



City of Humboldt
February 12, 2024 - Special Council Meeting - 05:30 PM

- 1 Call To Order**
- 2 Adopt Agenda**
 - 2.1 Conflict of Interest
- 3 Public Hearing - Discretionary Use Application**
 - 3.1 Suspend Council Meeting
 - 3.2 Public Hearing - Discretionary Use - Fertilizer Blending & Storage Facility - 10564 8th Ave
 - 📎 Report - Discretionary Use - Fertilizer Blending & Storage Facility - 10564 8th Ave
 - 3.3 Resume Meeting
- 4 New Business**
 - 4.1 Recommendation - Community Development Coordinator - Discretionary Use Application - Fertilizer Blending & Storage Facility - 10564 8th Ave
 - 📎 Report - Discretionary Use Application - Fertilizer Blending & Storage Facility - 10564 8th Ave
- 5 Adjourn**



CITY OF HUMBOLDT REPORT

TITLE: Public Hearing – Discretionary Use – Fertilizer Blending and Storage Facility – 10564 8th Ave

PREPARED BY: Donna Simpson, Acting City Clerk

REVIEWED BY: Joe Day, City Manager

PREPARED FOR: City Council

DATE: February 12th, 2024

RECOMMENDATION:

That this report be accepted for information and filed.

BACKGROUND

The City of Humboldt has received a discretionary use application from The Humboldt Co-operative Association to operate a **Fertilizer Blending and Storage Facility** at 10564 8th Ave; legally described as Block X Plan 101861197.

CURRENT SITUATION

The facility has been classified as a Heavy Industrial Use which is considered a discretionary use in a C3 Zoning District within the City’s Zoning Bylaw 04/2016. In accordance with Section 24 (1)(c) of the Planning and Development Act, 2007, an approving authority may follow its public notice policy respecting any matters relating to an application for discretionary use pursuant to Section 55.

COMMUNICATION AND ENGAGEMENT

The Notice was posted at City Hall, the City’s web site, and social media platforms for ten clear days prior to the Special Council meeting on February 12th, 2024 at which Council will initially consider the matter. The landowners within 75 meters of the application were notified of the public hearing. Those wishing to submit their comments on this matter must have made their submission to the City Clerk by noon on Thursday, February 8th, 2024.

FINANCIAL IMPLICATION

There is no anticipated financial impact of the recommended action.



CONCLUSION

The City Clerk did not receive any written submission or requests to address Council in regard to this discretionary use application.



CITY OF HUMBOLDT REPORT

TITLE: Discretionary Use Report – Fertilizer Blending and Storage Facility – 10564 8th Ave.

PREPARED BY: Tanner Zimmerman, Community Development Coordinator

REVIEWED BY: Joe Day, City Manager

PREPARED FOR: Special Council Meeting

DATE: February 12, 2024

RECOMMENDATION

That a discretionary use is approved for a fertilizer blending and storage facility located at 10564 8th Ave, legally described as Block X, Plan 101861197.

BACKGROUND

The City of Humboldt has received a discretionary use application from The Humboldt Co-Operative Association to operate a fertilizer blending and storage facility. The property currently houses the Co-Op Agro facility along with a cardlock facility and a storage facility that received a building permit in 2023.

S.3.10.3 of the Zoning Bylaw requires that a Discretionary Use be reviewed using the following evaluation criteria:

- i) Conformance with the Official Community Plan and applicable sections of the Zoning Bylaw;
- ii) Serviceability by community infrastructure including roadways, water & sewer services, etc.;
- iii) The potential effect of noise, odour, dust, lighting, glare, vibrations, emissions, hazardous substances, etc. to the health, safety, convenience or general welfare of persons residing or working within the vicinity or injurious effects to property, or potential development in the vicinity of the project;
- iv) Landscaping and screening, and, wherever applicable, the preservation existing vegetation;
- v) Potential traffic generation by the use, and the ability for existing roadways to accommodate for the use, as well as the adequate provision of parking accommodations;

- vi) Presence of activities located in the area and on the site, and effects to the surrounding urban environment.
- vii) Pedestrian safety and convenience both within the site, and in terms of the relationship to the road network in and around the adjoining area;
- viii) All operations shall comply with all regulations of Saskatchewan Environment and Saskatchewan Labour which govern their operation and development; and
- ix) Traffic entrances and exits to or from major roadways and truck routes.

CURRENT SITUATION

Fertilizer blending operations are not specifically named and listed within any of the “use categories” in the City’s zoning Bylaw. In other words, The City’s Zoning Bylaw does not identify fertilizer blending plants as specifically permitted, prohibited or discretionary within any area of the City. As such, administration has deemed fertilizer blending to fall within the definition of Heavy Industrial Use under the general description of heavy industrial uses that include: **the processing of raw or finished materials**. The property is currently Zoned C3 (Commercial/Industrial Mixed Use District) which identifies Heavy Industrial Uses as discretionary.

It is in administration’s opinion that the lot, and the uses surrounding it, would not be negatively affected by the proposed use.

OPTIONS

- Approve the recommendation as presented.
- Refer the matter back to administration for further review.

ATTACHMENTS

- A. Map of property showing all properties within 75m.
- B. Site and Construction Plans included with Building Permit Application.

COMMUNICATION AND ENGAGEMENT

As is required in Planning and Development Act, 2007, Public Notice was given ten full days prior to the Special Council Meeting. All owners of property within 75m of 10564 8th Ave were sent letters. Additionally, Public Notice documents were posted at City Hall and on the City’s website.

FINANCIAL IMPLICATION

There is no anticipated financial implications.



CONCLUSION

The proposed discretionary use does not fit any proper definition in the Zoning Bylaw, 2016. As such it was deemed appropriate to have council approve or deny the operation of a fertilizer blending and storage facility. 10564 8th Ave is located on a large C3 lot with similar operations surrounding it. It is administration's opinion that the proposed use will not negatively affect the community. In fact, the increased commercial activity will likely be a net benefit.

