DRAWING WHERE

SECTION VIEW

SYMBOL

DETAIL IS LOCATED

ABBREVIATIONS

ADD'L ADDITIONAL ADH. ADHESIVE AGGR. AGGREGATE ALUM. ALUMINUM APPROX. APPROXIMATE ARCH. ARCHITECTURAL ASSY ASSEMBLY **BOTTOM OF** B/B BACK TO BACK B.C. **BOLT CIRCLE** BD BOARD BLT BOLT BM BFAM B.M. BENCH MARK BLDG BUILDING BLK BLOCK BLKG BLOCKING BOTT BOTTOM BPL. BASE PLATE BRDG BRIDGING B.S. **BOTH SIDES** BTWN BETWEEN **BOTH WAYS** B W C/C CENTRE TO CENTRE CERTIFICATION CHAM. CHAMFER CIR. CIRCLE CLR CLEAR CMU CONCRETE MASONRY UNITS COL. COLUMN COMP. COMPRESSIVE CONC. CONCRETE CONT. CONTINUOUS CONC. BLK CONCRETE BLOCK **COLUMN TIE** C.I. CTR CENTRE COMPLETE WITH C/W DIA. DIAMETER DIAG DIAGONAL DIM. DIMENSION DN DOWN DWG DRAWING E.A. EACH E.D. **EDGE DISTANCE** E.E. EACH END E.F. EACH FACE ELECT. ELECTRICAL EL. or ELEV **ELEVATION** EMBED. **EMBEDMENT** EQ. EQUAL **EQUALLY SPACED** EQ. SP E.S. EACH SIDE **EQUIP EQUIPMENT** E.W. EACH WAY **EXIST** EXISTING EXP. **EXPANSION** EXT. **EXTERIOR EXTR** EXTRUDE FNDN FOUNDATION F.F. FAR FACE F/F FACE TO FACE FIN. FINISH (FINISHED FIN. GF FINISHED GRADE F.G. FAR SIDE FTG FOOTING GAUGE GALV GALVANIZED GEN. GENERAL G.I GALVANIZED IRON GLB GLUED LAMINATED BEAM HDG HOT DIPPED GALVANIZED HDW HARDWARE HEX HEXAGON HORIZ HORIZONTAL HSS HOLLOW STRUCT. SECTION HT HEIGHT

INSIDE DIAMETER

INSIDE FACE

INSULATION

LEFT HAND

LONG LEG HORIZONTAL

LONG LEG VERTICAL

INTERIOR

JOINT

JOIST

ANGLE

LONG

I.D.

I.F.

INSUL

INT.

JST

LG

LH

LLH

LLV

MATERIAL MAX. MAXIMUM MECH. **MECHANICAL** MEZZ. MEZZANINE MFR MANUFACTURER MK MIN. MINIMUM MISC. MISCELLANEOUS M.O. MASONRY OPENING MOD. BIT. MODIFIED BITUMINOUS N.F. **NEAR FACE** N.I.C NOT IN CONTRACT NUMBER N.S. **NEAR SIDE** N.T.S. NOT TO SCALE O/C ON CENTRE O/D **OUTSIDE DIAMETER** O.F. **OUTSIDE FACE** O/O OUT TO OUT OPNG OPENING OVHD OVERHEAD **OPEN WEB STEEL JOIST OWSJ** PB PLAIN BAR PRECAST PC CONC. PRECAST CONCRETE PI ATF PRE-FAB. PRE-FABRICATED PRE-FIN. PRE-FINISHED PRESSURE TREATED PVC POLY VINYL CHLORIDE **PWF** PRESERVED WOOD FNDN QTY QUANTITY RADIUS REF. REFERENCE REINF REINFORCING REQ'D REQUIRED REV. REVISION RIGHT HAND R.O. **ROUGH OPENING** SCHED. **SCHEDULE** SECT. SECTION SPEC. SPECIFICATION SQU. SQUARE S.S. STAINLESS STEEL STD **STANDARD** STIRR. STIRRUP STL STEEL STRUCT. STRUCTURE (STRUCTURAL) SWG STANDARD WIRE GAUGE TOP OF TBC TO BE CONFIRMED THD THREAD THRU THROUGH T.O.S. TOP OF STEEL TPI THREAD PER INCH TYP TYPICAL T&G TONGUE AND GROOVE T&B TOP AND BOTTOM U.N. **UNLESS NOTED** U.N.O. UNLESS NOTED OTHERWISE U/S UNDERSIDE VERT. VERTICAL VOL. VOLUME WIDE FLANGE WITH WD WOOD W/O WITHOUT

WEIGHT

DESCRIPTION

NOTES

DRAWING QUANTITY = 6

SITE PLAN

SECTIONS AND DETAILS

SECTIONS AND DETAILS

SECTIONS AND DETAILS

WELDED WIRE FABRIC

STRUCTURAL DRAWING LIST

NOTES, ABBREVIATIONS, SYMBOL LEGEND & DRAWING LIST

WT

DWG. No.

