

# **YORK REGION PRS STATION #29 T-19-16** 107 GLEN CAMERON ROAD, MARKHAM

### ARCHITECT

SHEET

COVER SHEET

A0 1

A0.2

THOMAS BROWN ARCHITECTS INC. 197 SPADINA STREET, SUITE 500 TORONTO, ON M5T 2C8 TEL: (416) 364-5710 ext 101

### STRUCTURAL CONSULTANT

S4-06 TYPICAL DETAILS

S4-07 TYPICAL DETAILS

STEPHENSON ENGINEERING LTD. 550 VICTORIA PARK AVE #602, NORTH YORK, ON M2J 5A9 TEL: (416) 703-0553

### MECHANICAL CONSULTANT

REGAL ENGINEERING 2828 KINGSWAY DRIVE, SUITE 201 OAKVILLE, ON ON L6J 7M2 P: 905-829-3010

ELECTRICAL CONSULTANT REGAL ENGINEERING 2828 KINGSWAY DRIVE, SUITE 201 OAKVILLE, ON ON L6J 7M2 P: 905-829-3010

ARCHITECTURAL	DRAWING LIST

ASSEMBLIES, SCHEDULES & NOTES

TITLE

STRUCTURAL DRAWING LIST

**MECHANICAL DRAWING LIST** 

SHEET	TITLE	SHEET	TITLE	SHEET	TITLE	SHEET	TITLE	SHEET	TITLE
S1-01	FOUNDATION PLAN	M1.0	MECHANICAL LEAD SHEET	E1.0	ELECTRICAL LEAD SHEET	L1	LANDSCAPE PLAN AND DETAILS	CV-1	EROSION & SEDIMENT CONTROL PLAN
S1-02	ROOF FRAMING PLAN	M2.0	DRAINAGE FLOOR PLAN	E2.0	ELECTRICAL SITE PLAN	L2-TP1	TREE PRESERVATION PLAN	CV-2	SERVICING PLAN
S2-01	COLUMN SCHEDULE AND FOUNDATION PLAN DETAILS	M3.0	PLUMBING FLOOR PLAN	E3.0	POWER FLOOR PLAN	L3-TP2	INVENTORY OF EXISTING TREES	CV-3	GRADING PLAN
S2-02	FOUNDATION SECTIONS	M4.0	SPRINKLER FLOOR PLAN	E4.0	SECUIRTY FLOOR PLAN			CV-4	DETAILS
S3-01	ROOF SECTIONS	M5.0	HVAC FLOOR PLAN	E5.0	LIGHTING FLOOR PLAN				
S3-02	ROOF SECTIONS	M6.0	MECHANICAL SCHEDULES	E6.0	FIRE ALARM SYSTEM FLOOR PLAN				
S4-01	GENERAL NOTES AND TYPICAL DETAILS	M7.0	MECHANICAL DETAILS - 1	E7.0	SINGLE LINE DIAGRAM & PANEL SCHEDULE				
S4-02	TYPICAL DETAILS	M7.1	MECHANICAL DETAILS - 2	E8.0	ELECTRICAL DETAILS				
S4-03	TYPICAL DETAILS		—	E9.0	LIGHTING CONTROL DETAILS				
S4-04	TYPICAL DETAILS		—	E10.0	TYPICAL SECUIRTY DOOR DETAILS				
S4-05	TYPICAL DETAILS								

A0.3	FIRE, EXIT, AND AODA PLAN
A1.1	SITE SURVEY
A1.2	DEMOLITION SITE PLAN
A1.3	SITE PLAN
A1.4	SITE AND GENERAL DETAILS
A1.5	SITE AND GENERAL DETAILS
A2.1	FOUNDATION PLAN & FROST SLAB DETAIL
A2.2	FLOOR PLAN AND PLAN DETAILS
A2.3	FLOOR FINISH & FURNITURE PLAN
A2.4	REFLECTED CEILING PLAN
A3.1	ROOF PLAN
A4.1	BUILDING ELEVATIONS
A4.2	CLADDNG, GLAZING, & LOUVER ELEVATIONS
A4.3	CLADDNG, GLAZING, & LOUVER ELEVATIONS, I.T ROOM PLAN AND ELEVATIONS
A5.1	BUILDING SECTIONS & DETAILS
A6.1	WALL SECTIONS
A6.2	WALL SECTIONS & DETAILS
A7.1	WASHROOM DETAILS & FIXTURE MOUNTING HEIGHTS
A7.2	MILLWORK PLAN, ELEVATIONS & DETAILS
A7.3	MILLWORK & SHOWER DETAILS / MEDICAL ROOM ELEVATIONS
A8.1	DOOR FINISH SCHEDULES & UNIVERSAL WASHROOM OPERATION

ROOM FINISH SCHEDULE A8.2

3 **KEY PLAN** 1:5000 FIRM NAME ADDRESS TORONTO, ONTARIO CONTACT 416-364-5710

### LANDSCAPE CONSULTANT

HARRINGTON MCAVAN LTD. 6882 14th AVENUE MARKHAM, ON L6E 1A5 TEL: (905) 294-8282

LANDSCAPE DRAWING LIST

# SITE SERVICING CONSULTANT

MGM CONSULTING LTD. 140 RENFREW DRIVE, SUITE 100 MARKHAM, ON L3R 6B3 TEL: (905) 477-3600

**CIVIL DRAWING LIST** 

### **ELECTRICAL DRAWING LIST**

\_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_

# 14 15 Actual Construction Importance Category 16 17 21 First Floor 22 Barrier Free Design 23 Hazardous Substances Required Fire Separations 24 25 Required Fire Resistance Rating (FRR) Wall Area of EBF (m2)

STATION

High Building

10

13

North 210 South 210 East 92.2 West 92.2 27 Energy Efficiency 28 Other (describe)



THE CONTENTS OF THIS DRAWING AND SPECIFICATIONS REMAIN THE COPYRIGHT PROPERTY O THOMAS BROWN ARCHITECT INC. AND MUST BE RETURNED UPON COMPLETION OF THE WORK. **ISSUE OR REVISION** ISSUED FOR DATE NO SPA SUBMISSION 01 2018.01.29 80% CLIENT REVIEW 2018.05.29 2019.02.12 100% CLIENT REVIEW BUILDING PERMIT 2019.04.11  $(\bigcirc$  $\mathbf{O}$  $\mathbf{O}$ ГГ 77 Ш Ш  $\bigcirc$ CI IENT C York Region THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO COMMENCEMENT OF THE WORK. ANY DISCREPANCIES ARE TO BE REPORTED TO THE CONSULTANT. ARCHITECT THOMASBROWN AKCHI 197 SPADINA AVE, SUITE 500, TORONTO, ON 416-364-5710 EXT 101 WWW.TBROWNARCH.COM PROFESSIONAL SEAL

COVER SHEET

DWG TITLE



ABBREVIATION	WORD	ABBREVIATIO	N WORD
۶.	AND	MP	
@ 	AT	MAINT	MAINTENANCE
A.C.T A.F.F	ACOUSTIC CEILING TILE ABOVE FINISH FLOOR	MAS MAX	MASONRY MAXIMUM
AL		MECH	MECHANICAL
ARCH AUTO	ARCHITECTURAL	MED MFG	MEDIUM MANUFACTURING
AVG	AVERAGE	MFR	MANUFACTURER
B.O B/W	BOTTOM OF BETWEEN	MI MIN	MIRROR MINIMUM
BD	BOARD	MISC	MISCELLANEOUS
BF BL	BARRIER FREE BOLLARD	MM MTC COORD	MILLIMETER MULTIPLE TRADE
BLDG	BUILDING		COORDINATION REQUIRED
BLKG	BLOCKING CERAMIC BASE TH E	MTD MTG	MOUNTED MEETING
C.B.U	CONCRETE BLOCK UNIT	MTL	METAL
C.L.	CENTERLINE	N N.S	NORTH NON-SLIP
C/W	COMPLETE WITH	N.T.S	NOT TO SCALE
CA Item	CASH ALLOWANCE ITEM	NIC	NOT IN CONTARCT
CHAN	CHANNEL	0.C.	ON CENTER
CL	CLOSET	O.D. OH	OUTSIDE DIAMETER
CNTR	COUNTER	OPG.	OPENING
COL	COLUMN	OPP.	OPPOSITE
CONC	CONCRETE	ORN. OZ.	OUNCE
CONST	CONSTRUCTION	P.B.	PUSH BUTTON
CONT	CONTINUOUS	P.C. P.P.	PRECAST PUSH PLATE
CORR	CORRIDOR	P.T.D.	PAPER TOWEL DISPENSER
CPT		PAR.	PARALLEL
CT D.F	CERAMIC FLOOR TILE	PER.	PERIMETER
D.O	DOOR OPENING	PERP.	PERPENDICULAR
DEPT DET	DEPARTMENT DETAII	PL. PLAM	PLATE PLASTIC LAMINATE
DIA	DIAMETER	PLF.	PLATFORM
DIM	DIMENSION	PNL.	
DR	DOWN	PR.	PAIR
DS	DOWNSPOUT	PREFAB	
DWG		PT. PVC.	PAINT POLYVINYLCHLORIDE
E	EAST	QTR.	QUARTER
E.W		QTY. R	QUANTITY RADIUS
EL	ELEVATION	R.D.	ROOF DRAIN
ELECT	ELECTRICAL	R.H.	
ELEV EMER	ELEVATOR EMERGENCY	R.W.	RAIN WATER
ENCL	ENCLOSURE	RCA	REINFORCED CONCRETE AF
ENTR	ENTRANCE,ENTRY	REF. REQ'D	REFRIGERATOR
EQUIP	EQUIPMENT	RES.	RESIDENTIAL
EXIST	EXISTING	RM. RSI	ROOM RESILIENT
EXT	EXTERIOR	S.	SOUTH
F.A		S.C.S.	SOLID CORE STEEL
F.E	FIRE EXTINGUISHER	S.M.	SHEET METAL
F.E.C	FIRE EXTINGUISHER CABINET	S.N.D.	SANITARY NAPKIN DISPENS
F.H.C F.R.R	FIRE HOSE CABINET	5.P. S.S.	STEEL PLATE STAINLESS STEEL
FDN	FOUNDATION	S.SK.	SERVICE SINK
FIN FI R	FINISH FLOOR	S.T.C. SCHED.	SOUND TRANSMISSION CLA SCHEDULE
FT	FEET,FOOT	SECT.	SECTION
FTG		SER. SH	SERVICE
FUT	FUTURE	SHLV.	SHELVING
G.W.B	GYPSUM WALL BOARD	SIM.	SIMILAR
GA GALV	GAUGE GALVANIZED	SPEC. SPRT.	STRUCTURAL
GEN	GENERAL	SQ.	SQUARE
GL		SQ.FT. SSURF.	SQUARE FEET, SQUARE FOO SOLID SURFACE (MATERIAL
GR	GRADE	STA.	STANDARD
GYP	GYPSUM BOARD	STD. STI	STATION
H.S.P H.V.A.C	HOSE STAND PIPE HEATING, VENTILATION, AIR	STOR.	STORAGE
	CONDITIONING	STRUCT.	STRUCTURAL
HD	HOSE BIB HAND DRYER	SUSP. SYS.	SUSPENDED
HDA	HEAVY DUTY ASPHALT	T.&G.	TONGUE AND GROVE
ноw HM	HARDWARE HOLLOW METAL	т.т.н.	TOILET TISSUE DISPENSER
HORIZ	HORIZONTAL	Τ/Ο	TOP OF
HR HT	HOUR HEIGHT	TEL. TEMP	I ELEPHONE TEMPFRARTURE
I.D	INSIDE DIAMETER	THR.	THRESHOLD
IN INFO		THRU.	
INSUL	INFURINATION	TOWM	TOILET - FLOOR MOUNTED
INT		TV.	TELEVISION
J.C JT	JANITOR CLOSET JOINT	TYP. U.L.C.	I YPICAL UNDERWRITERS'
K.P	KICK PLATE		LABORATORIES CANADA
KIT I	KITCHEN LENGTH	U.N.O. U.O.S.	UNLESS NOTED OTHERWISE
– L.F	LINEAR FOOT	U.S.S.	UNDER SIDE OF STRUCTUR
L.H		UNFIN.	
L.P LAB		V.C.T.	VINYL COMPOSITE TILE
LAM	LAMINATE	V.F.W.	VINYL FABRICK WALL COVE
LAV I BI	LAVATORY LABEL	V.P. VEST.	VENT PIPE VESTIBULE
LINO	LINOLEUM	VIF.	VERIFY
LKR		VIN. Vol	VINYL VOLUME
	LINTEL	W.	WEST
LRG	LARGE	W.C.	WATER CLOSET
LT		W.M. W.O	WIRE MESH WINDOW OPENING
LVL	LEVEL	W.W.F.	WELDED WIRE FABRIC
LVR		W/	WITH
	LOUVER OPENING METER	WD.	WOOD
LVR.O M			WINDOW
M M.O	MASONRY OPENING	VVDVV.	
M M.O	MASONRY OPENING	WT.	CERAMIC WALL TILE

3 / A0.2			
X22A 390mm		R - 19 MINERAL WOOL II AIR / VAPOUR BAI 290 CONCRETE M	(U -0.30) CI - R20 NSULATION - R20 RRIER IASONRY UNITS
X22 530mm		R - 31 ( BRICK MASONRY 50 AIR SPACE MINERAL WOOL IN AIR / VAPOUR BAF 290 CONCRETE M	U -0.19) CI - R20 UNITS NSULATION - R20 RRIER ASONRY UNITS
X21P 397mm		R - 37 (	U -0.15)
		BRICK MASONRY 50 AIR SPACE MINERAL WOOL IN AIR / VAPOUR BAF EXTERIOR SHEAT 150 STEEL STUDS MINERAL WOOL IN 38mm RIGID INSUI ROOF MEMBRANE	UNITS NSULATION - R20 RRIER HING © @ 400MM o/c NSULATION LATION & EXTERIOR SHEA
X21B 375mm		R - 19 MINERAL WOOL II AIR / VAPOUR BA 240 CONCRETE M 22 FURRING CHA 12.7 GYPSUM BO	(U -0.30) CI - R20 NSULATION - R20 RRIER IASONRY UNITS NNEL ARD
X21A 340mm		R - 18	(U -0.31) CI - R20
		MINERAL WOOL II AIR / VAPOUR BAI 240 CONCRETE M	NSULATION - R20 RRIER IASONRY UNITS
X21 480mm	FRR - 3	R - 30 (	U -0.19) CI - R20
		BRICK MASONRY 50 AIR SPACE MINERAL WOOL IN AIR / VAPOUR BAF 240 CONCRETE M	UNITS NSULATION - R20 RRIER ASONRY UNITS SEPARATION WHERE INDICATED
Γ	E / AO O		
	5 / A0.2		R-VALUE SEALED CONCRETE OR 100 CONCRETE VAPOUR BARRIER RIGID INSULATION - R15 200 COMPACTED OPSS
	FL-10		R-VALUE 200 CONCRETE VAPOUR BARRIER RIGID INSULATION - R15 200 COMPACTED OPSS
	FL-11		R-VALUE 200 CONCRETE 200 COMPACTED OPSS
	SW-1		EXTERIOR 125 CONCRETE - BROOI 200 COMPACTED GRAV
6 / A0.2			

RT7

R-VALUE 35 SRI 96 RSI 6.156 FRR 2-ply MODIFIED BITUMEN ROOFING SYSTEM PROTECTION BOARD TAPERED INSULATION (AS INDICATED) POLYISO INSULATION BOARD (MECHANICALLY FASTE VAPOUR BARRIER GYPSUM BOARD UNDERLAY 38mm METAL DECK



	RT7a
ENED)	

TAPERED INSULATION (AS INDICATED) POLYISO INSULATION BOARD (MECHANICALLY FASTENED) VAPOUR BARRIER GYPSUM BOARD UNDERLAY 51mm DOVETAIL METAL DECK

RT-9	R-VALUE	SRI	96	RSI	FRR
	2-ply MODIFIED PROTECTION E TAPERED INSU VAPOUR BARR GYPSUM BOAF 38mm METAL D	) BITUMEN F BOARD JLATION (AS IER RD UNDERL DECK	ROO S INE AY	FING SYSTEM	

### ROOM TAG READ THE GENERAL NOTES. **ISSUE OR REVISION** THEY CONTAIN INFORMATION THAT IS ESSENTIAL IDENTIFIES ROOM NAME ISSUED FOR DATE NO TO UNDERSTANDING THE SCOPE OF WORK / IDENTIFIES ROOM NUMBER SPA SUBMISSION 01 2018.01.29 \_---WHERE SHOWN - INDICATES OCCUPANT IT IS STRONGLY ADVISED THAT THE CONTRACTOR 80% CLIENT REVIEW 2018.05.29 ----LOAD OR ROOM AREA ENSURE ALL SUBTRADES REFER AND COORDINATE 90% CLIENT REVIEW 2018.12.05 WITH A-SERIES DRAWINGS IN THE EXECUTION OF 100% CLIENT REVIEW 2019.02.12 WALL TAG THEIR RESPECTIVE SCOPE OF WORK. - IDENTIFIES WALL TYPE BUILDING PERMIT 2019.04.11 WHERE SHOWN - INDICATES HEIGHT OF **DIMENSIONS** WALL BOTTOM OF WALL FROM FINISH THE SOFTWARE USED TO PRODUCE THESE FLOOR BELOW AND HEIGHT OF WALL. DRAWINGS IS VERY PRECISE IN TERMS OF TYPICALLY APPEARS ON REFLECTED DIMENSIONING. FOR LAYOUT PURPOSES, CEILING PLANS AT BULKHEADS ETC. DIMENSIONS CAN BE ROUNDED TO THE NEAREST DOOR TAG 5MM INCREMENT. IDENTIFIES DOOR TYPE THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO COMMENCMENT OF THE WORK. ALL DRAWINGS AND SPECIFICATIONS (HARD AND IDENTIFIES DOOR NUMBER ---SOFT COPIES ARE THE PROPERTY OF THE ARCHITECT AND MUST BE RETURNED UPON WINDOW TAG COMPLETION OF THE WORK - IDENTIFIES WINDOW / CURTAIN WALL TYPE FLOOR TAG - IDENTIFIES FLOOR TYPE ----FLOOR FINISH TAG - IDENTIFIES FLOOR FINISH **ROOF TAG** IDENTIFIES ROOF TYPE CEILING TAG IDENTIFIES CEILING TYPE / IDENTIFIES HEIGHT OF CEILING ABOVE FINISHED FLOOR BELOW ITEM TAG IDENTIFIES ITEM BY A CODE OR DESIGNATION FOR ----REFERENCE TO SPECIFICATIONS OR SCHEDULES SECTION SYMBOLS DENTIFIES WHEN DETAIL IS SIMILAR TO ANOTHER DETAIL THREE FILLED TRIANGLES INDICATES SECTION TYPE - BUILDING SECTION IDENTIFIES DETAIL NUMBER ON SHEET - IDENTIFIES SHEET NUMBER IDENTIFIES WHEN DETAIL IS SIMILAR TO ANOTHER DETAIL THREE OPEN TRIANGLES INDICATES SECTION TYPE - WALL SECTION IDENTIFIES DETAIL NUMBER ON SHEET \_\_\_\_Y - IDENTIFIES SHEET NUMBER - IDENTIFIES WHEN DETAIL IS SIMILAR TO ANOTHER DETAIL SINGLE FILLED TRIANGLE INDICATES SECTION TYPE - DETAIL SECTION - IDENTIFIES DETAIL NUMBER ON SHEET - IDENTIFIES SHEET NUMBER ELEVATION SYMBOLS IDENTIFIES DETAIL NUMBER ON SHEET FILLED TRIANGLE INDICATES ELEVATION TYPE - BUILDING - IDENTIFIES SHEET NUMBER TRIANGLE LOCATION INDICATES DIRECTION OF VIEW IDENTIFIES DETAIL NUMBER ON SHEET OPEN TRIANGLE INDICATES ELEVATION TYPE - DETAIL - IDENTIFIES SHEET NUMBER - TRIANGLE LOCATION INDICATES DIRECTION OF VIEW **CLADDING ELEVATION** CI IENT - IDENTIFIES DETAIL NUMBER ON SHEET IDENTIFIES SHEET NUMBER **GLAZING (WINDOW) ELEVATION** IDENTIFIES DETAIL NUMBER ON SHEET IDENTIFIES SHEET NUMBER York Region MILLWORK ELEVATION - IDENTIFIES DETAIL NUMBER ON SHEET IDENTIFIES SHEET NUMBER THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOF CALLOUT SYMBOLS TO COMMENCEMENT OF THE WORK. ANY DISCREPANCIES ARE TO BE REPORTED TO THE CONSULTANT. ARCHITEC - IDENTIFIES WHEN DETAIL IS SIMILAR TO ANOTHER DETAIL THOMASBROWN - IDENTIFIES DETAIL NUMBER ON SHEET - IDENTIFIES SHEET NUMBER 197 SPADINA AVE, SUITE 500, TORONTO, ON 416-364-5710 EXT 101 AODA SYMBOL WWW.TBROWNARCH.COM INDICATES THAT AN ITEM IS REQUIRED TO MEET REQUIREMENTS OF THE AODA (ACCESSIBILITY FOR ONTARIANS WITH PROFESSIONAL SEAL G DISABILITIES ACT) OR SIMILAR TYPE REQUIREMENT AODA WASHROOM - ACCESSIBLE SYMBOL INDICATES WHERE A WASHROOM IS TO BE CONSTRUCTED IN ACCORDANCE WITH AODA REQUIREMENTS FOR 6 ACCESSIBLE WASHROOMS WC-A AODA WASHROOM - UNIVERSAL SYMBOL INDICATES WHERE A WASHROOM IS TO BE CONSTRUCTED IN ACCORDANCE WITH AODA REQUIREMENTS FOR E DWG TITLE UNIVERSAL WASHROOMS WC-U ASSEMBLIES, FIRE RATING SYMBOL SCHEDULES & INDICATES THAT ITEM IS OR MAY BE REQUIRED TO BE CONSTRUCTED WITH A FIRE RATING NOTES CASH ALLOWANCE SYMBOL INDICATES THAT AN ITEM WILL BE PURCHASED OR CA SUPPLIED UNDER THE CONTRACT CASH ALLOWANCE. REFER TO CASH ALLOWANCE SECTION OF SPECIFICATION FOR DETAILS AND/OR EXCLUSIONS NIC (NOT IN CONTRACT) SYMBOL CREYSCAL REPRODUC INDICATES THAT AN ITEM IS 'NOT IN CONTRACT' NIC MULTIPLE TRADE COORDINATION SYMBOL D IN COLOUR OR MAY DEGRADE F INDICATES CIRCUMSTANCES THAT MAY REQUIRE SPECIFIC COORDINATION GC EFFORT. THIS SYMBOL IS PROVIDED AS AN AID TO THE CONTRACTOR TO ENSURE PROPER EXECUTION OF THE WORK BY SUBTRADES. IN NO WAY IS IT INTENDED TO DICTATE MEANS OR METHODS OF EXECUTION 2019/07/09 SUBTRADES As indicated EST PI AND BUILDING ENTRANCE SYMBOL DWG STATUS : RAWINGS ARE BE INDICATES THE LOCATION OF BUILDING ENTRANCES. TENDER OFTEN CODE-RELATED PROJECT No. SITE ACCESS SYMBOL 1509 o

A700-GUIDE TO USE OF DRAWINGS

CONSTRUCTION. SITE ACCESS

INDICATES THE LOCATION OF SITE ENTRANCES DURING

REVISION 9

NG NG

DRAWING No.

**AU.2** 

THE CONTENTS OF THIS DRAWING AND SPECIFICATIONS REMAIN THE COPYRIGHT PROPERTY O

THOMAS BROWN ARCHITECT INC. AND MUST BE RETURNED UPON COMPLETION OF THE WORK.







DATE

2018.05.29

2018.12.05

2019.02.12

2019.04.11

DRAWN BY

SRL

REVISION

9









	THE TERM 'SITE EXTENTS' REFERS TO THE AREA THAT THE CONTRACTOR IS REQUIRED TO	
	ENCLOSE WITH CONSTRUCTION FENCING FOR THE DURATION OF THE WORK.	
•	ALL WORK DONE OUTSIDE OF THESE LIMITS MUST BE EXECUTED IN STRICT ACCORDANCE	
	WITH THE STANDARDS OF THE MUNICIPALITY AND ALL OTHER AUTHORITIES HAVING	
	JURISDICTION. MAKE GOOD AT NO ADDITIONAL COST TO THE OWNER OR MUNICIPALITY ANY UBTRADES	
	DAMAGE CAUSED BY THIS CONSTRUCTION TO MATERIALS OR FINISHES BEYOND THE	
	"PROPERTY LINE" INDICATED.	
•	CONTRACTOR IS TO RESTRICT ALL WORK, EQUIPMENT AND MATERIALS STORAGE TO AREA	
	WITH-IN "PROPERTY LINE" EXCEPT WHERE NOTED OTHERWISE. PRIMARY SITE ACCESS	
	POINT & CONSTRUCTION PARKING IS TO BE CONFIRMED WITH OWNER. NO PARKING IN CITY	
	RIGHT-OF-WAY.	
•	LOCATE EXCAVATED MATERIALS & TOPSOIL PILES AS DIRECTED. AT COMPLETION OF	
	PROJECT ANY EXCESS MATERIAL IS TO BE REMOVED AND AREA MADE GOOD TO	
	ARCHITECT'S SATISFACTION.	
•	FOR TRENCHING & BACKFILLING OF ALL SERVICE LINES AND DIVISION OF RESPONSIBILITY	
	REFER TO APPROPRIATE SPEC SECTIONS & DWG NOTES. TRENCHING & BACKFILLING NOT	
	IDENTIFIED BY A PARTICULAR SUB-TRADE WILL BE THE GENERAL CONTRACTOR'S	
	RESPONSIBILITY TO PROVIDE TRENCHING AND BACKFILLING AND GRADE FINISHES TO	
	MATCH THE SURROUNDING SURFACES.	
•	NOTE THAT THE EXACT LOCATIONS OF ALL NEW MECHANICAL & ELECTRICAL ITEMS ARE	
	APPROXIMATE UNLESS DIMENSIONS ARE GIVEN. ADJUST LOCATIONS AS REQUIRED AND AS	
	APPROVED BY CONSULTANT TO SUIT SITE CONDITIONS.	
•	ALL FINISHED PAVING AND GRADING TO BE TO NEW LEVELS SHOWN. ALL DRAINAGE TO BE	
	POSITIVE, LEAVING NO POCKETS IN FINISHED GRADE. FINISHED GRADING TO SLOPE	
	MINIMUM 1:12 AND ASPHALI TO SLOPE MAX 1:10 AWAY FROM BUILDING UNLESS SHOWN	
	OTHERWISE, NEW GRADES TO MEET EXISTING GRADES FALLING AWAY FROM BUILDING AND	
	FEATHERED OUT EVENLY.	
•	NOTE THAT ALL MECHANICAL AND ELECTRICAL UNDERGROUND SERVICE LINES INDICATED	
	UN DRAWINGS ARE APPROXIMATE UNLT AND ARE INDICATED AS ACCURATELT AS POSSIBLE	
	FROM INFORMATION SUPPLIED. CONTRACTOR STALL DE RESPONSIBLE FOR DETERMINING	
	EARCH THES, LOCATIONS, DEFTINS AND MARKING ALL UNDERGROUND SERVICES WITHIN	
	ALL AREAS OF NEW CONSTRUCTION. INCLUDING GAS LINES, WATER LINES, ELECTRICAL	
n		
0.	CONSTRUCTION TO FACILITATE AS BUILT DRAWINGS	
1	CO-ORDINATE ALL WORK NOTED HER WITH THE SPECIFICATION DOCUMENTS - FOR	
••	GENERAL REQUIREMENTS EXISTING CONDITIONS EXCAVATION & BACKFILLING	

em		Requirements	Proposed			
1	Zoning By-Law:	2237, AS AMENDED BY B	Y-LAW 2007-205			
2	Zoning Category:	0				
3	Permitted Uses:	EMERGENCY SERVICES	STATION			
4	Lot and Plan Number:	0				
5	Lot Area (sqm):	3,895	3,895			
6	Lot Coverage Maximum (%):		12.6			
7	Established Grade:		1			
8	Gross Building Area (sqm):	N/A	490			
9	Building Footprint (sqm):	N/A	490			
10	Floor Space Index (FSI)	0.1	1			
11	Green Roof Area (sqm):	N/A	0			
12	Landscaped Area (sqm):	N/A	1717.32			
13	Front Yard Landscape Minimum (%):	N/A				
14	Hardscaped Area (High Albedo) (sqm):	N/A	372.03			
15	Paved Area (sqm):	N/A	1276			
16	Building Height Maximum (m):	N/A	6M			
17	Parking Spaces:	N/A	14			
18	Parking Spaces for Persons with Disabilities:	N/A	1			
19	Bicycle Parking:	N/A	0			
20	Loading Spaces:	N/A	0			
Municip	oal Setbacks					
21	Front Yard Setback	1.8M MIN 2.4m MAX	2.4M			
22	Side Yard Setback	0	5M			
23	Rear Yard Setback	7M	17M			
24	Side Yard Setback	0	88M			

THE CO AND MUS <sup>-</sup> 1 2 3 4 6 7 8 9	THE CONTENTS OF THIS DRAWING AND SPECIFIC REMAIN THE COPYRIGHT PROPERTY CONTHOMAS BROWN ARCHITECT INC. AND MUST BE RETURNED UPON COMPLETION OF ISSUED FOR 1 SPA SUBMISSION 01 2 SPA SUBMISSION 02 3 80% CLIENT REVIEW 4 SPA SUBMISSION 03 6 SPA SUBMISSION 05 7 90% CLIENT REVIEW 8 100% CLIENT REVIEW 9 BUILDING PERMIT					
PROJECT :	YORK REGION PRS	STATION #29 T-19-16	107 GLEN CAMERON ROAD, MARKHAM			
	NTRACTOR SHALL	Reg	<b>TION</b>			
A A A A T: W:	197 SPADINA AN 416-364-5710 EX WWW.TBROWN	VE, SUITE 500, TO TARCH.COM	DISCREPANCIES ISULTANT.			
PROFESSIO	NAL SEAL					

SITE PLAN

DWG TITLE









			CONSTRUC				
	DATE	2019/	/07/09				
_	AS	indicated	DRAWN BY	Author			
	PROJECT N	<sup></sup> 15	09				

A1.5

REVISION

6

DRAWING No.































					2	21175		
2030	1840	1840	1170	1840	1840	1170	1840	
GL	GL							
GL	GL							
GL	GL							
GL			GL			GL		
GL			GL			GL		
GL			GL			GL		
GL			GL			GL		
GL			GL			GL		
GL			GL			GL		
2054	36	32	1220	36	332	1220		

DATE

2018.05.29

2018.12.05

2019.02.12

2019.04.11

Z∀

Y N

Ś

RO

Z O

AMER(

Q

GLEN

107

SRL

REVISION

9













											D	00	R SC	CHE	DU	LE											
			DOORS															HARD	WAR								
No.	FROM	то	WIDTH	HEIGHT	THICKNESS	TYPE	DOOR MATL	INSULATED	FRAME TYPE	FRAME MATL	FRR-D	THRESHOLD	KICK PLATE	DOOR SWEEP	DOOR BELL	KEY PAD	CARD READER	DOOR CONTACT	ELECTRIC STRIKE	REX	EXIT DEVICE	DOOR OPERATOR	DOOR CLOSER	PUSH TO LOCK	LOCKSET		
100A	VESTIBULE	EXTERIOR	1100	2150	51	FG	AL	Yes	AL	AL		Yes		Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes		STOREROOM		
100B	ACCESS CORRIDOR	VESTIBULE	1100	2150	51	FG	AL		AL	AL											Yes	Yes	Yes		PASSAGE		
101	ACCESS CORRIDOR	VEHICLE BAYS	1100	2150	51	FG	HM		BUTT	HM	1.5HR	Yes									Yes				PASSAGE		
103	LOUNGE ROOM	WRITE-UP ROOM	1300	2760	45	WD	WD		N/A	N/A															N/A		
104	WRITE-UP ROOM	EXTERIOR	1100	2150	51	FG	AL	Yes	AL	AL		Yes		Yes			Yes	Yes	Yes	Yes	Yes		Yes		STOREROOM		
106	LOCKER ROOM	MALE WASHROOM / SHOWER	965	2150	45	М	НМ		WRAP	НМ			Yes						Yes			Yes	Yes	Yes	STOREROOM		
107	LOCKER ROOM	FEMALE WASHROOM / SHOWER	965	2150	45	М	НМ		WRAP	НМ			Yes						Yes			Yes	Yes	Yes	STOREROOM		
108	VEHICLE BAYS	UTILITY ROOM	965	2150	45	М	HM		WRAP	HM	1.5HR		Yes								Yes		Yes		PASSAGE		
109	ACCESS CORRIDOR	I.T ROOM	965	2150	45	М	HM		WRAP	HM		Yes	Yes				Yes	Yes	Yes	Yes					STOREROOM		
110A	EXTERIOR	VEHICLE BAYS	965	2150	45	NL1	HM	Yes	BUTT	НМ		Yes	Yes	Yes			Yes	Yes	Yes	Yes					STOREROOM		
110B	EXTERIOR	VEHICLE BAYS	965	2150	45	NL1	HM	Yes	BUTT	НМ		Yes	Yes	Yes			Yes	Yes	Yes	Yes					STOREROOM		
110C	EXTERIOR	VEHICLE BAYS	3600	3600	54	FFD	AL	Yes	N/A	N/A				Yes			Yes								N/A		
110D	EXTERIOR	VEHICLE BAYS	3600	3600	54	FFD	AL	Yes	N/A	N/A				Yes			Yes								N/A		
110E	EXTERIOR	VEHICLE BAYS	3600	3600	54	FFD	AL	Yes	N/A	N/A				Yes			Yes								N/A		
110F	EXTERIOR	VEHICLE BAYS	3600	3600	54	FFD	AL	Yes	N/A	N/A				Yes			Yes								N/A		
110G	EXTERIOR	VEHICLE BAYS	3600	3600	50	OHD	AL	Yes	N/A	N/A				Yes			Yes								N/A		
110H	EXTERIOR	VEHICLE BAYS	3600	3600	50	OHD	AL	Yes	N/A	N/A				Yes			Yes								N/A		
1101	EXTERIOR	VEHICLE BAYS	3600	3600	50	OHD	AL	Yes	N/A	N/A				Yes			Yes								N/A		
110J	EXTERIOR	VEHICLE BAYS	3600	3600	50	OHD	AL	Yes	N/A	N/A				Yes			Yes								N/A		
112	MEDICAL STORAGE	VEHICLE BAYS	965	2150	44	G	HM		BUTT	ΗM	1.5HR		Yes				Yes	Yes	Yes	Yes					STOREROOM		
112A	VEHICLE BAYS	OXYGEN STORAGE	965	2150	45	Μ	HM		BUTT	HM	1.5HR		Yes												PASSAGE		
112B	EXTERIOR	OXYGEN STORAGE	965	2150	45	М	HM	Yes	BUTT	HM		Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes		Yes		STOREROOM		
114	EXTERIOR	EXTERIOR GARBAGE ROOM	1800	2150	45	M2	НМ	Yes	BUTT	НМ			Yes	Yes									Yes		UNICAN LOCK		

**≩ 2 / A8.1** 

DOOR TYPES

WIDTH



1:30



150 150

UNICAN LOCK ON EXTERIOR PROGRAMMED TO CODE PROVIDED BY EMS. EACH DOOR SHALL HAVE A LOUVER.

150 150

COMMENTS DOOR OPERATOR MUST BE INTEGRATED WITH ACCESS CONTROL BY USE OF CX 12 PROVIDED BY OPERATOR SUPPPLIER FIRE RATED GLASS AS PER SPECIFICATIONS SOLID WOOD CORE SLIDING DOOR c/w WINDOW TO COMPLY WITH AODA REGULATION UNIVERSAL WASHROOM TO COMPLY WITH AODA REGULATION UNIVERSAL WASHROOM DOOR SHALL BE UNDERCUT 25mm FOUR-FOLD DOOR, GC TO PROVIDE RELAY FOR CARD ACCESS INTEGRATION TO BE WIRED AND TESTED BY SECUIRTY CONTRACTOR. FOUR-FOLD DOOR, GC TO PROVIDE RELAY FOR CARD ACCESS INTEGRATION TO BE WIRED AND TESTED BY SECUIRTY CONTRACTOR. FOUR-FOLD DOOR, GC TO PROVIDE RELAY FOR CARD ACCESS INTEGRATION TO BE WIRED AND TESTED BY SECUIRTY CONTRACTOR FOUR-FOLD DOOR, GC TO PROVIDE RELAY FOR CARD ACCESS INTEGRATION TO BE WIRED AND TESTED BY SECUIRTY CONTRACTOR. OVERHEAD SECTIONAL, GC TO PROVIDE RELAY FOR CARD ACCESS INTEGRATION TO BE WIRED AND TESTED BY SECUIRTY CONTRACTOR. OVERHEAD SECTIONAL, GC TO PROVIDE RELAY FOR CARD ACCESS INTEGRATION TO BE WIRED AND TESTED BY SECUIRTY CONTRACTOR. OVERHEAD SECTIONAL, GC TO PROVIDE RELAY FOR CARD ACCESS INTEGRATION TO BE WIRED AND TESTED BY SECUIRTY CONTRACTOR. OVERHEAD SECTIONAL. GC TO PROVIDE RELAY FOR CARD ACCESS INTEGRATION TO BE WIRED AND TESTED BY SECUIRTY CONTRACTOR.









