

DESIGN:

EXISTING PLANS:

TRAFFIC:

EXISTING CONDITIONS:

UTILITIES:

PLAN REVISIONS:

SCALES:

REINFORCEMENT:

MODIFICATION	CONDITION	#4 BARS	#5 BARS	#6 BARS
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ALL OTHER BARS SHALL BE LAPPED AS SHOWN ON THE CONSTRUCTION DRAWINGS.

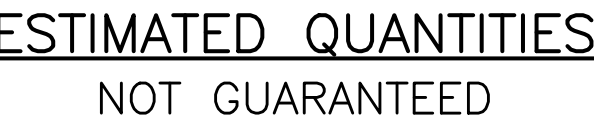
CONCRETE:

SURVEY:

BENCH MARK:

COMMONWEALTH OF MASSACHUSETTS
MassDOT, Highway Division
APPROVED UNDER PROVISIONS OF
MASS. GEN. LAWS CH 85 S 35

STATE BRIDGE ENGINEER **DATE**

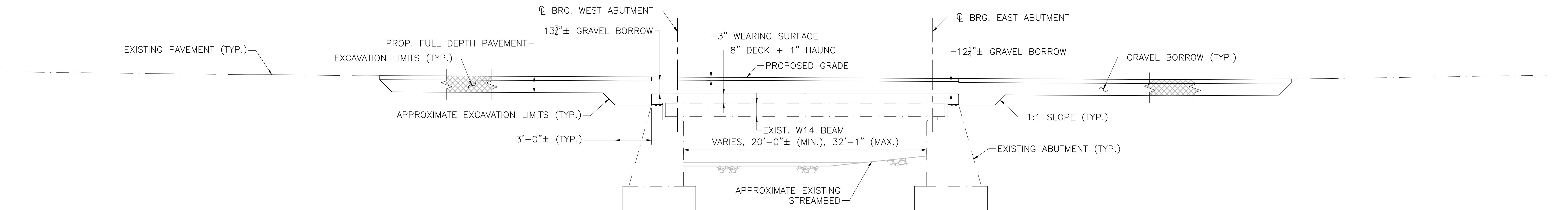
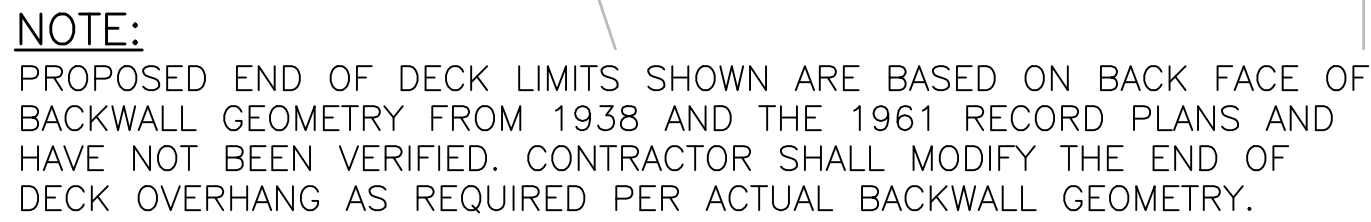


PROPOSED DECK REPLACEMENT

TOWN OF CHARLEMONT

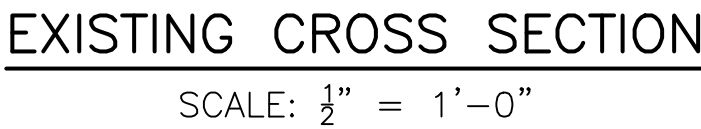
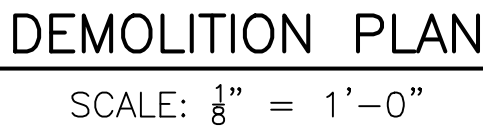
DECK REPLACEMENT FOR CHARLEMONT
C-05-027 (0ET)
SOUTH RIVER ROAD OVER ALBEE BROOK

SHEET 1 OF 8





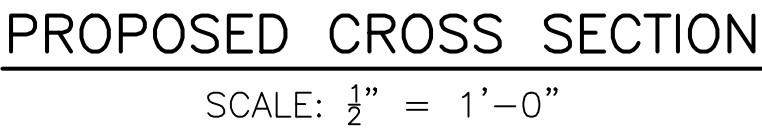
COMMONWEALTH OF MASSACHUSETTS
MassDOT, Highway Division
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MASS. GEN. LAWS CH 85 S 35

STATE BRIDGE ENGINEER	DATE
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LEGEND:

	DENOTES LIMITS OF DEMOLITION
	DENOTES LIMITS OF PARTIAL DEMOLITION

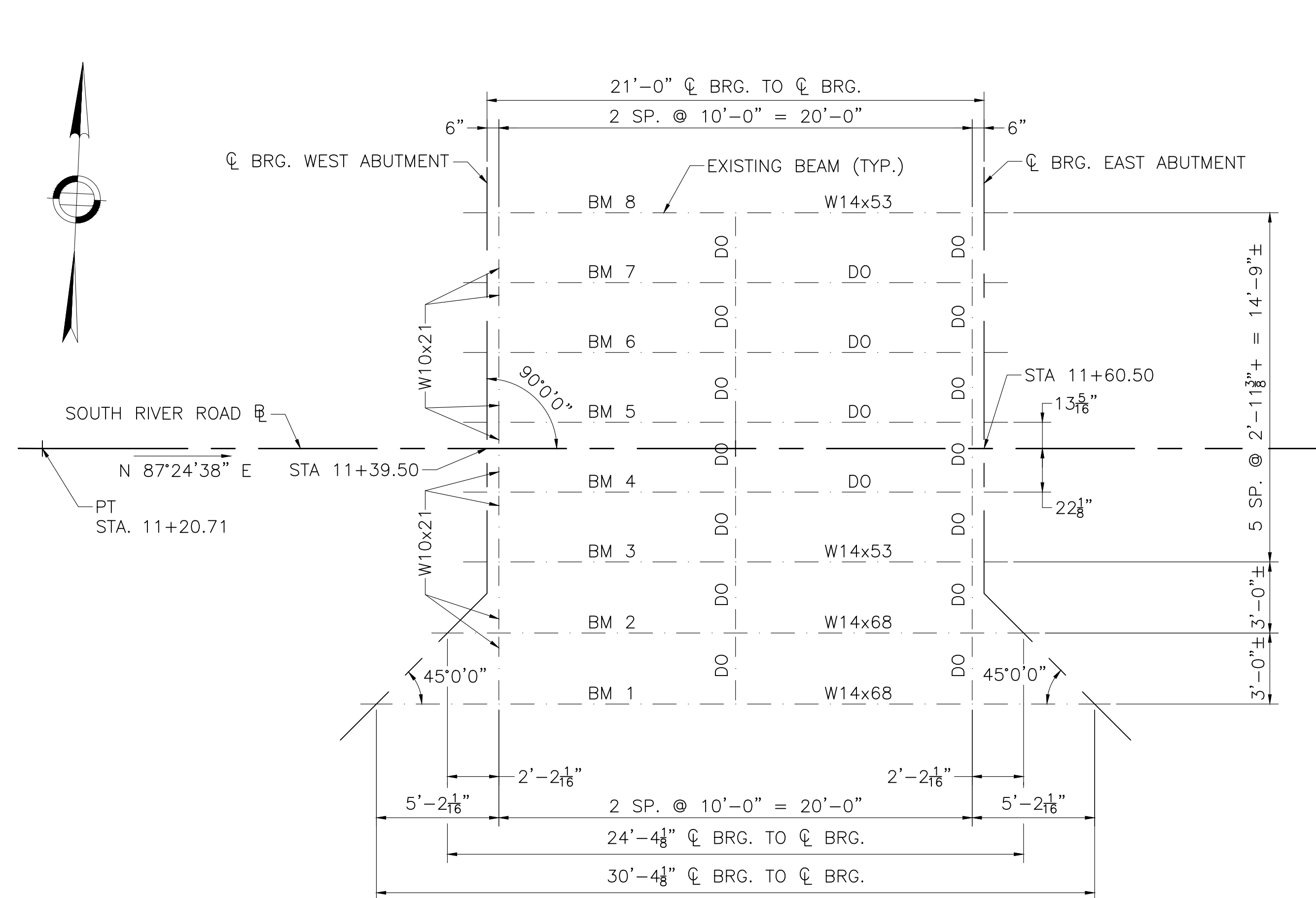


NOTE:
SECTIONS TAKEN LOOKING WEST.

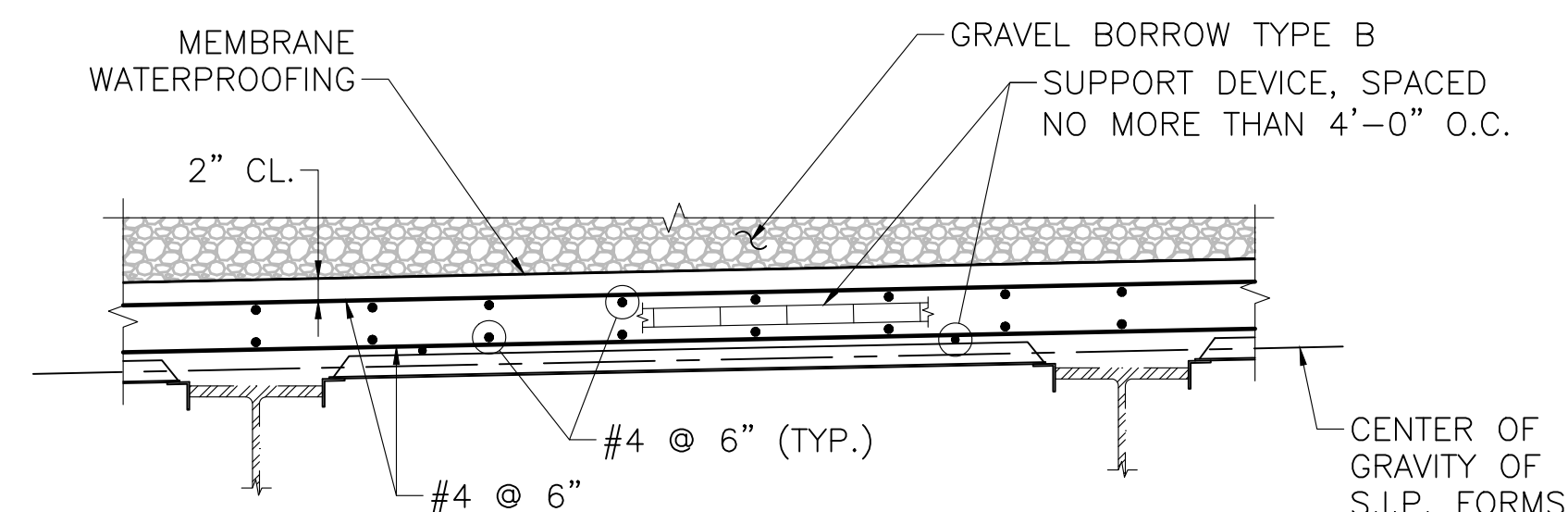
- DEMOLITION NOTES:**
1. ALL DEMOLITION WORK SHALL BE DONE IN A SINGLE PHASE.
 2. FOR ADDITIONAL DEMOLITION REQUIREMENTS SEE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
 3. DEMOLISH ANY MATERIAL INCIDENTAL TO THE PROPOSED CONSTRUCTION AS DIRECTED BY THE RESIDENT ENGINEER.
 4. ALL DEMOLITION WORK SHALL BE DONE IN CONFORMANCE WITH ALL APPLICABLE FEDERAL STATE AND LOCAL LAWS, REGULATIONS AND PERMITS AND THE JOB SPECIFICATIONS.
 5. THE CONTRACTOR SHALL SUBMIT HIS PROPOSED DEMOLITION PROCEDURE TO THE ENGINEER FOR APPROVAL PRIOR TO COMMENCING WORK. SEE SPECIAL PROVISIONS FOR ADDITIONAL DETAILS.

