWG STRANDED	16MIL-CAM-05-16South Walkway Entrance17MIL-CAM-05-17Mid Walkway Looking South
			22 BMS ALARM	I MONITORING INPUT 1 1 ALARM POINT	6C #22 AWG STRANDED	<ul> <li>18 MIL-CAM-05-18 Mid Walkway Looking North</li> <li>19 MIL-CAM-05-19 North Walkway</li> </ul>
ther CO	Innected LOAD         Demand Factor         Estimated be           1500 VA         100.00%         1	MAND     PANEL TOTALS       500 VA	23 WATER SEN	ISOR INPUT 1 1 ALARM POINT	ONE (1) 4C #22 AWG STRANDED	20 MIL-CAM-05-20 North Walkway Looking Wes
EC.	3280 VA         100.00%         33           14000 VA         50.00%         7           17428 VA         70.00%         12	000 VA     Total Est. Demand:     32.56 kVA       000 VA     Total Conn. Current:     124.4	NOTE: CONDUITS TO B	E SIZED AT 40% FILL TO ALLOW FOR EXPANSION, MINIMUM SIZE	= 21mmC	21MIL-CAM-05-21North Walkway Entrance22MIL-CAM-05-22West Bus Entrance
TH.	6790 VA 100.00% 6	Y90 VA     Total Est. Demand Current:     90 A	-			23 MIL-CAM-05-23 East Bus Entrance
otes:			-			
NEL TO BE 2x42 CCT DOUBLE TUB CONFIGURATION						E3.02 SCALE: N.T.S
	Load Motor Control	MECHANICAL EQUIPMENT SCHEDULE	Fire	Local		
Equip. No. Description Location	HP kW Voltage Amps Equipment Panel	eaker Starter Starter Type HOA ON/OFF Other Interlocked With	Alarm Duct Detector	Disconnect Switch Motor Feeder	Remarks	
CU-1 SPLIT SYSTEM CONDENSING UNIT ROOF ABOVE COMM. WH-1 DOMESTIC WATER HEATER JANITOR CLOSET	101         208V         13.0 A         B1         20           1.5         120V         B1         20	A-2P FAN COIL 'FC-1' A-1P	No No No No	Yes     3#12AWG in 21mmC     ROOF MOUNT       Yes     2#12AWG in 21mmC		
EF-1 EXHAUST FAN HEATED WAITING ARE EF-2 EXHAUST FAN HEATED WAITING ARE	EA 111         0.05 np         120V         B1         120V           EA 111         0.05 hp         120V         B1         11           200V         10.0         B1         120V         10.0	A-1P MOTORIZED DAMPER 'N A-1P MOTORIZED DAMPER 'N A-2P CONDENSING UNIT 'C	MD-1' NO NO MD-2' No No	Yes         2#12AWG in 21mmC           Yes         2#12AWG in 21mmC           Vac         2#12AWG in 21mmC		
GFS-1 GLYCOL FILL TANK MECHANICAL 103	.05         120V         34.8 A         B1         21           .05         120V         B1         15	A-1P	No         No           No         No	Yes         2#12AWG in 21mmC           Yes         2#12AWG in 21mmC		
IR-1 INFRARED HEATER FAN HEATED WAITING ARE	EA 111         120V         1.0 A         B1         1.0           EA 111         120V         1.0 A         B1         1.1	A-1P	No No	Yes         2#12AWG in 21mmC           Yes         2#12AWG in 21mmC		
MD-1 MOTORIZED DAMPER MECHANICAL 103	0.05 hp         120V         0.05 A         B1         1           0.05 hp         120V         0.5 A         B1         1	A-1P EXHAUST FAN 'EF-3	NO         NO           3'         No         No           1'         No         No	Yes         2#12AWG in 21mmC           Yes         2#12AWG in 21mmC		
P-1 GLYCOL HEATING PUMP MECHANICAL 103	0.03 hp         120V         B1         11           0.17 hp         120V         2.0 A         B1         11           0.17 hp         120V         2.0 A         B1         11	A-1P	No No	Yes         2#12AWG in 21mmC           Yes         2#12AWG in 21mmC		
P-3 DWH RECIRC PUMP JANITOR CLOSET P-8 BOILER RECIRC PUMP MECHANICAL 103	0.17 hp         120V         2.0 A         B1         1           120V         120V         B1         1           0.17 hp         120V         B1         1	A-1P	No No	Yes         2#12AWG in 21mmC           Yes         2#12AWG in 21mmC           Yes         2#12AWG in 21mmC		
P-B2 BOILER RECIRC PUMP MECHANICAL 103 UH-1 UNIT HEATER COMM 101	0.17 hp         120V         2.0 A         B1         1           120V         120V         2.0 A         B1         1	A-1P	No No	Yes         2#12AWG in 21mmC           Yes         2#12AWG in 21mmC		
UH-2     UNIT HEATER     ELECTRICAL 102       UH-3     UNIT HEATER     MECHANICAL 103	120V B1 1 120V B1 1	A-1P	No No No	Yes         2#12AWG in 21mmC           Yes         2#12AWG in 21mmC           Yes         2#12AWG in 21mmC		
		) permit ) seal	LENGING	ΔΞϹΟΜ	и пре	
ISSUED FOR TENDER 03-05-19 description date app		sultant	ENA PAR	Prime Consultant		and Land Services
issue data	A1 bar scale AS INDICATED	LE G				drawing title
			A Permit P10020	Famoutou		MILL WOODS
	LL designed by LL/CB/C		2019-05-06			SCH
description date chec	cked checked by date 2019/05/03	consultant job no 01255E0800	reviewed by	rime consultant job no	prime consultant reviewed by Approver	y

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IYPE	CCT NO.
