Nisichawayasihk Cree Nation
NELSON HOUSE, MANITOBA, R0B 1A0
Telephone (204) 484-2332 Fax (204) 484-2392

TENDER NOTICE

January 19, 2023.

The Nisichawayasihk Cree Nation - NNOC (Former High school) is now accepting bid quotations from qualified General and Roofing Contractors for the following Roofing Contract

Supply and Install Roofing Contract Job # 2023-01 NCN/NNOC

Bid packages can be obtained at the NCN Trust Office by contacting Charlize Linklater at the NCN Trust Office or call (204) 484-2604 for assistance. For Contractor site access contact: Mike Cullen @ 204 679-6475

Bids will be accepted by Nora Thomas at the NCN Trust Office and must be submitted in the clearly marked envelope provided and submitted prior to the submission deadline date.

Electronic Tender packages can be downloaded from the NCN Website (ncncree.com) and submitted electronically to:

Nora Thomas – (e-mail) norathomas@ncncree.com

Submission Deadline Date: February 9, 2023 5:00 p. m.

Submissions after the Submission Deadline Date & time will not be accepted.

All or lowest bids not necessarily accepted. NCN shall have the right to disqualify Proponents from the bidding process if they have poor performance including failure to complete their obligations under any prior contract with NCN or have been involved in vexatious litigation with NCN".

Mike Cullen,

NCN Commercial Properties & Claims Manager

Nisichawayasihk Cree Nation
NELSON HOUSE, MANITOBA, R0B 1A0
Telephone (204) 484-2332 Fax (204) 484-2392

Contractor Responsibilities and Liabilities

A) Contractor responsible to review the tender package documentation and provide a complete bid package as required to ensure that your bid meets the qualifying criteria.

B) Contractor responsible to adhere to all applicable codes, regulations and maintain a clean and safe work environment.

C) Contractor responsible to remove all debris from work site and haul to the landfill site or area designated by the owner, in a timely manner and not allow the debris to accumulate on site or in the property.

D) Contractor responsible for the safety of all persons permitted on the site for the duration of the contract.

E) Contractor responsible to inform the NCN Commercial Properties and Claims Manager Mike Cullen (204) 679-6475 of any unsafe or health hazardous conditions that may arise as the work is being performed.

F) Any additional work that may arise from this report, will be negotiated between the contractor and the Designate appointed by the Owner.

G) All additional work or changes to the contract amount will be supported by an approved Change Order, prior to the contractor's continuance of original contract.

H) Contractor responsible to provide all tools, safety equipment etc., required to perform the work.

I) Contractor will be held accountable for the actions of his employees and or any person or sub-contractor that the General Contractor grants access to the NCN Personal Care Home work site for the duration of the contract.

J) Contractor will be required to adhere to all regulations as per NCN Chief & Council and the PCH Executive Director Regitha Rajesh with respect to Covid-19 Pandemic.

Nisichawayasihk Cree Nation
NELSON HOUSE, MANITOBA, R0B 1A0
Telephone (204) 484-2332 Fax (204) 484-2392

January 19, 2023

SCOPE OF WORK

1) Remove and dispose of shingles to local landfill site.

Supply and complete the following

2) Perimeter ice and water shield.
3) Synthetic underlayment over roof sheathing.
4) 24 new attic vents. (Brown)
5) Mystique 42 shingles. (Brown)
6) Install ridge venting supplied by owner.

Nisichawayasihk Cree Nation
NELSON HOUSE, MANITOBA, R0B 1A0
Telephone (204) 484-2332 Fax (204) 484-2392

NCN/NNOC BID FORM

Date: _____

NCN/NNOC Supply & Install Roofing Contract **Job # 2023-01**

CONTRACTOR: _____

Contact Information

Business Name: _____

Contact Person: _____

Mailing Address: _____

Telephone # _____

E-Mail: _____

Labour and materials

Total Bid Amount: $ _____

Contractors Signature: _____

NNOC HIGH SCHOOL TRAILERS
AT
NISICHAWAYASIHK CREE NATION
NELSONHOUSE

ROOF INSPECTION REPORT

April 2022

Prepared by:
NSK Northern Engineering Ltd.

Background:

On April 26, 2022, we traveled to Nelson house to inspect the roof of the NNOC High School Trailers.

The school was constructed of two rows of trailers with a corridor in the middle, several entrance doors were constructed on both sides. A wooden trusses roof was constructed on top of the trailer assembly, steel tie rods were installed to hold the roof trusses together. Roof ridge vent was improperly constructed, the roof vent is fallen apart and partially blown off.

The roof shingles could last for another 1-2 years, immediate repair should be completed; water damages were observed on the ceiling in several classrooms. There was no sign of mold or black stain observed on the roof trusses and sheathing.

Mike Cullen of Nisichawayasihk Cree Nation has requested NSK Northern Engineering to conduct a field inspection to evaluate the roof condition in NNOC High school.

The field inspection was conducted on April 26, 2022, at 2.00 PM; the weather was (-5 C°). The inspection was limited to the roof of the school. Mike was accompanied the inspection.

Naim Karim is a Civil/Structural Engineer registered with the Association of Professional Engineer and geoscientists of Manitoba (EGM) and has performed this visual inspection for NSK Northern engineering. The inspection was limited to the portions of the building that are accessible and visible without destructive testing or disassembling components to gain access. The structural adequacy of the building or any element of the building is not warranted or guaranteed.

Finding

Walk-on inspection was performed; the roof shingles are due and could last for another 1-2 years, several shingles have blown, and the roof sheathing is exposed. The roof ridge vent has fallen apart and partially blown off results in exposing the attic space to the outside environment. The role of thump is to provide roof ventilation based on the ratio of roof area to ventilation opening is 300:1.

In the event that the roof shingles are unable to be replaced by this summer, an immediate action should be taken to cover the exposed roof sheathing and roof ridge; roof ventilation hood needs to be installed to ensure air circulation in the attic space

The roof plumbing, roof flashing, aluminum fascia, eave soffit, eave trough, and downspout should be scheduled for replacement at the same time of the roof shingles replacement; the existing eave trough appears under size, it is recommended to installed new eave trough with cross section of 6"x6".

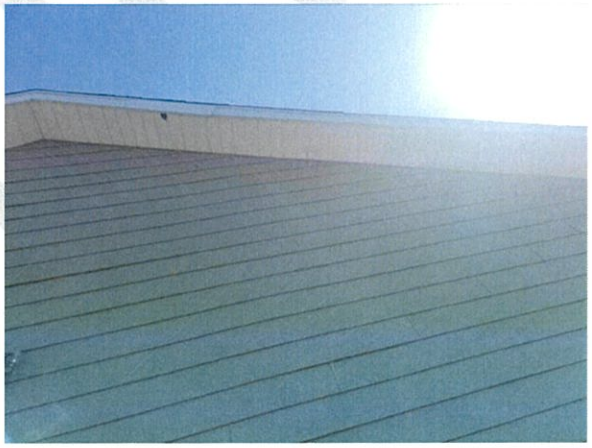
The insulation layer in the attic space should be inspected after the roof shingles are replaced to ensure is free of wet pocket, any wet insulation shall be removed and replaced with new insulation. The defective ceiling board shall be repaired and finish the new ceiling to match the existing.

Prepared by

Naim Karim P.Eng

NSK Northern Engineering

Field Pictures



ALL DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF THE CONSULTANT AND MUST BE RETURNED UPON REQUEST.
ANY REPRODUCTIONS MAY BE MADE WITHOUT THE CONSENT OF THE CONSULTANT AND A REPRODUCTION FEE MUST BE PAID TO THE CONSULTANT.
THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DATUMS AND DETAILS IMPRESSED ON THIS DRAWING WITH THE CONDITIONS ON SITE AND SHALL BE RESPONSIBLE FOR REPORTING ANY ERRORS OR OMISSIONS TO THE DESIGNER PRIOR TO CONSTRUCTION.
THIS DRAWING SHALL NOT BE SCALED.

