| ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NUMBER |
|---------|-----------|--------|-----------------|-----------------|
| FAP 330 | 2004-1301 | WILL | 14 _ | 1 |

DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS DISTRICT ONE

PROPOSED HIGHWAY PLANS

STATE OF ILLINOIS

FAP 330: US 45

1) OVER NORTH BRANCH PRAIRIE CREEK,

(SN: 099-0118)

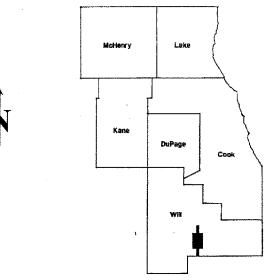
2) OVER PRAIRIE CREEK, (SN: 099-0119)

SECTION 2004-130I
P.P.C. DECK BEAM REPLACEMENT
WILL COUNTY
C-91-100-05

GREEN GARDEN TOWNSHIP

CONTRACT: 62900

D-91-100-05



LOCATION OF IMPROVEMENTS INDICATED THUS:

TRAFFIC DATA

LOCATION 1 (SN 099-0118)

FOR INDEX OF SHEETS SEE SHEET 2

IMPROVEMENTS ARE

LOCATED IN GREEN

GARDEN TOWNSHIP

2003 ADT = 6,100

SPEED LIMIT = 55 MPH

LOCATION 2 (SN 099-0119)

2003 ADT = 6,100

SPEED LIMIT = 55 MPH

CONTRACT NO. 62900

LOCATION 1

Note: The stuenkel RD

Note: The

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED:

Merch 31, 20

DEPUTY DIRECTOR OF HIGHWAY, REGION ENGINEER

May 13 200

ENGINEER OF

May 13, 2005

DIRECTOR, DIVISION OF HIGHWA

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

J.U.L.I.E.: JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION (800) 892-0123

DISTRICT ONE BUREAU OF DESIGN PLAN PREPARATION ENGINEER: KEN ENG / R. BORO (847)-705-4178

| ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NUMBER |
|---------|-----------|--------|-----------------|-----------------|
| FAP 330 | 2004-1301 | WILL | 14 | 2 |

INDEX OF SHEETS

| 1 | TITLE SHEET |
|-------|--|
| 2 | INDEX OF SHEETS, STATE STANDARDS |
| | AND GENERAL NOTES |
| 3-4 | SUMMARY OF QUANTITIES |
| 5 | TRAFFIC STAGING PLANS, LOCATION 1, SN 099-0118 |
| 6 | TRAFFIC STAGING PLANS, LOCATION 2, SN 099-0119 |
| 7-10 | BRIDGE REPAIR PLANS, LOCATION 1, SN 099-0118 |
| 11-13 | BRIDGE REPAIR PLANS, LOCATION 2, SN 099-0118 |
| 14 | TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, |
| | INTERSECTIONS & DRIVEWAYS |

STATE STANDARDS

701301-02 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS

701321-09 LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER

702001-05 TRAFFIC CONTROL DEVICES

704001-02 TEMPORARY CONCRETE BARRIER

BITUMINOUS MIXTURE REQUIREMENTS

| MIXTURE | AC TYPE | MAX RAP (%) | AIR VOIDS |
|---|----------|-------------|--------------|
| BIT. CONC. SURFACE CSE. SUPERPAVE, MIX "D" N50 | PG 64-22 | 15% | 4% @ 50 GTR. |

*THE UNIT WEIGHT USED TO CALCULATE ALL BITUMINOUS SURFACE MIXTURE QUANTITIES IS 112 Lbs/SqYd/in.
NO VIBRATORY ROLLERS ALLOWED ON BRIDGE DECK

GENERAL NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. (48 HOUR NOTIFICATION IS REQUIRED).

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD (FOR FUTURE REFERENCES), ALL EXISTING PAVEMENT MARKING LINES AND RAISED REFLECTIVE PAVEMENT MARKERS IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL STRIPING SHALL BE AS DIRECTED BY THE ENGINEER.

ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE CONCRETE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

THE CONTRACTOR SHALL CONTACT MS. DEBBIE HANLON, TRAFFIC FIELD ENGINEER AT (847) 438-2300, TWO (2) WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM DISTRICT BRIDGE INSPECTORS.

THE THICKNESS OF THE BITUMINOUS MIXTURE SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE BITUMINOUS MIXTURE IS PLACED.

THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

CONCRETE SUPERSTRUCTURE SHALL HAVE A SEVEN (7) DAY MINIMUM CURE TIME.

ILLINOIS DEPARTMENT OF TRANSPORTATION

CONTRACT: 62900

INDEX OF SHEETS STATE STANDARDS GENERAL NOTES

| | | <u></u> | TOTAL | SHEET |
|---------|-----------|---------|--------|--------|
| ROUTE | SECTION | COUNTY | SHEETS | NUMBER |
| FAP 330 | 2004-1301 | WILL | 14 | 3 |

| LOCATION C | OF WORK: 1) US 45 OVER NORTH BRANCH PRAIRIE CREEK, SN 099-0118 2) US 45 OVER PRAIRIE CREEK, SN 099-0119 | | | | |
|------------|--|---------------|------------|--|---------------------|
| | SUMMARY OF QUANTITIES | | | CONSTRUCTIO | ON TYPE CODE |
| | | | TOTAL | ······································ | / –2A |
| CODE NO. | DESCRIPTION | UNIT | QUANTITIES | Loc. 1: SN 099-0118 | Loc. 2: SN 099-0119 |
| 44001000 | BITUMINOUS CONCRETE SURFACE REMOVAL | SQ YD | 91.9 | 63.6 | 8.3 |
| 50102400 | CONCRETE REMOVAL | CU YD | 13.7 | 5.2 | 8.5 |
| 50300100 | FLOOR DRAINS CONCRETE SUPERSTRUCTURE | EACH CU YD | 6 | 5.2 | 8.5 |
| 50300200 | | 5Q 40 | 13.7 | 19.5 | 14.2 |
| 50400405 | PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH) | SQ FT | 2070 | 1065 | 1005 |
| 50800205 | REINFORCEMENT BARS, EPOXY COATED | POUND | 2190 | 830 | 1360 |
| 58100200 | WATERPROOFING MEMBRANE SYSTEM | SQ YD | 303.5 | 193.5 | 110 |
| 58300100 | PORTLAND CEMENT MORTAR FAIRING COURSE | FOOT | 867 | 494 | 373 |
| 67000400 | ENGINEER'S FIELD OFFICE, TYPE A | CAL MO | 4 | 2 | 2 |
| 67100100 | MOBILIZATION | L SUM | 1 | 0.5 | 0.5 |
| 70100405 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 | EACH | 2 | 1 | 1 |
| 70400100 | TEMPORARY CONCRETE BARRIER | FOOT | 360 | 180 | 180 |
| 70400200 | RELOCATE TEMPORARY CONCRETE BARRIER | FOOT | 360 | 180 | 180 |
| 89000100 | TEMPORARY TRAFFIC SIGNAL INSTALLATION | EACH | 2 | 1 | 1 |
| | | [| 1 | | |