ROOM FINISH SCHEDULE									
	WA	LLS			CEILING				
NORTH	EAST	SOUTH	WEST	FINISH		_			
					HEIGHT	COMMENTS			
PT-1	PT-1	PT-1	PT-1	PT-1	2750				
PT-1	N/A	PT-1	PT-1	PT-1	2750				
PT-1	PT-1	PT-1	WT-4	PT-1	2750				
PT-1	PT-2	PT-1	N/A	PT-1	2750				
PT-1	PT-2	PT-1	PT-1	PT-1	2750				
PT-1/PT-2	PT-1/PT-2	PT-1/PT-2	PT-1/PT-2	PT-1	2750				
WT-1 / WT-2	WT-1 / WT3	WT-1 / WT2	WT-1 / WT2	PT-1	2750				
WT-1 / WT2	WT-1 / WT2	WT-1 / WT2	WT-1 / WT3	PT-1	2750				
N/A	N/A	N/A	N/A	N/A	2750				
N/A	N/A	N/A	N/A	PT-4	2750				
PT-1	PT-1	PT-1	PT-1	PT-4	5500				
PT-1	PT-1	PT-1	PT-1	PT-1	2750				
PT-1	PT-1	PT-1	PT-1	PT-4	2750				
					0400				

			A700-10000-IS-1
	OFFICE/ROOM SIGNS (CHANGEABLE MESSAGE)	150	
	TYPE DANSIGN PAPERFLEX CURVE SIGN WITH A	SC NAME	<ul> <li>HEADER PANEL</li> <li>25mm FONT (FUTURA</li> <li>HV BT)</li> </ul>
HITE TEXT AND	MAGNETIC LOCKING SYSTEM AND TAMPER PROOF PAPER INSERT SYSTEM MATERIAL	IS-1	<ul> <li>PAPER INSERT 15mm</li> <li>FONT (FUTURA MD</li> <li>BT)</li> </ul>
NGS INSERTED	LACQUERED ABS WITH EXTRUDED ALUMINUM BRACKETS		WITH WHITE TEXT
BLE TO VANDALISM	VINYL ROOM NUMBER ON HEADER PANEL AND PAPER INSERT WITH ROOM NAME OR OCCUPANT'S NAME		
M TO 1.5MM ABOVE	INSTALLATION MOUNTED AT 1500MM TO CENTRELINE ABOVE THE FINISHED FLOOR AND 150MM AWAY FROM THE DOOR FRAME		
S AND THE FIRST	ROOM SIGNS (PERMANENT MESSAGE)	150 150	
ATIVE POSITION,	MATERIAL	0 NAME	<ul> <li>HEADER PANEL 25mm</li> <li>FONT (FUTURA HV BT)</li> </ul>
LS OR TACTILE RE TEXT	LACQUERED ABS WITH EXTRUDED ALUMINUM BRACKETS	5-51	<ul> <li>BODY PANEL WITH</li> <li>15mm FONT (FUTURA</li> </ul>
TACTILL	MESSAGE		MD BT)
SMOOTH	VINYL ROOM NUMBER ON HEADER PANEL AND VINYL ROOM NAME ON BODY PANEL		<ul> <li>BLUE BACKGROUND</li> <li>WITH WHITE TEXT</li> </ul>
PROOFREADER HAS V PLACEMENT ONLY	INSTALLATION		
	MOUNTED AT 1500MM TO CENTRELINE ABOVE THE FINISHED FLOOR AND 150MM AWAY FROM THE DOOR FRAME		
	WASHROOM SIGNS	200	
	MATERIAL		<b>m</b>
	LACQUERED ABS WITH EXTRUDED ALUMINUM BRACKETS.		MEN.
	MESSAGE	+ IS-3	IS-4
	TACTILE TEXT AND PICTOGRAM AND BRAILLE	<u> </u>	<u> </u>
	INSTALLATION		
	MOUNTED AT 1500MM TO CENTRELINE ABOVE THEFINISHED FLOOR AND 150MM AWAY FROM THE DOOR FRAME, ADJACENT TO THE DOOR	WOMEN	MEN
	HANDLE	IS-5	IS-6







MADE TO THE DESIGN STANDARDS (TOWN OF MARKHAM, AUGUST 2012) 4. ALL RESTORATIONS AND RELOCATION SHALL BE COMPLETED TO THE SATISFACTION OF

THE DIRECTOR OF ENGINEERING AND THE REGION OF YORK. ALL AREAS WITHIN PUBLIC RIGHT-OF-WAYS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER. GRASSED AREAS SHALL BE PROVIDED WITH 200mm OF TOPSOIL AND SODDED TO THE SATISFACTION OF THE DIRECTOR OF ENGINEERING. 5. THE LOCATION OF UTILITIES IS APPROXIMATE ONLY. THE EXACT LOCATION SHALL BE

DETERMINED BY CONSULTING THE CONCERNED UTILITY COMPANIES. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES AND SHALL BE RESPONSIBLE FOR ADEQUATE PROTECTION FROM DAMAGE DURING CONSTRUCTION

6. ALL DIMENSIONS, ELEVATIONS, AND OTHER INFORMATION SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION. ANY DISCREPANCIES FOUND MUST BE REPORTED IMMEDIATELY TO THE ENGINEER. 7. UNLESS OTHERWISE NOTED ON THE DRAWINGS, THE FOLLOWING REQUIREMENTS SHALL APPLY TO THE WORKS.

### (A) SEWER PIPE MATERIAL

1. ALL POLYVINYL CHLORIDE (PVC) SEWER PIPES AND FITTINGS SHALL CONFORM TO CSA-B182.1 OR CSA-B182.2. ALL POLYETHYLENE PIPES (PE) AND FITTINGS SHALL CONFORM TO CSA-B182.6. ALL PIPES AND FITTINGS SHALL MEET CURRENT M.O.E. SPECIFICATIONS. THE PIPE SHALL HAVE A MAXIMUM STANDARD DIMENSION RATIO (SDR) OF 35 AND SHALL BE GREEN IN COLOUR.

2. ALL CONCRETE SEWER PIPES 375mm DIAMETER OR LARGER SHALL CONFORM TO CSA-A257.2 REINFORCED CLASSES AS SPECIFIED (50-D, 65-D, 100-D, OR 140-D) WHILE CONCRETE SEWERS 300mm DIAMETER OR SMALLER SHALL CONFORM TO CSA-A257.1-M92 CLASS 3 OR LATEST AMENDMENT UNLESS OTHERWISE SPECIFIED. 3. THE MINMUM PIPE SIZE FOR SANITARY AND STORM SEWERS SHALL BE 200mm and 300mm DIAMETER RESPECTIVELY.

4. WHERE WATER BEARING SAND OR SILT OCCUR, THE SEWER JOINTS SHOULD BE LEAK-PROOF, OR WRAPPED WITH A WATER PROOF MEMBRANE TO PREVENT SUBGRADE MIGRATION THROUGH LEAKY JOINTS RESULTING FROM INADVERTENT FAULTY INSTALLATION. THE NECESSITY OF IMPLEMENTING THESE MEASURES CAN BEST BE DETERMINED DURING SEWER CONSTRUCTION.

1. ALL MANHOLE AND CATCHBASIN EXCAVATIONS SHALL BE BACKFILLED WITH GRANUAL 'B' COMPACTED TO 100% SPD. (D) MANHOLES

ALL STORM MANHOLES SHALL CONFORM TO OPSD 701.010, 701.011, 701.012 AND 701.013 WITH FRAME AND COVER AS PER OPSD 401.010. 2. MANHOLE STEPS SHALL BE AS PER OPSD 405.010. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR ALL MANHOLES OVER 3,600mm DIAMETER OR CAST-IN-PLACE MANHOLES.

3. ALL SANITARY MANHOLES SERVING 200mm SEWER LINES SHALL BE PROVIDED WITH MINUMUM 250mm BENCHING THROUGHOUT AND CONFORM TO OPSD SPECIFICATIONS. 4. 'MODULOC' OR APPROVED MANHOLE ADJUSTERS SHALL BE USED IN LIEU OF BRICKING. 5. EXTERNAL SANITARY DROP STRUCTURES SHALL BE AS PER TOWN STD. MS-1, INTERNAL SANITARY DROP STRUCTURES SHALL BE AS PER MS-2, STORM DROP STRUCTURES SHALL BE AS PER OPSD-1003.01 (MODIFIED). DROP PIPE SHALL BE ONE SIZE LESS THAN SEWER TO A MAX. OF 450mm DIAMETER AND SHALL BE CONNECTED TO MAINLINE SEWER WITH TEE OR WYE.

### (E) CATCHBASINS

1. ALL SINGLE AND DOUBLE CATCHBASINS SHALL BE PRECAST AS PER OPSD-705.010 AND 705.020 RESPECTIVELY. ALL REAR LOT CATCHBASINS (RLCB) SHALL BE AS PER TOWN STD. MS-4 &

MS-12. 2. ALL STREET CATCHBASIN FRAME AND COVER SHALL BE AS PER OPSD 400.020

200mm - R=57.0m; 300mm - R=83.0m and 400mm - R =100.0m 5. ALL WATERMAIN BEDDING SHALL BE CLEAN SAND FILL 150mm BELOW TO 150mm ABOVE OBVERT AS PER TOWN STD. MW-13; CLASS 'E' FOR STABLE GROUNDS AND CLASS 'F' WITH RESTRAINED JOINTS

FOR UNSTABLE GROUNDS. 6. CATHODIC PROTECTION SHALL BE PROVIDED ON ALL BURIED METAL PIPES AND FITTINGS AS DETERMINED BY THE SOILS ENGINEER. 7. TRACER WIRE SHALL BE INSTALLED ON ALL PVC WATERMAIN AS PER TOWN STD. MW-11 AND SHALL BE NO. 12 GAUGE (CANADIAN WIRE STRANDED T.W.V., 75C 600V OR APPROVED EQUIVALENT).

8. FLUSHING STATION COMPLETE WITH 50mm (MIN.) SERVICE CONNECTION SHALL BE PROVIDED AT END OF ALL PERMANENT DEAD END MAINS AS PER TOWN STD. MW-7 AND MW-7A & MW-7B AND SHALL BE CONNECTED TO STORM SEWER, IF POSSIBLE. 9. HYDRANTS AND VALVES SHALL BE PROVDED AT THE END OF ALL

TEMPORARY DEAD ENDS. 10. ALL TEES AND HORIZONTAL BENDS SHALL BE PROVIDED WITH THRUST BLOCKING AS PER OPSD-1103.010. ALL VERTICAL BENDS SHALL BE PROVIDED WITH THRUST BLOCKING AS PER OPSD-1103.020

OR AS SPECIFIED. 11. ALL PLUGGED TEES AND CROSSES SHALL BE PROVIDED WITH THRUST BLOCKING AS PER TOWN STD. MW-16A.

12. HYDRANT INSTALLATION SHALL BE AS PER TOWN STD. MW-6 (SELF DRAINING) WITH STORZ PUMPER. 13. ALL PIPE FITTINGS SHALL BE CAST IRON, CEMENT LINED

MECHANICAL JOINT, SHORT BODY CONFORMING TO AWWA C110 IRON FITTINGS OR AWWA C135 FOR DUCTILE IRON FITTINGS. FITTINGS SHALL BE SUPPLIED WITH MECHANICAL JOINT TYPE ENDS AWWA C111. 14. ALL VALVE BOXES SHALL BE 100mm SLIDING TYPE BOX WITH 750mm TOP SECTION AND 1.75m LENGTH LOWER SECTION AS REQUIRED COMPLETE WITH GUIDE PLATE. VALVE BOXES SHALL BE MUELLER A-769, EMCO NO. 4 OR BIBBY ST. CROIX N2 V6.







	DENOTES	HAND WELL
•	DENOTES	UTILITY POLE
	DENOTES	LIGHT
	DENOTES	HYDRO
$\frown$	DENOTES	OVERHEAD WIRES
n TREE ( Ø )	DENOTES	EXISTING TREE
P (500)	DENOTES E	X. CORRUGATED STEEL PIPE (500Ø)
Y ————————————————————————————————————	DENOTES	GUY WIRE/POLE
·	DENOTES	CULVERT INVERT
	DENOTES	UNDERGROUND GAS MAIN PIP
(8 <sup>1,82</sup>	DENOTES	EXISTING ELEVATION
$\Box \!$	DENOTES	EXISTING OVERLAND FLOW
•	DENOTES F	PROPOSED MAJOR OVERLAND FLC
]) свмн	DENOTES	PROPOSED CATCH BASIN MANHOL
ogs	DENOTES	PROPOSED OIL/GRIT SEPARATOR
МН 2	DENOTES	PROPOSED STORM MANHOLE
	DENOTES	PROPOSED SANITARY MANHOLE
CB 1	DENOTES	PROPOSED CATCH BASIN
	DENOTES	PROPOSED STORM SEWER
	DENOTES	PROPOSED SANITARY SEWER
<b>&gt;</b>	DENOTES	PROPOSED WATERMAIN
	DENOTES	PROPOSED SWALE
BP	DENOTES	BACKFLOW PREVENTOR
M	DENOTES I	METERS

\varTheta VB DENOTES PROPOSED VALVE BOX ALL ELEVATIONS SHOWN HEREON ARE GEODETIC DATUM AND ARE DERIVED FROM THE CITY OF MARKHAM BENCHMARK No.M-01-003 HAVING A PUBLISHED FLEVATION OF 162,781m

TOPOGRAPHIC SURVEY PROVIDED BY J.D. BARNES., DATED 17 JANUARY 2017

	OPSD STANDARDS DWG					
STRUCTURE	STANDARD	FRAME/GRATE				
СВМН 1	701.010	400.010				
CBMH 2	701.010	400.010				
СВМН 3	701.012	400.010				
CB 4	705.010	400.010				
CTLMH 5	701.010	401.010				
MH 6	701.010	401.010				
MHA1	701.010	401.010				
MHA2	701.010	401.010				
OGS	STC300					

Accepted to be in accordance with the City of Markham Standards This acceptance is not to be construed as verification of engineering content. Review Staff: Signature: Reza Fani, P.Eng. Date

Manager, Development Engineering



REVISIO

DRAWING No



IMMEDIATELY SHOULD THERE BE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND PROPOSED GRADING AND/OR SERVICING DESIGN, OR CONFLICTS IN CONSTRUCTING THE WORK AS PER THE INTENT OF THE APPROVED DESIGN PRIOR TO CONSTRUCTION.

### GENERAL NOTES

. PRIOR TO STARTING ANY WORKS, THE CONTRACTOR MUST ENSURE THAT ALL NECESSARY APPROVALS ARE IN PLACE FROM THE CITY OF MARKHAM, REGION OF YORK, AND OTHER EXTERNAL AGENCIES, AS REQUIRED. 2. ALL WORKS SHALL CONFORM TO THE LATEST STANDARDS AND SPECIFICATIONS OF THE TOWN OF MARKHAM, THE REGION OF YORK, M.O.E. AND OPSD/OPSS.

3. FOR ALL CONSTRUCTION DETAILS NOT SHOWN ON THE DRAWINGS, REFERENCE SHALL BE MADE TO THE DESIGN STANDARDS (CITY OF MARKHAM, AUGUST 2012)

4. ALL RESTORATIONS AND RELOCATION SHALL BE COMPLETED TO THE SATISFACTION OF THE DIRECTOR OF ENGINEERING AND THE REGION OF YORK. ALL AREAS WITHIN PUBLIC RIGHT-OF-WAYS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER. GRASSED AREAS SHALL BE PROVIDED WITH 200mm OF TOPSOIL AND SODDED TO THE SATISFACTION OF THE DIRECTOR OF ENGINEERING. 5. THE LOCATION OF UTILITIES IS APPROXIMATE ONLY. THE EXACT LOCATION SHALL BE DETERMINED BY CONSULTING THE CONCERNED UTILITY COMPANIES. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES AND SHALL BE RESPONSIBLE FOR

ADEQUATE PROTECTION FROM DAMAGE DURING CONSTRUCTION. 6. ALL DIMENSIONS, ELEVATIONS, AND OTHER INFORMATION SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION. ANY DISCREPANCIES FOUND MUST BE REPORTED IMMEDIATELY TO THE ENGINEER. 7. UNLESS OTHERWISE NOTED ON THE DRAWINGS, THE FOLLOWING REQUIREMENTS SHALL APPLY TO THE WORKS. (A) SEWER PIPE MATERIAL

1. ALL POLYVINYL CHLORIDE (PVC) SEWER PIPES AND FITTINGS SHALL CONFORM TO CSA-B182.1 OR CSA-B182.2. ALL POLYETHYLENE PIPES (PE) AND FITTINGS SHALL CONFORM TO CSA-B182.6. ALL PIPES AND FITTINGS SHALL MEET CURRENT M.O.E. SPECIFICATIONS. THE PIPE SHALL HAVE A MAXIMUM STANDARD DIMENSION RATIO (SDR) OF 35 AND SHALL BE GREEN IN COLOUR.

2. ALL CONCRETE SEWER PIPES 375mm DIAMETER OR LARGER SHALL CONFORM TO CSA-A257.2 REINFORCED CLASSES AS SPECIFIED (50-D, 65-D, 100-D, OR 140-D) WHILE Concrete sewers 300mm DIAMETER OR SMALLER SHALL CONFORM TO CSA-A257.1-M92 CLASS 3 OR LATEST AMENDMENT UNLESS OTHERWISE SPECIFIED.

3. THE MINMUM PIPE SIZE FOR SANITARY AND STORM SEWERS SHALL BE 200mm and 300mm DIAMETER RESPECTIVELY. 4. WHERE WATER BEARING SAND OR SILT OCCUR, THE SEWER JOINTS SHOULD BE

LEAK-PROOF, OR WRAPPED WITH A WATER PROOF MEMBRANE TO PREVENT SUBGRADE MIGRATION THROUGH LEAKY JOINTS RESULTING FROM INADVERTENT FAULTY INSTALLATION. THE NECESSITY OF IMPLEMENTING THESE MEASURES CAN BEST BE DETERMINED DURING SEWER CONSTRUCTION.

### (B) SEWER BEDDING

1. ALL PIPES ATTACHED TO MANHOLES SHALL BE CONCRETE ENCASED FROM MANHOLE TO THE FIRST PIPE JOINT. 2. STORM, SANITARY AND FDC SEWER BEDDING SHALL BE AS PER OPSD-802.010 CLASS 'B' FOR FLEXIBLE PIPES AND OPSD-802.030 CLASS 'B' FOR RIGID PIPES OR AS SPECIFIED. 3. ALL SERVICES AND STRUCTURES LOCATED IN TRENCH CUT SHALL BE SUPPORTED BY COMPACTED GRANULAR TO UNDISTURBED OR STRUCTURALLY COMPACTED GROUND.

### (C) BACKFILL

1. ALL MANHOLE AND CATCHBASIN EXCAVATIONS SHALL BE BACKFILLED WITH GRANUAL 'B' COMPACTED TO 100% SPD. (D) MANHOLES

1. ALL STORM MANHOLES SHALL CONFORM TO OPSD 701.010, 701.011, 701.012 AND 701.013 WITH FRAME AND COVER AS PER OPSD 401.010. 2. MANHOLE STEPS SHALL BE AS PER OPSD 405.010. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR ALL MANHOLES OVER 3,600mm DIAMETER OR CAST-IN-PLACE MANHOLES.

3. ALL SANITARY MANHOLES SERVING 200mm SEWER LINES SHALL BE PROVIDED WITH MINUMUM 250mm BENCHING THROUGHOUT AND CONFORM TO OPSD SPECIFICATIONS. 4. 'MODULOC' OR APPROVED MANHOLE ADJUSTERS SHALL BE USED IN LIEU OF BRICKING. 5. EXTERNAL SANITARY DROP STRUCTURES SHALL BE AS PER TOWN STD. MS-1, INTERNAL SANITARY DROP STRUCTURES SHALL BE AS PER MS-2, STORM DROP STRUCTURES SHALL BE AS PER OPSD-1003.01 (MODIFIED). DROP PIPE SHALL BE ONE SIZE LESS THAN SEWER TO A MAX. OF 450mm DIAMÈTER AND SHALL BE CONNECTED TO MAINLINE SEWER WITH TEE OR WYE.

### (E) CATCHBASINS

1. ALL SINGLE AND DOUBLE CATCHBASINS SHALL BE PRECAST AS PER OPSD-705.010 AND 705.020 RESPECTIVELY. ALL REAR LOT CATCHBASINS (RLCB) SHALL BE AS PER CITY STD. MS-4 & MS-12.

> MECHANICAL JOINT, SHORT BODY CONFORMING TO AWWA C110 IRON FITTINGS OR AWWA C135 FOR DUCTILE IRON FITTINGS. FITTINGS SHALL BE SUPPLIED WITH MECHANICAL JOINT TYPE ENDS AWWA C111. 14. ALL VALVE BOXES SHALL BE 100mm SLIDING TYPE BOX WITH 750mm TOP SECTION AND 1.75m LENGTH LOWER SECTION AS REQUIRED COMPLETE WITH GUIDE PLATE. VALVE BOXES SHALL BE MUELLER A-769, EMCO NO. 4 OR BIBBY ST. CROIX N2 V6.

SHALL BE CONNECTED TO STORM SEWER, IF POSSIBLE. TEMPORARY DEAD ENDS.

11. ALL PLUGGED TEES AND CROSSES SHALL BE PROVIDED WITH

12. HYDRANT INSTALLATION SHALL BE AS PER TOWN STD. MW-6

13. ALL PIPE FITTINGS SHALL BE CAST IRON, CEMENT LINED

THRUST BLOCKING AS PER TOWN STD. MW-16A.

(SELF DRAINING) WITH STORZ PUMPER.

CONNECTION SHALL BE PROVIDED AT END OF ALL PERMANENT DEAD

8. FLUSHING STATION COMPLETE WITH 50mm (MIN.) SERVICE END MAINS AS PER TOWN STD. MW-7 AND MW-7A & MW-7B AND

9. HYDRANTS AND VALVES SHALL BE PROVDED AT THE END OF ALL

10. ALL TEES AND HORIZONTAL BENDS SHALL BE PROVIDED WITH THRUST BLOCKING AS PER OPSD-1103.010. ALL VERTICAL BENDS SHALL BE PROVIDED WITH THRUST BLOCKING AS PER OPSD-1103.020

-EXISTING -

RESIDENTIAL

O SAN MH LID 162.94

YEX. TREE TO BE REMOVED

\_\_\_PLEASE\_REFER\_TO\_IP1\_PLAN

END OF CHAINLINK

FENCE

ZONE

м

CHAINLINK FENCE

CABLE

ALL DISTURBED AREAS TO BE

RESTORED WITH 200mm TOPSOIL

RESIDENTIAL

-MATCH CURB TO EXISTING

- 3.05M WIDENING (DEDICATED BY BY-LAW 168-89, INSTRUMENT NO. 519246

3.0%

& SOD

ANDSCAPING

PHALI EDGE

0158 (LT)

BC163.28

TC163.43

METAL FENCE

2075, REGISTERED AS MA72145

SETBACK

JURIED FIBRE OPTIC CABLE

1. WATERMAINS AND APPURTENANCES SHALL BE AS PER CITY OF

2. WATERMAIN SHALL BE POLYVINYL CHLORIDE (PVC) CLASS-150,

4. MINIMUM CURVATURE OF PIPE DEFLECTION SHALL BE AS PER THE

200mm - R=57.0m; 300mm - R=83.0m and 400mm - R =100.0m

FOLLOWING GUIDELINES: 100mm - R=30.0m; 150mm - R=43.0m;

5. ALL WATERMAIN BEDDING SHALL BE CLEAN SAND FILL 150mm

3. ALL WATERMAIN SHALL HAVE A MINIMUM COVER OF 1.75m.

(F) WATERMAINS

OR AS SPECIFIED.

MARKHAM SPECIFICATIONS.

DR-18 CONFORMING TO AWWA C-900.

WIRE STRANDED T.W.V., 75C 600V OR APPROVED EQUIVALENT).

PER TOWN STD. MW-11 AND SHALL BE NO. 12 GAUGE (CANADIAN

PIPES AND FITTINGS AS DETERMINED BY THE SOILS ENGINEER. 7. TRACER WIRE SHALL BE INSTALLED ON ALL PVC WATERMAIN AS

BELOW TO 150mm ABOVE OBVERT AS PER TOWN STD. MW-13; CLASS 'E' FOR STABLE GROUNDS AND CLASS 'F' WITH RESTRAINED JOINTS FOR UNSTABLE GROUNDS. 6. CATHODIC PROTECTION SHALL BE PROVIDED ON ALL BURIED METAL

RESIDENTIAL

ONCRETE CURB AND GUTTER

\_\_\_\_\_

PHONE CABLE**MARKHAM MR-19** 

ASPHALT EDGE 24.5m

<u>-RE/RE-24.5m\_CURB</u>URDEROPMAISR PER VOFY OF

GLEN CAMERON ROAD

TE CURB AND GUTTER

63.80 163.80

1.8%

BOTTOM OF DITL

P.I.N. 030

19246 CTLMH5

NTI

T/C 1630

164.00

164.00

63 05

1C 300 163.79

**○ ○ CBMH3 163.55** 

Here a

T/C 163.38

RESIDENTIAL

TC163,72

´CB4 □ T∕G 163.55

SIGN WITH LIGHT

DEDICATED BY 168

16395

163.70

1.6%

6.3 80

16357

163.95

100vr PONDING ELEV: 163.80m

ONDING AREA = 362sq.m

STORAGE VOLUME = 30.2cu.m



	TRUE NORTH CONSTRUCTION NORTH
	DATE : 30/04/2018
	SCALE: 1:250
	DRAWN BY: CS
	DWG STATUS :
larkham Standards. cation of engineering content.	PROJECT No. : 2017-064
Date	DRAWING NO.: CV-3

The Contractor shall verify all dimensions prior to commencement of the work. All print and specifications are the property of the Architect and must be returned upon completion of the work.

The contents of this drawing remain the

Copyright Property of Thomas Brown Architect Inc.

**ISSUE OR REVISION** 

DATE

02/03/20

29/01/201

30/04/2018

17/08/201

04/01/2019

ISSUED FOR

DAY LIGHTING REQUEST

ISSUED FOR SPA

ISSUED FOR SPA

**ISSUED FOR SPA** 

ISSUED FOR SPA

THOMASB

MG

400 Bronte Street South

Suite 201 Milton, Ontario L9T 0H7

PROFESSIONAL SEAL

DWG TITLE :

CONSULTING INC Consulting Engineering & Project Management

**GRADING PLAN** 

SC 18 170128

94 King Street East,

M5A 1K9

Tel: 416.364.5710

Fax: 416.364.4662

Tel: (905)567-8678 Fax: (905)875-1339

www.mgm.on.ca

REVISIO

Email: mgm@mgm.on.ca

Accepted to be in accordance with the City of Me This acceptance is not to be construed as verific Review Staff:

> Reza Fani, P.Eng. Manager, Development Engineering

Signature:



LEGEND			FLOOR MOUNTED DATA/TEL OUTLET										
Æ	FIXTURE TYPE "A1"		ESI OUTLET FOR SECURITY DOOR STRIKE			LIGHTING FIXTURE SCHEDULE							
\$	15A, 125V SINGLE POLE SWITCH, $\$_2$ (TWO POLE), $\$_3$ (3–WAY), $\$_4$ (4–WAY), $\$_4$ (KEY OPERATED), $\$_0$ (DIMMER),	DC OUTLET FOR SECURITY CONCEALED DOOR CONTACT									[		
φ	$s_{pL}^{-}$ (C/W PILOT LIGHT), $s_{LV}$ (LOW VOLTAGE), $s_{T}$ (TIMER), S <sub>S</sub> (OCCUPANCY SENSOR SWITCH), \$ (GANGED SWITCHES)	OHD]	OVER HEAD DOOR CONTACT		TYPE	DESCRIPTION	MAKE/MODEL	VOLT		LAMP		MOUNT	REMARKS
\$LV1	DIGITAL ONE BUTTON LIGHT SWITCH, WATT STOPPER LMSW-101	[AB]	ARMING BUTTON				·		WATT	TYPE	COL.		
\$LV2	DIGITAL TWO BUTTONS LIGHT SWITCH, WATT STOPPER LMSW-102	CR	OUTLET FOR SECURITY HID CARD ACC	ESS READER		GE 2X4 TROFFER WITH HIGH OPTICAL GRADE LENS	GE MODEL BR-24-0-A3-A-V-XX OR APPROVED EQUIVALENT BY ALTERNATE: PEERLESS, METALUMEN, OR	120-				CEILING	MEDICAL STORAGE, I.T. ROOM, LOCKER
\$LV3	DIGITAL THREE BUTTONS LIGHT SWITCH, WATT STOPPER LMSW-103	KP	OUTLET FOR HONEYWELL KEY PAD		F1		HUBBELL.	277	49	LED	4000	RECESSED	ROOM, WRITE-UP ROOM, LOUNGE
\$1.14	DIGITAL FOUR BUTTONS LIGHT SWITCH, WATT STOPPER LMSW-104	GB	OUTLET FOR SECURITY GLASS BREAK	SENSOR		4' UNDERCABINET GM LIGHTING LTAB DIMMABLE HIGH	2X LTAB-N-24 W/ LTCWP-12 CONNECTOR AND LTH-16						KITCHEN
\$lvd	DIGITAL DIMMING WALL SWITCH LIGHT, WATT STOPPER LMDM-101.	MS	OUTLET FOR SECURITY MOTION SENSOR	R	F6	OUTPUT LED LINEAR LIGHTBAR	POWER SUPPLY OR APPROVED EQUIVALENT BY COLUMBIA AND SENSO LIGHT.	120	10.4	LED	3500	UNDER CABINET	
	ELECTRICAL PANEL	ARB	OUTLET FOR ASSISTANCE REQUIRE BU	TTON		8' SUSPENDED LED FIXTURE	GE MODEL ALR1-0-1-H-47-1-8-S-N-V-ST-XX-N-W	120-					APPARATUS BAY
	NON-FUSED DISCONNECT SWITCH	REX	OUTLET FOR REQUEST FOR EXIT		F7		ALTERNATE: PEERLESS, COLUMBIA OR HUBBELL	277	74	LED	4000	SUSPENDED	
Ŵ	WEATHERPROOF DISCONNECT SWITCH	ERS	EMERGENCY RESPONSE SYSTEM		<b>F7</b> A	4' SUSPENDED LED FIXTURE	GE MODEL ALR1-0-1-H-47-1-4-S-N-V-ST-XX-N-W	120-	70		4000	CEILING	APPARATUS BAY
×	TELEVISION OUTLET C/W 21MM CONDUIT.	ΗQ	OUTLET FOR SECURITY SIREN/ALARM H	HORN	F/A		ALTENNATE. TEENEESS, SOLOMBIA ON HOBBELL	277	38	LED	4000	SUSPENDED	
▼	ANALOG TELEPHONE OUTLET C/W 21MM CONDUIT. (RED PHONE) TO BE INSTALLED AT 1200MM A.F.F.		OUTLET FOR CLOSED CIRCUIT TV SECU	JRITY CAMERA	Т1	SUSPENDED LED FIXTURE	GE MODEL ALR1-0-1-H-47-1-4-S-N-V-ST-XX-N-W ALTERNATE: PEERLESS, COLUMBIA OR HUBBELL	120-	38	LED	4000	CEILING	OXYGEN STORAGE, UTILITY ROOM
▼ic	INTERCOM UNIT OUTLET C/W 21MM CONDUIT.		OUTLET FOR A/V MICROPHONE.					2//				SUSPENDED	
★	TELEPHONE OUTLET MOUNTED AT 1500MM A.F.F C/W 21MM CONDUIT.		EMERGENCY PUSH BUTTON FOR GAS S	SOLENOID VALVE	CA	4" LED DOWN LIGHT, ALZAK SEMI-DIFFUSE REFLECTOR, WHITE TRIM, 2000 LUMEN, WET RATED	GE DI-4R-20-940-1V-10 WITH R-DI4R-W-SD OR APPROVED EQUIVALENT BY PEERLESS, PRESCOLTE OR SENSO	120	25	LED	4000	CEILING RECESSED	SHOWER AREA
	DATA OUTLET C/W 21MM CONDUIT.		120V, COMBINATION SMOKE & CO ALAF	RM UNIT C/W STROBE LIGHT & BATTERY BACK UP.									
₩	WIFI OUTLET C/W 21MM CONDUIT. AT CEILING LEVEL		EDWARDS # 900-0119 OR KIDDE, SIMP	PLEX	СВ	REFLECTOR, WHITE TRIM, 2000 LUMEN, WET RATED	APPROVED EQUIVALENT BY PEERLESS, PRESCOLTE OR SENSO	120	25	LED	4000	CEILING RECESSED	WASHROOM
\Zms	MEDIX SAFE C/W 50MM CONDUIT.		CEILING MOUNT DUAL TECH OCCUPAN	CY SENSOR, WATT STOPPER LMDC-100.		LED FULL OUT OFF WALL PACK DIE CAST ALUMINUM	HUBBELL OUTDOOR SG1-20-4K7-ET-UNV-XX-CS MOUNT AT						EXTERIOR WALL
V	TELEPHONE/DATA OUTLET C/W 21MM CONDUIT.	052		SOR WATT STOPPER IMPC-100	MA	HOUSING AND DOOR	12 AFF, FINISH SHOULD BE AS PER ARCHITECT SELECTION ALTERNATE: WILLIAMS, CANTYLE OR THOMAS	120- 277	20	LED	4000	WALL MOUNTED	
S	SYSTEM.	053	CEILING MOUNT ULTRA SONIC OCCUPA	ANCY SENSOR, WATT STOPPER LMUC-100.		2', 4', 6', 8' CONTINUOUS DIRECT TRUGROOVE LED	PHILLIPS MODEL 39S0-L-A-K-Q-S-4-X-1-1 OR			,			
M	MICROPHONE OUTLET C/W 16MM CONDUIT.	054			MB	LUMINAIRE	APPROVED EQUIVALENT BY ALTERNATE: PEERLESS, METALUMEN, OR HUBBELL.	120	18.77 4FT	LED	4000	RECESSED	
•	DOOR OPERATOR	055	WALL CORNER MOONT DUAL TECH OCCUPANCY	( SENSOR, WATT STOPPER LMDX-102.		6" LED POT LIGHT, CSA LISTED FOR PROTECTED	COOPER MODEL # FFLD6A-15-DL3 ALTERNATE: PEERLESS,	100					CANOPY
В	DOOR BELL BUZZER	los6	WALL MOUNT PIR OCCUPANCY SENSOR	R, WATT STOPPER PW-100	MC	WET LOCATIONS, 22.6W	CANETTE OR GE	277	22.6	LED	4000	RECESSED	
	DOOR BELL PUSH BUTTON	RC1	DIGITAL ROOM CONTROLLER WITH SING	GLE RELAY, WATT STOPPER LMRC-101		FULL CUTOFF LIGHTING FIXTURE. LIGHTING STANDARD	BEACON VIPER MODEL #						PARKING LOT
•	FIRE ALARM HEAT DETECTOR, CEILING MOUNTED	RC2	DIGITAL ROOM CONTROLLER WITH TWO	RELAYS, WATT STOPPER LMRC-102	PA	C/W 3.85M HIGH STEEL TAPPERED POLE ON 550MM ABOVE GRADE CONCRETE BASE, POLE & LUMINAIRES	VPS-48NB-110-3K-T3-UNV-HSS-90 ALTERNATE: GE, CANLYTE & HUBBELL.	120– 277	110	LED	3000	POLE MOUNTED	
<b>₽</b> F	FIRE ALARM HEAT DETECTOR, CEILING MOUNTED, FIXED TEMPERATURE	LM1	DIGITAL ON/OFF/0-10V DIMMING ROO	DM CONTROLLERS WITH ONE RELAY, WATT STOPPER LMRC-211		(BLACK) FINISH AS PER ARCHITECT SELECTION.							
FS	FLOW SWITCH		DIGITAL ON/OFF/0-10V DIMMING ROO	DM CONTROLLERS WITH TWO RELAYS, WATT STOPPER LMRC-212				7					
ESV	ELECTRICALLY SUPERVISED VALVE	LM3	DIGITAL ON/OFF/0-10V DIMMING ROO	DM CONTROLLERS WITH THREE RELAYS, WATT STOPPER LMRC-213				-					
	FIRE ALARM PULLSTATION	HD	HAND DRYER		ELEVATIO	NS, AND FROM FIELD MEASUREMENTS. 16 SHALL REFER TO ARCHITECTURAL & MECHANICAL DRAW	VINGS FOR ALL SCOPE OF WORK OF DIVISION 16 WHICH ARE						
<u>S</u> H	FIRE ALARM STROBE	φ			RELATED 3. ELECTRIC	TO OTHER TRADES AL AND MECHANICAL TRADES SHALL WORK IN CONJUNCTIO	IN WITH ONE ANOTHER, SO AS TO AVOID INTERFERENCES AND						
	FIRE ALARM COMBINATION HORN AND STROBE	_₩ _₩	15A, 120V HALF SWITCHED DUPLEX RE	ECEPTACLE.	4. REVIEW A	RCHITECTURAL DRAWINGS FOR FIRE RATED WALLS, AND CE CONJUNCTION WITH REFLECTED CEILING PLANS WHEN LOCA	EILINGS AND PROVIDE NECESSARY FIRE STOPPING AS REQUIRED. ATING LIGHT FIXTURES.						
	SURFACE OR RECESS MOUNTED LIGHTING FIXTURE. LETTER DENOTES TYPE	dX	15A. 120V DUPLEX RECEPTACLE MOUN	NTED ABOVE COUNTER.	6. WORK IN 7. POWER A	CONJUNCTION WITH MECHANICAL DIFFUSER LAYOUT WHEN ND CONTROL WIRING SHALL RISE TO ROOF TOP EQUIPMENT	LOCATING SMOKE DETECTORS. I WITHIN CURB OF UNIT, WHEN OTHERWISE APPROVED BY THE						
		47 /htt		ארבי ארביים ביינים אין	8. PROVIDE FIXTURES	ANT. AND INCLUDE FOR ALL NECESSARY ACCESSORIES AND FIT . INCLUDING CEILING TRIMS AND FRAMES TO SUIT CEILING.	TINGS FOR A FULL AND COMPLETE INSTALLATION OF LIGHTING REFER TO ARCHITECTURAL CEILING SCHEDULE FOR CEILING						
	LIGHTING FIXTURE ON NIGHT LIGHT CIRCUIT	<b>0</b>	15A, 120V ISOLATED GROUND DUPLEX	RECEPTACLE WITH SEPARATE NEUTRAL & GROUND WIRE PER	TYPES. 9. LIGHTING	BALLASTS AND DIMMERS SHALL BE COMPATIBLE WITH THE	LIGHTING SOURCE AND LIGHTING FIXTURES BEING CONTROLLED						
	SURFACE OR RECESS MOUNTED LIGHTING FIXTURE. LETTER DENOTES TYPE	<b>Š</b>	15A, 120V ISOLATED GROUND DUPLEX	RECEPTACLE WITH SEPARATE	AND INST 10. PROVIDE CONDITIO	ALLED. EACH ITEM MENTIONED OR INDICATED OF QUALITY AND SU NS STATED FACH OPERATIONS STATED. FACH OPERATION F	BJECT TO QUALIFICATIONS NOTED; PERFORM ACCORDING TO PRESCRIBED : AND PROVIDE THEREFORE ALL LABOR, MATERIAL						
	DIRECT HARDWIRE CONNECTION	ф.	15A. 120V DUPLEX GROUND FAULT INT	TERRUPTER RECEPTACLE.	EQUIPMEN 11. SCHEDULI	IT, INCIDENTALS AND SERVICES REQUIRED TO COMPLETE THE AND COORDINATE ALL WORK WITH OTHER TRADES.	HE INSTALLATION.						
	JUNCTION BOX		15A, 120V DUPLEX GROUND FAULT INT	TERRUPTER RECEPTACLE MOUNTED	13. CONTRAC SHALL M	TOR SHALL BALANCE CIRCUIT LOADS AS CLOSELY AS POS TOR SHALL PERFORM VOLTAGE DROP CALCULATIONS FOR A AINTAIN VOLTAGE DROP WITHIN PERMISSIBLE LIMITS AS PEF	SIBLE. ALL BRANCH CIRCUITS OF LIGHTING, POWER AND FEEDERS AND R OESC REQUIREMENTS AND PROVIDE PROPER WIRE SIZES						
	SURFACE MOUNTED STRIP FLUOUESCENT LIGHTING FIXTURE. LETTER DENOTES TYPE	¢k	20A CEILING MOUNT EMS SHORE CORD	D ASSEMBLES.		NGLY PRIOR TO COMMENCING ROUGH-IN INSTALLATION. THE AMPACITY.	E VOLTAGE DROP CALCULATIONS SHALL BE BASED ON MAXIMUM						
		Ø	15A, 120V DUPLEX RECEPTACLE WITH ( (SG: SINGLE GANG, DG: DOUBLE GANG)	USB CHARGER IG. QG: QUAD GANG)	15. DIVISION SYSTEM.	16 TO PROVIDE CONDUIT & WIRING FOR ALL ELECTRICAL &	MECHANICAL EQUIPMENT FOR A COMPLETE OPERATIONAL						
		Φ	15A, 120V SINGLE RECEPTACLE.			AL CONTRACTOR IS RESPONSIBLE FOR ALL OF THE COORDI AL CONTRACTOR SHALL COMPLY WITH HYDRO REQUIREMEN	INATION WORKS REGARDING HYDRO NEW INCOMING SERVICE. T AND SHALL PROVIDE ALL NECESSARY MATERIAL & LABOR						
	EXIT SIGN	<b>●</b> ⊏	50A, 250V 3 WIRE RANGE RECEPTACL	E.	17. ELECTRIC	ACCORDINGET. AL CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL THE RO THERWISE) INCLUDING CONDUITS, BACK BOXES, JUNCTION E	DUGH INS REQUIRED FOR DIVISION 15 SCOPE OF WORK (UNLESS BOXES, PULL WIRES, ETC, ELECTRICAL CONTRACTOR SHALL						
		0=	30A, 208V, 1ø SINGLE RECEPTACLE.		REFER TO THE ROU	) DIVISION 15 DRAWINGS AND SPECS FOR MORE INFORMATI GH INS IN HIS TENDER PRICE.	ION AND SHALL INCLUDE ALL COSTS ASSOCIATED RELATED TO						
		@=	20A, 120V SINGLE RECEPTACLE.		18. REFER TO SYSTEM 19. ELECTRIC	) DOOR HARDWARE SCHEDULE FOR ROUGH IN REQUIREMEN TO COMPLY ACCORDINGLY. AL CONTRACTOR SHALL PROVIDE SUPPORTING SYSTEM TO	I AND PROVIDE ALL NECESSARY FOR FULL OPERATIONAL SUPPORT ALL LIGHT FIXTURES ONLY FROM THE JOIST OR STEEL						
	EMERGENCY LIGHTING FIXTURE, BATTERY AND EXIT SIGN	3-	20A, 208V, 3ø SINGLE RECEPTACLE.		BEAMS ( 20. ALL ELEC	NOT FROM THE ROOF DECK). TRICAL EQUIPMENT THAT IS SUSPENDED SHALL BE SUPPO	RTED BY A SYSTEM THAT IS CERTIFIED BY THE MANUFACTURER						
		<b>()</b> -	15A, 208V, 1Ø SINGLE RECEPTACLE.			T THE LUADS OF THE EQUIPMENT. IF NO SYSTEM IS RECON A DESIGN STAMPED BY A P.ENG. THESE ITEMS SHALL INCL SIMILAR ELECTRICAL FOLIPMENT INSTALL IN ACCORDANCE	MMENDED BY THE MANUFACTURER, THE CONTRACTOR SHALL LUDE BUT NOT LIMITED TO LIGHTING, TRANSFORMER, HEATERS, WITH MANUFACTURER'S OR PENG DESIGN						
AC	ABOVE COUNTER	<b>5</b> -	15A, 208V, 3Ø SINGLE RECEPTACLE.		21. PROVIDE 109.	3/4" EMT CONDUIT FROM EACH VOICE/DATA OUTLET TO T	THE PLYWOOD BACKBOARD LOCATED IN THE MECH/ELEC ROOM	#					
AFF	ABOVE FINISHED FLOOR	©-	40A, 208V, 3ø SINGLE RECEPTACLE.		22. PROVIDE # 109.	3/4" EMT CONDUIT FROM PUBLIC ADDRESS SPEAKER TO 1	THE PLYWOOD BACKBOARD LOCATED IN THE MECH/ELEC ROOM						
AN	FIRE ALARM ANNUNCIATOR	нXX	TELEVISION OUTLET C/W 21MM CONDU	ит.	24. COORDINA MANUFAC	ATION & ARC FLASH STUDY SHOP DRAWINGS SHALL BE PR TURING OF ELECTRICAL PANELS INCLUDING MAIN SWITCHBO	ROVIDED FOR THE CONSULTANT'S REVIEW PRIOR TO DARD & DISTRIBUTION PANELS.						
вн	BASEBOARD HEATER				25. THROUGH MEETS CI	OUT DIVISION 16 ARE LIST OF "ALTERNATE EQUIPMENT" MA	ANUFACTURERS ACCEPTABLE TO CONSULTANT IF THEIR PRODUCT DUCTS. IT IS RESPONSIBILITY OF THIS DIVISION TO ENSURE	т					
СВ	CIORCUIT BREAKER	ELECTRIC	AL DRAWING LIST		ALTERNA AND ASS	NE EQUIPMENT" COMPLIES WITH THE SPECIFIED DESCRIBED OCIATED WITH ALTERNATE EQUIPMENT SHALL BE PROVIDED TURERS LISTED IN THE SPECS WILL BE ACCEPTED FOR TH	EQUIPMENT/PRODUCTS. ALL ADDITIONAL WORK REQUIRED FOR WITHOUT CHANGE IN CONTRACT AMOUNT. ONLY FIR PRODUCT LISTING REFER TO ELECTRICAL SUBDITIONAL						
ER	EXISTING TO BE RELOCATED		LEAD SHEET		BID FORM 26. COORDIN	I DOCUMENT 16001 FOR MORE INFORMATION. ATE ON SITE WITH THE GENERATOR MANUFACTURER AND O	THER TRADES BEFORE COMMENCEMENT OF THE GENERATOR						
EX	EXISTING TO REMAIN	E2.0 ELECTRICAL	SITE PLAN		INSTALLA 27. PROVIDE	TION WORK AND THEN PROCEED ACCORDINGLY. ADDITIONAL ALARM SIGNALS (C/W ALL MATERIAL AND LAB	BOR FOR FULLY OPERATIONAL SYSTEM) AT THE GENERATOR						
FH	FORCED-AIR HEATER	E3.0 POWER FLOO	DR PLAN		-ATS ON -ATS ON	FAMEL AND THE REMUTE ANNUNCIATOR PANEL TO INCLUE BYPASS MODE. EMERGENCY POWER.	JE ITE FULLUWING ALAKM SIGNALS:						
GFI	EQUIPMENT SO NOTED TO BE SUPPLIED WITN GROUND FAULT CIRCUIT INTERRUPT	E4.0 SECURITY SY	YSTEM FLOOR PLAN										
JB	JUNCTION BOX		UUR PLAN SYSTEM FLOOR PLAN										
R	RELAY WITH AUXILIARY CONTACTS	E7.0 SINGLE LINE	DIAGRAM & PANEL SCHEDULES		ELEC	TRIC CABINET UNIT HEATER SCHE	EDULE						
DW	DISH WASHER	E8.0 ELECTRICAL	DETAILS			CITY ELECTRICAL REMARK							
Т	TRANSFORMER	E9.0 LIGHTING CO											
UH	UNIT HEATER	E10.0 TYPICAL SE	CURITY DOOR DETAILS		ECUH-1 3	208/1/60 MODEL # OAC04000 BY OUELLET OR APF THERMOSTAT	PROVED EQUIVALENT. UNITS TO COME WITH INTEGRAL						
w	WALL MOUNT - VERIFY HEIGHT					1 1							
WP	EQUIPMENT SO NOTED TO BE SUPPLIED WITH THE MANUFACTURER'S WEATHER-PROOF OPTION(S)				ELEC	TRIC BASEBOARD HEATER SCHE	EDULE						
MD	MOTORIZED DAMPER												
	SPEAKER					VOLTAGE							
	INCION CONNECTION (SINGLE ON INREE FIRAGE)				EBH-1 0.7	5 120/1/60 MODEL # OFM0752 BY OUELLET OR APP	ROVED EQUIVALENT. UNITS TO COME WITH INTEGRAL						

