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### **TENDER NOTICE- Nisichawayasihk Cree Nation Housing Lot #153 New School Road**

The Nisichawayasihk Cree Nation ("NCN") is seeking bids for the construction of a 3-bedroom duplex unit on New School Road at Lot #153 (the "Project"). The Project includes excavation, material procurement, and satisfying all other elements in the below scope. The expected date for this project to be completed is April 15, 2027 for move in (including decks), and June 15, 2027 for any finishing landscaping. The Project contains, among other things, the following requirements:

- Coordinate appropriate excavation of site
- Coordinate appropriate water/sewer hook ups and culvert installs
- Construct 3 bedroom duplex, 1,305SqFt (x2) \$2,610sqft as per engineered drawings
- Coordinate all trades for required work to National/Provincial Building Code
- Coordinate all Hydro and utilities hook ups
- Acquire and supply all materials
- Preparing site, storing materials, and cleaning site
- Ensure safety of workers, materials, and building
- Any other items that were identified in the original tender posting
- Provide evidence of compliance with workers' compensation legislation;
- Obtain, at its own cost, all necessary permits.

Contract stipulations, including responsibilities and liabilities of the parties, payment schedule and scope of work are available for review by all bidders at [www.ncncree.com](http://www.ncncree.com) or by contacting [projects@ncncree.com](mailto:projects@ncncree.com)

Bids will be accepted by Nisichawayasihk Cree Nation via email at [projects@ncncree.com](mailto:projects@ncncree.com) or in person submitted to the NCN Housing Authority in an envelope prior to the submission date set out below.

Submission date: September 9, 2026 at 12:00 p.m. Bids cannot be withdrawn after 5 days of the submission date.

Submissions after the submission date will not be accepted. To modify a bid prior to the submission date please contact [projects@ncncree.com](mailto:projects@ncncree.com)

All or lowest bids not necessarily accepted, if there are no bids that meet the needs of NCN, the Project may be re-tendered or terminated. Selection criteria is based on price, experience, and compliance with NCN requirements set out above.

Site visits are not mandatory but are recommended.



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### **Contractor Responsibilities and Liabilities**

- 1) The Contractor is responsible to perform the work in a good and workmanlike manner and to correct any defective work or work not performed as provided for by NCN at its request.
- 2) The Contractor is responsible for obtaining and paying for any required permits, licenses or certificates necessary for the performance of the work (National Building Codes of Canada or Provincial Construction Regulations and Manitoba Hydro).
- 3) The Contractor shall provide evidence of compliance with workers' compensation legislation including payments due thereunder, if applicable. Contractor can opt to waive insurance by signing a waiver to release NCN from any damages or liabilities related to individuals and the construction outside of any NCN blanket insurance.
- 4) The Contractor is liable for the actions of all its employees or sub-contractors that are engaged to perform work in relation to the Project.
- 5) The Contractor is responsible for the safety of all persons it permits on the site during the duration of the Project.
- 6) The contractor is responsible for acquiring and maintain builders insurance with a minimum amount of \$1,000,000.00. Contractor can opt to waive insurance by signing a waiver to release NCN from any damages or liabilities related to individuals and the construction outside of any NCN blanket insurance.
- 7) The Contractor is responsible for obtaining and paying for all tools, materials, and equipment, including safety equipment, it requires in relation to the Project.
- 8) The Contractor is responsible to inform the Project Coordinator of any unsafe health hazards or conditions that may arise throughout the course of the Project.
- 9) Any additional work that may be required by the Contractor will be negotiated between the Contractor and NCN. Any additional work should not commence until approved by NCN in writing via email by an authorized representative of NCN.
- 10) The Contractor shall provide the required notices and comply with the laws, rules, regulations, and codes which are or become in force during the Project and which relate to the Contractor's work, to the preservation of the public health and construction safety.
- 11) The contractor is responsible for acquiring all required permits for all trades and building and to coordinate all trades, hook ups, and procedures of the build.

### **Responsibilities of NCN**

- 1) Provide Contractor with access to the Project site during hours requested by the Contractor.
- 2) Communicate with the Contractor about any on-going needs and status updates.
- 3) NCN shall be responsible for the payment of unforeseen, reasonable expenses affiliated with the Project if the Contractor and NCN agree in writing to any additional costs.
- 4) NCN will not to be liable for any damages sustained by the Contractor during work it undertakes in relation to the Project.
- 5) NCN will coordinate any applicable inspections and consume the costs of hiring a third party inspector if NCN deems necessary for progress claims only.

### **Schedule and Payment Schedule**

- 1) NCN will negotiate with the Contractor a schedule for the completion of the Project, with an end date of April 15, 2027, less landscaping (June 15, 2027) unless a later date is agreed upon by the parties.
- 2) NCN will negotiate with the Contractor a fair payment schedule to reflect the work being done based on progress claims that agreed upon by both parties.
- 3) All payments will be subject to legislation and statutory regulations respecting holdback percentages (7.5% per payment)



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## **Scope of Work**

### **Architectural and Engineering**

- Site plan supplied by Owner; Contractor to follow all dimensions, details, specifications and installations shown on engineered drawings and this scope.
- Engineer-stamped drawings supplied by Owner.
- Contractor shall verify all measurements against site conditions and report errors or omissions for clarification prior to proceeding.
- Window and door dimensions shown on drawings are generic/conceptual; Contractor shall coordinate actual rough openings with supplier specifications.
- Trusses supplier/manufacture shall be responsible for engineering, layout and installation instructions for the roof truss system.
- Heating and HRV layout and design to be completed by HVAC Contractor.
- Electrical layout and design to be completed by Electrical Contractor.
- Plumbing details to be completed by Mechanical Contractor.
- All construction shall conform to applicable National and Manitoba Building Codes and engineered drawings.

### **Site Prep**

- Contractor responsible for clearing vegetation and preparing building site as required.
- Contractor responsible for staking and squaring building perimeter.
- House to be centered on lot as shown on site/top-view drawing.
- Maintain 35'-0" setback from ditch as indicated on drawing.
- Contractor responsible for determining and establishing appropriate excavation elevations based on drawings and site conditions.
- Contractor responsible for coordinating required sewer, water and utility connections with NCN/Public Works and applicable utilities.
- All costs associated with site preparation and utility coordination to be included in bid unless specifically identified otherwise.

### **Excavation**

- Contractor responsible for coordinating and supervising excavation to required depth, width and length for continuous footings, telepost pads, crawlspace and associated construction.
- Excavation shall accommodate 4'-0" high SIP foundation walls and footing system shown on engineered drawings.
- Preserve undisturbed bearing soil below footings wherever required by drawings.
- Contractor responsible for excavation required for sump pit and drainage system.
- Suitable excavated material may be reused as approved fill where appropriate.
- All excavation-related costs to be included in bid (contractor billed for excavation)

### **Landscaping/Driveway**

- Contractor responsible for final grading around building.
- Berm grade approximately 6" at house and slope to finished grade approximately 4'-0" away from house, as detailed.
- Ground surrounding building shall be graded to direct water away from structure.
- Exterior ground slope of approximately 1 in 12 for the first 6 feet (as per drawing)
- Crawlspace granular surface shall slope toward sump pit at 1:50.



- Contractor responsible for restoring disturbed areas around building following construction.
- Contractor responsible for coordinating culvert installation for 2 driveways with 16" minimum culverts 20' feet long.
- Contractor responsible for installing 2x18' wide driveway with geotextile layer over packed clay base, C-base to cover driveway (18 feet by 50 feet or to mid point of house), and gravel on top of all c-base to each unit. C-base= 6" thick, gravel=3" thick, depth of material over culvert to be sufficient to provide a proper slope, will require more than 6".
- Contractor is responsible for grading a swale at the back of unit to mitigate run off into front ditches
- Contractor is responsible for slopping yard to run off into front culverts through the sides of the houses
- Contractor is responsible for packing clay around entirety of units near end of project

**Footings (2 crawlspaces required, one for each house following below spec)**

- Contractor responsible for forming and installing continuous 30" wide x 10" thick concrete footings as shown
- Contractor responsible for installing 30" x 30" x 10" concrete telepost pads
- Footing design based on soil bearing capacity of 75 kPa as indicated in engineering notes.
- Footing concrete specified as 25 MPa @ 28 days, Type GU cement, applicable exposure class as shown in drawing.
- Install reinforcing steel at foundation wall/footing details:
  - 3 – 15M bars continuous, equally spaced.
  - 10M ties @ 48" O/C where shown.
- Install 3" drainage/weeper pipes through footings @ 48" O/C.
- Contractor responsible for coordinating concrete supply, placement and finishing.
- Contractor responsible for supplying and installing required granular material adjacent to and over footings.
- Install 4'-0" wide x 2" thick Styrofoam frost break around foundation as detailed.
- Contractor responsible for constructing/installing 30" x 30" perforated sump pit.
- Slope crawlspace surface toward sump pit at 1:50.
- Drain sump system into sewer line on street side of backwater valve as detailed.
- Install 10 mill CGSB poly sealed and taped at joints in crawlspace
- Install minimum 6" coarse clean granular fill/drainage layer throughout crawlspace.

**Beam and Foundation Walls**

- Contractor responsible for supplying and installing 6½" SIP foundation walls approximately 4'-0" high.
- SIP foundation wall construction:
  - 5/8" PWF plywood exterior
  - 1/2" PWF plywood interior
- Install PWF retaining strips and fastening system as detailed.
- Install 1/2" galvanized Quick Bolts @ 48" O/C, typical, where detailed.
- Seal foundation wall/poly system to footing as detailed.
- Install spray foam insulation at floor/foundation connection as detailed.
- Contractor responsible for supplying and installing standard short teleposts.
- Install 4-ply 2x10 main wood beam where shown.



- Post beam to footing with one PWF 2×6 per ply of beam at each end on inside of SIP foundation walls, as detailed.
- Supply and install all structural connectors, hangers, fasteners, blocking, screws, bearing hardware and accessories required by engineered drawings.
- Load-bearing SIP walls shall be designed by SIP manufacturer to carry required structural loads.
- Construct 6 ½" foundation demising wall separation from unit A and B with 5/8" type X fireguard drywall on both sides and 26-gauge sheet metal fire stopping assemblies in accordance with engineered details. (dry wall finished as per below interior walls)
- Exact SIP wall heights to be confirmed by SIP manufacturer

### **Floor**

- Contractor responsible for supplying and installing 2×10 SPF floor joists @ 16" O/C maximum.
- Provide bracing in accordance with manufacturer requirements.
- Provide blocking at 24" O/C on parallel walls where indicated.
- Install rim board and required lateral restraint system.
- Install approved joist hangers at all butt-jointed joists.
- Install LVL beams at openings as shown:
- 1-ply 1¾" × 9½" LVL, where indicated (floor openings)
- Frame crawlspace access opening.
- Frame furnace access/opening as shown.
- Run floor sheathing over furnace opening and cut opening when furnace is installed, as directed on drawing.
- Install ¾" OSB/T&G subfloor, glued and screwed.
- Install 3/8" underlayment under sheet flooring.
- Finished flooring to be supplied and installed throughout house, colour to be provided by owner
- Crawlspace access panel to include: Two layers of ¾" material glued together 2×4 ledger board on all four sides, transition strip as detailed.

### **Exterior Foundation Walls-**

- Install Blueskin/waterproofing membrane glued to exterior SIP foundation wall as detailed.
- Install prefinished vertical steel siding over exposed foundation wall.
- Vertical steel siding to extend to approximately 6" from top of footing, with drawing detail also indicating siding starting approximately 2" above footing at transition condition.
- Install appropriate flashing at transition between vertical foundation siding and horizontal wall siding.
- Install coarse stone beside footings, over footings and upside of foundation wall as detailed.
- Install 4'-0" wide × 2" thick Styrofoam frost protection.
- Contractor responsible for backfilling foundation following completion of required waterproofing and foundation work.



- Provide flexible sealants, flashing and waterproofing necessary to prevent water penetration.

#### **Exterior Walls-**

- Exterior walls to utilize 6½" structural SIP panels with 7/16" OSB each side, unless otherwise detailed.
- Install Tyvar (or equivalent) building wrap/air barrier or approved equivalent.
- Install CanExel siding or approved equivalent except where elevations indicate alternate finish.
- Exterior elevations include: Prefinished horizontal CanExel siding, prefinished vertical steel siding, light cultured stone accents, cultured stone to be screw-installed in accordance with manufacturer's instructions.
- Provide appropriate flashing where steel siding meets horizontal siding.
- Window flashing required over all openings.
- Caulking required at all siding termination points.
- Interior face of exterior walls to receive 1/2" drywall (interior of SIP)
- Drywall to receive painted finish (1x prime, 1x paint, white eggshell)
- Load-bearing SIP wall design to be coordinated with SIP manufacturer.

