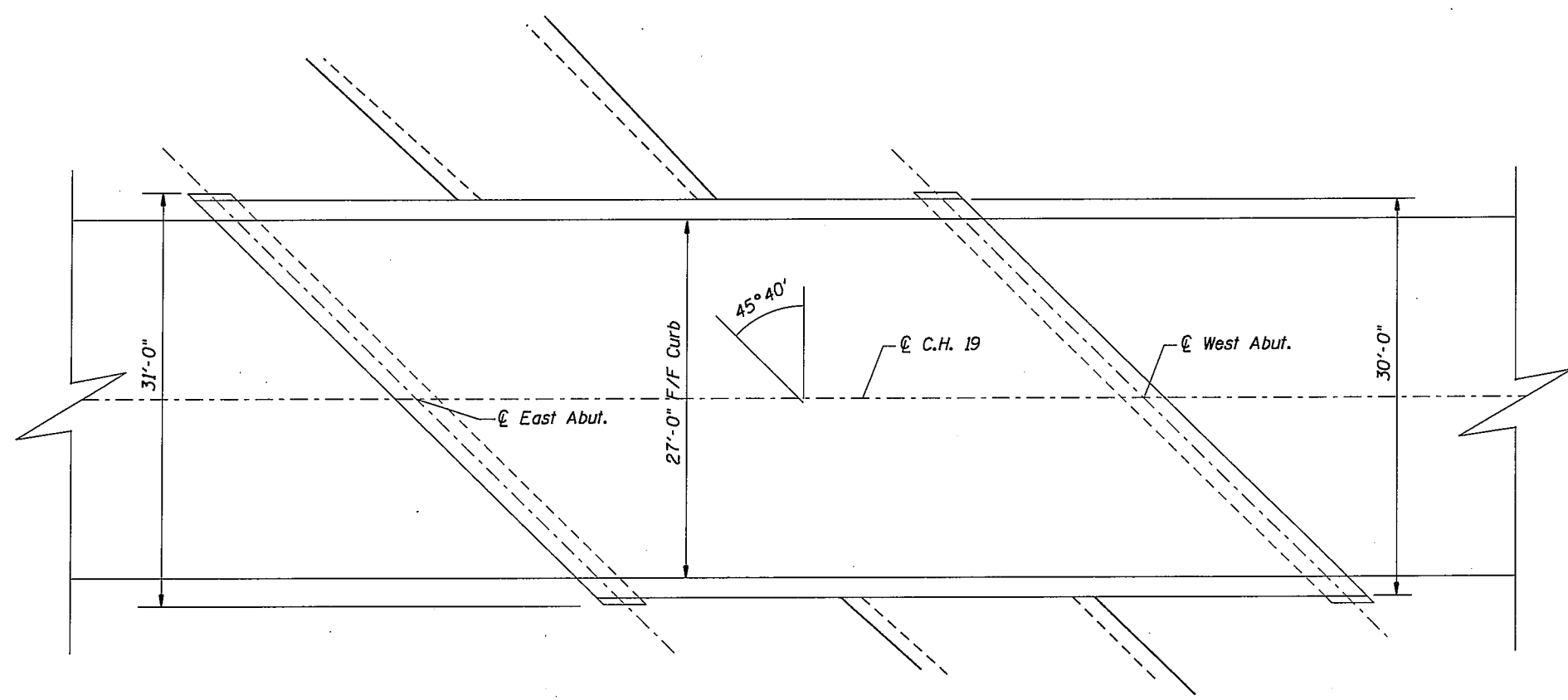
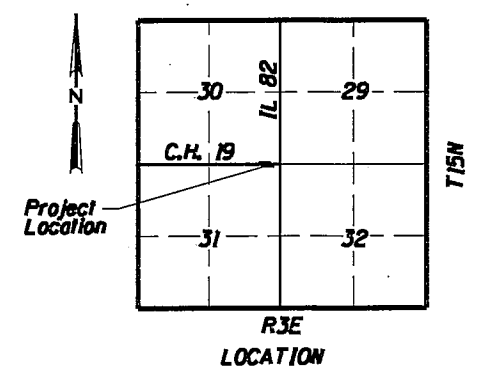
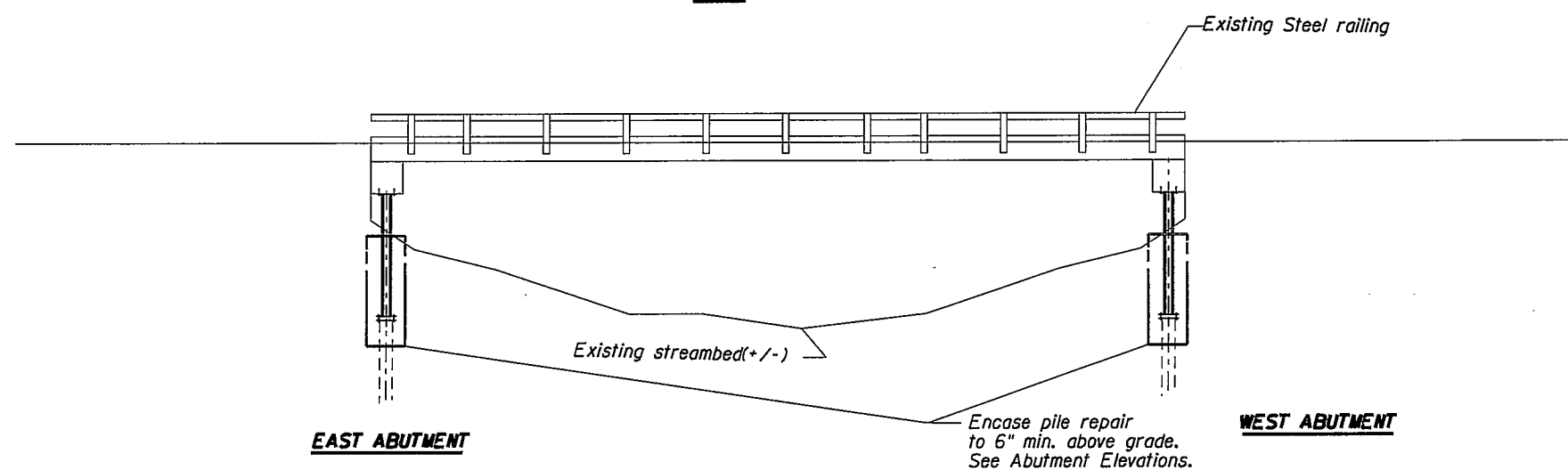


