GENERAL NOTES:

- SITE VERIFY ALL DIMENSIONS, ELEVATIONS, DETAILS, QUANTITIES AND CONDITIONS PRIOR TO START OF ANY DEMOLITION, CONSTRUCTION OR PREFABRICATION OF ANY COMPONENT.
- THE CONTRACTOR SHALL ENSURE THAT ALL BURIED SERVICES ARE LOCATED AND MARKED PRIOR TO ANY EXCAVATION.
- ALL COMPONENTS SHALL BE THE PRODUCTS OF A SINGLE MANUFACTURER UNLESS SPECIFIED OTHERWISE.
- SHIP, STORE, HANDLE, ERECT, INSTALL, ETC. ALL MATERIALS, COMPONENTS, FIXTURES, EQUIPMENT, ETC. AS PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
- ALL DEMOLITION, FABRICATION, CONSTRUCTION, ETC. SHALL BE CARRIED OUT IN ACCORDANCE WITH ALL PERTINENT BUILDING CODES, AND LOCAL BYLAWS AND ORDINANCES.
- 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.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY THE CONTRACT ADMINISTRATOR 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.
- ALL WORK TO BE DONE IN ACCORDANCE WITH THE PVC MEMBRANE MANUFACTURER INSTALLATION INSTRUCTIONS AND TO THE BEST PRACTICE OF THE POOL REHABILITATION INDUSTRY.

CONCRETE SURFACE PREPARATION:

- CONCRETE TO BE CLEAN AND FREE OF DUST. DEBRIS. GREASE. OIL. DIRT, UNSOUND CONCRETE AND ANY OTHER SUBSTANCE THAT WOULD ADVERSELY EFFECT THE BONDING OF THE CONCRETE PATCH.
- PATCH ALL DEPRESSIONS, SPALLED AREAS AND PITTED AREAS WITH CONCRETE PATCH COMPOUND. FOR AREAS WHERE MORE EXTENSIVE REPAIR IS REQUIRED, SEE CONCRETE SURFACE REPAIR NOTES.
- CONCRETE PATCH COMPOUND TO BE A ONE-COMPONENT. POLYMERMODIFIED, CEMENTITIOUS REPAIR MORTAR DESIGNED FOR HORIZONTAL AND VERTICAL APPLICATIONS. ACCEPTABLE PRODUCT MEADOW-PATCH T1 AS MANUFACTURED BY WR MEADOWS OR APPROVED EQUAL IN ACCORDANCE WITH B7. SURFACE PREPARE THE CONCRETE AS PER MANUFACTURER'S RECOMMENDATIONS.
- SPRAY ALL POOL CONCRETE WITH AN ANTI-FUNGAL AGENT. ANTI-FUNGAL AGENT TO BE A SODIUM HYPOCHLORITE AND WATER SOLUTION OR A POLYQUAT ALGAECIDE AND WATER SOLUTION.

CONCRETE SURFACE REPAIR:

- REMOVE EXISTING FINISH AS REQUIRED BY SCRAPING. HIGH-PRESSURE WASH OR APPROVED ALTERNATE METHOD.
- 2. SQUARE CUT PERIMETER OF LARGE REPAIR AREAS TO A MINIMUM 25mm DEPTH TO AVOID FEATHER EDGES.
- 3. CHIP UNSOUND DETERIORATED CONCRETE TO A MINIMUM 25mm DEPTH.
- COMPLETELY EXPOSE ANY REINFORCING STEEL IF ENCOUNTERED DURING CONCRETE DEMOLITION TO ENSURE COMPLETE ENCAPSULATION WITH REPAIR MORTAR.
- REMOVE CORROSION FROM REINFORCING STEEL USING MECHANICAL ABRASION TECHNIQUES (WIRE BRUSH, BLASTING).
- LAP OR REPLACE EXISTING REINFORCING THAT HAS EXPERIENCED SIGNIFICANT SECTION LOSS.
- CLEAN THE ROUGHENED CONCRETE SURFACE OF DIRT, LOOSE CHIPS, DUST, OIL, ETC. BY PRESSURE WASH AND COMPRESSED AIR (CONTAIN ALL DEBRIS).
- FORM VERTICAL SURFACES AS REQUIRED AND CHAMFER TO MATCH
- DAMPEN SUBSTRATE WITH WATER AND THEN PRIME WITH BRUSH COAT OF STRUCTURAL REPAIR MORTAR.
- CAST REPAIR AREA WITH STRUCTURAL REPAIR MORTAR AS PER MANUFACTURER'S SPECIFICATIONS (SMALL AREAS MAY BE APPLIED BY HAND TROWEL).
- MOIST CURE REPAIR AREAS EXPOSED TO THE AIR FOR 3 DAYS AT A MINIMUM TEMPERATURE OF 10 DEGREES CELSIUS OR UNTIL MINIMUM OF 40% OF THE COMPRESSIVE STRENGTH OF THE CONCRETE IS ATTAINED.

