

1617 RB
21581 R9

NOTES: (CONT'D)

15. THOSE PORTIONS OF THE FIRE PROTECTION SYSTEM REQUIRING WELDED CONSTRUCTION SHOULD BE SHOP FABRICATED TO THE MAXIMUM EXTENT PRACTICAL. IN-PLACE WELDING SHOULD BE LIMITED TO THAT NECESSARY TO ACCOMPLISH IN-PLACE ASSEMBLY OF SHOP FABRICATED SECTIONS. APPROPRIATE ADMINISTRATIVE CONTROLS SHALL BE ESTABLISHED TO MINIMIZE THE POSSIBILITY OF FIRES AS A RESULT OF WELDING OPERATIONS.

16. 24" AIR, 26" & 42" EXHAUST PIPING SHALL BE CONSTRUCTED TO B31.1 USING ASME III-3 MATERIAL.

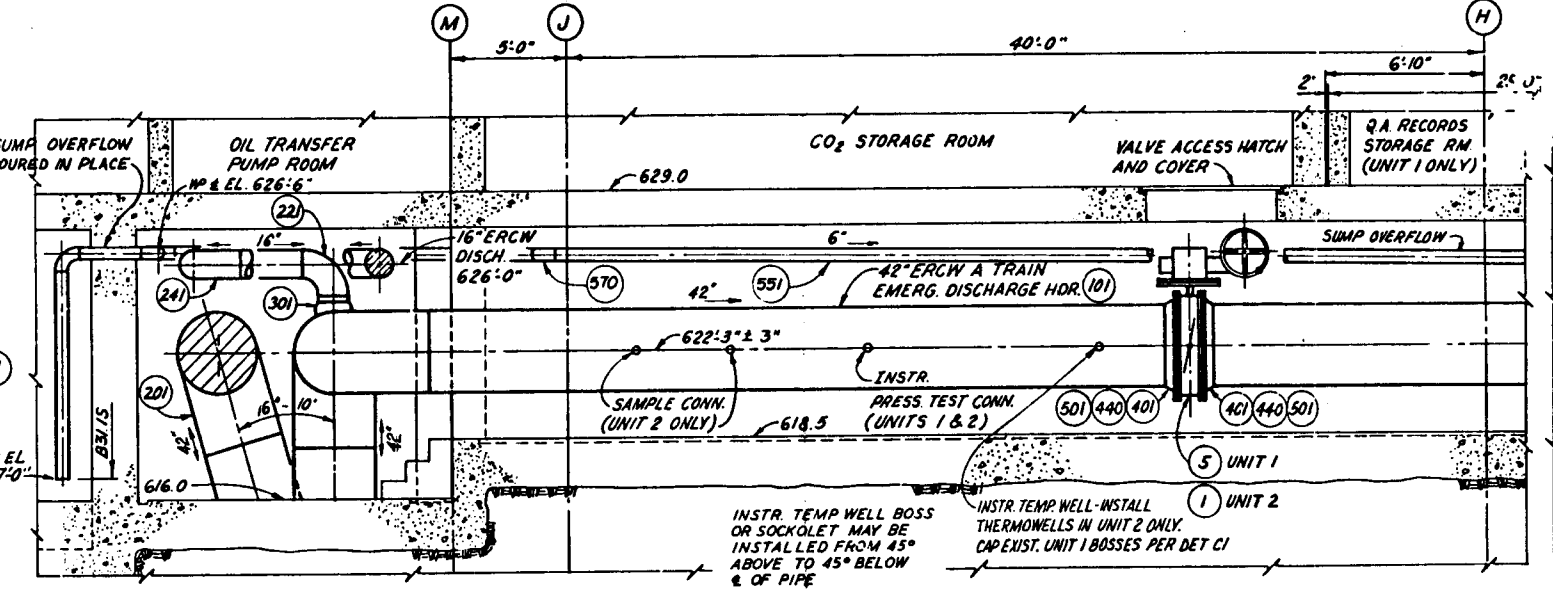
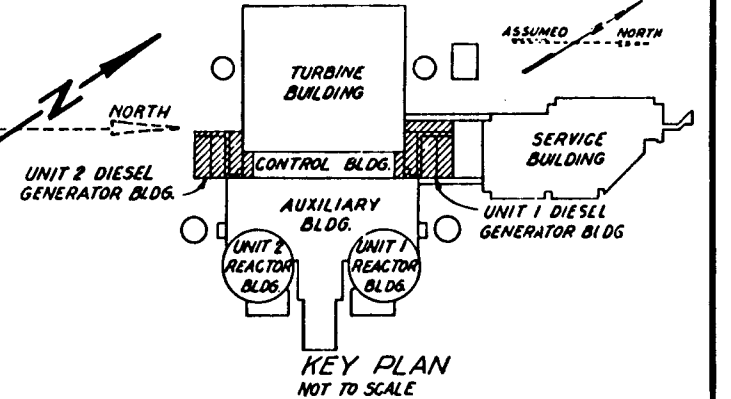
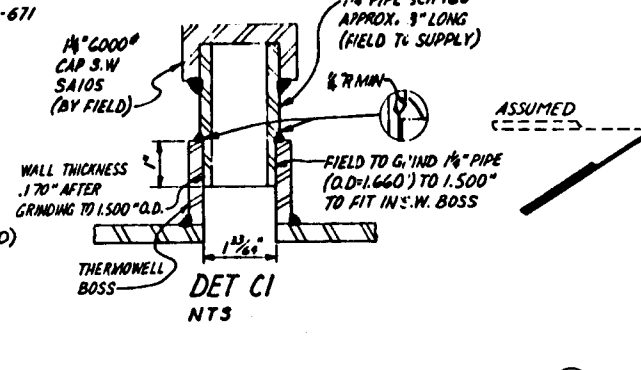
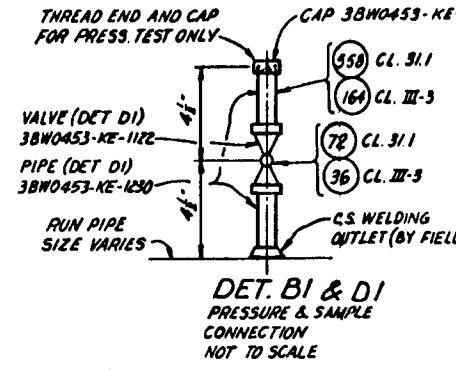
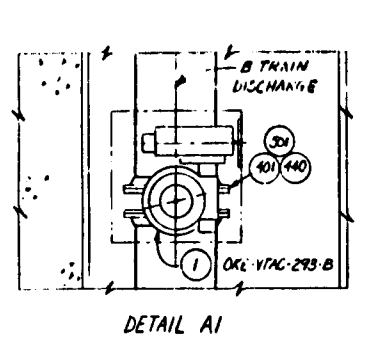
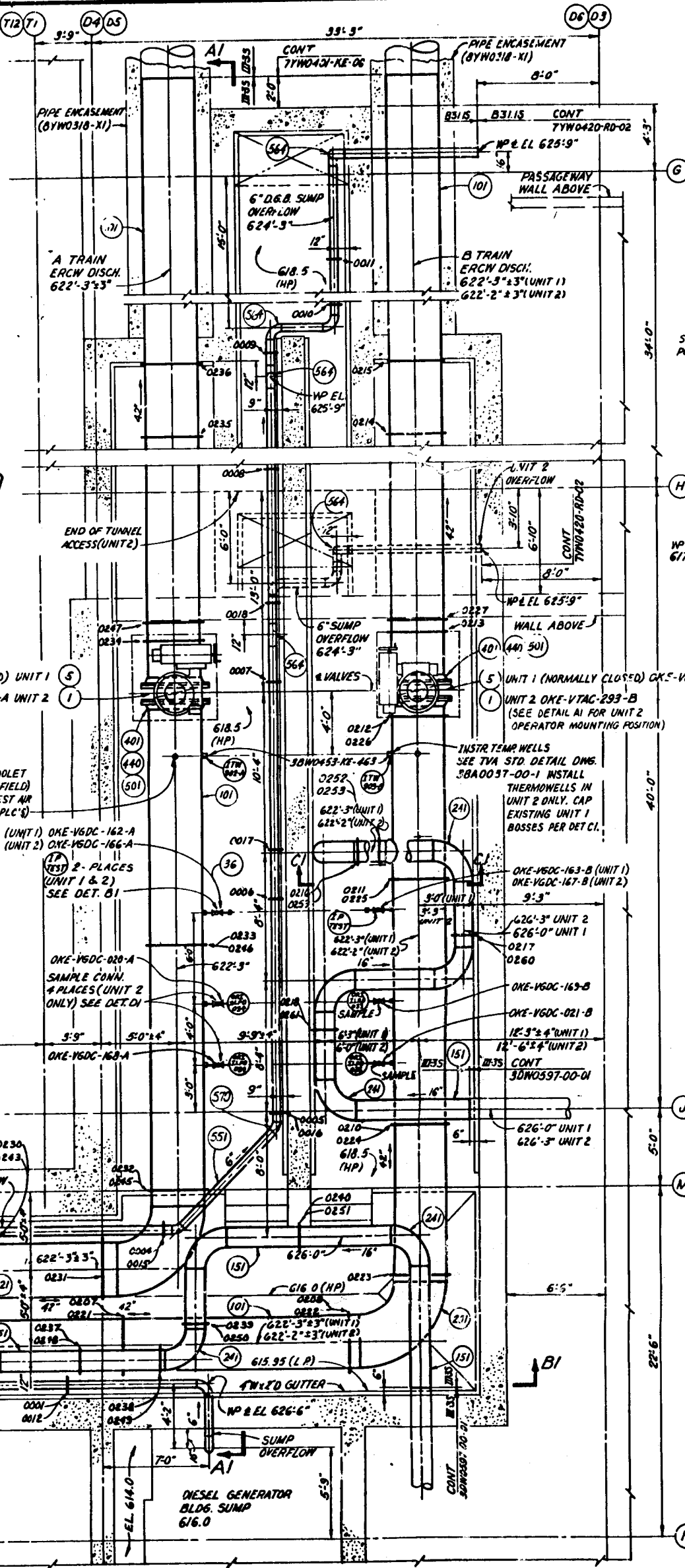
17. ENGINE LUBE OIL FILL CONNECTION (224) TO BE CLEARLY MARKED ON ALL ENGINES BY FIELD.