S0.0

S0.1

S1.0

S2.0

S2.1

S2.2

GENERAL NOTES:

TRUE NORTH

PROJECT NORTH

SPAN DIRECTION

ELEVATION SYMBOL

(TO BE DEMOLISHED)

(TO REMAIN)

EXISTING

INDICATOR

INDICATOR

PROJECT

NORTH

- THIS STRUCTURE HAS BEEN DESIGNED AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF PART 4 OF THE MANITOBA BUILDING CODE-2024.
- 2. ALL SPECIFICATIONS AND CODES SPECIFIED SHALL BE THE LATEST REVISION AVAILABLE.
- 3. SITE VERIFY ALL DIMENSIONS, ELEVATIONS, DETAILS, QUANTITIES AND CONDITIONS PRIOR TO START OF ANY DEMOLITION, CONSTRUCTION OR PREFABRICATION OF ANY STRUCTURAL COMPONENT.
- 4. EXISTING STRUCTURAL SUPPORTS WHICH INTERFERE WITH NEW WORK SHALL BE RELOCATED UPON APPROVAL BY THE DESIGN ENGINEER
- 5. THE CONTRACTOR SHALL ENSURE THAT ALL BURIED SERVICES ARE LOCATED AND MARKED PRIOR TO EXCAVATION.
- 6. ALL BUILDING SYSTEMS COMPONENTS SHALL BE THE PRODUCTS OF A SINGLE MANUFACTURER UNLESS SPECIFIED OTHERWISE.
- 7. SHIP, STORE, HANDLE, ERECT, INSTALL, ETC. ALL BUILDING MATERIALS, COMPONENTS, FIXTURES, EQUIPMENT, ETC. AS PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 8. ALL DEMOLITION, FABRICATION, CONSTRUCTION, ETC. SHALL BE CARRIED OUT IN ACCORDANCE WITH ALL PERTINENT BUILDING CODES, AND LOCAL BYLAWS AND ORDINANCES.
- 9. EACH TRADE SHALL BE RESPONSIBLE TO PROVIDE ADEQUATE PROTECTION FOR THE EXISTING FACILITY/PROPERTY TO PREVENT PHYSICAL DAMAGE AND LOSS OF VALUE OR USE OF ANY KIND, AS A RESULT OF DEMOLITION, CONSTRUCTION AND RELATED ACTIVITIES.
- 10. TIME AND DURATION OF ANY NECESSARY DISRUPTION IN THE USE OF ANY ROOM, SPACE, SERVICE, EQUIPMENT, ETC. SHALL BE COORDINATED WITH. AND APPROVED BY THE OWNER AT THE START OF THE PROJECT. PROVIDE OWNER WITH MINIMUM ONE WEEK NOTICE (OR AS REQUIRED) PRIOR TO EACH ACTUAL OCCURRENCE.
- 11. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY THE OWNER AND THE DESIGN ENGINEER OF ANY PREVIOUSLY UNNOTICED PRE-EXISTING FLAW OR CONDITION THAT MIGHT INCREASE THE SCOPE OF WORK OR COMPROMISE NEW CONSTRUCTION, PRIOR TO THE START OF DEMOLITION AND CONSTRUCTION, OR AS SOON AS IT IS DISCOVERED.
- 12. DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE PROJECT TECHNICAL SPECIFICATIONS.

