

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOTAL BILL OF MATERIAL

ROUTE NO.	SECTION	COUNTY	DATE SHEETS	SHEET NO.
FAP 303 IL 173	134(B&B-2)R-1	LAKE	137 65	17 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

GENERAL NOTES

No field welding is permitted except as specified in the contract documents.

The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the wide flange beams.

Reinforcement bars shall conform to the requirements of ASTM A 706m Gr. 420. See special provisions.

Reinforcement bars designated (E) shall be epoxy coated.

Backfill shall be placed behind the abutment after the superstructure has been poured and falsework removed. See Article 502.10 of the Standard Specifications.

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.

Calculated mass of Structural Steel = 1005 kg (Grade 250)*
= 5825 kg (Grade 345)

* Includes mass of bearings

All dimensions are in millimeters (mm) except as noted.

The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception that masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color of the final finish coat for all steel surfaces shall be Gray, Munsell No. 5B 7/1. See Special Provision for "Cleaning and Painting New Metal Structures".

All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

Slipforming of the parapet is not allowed.

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts M22 open hole 24mm φ unless otherwise noted.

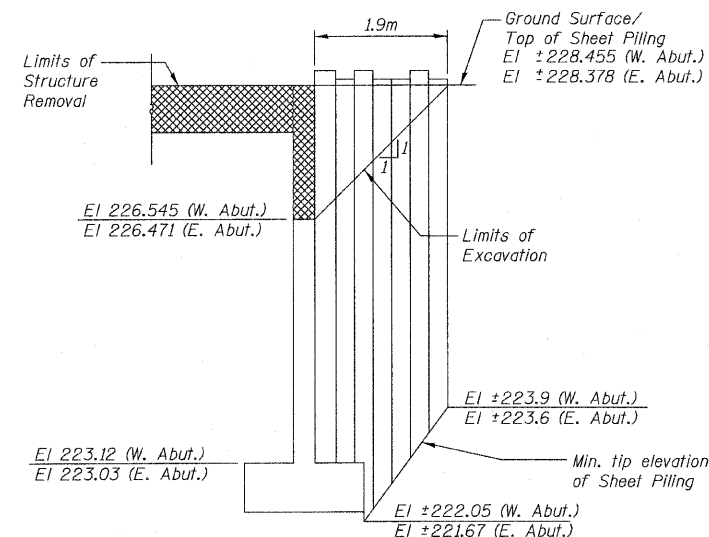
ITEM	UNIT	SUPER	SUB	TOTAL
Structural Repair of Concrete Depth equal to or less than 125mm	Sq M	0	23	23
Porous Granular Embankment, Special	Cu M	0	75	75
Concrete Removal	Cu M	0	14	14
Removal of Existing Superstructures	Each	1	0	1
Protective Shield	Sq M	155	0	155
Structure Excavation	Cu M	0	75	75
Concrete Structures	Cu M	0	34	34
Concrete Superstructure	Cu M	130	0	130
Bridge Deck Grooving	Sq M	343	0	343
Protective Coat	Sq M	389	0	389
Erecting Structural Steel	L Sum	0.07	0	0.07
Stud Shear Connectors	Each	738	0	738
Reinforcement Bars, Epoxy Coated	KG	18,670	1,730	20,400
Bar Splacers	Each	282	100	382
Temporary Sheet Piling	Sq M	0	25	25
Name Plates	Each	1	0	1
Anchor Bolts, M24	Each	0	24	24
Epoxy Crack Injection	Meter	0	42	42
Geocomposite Wall Drain	Sq M	0	45	45
Pipe Underdrains for Structures, 100mm	Meter	0	60	60

Note:

The top of existing abutment shall be braced prior to removal of existing superstructure. The bracing shall remain in place until the anchor bolts are set and the concrete in the new deck slab attains the specified 28-day strength (f'c). The Contractor shall submit details and calculations of the proposed bracing system for approval by the Engineer, before commencing work. The submittal shall be designed and sealed by a licensed Structural Engineer in Illinois. All costs of the bracing shall be included with "Removal of Existing Superstructures."