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10465

8th Ave

Crawley Rd

Bruce St

10568

10566

10564

10562

640

620

Bruce St

10562A

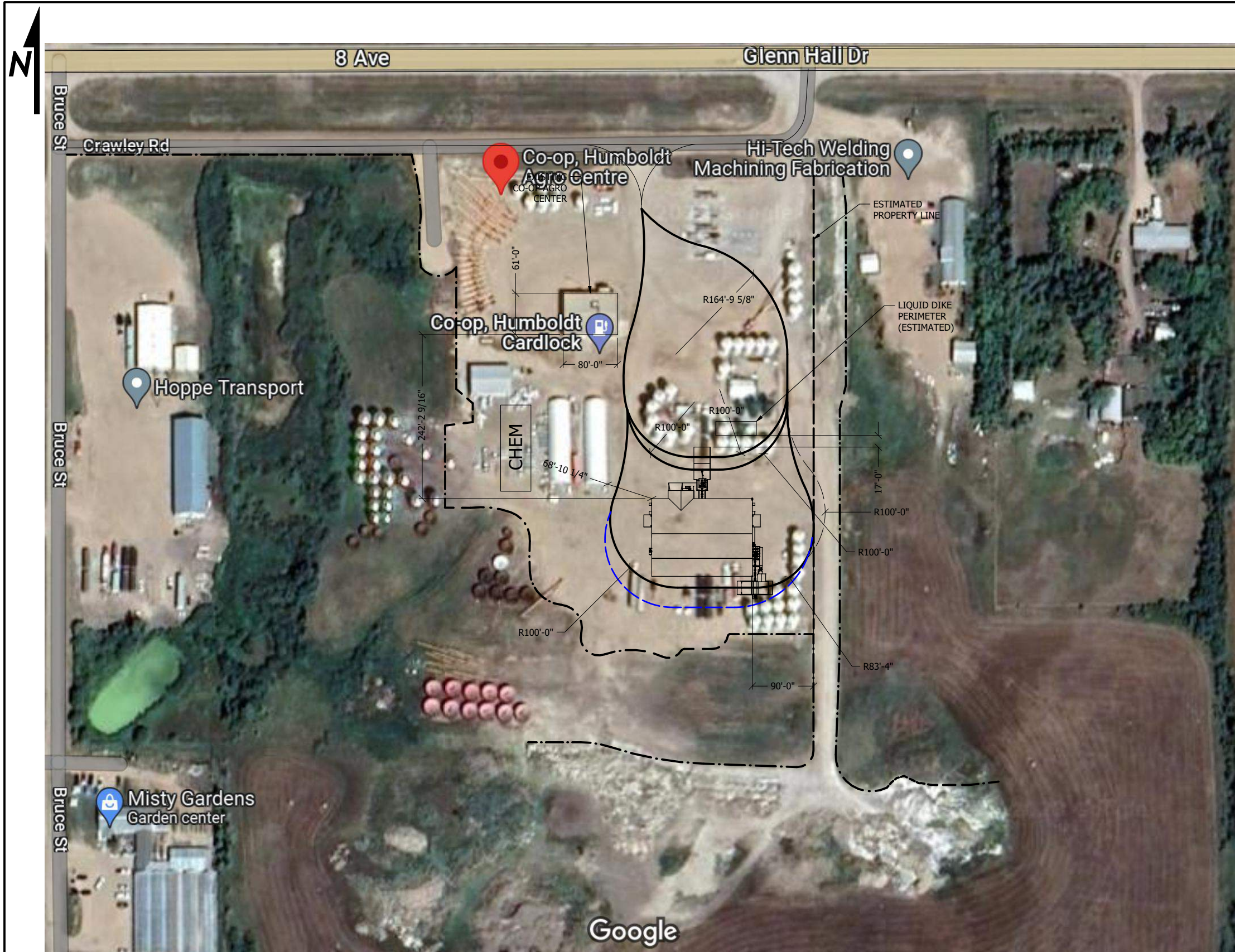


SCALE: 1:400
DATE: 2024/01/29

Attachment A

75m Setback
10564 8th Ave





NOTES:

- (1) ROADWAY TURN RADIUS' MINIMUM 100ft IN MOST CASES
- (2) POTENTIAL TO INCLUDE BYPASS LANES ON NORTH SIDE OF OUTLOAD AND SOUTH SIDE OF INLOAD
- (3) ROADWAY WIDTH SET AT 18ft
- (4) BUILDING FOOTPRINT (EXCL. INLOAD & OUTLOAD): 113'-0" x 148'-0"

Attachment B

LEGEND		GFS Projects Grain • Fertilizer • Seed		PROJECT: FP2534 - HUMBOLDT CO-OP - HUMBOLDT SK - 6,000MT DWV	
—	ROADWAY (PROPOSED)	WFO NUMBER		SUBJECT: FERTILIZER BLENDING & STORAGE FACILITY	
- - -	BYPASS LANES (PROPOSED)	FILE NUMBER	FP2534	TITLE: SITE PLAN - LAYOUT	
		DRAWN BY	D.U.	FP2534-SITEPLAN-Rev0	
		CHECKED BY		SHEET 1 OF 1	
		WEIGHT		REV	△
		CLIENT	HUMBOLDT CO-OP		
		LOCATION	HUMBOLDT, SASKATCHEWAN		

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-DO NOT SCALE DRAWINGS
-CONCRETE SLAB ELEVATIONS, SUB-FLOOR ELEVATIONS, TOP OF FOOTING ELEVATIONS, AND DRIVEWAY SLOPE PERCENTAGES ARE SUGGESTED ONLY. CONTRACTOR/CLIENT TO VERIFY AND CROSS REFERENCE WITH GRADING PLANS

-THE CONTRACTOR/CLIENT IS RESPONSIBLE TO ENSURE ADEQUATE FILL AND FROST PROTECTION IN ACCORDANCE WITH APPLICABLE BUILDING CODE.

-THE CONTRACTOR/CLIENT ACKNOWLEDGES THAT BY USING THESE DRAWINGS, THE TERMS ABOVE SHALL APPLY TO ALL CONSTRUCTION DRAWINGS MADE BY JAYCO BUILDERS INC.

-THE CONTRACTOR/CLIENT TO REVIEW THESE DRAWINGS AND REPORT ANY ERRORS OR OMISSIONS TO THIS OFFICE PRIOR TO COMMENCEMENT OF WORK.

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MECHANICAL SPECIFICATIONS

GENERAL REQUIREMENTS

1. PROVIDE A COMPLETE AND FULLY OPERATIONAL MECHANICAL VENTILATION SYSTEM.
2. ANY DISCREPANCIES AND OMISSIONS DISCOVERED SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY AND PRIOR TO TENDER CLOSING FOR RECTIFICATION BY ADDENDUM.
3. EACH CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR CARRYING OUT HIS WORK IN ACCORDANCE WITH THE DRAWINGS AND FOR ANY DAMAGE CAUSED BY IMPROPER EXECUTION OF HIS WORK. CARRY ALL NECESSARY INSURANCE COVERAGE.

WORK PRODUCTS AND QUALITY

1. EQUIPMENT AND MATERIALS TO BE NEW AND FREE FROM DEFECTS AND HAVE DESIGN CHARACTERISTICS AS SPECIFIED.
2. ALL WORK AND MATERIALS SHALL BE INSTALLED AS SHOWN AND IN ACCORDANCE WITH THE NATIONAL BUILDING CODE AND ALL LOCAL CODES AND BUILDING REGULATIONS.
3. ALL EQUIPMENT SHALL BE CSA APPROVED.

FLASHING AND COUNTER FLASHING

1. ALL MECHANICAL WORK PASSING THROUGH THE WALL SHALL BE FLASHED BY THE MECHANICAL CONTRACTORS. COUNTERFLASHING TO BE DONE BY THE ROOFING CONTRACTOR.

APPROVALS

1. REQUEST FOR APPROVAL OF EQUIPMENT NOT SPECIFIED ON DRAWINGS SHALL BE MADE TO THE ENGINEER.

ELECTRIC MOTOR AND WIRING

1. SUPPLY ALL MECHANICAL EQUIPMENT COMPLETE WITH ELECTRIC MOTORS AND CONTROL WIRING FOR ALL MECHANICAL EQUIPMENT AS REQUIRED.
2. ELECTRICAL CONTROLS CONNECTED TO MECHANICAL EQUIPMENT SHALL BE SUPPLIED AND INSTALLED BY THE MECHANICAL CONTRACTOR.

IDENTIFICATION

1. THE MECHANICAL CONTRACTOR SHALL SUPPLY AND PERMANENTLY INSTALL LAMACODS TO PROVIDE IDENTIFICATION OF ALL INSTALLED EQUIPMENT (BOILERS, HVAC UNITS, EXHAUST FANS AND THEIR SWITCHES).
2. ALL VALVES AND SWITCHES SHALL BE TAGGED OR LABELED WITH FRAMED DIRECTORY, WALL MOUNTED IN MECHANICAL ROOM.