		LIGHTING FIXTURE SCHEDULE						
			VOLT		LAMP			BEMARKO.
ITPE	DESCRIPTION	MAKE/MODEL	VOLI	WATT	TYPE	COL.	MOUNT	REMARKS
F1	GE 2X4 TROFFER WITH HIGH OPTICAL GRADE LENS	GE MODEL BR-24-0-A3-A-V-XX OR APPROVED EQUIVALENT BY ALTERNATE: PEERLESS, METALUMEN, OR HUBBELL.	120– 277	49	LED	4000	CEILING RECESSED	MEDICAL STORAGE, I.T. ROOM, LOCKER ROOM, WRITE-UP ROOM, LOUNGE ROOM
F6	4' UNDERCABINET GM LIGHTING LTAB DIMMABLE HIGH OUTPUT LED LINEAR LIGHTBAR	2X LTAB-N-24 W/ LTCWP-12 CONNECTOR AND LTH-16 POWER SUPPLY OR APPROVED EQUIVALENT BY COLUMBIA AND SENSO LIGHT.	120	10.4	LED	3500	UNDER CABINET	KITCHEN
F7	8' SUSPENDED LED FIXTURE	GE MODEL ALR1-0-1-H-47-1-8-S-N-V-ST-XX-N-W ALTERNATE: PEERLESS, COLUMBIA OR HUBBELL	120- 277	74	LED	4000	CEILING SUSPENDED	APPARATUS BAY
F7A	4' SUSPENDED LED FIXTURE	GE MODEL ALR1-0-1-H-47-1-4-S-N-V-ST-XX-N-W ALTERNATE: PEERLESS, COLUMBIA OR HUBBELL	120– 277	38	LED	4000	CEILING SUSPENDED	APPARATUS BAY
T1	SUSPENDED LED FIXTURE	GE MODEL ALR1-0-1-H-47-1-4-S-N-V-ST-XX-N-W ALTERNATE: PEERLESS, COLUMBIA OR HUBBELL	120– 277	38	LED	4000	CEILING SUSPENDED	OXYGEN STORAGE, UTILITY ROOM
CA	4" LED DOWN LIGHT, ALZAK SEMI-DIFFUSE REFLECTOR, WHITE TRIM, 2000 LUMEN, WET RATED	GE DI-4R-20-940-1V-10 WITH R-DI4R-W-SD OR APPROVED EQUIVALENT BY PEERLESS, PRESCOLTE OR SENSO	120	25	LED	4000	CEILING RECESSED	SHOWER AREA
СВ	6" LED DOWN LIGHT, ALZAK SEMI-DIFFUSE REFLECTOR, WHITE TRIM, 2000 LUMEN, WET RATED	GE DI-6R-20-940-1V-10 WITH R-DI6R-W-SD OR APPROVED EQUIVALENT BY PEERLESS, PRESCOLTE OR SENSO	120	25	LED	4000	CEILING RECESSED	CORRIDOR, WASHROOM
МА	LED FULL CUT OFF WALL PACK, DIE CAST ALUMINUM HOUSING AND DOOR	HUBBELL OUTDOOR SG1-20-4K7-FT-UNV-XX-CS MOUNT AT 12 AFF, FINISH SHOULD BE AS PER ARCHITECT SELECTION ALTERNATE: WILLIAMS, CANTYLE OR THOMAS	120– 277	20	LED	4000	WALL MOUNTED	EXTERIOR WALL
МВ	2', 4', 6', 8' CONTINUOUS DIRECT TRUGROOVE LED LUMINAIRE	PHILLIPS MODEL 39S0-L-A-K-Q-S-4-X-1-1 OR APPROVED EQUIVALENT BY ALTERNATE: PEERLESS, METALUMEN, OR HUBBELL.	120	18.7/ 4FT	LED	4000	CEILING RECESSED	
MC	6" LED POT LIGHT, CSA LISTED FOR PROTECTED WET LOCATIONS, 22.6W	COOPER MODEL # FFLD6A-15-DL3 ALTERNATE: PEERLESS, CANLYTE OR GE	120– 277	22.6	LED	4000	CEILING RECESSED	CANOPY
ΡΑ	FULL CUTOFF LIGHTING FIXTURE. LIGHTING STANDARD C/W 3.85M HIGH STEEL TAPPERED POLE ON 550MM ABOVE GRADE CONCRETE BASE, POLE & LUMINAIRES (BLACK) FINISH AS PER ARCHITECT SELECTION.	BEACON VIPER MODEL # VPS-48NB-110-3K-T3-UNV-HSS-90 ALTERNATE: GE, CANLYTE & HUBBELL.	120- 277	110	LED	3000	POLE MOUNTED	PARKING LOT

NO.	ISSUE OR REVIS	ON
1	ISSUED FOR ISSUED FOR REVIEW ISSUED FOR 80% REVIEW	<b>DATE</b> 2018-05 2018-10
3 4	ISSUED FOR 90% DESIGN DEVELOF ISSUED FOR REVIEW	2018-11 2019-01-
	<b>O</b>	
PROJECT :	YORK REGION PRS STATION #29 T-19-1	107 GLEN CAMERON ROAD, MARKHAM
	GAL CONSULTING ENG CONSULTING MECHANICAL & ELECTR 59 Royal Windsor Drive, Suite 201, Misissa PHONE: (905)855-3010 www.regal-eng.com Www.regal-eng.com CONTRACTOR SHALL VERIFY ALL DI OMMENCEMENT OF THE WORK. ANY ARE TO BE REPORTED TO THE CO ECT	ALENGINEERS Uga, Ontario L5J 45 Uga, Ontario L5J 45 DISCREPANCIE NSULTANT.
	197 SPADINA AVE, SUITE 500, TO	LCIJ
T:	410-304-3/10 EX1 101	DRONTO, ON
T: W: PROFES	4 10-304-37 10 EXT 101 WWW.TBROWNARCH.COM	DRONTO, ON
T: W: PROFES	4 10-304-37 10 EXT 101 WWW.TBROWNARCH.COM SSIONAL SEAL	DRONTO, ON
PROFES	4 10-304-37 10 EX I 101 WWW.TBROWNARCH.COM SSIONAL SEAL oval to Proceed ot Phase	DRONTO, ON
T: W: PROFES Appro Projec Autho	4 10-304-37 IU EX I 101 WWW.TBROWNARCH.COM SSIONAL SEAL 20val to Proceed Ct Phase Drization (signature)	DRONTO, ON
T: W: PROFES Appro Project Autho DWG TIT ORIENT/ ORIENT/ ORIENT/ ORIENT/ ORIENT/ ORIENT/ ORIENT/ ORIENT/	ATION ATION ATION ATION TLE ATION TUE NORTH IN IN IN IN IN IN IN IN IN IN	N CTION NORTH
	ATION ATION ATION ATION TLE ATION TRUE NORTH TRUE NORTH TRUE NORTH TRUE NORTH CONSTRUE DRAWN BY TRUE NORTH CONSTRUE DRAWN BY TRUE ST NO. 2016–14	PRONTO, ON





	N <u>OTES:</u>	
	SWITCH TO CONTROL THE POWER TO THE EXTERIOR RECEPTACLES.	
2	ELECTRICAL BLACK BOX C/W COVER PLATE TO BE PROVIDED BY OTHERS. ELECTRICAL CONTRACTOR TO INSTALL THE BLACK BOX ON THE WALL AND BEHIND THE LOCAL SOUND SYSTEM RACK. TERMINATE ALL THE ROUGH IN CONDUITS FOR LOCAL SOUND SYSTEM SPEAKERS AND MICROPHONES INTO THIS RECESSED BACK BOX.	
3.	REMOTE UP/DOWN/OFF PUSH BUTTON FOR MOTORIZED FOLDING DOOR SYSTEMS. BUTTONS AND CONNECTED CONDUITS TO BE SURFACE MOUNTED BUTTONS TO BE MOUNTED SIDE BY SIDE	
5.	ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL 4" CONDUITS (3 NO'S) IN IT ROOM 109 TO EXTEND FIBRE CABLE, TEL SERVICE & CABLE	
6	PROVIDE THE FOLLOWING EMPTY CONDUITS:	
	A)2" CONDUIT FROM ROOF AND RUN DOWN ALONG EXTERIOR WALL FOR GROUNDING OF ANTENNA. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR EXACT LOCATION PRIOR TO ROUGH IN AND THEN PROCEED ACCORDINGLY.	
	B)2" CONDUIT FROM THE PLYWOOD BACK BOARD IN IT ROOM #109 TO ROOF FOR SATELLITE RADIO SYSTEM. COORDINATE ON SITE FOR EXACT STUB UP LOCATION PRIOR TO ROUGH IN AND PROCEED ACCORDINGLY.	
	C)2" CONDUIT FROM THE PLYWOOD BACK BOARD IN IT ROOM #109 TO WRITE UP ROOM #104. TERMINATE THE CONDUIT INTO 6"X6"X4" ELECTRICAL BACK BOX TO BE LOCATED ADJACENT TO THE LOCAL SOUND SYSTEM RACK.	
<ul><li></li><li></li></ul>	BELL DEMARC LOCATION IN I.T. ROOM 109. REFER TO ARCHITECTURE DRAWINGS FOR EXACT LOCATION OF POWER & DATA/PHONE RECEPTACLES.	
٩	GAS SOLENOID VALVE, BARBECUE CONNECTION TO BE SHUT-OFF FROM EMERGENCY SHUT-OFF. GAS SHALL BE SHUT OFF THROUGH THE EMERGENCY SHUTOFF PUSH BUTTONS WHICH ARE LOCATED IN ACCESS CORRIDOR 101. THE RE-SET PUSH BUTTON SHALL BE PROVIDED TO RESTORE THE POWER TO THE GAS SOLENOID VALVES.	
10.	ALL WALLS IN I.T. ROOM TO HAVE FIRERATED PLYWOOD BACKING. PROVIDE ALL ROUGH IN CONDUITS FOR LOW VOLTAGE OUTLETS (I.E. VOICE, DATA, INTERCOM, CABLE TV, ETC) TO BE TERMINATED AT THIS PLYWOOD BACK BOARD. ALL FIRE RATED PLYWOOD TO BE 100% FSC CERTIFIED WOOD.	
<b>1</b> ⋧	2440MMX1830MMX18MM FIRE RATED PLYWOOD BACKBOARD FOR SPLITTER. PROVIDE ROUGH IN CONDUITS FOR SPLITTER TO BE TERMINATED AT THIS PLYWOOD BACK BOARD. ALL FIRE RATED PLYWOOD TO BE 100% FSC CERTIFIED WOOD.	(E)
<b>{</b> }	PROVIDE DOOR BUZZER SYSTEM FOR FULLY OPERATIONAL SYSTEM AS PER MANUFACTURER RECOMMENDATION INCLUDING BUT NOT LIMITED TO THE FOLLOWING:	
	PROVIDE ALL CONDUIT, OUTLETS, CABLES, COVER PLATES, DOOR BUZZER, PUSH-BUTTON AND ASSOCIATE COMPONENTS AS REQUIRED AND/OR AS SHOWN ON THE DRAWINGS FOR OPERATIONAL SYSTEM.	
	DOOR BUZZER SHALL BE EDWARD#762, 24VOLT AC, COMPACT STRAP MOUNTED SUITABLE FOR FLUSH MOUNTING IN STANDARD GANG BOX.	
	PUSH-BUTTON SHALL BE EDWARD#654, 24VOLT, COMPACT, STRAP MOUNTED SUITABLE FOR FLUSH MOUNTING IN STANDARD GANG BOX.	
	TRANSFORMER SHALL BE EDWARDS#590 SERIES, 24VOLT, 20VA OUTPUT RATING COMPLETE WITH NO.593 PLATE TO PERMIT A COMPLETELY ENCLOSED MOUNTING OF 590 SERIES TRANSFORMER IN A STANDARD TWO GANG OUTLET BOX.	
	ALL WIRING SHALL BE RUN IN CONDUIT, CONDUIT SHALL BE 16MM(1/2") UNLESS OTHERWISE NOTED.	
	TWO DOOR BUZZER SYSTEM ARE TO BE INSTALLED ON E FOR THE FIRE STATION AND THE OTHER FOR THE EMS STATION AS SHOWN ON DRAWINGS.	
<b>€</b>	CONTROL PANELS FOR OVERHEAD SECTIONAL DOOR SYSTEMS. PROVIDE CONDUITS, POWER, & CONTROL WIRING, DISCONNECT SWITCHES, OUTLET AND POWER CONNECTIONS FOR MOTORS CONTROL PANES AND REMOTE UP/DOWN/OFF PUSH BUTTONS FOR MOTORIZED FOLDING DOOR SYSTEMS. COORDINATE WITH OTHER TRADES AND SYSTEMS SUPPLIES AND PROVIDE ALL NECESSARY MATERIALS AND LABOR REQUIRED FOR FULLY OPERATIONAL SYSTEM. ALL RECEPTIVE HARDWARE FOR FOLDING DOOR SYSTEMS WILL BE PROVIDED BY THE GENERAL CONTRACTOR.	
15.	COORDINATE WITH OTHER TRADE REGARDING CEILING FANS AND PROVIDE 3/4" CONDUIT AND WIRING FROM EACH SPEED CONTROLLER SWITCH TO EACH RESPECTIVE CEILING FAN FOR FULLY OPERATIONAL SYSTEM.	
16.	ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL ELECTRICAL CONDUITS FOR HIGH VOLTAGE AND LOW VOLTAGE WIRING. LOW VOLTAGE WIRING & TERMINATION BY OTHERS.	
17.	REFER TO E4.0 FOR SECURITY LAYOUT OF EMS STATION.	<b>B</b> —
\$ 19 20	COAX AT LOWER HEIGHT AS SHOWN. PROVIDE AND INSTALL A 1" EMT CONDUIT IN WALL TO RUN THROUGH HDMI CABLE. REFER TO ARCHITECTURAL DRAWING FOR EXACT LOCATION. ELECTRICAL CONTRACTOR TO INSTALL TEN (10) DATA DROP IN MEDICAL STORAGE #111. COORDINATE WITH CLIENT AND IT. CABLING CONTRACTOR FOR EXACT LOCATION. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING DETAILS OF	
	DEFIBRILLATOR.	
	DEDICATED 3" IT EMT CONDUIT FOR IT CABLE.	
Ŷ	DEDICATED 3" IT EMT CONDUIT FOR LOUNGE.	
	DEDICATED 3" IT EMT CONDUIT FOR MEDICAL ROOM.	
~~4∳>	DEDICATED S IT EMI CONDULT FOR VEHICLE BAY.	
EMS TO	S SHORE CORD ASSEMBLY MAKE COMPLETE ASSEMBLIES FROM POWER SUPPLY LINE TO EMS	
VEH	ICLE PLUG THE FOLLOWING PARTS ARE REQUIRED:	
PAF	RT# DESCRIPTION QTY.	
695 25V 25V HUE HBL	Jailer W3       Jailer W5       Jailer W5	
IN I	HOUSE	
35" REF	14/3 CABTIRE LENGTH TER TO ELECTRICAL SPECIFICATIONS FOR DETAILED EMS SHORE CORD	
ASS	SEMBLY INSTRUCTIONS.	



AND M	CONTENTS OF THIS DRAWING AND SPE REMAIN THE COPYRIGHT PROPERTY THOMAS BROWN ARCHITECT INC UST BE RETURNED UPON COMPLETION ISSUE OR REVISION	CIFICATIONS ( OF ). OF THE WORK
NO. 1 2 3 4	ISSUED FOR ISSUED FOR REVIEW ISSUED FOR 80% REVIEW ISSUED FOR 90% DESIGN DEVELOPMEN ISSUED FOR REVIEW	DATE 2018-05-1 2018-10-0 17 2018-11-2 2019-01-0
лт.	ORK REGION PRS TATION #29 T-19-16	GLEN CAMERON ROAD, MARKHAM
PICONA 235 CLIENT	Consultance         Consultance         Service         Consultance         Service         Consultance         Service         Consultance         Service         Consultance         Service         Consultance         Service         Service	ERS INC ENGINEERS Datario L5J 459
<b>Y</b> THE TO C	CONTRACTOR SHALL VERIFY ALL DIMEN OMMENCEMENT OF THE WORK. ANY DIS ARE TO BE REPORTED TO THE CONSU	LOTA SIONS PRIOR CREPANCIES TANT.
ARCHIT T	HOMASBRO 197 SPADINA AVE, SUITE 500, TOROI 416.364.5710 EYT 101	WNS VTO, ON
PROFES	SIONAL SEAL	
Appro	val to Proceed	
Projec	rization (signature)	
P( FL	™ OWER .OOR PLAN	
ORIENT.	ATION N TRUE NORTH CONSTRUCTION Jan. 03, 2019	
SCALE	1:75	MJ
DWG ST	ATUS :	
DWG ST		
DWG ST PROJEC	TENDER 2016-147	REVISIO

LEGEND	
ES	OUTLET FOR SECURITY DOOR STRIKE
DC	OUTLET FOR SECURITY CONCEALED DOOR CONTACT
OHD	OVER HEAD DOOR CONTACT
[AB]	ARMING BUTTON
[CR]	OUTLET FOR SECURITY HID CARD ACCESS READER
EBI	HONEYWELL CONTROL PANELS
REX	OUTLET FOR REQUEST FOR EXIT
FC	FIXED AXIS WIDE ANGLE CAMERA

### NOTES:

1.	SECURITY CONTRACTOR TO PROVIDE INTEGRATION OF DOOR OPERATORS. ALL DOOR OPERATORS TO INCLUDE SEQUENCING CONTROL CX12.
2.	FIXED CAMERAS ARE TO BE SUPPLIED BY HONEYWELL AND INSTALLED BY SECURITY CONTRACTOR. FINAL LOCATION FOR THE CAMERAS ARE TO BE APPROVED BY YR DURING CONSTRUCTION TO ACHIEVE BEST
\$	PROVIDE ALL ROUGH IN CONDUITS FOR FIRE ALARM PANEL TO BE TERMINATED AT THIS PLYWOOD BACK BOARD.







### NOTES:

-(G)

-( F )

-**D** 

-**C** 

- LIGHTING CONTROL IN THESE ROOMS SHALL BE MANUAL ON THROUGH DIGITAL SWITCHES AND AUTO OFF THROUGH OCCUPANCY SENSORS.
- 2. REFER TO WIRING DIAGRAM INDICATED ON DRAWING E9.0 FOR LIGHTING CONTROL AS TYPICAL DETAILS CO-ORDINATE WITH LIGHTING CONTROL SUPPLIER FOR MORE INFORMATION AND EXACT REQUIRED WIRING AND PROVIDE ALL NECESSARY MATERIAL AND LABOR FOR FULLY OPERATIONAL SYSTEMS.
- 3. THE CAPACITY OF THE BATTERY UNITS SHALL BE RATING AS FOLLOWS. BU-1 720W
- 4. PROVIDE A MINIMUM OF 2#8+GRD WIRING SIZE IN 1.25" CONDUIT FOR EXTERIOR LIGHT CIRCUITS.
- 5. ALL EXTERIOR LIGHTING TO BE CONTROLLED THROUGH PHOTOCELL.
- 6. ELECTRICAL CONTRACTOR TO ALLOW FOR ADDITIONAL DIGITAL SWITCHES & REALYS. SENSORS TO PROVIDE A FULLY FUNCTIONAL DIGITAL LIGHTING CONTROL SYSTEM.

BATTERY UNIT SCHEDULE												
LOCATION	UNIT UNMBER	EXIT SIGNS	DOUBLE HEADS	SINGLE HEADS	CONNECTED LOAD (WATT)	CAPACITY (WATT)						
UTILITY ROOM # 126	BU-1	10	7	8	490	720						
REFER TO SPECIFICATION	REFER TO SPECIFICATION SECTION 26 50 00											

AND MUS	REMAIN THE COPYRIGHT PROPE THOMAS BROWN ARCHITECT ST BE RETURNED UPON COMPLETION	RTY OF INC. ON OF THE WORF
<b>NO</b> .	ISSUE OR REVISIO	DN DATE 2018-05-1
2 3 [5 4	ISSUED FOR 80% REVIEW SSUED FOR 90% DESIGN DEVELOP ISSUED FOR REVIEW	2018-10-0 MENT 2018-11-2 2019-01-0
	9-1 2-1	
		HAM
	ZH	ARK
	20 00 00	, D N
	U #	ROA
	ЖZ	NOS
		AMEI
		C N
<b>т</b> :	Οř	, GLE
PROJEC	> `∽	107
	RCEI	
REG	GAL CONSULTING ENGI	NEERS INC
2359 CLIENT	Royal Windsor Drive, Suite 201, Misissau, PHONE: (905)855–3010 www.regal-eng.com	ga, Ontario L5J 4S9
	SF	
Y	ork Reg	<b>zio</b> n
	ONTRACTOR SHALL VERIFY ALL DIM MMENCEMENT OF THE WORK. ANY ARE TO BE REPORTED TO THE CON	IENSIONS PRIOR DISCREPANCIES SULTANT.
TF		DWN
A T: W:	197 SPADINA AVE, SUITE 500, TO 416-364-5710 EXT 101 WWW.TBROWNARCH.COM	RONTO, ON
PROFESSI	IONAL SEAL	
Project	Phase	
Authoriz	zation (signature)	
	GHTING	
FL	UUK PLAN	
		N
$\left  \right $		
DATE		TION NORTH
SCALE	Jan. 03, 201 1:75	MJ
DWG STAT		
PROJECT	2016-147	7
DRAWING	<b>E5.0</b>	REVISION

THE CONTENTS OF THIS DRAWING AND SPECIFICATIONS



				F
ABBREVIAT FZ - ALARM SZ - ALERT CZ - CONTR	IONS ZONE ZONE IOL ZONE	HD - HEAT DET SD - SMOKE DI DSD - DUCT SI MP - MANUAL SC - SUPERVIS	TECTOR ETECTOR MOKE DETECTO PULL STATION SED CONTACT	)R
ZONE NO.	ZONE IDE	NTIFICATIONS	DEVICES	FUNC
FZ-01	EMS CREW ARE	A	SD/HD/PS	AL
FZ-02	EMS VEHICLE B	ΑY	HD/PS	AL
NOTES: 1. PROV 2. FOR N 3. PROV 4. ALL P 5. PROV 6. ALL LO 7. SOUN 8. PROV	IDE FIRE ALARM ( IUMBER AND LOC IDE WRING IN COI ULL STATIONS SH IDE ISOLATORS F OOP WIRING FOR D ALL AUDIBLE SI IDE CONNECTION	GRAPHICS TO BE INST ATION OF DEVICES RI NDUIT FOR COMPLETI IALL BE C/W PLASTIC OR EVERY ONE TO TV INITIATING CIRCUITS GNALS AND SHUT DO IS C/W EMT CONDUIT	ALLED ADJACE EFER TO FLOOF E OPERATIONAI COVERS WITH L VO HOUR RATE SHOULD RUN C WN AIR SYSTEM AND WIRING TO	NT TO PLAN SYSTI OCAL I D FIRE N SEP/ M IN CA ALL FI

IRE ALARM ZONE SCHEDULE													
FS PS S\ MS	5 - FLOW SWITC 5 - PRESSURE 5 7 - SUPERVISEI 5 - MONITOR S\	CH SWITCH D VALVE WITCH											
TIONS	REMARKS	ZONE NO.	ZONE IDENTIFICATIONS	DEVICES	FUNCTIONS	REMARKS							
ARM		SZ-01	SPRINKLER VALVE	MS-01	ALERT								
ARM		SZ-02	SPRINKLER VALVE	MS-02	ALERT								

THE LED ANNUNCIATOR IN THE MAIN ENTRANCE.

### em. Horn.

E COMPARTMENT. PARATE ROUTE INCLUDING RISER.

SOUND ALL AUDIBLE SIGNALS AND SHUT DOWN AIR SYSTEM IN CASE OF GENERAL ALARM. PROVIDE CONNECTIONS C/W EMT CONDUIT AND WIRING TO ALL FIRE PROTECTION EQUIPMENT AND DEVICES (SPRINKLER SYSTEM) SHOWN ON THE FIRE ALARM ZONE SCHEDULE AS ALARM OR SUPERVISORY ZONE. REFER TO MECHANICAL DRAWINGS AND COORDINATE WITH MECHANICAL CONTRACTOR FOR EXACT LOCATIONS OF DEVICE PRIOR TO ROUGH IN.





ELECTRICAL PANEL: 120/208V-3Ø-60HZ, 225 AMP MAIN BREAKER		PAI	NEL	.B0	AR	RD	Д		SCH	IED	ULE		
	BRKR	WATTS	S PER	PHASE	CR				WATT	S PER	PHASE	BRKR	
DESCRIPTION	SIZE (A)	A	В	с	NO	BUS	ABC	NO	A	В	С	A SIZE	DESCRIPTION
LIGHTING	15				01	•		02				15	LIGHTING
LIGHTING	15				03	1		04				15	LIGHTING
LIGHTING	15				05	1	┝┥	06				15	LIGHTING
LIGHTING	15				07	]∳	$\square$	08				15	NIGHT LIGHT (***)
EMERGENCY LIGHT/EXIT SIGN (***)	15				09	]		10				20	
	20				11	]	┝┥	12				2P	FOLDING DOOR MOTOR
	2P				13	]	$\square$	14				20	
	20				15	J ⊢∙		16				2P	
	2P				17	<u> </u> ⊢	┝─┥	18				20	
OVERHEAD DOOR MOTOR	20				19	<b>│</b>	$\square$	20				2P	
	2P				21	<u> </u> ⊢•		22				20	FOLDING DOOR MOTOR
OVERHEAD DOOR MOTOR	20				23	╎┝─	┝─┥	24				2P	
	2P				25	<b>│</b>	$\square$	26				20	RECEPTACLE
EMERGENCY RESPONSE SYSTEM (***)	20				27	↓ ⊣		28				20	RECEPTACLE
DEFIBRILLATOR (***)	15				29	╎┝─	+	30				20	RECEPTACLE
GSV (***)	15				31	<u> </u> • –		32					
EBH-1	15				33	<u> </u> ⊢∙		34				15	DF-1
EBH-1	15				35		┝─┥	36				15	DF-1
					37	<b>↓</b> ● ─	$\square$	38				15	TV
FIRE ALARM PANEL (***)	15				39	↓ ⊢•		40				15	EF-1
BAS	15				41		┝┥	42				20	EMS SHORE CORD REEL RECEPTACLE (*)
EMS SHORE CORD REEL RECEPTACLE (*)	20				43		$\square$	44				20	EMS SHORE CORD REEL RECEPTACLE (*)
EMS SHORE CORD REEL RECEPTACLE (*)	20				45		H	46				15	HWT–1
FURNACE F-1	15				47		+	48				15	HOT WATER RECIRCULATION PUMP P-1
RECEPTACLE (*)	20				49	<b>! ∳</b> ─		50				20	RECEPTACLE (*)
					51			52				4	
					53		+	54				30	TVSS
					55	┦╋──	$\square$	56					
					57		H	58					
					59	╎└─┘	•	60		<u> </u>			
		UII BRI				-				<u> </u>			
(**) AKC-FAULI IN IERRUPTER		II BRE/	AKER			-				<u> </u>			
(***) C/W LOCK-OFF			TERIO			4							
##### 				AD		-							
##				1		-							
										1			

# ELECTRICAL PANEL: 120/208V-3Ø-60HZ, 225 AMP MAIN BREAKER

## PANELBOARD B SCHEDULE

MAIN BREAKER													
	BRKR	WATTS	S PER	PHASE	CR	BIIC		CR	WATT	S PER	PHASE	BRKR SIZE	
	(A)	Α	В	С	NO	003		NO	A	В	С	(A)	
DOOR OPERATOR	15				01	•		02				20	
DOOR OPERATOR	15				03	!⊢•		04				2P	Econ=1
DOOR OPERATOR	15				05	!⊢	┝┥	06					
DOOR OPERATOR	15				07	<b>! ∳</b> —		08					
BUZZER	15				09	∐ ├-•		10				15	FRIDGE
RECEPTACLE (*)	20				11	]	┝─┥	12				20	CHARGE STATION
RECEPTACLE (*)	20				13	]		14				15	MOTORIZED DAMPER
RECEPTACLE (*)	20				15	]┝┥		16				15	HONEYWELL SECURITY SYSTEM
RECEPTACLE (*)	20				17		┝┥	18				20	LOW VOLTAGE SYSTEM
RECEPTACLE	20				19	┥—		20				20	LOW VOLTAGE SYSTEM
RECEPTACLE (*)	20				21	] ├-•		22				20	LOW VOLTAGE SYSTEM
RECEPTACLE	20				23		┝─┥	24				20	LOW VOLTAGE SYSTEM
RECEPTACLE	20				25	]		26				20	LOW VOLTAGE SYSTEM
SOLENOID VALVE	20				27	]⊢∙		28				20	SERVER FOR SECURITY CAMERA'S
FIRE PROTECTION PUMP	20				29		┝┥	30				15	FRIDGE
GENERATOR BLOCK HEATER	20				31	]		32				15	MEDIX SAFE
GENERATOR BATTERY CHARGER	15				33	]		34				15	MEDIX SAFE
RADIANT TUBE HEATER & THERMOSTAT	15				35		┝┥	36				20	CHARGE STATION
	15				37	]_		38				15	MICROWAVE AT HIGH LEVEL
C0-2	2P				39	]⊢		40					
RADIANT TUBE HEATER & THERMOSTAT	15				41	1⊢	┝┥	42				20	ERV-1
					43	]∳—		44					
					45	]		46					
					47	1⊢	┝┥	48					
					49	]		50					
					51	]		52					
					53	]	┝─┥	54					
					55	]		56					
					57	]		58					
					59	╵└─		60					
(*) GROUND FAULT INTERRUPTE	ER CIRC	uit Bri	EAKER										
(**) ARC-FAULT INTERRUPTER CIRCUIT BREAKER													
(***) C/W LOCK-OFF	F DEVIC	ES											
####	CONNECTED LOAD												
##		ΤΟΤΑ	L AMPS										



MECHANICAL EQUIPMENT WIRING SCHEDULE										
EQUIPMENT & LABEL	STARTER LOCATION	UN POWER	NT PH ASE	VOLT AGE	STARTER TYPE	BREAKER SIZE	FEEDER SIZE	PANEL & CCT. NOS.	REMARKS	
DOMESTIC WATER HEATER DWH	UTILITY ROOM 108	MBH 199	1	120	MANUAL	15A,1P	2#12+GRD16mmC	12>	PROVIDE LOCKABLE DISCONNECT SWITCH AT THE ENTRANCE OF THE ROOM	
RE-CIRC. PUMP FOR DWH (P-1)	UTILITY ROOM 108	HP 1/15	1	120	MANUAL	15A,1P	2#12+GRD16mmC	12>		
EXH. FAN EF-1	VEHICLE BAYS 110	HP 3/4	1	120	MAGNETIC	20A,1P	2#10+GRD16mmC	12>		
ERV-1	INTEGRAL	1.65KW	3	208	MAGNETIC	20A,3P	4#12+GRD16mmC	12>		
F—1	INTEGRAL	MCA 14.8	1	120	MANUAL	20A,1P	2#12+GRD16mmC	(12)		
CU-1	INTEGRAL	MCA 38.7	1	208	MANUAL	60A,1P	4#6+GRD35mmC	MAIN SPLITTER		
CU-2	INTEGRAL	MCA 13	1	208	MANUAL	60A,1P	3#12+GRD21mmC	(12)		
DE-STRATIFICATION FAN DF-1	VEHICLE BAY	HP 0.11	1	120	MANUAL	15A,1P	2#12+GRD16mmC	(12)	ELECTRICAL CONTRACTOR TO WIRE THE WALL CONTROL TO THE FAN.	

1. PROVIDE POWER CONNECTION TO ALL EQUIPMENTS LISTED IN THE SCHEDULE. REFER TO ELECTRICAL AND MECHANICAL LAYOUTS FOR EXACT LOCATION OF EQUIPMENTS.