#### **Exterior Doors and Windows-**

- Contractor responsible for supplying and installing exterior doors and windows in quantities and sizes generally shown on floor plan.
- Exterior doors shown as 36/80 units.
- Windows to be triple-pane and comply with northern requirements.
- All windows shall have a break-resistant outer pane.
- Window styles/sizes include fixed/picture, slider and awning configurations as shown on floor plan.
- Provide sill/head flashing, flashing membrane/tape, sealants, trims and all accessories required for complete weather-tight installation.
- Window flashing required over all openings.
- Contractor shall coordinate rough openings with actual window and door supplier specifications.

#### **Interior Walls**

- Interior partitions to be constructed using 2×4 studs @ 16" O/C, unless otherwise noted.
- Provide double studs at openings.
- Structural lintels are not required in non-load-bearing walls unless otherwise specified.
- Install 1/2" drywall both sides of interior partitions.
- Drywall to receive tape, mud, painted finish (1x prime, 1x paint, white eggshell)
- Construct closets and linen closet in locations shown on floor plan (doors and accessories to be included)
- Frame openings and partitions for bathroom, bedrooms, furnace/laundry room, kitchen and other spaces in accordance with floor plan.

#### **Roof**

- Contractor responsible for supplying and installing 25-year asphalt shingles.
- Install ice and water shield/eaves protection over first 6' from eaves.
- Install 7/16" OSB roof sheathing with H-clips.



- Install engineered pre-manufactured wood roof trusses at 24" O/C.
- Roof pitch shown as approximately 6:12, unless noted otherwise.
- Truss layout and structural design by truss manufacturer.
- Provide approximately 16" total heel height
- Provide 2'-0" eaves/overhang where shown.
- Install insulation chutes at eaves.
- Install R60 blown-in attic insulation.
- Install 6 mil polyethylene vapour barrier.
- Install 1/2" ceiling-board drywall (mud, tape, prime x1, paint x 1)
- Install aluminum fascia and perforated soffit.
- Install prefinished aluminum eavestroughs.
- Eavestroughs to front and back as detailed.
- Provide downspouts at corners in accordance with roof/top-view drainage layout.
- Install roof vents as shown on elevations.
- Provide attic access hatch/air vent minimum 20" x 28" as indicated.
- Continue roof sheathing to underside of truss top chord and provide backing as detailed.
- Install fire separation continuously in atticm 55/8' fireguard drywall between with 26-gauge sheet metal.

#### **Millwork**

- Contractor responsible for supplying and installing kitchen cabinetry in configuration shown on floor plan.
- Provide kitchen sink cabinet and associated cabinetry/countertop layout shown.
- Provide bathroom vanity and sink.
- Provide closet shelving in three bedrooms and linen/other storage areas as appropriate.
- Colour of millwork to be provided by owner

#### **Finishing**

- Contractor responsible for supplying and installing interior doors in quantities and sizes shown on floor plan.
- Typical interior doors shown as 32/80 and 36/80, depending on location.
- Supply and install all door jambs, casing, baseboard, hinges, handles, stops and related finish hardware.
- Supply and install exterior door locksets.
- Complete drywall finishing and painting throughout.
- Provide all transition strips and finish trims required for completed flooring installation.

#### **Appliances**

- All material, measurements, and installations to be done to scope of floor plan
- Contractor is responsible for supplying and installing Maytag washer and electric dryer
- Contractor is responsible for supplying and installing 30" coiltop range self-cleaning as per spec of floor plan
- Contractor is responsible for supplying and installing 18 CF fridge with freezer
- Contractor is responsible for supplying and installing microwave combo rangehood as per floor plan spec



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**Electrical-** All material, measurements, and installations to be done to scope of floor plan

- Contractor is responsible for supplying and installing electrical panel to meet Manitoba Hydro's requirements for square footage of house and outputs.
- Contractor is responsible for supplying and installing all wiring, receptacles, switches, light fixtures to Manitoba Hydro Code and floor plan specs
- Contractor is responsible for supplying and installing all necessary 20A GFCI receptacles front & back as per floor plan
- Contractor is responsible for coordinating Hydro hook up with Manitoba Hydro at cost of contractor.
- Contractor responsible for temporary utilities during project
- Provide exterior lighting at locations generally indicated on elevations.
- Install hard-wired smoke detectors and combination smoke/carbon monoxide detectors in locations shown on floor plan and as required by code.

**Plumbing-** All material, measurements, and installations to be done to scope of floor plan

- Contractor is responsible for supplying and installing solid ABS waste, vent, and drainpipe as per floor plan
- Contractor is responsible for supplying and installing pex water supply lines
- Contractor is responsible for supplying and installing 60 gal electric hot water tank
- Contractor is responsible for supplying and installing Mirolin or longevity 1pc or 3pc tub with cap temperature balance valve S/L handles
- Contractor is responsible for supplying and installing comfort height toilet 17" seat with lid
- Contractor is responsible for ensuring all work is to building code and permits
- Contractor is responsible for supplying and installing medicine cabinet, towel bar, shower rod, and paper holder
- Contractor to tie in sump pump to main sewer line
- Contractor is responsible for supplying and installing sump pump solid plumbed into sewer line as per local authority

**Heating/HRV/Ventilation**

- All material, measurements, and installations to be done to scope of floor plan
- Contractor responsible for supplying and installing electric forced air furnace along with duct work for floor plan. CSA Approved, 20.0kW 240V, multispeed.
- Contractor responsible for supplying and installing HRV with 1 timer/switch along with duct work for floor plan. Balancing and operation to be verified.
- Contractor is responsible for supplying and installing kitchen rangehood and bath fan both vented outside
- Contractor is responsible for installing dryer vent to outside and connection to dryer

**Decks and Landings**

- Contractor responsible for supplying and constructing exterior landings, stairs, guards and railings shown on drawings.
- Construct stairs to suit finished grade.
- Steps shall have equal rise.
- Maximum stair rise approximately 7-7/8".
- Landing/deck framing includes 2x6 joists @ 16" O/C where detailed.



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- Install 2×6 deck planking.
  - Use non-rusting deck screws as detailed.
  - Provide ground anchors/ground hogs where detailed.
  - Apply flexible caulking at house connection to prevent water penetration.
  - Guardrail to be approximately 36" high where required.
  - Railing at step shown approximately 32" high.
  - Construct guards using:
    - 2×4 top rail
    - 2×6 inside face rail
    - 2×2 balusters
    - Maximum approximately 4" spacing between balusters
  - Provide all required lag bolts, structural screws, blocking, anchors and hardware.
  - Final stair quantities/heights shall be adjusted to suit finished site grade.

#### **Clean up**

- Contractor is responsible for hauling all debris and garbage from site
- Contractor responsible for repairing any damaged land around work site
- Contractor responsible for providing 20 yards of clean gravel and prepared a walk-way from front landing to driveway
- Contractor is responsible for stacking leftover material in neatly organized piles away from building as designated by owner
- Contractor to satisfy testing on plumbing, electrical, HRV.

#### **Disclosure:**

The Contractor shall furnish all labour, materials, equipment, hardware, fasteners, sealants, flashing, blocking, connectors, accessories, permits, inspections, testing, startup, commissioning, and incidental work necessary to complete the project in accordance with the engineered drawings, applicable building codes, manufacturer's recommendations, and industry best practices, whether specifically listed in this scope or reasonably inferred from the drawings. All aspects of the engineered stamped drawings to be included in build whether identified in scope or not.

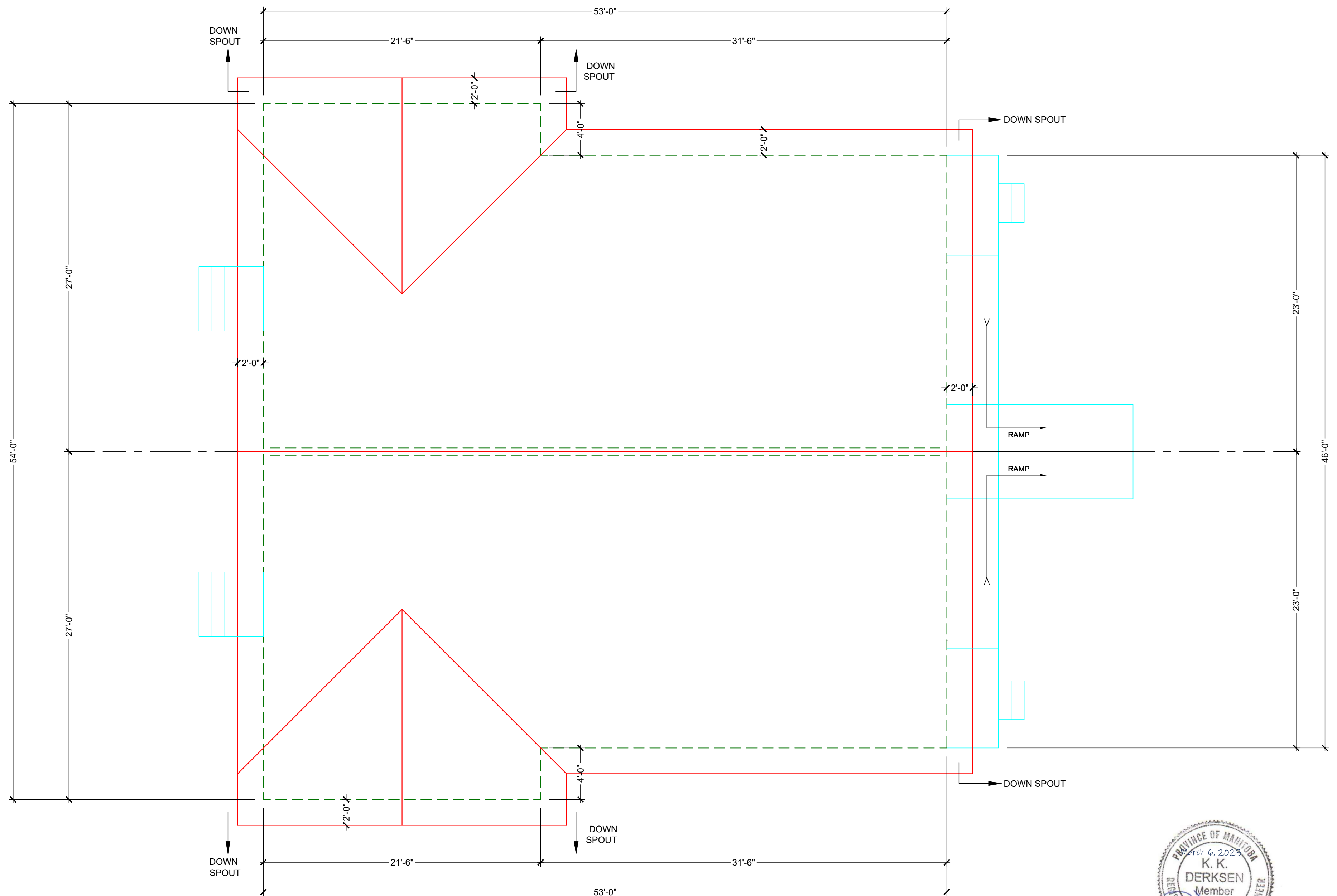
Please contact [projects@ncncree.com](mailto:projects@ncncree.com) for additional information.