POOL FELT SLIP SHEET:

- ADHERE 150 MIL. FELT TO CONCRETE POOL SURFACES TO PROVIDE A SLIP SHEET BETWEEN THE EXISTING CONCRETE POOL AND THE NEW PVC POOL LINER. ACCEPTABLE PRODUCT: GEOTEXTILE 10 oz NON-WOVEN 4570 x 91440 OR APPROVED EQUAL IN ACCORDANCE WITH
- ENSURE THE FELT IS FULLY ADHERED TO THE EXISTING CONCRETE. FELT IS TO BE FREE OF ANY WRINKLES OR INCONSISTENCIES WHICH WOULD AFFECT THE QUALITY OF THE PVC LINER INSTALLATION.
- 3. FELT ADHESIVE ACCEPTABLE PRODUCT: HENRY 630 PEACH PRO OR APPROVED EQUAL IN ACCORDANCE WITH B7.

REINFORCED PVC POOL LINER MEMBRANE:

- POOL LINER MEMBRANE TO BE 60 MIL., SMOOTH MEMBRANE WITH A POLYESTER SCRIM REINFORCEMENT BETWEEN TWO PVC SKINS. ACCEPTABLE PRODUCT: REINFORCED INFINITY POOL MEMBRANE AS MANUFACTURED BY CANADA GENERAL TOWER LTD. OR APPROVED EQUAL IN ACCORDANCE WITH B7.
- 2. SLIP RESISTANT MEMBRANE. TO BE 60 MIL. EMBOSED MEMBRANE WITH A POLYESTER SCRIM REINFORCEMENT BETWEEN TWO PVC SKINS. ACCEPTABLE PRODUCT: REINFORCED INFINITY POOL MEMBRANE AS MANUFACTURED BY CANADA GENERAL TOWER LTD. OR APPROVED EQUAL IN ACCORDANCE WITH B7.
- 3. CONTRACT ADMINISTRATOR TO CHOOSE COLOUR FROM STANDARD PRODUCT COLOUR OPTIONS.
- 4. SLIP RESISTANT DEMARKATION MEMBRANE. TO BE 60 MIL. EMBOSED MEMBRANE WITH A POLYESTER SCRIM REINFORCEMENT BETWEEN TWO PVC SKINS. ACCEPTABLE PRODUCT: REINFORCED INFINITY POOL MEMBRANE AS MANUFACTURED BY CANADA GENERAL TOWER LTD. OR APPROVED EQUAL IN ACCORDANCE WITH B7. COLOUR TO BE BLACK.

POOL MESH COVER

- THE CONTRACTOR SHALL PROVIDE A NEW STEEL CABLE AND NYLON MESH SYSTEM TO COVER THE POOL DURING THE WINTER SEASON. THE COVER IS INTENDED TO BE INSTALLED AT THE END OF THE POOL SEASON AND REMAIN IN PLACE UNTIL THE POOL REOPENS THE FOLLOWING SEASON. THE POOL MESH COVER SYSTEM MUST BE ABLE TO BE INSTALLED BY TWO PEOPLE WITHOUT THE USE OF ANY SPECIAL EQUIPMENT OR TOOLS.
- CONTRACTOR TO PROVIDE DETAILED SHOP DRAWING OF THE POOL MESH COVER AND ANCHORS SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA TO CONTRACT ADMINISTRATOR FOR REVIEW PRIOR TO FABRICATION.
- POOL MESH COVER TO BE FULLY INSTALLED AND REMOVED ONCE IN THE PRESENCE OF THE CONTRACT ADMINISTRATOR TO DEMONSTRATE PROPER FIT AND OPERATION.
- CONTRACTOR SHALL PROVIDE FULL INSTALLATION AND REMOVAL INSTRUCTIONS AND TRAINING TO THE CONTRACT ADMINISTRATOR.
- CABLE ANCHORS: UNIVERSAL SCREW-TYPE BRASS ANCHOR M3525 AND BRASS ANCHOR FLANGE M3545 OR APPROVED EQUAL IN ACCORDANCE WITH B7. THE CABLE ANCHOR TYPE AND SPACING SHALL BE CONFIRMED BY SUPPLIER AND DETAILED ON THE SHOP DRAWINGS.
- SPRINGS: 200mm STAINLESS STEEL SPRING M3500 C/W VINYL SAFETY COVER M3515 OR APPROVED EQUAL IN ACCORDANCE WITH B7.
- CABLES: MINIMUM 7mm DIAMETER STAINLESS STEEL CABLE WITH STANDARD WIRE ROPE THIMBLE AND 3-STAINLESS STEEL WIRE ROPE CLIPS EACH END OF CABLE.
- SAFETY NET: 50mm SQ. #36 KNOTTED NYLON MESH, DYED BLACK & BONDED; C/W CROSS TIES 8mm BRAIDED ROPE AND PERIMETER ROPE 9.5mm. SAFETY NET TO BE DRAPED OVER CABLE GRID, PERIMETER ROPE TO BE FASTENED TO WIRE ROPE THIMBLES WITH CARABINERS.
- POOL MESH COVER TO BE FULLY INSTALLED AND REMOVED ONCE IN THE PRESENCE OF THE CONTRACT ADMINISTRATOR TO DEMONSTRATE PROPER FIT AND OPERATION.
- CONTRACTOR SHALL PROVIDE FULL INSTALLATION AND REMOVAL INSTRUCTIONS AND TRAINING TO THE CONTRACT ADMINISTRATOR.