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STATE BRIDGE ENGINEER DATE

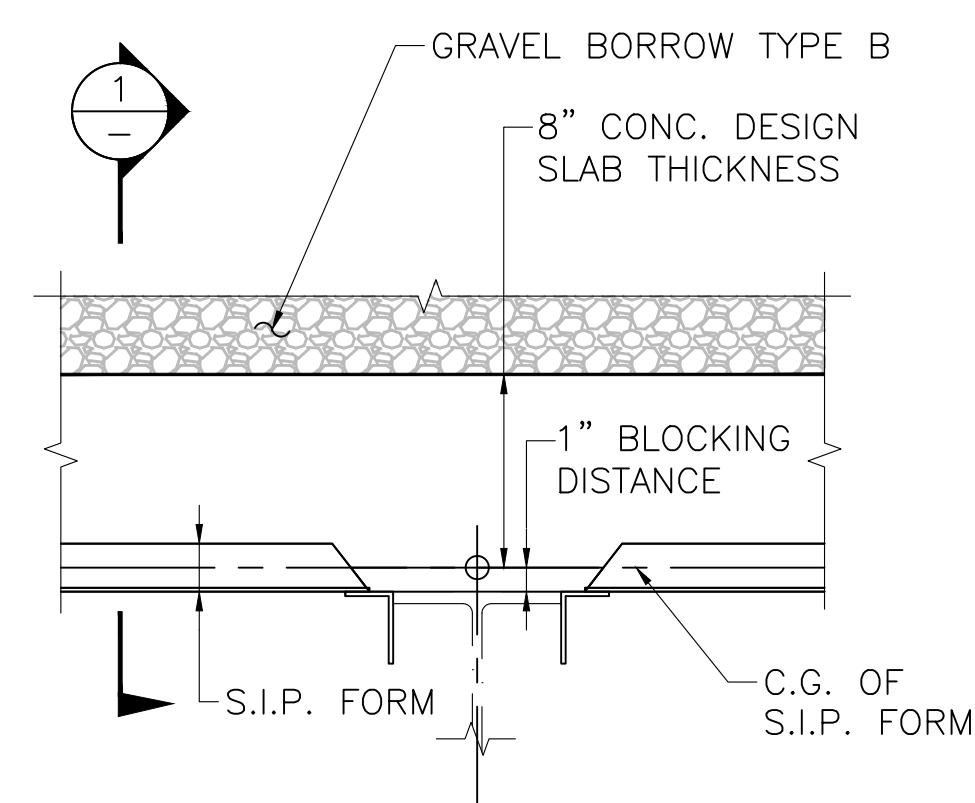


FRAMING PLAN
SCALE: $\frac{1}{4}" = 1'-0"$

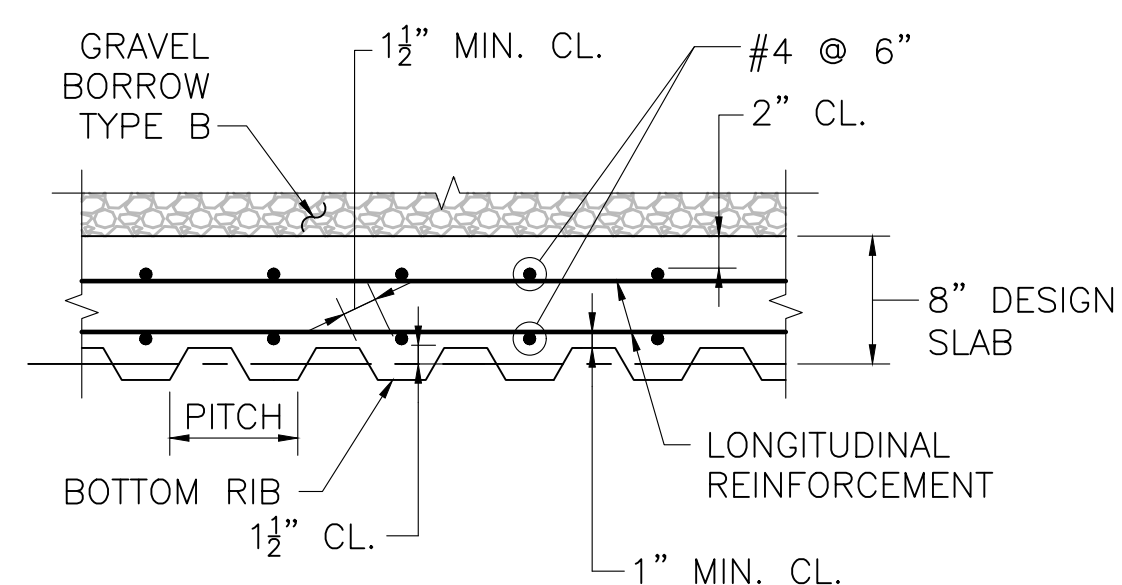


TYPICAL DECK REINFORCEMENT

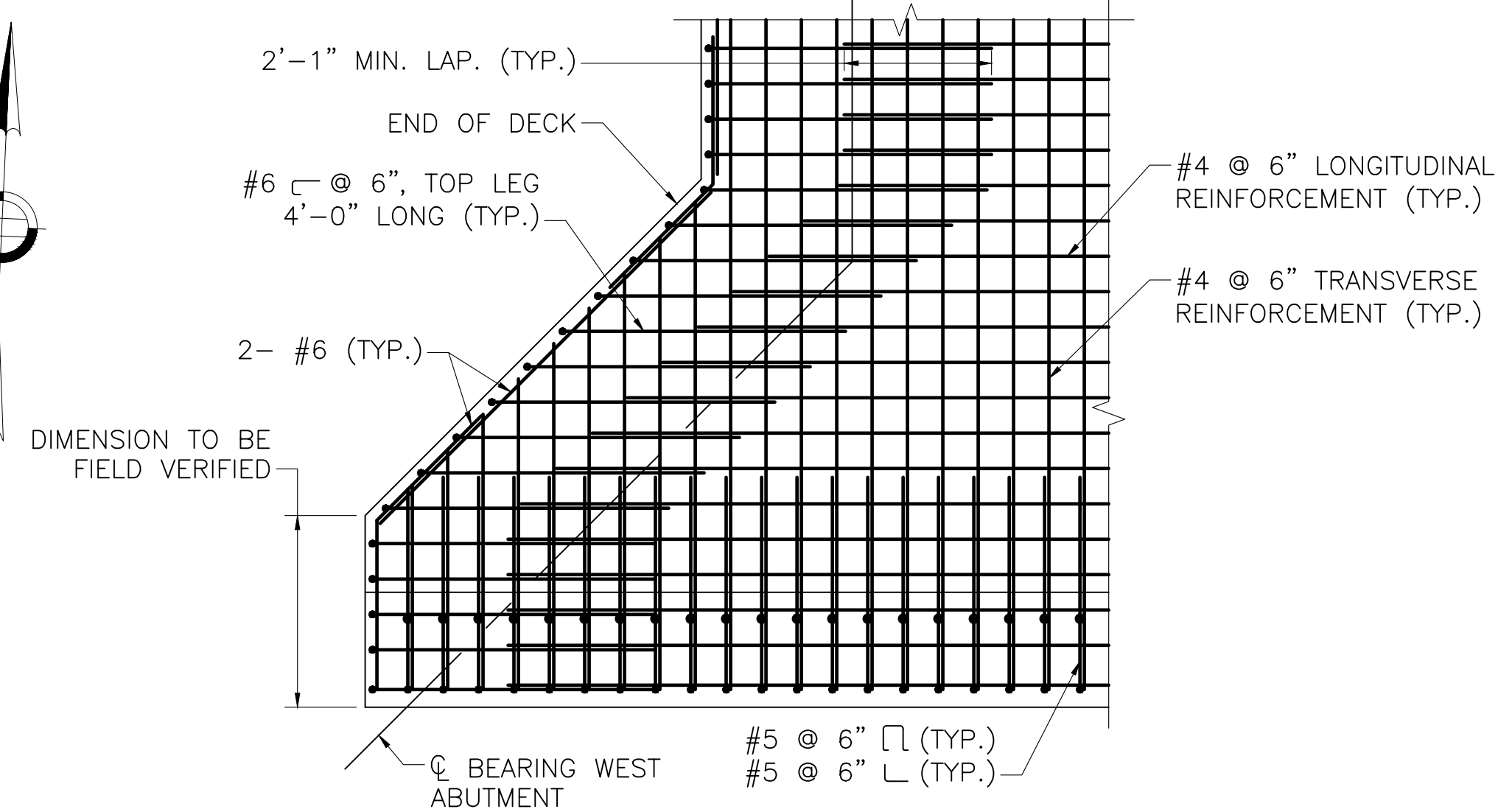
SCALE: $\frac{3}{4}" = 1'-0"$



HAUNCH DETAIL
NOT TO SCALE

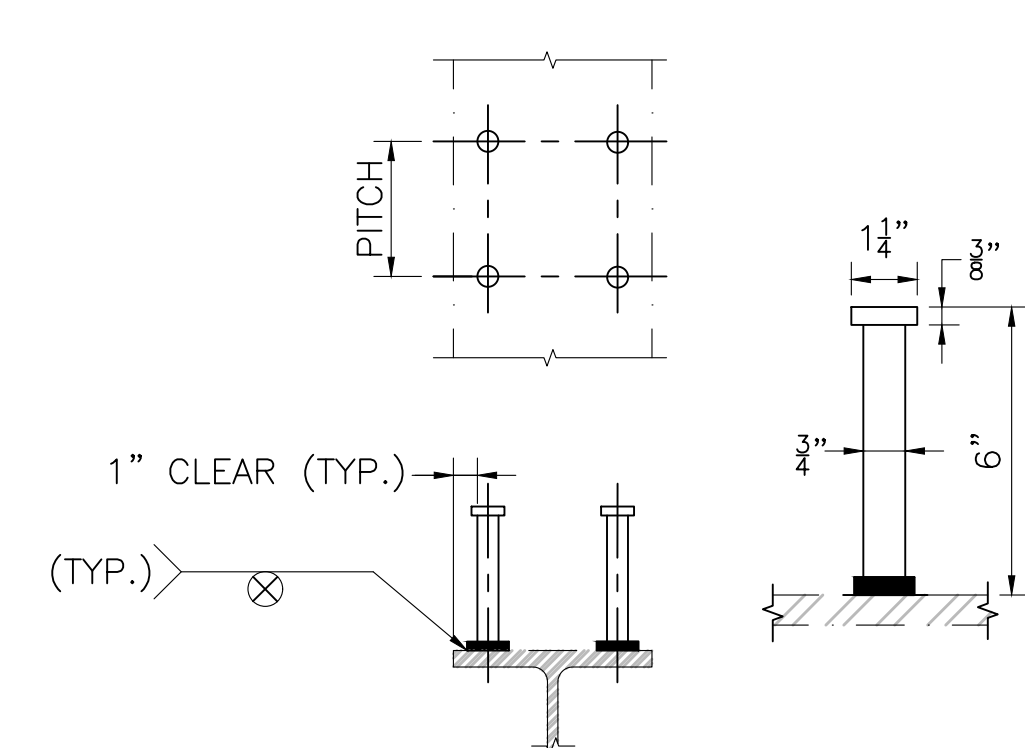


SECTION 1
NOT TO SCALE



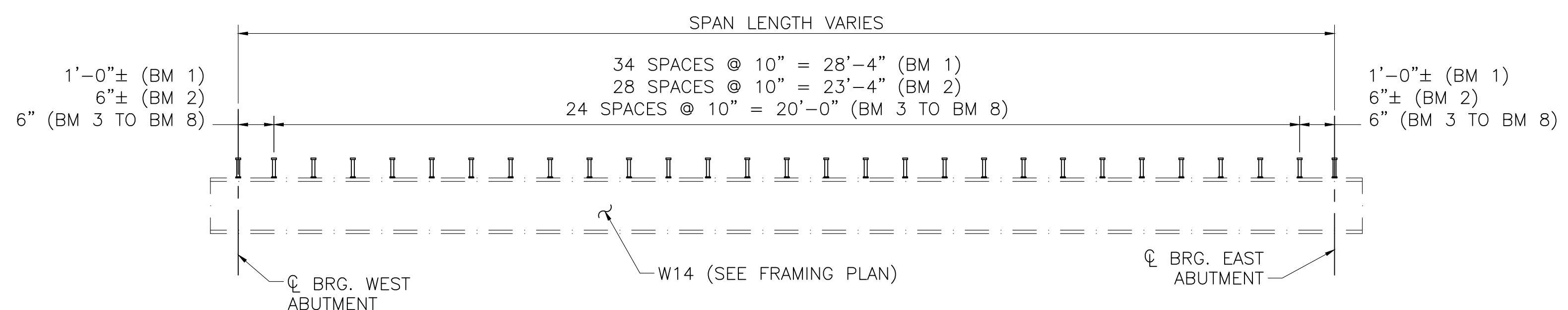
