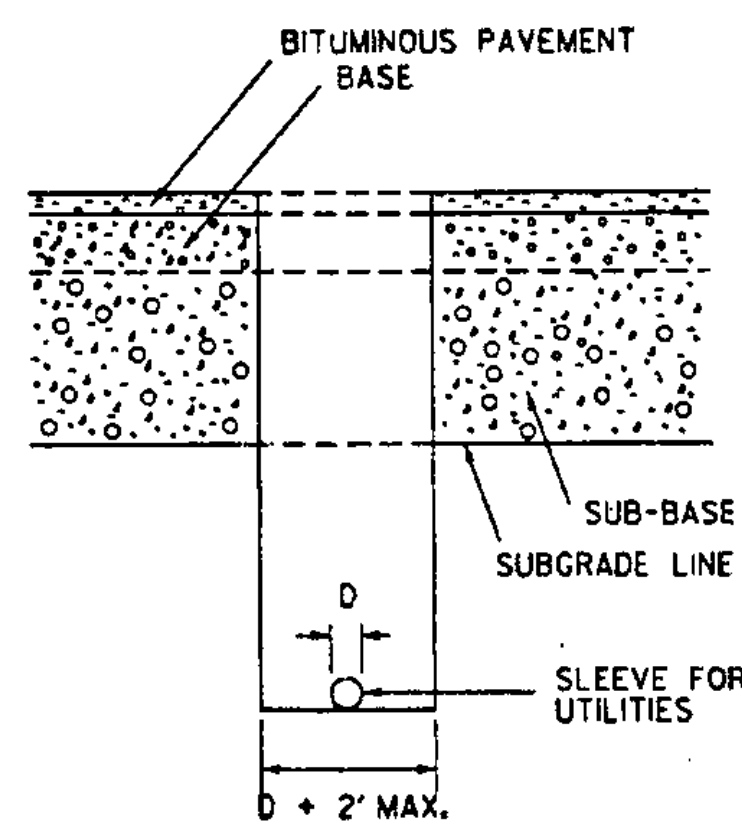


OPEN CUT AND PAVEMENT REPLACEMENT
APPLICABLE ONLY WHEN SPECIFICALLY AUTHORIZED BY HIGHWAY PERMIT

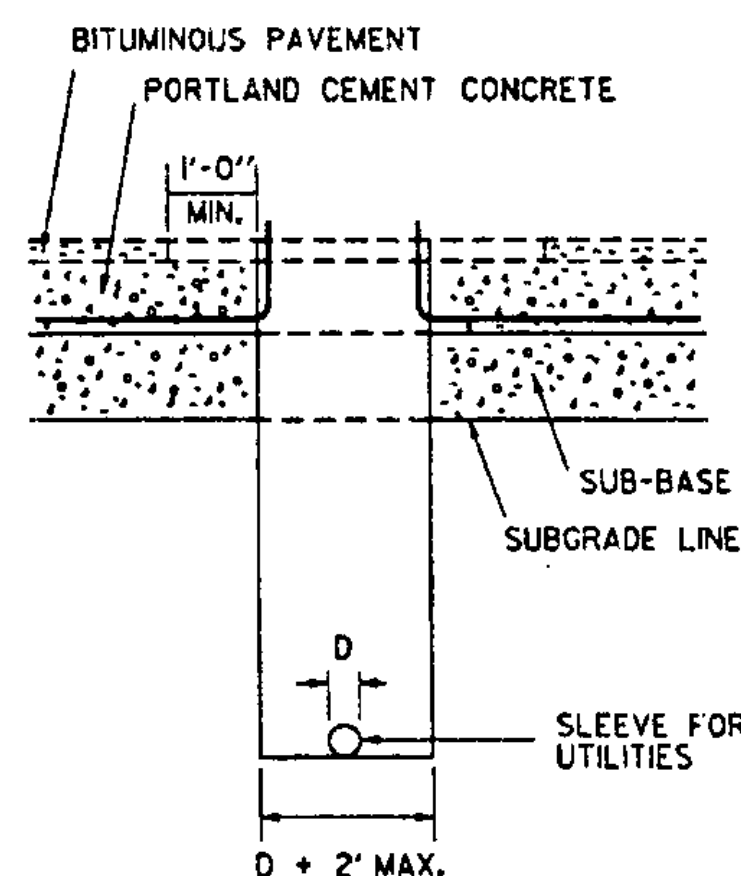
DETAIL 'C'
OPEN CUT WITH
BITUMINOUS CONCRETE PAVEMENT

BITUMINOUS TREATED BASE MATERIALS TO BE REPLACED WITH BITUMINOUS CONCRETE.



