PROPOSED NEW MAINTENANCE BUILDING FOR:

NORTH LAKELAND DISCOVERY CENTER

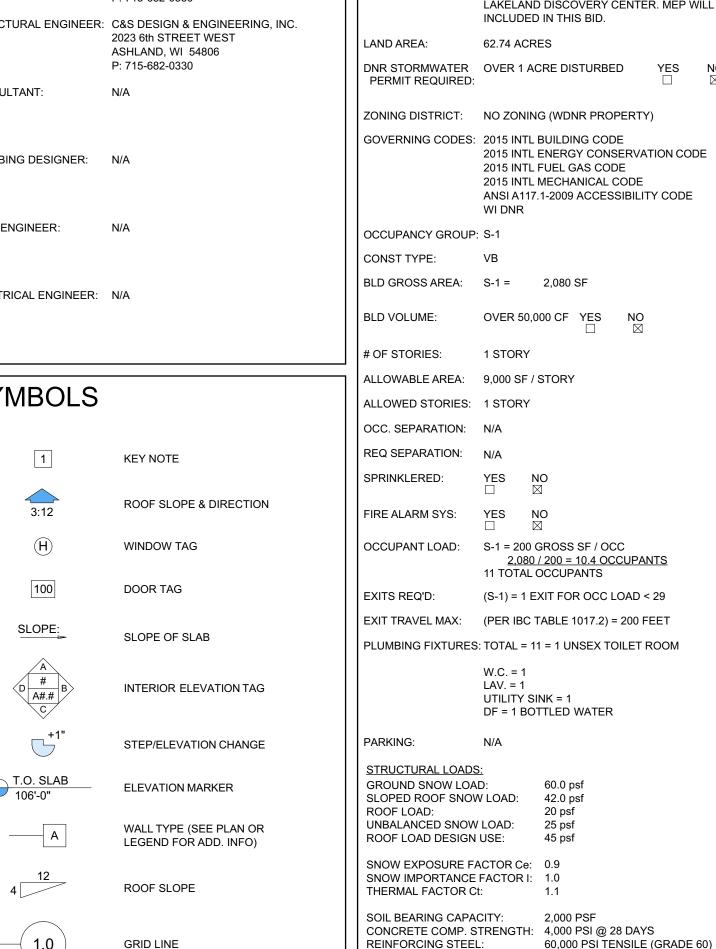
14006 DISCOVERY LANE **MANITOWISH WATERS, WI 54545**

PROJECT NUMBER: 20-3512.1



PROJECT TEAM NORTH LAKELAND DISCOVERY CENTER 14006 DISCOVERY LANE MANITOWISH WATERS, WI 54545 2023 6th STREET WEST ASHLAND, WI 54806 P: 715-682-0330 STRUCTURAL ENGINEER: C&S DESIGN & ENGINEERING, INC. 2023 6th STREET WEST ASHLAND, WI 54806 P: 715-682-0330 CONSULTANT: PLUMBING DESIGNER: N/A HVAC ENGINEER:





PROJECT DATA

14006 DISCOVERY LANE

MANITOWISH WATERS, WI 54545

NORTH LAKELAND DISCOVERY CENTER

CONSTRUCTION OF A NEW WOOD FRAMED

MAINTENANCE FACILITY FOR THE NORTH

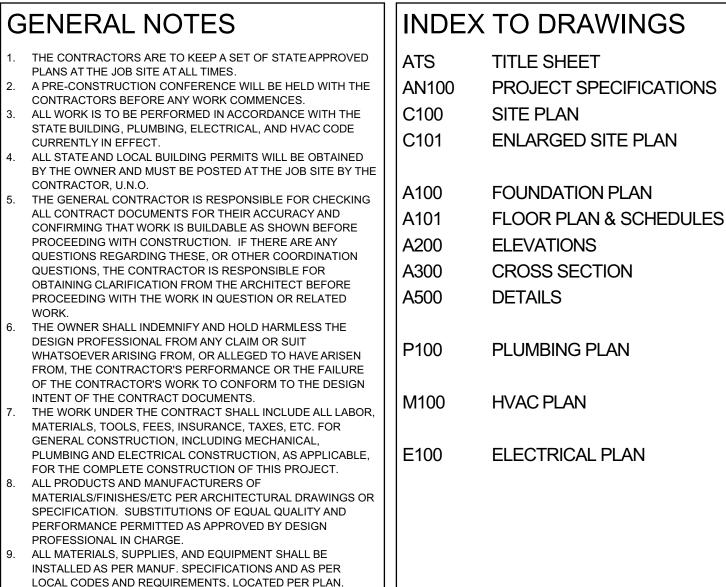
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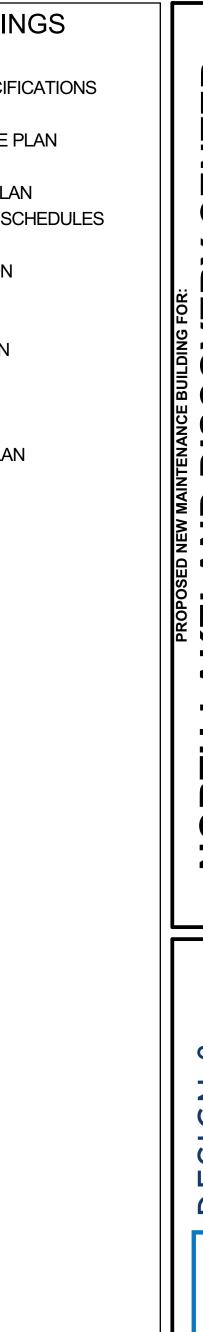
OWNER:

PROJECT

DESCRIPTION:

PROJECT ADDRESS:





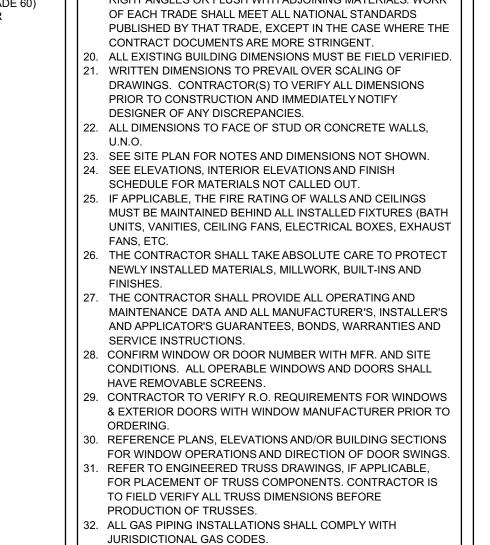
DISCOVI

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L.D.

20-3512.1

1	KEY NOTE
3:12	ROOF SLOPE & DIRECTION
H	WINDOW TAG
100	DOOR TAG
SLOPE:	SLOPE OF SLAB
D # B C C	INTERIOR ELEVATION TAG
+1"	STEP/ELEVATION CHANGE
T.O. SLAB 106'-0"	ELEVATION MARKER
——— A	WALL TYPE (SEE PLAN OR LEGEND FOR ADD. INFO)
4 12	ROOF SLOPE
1.0	GRID LINE
1 A200	BUILDING ELEVATION
1 A300	BUILDING SECTION
1 A401	WALL SECTION
A400	DETAIL/ENLARGED PLAN CALLOUT
1 A500	DETAIL CALLOUT
i i	



33. ALL DOOR 3" FROM NEAREST ADJ. STUD WALL, U.N.O.

CONSTRUCTION MEANS, METHODS, SEQUENCE OR

ALL DAMAGE TO EXISTING DRIVEWAYS, ROADWAYS, STREETS

CONCRETE SIDEWALKS, LAWNS, ETC. MUST BE RESTORED TO

GENERAL CONTRACTOR IS RESPONSIBLE FOR THE STABILITY

OF THE STRUCTURE PRIOR TO THE APPLICATION OF ALL

PROFESSIONAL WORK; JOIN MATERIALS TO UNIFORM,

AND FINISH MATERIALS.

SHEAR WALLS, ROOF SHEATHING, STRUCTURAL ELEMENTS

THE GENERAL CONTRACTOR SHALL PERFORM HIGH QUALITY

T.L.P. **AS NOTED FEBRUARY 19, 2024**

	Douglas	Bayfeld	
Bume		As Sawyer	shland ling Vilas
	Washbi		Oneida Forest
Polk	Barron	Rusk	Price Marinette Marinette
St Croix		Ti Chippewa	Taylor Menominee Oconto
Pierc		au Claire	Marathon Shawano Door
	Pepin	Trempealeau	Clark Waupaca Brown Kewaunee

STANDARD ABBREVIATIONS												
ABOVE FINISH FLOOR	A.F.F.	CONTRACTOR	CONTR.	FIRE EXTINGUISHER	F.E.	JOINT	JT.	PAINT	PT.	STEEL	STL.	
ACOUSTICAL CEILING TILE	ACT.	CONTROL JOINT	C.J.	FIRE EXTINGUISHER CABINET	F.E.C.	JOIST	JST	PAINTED	PTD.	STORAGE	STOR.	
ADDITIONAL	ADD.	COURSES	CRS.	FIRE RATED	FR.			PANEL	PNL.	STREET	ST.	
ADJUSTABLE	ADJ.	CUBIC FOOT(AGE)	CF	FIXTURE	FIX.	LAMINATED	LAM.	PARTITION	PTN.	STRUCTURAL	STRUCT.	
ALIGN WITH BELOW	A.W.B.			FLASHING	FLASH'G	LAVATORY	LAV.	PERFORATED	PERF.	SUSPEND (ED)	SUSP. (D)	
ALTERNATE	ALT.	DETAIL	DET.	FLOOR	FLR.	LEVEL	LVL.	PLASTIC LAMINATE	PLAM.			
ALUMINUM	ALUM.	DIAMETER	DIA.	FLOORING	FLR'G	LIGHTING	LTG.	PLATE	PL.	TELEPHONE	TEL.	
AMERICAN DISABILITIES ACT	ADA	DIMENSION	DIM.	FLOOR PLAN	F.P.	LINE	LN.	POLYVINYL CHLORIDE	PVC	THERMOPLASTIC POLYOLEFIN	TPO	
APPROXIMATELY	APPROX.	DISPENSER	DISP	FOOTING	FTG.	LINOLEUM	LINO.	POUNDS PER SQUARE INCH	PSI	THICKNESS	THK.	
		DOOR	DR	FOUNDATION	FDNT.	LONG LEG HORIZONTAL	LLH	PRESERVATIVE TREATED	P.T.	TOP OF	T.O.	
BASEMENT	BSMT.	DOWN	DN.	FLUORESCENT	FLUOR	LONG LEG VERTICAL	LLV	PROPERTY	PROP.	TOP OF CONCRETE	T.O.C.	
BEAM	BM.	DOWNSPOUT	DS.			LOW POINT	L.P.			TOP OF FOOTING	T.O.F.	
BELOW	BELW.	DRAWING (S)	DWG. (S)	GALVANIZED	GALV.			QUANTITY	QTY.	TOP OF RAIL	T.O.R.	
BITUMINOUS	BIT.	DRINKING FOUNTAIN	D.F.	GAUGE	GA.	MANUFACTURER	MFR.	QUARRY TILE	Q.T.	TOP OF STEEL	T.O.S.	
BLOCK	BLK.			GENERAL CONTRACTOR	G.C.	MASONRY	MAS.			TOP OF WALL	T.O.W.	
BLOCKING	BLKG.	EACH	EA.	GLASS	GL.	MASONRY OPENING	M.O.	RADIUS	R.	TREAD	T.	
BOARD	BD.	ELECTRICAL	ELEC.	GYPSUM	GYP.	MATERIAL	MAT.	RECEPTACLE	RECEPT.	TREATED	TRT	
ВОТТОМ	BOT.	ELEVATION	ELEV.	GYPSUM WALLBOARD	GWB.	MAXIMUM	MAX.	REINFORCING	REINF.	TRENCH DRAIN	T.D.	
BOTTOM OF	B.O.	ELEVATOR	EL.			MECHANICAL	MECH.	REQUIRED	REQ'D.	TYPICAL	TYP.	
BRICK COURSE	B.C.	ENCLOSURE	ENCL.	HARDWARE	HDW.	MEMBRANE	MEMB.	RESILIENT FLOORING	RSL.			
BUILDING	BLDG.	EQUAL	EQ.	HEATER	HTR.	METAL	MTL.	RETURN AIR	R.A.	UNDERWRITERS	U.L.	
BUILT-UP ROOFING	B.U.R.	EQUIPMENT	EQUIP.	HEATING, VENTING, AND	HVAC	MINIMUM	MIN.	REVISION	REV.	LABORATORIES		
		EXHAUST	EXH.	AIR CONDITIONING		MISCELLANEOUS	MISC.	RISER	R.	UNLESS NOTED OTHERWISE	U.N.O.	
CARPET	CPT.	EXISTING	EXIST.	HEIGHT	HGT.	MOUNTED	MTD.	ROOF DRAIN	R.D.			
CAST-IN-PLACE	C.I.P.	EXPANSION	EXP.	HIGH POINT	H.P.	NON-COMBUSTIBLE	NC.	ROOM	RM.	VENEER PLASTER	V.P.	
CAST IRON	C.I.	EXPANSION JOINT	E.J.	HOLLOW CORE	H.C.	NOT APPLICABLE	N.A.	ROUGH OPENING	R.O.	VERIFY IN FIELD	V.I.F.	
CATCH BASIN	C.B.	EXPOSED	EXP.	HOLLOW METAL	H.M.	NOT IN CONTRACT	N.I.C.	RUBBER	RUBR.	VERTICAL	VERT.	
CEILING	CLG.	EXTERIOR	EXT.	HORIZONTAL	HORIZ.	NOT TO SCALE	N.T.S.			VINYL COMPOSITION TILE	VCT.	
CEMENT	CEM.			HOUR	HR.	NUMBER	NO.	SECTION	SEC.	VINYL WALL COVERING	VWC.	
CENTER LINE	CL	FACE OF	F.O.					SHEET	SHT.			
CERAMIC TILE	C.T.	FACE OF CONCRETE	F.O.C.	INCANDESCENT	INCAN.	OCCUPANT / OCCUPANCY	OCC.	SIMILAR	SIM.	WATER CLOSET	W.C.	
CLEARANCE	CLR.	FACE OF FINISH	F.O.F.	INCH	IN.	ON CENTER	O.C.	SOLID CORE	S.C.	WATERPROOFING	W.P.	
CLOSET	CLO.	FACE OF MASONRY	F.O.M.	INCLUDING	INCL	OPENING	OPNG.	SPECIFICATIONS	SPEC.	WELDED WIRE FABRIC	W.W.F.	
COLUMN	COL.	FEET	FT.	INSIDE DIAMETER	I.D.	OPPOSITE	OPP.	SQUARE	SQ.	WIDE FLANGE	W.F.	
CONCRETE	CONC.	FINISH	FIN.	INSULATION	INS.	OPPOSITE HAND	O.H.	SQUARE FOOT(AGE)	SF	WINDOW	WDW.	
CONCRETE MASONRY UNIT	CMU	FINISH FLOOR ELEVATION	F.F.E.	INTERIOR	INT.	OUTSIDE DIAMETER	O.D.	STAINLESS STEEL	SSTL.	WITH	W/	
CONSTRUCTION	CONST.	FINISH GRADE	F.G.			OVERFLOW DRAIN	O.F.D.	STANDARD	STD.	WITHOUT	W/O	
CONTINUOUS	CONT.	FINISH SURFACE	F.S.	JANITOR	JAN.					WOOD	WD.	
1 1				•		•		•		•		



<u>DIVISION 8A. DOORS & DOOR HARDWARE</u> - CONTRACTOR TO PROVIDE FULL SUBMITTALS FOR ALL ITEMS THIS SECTION

WEATHER-STRIPPING, THRESHOLDS, SWEEPS, STOPS, VIEWER, ETC. SIZE AND SWING AS INDICATED ON PLANS.

REFER TO FINISH CARPENTRY SPECIFICATION SECTION

NOTE: ALL DOOR GLASS TO BE TEMPERED; PROVIDE DOOR STOPS FOR ALL DOORS, TYPICAL.

INTERIOR DOORS- 'KWIKSET' 720TNL LEVER HANDLE, SATIN NICKEL, SEE DOOR SCHEDULE

EXTERIOR DOORS-'SCHLAGE' 816 KEY CONTROL SINGLE CYLINDER DEADBOLT. SATIN NICKEL FINISH.

PROVIDE APPROPRIATE DOORSTOP ATALL DOORS TO PREVENT DAMAGE TO DOOR AND WALL SURFACES.

<u>DIVISION 8B. EXTERIOR WINDOWS</u> - CONTRACTOR TO PROVIDE FULL SUBMITTALS FOR ALL ITEMS THIS SECTION

<u>DIVISION 9A. GYPSUM WALL BOARD</u> - CONTRACTOR TO PROVIDE FULL SUBMITTALS FOR ALL ITEMS THIS SECTION

APPLY NON-SAG TYPE AT INTERIOR CEILINGS, MOISTURE RESISTANT (MR) TYPE IN UNISEX.