PLUMBING GENERAL

1. PROVIDE COMPLETE DOMESTIC WATER, DRAINAGE AND VENT PIPING SERVING ALL PLUMBING FIXTURES. CONNECT TO EXISTING WATER AND SEWER LINES SHOWN ON DRAWINGS. INCLUDE COST OF ALL UTILITIES SERVICE CHARGES. ENSURE THAT SEWER SERVICES ARE RUN WITH SUFFICIENT SLOPE FOR DRAINAGE AND ADEQUATE COVER TO AVOID FREEZING. INCLUDE BACKWATER VALVE ON SEWER SERVICES AND NEW DOUBLE CHECK VALVE ASSEMBLY ON WATER SERVICE LINE.
2. CONTRACTOR TO INCLUDE DISINFECTING OF WATER LINES TO SUIT STANDARDS AND REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION. STERILIZE SERVICES 1" OR GREATER WITH CHLORINE AND PROVIDE DETAILED WRITTEN RECORDS. FLUSH SYSTEM AND HAVE BACTERIOLOGICAL TESTS COMPLETED AT A CERTIFIED LABORATORY. INCLUDE IN MECHANICAL TENDER THE EXTRA COST OF HAVING THE TEST VERIFIED BY A PROFESSIONAL ENGINEER.
3. PROVIDE MANUFACTURED SHOCK ABSORBERS OR AIR CHAMBERS TO PREVENT PIPING WATER HAMMER. INSTALL ON ALL HOT AND COLD WATER SUPPLIES TO EACH FIXTURE OR GROUP OF FIXTURES. AIR CHAMBERS SHALL BE MINIMUM 1/4" AND 18" LONG.
4. INSTALL OVERSEED CLAMPS AND 1/2" ARMAFLEX FOAM RUBBER INSULATION, 3" LONG AROUND EACH PLUMBING DRAINAGE STACK AND EACH DOMESTIC WATER PIPE AT EACH SUPPORT POINT THROUGH A WOODEN STRUCTURE.
5. PROVIDE VACUUM BREAKERS ON LINES SERVING EQUIPMENT OR FIXTURES WHERE CONTAMINATION OF DOMESTIC WATER MAY OCCUR.
6. INSTALL BACKFLOW PREVENTER (WATTS 900 SERIES OR APPROVED EQUAL) ON ALL POTABLE WATER LINES WHERE BACKFLOW AND CROSS CONNECTION MAY OCCUR.
7. INSTALL AUTOMATIC TRAP SEAL PRIMERS (ANCON AS-810 WITH INTEGRAL VACUUM BREAKER OR SIMILAR) FOR FLOOR DRAINS AS REQUIRED BY PLUMBING CODE OR AS DIRECTED BY THE PLUMBING INSPECTOR.
8. PROVIDE VALVES AS SHOWN ON THE DRAWINGS OR AS REQUIRED BY THE AUTHORITIES HAVING JURISDICTION. INSTALL ISOLATION VALVES AT WATER METER, HOT WATER TANKS, EACH EXTERIOR HOSE BIB, ALL CONNECTIONS TO EQUIPMENT AND IN ALL BRANCHES, FIXTURES OR GROUP OF FIXTURES.

PPE AND FITTINGS

1. ALL PIPING SHALL BE CSA APPROVED AND MEET THE REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION.
2. DOMESTIC WATER ABOVE GRADE: USE COPPER TUBE, TYPE 1 (OR PEX TUBING EQUIVALENT) FOR UP TO 1" LEAD FREE SOLDER JOINTS. WROUGHT COPPER OR BRASS FITTINGS. PEX FITTING TO BE FULL DIAMETER. CAN BE INSTALLED FROM A SUITABLE MANHOLE TO PLUMBING FIXTURES.
3. DOMESTIC WATER BELOW GRADE: USE COPPER TUBE, SOFT ANNEALED, TYPE 1 IN LONG LENGTHS AND WITH NO BURIED JOINTS (OR EQUIVALENT).
4. WASTE AND VENT PIPING ABOVE GRADE: USE CAST COPPER OR FIRE RATED PVC.
5. WASTE AND VENT PIPING BELOW GRADE: CSA APPROVED PVC.
6. SUPPLY AND INSTALL FLOOR STOPPING AS REQUIRED AROUND ALL PIPING PENETRATING FIRE SEPARATIONS OR AS REQUIRED BY AUTHORITIES.
7. MAKE NECESSARY PROVISIONS FOR EXPANSION AND CONTRACTION OF PIPING AS PER MANUFACTURERS RECOMMENDATIONS.

VALVES

1. VALVES ON HOT, COLD AND RECIRCULATING WATER PIPING SHALL BE AS FOLLOWS (OR EQUIVALENT):
 - a. GATE VALVES - 2" AND SMALLER: RED & WHITE 207A
 - b. GATE VALVES - 2 1/2" AND LARGER: RED & WHITE 421A
 - c. GLOBE VALVES - 2" AND SMALLER: RED AND WHITE 212
 - d. GLOBE VALVES - 2 1/2" AND LARGER: RED & WHITE 400A
 - e. CHECK VALVES - 2" AND SMALLER: RED & WHITE 4257
 - f. CHECK VALVES - 2 1/2" AND LARGER: RED & WHITE 435A
 - g. BALL VALVES - 1/2" THRU 2": RED & WHITE 5044A

VERIFICATION ISOLATION

1. PROVIDE AND INSTALL MECHANICAL EQUIPMENT SO THAT AVERAGE NOISE CRITERIA CURVES, AS OUTLINED IN ASHRAE GUIDE, ARE NOT EXCEEDED.
2. SUBMIT VIBRATION ISOLATION SHOP DRAWINGS SHOWING ISOLATOR LOCATIONS, LOAD ON EACH ISOLATOR AND INERTIA SLAB DIMENSIONS.
3. PROVIDE VIBRATION ISOLATORS FOR MECHANICAL MOTOR DRIVEN EQUIPMENT THROUGHOUT, UNLESS SPECIFICALLY NOTED OTHERWISE.

INSULATION

PLUMBING

1. 1" THICK INSULATION @ 0.035W/m°C @ 38°C ON ALL LINES REQUIRING INSULATION.
2. CW TO HAVE FOL VAPOR PROOF JOINTS.
3. 1/2" FOL FACED INSULATION ON ALL SANITARY STACKS.
4. 1/2" FOL FACED VAPOR PROOF INSULATION WITHIN 1' OF ROOF FOR VENTS.
5. FOR PIPING RUN IN A PLUMBING WALL, WHERE SPACE IS RESTRICTED, A BATT OF R40 INSULATION ON EACH SIDE OF THE PIPELINE SHALL BE AN ACCEPTABLE ALTERNATIVE INSULATING METHOD. NOT PERMISSIBLE FOR HEATING LINE OVER 140°F CW, OR HW PIPES 2" AND UP. HOT AND COLD PIPES IN PLUMBING WALL ARE TO BE A MINIMUM OF 12" APART WITH AN INSULATION SEPARATION.

FIRE PROTECTION

1. FIRE STOP SYSTEM
2. EACH CONTRACTOR TO SUBMIT U.L.C OR CUL APPROVED FIRE STOP SYSTEMS FOR EACH FIRE RATED WALL OR FLOOR PENETRATION CONFORMING TO LOCAL AUTHORITY STANDARDS AND REQUIREMENTS.

GENERAL ELECTRICAL NOTES:

CONTROLS AND EQUIPMENT PROVIDED BY OTHERS:

- PANELBOARDS
- VOICE AND DATA
- THERMOSTATS (INDIVIDUAL FOR ALL EQUIPMENT)

EXIT AND EMERGENCY LIGHTING:

- EXIT SIGNS AT ALL DOORS
- EMERGENCY LIGHTS IN ALL AREAS.

ELECTRICAL SPECIFICATIONS

GENERAL REQUIREMENTS

1. PROVIDE ALL LABOUR, MATERIALS, PRODUCTS, EQUIPMENT, SERVICES AND ALL INCIDENTALS REQUIRED TO COMPLETE, TEST AND COMMISSION ALL ELECTRICAL WORK SHOWN ON THE DRAWINGS AND INDICATED HEREUNDER. DRAWINGS ARE DIAGNOSTIC EXCEPT WHERE SPECIFIC DETAILS ARE GIVEN. OBTAIN ACCURATE DIMENSIONS FROM THE ARCHITECTURAL, STRUCTURAL, OR BY ON-SITE MEASUREMENTS.
2. THE ENTIRE INSTALLATION SHALL BE IN ACCORDANCE WITH THE CURRENT CANADIAN ELECTRIC CODE, CSA STANDARDS, CITY ELECTRICAL INSPECTION AUTHORITY REQUIREMENTS AND WITH THE REQUIREMENTS OF ALL AUTHORITIES HAVING JURISDICTION. SUBMIT THE NECESSARY PLANS TO THE ELECTRICAL INSPECTION DEPARTMENT AND PAY FOR ALL PERMITS AND FEES AS REQUIRED PRIOR TO COMMENCEMENT OF WORK.