ACUTE CORNER REINFORCEMENT PLAN

SCALE: $\frac{1}{8}" = 1'-0"$

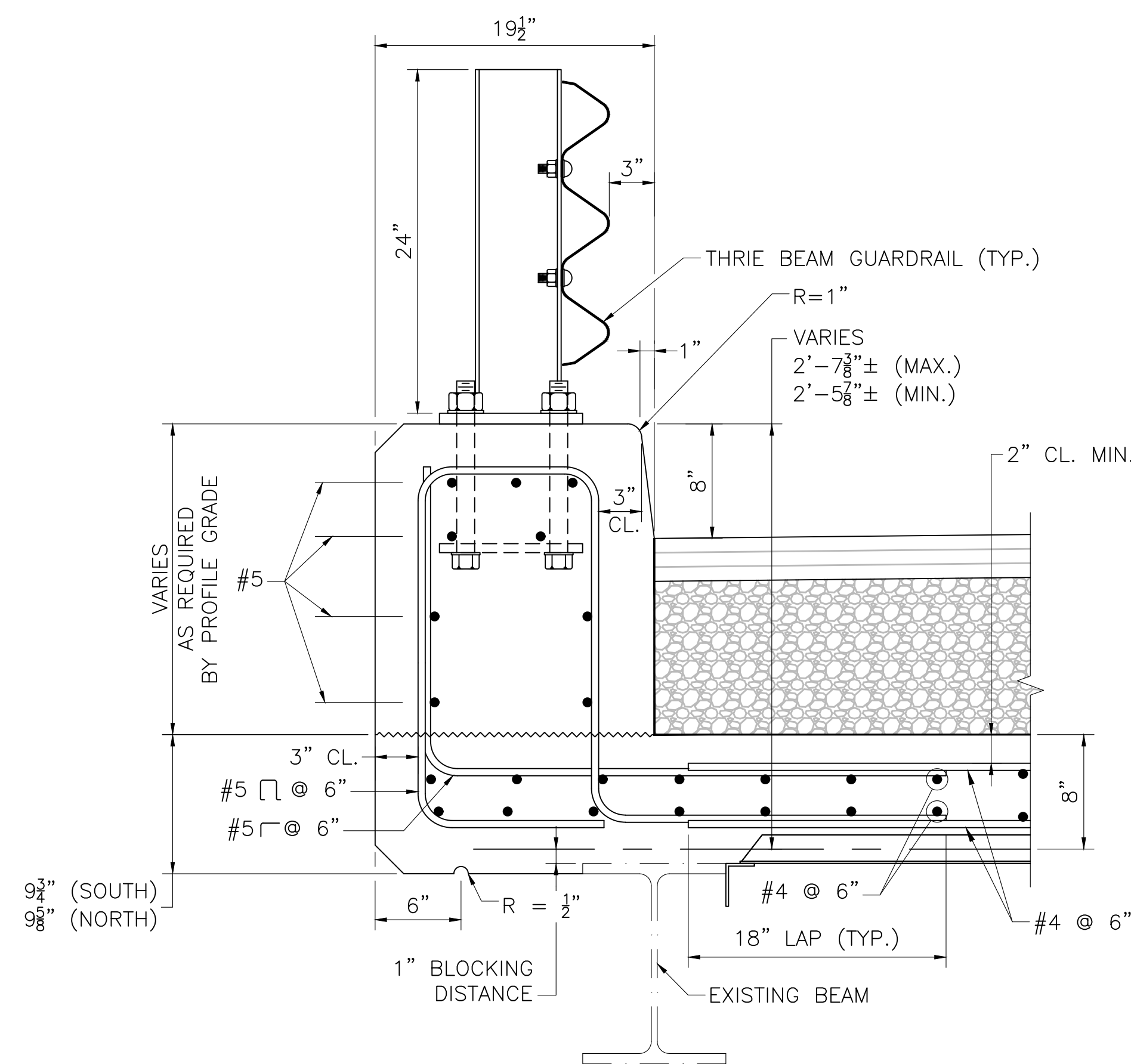


SHEAR STUD CONNECTORS
NOT TO SCALE

- NOTES:
1. GRIND SMOOTH TOP FLANGE AT EACH STUD LOCATION AND APPLY CORROSION MITIGATION SOLUTION AS REQUIRED (TERMARUST OR APPROVED EQUAL).
 2. $\frac{7}{8}$ " \emptyset STUDS MAY BE SUBSTITUTED FOR $\frac{3}{4}$ " \emptyset STUDS BY ADJUSTING THE PITCH TO PROVIDE AN EQUIVALENT CROSS-SECTIONAL AREA PER FOOT.