DIVISION 9B. PAINT - CONTRACTOR TO PROVIDE FULL SUBMITTALS FOR ALL ITEMS THIS SECTION

SURFACES AT RESTROOMS, CREATE DURABLE, CLEANABLE SURFACES - COORDINATE WITH PAIN'

COAT PRIMER, TWO (2) COATS EGG SHELL, COLOR: PER OWNER/ARCHITECT PER FINISH SCHEDULE.

MANUFACTURER FOR RECOMMENDATION. ALL PAINTS AND PRIMERS TO HAVE V.O.C. LEVELS LESS THAN 50 G/I

<u>DIVISION 11C. BATH ACCESSORIES</u> - CONTRACTOR TO PROVIDE FULL SUBMITTALS FOR ALL ITEMS THIS SECTION

EQUAL. FOR INTERIOR SURFACES APPLY VOC PAINT & PRIMER

3. INTERIOR WALLS AND CEILINGS- PREP AND APPLY ONE (1)

1. ALL ITEMS- SEE BATHROOM ACCESSORY SCHEDULE ON PLANS

<u>DIVISION 22. PLUMBING</u> - REFER TO MECHANICAL DRAWINGS

<u>DIVISION 23. MECHANICAL</u> - REFER TO MECHANICAL DRAWINGS

<u>DIVISION 26. ELECTRICAL</u> - REFER TO ELECTRICAL DRAWINGS

4. CONTRACTOR TO PROVIDE VOC MASKS TO WORKERS.

GYPSUM BOARD: APPLY 5/8" GYPSUM BOARD TO ALL INTERIOR WALL AND CEILING SURFACES IN THE OFFICE & UNISEX TOILET ROOM.

2. ONE COAT PRIMER, TWO COATS FINISH PER SCHEDULE; 'SHERWIN WILLIAMS', PROMAR 200, ZERO VOC SERIES, OR EQUAL. ALL PAINTING TO

INCLUDE ALL MATERIALS AND LABOR NECESSARY TO ENSURE PROPER APPLICATION, INCLUDING: PREPARATION, MASKING, AND CLEAN UP. ALL

1. ALL INTERIOR DRYWALL & OSB SURFACES TO BE PAINTED AND DOORS/TRIM WITH MATERIALS AS MANUFACTURED BY 'SHERWIN WILLIAMS', OR APPROVED

THE INSTALLATION OF VAPOR BARRIER DIRECTLY BEHIND MOISTURE RESISTANT GYPSUM BOARD IS PROHIBITED BY CODE, 2012 IBC.

2. LOCKSETS: 'MASTER KEY' ALL KEYED LOCKS PER OWNER REQUIREMENTS.

1. EQUIP ALL EXTERIOR AND INTERIOR DOORS TO PROVIDE A COMPLETE INSTALLATION, INCLUDING ALL REQUIRED: JAMB, HINGES, LEVER STYLE

A. EXTERIOR DOORS- 1-3/4", 24 GAUGE, METAL CLAD, FOAM CORE UNIT - MUST BE ENERGY STAR RATED FOR REGION, MANUFACTURER

EXTERIOR DOORS ARE TO RECEIVE CLOSER (FINISH TO MATCH DOOR HARDWARE)

(ALL) 11/16" X 4 9/16" PAINT GRADE WOOD W/ LUMBER CORE - 1-1/2" PAIR BUTTS (3 HINGES).

5/4 FINGER JOINT (FJ) WOOD WITH 1-1/2 PAIR BUTTS (3 HINGES) AND INTEGRAL WEATHER-STRIPS, METAL CLAD.

FLUSH, PAINT GRADE WOOD, SOLID CORE, MANUFACTURER PER OWNER. COLOR TO MATCH TRIM, AND SELECTED

MILL FINISH ALUMINUM WITH VINYL SWEEP, LOW PROFILE PER ADA /UNIVERSAL DESIGN STANDARDS

SEE DOOR AND WINDOW SCHEDULE FOR ADDITIONAL INFORMATION.

HANDLE, CASING, LOCK(S).

AND FINISH PER OWNER.

JAMB/STOP-

THRESHOLD-

JAMB/STOP-

CASING-

CLOSER -

CASING-

VIEWER-

C. INTERIOR DOORS

BY THE OWNER/ARCHITECT.

PER WINDOW SCHEDULE.

BORE-

DIVISION 1. GENERAL REQUIREMENTS

1. ALL WORK AND MATERIALS FURNISHED SHALL COMPLY WITH APPLICABLE BUILDING CODES, INCLUDING, BUT NOT LIMITED TO THE STATE OF WISCONSIN BUILDING CODE, THE REGULATIONS OF THE NATIONAL BOARD OF FIRE UNDERWRITERS, NATIONAL FIRE PROTECTIVE ASSOCIATION REQUIREMENTS AND ALL FEDERAL, STATE, AND MUNICIPAL AUTHORITIES HAVING JURISDICTION OVER THE WORK AND THE INTERNATIONAL BUILDING CODE

2. THE OWNER IS RESPONSIBLE FOR SECURING AND OBTAINING ALL NECESSARY PERMITS, APPROVALS, AND INSPECTIONS AND PAYINGALL APPLICABLE

3. CONTRACTORS MUST COMPLY WITH ALL APPROPRIATE MUNICIPAL AND REGULATORY AGENCIES, CODES AND REQUIREMENTS. THE CONTRACTOR SHALL SUBMIT CERTIFICATES OF INSURANCE IN ACCORDANCE WITH BUILDING REQUIREMENTS AND SHALL INCLUDE A HOLD HARMLESS CLAUSE FOR THE OWNER,

4. THE SUBMISSION OF A BID BY THE CONTRACTOR WILL BE CONSTRUED AS EVIDENCE THAT A CAREFUL AND THOROUGH EXAMINATION OF THE BID PLANS HAS BEEN MADE AND LATER CLAIMS FOR LABOR, MATERIALS OR EQUIPMENT REQUIRED OR FOR DIFFICULTIES ENCOUNTERED. WHICH COULD HAVE BEEN FORESEEN HAD SUCH AN EXAMINATION BEEN MADE. WILL NOT BE RECOGNIZED. IT SHALL ALSO CONSTITUTE A REPRESENTATION THAT THE CONTRACTOR HAS CHECKED AND VERIFIED ALL QUANTITIES, WORK AND MATERIALS INVOLVED AND THAT HE OR SHE SHALL TAKE RESPONSIBILITY OF

5. BEFORE ORDERING ANY MATERIALS OR DOING ANY WORK, EACH TRADE SHALL VERIFY ALL MEASUREMENTS AT THE BUILDING AND SHALL BE RESPONSIBLE FOR CORRECTNESS OF SAME. NO EXTRA CHARGE OR COMPENSATIONS WILL ALLOWED ON ACCOUNT OF DIFFERENCE BETWEEN ACTUAL DIMENSIONS AND THE MEASUREMENTS INDICATED ON THE DRAWINGS: ANY DISCREPANCIES BETWEEN THE DRAWINGS AND FIELD CONDITIONS WHICH MAY BE FOUND SHALL BE SUBMITTED TO THE ARCHITECT FOR CONSIDERATION AND CLARIFICATION BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONTRACT DOCUMENTS.

6. ALL THE ARCHITECT'S DRAWINGS AND CONSTRUCTION NOTES ARE COMPLIMENTARY AND WHAT IS CALLED FOR BY EITHER WILL BE BINDING AS IF CALLED FOR BY ALL; ANY WORK SHOWN OR REFERRED TO ON ANY ONE DRAWING SHALL BE PROVIDED AS SHOWN ON ALL DRAWINGS. WHENEVER AN ITEM IS SPECIFIED AND/OR SHOWN ON THE DRAWINGS BY DETAIL OR REFERENCE IT SHALL BE CONSIDERED TYPICAL FOR OTHER ITEMS WHICH ARE

7 FULL SIZE OR LARGE SCALE DETAILS OR DRAWINGS SHALL GOVERN SMALL SCALE DRAWINGS WHICH THEY ARE INTENDED TO AMPLIFY. DETAILS OR CONDITIONS INDICATED FOR A PORTION OF THE WORK BUT NOT CARRIED OUT FULLY FOR OTHER PORTIONS SHALL APPLY THROUGHOUT TO ALL SIMILAR PORTIONS EXCEPT AS OTHERWISE SPECIFICALLY NOTED. IN EVERY CASE A MORE EXPENSIVE ITEM OR METHOD SHALL BE ASSUMED OVER A LESS EXPENSIVE ONE AND DIMENSIONS SHALL BE FIGURED RATHER THAN DETERMINED BY RULE OR SCALE.

OBVIOUSLY INTENDED TO BE THE SAME, EVEN THOUGH NOT SO DESIGNATED OR SPECIFICALLY NAMED BUT DO SERVE THE SAME FUNCTION.

8. THE CHARACTER AND SCOPE OF THE WORK ARE ILLUSTRATED BY THE DRAWINGS. TO INTERPRET AND EXPLAIN THE DRAWINGS, OTHER INFORMATION DEEMED NECESSARY BY THE ARCHITECT WILL BE FURNISHED TO CONTRACTOR WHEN AND AS REQUIRED BY THE WORK. IT IS TO BE UNDERSTOOD THAT THE SAID ADDITIONAL DRAWINGS ARE TO BE OF EQUAL FORCE AS THE ORIGINAL DRAWINGS, AND SHALL BE CONSIDERED AS FORMING A PART OF THIS

9. THE CONTRACTOR SHALL ABIDE BY AND COMPLY WITH THE TRUE INTENT AND MEANING OF THE DRAWINGS AND NOTES TAKEN AS A WHOLE AND SHALL NOT AVAIL THEMSELF OF ANY OBVIOUS ERRORS AND OMISSIONS. SHOULD ANY EXIST, SHOULD ANY ERROR OR DISCREPANCY APPEAR OR ANY DOUBT ARISE AS TO THE TRUE MEANING OF THE DRAWINGS OR NOTES THE CONTRACTOR SHALL BRING SUCH ITEMS TO THE ATTENTION OF THE ARCHITECT BEFORE SUBMISSION OF PROPOSAL FOR EXPLANATION OR CORRECTION OF SAME. AFTER SUBMISSION OF PROPOSAL, THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ALL SUCH ITEMS.

10. THE WORK TO BE PERFORMED CONSISTS OF FURNISHING ALL LABOR, EQUIPMENT, TOOLS, TRANSPORTATION, SUPPLIES, FEES, MATERIALS, AND SERVICES IN ACCORDANCE WITH THESE NOTES AND DRAWINGS; AND INCLUDES PERFORMING ALL OPERATIONS NECESSARY TO CONSTRUCT AND INSTALL COMPLETE, IN SATISFACTORY CONDITION, THE VARIOUS MATERIALS AND EQUIPMENT AT THE LOCATIONS SHOWN. IT IS INTENDED THAT THE DRAWINGS INCLUDE EVERYTHING REQUISITE AND NECESSARY TO FINISH THE ENTIRE WORK PROPERLY, NOTWITHSTANDING THE FACT THAT EVERY ITEM NECESSARILY INVOLVED MAY NOT BE SPECIFICALLY MENTIONED OR SHOWN. ANY ITEM WHICH MAY BE REASONABLY CONSTRUED AS INCIDENTAL TO THE PROPER AND SATISFACTORY COMPLETION OF THE WORK IN ACCORDANCE WITH THE INTENT OF THESE NOTES AND DRAWINGS IS HEREBY INCLUDED.

11. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY IF HE CANNOT FOR ANY REASON COMPLY WITH ALL THE REQUIREMENTS OF THESE NOTES AND DRAWINGS.

12. THE CONTRACTOR SHALL SUBMIT IN WRITING ALL PROPOSALS FOR ADDITIONAL WORK TO THE ARCHITECT FOR REVIEW AND APPROVAL. IN CASES WHERE INSTRUCTIONS ACCOMPANYING AN ISSUE OF REVISED DRAWINGS OR SPECIFICATIONS REQUEST ESTIMATES OF COST. SUCH ESTIMATES SHALL BE PREPARED AND SUBMITTED PROMPTLY IN ORDER NOT TO AFFECT THE PROGRESS OF THE WORK. NO WORK AFFECTED BY CHANGES PROPOSED IN ANY REVISED DRAWINGS OR OTHER DOCUMENTS ISSUED TO OR BY THE CONTRACTOR SHALL BE EXECUTED UNTIL AN AUTHORIZED CHANGE ORDER,

13. PAYMENT WILL NOT BE MADE TO GENERAL CONTRACTOR ON CHANGES OR EXTRAS UNLESS THEY ARE APPROVED IN WRITING BY OWNER OR OWNER'S REPRESENTATIVES. SEE CONTRACT FOR DESCRIPTION OF CHANGE ORDER PROCESS

SIGNED BY THE OWNER AND ARCHITECT. IS RETURNED TO CONTRACTOR.

COMMENCEMENT OF WORK.

14. THE PROJECT HAS BEEN DESIGNED AND DETAILED FOR THE SPECIFIC MATERIALS AND EQUIPMENT SPECIFIED. NO SUBSTITUTIONS SHALL BE MADE WITHOUT THE EXPRESS WRITTEN CONSENT OF THE ARCHITECT. IF THE SPECIFIED MATERIAL IS NOT AVAILABLE, THE CONTRACTOR SHALL PROPOSE AN ALTERNATE MATERIAL AND SHALL PROVIDE DRAWINGS, SAMPLES, SPECIFICATIONS, MANUFACTURER'S LITERATURE, PERFORMANCE DATA, ETC., IN ORDER THAT THE ARCHITECT CAN EVALUATE THE PROPOSED SUBSTITUTION. IF THE SUBSTITUTION AFFECTS A CORRELATED FUNCTION, ADJACENT CONSTRUCTION, OR THE WORK OF ANY OTHER CONTRACTOR OR TRADE, THE NECESSARY CHANGES AND MODIFICATIONS TO THE AFFECTED WORK SHALL BE ACCOMPLISHED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER. NO REQUESTS FOR SUBSTITUTES WILL BE ENTERTAINED BY THE

ARCHITECT DUE TO CONTRACTOR'S FAILURE TO ORDER MATERIALS IN A TIMELY MANNER. 15. ALL MATERIALS REQUIRED FOR THE PERFORMANCE OF THIS WORK SHALL BE NEW AND OF THE BEST QUALITY OF THE KINDS SPECIFIED. THE USE OF OLD OR SECOND-HAND MATERIALS IS STRICTLY FORBIDDEN. EXCEPT FOR LOCATIONS ON THE DRAWINGS THAT REFER TO REMOVAL AND RELOCATION OF MATERIALS OR EQUIPMENT. MATERIALS SHALL BE USED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. THE CONTRACTOR SHALL SUBMIT ALL PRODUCT WARRANTIES. THE CONTRACTOR SHALL WARRANTY ALL WORK AS PER WISCONSIN REGULATIONS, UPON REQUEST, THE MANUFACTURER'S REPRESENTATIVE SHALL GO TO THE SITE AND INSTRUCT THE WORKERS IN THE USE OF THE MATERIALS OR SHALL SUPERVISE THEIR

16. THE STANDARD SPECIFICATIONS OF THE MANUFACTURERS APPROVED FOR USE IN THE PROJECT ARE HERE MADE A PART OF THESE NOTES WITH THE SAME FORCE AND EFFECT AS THOUGH HEREIN WRITTEN OUT IN THAT WHEREVER THE DRAWINGS REQUIRE HEAVIER MEMBERS. BETTER QUALITY MATERIALS OR ARE STRINGENT, THOSE MORE STRINGENT REQUIREMENTS SHALL GOVERN.

17. THE CONTRACTOR SHALL SUBMIT ALL FABRICATION SHOP DRAWINGS, SAMPLES, AND FIXTURE CUT-SHEETS FOR THE ARCHITECT'S REVIEW AS REQUIRED OR INDICATED ON THE DRAWINGS. THE ARCHITECT'S APPROVAL SHALL NOT BE CONSTRUED AS AN INDICATION THAT THE SUBMITTAL IS CORRECT OR SUITABLE NOR THAT THE WORK REPRESENTED BY THE SUBMITTAL COMPLIES WITH THE DRAWINGS, EXCEPT AS TO MATTERS OF FINISH, COLOR, AND OTHER AESTHETIC MATTERS. ACTION NOTED ABOVE DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO COORDINATE ALL TRADES AND TO CHECK QUANTITIES AND DIMENSIONS AGAINST CONDITIONS IN THE FIELD. CONTRACTORS SHALL ASSUME RESPONSIBILITY FOR ALL

18. THE CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS COMPLETE WITH MANUFACTURER'S EQUIPMENT CUT-SHEETS, FOR APPROVAL PRIOR TO

19. WHEN "APPROVED EQUAL", "EQUAL TO", OR OTHER GENERAL QUALIFYING TERMS ARE USED IT SHALL BE BASED UPON THE REVIEW AND APPROVAL BY CLIENT OR HIS/HER REPRESENTATIVE, NO MATERIAL SUBSTITUTIONS SHALL BE MADE WITHOUT FIRST INFORMING CLIENT, SUBMIT SUBSTITUTE MATERIALS SPECIFICATIONS AND SAMPLES FOR APPROVAL, IN WRITING PRIOR TO COMMENCEMENT OF WORK.