DEMOLITION:

- 1. ALL DEMOLITION WORK SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF ALL PERTINENT BUILDING CODES, THE MANITOBA DEPARTMENT OF LABOUR, AND ANY OTHER PROVINCIAL AND LOCAL BY-LAWS, REGULATIONS AND ORDINANCES.
- 2. DEMOLITION SHALL INCLUDE THE SAFE REMOVAL, HAULING AND DUMPING OF ALL DEBRIS, ETC. TO AN APPROVED SITE. ALL COSTS ASSOCIATED WITH THIS OPERATION. INCLUDING TRANSPORT, LICENSES AND FEES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- COORDINATE THE MOVING AND STORAGE OF SALVAGED ITEMS, MATERIALS, EQUIPMENT, ETC. WITH THE OWNER.
- 4. ALL EXISTING STRUCTURE IS TO DEMOLISHED A MINIMUM OF 300 BELOW THE PROPOSED NEW STRUCTURE. REFER TO ORIGINAL CONSTRUCTION DRAWINGS FOR EXISTING ELEVATIONS OF STRUCTURE AND NEW L.ARCH DRAWINGS FOR PROPOSED NEW CONSTRUCTION ELEVATIONS.

EXCAVATION & BACKFILL

- REMOVE ALL FILL MATERIALS, DELETERIOUS SOILS AND ORGANICS IN AREAS REQUIRING GRANULAR BASE MATERIALS. COMPACT SUBGRADE TO 95% STANDARD PROCTOR DENSITY. SUB-EXCAVATE AND REPAIR ALL AREA EXHIBITING UNSUITABLE DEFLECTIONS.
- GRANULAR BASE TO BE PLACED ON GRADE SHALL BE COMPACTED TO 100% STANDARD PROCTOR DENSITY IN MAXIMUM 150mm LIFTS.
- 3. DO NOT COMPACT FROZEN BACKFILL OR PLACE ON FROZEN SUBGRADE.
- 4. SUB-GRADE, SUB-BASE AND BASE COURSE MATERIALS AND CONSTRUCTION METHODS SHALL BE AS PER CITY OF WINNIPEG SPECIFICATION CW3110 UNLESS NOTED.
- 5. SUBGRADE AND BASE COURSE INSTALLATION SHALL BE INSPECTED AND APPROVED BY OWNER'S GEOTECHNICAL ENGINEER, REGISTERED IN THE PROVINCE OF MANITOBA, AT CONSTRUCTION PHASES AS DETERMINED BY THE GEOTECHNICAL ENGINEER, BEFORE WORK IS TO COMMENCE

FOUNDATIONS (C.I.P. CONCRETE PILES):

- 1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE CONTRACT DOCUMENTS AND THE PILING SPECIFICATION.
- 2. FOUNDATIONS SHALL BE CAST-IN-PLACE CONCRETE FRICTION PILES AS SHOWN ON DRAWINGS.
- 3. CONCRETE PILES HAVE BEEN DESIGNED FOR AN AVERAGE ALLOWABLE SKIN FRICTION VALUE OF 12 kPa ASSUMED. TO BE VERIFIED BY GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION.
- 4. INSTALLATION OF ALL CONCRETE PILES SHALL BE INSPECTED AND APPROVED BY THE GEOTECHNICAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA, PRIOR TO PLACEMENT OF CONCRETE.
- THE PILING CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND SERVICES IN PILING AREA WHETHER SHOWN OR NOT. EXPOSE ALL SERVICES CLOSE TO PILING AS REQUIRED.
- 6. PILES SHALL NOT BE MORE THAN 50mm OUT OF POSITION LATERALLY AT THE TOP AND NOT MORE THAN 2% OUT OF
- 7. REINFORCE ALL PILES AS DETAILED ON THE DRAWINGS. REFER TO CONCRETE NOTES FOR CONCRETE REQUIREMENTS. INSTALL EACH PILE AS A CONTINUOUS POUR.
- 8. VIBRATE TOP 4.5m OF CONCRETE IN ALL PILES.
- 9. SLEEVING WHERE REQUIRED SHALL BE INCLUDED IN THE PILING CONTRACT.

FOUNDATIONS (CONCRETE FOOTINGS):

- 1. FOUNDATIONS SHALL BE CAST-IN-PLACE CONCRETE FOOTINGS AS SHOWN ON DRAWINGS.
- 2. CONCRETE FOOTINGS HAVE BEEN DESIGNED FOR AN AVERAGE FACTORED ULTIMATE BEARING VALUE OF 90 kPa AS RECOMMENDED BY ENG-TECH CONSULTING LTD. IN THEIR REPORT GEOTECHNICAL INVESTIGATION - AIR CANADA WINDOW PARK, 345 PORTAGE AVENUE, WINNIPEG, MANITOBA DATED JULY 2017.
- 3. INSTALLATION OF ALL CONCRETE FOOTINGS SHALL BE INSPECTED AND APPROVED BY THE GEOTECHNICAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA, PRIOR TO PLACEMENT OF CONCRETE.
- 4. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND SERVICES IN EXCAVATION AREA WHETHER SHOWN OR NOT.
- 5. FOOTINGS SHALL NOT BE MORE THAN 50mm OUT OF POSITION LATERALLY, AND NOT MORE THAN 2% OUT OF LEVEL.