2. PROVIDE SEPARATE BREAKER FOR INDIVIDUAL MECHANICAL EQUIPMENT. SIZE AS INDICATED IN THE SCHEDULE. 3. PROVIDE LOCAL DISCONNECT SWITCH FOR ALL MECHANICAL EQUIPMENTS AS REQUIRED BY OESC.

4. DIVISION 16 TO PROVIDE POWER WIRING TO & FROM STARTERS (SUPPLIED BY DIV. 15 & INSTALLED BY DIVISION 16) TO MECHANICAL EQUIPMENTS.

5. DIVISION 16 SHALL REFER TO MECHANICAL DRAWINGS FOR LOCATIONS OF MECHANICAL EQUIPMENT AND SHALL COORDINATE FOR MECHANICAL MECHANICAL EQUIPMENT LOCATIONS, STARTERS LOCATIONS AND BREAKERS SIZES & WIRES WITH THE MECHANICAL CONTRACTOR & CONSULTANT PRIOR TO ROUGH-IN.

6. LOCATIONS OF BOILERS AND HOT WATER HEATERS DISCONNECT SWITCHES SHALL BE NEXT TO THE ENTRANCE DOOR OF THE RESPECTIVE ROOM.

7. LOCATIONS OF BOILERS AND HOT WATER HEATERS DISCONNECT SWITCHES SHALL BE NEXT TO THE ENTRANCE DOOR OF THE RESPECTIVE ROOM.

8. REFER TO MECHANICAL DOCUMENTS/DRAWINGS FOR DIVISION 16 SCOPE OF WORK.

NOTES

9. RESERVED.

10. LOCATION OF ON/OFF SWITCH'S, THERMOSTATS AND SPEED CONTROLLER SWITCH'S SHALL BE VERIFIED/COORDINATED ON SITE WITH OTHER TRADES AND CLIENT'S REPRESENTATIVE PRIOR TO ROUGH-IN. 11. PROVIDE POWER CONNECTION TO ALL REVERSE ACTING THERMOSTATS AND SPEED CONTROLLER SWITTCHES AND FEED FROM RESPECTIVE CIRCUITS FEEDING RESPECTIVE MECHANICAL EQUIPMENT WHICH SHALL BE CONTROLLED VIA THE REVERSE ACTING THERMOSTATS AND SPEED CONTROLLERS. LOCATIONS OF DEVICES SHALL BE WITHIN THE SAME AREA SERVED BY THE RESPECTIVE MECHANICAL EQUIPMENT. COORDINATE ON SITE FOR DEVICE LOCATIONS WITH ARCHITECT AND CONSULTANT PRIOR TO ROUGH IN. 12. REFER TO PANEL SCHEDULES AND FLOOR PLAN FOR CIRCUITING.

EMERGENCY RESPONSE SYSTEM FOR WASHROOMS . CONTRACTOR TO PROVIDE AND INSTALL EMERGENCY RESPONSE SYSTEM FOR THE WASHROOMS. BASIS OF DESIGN IS MIRCOM, EQUIVALENT PRODUCT BY OTERH MANUFACTURERES ACCEPTABLE BASED ON SHOP DRAWING REVIEW. MICARE SYSTEM CONSIST OF THE FOLLOWING: CO-ORDINATOR BUNDLE NC-2100K 1 EACH SOFTWARE NC-2100SW 1 EACH 4\_LED.MULTIDOME LIGHT NC-44ED 4 EACH COUTER 3 GANG ELECTRICAL BOX ELECTRICAL BOX 24V POWER SUPPLY ADDED FWSW-UPC 4 EAC (W-PS24BB 1 EACH B-MD-990 1 EACH CABLE 1 FOOT EOL-103 END OF LINE RESISTOR (10K) ELECTRICAL CONTRACTOR SHALL INSTALL THE SYSTEM AS PER MANUFACTURER'S INSTRUCTIONS.
 PROVIDE AND INSTALL COMPLETE SYSTEM TO MEET THE CODE REQUIREMENTS. CO-ORDINATE WITH MIRCOM (CHRIS SCOTT #647-464-9972) AND INSTALL SYSTEM AS PER MANUFACTURER'S INSTRUCTIONS.
 ONCE SYSTEM IS INSTALLED AND TESTED, PROVIDE REQUIRED TRAINING TO THE MAINTENANCE STAFF. TYPICAL FLOOR PLAN FOR EACH WASHROOM NC-2100K PAGING AMPLIFIER NOTE: SERVER TO BE LOCATED IN IT ROOM # 109, ELECTRICAL CONTRACTOR TO PROVIDE POWER REQUIRED (A−27) FOR THE EMERGENCY RESPONSE SYSTEM.

### NOTES: 1. DISTRIBUTION PANELS SHALL HAVE 25% SPACE PROVISION AS A MINIMUM.

- 2. ALL FEEDER CABLES SHALL BE COPPER XLPE R90 FOR DRY LOCATIONS, COPPER XLPE RW90 FOR DAM/WET LOCATIONS AND COPPER XLPE RWU90 FOR UNDERGRO INSTALLATIONS, UNLESS NOTED OTHERWISE.
- 3. CONTRACTOR SHALL PERFORM VOLTAGE DROP CALCULATIONS FOR ALL BRACH CIRCUITS AND SHALL MAINTAIN VOLTAGE DROP WITHIN PERMISSIBLE LIMITS AS PER OESC REQUIREMENTS AND PROVIDE PROPER WIRE SIZES ACCORDINGLY PRIOR TO COMMENCING OF ROUGH-IN INSTALLATION. THE VOLTAGE DROP CALCULATIONS SHALL BE BASED ON MAXIMUM CIRCUIT AMPACITY.
- . PROVIDE LOCK-ON BREAKERS FOR CIRCUITS FEEDING EXIT LIGHTINGS, EMERGENCY BATTERY UNITS, FIRE ALARM PANEL, SERVER ROOMS, PA SYSTEM, MECHANICAL CONTROLS.
- 5. REFER TO FLOOR PLANS FOR TYPE OF DISCONNECT SWITCHES I.I. WEATHER PROOF, NON-FUSED, FUSED ETC. 6. ALL POWER EQUIPMENT SHALL BE OF SPRINKLER PROOF DESIGN.
- 7. VERIFY INTERRUPTION CAPACITY OF ALL EQUIPMENT WITH CO-ORDINATION STUDY PRIOR TO MANUFACTURING OF ELECTRICAL DISTRIBUTION EQUIPMENT. B. ALL WIRING, FEEDERS & CABLES SHALL BE COPPER.
- 9. BREAKER SIZE TO SUIT APPLICATION AS PER SWITCHBOARD MANUFACTURER RECOMMENDATIONS.
- 10. PROVED CONCRETE PAD FOR ATS & GENERATOR.

CONTRACTOR TO PROVIDE & INSTALL ELECTRICAL SUB METER AS SHOWN. REFER TO ELECTRICAL SPECIFICATION FOR ENERGY SUB METER DETAILS.

ER	
RO	UN

1		
1 2 3 IS 4	ISSUED FOR REVIEW ISSUED FOR 80% REVIEW SUED FOR 90% DESIGN DEVELOPM ISSUED FOR REVIEW	2018-05-1 2018-10-0 ENT 2018-11-2 2019-01-0
PROJECT :	YORK REGION PRS STATION #29 T-19-1	107 GLEN CAMERON ROAD, MARKHAM
	ALCONSULTING EACURE NSULTING MECHANICAL & ELECTRICA Royal Windsor Drive, Suite 201, Misissaug Prome: (905)855-3010 www.regal-eng.com WWW.regal-eng.com WINTRACTOR SHALL VERIFY ALL DIME MENCEMENT OF THE WORK. ANY DE MITRACTOR SHALL VERIFY ALL DIME MENCEMENT OF THE WORK. ANY DE RETORNASSER	NEERS INC AL ENGINEERS a, Ontario L5J 459 TOTAL ENSIONS PRIOR DISCREPANCIES SULTANT.
A T:	197 SPADINA AVE, SUITE 500, TOR 416-364-5710 EXT 101	RONTO, ON
W: PROFESSIO	WWW.TBROWNARCH.COM	
<u>Approva</u>	al to Proceed	
Project F	Phase	
Authoriz	ration (signature)	
SIN DIA SC	NGLE LINE AGRAM & HEDULES	
ORIENTATI DATE SCALE DWG STATE	ON TRUE NORTH CONSTRUCT Jan. 03, 2019 1:75 DRAWN BY TENDER	N TION NORTH
PROJECT N	2016-147	







	CONTENTS OF THIS DR REMAIN THE COPY <b>THOMAS BROW</b> IST BE RETURNED UPO	RAWING AND SPEC RIGHT PROPERTY <b>N ARCHITECT INC</b> ON COMPLETION C	OF OF OF THE WORK.
NO. 1 2 3 4	ISSUED FOR ISSUED FOR ISSUED FOR 80 ISSUED FOR 90% DESI ISSUED FOR	REVISION FOR REVIEW % REVIEW GN DEVELOPMEN REVIEW	DATE 2018-05-14 2018-10-02 2018-11-21 2019-01-03
			107 GLEN CAMERON ROAD, MARKHAM
CLIENT THE C TO CC	ONTRACTOR SHALL VI	ERIFY ALL DIMENS WORK. ANY DISC DO TO THE CONSUL	IONS PRIOR REPANCIES TANT.
	THE SPADINA AVE, 3 416-364-5710 EXT 1 WWW.TBROWNARG	SBRO SUITE 500, TORON 01 CH.COM	TO, ON
PROFESS Approv Projec Author	sional seal val to Proceed Phase ization (signature)		
DWG TIT EL DE	ECTRIC TAILS	AL	
ORIENTA date SCALE DWG STA	TION TRUE NORTH Jan. 0 1:75 TEN	CONSTRUCTION O3, 2019 DRAWN BY	NORTH
PROJEC	2016 a No. <b>E8</b>	6-147 <b>8.0</b>	REVISION
# OFFICE (TYPICAL)

- MANUAL ON 100%

- AUTO OFF AFTER VACANCY VIA OCCUPANCY SENSOR



#### DEVICES ARE PRESET FOR PLUG n' GO™ OPERATION, ADJUSTMENT IS OPTIONAL.

Sequence of Operation: In this configuration the LMRC-211 defaults to automatic-on/automatic-off operation. Enhanced room controllers support up to 64 loads and 48 devices per DLM local network. For full operational details, adjustments and more features of the product, see the DLM System Installation Guide at www.wattstopper.com LMRC-211 Single Relay Wiring Diagram

# WASHROOMS

- AUTO ON 100% - AUTO OFF AFTER VACANCY VIA OCCUPANCY SENSOR - USE OF ULTRASONIC OR DUAL TECHNOLOGY SENSOR





- MANUAL AND/OR PROGRAMMING ON / OFF - SWITCHES LOCATED AT ENTRANCE(S) Lighting Load (a) Lighting Load (b) LILM 8 DLM 8 RELAY PANEL LMSW-102LMSW-102LMSW-102LMSW-1022 BUTTON SWITCH2 BUTTON SWITCH2 BUTTON SWITCH2 BUTTON SWITCH  $\sim$ RJ45\_\_\_\_ **王王王王王** (Typical)

**APPARATUS BAY** 

	ISSUE	OR REVISIO	DN
<b>NO.</b> 1 2	ISSUED ISSUED FO	UED FOR FOR REVIEW OR 80% REVIEW	DATE 2018-05-14 2018-10-02
3 IS 4	ISSUED FOR 90%	DESIGN DEVELOPN	IENT 2018-11-21 2019-01-03
		(0	
PROJECT :	<b>YORK REGION PRS</b>	STATION #29 T-19-1	107 GLEN CAMERON ROAD, MARKHAM
CLIENT	AL CONSU DNSULTING MECH Royal Windsor Driv PH W	LING ENGL ONE: (905)855-3010 www.regal-eng.com	NEERS INC. AL ENGINEERS (a, Ontario L5J 4S9
	DNTRACTOR SHA MMENCEMENT O ARE TO BE REPO T HOMAN 197 SPADINA A 416-364-5710 E	ALL VERIFY ALL DIM F THE WORK. ANY I INTED TO THE CONS AVE, SUITE 500, TOP EXT 101	ENSIONS PRIOR DISCREPANCIES SULTANT.
PROFESSI	ONAL SEAL		
Project	Phase		
Author	zation (signatur-	3)	
, aanori	ເອິນເປັນເຊິ່ງ	- 1	
	GHTIN ONTRC TAILS	G DL	
ORIENTAT		CONSTRUCT	
SCALE DWG STAT	1:75	DRAWN BY	MJ
PROJECT	TE	ENDER	
	201	16-147	,
DRAWING	No.	9.0	REVISION





2 SECONDARY ENTRY SINGLE DOOR DETAIL E10.0 SCALE: N.T.S.

# EMS MARKHAM #29 SECURITY DEVICE SUMMARY

SECURITY / ACCESS SYSTEM COMPONENTS							INTRUSION DETECTION EQUIPMENT				т	LOCKSMITHING & KEYS									
DOC OI DRAV SUPP	R # I ING IED DOOR DESCRIPTION	SECURITY OPERATION TYPE	EXTERIOR CARD READER	INTERIOF CARD READER	ARMING BUTTON	ELECTRIC STRIKE MECHANISM	ELECTROMAETIC LOCK	MAGNETIC DOOR CONTACT	OVERHEAD DOOR CONTACT	REQUEST TO EXIT MOTION	PEIZZO BUZZER	DOOR / GATE RELEASE	INTERCOM OR COMMUNICATOF NEEDED	KEYPAD	CONTROL PANEL	DIRECTIONAL MOTION DETECTOR	360 DEGREE MOTION VICINITY	GLASS BREAKER DETECTOR IN VICINITY	REQUIRED LOCKSMITHING	DETAILS	COMMENTS OR QUESTIONS
FG 1	SINGLE EXTERIOR DOOR LEADING IN TO VESTIBULE 100	T1	1	1	1	1	0	1	0	1	0	0	0	1	0	0	0	0	Sargent panic 80 series (manufacturer by Assa Abloy) storeroom function, are the standard locksets used in these types of facilities. Must be compatible with Medeco M3 I/C Core Series. Exterior trim packs can be ordered to suit function. Latch guard Required.	GGMK ONLY (Lockbox to be installed on exterior)	EXTERIOR CARD READER TO BE INSTALLED NEXT TO THE DOOR OPERATOR BUTTON.
FG 1	SINGLE INTERIOR DOOR LEADING INTO ACCESS CORRIDOR 101	N/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PASSAGE FUNCTION	N/A	
FG	SINGLE EXTERIOR DOOR FROM GARAGE BAY INTO CORRIDOR 101	N/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PASSAGE FUNCTION	N/A	
FG <sup>-</sup>	SINGLE EXTERIOR DOOR LEADING INTO 04 THE WRITE UP ROOM	T2	1	0	0	1	0	1	0	1	0	0	0	0	0	0			STOREROOM FUNCTION LOCKSET	GGMK ONLY	
M 1	Single door leading into Male Washroom	N/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	STOREROOM FUNCTION	Change key 1	GC to install all required equipment to comply with AODA regulation. Red emergency box to be installed between the two washrooms which house key to override the lock.
STEM DEVICES	Single door leading into Women's Washroom	N/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	STOREROOM FUNCTION	Change key 1	GC to install all required equipment to comply with AODA regulation. Red emergency box to be installed between the two washrooms which house key to override the lock.
KOL SY ₩ 1	Single Door leading into Utility room	N/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PASSAGE FUNCTION	N/A	
NOO SSI M 1	Single Door leading into the IT room	T2	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	STOREROOM FUNCTION LOCKSET	GGMK ONLY	
TY ACCE	Single Exterior door 10A leading into the Bay Area	T2	1	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	STOREROOM FUNCTION LOCKSET	GGMK ONLY	
SECURI	Single Exterior door leading into the Bay Area	T2	1	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	STOREROOM FUNCTION LOCKSET	GGMK ONLY	
2G -	DOOR LEADING INTO MEDICAL STORAGE	T2	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	STOREROOM FUNCTION LOCKSET	GGMK ONLY	
M 11	leading into the Bays 2B Area	T2	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	PASSAGE FUNCTION	GGMK ONLY	
M 11	Single Exterior door leading into the oxygen room	N/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	STOREROOM FUNCTION UNICAN LOCK	GGMK ONLY	Code to be programed by GC as per EMS instruction.
O⊦ 110	D Overhead door leading H into Bay 1	T5	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	N/A	N/A	GC to provide relay for card access integration to be wired and tested by sec. contractor
O⊢ 11	Overhead door leading into Bay 2	Т5	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	N/A	N/A	GC to provide relay for card access integration to be wired and tested by sec. contractor
O⊦ 11(	O Overhead door leading J into Bay 3	Т5	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	N/A	N/A	GC to provide relay for card access integration to be wired and tested by sec. contractor
OF 110	O Overhead door leading G into Bay 4	Т5	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	N/A	N/A	GC to provide relay for card access integration to be wired and tested by sec. contractor
	TOTALS		12	4	1	7	0	7	8	15	0	0	0	1	0	0	0	0	N/A	N/A	GC to provide relay for card access integration to be wired and tested by sec. contractor



3 OVERHEAD GARAGE DOOR WITH ACCESS CONTROL DETAIL SCALE: N.T.S.



4 HONEYWELL PANEL CLEARANCE E10.0 SCALE: N.T.S.

NO.       ISSUED FOR REVIEW       Data         1       ISSUED FOR REVIEW       2018-00         2       ISSUED FOR REVIEW       2018-00         3       SUED FOR REVIEW       2018-00         4       ISSUED FOR REVIEW       2018-00         4       ISSUED FOR REVIEW       2019-00         5       SUED FOR REVIEW       2019-00         6       SUED FOR REVIEW       2019-00         6       SUED FOR REVIEW       2019-00         7       ISSUED FOR REVIEW       2019-00         7       ISSUED FOR REVIEW       2000-00         8	THE (	CONTENTS OF THI REMAIN THE C THOMAS BI IST BE RETURNED	S DRAWING AN OPYRIGHT PRO ROWN ARCHITE UPON COMPL	ID SPECI OPERTY ( ECT INC. ETION OF	FICATION
Insure FOR REVIEW       2019-01         Insure FOR REVIEW       2019-01         Insure FOR REVIEW       2019-01         Insure FOR REVIEW       2019-01         Insure FOR REVIEW       Insure FOR REVIEW         Insure FOR REVI	NO. 1 2 3	ISSUED FOR 90%	JED FOR FOR REVIEW R 80% REVIEW DESIGN DEVEL	N OPMENT	DATE 2018-05 2018-10 2018-11
	4	ISSUED	-OR REVIEW		2019-01
REAL CONSULTING MECHANICAL & ELECTRICAL ENGINEERS 2359 Royal Windsor Drive, Suite 201, Misisauga, Ontario L5J 4 PHONE: 0201555-0010 www.regat-eng.com THE CONTRACTOR SHALL VERIEY ALL DIMENSIONS PRICE ACTO COMMENCEMENT OF THE WORK ANY DISCREPANCE ARE TO BE REPORTED TO THE CONSULTANT. THE CONTRACTOR SHALL VERIEY ALL DIMENSIONS PRICE ARE TO BE REPORTED TO THE CONSULTANT. ARE 10 BE REPORTED TO THE CONSULTANT. THE ONDERNE SUITE 500, TORONTO, ON THE WWW.TBROWNARCH.COM PROFESSIONAL SEAL Approval to Proceed Project Phase Authorization (signature) DWG TITLE TYPICAL SECURITY DOOR DETAILS ORIENTATION TRUE NORTH CONSTRUCTION NORTH DATE 1:75 DRIVE TENDER PROJECT NO. 20116-1147	PROJECT :	YORK REGION PRS	STATION #29 T-19-1		107 GLEN CAMERON ROAD, MARKHAM
A 197 SPADINA AVE, SUITE 500, TORONTO, ON T: 416-364-5710 EXT 101 WWW.TBROWNARCH.COM PROFESSIONAL SEAL Approval to Proceed Project Phase Authorization (signature) DWG TITLE TYPICAL SECURITY DOOR DETAILS ORIENTATION N 0 TRUE NORTH CONSTRUCTION NORTH DATE Jan. 03, 2019 SCALE 1:75 MJ DRAWN BY MJ DATE TENDER PROJECT NO. 2016-147		ONSULTING MECH Provention of the second sec	ANICAL & ELECT a, Suite 201, Misis DNE: (905)855-33 ww.regal-eng.con	RIGAL EN Issauga, On 10 DIMENSI NY DISCI CONSULT	ONS PRIO REPANCIE ANT.
PROFESSIONAL SEAL Approval to Proceed Project Phase Authorization (signature) DWG TITLE TYPICAL SECURITY DOOR DETAILS ORIENTATION N U U U U U U U U U U U U U	A T: W:	197 SPADINA A 416-364-5710 E WWW.TBROW	VE, SUITE 500, XT 101 NARCH.COM	TORONT	O, ON
ORIENTATION N TRUE NORTH DATE Jan. 03, 2019 SCALE 1:75 DRAWN BY MJ DWG STATUS: TENDER PROJECT NO. 2016-147	PROFESS Approv Project Author DWG TITT TY SE DC DE	ization (signature Plase Plase PlCAL CURIN OOR TAILS	) TY		
2016-147	ORIENTA ( DATE SCALE DWG STA	TION N TRUE NORTH Jan 1:75 TUS : TE	CONSTR . 03, 20 DRAWN B ENDE	N RUCTION P19	NORTH
		201	16-14	-7	



	NO.			)N	DATE
AND DE LA LA CALE A LA CAL	2. 9 3. 0 4.	SPA SUBMISSIO JPDATED FOR S	N 2 SPA SUBMISSION	2	MAY22,'18 AUG22,'18 JUL 10.'19
AND STATES OF THE SAME AND DETAILS					00210,10
AND STATES IN A SAME A CONTRACT OF A CONTRAC					
BOORD		<b>RK REGION PRS</b>	TION #29 T-19-16		N CAMERON ROAD, MARKHAM
A constrained on the second se	PROJECT :		A Larring	tc	
PROFESSIONAL SEAL DWG TITLE : LANDSCAPE PLAN AND DETAILS DWG TITLE : LUNDSCAPE PLAN AND DETAILS DATE : JULY 2019 SCALE : 1:200 DRAWN BY: L.H./ R.M. DWG STATUS : ISSUED FOR TENDER PROJECT NO. : 17-40 DRAWING NO. : L10F1 A	197 Spa Toronto		ACAVAC 6882 14TH Markham, Ontario 294-8282 Fax: 905- www.harringtonmo ces in Markham & C ASBARCA ASBARCA uite 500 T: 416-30 info@	AVE AVE L6B 294	td NUE 1A8 7623 .com ridge
LANDSCAPE PLAN AND DETAILS	PROFE DWG T	TITLE :	N OF LAND N OF LAND N OF LAND	CONPE ARCH	
DATE : JULY 2019 SCALE : 1:200 DRAWN BY: L.H./R.M. DWG STATUS : ISSUED FOR TENDER PROJECT NO. : 17-40 DRAWING NO. : 17-40 A REVISION 4	L	ANDS. AND	CAPE I DETAI	בר בפ	.AN S
DATE : JULY 2019 SCALE : 1:200 DRAWN BY: L.H./ R.M. DWG STATUS : ISSUED FOR TENDER PROJECT NO. : 17-40 DRAWING NO. : L10F1					
T:200 DRAWN BY: L.H./ R.M. DWG STATUS: ISSUED FOR TENDER PROJECT No.: 17-40 DRAWING No.: Llof 1 4	DATE : SCALF	JU	LY 2019		
DWG STATUS : ISSUED FOR TENDER PROJECT No. : 17-40 DRAWING No. : L10F1 REVISION 4	DRAW	1:2 <sup>N BY:</sup> I ∟			
PROJECT No. : 17-40 DRAWING No. : L10F1 4	DWG S			TE	ENDER
T7-40 DRAWING No. : L1oF 1	PROJE	CT No. :	7 40		
<b>L</b> OF 1 4	DRAW	1 ING No. : ∎	/-40 ▲	Т	REVISION
			OF 1		4

The Contractor shall verify all dimensions prior

All print and specifications are the property of

the Architect and must be returned upon

The contents of this drawing remain the

Copyright Property of

Thomas Brown Architect Inc.

completion of the work.

to commencement of the work.



										Table 1. Tree ii	nventory for	107 Gle	en Ca	meron	Road,	Richmond Hill					
TREE TAG#	FAMILY	GENERA	SPECIES_SC	SPECIES	DBH (cm)	HEIGHT (m)	CROWN DIAMETER (M)	AGE CLASS (YEARS)	HEALTH	DEADWOOD	TOPOGRAPHY	SOIL	COMM_1	PRUNING HISTORY	COMM_2	TRUNK WOUNDS	сомм_з	TRUNK CONDITION	ROOT CONDITION	CROWN DEFECTS	COMMENTS
901	Aceraceae	Acer	platanoides	Norway maple	32	10	)	7 4	0 SATISFACTORY	MINOR (<5%)	MINOR SLOPE (<10%)	NORMAL		-Raised-		MINOR (<10X10CM OR < BASAL AREA)		NO ISSUES	-COLLAR BURRIED-	-Co-dominant limb(s)-	Retain if possible
902	Aceraceae	Acer	platanoides	Norway maple	31	10	, .	7 4	0 SATISFACTORY	MINOR (<5%)	MINOR SLOPE (<10%)	NORMAL		-Raised-		NO PROBLEM (no visible problem)		NO ISSUES	-COLLAR BURRIED-	-Co-dominant limb(s)-	Retain if possible
		- Caugardy													Decay near						
															branch						
															poor						Data in if
903	Aceraceae	Acer	platanoides	Norway maple	36	12		9 4	0 SATISFACTORY	problem)	MINOR SLOPE (<10%)	NORMAL		-Raised-	pruning practices.	NO PROBLEM (no visible problem)		NO ISSUES	NO ISSUES	-Co-dominant limb(s)-	possible
																	2 stems (41 cm and 42 cm).			-MushroomCrack(s)	
904	Aceraceae	Acer	negundo	Manitoba maple	42	11		8 5		EXTREME (>30%)	MINOR SLOPE (<10%)	NORMAL		-Reduced Raised-		MAJOR (>10X10CM)	Extensive internal decay.	-Crack(s)-	-CUT ROOTS-	Previous failureCo- dominant limb(s)-	-Woodpecker feeding-
																					-Limbs
905	Aceraceae	Acer	platanoides	Norway maple	27	11	. 8	в 3	0 SATISFACTORY	MINOR (<5%)	MINOR SLOPE (<10%)	NORMAL		-Raised-		NO PROBLEM (no visible problem)		NO ISSUES	NO ISSUES	limb(s)-	sign-
906	Fabaceae	Gleditsia	triacanthos	Honey locust	7	4		2 1	0 SATISFACTORY	NO PROBLEM (no visible problem)	MINOR SLOPE (<10%)	NORMAL		NO ISSUES		NO PROBLEM (no visible problem)		NO ISSUES	NO ISSUES	-Co-dominant limb(s)-	
											5 K						3 stems (13 cm,				
907	Juglandaceae	Juglans	nigra	Black walnut	13	6	; <u> </u>	4 2	0 GOOD	MINOR (<5%)	MAJOR SLOPE (11-30%)	NORMAL		NO ISSUES		NO PROBLEM (no visible problem)	13 cm, 12 cm)	NO ISSUES	NO ISSUES	-Co-dominant limb(s)-	
908	Rosaceae	Malus	sp.	Apple	13	4		3 2	0 DEAD	EXTREME (>30%)	MINOR SLOPE (<10%)	NORMAL		NO ISSUES		NO PROBLEM (no visible problem)		NO ISSUES	NO ISSUES	-Unbalanced crown-	
909	Salicaceae	Populus	sp.	Poplar SP.	6	6	, i	2 1	GOOD	NO PROBLEM (no visible problem)	FLAT	NORMAL		NO ISSUES		NO PROBLEM (no visible problem)		NO ISSUES	NO ISSUES	NO ISSUES	
910	Juglandaceae	Juglans	nigra	Black walnut	8	6	; ;	3 1	0 GOOD	NO PROBLEM (no visible problem)	EXTREME SLOPE (>30%)	NORMAL		NO ISSUES		NO PROBLEM (no visible problem)		NO ISSUES	NO ISSUES	-Co-dominant limb(s)-	
911	luglandaceae	luglans	nigra	Black walnut		5		2 1	0,6000	NO PROBLEM (no visible	MINOR SLOPE (<10%)	NORMAL		NO ISSUES		NO PROBLEM (no visible problem)			NO ISSUES	-Co-dominant limb(s)-	
511	Jugianuaceae	Jugians	ingra		°					NO PROBLEM (no visible		NORWAL		10133023					10133023	-co-dominant imb(s)-	Retain if
912	Betulaceae	Betula	papyrifera	White birch	11	7		3 2	GOOD	problem)	MAJOR SLOPE (11-30%)	NORMAL		NO ISSUES		NO PROBLEM (no visible problem)		NO ISSUES	NO ISSUES	NO ISSUES	possible
913	Salicaceae	Salix	sp.	Willow SP.	13	5	i 4	4 2	0 POTENTIAL TROUBLE	EXTREME (>30%)	MINOR SLOPE (<10%)	NORMAL		NO ISSUES		NO PROBLEM (no visible problem)	Internal decay.	NO ISSUES	NO ISSUES	-Unbalanced crown-	
914	Ulmaceae	Ulmus	Americana	American elm	10	6	; <u> </u>	2 1	0 SATISFACTORY	MINOR (<5%)	MINOR SLOPE (<10%)	NORMAL		NO ISSUES		NO PROBLEM (no visible problem)		NO ISSUES	NO ISSUES	-Unbalanced crown-	
rigona en					57.00												5 stems (10 cm, 14 cm, 15cm).	No. 10 No. 10 No. 10		an a	
915	Rosaceae	Malus	sp.	Apple	15	8		5 2	0 SATISFACTORY	MINOR (<5%)	EXTREME SLOPE (>30%)	NORMAL		NO ISSUES		NO PROBLEM (no visible problem)	Internal decay. 4 stems (14 cm,	-Included bark-	NO ISSUES	-Co-dominant limb(s)-3 stems	5
916	Rosaceae	Malus	SD.	Apple	15	6		5 2	0 SATISFACTORY	MINOR (<5%)	EXTREME SLOPE (>30%)	NORMAL		NO ISSUES		NO PROBLEM (no visible problem)	12 cm, 12 cm, 14 cm)	NO ISSUES	NO ISSUES	-Co-dominant limb(s)	
917	Oleaceae	Fraviour	60	Ach	12	11		1 3		MAIOP (10.30%)	EXTREME SLOPE (>30%)	NORMAL				MAIOR (S10X10CM)			NO ISSUES	-Co-dominant limb(s)-	-Woodpecker
517	Oleaceae	Traxinus	sp.	ASI	13			+ 2	DECENTING	MAUCK (10-50%)	EXTREME SLOPE (250%)	NORWIAL		NO 1330E3		NADOR (PIDATOCINI)		10 135025	10135023	-co-dominant imp(s)-	recung-cAb-
918	Aceraceae	Acer	platanoides	Norway maple	12	7	, ,	4 2	0 SATISFACTORY	NO PROBLEM (no visible problem)	EXTREME SLOPE (>30%)	NORMAL		NO ISSUES		NO PROBLEM (no visible problem)	3 stems (11 cm, 10 cm, 12 cm)	-Co-dominant stems-	NO ISSUES	-Unbalanced crown-	
919	Juglandaceae	Juglans	nigra	Black walnut	9	5	5 3	3 1	0 GOOD	NO PROBLEM (no visible problem)	EXTREME SLOPE (>30%)	NORMAL		NO ISSUES		NO PROBLEM (no visible problem)		NO ISSUES	NO ISSUES	-Co-dominant limb(s)-	
																	4 stems (7 cm, 7				1
920	Aceraceae	Acer	platanoides	Norway maple	13	8	s 2	4 2	0 DEATH IMMINENT	EXTREME (>30%)	EXTREME SLOPE (>30%)	NORMAL		NO ISSUES		NO PROBLEM (no visible problem)	cm)	NO ISSUES	NO ISSUES	-Co-dominant limb(s)-	
921	Oleaceae	Fraxinus	sp.	Ash	13	6	5 3	3 2	O POTENTIAL TROUBLE	MINOR (<5%)	EXTREME SLOPE (>30%)	NORMAL		NO ISSUES		MINOR (<10X10CM OR < BASAL AREA)		NO ISSUES	NO ISSUES	-Co-dominant limb(s)-	-EAB-
																	3 stems (13 cm,				
922	Aceraceae	Acer	platanoides	Norway maple	13	8	3 4	4 2	0 POTENTIAL TROUBLE	MINOR (<5%)	EXTREME SLOPE (>30%)	NORMAL		NO ISSUES		NO PROBLEM (no visible problem)	13 cm, 12cm)	-Included bark-	NO ISSUES	-Co-dominant limb(s)-	Woodnecker
923	Oleaceae	Fraxinus	sp.	Ash	22	10	) (	5 3	0 DECLINING	EXTREME (>30%)	EXTREME SLOPE (>30%)	COMPACTED		NO ISSUES		MAJOR (>10X10CM)	Internal decay.	NO ISSUES	NO ISSUES	-Co-dominant limb(s)-	feedingEAB-
924	Aceraceae	Acer	platanoides	Norway maple	18	9		5 2	0 GOOD	NO PROBLEM (no visible problem)	MAJOR SLOPE (11-30%)	COMPACTED		NO ISSUES		NO PROBLEM (no visible problem)		NO ISSUES	NO ISSUES	NO ISSUES	Retain if possible
925	Oleaceae	Fraxinus	sp.	Ash	22	11		5 3		MAJOR (10-30%)	EXTREME SLOPE (>30%)	NORMAL		NO ISSUES		MAJOR (>10X10CM)		NO ISSUES	NO ISSUES	-Co-dominant limb(s)-	-Woodpecker feedingEAB-
-																	7 stoms (All				
																	dead: 15 cm, 13				
																	cm, 14 cm, 7 cm, 8 cm, 8 cm,				
926	Aceraceae	Acer	negundo	Manitoba maple	17	9		5 2	0 DEAD	EXTREME (>30%)	MAJOR SLOPE (11-30%)	COMPACTED		NO ISSUES		MINOR (<10X10CM OR < BASAL AREA)	17 cm). Internal decay.	-Crack(s)-	NO ISSUES	-Co-dominant limb(s)-	
927	Oleaceae	Fraxinus	sp.	Ash	14	10		4 2	0 DEATH IMMINENT	EXTREME (>30%)	MINOR SLOPE (<10%)	NORMAL		NO ISSUES		MAJOR (>10X10CM)		NO ISSUES	NO ISSUES	-Co-dominant limb(s)-	-Woodpecker feedingEAB-
928	Juglandaceae	Juglans	nigra	Black walnut	19	9	, ,	5 2	GOOD	NO PROBLEM (no visible problem)	MAJOR SLOPE (11-30%)	SATURATED	Ditch	NO ISSUES		NO PROBLEM (no visible problem)			NO ISSUES	NO ISSUES	Retain if possible
000	0.	B		A.b.						NO PROBLEM (no visible		CATUDATED	0.4-6	NOISSUES		MINOR (<10X10CM OR < BASAL				Condensioned limb(a)	-Woodpecker
929	Oleaceae	Fraxinus	sp.	Ash		/		+ 2	DECLINING	problem)	MINOR SLOPE (<10%)	SATURATED	Ditch	NO ISSUES		ARCAJ		NO ISSUES	NO ISSUES	-co-dominant limb(s)-	reedingLAB-
																	4 stems (14 cm, 11 cm, 11 cm,				
930	Aceraceae	Acer	negundo	Manitoba maple	15	8		5 2	0 SATISFACTORY	MAJOR (10-30%)	EXTREME SLOPE (>30%)	NORMAL		NO ISSUES		MINOR (<10X10CM OR < BASAL AREA)	12 cm). Internal decay.	-Lean >10%Co- dominant stems-	NO ISSUES	-Unbalanced crownCo- dominant limb(s)-	-Woodpecker feeding-
931	Oleaceae	Fraxinus	sn	Ash	13	12		4 2	0 DEATH IMMINENT	EXTREME (>30%)	MINOR SLOPE (<10%)	NORMAL	Ditch	NO ISSUES		MAJOR (>10X10CM)			NO ISSUES	-Co-dominant limb(s)-	-Woodpecker
	Acertación	Aror	norunda	Manitche aver				3 6		EXTDENSE (~2004)	EXTREME SLODE / DOM	NOPMAL		NO ISSUES		MAIOR (STOVIOCH)	Internal de	NO ISSUES	NOISSUES	Muchroom	
952	ALEI ALEAE	ACE	negundo	Manicoba maple	15	9		2		NO PROBLEM (no visible	EXTREME SLOPE (>50%)	NORMAL		NO ISSUES		MAJOR (>10X10CM)	internal decay.	NO ISSUES	NO ISSUES	-Mushroom-	Retain if
933	Juglandaceae	Juglans	nigra	Black walnut	14	8		5 2	GOOD	problem)	MINOR SLOPE (<10%)	NORMAL		NO ISSUES		NO PROBLEM (no visible problem)		NO ISSUES	NO ISSUES	-Co-dominant limb(s)- -Co-dominant limb(s)	possible
934	Ulmaceae	Ulmus	Americana	American elm	19	10	) (	5 2	0 SATISFACTORY	MINOR (<5%)	MINOR SLOPE (<10%)	NORMAL		NO ISSUES		NO PROBLEM (no visible problem)		NO ISSUES	NO ISSUES	Unbalanced crown-	
935	Aceraceae	Acer	platanoides	Norway maple	24	9		5 3	0 SATISFACTORY	problem)	EXTREME SLOPE (>30%)	NORMAL		NO ISSUES		NO PROBLEM (no visible problem)		NO ISSUES	ROOTS-	dominant limb(s)-	
936	Oleaceae	Fraxinus	sp.	Ash	13	8		3 2	0 DECLINING	MINOR (<5%)	MINOR SLOPE (<10%)	NORMAL	Ditch	NO ISSUES		AREA)		-Crack(s)-	NO ISSUES	-Co-dominant limb(s)-	-woodpecker feedingEAB-
																MINOR (<10X10CM OR < BASAL	2 stems (18 cm,	-Included barkLean >10%Co-dominant			
937	Rosaceae	Malus	sp.	Apple	18	5	i -	7 2	0 DECLINING	EXTREME (>30%) NO PROBLEM (no visible	MINOR SLOPE (<10%)	NORMAL		NO ISSUES		AREA)	18 cm)	stems-	NO ISSUES	NO ISSUES	
938	Rosaceae	Malus	sp.	Apple	12	7	, :	3 2	0 SATISFACTORY	problem)	MINOR SLOPE (<10%)	NORMAL		NO ISSUES		NO PROBLEM (no visible problem)	1	NO ISSUES	NO ISSUES	-Unbalanced crown-	
																	4 stems (7 cm, 10 cm, 10 cm,			-Previous failureCo-	
939	Salicaceae	Salix	sp.	WIIIOW SP.	15	5		4 2	OPOTENTIAL TROUBLE	MAJOR (10-30%)	MINOR SLOPE (<10%)	SATURATED	Ditch	NO ISSUES		NO PROBLEM (no visible problem)	15 cm)	-Co-dominant stems-	NO ISSUES	dominant limb(s)-	
940	Aceraceae	Acer	negundo	Manitoba maple	20	13		5 2	0 DECLINING	MAJOR (10-30%)	EXTREME SLOPE (>30%)	NORMAL		NO ISSUES		MAJOR (>10X10CM)	2 stems. Internal decay.	-Co-dominant stems-	NO ISSUES	NO ISSUES	
																	A stams (13 cm				1
																	9 cm, 8 cm, 13				
941	Aceraceae	Acer	negundo	Manitoba maple	13	7		8 2	0 POTENTIAL TROUBLE	MAJOR (10-30%)	MAJOR SLOPE (11-30%)	NORMAL		NO ISSUES		MAJOR (>10X10CM)	cm). Internal decay.	-Co-dominant stems-	NO ISSUES	NO ISSUES	
942	Oleaceae	Fraxinus	sp.	Ash	21	11		6 3	0 DEATH IMMINENT	MAJOR (10-30%)	EXTREME SLOPE (>30%)	NORMAL		NO ISSUES		MAJOR (>10X10CM)		-Included bark-	NO ISSUES	-Co-dominant limb(s)-	-Woodpecker feedingEAB-
042	Salicaceae	Salix	sp.	Willow SP	1.9			3 1	GOOD	NO PROBLEM (no visible	EXTREME SLODE (S2091)	NORMAL		NO ISSUE		NO PROBLEM (no visible problem)		NO ISSUES	NO ISSUES	-Unbalanced crownCo-	
	had a			pla i						NO PROBLEM (no visible		Nontre		NO						-Included barkCo-dominant	
944	Jugiandaceae	Juglans	nigra	Black walnut	13	8	4	4 2	USATISFACTORY	problem)	EXTREME SLOPE (>30%)	NORMAL		NO ISSUES		אט אאטBLEM (no visible problem)		NO ISSUES	INO ISSUES	וווחס(s)-	-
945	Salicaceae	Salix	sp.	Willow SP.	10	6	;	4 1	0 SATISFACTORY	NO PROBLEM (no visible problem)	FLAT	AGGREGATE OVER ROOTS		NO ISSUES		NO PROBLEM (no visible problem)		-Co-dominant stems-	NO ISSUES	NO ISSUES	
																					Remove
	Salicacoas	Populus	sp.	Poplar SP					SATISFACTORY	NO PROBLEM (no visible	FLAT	AGGREGATE		NO ISSUES				NO ISSUES	NO ISSUES	-Included back	Interferes with
946	Suncaceae	Populas	.uc		16	8		2				OVER ROUTS		ING ISSUES		NO I NOULLINI (IIO VISIOIE PRODIEM)		10 1030 23	10 100005	melducu Ddi N*	Construction
										NO PROBLEM (no visible		AGGREGATE									Remove: Interferes with
947	Ulmaceae	Ulmus	sp.	Elm	11	5	i  - :	3 2	GOOD	problem)	FLAT	OVER ROOTS		NO ISSUES		NO PROBLEM (no visible problem)		NO ISSUES	NO ISSUES	-Co-dominant limb(s)-	construction