1 MAIN LEVEL PLAN
2 1 2 1 Scale 1/8" = 1'-0"

RENOVATION NOTES

1. SEAL JOINT IN EXISTING VAPOUR BARRIER AT CEILING WHERE BEAMS BETWEEN MODULAR UNITS HAVE SEPARATED. CAULK JOINT FROM UNDERSIDE TO PROVIDE A CONTINUOUS SEAL.
2. AFTER BUILDING HAS BEEN LEVELLED AND FOUNDATION HAS BEEN REINFORCED, ADJUST ALL DOORS.
3. REMOVE AND REINSTALL EXISTING EXTERIOR CLADDING ON GABLE END OF ATTIC SPACE. INSTALL NEW AIR BARRIER PRIOR TO REINSTALLING CLADDING.
4. INSTALL NEW EXTERIOR CLADDING AND CORNER TRIM TO MATCH EXISTING WHERE MISSING. REPLACE DAMAGED WALL SHEATHING AND INSTALL NEW AIR BARRIER PRIOR TO INSTALLING CLADDING.

NOTE: THE CEILINGS AND WALLS BETWEEN CLASSROOMS ARE FIRE RESISTANCE RATED. ALL NEW PENETRATIONS THROUGH THESE ASSEMBLIES ARE TO BE FIRESTOPPED.

NOTE: PROVIDE REPAIRS AND MODIFICATIONS TO ATTIC FIRE BLOCKS AS INDICATED ON DRAWING S3 ROOF FRAMING PLAN. INSTALL NEW 22" x 36" RATED ACCESS DOOR C/W SELF CLOSING HINGES AND LATCH.

NOTE: CONTRACTOR TO INSTALL NEW PWF FRAMING AND SKIRTING AROUND THE CRAWL SPACE. SKIRTING PROFILE AND FRAMING TO MATCH EXISTING. USE 5/8" PWF PLYWOOD FOR SKIRTING SHEATHING.

MECHANICAL SCOPE OF WORK

HVAC

1.1 MECHANICAL CONTRACTOR TO PROVIDE NEW 22 ½" X 20" X 19" HIGH RETURN AIR BONNET ON EXISTING ELECTRIC FURNACES. BONNET TO BE FIELD FABRICATED AND COME WITH 1" FILTER RACK. CONFIRM ACTUAL DIMENSIONS ON SITE. PROVIDE (1) 18" X 8" HART COOLEY MODEL 651 (OR EQUAL) RETURN AIR REGISTER C/W MS DAMPER FOR EACH BONNET.

1.2 REMOVE EXISTING OUTSIDE AIR FLEXIBLE DUCTWORK. INSTALL NEW 8" ROUND GALVANIZED OUTSIDE AIR DUCT FOR EACH FURNACE THROUGH TO EXISTING ROOF CAP. NOTE: ONLY (1) FURNACE OUTSIDE AIR DUCT IS TO BE CONNECTED TO EXISTING ROOF CAPS. IF (3) FURNACES ARE CONNECTED TO (1) ROOF CAP AN ADDITIONAL ROOF CAP MUST BE PROVIDED. **INCLUDE SEPARATE PRICE FOR ADDITIONAL ROOF CAP INSTALLATION.** CONNECT NEW 8" GALVANIZED OUTSIDE AIR DUCT TO NEW BONNET C/W BALANCING DAMPER.

PLUMBING

2.1 MECHANICAL CONTRACTOR TO RE HANG 8" SANITARY MAINS IN CRAWL SPACE UPON COMPLETION OF STRUCTURAL WORK. MAINTAIN GRADING AND HANGER SPACING AS PER CODE. EXTEND/REDUCE BRANCH CONNECTIONS TO MAINS TO ACCOMMODATE NEW GRADING. CARRY COSTS FOR ANY ADDITIONAL PIPING FOR CONNECTION TO CIVIL LOW PRESSURE SYSTEM. ALL PIPING TO BE SCHEDULE 40 PVC. ALL ABS PIPING OR FITTINGS TO BE REMOVED.

GENERAL NOTES :

1. THESE DRAWINGS SHALL NOT BE SCALED.
2. CONTRACTOR SHALL SATISFY THEMSELVES THAT ALL DIMENSIONS, DATUMS AND DETAILED INFORMATION SHOWN ARE CORRECT PRIOR TO COMMENCING WORK.
3. CONTRACTOR TO REPORT ANY DISCREPANCIES TO THE CONSULTANT PRIOR TO COMMENCEMENT OF WORK.
4. CONTRACTOR TO REVIEW ALL ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR ALL OPENINGS THROUGH FLOOR, WALLS AND ROOF. REFER TO STRUCTURAL DETAILS FOR STRUCTURAL FRAMING.
5. ALL PLYWOOD OR WOOD BLOCKING USED BELOW OR AT GRADE TO BE PRESSURE TREATED.
6. CONTRACTOR TO VERIFY ALL EXISTING SITE CONDITIONS AND REPORT ALL DISCREPANCIES TO THE CONSULTANT PRIOR TO CONSTRUCTION.
7. CONTRACTOR TO INVESTIGATE LOCAL CONDITIONS AND ARRANGE WITH OWNER TO EXAMINE SITE AND RELATED WORK.
8. COMPENSATION WILL NOT BE MADE BECAUSE OF FAILURE TO MAKE PROPER SITE INVESTIGATIONS & REPORTING ANY DISCREPANCIES TO THE CONSULTANT PRIOR TO TENDER CLOSING OR TO UNDERSTAND FULL NATURE OF WORK.
9. CONTRACTOR TO REMOVE ALL DEMOLITION ITEMS FROM SITE UNLESS OTHERWISE INSTRUCTED BY OWNER, OR INDICATED ON DRAWINGS.
10. CONTRACTOR TO REPLACE ANY ITEMS TEMPORARILY MOVED IN THE COURSE OF CONSTRUCTION WORK.
11. CONTRACTOR TO REPAIR ANY ITEMS DAMAGED DURING THE COURSE OF CONSTRUCTION WORK.

LIST OF DRAWINGS

A2.1 MAIN LEVEL PLAN

S1 FOUNDATION PLAN (AS BUILT)
S2 MAIN FLOOR & CONC. PAD REMEDIAL CONSTRUCTION
S3 ROOF FRAMING PLAN W/REMEDIAL CONSTRUCTION
S4 NOTES

Revisions

Date	Revision

Northern Sky Architecture Inc.
100 - 28 Applebridge
Winnipeg, Manitoba, Canada
R2M 5Y2
Tel 204 103 7676
Fax 204 103 7679
204 943 6767

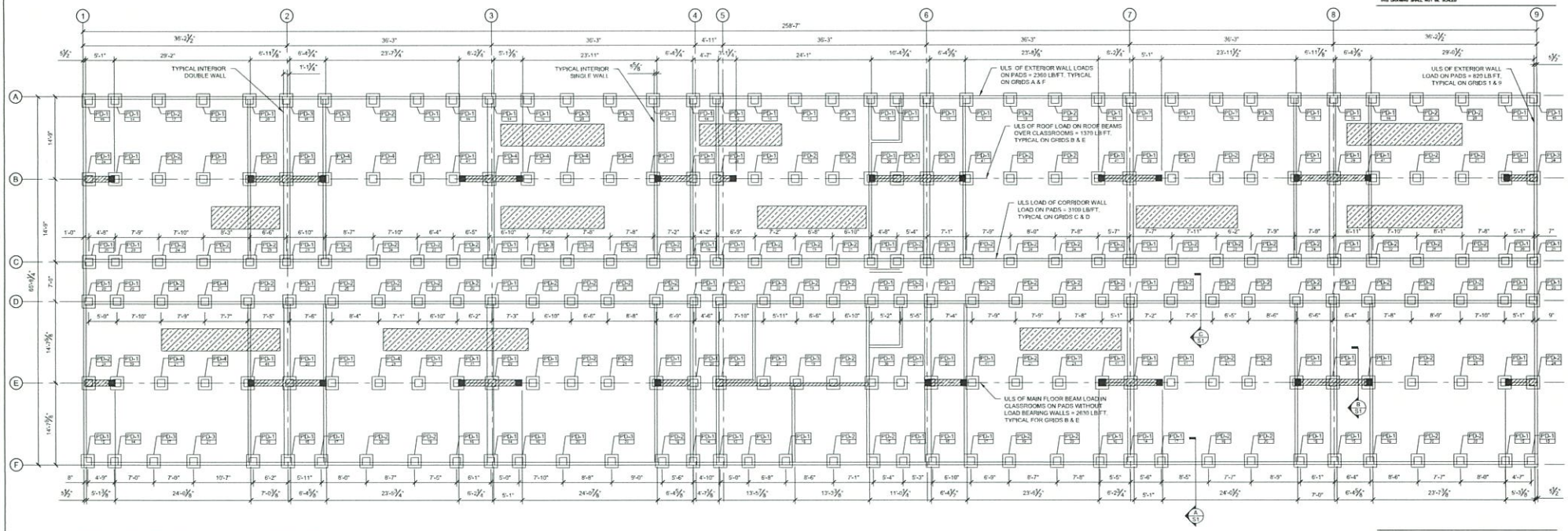
Stamp: PROVINCE OF MANITOBA NORTHERN SKY ARCHITECTURE INC. No. 521 REGISTERED ARCHITECTURAL CORPORATION

