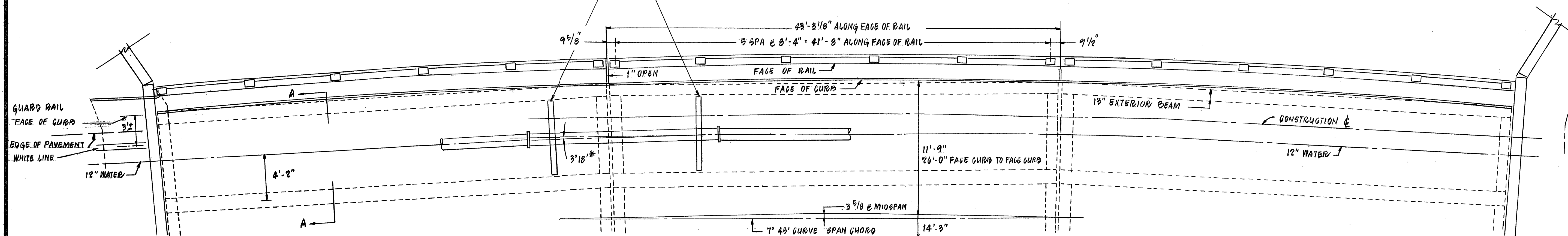


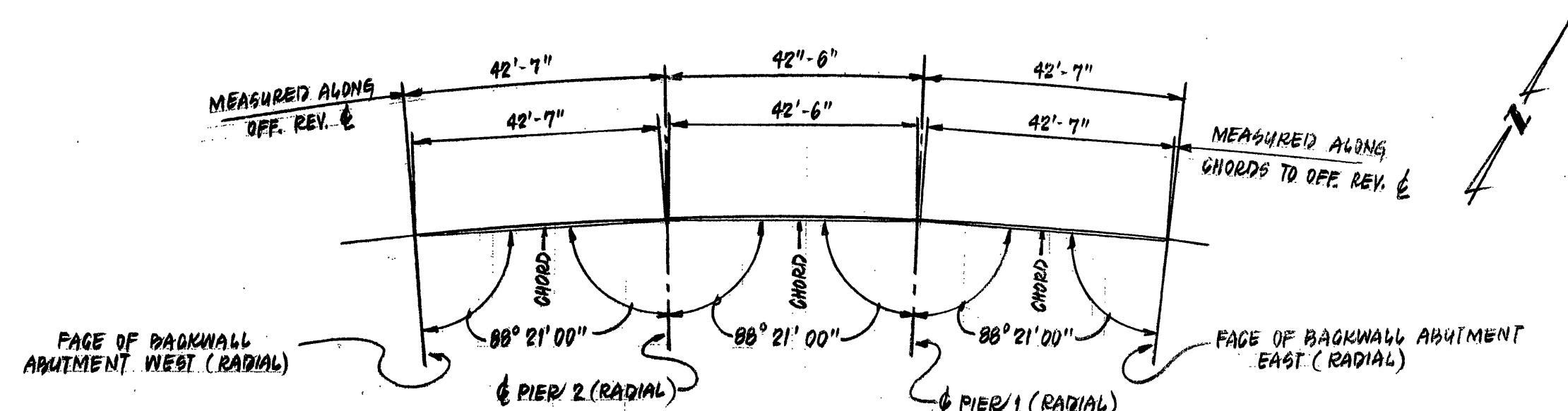
NOTE:
LOCATION OF HOLES FOR THESE SUPPORT ROLLERS AT PIERS
MUST BE FIELD MEASURED TO ALLOW FOR DEFLECTION OF PIPE
AT JOINTS TO ACCOMMODATE BRIDGE CURVE (SEE BRIDGE LAYOUT)



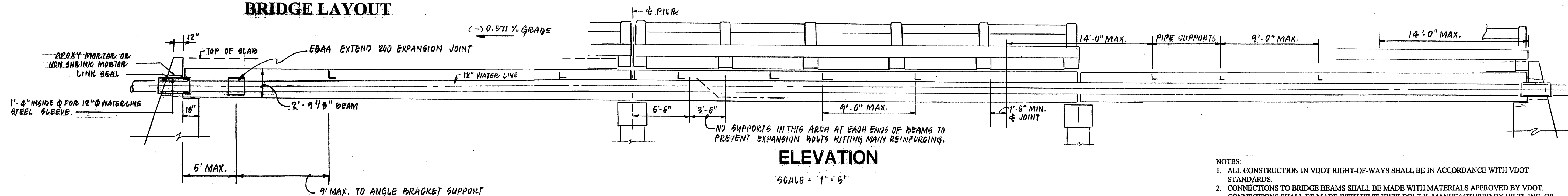
*SEE NOTE 6 AND BRIDGE LAYOUT.