18. ALL SPRINKLER PIPING 2 1/2" AND ABOVE WILL BE SLOPED IN THE DIRECTION OPPOSITE OF FLOW UNLESS NOTED OTHERWISE. SLOPE WILL BE NO LESS THAN 1/4" OR GREATER THAN 1/2" IN 10 FEET. THE FIELD ROUTED PIPE WILL SLOPE TOWARD THE MAIN HEADER IF PRACTICAL. THE SLOPE WILL BE NO LESS THAN 1/4" OR GREATER THAN 1/2" IN 10 FEET FOR FIELD ROUTED PIPE.

19. ALL 2" AND SMALLER BRANCH LINE PIPING FROM THE MAIN FIRE HEADERS TO SPRINKLER NOZZLES MAY BE FIELD ROUTED AND FIELD ANALYZED. THE FINAL SPRINKLER LOCATION MAY BE MOVED A MAXIMUM OF 12" IN THE HORIZONTAL PLANE IN ANY DIRECTION AND FROM 1" TO 16" FROM CEILING. THE FINAL LOCATION OF ADJACENT SPRINKLER NOZZLES SHALL MEET THE MINIMUM & MAXIMUM SPACING REQUIREMENTS OF 6'-0" AND 11'-0" RESPECTIVELY.

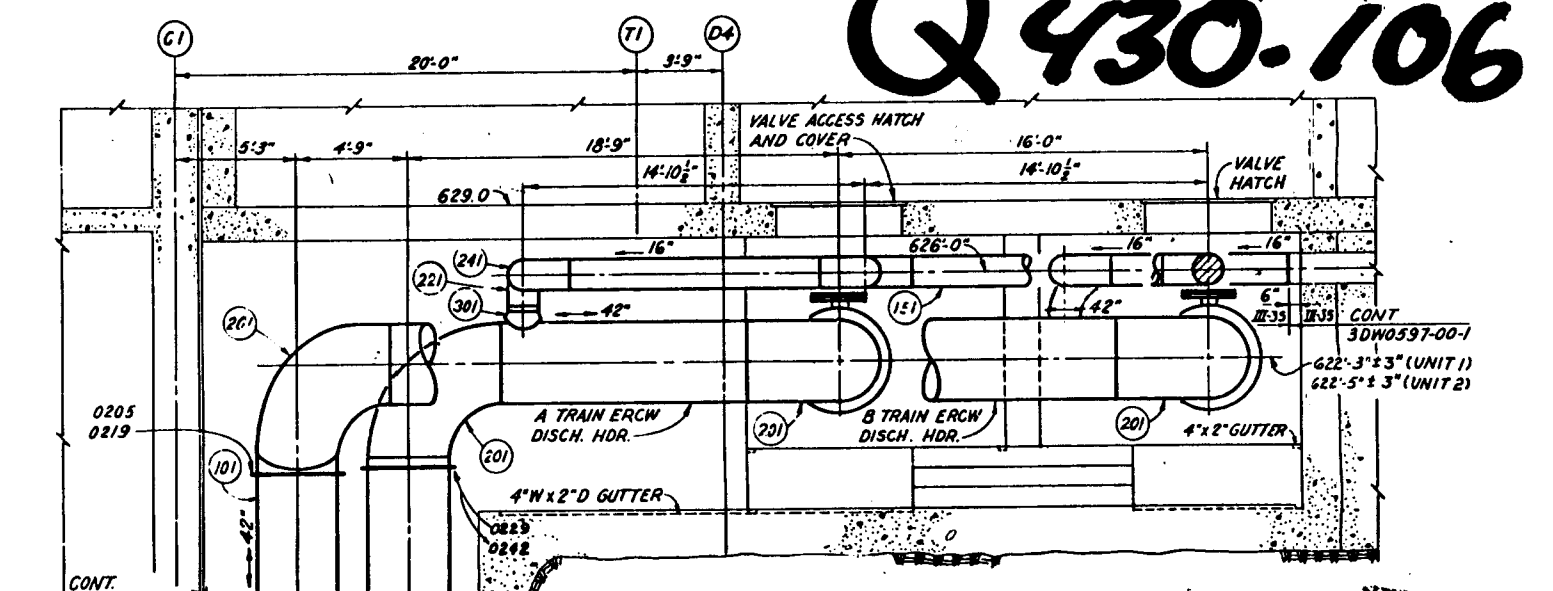
20. ALL TYPED BRANCH LINE PIPING IS B31.1 IN DIESEL BUILDING. ALL TYPED BRANCH LINE PIPING IS B31.1 IN DIESEL BUILDING.

21. PIPE INSULATION MAY BE LEFT OFF OF WE PIPING IN SECTIONS UP TO 4'-0" LONG WHERE INTERFERENCES DICTATE.