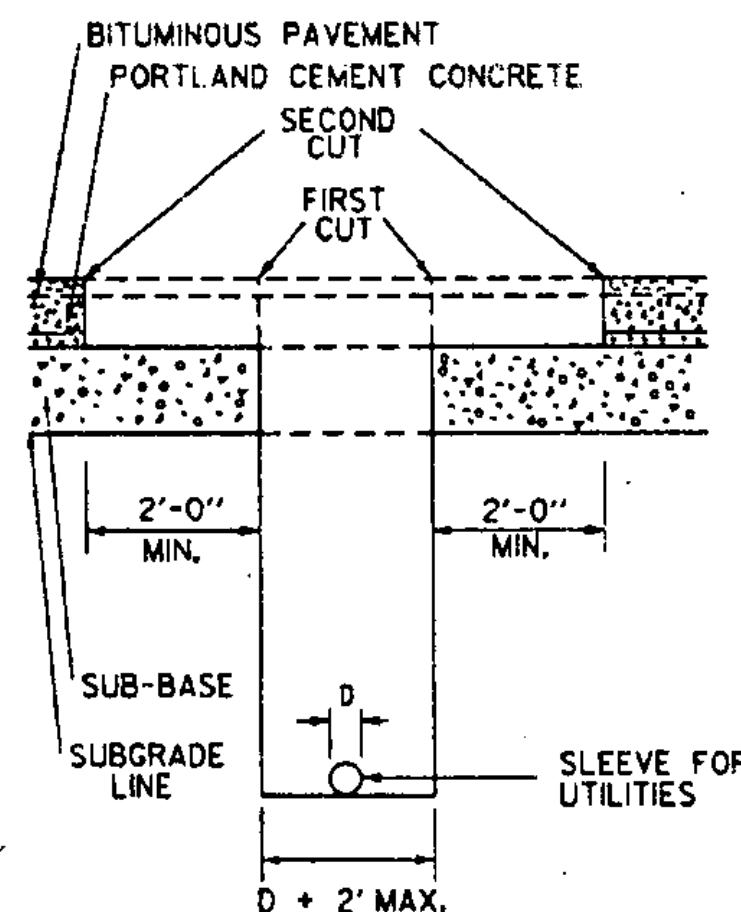
DETAIL 'D'
OPEN CUT WITH
PORTLAND CEMENT CONCRETE PAVEMENT

LONGITUDINAL STEEL TO BE CUT AND BENT BACK TO ALLOW FOR TRENCH EXCAVATION. REINFORCING BARS TO BE BENT BACK IN PLACE, SPLICED, AND NEW CROSS REINFORCING STEEL TO BE TIED TO THE LONGITUDINAL BARS PRIOR TO REPLACING THE PORTLAND CEMENT CONCRETE.



