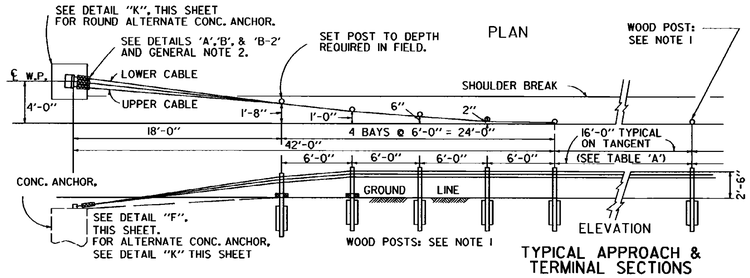
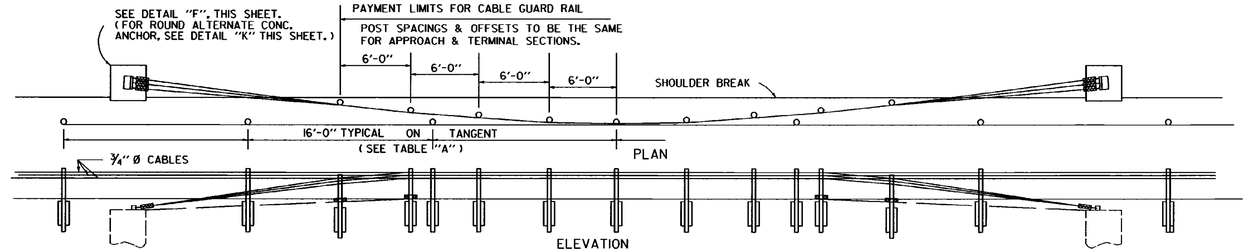
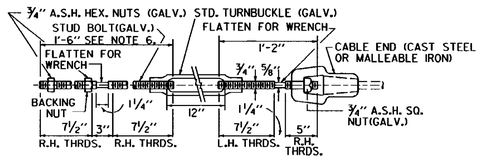


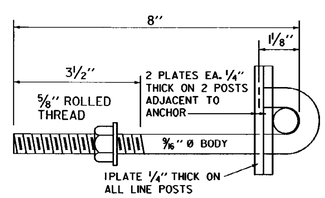
TYPICAL APPROACH & TERMINAL SECTIONS



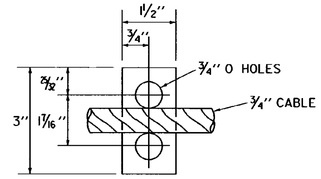
TYPICAL INTERMEDIATE ANCHORAGE SECTION



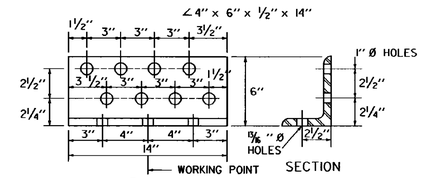
DETAIL 'A'
STEEL TURNBUCKLE CABLE END ASSEMBLY
MIN. TENSILE STRENGTH 25,000 #



HOOK BOLT AND PLATES



2 PLATES ARE TO BE USED ON 2 POSTS ADJACENT TO ANCHORS ONLY

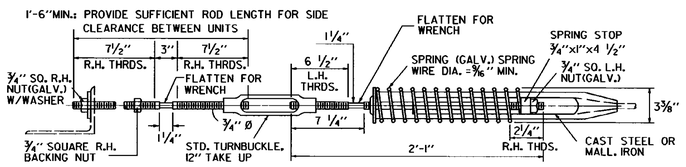


SKETCH NO. 3
ANCHOR ANGLE

CABLE TENSION

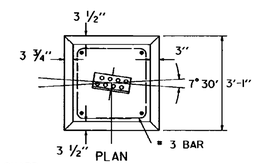
COMPRESSION OF SPRING COMPENSATORS TO BE DETERMINED BY THE FOLLOWING MEASUREMENTS.