		The Contractor shall verify all dimensions prior to commencement of the work. All print and specifications are the property of the Arabitest and must be returned upon
		completion of the work.
RECOMMENDATION	TREE INVENTORY	Copyright Property of Thomas Brown Architect Inc.
REMOVE	COMPLETED BY	ISSUE OR REVISION
REMOVE	SILV-EVON LTD.	NO. ISSUED FOR DATE
		1.     SPA SUBMISSION 1     JAN25, 18       2.     SPA SUBMISSION 2     MAY22,'18       3.     UPDATED FOR SPA SUBMISSION 2     AUG22,'18       4.     ISSUED FOR TENDER     JUII 10,'19
PRESERVE		
DEMOVE		
REIVIOVE		
PRESERVE		
REIVIOVE		
REMOVE		
REMOVE		I L Ó
REMOVE		
PRESERVE		
PRESERVE		
REMOVE		
PRESERVE		
PRESERVE		
REMOVE		
REMOVE		
INCOVE		
PRESERVE		
PRESERVE		
REMOVE		Harrington
		MCAvan Ltd 6882 14TH AVENUE
		Markham, Ontario L6B 1A8 Tel: 905-294-8282 Fax: 905-294-7623 www.harringtonmcavan.com
REMOVE		Offices in Markham & Cambridge
REMOVE		ΤΗΟ <u>ΜΑ</u> <u>Υ</u> ΒΡΟΨΝ
REMOVE		ARCHIECIS 197 Spadina Avenue, Suite 500 T: 416-364-5710 ext 101
REIVIOVE		Toronto, ON M5T 2C8 info@tbrownarch.ca
		PROFESSIONAL SEAL
REMOVE		V CHARD MC V C AD
REMOVE		SSY SALA
PRESERVE		ALEMBER THE
PRESERVE		DWG TITLE :
PRESERVE		
REIVIOVE		INVENTORY OF
REMOVE		
REMOVE		
REMOVE		
REMOVE		SCALE: NITO
REMOVE		
REMOVE		L.H./K.IVI.
REMOVE		PROJECT No. :
REMOVE		17-40
ILLINOVE		DRAWING No.: TP20F 2 4

LEGEN	D - HVAC
	ALL SYMBOLS MAY NOT APPEAR ON DRAWINGS.
REFER	DESCRIPTION
—E(NAME)—	EXISTING PIPING TO REMAIN
—— RS ——	REFRIGERANT SUCTION
RL	REFRIGERANT LIQUID
<u> </u>	PIPING RISER UP
<del></del>	PIPING DROP
•	PIPING RISER UP & DOWN
,ŧ,	TEE
t	ELBOW – 90°
,×	ELBOW – 45°
<del>/_</del>	WYE
—-X—	REDUCER
	UNION
	FLANGE
<b>&gt;</b>	PUMP
	VERTICAL INLINE PUMP
	STRAINER
<u>*</u>	SAFETY (S) OR RELIEF (R) VALVE
	DRAIN COCK
	SOLENOID ELECTRIC VALVE
Ŷvв	VACUUM BREAKER
	BACKFLOW PREVENTOR
- M	POSITIVE PRESSURE (SUPPLY) DUCT UP
	POSITIVE PRESSURE (SUPPLY) DUCT UP
-	NEGATIVE PRESSURE (RETURN) DUCT UP
	POSITIVE PRESSURE (SUPPLY) DUCT DOWN
	POSITIVE PRESSURE (SUPPLY) DUCT DOWN
	NEGATIVE PRESSURE (RETURN) DUCT DOWN
	EXISTING DUCTWORK TO BE REMOVED
łł	EXISTING DUCTWORK TO REMAIN
	NEW DUCTWORK
X	SUPPLY AIR DIFFUSER (SQUARE)
	SUPPLY AIR DIFFUSER (ROUND)
	SIDEWALL GRILLE
	RETURN/EXHAUST GRILLE
	FULL RADIUS DUCT CONNECTION
	TAP-IN DUCT CONNECTION
	ROUND DUCT CONNECTION
	TURNING VANES
	FIRE DAMPER
MD	MOTORIZED DAMPER
BD	BALANCING DAMPER
OBBD	OPPOSED BLADE BALANCING DAMPER
OED	OPEN ENDED DUCT
Ō	THERMOSTAT
() RAT	REVERSE ACTING THERMOSTAT
	THERMOSTAT c/w TAMPERPROOF COVER
	САР

LEGEN	d - Plumbing	MECHANICAL DRAWING LIST
	ALL SYMBOLS MAY NOT APPEAR ON DRAWINGS.	M1.0 MECHANICAL LEAD SHEET
REFER	DESCRIPTION	M2.0 DRAINAGE FLOOR PLAN
—— E——	EXISTING PIPING	M3.0 PLUMBING FLOOR PLAN
	DOMESTIC COLD WATER PIPING	M4.0 SPRINKLER FLOOR PLAN
	DOMESTIC HOT WATER PIPING	M5.0 HVAC FLOOR PLAN
	DOMESTIC HOT WATER RECIRC. PIPING	M6.0 MECHANICAL SCHEDULES
V	VENT PIPING	M7.0 MECHANICAL DETAILS - 1
	SANITARY PIPING ABOVE FLOOR	M7.1 MECHANICAL DETAILS – 2
	SANITARY PIPING BELOW GRADE OR FLOOR	
s	STORM PIPING ABOVE FLOOR	GENERAL NOTES
——s——	STORM PIPING BELOW GRADE OR FLOOR	
NP	NON-PORTABLE WATER PIPING	OF GRILLES, DIFFUSERS AND OTHER ELEMENTS.
T	TEMPERED WATER PIPING	IN ALL INSTANCES THE NEED FOR ACCESS DOORS IN GWB CEILINGS SHOULD BE AVOIDED IF POSSIBLE, WHERE INSTALLATION OF COMPONENTS
GAS	GAS PIPING	WHICH REQUIRE ACCESS CANNOT BE AVOIDED, SUBMIT (DIMENSIONED) LAYOUT ON ARCHITECTURAL REFLECTED CEILING PLANS TO CONSULTANTS
******	PIPING TO BE REMOVED	FOR APPROVAL PRIOR TO INSTALLATION OF COMPONENT.
·······	HEAT TRACED PIPING	SHALL BE DELIVERED TO A LOCATION ON SITE DESIGNATED BY THE OWNER A IF THE OWNER DECI ARES NO INTEREST IN THE REMOVED ITEMS ASSUME
E	CONNECTION OF NEW AND EXISTING PIPING	OWNERSHIP AND REMOVE THE ITEMS FROM THE SITE.
	CAPPED PIPE	REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATION FOR PHASING AND STAGING.
 FD	FLOOR DRAIN	
↓ ↓ FFD	FUNNEL FLOOR DRAIN	PLUMBING NOTES
С нd	HUB DRAIN	
() RD	ROOF DRAIN	1. CONTRACTOR IS TO VERIFY CONNECTION POINTS TO SERVICES WITH OTHER TRADES ON SITE.
	ROOF DRAIN ABOVE	2. CONTRACTOR IS TO CLEAR DUCTWORK WHEN INSTALLING NEW PIPING CLEARANCES TO BE VERIFIED ON SITE.
		3. PROVIDE A CLEANOUT AT THE BOTTOM OF EVERY SOIL AND WASTE
		4. PROVIDE A CLEANOUT FROM EACH PLUMBING FIXTURE WHERE
		REQUIRED BY ONTARIO BUILDING CODE, PART 7 - PLUMBING.
		5. CHECK AND VERIFY LOCATION OF ALL PIPES, DUCTS AND EQUIPMENT WITH ALL OTHER TRADES TO PREVENT INTERFERENCE. REMOVAL OR DELOCATION OF ANY SUCH WORK INTERFERENCE. WORK OF OTHER
		TRADES IS THE RESPONSIBILITY OF THE MECHANICAL TRADE
	NON-EREFE WALL HYDRANT & W VACUUM BREAKER	6. ALL PLUMBING FIXTURES INCLUDING FLOOR DRAINS (HUB, FUNNEL
		FLOOR DRAINS) TO BE TRAPPED AND VENTED AS REQUIRED BY ONTARIO BUILDING CODE, PART 7 - PLUMBING.
		7. FOR MOUNTING HEIGHT OF ALL PLUMBING FIXTURES REFER TO
		8. PROVIDE ACCESS DOOR FOR ALL VALVES LOCATED ABOVE DRY WALL
		CEILING.
		WALL CEILING.
k.↓		10. IN ALL INSTANCES THE NEED FOR ACCESS DOOR IN GWB CEILINGS SHOULD BE AVOIDED IF POSSIBLE. WHERE INSTALLATION OF
'~' <b>T</b>		(DIMENSIONED) LAYOUT ON ARCHITECTURAL REFLECTED CEILING
		COMPONENT.
R I PVB		11. PROVIDE SIGN IDENTIFYING LOCATION OF ALL VALVES INSTALLED IN CEILING SPACE.
		12. ALL WATER, SANITARY, SEWER AND VENT COPPER PIPING WITH
	PRESSURE REDUCING VALVE (WATER)	IN OUTSIDE WALL WHERE THEY MAY FREEZE, UNLESS BOTH THE WALL AND THE PIPES ARE PROPERLY INSULATED.
<u>√</u> 2 \$↓		13. INSTALL SHUT-OFF VALVES AT EACH PLUMBING FIXTURE.
		14. REFER TO ARCHITECTURAL FOR OWNER SUPPLIED EQUIPMENT. CONFIRM ALL MECHANICAL REQUIREMENTS AND PROVIDE TO SUIT.
т QPG		FIDE SUDDDESSION NOTES
і Пт		FIRE SUFFRESSION NOTES
		1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE NATIONAL BUILDING CODE, NFPA STANDARDS AND THE ONTARIO
S, ESV		BUILDING CODE.
0		
с Г		
F		
E		
3r \$_ ESV		
\ <b>&gt;</b>		
·····		
FEX		
•		
<b>A</b>		
▶	SPRINKLER HEAD - SIDEWALL	

## MECHANICAL DRAWING LIST

## ENERAL NOTES

TING ITEMS TO BE REMOVED REMAIN THE PROPERTY OF THE OWNER AND LL BE DELIVERED TO A LOCATION ON SITE DESIGNATED BY THE OWNER. HE OWNER DECLARES NO INTEREST IN THE REMOVED ITEMS, ASSUME RSHIP AND REMOVE THE ITEMS FROM THE SITE.

# LUMBING NOTES

# TIRE SUPPRESSION NOTES

THE CONTENTS OF THIS DRAWING AND SPEC REMAIN THE COPYRIGHT PROPERTY <b>THOMAS BROWN ARCHITECT INC.</b> AND MUST BE RETURNED UPON COMPLETION O	FICATIONS OF F THE WORK.
ISSUE OR REVISION           NO.         ISSUED FOR           1         ISSUED FOR REVIEW	<b>DATE</b> 2018-05-14
2         ISSUED FOR 80% REVIEW           3         ISSUED FOR 90% DESIGN DEVELOPMENT           4         ISSUED FOR REVIEW	2018-10-02 2018-11-21 2019-01-03
YORK REGION PRS STATION #29 T-19-1	107 GLEN CAMERON ROAD, MARKHAM
The second secon	ERS INC. NGINEERS Itario L5J 4S9
CLIENT	
Vork Regi	01/
THE CONTRACTOR SHALL VERIFY ALL DIMENSI TO COMMENCEMENT OF THE WORK. ANY DISC	IONS PRIOR REPANCIES
ARE TO BE REPORTED TO THE CONSULT	
A 197 SPADINA AVE, SUITE 500, TORONT 416-364-5710 EXT 101	CTS
W: WWW.TBROWNARCH.COM	
Approval to Proceed	
Authorization (signature)	
LEAD SHEET	
ORIENTATION TRUE NORTH DATE Jan. 03, 2019 SCALE N.T.S. DRAWN BY N.T.S. DH DWG STATUS :	NORTH
IENDER PROJECT NO. 2016_1/7	
DRAWING No. <b>M1_0</b>	REVISION



Image: Solution of the series of the seri		CONTENTS OF THIS REMAIN THE CO THOMAS BR ST BE RETURNED	B DRAWING AND DPYRIGHT PRO DOWN ARCHITE UPON COMPLE	SPECI PERTY ( CT INC. TION OI	FICATIONS OF THE WOR
	NO. 1 2 3 4	ISSUED F ISSUED FOF ISSUED FOR 90% D ISSUED F	IED FOR OR REVIEW 8 80% REVIEW DESIGN DEVELO OR REVIEW	/ PMENT	DATE 2018-05- 2018-10- 2018-11- 2019-01-
			6		
<image/> Point ATION     THE         Project Phase         Authorization (signature)         Project Phase          Project	Т.	ORK REGION PRS	TATION #29 T-19-1		GLEN CAMERON ROAD, MARKHAM
	PROJECT :	× 0	E S H		107 Gl
CONSULTING MECHANICAL & ELECTRICAL ENGINEER 2399 Royal Windsor Drive, Suite 201, Misissaug, Ontario LSJ PHONE, 200305-2010 WWW.regal-eng.com THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PR TO COMMENCEMENT OF THE WORK ANY DISCREPANC ARE TO BE REPORTED TO THE CONSULTANT. INCOMMENCEMENT OF THE WORK ANY DISCREPANC ARE TO BE REPORTED TO THE CONSULTANT. INCOMMENCEMENT OF THE WORK ANY DISCREPANC ARE TO BE REPORTED TO THE CONSULTANT. INCOMMENCEMENT OF THE WORK ANY DISCREPANC ARE TO BE ANY THE SUITE 500, TORONTO, ON THE SPADINA AVE, SUITE 500, TORONTO, ON THE WWW.TBROWNARCH.COM INCOMENSIONAL SEAL Approval to Proceed Project Phase Authorization (signature) WIG TITLE DRAINAGE FLOORR PLAN INCOMENTATION ATE JAIN.O3, 2019 CALE DRAWN BY DH WIG STATUS: TENDER ROJECT NO. ROMENTATION ATE CONTRUCTION NORTH ATE JAIN. 03, 2019 CALE DRAWN BY DH WIG STATUS: ROMENTATION ATE CONTRUCTION NORTH ATE CONTRUCTION NORTH ATE JAIN. 03, 2019 CALE DRAWN BY DH WIG STATUS: ROMENTATION ATE CONTRUCTION AND BY DH WIG STATUS: ROMENTATION ATE CONTRUCTION AND BY DH WIG STATUS: ROMENTATION ATE CONTRUCTION AND BY DH WIG STATUS: ROMENTATION ANY ANY AND ANY	REC				ERS INC
ALIENT VICENTRACTOR SHALL VERIEY ALL DIMENSIONS PR TO COMMERCEMENT OF THE WORK ANY DISCREPANC ARE TO BE REPORTED TO THE CONSULTANT. INCHITECT THOMASSBROWN ARE 197 SPADINA AVE. SUITE 500, TORONTO, ON TY 416-384-5710 EXT 101 WWWW.TBROWNARCH.COM ROFESSIONAL SEAL Approval to Proceed Project Phase Authorization (signature) WG TITLE DRAINAGE FLOORR PLAN WG TITLE TENDER AUTHORITIE TENDER ROJECT NO. ROJECT NO. ROJECT NO. ROJECT NO. ROYALS AND ANY AND ANY AND ANY AND ANY AND ANY AND ANY	2359	ONSULTING MECHA Royal Windsor Drive PHC wv	NICAL & ELECTI , Suite 201, Misiss NE: (905)855–301 vw.regal–eng.com	RICAL EN auga, Or 0	NGINEERS tario L5J 4S
THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PR TO COMMENCEMENT OF THE WORK, ANY DISCREPANC ACTOR BE REPORTED TO THE CONSULTANT. BUTTER THOMASSBROWN ACTOR 197 SPADINA AVE, SUITE 500, TORONTO, ON TO 416-364-5710 EXT 101 WWW.TBROWNARCH.COM ROFESSIONAL SEAL Approval to Proceed Project Phase Authorization (signature) WG TITLE DRAINAGE FLOOR PLAN RUENTATION ATE JAN. 03, 2019 CALE DRAWN BY 1:75 DH MG STATUS: TENDER ROJECT NO. 2016-1447 RAWING NO. REVISIONAL REVISIONA		ork	Z Res	gi	01
ACTION AND AND AND AND AND AND AND AND AND AN	THE C TO CO	ONTRACTOR SHAL MMENCEMENT OF ARE TO BE REPOR	L VERIFY ALL D THE WORK. AN RTED TO THE C	DIMENSI IY DISCI	ONS PRIOF REPANCIES ANT.
ROFESSIONAL SEAL Approval to Proceed Project Phase Authorization (signature) WG TITLE DRAINAGE FLOOR PLAN RUENTATION TUE NORTH ATE Jan. 03, 2019 CALE 1:75 DH WG STATUS: TENDER ROJECT NO. RUENCE ROJECT NO. RAWING NO. REVIS		HOMA 197 SPADINA A 116.364.5710 E	SBR CHII		NN TO, ON
Approval to Proceed Project Phase Authorization (signature) WG TITLE DRAINAGE FLOOR PLAN WG TITLE UNITIALIAN WG TITLE DRAINAGE FLOOR PLAN WG TITLE DRAINAGE FLOOR PLAN UNITIAL UNI	W:	WWW.TBROWN	IARCH.COM		
Authorization (signature) WG TITLE DRAINAGE FLOOR PLAN RENTATION NUMBER ATE JAN. 03, 2019 CONSTRUCTION NORTH ATE JAN. 03, 2019 DH MARINE TENDER ROJECT NO. RAVING NO. RAVING NO. REVIS	<u>Approv</u>	Phase			
ATE Jan. 03, 2019 CALE DRAWN BY 1:75 DH WG STATUS: ROJECT NO. RAWING NO. MG STATUS: RAWING NO. MG STATUS: RAWING NO. MG STATUS: CALE DRAWN BY DH CALE DRAWN BY CALE DRAWN BY DH CALE DRAWN BY DH CALE DRAWN BY CALE DRAWN BY	Authori	zation (signature)			
ATE Jan. 03, 2019 CALE DRAWN BY 1:75 DH WG STATUS: TENDER ROJECT NO. RAWING NO. RAWING NO. RAWING NO. REVIS	DWG TITL D P	⊧ RAINA LAN	GE FL	.00	DR
RAWING NO. 2016-147	ORIENTA	TION N TRUE NORTH Jan.	CONSTRUCT CONSTRUCT 03, 20 DRAWN BY DH NDEF	N JCTION 19	NORTH
RAWING NO. REVIS	PROJECT	<sup>No.</sup> 201	6-14	7	
	DRAWING	i No.	2.0		REVISIO



<b>NO.</b> 1	ISSUED FOR ISSUED FOR REVIEW	DN DATE 2018-05-14
2 3 4	ISSUED FOR 80% REVIEW SSUED FOR 90% DESIGN DEVELOPM ISSUED FOR REVIEW	2018-10-02 2018-10-02 MENT 2018-11-2 2019-01-02
	()	
	SS -	
		N
		КНА
	<u> </u>	MAF
	#2 #2	JAD,
		N RC
	$\overline{\mathbf{X}}$	EROI
	× H	;AME
		U E N
CT :	$\Theta$	7 GL
PROJE	ר ט א	10
	RCEI	
REG	GAL CONSULTING ENGI	NEERS INC AL ENGINEERS
2359 CLIENT	Royal Windsor Drive, Suite 201, Misissau PHONE: (905)855–3010 www.regal-eng.com	ga, Ontario L5J 4S9
	SF	
Y	ork Reg	<b>tion</b>
THE CO TO COI	ONTRACTOR SHALL VERIFY ALL DIM MMENCEMENT OF THE WORK. ANY I ARE TO BE REPORTED TO THE CON	IENSIONS PRIOR DISCREPANCIES SULTANT.
	IOMASBRO	DWN
A T:	197 SPADINA AVE, SUITE 500, TOI 416-364-5710 EXT 101	RONTO, ON
W: PROFESSI	WWW.TBROWNARCH.COM	
Approv	al to Proceed	
Authoriz	zation (signature)	
DWG TITLI	E	
P P	LUMBING FL( LAN	DOR
ORIENTAT	ION _JN	_N
	$\square$	
	$\bigcup \overline{\bigcup}$	$\bigcup$
DATE	TRUE NORTH CONSTRUC	TION NORTH
SCALE 1:75		
	TENDER	
PROJECT	2016-147	,
DRAWING	». Μ Υ Λ	REVISION



WING No.

M4.0

REVISION

--



<b>NO</b> .		OR REVISIO	<b>DN</b> 2018-05-
2	ISSUED FOR SUED FOR 90% D	R 80% REVIEW	2018-10- 2018-11- MENT 2018-11-
4	ISSUED F	OR REVIEW	2019-01-
	()	4	
	ľ	<b>O</b>	
	Ω		٩M
			Ϋ́Η
			ARI
	Ο	0	Ź
		Ņ	AD,
	U	#	30,
	Ш	7	Ž
	N	$\leq$	RO
		$\bigcirc$	Ш М
	$\mathbf{X}$		CAI
	M		Z
			ЭLЕ
JECT :	$\mathbf{\mathcal{C}}$		)7(
PRO		U)	10
	F		/
<b></b>			
<b>KEG</b> 2359	AL CONSU NSULTING MECHA Royal Windsor Drive	LIING ENGI NICAL & ELECTRIC , Suite 201, Misissauj	NEERS IN( AL ENGINEERS ga, Ontario L5J 4S
o=	PHO wv	ישוינ: (905)855–3010 ww.regal−eng.com	
	C	Z	
•7	N		٠
Y	DYK.	Keg	101
THE CO TO COM	ONTRACTOR SHAL	L VERIFY ALL DIM	IENSIONS PRIOF
ARCHITEC	ARE TO BE REPOR	KIED TO THE CON	SULTANT.
TF	IOMA	ASBRO	DMM
A	197 SPADINA A	VE, SUITE 500. TO	RONTO, ON
T: W:	416-364-5710 EX WWW.TBROWN	XT 101 IARCH.COM	,
PROFESSI	ONAL SEAL		
	al to Proceed		
<u>Approva</u>			
Approva	Phase		
Approva Project	Phase zation (signature)		
Approva Project I Authoriz	Phase zation (signature)		
Approva Project I Authoriz	Phase ration (signature)	OOR P	LAN
Approva Project I Authoriz	Phase zation (signature)	OOR P	LAN
Approva Project I Authoriz DWG TITLE HV	Phase zation (signature)	OOR P	LAN
Approva Project I Authoriz	Phase ration (signature)	OOR P	LAN
Approva Project I Authoriz DWG TITLE HV	Phase ration (signature) AC FL	OOR P	LAN
Approva Project I Authoriz DWG TITLE HV	Phase	OOR P	
	Phase	00R P	
	Phase TRUE NODTU		
Approva Project I Authoriz DWG TITLE HV ORIENTAT	Phase		
Approva Project I Authoriz DWG TITLE HV ORIENTAT ORIENTAT C	Phase Eation (signature) AC FL AC FL ION TRUE NORTH Jan.	OOR P	LAN
Approva Project I Authoriz DWG TITLE HV ORIENTAT ORIENTAT CORIENTAT	Phase Tation (signature) AC FL AC FL TRUE NORTH Jan.	OOR P	LAN
Approva Project I Authoriz DWG TITLE HV ORIENTAT ORIENTAT CALE SCALE 1:75 DWG STAT	Phase	OOR P	LAN
Approva Project I Authoriz DWG TITLE HV ORIENTAT ORIENTAT C C DATE SCALE 1:75 DWG STAT	Phase Tation (signature) TAC FLO TRUE NORTH Jan. TUS: TE No. 201	OOR P	LAN N TION NORTH 9
Approva Project I Authoriz DWG TITLE HV ORIENTAT ORIENTAT CRIENTAT CRIENTAT CRIENTAT ORIENTAT ORIENTAT PROJECT I DRAWING	Phase Tation (signature) TAC FLO TRUE NORTH Jan. US : TE No. 201 No.	OOR P	LAN

FU	RNACE	UNIT S	CHED	DULE																
				_			COOLI	NG			HE	ATING	ELECTRIC	CAL						
R	EFER	AIRFLOW LPS (CFM)	E.S.F Pa (IN.V	P. W.C.)		- Si	ENSIBLE W (MBH)	EER	REI	FRIGERANT	. Te	OTAL	MOTOR HP	SIZE	VOLT	AGE	M.C.A.	M.O.C.P.		ER, MODEL AND ACCESSOR
	El	670 (1420)	17: (0.7	5 7)	14.1 (48.0)		-			R410a	2	29.31 100)	1.0		120V/1,	/60Hz	14.7	20	CARRIER 591 CNPVP4821A VALVE. FURN PROVIDED BY	P6A100E21-20 AND CA LA WITH FACTORY INSTA ACE TO BE CONTROLLEE ( ERV.
	<u>CU-1</u>						_			R410a		_	_		208V/1	/60Hz	26.1	40	CARRIER 244	ABC648A003
NOTES	5: 1. ACCEF	TABLE ALT		SUBJEC	T TO SI	HOP DR	AWING R	EVIEW: 1	TRANE, N	YORK.										
				E.S.P.			ELECTRK	CAL				OPERATING		MANI					IEQ	
	SERVED		CFM) P	PA (IN.W.C.)		R SIZE	VOL	TAGE			°M	KG (LBS)								
EF-1	VEHICLE BA	YS 155 (33	58.1 00)	63.5 (0.25)	3/4	HP	115V/	1ø/60Hz	BEL	-T 118	88	49.5 (109)	8.9	BACH	K XPD, 18 KDRAFT D	3XP29D AMPER	132; CO ALUM, S	MPLETE SHUTTER	WITH PRE-WRI GUARD-STL,	ED FLEX-CONDT, GRAVIT FAN SPEED CONTROLLER
EF-2	STORAGE [112]	4 (10	7 )0)	127 (0.5)	86 W	IATTS	115V/ <sup>-</sup>	1ø/60Hz	DIRE	:CT 90	00	-	2.7	COOF DAME	k gemini Per and	GC-144 ISOLAT	4; COMP OR KIT.	PLETE WI C/W LIN	TH WHITE META IE VOLTAGE RE	L FACE GRILL, 100 SER VERSE ACTING THERMOS
EF-3	UTILITY ROC [108]	ЭМ 4 (10	7 )0)	127 (0.5)	86 W	IATTS	115V/ <sup>-</sup>	Iø∕60Hz	DIRE	CT 90	00	-	2.7	COOF DAMF MECF THE	K GEMINI PER AND HANICAL ( ROOM BY	GC-14 ISOLAT CONTRA CELECT	4; COMP OR KIT. ACTOR TO RICAL C	CONTRO CONTRO O PROVIE CONTRAC	TH WHITE META L BY BAS VIA DE HAND-OFF- TOR.	L FACE GRILL, 100 SER TEMPERATURE SENSOR. -AUTO STARTER INSTALL
NOTES	: 1. ALL F 2. REFER	ANS SHALL TO THE C		UBRAT SCHEMA	ION ISLO TICS AN	OATION ID SEQU	AND ST ENCES (	ARTERS. DF OPERA	ATION.											
<u> </u>					TTIS⊢		WING RE	EVIEW: C	OOK, CA	ARNES, GF	REENHE	ECK, REV	ERSOMAT	TIC, BRO	OAN.					
H		COVE		ENII		OH														
SYMBOL	SUPPL'					DESIGN C	SUN			IR TEMP		Y AIR TEM 3S UNIT 17 SUM	P REGAC	COVERE ROSS UI	ED HEAT TE INIT A LIMMER M	EMP. EFI CROSS   VINTER	FICIENCY UNIT SUMMER			REMARKS
	(CFM)	(IN.WG.)	(CFM)		N.WG.)	DB/WB(f	=) DB/	WB(°F) D	B/WB(°F)	DB/WB(°F)	DB/WI	B(°F) DB/\	NB(°F) TC LA ME	TAL/M TENT 3H	IBH			VOLTA	GE MCA MOF	
<u>ERV-1</u>	480	0.5	455		0.5	-5.0/ -5.0	88. 73.	0/ 72 0 55	2.0/ 5.0	75.0/ 63.0	62.4/ 47.5	/ 78.0 70.2	)/ 34 2 7.	.9/ - 7	-5.2 87	7.5%	77.1%	208/3	/60 11.0 15.0	TEMPEFF RGSP 600 C, BAS. ERV TO BE WITH ON THE SIDE OF THE
							PLUMB	<b>ING FIX</b>	TURE C	CONNEC	TION	SCHEDU	JLE							
TAG	FIX	TURN NAME		SANITA	RY	VE	NT	D	cws	Dŀ	HWS	TE	MPERED				REM	IARKS		
	BARRIER F	REE FLUSH \	VALVE	MM	INS	MM	INS	MM	INS	MM	INS	5 MM	I INS	;						
VV1	BARRIER F	TER CLOSET	ERTOP	22	3.00	38	1.50	32	1.25	-	-	-	-							
SH1	BARRIFE	AVATORY	VFR	-	-	-	-	13	0.50	13	0.50	) 19	0.3	5						
SH1	SHOW	ER HEAD SE	т	-	-	-	-	13	0.50	13	0.50	) 19	0.7	5						
S1	SINGLE	COMPARTME ESS STEEL SI	ENT INK	38	1.50	32	1.25	13	0.50	13	0.50	) -	-							
S2	SINK PROV CONTRA ARC SPECIFIC PROVIDE	VIDED BY GEI CTOR, REFEF HITECTURAL ATIONS, FAU BY MECHAN	NERAL R TO ICET ICAL	38	1.50	32	1.25	13	0.50	13	0.50	) -	-							
MS1	CO	10P SINK		75	3.00	38	1.50	19	0.75	19	0.75	5 -	-							
EW	EMERGE		ASH	32	1.25	32	1.25	19	0.75	19	0.75	5 19	0.7	5						
НВ	ŀ	IOSE BIB		-	-	-	-	13	0.50	13	0.50	) 13	0.50	D						
HR	Н	OSE REEL		-	-	-	-	13	0.50	13	1.50	) 13	1.50	D						
NFWH	NON-FROZ	EN WALL HYE	DRANT	-	-	-	-	13	0.50	-	-	-	-							
FD	FLO	DOR DRAIN		75	3.00	38	1.50	10	0.38	-	-	-	-	_						
FFD	FUNNE	L FLOOR DRA	AIN	75	3.00	38	1.50	10	0.38	-	-	-	-	_						_
TSP	TRAP	SEAL PRIME	R	-	-	-	-	10/13	0.38/0.5	0 -	- 1	-	- 1		C	ONE - 10	MM/0.38"	PER FD, F	FD, HD, PD	

AC	AC UNIT SCHEDULE											
REFER	AIRFLOW CFM	/ E.S.P.	COOLING			HEATING	ELECTRICAL					
		IN.W.C.	TOTAL MBH	TOTAL SENSIBLE EER REFRIGERANT		TOTAL MBH	MOTOR SIZE KW	VOLTAGE M.C.A. M.O.C.P.				
AC-1	425	-	18.0	-	-	R410a	-	0.03	230V/1/60Hz, FROM CU-3	-	-	MITSUBISHI PKA-A18HA6
<u>CU-2</u>	-	-	18.0	-	_	R410a	_	-	230V/1/60Hz	13	15	MITSUBISHI PUY-A18NHA6. C/W ULTRA LOW AMBIENT KIT (-40°F)

NOTES: BASIS IF DESIGN IS MITSUBISHI. EQUIVALENT PRODUCT MATCHING THE SPECIFICATIONS BY SAMSUNG, LG DAIKIN TO BE TREATED AS EQUAL.

## ) ACCESSORIES

-20 AND CASED VERTICAL N-COIL CTORY INSTALLED THERMOSTATIC EXPANSION CONTROLLED BY BAS. OUTSIDE AIR 480 CFM

NDT, GRAVITY CONTROLLER.

, 100 SERIES NG THERMOSTAT

ll, 100 series Re sensor. Ter installed in

GSP 600 C/W EC MOTOR, MODULATION CONTROLLED BY TO BE WITH REMOVABLE PANELS FOR ACCESS THE CORES DE OF THE UNIT.

RETURN/ EXHAUST GRILLE SCHEDULE									
SYMBOL	SIZE MM x MM (IN. x IN.)	APPLICATION	NECK SIZE MMt (INSt)	AIRFLOW RANGE CFM	NC RANGE	MANUFACTURER AND MODEL (BASIS OF DEISN: E.H. PRICE)			
R-1 E-1 CFM CFM	300x300 (12x12)	CEILING GRILLE	-	<450	<30	80D			
R-2 CFM	600x600 (24x24)	CEILING GRILLE	_	<1600	<30	80D			

NOTE(S): 1. ACCEPTABLE ALTERNATES SUBJECT TO SHOP DRAWING REVIEW: TITUS, METALAIRE, KRUEGER.

DIFFU	DIFFUSER SCHEDULE									
SYMBOL	SIZE MM x MM (IN. x IN.)	APPLICATION	NECK SIZE MM† (INS†)	AIRFLOW RANGE CFM	NC RANGE	MANUFACTURER AND MODEL (BASIS OF DEISN: E.H. PRICE)				
S-1 CFM	600x600 (24x24)	4 WAY CEILING DIFFUSER	150 (6)	0–135	<30	SCD				
S-2 CFM	600x600 (24x24)	4 WAY CEILING DIFFUSER	200 (8)	136–250	<30	SCD				
S-3 CFM	600x600 (24x24)	4 WAY CEILING DIFFUSER	200 (10)	251–350	<30	SCD				
NOTE(S):	1. ACCEPTABLE AL	TERNATES SUBJE	CT TO SHOP	DRAWING RE	EVIEW: TITUS, M	IETALAIRE, KRUEGER.				

ELECTRIC CABINET UNIT HEATER SCHEDULE SYMBOL CAPACITY (KW) REMARK ECUH-1 3.00 PROVIDED AND INSTALLED BY DIV. 16

ELECT	ELECTRIC BASEBOARD HEATER SCHEDULE							
SYMBOL	CAPACITY (KW)	REMARK						
EBH-1	0.75	PROVIDED AND INSTALLED BY DIV. 16. CONTROLLED BE BAS.						

ELECT	RIC UNIT	HEATER SCHEDULE
SYMBOL	CAPACITY (KW)	REMARK
EUH-1	2.0	PROVIDED AND INSTALLED BY DIV. 16. CONTROLLED BY BAS.

DE	DE-STRATIFICATION FAN SCHEDULE								
SYMBOL	AREA SERVED	LOCATION	ELI MOTOR HP	ECTRICAL VOLTAGE	MOTOR	OPRATING WEIGHT LBS	MODEL		
<u>DF-1</u>	APPARATUS BAY	CEILING SUSPENDED	1.0	120/1/60	ONBOARD VFD CONTROLLER	124	BIG ASS BASIC 6, FAN DIAMETER 3000MM, C/W WALL-MOUNTED KEYPAD, SAFETY CABLE. INSTALLATION HEIGHT TO BE CONFIRMED ON SITE.		

RAE	RADIANT TUBE HEATER SCHEDULE								
	CAPACITY	ELI	ECTRICAL	OPRATING					
STMBUL	GAS INPUT MBH	AMPS	VOLTAGE	WEIGHT LBS	NODEL (BASIS OF DESIGN: SCHWANK				
<u>IR–1</u>	200	145VA	120/1/60	518	SCHWANK MODEL UHE 200-60. HEATERS ARE TO BE MOUNTED HORIZONTALLY. EACH RADIANT TUBE HEATER TO BE CONTROLLED BY A SCHWANK TRUTEMP MEAN RADIANT TEMPERATURE THERMOSTAT THROUGH BAS AND INTERLOCKED WITH OVERHEAD DOORS AND FOLDING DOORS THROUGH BAS.				

DOMESTIC HOT WATER TANK									
SYMBOL/AREA	INPUT STORAGE CAPACITY		RECOVERY RATE • 100°F ELECTRICAL RISE		BEMARKS				
	MBH	GALLON	GPH	VOLTAGE					
DHWT-1	120	60	138	120/1/60	A.O. SMITH CYCLONE MXI BTH-120(A). NATURAL GAS.				