20. ANY MATERIALS DELIVERED OR WORK PERFORMED, CONTRARY TO THE DRAWINGS AND SPECIFICATIONS AND APPROVED SHOP DRAWINGS, SHALL BE REMOVED BY THE CONTRACTOR AT HIS OWN EXPENSE. AND THE SAME SHALL BE REPLACED WITH OTHER MATERIALS OR WORK SATISFACTORY TO THE ARCHITECT. THE CONTRACTOR SHALL ALSO ASSUME THE COST OF REPLACING THE WORK WHICH MAY BE DISTURBED.

21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY AND ACCURATELY LAYING OUT THE WORK AND FOR THE LINES AND MEASUREMENTS HEREIN. THE CONTRACTOR SHALL ESTABLISH NECESSARY REFERENCE LINES AND PERMANENT BENCHMARKS FROM WHICH BUILDING LINES AND ELEVATIONS SHALL BE TAKEN. HEIGHTS OF ALL WORK, CALLED FOR "A.F.F." INCLUDING BUT NOT LIMITED TO SOFFITS, CEILINGS, DOORS, AND HOLLOW METAL SHALL BE TRUE AND LEVEL WITHIN A TOLERANCE OF 1/8" OVERALL THROUGHOUT THE ENTIRE PROJECT.

22. ALL HVAC, PLUMBING, SPRINKLER AND ELECTRICAL LINES ARE TO BE COORDINATED SO THAT NO CONFLICTS OCCUR. ANY CONFLICTS WHICH RESULT IN A RELOCATION OF A FINISHED SURFACE MUST BE BROUGHT TO THE ATTENTION OF THE OWNER/ARCHITECT/ENGINEER PRIOR TO

23. UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL PROVIDE A TWO YEAR WARRANTY COVERING ALL WORK PERFORMED AND EQUIPMENT INSTALLED, FROM THE TIME OF SUBSTANTIAL COMPLETION. MANUFACTURER'S WARRANTIES FOR EQUIPMENT OR MATERIALS SHALL BE GIVEN TO THE CLIENT AT THE COMPLETION OF THE PROJECT.

24. THE CONTRACTOR SHALL KEEP THE ARCHITECT INFORMED OF THE PROGRESS OF THE WORK. NO WORK SHALL BE CLOSED OR COVERED UNTIL IT HAS BEEN DULY INSPECTED AND APPROVED. SHOULD UN-INSPECTED WORK BE COVERED THE CONTRACTOR SHALL, AT THEIR OWN EXPENSE, UNCOVER ALL SUCH WORK SO THAT IT CAN BE PROPERLY INSPECTED AND AFTER SUCH INSPECTION, SHALL PROPERLY REPAIR AND REPLACE ALL WORK

25. ALL WORK SHALL BE SUBJECT TO FINAL INSPECTION BY THE ARCHITECT AND ACCEPTANCE BY THE OWNER.

26. CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF WORKERS, PUBLIC, AND PROPERTY. 27. A COPY OF THE LATEST SIGNED AND SEALED SET OF CONSTRUCTION DRAWINGS SHALL BE KEPT AT THE JOB SITE FOR REVIEW BY CLIENT, THEIR REPRESENTATIVES. THE ARCHITECT. OR INSPECTORS.

28. THE CONTRACTOR SHALL HAVE A COMPETENT SUPERINTENDENT ON THE PREMISES AT ALL TIMES WHEN THE WORK IS IN PROGRESS.

29. ALL PLUMBING AND ELECTRICAL WORK SHALL BE PERFORMED BY PERSONS LICENSED IN THEIR TRADES.

30. THE GENERAL CONTRACTOR SHALL COORDINATE THEIR OWN WORK WITH THE WORK OF ALL OTHER CONTRACTORS, WHETHER THEIR OWN OR THOSE ON SEPARATE CONTRACT. PRIOR TO COMMENCING WORK, THE GENERAL CONTRACTOR SHALL PROVIDE A WORK SCHEDULE TO SHOW ESTIMATED COMMENCEMENT AND COMPLETION DATES OF EACH TRADE IDENTIFYING ANY LONG LEAD TIMES. CONTRACTOR SHALL BE RESPONSIBLE FOR GIVING ALL TRADES SUCH INFORMATION, PLANS OR DETAILS AS MAY BE REQUIRED FOR THE PROPER INSTALLATION OF THEIR WORK, ALL MATERIALS SHALL BE ORDERED SUFFICIENTLY AHEAD OF TIME SO THAT WORK CAN PROCEED ON SCHEDULE. WHERE APPLICABLE, NO SUBSTITUTIONS WILL BE ACCEPTED

31. THE PREMISES AND THE JOB SITE SHALL BE MAINTAINED IN A REASONABLY NEAT AND ORDERLY CONDITION AND KEPT FREE FROM ACCUMULATIONS OF WASTE MATERIALS AND RUBBISH DURING THE ENTIRE CONSTRUCTION PERIOD. REMOVE CRATES, CARTONS AND OTHER FLAMMABLE WASTE MATERIALS OR TRASH FROM THE WORK AREAS AT THE END OF EACH WORKING DAY. NO MATERIAL OR DEBRIS STORAGE SHALL BE PERMITTED IN THE STREET OR ON SIDEWALKS AT ANY TIME.

32. ELECTRICAL CLOSETS, PIPE AND DUCT SHAFTS CHASES, FURRED SPACES, CRAWL SPACES, ATTICS, UTILITY ROOMS AND SIMILAR SPACES SHALL BE CLEANED AND LEFT FREE FROM RUBBISH LOOSE PLASTER, MORTAR DRIPPINGS, EXTRANEOUS CONSTRUCTION MATERIALS, DIRT AND DUST.

33. CONTRACTOR SHALL PROTECT AND BE RESPONSIBLE FOR THE EXISTING STRUCTURES, FACILITIES AND IMPROVEMENTS ADJOINING THE AREA UNDER THIS CONTRACT. ANY DISTURBANCE OR DAMAGE TO ADJOINING PROPERTY RESULTING DIRECTLY OR INDIRECTLY FROM THE CONTRACTOR'S OPERATIONS SHALL BE PROMPTLY RESTORED, REPAIRED OR REPLACED TO THE SATISFACTION OF THE CLIENT AT NO ADDITIONAL COST.

34. CLEAN UP IMMEDIATELY UPON COMPLETION OF EACH TRADE'S WORK. CLEANING INCLUDES THE REMOVAL OF TRASH AND RUBBISH FROM THESE AREAS, BROOM CLEANING OF FLOORS, THE REMOVAL OF ANY PLASTER, MORTAR, DUST AND OTHER EXTRANEOUS MATERIALS FROM FINISH SURFACES, INCLUDING BUT NOT LIMITED TO MISCELLANEOUS METAL, WOODWORK, PLASTER, GLASS, GYPSUM DRYWALL, MASONRY, CONCRETE, MECHANICAL AND ELECTRICAL EQUIPMENT, PIPING DUCTWORK, CONDUIT, AND SURFACES VISIBLE AFTER PERMANENT FIXTURES GRILLES, REGISTERS, AND OTHER SUCH FIXTURES OR DEVICES ARE IN PLACE

35. CONTRACTOR SHALL PROVIDE ALL OTHER CLEANING AS REQUIRED TO TURN THE PREMISES OVER TO THE OWNER IN A SPOTLESS AND ORDERLY

36. EVERY EFFORT HAS BEEN MADE TO PROVIDE THE MOST ACCURATE AND DETAILED CONSTRUCTION DOCUMENTS AS POSSIBLE BASED ON BUILDING INDUSTRY STANDARDS. CHANGE ORDERS RESULTING ONLY FROM THE FOLLOWING CONDITIONS SHALL BE ALLOWED:

A. ANY WRITTEN CHANGE ORDER REQUEST FROM OWNER/ARCHITECT B. ANY WRITTEN CHANGE ORDER REQUEST FROM ADDITIONAL WORK REQUIRED DUE TO NON-VISIBLE, HIDDEN EXISTING CONDITIONS, WHICH COULD NOT BE ECONOMICALLY EXPOSED AND TAKEN INTO ACCOUNT PRIOR TO ACTUAL DEMOLITION AND/OR CONSTRUCTION.

37. ALL BUILDING CONSTRUCTION SHALL CONFORM TO THE CODES LISTED ON THE TITLE SHEET 38. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT JOBSITE BEFORE COMMENCING WORK AND SHALL RESOLVE ANY DISCREPANCIES

39. THE CONTRACT DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE: THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. WHERE ANY DISCREPANCIES OCCUR BETWEEN PLANS. DETAILS, NOTES AND SPECIFICATIONS, THE GREATER, MORE STRINGENT REQUIREMENTS SHALL GOVERN. WHERE NO SPECIFIC DETAIL IS SHOWN, IT IS THE INTENTION THAT CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT.

40. THE SITE SHALL BE EXAMINED AND INSPECTED BY THE CONTRACTOR FOR EXISTING CONDITIONS THAT MAY HAVE A BEARING ON THE WORK. NO ALLOWANCE SHALL BE MADE ON BEHALF OF THE CONTRACTOR FOR ERRORS DUE TO FAILURE TO UNDERSTAND EXISTING CONDITIONS.

42. THE CONTRACTOR AND SUB-CONTRACTORS SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SAFETY PROCEDURES AND PRECAUTIONS FOR ALL WORKMEN IN COMPLIANCE WITH CURRENT ACCEPTED INDUSTRY AND GOVERNMENT STANDARDS.

43. REFER TO DRAWINGS FOR ADDITIONAL SPECIFICATION REQUIREMENTS. 44. THIS PROJECT SHALL PRECLUDE THE USE OF MATERIALS THAT CONTAIN HAZARDOUS MATERIALS IN EXCESS OF THE

1. INSTITUTE AND MAINTAIN SAFETY MEASURES AND PROVIDE ALL EQUIPMENT OR TEMPORARY CONSTRUCTION NECESSARY TO SAFEGUARD ALL PERSONS AND PROPERTY AFFECTED.

2. STRUCTURES, DEVICES, OR CONSTRUCTION EQUIPMENT SHALL NOT BE LOADED IN EXCESS OF THEIR DESIGN CAPACITY. 3. BEFORE USING CONSTRUCTION EQUIPMENT OR DEVICES, SAME SHALL BE INSPECTED BY THE PERSON SUPERINTENDING THE WORK, AND DEFECTS

4. DETERMINE LOCATION, PROTECT AND SAFEGUARD ALL UTILITIES ON OR ADJACENT TO SITE. NOTIFY ALL UTILITY COMPANIES AND BUILDING MANAGEMENT AS REQUIRED.

5. MAINTAIN FIRE PREVENTIVE, SANITARY AND SAFETY FACILITIES.

OR UNSAFE CONDITIONS SHALL BE PROMPTLY CORRECTED BEFORE USE.

AND ALL OTHER PROPER AGENCIES PRIOR TO STARTING CONSTRUCTION.

41. OWNER RESPONSIBLE FOR MAINTAINING UTILITIES.

6. ALL MACHINES, TOOLS, SERVICE LINES AND CONDUITS SHALL BE SHIELDED OR BARRICADED TO PROVIDE SAFETY AND PREVENT CONTACT BY THE

7. NO MATERIALS SHALL BE DROPPED OR THROWN OUTSIDE THE EXTERIOR WALLS OF THE BUILDING.

<u>DIVISION 3. CONCRETE</u> - CONTRACTOR TO PROVIDE FULL SUBMITTALS FOR ALL ITEMS THIS SECTION

WITH THE OWNER/ARCHITECT. DO NOT SCALE DRAWINGS; USE WRITTEN DIMENSIONS.

8. AREAS USED BY THE PUBLIC SHALL BE MAINTAINED FREE FROM DEBRIS, EQUIPMENT & MATERIALS DIVISION 2A. SITE WORK - ALL WORK THIS SECTION TO BE PROVIDED AND INSTALLED BY OWNER, WITH THE EXCEPTION OF THE BUILDING SAND LIFT AND

1. CONTRACTOR SHALL VERIFY LOCATION(S) OF BUILDING PROJECT, DRIVEWAY, VEGETATION AND ALL UTILITIES WITH CLIENT

2. ALL NATURAL GROWTH SHALL REMAIN UNDISTURBED EXCEPT THAT WHICH IS IN THE BUILDING AREA AND NO GROWTH SHALL BE REMOVED

3. ALL FINISH GRADING SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDING. PROVIDE ADDITIONAL MATERIAL AS REQUIRED FOR PROPER DRAINAGE. 4. SITE EROSION CONTROL TO BE PROVIDED BY OWNER.

5. BASE COURSE MATERIAL USED FOR SAND LIFT SHOULD BE COMPACTIBLE, EASY TO TRIM, GRANULAR FILL THAT WILL REMAIN STABLE AND SUPPORT CONSTRUCTION TRAFFIC. USE SAND MATERIAL WITH 10 TO 30% FINES (PASSING THE NO.100 SIEVE) WITH NO CLAY, SILT, OR ORGANIC MATERIALS.

1. ALL CONCRETE CONSTRUCTION TO CONFORM TO ACI "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" ACI 318-(MOST RECENT EDITION) AND ACI "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" ACI 301, UNLESS NOTED OTHERWISE.

2. ALL REINFORCING STEEL TO BE DETAILED IN ACCORDANCE WITH ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE

3. CONCRETE MIX TO CONFORM TO THE FOLLOWING:

A. FOR INTERIOR SLABS: 1) 4,000 PSI AT 28 DAYS W/C RATIO = 0.45 (MAXIMUM) 3) SLUMP LIMIT = 4" (+/- 1") 4) AIR-ENTRAINED = MAX. 3%

A GRADE 40 FOR #4 BAR & SMALLER

4. ALL REINFORCED STEEL TO BE ASTM A 615, DEFORMED.

B. GRADE 60. FOR #5 BAR & LARGER 5. WELDED WIRE FABRIC TO BE ASTM A 185. LAP FABRIC 6" MINIMUM. FILL SLABS AND SLABS ON GRADE SHALL BE REINFORCED WITH 6x6-W1.4

x W1.4 W.W.F. UNLESS NOTED OTHERWISE. 6. REINFORCING SHALL BE CONTINUOUS WHEREVER POSSIBLE. SPLICES AND LAPS TO CONFORM TO ACI 318 REQUIREMENTS.

7. DOWELS IN FOOTING, WALLS, AND DRILLED PIERS MUST BE IN POSITION BEFORE PLACING CONCRETE WHENEVER POSSIBLE.

8. PROVIDE THE FOLLOWING ADDITIONAL REINFORCING UNLESS OTHERWISE CALLED FOR ON STRUCTURAL PLANS: A. 2 - #5 BARS EACH SIDE OF OPENINGS 1'-0" OR LARGER IN SLABS AND WALLS.

B. CORNER BARS (2'-0" x 2'-0") IN OUTER FACE OF ALL CONCRETE WALLS AND TO MATCH SIZE AND SPACING OF BARS IN WALL OR BEAM. 9. MINIMUM STRUCTURAL STEEL CONCRETE COVER, UNLESS NOTED OTHERWISE: A. UNFORMED SURFACE IN CONTACT WITH THE GROUND - 3"

B. FORMED SURFACES EXPOSED TO GROUND OR WEATHER - 2" C. FORMED SURFACES NOT EXPOSED TO GROUND OR WEATHER:

2) BEAMS, GIRDERS, AND COLUMNS (TO TIES OF STIRRUPS) - 1-1/2" 10. UNLESS OTHERWISE SHOWN IN THE ARCHITECTURAL DRAWINGS, PROVIDE 3/4" CHAMFERS AT THE EDGES THAT ARE EXPOSED TO VIEW IN THE

11. REFER TO ARCHITECTURAL DRAWINGS FOR MASONRY, ANCHORS, AND FOR MISCELLANEOUS EMBEDDED PLATES, BOLTS, ANCHORS, ANGLES, ETC.

12. REFER TO ARCHITECTURAL DRAWINGS FOR CONCRETE FINISHES. WHERE FINISH IS NOT SPECIFIED, UTILIZE STANDARD BROOM FINISH. 13. REFER TO MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR DRAINS, SLEEVES, OUTLET BOXES, CONDUIT, ANCHORS, ETC. THE VARIOUS TRADES ARE RESPONSIBLE FOR PLACING THEIR ITEMS.