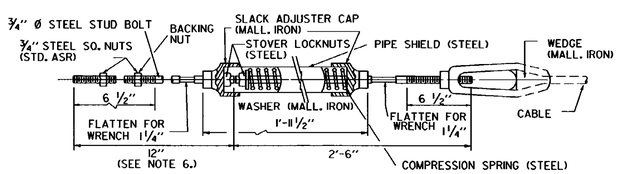
AIR TEMPERATURE	SPRING COMPRESSION
80° F	1" LESS THAN FREE LENGTH
40° F	2" LESS THAN FREE LENGTH
0° F	3" LESS THAN FREE LENGTH



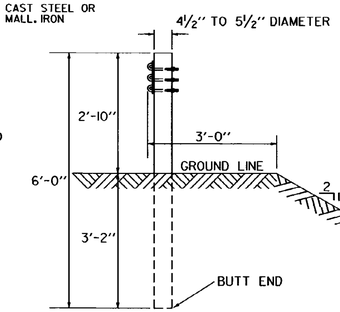
DETAIL 'B' - SPRING CABLE END ASSEMBLY

3" x 1½" REFLECTIVE ALUMINUM STRIP TO BE PLACED ON EVERY OTHER WOOD POST IN A LINE OF POSTS AND CLEARLY VISIBLE TO APPROACHING TRAFFIC. STRIPS TO BE ATTACHED TO THE DESIGNATED GUARD RAIL POSTS ON BOTH SIDES OF THE ROAD AND VISIBLE TO TRAFFIC IN BOTH DIRECTIONS. REFLECTIVE MATERIAL SHALL MEET THE REQUIREMENTS OF SUBSECTION 750.09 AND SHALL BE OF ENCAPSULATED LENS SILVER OR AMBER.

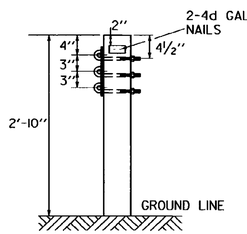




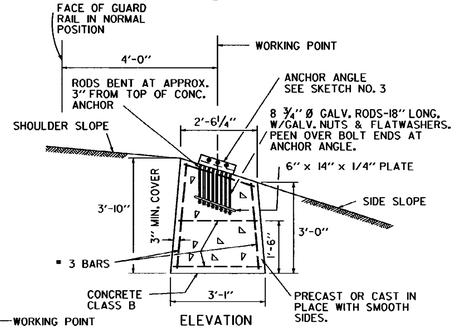
DETAIL 'B-2'
ALTERNATE SPRING CABLE ASSEMBLY
(COMPENSATING DEVICE)