#### PUMP SCHEDULE ELECTRICAL DATA PERFORMANCE REF: REMARKS SYSTEM FLUID GPM FT. HEAD RPM MOTOR HP VOLTAGE P-1 DOMESTIC HOT WATER WATER 4.0 3.0 1800 1/40 120/1/60 TACO MODEL PLUMB 'n' PLUG C/W DIGITAL TIMER MATER 4.0 3.0 1800 1/40 120/1/60 TACO MODEL PLUMB 'n' PLUG C/W DIGITAL TIMER

EXP	EXPANSION TANK SCHEDULE								
SYMBOL	LOCATION/SERVICE	MODEL No.	TANK VOLUME LITERS (GAL.)	ACCEPTANCE VOLUME LITERS (GAL.)	REMARKS				
EXP-1	MECH/ELEC ROOM 111 DOMESTIC HOT WATER RETURN	PLT-20	32.1 (8.5)	12.9 (3.4)	WATTS PLT-20				

THE CO	ONTENTS OF TH REMAIN THE C THOMAS B BT BE RETURNED	IS DRAWING AND S COPYRIGHT PROPE ROWN ARCHITECT D UPON COMPLETI	PECIFICATIO RTY OF INC. DN OF THE V	ONS VORK.
NO. 1 2 3 IS 4	ISSUE ISSUED ISSUED FO SUED FOR 90% ISSUED	OR REVISIO UED FOR FOR REVIEW DR 80% REVIEW DESIGN DEVELOPI FOR REVIEW	DN 2018- 2018- 2018- MENT 2018- 2019-	<b>ATE</b> -05-14 -10-02 -11-2 -01-03
- FROJECT : PROJECT :		1-01-1 0-1 0-1 LINGE ELECTRIC ANICAL & ELECTRIC ANICAL ANICAL		
		ALL VERIFY ALL DIM F THE WORK. ANY PRTED TO THE CON	ENSIONS PF DISCREPANC SULTANT.	RIOR CIES
A T: W:	197 SPADINA A 416-364-5710 E WWW.TBROW	AVE, SUITE 500, TO EXT 101 'NARCH.COM	RONTO, ON	
PROFESSIO	ONAL SEAL			
Approva	I to Proceed			
Project F	Phase			
Authoriz	ation (signature	)		
DWG TITLE ME SC	CHAN HEDU	IICAL LES		
		CONSTRUCT		-
1:75	US :	DRAWN BY		
- 5141	TE	ENDER		
PROJECT	201	16-147	,	
DRAWING	No.		REVI	SION
	IV	1U.U	-	-





IR-1A ENABLE/ DISABLE DO
IR-1B ENABLE/ DISABLE DO
IR-1C ENABLE/ DISABLE DO
IR-1C ENABLE/ DISABLE DO
ROOM TEMPERATURE SENSOR AI
TRUTEMP TEMPERATURE THERMOSTAT DI
DOOR1 CONTACT DI
DOOR2 CONTACT DI
DOOR3 CONTACT DI
DOOR4 CONTACT DI
DOOR5 CONTACT DI
DOOR6 CONTACT DI
DOOR7 CONTACT DI

DATE

2018-05-14

2018-10-02

2019-01-03

ARKHAN

Σ

AD

0

Ŷ

ERON

AM

 $\odot$ 

Z Ш

Ū

 $\sim$ 

Ö

REVISION

--

# **CONCRETE MIX SCHEDULE**

	STRENGTH AT 28 DAYS (Mpa)	SLUMP AT DELIVERY (mm)	AIR ENTRAINMENT	MAXIMUM W/C RATIO	EXPOSURE CLASSIFICATION
FOOTINGS & INTERIOR FOUNDATION WALLS	25	80 ± 20		TO SUIT	N
(1) GROUT FOR MASONRY FILL / BOND BEAMS	15 MIN. (FINE GROUT)	TO SUIT CONFORMING TO CSA A179 SUPERPLASTICIZER MAY BE USED			
EXTERIOR CONCRETE SLABS, SIDEWALKS, CURBS AND GUTTERS	32	80 ± 20	5 - 8 %	0.45	C - 2
(2) INTERIOR SLAB-ON-GRADE EXCEPT APPARATUS BAY	SUPERPLASTICIZED 25	BEFORE ADDITION OF SUPERPLASTICIZER $50 \pm 20$ AFTER ADDITION OF SUPERPLASTICIZER $150 \pm 20$		0.50	Ν
APPARATUS BAY SLAB-ON-GRADE	SUPERPLASTICIZED 32	BEFORE ADDITION OF SUPERPLASTICIZER 50 MAX AFTER ADDITION OF SUPERPLASTICIZER 150 ± 30		0.40	Ν
EXPOSED EXTERIOR WALLS, FOUNDATION WALLS	25	80 ± 20	4 - 7 %	0.55	F - 2
APRON SLABS	35	80 ± 20	5 - 8 %	0.40	C - 1

1) FINE GROUT TO CONSIST OF (BY VOLUME) 1. PART PORTLAND CEMENT (MASONRY CEMENT IS NOT ACCEPTABLE)

2. 1/2 TO 3 PARTS FINE AGGREGATE (SEND) AND NO COARSE AGGREGATE.

2) SYNTHETIC FIBRES ADDED AT BATCHING PLANT. REFER TO SPECIFICATION. NOTE. IF CONCRETE IS TO BE "PUMPED" INCLUDE DETAILS IN MIX DESIGN SUBMISSION.

## DESIGN CRITERIA NOTES

#### 1. GENERAL

- 1.1. THE PROJECT HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2012 OBC (O. REG. 332/12 AS AMENDED) INCLUDING CLAUSES 4.1.6.1(1), 4.1.6.4(3), 4.1.7 AND 4.1.8. IT IS THE RESPONSIBILITY OF THE CONTRACTOR WHO IS SUPPLYING AND INSTALLING EQUIPMENT THAT ALL ELEMENTS OF STRUCTURES LISTED IN TABLE 4.1.8.18 OF THE OBC 2012 ARE DESIGNED IN ACCORDANCE WITH CLAUSE 4.1.8.18.
- 1.3. BUILDING IMPORTANCE CATEGORY (SNOW, WIND, AND EARTHQUAKE) IS POST DISASTER. STIFF ELEMENTS NOT PART OF SFRS SHALL BE SEPARATED FROM THE STRUCTURE AS PER OBC 1.4. CLAUSE 4.1.8.3 (6a). EXAMPLES INCLUDE, BUT NOT LIMITED TO MASONRY PARTITIONS, BRICK VENEER, PRECAST CLADDING ETC. IT IS THE RESPONSIBILITY OF THE SUBCONTRACTOR TO PROVIDE SHOP DRAWINGS, STAMPED, SIGNED AND DATED BY A PROFESSIONAL ENGINEER DEMONSTRATING COMPLIANCE. PROVIDE MINIMUM 15mm SEPARATION UNLESS NOTED OTHERWISE.

#### 2. LATERAL LOADS ON STRUCTURE

- 2.1. WIND q(1/50) = 0.44 kPa
  - Ce = (h/10)^1/5 NOT LESS THAN 0.9. Cg = 2.0
  - Cp = AS PER FIGURE I-15 OF USER'S GUIDE NBC 2010 STRUCTURAL COMMENTARIES (PART 4 OF DIVISION B).
  - EARTHQUAKE 0 - (0, 0) = 0.40

Sa(0.2) = 0.18	PGA = 0.061	Fa = 1.3
Sa(0.5) = 0.110	SITE CLASS = D	Fv = 1.4
Sa(1.0) = 0.067	Rd = 2.0	le = 1.5
Sa(2.0) = 0.022	Ro = 1.5	le Fa Sa (0.2) = 0.35
SFRS CONSISTS OF:		
- MODERATELY DUC	TILE MASONRY SHEAR WALLS	

- LIMITED DUCTILITY MOMENT RESISTING FRAMES - METHOD OF ANALYSIS : STATIC
- FOUNDATION WALLS 3.

2.2.

- 3.1. WALLS RETAINING EARTH ARE DESIGNED TO SAFELY WITHSTAND HORIZONTAL EARTH PRESSURE (P=K (Wt.h+q)
  - K = 0.31 Wt = 20 kN/m^3
  - q = 12 kPa
- h = DEPTH IN METRES THE WALLS HAVE BEEN DESIGNED ASSUMING FREE DRAINING BACKFILL OR THE USE OF A DRAINAGE 3.2. CORE TO PREVENT THE BUILD-UP OF HYDROSTATIC PRESSURE.





#### WHERE MECHANICAL SERVICE PIPES PASS PROVIDE STEEL SLEEVES (MIN) 500) LARGER THAN PIPE (TYPICAL)

## SITE PREPARATION NOTES FOR SLAB-ON-GRADE (WITHIN BUILDING ENVELOPE)

THE AREA WITHIN THE BUILDING SHALL BE ST
CONTAMINATED MATERIAL AND RUBBLE TO EI
GEOTECHNICAL REPORT AND THE BOREHOLE

- THE EXPOSED SUB-GRADE SHALL BE EXAMINED AND APPROVED BY THE SOIL CONSULTANT.
- PROCTOR MAX. DRY DENSITY AND TO THE APPROVAL OF THE SOIL CONSULTANT.
- APPROVED MATERIAL.
- LEAST 100% OF ITS STANDARD PROCTOR MAXIMUM DRY DENSITY.
- THE LAYER IMMEDIATELY BELOW THE SLAB-ON-GRADE SHALL BE 200mm (8") OF GRANULAR 'A' COMPACTED 6. TO MIN. 98% STANDARD PROCTOR MAX. DRY DENSITY.
- ALL PROCEDURES, EQUIPMENT AND MATERIALS SHALL BE APPROVED BY THE SOIL CONSULTANT WHO SHALL CONDUCT SUFFICIENT TESTS TO ENSURE THAT THE SPECIFIED MATERIALS AND DENSITIES ARE ACHIEVED. THE CONTRACTOR SHALL CO-ORDINATE WITH THE SOIL CONSULTANT AND ARRANGE A SUITABLE PROGRAM FOR
- SAMPLING AND INSPECTIONS, ETC. AND NOTIFY THE ARCHITECT ACCORDINGLY.
- EXISTING ON-SITE MATERIAL SHALL NOT BE USED WITHIN THE BUILDING AREA FOR BACKFILLING IN TRENCHES
- AGAINST FOUNDATION WALLS OR UNDER SLABS-ON-GRADE. REFER TO THE SPECIFICATION AND THE SOIL REPORT FOR PREPARATION OF AREAS OUTSIDE THE BUILDING 10.
- ENVELOPE.

FOOTING SCHEDULE			
FOOTING NUMBER	SIZE	FOOTING REINF. B.E.W.	
F1	1200x1200x300 DP.	5-15	
F2	1600x1600x300 DP.	7-15 T&BEW	
F3	2800x1600x400 DP.	9-20 T&B LONG HOOKED EE 9-20 T&B TRANS. HOOKED EE	

LOWER ELEVATIONS AT UNDERSIDE OF COLUMN AND WALL FOOTINGS, THROUGH LOAD BEARING FOUNDATION WALLS WHERE REQUIRED, BUT NOT LIMITED TO STORM, SANITARY, WATER/FIRE LINES AND ELECTRICAL DUCT BANKS ETC. THE MAXIMUM SLOPE FROM THE PIPE EXCAVATION TO THE UNDERSIDE OF ADJACENT FOOTING ELEVATIONS SHALL NOT EXCEED 7 VERTICAL TO 10 HORIZONTAL.

- TRIPPED OF THE UPPER LAYER SOIL, FILL, ORGANICALLY
- LEVATIONS 600-1000mm BELOW EXISTING GRADE. SEE E LOGS FOR FURTHER DETAILS.
- THE ENTIRE AREA SHALL BE PROOF ROLLED WITH A HEAVY COMPACTOR TO A MINIMUM OF **100%** STANDARD
- ANY LOOSE OR SOFT SPOTS ENCOUNTERED SHALL BE SUB-EXCAVATED AND BACKFILLED WITH COMPACTED
- FILL REQUIRED TO RAISE THE GRADES SHALL BE COMPRISED OF APPROVED ON-SITE MATERIAL GRANULAR 'B' TYPE 1 CONFORMING TO OPSS 1010 PLACED IN SUCCESSIVE LOOSE 200mm(8") LAYERS EACH COMPACTED TO AT

## FOUNDATION PLAN 1:75

- TOP OF SLAB ON GRADE TO BE 0.0 BELOW FINISHED FLOOR DATUM ELEVATION 165.00m, EXCEPT
- AS NOTED. TOS = TOP OF SLAB. FOOTINGS SHALL FOUNDED ON VERY DENSE CLAY AND SILT TO CLAYEY SILT TILL CAPABLE OF SUSTAINING A MINIMUM SOIL BEARING VALUE
- OF 150 kPa (SLS).

11.

12.

14

- REFER TO THE SOIL REPORT 5984-001, DATED APRIL 17, 2017 PREPARED BY CAMBIUM INC.
- SOIL AT THE UNDERSIDE OF THE FOOTINGS IS TO BE INSPECTED AND APPROVED BY A REPRESENTATIVE OF A SOILS CONSULTANT BEFORE PLACING CONCRETE.
- REFER ALSO TO SITE PREPARATION NOTES ON DRAWING \$1-01.
- CO-ORDINATE ALL DIMENSIONS WITH THE ARCHITECTURAL DRAWINGS AND REPORT ANY DISCREPANCIES TO ENGINEER PRIOR TO PROCEEDING WITH ANY WORK.
- UNDERSIDE OF WALL FOOTINGS TO BE AT ELEVATIONS AS NOTED ON PLAN. SDF = STEP DOWN FOOTING.
- UNLESS OTHERWISE SHOWN, ALL WALL FOOTINGS TO BE 300mm DEEP WITH 150mm PROJECTIONS
- EACH SIDE.
- FILL REQUIRED ON BOTH SIDES OF FOUNDATION WALLS SHALL BE PLACED AND COMPACTED 10.
- SIMULTANEOUSLY ON EACH SIDE TO EQUALIZE SOIL PRESSURE. PROVIDE SLAB DEPRESSIONS AND SLOPES, OTHER THAN THOSE SHOWN ON THE STRUCTURAL
- DRAWINGS, AS REQUIRED BY THE ARCHITECTURAL AND MECHANICAL DRAWINGS AND SPECIFICATIONS.
- THE PROJECT SUPERINTENDENT MUST CONTACT THIS OFFICE 24 HOURS PRIOR TO PLACING STRUCTURAL CONCRETE INCLUDING STRIP FOOTINGS.
- GENERAL SLAB ON GRADE IS 100mm THICK REINFORCED WITH SYNTHETIC FIBRES (REFER TO CONCRETE 13. SPECIFICATION). EXCEPT AS NOTED.
- CONCRETE STRENGTHS SEE CONCRETE SCHEDULE. 15. SEE TYPICAL NOTES, TYPICAL DETAILS, AND ALL OTHER DRAWINGS.

	DRAWING LIST
Sheet	
Number	Sheet Name
S1-01	FOUNDATION PLAN
S1-02	ROOF FRAMING PLAN
S2-01	COLUMN SCHEDULE AND FOUNDATION PLAN DETAILS
S2-02	FOUNDATION SECTIONS
S3-01	ROOF SECTIONS
S3-02	ROOF SECTIONS
S4-01	GENERAL NOTES
S4-02	TYPICAL DETAILS
S4-03	TYPICAL DETAILS
S4-04	TYPICAL DETAILS
S4-05	TYPICAL DETAILS
S4-06	TYPICAL DETAILS
S4-07	TYPICAL DETAILS

L		
No. 1 ISSUED FO	Description R PERMIT	Date JAN/31/19
()	0	
	$\frac{1}{2}$	5
	, Ì I	HAN
Ζ	<b>—</b>	<b>RK</b>
Ο	<b>O</b>	MΑ
	t C	AD,
<u> </u>	4	RO
Ш	Ζ	NO
ſĽ	0	IER
$\mathbf{X}$		CAN
$\overline{\mathbf{r}}$		Z
		ULE ULE
		07 (
ar and a second		
	stephei	<b>NSON</b>
2550 Victoria Toronto ON M	Park Ave. Suite 602 2J 5A9   Tel: (416) 635 9	9970
www.stephens	son-eng.com   info@step BEAL :	henson-eng.com
SED PROFESS	VONAL END	DFESSIONAL 64
		C. GASDIA
NOU NCE OF	ONTHE COM	CE OF ONTAR
DWG TITLE :		
FOUN	DATION I	PLAN
		]
		$\searrow$
~		Ť
DATE		
DATE : SCALE :	JAN. 2019	instad
DRAWN BY:	As Ind	
CHECKED BY :	- H 0 M	
DESIGNED BY:		, <u></u> M
DWG STATUS :		
PROJECT No. :	<b>-</b> -	
PROJECT No. :	201607	760
PROJECT No. : DRAWING No. :	201607 S1-07	760 1









Date JAN/31/19

MARKHAM

AD,

RO

CAMERON

GLEN

107

REVISION





	or REVISION	d must be the work.
1 ISSUED	FOR PERMIT	JAN/31/19
	0	
		M
	>	КНА
$\overline{C}$	- )の	MAF
		DAD,
		N RO
Δ		ERO
X	$\leq $	CAM
Δ		ĒN
		17 GL
PROJE	- ()	10
	stepher	<b>ISON</b>
2550 Victor Toronto ON	ria Park Ave. Suite 602 NM2J 5A9   Tel: (416) 635 9 ansan ang sam LinfaQctan	970
PROFESSION	AL SEAL :	FESS/ONA
19- 19- 19- 19- 19- 19- 19- 19- 19- 19-	01.31	19-01-31 C. GASDIA
HO INCE	OF ONTR	CE OF ONTHR
NOO		NO
DATE :	IANI 2010	
	1 :	20
SCALE :		
SCALE : DRAWN BY:		
SCALE : DRAWN BY: CHECKED BY DESIGNED BY	- HAM	/ JG M
SCALE : DRAWN BY: CHECKED BY DESIGNED BY DWG STATUS	- HAM	/ JG M
SCALE : DRAWN BY: CHECKED BY DESIGNED BY DWG STATUS PROJECT No.	- HAM MI PERMIT 201607	/ JG M 760