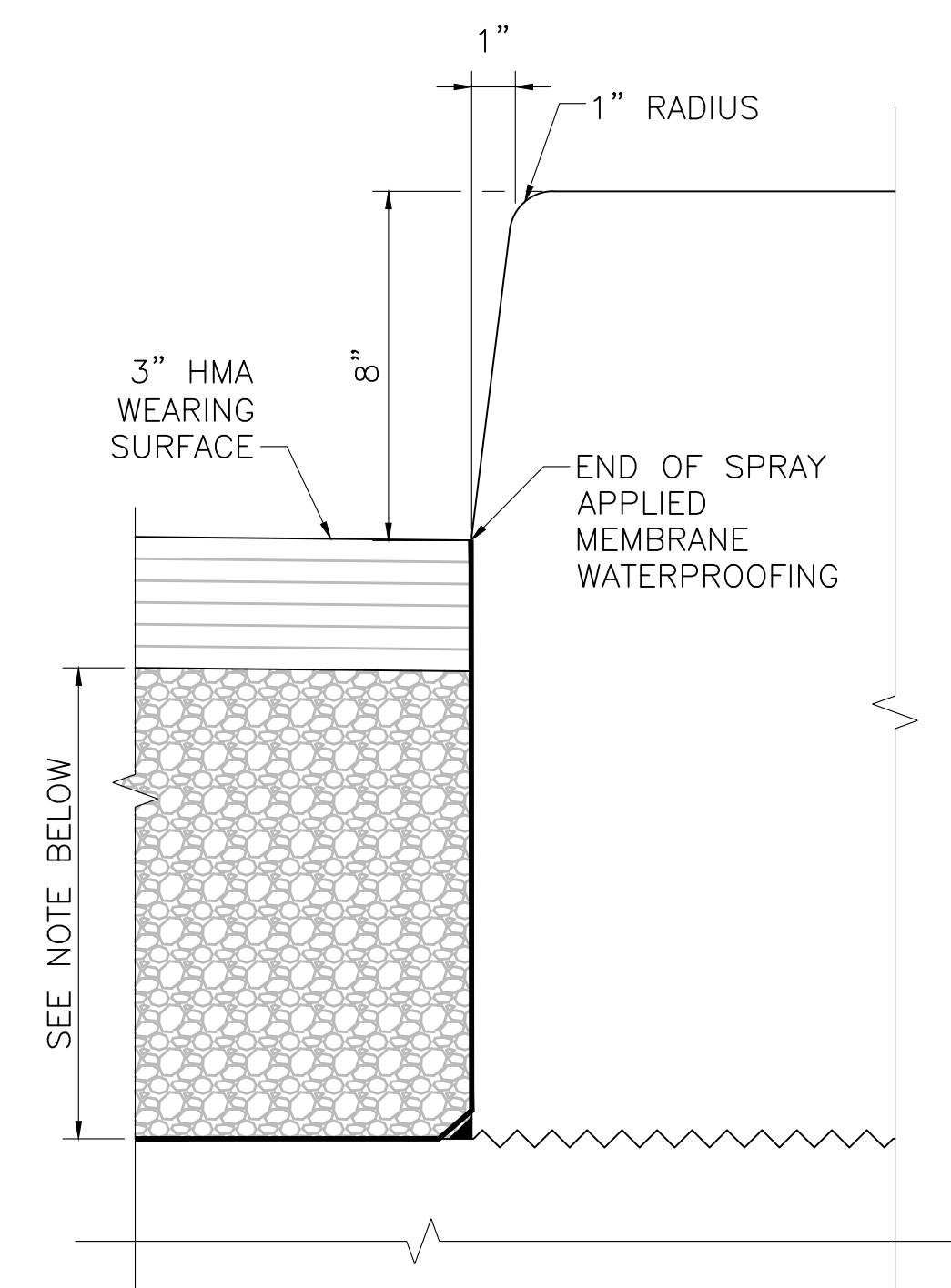


TYPICAL BEAM ELEVATION
NOT TO SCALE



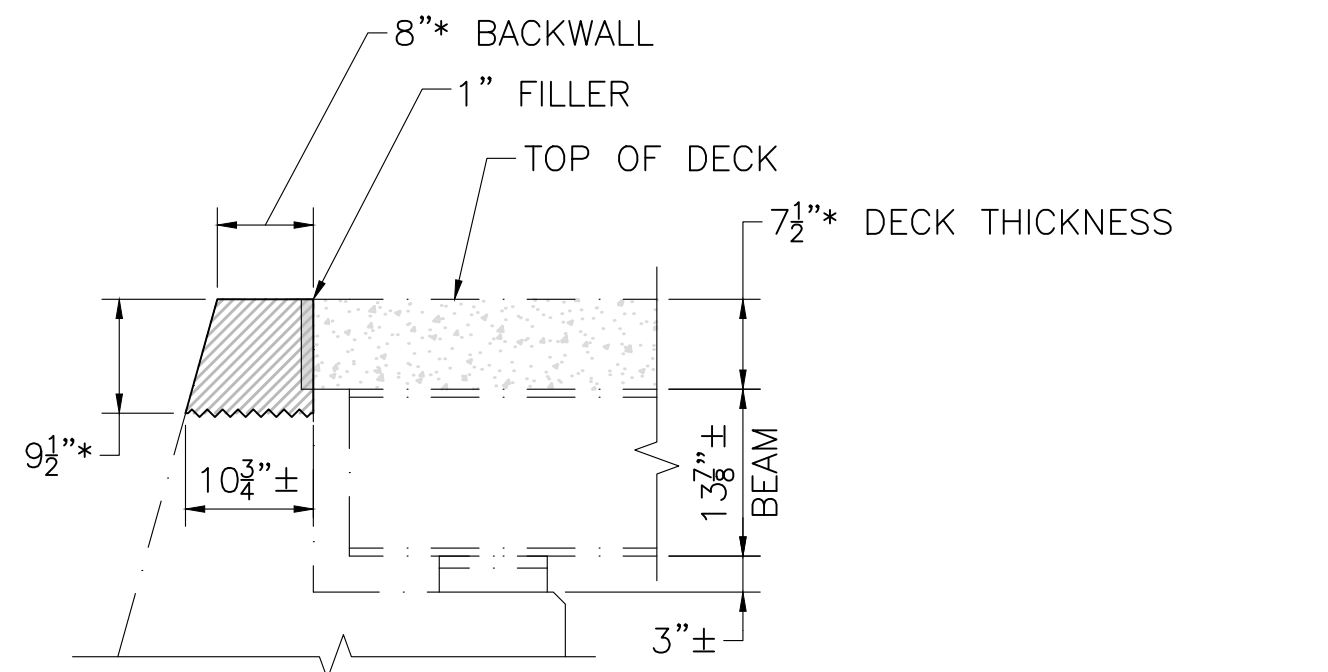
SAFETY CURB REINFORCEMENT DETAIL

SCALE: $1\frac{1}{2}" = 1'-0"$



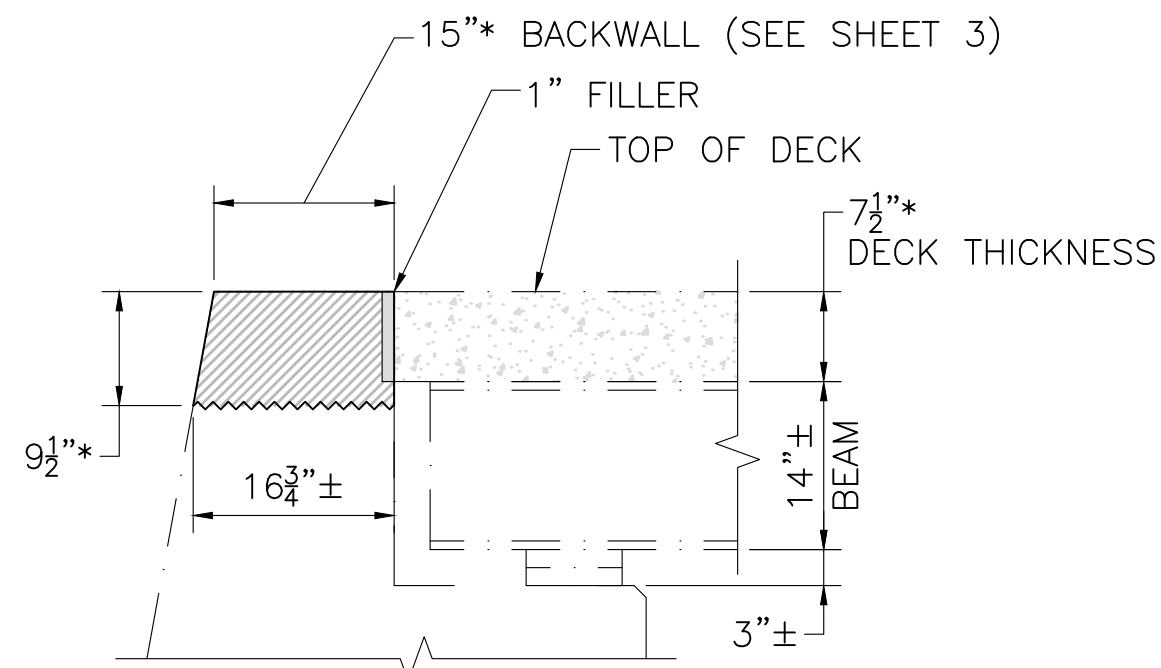
NOTE:
FINE GRADE AND COMPACT GRAVEL BORROW
AS NEEDED TO MEET PROPOSED GRADE.