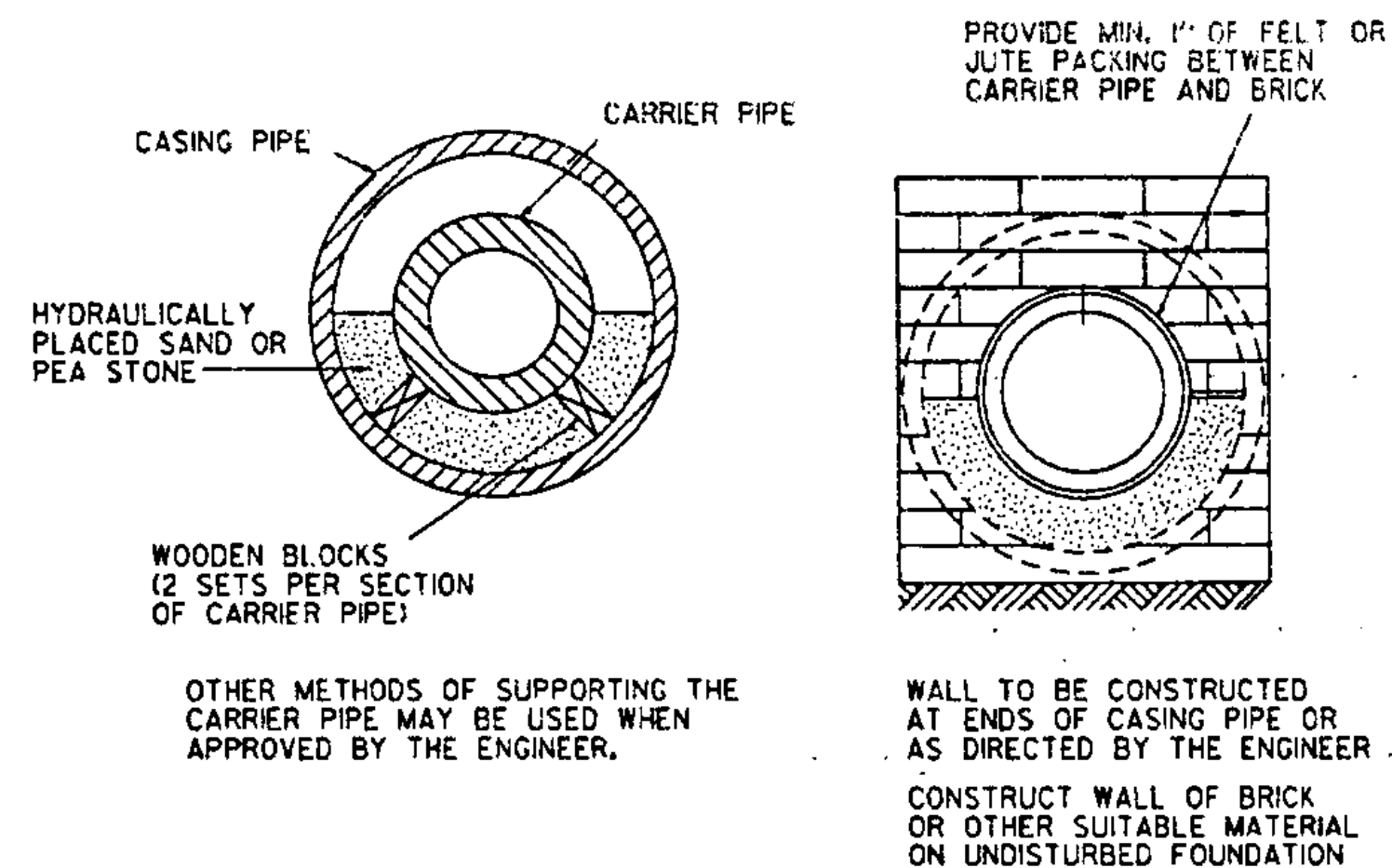
DETAIL 'E'
OPEN CUT WITH
PORTLAND CEMENT CONCRETE PAVEMENT

THE FIRST CUT WILL BE TO THE DESIRED WIDTH OF THE TRENCH. BACKFILL IS TO BE MADE TO THE ROAD SURFACE. THE SECOND CUT WILL THEN BE MADE AND ALL MATERIAL REMOVED TO THE BOTTOM ELEVATION OF THE CONCRETE SLAB. THE SUB-BASE WILL THEN BE RE-COMPACTED AND THE PORTLAND CEMENT CONCRETE REPLACED.



IN THE EVENT THAT AN ADJACENT TRANSVERSE JOINT IS LESS THAN FOUR FEET FROM THE FIRST CUT, THE PAVEMENT SHALL BE REMOVED TO THAT JOINT.