Stamp: PROVINCE OF MANITOBA DONALD R. OLIVER 5/10/16 REGISTERED ARCHITECT

Project
Nisichawayasihk Cree Nation
NNOC Remediation
Nelson House, Manitoba

drawing title	MAIN LEVEL PLAN		
scale	as noted	designed by	kdw
date	October 7, 2016	drawn by	kdw
project no.	15.261	reviewed by	dlo
reference no.		sheet A2.1	REV.

ALL DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF THE CONSULTANT
NO REPRODUCTIONS MAY BE MADE WITHOUT THE CONSENT OF THE CONSULTANT AND ALL REPRODUCTIONS MUST BEAR THE NAME OF THE CONSULTANT.
THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DATUMS AND LEVELS NOTED ON THIS DRAWING PRIOR TO COMMENCEMENT OF WORK. REPORT ANY ERRORS OR OMISSIONS TO THE DESIGNER FOR CLARIFICATION.
THIS DRAWING SHALL NOT BE SCALED



FOUNDATION PLAN (AS-BUILT)

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

MAIN FLOOR LOADING:
LIVE LOAD = 100 PSF
DEAD LOAD = 20 PSF

EXISTING CONCRETE PAD SCHEDULE	
MARK	DESCRIPTION
PD-1	EXISTING 28"x28"x11½" CONC. PAD W/ 16"x16" CONC. PIER
PD-2	EXISTING 28"x28"x11½" CONC. PAD W/ 3"Ø STEEL TELEPOST
PD-3	EXISTING 28"x28"x11½" CONC. PAD WITH NO POST
PD-4	EXISTING 28"x28"x11½" CONC. PAD W/ 6"x6" WOOD POST
PD-5	EXISTING 28"x28"x11½" CONC. PAD REPOSITIONED AT LOCATIONS SHOWN UNDER NEW CLASS ROOM POSTS IN MAIN FLOOR. ENSURE PROPER CONTINUOUS BEARING FROM MAIN LEVEL TELEPOST TO TOP OF NEW TELEPOST IN CRAWL SPACE THROUGH MAIN LEVEL FLUSH FRAMED BUILT-UP LVL. BEAM. TYPICAL FOR 13 LOCATIONS

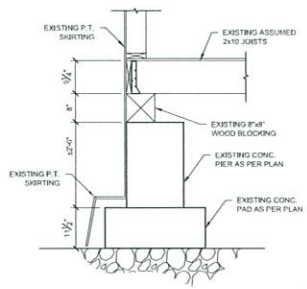
TYPICAL CONCRETE PAD DESIGNATIONS.
PD-1 PAD TYPE (SEE SCHEDULE FOR DETAILS)
COORDINATE ULS FACTORED DESIGN LOADS WITH STRUCTURAL ENGINEER

DIMENSION NOTES:

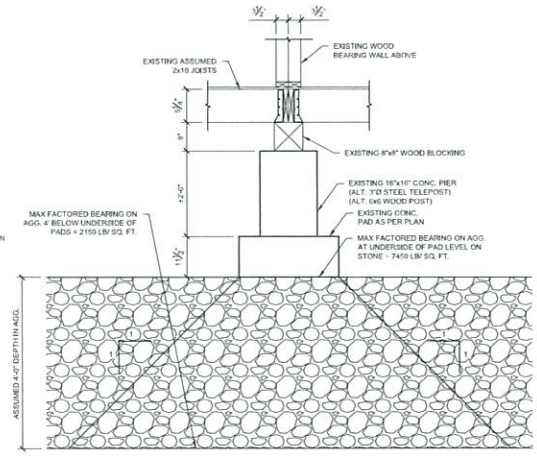
1. THE FACE OF PIER = THE FACE OF FOUNDATION IN BOTH DIRECTIONS.
2. THE CONCRETE PADS ON GRIDLINES "A,B, & C" AND "D & E" ARE IN LINE WITH ONE ANOTHER.
3. ALL DIMENSIONS ARE APPROXIMATE AND ARE TO BE SITE CONFIRMED BEFORE COMMENCING CONSTRUCTION.

HATCH DENOTES LOAD BEARING WALLS W/ULS (ULTIMATE LIMIT STATES + FACTORED) LOADING = 4100 LBS/F.T. GRIDLINES B & E

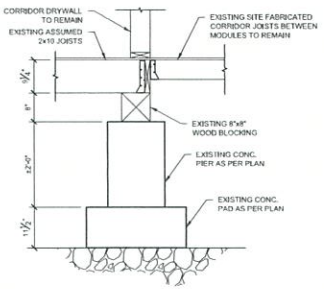
HATCH DENOTES APPROXIMATE LOCATION OF EXISTING MOVING FRAME AND WHEELS TO BE REMOVED



A S1 EXTERIOR CONC. PAD SECTION
SCALE: 3/4"=1'-0"



B S1 LOAD BEARING WALL SECTION
SCALE: 3/4"=1'-0"



C S1 CORRIDOR - CLASSROOM FLOOR SECTION
SCALE: 3/4"=1'-0"

APEGM
Certificate of Authorization
KNH Sawatzky & Associates Ltd.
No. 1193 Date: Oct. 7, 2016

Revisions

Date	Revision

Northern Sky Architecture Inc.
100–128 James Avenue
Winnipeg, Manitoba, Canada
R3B 0N5
204.943.6767

KNH
K.N.H. SAWATZKY & ASSOCIATES
STRUCTURAL ENGINEERING CONSULTANTS
100 PRINCE ST. WINNIPEG, MANITOBA R3B 1L1
PH. 204-956-7076
FAX 204-956-7078