** Includes Approach Slabs

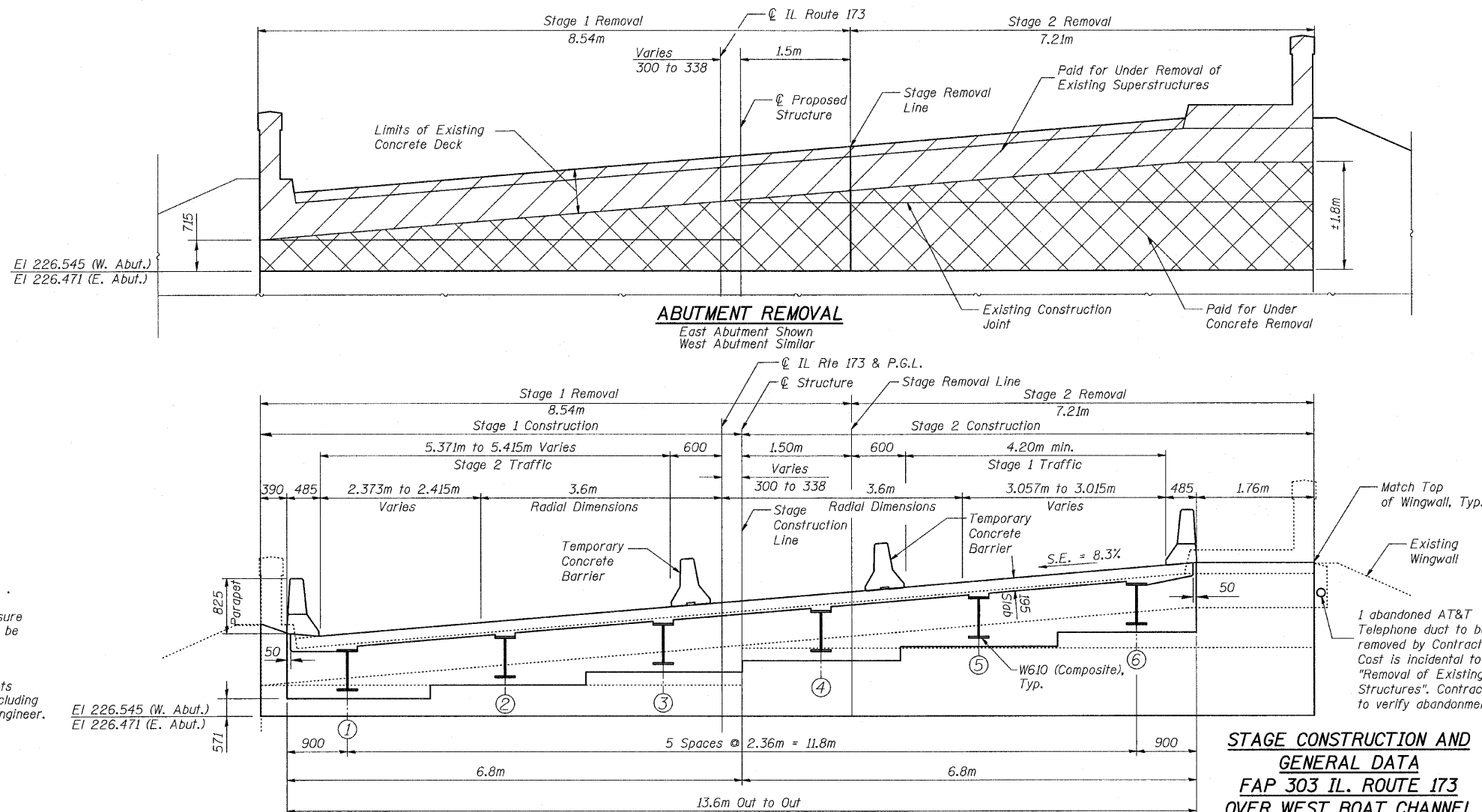
*** Furnishing Structural Steel is paid for under a separate contract



TEMPORARY SHEET PILING (STAGED CONST.)

- Minimum section modulus of the temporary sheet piling shall be $415 \times 10^3 \text{ mm}^3/\text{m}$.
- The Contractor shall connect the first sheet to the existing abutment wall to ensure stability of sheets driven to the top of the existing footing. This connection shall be reviewed and accepted by the Engineer and included in the cost for Temporary Sheet Piling.
- If the Contractor chooses to alter the temporary sheet piling design requirements shown on the plans for lesser design requirements, then a full design submittal including plan, details, and calculations will be required for review and acceptance by the Engineer.

DESIGNED	PAT2
CHECKED	RCJ/JRF
DRAWN	RDS
CHECKED	PAT2



CROSS SECTION

Looking East

NOTE:

See Sheet 15 for details of Temporary Concrete Barrier. See roadway plans for quantity of Temporary Concrete Barrier.

STAGE CONSTRUCTION AND
GENERAL DATA
FAP 303 IL. ROUTE 173
OVER WEST BOAT CHANNEL
SECTION 134(B&B-2)R-1
LAKE COUNTY
STATION 25+098.390
STRUCTURE NO. 049-0055