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES (SHEET 1 OF 2)

Rev

| ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NUMBER |
|---------|-----------|--------|-----------------|-----------------|
| FAP 330 | 2004-1301 | WILL | 14 | 4 |

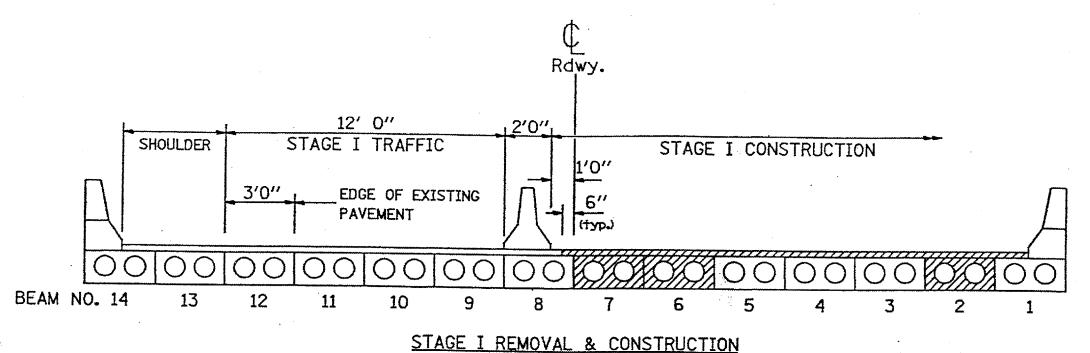
| LC | DCATION C | OF WORK: 1) US 45 OVER NORTH BRANCH PRAIRIE CREEK, SN 099-0118 2) US 45 OVER PRAIRIE CREEK, SN 099-0119 | · | | | |
|----|-----------|--|-------|------------------|-----------------------------|-----------------------------|
| ļ | | SUMMARY OF QUANTITIES | | | CONSTRUCTIO | N TYPE CODE |
| С | ODE NO. | DESCRIPTION | UNIT | TOTAL QUANTITIES | SFTY Loc. 1: SN 099-0118 | ′-2A Loc. 2: SN 099-0119 |
| X | (0320047 | REMOVAL OF EXISTING PRECAST PRESTRESSED CONCRETE DECK BEAMS | SQ FT | 2084 | 1076 | / 1008 |
| X | (0322467 | TEMPORARY INFORMATION SIGNING FOR LANE CLOSURE | SQ FT | 96 | 48 | 48 |
| X | 4066424 | BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE MIX "D" N50 | TON | 34,2 | 21.8 | 12.4 |
| Z | 0030240 | IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2 | EACH | 4 | 2 | 2 |
| Z | 0030340 | IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 2 | EACH | 4 | 2 | 2 |

△SFTY-3N

ILLINOIS DEPARTMENT OF TRANSPORTATION

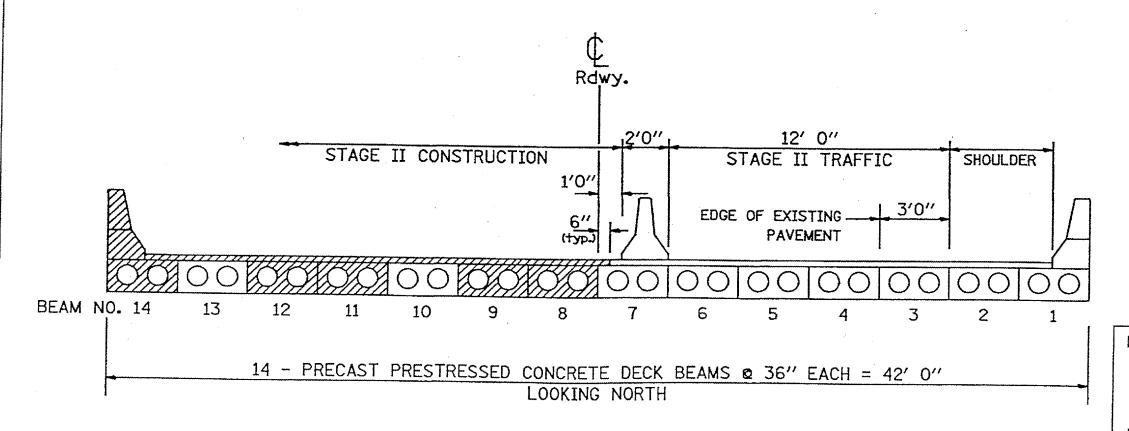
SUMMARY OF QUANTITIES (SHEET 2 OF 2)

| ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NUMBER |
|---------|-----------|--------|-----------------|-----------------|
| FAP 330 | 2004-1301 | WILL · | 13 | 5 |



NOTE:

Shoulders shall be brought to grade before they are used for traffic. This work shall be paid for by the contract unit price for, "Bituminous Concrete Surface Course, Superpave Mix "D" N50.