Stamp

PROVINCE OF MANITOBA
Oct. 7, 2016
KNH
SAWATZKY
Member
5471
REGISTERED PROFESSIONAL ENGINEER

Stamp

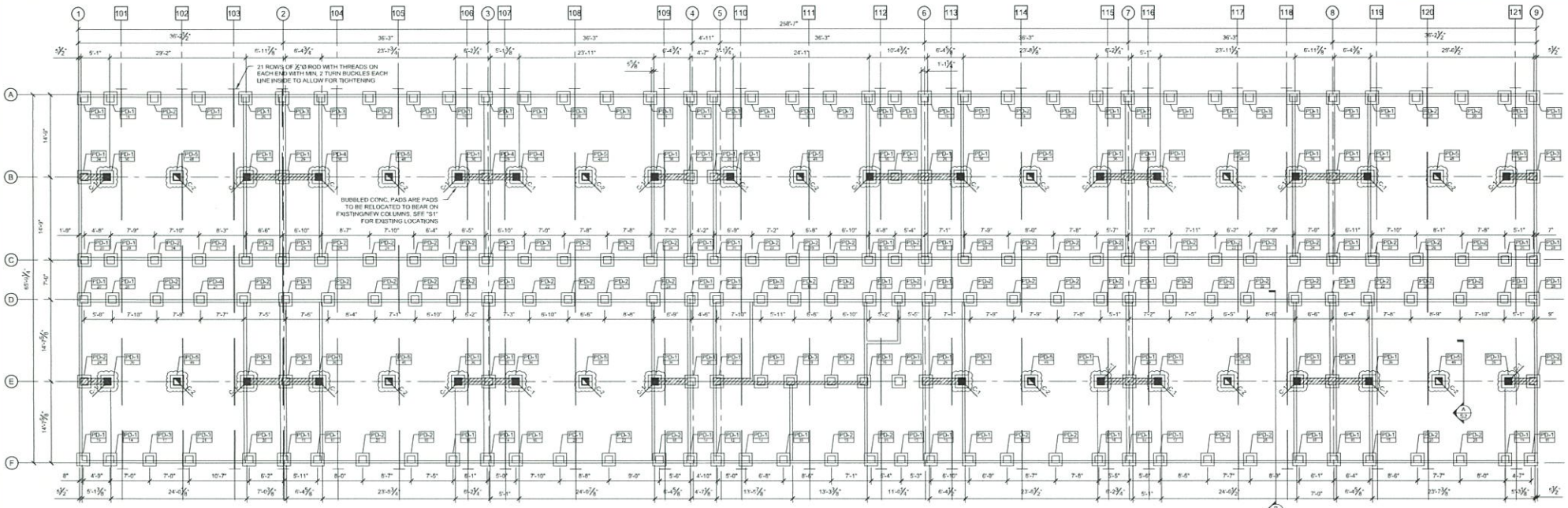
Project
Nisichawayasihk Cree Nation
NNOC Remediation
Nelson House, Manitoba

drawing title: FOUNDATION PLAN (AS-BUILT)

scale	as noted	designed by	knhs
date	September , 2016	drawn by	js
project no.	16.261	reviewed by	knhs
reference no.		sheet S1	REV.

EXISTING MAX FACTORED PAD LOAD = 41200 LBS
EXISTING MAX FACTORED BEARING PRESSURE AT UNDERSIDE OF PADS = 7540 PSF (ULS)

ALL DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF THE CONSULTANT
[illegible]
THIS DRAWING SHALL NOT BE SCALED



MAIN FLOOR & CONC. PAD REMEDIAL CONSTRUCTION

SCALE: ⅛" = 1'-0"

ROOF DESIGN LOADING:
SNOW LOAD = 45 PSF
DEAD LOAD = 20 PSF

MAIN FLOOR DESIGN LOADING:
LIVE LOAD = 100 PSF
DEAD LOAD = 20 PSF

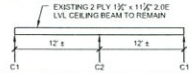
EXISTING CONCRETE PAD SCHEDULE

MARK	DESCRIPTION
PD-1	EXISTING 28"x28"x11½" CONC. PAD W/ 16"x16" CONC. PIER
PD-2	EXISTING 28"x28"x11½" CONC. PAD W/ 3"Ø STEEL TELEPOST
PD-3	EXISTING 28"x28"x11½" CONC. PAD WITH NO POST
PD-4	EXISTING 28"x28"x11½" CONC. PAD W/ 6"x6" WOOD POST
PD-5	EXISTING 28"x28"x11½" CONC. PAD REPOSITIONED AT LOCATIONS SHOWN UNDER NEW CLASS ROOM POSTS IN MAIN FLOOR. ENSURE PROPER CONTINUOUS BEARING FROM MAIN LEVEL TELEPOST TO TOP OF NEW TELEPOST IN CRAWL SPACE THROUGH MAIN LEVEL FLUSH FRAMED BUILT-UP LVL BEAM. TYPICAL FOR 13 LOCATIONS

COLUMN SCHEDULE

MARK	DESCRIPTION
C-1	VERIFY THREE PLY 2x4 OR TWO PLY 2x6 SPF #2 OR BETTER STUD COLUMN
C-2	NEW 20600 LBS FACTORED STEEL TELEPOST (SEE A/S2 FOR DETAILS) 4"x4"x¼" MIN. CAP PLATES AND BASE PLATES BEARING DIRECTLY ON WOOD ONLY

TYPICAL CLASSROOM ROOF BEAM REMEDIAL REQUIREMENTS:



CRAWL SPACE TELEPOST CAP PLATE & BASE PLATE SCHEDULE

GRIDLINES	DESCRIPTION
A & F	4"x6"x¼" MIN. CAP PLATES, 4"x4"x¼" BASE PLATES
B & E	48000 MIDDLE CLASSROOM LOCATIONS ONLY: 6"x12"x1¼" MIN. CAP PLATES, 6"x6"x1" MIN. BASE PLATES
B & E	ALL OTHER POSTS: 6"x12"x1" MIN. CAP PLATES, 4"x5"x¼" MIN. BASE PLATES
C & D	5"x8"x1" MIN. CAP PLATES, 4"x4"x¼" MIN. BASE PLATES

DIMENSION NOTES:

1. THE FACE OF PIER = THE FACE OF FOUNDATION IN BOTH DIRECTIONS.
2. THE CONCRETE PADS ON GRIDLINES "A,B, & C" AND "D & E" ARE IN LINE WITH ONE ANOTHER.
3. ALL DIMENSIONS ARE APPROXIMATE AND ARE TO BE SITE CONFIRMED BEFORE COMMENCING CONSTRUCTION.

HATCH DENOTES LOAD BEARING WALLS W/ ULS (ULTIMATE LIMIT STATES = FACTORED) LOADING = 4100 LBS/FT. GRIDLINES B & E

HATCH DENOTES LOCATIONS OF EXISTING COLUMNS. SEE COLUMN SCHEDULE FOR DETAILS. (C-1)

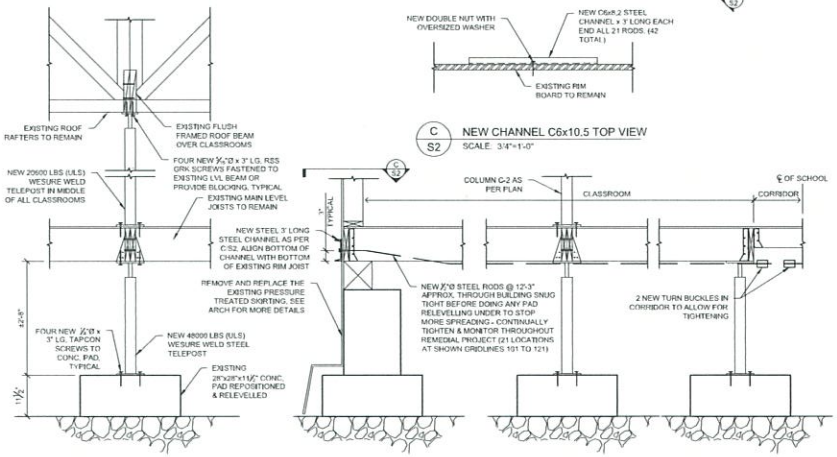
HATCH DENOTES LOCATIONS OF NEW COLUMNS. SEE COLUMN SCHEDULE FOR DETAILS. (C-2)

TELEPOST & BASE PLATE NOTES:

- PROVIDE A SINGLE NEW ADJUSTABLE STEEL TELEPOST AT ALL PADS EXCEPT ALL PD-1 PADS.
- ENSURE TELEPOST CAPACITIES MEET THE LOADS INDICATED AT EACH PAD ON THE PLAN.
- PROVIDE NEW STEEL TELEPOSTS FOR ALL PD-1 PADS WITH ONE STEEL TELEPOST LOCATED ON EITHER SIDE OF THE EXISTING CONCRETE PIER (HALF TOTAL FACTORED LOAD AS SHOWN TO BE REBSTED BY EACH NEW TELEPOST.
- FOR ALL PD-1 PADS, A NEW 6x6 TIMBER BEAM IS TO BE INSTALLED ACROSS THE TOP OF THE EXISTING CONC. PIER WITH A MIN. 1" GAP BETWEEN THE TOP OF THE CONCRETE PIER AND THE UNDERSIDE OF THE NEW 6x6. THE 6x6 SHALL BE LONG ENOUGH TO EXTEND A MIN. OF 4" BEYOND THE EXTERIOR EDGE OF BOTH TELEPOST CAP PLATES FOR FULL BEARING AND TO PROVIDE AN EDGE DISTANCE TO THE CLOSEST TELEPOST ATTACHMENT SCREW TO PREVENT SPLITTING OF WOOD.
- SEE SCHEDULE ON "S2" FOR ALL TELEPOST CAP PLATE & BASE PLATE SIZES IN CRAWLSPACE.
- CLEAN OFF THE BEARING SURFACE ON ALL CONCRETE PADS TO PROVIDE SMOOTH BEARING FOR ALL TELEPOST BASEPLATES.