WORKMANSHIP AND MATERIAL

1. ALL MATERIALS SHALL BE NEW AND CARRY CSA APPROVAL AND CONFORM WITH EEMAC STANDARDS.
2. ALL WORKMANSHIP SHALL BE OF A HIGH STANDARD THROUGHOUT.

EXECUTION OF THE WORK

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN FROM THE ENGINEER ANY NECESSARY CLARIFICATIONS AND THE SPECIFICATIONS AND DRAWINGS BEFORE PROCEEDING WITH THE WORK.
2. DRAWINGS AND SPECIFICATIONS INDICATE INTENT OF DESIGN ONLY. DRAWINGS ARE TO BE CONSIDERED AS DIAGNOSTIC ONLY AND DO NOT SHOW ALL STRUCTURAL AND CONSTRUCTION DETAILS. OBTAIN ANY INFORMATION INVOLVING ACCURATE MEASUREMENTS OF BUILDING FROM ARCHITECTURAL AND STRUCTURAL DRAWINGS OR AT SITE. MAKE ANY NECESSARY CHANGES OR ADDITIONS TO ACCOMMODATE STRUCTURAL CONDITIONS.
3. CLEAN AND TOUCH-UP SURFACES OF SHOP PAINTED EQUIPMENT SCRATCHED OR MARRED DURING SHIPMENT OR INSTALLATION, TO MATCH ORIGINAL PAINT.
4. ON COMPLETION OF THE WORK, THE CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS CONSISTING OF 1 SET OF PANEL DRAWINGS. THE CONTRACTOR SHALL TRANSFER ALL "AS BUILT" INFORMATION TO THE DRAWINGS.
5. COORDINATE AND COOPERATE WITH ALL OTHER TRADES ON-SITE TO AVOID INTERFERENCE.
6. ON COMPLETION, FURNISH A CERTIFICATE OF FINAL INSPECTION AND ACCEPTANCE BY THE AUTHORITIES HAVING JURISDICTION.
7. UPON COMPLETION OF WORK PERFORM FINAL CLEANING, CLEAN LIGHTING REFLECTORS, LENSES AND OTHER LIGHTING SURFACES THAT HAVE BEEN EXPOSED TO CONSTRUCTION DUST AND DIRT.
8. PROTECT ALL FINISHES AND UNFINISHED WORK OF THIS AND OTHER DIVISIONS FROM DAMAGE DUE TO CARRYING OUT OF ALL WORK.
9. KEEP EQUIPMENT DRY AND CLEAN AT ALL TIMES.
10. COVER OPENINGS IN EQUIPMENT AND MATERIALS.
11. BE RESPONSIBLE FOR AND MAKE GOOD ANY DAMAGE CAUSED DIRECTLY OR INDIRECTLY TO WALLS, FLOORS, CEILING, WOODWORK, BRICKWORK, FINISHES, ETC. WHERE CABLES OR CONDUITS PASS THROUGH FLOORS AND FIRE RATED WALLS, PACK SPACE BETWEEN WIRING AND SLEEVE FULL WITH MINERAL WOOL FIBRE STOPPING OR FIRE RATED SILICONE CAULKING, AND SEAL WITH APPROVED CAULKING COMPOUND.

SEALING AND FIRE PROTECTION

1. WHERE CABLES OR CONDUITS PASS THROUGH FIRE RATED ASSEMBLIES SUCH AS FLOORS, WALLS, CEILING ETC. AND THE FIRE RATINGS OF THESE ASSEMBLIES SHALL BE MAINTAINED. USE APPROVED AND UL LISTED FIRESTOP MATERIALS AND METHODS. PROVIDE MANUFACTURER LITERATURE SHOWING THAT THE PROPOSED FIRESTOP SYSTEM IS A UL LISTED SYSTEM FOR THE APPLICATION.
2. WHERE CABLES OR CONDUITS PASS THROUGH SMOKE RATED ASSEMBLIES SUCH AS FLOORS, WALLS, CEILING ETC., THE SMOKE RATING OF THESE ASSEMBLIES SHALL BE MAINTAINED. ENSURE THAT THESE OPENINGS ARE SEALED WITH AN APPROVED SYSTEM TO PREVENT THE TRANSMISSION OF SMOKE. CONFIRM THE SYSTEM TO BE USED ON-SITE WITH THE ENGINEER.

AS-BUILT DRAWINGS

1. THE ELECTRICAL TRADE WILL BE PROVIDED ONE SET OF CLEAN PRINTS. THESE PRINTS ARE TO BE USED TO RECORD WORK AS ACTUALLY INSTALLED AND EXISTING AS-BUILT INFORMATION. ELECTRICAL TRADE SHALL ACCURATELY RECORD ON THIS SET OF PLANS (RECORD DRAWINGS), DAY BY DAY, ALL OUTLETS, CONDUIT, LUMINAIRES, EQUIPMENT, ETC. AS ACTUALLY INSTALLED ON THE JOB. ANY CHANGES TO THE WORK SHALL BE SIMILARLY RECORDED.
2. RECORD DRAWINGS SHALL BE CLEARLY MARKED IN RED INCLUDING ALL CHANGES TO THE ORIGINAL DRAWINGS.
3. RECORD DRAWINGS SHALL INCLUDE ALL COMMUNICATIONS, SECURITY AND OTHER ELECTRICAL SYSTEMS, RACEWAYS, WIRING AND SCHEMATICS AS REQUIRED FACILITATING TROUBLE SHOOTING.
4. THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER A SET OF AS-BUILT DRAWINGS.

TESTING

1. MEASURE PHASE CURRENTS OF PANEL BOARDS WITH NORMAL LOADS (LIGHTING) OPERATING. ADJUST BRANCH CIRCUIT CONNECTIONS AS REQUIRED TO OBTAIN BALANCE OF CURRENT BETWEEN PHASES NOT EXCEEDING 10% MAXIMUM AND RECORD CHANGES. MEASURE PHASE VOLTAGES AT LOADS AND ADJUST TRANSFORMER TAPS TO WITHIN 2% OF RATED VOLTAGE OF EQUIPMENT.
2. PERFORM ALL NECESSARY TESTS TO CONFIRM THE CORRECT OPERATION OF ALL SYSTEMS.

SUPPORTING DEVICES

1. INSTALL TO MAINTAIN HEAD ROOM, NEAT MECHANICAL APPEARANCE AND TO SUPPORT EQUIPMENT LOADS REQUIRED. WHERE INSERTS ARE REQUIRED IN CONCRETE, BRICKWORK OR PLASTER, WOOD OR PLASTIC INSERTS MAY BE USED IN DRILL HOLES. WOODEN PLUGS NOT PERMITTED.
2. ALL ELECTRICAL DISTRIBUTION INCLUDING CABLE TRAY AND CONDUIT, WHICH IS MOUNTED ABOVE THE SUSPENDED CEILING, SHALL BE SUPPORTED DIRECTLY AND INDEPENDENTLY FROM THE SUPPORT STRUCTURE ABOVE.
3. THE USE OF ANY PART OF THE CEILING OR CEILING SUSPENSION SYSTEM AS A SUPPORT OR FOUNDATION FOR THE SUSPENSION OF CABLE TRAY, CONDUIT OR FLEXIBLE CONDUIT (WHERE PERMITTED) IS FORBIDDEN.
4. SUPPORT HANGERS AND TRAYS INSTALLED BY THE ELECTRICAL TRADE SHALL NOT BE USED BY OTHER TRADES TO SUPPORT NON-ELECTRICAL SERVICES OR DEVICES.