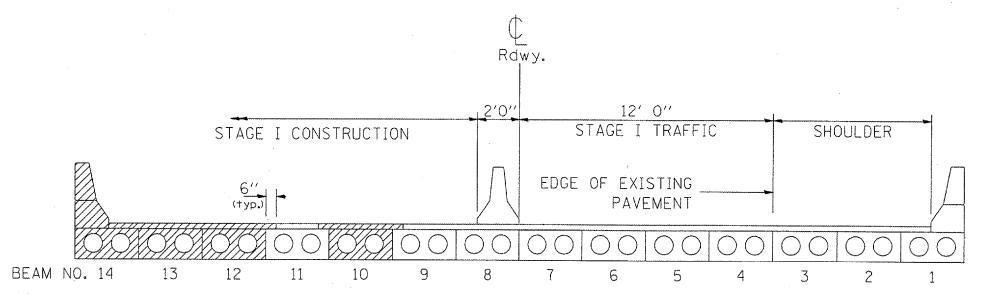


STAGE II REMOVAL & CONSTRUCTION

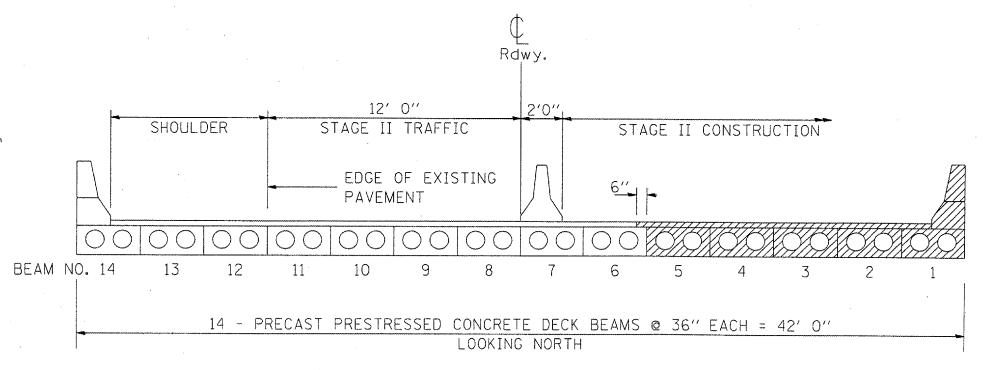
ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC STAGING PLANS
TYPICAL SECTIONS

US 45 OVER NORTH BRANCH PRAIRIE CREEK SN 099-0118

| ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NUMBER |
|-----------|-----------|--------|-----------------|-----------------|
| FAP 330 | 2004-1301 | WILL | 14 | 6 |



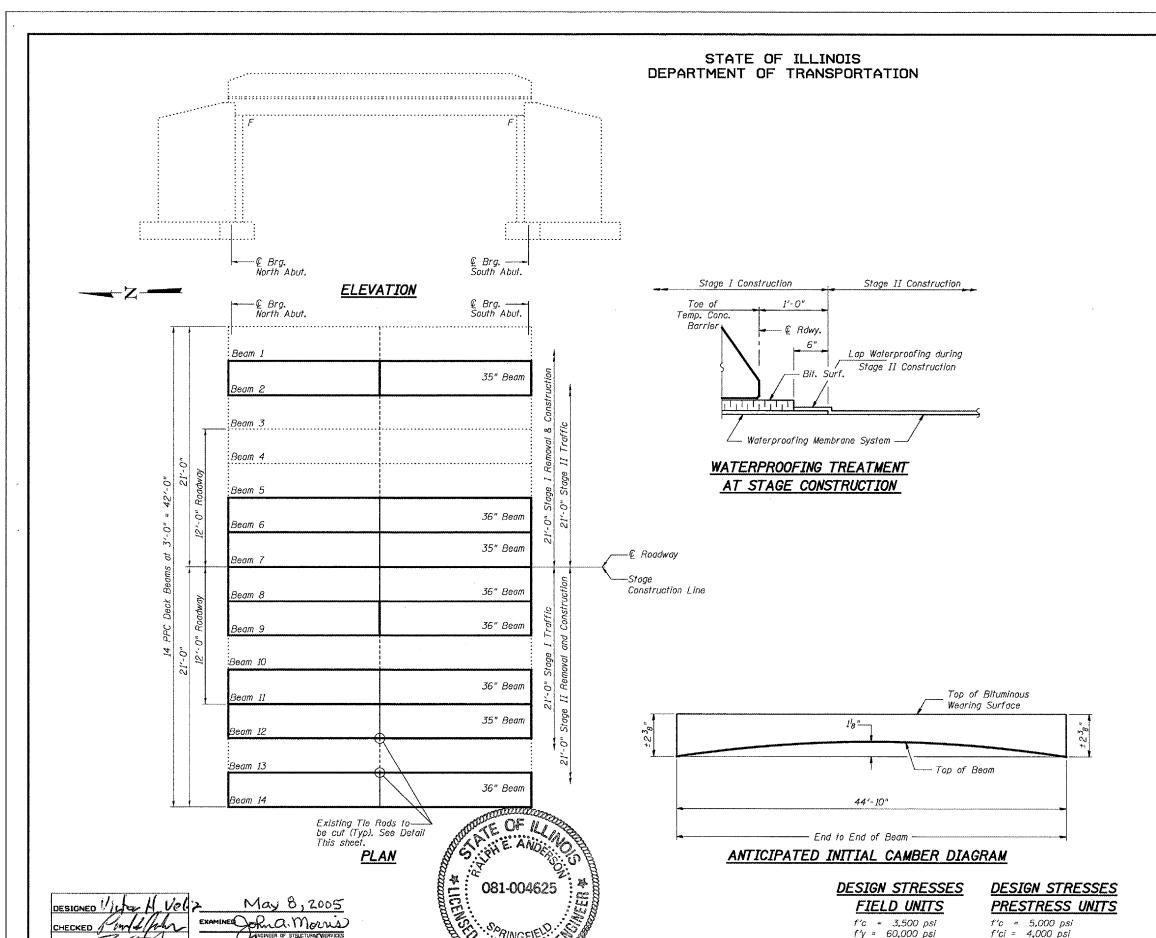
STAGE I REMOVAL & CONSTRUCTION



STAGE II REMOVAL & CONSTRUCTION

TRAFFIC STAGING PLANS TYPICAL SECTIONS

US 45 OVER PRAIRIE CREEK SN 099-0119



Expires 11-30-06

TOTAL SHEETS SHEET NO. SHEET NO. 1 14

62900

3 SHEETS

GENERAL NOTES

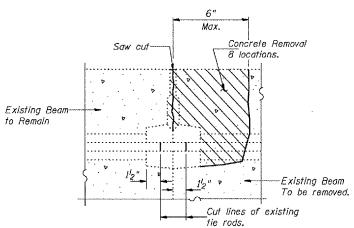
Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Any damage done to the bridge during beam removal shall be repaired by the Contractor. Cost to be included in the cost of "Removal of Existing P.P.C. Deck Beams".