PLAN TYPICAL EACH SPAN

SCALE: 1" = 5'



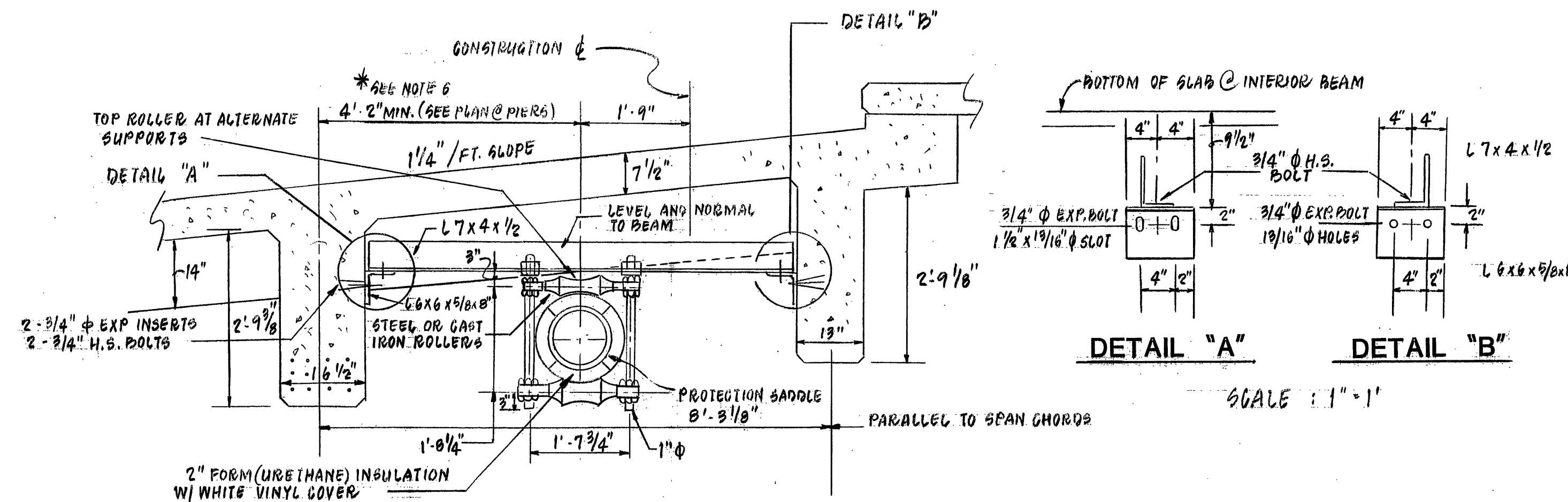
BRIDGE LAYOUT



ELEVATION

SCALE: 1" = 5'

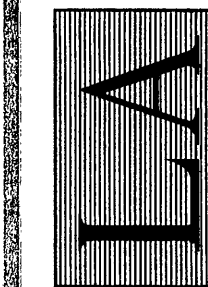
- NOTES:
1. ALL CONSTRUCTION IN VDOT RIGHT-OF-WAYS SHALL BE IN ACCORDANCE WITH VDOT STANDARDS.
 2. CONNECTIONS TO BRIDGE BEAMS SHALL BE MADE WITH MATERIALS APPROVED BY VDOT. CONNECTIONS SHALL BE MADE WITH HILTI KWIK BOLT II, MANUFACTURED BY HILTI, INC. OR APPROVED EQUAL.
 3. THE CONTRACTOR SHALL USE EQUIPMENT CAPABLE OF DRILLING THROUGH CONCRETE OR STEEL WHEN DRILLING FOR BEAM CONNECTIONS.
 4. EXPOSED PIPE SHALL BE DUCTILE IRON, CLASS 52, RESTRAINED JOINT PIPE.
 5. MISCELLANEOUS HARDWARE (ANGLES, RODS, ETC.) SHALL BE GALVANIZED.
 6. CONTRACTOR MAY ALTER DIMENSIONS AS SHOWN TO ALLOW FOR SMALLER PIPE DEFLECTION AS EACH JOINT IS PLACED.



SECTION A-A

SCALE: 5/8" = 1'-0"

LUMSDEN ASSOCIATES, P.C.
ENGINEERS-SURVEYORS-PLANNERS
ROANOKE, VIRGINIA



4664 BRAMBLETON AVENUE
P.O. BOX 20669
ROANOKE, VIRGINIA 24018
PHONE: (540) 774-4411
FAX: (540) 772-9445
EMAIL: MAIL@LUMSDENPC.COM

WATER LINE NOTES & DETAILS

MASON'S CREST
PREPARED FOR
RADFORD & COMPANY
CAVE SPRING MAGISTERIAL DISTRICT
ROANOKE COUNTY, VIRGINIA

NO.	DATE	DESCRIPTION
1		
2		
3		
4		
5		

DATE: 23 FEBRUARY 2005
SCALE: AS SHOWN
COMMISSION NO: 03-164
CADD FILE: P:\2003\03164\END\03164001P
SHEET 5 OF 8