CONTRACTOR TO CONTACT ENGINEER TO CONFIRM NEW TELEPOST LOCATIONS AS IT MIGHT BE IN A POOR LOCATIONS BASED ON UNSEEN SPLICES IN EXISTINGBEAM

REFER TO "S4" FOR MAIN FLOOR FRAMING SEQUENCING NOTES



A S2 CLASSROOM TELEPOST SECTION
SCALE: 3/4"=1'-0"

B S2 CLASSROOM TO CORRIDOR SECTION
SCALE: 3/4"=1'-0"

APEGM
Certificate of Authorization
KNH Sawatzky & Associates Ltd.
No. 1193 Date: Oct. 7, 2016

Revisions

Date	Revision

Northern Sky Architecture Inc.
100-135 George Avenue
Winnipeg, Manitoba, Canada
R3B 1G6
204.943.6767

KNH
K.N.H. SAWATZKY & ASSOCIATES STRUCTURAL ENGINEERING CONSULTANTS
Tel: (204) 338-0877
Fax: (204) 338-0878
Email: mail@knh.mb.ca
Web: www.knh.mb.ca

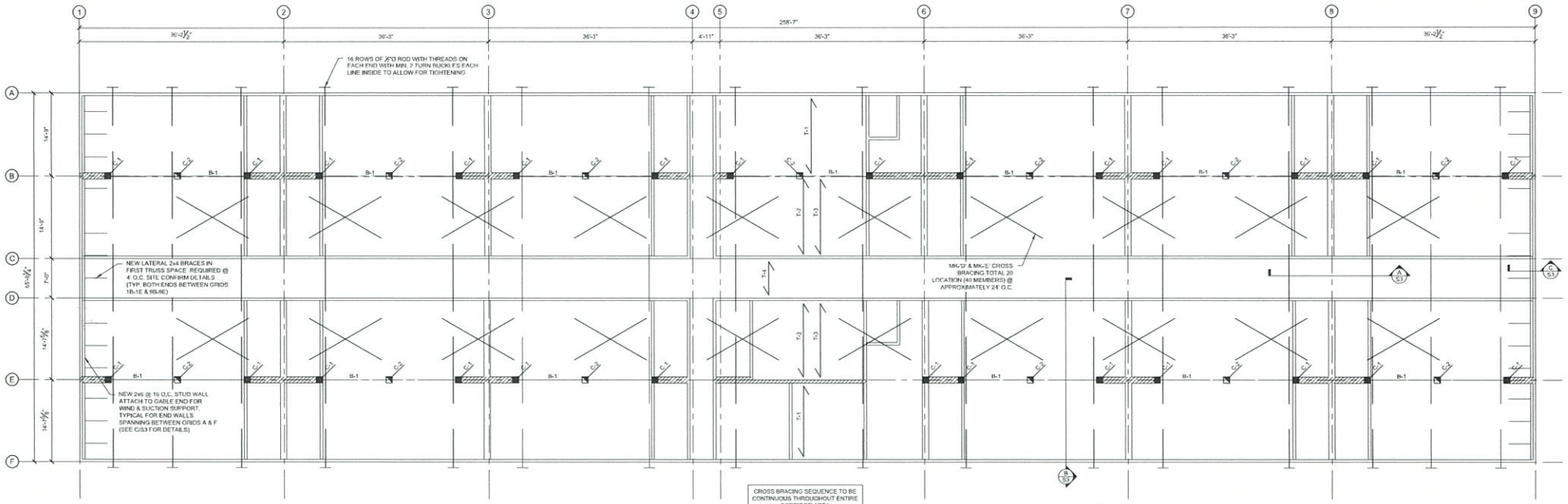
Stamp
PROVINCE OF MANITOBA
Oct. 7, 2016
K.N.H. SAWATZKY
Member 5471
REGISTERED PROFESSIONAL ENGINEER

Stamp

Project
Nisichawayasihk Cree Nation
NNOC Remediation
Nelson House, Manitoba

drawing title	MAIN FLOOR & CONC. PAD REMEDIAL CONSTRUCTION		
scale	as noted	designed by	knhs
date	September , 2016	drawn by	js
project no.	16.261	reviewed by	knhs
reference no.		sheet S2	REV.

ALL DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF THE CONSULTANT
NO REPRODUCTIONS MAY BE MADE WITHOUT THE CONSENT OF THE CONSULTANT AND ALL REPRODUCTIONS MUST BEAR THE NAME OF THE CONSULTANT.
THE CONTRACTOR WILL VERIFY ALL DIMENSIONS, DATUMS AND LEVELS NOTED ON DRAWINGS PRIOR TO THE PREPARATION OF SHOP DRAWINGS OR THE PERFORMANCE OF WORK. REPORTING ANY ERRORS OR OMISSIONS TO THE ENGINEER FOR ADJUSTMENT.
THIS DRAWING SHALL NOT BE SCALED



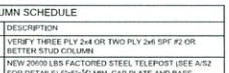
ROOF FRAMING PLAN W/ REMEDIAL CONSTRUCTION

SCALE: ¼" = 1'-0"

ROOF DESIGN LOADING:
SNOW LOAD = 45 PSF
DEAD LOAD = 20 PSF

COLUMN SCHEDULE	
MARK	DESCRIPTION
C-1	VERIFY THREE PLY 2x4 OR TWO PLY 2x6 SPF #2 OR BETTER STUD COLUMN
C-2	NEW 20600 LBS FACTORED STEEL TELEPOST (SEE A/S2 FOR DETAILS) 5"x5"x⅜" MIN. CAP PLATE AND BASE PLATES BEARING DIRECTLY ON WOOD ONLY

TYPICAL CLASSROOM ROOF BEAM REMEDIAL REQUIREMENTS



TRUSS SCHEDULE (SEE DETAIL B/S3)	
MARK	DESCRIPTION
T-1	EXISTING MONO-PITCH TRUSS @ 24" O.C.
T-2	EXISTING PARALLEL CHORD BOTTOM (42" HIGH) ROOF TRUSS @ 24" O.C.
T-3	EXISTING MONO-PITCH "PIGGY-BACK" ROOF TRUSS OVER TOP OF T-2
T-4	EXISTING 2x8 CEILING JOISTS ABOVE CORRIDOR @ 24" O.C.