Reinforcement bars shall conform to the requirements of AASHTO M-31 or M322 Grade 60.

The top surface of the beams shall be finished in accordance with Article 504.06 of the Standard Specifications except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners, and the top edge of keys shall be rounded or chamfered a minimum of 4".

Temporary concrete barrier shall only be anchored into the overlay and not the PPC Deck Beams.



BEAM REMOVAL DETAIL AT TRANSVERSE TIES

TOTAL BILL OF MATERIAL

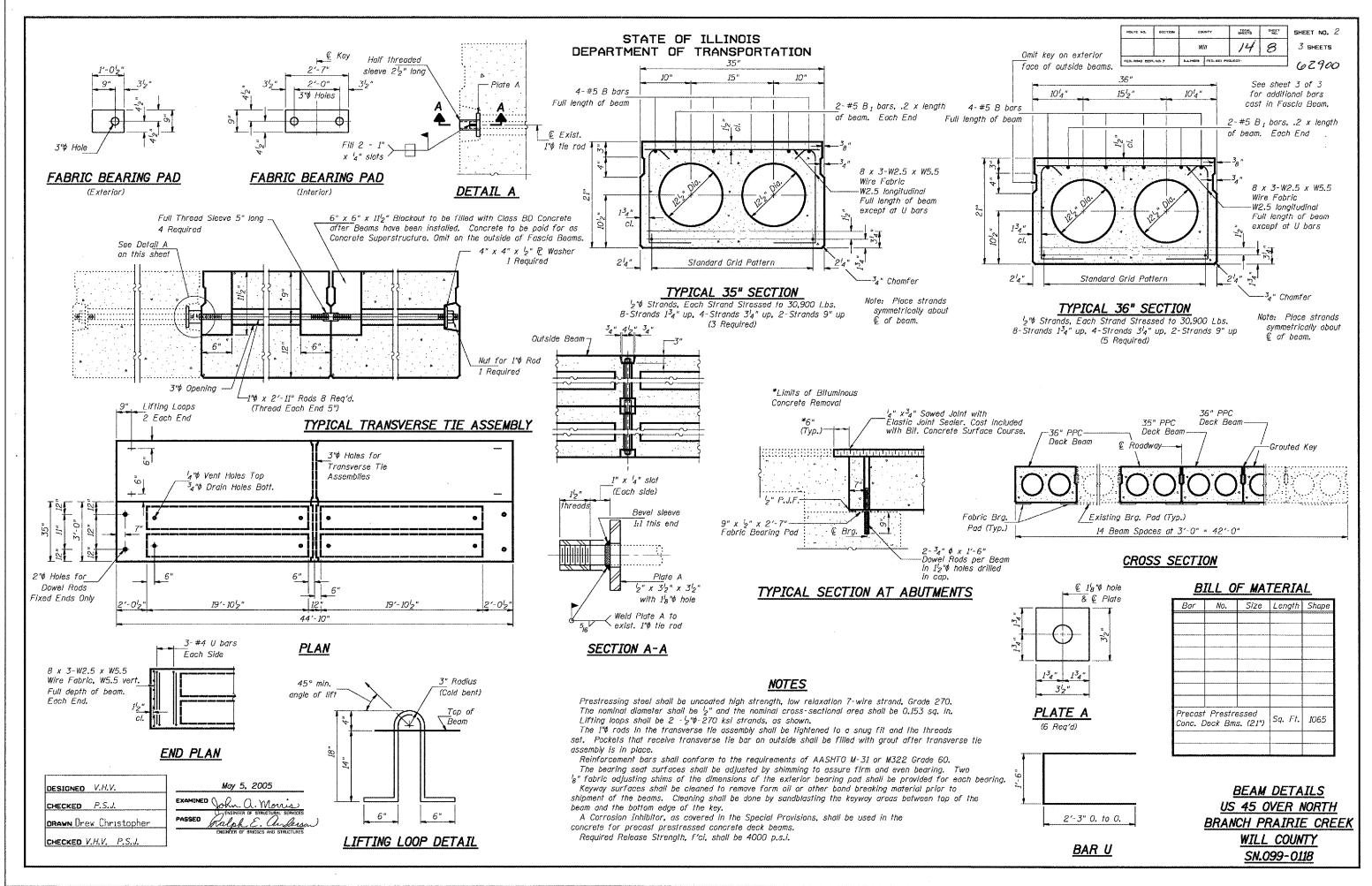
| | ITEM | UNIT | QUANTITY |
|---|--|---------|----------|
| | Precast Prestressed Concrete Deck Beams (21" Depth) | Sq. Ft. | 1065 |
| * | Bituminous Concrete Surface Removal | Sq. Yd. | 83.6 |
| | Removal of Existing PPC Deck. Beams | Sq. Ft. | 1076 |
| | Bituminous Concrete Surface Course, Superpave Mix "D" N50 | Tons | 21.8 |
| | PC Mortar Fairing Course | Foot | 494 |
| | Reinforcement Bars, Epoxy Coated | Pound | 830 |
| | Waterproofing Membrane System | Sq. Yd. | 193,5 |
| | Concrete Superstructure | Cu. Yd. | 5.2 |
| | Concrete Removal | Cu. Yd. | 5.2 |
| | Protective Coat | Sq. Yd. | 19.5 |