CONCRETE:

- CONCRETE MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH CSA A23.1-09 (R2014), SEE BELOW FOR MIX REQUIREMENTS.
- ADMIXTURES SHALL NOT BE USED UNLESS SPECIFIED HEREIN OR APPROVED BY THE CONTRACT ADMINISTRATOR. CALCIUM CHLORIDE SHALL NOT BE USED.
- MIX WATER SHALL BE POTABLE.
- DESIGN, FABRICATE AND ERECT FORMWORK/SHORING IN ACCORDANCE WITH CAN/CSA-S269.3-M92 (R2013). ALLOW SUFFICIENT CONCRETE CURING TIME PRIOR TO REMOVAL.
- CONCRETE FINISHING SHALL MEET THE REQUIREMENTS OF CSA A23.1-09 (R2014).
- FORM RELEASE AGENT SHALL BE BIODEGRADABLE, NON-STAINING AND NON-VOLATILE.
- PROVIDE ADEQUATE COLD/HOT WEATHER PROTECTION AS REQUIRED DURING CURING PERIOD.
- 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, BLOCKING, ETC.
- LOCATE AND FABRICATE ALL CONSTRUCTION JOINTS, CONTROL JOINTS AND EXPANSION JOINTS AS DETAILED ON THE DRAWINGS. JOINTS NOT SHOWN SHALL BE APPROVED BY THE CONTRACT ADMINISTRATOR PRIOR TO THE PLACEMENT OF CONCRETE.
- GROUT REINFORCING DOWELS WITH EPOXY GROUT HILTI HIT-HY200 MAX. OR APPROVED EQUAL IN ACCORDANCE WITH B7. PLACE AND CURE ALL GROUT WITHIN TEMPERATURE RANGE RECOMMENDED BY MANUFACTURER.
- 11. BONDING AGENTS SHALL BE USED TO ADHERE NEW CONCRETE TO EXISTING CONCRETE OR STEEL. ACCEPTABLE PRODUCT: SIKADUR 32 HI-MOD (EPOXY) OR APPROVED EQUAL IN ACCORDANCE WITH B7.
- 12. THE CONCRETE SUPPLIER SHALL BE CERTIFIED TO MEET THE REQUIREMENTS OF CSA A23.1-09 (R2014).
- 13. THE CONCRETE SUPPLIER SHALL SUBMIT CONCRETE MIX DATA SUBMISSION FORMS FOR EACH TYPE OF CONCRETE SPECIFIED FOR REVIEW PRIOR TO BATCHING ANY CONCRETE.

CONCRETE MIX DESIGNS:

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

GRADE BEAMS, FOUNDATION WALLS & PIERS:

Eλ	(POSURE CLASS	S-2
M	N. 28 DAY COMP. STRENGTH	30 MPa
CE	EMENT TYPE	HS
M	AX. W/C RATIO	0.45
M	AX. AGGREGATE SIZE	20mm
EN	NTRAINED AIR CONTENT	4%-7%

EXTERIOR SLABS (NON-STRUCTURAL):

EXPOSURE CLASS	C-2
MIN. 28 DAY COMP. STRENGTH	32 MPa
CEMENT TYPE	GU
MAX. W/C RATIO	0.45
MAX. AGGREGATE SIZE	20mm
ENTRAINED AIR CONTENT	5%-8%