ROUTE NO.	STRUCTURE NO.	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 19	037-3006	HENRY	4	1
STA.	TO STA.			
F.H.W.A. REG.	ILLINOIS PROJECT			



PLAN



EAST ABUTMENT

WEST ABUTMENT

**ELEVATION
(LOOKING SOUTH)**

GENERAL NOTES

- The bridge shall be closed to traffic for the duration of the repairs, and until the concrete has achieved $f'_c = 3,500$ p.s.i.
- THE BRIDGE MUST BE SHORED PRIOR TO REMOVAL OF ANY TIMBER PILES.** Deteriorated timber piles shall be replaced as shown on the Abutment sheets with steel columns. Cut off each deteriorated timber pile at an elevation where the pile is solid and sound, a minimum of 2'-0" below the existing grade. Replace each pile completely prior to cutting the next pile.
- Concrete encasement of the new columns and existing piles shall extend to a minimum of 4'-0" below the existing grade. Minimum concrete cover around the steel base plates shall be 3"
- Existing timber piles are irregular in shape and the distance between piles vary. Dimension shown are approximate only. Field verify all dimensions prior to ordering materials.
- Rehabilitate Piles No. 1 through No. 4, inclusive of the East Abutment, and Piles No. 2 through No. 7, inclusive, as shown on the abutment sheets. The Engineer may vary the number and location of the piles to be repaired in the field. The Contractor shall be paid at the Unit Price for each item for the quantities used.
- Reinforcement bars shall conform to the requirements of ASTM A706 Gr. 60.
- All structural steel shall be AASHTO M270 Grade 50.
- Fasteners shall be AASHTO M164 Type 1, mechanically galvanized threaded rods. Rods $\frac{3}{4}$ in. diameter, holes $\frac{7}{8}$ in. diameter, unless otherwise noted.
- The excavated holes for the pier repairs shall be kept dry. The Contractor shall be responsible for diversion of water. This work shall not be paid for separately, and no additional compensation shall be made.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QTY.
Furnish & Erect Structural steel	Pound	4,198
Reinforcement bars	Pound	1,000
Shore existing structure	L. Sum	1
Structure Excavation	Cu. Yd.	118
Concrete structures	Cu. Yd.	21.7

DESIGN SPECIFICATIONS (EXISTING)

Design Criteria for Prestressed Concrete Bridges
Bureau of Public Roads - 1954

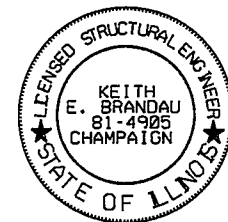
Illinois Department of Transportation Standard Specifications
for Road and Bridge Construction - 1958

DESIGN LOADING (EXISTING)

