

DRILL & EPOXY #3 X STD
 90° HOOK EA. SIDE @ 24" O.C.
 EMBED 3"- BARS MAY BE
 INSTALLED AT THE MAX.
 ANGLE SHOWN & BENT DOWN
 INTO THE TRENCH

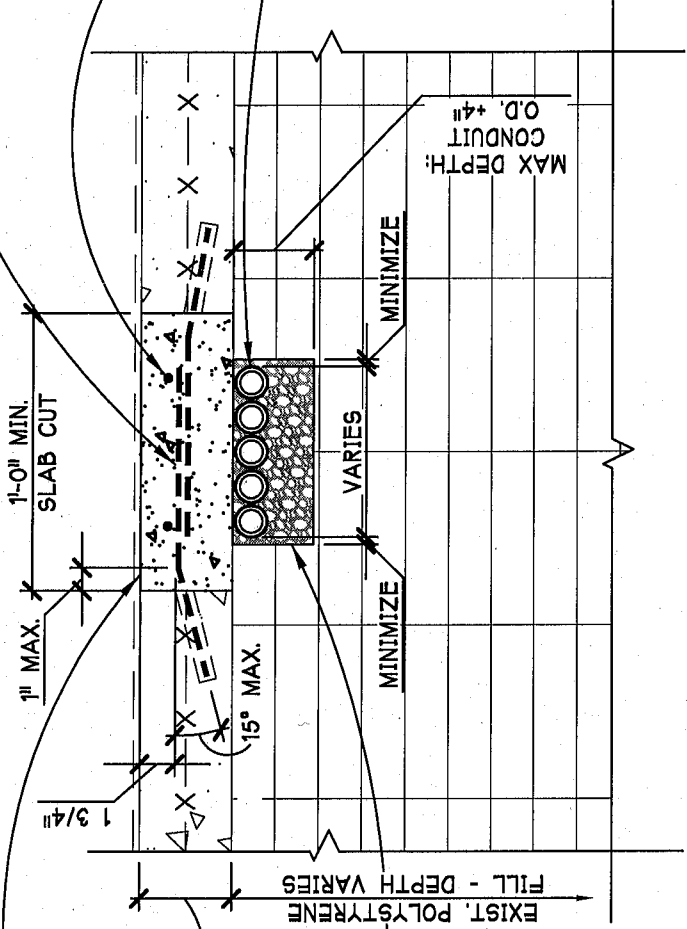
#3 @ 12" LONGITUDINAL
 PROVIDE (1) MIN.

SINGLE OR MULTIPLE
 SMALL CONDUIT RUN(S) UP
 TO 6" DIA EA. -SPACE
 CONDUITS AS CLOSELY AS
 POSSIBLE TO MINIMIZE
 WIDTH OF TRENCH IN
 POLYSTYRENE FILL

TENANT CONTRACTOR
 TO SAW-CUT & REMOVE
 SLAB- REPLACE W/ MIN.
 5,000 PSI CONC.

EXIST. 4" COMP.
 CONC. SLAB

PEA GRAVEL FILL BY
 TENANT CONTRACTOR



TENANT CONDUIT TRENCH IN BUILT-UP SLAB

SCALE - 1 1/2" = 1'-0"
 HB08AD004

HB-3278A

TENANT SLAB
 PENETRATION &
 TRENCH DETAILS
 09/08/11 - PMB

TENANT CONTRACTOR
TO SAW-CUT & REMOVE
SLAB- REPLACE W/ MIN.
5,000 PSI CONC.