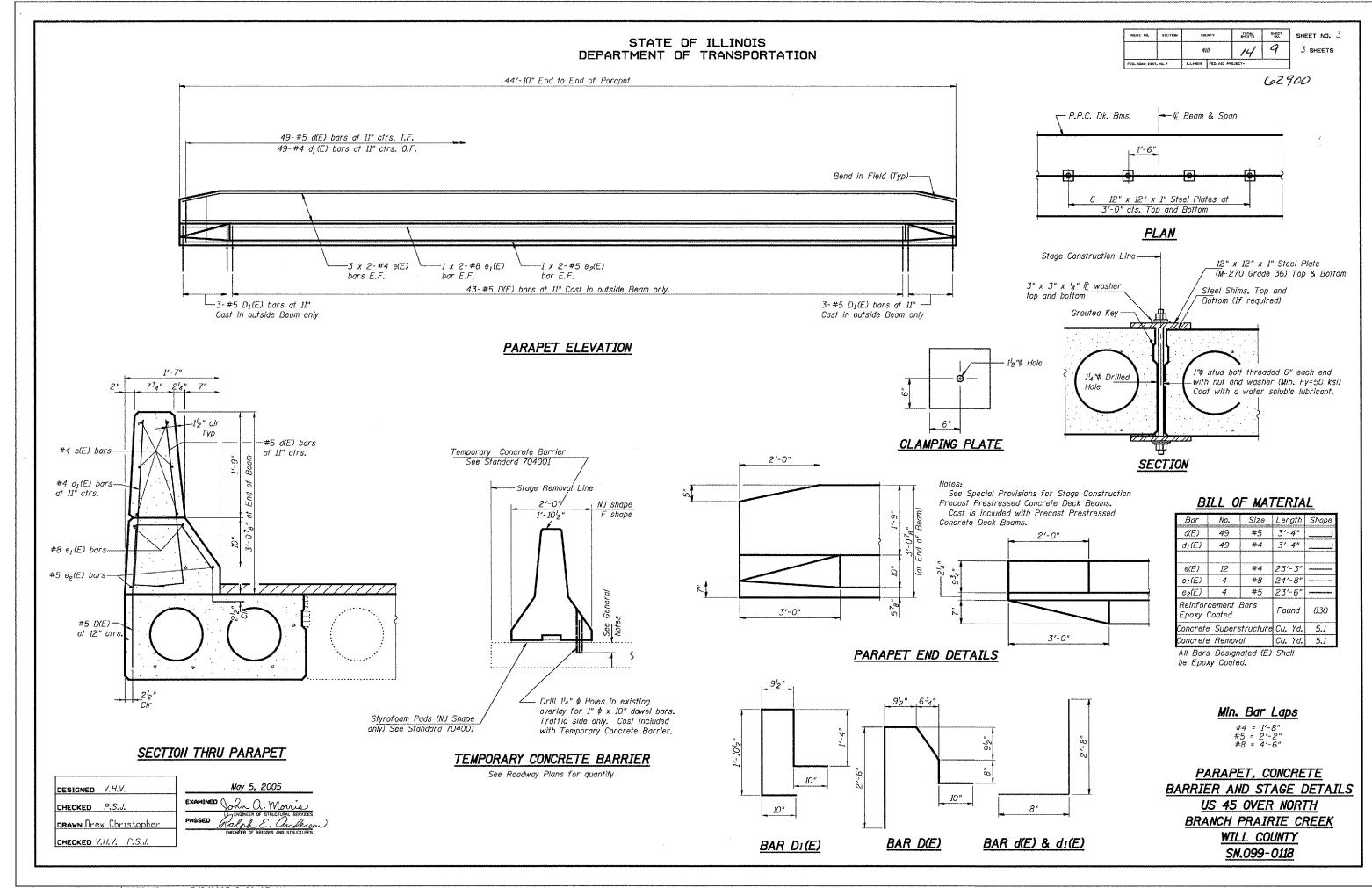
* Includes only bituminous on beams to remain.

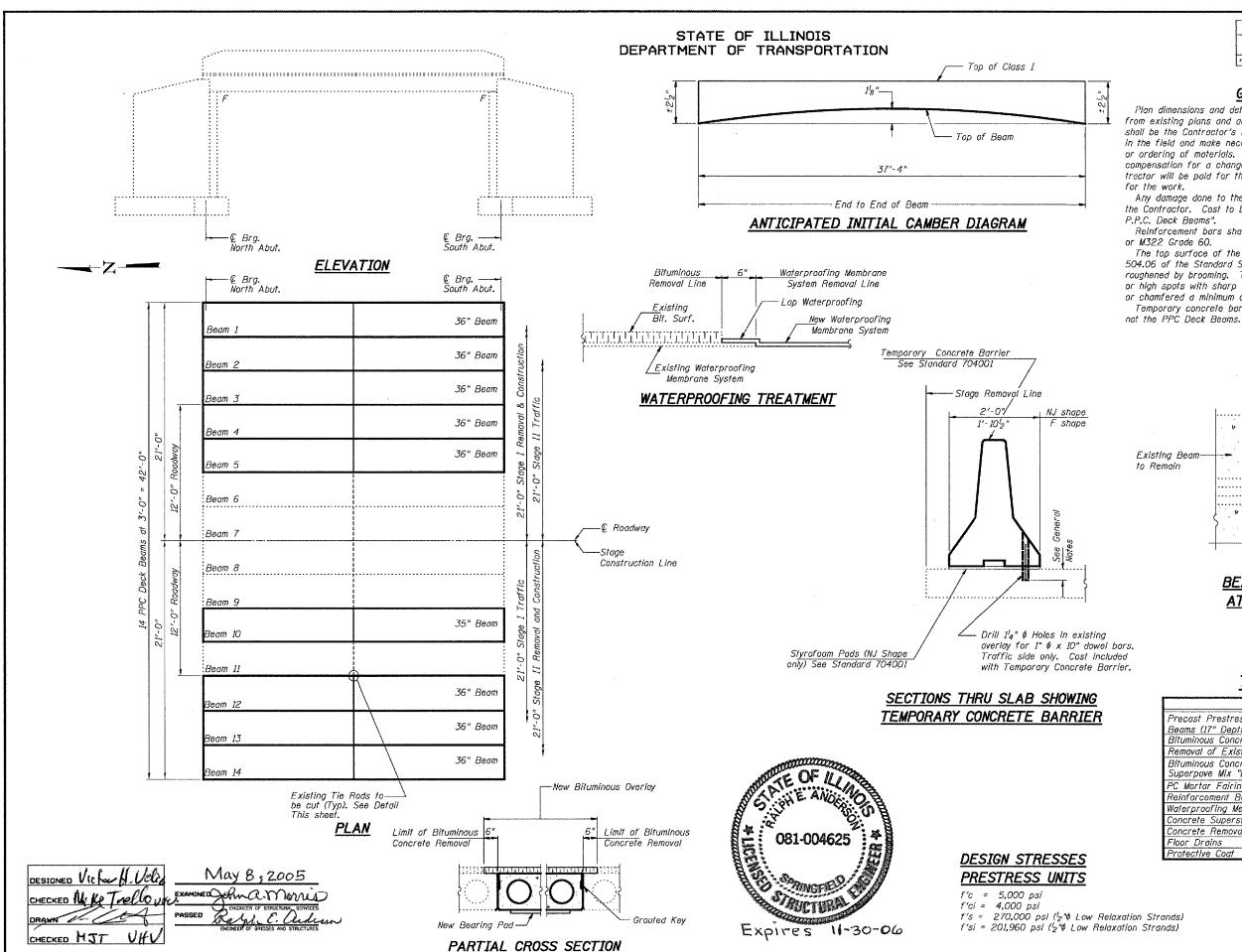
 $f's = 270,000 \text{ psi } (\frac{1}{2})^m \text{ Low Relaxation Strands})$