1. COMPLY WITH RECOMMENDATIONS OF BRICK INSTITUTE OF AMERICAN (BIA) AND NATIONAL CONCRETE MASONRY ASSOCIATION (NCMA). 2. PROVIDE ASTM C 90, GRADE N, NORMAL WEIGHT UNITS IN INDUSTRY STANDARD SIZES AS NOTED ON PLANS.

 REINFORCEMENT TO COMPLY WITH THE FOLLOWING: A. BARS: ASTM A165, GRADE 40, DEFORMED FOR #3 AND LARGER, UNLESS OTHERWISE SHOWN ON DRAWINGS B. BENDING: ACI 318

C. WIRE REINFORCEMENT: ASTM A82 4. MORTAR AND GROUT MATERIALS A. PORTLAND CEMEMT: ASTM C150, TYPE I OR II, EXCEPT TYPE III MAY BE USED FOR COLD-WEATHER CONSTRUCTION.

AGGREGATE FOR GROUT: ASTM C 404 E. WATER: CLEAN AND POTABLE

A. ASTM C 270, PROPERTY SPECIFICATION FOR JOB-MIXED MORTAR AND ASTM C 1142 FOR READY-MIXED MORTAR. B. USE TYPE M MORTAR FOR MASONRY BELOW GRADE AND IN CONTACT WITH EARTH AND WHEN INDICATED USE TYPE S MORTARY FOR EXTERIOR, ABOVE GRADE, LOADBEARING AND NON-LOADBEARING WALLS; FOR INTERIOR LOADBEARING WALLS

AGGREGATE FOR MORTAR: ASTM C 144, EXCEPT FOR JOINTS LESS THAN 1/4" USE AGGREGATE GRADED WITH 100% PASSING NO.16 SIEVE

AND FOR OTHER APPLICATIONS WHERE ANOTHER TYPE IS NOT INDICATED.

6. DO NOT PLACE MASONRY UNITS WHEN AIR TEMPERATURE IS BELOW 40 DEGREES F. 7. CUT JOINTS FLUSH AND TOOL SLIGHTLY CONCAVE UNLESS OTHERWISE INDICATED.

8. FILL IN SOLIDLY WITH MASONRY AROUND BUILT-IN ITEMS.

B. HYDRATED LIME: ASTM C 207 TYPE S

9. AFTER MORTAR IS THOROUGHLY SET AND CURED, CLEAN EXPOSED MASONRY BY FIRST REMOVING LARGE MORTAR PARTICLES WITH HAND TOOLS.

REFER TO ATTACHED STRUCTURAL DRAWINGS. FOR ITEMS NOT INCLUDED DEFER TO THE BELOW.

ALL STRUCTURAL STEEL TO BE FABRICATED AND ERECTED IN ACCORDANCE WITH AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND

MATERIALS: A. WIDE FLANGE SHAPES: ASTM A992 B. CHANNELS, ANGLES, PLATES: ASTM A36 C. HOLLOW STRUCTURAL SHAPES: ASTM A500, GRADE B D. HIGH STRENGTH BOLTS: 3/4" DIAMETER (MINIMUM), A325-N. E. ANCHOR BOLTS: 5/8" DIAMETER (MINIMUM), A36 - F1554 F. ADHESIVE BOLTS: (THREADED ROD ASTM A36) 1) HILTI HIT-HY 20 ADHESIVE w/ SCREEN TUBES IN MASONRY

8. FABRICATE ALL BEAMS WITH THE MILL CAMBER UP U.N.O.

G. EXPANSION BOLTS: HILTI KWIK BOLT III

2) HILTI HIT-HY 150 (OR HIT-HY 250) ADHESIVE IN CONCRETE

THROUGH ANY MEMBER UNLESS THEY ARE DETAILED ON THE APPROVED SHOP DRAWINGS.

PROJECT SPECIFICATIONS

3. BOLTED CONNECTIONS: ALL BOLTED CONNECTIONS SHALL BE SNUG-TIGHT IN ACCORDANCE WITH THE "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS" PUBLISHED BY THE RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS. 4 WELDED CONNECTIONS: ALL WELDING SHALL BE IN ACCORDANCE WITH THE "STRUCTURAL WELDING SOCIETY CODE" (AWS D1 1-96) PUBLISHED BY THE AMERICAN WELDING SOCIETY. ELECTRODES FOR WELDING SHALL COMPLY WITH THE REQUIREMENTS OF TABLE 3.1 OF (AWS D1.1-96). ALL WELDING TO BE DONE BY QUALIFIED WELDERS CONFORMING TO THE AMERICAN WELDING SOCIETY STANDARDS.

5. SPLICING OF STEEL MEMBERS, UNLESS SHOWN ON THE DRAWINGS, IS PROHIBITED WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER. 6. NO CHANGE IN SIZE OR POSITION OF THE STRUCTURAL ELEMENTS SHALL BE MADE, AND HOLES, SLOTS, CUTS, ETC., ARE NOT PERMITTED

7. NO FINAL BOLTING OR WELDING SHALL BE MADE UNTIL AS MUCH OF THE STRUCTURE AS WILL BE STIFFENED THEREBY HAS BEEN PROPERLY

9. ALL COLUMN BASE PLATES SHALL BE SOLIDLY GROUTED WITH NON-SHRINK GROUT UNDER THE ENTIRE BASE PLATE AREA. GROUT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI @ 28 DAYS.

THE CONTRACT DOCUMENTS. FABRICATOR IS TO FURNISH ARCHITECT/ENGINEER WITH SHOP DRAWINGS FOR APPROVAL.

10. ALL HOLLOW STRUCTURAL SHAPE WELDED CONNECTIONS TO BE GROUND SMOOTH. 11. THE FABRICATOR SHALL BE RESPONSIBLE FOR THE DESIGN AND PERFORMANCE OF ALL CONNECTIONS NOT FULLY DESIGNED OR DETAILED ON

12. ONCE THE FRAME IS ASSEMBLED, ALL STRUCTURAL STEEL SHALL BE COATED WITH A RUST INHIBITING PRIMER AND PAINTED. THE NEW AND EXISTING STEEL SHALL BE PROPERLY CLEANED AND PREPARED PRIOR TO PRIMING.

DIVISION 6A. ROUGH CARPENTRY 1. CONTRACTOR IS RESPONSIBLE TO ADEQUATELY SHORE AND BRACE ALL FLOOR AND ROOF FRAMING AND WALLS DURING CONSTRUCTION.

1) JOIST, RAFTERS, HEADERS, BEAMS 2x AND LARGER, PLATES, SILLS a. SEE DRAWINGS 2) STUDS, BEARING WALLS. SEE PLAN FOR SIZE USED: a. STUDS: SPRUCE-PINE-FIR "STUD" GRADE

b. SILL AND TOP PLATES: NO. 2 SOUTHERN PINE 3) SPECIES AND GRADES SHOWN ARE THE MINIMUM ACCEPTABLE. BETTER GRADES MAY BE SUBSTITUTED

4) PRESSURE TREATED WOOD TO BE USED AT THE FOLLOWING LOCATIONS a. LUMBER EXPOSED TO WEATHER

b. WOOD IN CONTACT WITH CONCRETE OR MASONRY

B. SHEATHING (WOOD STRUCTURAL PANEL) 1) ROOF SHEATHING: 5/8" O.S.B.

2) FLOOR SHEATHING (ABOVE OFFICE, UNISEX & MECH, ROOM: 3/4" (NOMINAL) RATED 48/24 FOR MAXIMUM JOIST SPACING. TONGUE-AND-GROOVE, GLUED TO SUPPORTS. APA RATED

3) WALL SHEATHING: 1/2" NOMINAL ON EXTERIOR SIDE OF WALL FRAMING; 7/16" ON INTERIOR SIDES OF WALL FRAMING 4) WOOD STRUCTURAL PANELS TO BE A.P.A. RATED AND EXPOSURE 1. PANELS TO BE MANUFACTURED PER U.S. DEPARTMENT OF COMMERCE PRODUCT STANDARDS PS1 OR PS2.

C. MICROLLAM: Fb = 2600 PSI, E = 1.9 x 10 E6 PSI

D. HARDWARE 1) BOLTS AND THREADED ROD: ASTM A307 (MIN.)

2) PREFABRICATED CONNECTORS: "SIMPSON STRONG TIE"/"USP" OR EQUAL. 3) NAILS: BOX WIRE NAILS. UNLESS COMMON NAILS REQ'D BY METAL CONNECTORS.

4) USE GALVANIZED HARDWARE FOR EXTERIOR FRAMING.

NAILING: SHALL BE PER FASTENING SCHEDULE OF THE INTERNATIONAL BUILDING CODE. FOR PREFABRICATED CONNECTORS USE ALL FASTENERS AS PRESCRIBED BY THE MANUFACTURER. 4. ALL POST AND JAMBS ARE TO BE BLOCKED SOLID WITH THE SAME NUMBER OF PIECES AS THE POST OF JAMB WITHIN THE FLOOR SPACE.

BLOCKING IS TO ALIGN WITH POST OR JAMBS. <u>DIVISION 7A. ROOFING</u> - CONTRACTOR TO PROVIDE FULL SUBMITTALS FOR ALL ITEMS THIS SECTION

EXTERIOR ROOFING SYSTEM - 26 GA. RIBBED GAI VANIZED STEEL COMPLYING WITH ASTM A446 WITH 1.25 OZ G90. COATING FACTORY PREFINISH IN KYNAR 500, ROOFING COLOR TO BE GREEN TO MATCH EXISTING BUILDINGS ON COMPLEX ADD SNOW STOPS ABOVE ALL DOORS

b. STANDARD WARRANTY - PROVIDE MANUFACTURER'S STANDARD WARRANTY. c. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT TO INSTALL ROOFING SYSTEM AS DETAILED/SPECIFIED.

PROVIDE A COMPLETE JOB.

1. EXTERIOR SIDING & TRIM SYSTEM - 26 GA. RIBBED GALVANIZED STEEL COMPLYING WITH ASTM A446 WITH 1.25 OZ G90 COATING. FACTORY PREFINISH IN KYNAR 500. SIDING COLOR TO BE BROWN TO MATCH EXISTING BUILDINGS ON COMPLEX.

2. PREFINISHED ALUMINUM SOFFIT & FASCIA, COLOR TO BE SELECTED BY OWNER/ARCHITECT FROM MANUFACTURERS FULL RANGE.

CONTROL JOINTS IN ANY MASONRY & CONCRETE SURFACES, BOTH INT. & EXT.

PERIMETER OF LOUVERS & GRILLES, INT. & EXT. PERIMETER OF ALL WALLS TOP AND SILL PLATES, EXT. PER WGBH C.14 & CR.2

PROVIDE CAULKING AT OTHER AREAS AS INDICATED 3. CAULKING VOC LEVELS MUST MEET THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168

<u>DIVISION 7D. INSULATION</u> - CONTRACTOR TO PROVIDE FULL SUBMITTALS FOR ALL ITEMS THIS SECTION 1. INSTALL R-10 EXTRUDED POLYSTYRENE BOARDS AT FOUNDATION, R-24 FIBERGLASS BATT AT EXTERIOR WALLS, R-49 BLOWN FIBERGLASS ATTICS,

2. SEAL ALL CRACKS, GAPS, JOINTS, ELECTRICAL BOXES AND ANY OTHER PLACES THAT ALLOW POTENTIAL AIR LEAKAGE PRIOR TO INSTALLATION OF

3. INSTALL WEATHERSTRIP & INSULATION AT ALL CRAWL SPACE AND ATTIC HATCHES PER 2009 IECC.

4. THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND ICC-EVALUATION REPORT (ESR-1826) MUST BE STRINGENTLY ADHERED TO AND A COPY OFINSTRUCTIONS AND EVALUATION REPORT MUST BE AVAILABLE ON THE JOBSITE AT ALL TIMES DURING INSTALLATION.

5. THE ATTIC MUST BE VENTED IN ACCORDANCE WITH 806.1

1. PROVIDE AND INSTALL TYVEK OVER EXTERIOR SHEATHING AS RECOMMENDED BY MANUFACTURER'S WRITTEN INSTRUCTIONS. TAPE ALL SEAMS,

DIVISION 7E. WATERPROOFING

ROOFING - (SUPPLY & INSTALL) a. UNDERLAYMENT - PROVIDE SELF-ADHERING. SLIP-RESISTING, POLYETHYLENE-FILM TOP SURFACE LAMINATED TO LAYER OF BUTYL OR SBS-MODIFIED ASPHALT ADHESIVE. WITH RELEASE PAPER BACKING: COLD APPLIED. PROVIDE PRIMER WHEN RECOMMENDED BY UNDERLAYMENT MANUFACTURER. d. ROOFER SHALL SUPPLY AND INSTALL ALL REQUIRED FLASHING, METAL EDGING, ROOF JACKS, ROOF VENTS, ETC. (IF INDICATED) TO e. INSTALLALL ROOFING SYSTEMS IN STRICT COMPLIANCE WITH MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS AS WELL AS PER LOCAL BUILDING CODES AND INDUSTRY STANDARDS; PROVIDE WRITTEN WARRANTIES.

<u>DIVISION 7B. SIDING</u> - CONTRACTOR TO PROVIDE FULL SUBMITTALS FOR ALL ITEMS THIS SECTION

<u>DIVISION 7C. SEALANTS</u> - CONTRACTOR TO PROVIDE FULL SUBMITTALS FOR ALL ITEMS THIS SECTION

1. ALL EXT. CAULKING AT SIDING/TRIM TO BE TIGHTBOND - WEATHERMASTER SEALANT, SINGLE-COMPONENT, COLOR: MATCH ADJACENT SURFACES 2. PROVIDE CAULKING AT FOLLOWING LOCATIONS:

PERIMETER OF DOOR AND WINDOW FRAMES, INT. & EXT.

JOINTS IN EXTERIOR SIDING AND TRIM

4. CONTRACTOR TO SELECT PROPER CAULK FOR APPLICATION FROM TIGHTBOND PRODUCT LINE. INSULATION TO PROVIDE COMPLETE ENCLOSURE OF ALL CONDITIONED SPACES, INCLUDING ALL SHIM SPACES AT DOORS AND WINDOWS IN

EXTERIOR WALLS AND AT GARAGES WHERE ADJACENT TO CONDITIONED SPACES. GYPSUM BOARD AND OTHER FINISHES AS RECOMMENDED BY INSULATION MANUFACTURER'S WRITTEN RECOMMENDATIONS.

<u>DIVISION 7F. HOUSE WRAP</u> - CONTRACTOR TO PROVIDE FULL SUBMITTALS FOR ALL ITEMS THIS SECTION

2. PROVIDE AND INSTALL WINDOW FLASHING SUCH AS TYVEK FLEX WRAP OR EQUAL ON ALL SIDES OF ALL WINDOWS.

NANCE BUILDING FOR:

SCOVERY CENTROWISH WATERS, WI 54545

4006 DISCOVERY LANE, MANITOWISH WAT

DESIGN & ENGINEERING with framework design inc

NORTH

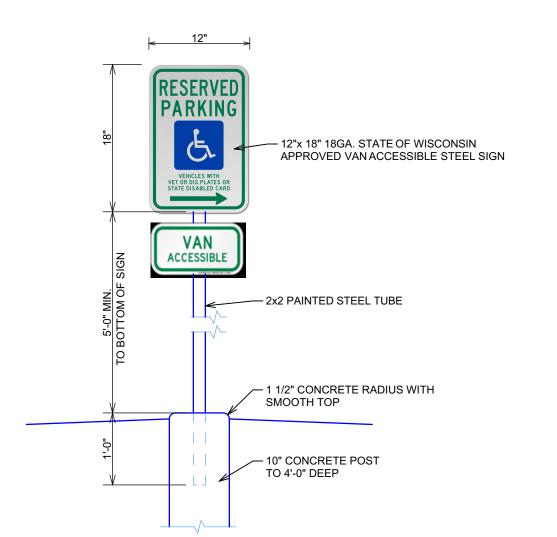
L.D. T.L.P.

FEBRUARY 19, 2024

AS NOTED

20-3512.1

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STORMWATER MANAGEMENT AND EROSION CONTROL

All work to be performed in order to maintain all project grounds, public streets and associated areas, including fill areas in a manner consistent with the general policy to conserve soil and soil resources, and to control and prevent soil erosion and to control and prevent siltation into lakes, rivers and streams. This clause is to be liberally construed to further the above stated objectives. The following shall include, but not limit areas in which control is to be executed:

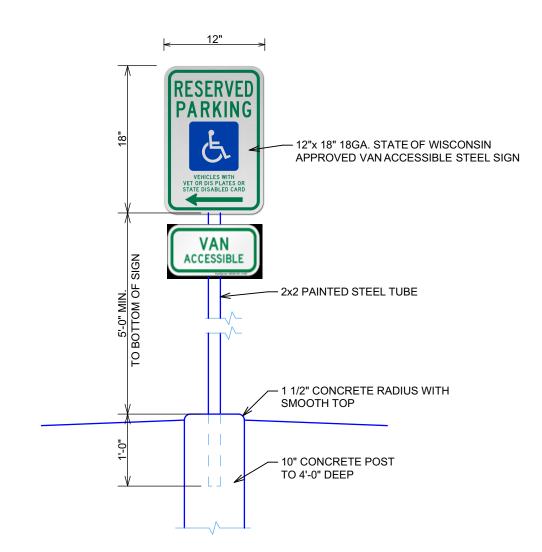
Minimum Stripping: Strive to limit stripping of sod and vegetation to a period that will expose bare soil to least possiblity of erosion that construction reqirements will allow.