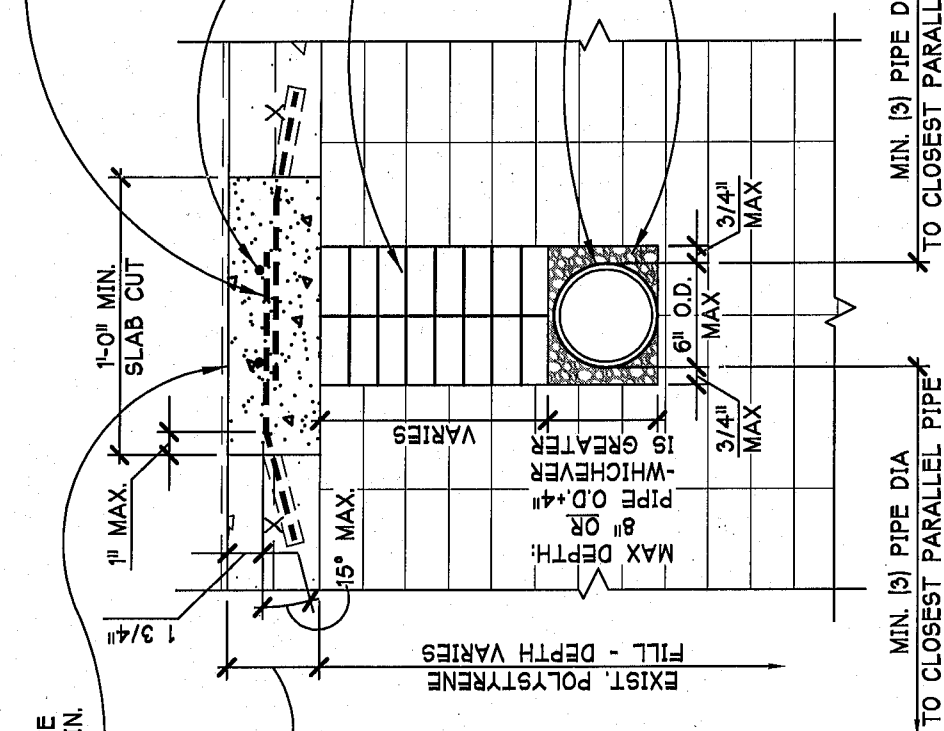
DRILL & EPOXY #3 X $\frac{1}{4}$ STD
90° HOOK EA. SIDE @ 24" O.C.
EMBED 3"- BARS MAY BE
INSTALLED AT THE MAX.
ANGLE SHOWN & BENT DOWN
INTO THE TRENCH

#3 @ 12" LONGITUDINAL
PROVIDE (1) MIN.

BACKFILL TRENCH W/
POLYSTYRENE FILL ABOVE
PEA GRAVEL FILL (BY
TENANT CONTRACTOR)