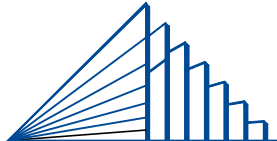


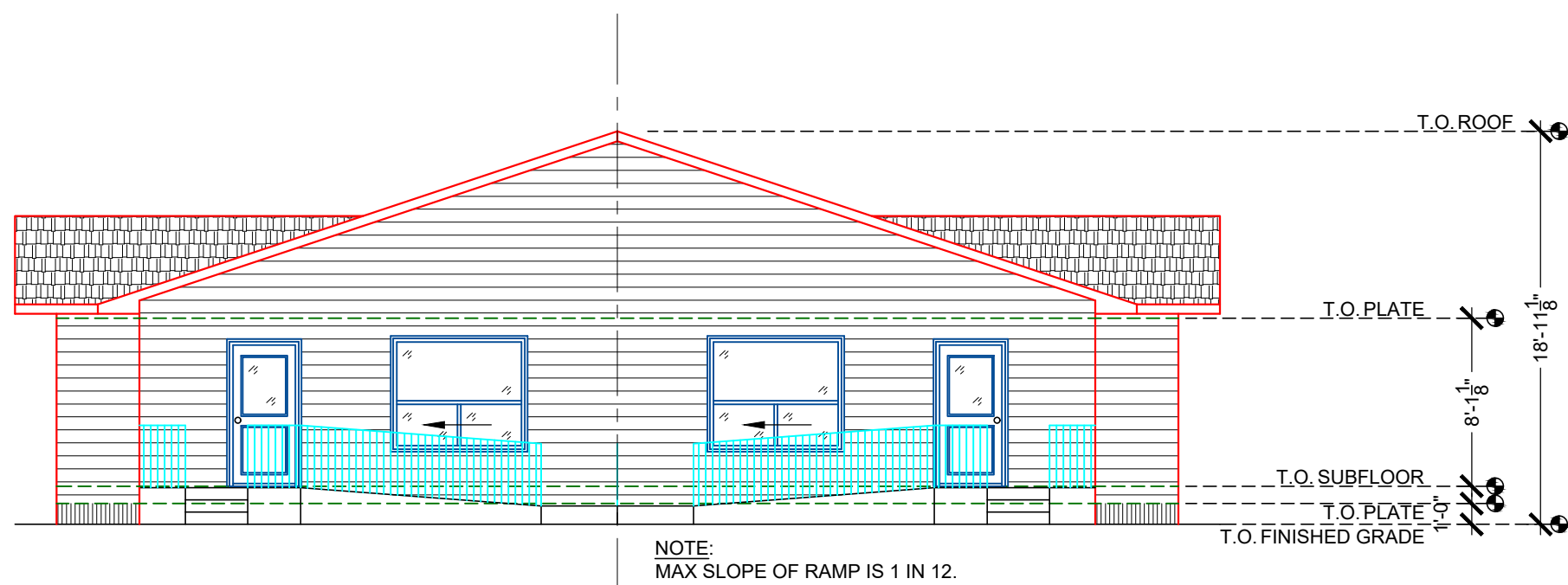
**NISICHAWAYASIIHK  
HOUSING AUTHORITY**

Box 363, Nelson House Manitoba R0B 1A0  
Phone (204) 484-2055 or 484-2057, Fax (204) 484-2392

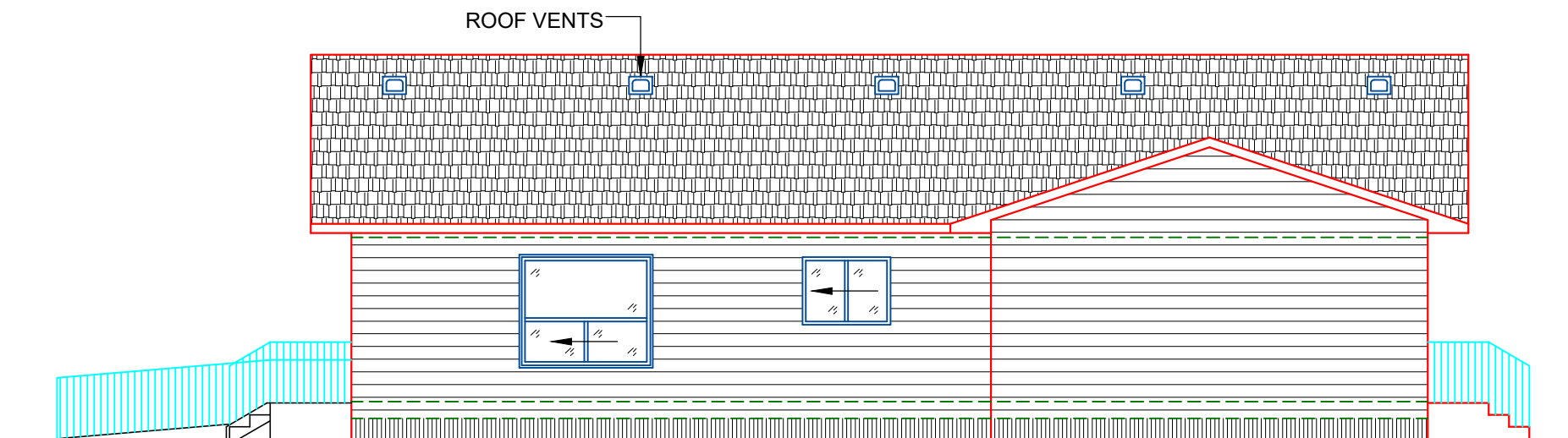




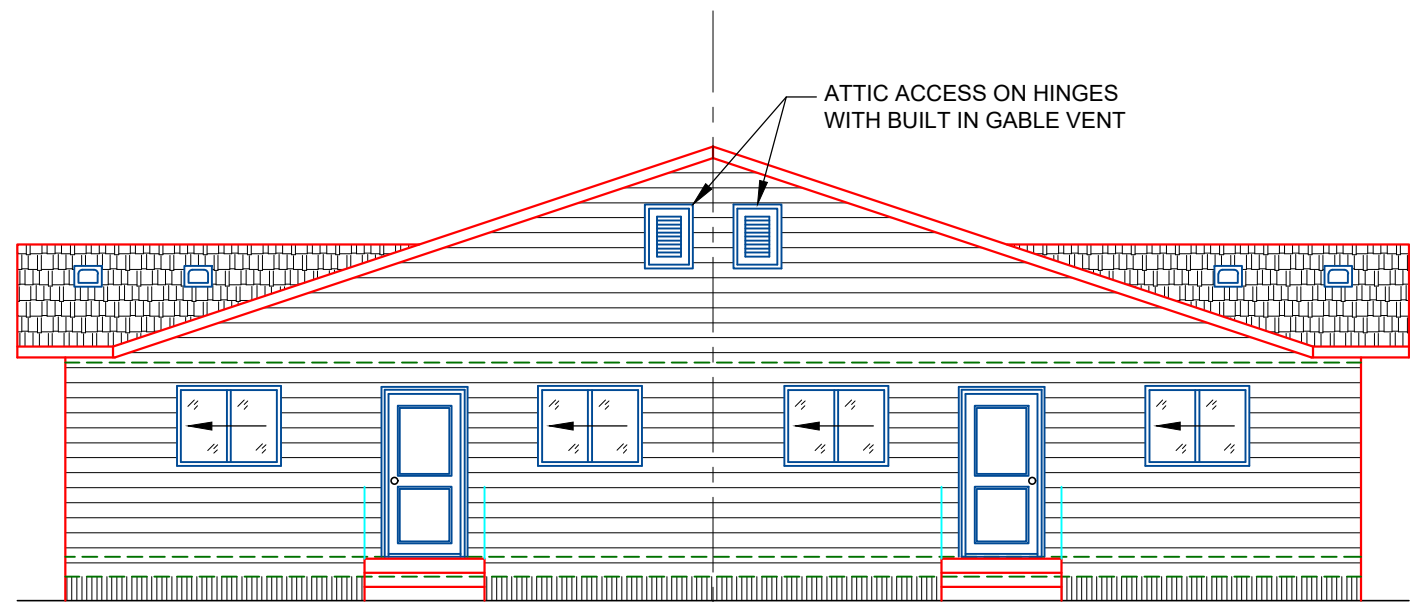
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|-----------------------------------------------------------------------------------|--------------------|-------------------------|-------------|--------------------|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DESIGNED FOR: <b>NCN 6 UNIT BUNGALOW SIDE BY SIDE HANDICAP ACCESSIBLE PROJECT</b> |                    | UNIT 'A':               | 1305 SQ.FT. | REVISION DATE:     |                     | <div>DESIGN TEAM:<br/>204-792-7526</div> <div></div> <div>THESE DRAWINGS ARE COPYRIGHT PROTECTED BY INTERPRO BUILDING DESIGN SERVICES AND SHALL NOT BE USED OR REPRODUCED WITHOUT PERMISSION. IT IS THE RESPONSIBILITY OF THE USER OF THESE DRAWINGS TO NOTE ANY ERRORS OR DISCREPANCIES AND REPORT THEM FOR AMENDMENTS AND CORRECTIONS. INTERPRO BUILDING DESIGN SERVICES' SOLE LIABILITY IS TO MAKE THESE DRAWING CORRECTIONS.</div> <div>1</div> |
|                                                                                   |                    | UNIT 'B':               | 1305 SQ.FT. | DRAWN BY: SS / DAS |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                                                                                   |                    | TOTAL:                  | 2610 SQ.FT. | FILE NAME: 23-08   |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| DATE: MARCH 2023                                                                  | SCALE: 3/16"=1'-0" | DRAWING TITLE: TOP VIEW |             | ADDRESS:           | TBA IN NELSON HOUSE | INTERPRO BUILDING DESIGN SERVICES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |



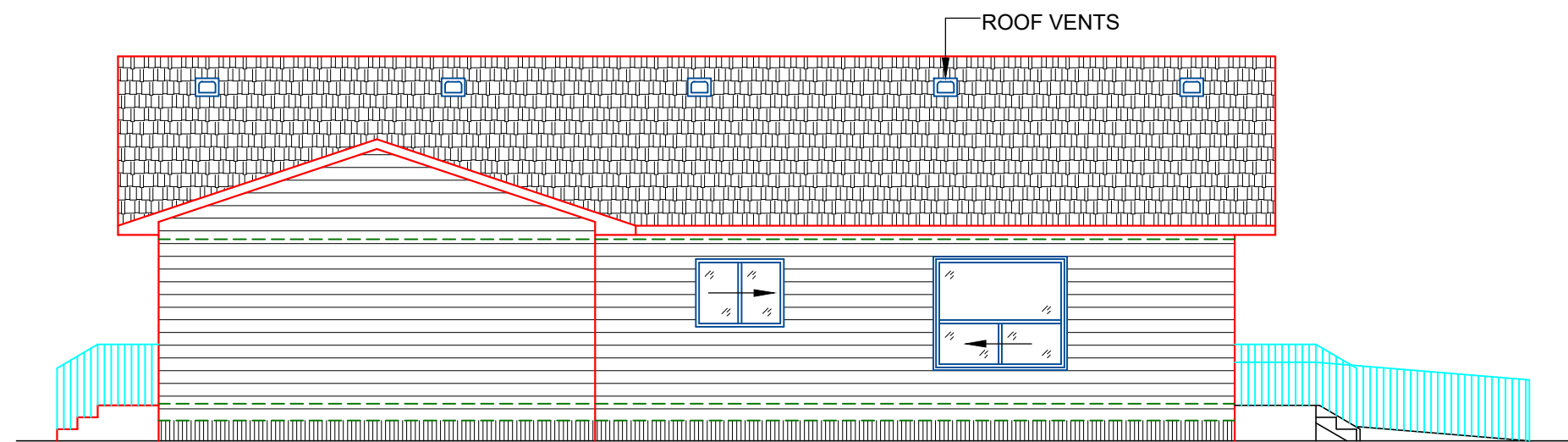
FRONT ELEVATION



RIGHT ELEVATION



BACK ELEVATION



LEFT ELEVATION



DESIGNED FOR: **NCN 6 UNIT BUNGALOW SIDE BY SIDE  
HANDICAP ACCESSIBLE PROJECT**

DATE: MARCH 2023

SCALE: 1/8"=1'-0"