Stockpiling: Material shall be stored in a manner that will not runoff of stockpiled material into streets or drainage facilities in the event of rain.

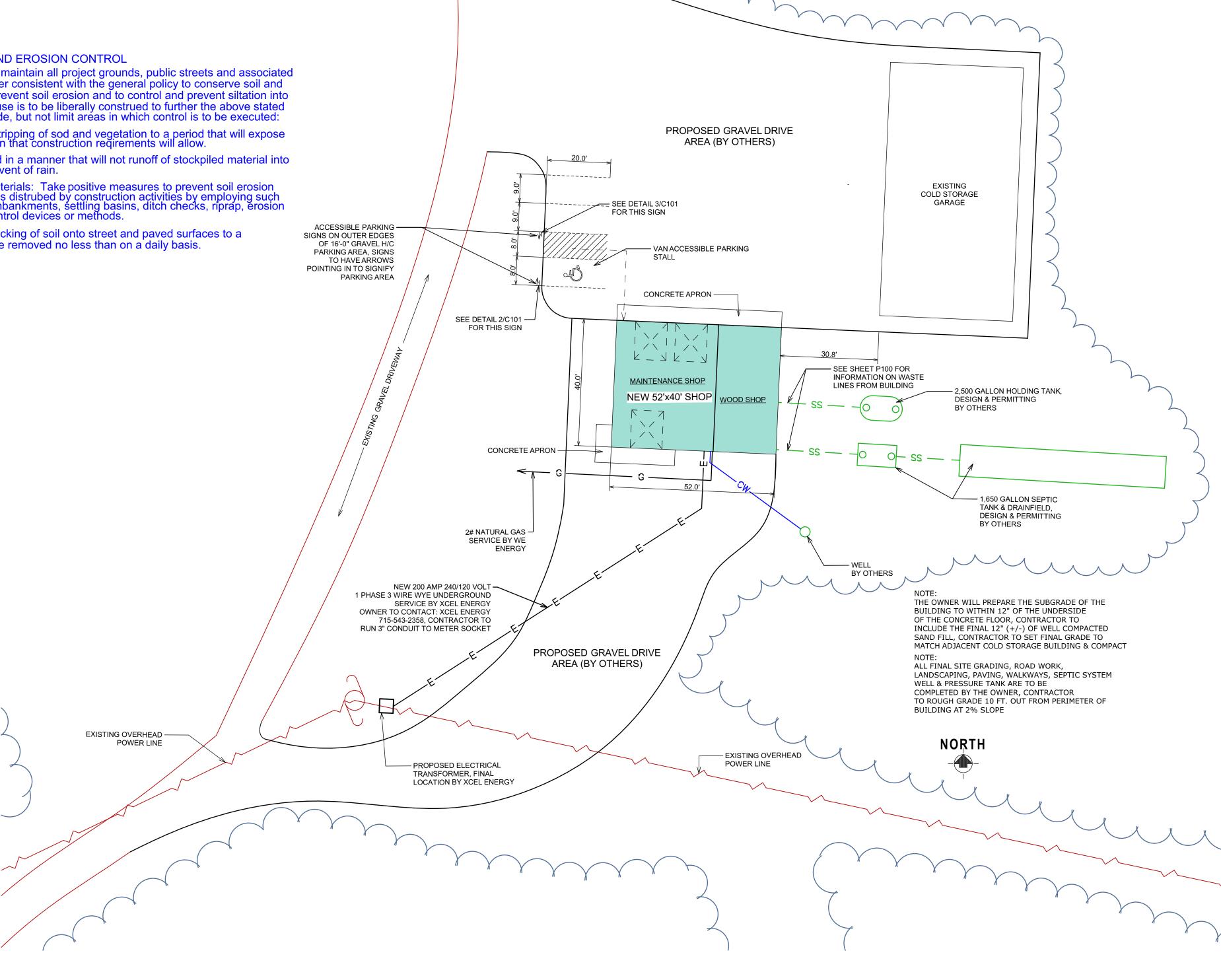
Stormwater Runoff and Erodible Materials: Take positive measures to prevent soil erosion from the construction area and areas distrubed by construction activities by employing such means as: mulches, intercepting embankments, settling basins, ditch checks, riprap, erosion mats or other temporary erosion control devices or methods.

Street Maintenance: Control the tracking of soil onto street and paved surfaces to a minimum. Any such tracking shall be removed no less than on a daily basis.











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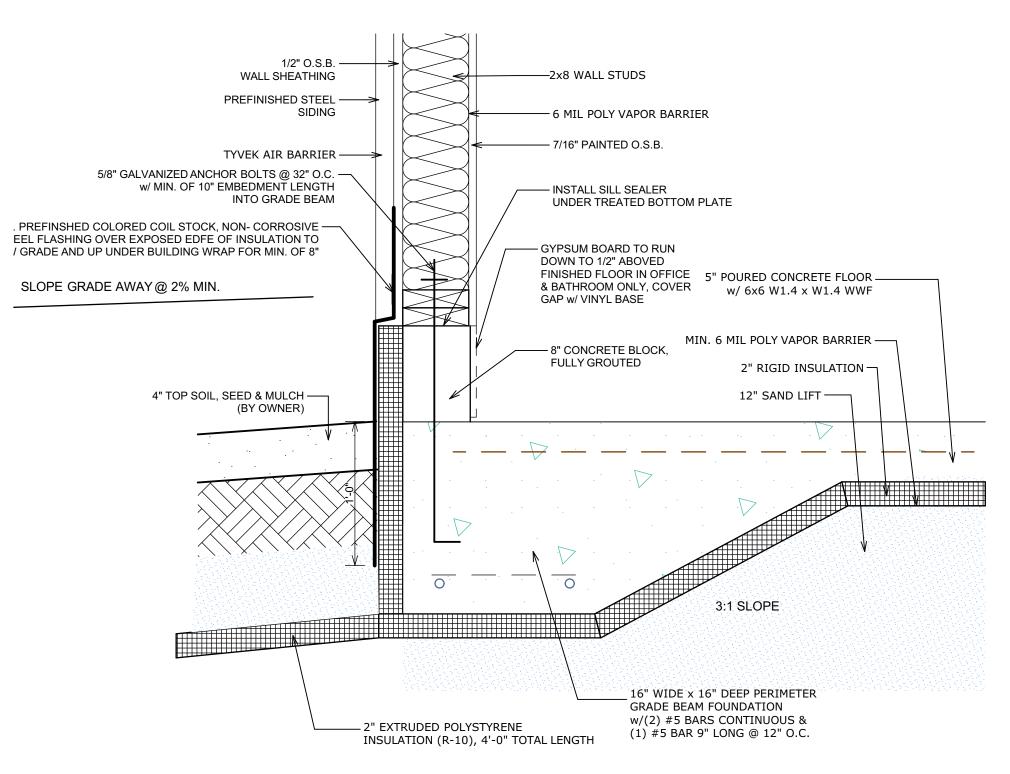
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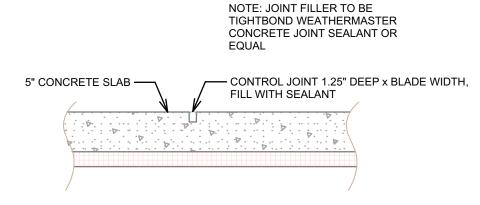
AS NOTED FEBRUARY 19, 2024

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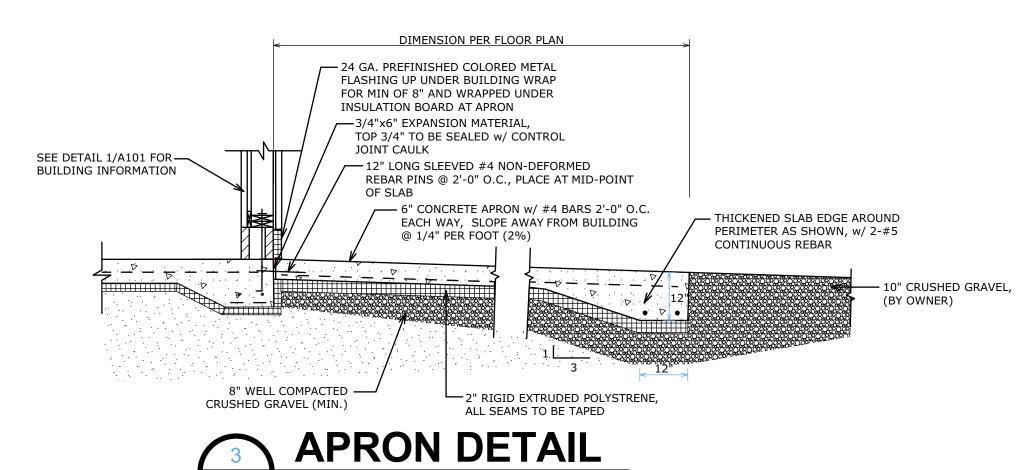
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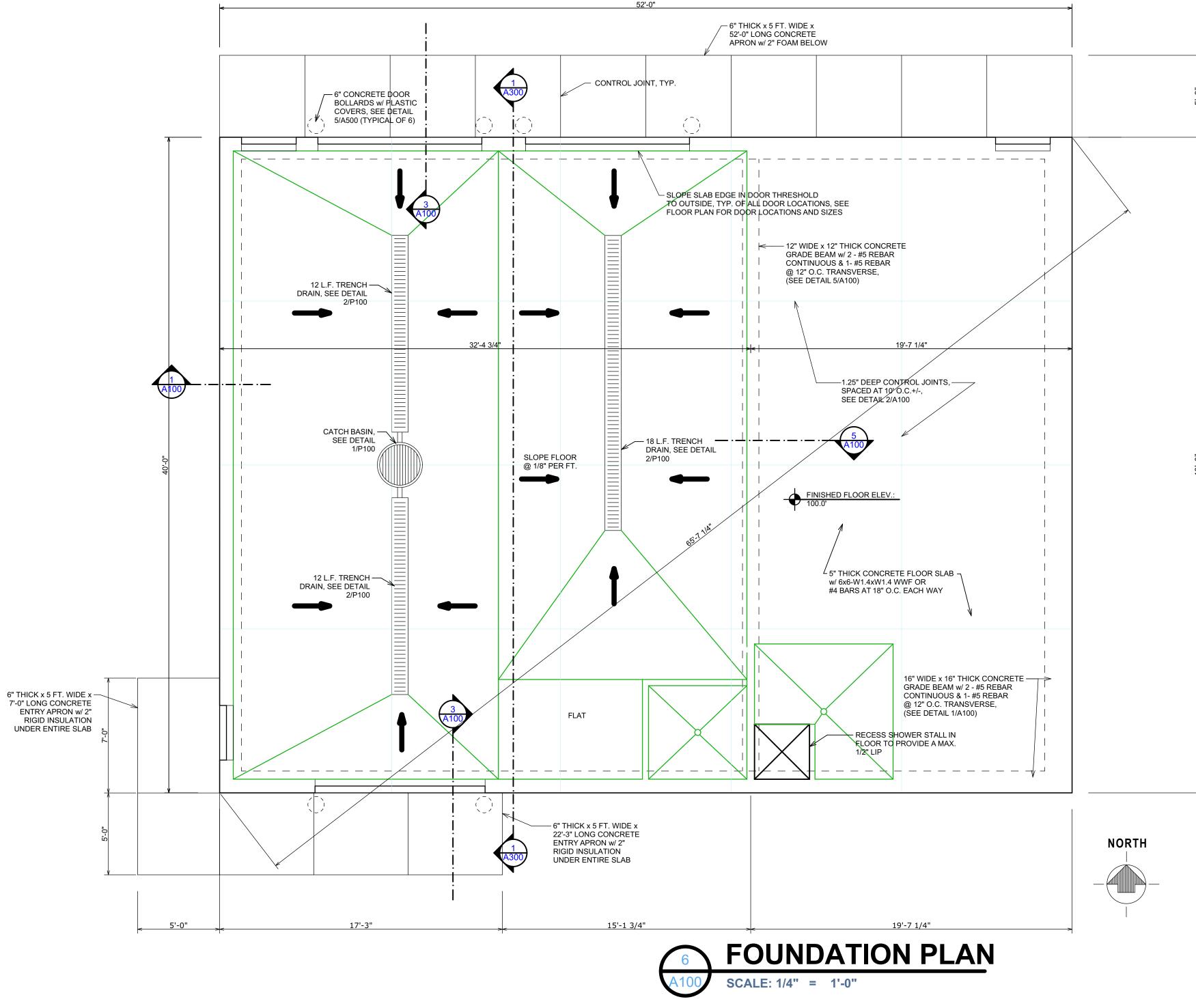


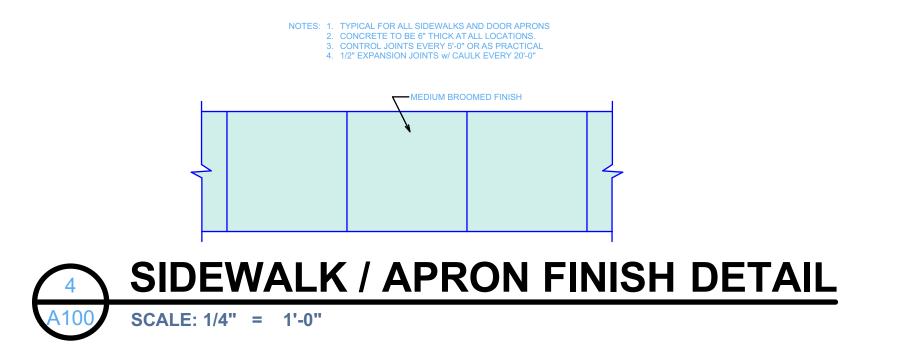


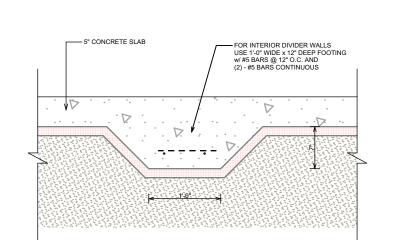




SCALE: 1/2" = 1'-0"









DISCOVERY CENTANITOWISH WATERS, WI 54545

FOUNDATION PLAP

DESIGN & ENGINEERING with framework design inc

L.D. T.L.P.