CONDUIT

1. CONDUIT IN GROUND TO BE RIGID PVC, UNLESS NOTED OTHERWISE.
2. CONDUIT SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO BUILDING LINES. CONDUITS SHALL BE CONCEALED IN FRAMED WALLS WHEREVER POSSIBLE. IN EACH CONDUIT LEFT EMPTY, INSTALL A CONTINUOUS 180 KG TEST NYLON CORD, LABEL AND CAP SUCH CONDUITS AT EACH END.
3. PROVIDE JUNCTION AND OUTLET BOXES WHERE NECESSARY FOR PROPER PULLING OR SPLICING OF WIRES.
4. PROVIDE OUTLET BOX FOR LIGHTING FIXTURES, WIRING DEVICES, COMMUNICATION OUTLETS AND AS INDICATED. BOXES TO BE ELECTRO GALVANIZED STEEL.
5. PROVIDE GANG BOXES WHERE WIRING DEVICES ARE GROUPED. SUPPORT BOXES INDEPENDENTLY OF CONNECTION CONDUITS. DO NOT INSTALL OUTLET BOXES BACK-TO-BACK IN WALLS. SUCH OUTLETS MUST BE STAGGERED AND SEALED AGAINST NOISE TRANSMISSION.

WIRE AND CABLE

1. BUILDING AND CONTROL WIRES SHALL BE 300 VOLT, COPPER, NMJ-90 OR NMW-90 CABLE.
2. WHENEVER WIRE SIZES ARE NOT INDICATED ON THE DRAWINGS IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE CONDUCTORS ARE SIZED IN ACCORDANCE WITH THE CEC, INCLUDING ALL DE-RATING FACTORS FOR CONDUIT FILL AND VOLTAGE DROP DUE TO DISTANCE.

PANELBOARDS

1. PANEL BOARDS SHALL INCLUDE ALL CIRCUIT BREAKERS WITH POLES AND TRIP RATINGS AS LISTED IN THE SCHEDULES.
2. CIRCUIT BREAKERS SHALL BE EITHER PUSH-IN-PLACE TYPE OR BOLT-IN-PLACE TYPE MOLDED CASE AUTOMATIC AIR CIRCUIT BREAKERS WITH BOTH THERMAL AND MAGNETIC TRIP AND TRIP FREE ACTION. EACH BREAKER SHALL BE IDENTIFIED AS TO FUNCTION AND THE LOAD CONTROLLED.
3. PANEL BOARDS SHALL BE OF CORROSION RESISTANT FINISH HAVING TRIM FOR FLUSH OR SURFACE MOUNTING AS INDICATED IN THE SCHEDULES. PANEL BOARD TRIM SHALL HAVE A HINGED LOCKING DOOR WITH FLUSH TYPE CATCH AND LOCK OVER CIRCUIT BREAKER.
4. PROVIDE TYPE WRITTEN DIRECTORIES FOR ALL PANEL BOARDS.

WIRING DEVICES AND COVER-PLATES

1. CONFIRM COLOUR OF DEVICES AND COVER PLATES WITH THE OWNER.
2. MOUNTING HEIGHTS FROM FINISHED FLOOR TO CENTRE OF THE DEVICE, UNLESS INDICATED OTHERWISE, SHALL BE:
 - A. OUTLET ABOVE COUNTER OR BACKSPLASH 150MM ABOVE COUNTER
 - B. LIGHT SWITCHES 1200MM
 - C. DUPLEX RECEPTACLE 450MM
 - D. THERMOSTATS 1550MM
 - E. TELEPHONE OUTLETS 150MM ABOVE COUNTER
 - F. TELEPHONE OUTLETS 450MM
3. USE MULTIGANG PLATES WHERE TWO OR MORE OUTLETS ARE LOCATED TOGETHER. PROVIDE BLANK COVER PLATES FOR BOXES WITHOUT WIRING DEVICES.
4. WHERE LIGHTING DIMMERS ARE SHOWN, USE SEPARATE SINGLE GANG BOXES ONLY.

LUMINAIRES

1. LUMINAIRES, AS SPECIFIED, SHALL BE COMPLETE WITH THE APPROPRIATE LAMPS.

EMERGENCY BATTERY PACK AND EXIT LIGHTING

1. STANDARD PROFILE, EXTRUDED ALUMINUM HOUSING, LED ILLUMINATED, GREEN LETTERING. EXIT SIGN SHALL BE FOR 120VAC, 12VDC OPERATION, AND SINGLE OR DOUBLE FACED AS REQUIRED.
2. EXIT SIGNS SHALL BE AS NOTED ON EXIT SIGN SCHEDULE ON DRAWINGS.
3. INSTALL EXIT SIGNS WHERE INDICATED ON THE DRAWINGS, ENSURING THAT THE EXIT SIGN IS VISIBLE FROM THE MAXIMUM VIEWING AREA. EXIT SIGNS TO BE BREAKER CONTROLLED FROM PANEL WITH DEDICATED BREAKER, SUITABLY IDENTIFIED.
4. PROVIDE AN EMERGENCY DC VOLTAGE BATTERY PACK AND REMOTE HEAD LIGHTING SYSTEM FOR AUTOMATIC OPERATION ON UTILITY POWER FAILURE. PROVIDE LIGHTING UNITS AS INDICATED ON THE DRAWINGS. UNITS TO BE 12 VOLT, DC OPERATING VOLTAGE WITH 120 VOLT 60HZ SUPPLY CONNECTION. UNIT TO BE COMPLETE WITH THE FOLLOWING:
 - SEALED PURE LEAD BATTERY
 - FULLY AUTOMATIC CHARGER
 - AUTOMATIC CHANGE OVER RELAY
 - BUILT-IN TEST SWITCH
 - AC ON/POFF LIGHT
 - AUTOMATIC BATTERY EXERCISER
5. UNIT TO BE CSA APPROVED, UNIT TO BE DESIGNED FOR 12 VOLT OPERATION WITH A MINIMUM OPERATING TIME OF 1/2 HOUR WHEN LOADED BY ALL LIGHTING HEADS AND EXIT SIGN EMERGENCY LAMP. UNITS TO BE SURFACE WALL MOUNTED. UNITS TO BE AS NOTED ON EMERGENCY LIGHTING SCHEDULE ON DRAWINGS. CABINET TO BE SIZED ACCORDING TO LOAD AND TO INCLUDE 25% SPARE CAPACITY. APPROVED MANUFACTURERS SHALL BE DUAL LITE, EMERGI-LITE, AND READY LITE.
6. PROVIDE REMOTE LIGHTING HEADS FOR SURFACE WALL MOUNTING OR PENDANT HANG FROM CEILING AS INDICATED ON THE DRAWINGS. REMOTE HEADS TO BE AS NOTED IN EMERGENCY LIGHTING SCHEDULE ON DRAWINGS. LOCATION & QUANTITY OF HEADS TO BE AS INDICATED ON DRAWINGS. APPROVED MANUFACTURERS SHALL BE DUAL LITE, EMERGI-LITE, AND READY LITE.
7. THE BATTERY OPERATED EMERGENCY LIGHTING UNITS TO BE SURFACE WALL MOUNTED, AS INDICATED, CONNECTED TO INDEPENDENT POWER CIRCUIT. BATTERY PACK TO BE HARD WIRED TO OUTLET BOX. DO NOT USE RECEPTACLE/CORD SET CONNECTION.
8. ALL EMERGENCY, BATTERY POWERED LIGHTING EQUIPMENT SHALL BE CSA CERTIFIED AND SIZED ADEQUATELY TO HANDLE THE LIGHTING LOAD REQUIRED BY CODE.

