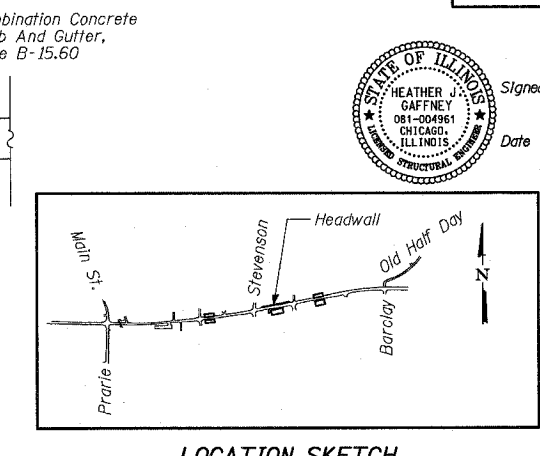
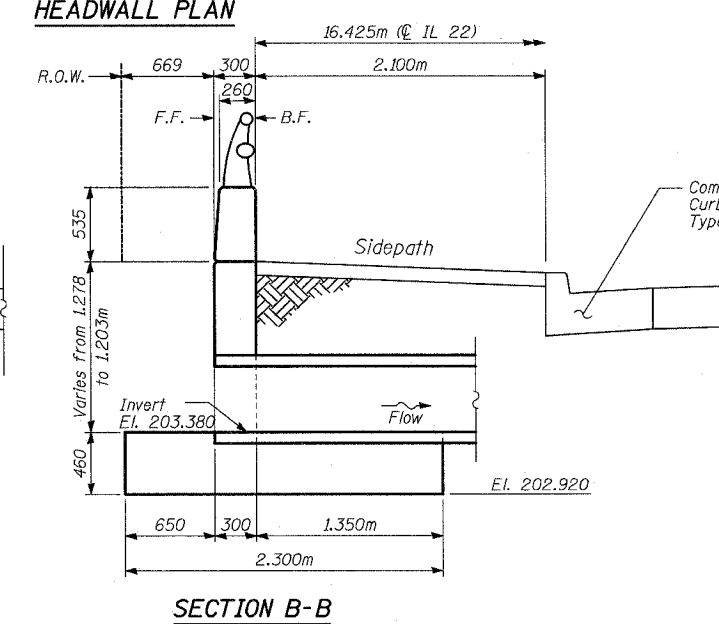
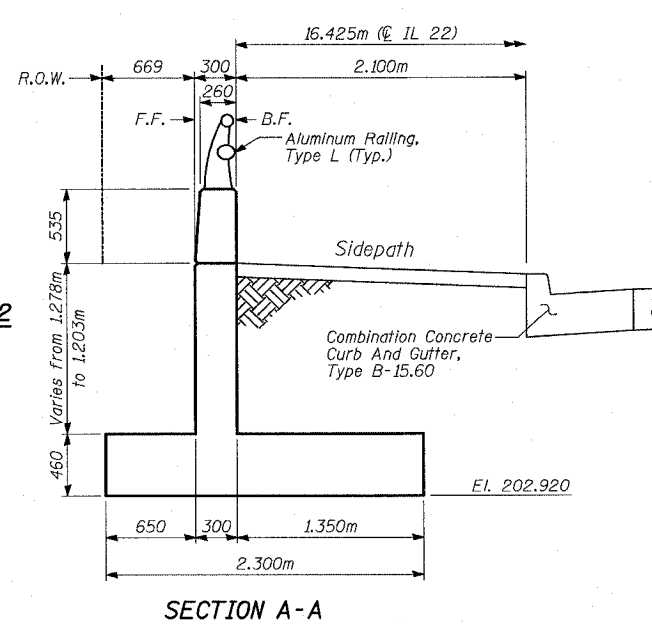
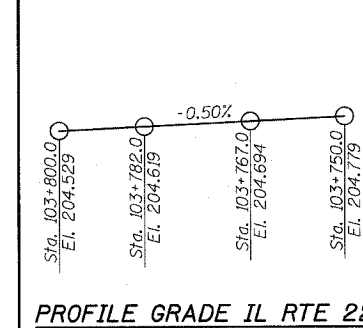
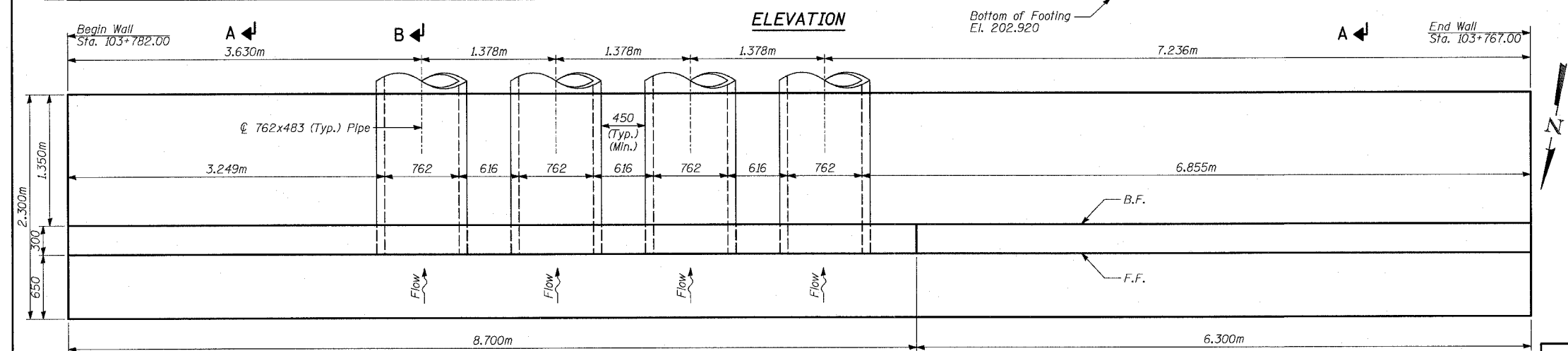
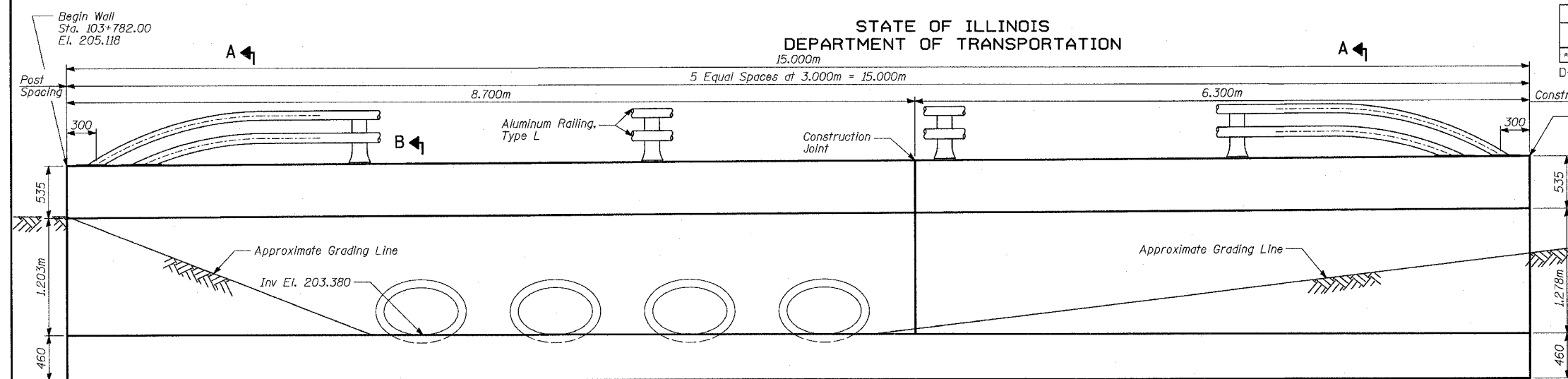