f'si = 201,960 psi (1/2"\$\psi\$ Low Relaxation Strands)

PLAN AND ELEVATION US 45 OVER NORTH BRANCH PRAIRIE CREEK WILL COUNTY SN.099-0118







ROLITE NO. SECTION COUNTY STATE PAST SHEET NO. 1

WILL /4 /0 3 SHEETS

FEO. ROBO DIET. NO. 7 ILLINOIS FED. ALD PROJECT-

62900

GENERAL NOTES

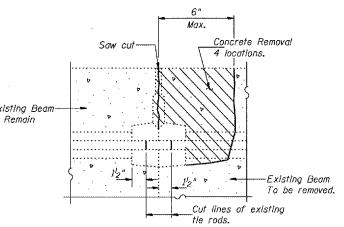
Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Any damage done to the bridge during beam removal shall be repaired by the Contractor. Cost to be included in the cost of "Removal of Existing PPC Deck Beams"

Reinforcement bars shall conform to the requirements of AASHTO M-31 - M322 Grade 60.

The top surface of the beams shall be finished in accordance with Article 504.06 of the Standard Specifications except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners, and the top edge of keys shall be rounded or chamfered a minimum of ${}^{l}_{4}$ ".

Temporary concrete barrier shall only be anchored into the overlay and not the PPC Deck Beams.