EXPOSE ALL SERVICES CLOSE TO EXCAVATION AS REQUIRED.

- 6. REINFORCE ALL FOOTINGS AS DETAILED ON THE DRAWINGS.
- 7. REFER TO CONCRETE NOTES FOR CONCRETE REQUIREMENTS.
- 8. FOOTINGS SHALL NOT BE INSTALLED ON FROZEN GROUND OF ANY KIND. BEARING MATERIAL SHALL NOT BE ALLOWED TO FREEZE DURING INSTALLATION OF FOOTINGS OR ANY TIME THEREAFTER.

REINFORCING STEEL

- 1. REINFORCING STEEL TO BE NEW DEFORMED BILLET STEEL BARS CONFORMING TO CSA G30.18-09 (R2014). GRADE TO BE 400 MPa.
- 2. REINFORCING STEEL SHALL BE CLEAN, FREE OF RUST, DIRT, LOOSE SCALE, OIL, GREASE OR ANY OTHER MATERIAL WHICH WOULD REDUCE BOND WITH THE CONCRETE.
- 3. WELDED STEEL WIRE FABRIC SHALL CONFORM TO A1064/A1064M-14. 400 MPa MINIMUM GRADE IN FLAT SHEETS ONLY UNLESS APPROVED OTHERWISE.
- 4. SUBMIT SHOP DRAWINGS WHICH CLEARLY INDICATE BAR SIZES. SPACINGS, LOCATIONS & QUANTITIES OF REINFORCING STEEL BENDING & CUTTING SCHEDULES, SUPPORTING & SPACING DEVICES, ETC. FOR REVIEW PRIOR TO FABRICATION. DETAIL, FABRICATE AND PLACE REINFORCING IN ACCORDANCE WITH CSA A23.1-09, CSA A23.3-09 AND ACI SP-66 (2004) UNLESS NOTED. LAP STEEL 36 BAR DIAMETERS (MINIMUM) UNLESS NOTED.
- 5. LAP BEAM AND STRUCTURAL SLAB TOP REINFORCING AT CENTER SPAN, AND BOTTOM STEEL AT SUPPORTS.
- 6. BEND ALL HORIZONTAL REINFORCING 305mm AROUND CORNERS OR PROVIDE ADDITIONAL 610mm X 610mm ANGLE
- 7. PROVIDE AT EACH FACE, 2-15M EXTRA BARS ALONG ALL SIDES. AND 2-15M DIAGONAL BARS AT ALL CORNERS OF OPENINGS UNLESS NOTED. PROJECT ALL BARS 610mm PAST CORNERS.
- 8. TIE, SUPPORT AND SPACE ALL REINFORCING STEEL WITH PROPER APPROVED DEVICES DESIGNED FOR USE IN REINFORCED CONCRETE, TO PREVENT DISPLACEMENT OF REINFORCING AND ENSURE SPECIFIED CONCRETE COVER
- 9. PROVIDE MINIMUM CONCRETE COVER FOR REINFORCING STEEL AS FOLLOWS:

C.I.P. PILES PILECAPS FOOTINGS AND PIERS GRADE BEAMS (SIDES) GRADE BEAMS (BOTTOM) SLAB-ON-GRADE (TOP) SLAB-ON-GRADE (BOTTOM)	75mm 75mm 75mm 38mm 50mm 50mm
,	

CONCRETE:

- 1. CONCRETE MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH CSA A23.1-09 (R2014). SEE BELOW FOR MIX REQUIREMENTS.
- 2. ADMIXTURES SHALL NOT BE USED UNLESS SPECIFIED HEREIN OR APPROVED BY THE DESIGN ENGINEER. CALCIUM CHLORIDE SHALL NOT BE USED.
- MIX WATER SHALL BE POTABLE.

BLOCKING, ETC.