DETAIL 'F'
CASING AND CARRIER PIPE
(SLEEVE FOR UTILITIES)



NOTE: MEASUREMENT FOR PAYMENT OF THIS COMPOSITE SLEEVE IS THE NUMBER OF LINEAR FEET OF THE COMPLETED INSTALLATION.

GENERAL NOTES

1. SHEET PILING MAY BE DRIVEN VERTICALLY FIVE (5) FEET OUTSIDE THE SHOULDER POINT, OR ONE (1) FOOT BACK OF THE SIDEWALK, TO ALLOW FOR A SHORTER SLEEVE.
2. EARTH BACKFILL, TO BE MADE IN SIX (6) INCH LIFTS AND COMPACTED TO NOT LESS THAN 95% MAX. DRY DENSITY.
3. SEE DETAIL 'A' OR 'B' FOR DETERMINING SLEEVE LENGTH.
4. IN THE EVENT THAT PERMISSION IS GRANTED TO CUT AN EXISTING PORTLAND CEMENT CONCRETE OR BITUMINOUS PAVEMENT, ALL CUTS, IF POSSIBLE, SHALL BE MADE WITH A SAW TO A MINIMUM OF 1/2".
5. BITUMINOUS PAVEMENTS TO BE REPLACED WITH BITUMINOUS CONCRETE. PORTLAND CEMENT CONCRETE AND SUB-BASE TO BE REPLACED IN KIND. MATERIAL BELOW SUBGRADE TO BE REPLACED WITH EXCAVATED MATERIAL OR AS DIRECTED BY THE HIGHWAY ENGINEER.
6. SUB-BASE TO BE REPLACED IN SIX (6) INCH COMPACTED LAYERS.
7. PORTLAND CEMENT CONCRETE PATCHES SHALL BE PROPERLY CURED FOR SEVEN (7) DAYS BEFORE BEING SUBJECTED TO TRAFFIC LOADS. WHEN HIGH EARLY STRENGTH CEMENT IS USED, PROPER CURING FOR THREE (3) DAYS SHALL BE REQUIRED BEFORE BEING SUBJECTED TO TRAFFIC LOADS. WHEN A HIGH STRENGTH, QUICK SETTING CONCRETE PATCHING COMPOUND IS APPROVED, IT SHALL BE PROPERLY CURED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS BEFORE BEING SUBJECTED TO TRAFFIC LOADS.

REVISIONS AND CORRECTIONS

- DEC. 23, 1974 - ORIGINAL APPROVAL
- SEPT. 9, 1975 - CARRIER PIPE AND PORTLAND CEMENT NOTES REVISED
- OCT. 30, 1985 - REVISED TO CONFORM WITH 1986 SPECIFICATIONS
- JUNE 1, 1994 - REISSUED, WITHOUT CHANGE, UNDER NEW SIGNATURES.
- MAR. 10, 1995 - REISSUED, WITHOUT CHANGE, UNDER NEW SIGNATURES.

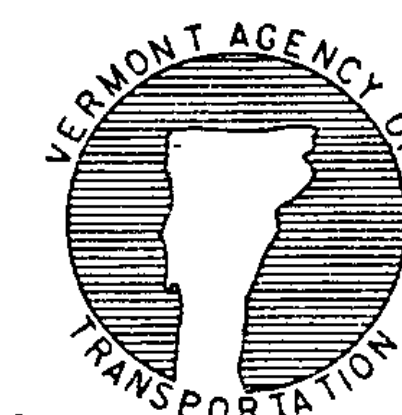
APPROVED

APPROVED FOR THIS PROJECT AND/OR DESIGN IMPLEMENTATION. FIVE (5) FINAL APPROVAL PENDING.

Thomas D. McArthur
DIRECTOR OF ENGINEERING

Thomas Page
UTILITIES ENGINEER

HIGHWAY CROSSING SLEEVES FOR UNDERGROUND UTILITIES



**STANDARD
D-20**