NOTE: THE ± 3" FOR ELEVATIONS AND ± 6" FOR DIMENSION SHOW ON PLAN AND SECTIONS APPLY TO 42" ERGW PIPE ONLY.

Q 430-106



NOTE: FOR ENCASED DRAIN PIPING SEE 38W0597-00-04

SECT B1-B1

ITEM	FILE NO.	CONTRACT NO.	VENDOR
DIESEL GENERATORS & ASSOCIATED EQUIP.	N4N-20	76K61-86181	DELAVAL TURBINE CO.
D.G. BLDG SUMP PUMPS	N4N-202	77K12-821278	WEIL PUMP CO.
WASTE OIL PUMPS	N4N-155	76K12-820610	DOVER CORP.
FUEL OIL TRANSFER PUMPS	N4N-239	77K12-821911	VIKING

NOTES (CONT'D)

12. COOL, ETC. DENOTES PIPE SUPPORT NUMBER AND APPROXIMATE LOCATION. SEE TABLE 'F' SUPPORT LOADS FOR EXACT LOCATION.

13. (Symbol) INDICATES CONSTRUCTION ANALYSIS LIMITS AND TYPES. WHERE CONSTRUCTION AND EN DES. INTERFACE, CONSTRUCTION SHALL ASSUME A 3 WAY RESTRAINT AT INTERFACE POINT IF CONSTRUCTION ANALYSIS IS CAT I OR CAT IIA AND AS A MINIMUM, A UNIDIRECTIONAL SUPPORT IF CONSTRUCTION ANALYSIS IS CAT IIB. FOR DEFINITIONS AND REQUIREMENTS OF FIELD ANALYZED PIPING, REFER TO BLP-INSTR-40-1. THE STRUCTURE FOR ANALYSIS, DESIGN, PROCUREMENT, FABRICATION AND INSTALLATION OF PIPING SYSTEMS IN CATEGORY I STRUCTURES FOR BELLEFONTE NUCLEAR PLANT.

