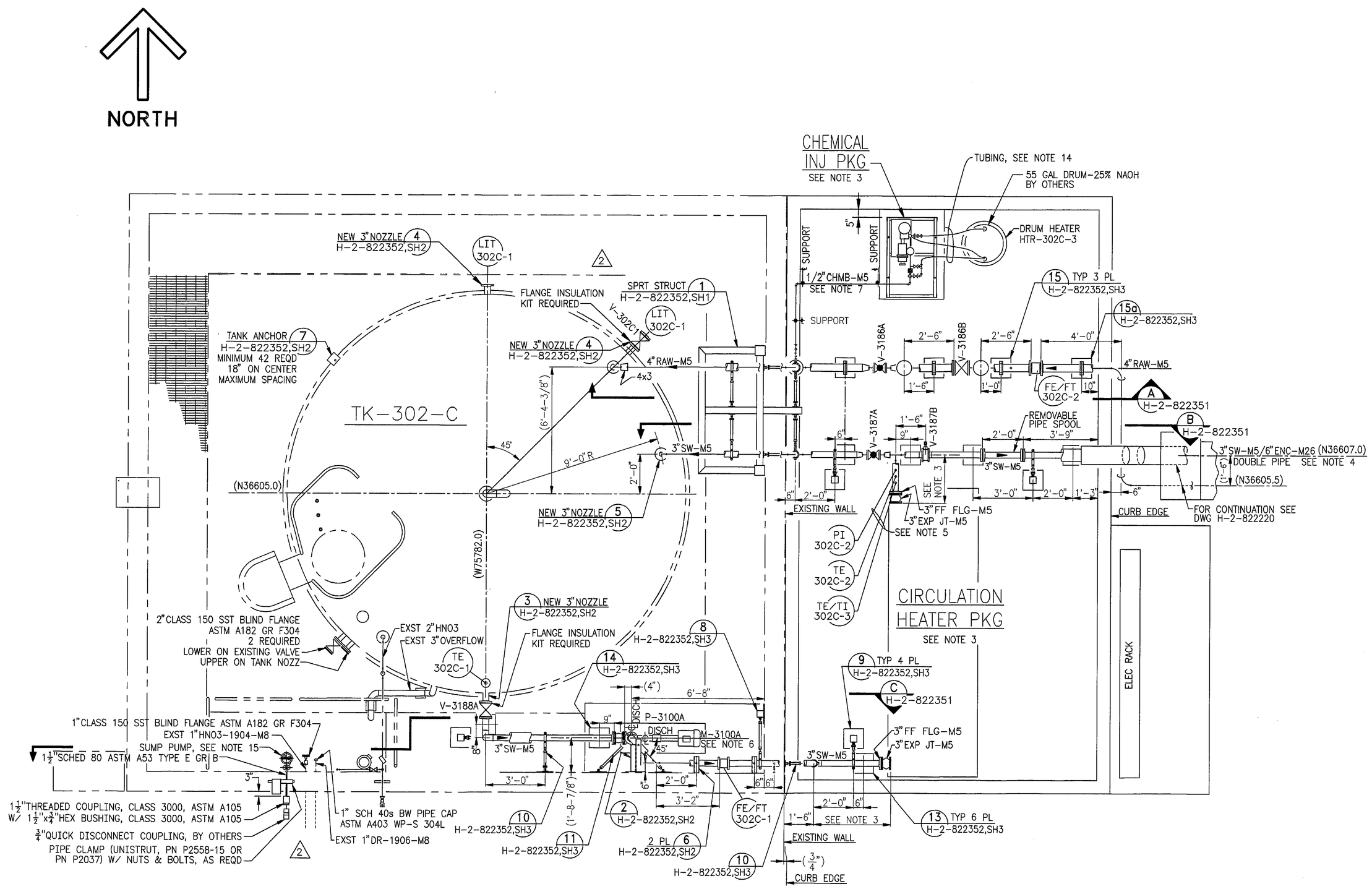

PLAN
SCALE: 3/8"=1'-0"

GENERAL NOTES:

UNLESS OTHERWISE SPECIFIED

1. MATERIAL, FABRICATION, INSPECTION, CLEANING, EXAMINATION, AND TESTING SHALL BE IN ACCORDANCE WITH CONSTRUCTION SPECIFICATION W-058-C5.