GROUNDING

1. SUPPLY AND INSTALL A COMPLETE GROUNDING SYSTEM. THE GROUNDING/EARTHING SYSTEM MUST MEET THE FOLLOWING CRITERIA:
2. ALL GROUNDING CONDUCTORS SHALL BE COPPER.
3. CABLE ASSEMBLIES SHALL BE UL LISTED AND CSA CERTIFIED.

UTILITY POWER SERVICE

1. PROVIDE ALL NECESSARY CONDUIT WIRE, ETC. AS INDICATED ON THE DRAWINGS FOR A COMPLETE SERVICE CONNECTION.

MECHANICAL WIRING

1. CONTRACTOR SHALL CONFIRM ALL MOTOR LOADS WITH SUPPLIER AND PROVIDE ELECTRICAL PROTECTION ACCORDING TO THE ACTUAL REQUIREMENT IN ACCORDANCE WITH THE CEC.
2. INCLUDE MOTOR STARTERS, DISCONNECTS, CONDUITS, WIRE FITTINGS, INTERLOCKS, OUTLET BOXES, JUNCTION BOXES, AND ALL ASSOCIATED EQUIPMENT REQUIRED TO PROVIDE POWER WIRING FOR MECHANICAL EQUIPMENT.
3. ALL EQUIPMENT MOUNTED ON THE EXTERIOR OF THE BUILDING SHALL BE WEATHERPROOF.
4. INSTALL MOTOR FEEDERS, STARTER DISCONNECTS AND ASSOCIATED EQUIPMENT AND MAKE CONNECTIONS TO ALL MOTORS.
5. INSTALL WIRING TO STARTERS FURNISHED WITH EQUIPMENT AND FROM REMOTE STARTERS AND MOTORS AND EQUIPMENT.
6. INSTALL BRANCH CIRCUIT WIRES FOR CONTROL CIRCUITS.
7. WIRE AND CONNECT THERMOSTATS FOR FORCED FLOWS AND UNIT HEATERS.
8. WIRE AND CONNECT ELECTRICAL INTERLOCKS FOR STARTERS.

MISCELLANEOUS APPARATUS AND APPLIANCES

1. MAKE ALL REQUIRED ELECTRICAL CONNECTIONS TO DEVICES, EQUIPMENT, APPLIANCES, ETC. FURNISHED BY OTHER TRADES OR OWNER SUPPLIED, AS INDICATED OR IMPLIED ON THE DRAWINGS.
2. VERIFY ELECTRICAL SUPPLY CHARACTERISTICS OF ALL EQUIPMENT.
3. PROVIDE ALL REQUIRED ELECTRICAL DEVICES, COMPONENTS, CONDUITS, FITTINGS, DISCONNECTS AND MISCELLANEOUS EQUIPMENT TO MAKE ALL CONNECTIONS TO EQUIPMENT.
4. WHERE EQUIPMENT HAS LINE CORD AND PLUG, ENSURE CORD IS COMPATIBLE WITH RECEPTACLE. PROVIDE CORD SETS WHERE REQUIRED.
5. THE CONTRACTOR IS TO CONFIRM THE EXACT METHOD FOR FINAL CONNECTION OF ALL OWNERS EQUIPMENT. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING THE REQUIRED CONNECTION DEVICES FOR EACH PIECE OF EQUIPMENT.
6. PROVIDE AND INSTALL MISCELLANEOUS ELECTRICAL COMPONENTS WHERE INDICATED.

HEAT TRACING

1. HEAT TRACING TO BE RAYCHEM XL TRACE PIPE FREEZE PROTECTION OR EQUAL.
2. END TERMINATION KITS ARE TO BE INSTALLED AS REQUIRED.

CLIMATIC LOAD CONDITIONS

GROUND SNOW LOAD = 1.9 kPa
RAIN LOAD = 0.1 kPa
1/50 YR. WIND LOAD = 0.40 kPa

GRADE ELEVATION:

- 1. FINISHED GRADE AROUND FOUNDATION TO BE A MINIMUM OF 3" BELOW THE INTERIOR (MAIN) FLOOR SLAB ELEVATION (TYP) AND SLOPE A MINIMUM OF 2% AWAY FROM CONCRETE FOUNDATION FACE FOR A MINIMUM OF 10'.

AS BUILT DRAWINGS:

- 1. TRADES WILL BE PROVIDED ONE SET OF CLEAN PRINTS. THESE PRINTS ARE TO BE USED TO RECORD WORK AS ACTUALLY INSTALLED AND EXISTING AS-BUILT INFORMATION. TRADES SHALL ACCURATELY RECORD ON THIS SET OF PLANS (RECORD DRAWINGS). ALL EQUIPMENT, ITEMS, COMPONENTS ETC. AS ACTUALLY INSTALLED ON THE JOB. ANY CHANGES TO THE WORK SHALL BE SIMILARLY RECORDED.
2. RECORD DRAWINGS SHALL BE CLEARLY MARKED IN RED INCLUDING ALL CHANGES TO THE ORIGINAL DRAWINGS.
3. THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER A SET OF AS-BUILT DRAWINGS.

REQUIRED INSPECTIONS:

- 1. LISTED BELOW ARE THE APPROXIMATE TIMES DURING WHICH THE ENGINEER SHOULD INSPECT EACH PROJECT.
a. A FOUNDATION INSPECTION SHOULD BE COMPLETED WHEN A FOUNDATION COMPONENTS FORMS AND REINFORCEMENT HAS BEEN PLACED AND PRIOR TO ANY CONCRETE POUR.
b. A FRAMING INSPECTION SHOULD BE COMPLETED WHEN ASSEMBLIES ARE BUILT YET STILL EXPOSED ENOUGH TO VISIBLY CONFIRM ALL REQUIRED CONNECTIONS, FRAMING SPECIFICATIONS, AND COMPLIANCE WITH THE STRUCTURAL DRAWINGS, PRIOR TO INSTALLATION OF INSULATION.
c. A FINAL INSPECTION SHOULD BE COMPLETED WHEN THE CONTRACTOR HAS COMPLETED HIS QUALITY CONTROL INSPECTION AND REVIEW. ASSEMBLIES ARE COMPLETE ALONG WITH ALL ELECTRICAL, MECHANICAL AND PLUMBING COMPONENTS.
2. IF THE ABOVE INSPECTION TIMES CANNOT BE PROVIDED IN A SINGLE INSPECTION CONFIRMATION OF ADDITIONAL INSPECTION TIMES IS REQUIRED TO BE PROVIDED TO THE ENGINEER BY THE CONTRACTOR.
3. CONTRACTOR IS RESPONSIBLE TO NOTIFY ENGINEER A MINIMUM OF 72 HOURS PRIOR TO DESIRED INSPECTION DATE.
4. CONTRACTOR IS RESPONSIBLE TO PROVIDE ENGINEER WITH AN UPDATED PROJECT SCHEDULE, COMPLETE WITH ALL CURRENT CHANGES AND UPDATES (AS APPLICABLE).