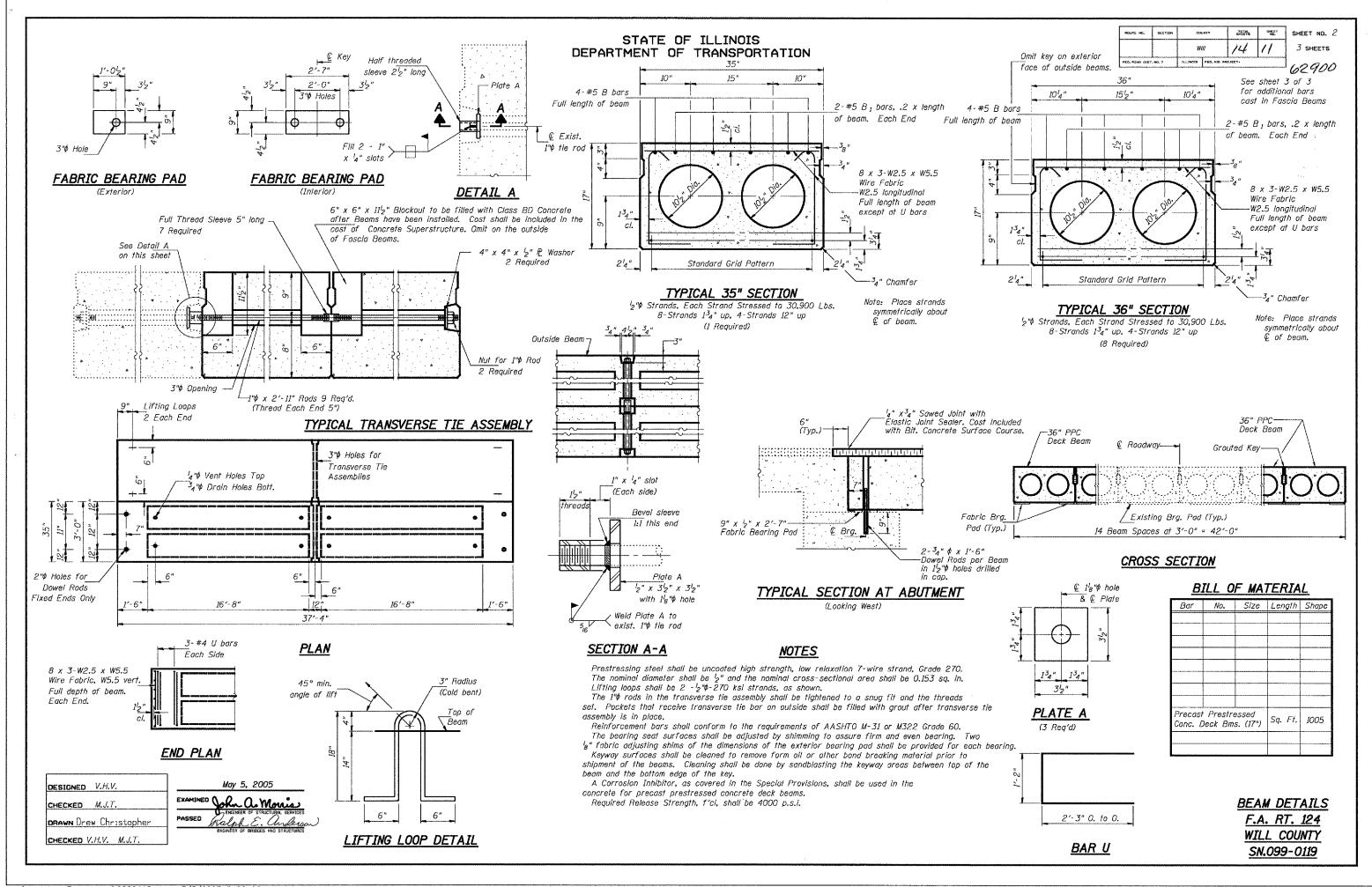
BEAM REMOVAL DETAIL
AT TRANSVERSE TIES

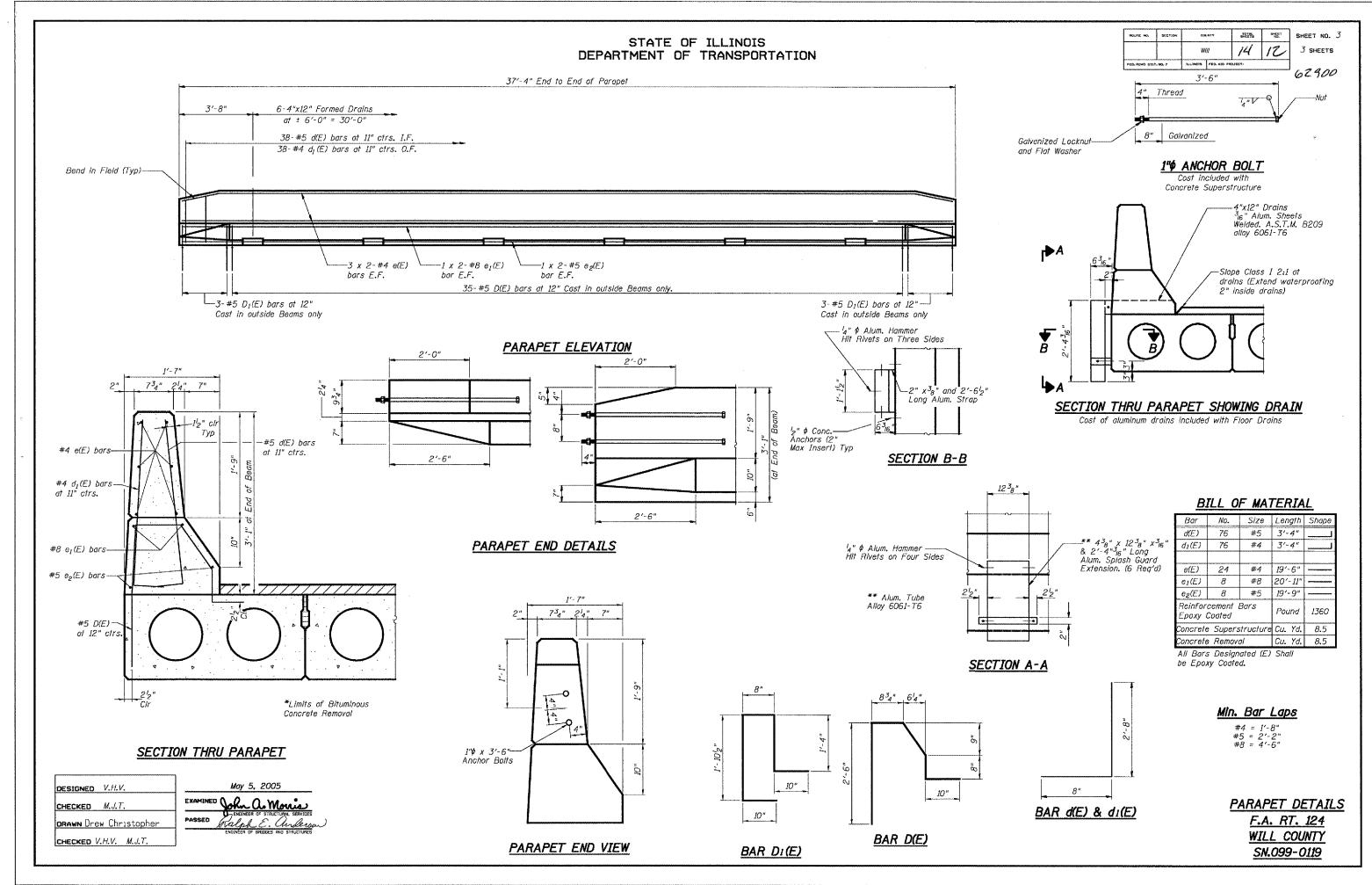
TOTAL BILL OF MATERIAL

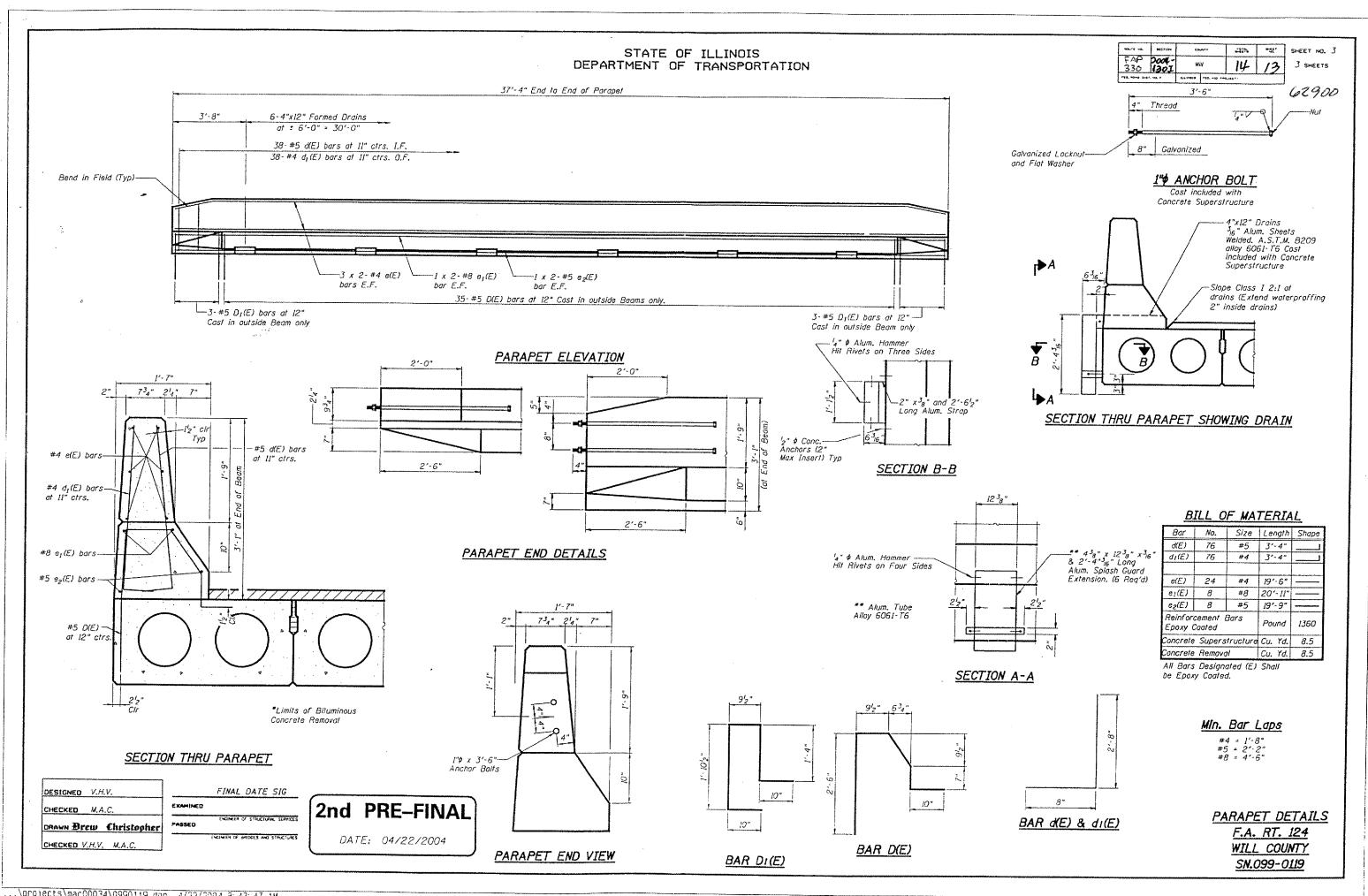
| ITEM | UNIT | QUANTITY |
|--|---------|----------|
| Precast Prestressed Concrete Deck Beams (17" Depth) | Sq. Ft. | 1005 |
| Bituminous Concrete Surface Removal | Sq. Yd. | 8.3 |
| Removal of Existing PPC Deck Beams | Sq. Ft. | 1008 |
| Bituminous Concrete Surface Course, Superpave Mix "D" N50 | Ton | 12.4 |
| PC Mortar Fairing Course | Foot | 373 |
| Reinforcement Bars, Epoxy Coated | Pound | 1360 |
| Waterproofing Membrane System | Sq. Yd. | 110 |
| Concrete Superstructure | Cu. Yd. | 8.5 |
| Concrete Removal | Cu. Yd. | 8.5 |
| Floor Drains | Each | 6 |
| Protective Coat | Sq. Yd. | 14.2 |

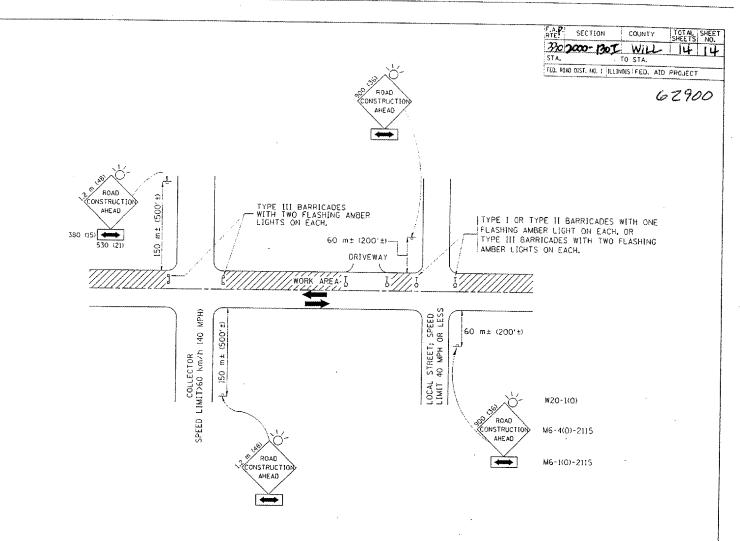
PLAN AND ELEVATION

F.A. RT. 124 WILL COUNTY SN.099-0119









TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

ಗಳನ್ನು ಚಿತ್ರಗಳಲ್ಲಿ ಪ್ರಮುಖ್ಯ ಪ್ರಭಾವತಿಗಳಲ್ಲಿ ಅನಕ್ಕೆ ಸಿದ್ದರೆ. ಆಫ್ಲಿಕ್ಷಣ ಈ ಹೇಗು ಸ್ವತೀಕ್ ಕರ್ಯಕ್ಕೆ ಸಿದ್ದರೆ.

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- I. SIDE ROAD WITH A SPEED LIMIT OF 60 km/h (40 MPH) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- 01 ONE ROAD CONSTRUCTION AHEAD SIGN 900×900 (36×36) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 60 m (200') IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 60 Km/h (40 MPH) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- d) ONE ROAD CONSTRUCTION AHEAD SIGN 1.2 m \times 1.2 m (48×48) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 150 m (500°) IN ADVANCE OF THE MAIN ROUTE.
- D) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK TONE, A SINGLE HEADED ARROW (MB-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (MB-4).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STO. 70150). STO. 701600 OR THE APPROPRIATE STANDARD).
THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD
CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW
SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

| REVISIONS | |
|--------------|------------|
| HAME | DATE |
| LHA | 6/89 |
| T. PAMMACHEP | 09/08/94 |
| J. OBERLE | 10/18/95 |
| A. HOUSEH | 03/06/96 |
| A. HOUSEH | 10/15/96 [|
| T. PAMMACHER | 01/06/00 |
| i | |

ILLINOIS DEPARTMENT OF TRANSPORTATION TPAFFIC CONTROL AND PROTECTION

SIDE POADS, INTERSECTIONS, AND

DRIVEWAYS

SCALE: VERT.

CHECKED BY