FEBRUARY 19, 2024

AS NOTED

20-3512.1

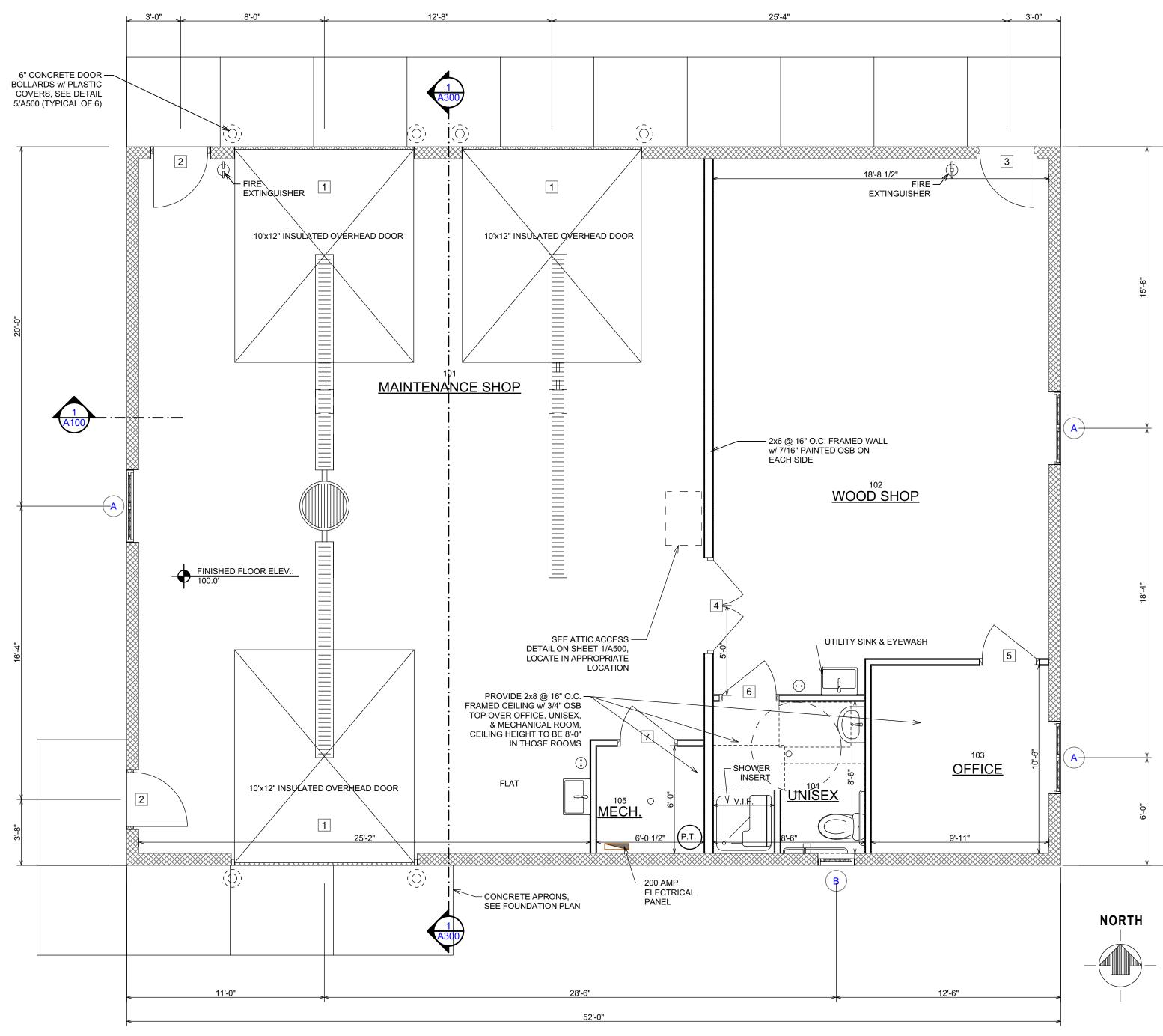
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FLOOR PLAN

SCALE: 1/4" = 1'-0"

ROOM

NAME

MAINTENANCE SHOP

WOOD SHOP

UNISEX

MECHANICAL ROOM

SUBSTRATE

CONCRETE SEALER

CONCRETE | SEALER

INTERIOR ROOM FINISH SCHEDULE

SUBSTRATE

7/16" OSB

7/16" OSB

5/8" GYPSUM BD.

5/8" W.P. GYPSUM BD.

5/8" GYPSUM BD.

FINISH

PAINT

PAINT

PAINT

SUBSTRATE

7/16" OSB

7/16" OSB

5/8" GYPSUM BD.

5/8" W.P. GYPSUM BD.

5/8" GYPSUM BD.

FINISH

PAINT

PAINT

PAINT

PAINT

PAINT

HEIGHT

14'-0"

14'-0"

8'-0"

8'-0"

8'-0"

BASE FINISH

NONE

NONE

1. ALL PAINTING: PRIMER WITH TWO (2) FINISH COATS OF PAINT.
2. CONCRETE FLOORS TO BE SEALED WITH ONE COAT CONSPEC "INTRASEAL" OR APPROVED EQUAL. NOTES:

FINISH

CONCRETE SEALER 4" RUBBER

CONCRETE SEALER 4" RUBBER

CONCRETE SEALER 4" RUBBER

DOOR SCHEDULE						
DOOR TYPE	S W	IZE H	FRAME TYPE	DOOR HEADER	HARDWARE LOCK FUNCTION	REMARKS
INSULATED STEEL OVERHEAD GARAGE DOOR	10'-0"	12'-0"		2 PLY 11 1/4" MICROLLAM w/ 2 PLY 2x8		W/ OPENER AND INTERIOR WALL MOUNTED CONTROLS & EXTERIOR KEYPAD
HALF GLASS			PREHUNG	SHOULDER STUDS	KEYED ENTRY	w/ CLOSER AND
INSULATED STEEL	3'-0"	6'-8"	WOOD	2 PLY 2x8	LOCKSET	WEATHERSTRIPPING
HALF GLASS INSULATED STEEL	3'-0"	6'-8"	PREHUNG WOOD	2 PLY 2x8	KEYED ENTRY LOCKSET	w/ CLOSER AND WEATHERSTRIPPING
DOUBLE INSULATED STEEL	6'-0"	6'-8"	PREHUNG WOOD	2 PLY 2x10	KEYED ENTRY LOCKSET	
	$-\!\!\!\!-\!\!\!\!-$	+		+		

SYMBOL	QTY	TYPE	UNIT SIZE (WxH)	WALL THICKNESS	GLASS INSUL. TYPE	HEADER HEIGHT	HEADER SIZE	COMMENTS
A	3	SLIDER	4'-0" x 4'-0"	8 3/8"	LOW E W/ ARGON	6'-8"	2 PLY 2x8	
B	1	DOUBLE HUNG	2'-0" x 3'-0"	8 3/8"	LOW E W/ ARGON	6'-8"	2 PLY 2x10	

	MOUNTED CONTROLS & EXTERIOR KEYPAD
KEYED ENTRY LOCKSET	w/ CLOSER AND WEATHERSTRIPPING
KEYED ENTRY LOCKSET	w/ CLOSER AND WEATHERSTRIPPING
KEYED ENTRY LOCKSET	
KEYED ENTRY LOCKSET	
PRIVACY LOCKSET	

1. CONTRACTOR SHALL VERIFY ALL SIZES WITH MANUFACTURER BEFORE ORDERING OR INSTALLING. 2. ALL DOORS SHALL BE PAINTED IN A COLOR SELECTED BY THE OWNER AND ARCHITECT.

2 PLY 2x6

2 PLY 2x6

PASSAGE

LOCKSET

PREHUNG

WOOD

PREHUNG

WOOD

PREHUNG

3. ALL LOCKSETS TO BE LEVER HANDLE, ADA COMPLIANT.

SOLID CORE WOOD w/ HALF GLASS

SOLID CORE

WOOD

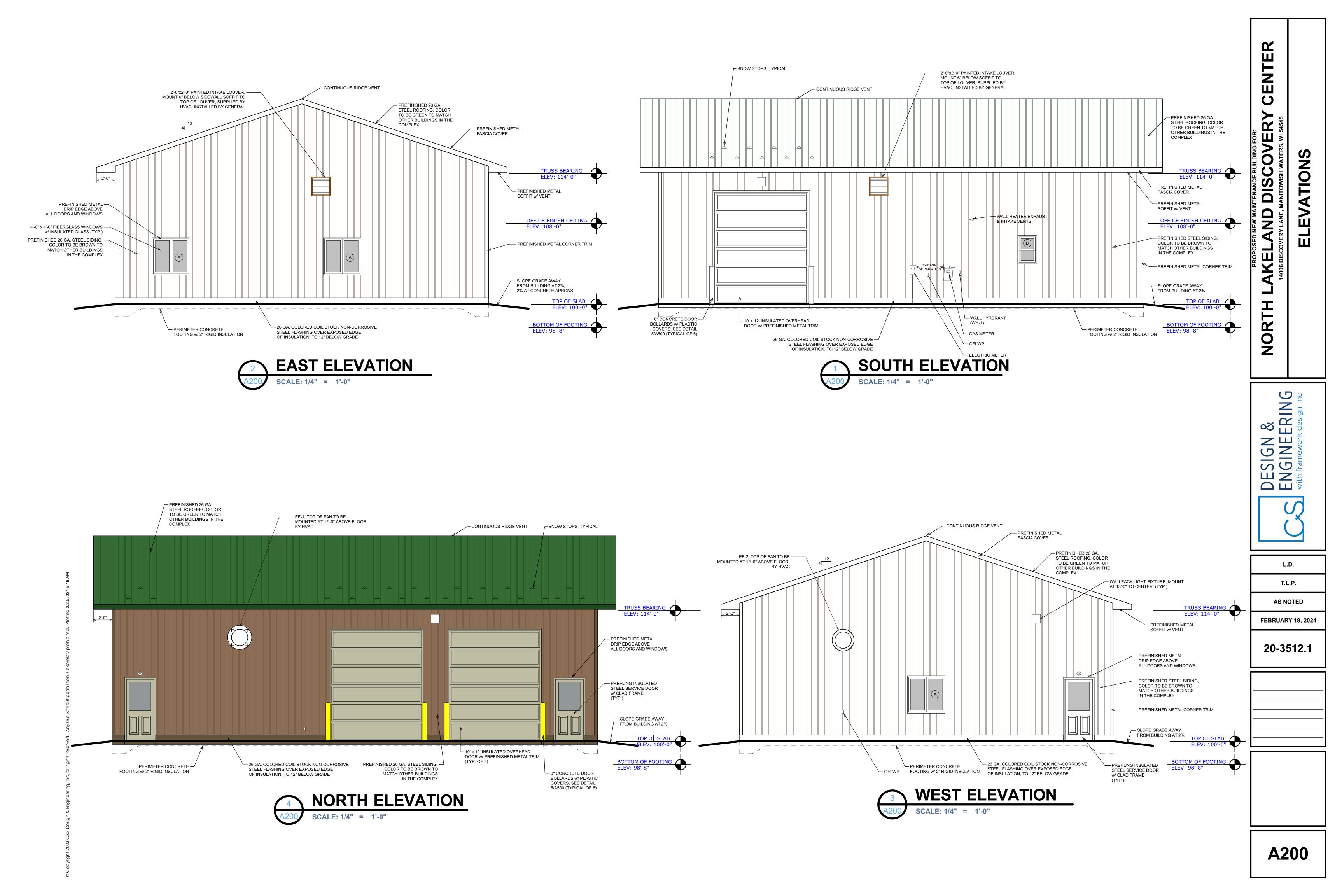
SOLID CORE

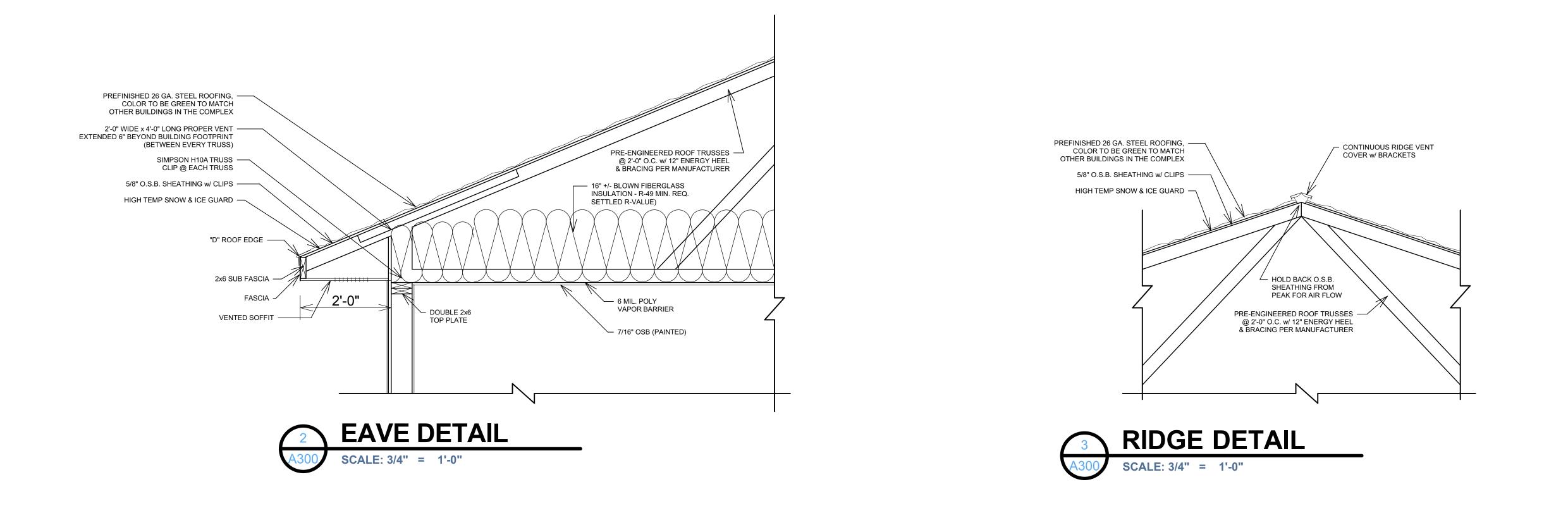
WOOD

2

4

4. ALL EXTERIOR PREHUNG WOOD FRAMES ARE TO HAVE ALUMINUM CLADDING ON THEM. 5. ALL GLASS IN EXTERIOR DOORS TO BE TEMPERED.





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ANITOWISH WATERS, WI 54545

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DESIGN & ENGINEERING

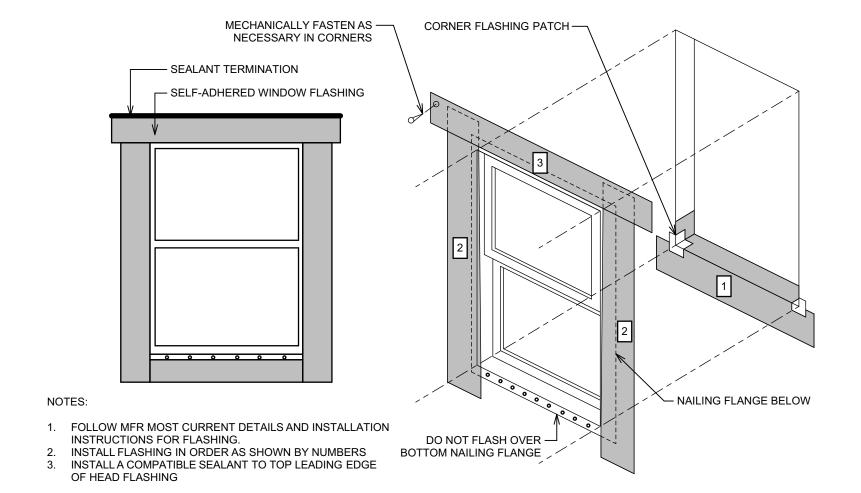
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AS NOTED
FEBRUARY 19, 2024

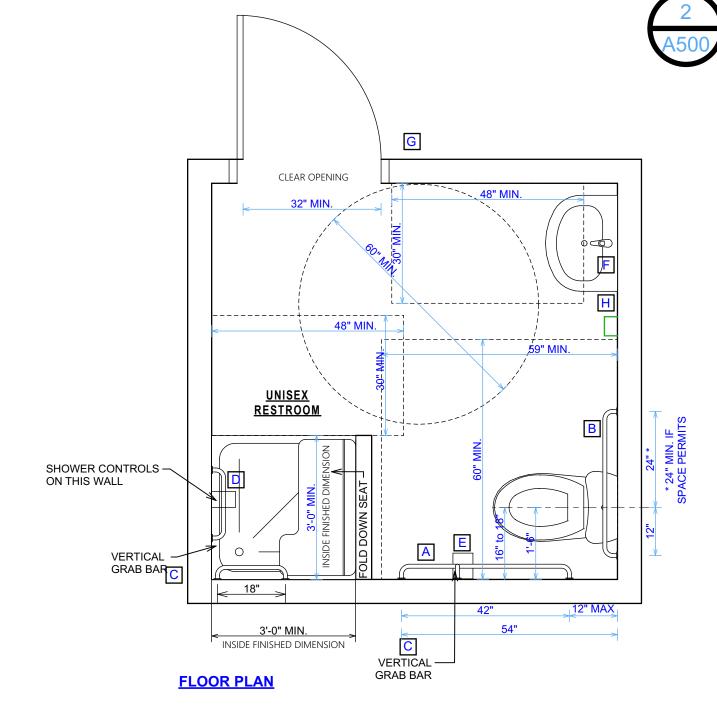
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WINDOW & LOUVER FLASHING DETAIL

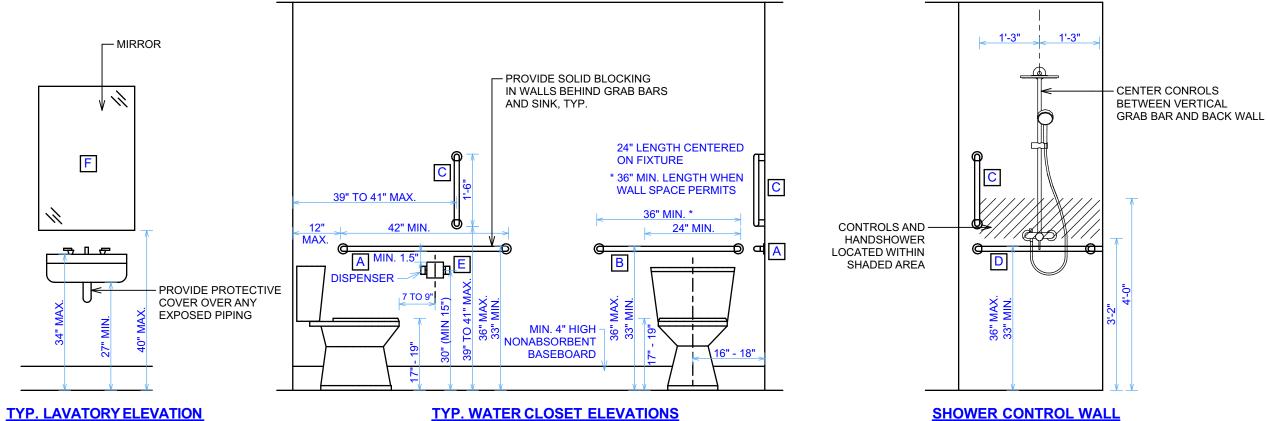


BATHROOM ACCESSORY SCHEDULE											
SYM.	DESCRIPTION	MOUNTING HEIGHT	MFR'S CATALOG No.								
A	1 1/4" DIA. 42" GRAB BAR	34.5" ABOVE FINISHED FLOOR	BOBRICK B-6806x 42 SATIN FINISH								
В	1 1/4" DIA. 36" GRAB BAR	34.5" ABOVE FINISHED FLOOR	BOBRICK B-6806x 36 SATIN FINISH								
C	1 1/4" DIA. 18" GRAB BAR	40" ABOVE FINISHED FLOOR (HORIZONTAL BAR @ 34.5")	BOBRICK B-6806x 18 SATIN FINISH								
1 1/4" DIA. TWO-WALL GRAB BAR		34.5" ABOVE FINISHED FLOOR	BOBRICK B-6861 SATIN FINISH								
E	TOILET PAPER DISPENSER	HORIZONTAL CENTERLINE 30" ABOVE F.F.	BOBRICK B-7685								
F	ACCESSIBLE 24" x 36" MIRROR	BOTTOM EDGE TO BE 40" ABOVE F.F.	BOBRICK B-293 2436								
G	ACCESSIBLE SIGNAGE FOR RESTROOM	BOTTOM EDGE TO BE 48" ABOVE F.F.									
H	FOLDED PAPER TOWEL DISPENSER	HORIZONTAL CENTERLINE 44" ABOVE F.F.	BOBRICK B-262								
NOTES	1. ALL ACCESSORIES TO HAV	/E BLOCKING IN THE WALL.									