BEAM SCHEDULE	
MARK	DESCRIPTION
B-1	EXISTING 2 PLY 1¾"x11⅞" LVL BEAM

BRACING NOTES:

- USE 2x4 SPF #2 OR BETTER UNLESS NOTED OTHERWISE
- SHALL HAVE MIN. TWO 3½" LONG FRAMING NAILS INSTALLED INTO EACH ROOF TRUSS MEMBER
- SHALL BE INSTALLED ALONG A VERTICAL WEB IN EACH TRUSS
- SHALL BE INSTALLED CONTINUOUS FROM THE BOTTOM CHORD TO THE TOP CHORD OF EACH TRUSS BEING LATERALLY SUPPORTED

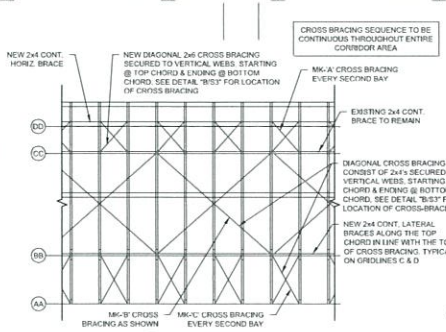
HATCH DENOTES LOAD BEARING WALLS W. ULS (ULTIMATE LIMIT STATES = FACTORED) LOADING = 4100 LBS/FT. GRIDLINES B & E

HATCH DENOTES LOCATIONS OF EXISTING COLUMNS, SEE COLUMN SCHEDULE FOR DETAILS. (C-1)

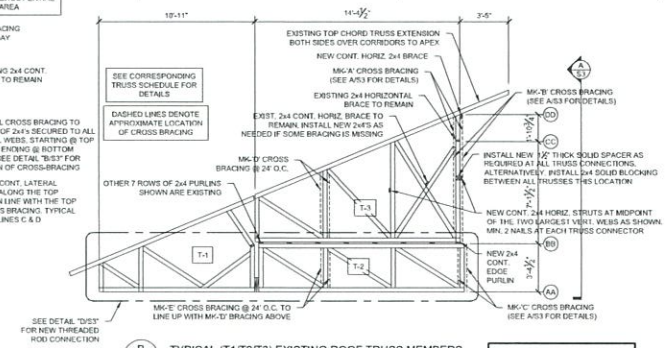
HATCH DENOTES LOCATIONS OF NEW COLUMNS. SEE COLUMN SCHEDULE FOR DETAILS. (C-2)

ALL DIMENSIONS ARE APPROXIMATE AND ARE TO BE SITE CONFIRMED BEFORE COMMENCING CONSTRUCTION

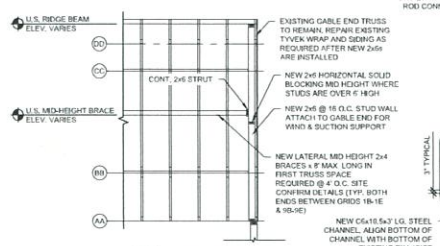
SEE "S4" FOR ROOF FRAMING SEQUENCING NOTES



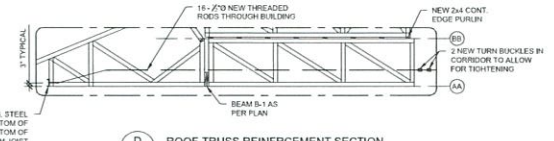
A S3 BRACING PLAN
SCALE: 1/4"=1'-0"



B S3 TYPICAL (T1/T2/T3) EXISTING ROOF TRUSS MEMBERS
SCALE: 1/4"=1'-0"



C S3 END GABLE PLAN
SCALE: 1/4"=1'-0"



D S3 ROOF TRUSS REINFRCEMENT SECTION
SCALE: 1/4"=1'-0"

APEGM
Certificate of Authorization
KNH Sawatzky & Associates Ltd.
No. 1193 Date: Oct. 7, 2016

Revisions

Date	Revision

Northern Sky Architecture Inc.
100-128 James Avenue
Winnipeg, Manitoba, Canada
R3B 0N5
Ph: 204.943.8767
Fax: 204.943.8768
204.943.6767

KNH
K. V. A. SAWATZKY & ASSOCIATES
STRUCTURAL ENGINEERING CONSULTANTS
100-128 James Avenue
Winnipeg, Manitoba
R3B 0N5
Ph: 204.943.8767
Fax: 204.943.8768

Stamp
PROVINCE OF MANITOBA
Oct. 7, 2016
KNH
SAWATZKY
Member
5471
REGISTERED PROFESSIONAL ENGINEER

Stamp

Project
Nisichawayasihk Cree Nation
NNOC Remediation
Nelson House, Manitoba

drawing title	ROOF FRAMING PLAN W/ REMEDIAL CONSTRUCTION		
scale	as noted	designed by	knhs
date	September , 2016	drawn by	js
project no.	16.261	reviewed by	knhs
reference no.		sheet	S3
		REV.	

ALL DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF THE CONSULTANT
[illegible]
[illegible]
THIS DRAWING SHALL NOT BE SCALED

A. GENERAL

1. ALL RELEVANT CSA CODES, PROVINCIAL BUILDING CODE, WORKMAN'S COMPENSATION BOARD, AND LOCAL BY-LAWS SHALL APPLY TO ALL WORK PERFORMED FOR THIS PROJECT.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, INSTALLATION AND SAFETY OF ALL TEMPORARY SHORING, BRACING, FORM WORK AND SCAFFOLDING DURING WORK IN THIS PROJECT. ALL INFORMATION NOTED IN THESE NOTES SHALL BE READ IN CONJUNCTION WITH THE WRITTEN PROJECT SPECIFICATIONS.

3. THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS SHOWN ON THE STRUCTURAL DRAWINGS PRIOR TO CONSTRUCTION AND SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY SUCH DISCREPANCY. DO NOT SCALE DRAWINGS.

4. THIS PROJECT HAS BEEN DESIGNED IN ACCORDANCE WITH 2010 EDITION OF THE NATIONAL BUILDING CODE OF CANADA AND THE MANITOBA BUILDING CODE 2011.

5. THE CONTRACTOR SHALL ENSURE ALL MATERIALS ARE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.

B. WOOD

1. ALL DIMENSIONAL LUMBER SHALL BE SPECIES GROUP 'D' S-P-F No.1 AND 2 UNLESS NOTED OTHERWISE ON THE DRAWINGS.

2. ALL STRUCTURAL SAWN LUMBER, NAILING, AND CONNECTIONS SHALL BE IN ACCORDANCE WITH CSA STANDARD O86-09

3. ALL METAL STRAPS, JOIST HANGERS, TRUSS ANCHORS ETC. SHALL BE MINIMUM 18 GAUGE HOT-DIPPED GALVANIZED MATERIAL INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

4. ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED IN ACCORDANCE WITH CSA O121-08 STANDARD. T&G FLOOR SHEATHING SHALL BE DOUGLAS FIR PLYWOOD TO CSA O121-08 OR SPRUCE PLYWOOD TO CSA STANDARD O151-09 OR OSB PANEL TO CSA O437-93-R2011.

5. UNLESS OTHERWISE NOTED ON THE DRAWINGS ALL STUD MATERIAL, BACKING, BLOCKING AND BRACING SHALL BE SPECIES GROUP 'D' S-P-F GRADE No.1 AND 2.

6. ALL ROOF AND EXTERIOR SHEATHING SHALL BE EITHER DOUGLAS FIR PLYWOOD EXTERIOR GRADE TO CSA O121-08 STANDARD, SPRUCE PLYWOOD TO CSA O151-09, OR OSB PANEL TO CSA O437-93-R2011.

7. ASPENITE OR WAFERBOARD IS NOT PERMITTED TO BE USED FOR ANY STRUCTURAL APPLICATION ON THIS PROJECT.

8. ALL BRIDGING, GENERAL BRACING, AND BLOCKING FOR ROOF TRUSSES AND PRE ENGINEERED FLOOR SYSTEMS SHALL BE INSTALLED AS REQUIRED AND SPECIFIED BY THE MANUFACTURER UNLESS NOTED OTHERWISE ON THE DRAWINGS.

9. DO NOT PILE ROOF SHEATHING OR ANY CONSTRUCTION MATERIALS OR EQUIPMENT ON ROOF DURING CONSTRUCTION.

C. STRUCTURAL STEEL

1. ALL STRUCTURAL STEEL SHALL CONFORM TO G40.20-04/G40.21- 04(R2009)-M350W.

2. ALL STEEL DETAILING AND FABRICATION INCLUDING ERECTION SHALL BE IN ACCORDANCE WITH THE LATEST CSA S16-09 STANDARD.

3. ALL WELDING OF STRUCTURAL STEEL SHALL CONFORM TO CSA W59-03-R2008 WITH FABRICATOR TO BE CERTIFIED IN ACCORDANCE WITH CSA W47.1-09. PROVIDE WRITTEN PROOF OF WELDER'S CERTIFICATION UPON REQUEST.