H 15 S-12

DESIGN STRESSES (NEW)

$f'_c = 3,500$ psi (Cast in Place Concrete)
 $f_y = 50,000$ psi (Structural Steel)
 $f_y = 60,000$ psi (Reinforcement)

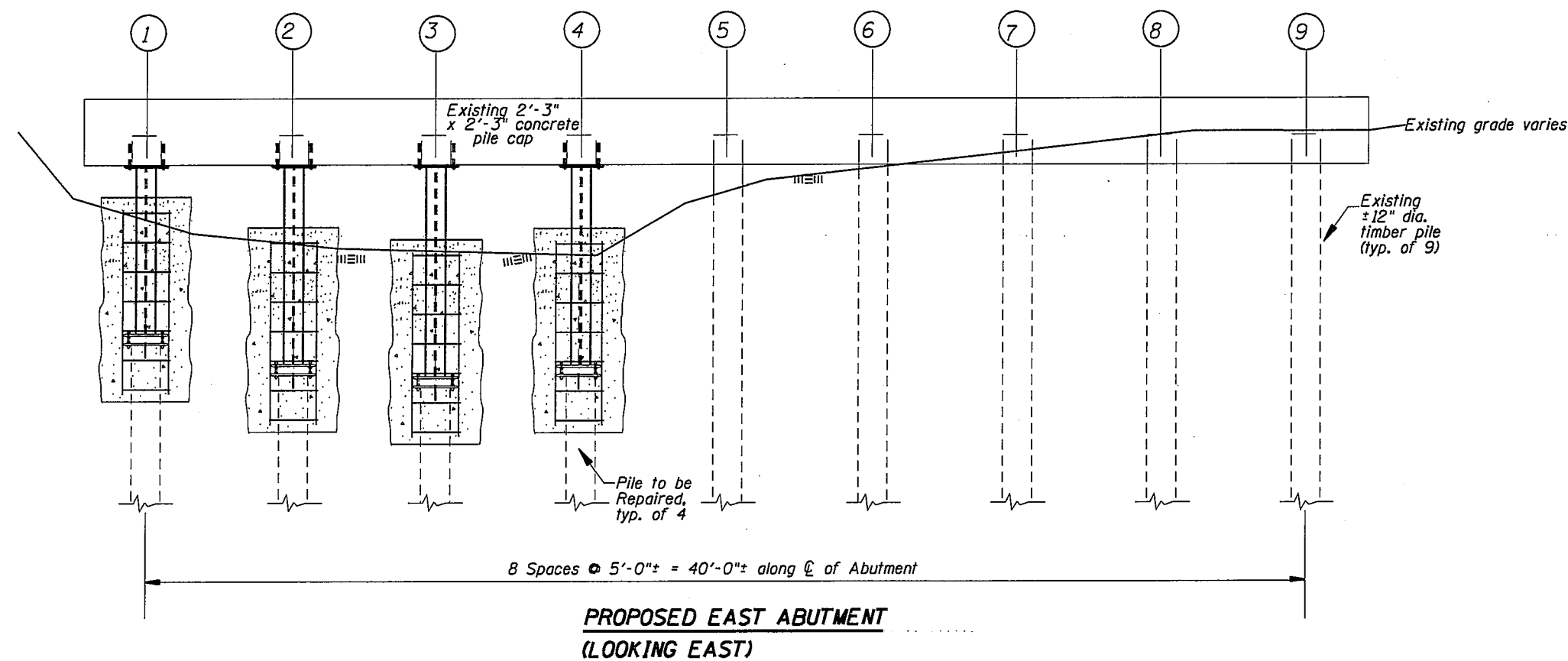
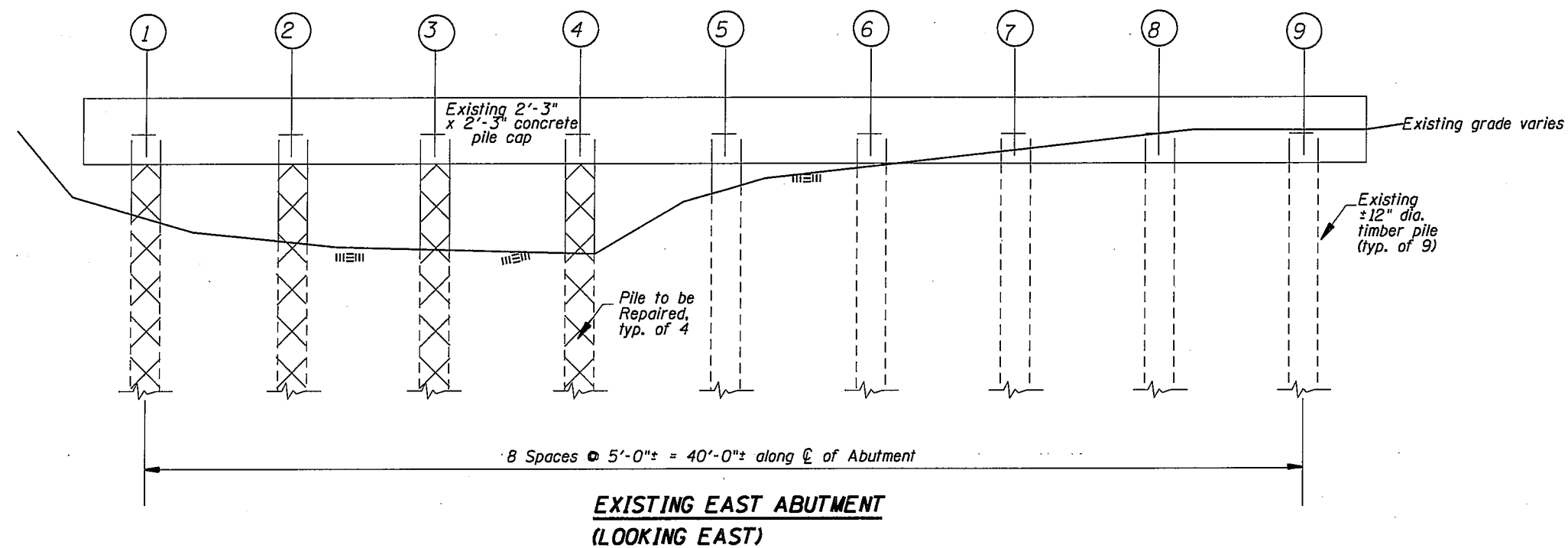