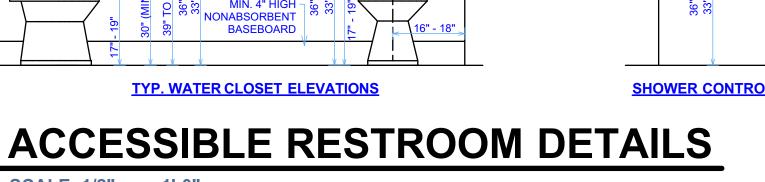
2. ALL HARDWARE SHALL BE MEDIUM DUTY USE.

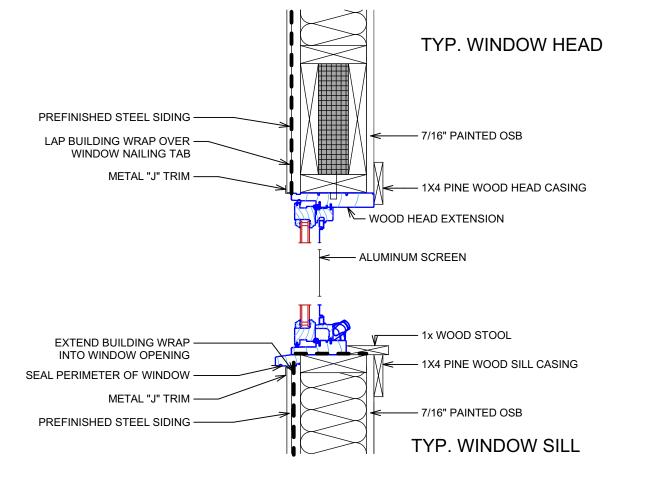
3. PROVIDE 3/4" PLYWOOD BACKING BEHIND ALL GRAB BARS.

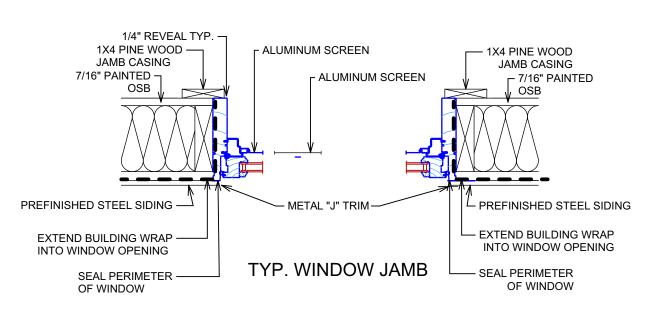
4. MANUFACTURER TO BE BOBRICK, OR EQUAL. 5. PROVIDE A "WATER STOPPER" THRESHOLD SYSTEM AT THE FRONT OF THE SHOWER. MFR TO BE BEST BATH SYSTEMS OR APPROVED EQUAL. THE WATER STOPPER SYSTEM CAN BE FOUND ON WWW.BEST-BATH.COM. SHOWER GRAB BARS AND SEAT SUPPLIED BY PLUMBING WITH STALL.



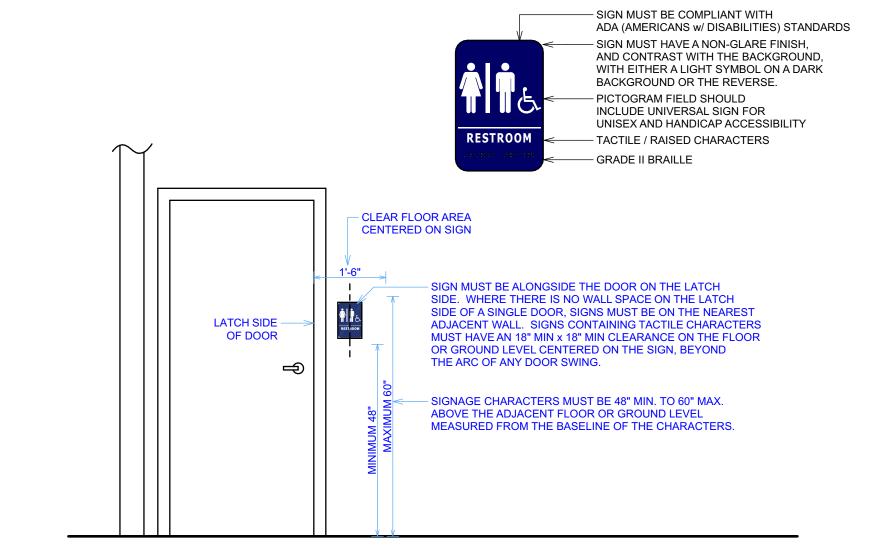
SCALE: 1/2" = 1'-0"





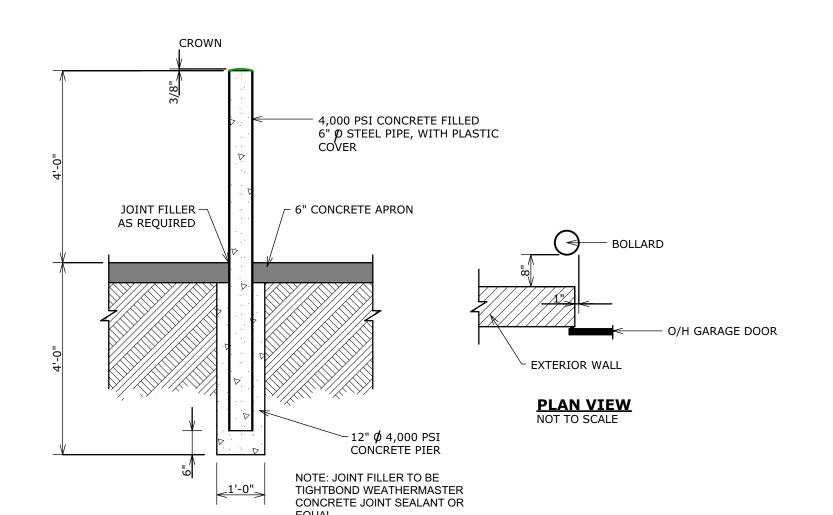




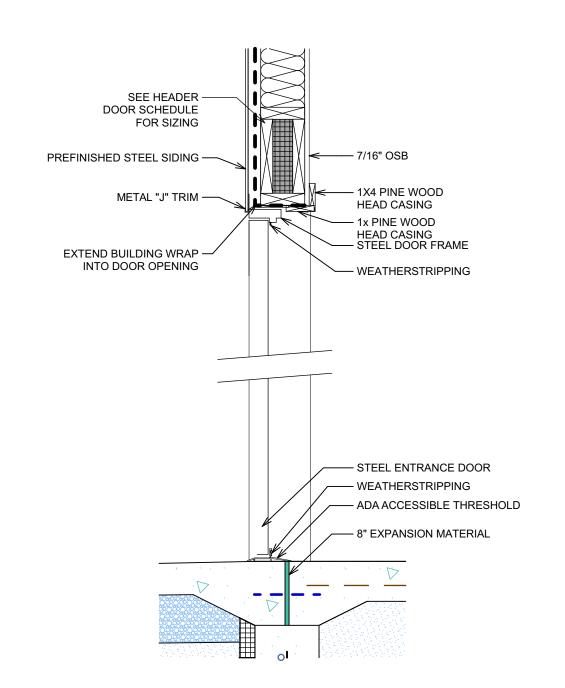


<u>UNISEX</u> RESTROOM

ACCESSIBLE RESTROOM SIGNAGE









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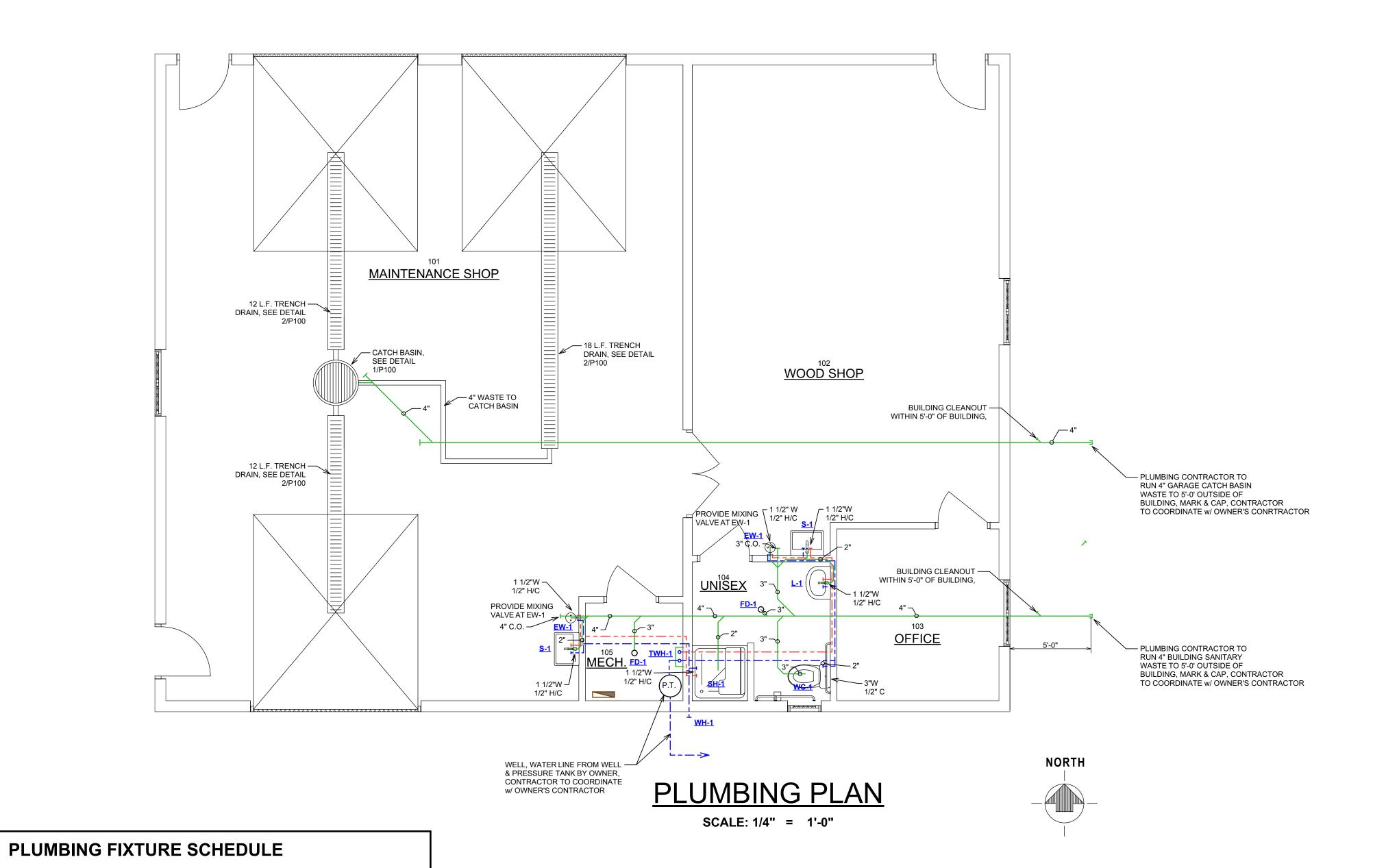
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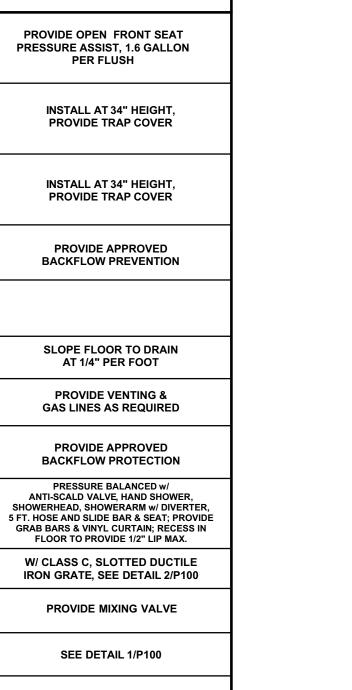


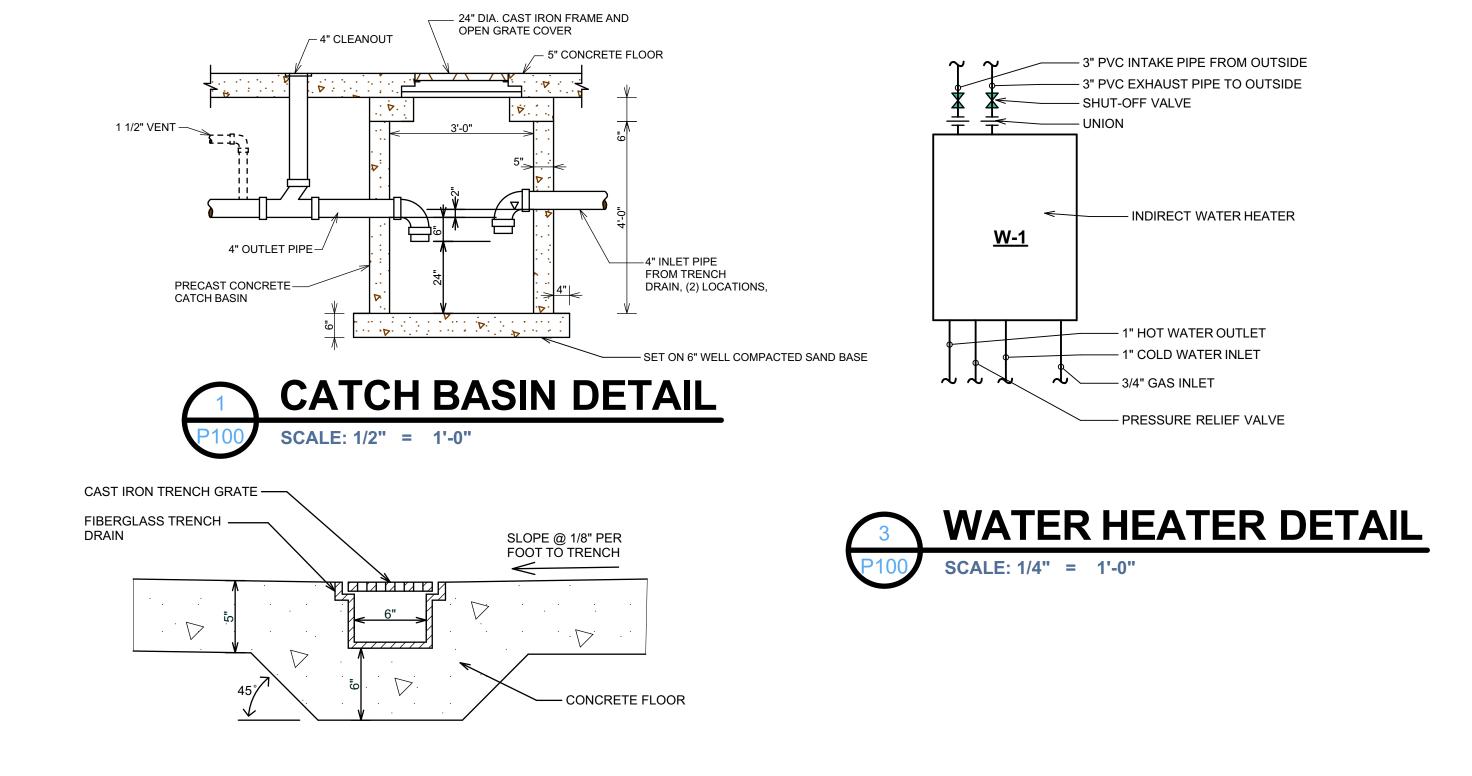
PLUMBING NOTES

- EACH FIXTURE IS TO HAVE A HOT & COLD SHUTOFF VALVE.
- H.C. HANDICAP ACCESSIBLE.
- N.I.C. NOT IN CONTRACT
- V.S.T.R. VENT STACK THRU ROOF.
- ALL FIXTURES AND FLOOR DRAINS ARE TO BE PROVIDED WITH A TRAP AND BE PROPERLY VENTED.
- ALL PLUMBING TO BE INSTALLED IN ACCORDANCE WITH STATE OF WISCONSIN PLUMBING CODE.