DRAWING TITLE: ELEVATIONS

ADDRESS: TBA IN NELSON HOUSE

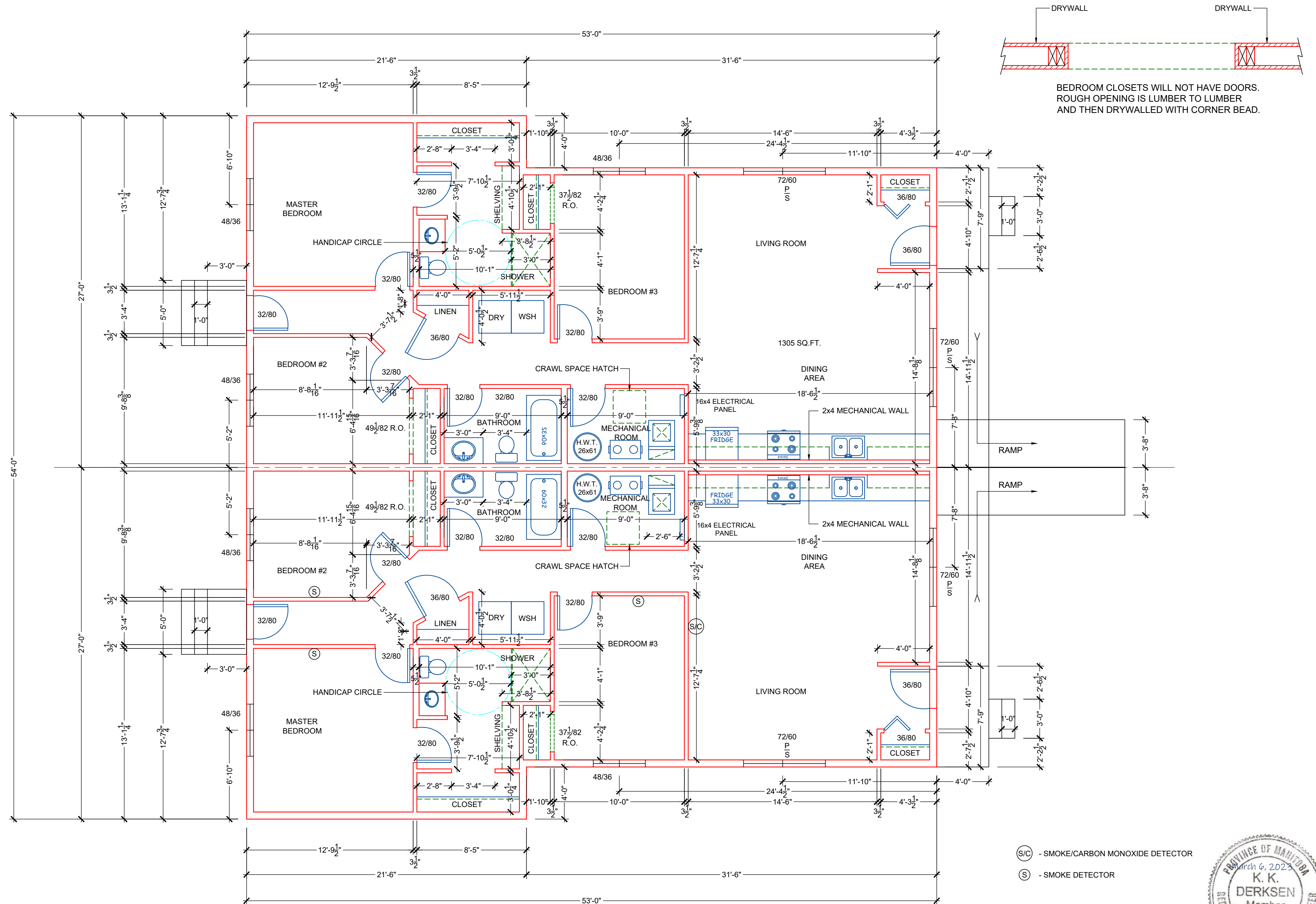
REVISION DATE:  
DRAWN BY: SS/DAS  
FILE NAME: 23-08

DESIGN TEAM:  
204-792-7526

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BUILDING DESIGN SERVICES



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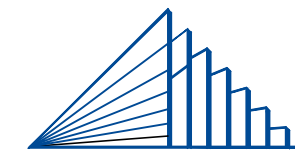


DESIGNED FOR: **NCN 6 UNIT BUNGALOW SIDE BY SIDE**  
**HANDICAP ACCESSIBLE PROJECT**

UNIT 'A': 1305 SQ.FT.  
UNIT 'B': 1305 SQ.FT.  
TOTAL: 2610 SQ.FT.

REVISION DATE:  
DRAWN BY: SS / DAS  
FILE NAME: 23-08

DESIGN TEAM:  
204-792-7526



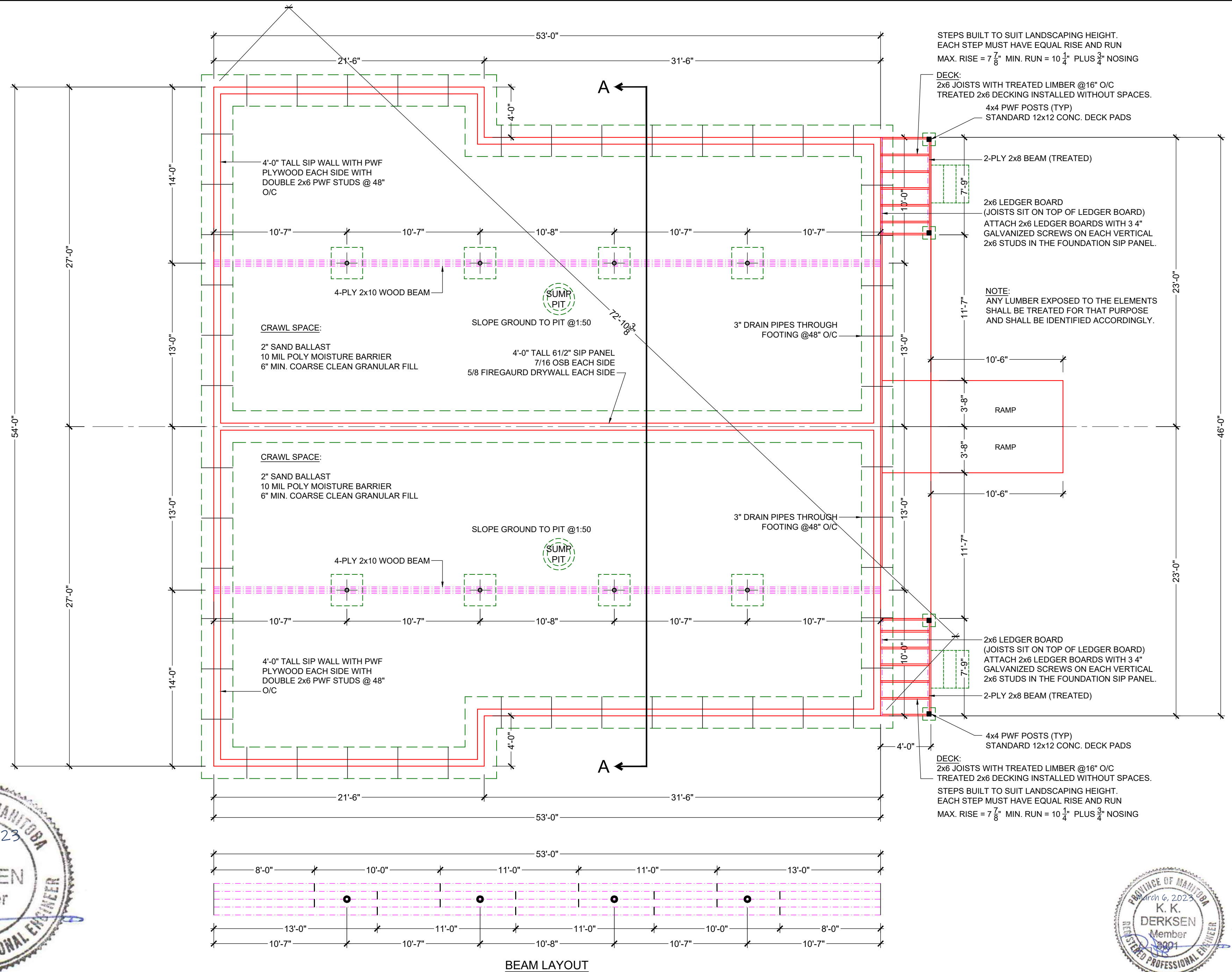
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3

DATE: MARCH 2023 SCALE: 3/16"=1'-0" DRAWING TITLE: FLOOR PLAN

ADDRESS: TBA IN NELSON HOUSE

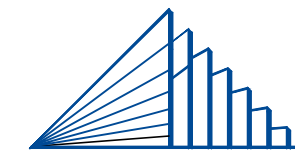
INTERPRO BUILDING DESIGN SERVICES



DESIGNED FOR: **NCN 6 UNIT BUNGALOW SIDE BY SIDE  
HANDICAP ACCESSIBLE PROJECT**

REVISION DATE:  
DRAWN BY: SS / DAS  
FILE NAME: 23-08

DESIGN TEAM:  
204-792-7526



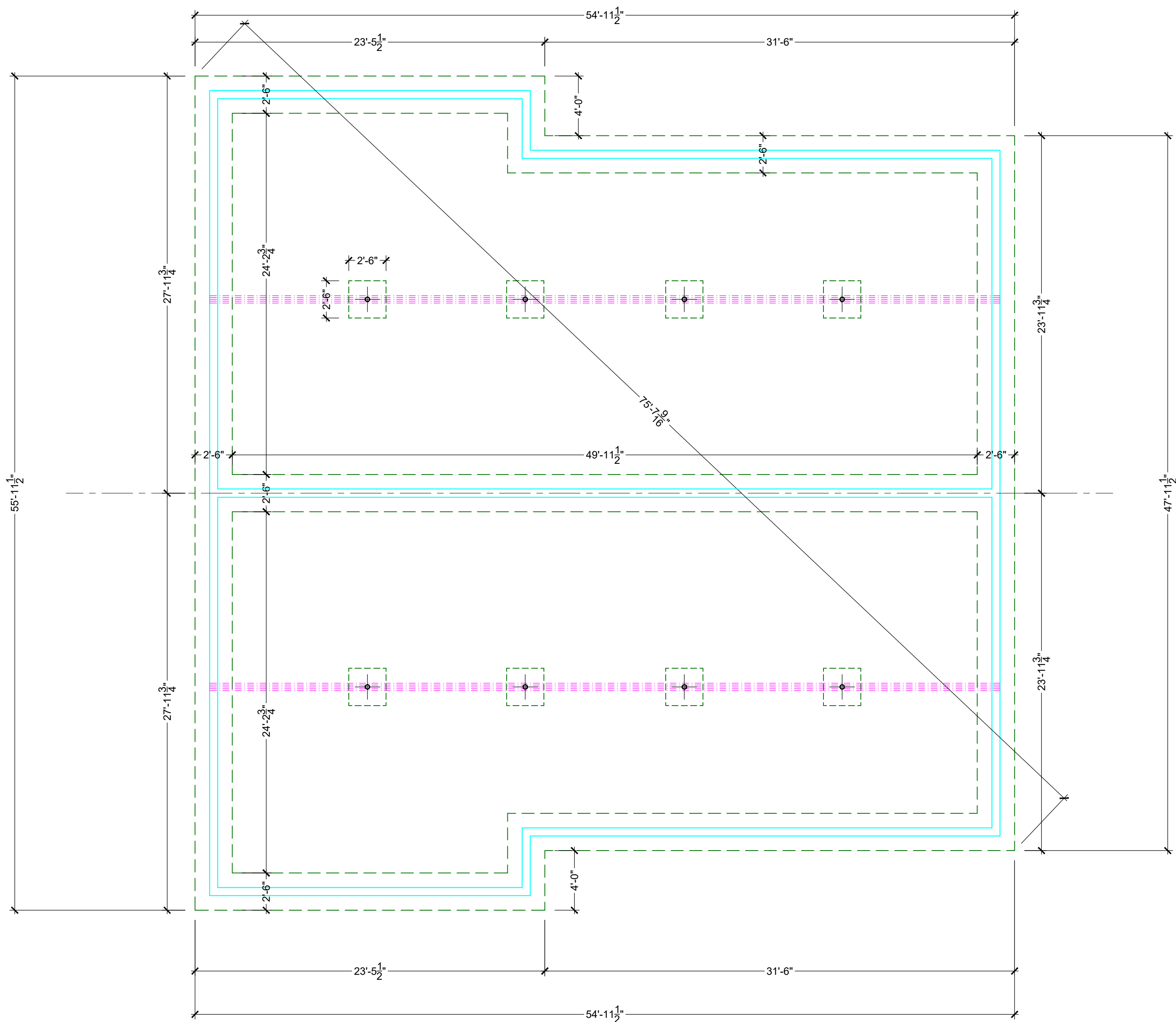
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**4**