- 4. DESIGN, FABRICATE AND ERECT FORMWORK/SHORING IN ACCORDANCE WITH CAN/CSA-S269.1-16. ALLOW SUFFICIENT CONCRETE CURING TIME PRIOR TO REMOVAL.
- 5. CONCRETE FINISHING SHALL MEET THE REQUIREMENTS OF CSA A23.1-09 (R2014).
- 6. FORM RELEASE AGENT SHALL BE BIODEGRADABLE, NON-STAINING AND NON-VOLATILE.
- 7. PROVIDE ADEQUATE COLD/HOT WEATHER PROTECTION AS REQUIRED DURING CURING PERIOD.
- 8. PLACE AND SECURE ALL EMBEDDED ANCHORS, WELD PLATES, SLEEVES, BUCKS, DOWELS, INSERTS, WATERSTOPS, ETC., PRIOR TO PLACING CONCRETE. CO-ORDINATE WITH ALL TRADES FOR EMBEDDING OF ALL OTHER, CONDUIT, SERVICES,
- 9. LOCATE AND FABRICATE ALL CONSTRUCTION JOINTS, CONTROL JOINTS AND EXPANSION JOINTS AS DETAILED ON THE DRAWINGS. JOINTS NOT SHOWN SHALL BE APPROVED BY THE DESIGN ENGINEER PRIOR TO THE PLACEMENT OF CONCRETE.
- 10. ALL EXPOSED CORNERS TO HAVE 25mm CHAMFER FILLET UNLESS NOTED.
- 11. SAWCUTS TO BE 3mm WIDE X 25mm DEEP AT A SPACING OF 6100mm MAXIMUM, AS NOTED ON DRAWINGS, WITHIN 24 HOURS OF POUR. SAW CUTS TO BE FILLED WITH SIKA SELF-LEVELLING OR APPROVED EQUAL. INSTALL AS PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 12. CAST-IN-PLACE ANCHOR BOLTS SHALL MEET REQUIREMENTS OF ASTM F1554-GRADE 36.
- 13. EXPANSION ANCHORS SHALL BE HILTI KWIK-BOLTS OR APPROVED EQUAL, UNLESS NOTED. INSTALL AS PER MANUFACTURER'S INSTRUCTIONS.
- 14. ADHESIVE ANCHORS SHALL BE HAS RODS W/ HILTI HIT-HY 200 ADHESIVE OR APPROVED EQUAL, UNLESS NOTED. INSTALL AS PER MANUFACTURER'S INSTRUCTIONS.
- 15. GROUT REINFORCING DOWELS WITH EPOXY GROUT HILTI HIT-HY 200, OR APPROVED EQUAL. GROUT BASE PLATES WITH NON-SHRINK GROUT SIKA M-BED STANDARD, OR APPROVED EQUAL. PLACE AND CURE ALL GROUT WITHIN TEMPERATURE RANGE RECOMMENDED BY MANUFACTURER.
- 16. BONDING AGENTS SHALL BE USED TO ADHERE NEW CONCRETE TO EXISTING CONCRETE OR STEEL. ACCEPTABLE PRODUCT: SIKADUR 32 HI-MOD OR APPROVED EQUAL.
- 17. THE CONCRETE SUPPLIER SHALL BE CERTIFIED TO MEET THE REQUIREMENTS OF CSA A23.1-09 (R2014).
- 18. THE CONCRETE SUPPLIER SHALL SUBMIT CONCRETE MIX DATA SUBMISSION FORMS FOR EACH TYPE OF CONCRETE SPECIFIED FOR REVIEW PRIOR TO BATCHING ANY CONCRETE.
- 19. CONCRETE STRENGTH TESTS SHALL BE ARRANGED BY THE CONTRACTOR. PROVIDE ONE SET OF TEST CYLINDERS IN ACCORDANCE WITH CSA A23.1-14 FOR EVERY 50 CUBIC METERS OF CONCRETE PLACED AND A MINIMUM OF ONE SET PER STRUCTURAL COMPONENT.