PLUMBING LEGEND

	COLD WATER
	HOT WATER
	SHUT OFF VALVE
	UNION
' '	WASTE LINE
	VENT LINE
	3" VENT STACK THRU ROOF
0	FIXTURE DRAIN
0	VERTICAL VENT
0	FLOOR OR CEILING PENETRATION
0	BALL VALVE
ф	
c.o. >	CLEAN OUT







TYPE OF FIXTURE

H/C WATER

CLOSET

WALL-HUNG

LAVATORY

LAV. FAUCET

UTILITY

SINK

UTILITY

SINK

FAUCET

3" FLOOR

DRAIN

L.P. GAS

TANKLESS

WATER HEATER

EXTERIOR

WALL

HYDRANT

STALL

SH-1 H/C SHOWER

RENCH FIBERGLASS

DRAIN TRENCH DRAIN

EW-1 EYE WASH

CB CONCRETE CATCH BASIN

PRESSURE

TANK

FD-1

ΓWH-1 |

SYM

WC-1

DFU TOTAL WSFU TOTAL

6

CLASSIC

K-4304-SS-0

KOHLER

KINGSTON

CHICAGO FAUCET

2200-4ABCP

MUSTEE

MODEL 17W

CHICAGO FAUCET

NO. 897CRCF w/ WATTS

8BC VACUUM BREAKER

2" FLOOR DRAIN

w/ CHROME STRAINER

NPE-240S2

MODEL ZZ1321C12

FLORESTONE

MODEL 40-40H

(4" SYSTEM)

36" DIA. CATCH BASIN

TOTALS:

NOTES: 1. FIXTURES SHOWN AS KOHLER ARE TO BE KOHLER OR AMERICAN STANDARD, NO SUBSTITUTION.

W/ CAST IRON COVER

BY OWNER

3. ALL FAUCETS SHALL BE POLISHED CHROME. 4. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

2. ALL FIXTURES SHALL BE WHITE.

REMARKS

PROVIDE OPEN FRONT SEAT

INSTALL AT 34" HEIGHT,

PROVIDE TRAP COVER

INSTALL AT 34" HEIGHT,

PROVIDE TRAP COVER

PROVIDE APPROVED

BACKFLOW PREVENTION

SLOPE FLOOR TO DRAIN

AT 1/4" PER FOOT

PROVIDE VENTING &

GAS LINES AS REQUIRED

PROVIDE APPROVED

BACKFLOW PROTECTION

W/ CLASS C, SLOTTED DUCTILE

IRON GRATE, SEE DETAIL 2/P100

PROVIDE MIXING VALVE

SEE DETAIL 1/P100

PRESSURE ASSIST, 1.6 GALLON

2. ALL HVAC EQUIPMENT IS TO BE CONTROLLED BY THERMOSTATS LOCATED IN AREAS AS SHOWN ON

3. ALL GAS PIPING INSTALLATIONS SHALL COMPLY WITH NFPA 54.

4. HVAC CONTRACTOR TO PROVIDE OPERATION AND MAINTENANCE (O&M) MANUALS TO OWNER AND HVAC DESIGNER AT END OF PROJECT.

5. ALL REQUIRED TESTING AND BALANCING IS TO BE COMPLETED BY THE HVAC CONTRACTOR AT THE END OF THE PROJECT. A REPORT IS TO BE PROVIDED TO THE ARCHITECT AND OWNER.

6. ALL DUCTWORK IS TO BE SEALED AND KEPT FREE FROM DEBRIS, DUST, ETC. DURING THE CONSTRUCTION PHASE OF THE PROJECT WORK. THE HVAC CONTRACTOR WILL BE RESPONSIBLE FOR THIS TASK.

THE HVAC SYSTEM CONSISTS OF THE FOLLOWING:

7. EF-2 SHALL OPERATE CONTINUOUSLY (LOW MODE) PROVIDING VENTILATION IN THE HEATED BUILDING UNLESS THE CARBON MONOXIDE MONITORING SYSTEM AND NITROGEN DIOXIDE MONITORING SYSTEM TELL THE SYSTEM TO GO INTO HIGH MODE. UNIT HEATERS (UH-1) & ELECTRIC HEATERS WILL HEAT THE SPACE. EF-1 TO BE ACTIVATED BY CONTROL SWITCH AS NEEDED BY OWNER.

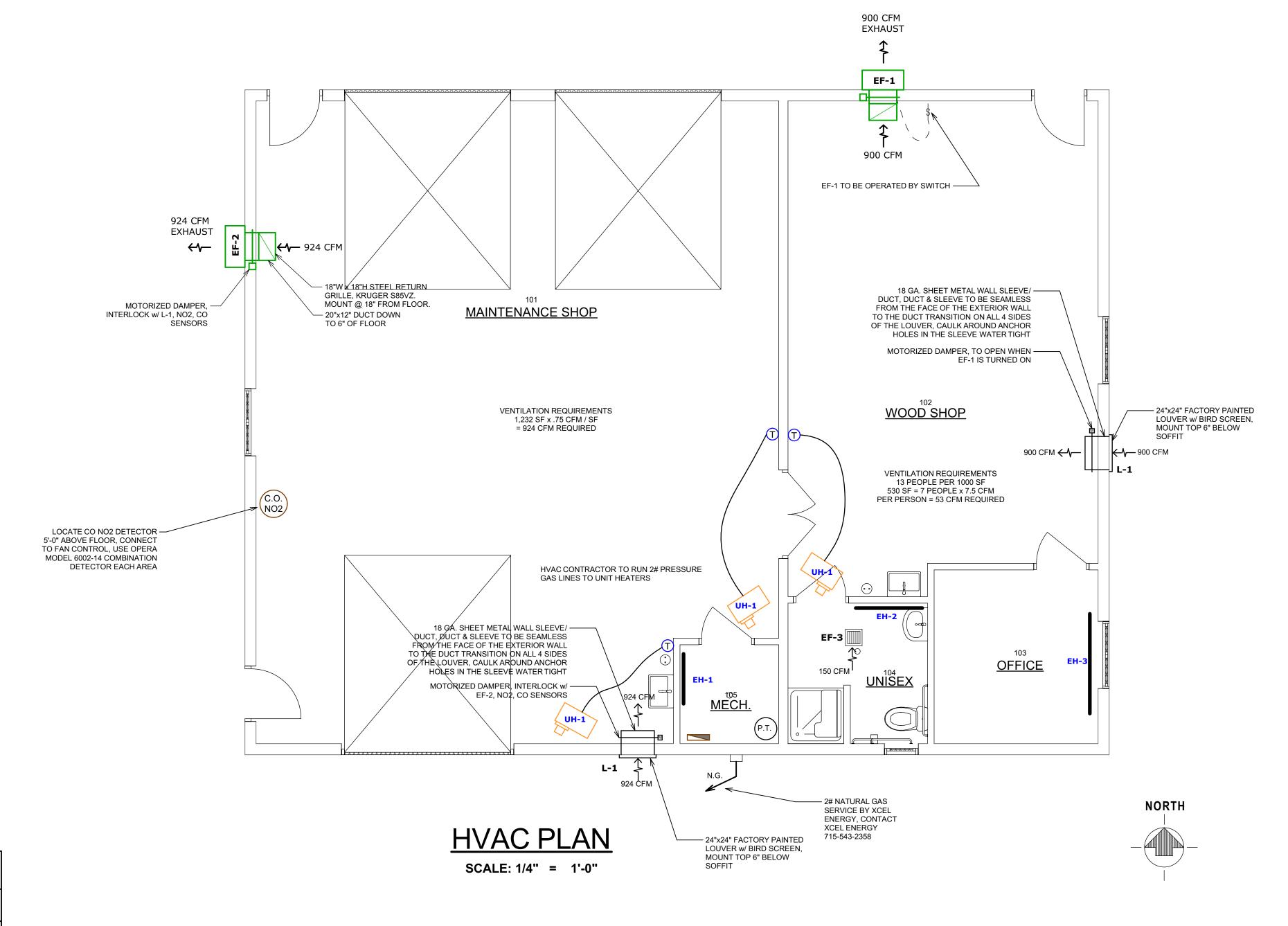
8. CARBON MONOXIDE MONITORING SYSTEM: OPERATE EF-2 WHEN 35 PARTS PER MILLION CARBON MONOXIDE CONCENTRATIONS IS DETECTED.

9. NITROGEN DIOXIDE MONITORING SYSTEM: OPERATE EF-2 WHEN 1 PART PER MILLION NITROGEN DIOXIDE CONCENTRATIONS IS DETECTED.

ELECTRIC HEATER SCHEDULE											
MARK	LOCATION	TYPE	BTU/H	WATTS	AMPS	ELEC.	BASED ON				
EH-1	ROOM #105	3 FT. ELECTRIC BASEBOARD HEATER	2,557	750	3.6	208/60/1	Q-MARK QMKC2503W				
EH-2	ROOM #104	4 FT. ELECTRIC BASEBOARD HEATER	3,410	1,000	4.8	208/60/1	Q-MARK QMKC2504W				
EH-3	ROOM #103	6 FT. ELECTRIC BASEBOARD HEATER	5,115	1,500	7.2	208/60/1	Q-MARK QMKC2506W				
NOTES: 1. VERIFY ELECTRICAL REQUIREMENTS PRIOR TO ORDERING EQUIPMENT. 2. MOUNT WALL HEATERS A MINIMUM OF 6" ABOVE FINISHED FLOORS.											

	NATURAL GAS UNIT HEATER SCHEDULE												
MARK	LOCATION	TYPE	GAS TYPE	BTU/H INPUT	BTU/H OUTPUT	THERMAL EFF.	AIRFLOW (CFM)	ELEC.	BASED ON				
UH-1	MAINTENANCE BUILDING	SEALED COMBUSTION GAS UNIT HEATER	NATURAL	75,000	60,000	80%	1,160	120/60/1	MODINE HDS75				
NOTES:						•	•						

	LOUVER SCHEDULE												
MARK	TYPE / SERVICE	THICKNESS (IN)	SIZE (IN) WxH	WALL ROUGH OPENING (IN)	MANUFACTURER AND MODEL	MATERIAL	COLOR & FINISH	AIRFLOW (CFM)	REMARKS				
L-1	STATIONARY EXTRUDED LOUVER WITH DRAINABLE BLADES AND 3/4" ALUMINUM BIRD SCREEN	4"	24 x 24 (NOMINAL)	24 x 24	NCA XAD-4	EXTRUDED ALUMINUM	FACTORY PAINTED	924	ACTUAL LOUVER LENGTH AND WIDTH IS UNDERSIZED BY 1/4" TO FIT IN LISTED SIZE ROUGH OPENING				
NOTE: LO	NOTE: LOUVERS TO BE SUPPLIED BY HVAC CONTRACTOR AND INSTALLED BY THE GENERAL CONTRACTOR, COODINATE WITH GENERAL CONTRACTOR.												



SYMBOLS:

✓ AIR SUPPLY OR RETURN

THERMOSTAT

EXHAUST FAN w/ LIGHT

DUCT (SIZED AS NOTED)

SUPPLY AIR REGISTER (IN SUSPENDED CEILING)

SUPPLY REGISTER

RETURN AIR GRILLE

(IN SUSPENDED CEILING)

CEILING MOUNTED AIR

CEILING MOUNTED
RETURN AIR GRILLE

FIF FIRE DAMPER (SEE ROOM 108)

BALANCING DAMPER

FAN SCHEDULE													
MARK	TYPE	DUTY	CFM	SP	DRIVE	RPM	MOTOR				SONES	BASED ON	COMMENTS
							HP	VOLTS	PH	HZ	CONLO	BAGED ON	<u> </u>
EF-1	WALL EXHAUST	GENERAL EXHAUST	900	0.37"	DIRECT	1,151	.5	115	1	60	6.70	S&P STXDW 12	2,4,5,6,7,9
EF-2	WALL EXHAUST	GENERAL EXHAUST	924	0.37"	DIRECT	1,379	.33	115	1	60	7.80	S&P STXDW 10	1,3,5,6,8,10
EF-3	CEILING EXHAUST	UNISEX BATHROOM	150	0.25"	N/A	N/A	N/A	115	1	60	60	BROAN QTXE150	CONNECT TO LIGHT SWITCH
2. 14. 3. BII 4. BII 5. MO	LS: x12 AUTO EXHA x14 AUTO EXHA RD SCREEN, ST RD SCREEN, ST OUNT & WIRE D EMA 1 1PH 115V	AUST DAMPER TXB/STXD 06-1 TXB/STXD 12-1 ISCONNECT F	R. 0 MOU 4 MOU FOR SQ	NTED. B/SQD/									

7. SPD CONTROL 115V 10 AMP LOOSE.

9. WALL MOUNT ADAPTER STXB/STXD 12-14. 10. WALL MOUNT ADAPTER STXB/STXD 6-7-8-10.

8. SPD CONTROL 115 UP TO 1/3 HP MOUNTED & WIRED 5 AMP.

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NOTES:
1. VERIFY ELECTRICAL REQUIREMENTS PRIOR TO ORDERING EQUIPMENT.
2. VENT HEATER TO EXTERIOR PER MFR'S RECOMMENDATIONS.

THREE-WAYSWITCH

DIMMER SWITCH

SWITCH

WALL MOUNTED, SINGLE SWITCH, w/ MOTION SENSOR

DUPLEX RECEPTACLE

220V RECEPTACLE

GROUND-FAULT CIRCUIT INTERRUPTER (GFCI) RECEPTACLE

WEATHERPROOF GFI RECEPTACLE

SPECIAL PURPOSE RECEPTACLE

TELEPHONE

COMPUTER DATAJACK

CEILING MOUNTED LIGHT FIXTURE

WALL MOUNTED EXTERIOR LIGHT FIXTURE

HIGH BAY LED LIGHT FIXTURE

EXHAUST FAN

EXIT LIGHT W/ DUAL REMOTE HEADS

EMERGENCY LIGHT w/ DUAL HEADS

©S OCCUPANCY SENSOR

PHOTOCELL SENSOR

TIME CLOCK

SD SMOKE DETECTOR (INTERCONNECTED AND HARD WIRED)

© C02 DETECTOR

LIGHT FIXTURE SCHEDULE								
SYM	TYPE	MANUFACTURER'S CATALOG No.	LAMPS	REMARKS				
Α	HIGH BAY LED	METALUX LHB-12-UNV-L840-CD-U	LED					
В	4 FT. LED CEILING LIGHT	METALUX 4NLW4040C	LED					
С	OUTDOOR WALL PACK	LUMARK AXCL8A-W	LED	PHOTOCELL CONTROL, COLD WEATHER RATED w/ SWITCH OVERRIDE				
EM-1	EMERGENCY LIGHT	SURE-LITES APWR2BK	LED	COLD WEATHER RATED				
EX-1	EXIT LIGHT	SURE-LITES APCH7R	LED	w/ DUAL REMOTE HEADS				
EM-2	EMERGENCY LIGHT	SURE-LITES SEL50SD	LED					
NOTES: 1. PROVIDE FIXTURES AS NOTED ABOVE OR APPROVED EQUAL. 2. LAMPS LISTED ARE MAXIMUM WATTAGE OF FIXTURE.								

3. CONTRACTOR SHALL PROVIDE ALL LAMPS WITH FIXTURES.4. DO NOT SUPPORT FIXTURES FROM THE CEILING MATERIALS, USE PROPER BACKING.

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DESIGN ENGINE

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