**COMMONWEALTH OF MASSACHUSETTS
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ABUTMENTS

■ DENOTES DEMOLITION LIMITS

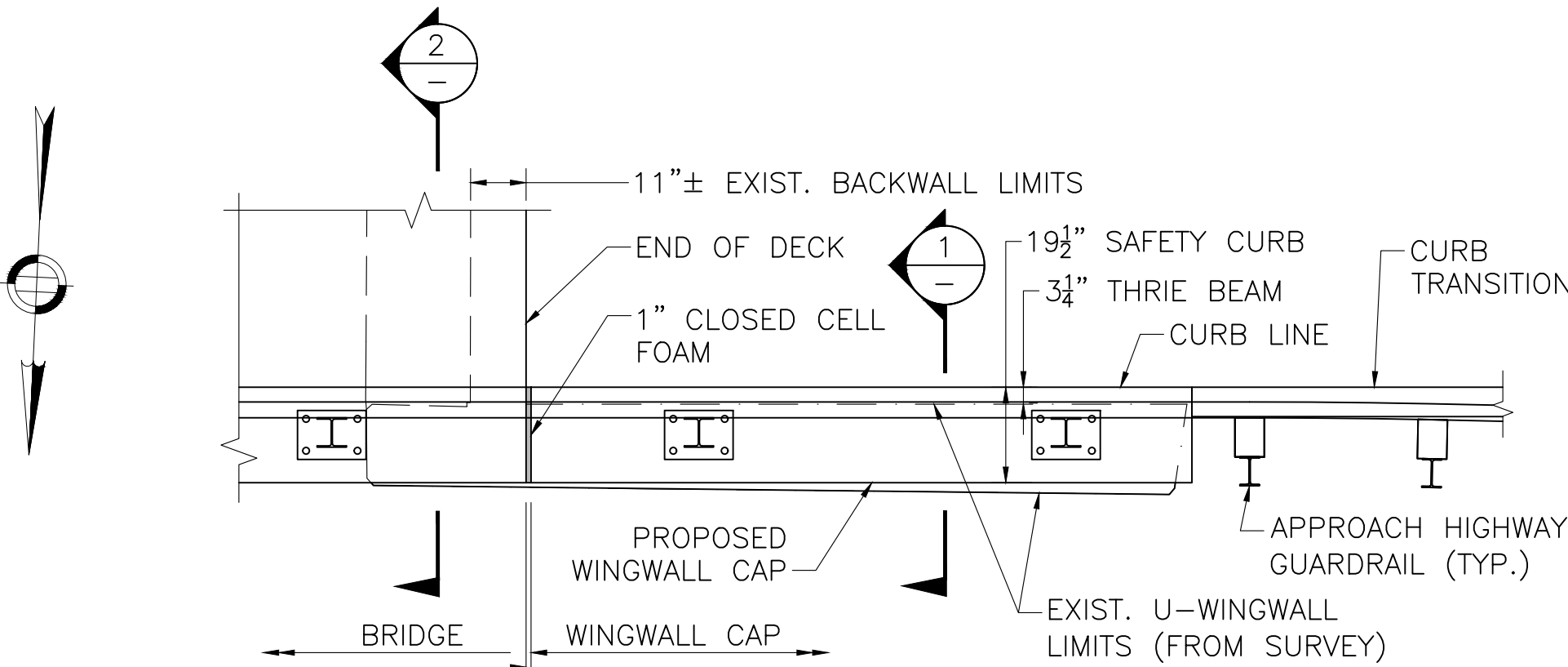


SOUTH SPLAYED WINGWALL/BACKWALL

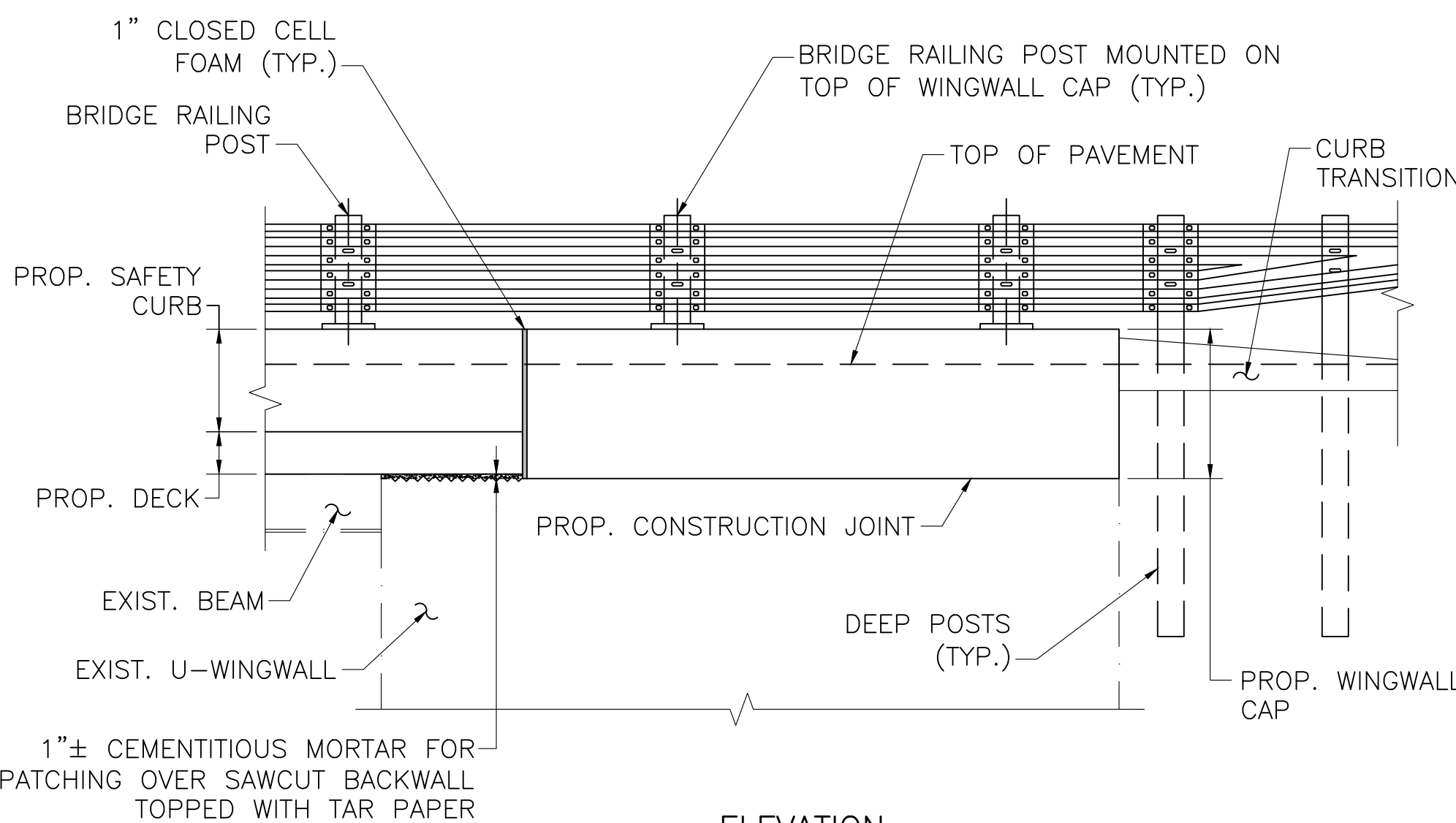
***NOTE:**
EXISTING DECK THICKNESS AND TOP OF BACKWALL LIMITS SHOWN HAVE NOT BEEN VERIFIED. CONTRACTOR SHALL MODIFY BACKWALL DEMOLITION LIMITS ACCORDINGLY BASED ON ACTUAL DIMENSIONS TO ACCEPT PROPOSED DECK OVERHANG OVER EXISTING BACKWALL.

PARTIAL DEMOLITION OF EXISTING BACKWALL

SCALE: $\frac{3}{4}" = 1'-0"$



PLAN

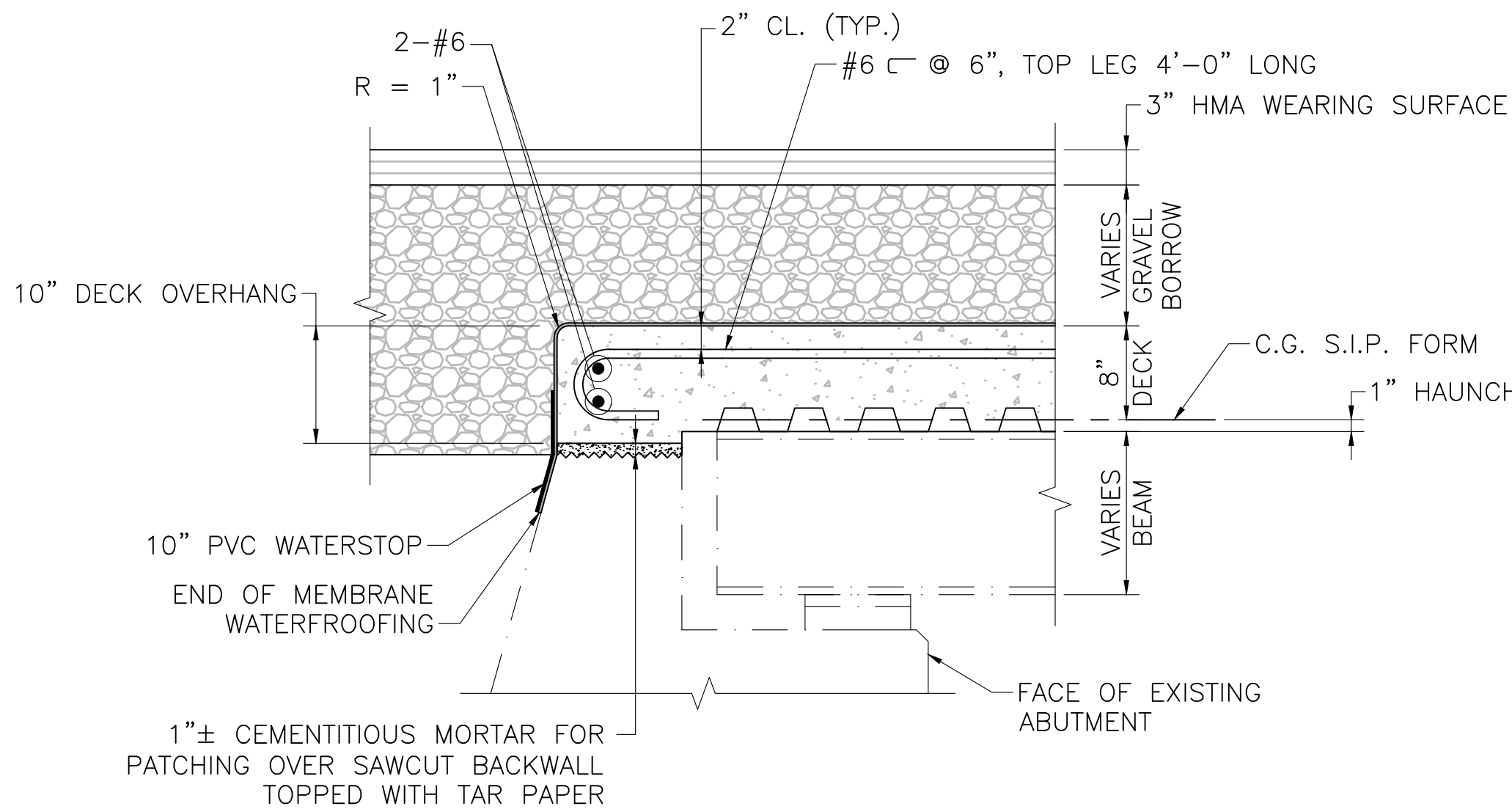


ELEVATION

NOTE:
NORTHWEST WINGWALL SHOWN, NORTHEAST WINGWALL SIMILAR.

NORTH U-WINGWALL

SCALE: $\frac{3}{8}" = 1'-0"$

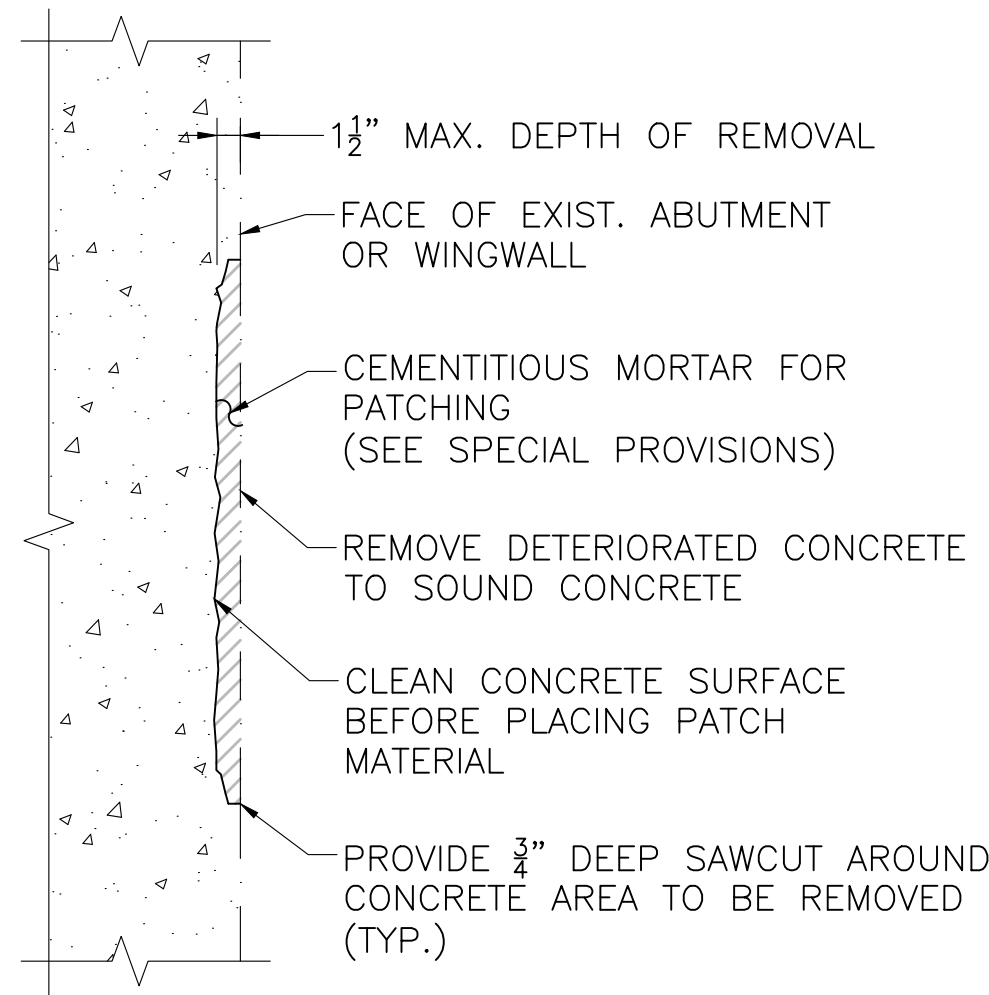


NOTES:

1. ALL DECK SLAB REINFORCEMENT NOT SHOWN FOR CLARITY.
2. WATERSTOP SHALL BE SECURED TO END OF DECK AND BACK OF ABUTMENT USING EPOXY PASTE PRIOR TO SPRAY APPLIED MEMBRANE PLACEMENT.