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP	SECTION	COUNTY	AREA	SHEET	SHEET NO. 1
337	20R-5	LAKE	562	228	3 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			
D-91-552-99		Contract No. 60881			



- DESIGN SPECIFICATION**
AASHTO 2002 Standard Specifications for Highway Bridges.
- LOADING MS18 & ALT.**
- DESIGN STRESSES**
FIELD UNITS
f'c = 24 MPa
fy = 400 MPa (Reinforcement)
Max. soil pressure under footing = 95 kPa
- NOTES:**
- Reinforcement bars shall conform to the requirements of AASHTO M31M, or M322M Grade 400.
 - All dimensions are in millimeters (mm) except as noted.
 - Elevations are in meters.
 - All exposed concrete edges shall be chamfered 19mm except as noted.
 - For reinforcement details, see sheet 2 of 3.
 - For Aluminum Railing, see sheet 3 of 3.
 - All pipe openings are based on Wall A, ASTM C76, coordinate openings with pipe supplier.
 - For Station and Offset, see "Drainage Schedules".
 - Protective Coat shall be applied to the exposed surfaces of the front face of the wall above the ground line.
 - All construction joints shall be bonded.

TOTAL BILL OF MATERIAL

Item	Unit	TOTAL
Porous Granular Embankment	CU M	26
Protective Coat	SQ M	39
Structure Excavation	CU M	90
Concrete Structures	CU M	24
Reinforcement Bars, Epoxy Coated	KG	1,950
Aluminum Railing, Type L	METER	14

Signed *Heather J. Gaffney*
Heather J. Gaffney, S.E. IL Lic. No. 081-004961
CHICAGO, ILLINOIS
EXPIRES 11-30-2004.
Date 3/22/04 For drawings 1 thru 3 of 3.

TY-LIN INTERNATIONAL

DESIGNED	MI, DJR
CHECKED	TD
DRAWN	DJR
CHECKED	TD
DATE	03-22-2004

GENERAL PLAN, ELEVATION AND SECTIONS

HEADWALL
STA. 103+782.0 TO STA. 103+767.0
IL ROUTE 22
FAP 337 SECTION 20R-5
IL RTE 83 TO US 45/IL 21
LAKE COUNTY