XXX
XXX

[redacted] PAY LIMIT FOR TRANSITION, CORRUGATED BEAM TO THRIE BEAM – ITEM 606.86

PAY LIMIT FOR HEAVY POST BLOCKED–OUT CORRUGATED BEAM GUIDE RAIL

[redacted] L (NOTE 9)

5 SPACES @ [redacted] W6x15 POSTS AND BLOCKOUTS

INTERMEDIATE POST

POST CONNECTION DETAILS DWG. **

L/2 L/2

BACK–UP THRIE BEAM SECTION IN THIS AREA

END POST (NOTE 8)

W6x9 WITH TIMBER BLOCKOUT

LAST BRIDGE RAIL POST

THRIE BEAM

[redacted] WITH BASE PLATE (NOTE 8)

℄ SPLICE CONN.

℄ SPLICE CONN.

℄ BOLTED SPLICE CONNECTION

PAY LIMIT FOR THRIE BEAM BRIDGE RAILING – ATTACHMENT TO EXISTING BRIDGE RAIL – ITEM 587.20

PLAN VIEW [redacted]

CUT OFF EXISTING EXPOSED RAIL/RAILS, WELD [redacted] END PLATE & PAINT TO MATCH EXISTING RAILS. COST INCLUDED UNDER ITEM 587.20.

EXISTING BRIDGE RAILING

[redacted] W/BASE PL

THRIE BEAM

TRANSITION TO HIGHWAY MOUNTING HEIGHT, IF NEEDED

W6x9 POST. COST TO BE INCLUDED IN THE PRICE BID FOR THE TRANSITION ITEM

VARIES FROM [redacted]

A B C

TOP OF SIDEWALK

TOP OF DECK

TWO SECTIONS OF [redacted] THRIE BEAM ONE NESTED INSIDE THE OTHER

TRANSITION SECTION– [redacted] THRIE BEAM TO CORR. BEAM

ELEVATION VIEW [redacted]

NOTES

1. INSTALL NEW TRANSITION, FROM CORRUGATED BEAM TO THRIE BEAM, PAID FOR UNDER ITEM 606.86.
2. ALL NEW THRIE BEAM SECTIONS SHALL BE [redacted]
3. THE TRANSITION SECTION FROM CORRUGATED BEAM TO THRIE BEAM SHALL BE [redacted]
4. THE MATERIAL FROM WHICH THE THRIE BEAM IS FABRICATED SHALL CONFORM TO MATERIAL SPECIFICATION 710–20.
5. ALL COMPONENTS OF THRIE BEAM UPGRADING SYSTEM SHALL BE GALVANIZED IN ACCORDANCE WITH MATERIAL SPECIFICATION 719–01 AFTER FABRICATION.
6. WHEN BRIDGE RAILING POSTS AND/OR HIGHWAY POST OCCUR WHERE THERE ARE NO HOLES IN THE STANDARD THRIE BEAM SECTION, HOLES SHALL BE DRILLED OR PUNCHED IN THE APPROPRIATE LOCATIONS AND GALVANIZING SHALL BE REPAIRED ACCORDING TO MATERIAL SPECIFICATION 719–01.
7. THE THRIE BEAM SHALL BE CONNECTED TO ALL POSTS.
8. AFTER ALL CONCRETE ANCHOR STUD NUTS HAVE BEEN PLACED AND TIGHTENED TO THE SATISFACTION OF THE ENGINEER, THE STUDS SHALL BE FLAME CUT–OFF 1 INCH ABOVE THE NUT AND THE FIRST THREAD ABOVE THE NUT SHALL BE DEFORMED AS ORDERED BY THE ENGINEER. ALL NUTS SHALL EITHER BE TACK WELDED IN PLACE (GALVANIZING REPAIRED IN ACCORDANCE WITH SPECIFICATION 719–01) OR HAVE LOCK WASHERS.
9. END POST AND INTERMEDIATE POSTS (IF REQUIRED) SHALL BE W6x25 (A36) MOUNTED ON CONCRETE. THE LENGTH OF THE POST SHALL BE SUCH TO ATTAIN THE PROPER RAILING HEIGHT. COST INCLUDED UNDER THE TRANSITION ITEM. REFER TO DETAIL–1 ON THIS SHEET.
10. [redacted]
11. THE THRIE BEAM SHALL HAVE AN EXPANSION JOINT AT EVERY LOCATION THAT THE BRIDGE HAS AN EXPANSION JOINT.
12. CRACKED WINGWALLS WITHIN [redacted] OF THE PROPOSED ANCHORAGE SHALL BE REMOVED A.O.B.E. AND REPLACED WITH GROUT MATERIAL AT THE SAME TIME THAT THE ANCHORS ARE GROUTED. THE COST OF THIS WORK SHALL BE INCLUDED IN THE THRIE BEAM ITEM. IF WINGWALLS ARE DETERIORATED TO A DEPTH GREATER THAN [redacted] REMOVE STRUCTURAL CONCRETE AND REPLACE WITH CLASS "A" CONCRETE – ITEM 582.05 WHERE SHOWN ON PLANS OR AS ORDERED BY THE ENGINEER.

DESIGNER NOTE:
THESE DETAILS HAVE LIMITED USE ON THRUWAY PROJECTS. SEE EB 99–08 OR JRB.