Keith E. Brandau 7/20/11
KEITH E. BRANDAU DATE

Illinois Licensed Structural Engineer Number 081-4905
License Expires 11/30/12

GENERAL PLAN & ELEVATION
S.N. 037-3006 C.H. 19
HENRY COUNTY
C STATION 10+00

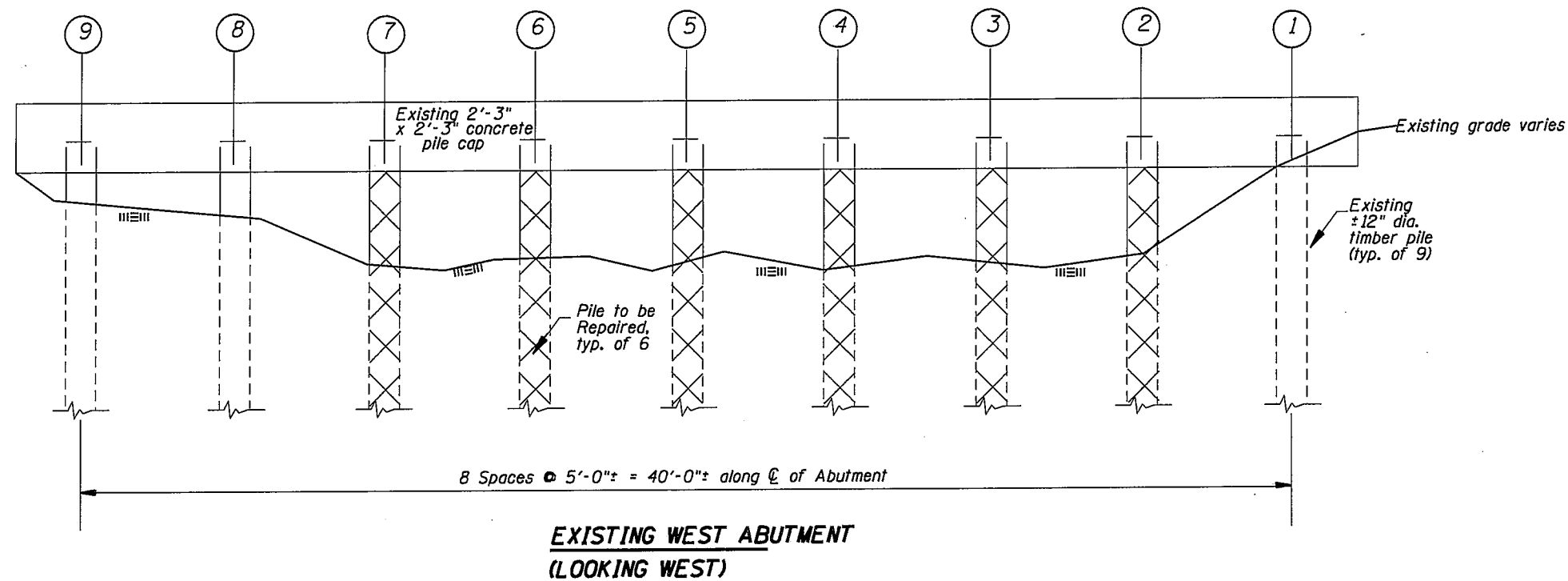
ROUTE NO.	STRUCTURE NO.	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 19	037-3006	HENRY	4	2
STA.	TO STA.			
F.H.W.A. REG.	ILLINOIS	PROJECT		