2. TOLERANCES:

   FRACTIONAL ± 1/2"
   ANGULAR ± 1°
   ERECTED POSITION OF PIPING 2-1/2" AND LARGER WITHIN ± 2" OF DESIGN POSITION
   ERECTED POSITION OF PIPING 2" AND SMALLER WITHIN ± 4" OF DESIGN POSITION
   ERECTED ELEVATION OF PIPING ± 1/4" OF DESIGN POSITION (SHOWN SLOPE SHALL BE MAINTAINED)
   PIPE SUPPORT LOCATION AXIALLY ± 4"

3. TO ACCOMMODATE ACTUAL SKID SIZE & TIE-IN LOCATIONS FIELD SHALL DETERMINE, WITH ENGINEERING APPROVAL, FINAL SKID PLACEMENT. LEVEL & ANCHOR SKID PER MANUFACTURER'S RECOMMENDATIONS.

4. SEE CONSTRUCTION SPECIFICATION W-058-C5, SECTION 15493, APPENDIX B.

5. INSTRUMENT CONNECTIONS : INT REINF BRANCH CONN, 3x1/2"NPT, 3000#, ASTM A105. INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

6. ANCHOR PUMP/MOTOR BASEFRAME TO CONCRETE PAD (SEE DWG H-2-822221). REFER TO PUMP VENDOR INFORMATION FOR LOCATION & QUANTITY OF ANCHOR BOLTS.

7. FIELD ROUTE AND SUPPORT 1/2" CHMB-M5, IN APPROXIMATE LOCATION SHOWN. MAXIMUM SUPPORT SPACING IS 4'-0". SUPPORTS SHALL BE CARBON STEEL AND RIGIDLY MOUNTED. 1/2" CHMB-M5 SHALL SLOPE AND DRAIN FROM MIXING TEE TO CHEM INJECTION PACKAGE WITH NO TRAPS.

8. PIPE SUPPORT HARDWARE (IE...CLAMPS, STRAPS, NUTS AND BOLTS, ETC...) SHALL BE IN ACCORDANCE WITH THE LATEST APPROVED "MSS SP-58".

9. ANCHOR BOLTS SHALL BE "HILTI KWIK BOLT II", OR APPROVED SUBSTITUTE. SIZE AND LOCATION AS SHOWN ON DRAWINGS. INSTALL IN ACCORDANCE WITH CONSTRUCTION SPECIFICATION W-058-C5.

   A) DUE TO STRUCTURAL REBAR INTERFERENCE WITH ANCHOR BOLT INSTALLATION, CONTRACTOR MAY RELOCATE 1/2"ø AND SMALLER ANCHOR BOLTS WITHIN ± 1" OF DESIGN LOCATION AND 5/8"ø AND LARGER ANCHOR BOLTS WITHIN ± 1-1/2" OF DESIGN LOCATION.

   B) CONTRACTOR SHALL MAINTAIN MINIMUM DISTANCE FROM ANCHOR BOLT CENTERLINE TO THE EDGE OF THE BASE PLATE IN ACCORDANCE WITH NINTH EDITION AISC STEEL CONSTRUCTION MANUAL, SECTION J3.

   C) MINIMUM CENTER TO CENTER DIMENSION OF ANCHOR BOLTS TO BE AT LEAST 12 BOLT SIZE DIAMETERS AND SHALL NOT BE VIOLATED WITHOUT ENGINEERING APPROVAL.

10. GROUT, PAINT, HEAT TRACE & INSULATE IN ACCORDANCE WITH CONST SPEC W-058-C5.

11. ALL VALVES SHALL BE IDENTIFIED WITH A WIRED ON STAINLESS STEEL TAG, WITH APPLICABLE VALVE NUMBER. LETTERS/NUMBERS SHALL BE MADE USING 1/4" HAMMER STRUCK CHARACTER DIES. THE WIRE SHALL BE STAINLESS STEEL.