WOOD POSTS
POSTS SHALL BE A MINIMUM OF 4½" & A MAXIMUM OF 5½" DIAMETER, MEASURED ON THE SMALL END



DETAIL OF CABLE SPACING

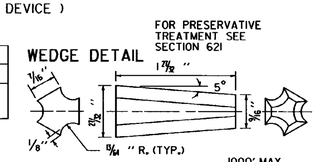


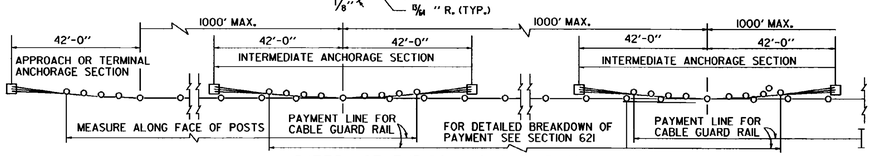
DETAIL 'F'
CONCRETE ANCHOR

GENERAL NOTES

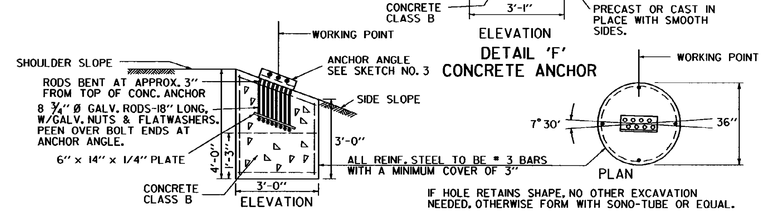
1. ALL WOOD POSTS SHALL BE 4 ½" TO 5 ½" IN DIAMETER . EVERY OTHER WOOD POST THAT IS PARALLEL TO THE EDGE OF PAV'T. SHALL BE REFLECTORIZED. SEE SECTION 621. DO NOT REFLECTORIZE POSTS IN THE TYPICAL APPROACH, TERMINAL, AND INTERMEDIATE ANCHORAGE SECTIONS.
2. FOR ARRANGEMENT OF SPRING CABLE END ASSEMBLIES (COMPENSATING DEVICES) AND TURNBUCKLE CABLE END ASSEMBLIES, THE FOLLOWING CRITERIA SHALL APPLY:
   LENGTH OF CABLE RUNS:
   TO 500' - USE COMPENSATING DEVICE ON ONE END, AND TURNBUCKLE ON OTHER END OF EACH INDIVIDUAL CABLE.
   OVER 500' TO 1000' - USE COMPENSATING DEVICE AND TURNBUCKLE ON EACH END OF EACH INDIVIDUAL CABLE.
   OVER 1000' - START NEW STRETCH BY INTERLACING AT LAST PARALLEL POST (SEE 'SKETCH OF TYPICAL LAYOUT' ABOVE).
3. CABLE SPLICES AND CABLE ENDS SHALL BE POSITIVE AND OF ANY TYPE AND DESIGN COINCIDING WITH THE INTENT, DESIGN, AND STRENGTH OF THE STRUCTURE AND MEETING WITH THE APPROVAL OF THE ENGINEER.
4. FITTINGS - ALL FITTINGS SHALL BE SO DESIGNED AND BE OF SUCH SECTION AS TO DEVELOP THE FULL STRENGTH OF A SINGLE CABLE OR CABLE ASSEMBLIES, AS THE CASE MAY BE.
   SINGLE CABLE ASSEMBLY - MIN. TENSILE STRENGTH = 25,000 #
   THREE CABLE ANCHOR ASSEMBLY - MIN. TENSILE STRENGTH = 100,000 #
   ALL FITTINGS SHALL BE GALVANIZED PER SECTION 621.
5. DESIGNS FOR A COMBINATION OR SINGLE UNIT COMPENSATING DEVICE AND TURNBUCKLE ASSEMBLY MAY BE SUBMITTED FOR APPROVAL.
6. AT ALL LOCATIONS WHERE THE CABLE IS CONNECTED TO A CABLE SOCKET WITH A WEDGE-TYPE CONNECTION, ONE WIRE OF THE WIRE ROPE SHALL BE CRIMPED OVER THE BASE OF THE WEDGE TO HOLD IT FIRMLY IN PLACE.
7. HOOK BOLTS AS INSTALLED SHALL DEVELOP AN ULTIMATE PULL OPEN STRENGTH OF FROM 500 # TO 1000 # APPLIED IN A DIRECTION NORMAL TO THE LONGITUDINAL AXIS OF THE POST.

TABLE "A"	
CURVATURE (DEGREE OR RADIUS)	POST SPACING
8° OR LESS	16'
MORE THAN 8° TO 26° (220 FT. RADIUS)	12'





SKETCH OF TYPICAL LAYOUT (PLAN)



PLAN-ELEVATION OF CIRCULAR ANCHOR, DETAIL 'K'

REVISIONS AND CORRECTIONS

DEC. 8, 1971 - ORIGINAL APPROVAL DATE
APR. 17, 1973 - LARGE POSTS ADJACENT TO ANCHOR REMOVED
MAY 29, 1979 - NOTE ON REFLECTIVE MATERIAL CHANGED
DEC. 17, 1980 - REVISED ANCHOR DETAILS AND INCREASED SHOULDER WIDENING FOR GUARD RAIL
OCT. 31, 1985 - REVISED TO CONFORM TO 1986 SPECIFICATIONS
JUNE 1, 1994 - REISSUED, WITHOUT CHANGE, UNDER NEW SIGNATURES.

APPROVED

APPROVED FOR THIS PROJECT AND/OR DESIGN IMPLEMENTATION. FHWA FINAL APPROVAL PENDING.

Gordon S. MacCallum P.E.
DIRECTOR OF ENGINEERING

Robert M. Murphy PE
DESIGN ENGINEER

CABLE GUARD RAIL (WITH WOOD POSTS)
ANCHOR FOR CABLE RAIL

VERMONT AGENCY OF TRANSPORTATION

STANDARD
G-6 a