CONCRETE MIX DESIGNS:

CONCRETE MIX DESIGN SHALL BE PROPORTIONED TO MEET THE FOLLOWING PERFORMANCE REQUIREMENTS:

S-2

C-2

32 MPa

30 MPa

32 MPa

C.I.P. PILES, PILE CAPS, FOOTINGS:

EXPOSURE CLASS

AIR CONTENT CATEGORY	1
GRADE BEAMS:	
EXPOSURE CLASS MIN. 28 DAY COMP. STRENGTH MIN. 56 DAY COMP. STRENGTH	S-2 30 MPa 32 MPa
AIR CONTENT CATEGORY	1

MIN. 28 DAY COMP. STRENGTH

MIN. 56 DAY COMP. STRENGTH

EXTERIOR SI ARS (STRUCTURAL

ERIOR SLABS (ST	RUCTURAL):	
	RE CLASS AY COMP. STRENGTH	C-1 35 MPa
AIR CON	TENT CATEGORY	1

EXTERIOR SLABS (NON-STRUCTURAL):

EXPOSURE CLASS

MIN. 28 DAY COMP. STRENGTH	
AIR CONTENT CATEGORY	

SCREW PILES:

1. LOCATIONS OF ALL UNDERGROUND PIPING LINES AND UTILITIES WHICH MAY INTERFERE WITH PILES SHOULD BE VERIFIED PRIOR TO DRILLING. OBTAIN ALL NECESSARY PERMITS PRIOR TO PILE INSTALLATION. SHOULD ANY INTERFERENCE OCCUR. THE CONTRACTOR SHALL NOTIFY OWNER BEFORE DRILLING COMMENCES OR CONTINUES.

NOTES:

- 2. ALL SCREW PILES SHALL BE CCMC CERTIFIED, WITH EVIDENCE OF CERTIFICATION AVAILABLE UPON REQUEST. CONTRACTOR TO PROVIDE CANADIAN-GENERATED MILL CERTIFICATES FOR ALL HELICAL PILES.
- 3. PRIOR TO INSTALLATION, THE CONTRACTOR SHALL SUBMIT A DESIGN REPORT FROM THE SCREW PILE MANUFACTURER STATING THE FOLLOWING INFORMATION:
- a. THE SPECIFIC LOCATION OF THE PROJECT.
- b. THE SOIL PROPERTIES USED IN THE DESIGN OF THE PILE CAPACITIES.
- c. THE DESIGN METHOD BY WHICH THE PILE CAPACITIES WERE DETERMINED. d. LIMIT STATES RESISTANCE CAPACITIES FOR THE PILES
- FOR SERVICEABILITY LIMIT STATES (SLS) AND ULTIMATE LIMIT STATES (ULS) FOR COMPRESSION, UPLIFT AND LATERAL MODES.
- e. CRITERIA BY WHICH PROPER INSTALLATION SHALL BE DETERMINED.
- f. SEAL OF ENGINEER LICENSED TO PRACTICE IN THE PROVINCE OF MANITOBA. g. CORROSION PROTECTION REQUIREMENTS (SACRIFICIAL
- LAYER, SACRIFICIAL ANODE, GALVANIZING, ETC.) TO ENSURE THE PILES ACHIEVE A DESIGN LIFE OF 75 YEARS, OR AS DIRECTED BY THE OWNER.
- 4. PRIOR TO INSTALLATION, THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS SEALED BY AN ENGINEER LICENSED TO PRACTICE IN THE PROVINCE OF MANITOBA THAT INDICATE THE FOLLOWING:
- a. THE LOCATION OF THE PROJECT.
- GENERAL ARRANGEMENT OF PILES.
- DIMENSIONAL DEFINITION OF THE SCREW PILES. MATERIAL AND FINISHES OF THE SCREW PILES.
- e. THE SLS AND ULS LOAD RESISTANCES FOR COMPRESSION, UPLIFT AND LATERAL MODES.
- CORROSION PROTECTION REQUIREMENTS (SACRIFICIAL LAYER, SACRIFICIAL ANODE, GALVANIZING, ETC) TO ENSURE THE PILES ACHIEVE A DESIGN LIFE OF 75 YEARS, OR AS DIRECTED BY THE OWNER.
- CONNECTION DETAILS. DIAMETER AND THICKNESS OF PIPE AND HELIX.
- PILE DEPTH.
- NUMBER AND SPACING OF HELIXES. CAP BRACKET DETAILS.
- 5. POST INSTALLATION, THE CONTRACTOR SHALL SUBMIT A CONFIRMATION REPORT, SEALED BY AN ENGINEER LICENSED TO PRACTICE IN THE PROVINCE OF MANITOBA, CONFIRMING THE PILE INSTALLATION UPON COMPLETION, SPECIFICALLY NOTING THAT THE ASSUMED DESIGN SOIL CONDITIONS WERE MET AND THE PROPER INSTALLATION CRITERIA AND FACTORED MAX PILE LOADS NOTED IN THE DRAWING WERE ATTAINED.