4. THE STEEL SUPPLIER SHALL BE RESPONSIBLE FOR THE DESIGN AND DETAILING OF ALL STRUCTURAL STEEL CONNECTIONS NOT EXPLICITLY SHOWN ON THE DRAWINGS.

5. ALL STRUCTURAL STEEL SHALL RECEIVE AT LEAST ONE COAT OF PRIMER TO CISC/CPMA STANDARD 2-75. ALL STEEL BELOW FLOOR SLAB LEVEL SHALL HAVE ASPHALT BASED PAINT.

6. ALL STRUCTURAL STEEL THAT MAY BE EXPOSED TO THE ELEMENTS SHALL BE EITHER HOT-DIPPD GALVANIZED, PAINTED WITH GREY-OXIDE PAINT OR POWDER COATED.

7. ALL REQUIRED DRY PACK GROUT SHALL BE 'M-BED' OR 'IN-PAKT'.

D. SHOP DRAWINGS

1. SUBMIT FOUR COMPLETE SETS OF SHOP DRAWINGS TO ENGINEER FOR REVIEW MINIMUM THREE WEEKS PRIOR TO REQUIRED MANUFACTURE DATE.

2. ALL SHOP DRAWINGS SHALL INCLUDE ALL LOADING DETAILS, DIMENSIONS, SIZES, OPENING LOCATIONS ETC.

3. ALL SHOP DRAWINGS SHALL BE SEALED BY A PROFESSIONAL REGISTERED IN THE PROVINCE OF MANITOBA.

4. SUBMIT SHOP DRAWINGS FOR THE FOLLOWING ITEMS:
   (1) STRUCTURAL & MISCELLANEOUS STEEL
   (2) TELEPOSTS

MAIN FLOOR FRAMING SYSTEM SEQUENCING FOR REMEDIAL CONSTRUCTION TO BE COMPLETED

1. ALL OF THE EXISTING TRAILER WHEELS, FRAMES AND AXLES SHOULD BE REMOVED FROM THE CRAWLSPACE AREA, TO FACILITATE THIS, THE SKIRTING ON ONE OR BOTH OF THE ENDS OF THE BUILDING SHOULD BE TEMPORARILY REMOVED. WE ESTIMATE THERE ARE APPROXIMATELY 11 TRAILERS TO BE REMOVED. ALTERNATIVELY, THE TRAILERS CAN SIMPLY BE DROPPED AND LEFT IN THE CRAWLSPACE IF THERE IS SUFFICIENT ACCESS AROUND TO PERFORM THE WORK REQUIRED.

2. BEFORE THE TRAILERS ARE REMOVED, CARE SHOULD BE TAKEN TO ENSURE THAT TEMPORARY POSTS ARE INSTALLED AS REQUIRED IN AREAS WHERE THE FLOOR IS SUPPORTED ON THE WHEELS WITHOUT PROPER SUPPORT POSTS IN PLACE TO TAKE THE VERTICAL LOAD ONCE THE WHEELS ARE REMOVED.

3. INITIATE THE RELEVELLING OF THE CRAWLSPACE SUPPORT POSTS AND PADS STARTING FROM THE EAST END. ALL FINAL PLACEMENT OF ALL PADS SHOULD BE CENTERED ON THE SUPPORT POSTS.

4. THE SUPPORT POSTS AND PADS SHOULD ONLY BE RELEVELLED IN AREAS AFTER ALL THE ROOF FRAMING SYSTEM ALIGNMENT AND BRACING IS PROPERLY COMPLETED ABOVE INCLUDING THE INSTALLATION OF ALL THE RODS WHICH SHOULD BE SNUG TIGHT ONLY TO PREVENT ANYMORE SPREAD OFF THE ROOF MODULES. THE CRAWLSPACE REMEDIAL WORK SHOULD NOT BE PERFORMED BELOW ROOF TRUSS AREAS WHICH HAVE NOT BEEN PROPERLY REMEDIATED.

5. THE RELEVELLING PROCESS SHOULD BE COMPLETED ON A PAD BY PAD BASIS TO ENSURE THAT ONLY SMALL PORTIONS OF THE FLOOR ARE BEING WORKED ON AT ONE TIME.

6. TEMPORARY POSTS SHOULD BE INSTALLED ON ALL PADS WHICH DO NOT HAVE SUPPORT POSTS BEFORE ANY REMEDIAL WORK COMMENCES. THERE ARE AT LEAST 8 EXISTING PADS WHICH DO NOT APPEAR TO HAVE ANY POSTS AT ALL.

7. THE RELEVELLING WORK ON EACH PAD SHALL INCLUDE A TEMPORARY SUPPORT TO BE INSTALLED WITHIN 2' OF THE EXISTING POSTS TO ENABLE THE EXISTING POST AND PAD TO BE REMOVED.

8. EACH PAD SHOULD THEN BE REMOVED AS REQUIRED TO ENABLE THE GRANULAR BASE UNDERNEATH TO BE RELEVELLED WITH NEW GRANULAR AGGREGATE. NEW GRANULAR AGGREGATE PLACED UNDERNEATH THE PADS SHOULD BE TAMPED WITH A 30 LBS METAL HAND TAMPING DEVICE AND LEVELLED OUT BEFORE REPLACING THE ORIGINAL PRE-CAST CONCRETE PAD IN PLACE.

9. ONCE THE NEW PAD IS PLACED, LEVELLED AND SQUARED TO THE BUILDING. THE NEW ADJUSTABLE STEEL TELEPOST SHOULD BE INSTALLED.

10. EACH ADJUSTABLE STEEL TELEPOSTS SHOULD HAVE A BOTTOM PLATE SECURE TO THE TOP OF THE CONCRETE WITH AT LEAST FOUR 1/2"Ø X 3" LONG TAPCON SCREWS.

11. THE TOP OF ALL TELEPOSTS SHOULD HAVE TOP STEEL CAP PLATES INSTALLED AS INDICATED IN THE STRUCTURAL DRAWINGS TO PROPERLY SUPPORT ALL PLIES OF ALL SUPPORTED BEAMS.

12. THE STEEL THREADED RODS SHOULD BE INSTALLED THROUGH THE ENTIRE FLOOR MAIN FLOOR FRAMING SYSTEM COMPLETE WITH GALVANIZED STEEL CHANNELS AT BOTH ENDS IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. THESE STEEL CHANNELS AND GALVANIZED THREADED RODS SHOULD BE INSTALLED THROUGHOUT THE MAIN FLOOR FRAMING SYSTEM AT THE SPECIFIED SPACINGS BEFORE ANY OTHER REMEDIAL WORK TAKES PLACE. THE THREADED RODS SHOULD BE SNUGGED UP BEFORE ANY WORK COMMENCES. HOWEVER, ATTEMPTS TO 'FORCE' THE BUILDING TOGETHER WITH THE THREADED RODS AND CHANNELS SHOULD NOT BE DONE UNTIL ALL OF THE REMEDIAL WORK HAS BEEN COMPLETED. THE NUTS SHOULD BE TIGHTENED ON A PERIODIC BASIS THROUGHOUT THE WORK IN THE EVENT THE GAPS BETWEEN THE MODULES ARE REDUCED AS THE RELEVELLING WORK PROGRESSES.

13. THE NEW TELEPOSTS SHOULD BE INSTALLED TO A SIMILAR HEIGHT TO THE EXISTING BEAM WITHOUT TRYING TO RELEVEL EACH BEAMS INDIVIDUALLY. THE MAJORITY OF THE RELEVELLING WORK FOR THE MAIN FLOOR SHOULD BE COMPLETED ONCE ALL OF THE TELEPOSTS HAVE BEEN INSTALLED. THE RELEVELLING PROCESS SHOULD BE DONE SLOWLY OVER MULTIPLE TELEPOSTS TO ENSURE THAT THE EXISTING BEAM MEMBERS ARE NOT OVERSTRESSED.

14. ELEVATION READINGS OF THE ENTIRE EXISTING MAIN FLOOR SHOULD BE TAKEN TO DETERMINE WHICH IS THE EXISTING HIGH POINT. THEN ALL ELEVATION READINGS SHOULD BE TAKEN FROM THIS POINT TO BRING THE OTHER PORTIONS OF THE MAIN FLOOR UP TO THIS ELEVATION TO PROVIDE A SINGLE UNIFORM LEVEL FLOOR.