END OF DECK AT ABUTMENT

SCALE: 1" = 1'-0"

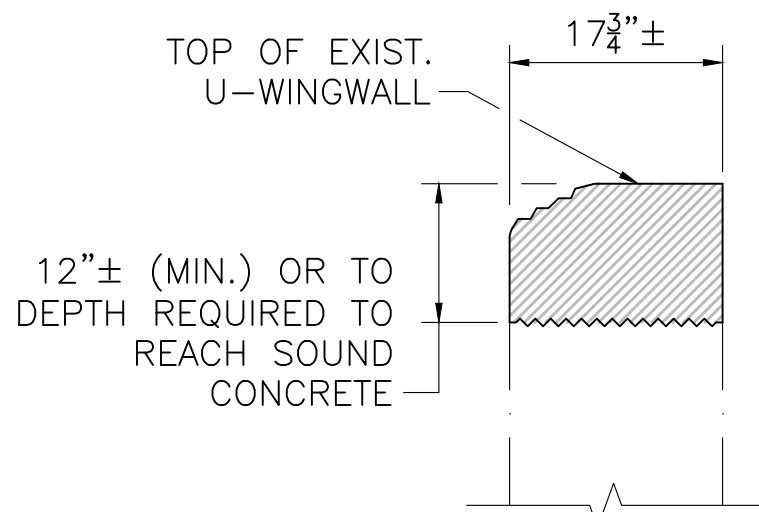


PARTIAL DEPTH REPAIR

SCALE: 1" = 1'-0"

EXCAVATION AND SURFACE REPAIR NOTES:

1. THE CONTRACTOR SHALL EXERCISE CARE WHEN REMOVING CONCRETE TO ONLY REMOVE DETERIORATED CONCRETE AND TO LIMIT THE SOUND CONCRETE REMOVED TO THE MINIMUM NECESSARY TO EFFECT A GOOD REPAIR.
2. THE LOCATION AND EXTENT OF ALL CONCRETE REPAIRS ARE TO BE FIELD VERIFIED AND APPROVED BY THE ENGINEER AFTER THE CONTRACTOR HAS SOUNDED AND MARKED OUT THE REPAIR AREAS. REPAIR CONFIGURATIONS SHOULD BE KEPT AS SIMPLE AS POSSIBLE, PREFERABLY WITH SQUARE CORNERS.
3. THE LIMITS OF THE REPAIRS SHALL BE SAWCUT ALONG NEAT LINES TO A DEPTH OF $\frac{3}{4}"$ TO PRODUCE A CLEAN EDGE.
4. AFTER DETERIORATED CONCRETE REMOVAL AND EDGE PREPARATION ARE COMPLETE, REMOVE BOND INHIBITING MATERIALS (DIRT, GREASE, LOOSELY BONDED AGGREGATE) BY ABRASION BLASTING OR HIGH PRESSURE WATER BLASTING WITH WATER THAT CONTAINS NO DETERGENTS OR BOND INHIBITING CHEMICALS. CHECK THE CONCRETE SURFACES AFTER CLEANING TO INSURE THAT THE SURFACE IS FREE FROM ADDITIONAL LOOSE AGGREGATE OR THAT ADDITIONAL DELAMINATIONS ARE NOT PRESENT.
5. CEMENTITIOUS MORTAR FOR PATCHING (SEE SPECIAL PROVISIONS) SHALL BE USED TO PERFORM THE REPAIRS WITH DEPTH $\leq 1\frac{1}{2}"$ AS SHOWN IN THIS DETAIL. FOR REPAIRS WITH DEPTH $> 1\frac{1}{2}"$, 5000 PSI $\frac{3}{8}"$ 710 HP CEMENT CONCRETE SHALL BE USED.
6. PRESOAK CONCRETE SUBSTRATE WITH A WATER HOSE FOR 24 HOURS OR AS LONG AS SITE CONSTRAINTS PERMIT. AT TIME OF REPAIR CONCRETE PLACEMENT, SUBSTRATE SHALL BE SATURATED SURFACE DRY WITH NO STANDING WATER.
7. ALL SURFACES SHALL BE RUBBED TO PRODUCE A SMOOTH FINISH TO MATCH EXISTING SURFACES.
8. IF AN EPOXY BONDING COMPOUND IS USED (AS DIRECTED BY THE ENGINEER), THE MATERIALS SHALL MEET AASHTO M235 TYPE V. GRADE AND CLASS SHALL BE SPECIFIED FOR EACH INDIVIDUAL APPLICATION. THE EPOXY COMPOUND SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. IN NO CASE WILL THE EPOXY BONDING COMPOUND BE ALLOWED TO CURE TO A HARDENED STATE PRIOR TO CONCRETE PLACEMENT. IF THIS DOES OCCUR IT MUST BE COMPLETELY REMOVED.