- NOTES:
1. The Engineer may vary the number and location of the piles to be repaired in the field. The Contractor shall be paid at the Unit Price for each item for the quantities used, as directed by the Engineer.
 2. Existing backwall not shown for clarity. Do not remove backwall to facilitate pile repair.
 3. Each individual pile shall be repaired in its entirety, and the concrete shall cure a minimum of 2 days, prior to beginning excavation for the next pile to be repaired.
 4. The piles, as shown, shall be repaired in the following sequence: #1, #3, #2, and #4.

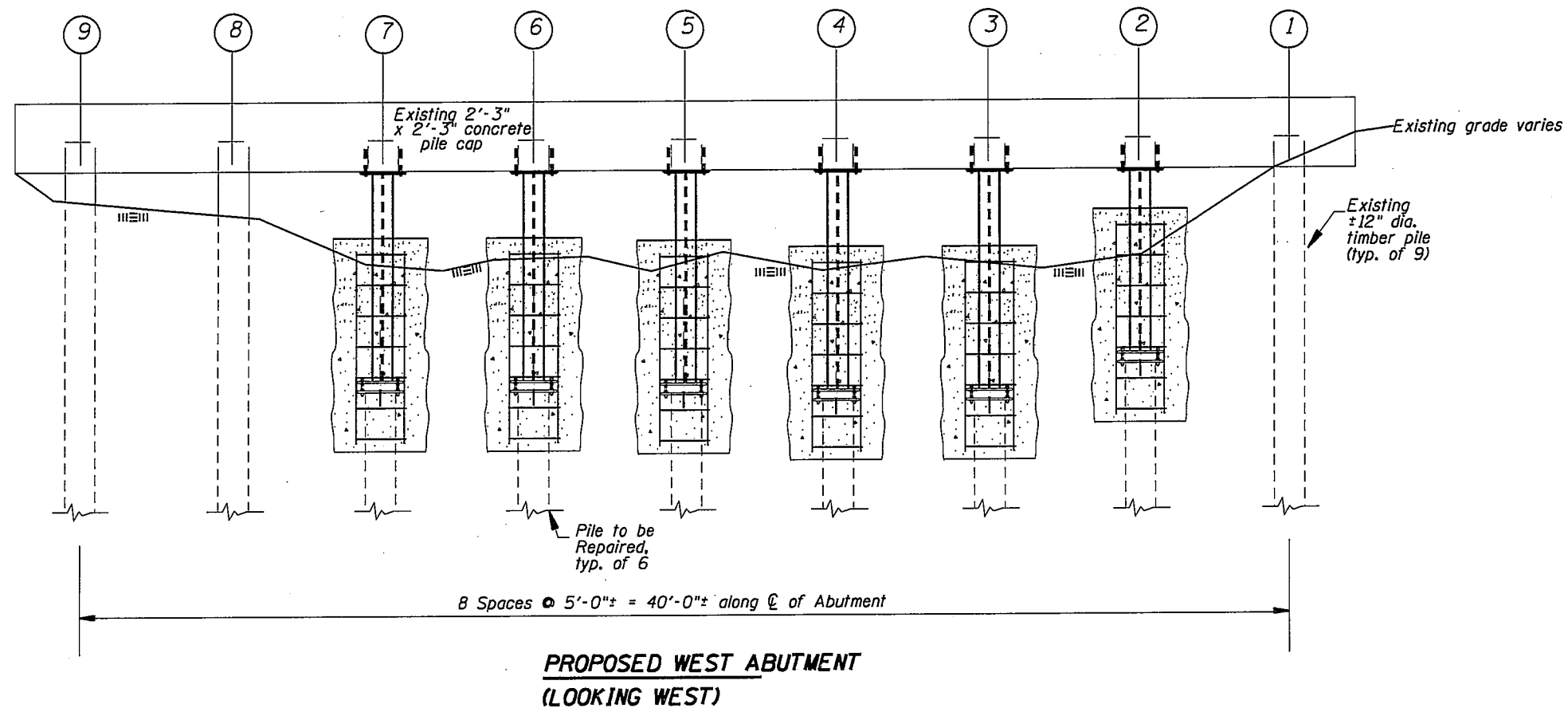
EAST ABUTMENT
 S.N. 037-3006 C.H. 19
 HENRY COUNTY
 Q STATION 10+00