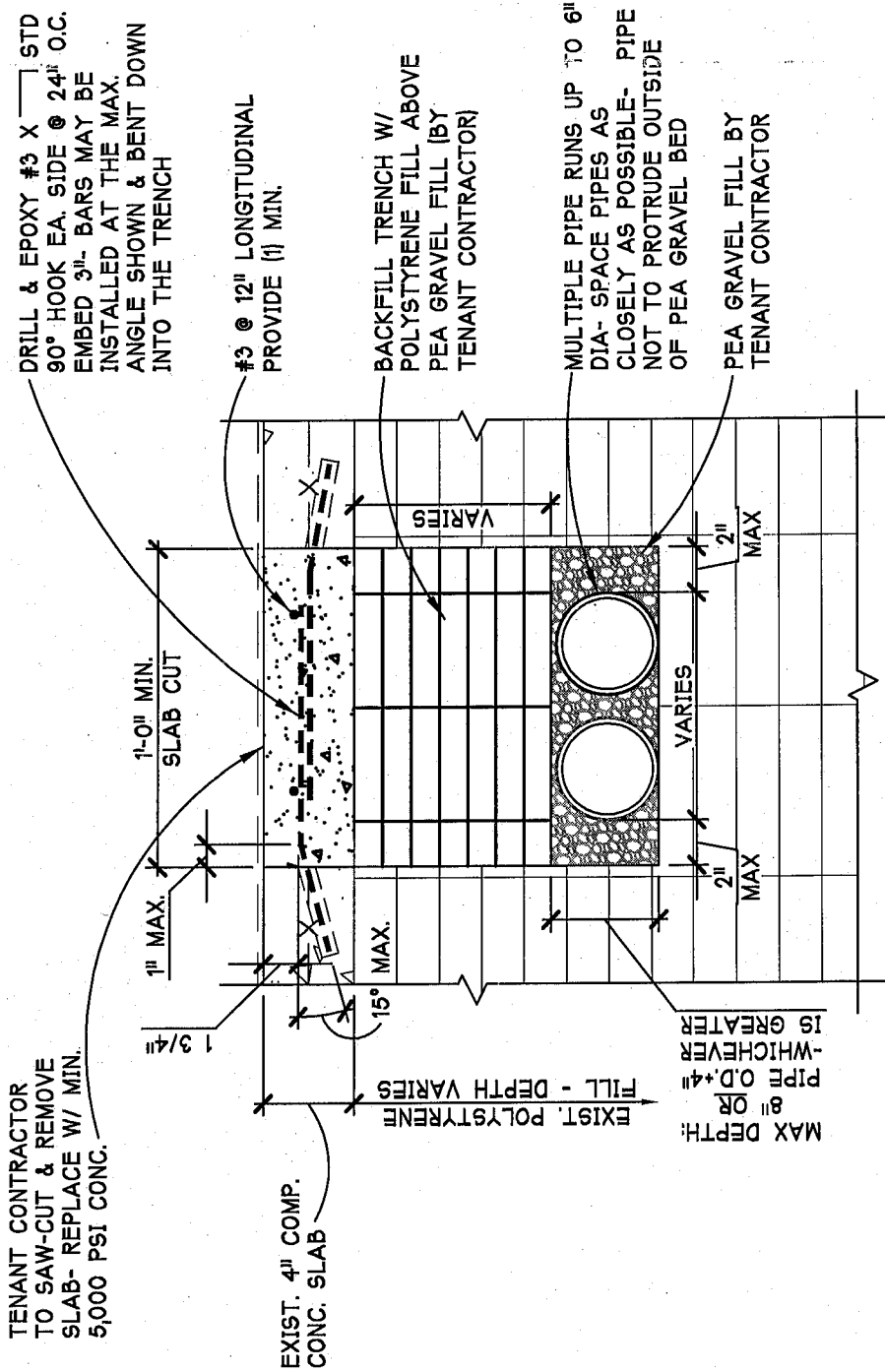
SINGLE PIPE RUN UP
TO 6" DIA

PEA GRAVEL FILL BY
TENANT CONTRACTOR



TENANT SINGLE SMALL PIPE TRENCH IN BUILT-UP SLAB

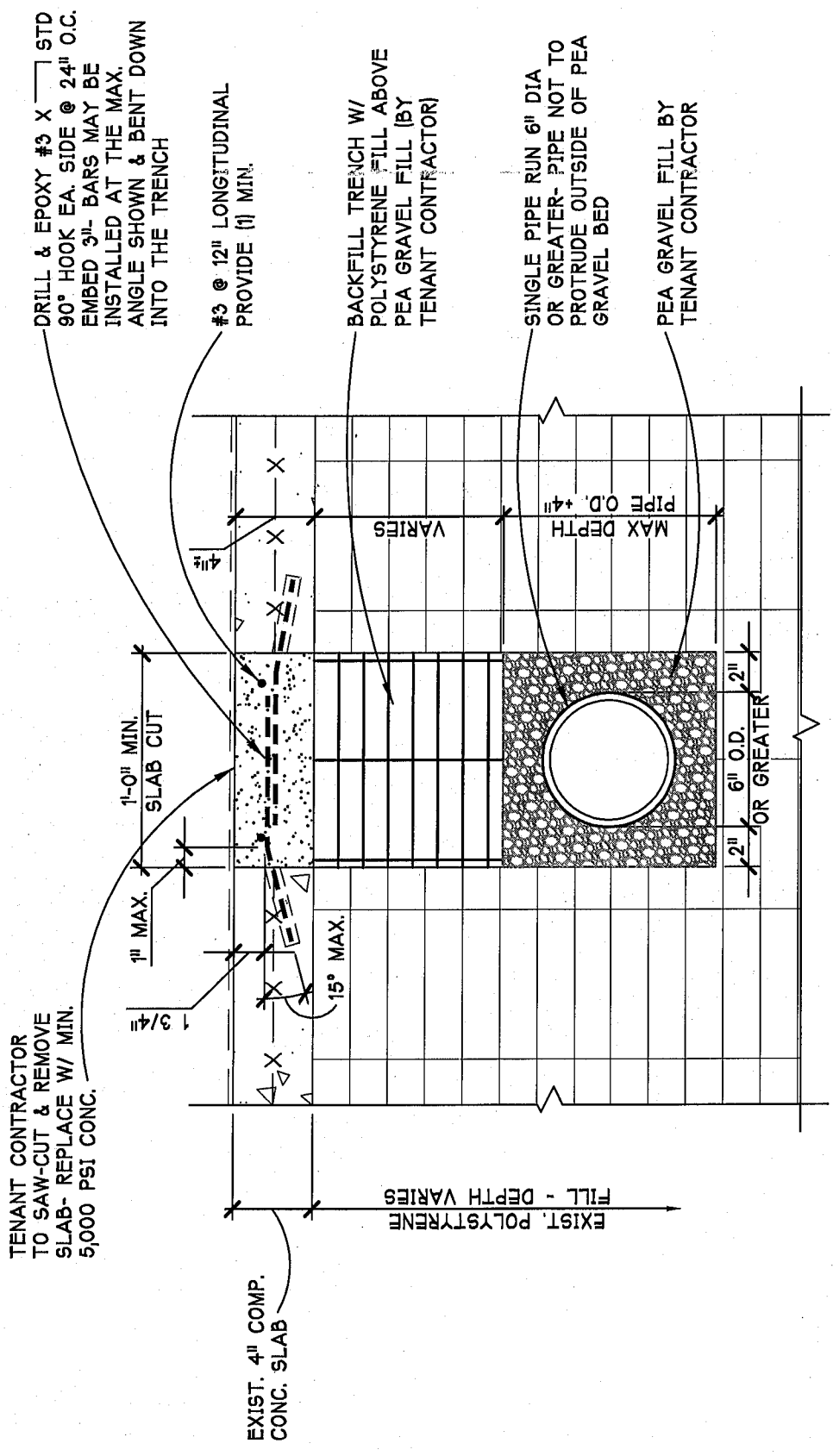
SCALE - 1 1/2" = 1'-0"
HE08AD004



TENANT MULTIPLE SMALL PIPE TRENCH IN BUILT-UP SLAB

SCALE - 1 1/2" = 1'-0"
HB08A0004

HB-3278C
 TENANT SLAB
 PENETRATION &
 TRENCH DETAILS
 09/08/11 - PMB



TENANT CONTRACTOR TO SAW-CUT & REMOVE SLAB- REPLACE W/ MIN. 5,000 PSI CONC.

DRILL & EPOXY #3 X 90° HOOK EA. SIDE @ 24" O.C. EMBED 3"- BARS MAY BE INSTALLED AT THE MAX. ANGLE SHOWN & BENT DOWN INTO THE TRENCH

#3 @ 12" LONGITUDINAL PROVIDE (1) MIN.

BACKFILL TRENCH W/ POLYSTYRENE FILL ABOVE PEA GRAVEL FILL (BY TENANT CONTRACTOR)

SINGLE PIPE RUN 6" DIA OR GREATER- PIPE NOT TO PROTRUDE OUTSIDE OF PEA GRAVEL BED

PEA GRAVEL FILL BY TENANT CONTRACTOR

EXIST. 4" COMP. CONC. SLAB

EXIST. POLYSTYRENE FILL - DEPTH VARIES

VARIES

MAX DEPTH PIPE O.D. +4"