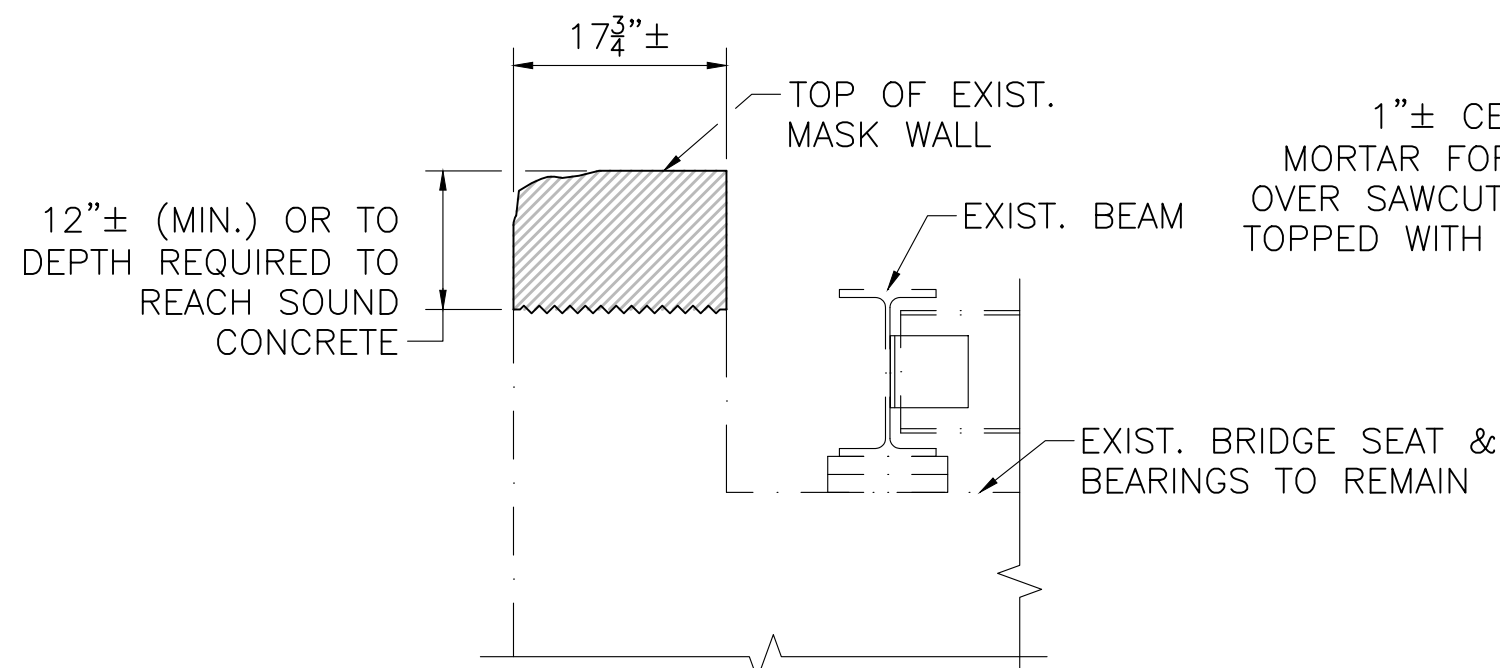


EXISTING

■ DENOTES DEMOLITION LIMITS

SECTION 1

SCALE: $\frac{3}{4}" = 1'-0"$

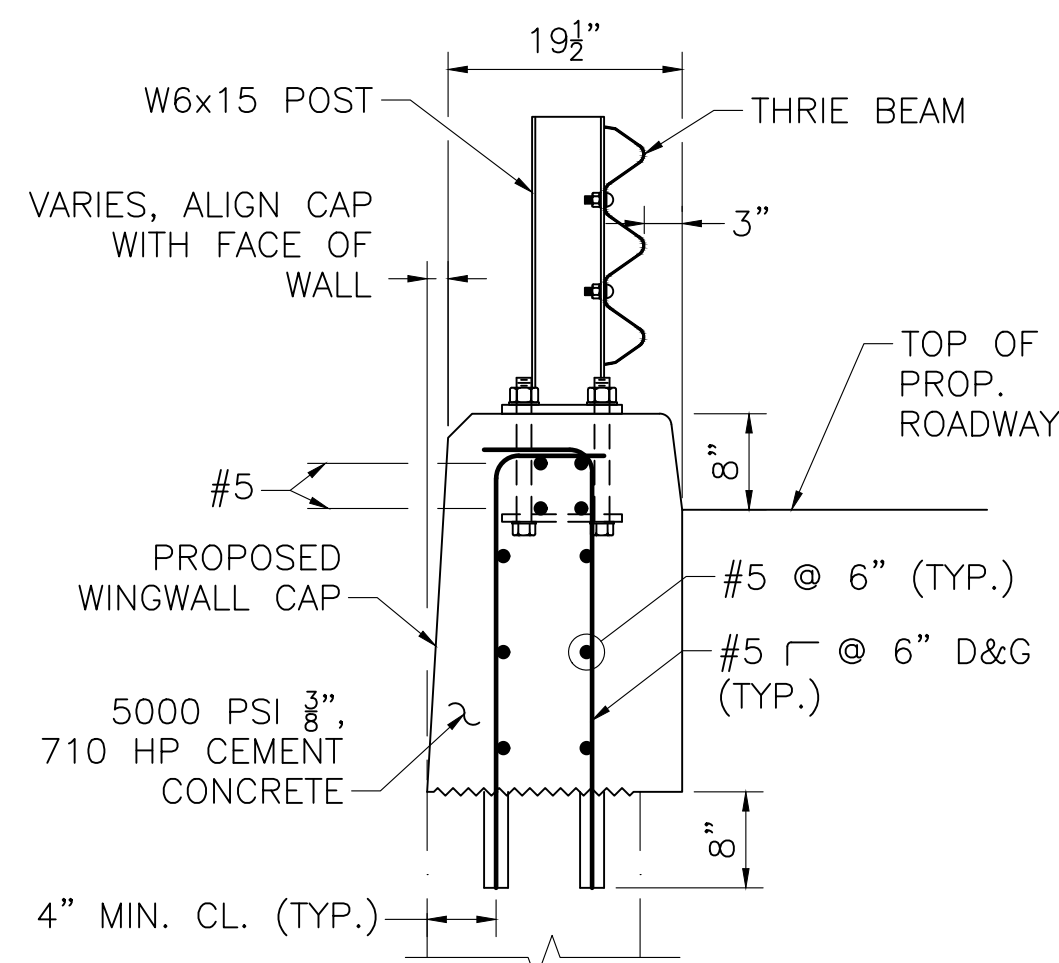


EXISTING

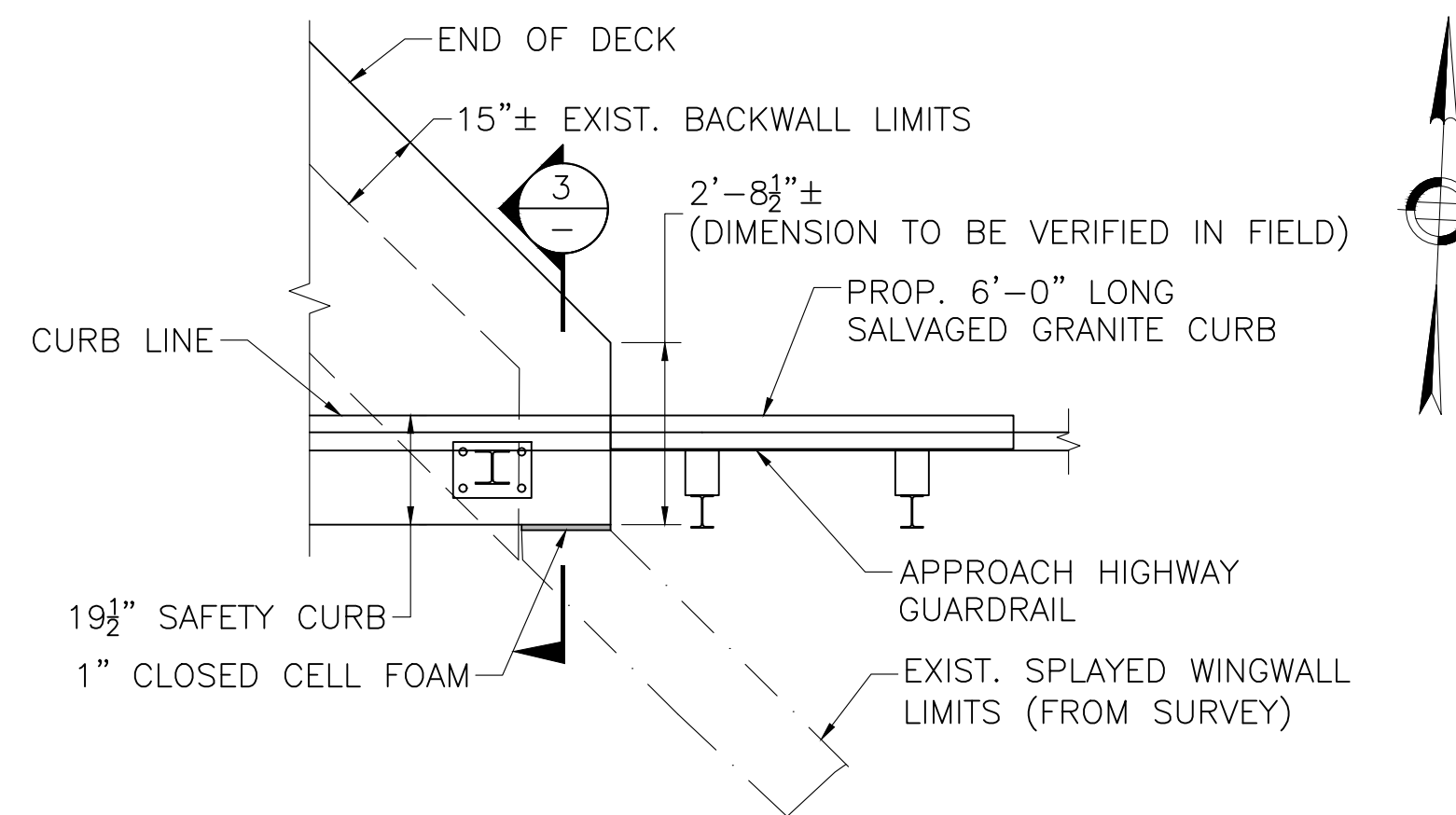
■ DENOTES DEMOLITION LIMITS

SECTION 2

SCALE: $\frac{3}{4}" = 1'-0"$



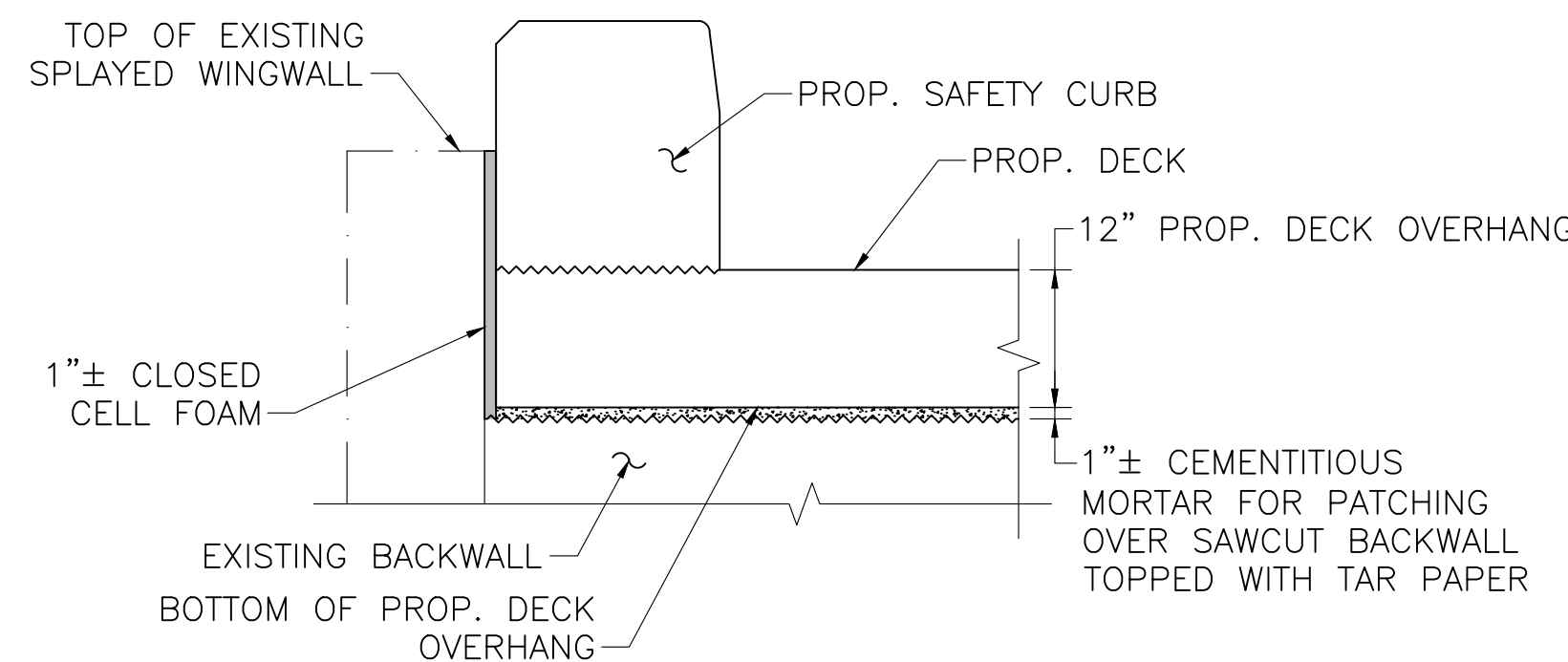
PROPOSED



SOUTH SPLAYED WINGWALL -- PLAN

SCALE: $\frac{3}{8}" = 1'-0"$

NOTE:
SOUTHEAST WINGWALL SHOWN, SOUTHWEST WINGWALL SIMILAR.