REC.	B1-2
REC.	D1-4
 REC.	B1-0
 REC.	B1.10
REC.	B1-10 B1_12
	B1-12
 REC	B1-14 B1_16
REC.	B1-10
 REC.	B1-20
 REC.	B1-20
REC.	B1-24
 REC.	B1-26
 REC	B1-28
OTH	B1-30
 OTH	B1-32
 OTH	B1-34
 OTH	B1-36
REC.	B1-38
REC.	B1-40
 REC.	B1-42
 OTH.	B1-44
 REC.	B1-46
	B1-48
	B1-50
	B1-52
OTH.	B1-54
OTH.	B1-56
 OTH.	B1-58
 OTH.	B1-60
	B1-62
	B1-64
	B1-66
	B1-68
	B1-70
	B1-72
	B1-74
	B1-76
	B1-78
	B1-80
	B1-82
	B1-84

		SECUR	ITY SYST	EM CABLE SCHE	DULE
NO.	DEVICE	TYPE	NO. OF POINTS	NOTES	CABLE
1	DOOR	CARD READER		CARD ACCESS SYSTEM ONLY	COMPOSITE ACCESS CONTROL CABLE OVERALL JACKETED. SEE DOOR INPUT/OUTPUTS.
2	CARD READER	CARD READER	DIRECT WIEGAND	CARD ACCESS SYSTEM ONLY	UNDER 250' - 3P STP #22 AWG SHIELDED FROM COMPOSITE CABLE OVER 250' - 3P STP #18 SHIELDED
3	ARMING CARD READER RM2-LPH	CARD READER	RS485 PORT	CARD ACCESS SYSTEM ONLY	3P STP #18 SHIELDED
4	DOOR CONTACT CARD READER DOOR	DOOR INPUT	1	CARD ACCESS SYSTEM ONLY	1P #22 AWG FROM COMPOSITE CABLE
5	DOOR CONTACT NON CARD READER DOOR	DOOR INPUT	1	DOUBLE DOOR CAN BE WIRED IN SERIES 1 PT. 2 DOORS.	4C #22 AWG STRANDED
6	ELECTRIC STRIKE	DOOR OUTPUT	1	CARD ACCESS SYSTEM ONLY	UNDER 250' - 1P #18 AWG SHIELDED FROM COMPOSITE CABLE OVER 250' - 1P #16 AWG SHIELDED
7	BARRIER FREE DOOR H/C BYPASS RELAY	OUTPUT	1	CARD ACCESS SYSTEM ONLY	1P #18 AWG SHIELDED
8	DOOR CONTROL RELAY	OUTPUT	1	CARD ACCESS SYSTEM ONLY	1P #18 AWG SHIELDED FROM COMPOSITI CABLE
9	SLIDING DOOR SOLENOID	DOOR OUTPUT	1	CARD ACCESS SYSTEM ONLY	1P #18 AWG SHIELDED FROM COMPOSIT CABLE
10	REQUEST TO EXIT	INPUT	1	CARD ACCESS SYSTEM ONLY	2P #22 AWG FROM COMPOSITE CABLE
11	SIREN	OUTPUT	1		2C #18 AWG SHIELDED STRANDED
12	STROBE	OUTPUT	1		4C #18 AWG SHIELDED STRANDED
13	SIREN STROBE COMBO	OUTPUT	1		ONE (1) 4C #18 AWG STRANDED
14	LED INICATOR	OUTPUT	1		ONE (1) 2C #18 AWG STRANDED
15	KEYPAD	NON READER	1		6C #22 AWG STRANDED
16	WINDOW CONTACT	INPUT	1		4C #22 AWG STRANDED
17	GLASS BREAK DETECTOR	INPUT	2	1 ALARM POINT 1 TAMPER POINT	6C #22 AWG STRANDED
18	MOTION DETECTOR	INPUT	2	1 ALARM POINT 1 TAMPER POINT	6C #22 AWG STRANDED
19	LOW TEMP. SENSOR	INPUT	1	1 ALARM POINT	4C #22 AWG STRANDED
20	PANIC ALARM	INPUT	1	1 ALARM POINT	6C #22 AWG STRANDED
21	WIRELESS PANIC RECEIVER	INPUT	1	1 ALARM POINT	6C #22 AWG STRANDED
22	BMS ALARM MONITORING	INPUT	1	1 ALARM POINT	6C #22 AWG STRANDED