NOTE:
PROVIDE FIRM LEVEL SEAT FOR BASE PLATE BY BUSH HAMMERING AND APPLYING A LAYER OF EPOXY MORTAR BINDER (MATERIAL SPECIFICATION 721–02), OR EPOXY REPAIR PASTE (MATERIAL SPECIFICATION 721–05), AS ORDERED BY THE ENGINEER.

[redacted] FULLY THREADED ANCHOR BOLTS, [redacted] W/NUTS

[redacted] POST (NOTE 9)

DETAIL 1 – [redacted] BASE PLATE

BACK UP SECTION OF THRIE BEAM [redacted] LONG. PLACED BEHIND CONTINUOUS THRIE BEAM AS INDICATED.

CONTINUOUS THRIE BEAM

[redacted] CARRIAGE BOLT AND NUT WITH WASHERS (TYP.)

SECTION A–A

[redacted] AND WASHERS (TYP.)

THRIE BEAM

MORTAR LEVELING COURSE

[redacted] FULLY THREADED ANCHOR BOLTS. COST OF DRILLING AND GROUTING TO BE INCLUDED UNDER THE TRANSITION ITEM.

VARIES

SECTION B–B

TW [redacted] BOLTS, NUTS AND WASHERS

[redacted] BLOCKOUT

[redacted] HEAVY POST

SECTION C–C

TRANSITION SECTION DETAILS [redacted]

SPLICE BOLT SLOTS [redacted] OF EXPANSION JOINT PLUS 1" [redacted]

[redacted] SLOTTED HOLES

THRIE BEAM TYPE GUIDE RAILING

WIDTH OF EXP. JT. PLUS [redacted]

BEAM SPLICE EXPANSION JOINT DETAIL [redacted]

(SEE NOTE #11)

NOTE:
TORQUE ALL BOLTS IN EXPANSION JOINT TO [redacted] AND USE A DOUBLE NUT OR TACK WELD NUT TO BOLT.

PE STAMP & SIGNATURE ARE NOT REQUIRED ON THIS SHEET.

[redacted] FOR [redacted] BOLT

FLAT PLATE WASHER

FLAT PLATE WASHER DETAIL [redacted]

EXISTING RAILING POST

[redacted] CARRIAGE BOLT, NUT AND WASHERS. (TYP.)

THRIE BEAM

[redacted] LG. FLAT PLATE WASHERS. (TYP.)

EXISTING RAILS

SECTION D–D

EXISTING RAILING POST

[redacted] CARRIAGE BOLT, NUT AND WASHERS. (TYP.)

[redacted] LG. FLAT PLATE WASHERS.

[redacted] HOLE IN THRIE BEAM. THE HOLE MAY BE A SLOTTED HOLE [redacted] TO ALLOW FIELD ADJUSTMENT. (THE HOLE IS SHOWN SLOTTED)

THRIE BEAM

EXISTING RAILS

SECTION E–E

[redacted] CARRIAGE BOLT WITH NUT, PLAIN WASHER & LOCK WASHER.

EXISTING RAILING POST

[redacted] FLAT PLATE WASHER [redacted] LONG

[redacted] (TYP)

[redacted] HOLE (TYP.)

THRIE BEAM

PLAN

NOTES FOR SECTION F–F

WHERE DIMENSION "B" IS LESS THAN OR EQUAL TO [redacted] "A" SHOULD BE [redacted] IF NECESSARY, DIMENSION "A" MAY BE DECREASED TO [redacted] OR INCREASED TO [redacted] TO AVOID CONNECTION DIFFICULTIES INVOLVING RAILS ON EXISTING SYSTEMS. IF DIMENSION "B" EXCEEDS [redacted] OR DIMENSION "C" IS GREATER THAN [redacted] CONTACT THE DIRECTOR OF THE HIGHWAY DESIGN BUREAU AT THRUWAY ADMINISTRATIVE HEADQUARTERS FOR ALTERNATE DETAILS.

THE RAIL PROJECTIONS AT THE FREE ENDS OF THE END SECTIONS ARE TO BE CUT OFF FLUSH WITH THE POST, AT THE BEGINNING AND ENDING OF A RUN OF RAILING. AREAS WHERE THE FINISH IS DAMAGED (IN THE CUTTING OPERATION) ARE TO BE PAINTED WITH AN APPROVED PAINT. MATCH COLOR AS CLOSE AS POSSIBLE.

D D E E

"B" – SEE NOTES

"A" SEE NOTES

"C" SEE NOTES

SECTION F–F [redacted]

DATE	DESCRIPTION	BY	SYM.

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT
TITLE OF PROJECT LINE 1
TITLE OF PROJECT LINE 2

LOCATION OF PROJECT
LOCATION OF PROJECT LINE 1
LOCATION OF PROJECT LINE 2

TITLE OF DRAWING
THRIE BEAM TRANSITION: 4–RAIL BRIDGE RAIL TO HPBO GUIDE RAIL DETAILS

CONTRACT NUMBER: TA

DATE: 12/11

DRAWING NUMBER: *

DESIGNED BY: TA
DRAFTED BY: TA
CHECKED BY: TA
IN CHARGE OF: TA