15. ONCE THE FLOOR HAS BEEN COMPLETELY RELEVELLED, ATTEMPTS SHOULD BE MADE TO TRY AND DRAW THE MODULES TOGETHER TO CLOSE THE EXISTING GAPS. CARE SHOULD BE TAKEN DURING THIS PROCESS TO ENSURE THAT NONE OF THE EXISTING MEMBERS ARE DAMAGED DURING THIS PROCESS. THE ROD TIGHTENING SHOULD BE DONE IN SLOW INCREMENTS OVER A NUMBER OF RODS AND NOT ON A ROD BY ROD BASIS.

16. ONCE THE ROD TIGHTENING WORK HAS BEEN COMPLETED, ANY SURPLUS THREADED ROD SHOULD BE REMOVED AND A DOUBLE LOCK NUT SHOULD BE INSTALLED ON EACH THREADED ROD END AND TIGHTENED.

17. OWNER IS RESPONSIBLE FOR ROUTINE MAINTENANCE SHOULD THEN BE COMPLETED AT REGULAR INTERVALS TO MAKE SURE THE THREADED ROD NUTS ARE TIGHT AND THE TELEPOSTS ARE RELEVELLED IN THE BASEMENT AS REQUIRED TO MAINTAIN A LEVEL FLOOR SO IT'S NOT TO STRESS THE STRUCTURE ABOVE.

EXISTING ROOF FRAMING SYSTEM SEQUENCING FOR REMEDIAL CONSTRUCTION TO BE COMPLETED

1. PROVIDE REGULAR DAILY REVIEWS OF THE CONDITION OF THE EXISTING ROOF TRUSSES IN THE ENTIRE SCHOOL.

2. PROVIDE EMERGENCY BRACING AS REQUIRED TO ENSURE THAT NO PORTION OF THE ROOF COLLAPSES PRIOR TO THE REMEDIAL CONSTRUCTION BEING COMPLETED.

3. INITIATE THE PERMANENT REMEDIAL WORK STARTING FROM THE EAST END OF THE ROOF FRAMING SYSTEM.

4. PROVIDE CROSS BRACING AND LATERAL BRACING AS SPECIFIED IN THE CONSTRUCTION DRAWINGS INCLUDING THE VERTICAL RE-PLUMBING OF THE FIRST 10 ROOF TRUSSES STARTING FROM THE EAST END OF THE BUILDING.

5. INSTALL THE CONTINUOUS VERTICAL STUDS ON THE EAST GABLE END OF THE BUILDING AS SPECIFIED TO PROVIDE THE REQUIRED LATERAL SUPPORT FOR THE EAST GABLE END.

6. FOLLOWING THE EAST GABLE END STRUCTURAL UPGRADING, THE EXISTING EXTERIOR BUILDING TYVEK AND SIDING SHOULD BE PROPERLY REINSTALLED TO PROVIDE A PROPER WEATHER PROOF ENCLOSURE.

7. ONCE THE EAST END OF THE BUILDING IS SECURE AND LATERALLY BRACED IN PLACE, THE REMAINING OF THE ROOF TRUSSES SHALL BE LEVELED OFF THIS SOLID BASE EXTENDING TRUSS BY TRUSS UP TO THE WEST END.

8. THE REMAINING UPGRADING OF THE ROOF TRUSSES SHALL INCLUDE RELEVELLING EACH ROOF TRUSS SUCH THAT ALL 3 ROOF TRUSS SEGMENTS ABOVE BOTH CORRIDOR WALLS ARE VERTICALLY PLUMB BEFORE INSTALLING AND ATTACHING THE PERMANENT BRACING.

9. THE EXISTING 2x4 PURLINS SPACED 24" ON CENTRE BETWEEN THE 2 MAIN ROOF TRUSSES IN THE FIRST MODULE EITHER SIDE OF THE CORRIDORS SHALL REMAIN IN PLACE AS THEY PROVIDE SOME STABILITY IN THE ROOF AT THIS JOINT. WHEN THE ROOF TRUSSES ARE LEVELLED ON A TRUSS BY TRUSS BASIS, THE NAILS INTO ALL THE PURLINS IN ONE TRUSS AT A TIME SHALL BE CAREFULLY SEVERED WITH A RECIPROCATING SAW DONE IN A MANNER WHICH DOES NOT DAMAGE THE ROOF TRUSS COMPONENTS. THE ROOF TRUSS SHOULD THEN BE RELEVELLED TO BE IN A VERTICALLY PLUMB POSITION AND THEN PROPERLY SECURED TO EACH 2x4 PURLIN ALONG ITS LENGTH WITH AT LEAST 2 - 3 1/2" LONG FRAMING NAILS. THESE FRAMING NAILS SHOULD BE INSTALLED FROM THE BOTTOM CHORD OF THE UPPER TRUSS INTO THE PURLIN AS WELL AS FROM THE TOP CHORD OF THE BOTTOM TRUSS INTO THE PURLIN FOR A TOTAL OF 4 NAILS PER TRUSS PER PURLIN LOCATION.

10. ONCE THE NEXT BATCH OF 10 ROOF TRUSSES FROM THE EAST ARE RELEVELLED, THE PERMANENT DIAGONAL AND HORIZONTAL BRACING AS SHOWN IN THE STRUCTURAL DRAWINGS SHOULD BE INSTALLED.

11. THE ROOF TRUSS REALIGNMENT AND PERMANENT BRACING TECHNIQUE IS TO BE REPEATED IN 10 TRUSS INTERVALS THROUGHOUT THE REMAINING ROOF FRAMING SYSTEM UP TO THE WEST EXTERIOR WALL.

12. THE WEST GABLE ENDS SHOULD HAVE NEW CONTINUOUS STUDS INSTALLED WITH THE EXTERIOR TYVEK AND SIDING REATTACHED AS REQUIRED SIMILAR TO THE EAST END TO PROVIDE A SECURE WEATHER PROTECTED GABLE END.

13. THE DRYWALL IN THE ATTIC FIRESTOPS IS THEN TO BE REINSTALLED AS NEEDED AT ALL ATTIC FIRESTOP LOCATIONS.

14. ACCESS DOORS SHOULD BE INSTALLED IN ALL ATTIC FIRESTOPS COMPLETE WITH SPRING LOADED HINGES AND LATCHES.

15. WE SUGGEST THAT A 2X10 MEMBER 'CATWALK' BE INSTALLED ON TOP OF THE CORRIDOR CEILING JOISTS IN LINE WITH THE ATTIC ACCESS DOORS TO PROVIDE EASY ACCESS THROUGHOUT THE ROOF WITHOUT DISTURBING THE INSULATION.

16. ALL JOINTS AND SCREWS IN THE ATTIC FIRESTOPS SHOULD BE FIRE TAPED.

17. THE INSULATION IN THE ATTIC SHOULD BE TOUCHED UP AS REQUIRED TO ENSURE IT IS IN A UNIFORM THICKNESS AFTER ALL THE ROOF TRUSS REMEDIAL WORK IS DONE.

APEGM
Certificate of Authorization
KNH Sawatzky & Associates Ltd.
No. 1193 Date: Oct. 7, 2016

Revisions

Date	Revision

Northern Sky Architecture Inc.
100-128 Garry Avenue
Winnipeg, Manitoba, Canada
R3C 1G8
204.943.6767

KNH
K.N.H SAWATZKY & ASSOCIATES
STRUCTURAL ENGINEERING CONSULTANTS

Stamp

PROVINCE OF MANITOBA
Oct. 7, 2016
K.N.H SAWATZKY
Member 5471
REGISTERED PROFESSIONAL ENGINEER

Stamp

Project
Nisichawayasihk Cree Nation
NNOC Remediation
Nelson House, Manitoba

drawing title	NOTES		
scale	as noted	designed by	knhs
date	September , 2016	drawn by	js
project no.	16.261	reviewed by	knhs
reference no.		sheet S4	REV.