12. ABBREVIATIONS:

BOP - BOTTOM OF PIPE	RF - RAISED FACE
BF - BOTTOM FLAT	SR - SHORT RADIUS
FF - FLAT FACE	TBE - THREAD BOTH ENDS
FOF - FACE OF FLANGE	TF - TOP FLAT
PBE - PLAIN BOTH ENDS	TOC - TOP OF CONCRETE
PE - PLAIN END	TOE - THREAD ONE END
POE - PLAIN ONE END	TOS - TOP OF STEEL

ALL OTHERS SHALL BE IN ACCORDANCE WITH ASME Y1.1

13. CALCULATIONS:

CALCULATION TITLE	CALCULATION NUMBER
EMERGENCY FLUSH SYSTEM LCCA	W058-P-005
TANK 242-S-302C SEISMIC ANALYSIS	W058-P-033
TANK 242-S-302C HEATER SIZING	W058-P-034
TANK SW-TK-3101A vs. TANK 242-S-302C LCCA	W058-P-035
FLUSH SYSTEM HYDRAULIC ANALYSIS	W058-P-046
FLUSH SYSTEM PIPE STRESS ANALYSIS	W058-P-047

14. 5/8" OD (.500" ID) BLACK POLYETHYLENE OR POLYPROPYLENE FLEXIBLE TUBING, OR APPROVED SUBSTITUTE. POLYETHYLENE INSERT FITTINGS AND STAINLESS STEEL HOSE CLAMPS OR FAST TITE TUBE FITTINGS OR APPROVED SUBSTITUTE.

2 15. SUMP PUMP SHALL BE A SUBMERSIBLE EFFLUENT 1/2 HP PUMP, 115V, 10' CORD W/PLUG (SINGLE PHASE), MANUAL OPERATION, CAST IRON MATERIALS, 1-1/2" NPT VERTICAL CONNECTION ("BARNES", MODEL NUMBER: SPRINT II-512L).

JAMES R. COLLINS STATE OF WASHINGTON 35941 REGISTERED PROFESSIONAL ENGINEER 4/2/98

EXPIRES: 11/11/99

USE	CONSTRUCTION		
DESIGNED	R J LAMOUREUX	DATE	SAFETY CLASS 3
DSGN ENGR	KELLY HAYASE	8/96	EDT 618496
CHECKED	TOM ANDERLIK	8/96	
SAFETY	SEE DR/AT FORM		
ENVIR	SEE DR/AT FORM		
QUAL ENGR	SEE DR/AT FORM		
LEAD ENGR	J.R. COLLINS	8/96	
REVISION NO.	2	8/1996	

U.S. DEPARTMENT OF ENERGY
RICHLAND OPERATIONS OFFICE
ICF KAISER HANFORD COMPANY

PIPING
PLAN
FLUSH SYSTEM

PROJECT W-058, REPLACEMENT OF CROSS-SITE TRANSFER SYSTEM

SIZE	BLDG NO.	INDEX NO.	DWG NO.	REV NO.
F	242-S	8400	H-2-822350	2

SCALE NOTED | JOB NO. CR1320 | SHEET 1 OF 1

APPROVED FOR IMPLEMENTATION BY / FOR WHC / DATE

REV NO.	DESCRIPTION	REV BY DATE	KEH APPROVALS	APVD FOR IMPL/CNC FOR DATE
2	383 INCORP ECN W-058-366, W-058 PROJECT TURNOVER	HBM 3/98	4/2/98 4/2/98	4/2/98

REVISIONS

CAD FILE B822350A | CAD CODE 2J:IBM:ACD2:12.0:NN | XREF N

REFERENCES

NUMBER	TITLE
W-058-P12	PROCUREMENT SPEC-CHEM INJ PKG
W-058-P11	PROCUREMENT SPEC-CIRC HTR PKG
H-2-822200	DRAWING LIST

NEXT USED ON H-2-822220

DRAWING TRACEABILITY LIST

NUMBER	TITLE
H-2-46542	PIPING ENLARGED PLAN
H-2-46541	PIPING PLAN

2 PLOT SCALE: 1=32 | KEHCAD | SGTKFOOF.DWG (09/95)