STANDARD ABBREVIATIO	ONS	A01	GENERAL NOTES		A02	CAST-IN-PLACE CONCRETE NOTES	A03.1	CAST-IN-PLA
@       -At         ADJ       -Adjustable         AIFB       -Asphalt Impregnated Fibre Board         ALT       -Alternate         ARCH       -Architectural         A. ROD(A.R.) - Anchor Rod       ASL         ASL       -Accumulated Snow Loading         BUT       -Bottom         BEW       -Bottom Each Way         BLDG       -Building         BLL       -Bottom Lower Layer         BM       -Beam         BML       -Bottom of Footing         BP       -Base NominalThickness         B.O.F.       -Bottom Upper Layer         C       -Standard Channel         CA       -Column Above         CANT       -Cantilever         CC (Colc) -Centre to Centre       CJ         CJ       -Control Joint         CL       -Centreline         CONC       -Concrete         CONT -Construction       Joint         CONT -Construction       Joint         CONT -Construction Joint       CONT (CONTIN)         CONT -Continuous       C/W         COW - Complete With       Joiagonal         DIAG       -Diagonal         DIAG       -Diagonal <td>H (HOR) -Horizontal         HEF       -Horizontal Inside Face         HIF       -Horizontal Nutside Face         HSC       -Horizontally Slotted Connection         HSS       -Hollow Structural Section         IF       -Inside Face         INT       -Interior         INV       -Invert         JT       -Joint         kg       -Kilogram         kN.m       -Kilo Newton Metres         kN/m<sup>2</sup>       -Kilo Newton per Square Metre         kN/m<sup>2</sup>       -Kilo Newton per Square Metre         kN/m<sup>2</sup>       -Kilo Pascals         L       -Angle         LB       -Pounds         LG       -Long Leg Verical         LV       -Long Leg Verical</td> <td>S -Standard Beam SDF -Step Down Footing SDL -Superimposed Dead Loa SECT -Section SL -Slab SQ -Square SOG -Slab on Grade S.P.FSpruce/Pine/Fir SPEC -Specifications ST -Steel STD -Standard STR -Straight STRUCT -Structural T -Top TEMP -Temperature Tf -Factored Tension Force TJ -Tie Joist TLL -Top Lower Layer TMF -Factored Torsional Mom- TML -Top Middle Layer TOD, T/D -Top of Deck T.O.FTop of Footing TOS, T/S-Top of Slab TOST -Top of Steel TSF -Tons per Square Foot TUL -Top Upper Layer TVP -Typical UL -Upper Layer U/N -Unless Noted U.N.OUnless Noted U.N.OUnless Noted U.N.OUnless Noted U.SUnderside USD -Underside Of Deck V (VERT) -Vertical VBF -Vertical Inside Face VOF -Vertical Inside Face VOF -Vertical Uside Face VSC -Vertical Uside Fac</td> <td>1.       GENERAL         1.1.       DESIGN AND CONSTRUCTION IS OR BY-LAW OF THE AUTHORITY HAW DRAWINGS, AND TO THE SPECIFICA REFERENCED IN APPLICABLE BUILD ALL DIMENSIONS, OTHER THAN ARCHITECTURAL DRAWINGS AND AM MUST NOT BE SCALED.         1.2.       REFER TO ARCHITECTURAL, ME SLEEVES, DEPRESSIONS, GROOVES ABOVE ITEMS WHERE SHOWN ON TH 1.3. UNLESS SPECIFICALLY NOTED O CONSTRUCTION. THE CONTRACTOR FROM ANY CAUSE DURING CONSTRU- RESPONSIBLITY OF THE CONTRACT SAFEGUARD ALL EXISTING OR ADJA REVIEW.         2.       SHOP DRAWINGS, PLACING DRAWIN 2.1. FOR ALL STRUCTURAL COMPON STRUCTURAL CONSULTANT. SHOP D COMPONENTS.         2.2.       REVIEW OF SHOP DRAWINGS BN INTENT OF THE STRUCTURAL DESIG 2.3. REVIEW BY THE STRUCTURAL DESIG 3.1. A SOILS CONSULTANT AND ANI 3.1.1.         3.1.1.       BEARING SOIL - RE 3.1.2.         3.1.3.       CAST-IN-PLACE ANI COMPACTION HAS BEEN ATTAIN 3.1.3.         3.1.4.       STEL DECK - SEE 3.1.7.         3.1.5.       STRUCTURAL STRUE REQUIREMENTS CSA S16.         3.1.6.       STEEL DECK - SEE 3.1.7.         Mesh       4.1.         4.1.       RECURENCY SCA SET OR 3.1.5.<!--</td--><td>TO CONFORM TO THE REQUIREMENTS OF THE 2012 ONTAI ING JURISDICTION. REFER ALSO TO TYPICAL DETAILS, NOT TION. ALL CODES, MANUALS, STANDARDS AND SPECIFICATI NG CODE INCLUDING ALL REVISIONS AND ADDENDA. PURELY STRUCTURAL DIMENSIONS SHOWN ON THE STRUCT I'ICONSISTENCIES REPORTED TO THE ARCHITECT BEFO CHANICAL AND ELECTRICAL DRAWINGS FOR LOCATIONS AN AND CHAMFERS NOT INDICATED ON THE STRUCTURAL DR HE STRUCTURAL DRAWINGS ARE INDICATED ONLY APPROX THE STRUCTURAL DRAWINGS AND PROVISION HAS BEENT IS TO PROVIDE ALL NECESSARY BRACING, SHORING, FJ COTION. THE CONTRACTOR SHALL ACCEPT FULL RESPONS DO FO POVIDE ALL NECESSARY BRACING, SHORING, SHEI CENT STRUCTURES AFFECTED BY THIS WORK. CONTRACTOR <b>GS AND BAR LISTS</b> ENTS SHOWN ON THE STRUCTURAL DRAWINGS, SUBMIT C RAWINGS TO SHOW COMPLETE INFORMATION FOR THE FA ' THE STRUCTURAL CONSULTANT IS ONLY TO ASSESS THA N. ONSULTANT SHALL NOT RELIEVE THE CONTRACTOR OF TH FORMITY WITH THE STRUCTURAL DRAWINGS AND SPECIFIC NUSEDEDENT INSPECTION AND TESTING COMPANY ARE TO FER TO NOTES ON STRUCTURAL DRAWINGS AND SPECIFIC NDEPENDENT INSPECTION AND TESTING COMPANY ARE TO FER TO NOTES ON STRUCTURAL DRAWINGS AND ALSO TO NO-GRADE - CONFORM THAT FILL MATERIAL USED IS SATISI IED. D PRECAST CONCRETE - ROUTINE INSPECTION OF MATERI, FORCING ROD TESTS WHEN REQUIRED OR DIRECTED IN A ERINTENDENT IS TO ADVISE THE STRUCTURAL CONSULTAN STEEL DECK NOTES. REQUIRED OR DIRECTED, CONCRETE BLOCKS SHALL BE TE SAA22: AND MORTAR AND/OR GROUT IN ACCORDANCE WIT SERVICES ARE TO BE PERFORMED BY COMPANIES CERTIFI DE CERTIFIED BY THE CANADIAN WELDING BUREAU. DATION PLANS. ALL EXTERIOR FOOTINGS OR ALONG STEPP D'). X'ATIONS SHOWN ON THE STRUCTURAL DRAWINGS ARE B/ DARWINGS. NDITIONS VARY FROM THOSE ASSUMED, THEN WRITTEN D ED BY A MINIMUM OF 1200mm (4''D') OF EARTH OR ITS EQU UDJACENT EXCAVATIONS FOR FOOTINGS OR ALONG STEPP D'). X'ATIONS SHOWN ON THE STRUCTURAL DRAWINGS ARE B/ DRAWINGS. NDITIONS VARY FROM THOSE ASSUMED, THEN WRITTEN D E PROCEEDING WITH THE WORK. USLY NAY BEFORE CONC</td><td>L RIO BUILDING CODE AND ANY APPLICABLE REQUREMENTS ES UNDER PLANS AND SCHEDULES ON THE STRUCTURAL ONS REFERRED TO SHALL BE THE SPECIFIC EDITION ITURAL DRAWINGS MUST BE CHECKED AGAINST THE RE PROCEEDING WITH THE WORK. STRUCTURAL DRAWINGS ND SIZES OF OPENINGS, TRENCHES, PITS, SUMPS, EQUIPMENT, AWINGS. UNLESS SPECIFICALLY NOTED OTHERWISE, THE IMATELY AS TO SIZE AND LOCATION. WADE IN THE DESIGN FOR CONDITIONS OCCURRING DURING IEQUIRED FOR STRESSES AND INSTABILITY OCCURRING IBILTY FOR ALL SUCH MEASURES. IT SHALL ALSO BE THE ET PLILING OR OTHER TEMPORARY SUPPORTS OF DR TO PROVIDE SHOP DRAWINGS FOR CONSULTANTS DEVISO F SHOP DRAWINGS AS DIRECTED FOR REVIEW BY THE BRICATION AND ERECTION OF THE STRUCTURAL IT HE SUBMITTED SHOP DRAWINGS REFLECT THE E RESPONSIBILITY FOR SEEING THAT THE WORK IS PATIONS. PIES OF SHOP DRAWINGS IN ADVANCE OF A CONCRETE IT SOIL REPORT. FACTORY AND THAT THE REQUIRED DEGREE OF ALS, INCLUDING SLUMP, CYLINDER AND AIR CCORDANCE WITH CSA STANDARD A23.2. IT A MINIMUM OF 24 HOURS IN ADVANCE OF A CONCRETE L BE CARRIED OUT IN ACCORDANCE WITH THE STED IN ACCORDANCE WITH ASTM C140 BRICKS IN H CSA A179. ED BY THE CANADIAN STANDARDS ASSOCIATION AND INGS EXPOSED TO FREEZING IN THE FINISHED BUILDING SHALL OFTED. FOOTINGS EXPOSED TO FROST ACTION DURING IVALENT SUFFICIENT TO PREVENT FREEZING. ED FOOTINGS SHALL NOT EXCEED A RISE OF 7 IN A RUN OF 10, ASED UPON INFORMATION AVAILABLE AT THE TIME OF IRECTIONS SHALL NOT EXCEED A RISE OF 7 IN A RUN OF 10, ASED UPON INFORMATION AVAILABLE AT THE TIME OF IRECTIONS SHALL NOT EXCEED A RISE OF 7 IN A RUN OF 10, ASED UPON INFORMATION AVAILABLE AT THE TIME OF IRECTIONS BUST BE OBTAINED FROM THE OFTENED BY WATER, THE EXCAVATION SHALL BE TO SUIT. EARTH MUST BE IN PLACE BEFORE BACKFILLING. LL AND COMPACT EACH SIDE OF WALL SIMULTANEOUSLY. UB-GRADE, (WHERE SUB-GRADE CONSISTS OF TH APPROVED MATERIAL UNLESS SPECIFICALLY NOTED LOOSE FILL EACH COMPACTED TO A MINIMUM OF 95% LABS-ON-GRADE A MINIMUM OF 200mm (8') OF COMPACTED CTOR MAXIMUM DRY</td><td><ol> <li>GENERAL         <ol> <li>FRAVIDE ALL LABOUR MATERIALS, TOOLS AND EQUIPMENT REQUIRED TO CARRY OUT THE WI             <ol> <li>REFER ALSO TO GENERAL NOTES, NOTES UNDER PLANS AND SCHEDULES, TYPICAL DETALSJ.</li> </ol> </li> <li>PRODUCTS</li></ol></li></ol></td><td>L ORK. AND SPECIFICATION. AND SPECIFICATION. AND SPECIFICATION. AND SPECIFICATION. AND SPECIFICATION. AND SPECIFICATION. FOR ENTRUCTION. FORMWORK DRAWINGS AND SPECIFICATION. FORMWORK DRAWINGS AND SPECIFICATION. FORMWORK DRAWINGS AND SPECIFICATION. FORMWORK DRAWINGS AND SPECIFICATION. FORMWORK DRAWINGS SO AT CANTILEVER. CAMBER BOTH THE D STRUCTURAL THICKNESS OF MEMBERS. AND SPECIFICATION CONCRETE FACES. SO AT CANTILEVER. CAMBER BOTH THE D STRUCTURAL THICKNESS OF MEMBERS. AND SPECIFICATION OF A SUBJECT ON SPECIFIC STRUCTURAL THICKNESS OF MEMBERS. AND CONCRETE FACES. SA SREQUIRED BY THE ARCHITECTURAL. G TO CANCSA -G30.18-M GRADE 400 (58000 PSI). E. DETAILING MANUAL AND THE MANUAL OF F 8 mm PEA GRAVEL WITH ONLY SUFFICIENT WATER PRE-WELDED CORNERS AND INTERSECTIONS. SEE STANDARD C309. GENERALLY ALL CONCRETE E WITH APPLIED FINISHES. HALL BE STUDRAILS® AS MANUFACTURED BY NG SHALL TAKE PLACE IN A ICC ES APPROVED A. DRAWINGS (20MPa MINIMUM). ESS NOTED OTHERWISE.GREATER SLUMPS ARE ANDARD A23.1. ING OF 10000mm (30'0'). UNLESS CONTROL NGINEER PRIOR TO PROCEEDING. LL BE APPROVED BY THE STRUCTURAL TO THE SPANS, AT MID-SPAN IF POSSIBLE INSTALLED AS REQUIRED BY THE DRAWINGS E SYSTEM, BE SO INSTALLED THAT THEY AN AS SHOWN ON THE TYPICAL DETAILS. SIDE DIAMETER THAN 1/3 SLAB THICKNESS OR I CENTRE UNLESS APPROVED BY THE SH TO EXPOSED CONCRETE. ALL HONEYCOMBING L DRAWINGS AND SPECIFICATIONS AND DWARE AND FOR FLOOR AND ROOF FINISHES SHALL FOR CONCRETE WALLS. (M EACH WAY PLUS 10M @ 400 (16') DOWELS S.</td><td>3.14 GENERAL REQUIRE (A) DO NOT DRILL BY THE STRUCT (B) UNLESS NOTEL CONCRETE REI PENETRATI AS AUTHORIZEI (C) GPR SCANNING (D) GPR SCANNING (D) GPR SCANNING (D) GPR SCANNING WITHIN A H THE REBAR (E) AFTER ALL THE REVIEW AND AF THE HOLE I (F) THE REVIEW BY THROUGH REINFORCE RESPONSIBILITY (G) CORE DRILL NI EXISTING REINFO (H) WHERE RECTA SERIES OF HOL 4. QUALITY CONTROL 4.1 FOR INSPECTION AN SERIES OF HOL 1. GENERAL 1.1. DESIGN, FABRICATIO 1.1. CSSBI 10M 1.1. CSSBI 10M 1.2. THE STEEL DECK SHALL SUPPORTS (3 SPANS SUPPORTS (3 SPANS SUPPORTS (3 SPANS SUPPORT THE L CONSTRUCTION 1.5. ROOF DECK SHALL I REQUIRED. DECK TH SUPPORT THE L CONSTRUCTION 1.6. LOCK SHALL I CONSTRUCTION 1.6. LOCK SHALL I CONSTRUCTION 1.7. DESIGN AND DETAIL UPLIFT FORCES ACT 2. PRODUCTS 2.1. UNLESS OTHERWISE</td></td>	H (HOR) -Horizontal         HEF       -Horizontal Inside Face         HIF       -Horizontal Nutside Face         HSC       -Horizontally Slotted Connection         HSS       -Hollow Structural Section         IF       -Inside Face         INT       -Interior         INV       -Invert         JT       -Joint         kg       -Kilogram         kN.m       -Kilo Newton Metres         kN/m <sup>2</sup> -Kilo Newton per Square Metre         kN/m <sup>2</sup> -Kilo Newton per Square Metre         kN/m <sup>2</sup> -Kilo Pascals         L       -Angle         LB       -Pounds         LG       -Long Leg Verical         LV       -Long Leg Verical	S -Standard Beam SDF -Step Down Footing SDL -Superimposed Dead Loa SECT -Section SL -Slab SQ -Square SOG -Slab on Grade S.P.FSpruce/Pine/Fir SPEC -Specifications ST -Steel STD -Standard STR -Straight STRUCT -Structural T -Top TEMP -Temperature Tf -Factored Tension Force TJ -Tie Joist TLL -Top Lower Layer TMF -Factored Torsional Mom- TML -Top Middle Layer TOD, T/D -Top of Deck T.O.FTop of Footing TOS, T/S-Top of Slab TOST -Top of Steel TSF -Tons per Square Foot TUL -Top Upper Layer TVP -Typical UL -Upper Layer U/N -Unless Noted U.N.OUnless Noted U.N.OUnless Noted U.N.OUnless Noted U.SUnderside USD -Underside Of Deck V (VERT) -Vertical VBF -Vertical Inside Face VOF -Vertical Inside Face VOF -Vertical Uside Face VSC -Vertical Uside Fac	1.       GENERAL         1.1.       DESIGN AND CONSTRUCTION IS OR BY-LAW OF THE AUTHORITY HAW DRAWINGS, AND TO THE SPECIFICA REFERENCED IN APPLICABLE BUILD ALL DIMENSIONS, OTHER THAN ARCHITECTURAL DRAWINGS AND AM MUST NOT BE SCALED.         1.2.       REFER TO ARCHITECTURAL, ME SLEEVES, DEPRESSIONS, GROOVES ABOVE ITEMS WHERE SHOWN ON TH 1.3. UNLESS SPECIFICALLY NOTED O CONSTRUCTION. THE CONTRACTOR FROM ANY CAUSE DURING CONSTRU- RESPONSIBLITY OF THE CONTRACT SAFEGUARD ALL EXISTING OR ADJA REVIEW.         2.       SHOP DRAWINGS, PLACING DRAWIN 2.1. FOR ALL STRUCTURAL COMPON STRUCTURAL CONSULTANT. SHOP D COMPONENTS.         2.2.       REVIEW OF SHOP DRAWINGS BN INTENT OF THE STRUCTURAL DESIG 2.3. REVIEW BY THE STRUCTURAL DESIG 3.1. A SOILS CONSULTANT AND ANI 3.1.1.         3.1.1.       BEARING SOIL - RE 3.1.2.         3.1.3.       CAST-IN-PLACE ANI COMPACTION HAS BEEN ATTAIN 3.1.3.         3.1.4.       STEL DECK - SEE 3.1.7.         3.1.5.       STRUCTURAL STRUE REQUIREMENTS CSA S16.         3.1.6.       STEEL DECK - SEE 3.1.7.         Mesh       4.1.         4.1.       RECURENCY SCA SET OR 3.1.5. </td <td>TO CONFORM TO THE REQUIREMENTS OF THE 2012 ONTAI ING JURISDICTION. REFER ALSO TO TYPICAL DETAILS, NOT TION. ALL CODES, MANUALS, STANDARDS AND SPECIFICATI NG CODE INCLUDING ALL REVISIONS AND ADDENDA. PURELY STRUCTURAL DIMENSIONS SHOWN ON THE STRUCT I'ICONSISTENCIES REPORTED TO THE ARCHITECT BEFO CHANICAL AND ELECTRICAL DRAWINGS FOR LOCATIONS AN AND CHAMFERS NOT INDICATED ON THE STRUCTURAL DR HE STRUCTURAL DRAWINGS ARE INDICATED ONLY APPROX THE STRUCTURAL DRAWINGS AND PROVISION HAS BEENT IS TO PROVIDE ALL NECESSARY BRACING, SHORING, FJ COTION. THE CONTRACTOR SHALL ACCEPT FULL RESPONS DO FO POVIDE ALL NECESSARY BRACING, SHORING, SHEI CENT STRUCTURES AFFECTED BY THIS WORK. CONTRACTOR <b>GS AND BAR LISTS</b> ENTS SHOWN ON THE STRUCTURAL DRAWINGS, SUBMIT C RAWINGS TO SHOW COMPLETE INFORMATION FOR THE FA ' THE STRUCTURAL CONSULTANT IS ONLY TO ASSESS THA N. ONSULTANT SHALL NOT RELIEVE THE CONTRACTOR OF TH FORMITY WITH THE STRUCTURAL DRAWINGS AND SPECIFIC NUSEDEDENT INSPECTION AND TESTING COMPANY ARE TO FER TO NOTES ON STRUCTURAL DRAWINGS AND SPECIFIC NDEPENDENT INSPECTION AND TESTING COMPANY ARE TO FER TO NOTES ON STRUCTURAL DRAWINGS AND ALSO TO NO-GRADE - CONFORM THAT FILL MATERIAL USED IS SATISI IED. D PRECAST CONCRETE - ROUTINE INSPECTION OF MATERI, FORCING ROD TESTS WHEN REQUIRED OR DIRECTED IN A ERINTENDENT IS TO ADVISE THE STRUCTURAL CONSULTAN STEEL DECK NOTES. REQUIRED OR DIRECTED, CONCRETE BLOCKS SHALL BE TE SAA22: AND MORTAR AND/OR GROUT IN ACCORDANCE WIT SERVICES ARE TO BE PERFORMED BY COMPANIES CERTIFI DE CERTIFIED BY THE CANADIAN WELDING BUREAU. DATION PLANS. ALL EXTERIOR FOOTINGS OR ALONG STEPP D'). X'ATIONS SHOWN ON THE STRUCTURAL DRAWINGS ARE B/ DARWINGS. NDITIONS VARY FROM THOSE ASSUMED, THEN WRITTEN D ED BY A MINIMUM OF 1200mm (4''D') OF EARTH OR ITS EQU UDJACENT EXCAVATIONS FOR FOOTINGS OR ALONG STEPP D'). X'ATIONS SHOWN ON THE STRUCTURAL DRAWINGS ARE B/ DRAWINGS. NDITIONS VARY FROM THOSE ASSUMED, THEN WRITTEN D E PROCEEDING WITH THE WORK. USLY NAY BEFORE CONC</td> <td>L RIO BUILDING CODE AND ANY APPLICABLE REQUREMENTS ES UNDER PLANS AND SCHEDULES ON THE STRUCTURAL ONS REFERRED TO SHALL BE THE SPECIFIC EDITION ITURAL DRAWINGS MUST BE CHECKED AGAINST THE RE PROCEEDING WITH THE WORK. STRUCTURAL DRAWINGS ND SIZES OF OPENINGS, TRENCHES, PITS, SUMPS, EQUIPMENT, AWINGS. UNLESS SPECIFICALLY NOTED OTHERWISE, THE IMATELY AS TO SIZE AND LOCATION. WADE IN THE DESIGN FOR CONDITIONS OCCURRING DURING IEQUIRED FOR STRESSES AND INSTABILITY OCCURRING IBILTY FOR ALL SUCH MEASURES. IT SHALL ALSO BE THE ET PLILING OR OTHER TEMPORARY SUPPORTS OF DR TO PROVIDE SHOP DRAWINGS FOR CONSULTANTS DEVISO F SHOP DRAWINGS AS DIRECTED FOR REVIEW BY THE BRICATION AND ERECTION OF THE STRUCTURAL IT HE SUBMITTED SHOP DRAWINGS REFLECT THE E RESPONSIBILITY FOR SEEING THAT THE WORK IS PATIONS. PIES OF SHOP DRAWINGS IN ADVANCE OF A CONCRETE IT SOIL REPORT. FACTORY AND THAT THE REQUIRED DEGREE OF ALS, INCLUDING SLUMP, CYLINDER AND AIR CCORDANCE WITH CSA STANDARD A23.2. IT A MINIMUM OF 24 HOURS IN ADVANCE OF A CONCRETE L BE CARRIED OUT IN ACCORDANCE WITH THE STED IN ACCORDANCE WITH ASTM C140 BRICKS IN H CSA A179. ED BY THE CANADIAN STANDARDS ASSOCIATION AND INGS EXPOSED TO FREEZING IN THE FINISHED BUILDING SHALL OFTED. FOOTINGS EXPOSED TO FROST ACTION DURING IVALENT SUFFICIENT TO PREVENT FREEZING. ED FOOTINGS SHALL NOT EXCEED A RISE OF 7 IN A RUN OF 10, ASED UPON INFORMATION AVAILABLE AT THE TIME OF IRECTIONS SHALL NOT EXCEED A RISE OF 7 IN A RUN OF 10, ASED UPON INFORMATION AVAILABLE AT THE TIME OF IRECTIONS SHALL NOT EXCEED A RISE OF 7 IN A RUN OF 10, ASED UPON INFORMATION AVAILABLE AT THE TIME OF IRECTIONS BUST BE OBTAINED FROM THE OFTENED BY WATER, THE EXCAVATION SHALL BE TO SUIT. EARTH MUST BE IN PLACE BEFORE BACKFILLING. LL AND COMPACT EACH SIDE OF WALL SIMULTANEOUSLY. UB-GRADE, (WHERE SUB-GRADE CONSISTS OF TH APPROVED MATERIAL UNLESS SPECIFICALLY NOTED LOOSE FILL EACH COMPACTED TO A MINIMUM OF 95% LABS-ON-GRADE A MINIMUM OF 200mm (8') OF COMPACTED CTOR MAXIMUM DRY</td> <td><ol> <li>GENERAL         <ol> <li>FRAVIDE ALL LABOUR MATERIALS, TOOLS AND EQUIPMENT REQUIRED TO CARRY OUT THE WI             <ol> <li>REFER ALSO TO GENERAL NOTES, NOTES UNDER PLANS AND SCHEDULES, TYPICAL DETALSJ.</li> </ol> </li> <li>PRODUCTS</li></ol></li></ol></td> <td>L ORK. AND SPECIFICATION. AND SPECIFICATION. AND SPECIFICATION. AND SPECIFICATION. AND SPECIFICATION. AND SPECIFICATION. FOR ENTRUCTION. FORMWORK DRAWINGS AND SPECIFICATION. FORMWORK DRAWINGS AND SPECIFICATION. FORMWORK DRAWINGS AND SPECIFICATION. FORMWORK DRAWINGS AND SPECIFICATION. FORMWORK DRAWINGS SO AT CANTILEVER. CAMBER BOTH THE D STRUCTURAL THICKNESS OF MEMBERS. AND SPECIFICATION CONCRETE FACES. SO AT CANTILEVER. CAMBER BOTH THE D STRUCTURAL THICKNESS OF MEMBERS. AND SPECIFICATION OF A SUBJECT ON SPECIFIC STRUCTURAL THICKNESS OF MEMBERS. AND CONCRETE FACES. SA SREQUIRED BY THE ARCHITECTURAL. G TO CANCSA -G30.18-M GRADE 400 (58000 PSI). E. DETAILING MANUAL AND THE MANUAL OF F 8 mm PEA GRAVEL WITH ONLY SUFFICIENT WATER PRE-WELDED CORNERS AND INTERSECTIONS. SEE STANDARD C309. GENERALLY ALL CONCRETE E WITH APPLIED FINISHES. HALL BE STUDRAILS® AS MANUFACTURED BY NG SHALL TAKE PLACE IN A ICC ES APPROVED A. DRAWINGS (20MPa MINIMUM). ESS NOTED OTHERWISE.GREATER SLUMPS ARE ANDARD A23.1. ING OF 10000mm (30'0'). UNLESS CONTROL NGINEER PRIOR TO PROCEEDING. LL BE APPROVED BY THE STRUCTURAL TO THE SPANS, AT MID-SPAN IF POSSIBLE INSTALLED AS REQUIRED BY THE DRAWINGS E SYSTEM, BE SO INSTALLED THAT THEY AN AS SHOWN ON THE TYPICAL DETAILS. SIDE DIAMETER THAN 1/3 SLAB THICKNESS OR I CENTRE UNLESS APPROVED BY THE SH TO EXPOSED CONCRETE. ALL HONEYCOMBING L DRAWINGS AND SPECIFICATIONS AND DWARE AND FOR FLOOR AND ROOF FINISHES SHALL FOR CONCRETE WALLS. (M EACH WAY PLUS 10M @ 400 (16') DOWELS S.</td> <td>3.14 GENERAL REQUIRE (A) DO NOT DRILL BY THE STRUCT (B) UNLESS NOTEL CONCRETE REI PENETRATI AS AUTHORIZEI (C) GPR SCANNING (D) GPR SCANNING (D) GPR SCANNING (D) GPR SCANNING WITHIN A H THE REBAR (E) AFTER ALL THE REVIEW AND AF THE HOLE I (F) THE REVIEW BY THROUGH REINFORCE RESPONSIBILITY (G) CORE DRILL NI EXISTING REINFO (H) WHERE RECTA SERIES OF HOL 4. QUALITY CONTROL 4.1 FOR INSPECTION AN SERIES OF HOL 1. GENERAL 1.1. DESIGN, FABRICATIO 1.1. CSSBI 10M 1.1. CSSBI 10M 1.2. THE STEEL DECK SHALL SUPPORTS (3 SPANS SUPPORTS (3 SPANS SUPPORTS (3 SPANS SUPPORT THE L CONSTRUCTION 1.5. ROOF DECK SHALL I REQUIRED. DECK TH SUPPORT THE L CONSTRUCTION 1.6. LOCK SHALL I CONSTRUCTION 1.6. LOCK SHALL I CONSTRUCTION 1.7. DESIGN AND DETAIL UPLIFT FORCES ACT 2. PRODUCTS 2.1. UNLESS OTHERWISE</td>	TO CONFORM TO THE REQUIREMENTS OF THE 2012 ONTAI ING JURISDICTION. REFER ALSO TO TYPICAL DETAILS, NOT TION. ALL CODES, MANUALS, STANDARDS AND SPECIFICATI NG CODE INCLUDING ALL REVISIONS AND ADDENDA. PURELY STRUCTURAL DIMENSIONS SHOWN ON THE STRUCT I'ICONSISTENCIES REPORTED TO THE ARCHITECT BEFO CHANICAL AND ELECTRICAL DRAWINGS FOR LOCATIONS AN AND CHAMFERS NOT INDICATED ON THE STRUCTURAL DR HE STRUCTURAL DRAWINGS ARE INDICATED ONLY APPROX THE STRUCTURAL DRAWINGS AND PROVISION HAS BEENT IS TO PROVIDE ALL NECESSARY BRACING, SHORING, FJ COTION. THE CONTRACTOR SHALL ACCEPT FULL RESPONS DO FO POVIDE ALL NECESSARY BRACING, SHORING, SHEI CENT STRUCTURES AFFECTED BY THIS WORK. CONTRACTOR <b>GS AND BAR LISTS</b> ENTS SHOWN ON THE STRUCTURAL DRAWINGS, SUBMIT C RAWINGS TO SHOW COMPLETE INFORMATION FOR THE FA ' THE STRUCTURAL CONSULTANT IS ONLY TO ASSESS THA N. ONSULTANT SHALL NOT RELIEVE THE CONTRACTOR OF TH FORMITY WITH THE STRUCTURAL DRAWINGS AND SPECIFIC NUSEDEDENT INSPECTION AND TESTING COMPANY ARE TO FER TO NOTES ON STRUCTURAL DRAWINGS AND SPECIFIC NDEPENDENT INSPECTION AND TESTING COMPANY ARE TO FER TO NOTES ON STRUCTURAL DRAWINGS AND ALSO TO NO-GRADE - CONFORM THAT FILL MATERIAL USED IS SATISI IED. D PRECAST CONCRETE - ROUTINE INSPECTION OF MATERI, FORCING ROD TESTS WHEN REQUIRED OR DIRECTED IN A ERINTENDENT IS TO ADVISE THE STRUCTURAL CONSULTAN STEEL DECK NOTES. REQUIRED OR DIRECTED, CONCRETE BLOCKS SHALL BE TE SAA22: AND MORTAR AND/OR GROUT IN ACCORDANCE WIT SERVICES ARE TO BE PERFORMED BY COMPANIES CERTIFI DE CERTIFIED BY THE CANADIAN WELDING BUREAU. DATION PLANS. ALL EXTERIOR FOOTINGS OR ALONG STEPP D'). X'ATIONS SHOWN ON THE STRUCTURAL DRAWINGS ARE B/ DARWINGS. NDITIONS VARY FROM THOSE ASSUMED, THEN WRITTEN D ED BY A MINIMUM OF 1200mm (4''D') OF EARTH OR ITS EQU UDJACENT EXCAVATIONS FOR FOOTINGS OR ALONG STEPP D'). X'ATIONS SHOWN ON THE STRUCTURAL DRAWINGS ARE B/ DRAWINGS. NDITIONS VARY FROM THOSE ASSUMED, THEN WRITTEN D E PROCEEDING WITH THE WORK. USLY NAY BEFORE CONC	L RIO BUILDING CODE AND ANY APPLICABLE REQUREMENTS ES UNDER PLANS AND SCHEDULES ON THE STRUCTURAL ONS REFERRED TO SHALL BE THE SPECIFIC EDITION ITURAL DRAWINGS MUST BE CHECKED AGAINST THE RE PROCEEDING WITH THE WORK. STRUCTURAL DRAWINGS ND SIZES OF OPENINGS, TRENCHES, PITS, SUMPS, EQUIPMENT, AWINGS. UNLESS SPECIFICALLY NOTED OTHERWISE, THE IMATELY AS TO SIZE AND LOCATION. WADE IN THE DESIGN FOR CONDITIONS OCCURRING DURING IEQUIRED FOR STRESSES AND INSTABILITY OCCURRING IBILTY FOR ALL SUCH MEASURES. IT SHALL ALSO BE THE ET PLILING OR OTHER TEMPORARY SUPPORTS OF DR TO PROVIDE SHOP DRAWINGS FOR CONSULTANTS DEVISO F SHOP DRAWINGS AS DIRECTED FOR REVIEW BY THE BRICATION AND ERECTION OF THE STRUCTURAL IT HE SUBMITTED SHOP DRAWINGS REFLECT THE E RESPONSIBILITY FOR SEEING THAT THE WORK IS PATIONS. PIES OF SHOP DRAWINGS IN ADVANCE OF A CONCRETE IT SOIL REPORT. FACTORY AND THAT THE REQUIRED DEGREE OF ALS, INCLUDING SLUMP, CYLINDER AND AIR CCORDANCE WITH CSA STANDARD A23.2. IT A MINIMUM OF 24 HOURS IN ADVANCE OF A CONCRETE L BE CARRIED OUT IN ACCORDANCE WITH THE STED IN ACCORDANCE WITH ASTM C140 BRICKS IN H CSA A179. ED BY THE CANADIAN STANDARDS ASSOCIATION AND INGS EXPOSED TO FREEZING IN THE FINISHED BUILDING SHALL OFTED. FOOTINGS EXPOSED TO FROST ACTION DURING IVALENT SUFFICIENT TO PREVENT FREEZING. ED FOOTINGS SHALL NOT EXCEED A RISE OF 7 IN A RUN OF 10, ASED UPON INFORMATION AVAILABLE AT THE TIME OF IRECTIONS SHALL NOT EXCEED A RISE OF 7 IN A RUN OF 10, ASED UPON INFORMATION AVAILABLE AT THE TIME OF IRECTIONS SHALL NOT EXCEED A RISE OF 7 IN A RUN OF 10, ASED UPON INFORMATION AVAILABLE AT THE TIME OF IRECTIONS BUST BE OBTAINED FROM THE OFTENED BY WATER, THE EXCAVATION SHALL BE TO SUIT. EARTH MUST BE IN PLACE BEFORE BACKFILLING. LL AND COMPACT EACH SIDE OF WALL SIMULTANEOUSLY. UB-GRADE, (WHERE SUB-GRADE CONSISTS OF TH APPROVED MATERIAL UNLESS SPECIFICALLY NOTED LOOSE FILL EACH COMPACTED TO A MINIMUM OF 95% LABS-ON-GRADE A MINIMUM OF 200mm (8') OF COMPACTED CTOR MAXIMUM DRY	<ol> <li>GENERAL         <ol> <li>FRAVIDE ALL LABOUR MATERIALS, TOOLS AND EQUIPMENT REQUIRED TO CARRY OUT THE WI             <ol> <li>REFER ALSO TO GENERAL NOTES, NOTES UNDER PLANS AND SCHEDULES, TYPICAL DETALSJ.</li> </ol> </li> <li>PRODUCTS</li></ol></li></ol>	L ORK. AND SPECIFICATION. AND SPECIFICATION. AND SPECIFICATION. AND SPECIFICATION. AND SPECIFICATION. AND SPECIFICATION. FOR ENTRUCTION. FORMWORK DRAWINGS AND SPECIFICATION. FORMWORK DRAWINGS AND SPECIFICATION. FORMWORK DRAWINGS AND SPECIFICATION. FORMWORK DRAWINGS AND SPECIFICATION. FORMWORK DRAWINGS SO AT CANTILEVER. CAMBER BOTH THE D STRUCTURAL THICKNESS OF MEMBERS. AND SPECIFICATION CONCRETE FACES. SO AT CANTILEVER. CAMBER BOTH THE D STRUCTURAL THICKNESS OF MEMBERS. AND SPECIFICATION OF A SUBJECT ON SPECIFIC STRUCTURAL THICKNESS OF MEMBERS. AND CONCRETE FACES. SA SREQUIRED BY THE ARCHITECTURAL. G TO CANCSA -G30.18-M GRADE 400 (58000 PSI). E. DETAILING MANUAL AND THE MANUAL OF F 8 mm PEA GRAVEL WITH ONLY SUFFICIENT WATER PRE-WELDED CORNERS AND INTERSECTIONS. SEE STANDARD C309. GENERALLY ALL CONCRETE E WITH APPLIED FINISHES. HALL BE STUDRAILS® AS MANUFACTURED BY NG SHALL TAKE PLACE IN A ICC ES APPROVED A. DRAWINGS (20MPa MINIMUM). ESS NOTED OTHERWISE.GREATER SLUMPS ARE ANDARD A23.1. ING OF 10000mm (30'0'). UNLESS CONTROL NGINEER PRIOR TO PROCEEDING. LL BE APPROVED BY THE STRUCTURAL TO THE SPANS, AT MID-SPAN IF POSSIBLE INSTALLED AS REQUIRED BY THE DRAWINGS E SYSTEM, BE SO INSTALLED THAT THEY AN AS SHOWN ON THE TYPICAL DETAILS. SIDE DIAMETER THAN 1/3 SLAB THICKNESS OR I CENTRE UNLESS APPROVED BY THE SH TO EXPOSED CONCRETE. ALL HONEYCOMBING L DRAWINGS AND SPECIFICATIONS AND DWARE AND FOR FLOOR AND ROOF FINISHES SHALL FOR CONCRETE WALLS. (M EACH WAY PLUS 10M @ 400 (16') DOWELS S.	3.14 GENERAL REQUIRE (A) DO NOT DRILL BY THE STRUCT (B) UNLESS NOTEL CONCRETE REI PENETRATI AS AUTHORIZEI (C) GPR SCANNING (D) GPR SCANNING (D) GPR SCANNING (D) GPR SCANNING WITHIN A H THE REBAR (E) AFTER ALL THE REVIEW AND AF THE HOLE I (F) THE REVIEW BY THROUGH REINFORCE RESPONSIBILITY (G) CORE DRILL NI EXISTING REINFO (H) WHERE RECTA SERIES OF HOL 4. QUALITY CONTROL 4.1 FOR INSPECTION AN SERIES OF HOL 1. GENERAL 1.1. DESIGN, FABRICATIO 1.1. CSSBI 10M 1.1. CSSBI 10M 1.2. THE STEEL DECK SHALL SUPPORTS (3 SPANS SUPPORTS (3 SPANS SUPPORTS (3 SPANS SUPPORT THE L CONSTRUCTION 1.5. ROOF DECK SHALL I REQUIRED. DECK TH SUPPORT THE L CONSTRUCTION 1.6. LOCK SHALL I CONSTRUCTION 1.6. LOCK SHALL I CONSTRUCTION 1.7. DESIGN AND DETAIL UPLIFT FORCES ACT 2. PRODUCTS 2.1. UNLESS OTHERWISE
FMC -Full Moment Connection FT -Foot / Feet FTG -Footing	REF -Reference REINF -Reinforcing REQ'D -Required	STANDARD LAP ABBREVIATIONS           CLS         -Compression Lap Splice           CDL         -Compression Developmer	t Length					TOASTM A653/ A 2.2. UNLESS OTHERWISI AS NOTED ON THE F
GA -Gauge GALV -Galvanized GEN -General STRUCTURAL STEEL AND 1. GENERAL 1.1. STRUCTURAL STEEL AND JOIST DESIG LICENSED PROFESSIONAL ENGINE 1.2. REFER ALSO TO GENERAL NOTES, NO 1.3. WELDING SHALL CONFORM TO CSA ST 1.4. BEAM CONNECTIONS SHALL BE DESIG UNLESS OTHERWISE NOTED, AND CONNECTIONS ARE UTILIZED, A M 1.5. MEMBER CONNECTIONS SHALL BE DESIG DRAWINGS AND CALCULATIONS B THE DESIGN SHALL BE SUBMT 2. PRODUCTS 2.1. STRUCTURAL STEEL SECTIONS SHALL 2.1.1. S SHAPES, CHANNELS, ANGLE 2.1.2. HSS SECTIONS: - GRADE 350W 2.1.3. WWF SHAPES, W SHAPES, WT 2.2. JOIST CHORDS AND WEBS SHALL CON 2.3. BOLTS FOR CONNECTIONS TO CONFOR 2.4. ANCHOR RODS FOR BASE PLATES, BE 2.5. NUTS AND WASHERS TO CONFORM TO 2.6. SHEAR STUDS WHERE REQUIRED TO C 2.7. WELDING MATERIALS TO CONFORM TO 2.8. SURFACE PREPARATION AND PRIMER	Rf -Factored Vertical Reaction R/W -Reinforced With <b>JD STEEL JOIST NOTES</b> SN DETAILS AND CONNECTIONS SHALL CONFORM TO C EER EXPERIENCED IN THIS TYPE OF WORK. TES UNDER PLANS AND TO THE SPECIFICATION. TANDARD W59 AND BE PERFORMED BY A FABRICATOR IN NO CASE BE LESS THAN THE LOADS SHOWN ON OR INIMUM OF TWO BOLTS PER CONNECTION SHALL BE U SIGNED BY A LICENSED PROFESSIONAL ENGINEER FOR EARING THE STAMP AND SIGNATURE OF THE REGISTE TTED FOR REVIEW PRIOR TO FABRICATION AND ERECT . CONFORM TO CSA-G40.20/G40.21 (UNLESS NOTED OTH ES, PLATES AND RODS: - GRADE 300 W V ( CLASS C U/N ) SHAPES: - GRADE 350W IFORM TO CSA - S16. RM TO ASTM F3125/3125M, GRADE A325 OR A325M, UNIL ARING PLATES AND WELD PLATES TO CONFORM TO AS D ASTM A563 AND ASTM F436. CONFORM TO ASTM A108, WELDING TO CONFORM TO CONFORM TO CSA - S16. RM TO ASTM TO ASTM A108, WELDING TO CONFORM TO CONFORM TO CSA - S16. RM TO ASTM A503 AND ASTM F436. CONFORM TO ASTM A108, WELDING TO CONFORM TO CONFORM TO CSA - S16. RM TO ASTM A503 AND ASTM F436. CONFORM TO ASTM A108, WELDING TO CONFORM TO CONFORM TO CSA - S16. RM TO ASTM A503 AND ASTM F436. CONFORM TO ASTM A108, WELDING TO CONFORM TO CO	HEL -Hook Embedment Length TLS -Tension Lap Splice TDL -Tension Development Len Al SA STANDARD S16 AND SHALL BE DESI CERTIFIED TO CSA W47.1. FORCE OF 50% OF THE BEAM SHEAR C HMPLIED BY THE DRAWINGS. WHERE B SED. R FORCES AND MOMENTS INDICATED. S RED PROFESSIONAL ENGINEER RESPC TION. HERWISE ON PLANS OR SECTIONS).	gth 1. GENERAL 1.1. UNLESS OTHERWISE NOTED O STRUCTURAL LOAD BEARING MASC 1.2. REFER ALSO TO ARCHITECTUR NON-LOAD BEARING WALLS AN 1.3. MASONRY CONSTRUCTION TO 2. PRODUCTS 2.1. CONCRETE BLOCKS TO BE MO OTHERWISE NOTED SHALL BE: 2.1.1. FOR BELOW GRADE AI STANDARD HOLLOW: 75% SOLID: 100% SOLID: 2.1.2. FOR INTERIOR ABOVE 2.1.2.1. LIGHTWEIGHT LOAI STANDARD HOLLOW: 75% AND 100% SOLID: 2.1.2.2. ULTRA LIGHT (OR E STANDARD HOLLOW: (REFER TO ARCHITEC) 2.2. CLAY BRICKS: TO CONFORM TO ONE OR MOR STYLES OF BRICKS REQUIRED. UNI SHALL BE 20 MPa. 2.3. MORTAR: TO CONFORM TO CSA A179 FOR LAYING ALL LOAD BEARIN FOR LAYING ALL CLAY BRICKS 2.4. MASONRY GROUT: TO CONFORM TO CSA A179. TH "FINE" GROUT SHALL BE 15MPa. 2.5. MASONIDY CONNECTORS (AND	ASOUNKY NOTES R SHOWN ON THE DRAWINGS, THE FOLLOWING INDICATES DNRY. AL DRAWINGS AND / OR THE SPECIFICATION FOR REQUIRE D PARTITIONS. CONFORM TO CSA STANDARD S304.1. DULAR UNITS AS SHOWN ON THE ARCHITECTURAL DRAWIN VD EXTERIOR EXPOSED WALLS USE NORMAL WEIGHT LOAD TYPE H / 15 / A / M. TYPE S / 15 / A / M. GRADE WALLS USE EITHER: D BEARING BLOCKS: TYPE H / 15 / C / M. QUIVELANT) BLOCKS: TYPE H / 15 / D / M. TURAL DRAWINGS AND SCHEDULES FOR LOCATIONS AND T THE OF CSA STANDARDS A82. (SERIES) SEE ARCHITECTURAL LESS OTHERWISE NOTED, THE MINIMUM COMPRESSIVE STI G CONCRETE BLOCKSUSE TYPE "S" MORTAR UNLESS 	AU6 THE MINIMUM REQUIREMENTS APPLICABLE TO EMENTS OTHER THAN STRUCTURAL, AND FOR GS AND /OR SPECIFICATION, AND UNLESS ` D BEARING UNITS: YPES). DRAWINGS AND / OR SPECIFICATIONS FOR TYPES AND RENGTH (BRICK FLATWISE) GROSS AREA NOTED. NOTED. NOTED.	LUAD BEAKING MASONRY:     3.1. BEARING ON MASONRY:     3.1.1. MINIMUM BEARING ON MASONRY UNLESS OTHERWISE NOTED:-     BEAMS (STEEL, CONC., WOOD)	AD IN MORTAR. ALL JOINTS ARE TO BE FULLY FILLED AL TO TWICE THE BEARING / WALL PLATE (WP) IN NO CASE LESS THAN 400 LONG x 200 DEEP D VOID BLOCKS OR BRICKS LAID IN MORTAR AT THE HALL CONFORM TO CSA A371. A A371 AND UNDER NO CIRCUMSTANCES SHALL A ASTM C140. REFER ALSO TO GENERAL NOTES.	2.3. COVER PLATES, CEI AND ZINC COAT 2.4. PRIMER PAINT TO B 2.5. UNLESS OTHERWISI SHALL PROVIDE NO' PERPENDICULAR TO 2.6. FOR ROOF OPENINO STRUCTURAL FRAM 3. EXECUTION 3.1. SUPPLY AND PLACE 3.2. FOR STEEL ROOF D IN THE SPECIFICATION LAP CONNECTIO 3.2.A. FOR 38mm I EACH SUPPORT ARC SPOT WELI (X-HSN24, H 3.2.B. FOR 76mm I SUPPORT PARA WELD WITH 20mm [3 HILTI X-ENP19, OR EQUIV 3.2.C. FOR ROOF WITH HILTI 3.3. FOR STEEL FLOOR I SPECIFICATIONS OF CONNECTIONS 3.3.A. SIDE LAPS OF SPACING BU 3.3.C. THE REQUII DIAPHRAGM SH 3.4. INSTALL ALL POWDE 3.5. WELD STUD SHEAR
<ul> <li>2.9. HOT DIP GALVANIZING SHALL PROVIDE</li> <li>2.11. BRIDGING AND BRACING FOR JOIS</li> <li>3. EXECUTION</li> <li>3.1. FABRICATION, HANDLING AND ERECTIVE</li> <li>3.2. TOLERANCES: VARIATION FROM PLUNTYPICAL DETAILS.</li> <li>3.5. FIELD " TOUCH-UP " BOLTS, WELDS, BL</li> <li>3.6. NO HOLES OTHER THAN THOSE SHOW PERMISSION OF THE STRUCTURAL CO</li> <li>3.7. CO-ORDINATE WITH MECHANICAL AND AND ERECTION OF THE STEEL STRUCT</li> <li>3.8. WHEREVER ITEMS ARE TO BE HUNG F</li> <li>3.9 PROVIDE L76X76X6.4(MIN) ANGLE SEAT INTERRUPTED. (EG. AT COLUMNS)</li> <li>3.10. PROVIDE ALL NECESSARY TEMPO PERMANENT FOR FINISHED BUILD</li> <li>3.11. PROVIDE A MINIMUM OF 2-12 mm (MASONRY, OR AN APPROVED EQUAL</li> <li>3.12. PROVIDE ADJUSTABLE ANCHORS</li> <li>DETAILS FOR VERTICAL SPACING (* NOTE, USE BACK-UP WYTHE THICKN</li> <li>3.13. WHERE STEEL PROVIDES LATERA</li> <li>DIFFERENTIAL VERTICAL MOVEN</li> <li>4. QUALITY CONTROL</li> <li>4.1. AN INDEPENDENT INSPECTION AND TE</li> <li>FOR WELDING, CONNECTIONS, BOLT TO</li> <li>4.2 SEE SPECIFICATIONS FOR ADDITIONAL</li> </ul>	AND THE AND	ERWISE SPECIFICATIONS. ERWISE SPECIFIED. L DETAILS FOR MINIMUM REQUIREMEN BE IN ACCORDANCE WITH SPECIFICATI ANY STEEL MEMBER WITHOUT WRITTE E WORK MAY EFFECT DETAILING, FABR C POINTS, UNLESS OTHERWISE PERMI ONNECTION TO SUPPORTING FRAMING B. BRACING SHOWN ON STRUCTURAL I R ALL BEAM AND JOIST BEARING PLATE ES TO BE WELDED TO BEARING PLATE SED WITH MASONRY (REFER ALSO TO T NTRES) IRT MASONRY) ANCHORS SHALL PERMI RY. AND STEEL DECK IN THE SHOP AND IN RUCTURAL DRAWINGS AND SPECIFICAT	TS. SHALL CONFORM TO CSA A370 SPACING, STRENGTH AND GAL PARTITION ANCHORS SHALL CI 2.6. HORIZONTAL JOINT REINFORC THE FOLLOWING ARE MINIMUM 2.6.1. CONFORM TO CSA ST/ 2.6.2. REINFORCEMENT SHA LONGITUDINAL AND CROSS 2.6.3. SPACING:- PROVIDE R COURSES ABOVE AND BEL REMAINDER OF WALLS, TH 2.6.4. OVERLAP SPLICES: SHALL BE A MIN. OF 150mm LAPS SHALL BE STAGGERE REINFORCING SHALL NOT 2.6.5. CORROSION RESISTAN JOINT REINFORCING FOR DIPPED GALVANIZED AFTER FA 2.6.6. COMPOSITE AND CAVITY WHERE COURSING OF WY REINFORCING SHALL BE AN AP CAVITY AND RESTRAINS THE TRAN DESIGNED TO HOLD THE INSULATIO "PIN-TIES" SHALL EXTEND 2.6.7. PROVIDE ALL PREFAB 2.7. COMPOSITE WALLS:- SHALL HA 2.8. BOND BEAMS:- MADE FROM LIN 2.9. GROUTING:- BY FILLING VOIDS 2.10. EXPANSION AND CONTROL SHALL BE PROVIDED. SEE ARC	AND BE INSTALLED TO COMPLY WITH CSA A371. VANIZING OF STRIP TIES, DOVETAIL ANCHORS, BAR ANCHO DMPLY WITH CSA A370. EMENT FOR ALL MASONRY WALLS: I REQUIREMENTS: ANDARDS A370 AND A371. LL BE AN APPROVED CONTINUOUS "LADDER" TYPE, PREFA 5 WIRES. EINFORCING IN THE TOP COURSE IMMEDIATELY BELOW FL OW EVERY WALL OPENING. THE REINFORCING SHALL EXTE E VERTICAL SPACING SHALL NOT EXCEED 400mm (16"). a (6") FOR KNURLED WIRE AND 300mm (12") FOR PLAIN WIRE ED A MINIMUM OF 750mm (30") FROM COURSE TO COURSE. PASS THROUGH A VERTICAL CONTROL JOINT UNLESS OTH VCE: ALL WALLS IN CONTACT WITH SOIL, EXTERIOR WALLS AND BRICATION TO ASTM A153,458 gm/sq.meter (1.5 oz. / sq. foot WALLS: THES DO NOT ALIGN OF WHERE IT IS DESIRABLE AND PERN PROVED ADJUSTABLE TYPE WITH A BOX OR EYE SECTION SVERSE MOVEMENT OF THE TWO WYTHES. FOR CAVITY W. DN IN PLACE BY USE OF PLASTIC WEDGES OR APPROVED E INTO THE FACE WYTHE TO COMPLETE THE ASSEMBLY. RICATED CORNER AND TEE SECTIONS. VE THE VERTICAL COLLAR JOINTS BETWEEN WYTHES COM ITEL BLOCKS, OR HALF WEB BLOCKS, WHERE SHOWN ON S OF HOLLOW UNITS AND REINFORCED HOLLOW UNITS SHAL . JOINTS: HITECTURAL DRAWINGS AND/ OR SPECIFICATION FOR DET.	ORS, ROD ANCHORS, STRAP ANCHORS, WALL AND BRICATED WITH 3.66mm DIAMETER (9 GAUGE) OOR AND ROOF BEARING LEVELS AND THE FIRST TWO ND 600mm (24") BEYOND SUCH OPENINGS. FOR THE ERWISE SHOWN. WALLS IN A MOIST ENVIRONMENT SHALL BE HOT ). IITTED TO BUILD ONE WYTHE BEFORE THE OTHER, WHICH EXTENDS INTO THE COLLAR JOINT OR ALLS WITH RIGID INSULATION, EXTENSION SHALL BE EQUAL. GALVANIZED HOOK STYLE "BOX TIES" OR IPLETELY FILLED WITH MORTAR OR GROUT. TRUCTURAL DRAWING SHALL CONFORM TO CSA A371. L CONFORM TO CSA A179 (MORTAR IS NOT ACCEPTABLE). AILS.	<ul> <li>LINTEL NOTEO</li> <li>UNLESS OTHERWISE SHOWN OR NOTED ON THE STRUCTURAL DRAWINGS, PROVIDE LINTELS OVER</li> <li>1. FOR OPENINGS UP TO 1200 mm (4'-0") CLEAR;</li> <li>1.1. ONE ANGLE 30 x 90 x 6 (3 1/2" x 3 1/2" x 1/4") FOR EACH 100mm (4") OF WALL THICKNESS OR POR OR</li> <li>1.2. 200mm (8") DEEP MASONRY LINTEL BLOCK REINFORCED WITH 1-10M BOTTOM FOR EACH 100mm</li> <li>2. FOR OPENINGS FROM 1200mm (4'-0") CLEAR TO 1800mm (6'-0") CLEAR;</li> <li>2.1. ONE ANGLE 125 x 90 x 8 LONG LEG VERTICAL (5"x 3 1/2" x 5/16") FOR EACH 100mm (4") OF WALL 1 OR</li> <li>2.2. 200mm (8") DEEP MASONRY LINTEL BLOCK REINFORCED WITH 1-15M BOTTOM FOR EACH 100mm</li> <li>3. ALL LINTELS TO BEAR 150mm (6") MINIMUM AT EACH END ON SOLID MASONRY, UNLESS SHOWN OTH</li> <li>PAIRS OF LINTEL ANGLES ARE TO BE BOLTED OR WELDED TOGETHER, PRIOR TO SHIPMENT, AT MA</li> <li>5. MASONRY LINTEL BLOCKS MAY ONLY BE USED IN LOAD-BEARING WALLS WITH PERMISSION AND ML</li> <li>NOT ACCEPTABLE AND WILL BE REJECTED.</li> <li>6. STEEL LINTELS ARE TO BE SUPPLIED BY STEEL CONTRACTOR BUT PLACED BY GENERAL CONTRACTOR.</li> <li>7. STEEL CONTRACTOR TO SUPPLY ALL NECESSARY DIRECTIONS REQUIRED FOR PLACING STEEL LIN</li> <li>8. WHILE EVERY EFFORT HAS BEEN MADE TO SHOW ON THE STRUCTURAL DRAWINGS EACH AND EVE ELECTRICAL SERVICES, RECESSES AND POCKETS ETC., THROUGH ALL WALLS (INCLUDING NON-LI UNLESS OTHERWISE DIRECTED, LINTELS SHALL CONFORM TO THE ABOVE REQUIREMENTS.</li> <li>9. REFER ALSO TO TYPICAL DETAILS.</li> </ul>	AU / ALL OPENINGS IN MASONRY WALLS, AS FOLLOWS: TION THEREOF. (4") OF WALL THICKNESS OR PORTION THEREOF. THICKNESS OR PORTION THEREOF. (4") OF WALL THICKNESS OR PORTION THEREOF. (4") OF WALL THICKNESS OR PORTION THEREOF. HERWISE. XIMUM 450mm (18") CENTRES. JST BE FILLED WITH 20 MPa CONCRETE. MORTAR IS TOR OR MASONRY SUB- CONTRACTOR. TELS. RY LINTEL OVER DOORS, MECHANICAL AND S, IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY OAD BEARING WALLS) THROUGHOUT THE PROJECT.	3.6. "TOUCH-UP" GALVAI SURFACES. 3.7. DO NOT SUSPEND C 4. QUALITY CONTROL 4.1. AN INDEPENDENT IN SERVICES: 4.1.a. SECTION PI 4.1.b. ZINC COATI 4.1.c. WELDE 4.1.d. BEARINGS. 4.1.e. SIDE LAP C 4.1.f. TOUCH 4.1.g. FIELD CUTT 4.2. REFER ALSO TO THE

# CE CONCRETE NOTES

A03.2

VIENTS FOR CUTTING AND DRILLING INTO CONCRETE NTO, CORE THROUGH, SAW-CUT OR CHIP THE CONCRETE STRUCTURE WITHOUT WRITTEN AUTHORIZATION

IRAL CONSULTANT. OTHERWISE, PRIOR TO CUTTING, CORING OR DRILLING INTO THE CONCRETE STRUCTURE, LOCATE EXISTING FORCEMENT AND EMBEDDED SERVICES AT THAT LOCATION USING SUITABLE SCANNING DEVICE (I.E. X-RAYS, GROUND

ON RADAR (GPR), LOCAL CHIPPING OF SLAB - ONLY WHERE APPROVED BY THE STRUCTURAL CONSULTANT, ETC), BY PROPERTY MANAGER IF APPLICABLE MUST BE DONE BY TRAINED TECHNICIANS WITH AT LEAST 5 YEARS OF EXPERIENCE AS SUCH.

DEVICES MUST BE CAPABLE OF ACCURATELY LOCATING REBAR IN A CONCRETE SLAB TO A MINIMUM DEPTH OF 300 mm, RIZONTAL TOLERANCE OF +- 25 mm AND A VERTICAL (DEPTH) TOLERANCE OF THE LARGER OF +-25 mm OR +- 15% OF IEPTH.

EXISTING REINFORCEMENT AND SERVICES HAVE BEEN LOCATED, NOTIFY THE STRUCTURAL CONSULTANT, WHO WILL PROVE THE PROPOSED LOCATION OF OPENINGS, CORES OR DRILLED HOLES. MAKE ANY NECESSARY ADJUSTMENTS TO OCATIONS AS DIRECTED BY THE STRUCTURAL CONSULTANT. THE STRUCTURAL CONSULTANT IS LIMITED ONLY TO THE LOCATION OF THE PROPOSED CORES OR DRILLED HOLES

HE EXISTING STRUCTURE AND IT IS BASED ON THE ASSUMPTION THAT THE X-RAY OR SCAN RESULTS LOCATING SLAB MENT AND EMBEDDED SERVICES ARE COMPLETE AND ACCURATE. STEPHENSON EGINEERING LTD. TAKES NO FOR THE ACCURACY OF THE X-RAY OR SCAN RESULTS.

EW HOLES FOR PIPES TO A DIAMETER NOT LARGER THAN THE OUTSIDE PIPE DIAMETER PLUS 25MM. DO NOT CUT IRCEMENT OR SERVICES WITHOUT PRIOR APPROVAL OF THE CONSULTANT. NGULAR OPENINGS ARE TO BE CUT, PRE-DRILL THE CORNERS USING A 100 MM DIAMETER CORE DRILL OR DRILL A LES TO PREVENT OVER CUTTING OF THE CORNERS.

TESTING, SEE GENERAL NOTES AND/OR SPECIFICATION.

CK NOTES A05

N, HANDLING AND ERECTION SHALL CONFORM TO THE FOLLOWING STANDARDS:

SPECIFICATIONS FOR STEEL SHEET, ZINC COATED (GALVANIZED) OR ZINC-IRON ALLOY COATED (GALVANNEALED) FSS.