23	WATER SENSOR	INPUT	1	1 ALARM POINT	ONE (1) 4C #22 AWG STRANDED

	LVRP B1-L1 SCHEDULE									
							DAYLIGHT			
	RELAY	ROOM		CIRCUIT	RELAY	OCCUPANCY	OR		TIME	
PANEL	NUMBER	NUMBER	ROOM NAME	NUMBER	VOLTAGE	SENSOR	PHOTOCELL	DIMMING	CLOCK	COMMENTS
B1-L1	L1-1	104	JANITOR RM.	B1-9	120 V	Yes	No	No	No	
B1-L1	L1-2	105	PUBLIC WC	B1-11	120 V	Yes	No	No	Yes	
B1-L1	L1-3	106	PUBLIC WC	B1-11	120 V	Yes	No	No	Yes	
B1-L1	L1-4	107	FEMALE STAFF WC	B1-11	120 V	Yes	No	No	Yes	
B1-L1	L1-5	108	MALE STAFF WC	B1-11	120 V	Yes	No	No	Yes	
B1-L1	L1-6	109	KIOSK	B1-11	120 V	Yes	No	No	No	
B1-L1	L1-7	110	SECURITY RM.	B1-11	120 V	Yes	No	No	No	
B1-L1	L1-8	111	HEATED WAITING AREA	B1-5	120 V	Yes	Yes	Yes	Yes	
B1-L1	L1-9	111	HEATED WAITING AREA	B1-7	120 V	Yes	Yes	Yes	Yes	
B1-L1	L1-10		CANOPY	B1-13	120 V	No	Yes	No	Yes	
B1-L1	L1-11		UNHEATED WAITING AREA	B1-13	120 V	No	Yes	No	Yes	
B1-L1	L1-12		WALKWAY WEST COLUMN	B1-23	120 V	No	Yes	No	Yes	
B1-L1	L1-13		WALKWAY EAST COLUMN	B1-25	120 V	No	Yes	No	Yes	
B1-L1	L1-14		BUS BAY AREA NORTH	B1-15	120 V	No	Yes	No	Yes	
B1-L1	L1-15		BUS BAY AREA SOUTH	B1-17	120 V	No	Yes	No	Yes	
B1-L1	L1-16		BUS BAY AREA ISLAND	B1-19	120 V	No	Yes	No	Yes	
B1-L1	L1-17		SIGNAGE	B1-21	120 V	No	Yes	No	Yes	
B1-L1	L1-18		BACK OF BUILDING		120 V	No	Yes	No	Yes	

Camera						Genetec		
ID	Camera Name	Location	Туре	Model #	Hostname	ID	IP Address	Revisions Notes
1	MIL-CAM-05-01	Northwest Heated Shelter	PTZ	P5635-E MKII	mil-cam01	2123001	10.102.123.11	
2	MIL-CAM-05-02	Northeast Heated Shelter	PTZ	P5635-E MKII	mil-cam02	2123002	10.102.123.12	
3	MIL-CAM-05-03	Public Washroom Doors	Fixed	Q3615-VE	mil-cam03	2123003	10.102.123.13	
4	MIL-CAM-05-04	Heated Waiting Area	Fixed, 360	P3707-PE	mil-cam04	2123004	10.102.123.14	
5	MIL-CAM-05-05	Unheated Waiting Area	Fixed, 360	P3707-PE	mil-cam05	2123005	10.102.123.15	
6	MIL-CAM-05-06	Comm Room	Fixed	P3225-LV Mk II	mil-cam06	2123006	10.102.123.16	
7	MIL-CAM-05-07	West Bus Entrance	Fixed, 360	P3707-PE	mil-cam07	2123007	10.102.123.17	Add POE extender
8	MIL-CAM-05-08	Soutwest Busway	PTZ	P5635-E MKII	mil-cam08	2123008	10.102.123.18	Add POE extender
9	MIL-CAM-05-09	North Central Busway	PTZ	P5635-E MKII	mil-cam09	2123009	10.102.123.19	
10	MIL-CAM-05-10	South Central Busway	PTZ	P5635-E MKII	mil-cam10	2123010	10.102.123.20	