DATE: MARCH. 2023 SCALE: 3/16"=1'-0" DRAWING TITLE: FOUNDATION PLAN

ADDRESS: TBA IN NELSON HOUSE

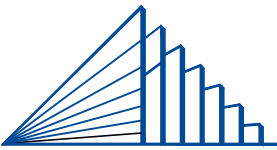
INTERPRO BUILDING DESIGN SERVICES



DESIGNED FOR: **NCN 6 UNIT BUNGALOW SIDE BY SIDE  
HANDICAP ACCESSIBLE PROJECT**

REVISION DATE:  
DRAWN BY: SS / DAS  
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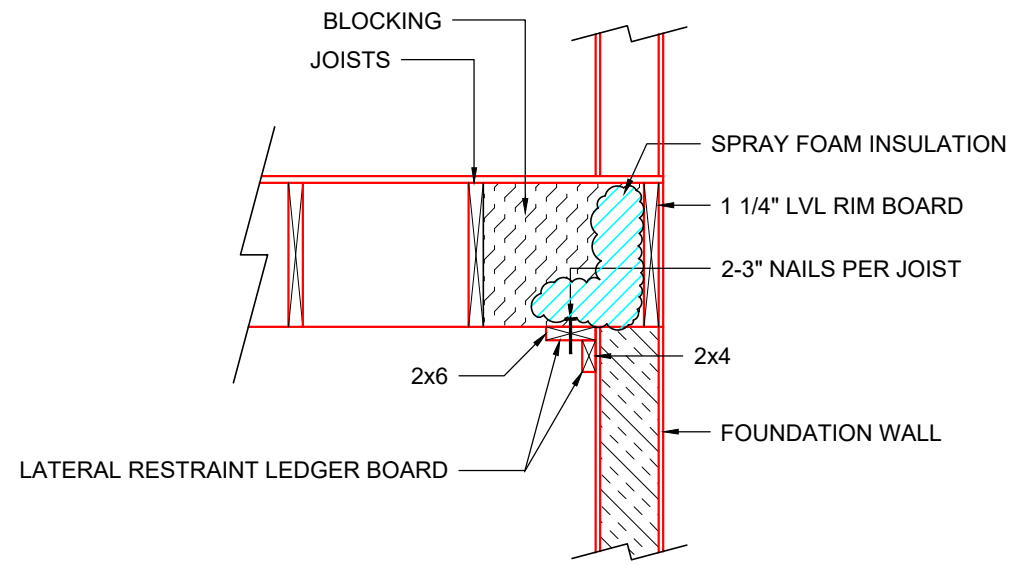
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**4B**

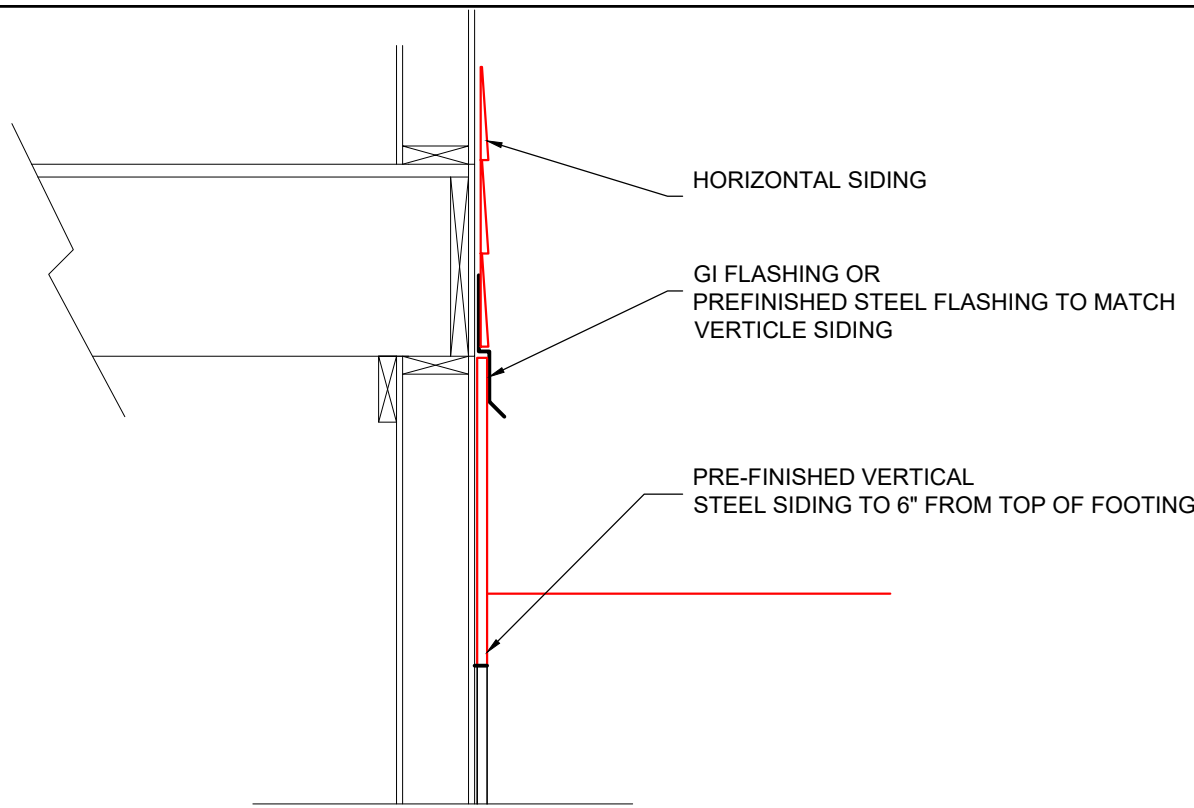
DATE: MARCH. 2023    SCALE: 3/16"=1'-0"    DRAWING TITLE: FOOTING LAYOUT    ADDRESS: TBA IN NELSON HOUSE

INTERPRO BUILDING DESIGN SERVICES





**FOUNDATION LATERAL RESTRAINT DETAIL**



**FLASHING DETAIL AT VERT.  
HORIZONTAL SIDING INTERSECTION**

**S1 ROOF CONSTRUCTION**

25 YEAR ASPHALT SHINGLES  
ICE AND WATER SHIELD EAVES PROTECTION ON FIRST 6'-0"  
7/16 OSB WITH H CLIPS  
ENG. PRE-MANUFACTURED WOOD TRUSSES @24" O/C  
R60 BLOWN IN INSULATION  
6 MILL POLY V.B.  
1/2" CEILING BOARD DRYWALL (OR EQ.)  
PAINT FINISH

**S2 EXTERIOR WALLS**

CANEXEL SIDING (OR EQUAL)  
TYPAR BUILDING WRAP AIR BARRIER (OR EQ.)  
6 1/2" STRUCTURAL SIP PANEL  
1/2" DRYWALL UNLESS OTHERWISE NOTED  
PAINT FINISH

**S3 INTERIOR PARTITIONS**

2X4 STUDS @16" O/C UNLESS NOTED OTHERWISE  
DOUBLE STUDS AT OPENINGS  
STRUCTURAL LINTELS NOT REQUIRED IN NON LOAD BEARING WALLS  
1/2" DRYWALL BOTH SIDES  
PAINT FINISH

**S4 INTERIOR DEMISING PARTITIONS (INC. SIP PANEL)**

PAINT FINISH  
5/8" FIREGUARD DRYWALL  
6 1/2" STRUCTURAL SIP PANEL WALL AS DESIGNED BY P.ENG.  
5/8" FIREGUARD DRYWALL  
PAINT FINISH

**S5 FOUNDATION WALLS**

VERTICAL PRE-FINISHED STEEL SIDING TO  
6" FROM TOP OF FOOTING  
BLUE SKIN WATER PROTECTION  
6 1/2" SIP FOUNDATION WALLS 4'-0" TALL  
USING 1/2" PWF PLYWOOD PANELS ON BOTH SIDES

**S6 FOUNDATION DEMISING WALL**

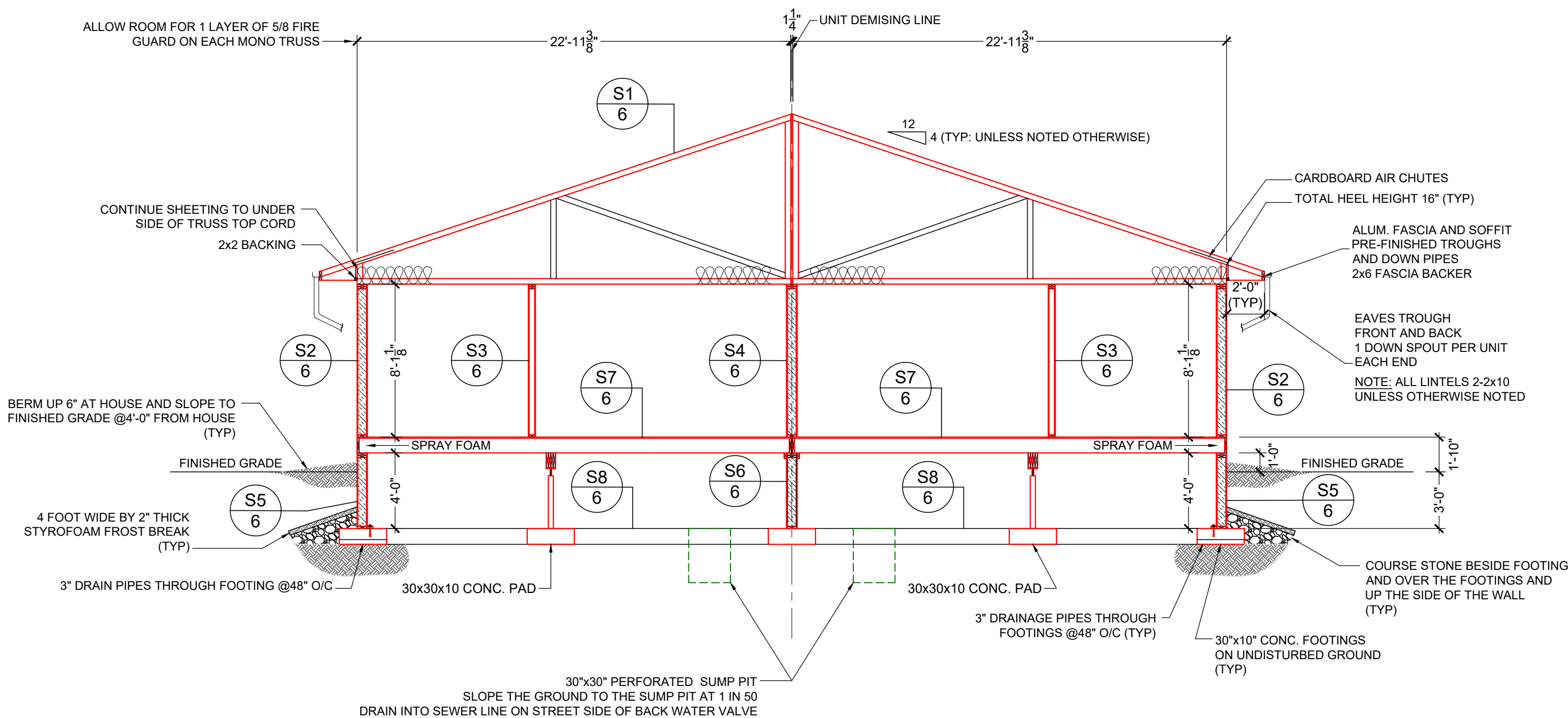
6 1/2" SIP FOUNDATION WALLS 4'-0" TALL WITH 1/2" PWF PLYWOOD EACH SIDE  
SHEETED WITH 5/8 TYPE X FIRE GUARD DRYWALL EACH SIDE

**S7 MAIN FLOOR CONSTRUCTION**

FINISHED FLOOR AS PER BUILDING SPECS.  
3/4" T&G PLYWOOD SUB FLOOR GLUED AND SCREWED  
3/8" UNDERLAY UNDER SHEET FLOORING  
2x10 SPF JOISTS #2 & BETTER @ 16" O/C  
1 ROW CROSS BRIDGING @ CENTER POINT  
(ENSURE THAT ALL JOISTS AND WALL STUDS LINE UP ON INTERIOR WALLS)

**S8 CRAWLSPACE FLOOR CONSTRUCTION**

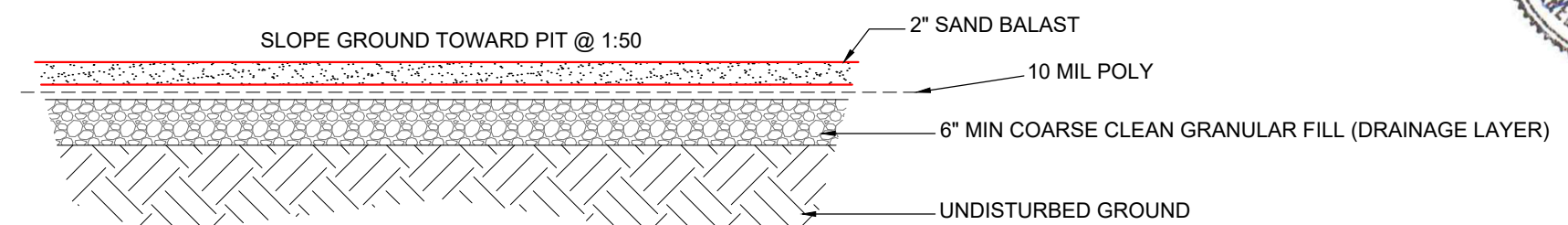
2" SAND BALLAST LAYER  
10 MILL CGSB POLY SEALED AND TAPED AT JOINTS  
MIN. 6" CLEAN STONE DRAINAGE GRAVEL  
3" DRAIN PIPES THROUGH FOOTING @48" O/C  
SLOPE FLOOR TO PIT @ 1:50



**SECTION A-A**

**NOTES:**

ALL FOUNDATION WALLS ARE 6 1/2" SIP PANEL WITH 5/8" PWF PLYWOOD EXTERIOR & 1/2" PWF PLYWOOD INTERIOR. ADD 5/8 FIRE GUARD EACH SIDE ON DEMISING WALL.  
ALL OUTSIDE SIP PANEL WALLS ABOVE GRADE ARE 6 1/2" WITH 7/16 OSB EACH SIDE THEN TOPPED WITH 1/2" DRYWALL ON THE INSIDE.  
DEMISING UPPER WALLS ARE 6 1/2" SIP PANEL PLUS 5/8 FIREGUARD DRYWALL.  
LOAD BEARING SIP WALLS MUST BE DESIGNED BY THE MANUFACTURER TO CARRY STRUCTURAL LOADS AS REQUIRED.  
WALLS THAT INTERSECT THE DEMISING WALL SHALL HAVE 5/8 FIRE GUARD DRYWALL BETWEEN THE INTERIOR WALLS AND INTERSECTING DEMISING WALL.