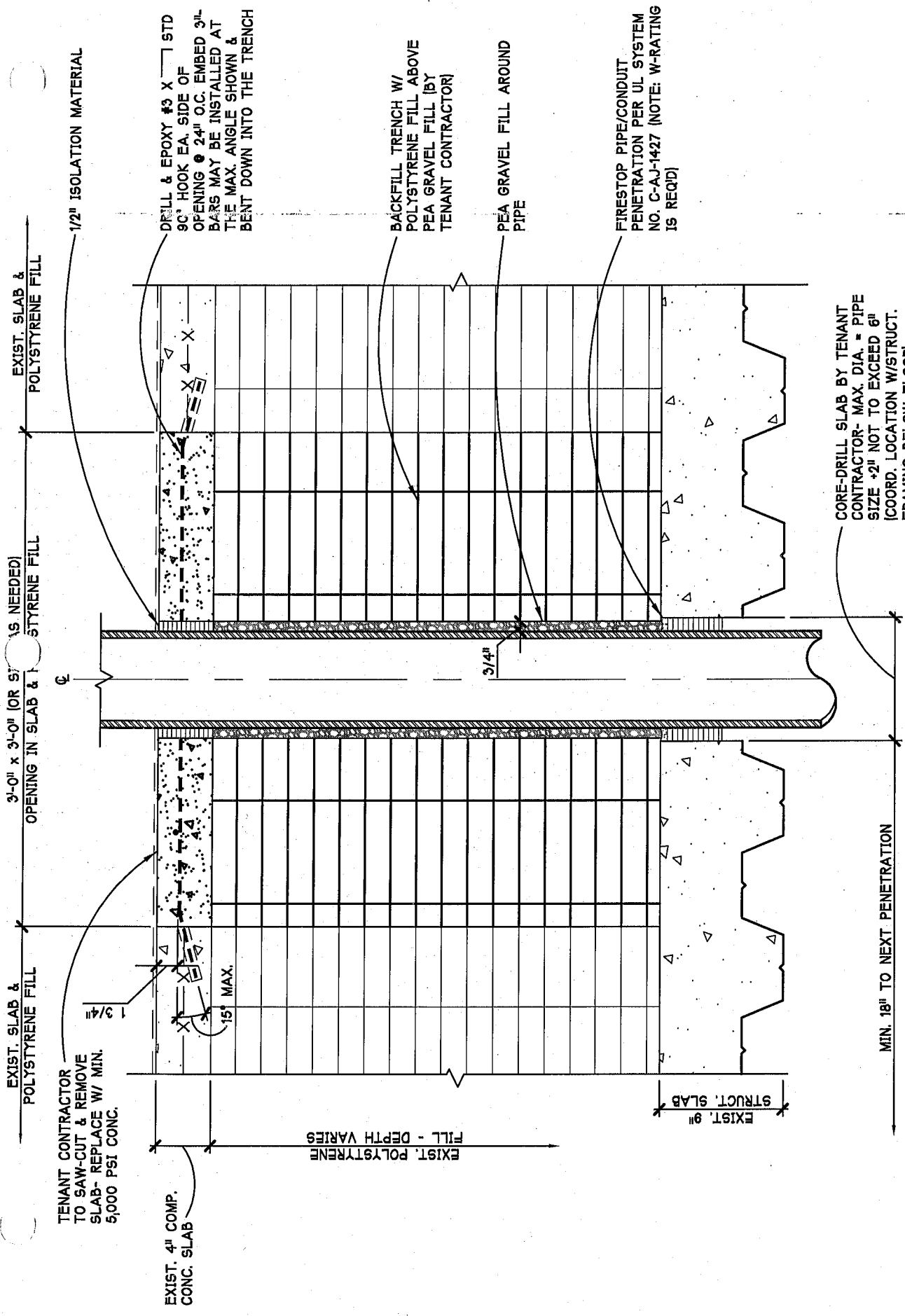
2" 6" O.D. 2" OR GREATER

TENANT LARGE SINGLE PIPE TRENCH IN BUILT-UP SLAB

SCALE - 1 1/2" = 1'-0"
HB08A0004

HB-3278D

TENANT SLAB PENETRATION & TRENCH DETAILS
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EXIST. SLAB & POLYSTYRENE FILL

3'-0" x 3'-0" (OR SIZE AS NEEDED) OPENING IN SLAB & POLYSTYRENE FILL

EXIST. SLAB & POLYSTYRENE FILL

TENANT CONTRACTOR TO SAW-CUT & REMOVE SLAB- REPLACE W/ MIN. 5,000 PSI CONC.