ROUTE NO.	STRUCTURE NO.	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 19	037-3006	HENRY	4	3
STA.	TO STA.			
F.H.W.A. REG.	ILLINOIS PROJECT			

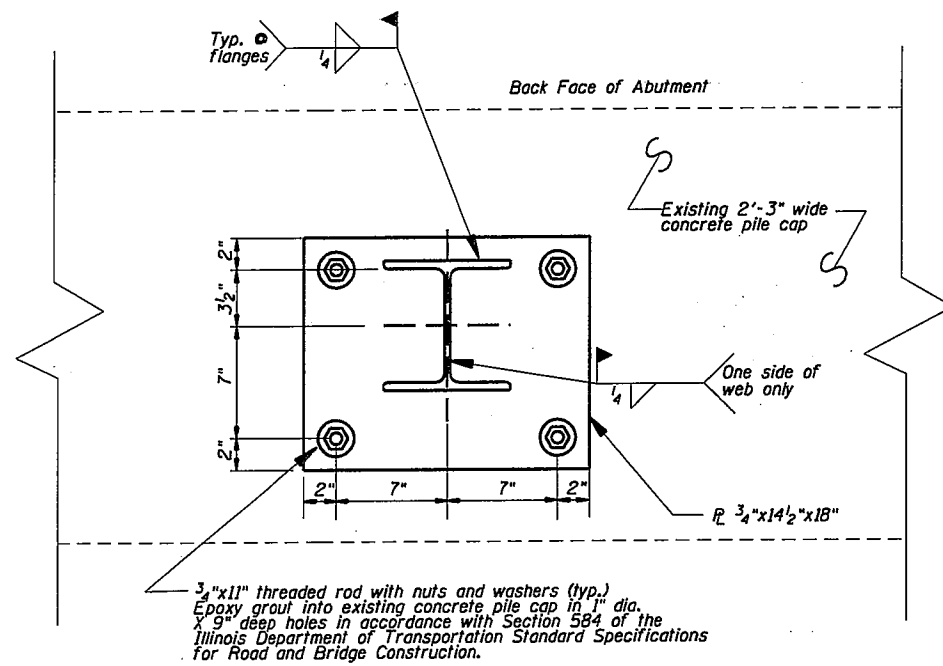


NOTES:

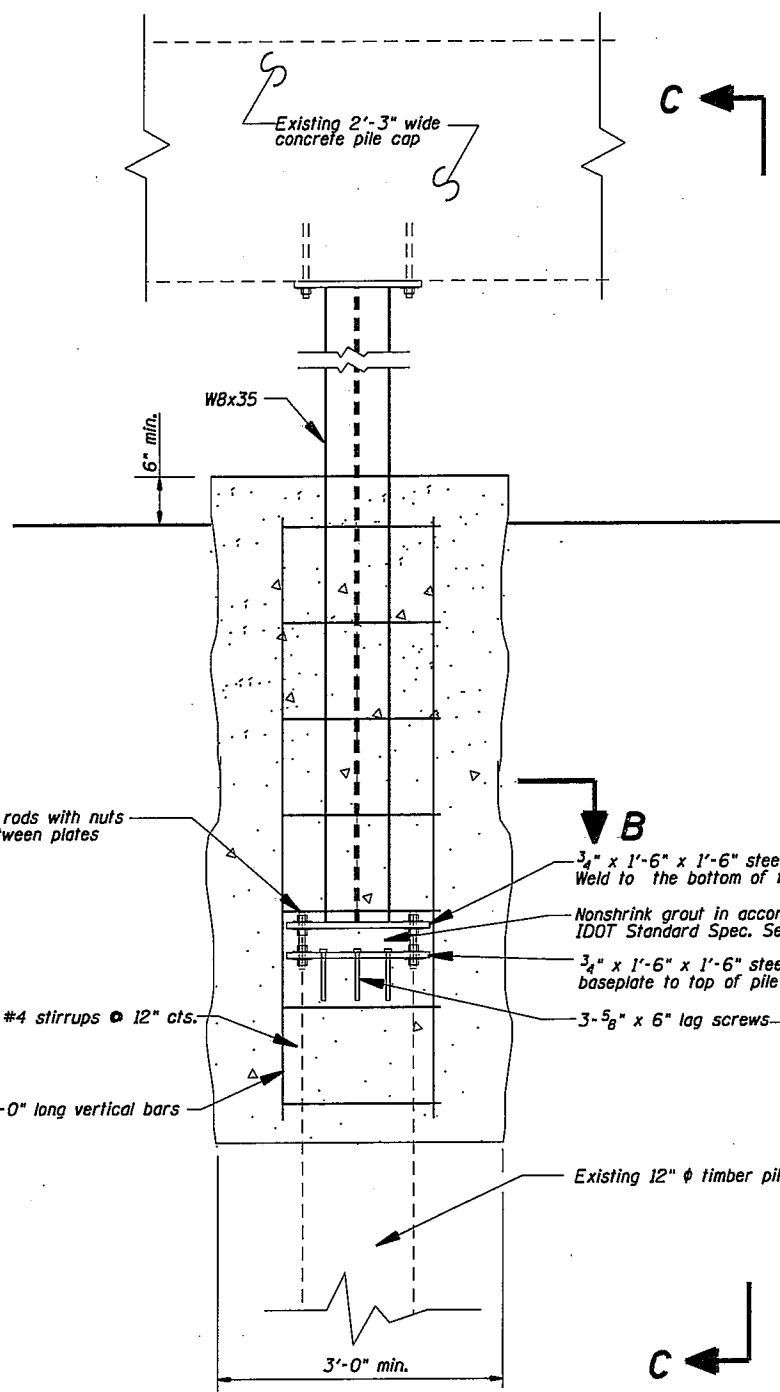
1. The Engineer may vary the number and location of the piles to be repaired in the field. The Contractor shall be paid at the Unit Price for each item for the quantities used, as directed by the Engineer.
2. Existing backwall not shown for clarity. Do not remove backwall to facilitate pile repair.
3. Each individual pile shall be repaired in its entirety, and the concrete shall cure a minimum of 2 days, prior to beginning excavation for the next pile to be repaired.
4. The piles, as shown, shall be repaired in the following sequence: #2, #4, #6, #3, #5, and #7.