CONCRETE NOTES:

GENERAL:

- 1. CONCRETE MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH CSA-A23.1-09.
2. THE DESIGN IS BASED ON THE SOIL HAVING AN ALLOWABLE BEARING CAPACITY OF 3132 PSF (150KPA)
3. REFER TO SPECIALTY ENGINEERS DRAWINGS FOR PILE DESIGN (BY OTHERS)
4. REFER TO GEOTECHNICAL ENGINEERS REPORT CREATED IN REFERENCE TO APPLICABLE SITE.
5. ALL CONCRETE, REINFORCEMENTS, ACCESSORIES AND PROCEDURES SHALL MEET OR EXCEED THE APPLICABLE CSA STANDARDS FOR THE PRODUCT.
6. THE GENERAL CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEER AT LEAST 48 HOURS (72 HOURS FOR OUT OF TOWN PROJECTS) PRIOR TO ALL CONCRETE POURS.
7. PLACE CONCRETE AS A CONTINUOUS OPERATION STOPPING ONLY AT CONSTRUCTION JOINTS. CONSTRUCTION JOINTS SHALL BE ADEQUATELY DOWELED AND KEYS. IF NOT PROVIDED AS PART OF THIS DRAWING SET, DETAILS AND LOCATIONS OF CONSTRUCTION JOINTS SHALL BE PROVIDED BY THE CONTRACTOR AND REVIEWED BY THE STRUCTURAL ENGINEER.
8. CONSTRUCTION JOINTS SHALL BE MADE AND LOCATED SO AS NOT TO SIGNIFICANTLY IMPAIR THE STRENGTH OF THE STRUCTURE. THE LOCATION OF CONSTRUCTION JOINTS SHALL BE APPROVED BY THE STRUCTURAL CONSULTANT. SALS AND BEAM CONSTRUCTION JOINT DETAILS SHALL BE APPROVED BY THE STRUCTURAL ENGINEER.
9. CURING PROCEDURES AND PROTECTION OF CONCRETE SHALL CONFORM TO THE CSA STANDARD REFERENCE CSA A23.1-09, CLAUSE 7.4.1.5.X, TABLE 14, & 7.4.2.X.
10. MAXIMUM AGGREGATE SIZE FOR ALL CONCRETE SHALL BE 3/4".
11. SLUMP SHALL BE 3" +/- 3/4".
12. IF ANY UNSOUND STRUCTURAL CONDITIONS ARE OBSERVED DURING CONSTRUCTION, REPORT THEM IMMEDIATELY TO THE STRUCTURAL ENGINEER.
13. FINIS ON CONCRETE SURFACES SHALL BE REMOVED. HONEYCOMB OR OTHERWISE DEFECTED CONCRETE SHALL BE REMOVED SUFFICIENTLY TO EXPOSE SOUND CONCRETE AND SHALL BE REPAIRED AS DIRECTED BY THE STRUCTURAL ENGINEER.
14. WET DOWELING OF ANCHORING RODS AND REBAR IS NOT PERMITTED AND SHOULD BE SECURED IN PLACE PRIOR TO CONCRETE BEING POURED.

REINFORCEMENT:

- 1. REINFORCING STEEL SHALL BE DEFORMED BARS FREE FROM RUST, MUD, OIL OR OTHER BOND REDUCING COATINGS AND SHALL CONFORM TO CSA G30.18-09 MINIMUM YIELD STRENGTH OF 400 MPA.
2. ALL REINFORCEMENT STEEL SHALL BE CHAIRED AND SECURED IN PLACE WITH STANDARD TIES, TO STANDARD INDUSTRY PRACTICE.
3. LAP ALL BARS 24 BAR DIAMETERS U.N.O. (MINIMUM LAP DISTANCE OF 12").
4. MINIMUM CONCRETE COVER FOR REINFORCING SHALL BE 2".
5. AT CORNERS PROVIDE BARS TO WRAP AROUND CORNER MINIMUM 24" LAP DISTANCE.
6. REINFORCING STEEL MUST BE REVIEWED BY THE STRUCTURAL ENGINEER PRIOR TO PLACING CONCRETE.
7. WELDED WIRE FABRIC TO CONFORM TO CSA G30.5-M1982 (R1998) / ASTM A185/A 185M-07

THICKENED FOOTINGS:

- 1. REFER TO STRUCTURAL DRAWINGS FOR DIMENSION, PLACEMENT AND REINFORCING DETAILS. CONCRETE TO BE 32 MPA (28 DAY COMPRESSIVE STRENGTH) TYPE HS WITH AIR ENTRAINMENT OF 6% +/- 1%.
3. ALL FOOTINGS ARE TO BE PLACED ON UNDISTURBED NATIVE MATERIAL.

FOUNDATION WALL / GRADE BEAMS:

- 1. REFER TO STRUCTURAL DRAWINGS FOR DIMENSIONS, PLACEMENT AND REINFORCING DETAILS. CONCRETE TO BE 32 MPA (28 DAY COMPRESSIVE STRENGTH) TYPE HS WITH AIR ENTRAINMENT OF 6% +/- 1%.
2. ALL FOOTINGS ARE TO BE PLACED ON UNDISTURBED NATIVE MATERIAL.

PAD FOOTINGS:

- 1. REFER TO STRUCTURAL DRAWINGS FOR DIMENSION, PLACEMENT AND REINFORCING DETAILS. CONCRETE TO BE 32 MPA (28 DAY COMPRESSIVE STRENGTH) TYPE HS WITH AIR ENTRAINMENT OF 6% +/- 1%.
3. ALL FOOTINGS ARE TO BE PLACED ON UNDISTURBED NATIVE MATERIAL.

INTERIOR FLOOR SLAB:

- 1. REMOVE ALL TOP SOIL, ORGANIC AND FROZEN MATERIAL.
2. BACKFILL AS REQUIRED BY THE SITE CONDITIONS WITH APPROVED SOIL. FINAL 12" U.N.O. SHALL BE 1" GRADED CRUSHED GRAVEL COMPACTED TO MIN 98% SPDD.
3. BACK FILL SHALL BE COMPACTED TO A UNIFORM 98% SPDD (MIN) IN LIFTS NOT EXCEEDING 6".
4. CONCRETE SHALL BE PLACED, SCREEDE AND FLOATED TO ENSURE A COMPACTED, FREE SLAB. CONCRETE TO BE 32 MPA (28 DAY COMPRESSIVE STRENGTH) TYPE HS WITH AIR ENTRAINMENT OF 6% +/- 1%.
6. REINFORCE AS INDICATED ON THE STRUCTURAL DRAWINGS.
7. INTEGRATE 1 1/4" DEEP SWA CUT CONTROL JOINTS. PLACEMENT AS SHOWN ON STRUCTURAL DRAWINGS.

PILES:

- REFER TO MANUFACTURER'S SPECIFICATIONS. LOAD CAPACITY MUST MATCH OR EXCEED CALCULATIONS.
1. ALL PILES ARE TO BE PLACED IN UNDISTURBED NATIVE MATERIAL.

STRUCTURAL STEEL (MILD STEEL):

- 1. STRUCTURAL SIZE W SHAPES TO ASTM A572 GRADE 50. OTHER STRUCTURAL SIZE SHAPES, BAR SIZE SHAPES AND PLATES TO CSA G40.21M, 300 MPA WELDABLE GRADE.
2. WELDING MATERIAL TO CSA W48.
3. ANCHOR BOLTS TO ASTM A307.
4. PAINT FOR PRIMER AS PER ZINC-RICH PRIMER AND TOUCH UP PAINTING - INORGANIC: CAN/CGSB-1-GP171, ORGANIC, READY MIXED: CAN/CGSB-1.181
5. PAINT FOR PRIMER AS PER CGSB 1-GP-40D, OR CISC/CPMA STANDARD 1-73A.
6. DESIGN AND DETAIL CONNECTIONS TO CSA S16 AND AS PER STRUCTURAL DRAWINGS. CONNECTION SHALL BE DESIGNED FOR THE LOADS INDICATED ON THE STRUCTURAL DRAWINGS.
7. WELDING TO CSA W59.1
8. FABRICATION AND ERECTION TO CSA S16 AND CISC CODE OF STANDARD PRACTICE.
9. FABRICATOR TO BE CERTIFIED TO CSA W47.1 DIVISION 1 OR 2.
10. PAINT STEEL SURFACE WITH ONE COAT OF PRIMER.
11. MINIMUM WELDS FOR CONNECTIONS SHALL BE 3/16" FILLET WELDS U.N.O.
12. NO BURNING OF HOLES SHALL BE ALLOWED ANYWHERE IN THE STRUCTURAL STEEL.
13. ALL BOLTS TO BE TORQUED TO TURN OF NUT METHOD.
14. AFTER ERECTION PRIME ALL WELDS, ABRASIONS, BOLTED CONNECTIONS AND ALL OTHER SURFACES NOT SHOP PRIMED, EXCEPT SURFACES TO BE IN CONTACT WITH CONCRETE.
15. MATERIAL TO BE HOT DIPPED GALVANIZED SHALL COMPLY WITH CSA STANDARD G164