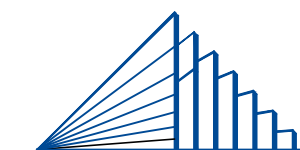


**CRAWLSPACE DETAIL**

DESIGNED FOR: **NCN 6 UNIT BUNGALOW SIDE BY SIDE  
HANDICAP ACCESSIBLE PROJECT**

REVISION DATE:  
DRAWN BY: SS / DAS  
FILE NAME: 23-08

DESIGN TEAM:  
204-792-7526



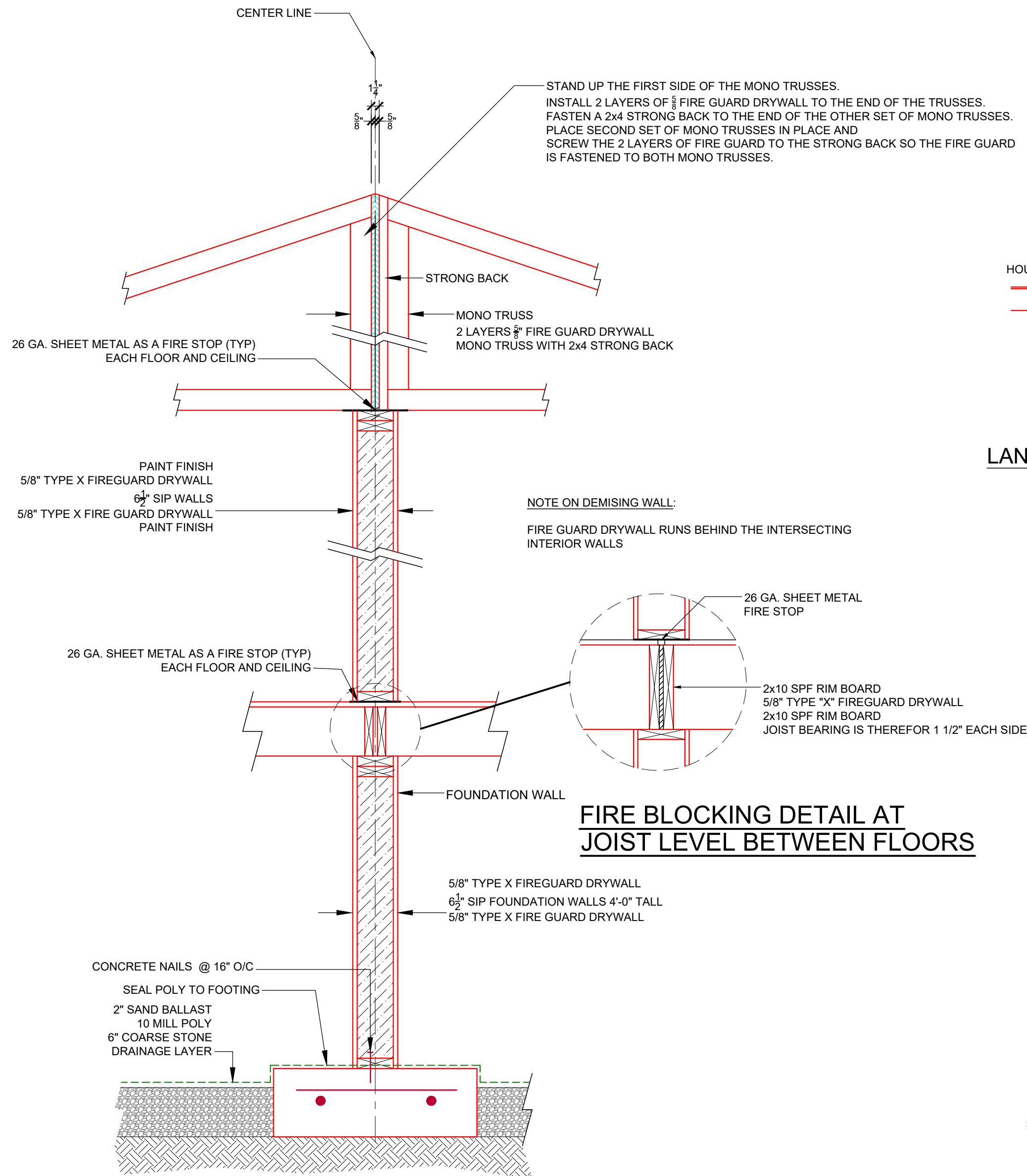
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**6**

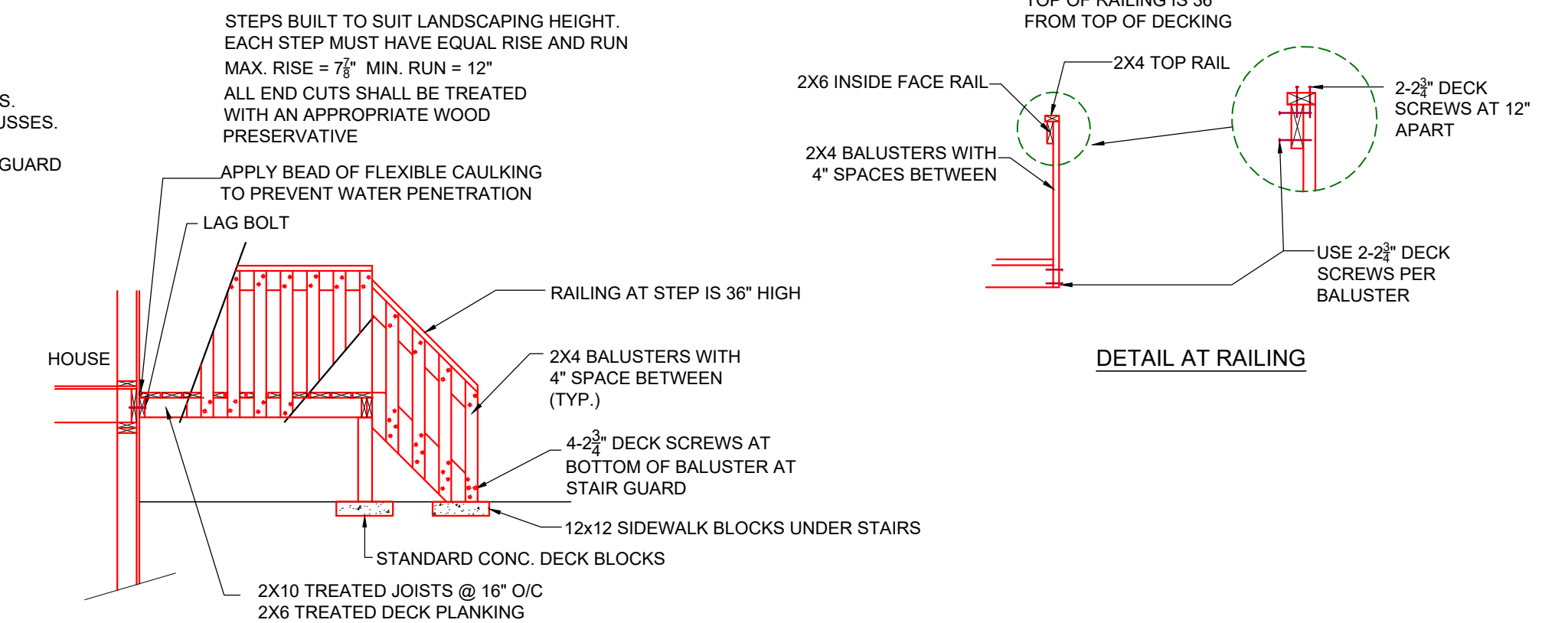
DATE: MARCH. 2023 SCALE: 3/16"=1'-0" DRAWING TITLE: CROSS SECTION

ADDRESS: TBA IN NELSON HOUSE

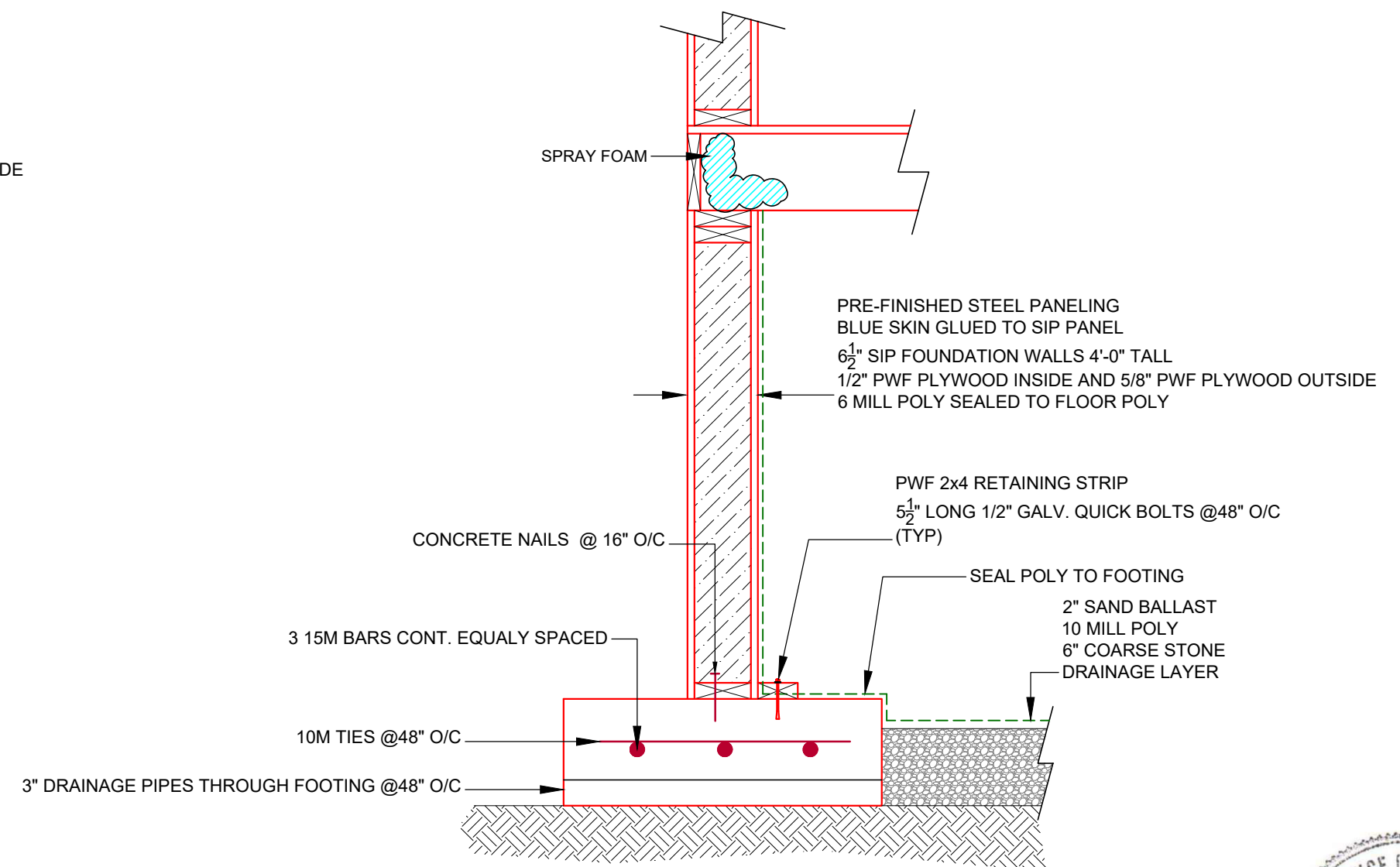
INTERPRO BUILDING DESIGN SERVICES



**DEMISING WALL DETAIL**



**LANDING, GUARDS AND RAILING DETAILS**



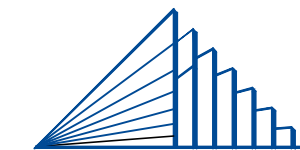
**OUTSIDE FOUNDATION WALL**



DESIGNED FOR: **NCN 6 UNIT BUNGALOW SIDE BY SIDE  
HANDICAP ACCESSIBLE PROJECT**

REVISION DATE:  
DRAWN BY: SS / DAS  
FILE NAME: 23-08

DESIGN TEAM:  
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**7**

DATE: MARCH. 2023 SCALE: 3/16"=1'-0" DRAWING TITLE: DETAILS PAGE I

ADDRESS: TBA IN NELSON HOUSE

INTERPRO BUILDING DESIGN SERVICES

CONCRETE SPECIFICATIONS BASED ON CSA A23.1

PILES:

- 30 Mpa @ 56 DAYS TYPE HS CEMENT
  - EXPOSURE CLASS S-3
- 4-7% AIR ENTRAINMENT

FOOTNGS:

- 25 Mpa @ 28 DAYS TYPE GU CEMENT
  - EXPOSURE CLASS N (F-2 FOR SURFACE FOOTINGS)
- 4-7% AIR ENTRAINMENT

GRADE BEAMS, FOUNDATION WALLS & PILE CAPS:

- 25 Mpa @ 28 DAYS TYPE GU CEMENT
  - EXPOSURE CLASS F-2
- 4-7% AIR ENTRAINMENT

BASEMENT SLAB ON GRADE:

- 25 Mpa @ 28 DAYS TYPE GU CEMENT
  - EXPOSURE CLASS N (F-2 FOR SURFACE FOOTINGS)
- 4-7% AIR ENTRAINMENT

GARAGE FLOORS (SLAB ON GRADE)

/EXTERIOR APRON SLABS & STEPS:

- 32 Mpa @ 28 DAYS TYPE GU CEMENT
  - EXPOSURE CLASS C-2
- 4-7% AIR ENTRAINMENT

STRUCTURAL GARAGE FLOORS (SLAB-ON-VOID):

- 35 Mpa @ 28 DAYS TYPE GU CEMENT
  - EXPOSURE CLASS C-1
- 5-8% AIR ENTRAINMENT

FOUNDATION WALLS ON PILES:

STRUCTURAL DESIGN CONFORMS TO MBC 2011

AREAS OF FLOOR  
LIVE LOAD 40 PSF  
DEAD LOAD 15 PSF

AREAS OF ROOF  
SNOW LOAD 36 PSF  
DEAD LOAD 15 PSF

PILE DESIGN BASED ON SKIN FRICTION OF 300 PSF

FOUNDATION WALLS ON FOOTINGS:

STRUCTURAL DESIGN CONFORMS TO MBC 2011

AREAS OF FLOOR  
LIVE LOAD 40 PSF  
DEAD LOAD 15 PSF

AREAS OF ROOF  
SNOW LOAD 36 PSF  
DEAD LOAD 15 PSF

FOOTING DESIGN FOR SOIL CAPACITY OF 75 KPA

GENERAL BUILDING NOTES:

THE GENERAL CONTRACTOR IS TO VERIFY ALL MEASUREMENTS WITH THE SITE CONDITIONS AND REPORT ANY ERRORS OR OMISSIONS IN WRITING TO INTERPRO BUILDING DESIGN SERVICES FOR DRAWING CLARIFICATION OR CORRECTION.

WINDOW AND DOOR SIZES ARE GENERIC IN SIZE AND CONCEPT. REFER TO SUPPLIERS SPECIFICATION AND ROUGH OPENINGS ON ALL WINDOWS AND DOORS.

THE SUPPLIER OF THE TRUSSES AND/OR ENGINEERED FLOOR SYSTEM SHALL BE RESPONSIBLE FOR ALL ENGINEERING AND LAYOUT C/W INSTALLATION INSTRUCTIONS AND DRAWINGS.

ALL LABOUR, MATERIAL, STRUCTURAL DESIGN AND PROCEDURES SHALL CONFORM TO THE CURRENT NATIONAL AND MANITOBA BUILDING CODES. IF THERE IS A CONFLICT BETWEEN THE CODE AND THIS DRAWING, THE MORE STRINGENT SHALL APPLY.

THE BUILDER IS TO VERIFY THE NORTH ARROW ON THE PLOT PLAN PRIOR TO APPLYING FOR A BUILDING PERMIT.

THE BUILDER IS TO ENSURE THE ADDRESS AND THE LOT NUMBERS ARE CORRECT PRIOR TO APPLYING FOR A BUILDING PERMIT.

ALL CONCRETE PILES ARE TO USE SULPHATE RESISTANT CEMENT.

IT IS THE OWNERS RESPONSIBILITY TO ENSURE THE BEARING CAPACITY OF THE SOIL IS ADEQUATE FOR THE FOOTINGS / PILES SPECIFIED.

ALL LUMBER SPANS ARE DESIGNED TO THE CANADIAN WOOD COUNCIL SPAN BOOK, 2009 EDITION.

NOTES:

ULS PILE CAPACITY  
PILES IN HEATED AREAS OR BELOW BASEMENT WALLS  
16" DIAMETER X 25' @32 KIPS  
20" DIAMETER X 25' @41 KIPS

PILES IN UNHEATED AREAS OR BELOW GARAGE GRADE BEAMS  
16" DIAMETER X 20' @20 KIPS

CAPACITY FOR EXTERIOR PILES DECKS & STEPS  
16" DIAMETER X 20' @15 KIPS

DEFINED STRUCTURAL SCOPE OF WORK  
APPLICABLE PART 4 SECTIONS OF THE MBC AS IT PERTAINS TO:  
-BUILDING FOUNDATIONS  
-WOOD AND STEEL FRAMING MEMBERS, TELEPOSTS, DOOR AND WINDOW HEADERS THAT ARE NOT SPECIFICALLY PRESCRIBED IN THE MBC OR BY THE PRE-ENGINEERED FLOOR/ROOF TRUSS DESIGNER (SUPPLIER)

HEATING & HRV LAYOUT AND DESIGN BY HVAC CONTRACTOR.

ELECTRICAL LAYOUT AND DESIGN TO BE SUPPLIED BY ELECTRICIAN.

PLUMBING DETAILS TO BE SUPPLIED BY MECHANICAL CONTRACTORS.

TALL WALL CONSTRUCTION:

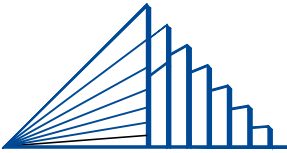
ALL WALLS THAT ARE 12' OR TALLER SHALL USE TALL WALL CONSTRUCTION METHODS.  
CONTINUOUS 2X6 SPF STUDS  
@16" O/C WITH SOLID BLOCKING @4'-0" O/C HORIZ.  
7/16 OSB SHEETING APPLIED HORIZ.



DESIGNED FOR: **NCN 6 UNIT BUNGALOW SIDE BY SIDE  
HANDICAP ACCESSIBLE PROJECT**

REVISION DATE:  
DRAWN BY: SS / DAS  
FILE NAME: 23-08

DESIGN TEAM:  
204-792-7526



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8

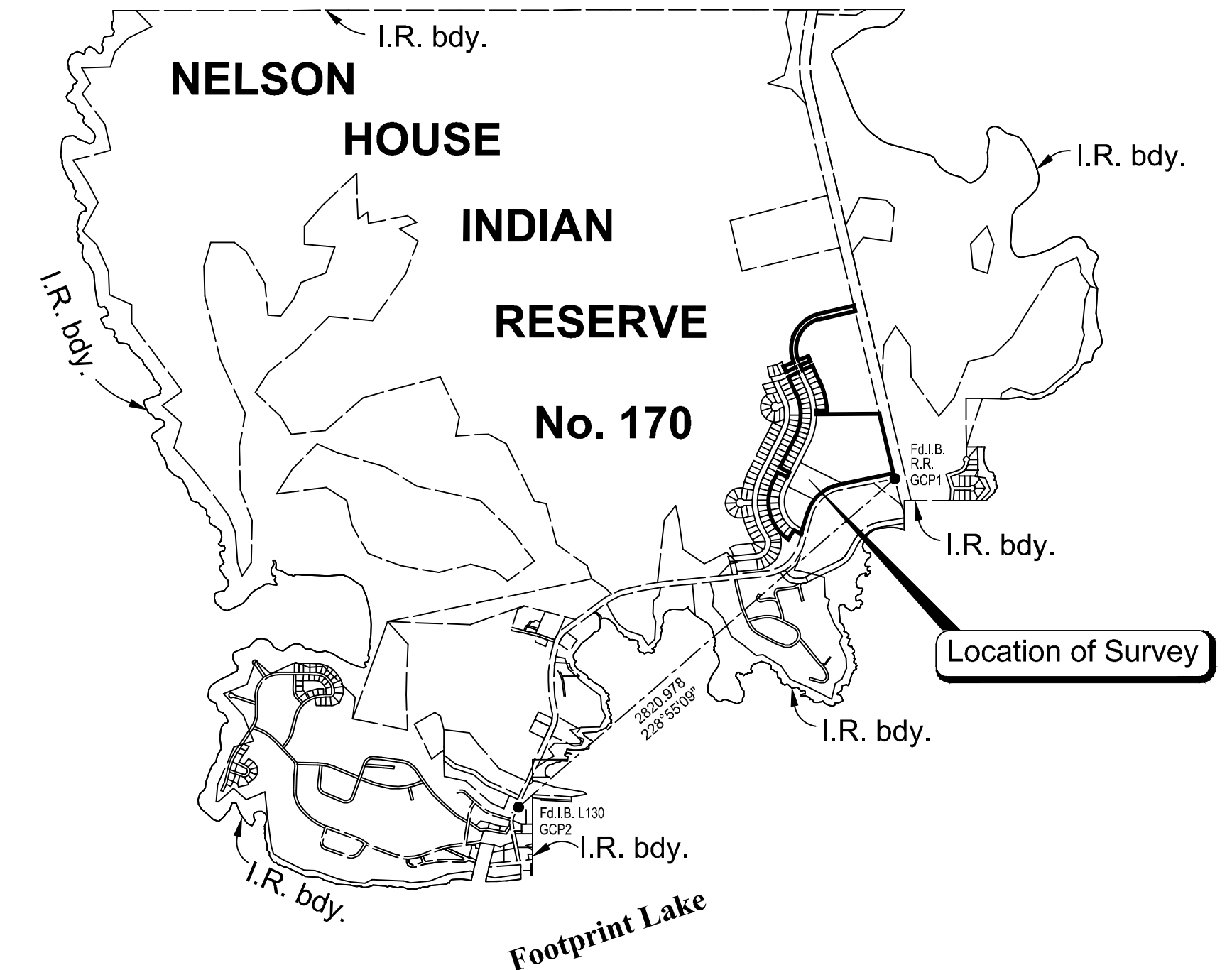
DATE: MARCH 2023

SCALE: 3/16"=1'-0"