SECTION 3

SCALE: $\frac{3}{4}" = 1'-0"$

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MASS. GEN. LAWS CH 85 S 35
STATE BRIDGE ENGINEER DATE

PROPOSED DECK REPLACEMENT

TOWN OF CHARLEMONT
DECK REPLACEMENT FOR CHARLEMONT
C-05-027 (OET)
SOUTH RIVER ROAD OVER ALBEE BROOK

BACKWALL & WINGWALL DETAILS

SHEET 5 OF 8

63 KENDRICK STREET
NEEDHAM, MA 02494
781-355-7100
781-355-7101 (FAX)

GILL
ENGINEERING

DATE 12/17/24

DRW BY DCH

CALC BY TBS

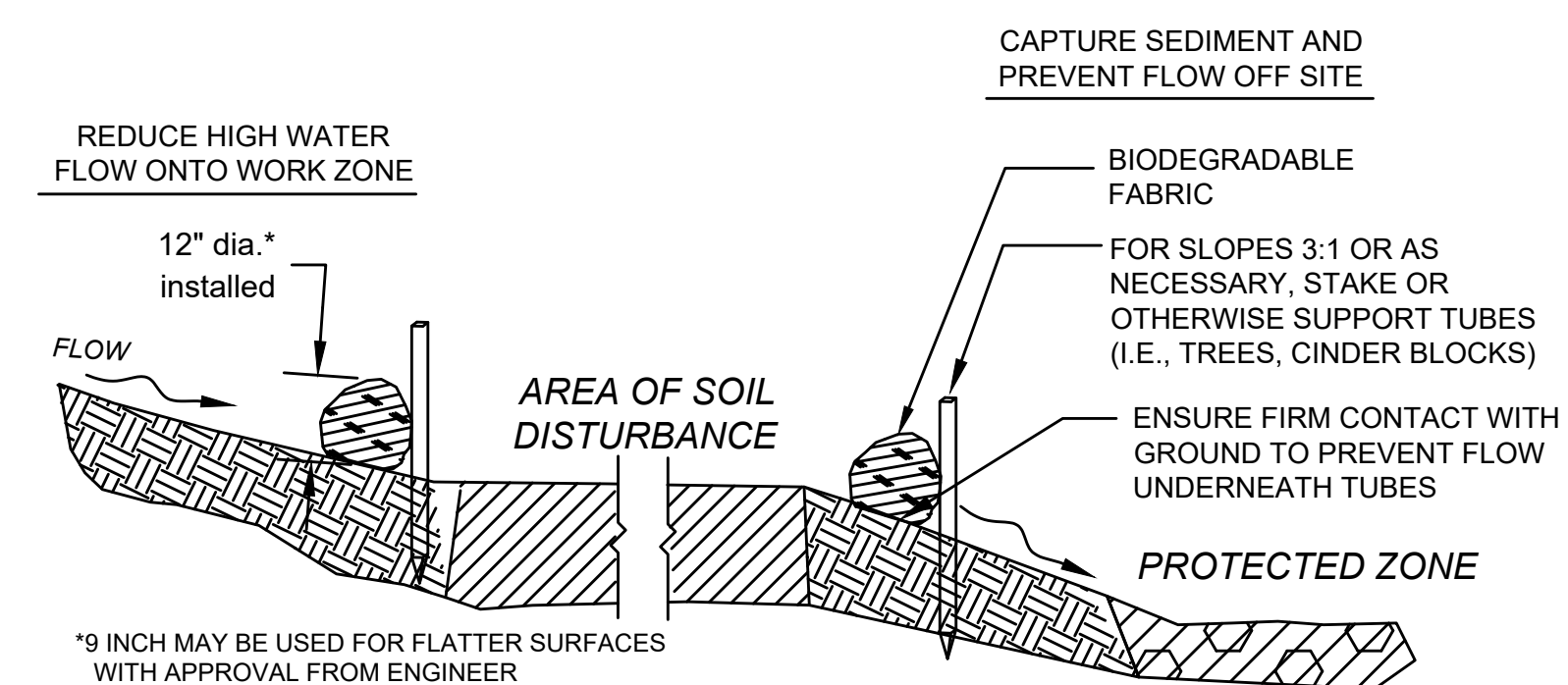
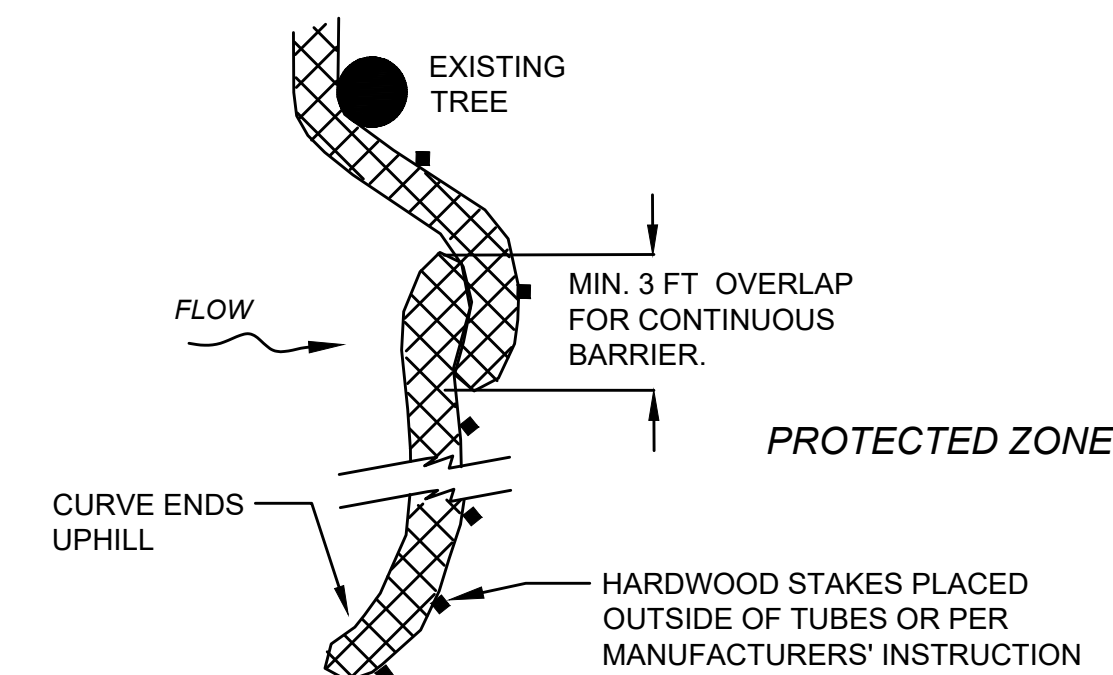
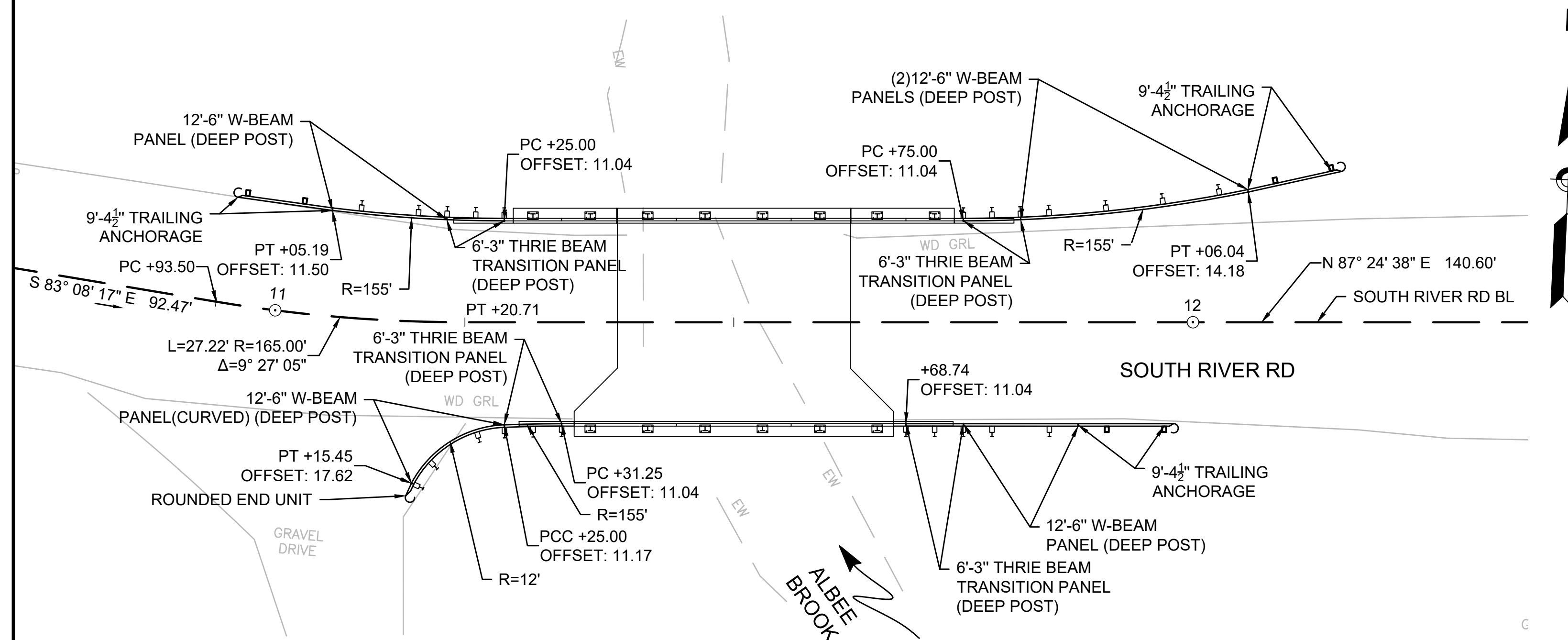
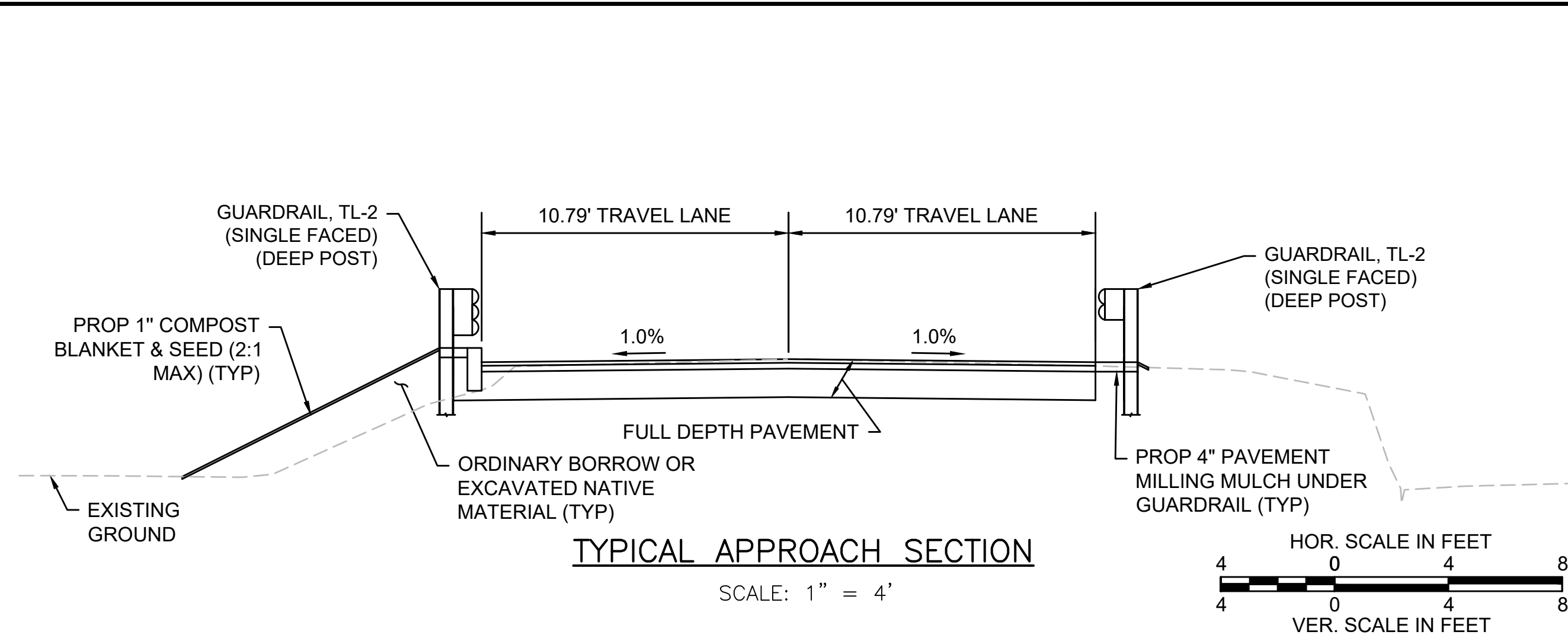
APPRV BY DSC

ISSUED FOR CHAPTER 85 REVIEW

DESCRIPTION

DATE

REGISTERED PROFESSIONAL ENGINEER

[illegible]