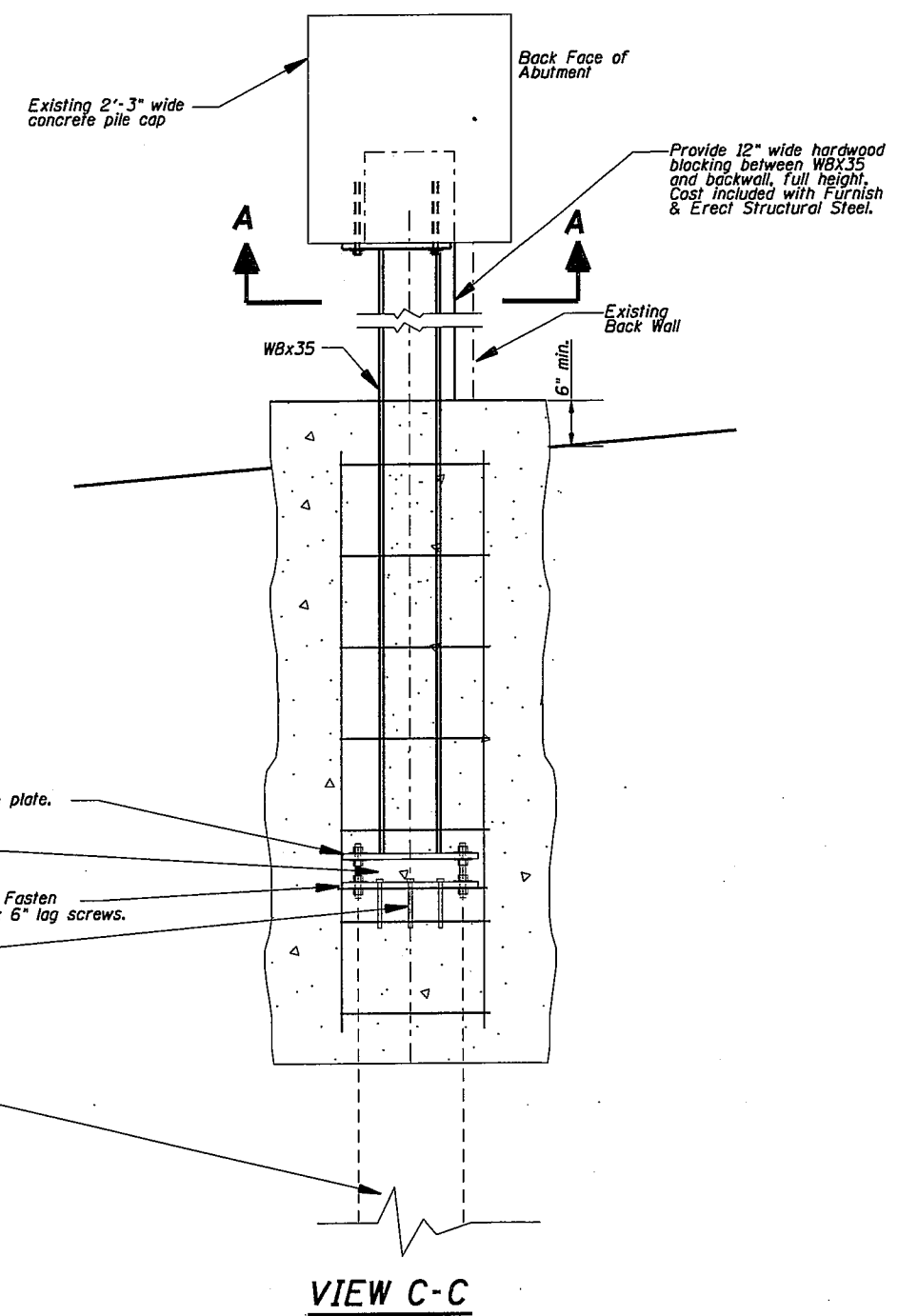
WEST ABUTMENT
S.N. 037-3006 C.H. 19
HENRY COUNTY
C STATION 10+00