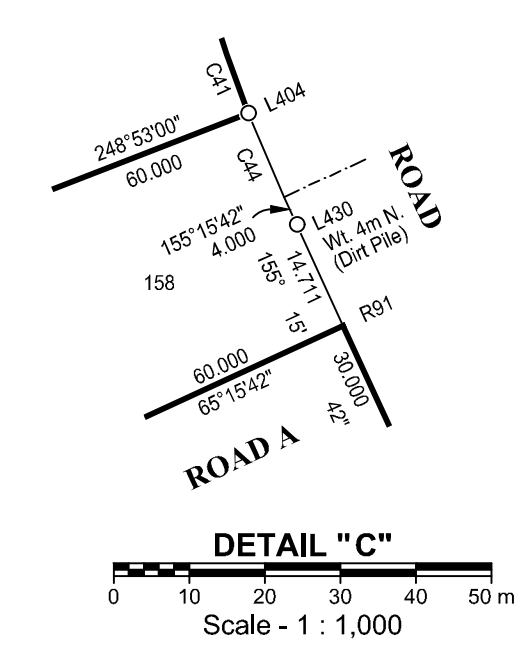
DRAWING TITLE: DETAILS PAGE II

ADDRESS: TBA IN NELSON HOUSE

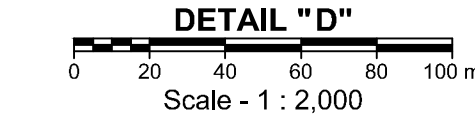
INTERPRO BUILDING DESIGN SERVICES



**PRELIMINARY PLAN**  
SUBJECT TO REVISION



**DETAIL "A"**  
Not To Scale



**DETAIL "B"**  
Not To Scale

**PRELIMINARY PLAN**  
SUBJECT TO REVISION

| CURVE INFORMATION TABLE |           |         |            |              |               |
|-------------------------|-----------|---------|------------|--------------|---------------|
| Curve                   | Delta     | Radius  | Arc Length | Chord Length | Chord Bearing |
| C1                      | 62°07'29" | 225.367 | 244.380    | 252.555      | 47°23'27"     |
| C2                      | 22°28'57" | 195.000 | 76.400     | 75.912       | 301°39'09"    |
| C3                      | 9°04'50"  | 255.000 | 40.360     | 40.320       | 317°26'54"    |
| C4                      | 2°41'05"  | 255.000 | 11.849     | 11.948       | 323°19'01"    |
| C5                      | 1°02'25"  | 255.000 | 4.481      | 4.481        | 325°09'48"    |
| C6                      | 5°22'29"  | 255.000 | 23.953     | 23.924       | 339°11'11"    |
| C7                      | 0°38'13"  | 255.000 | 2.869      | 2.869        | 331°22'14"    |
| C8                      | 6°01'52"  | 255.000 | 26.842     | 26.830       | 334°42'46"    |
| C9                      | 2°23'04"  | 255.000 | 10.613     | 10.612       | 338°10'14"    |
| C10                     | 3°38'48"  | 255.000 | 16.228     | 16.227       | 341°06'10"    |
| C11                     | 5°25'21"  | 255.000 | 24.134     | 24.125       | 346°28'15"    |
| C12                     | 0°38'31"  | 255.000 | 2.708      | 2.708        | 349°29'11"    |
| C13                     | 6°01'52"  | 255.000 | 26.842     | 26.824       | 352°49'22"    |
| C14                     | 2°25'46"  | 255.000 | 10.812     | 10.811       | 357°04'11"    |
| C15                     | 3°38'06"  | 255.000 | 16.030     | 16.027       | 0°03'10"      |
| C16                     | 5°28'01"  | 255.000 | 24.331     | 24.321       | 4°35'10"      |
| C17                     | 0°33'51"  | 255.000 | 2.511      | 2.511        | 7°36'06"      |
| C18                     | 6°01'52"  | 255.000 | 26.842     | 26.830       | 10°53'58"     |
| C19                     | 2°28'22"  | 255.000 | 11.005     | 11.004       | 15°09'04"     |
| C20                     | 3°33'07"  | 255.000 | 15.607     | 15.604       | 18°10'09"     |
| C21                     | 5°30'39"  | 255.000 | 24.519     | 24.510       | 22°42'02"     |
| C22                     | 0°35'28"  | 255.000 | 2.631      | 2.631        | 26°16'22"     |
| C23                     | 0°31'19"  | 255.000 | 2.323      | 2.323        | 29°42'58"     |
| C24                     | 2°33'14"  | 255.000 | 12.703     | 12.702       | 32°17'29"     |
| C25                     | 2°38'43"  | 255.000 | 12.892     | 12.891       | 32°42'39"     |
| C26                     | 2°28'43"  | 255.000 | 12.163     | 12.162       | 32°10'48"     |
| C27                     | 4°27'41"  | 255.000 | 22.162     | 22.167       | 34°04'56"     |
| C28                     | 0°30'44"  | 255.000 | 2.963      | 2.963        | 141°11'33"    |
| C29                     | 5°03'25"  | 255.000 | 25.155     | 25.147       | 11°22'18"     |
| C30                     | 1°15'15"  | 255.000 | 6.238      | 6.238        | 6°12'58"      |
| C31                     | 2°18'11"  | 255.000 | 18.817     | 18.813       | 2°41'15"      |
| C32                     | 3°08'13"  | 255.000 | 15.439     | 15.437       | 2°14'03"      |
| C33                     | 1°07'12"  | 255.000 | 6.716      | 6.716        | 358°42'21"    |
| C34                     | 5°03'25"  | 255.000 | 25.155     | 25.148       | 361°02'02"    |
| C35                     | 5°03'25"  | 255.000 | 25.155     | 25.148       | 361°08'37"    |
| C36                     | 5°03'25"  | 255.000 | 25.155     | 25.147       | 346°05'12"    |
| C37                     | 3°29'44"  | 255.000 | 17.885     | 17.883       | 341°45'37"    |
| C38                     | 1°27'41"  | 255.000 | 7.270      | 7.269        | 338°19'45"    |
| C39                     | 3°14'21"  | 255.000 | 18.113     | 18.110       | 338°52'53"    |
| C40                     | 3°24'42"  | 255.000 | 15.790     | 15.778       | 338°58'03"    |
| C41                     | 56°01'07" | 255.000 | 562.736    | 306.488      | 207°37'55"    |
| C42                     | 97°28'28" | 175.000 | 297.717    | 263.092      | 27°54'13"     |
| C43                     | 3°54'18"  | 175.000 | 11.827     | 11.825       | 337°12'51"    |
| C44                     | 3°21'01"  | 255.000 | 11.867     | 11.866       | 188°58'16"    |
| C45                     | 3°17'11"  | 345.000 | 19.799     | 19.795       | 188°04'02"    |
| C46                     | 5°03'27"  | 345.000 | 30.453     | 30.443       | 161°04'42"    |
| C47                     | 5°03'27"  | 345.000 | 30.453     | 30.443       | 168°08'08"    |
| C48                     | 5°03'27"  | 345.000 | 30.452     | 30.443       | 171°11'18"    |
| C49                     | 5°03'27"  | 345.000 | 30.452     | 30.442       | 176°15'02"    |
| C50                     | 3°13'37"  | 345.000 | 31.674     | 31.662       | 181°24'34"    |
| C51                     | 6°15'18"  | 345.000 | 25.231     | 25.222       | 188°26'01"    |
| C52                     | 5°03'39"  | 345.000 | 31.089     | 31.058       | 191°29'26"    |
| C53                     | 5°08'03"  | 345.000 | 30.915     | 30.905       | 196°37'15"    |
| C54                     | 4°52'42"  | 345.000 | 29.375     | 29.368       | 201°37'38"    |
| C55                     | 2°37'07"  | 345.000 | 15.065     | 15.064       | 201°46'02"    |
| C56                     | 1°07'45"  | 195.000 | 3.843      | 3.843        | 26°00'13"     |
| C57                     | 9°04'08"  | 195.000 | 30.865     | 30.832       | 29°54'17"     |
| C58                     | 9°04'10"  | 195.000 | 30.867     | 30.839       | 11°08'58"     |
| C59                     | 9°04'13"  | 195.000 | 30.869     | 30.837       | 2°45'36"      |
| C60                     | 9°04'14"  | 195.000 | 30.871     | 30.839       | 353°41'43"    |
| C61                     | 9°04'15"  | 195.000 | 30.872     | 30.840       | 344°37'28"    |
| C62                     | 9°04'16"  | 195.000 | 30.872     | 30.840       | 335°33'13"    |
| C63                     | 9°04'15"  | 195.000 | 30.872     | 30.839       | 328°28'58"    |
| C64                     | 9°04'14"  | 195.000 | 30.871     | 30.839       | 317°24'43"    |
| C65                     | 8°03'20"  | 165.000 | 274.711    | 244.964      | 338°12'19"    |
| C66                     | 26°54'06" | 375.000 | 176.070    | 174.458      | 13°07'03"     |
| C67                     | 2°35'28"  | 375.000 | 16.958     | 16.957       | 358°22'16"    |
| C68                     | 4°14'46"  | 375.000 | 30.735     | 30.727       | 344°49'40"    |
| C69                     | 4°14'46"  | 375.000 | 30.735     | 30.727       | 330°11'14"    |
| C70                     | 4°14'46"  | 375.000 | 30.736     | 30.727       | 345°20'09"    |
| C71                     | 4°14'46"  | 375.000 | 30.736     | 30.727       | 340°36'23"    |
| C72                     | 3°01'48"  | 375.000 | 19.831     | 19.828       | 338°46'36"    |
| C73                     | 2°56'40"  | 435.000 | 22.354     | 22.352       | 156°44'02"    |
| C74                     | 4°14'47"  | 435.000 | 35.655     | 35.645       | 160°33'15"    |
| C75                     | 4°14'47"  | 435.000 | 35.655     | 35.645       | 160°15'02"    |
| C76                     | 4°14'46"  | 435.000 | 35.655     | 35.645       | 160°04'46"    |
| C77                     | 4°14'46"  | 435.000 | 35.655     | 35.645       | 174°38'35"    |

PLAN OF SURVEY OF  
**LOTS 130 TO 169  
AND LOTS 170 TO 172 (ROADS)**  
IN PROJECTED TP. 78, R. 9 & 10, W.P.M.  
NELSON HOUSE INDIAN RESERVE No. 170  
PROVINCE OF MANITOBA  
SCALE 1:2000

THE PLOT SIZE THAT WILL PROVIDE TRUE SCALE AND OPTIMUM READABILITY FOR THIS PLAN IS 863.6 mm BY 1371.6 mm.

THIS SURVEY WAS EXECUTED DURING THE PERIOD OF MAY 9th, 2023 TO JUNE 9th, 2023  
BY MATHEU M. BOURGEOIS, C.L.S., S.L.S., P.Surv.

**LEGEND**

Iron Bars Ø 0.019 x 0.019 x 0.762 placed shown thus:

Iron Bars Ø 0.019 x 0.019 x 0.762 found shown thus:

Iron Bars Ø 0.025 x 0.025 x 0.914 placed shown thus:

Iron Bars Ø 0.025 x 0.025 x 0.914 found shown thus:

Land dealt with by this plan shown bounded thus:

Radial lines shown thus:

**NOTES:**

Bearings are UTM grid derived from the calculated bearing 166°45'11" between Fd.L.B. R.R. (GCP1) and Fd.L.B. and are referred to the central meridian of UTM Zone 14 (99°) NAD 83 (CSRS) datum.

All distances are horizontal at general ground level and are shown in metres and decimals thereof.

All distances shown on this plan were derived from GNSS observations.

To compute grid distances, multiply ground level distances by the average combined scale factor of 0.999565.

All monuments placed during this survey are marked with a unique number, R53, R54, L374, L375 etc.

| GCP CONTROL STATIONS-UTM COORDINATES - NAD 83 (CSRS - 2010.0 EPOCH) - ZONE 14 |             |            |                 |                 |                       |                    |                    |                               |
|-------------------------------------------------------------------------------|-------------|------------|-----------------|-----------------|-----------------------|--------------------|--------------------|-------------------------------|
| Point No.                                                                     | Northing    | Easting    | Latitude (N)    | Longitude (W)   | Combined Scale Factor | Orthometric Height | Ellipsoidal Height | Estimated Horizontal Accuracy |
| GCP1                                                                          | 6184069.868 | 600884.008 | 60°48'07.73854" | 98°51'01.08525" | 0.99956679            | 253.510            | 219.087            | 0.057                         |
| GCP2                                                                          | 6182216.888 | 607288.538 | 60°47'07.83239" | 98°53'03.32638" | 0.99956596            | 257.879            | 223.512            | 0.027                         |

Coordinates were derived from GNSS observations and are referred to NAD83 (CSRS) EPOCH 2010.0.  
Using the Precise Point Positioning Service  
Orthometric heights are derived from GNSS observations using the PPP Service and the HTv2 geoid model.

**PRELIMINARY PLAN**  
SUBJECT TO REVISION