CONFORM TO CSA STANDARD W59 AND BE PERFORMED BY A FABRICATOR CERTIFIED TO CSA STANDARD W47.1. LL BE DESIGNED BY A LICENSED PROFESSIONAL ENGINEER. SHOP DRAWINGS AND CALCULATIONS BEARING THE STAMP OF THE PROFESSIONAL ENGINEER RESPONSIBLE FOR THE DESIGN SHALL BE SUBMITTED FOR REVIEW PRIOR TO FABRICATION

ACKETS SHALL BE HUNG DIRECTLY FROM THE FLOOR OR ROOF DECK. ALL POINT LOADS MUST BE APPLIED DIRECTLY TO FRAMING UNLESS OTHERWISE SHOWN OR APPROVED BY THE STRUCTURAL CONSULTANT. JRAL FRAMING PERMITS, STEEL DECK SHALL BE DESIGNED AND FABRICATED TO SPAN CONTINUOUSLY OVER AT LEAST 4 ). PROVIDE AN ADEQUATE INCREASE IN THICKNESS OF METAL TO COMPENSATE FOR CONTINUITY WHEREVER FEWER UR. END LAPS TO BE 50mm (2") MIN. AND BE LOCATED OVER SUPPORTS.

E FORMED WITH INTEGRAL RIBS IN ORDER TO SAFELY SUPPORT THE LOADS GIVEN ON THE DRAWINGS OVER THE SPANS CKNESS GIVEN ON DRAWINGS IS MINIMUM ASSUMED ALLOWABLE THICKNESS AND MUST BE DESIGNED BY THE DECK

I OF ROOF DECK UNDER LIVE OR SNOW LOAD ONLY SHALL NOT EXCEED 1/300TH OF SPAN. BE FORMED WITH INTEGRAL RIBS AND EMBOSSMENTS FOR COMPOSITE ACTION WITH CONCRETE SLAB IN ORDER TO SAFELY DADS GIVEN ON THE DRAWINGS OVER THE SPANS REQUIRED. IN ADDITION, THE DECK SHALL SAFELY SUPPORT ALL LOADS WITH NO SHORING UNTIL CONCRETE IS SET. DECK THICKNESS GIVEN ON DRAWINGS IS MINIMUM ALLOWED. I OF COMPOSITE FLOOR UNDER LIVE LOAD ONLY SHALL NOT EXCEED 1/360TH OF SPAN. ON SHOP DRAWINGS ALL CONNECTIONS TO SUPPORTING MEMBERS FOR ALL COMBINATIONS OF DIAPHRAGM SHEAR AND NG ON THE ROOF DECK.

NG ON THE ROOF DECK. NOTED ROOF DECK AND / OR COMPOSITE DECK SHALL BE FORMED OF METALLIC COATED SHEET STEEL CONFORMING 53M, STRUCTURAL QUALITY GRADE ' 230' WITH A ZF75 ZINC COATING, (GALVANNEAL). NOTED DECK SHALL BE SINGLE FLUTED ELEMENT WITH INTEGRAL RIBS OF DEPTH AND MIN. BASE NOMINAL THICKNESS (BNT)

AVIED DECK SHALL BE SINGLE FLUTED ELEMENT WITH INTEGRAL RIDS OF DEPTH AND MIN. BASE NOMINAL THICKNESS (BNT) AWINGS. DECK SHALL HAVE INTERLOCKING SIDE JOINTS BETWEEN PANELS. (MIN.. BNT. 0.76mm (0.30")). CLOSURES, FLASHINGS AND REINFORCING STIFFENERS FOR UNSUPPORTED EDGES TO BE SUPPLIED OF SIMILAR MATERIAL IG TO THAT FOR DECK, UNLESS NOTED.

ZINC RICH, READY MIX TO CAN/ CGSB-1.181 FOR FIELD "TOUCH-UP" OF WELD BURNS AFTER DECK IS INSTALLED. SHOWN FOR OPENINGS THROUGH ROOF DECK FROM 150mm TO 450mm (6" TO 18") ACROSS THE FLUTES THE DECK SUPPLIER LESS THAN A 51x51X6.4 ANGLE (2"x2"x 1/4 L). REINFORCEMENT TO FRAME ACROSS EACH SIDE OF THE OPENING THE FLUTES, WELDED TO AT LEAST TWO FLUTES EACH SIDE OF THE OPENING.

S OVER 450mm (18") ACROSS THE FLUTES AND FOR AREAS OF CONCENTRATED LOAD, REINFORCE IN ACCORDANCE WITH NG DETAILS SHOWN ON PLANS OR TYPICAL DETAILS.

STEEL PACKING AS REQUIRED TO PRODUCE AN EVEN BEARING PRESSURE AT SUPPORTS. CK, UNLESS OTHERWISE DETERMINED DURING THE DIAPHRAGM AND UPLIFT CONNECTION DESIGN OR SPECIFIED OTHERWISE S OR ENGINEERING DRAWINGS, THE MINIMUM ATTACHMENT OF THE DECK TO THE BEARING SURFACES AND THE MINIMUM SIDE NS BETWEEN DECK UNITS SHALL BE:

EEP DECK PROFILES, CONNECT THE FIRST, THIRD, FIFTH AND SEVENTH LOW CORRUGATIONS (36/4 CONFIGURATION), AND PARALLEL TO FLUTE DIRECTION AT 300mm [12"] MAXIMUM CENTERS. CONNECTIONS SHALL BE MADE USING EITHER AN WITH 20mm [3/4"] NOMINAL TOP DIAMETER, OR MECHANICALLY FASTENED USING HILTI POWDER ACTUATED FASTENERS LTI X-ENP19, OR EQUIVALENT). EEP DECK PROFILES, CONNECT THE FIRST, THIRD AND FIFTH LOW CORRUGATIONS (24/3 CONFIGURATION), AND EACH

LLEL TO FLUTE DIRECTION AT 300mm [12"] MAXIMUM CENTERS. CONNECTIONS SHALL BE MADE USING EITHER AN ARC SPOT 4"] NOMINAL TOP DIAMETER, OR MECHANICALLY FASTENED USING HILTI POWDER ACTUATED FASTENERS (X-HSN24, 'ALENT).

DECKS, SIDE LAPS OF ADJACENT NESTABLE UNITS SHALL BE CRIMPED TOGETHER AT 900mm [36"] CENTRES, OR FASTENED M HWH SCREWS (SLC01, SLC02, OR EQUIVALENT). DECK, UNLESS OTHERWISE DETERMINED DURING THE DIAPHRAGM CONNECTION DESIGN OR SPECIFIED OTHERWISE IN THE

ENGINEERING DRAWINGS, THE MINIMUM ATTACHMENT OF THE DECK TO THE BEARING SURFACES AND THE MINIMUM SIDE LAP ETWEEN DECK UNITS SHALL BE: F ADJACENT FLOOR UNITS SHALL BE CRIMPED TOGETHER AT 600mm [24"] MAXIMUM ON CENTRE, BUT NOT EXCEEDING THE QUIRED FOR THE APPLICABLE ULC FIRE RATED ASSEMBLY.

DRTS PARALLEL AND PERPENDICULAR TO FLUTES SHALL BE WELDED WITH 20mm [3/4"] WELDS AT 300mm [12"] MAXIMUM NOT EXCEEDING THE SPACING REQUIRED FOR THE APPLICABLE ULC FIRE RATED ASSEMBLY. ED PUDDLE WELDS AT SUPPORTS MAY BE SUBSTITUTED WITH POWDER ACTUATED FASTENERS THAT PROVIDE EQUIVALENT

AR CAPACITY PER METRE.

R ACTUATED AND SCREW FASTENERS ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. CONNECTORS THROUGH DECK WHERE REQUIRED BY DRAWINGS.

IZED OR GALVANNEALED SURFACES WITH SPECIFIED PRIMER AT WELDS AND SCRAPES, ETC., BOTH UPPER AND LOWER

ILING OR MECHANICAL/ELECTRICAL SERVICES FROM U/S OF STEEL DECK. PECTION AND TESTING COMPANY IS TO BE ENGAGED TO CARRY OUT AND REPORT ON THE FOLLOWING INSPECTION

OFILE, GAUGE AND STEEL GRADE.

g. Joints.

NNECTIONS.

IP PRIMER.

IG AND/OR ALTERATIONS. GENERAL NOTES, SPECIFICATIONS, AND TERMS OF REFERENCE FOR ADDITIONAL INFORMATION.

No.         Description           1         ISSUED FOR PERMIT	JAN/31/19
Q	
S T	
വ്ര	
σ -	AM
ZF	RKH
00	MA
12 日 2	DAD
	Z RO
$\overline{\mathbf{X}}$	ROI
$\overline{}$	AME
	C Z
	GLE
	107
stonbor	ncon
	GINEERING
2550 Victoria Park Ave. Suite 602	70 enson-eng.com
Ioronto UN M2J 5A9   Tel: (416) 635 99 www.stephenson-eng.com   info@steph	
I oronto UN M2J 5A9   Tel: (416) 635 95 www.stephenson-eng.com   info@steph PROFESSIONAL SEAL :	ESSIONAL
PROFESSIONAL SEAL : PROFESSIONAL SEAL : PROFESSIO	9-01-31 GASDIA
PROFESSIONAL SEAL : PROFESSIONAL SEAL : PROFESSIO	9-01-31 GASDIA DI69574
Ioronto ON M2J 5A9   Tel: (416) 635 95         www.stephenson-eng.com   info@steph         PROFESSIONAL SEAL :         Image: Comparison of the second s	9-01-31 GASDIA DI69574 OF ONTAR
I oronto ON M2J 5A9   Tel: (416) 635 95 www.stephenson-eng.com   info@steph PROFESSIONAL SEAL :	ESSIONAL 9-01-31 GASDIA 0169574 OF ONTAR
I oronto UN M2J 5A9   Tel: (416) 635 95 www.stephenson-eng.com   info@steph PROFESSIONAL SEAL :	ESSIONAL 9-01-31 GASDIA 0169574 SOF ONTAR
I oronto ON M2J 5A9   Tel: (416) 635 95 www.stephenson-eng.com   info@steph PROFESSIONAL SEAL :	ESSIONAL 9-01-31 GASDIA 0169574 OF ONTAR
I oronto UN M2J 5A9   Tel: (416) 635 95 www.stephenson-eng.com   info@steph PROFESSIONAL SEAL :	ESSIONAL 9-01-31 GASDIA 0169574 OF ONTAR
I oronto UN M2J 5A9   Tel: (416) 635 95 www.stephenson-eng.com   info@steph PROFESSIONAL SEAL :	ESSIONAL END 9-01-31 GASDIA 0169574 OF ONTRO
DWG TITLE : DATE : JAN. 2019	ESSIONAL BOIL-31 GASDIA DI69574 OF ONTAR
DATE: JAN. 2019 DATE: JAN. 2019 SCALE: 1: DRAWN BY:	ESS/0N/4/ FIG 9-01-31 GASDIA 0169574 OF ONTARE ES
DWG TITLE: DATE: DATE: DATE: DRAWN BY: CHECKED BY: LA MC ALLUM DATE: DRAWN BY: CHECKED BY: DI TITLE: DATE: DATE: DRAWN BY: CHECKED BY: DI TITLE: DATE: DA	ESS/04/4/сти 9-01-31 GASDIA 0169574 СОГ ОМТИРС ESS 1
I oronto ON M2J 5A9   Tel: [416] 635 95 www.stephenson-eng.com   info@steph PROFESSIONAL SEAL :	ESS/0N/4/стр 9-01-31 GASDIA 0169574 СОГ ОМТАВСТ ESS 1 1 1
I oronto ON M2J 5A9   Tel: [416] 635 95 www.stephenson-eng.com   info@steph PROFESSIONAL SEAL :	ESSION 47 ста 9-01-31 GASDIA 0169574 СОГ ОМТИРС ESS 1 1 1 1
I oronto ON M2J 5A9   Tel: [416] 635 99 www.stephenson-eng.com   info@steph PROFESSIONAL SEAL:	ESS/0N/4/стр 9-01-31 GASDIA 0169574 СОГОМТИЧЕТ ES 1 1 1 1 1 1 1 1 1 1 1



![](_page_56_Figure_1.jpeg)

![](_page_57_Figure_0.jpeg)

ISSUED or RE	VISION		
1 ISSUED FOR PERMI	T	JAN/31/19	
	Q		
S S			
	5	Ž	
Z		RKHA	
$\overline{\mathbf{O}}$	5	), MAI	
Ū	#	ROAD	
Ш·	Z	RON	
	$\underline{O}$	AMEF	
È !		C EN EN	
		17 GLI	
	<i>J</i> )	10	
ste	epher	<b>SON</b> GINEERING	
2550 Victoria Park Av Toronto ON M2J 5A9 www.stephenson-eng	re. Suite 602   Tel: (416) 635 99  .com   info@steph	70 enson-eng.com	
PROFESSIONAL SEAL :	AGINE AND THE T	ESSIONAL 61	
H.A. McCallum		GASDIA H	)
		FOF ON	
TTPICAL		L3	
DATE : JA	N. 2019		
DRAWN BY:	1:	1	-
CHECKED BY : DESIGNED BY:	HAM	′ JG	
		1	
DWG STATUS :			

![](_page_58_Figure_0.jpeg)

ISSUED or REVISION          No.       Description         1       ISSUED FOR PERMIT         -       -         -	Date JAN/31/19
YORK REGION PRS STATION #29 T-19-16	107 GLEN CAMERON ROAD, MARKHAM
2550 Victoria Park Ave. Suite 602 Toronto ON M2J 5A9   Tel: (416) 635 997 www.stephenson-eng.com   info@stephe PROFESSIONAL SEAL: PROFESSIONAL SEAL: H.A. MCCALLUM H.A. MCCALLUM WCE OF ON THE DWG TITLE: TYPICAL DETAIL	SON INEERING
DATE : JAN. 2019 SCALE : 1 : 1	

![](_page_59_Figure_0.jpeg)

Sad Noise Sad Noise Sad Noise Sad Noise Stephenson Every Stephenson Stephen	
ENGINEER 2550 Victoria Park Ave. Suite 602 Toronto ON M2J 5A9   Tel: (416) 635 9970 www.stephenson-eng.com   info@stephenson-end PROFESSIONAL SEAL:	107 GLEN CAMERON ROAD, MARKHAM
	g.com
DATE : JAN. 2019 SCALE : 1 : 1 DRAWN BY: - CHECKED BY : HAM / JG DESIGNED BY: MM	

![](_page_60_Figure_0.jpeg)

![](_page_60_Figure_1.jpeg)

![](_page_61_Figure_0.jpeg)

The Co prior All print of the return	ntractor shall verify all to commencement of and specifications are Structural Engineer ar ed upon completion of	dimensions the work. the property nd must be f the work.
ISSUED	or REVISION	 
1 ISSUED	FOR PERMIT	JAN/31/19
	0	
m	<u>_</u>	
ם ן		IAM
	•  —	X T T
「て	ັ ດ	MAF
	N -	Ď,
C	) #	SOA
Ц		Ž
<b>Ω</b>		IRC
	$\mathbf{\Sigma}$	AME
	; –	
		ں ح
	- M	10
	stephe	nson
2550 Victor	ia Park Ave. Suite 602	
Toronto ON www.steph	M2J 5A9   Tel: (416) 635 9 enson-eng.com   info@step	9970 henson-eng.com
PROFESSION	AL SEAL :	DFESSIONAL
19-		19-01-31
		00169574
UNCE O	OF ON'	CE OF ONIN
	CAL DETA	ILS
DATE :	JAN. 2019	
SCALE :	1 :	1
DRAWN BY:		
CHECKED BY	HAM	/ JG
DWG STATUS	M	M
DW0 STATUS	PERMIT	
PROJECT No.	201607	760
DRAWING No.		7 REVISION
	J4-U	<b>r</b>

# HARDWARE SCHEDULE FOR

# YORK REGION PRS STATION #29 107 GLEN CAMERON ROAD

Architect THOMAS BROWN ARCHITECTS INC. 197 SPADINA AVE SUITE 200 TORONTO, ONTARIO M5T 2C8 Tel: 416-364-5710

Consultant: SHAUN CRAIG, DHC

Plan Revision: 7, Dated: DEC 5 2018 Submittal Date: APRIL 10 2019

Elite

595-16 Cityview Blvd Vaughan , Ontario, L4H 3M7 YORK REGION PRS STATION #29 107 GLEN CAMERON ROAD

Door & Hardware Inc

### **Manufacturers & Finishes**

#### **Manufacturers**

Cal-Royal Products	
CAMDEN	'CAMDEN
Corbin-Russwin	'Corbin-Russwin
HES	'HES
Ilco-Unican	'Ilco-Unican
K.N. Crowder	'K.N. Crowder
McKinney	
Norton	'Norton
Pemko	'Pemko
Rixson	'Rixson
Rockwood Manufact	turing
Sargent	'Sargent
Securitron	'Securitron
Von Duprin	'Von Duprin
-	

#### **Finishes**

- 26D Satin chromium plated over nickel
- 630 Satin stainless steel
- 689 Aluminum painted
- US26D Satin chromium plated over nickel
- US32D Satin stainless steel

Elite

595-16 Cityview Blvd Vaughan , Ontario, L4H 3M7 YORK REGION PRS STATION #29 107 GLEN CAMERON ROAD

Door & Hardware Inc

### **Index of Abbreviations**

#### Door Mat'l

PGS - Paintable Galvanneal Steel

#### Door Type

FG - Full Lite G - Half Lite M - Flush NL1 - Narrow Lite

#### Frame Mat'l

PGS - Paintable Galvanneal Steel

![](_page_64_Picture_7.jpeg)

595-16 Cityview Blvd Vaughan , Ontario, L4H 3M7 YORK REGION PRS STATION #29 107 GLEN CAMERON ROAD

Door & Hardware Inc

### **OPENINGS**

Opening H Number(s)	Heading Num.	Qtv	Location 1	To/ From	Location 2	Nominal Width	Nominal Height	Door Thickne	sHand	Label	Fram Mat'l	eFrame Type	Door Mat'l	Door Type	Remarks
<u></u>		<u></u> ,							<u> </u>			.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
100.4	4	4		<b>F</b>		4400	0450	54	DUD					50	
100A 100B	2	1	ACCESS	From	VESTIBULE 100	1100	2150 2150	51	RHR		ALUN	1 AL 1 AL	ALUM	FG	BY OTHERS BY OTHERS
101	3	1	VEHICLE BAYS 110	From	ACCESS CORRIDOR 101	1100	2150	44	RHR	WH-B	PGS	BUTT	PGS	FG	
103	4	1	LOUNGE ROOM 103	To/From	WRITE-UP ROOM 104	1300	2760	44	SLIDING	G	NONE	EN/A	WOOD	М	
104	5	1	EXTERIOR	From	WRITE-UP ROOM 104	1100	2150	51	LHR		ALUN	1 AL	ALUM	FG	
106	6	1	LOCKER ROOM 105	То	MALE WASHROOM 106	965	2150	44	RH		PGS	WRAP	PGS	М	
107	6	1	LOCKER ROOM 105	То	FEMALE WASHROOM 107	965	2150	44	LH		PGS	WRAP	PGS	М	
108	7	1	VEHICLE BAYS 110	From	UTILITY ROOM 108	965	2150	44	LHR	WH-B	PGS	WRAP	PGS	М	
109	8	1	ACCESS CORRIDOR 101	То	IT ROOM 109	965	2150	44	LH		PGS	WRAP	PGS	М	
110A	9	1	EXTERIOR	From	VEHICLE BAYS 110	965	2150	44	RHR		PGS	BUTT	PGS	NL1	
110B	9	1	EXTERIOR	From	VEHICLE BAYS 110	965	2150	44	RHR		PGS	BUTT	PGS	NL1	FOUR-FOLD DOOR BY OTHERS
110C	10	1	EXTERIOR	From	VEHICLE BAYS 110	3600	3600	54	FFD		N/A	N/A	ALUM	FFD	FOUR-FOLD DOOR BY OTHERS
110D	10	1	EXTERIOR	From	VEHICLE BAYS 110	3600	3600	54	FFD		N/A	N/A	ALUM	FFD	FOUR-FOLD DOOR BY OTHERS
110E	10	1	EXTERIOR	From	VEHICLE BAYS 110	3600	3600	54	FFD		N/A	N/A	ALUM	FFD	
110F	10	1	EXTERIOR	From	VEHICLE BAYS 110	3600	3600	54	FFD		N/A	N/A	ALUM	FFD	OVERHEAD DOOR BY OTHERS
110G	11	1	EXTERIOR	From	VEHICLE BAYS 110	3600	3600	50	OHD		N/A	N/A	ALUM	OHD	OVERHEAD DOOR BY OTHERS
110H	11	1	EXTERIOR	From	VEHICLE BAYS 110	3600	3600	50	OHD		N/A	N/A	ALUM	OHD	OVERHEAD DOOR BY OTHERS
1101	11	1	EXTERIOR	From	VEHICLE BAYS 110	3600	3600	50	OHD		N/A	N/A	ALUM	OHD	OVERHEAD DOOR BY OTHERS
110J	11	1	EXTERIOR	From	VEHICLE BAYS 110	3600	3600	50	OHD		N/A	N/A	ALUM	OHD	OVERHEAD DOOR BY OTHERS
112	12	1	VEHICLE BAYS 110	То	MEDICAL STORAGE	965	2150	44	RH	WH-B	PGS	BUTT	PGS	G	BY OTHERS
112A	7	1	VEHICLE BAYS 110	То	OXYGEN STORAGE	965	2150	44	LH	WH-B	PGS	BUTT	PGS	М	
112B	13	1	EXTERIOR	То	OXYGEN STORAGE	965	2150	44	LHR		PGS	BUTT	PGS	М	
114	14	1	EXTERIOR	From	EXT. GARBAGE ROOM	900, 900	2150	44	RHRA		PGS	BUTT	PGS	M2	

Elite

595-16 Cityview Blvd Vaughan , Ontario, L4H 3M7 YORK REGION PRS STATION #29 107 GLEN CAMERON ROAD

Door & Hardware Inc

### Hardware Schedule

Heading #1

Item #1

#### 1 Single door 100A, EXTERIOR From VESTIBULE 100

RHR

1100 x 2150 x 51 - ALUM DR x ALUM FR

1 1 1	Continuous Hinge Exit Device Cylinder	MCK-12HD 2150 mm Clear 33A-NL US26D 388 US26D RHR 1100 x 2150 Door 8000ICRIM US26D	CLEAR US26D/US26D US26D
1	Cylinder	2000ICC	0
1	Cylinder	1000ICC US26D GMK	US26D
1	Electric Strike	9400-630 - By LENEL	630
1	Door Pull	BF158 US32D Type 12 HD Mounting	US32D
1	Auto Door Operator	Besam SW200i x FWH	
2	Push Button	CM60/2	630
2	Surface Mounted Box	CM-69S	BLK
1	Miscellaneous Item	CX 12	
1	Overhead Door Stop	6-536 689	689
1	Threshold	252X2AFGx1100	AFG
1	Sweep	29326CNBx1100mm	С
1	Door Contact	3287 - OR SIMILAR BY LENEL	
1	Card Reader	Card Reader By LENEL	
1	REX Switch	REX By LENEL	

-Balance of gasketing by Door Supplier.

- Pressing actuators button cycles the operator.Manual operation with exit device from inside. REX inside , shunts the door contact When door is locked, valid card read Releases the Electric strike and makes push button active, inside push button to unlock strike and open the door.

- keyed exterior of exit device is STOREROOM Function .

-All wiring high and low voltage, conduit and back boxes by Electrical.

Elite

595-16 Cityview Blvd Vaughan , Ontario, L4H 3M7 YORK REGION PRS STATION #29 107 GLEN CAMERON ROAD

Door & Hardware Inc

		Heading #2					
Item #2		1 Single door 100B, A	CCESS CORRIDOR 101 From VESTIBULE 100	RHR			
		1100 x 2150 x 51 - AL	UM DR x ALUM FR				
	1 1 1	Continuous Hinge Exit Device Cylinder Cylinder	MCK-12HD 2150 mm Clear 33A-NL US26D 388 US26D RHR 1100 x 2150 Door 8000ICRIM US26D 2000ICC	CLEAR US26D/US26D US26D			
	1 1 1	Cylinder Door Pull Auto Door Operator	BF158 US32D Type 12 HD Mounting Besam SW100 x FWH x FXU-SI	US32D			
	2 1	Push Button Miscellaneous Item	CM60/2 CX 12	630			
	1	Overhead Door Stop	6-536 689	689			
		-Balance of gasketing - Exit device to be dog - Pushing inside or ou -All wiring high and lo	y by Door Supplier. ged down during normal use to make it unlocked / PAS it side buttons will open door. When door is locked / Ur w voltage, conduit and back boxes by Electrical.	SAGE function/ Push Pull . dogged opperator must be shut off.			
		Heading #3					
Item #3		1 Single door 101, VE	EHICLE BAYS 110 From ACCESS CORRIDOR 101	RHR			
		1100 x 2150 x 44 - HM DR x HM FR - WH-B					
	3 1 1 1 1 1	Standard Hinge Exit Device Surface Closer Kick Plate Sweep Gasketing Threshold	T4A3786 127mm x 114mm US26D NRP 99-L-BE-F US26D 996L-BE-R US26D RHR 1100 x 2 CPS7500 689 K1050 200mm X 875mm US26D 4BE SA 29326CNBx1100mm S88 BL 5215mm 252X3AFGx1100mm	US26D 150 Door 689 US26D C BL AFG			
		Exit Device is Passag	e Function				
		Heading #4					
Item #4		1 Single door 103, LC	DUNGE ROOM 103 To/From WRITE-UP ROOM 104	SLIDING			
		1300 x 2760 x 44 - W	OOD DR x NONE FR				
	1 1 1	Track / Hanger Track / Hanger Miscellaneous Item	C-818HD x 96" 1DR KIT C-110-BLA x 96" C-90DP x 626	BLA x 626			
		KIT INCLUDES STOP	P AND FLOOR GUIDE.				
		. 59	5-16 Citvview Blvd	YORK REGION PRS STATION #29			
2	El	ite <sup>Vai</sup>	ughan , Ontario, L4H 3M7	107 GLEN CAMERON ROAD			
Door &	Ha	rdware Inc		Submittal Date: APRIL 10 2019			

		Heading #5					
Item #5		1 Single door 104, EXTERIOR From WRITE-UP ROOM 104 LHR					
		1100 x 2150 x 51 - AL	LUM DR x ALUM FR				
	1	Continuous Hinge	MCK-12HD 2150 mm Clear	CLEAR			
	1	Exit Device	33A-NL US26D 388 US26D LHR 1100 x 2150 Door	US26D/US26D			
	1	Cylinder	8000ICRIM US26D	US26D			
	1	Cylinder					
	1	Cylinder Electric Strike		US26D 620			
	1	Door Pull	9400-030 - DY LEINEL RE158 US22D Type 12 HD Mounting	030			
	1	Surface Closer		689			
	1	Miscellaneous Item	6891	003			
	1	Threshold	252X2AFGx1100	AFG			
	1	Sweep	29326CNBx1100mm	C			
	1	Door Contact	3287 - OR SIMILAR BY LENEL				
	1	Card Reader	Card Reader By LENEL				
	1	REX Switch	REX By LENEL				
		- keyed exterior of exi -All wiring high and lo	he Electric strike, it device is STOREROOM Function . w voltage, conduit and back boxes by Electrical.				
		- keyed exterior of exi -All wiring high and lo	he Electric strike, it device is STOREROOM Function . w voltage, conduit and back boxes by Electrical.				
		- keyed exterior of exi -All wiring high and lo	he Electric strike, it device is STOREROOM Function . ow voltage, conduit and back boxes by Electrical.				
		- keyed exterior of exi -All wiring high and lo	he Electric strike, it device is STOREROOM Function . w voltage, conduit and back boxes by Electrical.				
		- keyed exterior of exi -All wiring high and lo	he Electric strike, it device is STOREROOM Function . ow voltage, conduit and back boxes by Electrical.				
		- keyed exterior of exi -All wiring high and lo	he Electric strike, it device is STOREROOM Function . w voltage, conduit and back boxes by Electrical.				
		- keyed exterior of exi -All wiring high and lo	he Electric strike, it device is STOREROOM Function . w voltage, conduit and back boxes by Electrical.				
		- keyed exterior of exi -All wiring high and lo	he Electric strike, it device is STOREROOM Function . w voltage, conduit and back boxes by Electrical.				
		- keyed exterior of exi -All wiring high and lo	he Electric strike, it device is STOREROOM Function . w voltage, conduit and back boxes by Electrical.				
		- keyed exterior of exi -All wiring high and lo	he Electric strike, it device is STOREROOM Function . w voltage, conduit and back boxes by Electrical.				

![](_page_68_Picture_1.jpeg)

595-16 Cityview Blvd Vaughan , Ontario, L4H 3M7 YORK REGION PRS STATION #29 107 GLEN CAMERON ROAD

Submittal Date: APRIL 10 2019

Page 7 of 12

em #6 em #7		1 Single door 106, LC 1 Single door 107, LC	OCKER ROOM 105 To MALE WASHROOM 106 OCKER ROOM 105 To FEMALE WASHROOM 107	RH LH
		965 x 2150 x 44 - HM	DR x HM FR	
	6	Standard Hinge	T4A3386 127mmx 114mm US26D	US26D
	1	Lockset	ML2057 LWA/LWA 626/626 LH LC	626/626
	1	Lockset	ML2057 LWA/LWA 626/626 RH LC	626/626
	2	Cylinder	7000ICMC US26D	US26D
	2	Cylinder	1000ICC US26D GMK	US26D
	2	Electric Strike	1006F-630-LBM HM-630 2005M3	630-LBM
	2	Auto Door Operator	Besam SW100 x FWH x EXU-SI	
	2	Electronic Closer	CM45/4	
	2	Electronic Closer	CM-43-CBL	
	2	Electronic Closer	CX-WC13XSM	
	2	Electronic Closer	CX-WEC10	630
	2	Kick Plate	K1050 200MM x 914MM" US26D SA	US26D
	2	Wall Stop	406 US32D	US32D
	2	Power Supply	BPS-12/24-1	
	2	Electrolynx Harness	QC-C1500P	
	2	Key Switch	MKA	
	2	Coat Hook	RM821 US32D	US32D
	2	Key Box	Smash Box - mounted between 2 washrooms - HPC511	

-Operator mounted inside washroom. Entry by pushing door or by pressing corridor wall mounted operator button. Upon entry and door closing, pressing of interior "push to lock" switch. Egress by using lever trim or by pressing wall mounted operator button. System automatically resets when door opens. Pressing emergancy switch unlocks electric strike and illuminates interior and exterior assistance required indicators and sound local alerts, until help arrives and opens door. System can be configured to open door upon alarm. For maintenance purposes, corridor side keyswitch secures washroom door and turns corridor side operator actuator off. Relay to be used to latch wall mount momentary tape switches to maintain assistance required status. Free egress at all times. Door is unlocked in a power fail condition.

-All wiring high and low voltage, conduit and back boxes by Electrical.

- RELAY INCLUDED IN RESTROOM KIT

Elite

595-16 Cityview Blvd Vaughan , Ontario, L4H 3M7

YORK REGION PRS STATION #29 107 GLEN CAMERON ROAD

Door & Hardware Inc

		Heading #7		
ltem #8 Item #9		1 Single door 10 1 Single door 11	8, VEHICLE BAYS 110 From UTILITY ROOM 108 2A, VEHICLE BAYS 110 To OXYGEN STORAGE 112	LHR LH
		965 x 2150 x 44	- HM DR x HM FR - WH-B	
	6 1 2 2 2 2	Standard Hinge Latchset Latchset Surface Closer Kick Plate Astragal Weatherstripping Passage Functio	T4A3786 114mm x 102mm US26D NRP ML2010 LWA/LWA 626/626 LH LC ML2010 LWA/LWA 626/626 LHR LC CPS7500 689 K1050 200MM x 914MM" US26D SA 29326CNB 38" S88 BL18	US26D 626/626 626/626 689 US26D C BL
		Heading #8		
Item #10		1 Single door 10	9, ACCESS CORRIDOR 101 To IT ROOM 109	LH
		965 x 2150 x 44	- HM DR x HM FR	
	3 1 1 1 1 1 1 1 1 1 1	Standard Hinge Lockset Electric Strike Cylinder Cylinder Surface Closer Kick Plate Card Reader Door Contact REX Switch -Valid card read lockset shunts th Storeroom locks -All wiring high a	T4A3786 114mm x 102mm US26D NRP ML2057 LWA/LWA 626/626 LH LC 1006CLB-630 By LENEL 7000ICMC US26D 2000ICC 1000ICC US26D GMK CPS7500 689 K1050 200MM x 914MM" US26D SA Card Reader By LENEL 3287 - OR SIMILAR BY LENEL REX By LENEL releases the electric strike and door can be pulled oper te door contact. at nd low voltage, conduit and back boxes by Electrical.	US26D 626/626 630 US26D 689 US26D
Ç	2/	ita	595-16 Cityview Blvd Vaughan , Ontario, L4H 3M7	YORK REGION PRS STATION #29 107 GLEN CAMERON ROAD
Door &	<b>H</b> a	<b>UK</b> rdware Iuc		Submittal Date: APRIL 10 2019

		Heading #9					
ltem #11 Item #12		1 Single door 110A, 1 Single door 110B,	EXTERIOR From VEHICLE BAYS 110 EXTERIOR From VEHICLE BAYS 110	RHR RHR			
		965 x 2150 x 44 - H	M DR x HM FR				
	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Continuous Hinge Exit Device Electric Strike Cylinder Cylinder Surface Closer Kick Plate Weatherstripping Threshold Astragal Door Contact Card Reader REX Switch . Manual operation v card read releases t - Extreior keyed side -All wiring high and Heading #10	MCK-12HD 2150 mm Clear 99-L-NL US26D 996L-NL-R US26D RHR 965 x 2 9400-630 - By LENEL 8000ICRIM US26D 2000ICC 1000ICC US26D GMK UNI7500 689 (965 Door) x 6191B-25 K1050 200MM x 914MM" US26D SA 2891AS-38" x 85" 252X3AFG38" 29326CNB 38" 3287 - OR SIMILAR BY LENEL Card Reader By LENEL REX By LENEL with exit device from inside. REX inside shunts the do he electric strike and door can be pulled open. e is Storeroom function. ow voltage, conduit and back boxes by Electrical.	150 Door LIS26D/US26D 630 US26D US26D 689 US26D A AFG C	-		
Item #13 Item #14		1 Single door 110C, 1 Single door 110D.	EXTERIOR From VEHICLE BAYS 110 EXTERIOR From VEHICLE BAYS 110	FFD FFD			
Item #15 Item #16		1 Single door 110E, 1 Single door 110F	EXTERIOR From VEHICLE BAYS 110 EXTERIOR From VEHICLE BAYS 110	FFD FFD			
		3600 x 3600 x 54 - A	ALUM DR x N/A FR				
	4 4 4	Card Reader REX Switch OH Door Contact	Card Reader By LENEL REX By LENEL OH DOOR CONTACT BY LENEL		-		
		FOUR FOLD DOOF	S COMPLEATE BY DOOR MANUFACTURE.				
\$	20		95-16 Cityview Blvd aughan , Ontario, L4H 3M7	YORK REGION PRS STATION #2 107 GLEN CAMERON ROA	9 D		
Door &	<b>1</b> 4a	<b>UK</b> rdware Inc	-	Submittal Date: APRIL 10 207	19		
				 Page 10 c	f 12		
		Heading #11					
--	--	---	--	----------------------------------	------	--	--
Item #17 Item #18 Item #19 Item #20		1 Single door 11 1 Single door 11 1 Single door 11 1 Single door 11	DG, EXTERIOR From VEHICLE BAYS 110 DH, EXTERIOR From VEHICLE BAYS 110 DI, EXTERIOR From VEHICLE BAYS 110 DJ, EXTERIOR From VEHICLE BAYS 110	OHD OHD OHD OHD			
		3600 x 3600 x 50	) - ALUM DR x N/A FR				
	4 4 4	REX Switch Card Reader OH Door Contac	REX By LENEL Card Reader By LENEL t OH DOOR CONTACT BY LENEL				
		OVER HEAD DO	OOR COMPLEAT BY MANUFACTURE				
		Heading #12					
Item #21		1 Single door 11	2, VEHICLE BAYS 110 To MEDICAL STORAGE 111	RH			
	965 x 2150 x 44 - HM DR x HM FR - WH-B						
	3 1 1 1	Standard Hinge Lockset Electric Strike Cylinder Cylinder	T4A3786 114mm x 102mm US26D NRP ML2057 LWA/LWA 626/626 RH LC 1006CLB-630 By LENEL 7000ICMC US26D 2000ICC	US26D 626/626 630 US26D			
	1 1 1 1 1	Cylinder Surface Closer Kick Plate Card Reader Door Contact REX Switch	1000ICC US26D GMK CPS7500 689 K1050 200MM x 914MM" US26D SA Card Reader By LENEL 3287 - OR SIMILAR BY LENEL REX By LENEL	US26D 689 US26D			
		-Valid card read releases the electric strike and door can be pulled open.Door closes and locks. REX inside the lockset shunts the door contact. Storeroom lockset -All wiring high and low voltage, conduit and back boxes by Electrical.					
	-		595-16 Cityview Blvd	YORK REGION PRS STATION	#29		
Elite			Vaughan , Ontario, L4H 3M7	107 GLEN CAMERON RC			
Door & Hardware Inc					2019		

		Heading #13				
Item #22		1 Single door 112	2B, EXTERIOR To OXYGEN STORAGE 112	LHR		
		965 x 2150 x 44 ·	- HM DR x HM FR			
	1 1 1 1 1 1 1 1 1 1 1 1 1	Continuous Hing Lockset Cylinder Cylinder Surface Closer Armor Plate Threshold Astragal Weatherstripping Door Contact Card Reader Electric Strike REX Switch	e MCK-12HD 2150 mm Clear ML2057 LWA/LWA 626/626 LHR LC 7000ICMC US26D 2000ICC 1000ICC US26D GMK CPS7500 689 K1050 900mm x 875mm US32D 4BE 252X3AFG38" 29326CNB 38" 2891AS-38" x 85" 3287 - OR SIMILAR BY LENEL Card Reader By LENEL 1006CLB-630 By LENEL REX By LENEL REX By LENEL	CLEAR 626/626 US26D 689 US32D AFG C A 630		
		Heading #14				
Item #23		1 Pair of doors 1	14, EXTERIOR From EXT. GARBAGE ROOM	RHRA		
		900, 900 x 2150 x 44 - PGS DR x HM FR				
	2 1 1 1 1 2 1 2 1 1	Continuous Hing Surface Bolt Lockset Cylinder Cylinder Surface Closer Threshold Sweep Gasketing Astragal Unican lockset to	e MCK-12HD 2134 mm Clear 585-12" US26D 585-24" US26D LL1021S-26D-41 - RHR 2000ICC 1000ICC US26D GMK UNI7500H 689 (900 Door) x 6191B-25 252X3AFGx1800mm 29326CNB 900mm 2891AS-2@2134,1@1800 357C x S88 x 2134mm be programed to code Provided by owner	CLEAR US26D 26D US26D 689 AFG C A C		
9	20	ite.	595-16 Cityview Blvd Vaughan , Ontario, L4H 3M7	YORK REGION PRS STATION #29 107 GLEN CAMERON ROAD		
Door & Hardware Inc				Submittal Date: APRIL 10 2019		