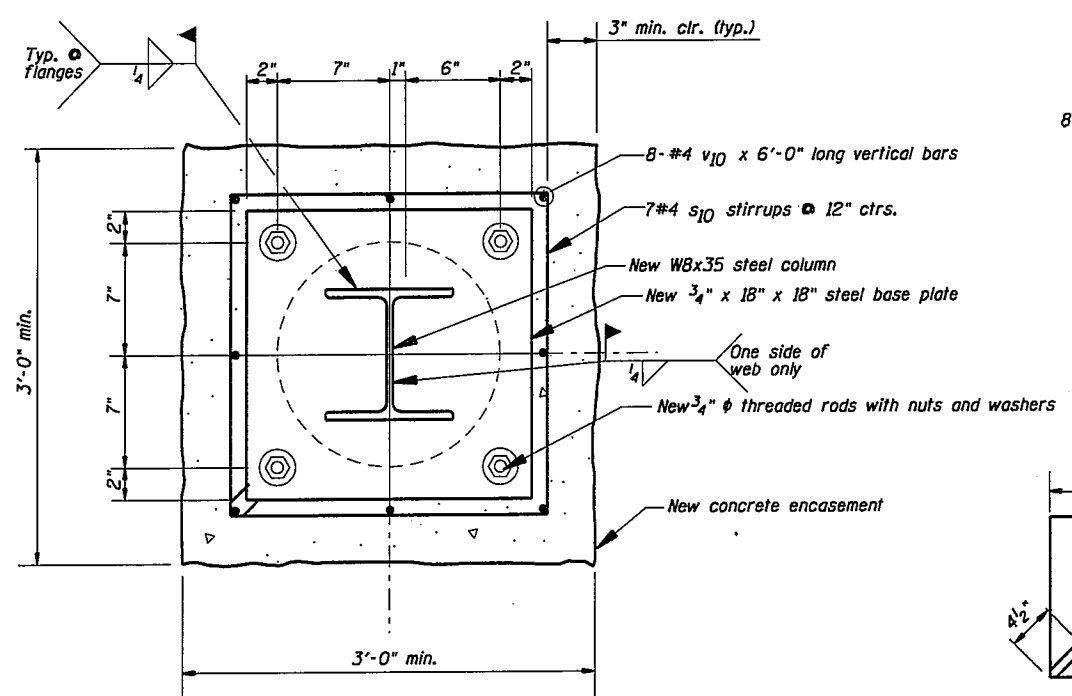
SECTION A-A



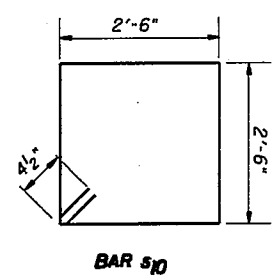
ELEVATION



VIEW C-C



SECTION B-B



BAR #10

BILL OF MATERIAL - 10 PILES

Bar No.	Size	Length	Shape
70	#4	10'-9"	□
80	#5	6'-0"	—
Structure Excavation		Cu. Yd.	118
Concrete Structures		Cu. Yd.	21.7
Reinforcement Bars		Pound	1,000

NOTE: Order #10(E) bars full length and field cut as needed.

PIER REPAIR DETAILS
 S.N. 037-3006 C.H. 19
 HENRY COUNTY
 STATION 10+00