11	MIL-CAM-05-11	Northeast Busway	PTZ	P5635-E MKII	mil-cam11	2123011	10.102.123.21	Add POE extender
12	MIL-CAM-05-12	Southeast Busway	PTZ	P5635-E MKII	mil-cam12	2123012	10.102.123.22	Add POE extender
13	MIL-CAM-05-13	East Bus Entrance	Fixed, 360	P3707-PE	mil-cam13	2123013	10.102.123.23	Add POE extender
14	MIL-CAM-05-14	Southeast Corner Bus Shelter	PTZ	P5635-E MKII	mil-cam14	2123014	10.102.123.24	
15	MIL-CAM-05-15	Northwest Corner Bus Shelter	PTZ	P5635-E MKII	mil-cam15	2123015	10.102.123.25	Parapet mounting
16	MIL-CAM-05-16	South Walkway Entrance	Fixed	Q3615-VE	mil-cam16	2123016	10.102.123.26	
17	MIL-CAM-05-17	Mid Walkway Looking South	Fixed	Q3615-VE	mil-cam17	2123017	10.102.123.27	
18	MIL-CAM-05-18	Mid Walkway Looking North	Fixed	Q3615-VE	mil-cam18	2123018	10.102.123.28	
19	MIL-CAM-05-19	North Walkway	PTZ	P5635-E MKII	mil-cam19	2123019	10.102.123.29	Add POE extender
20	MIL-CAM-05-20	North Walkway Looking West	Fixed	Q3615-VE	mil-cam20	2123020	10.102.123.30	
21	MIL-CAM-05-21	North Walkway Entrance	Fixed	Q3615-VE	mil-cam21	2123021	10.102.123.31	Add POE extender
22	MIL-CAM-05-22	West Bus Entrance	PTZ	P5635-E MKII	mil-cam22	2123022	10.102.123.32	Add POE extender
23	MIL-CAM-05-23	East Bus Entrance	PTZ	P5635-E MKII	mil-cam23	2123023	10.102.123.33	Add POE extender
24	MIL-CAM-05-24	Northwest Corner Bus Shelter	PTZ	P5635-E MKII	mil-cam24	2123024	10.102.123.34	Parapet mounting

MENT SCHEDULE									
		Fire Alarm	Duct	Local Disconnect					
	Interlocked With	Interlock	Detector	Switch	Motor Feeder	Remarks			
			1						
	FAN COIL 'FC-1'	No	No	Yes	3#12AWG in 21mmC	ROOF MOUNT			
		No	No	Yes	2#12AWG in 21mmC				
	MOTORIZED DAMPER 'MD-1'	No	No	Yes	2#12AWG in 21mmC				
	MOTORIZED DAMPER 'MD-2'	No	No	Yes	2#12AWG in 21mmC				
	CONDENSING UNIT `CU-1`	No	No	Yes	3#12AWG in 21mmC				
		No	No	Yes	2#12AWG in 21mmC				
		No	No	Yes	3#6AWG in 27mmC				
		No	No	Yes	2#12AWG in 21mmC				
		No	No	Yes	2#12AWG in 21mmC				
	EXHAUST FAN 'EF-3'	No	No	Yes	2#12AWG in 21mmC				
	EXHAUST FAN 'EF-4'	No	No	Yes	2#12AWG in 21mmC				
		No	No	Yes	2#12AWG in 21mmC				
		No	No	Yes	2#12AWG in 21mmC				
		No	No	Yes	2#12AWG in 21mmC				
		No	No	Yes	2#12AWG in 21mmC				
		No	No	Yes	2#12AWG in 21mmC				
		No	No	Yes	2#12AWG in 21mmC				
		No	No	Yes	2#12AWG in 21mmC				
		No	No	Yes	2#12AWG in 21mmC				

E - CCTV SCHEDULE