EXIST. 4" COMP. CONC. SLAB

EXIST. POLYSTYRENE FILL - DEPTH VARIES

1/2" ISOLATION MATERIAL

DRILL & EPOXY #3 X 90° HOOK EA. SIDE OF OPENING @ 24" O.C. EMBED 3" BARS MAY BE INSTALLED AT THE MAX. ANGLE SHOWN & BENT DOWN INTO THE TRENCH

BACKFILL TRENCH W/ POLYSTYRENE FILL ABOVE PEA GRAVEL FILL (BY TENANT CONTRACTOR)

PEA GRAVEL FILL AROUND PIPE

FIRESTOP PIPE/CONDUIT PENETRATION PER UL SYSTEM NO. C-AJ-1427 (NOTE: W-RATING IS REQ'D)

CORE-DRILL SLAB BY TENANT CONTRACTOR- MAX. DIA. = PIPE SIZE +2" NOT TO EXCEED 6" (COORD. LOCATION W/STRUCT. FRAMING BELOW FLOOR)

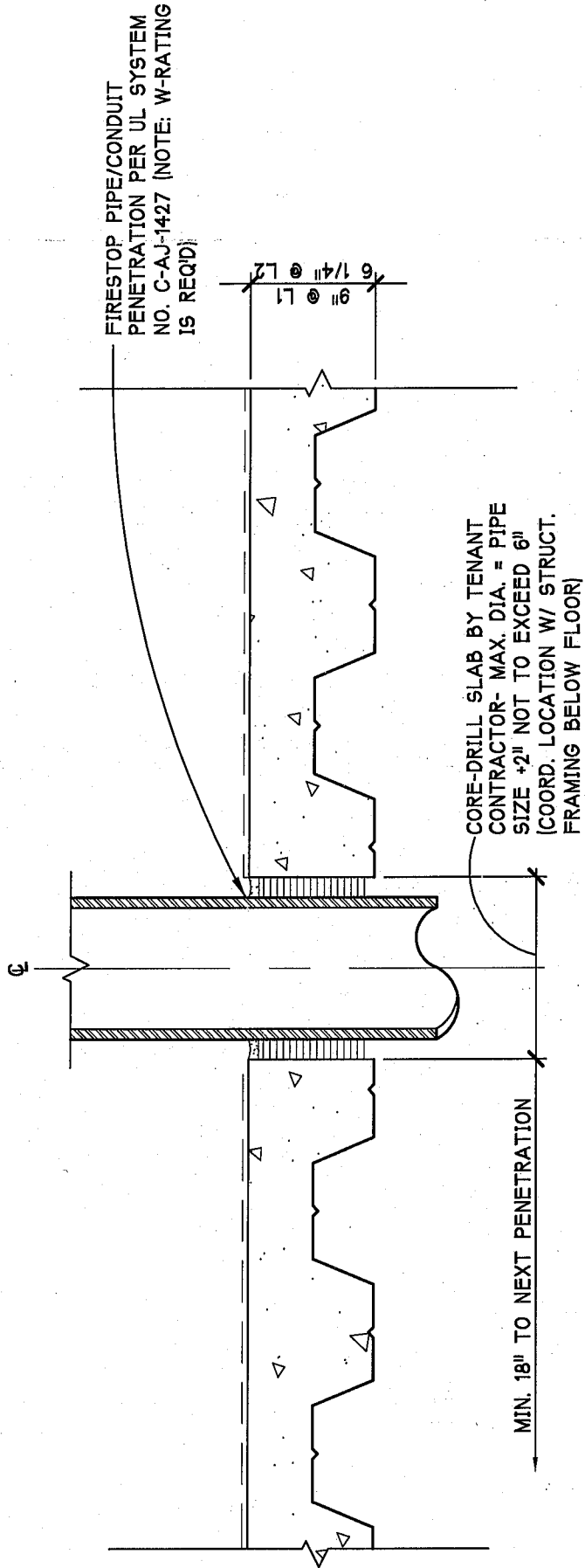
MIN. 18" TO NEXT PENETRATION

EXIST. 9" STRUCT. SLAB

HB-3278E
 TENANT SLAB
 PENETRATION &
 TRENCH DETAILS
 09/08/11 - PMB

**TENANT PIPE/CONDUIT
 PENETRATION @ BUILT-UP SLAB**

SCALE - N.T.S.
 HB3278E004



TENANT PIPE/CONDUIT PENETRATION @ STRUCTURAL FLOOR SLAB

SCALE - 1 1/2" = 1'-0"
 HB08AD004

HB-3278F
 TENANT SLAB
 PENETRATION &
 TRENCH DETAILS
 09/08/11 - PMB