- REPORT TO ALSO INCLUDE: PILE TYPE. PILE INSTALLATION DEPTH.
- PILE INSTALLATION TORQUE. LOAD CAPACITY ACHIEVED
- INSTALLATION LOGS
- LAYOUT PLANS (IF DEVIATIONS ON SITE OCCURRED) - FINAL PILE SHOP DRAWINGS (IF DEVIATIONS ON SITE
- 6. ALL ELEVATIONS SHOWN ARE LOCAL AND SHALL BE CONFIRMED BY THE CONTRACTOR.
- 7. ALL PILES SHALL BE INSTALLED TO A MINIMUM DEPTH OF 4267 UNLESS NOTED IN THE GEOTECH REPORT AND TO A TORQUE VALUE NECESSARY TO ACHIEVE REQUIRED CAPACITY.
- 8. THE CONTRACTOR SHALL SUPPLY THE OWNER WITH THE INSTALLATION TORQUE OF EACH PILE. THE TORQUE VALUE SHALL BE AVERAGED OVER 600mm INTERVALS DURING INSTALLATION OF EACH PILE WITHIN 1800mm OF THE FINAL PILE INSTALLATION DEPTH.
- 9. THE CONTRACTOR SHALL NOTIFY OWNER IMMEDIATELY OF ANY PILE NOT IN CONFORMANCE WITH THE DRAWINGS AND THESE SPECIFICATIONS.
- 10. ALL PIPE SPLICES SHALL BE FULL STRENGTH COMPLETE PENETRATION GROOVE WELDS OR THE COMBINATION OF A COLLAR AND CONTINUOUS FILLET WELD ON EACH END OF THE COLLAR TO ENSURE CONTINUITY OF PIPE.
- 11. WELDING PROCEDURE AND WELDER QUALIFICATION SHALL CONFORM TO CSA W59 AND CSA W47.1. WELDING ELECTRODES SHALL BE E48018 CLASSIFICATION CONFORMING TO CSA W48.1.
- 12. POSITION OF PILES SHALL BE CONSIDERED SATISFACTORY PROVIDING THE FOLLOWING CONDITIONS ARE MET: - PILE TOPS ARE LOCATED WITHIN 25MM OF THE POSITION
- SPECIFIED ON THE DRAWINGS. DIMENSIONS FROM CENTRELINE OF EQUIPMENT GOVERN. PILES ARE WITHIN 2% INCLINATION FROM THE VERTICAL
- OR SPECIFIED INCLINATION. THE PILES, AS PLACED, ARE NOT STRUCTURALLY DAMAGED.
- 12. CHANGES OR REPAIRS OF STRUCTURAL DAMAGE DUE TO IMPROPER PLACEMENT OF PILES SHALL BE MADE AS DIRECTED BY OWNER AT THE CONTRACTOR'S EXPENSE.
- 13. PILE DRILLING RECORDS FOR ALL PILES SHALL BE PROVIDED TO OWNER.
- 14. PRE-DRILL HOLES THROUGH FROST IF REQUIRED.
- 15. REFER TO GEOTECHNICAL REPORT FOR SCREW PILE DESIGN, AS REQUIRED BY SCREW PILE DESIGNER.

ENGINEERS GEOSCIENTISTS || FOR TENDER ONLY Certificate of Authorization KGS Group

NOT TO BE USED FOR CONSTRUCTION

24 / 02 / 09 ISSUED FOR TENDER REV YY/MM/DD DESCRIPTION SECTION LETTER OR DETAIL PROFESSIONAL'S SEAL DRAWING WHERE SECTION OR DETAIL IS DRAWN, DRAWING WHERE SECTION OR

SCATLIFF + MILLER + MURRAY

visionary urban design + landscapes

DETAIL IS INDICATED

SAME DRAWING.

CONSULTANT FILE NAME

CITY DRAWING NUMBER

B

CLIENT

SECTION OR DETAIL SHOWN ON

AIR CANADA PARK REDEVELOPMENT CITY OF WINNIPEG



SHEET

OF

AIR CANADA WINDOW PARK REDEVELOPMENT

STRUCTURAL NOTES, ABBREVIATIONS, SYMBOL LEGEND & DRAWING LIST

DRAWN DATE - Y / M / D MRB 23/08/31 N/A MEL CHECKED APPROVED | PROJECT No. DRAWING No. S0.0 23-0109-004

No. 245

BID OPPORTUNITY No. 78-2024