WOOD FRAMING:

- 1. JOISTS, HEADERS, LINTELS, WALL PLATES, STUDS, COLUMNS AND ALL OTHER STRUCTURAL WOOD FRAMING MEMBERS TO BE SPF #2 & BETTER.
2. PLYWOOD TO CSA O121-08 (R2013) DOUGLAS FIR PLYWOOD, CSA O151-09 (R2014) - CANADIAN SODTWOOD PLYWOOD, AND CSA 0325-16 CONSTRUCTION SHEATHING (OSB).
3. FLOOR SHEATHING TO BE 1/2" T&G SPRUCE NAILED TO JOOD JOISTS WITH 8D RING NAILS @ 6" O/C MAX. ALONG SHEET PERIMETER AND 12" O/C MAX. ALONG INTERMEDIATE FRAMING. EDGES TO BE SUPPORTED BY 1 1/2" X 1 1/2" BLOCKING OR T&G EDGE JOINT.
4. ROOF SHEATHING TO BE 7/16" OSB SHEATHING GRADE O-2 NAILED TO WOOD ROOF FRAMING @ 24" O/C. FASTEN WITH 8D NAILS OR STAPLES @ 6" O/C MAX. ALONG SHEET PERIMETER AND 12" O/C MAX ALONG INTERMEDIATE FRAMING. PROVIDE H-CLIPS AT UNSUPPORTED EDGES. ALLOW 1/8" SPACING AT PANEL ENDS AND EDGES UNLESS OTHERWISE RECOMMENDED BY SHEATHING MANUFACTURER.
5. EXCEPT AS SHOWN OTHERWISE ON THE STRUCTURAL DRAWINGS, WOOD FRAMING TO BE IN ACCORDANCE WITH NBC 2015, PART 9, SECTION 23, WOOD FRAME CONSTRUCTION.
6. NAILS, SPIKES, STAPLES TO CONFORM TO CSA B111.
7. PRESSURE TREATED LUMBER TO CONFORM TO CSA O80.15.
8. PRESSURE TREATED LUMBER WHICH IS CUT SHALL BE DOUBLE BRUSHED COATED WITH NON-LEACHING PRESERVATIVE.
9. ALL LUMBER IS TO HAVE GRADE STAMP CLEARLY VISIBLE FOR AN AGENCY CERTIFIED BY THE CANADIAN LUMBER STANDARDS ADMINISTRATIVE BOARD.
10. LAMINATIONS OF BUILT UP WOOD COLUMNS TO BE NAILED TOGETHER BASED ON THE FOLLOWING NAIL SIZE AND SPACING:
a. 2 PLY MEMBERS UP TO 2X6 - 2 ROWS OF 10D COMMON NAILS @ 9" O/C.
b. 2 PLY 2X8 MEMBERS - 3 ROWS 10D COMMON NAILS @ 9" O/C.
c. 2 PLY 2X10 MEMBERS - 4 ROWS 10D COMMON NAILS @ 9" O/C.
d. 2 PLY ENGINEERED MEMBERS - REFERR TO MANUFACTURER'S NAILING / BOLTING PATTERNS.
FIRST SET OF NAILS TO BE LOCATED 3" FROM THE TOP AND BOTTOM OF THE COLUMN.
BUILT UP COLUMNS GREATER THEN 2 PLIES TO FOLLOW THE ABOVE NAILING PATTERN AND NAILED FROM EACH SIDE.
11. LAMINATIONS OF BUILT UP BEAMS AND HEADERS SHALL BE NAILED TOGETHER BASED ON THE FOLLOWING NAIL SIZE AND SPACING:
a. 2 PLY MEMBERS UP TO 2X6 - 2 ROWS OF 10D COMMON NAILS @ 12" O/C.
b. 2 PLY 2X8 MEMBERS - 3 ROWS 10D COMMON NAILS @ 12" O/C.
c. 2 PLY 2X10 MEMBERS - 4 ROWS 10D COMMON NAILS @ 12" O/C.
d. 2 PLY ENGINEERED MEMBERS - REFERR TO MANUFACTURER'S NAILING / BOLTING PATTERNS.
FIRST SET OF NAILS TO BE LOCATED 3" FROM THE BEGINNING AND END OF THE BUILT-UP BEAM.
BUILT UP BEAMS GREATER THEN 2 PLIES TO FOLLOW THE ABOVE NAILING PATTERN AND NAILED FROM EACH SIDE.

EXTERIOR LOAD BEARING WOOD FRAMED WALLS:

- 1. ALL WALLS TO BE CONSTRUCTED AND ANCHORED AS PER DETAILS.
2. ALL WALLS TO BE SHEATHED WITH MINIMUM 7/16" OSB INSTALLED WITH FACE GRAIN PERPENDICULAR TO WALL STUDS.
3. USE 2 1/2" NAILS @ 4" O/C AT PANEL EDGES AND 12" O/C ALONG INTERMEDIATE FRAMING MEMBERS.
4. USE SPF #2 & BETTER GRADE STUDS @ 16" O/C. STAGGER DOUBLE TOP PLATE PLATE SPLICES A MINIMUM OF 48". USE A SINGLE BOTTOM PLATE.
5. ANCHOR WALL WITH PL400 OR EQUIV. CONSTRUCTION ADHESIVE AS WELL AS WITH MECHANICAL FASTENERS (AS NOTED) AND SHEATHING OVERLAP MINIMUM 12" ONTO FLOOR SYSTEM.

BEAMS AND TRUSSES:

- 1. CERTIFIED TRUSS MANUFACTURER TO PROVIDE DESIGN INFORMATION AND LAYOUT DRAWINGS AS REQUIRED.

STAIR NOTES:

- 1. ALL STAIR AND LANDING SURFACES SHALL HAVE A FINISH THAT IS SLIP RESISTANT.
2. ALL EXTERIOR STAIRS SHALL BE DESIGNED TO BE FREE OF ICE AND SNOW ACCUMULATION.
3. NO FLIGHT OF STAIRS SHALL HAVE A VERTICAL RISE OF MORE THAN 145" BETWEEN LANDINGS.

PREFABRICATED WOOD JOISTS:

- 1. PREFABRICATED WOOD JOISTS TO BE DESIGNED IN ACCORDANCE WITH CSA STANDARD 086.



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-DO NOT SCALE DRAWINGS

-CONCRETE SLAB ELEVATIONS, SUB-FLOOR ELEVATIONS, TOP OF FOOTING ELEVATIONS, AND DRIVEWAY SLOPE PERCENTAGES ARE SUGGESTED ONLY. CONTRACTOR/CLIENT TO VERIFY AND CROSS REFERENCE WITH GRADING PLANS

-THE CONTRACTOR/CLIENT IS RESPONSIBLE TO ENSURE ADEQUATE FILL AND FROST PROTECTION IN ACCORDANCE WITH APPLICABLE BUILDING CODE

-THE CONTRACTOR/CLIENT ACKNOWLEDGES THAT BY USING THESE DRAWINGS, THE TERMS ABOVE SHALL APPLY TO ALL CONSTRUCTION DRAWINGS MADE BY JAYCO BUILDERS INC.



Table with 3 columns: No., Description, Date. Row 1: 1, ISSUED FOR PERMIT, 2024-01-03

CO-OP, HUMBOLDT, SK

FERTILIZER STORAGE

STRUCTURAL NOTES

Table with 2 columns: Field, Value. Fields: Project number (COM740), Date (2023-07-06), Drawn by (Author), Checked by (Checker)

S001

Scale

ISSUED FOR PERMIT 2024-01-03