REINFORCING STEEL

- REINFORCING STEEL TO BE NEW DEFORMED BILLET STEEL BARS CONFORMING TO CSA G30.18-09 (R2014). GRADE TO BE 400 MPa.
- REINFORCING STEEL SHALL BE CLEAN, FREE OF RUST, DIRT, LOOSE SCALE, OIL, GREASE OR ANY OTHER MATERIAL WHICH WOULD REDUCE
- 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 (R2014), CSA A23.3-14 AND ACI SP-66 (2004) UNLESS NOTED. LAP STEEL 36 BAR
- BEND ALL HORIZONTAL REINFORCING 305mm AROUND CORNERS OR PROVIDE ADDITIONAL 610mm X 610mm ANGLE BARS.
- 5. TIE, SUPPORT AND SPACE ALL REINFORCING STEEL WITH PROPER APPROVED DEVICES DESIGNED FOR USE IN REINFORCED CONCRETE
- PROVIDE MINIMUM CONCRETE COVER FOR REINFORCING STEEL AS

FOUNDATION WALLS (EXTERIOR FACE) 38mm

NOTES:

THESE DRAWINGS SHALL NOT BE SCALED.

THE CONTRACTOR SHALL VISIT THE SITE AND SATISFY ONESELF ALL DIMENSIONS, DATUM AND DETAILED INFORMATION SHOWN ARE CORRECT.

THE CONTRACTOR IS TO REVIEW AND COORDINATE ALL ARCHITECTURAL, MECHANICAL, ELECTRICAL AND STRUCTURAL DRAWINGS FOR ADDITIONAL OPENINGS THROUGH FLOORS WALLS, AND CEILINGS FOR DUCT, PIPE & ELECTRICAL RISERS AND ALL OPENINGS NOT SHOWN ON DRAWINGS

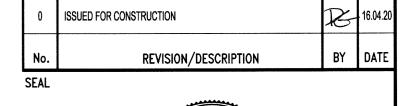
ALL OPENINGS THROUGH FIRE ASSEMBLIES ARE TO BE FIRE STOPPED AND SEALED WITH ULC APPROVED FIRE STOPPING TO MAINTAIN THE INTEGRITY OF THE FIRE SEPARATION, AND PROVIDE A SMOKE-TIGHT BARRIER.

ALL PRODUCTS AND MATERIALS TO BE USED AND INSTALLED SHALL CONFORM WITH MANUFACTURER'S SPECIFICATIONS & APPLICABLE CODES.

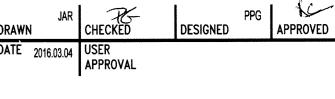
THE CONTRACTOR SHALL BE RESPONSIBLE TO PATCH AND MAKE GOOD ALL EXISTING CONSTRUCTION AFFECTED BY THE REMOVAL OF ALL ITEMS FORMING THE PART OF THE

WHERE NEW FLOORING AND BASE IS TO BE INSTALLED IN EXISTING AREAS (REFER TO FLOOR PLAN AND ROOM SCHEDULE) THE EXISTING FLOORING SURFACE AND BASE MUST BE REMOVED, UNLESS OTHERWISE NOTED, ALL FLOOR SURFACES SHALL BE PREPARED I ACCORDANCE TO MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION OF NEW

WHERE PAINTING OF EXISTING WALLS IS INDICATED ON THE ROOM SCHEDULE, THESE WALLS MUST BE CLEANED OF ANY EXISTING WALL COVERING, PATCHED & PREPARED TO ACCEPT NEW MATERIAL, UNLESS OTHERWISE NOTED.









THE CITY OF WINNIPEG PLANNING, PROPERTY AND DEVELOPMENT DEPARTMENT MUNICIPAL ACCOMMODATIONS DIVISION 3-65 GARRY STREET, R3C 4K4

PROJECT PROVENCHER OUTDOOR POOL

POOL REHABILITATION

590 RUE LANGEVIN SHEET TITLE

STRUCTURAL **NOTES**

AS SHOWN

SCALE

PROJECT No:

ZAPEGN GROUP Certificate of Authorization KGS Group CONSULTING ENGINEERS

- BOND WITH THE CONCRETE.
- DIAMETERS (MINIMUM) UNLESS NOTED.
- TO PREVENT DISPLACEMENT OF REINFORCING AND ENSURE SPECIFIED CONCRETE COVER.
- FOLLOWS:

SLAB-ON-GRADE (TOP) 50mm

15-0107-018