14. PIPING WITH SUPPORT ANALYSIS BY EN DES. MUST (WITH RESPECT TO ELBOWS, BENDS, AND WELDED JOINTS) BE AS SHOWN ON THESE DRAWINGS THROUGH THE FIRST TWO CHANGES IN DIRECTION FROM EQUIPMENT NOZZLES. PIPING IN THIS CATEGORY PREVIOUSLY INSTALLED SHALL BE VERIFIED TO BE AS SHOWN. ANY DISCREPANCIES SHALL BE REPORTED TO EN DES FOR DISPOSITION.

NOTES CONT'D (ZONE A-1)

- NOTES:
- ALL PIPING COMPONENTS WHICH INTERFERE WITH OTHER DESIGN JURISDICTIONS (E.G. INSTRUMENTS, PUMPS, ETC.) ARE IDENTIFIED BY THEIR UNIQUE IDENTIFIER AS SHOWN ON RESPECTIVE DESIGN CRITERIA DIAGRAM.
 - PIPING CONSTRUCTION SHALL BE IN ACCORDANCE WITH TVA SPECIFICATION G-294M.
 - ALL PIPING TO BE PRESSURE TESTED PER APPLICABLE CODE. SEE RESPECTIVE DESIGN CRITERIA DIAGRAM FOR DESIGN CONDITIONS.
 - ALL PIPING SHALL BE CLEANED FREE OF SCALE, DIRT, RUST, AND WELDING SPILLS AND BLOWN OUT WITH COMPRESSED AIR PRIOR TO USE.
 - ALL ELEVATIONS APPLY TO PIPE CENTERLINES UNLESS NOTED OTHERWISE.
 - FOR SUPPORT NUMBER PREFIXES, SEE APPROPRIATE TABLE OF SUPPORT LOADS.
 - FOR PRESSURE OR SAMPLE CONNECTIONS, SEE DET. B1.
 - FOR TEMPERATURE WELL DETAILS SEE TIA DWG. 38A0037-00-1.
 - MINIMUM 5 DIA. PIPE BENDS MAY BE USED IN LIEU OF ELBOWS (EXCEPT IN OR STARTING AIR SYSTEM) PROVIDED SUBSTITUTION DOES NOT CAUSE INTERFERENCE. QUALITY UP TO 11 PERCENT IS PERMISSIBLE. ALL PIPING USED IN THIS SYSTEM HAS, AS A MINIMUM, 8 PERCENT ADDITIONAL WALL THICKNESS TO ALLOW FOR THINNING. (SEE NOTE 14 FOR ADDITIONAL RESTRICTIONS) REFER TO 38W0597-00-1 SERIES.
 - FOR ITEMS THAT REQUIRE DESTROYING EXISTING CONCRETE (DRILLING, CHIPPING, CUTTING, ETC.) REFER TO CIVIL DRAWINGS FOR PERMISSION AND SPECIAL INSTRUCTIONS.

NOTES CONT'D (ZONE G-8)

NO.	DATE	BY	REVISION
1	11/11/88	J.P. WALTER	REVISED PER FCR 2-379, REAMAL, NOT REAMAL
2	11/11/88	J.P. WALTER	REVISED PER FCR 2-379, REAMAL, NOT REAMAL
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DIESEL GENERATOR BUILDING
UNITS 1 & 2

MECHANICAL
EXPOSED PIPING

BELLEFONTE NUCLEAR PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF ENGINEERING DESIGN

SUBMITTED: J.P. WALTER
RECOMMENDED: J.S. BELL
APPROVED: R.M. HODGSON

INSPECTED AND APPROVED FOR ISSUE: J.P. WALTER
DESIGN PROJECT MANAGER

KNOXVILLE 5-26-77 88 M 3DW0598-00-01R3

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