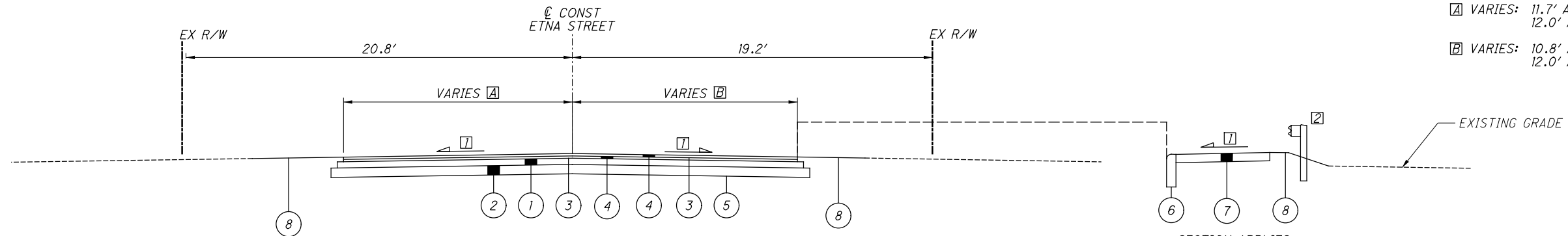


TYPICAL SECTION - EXISTING CONDITION

SECTION APPLIES:
STA 11+75.00 TO STA 13+25.00



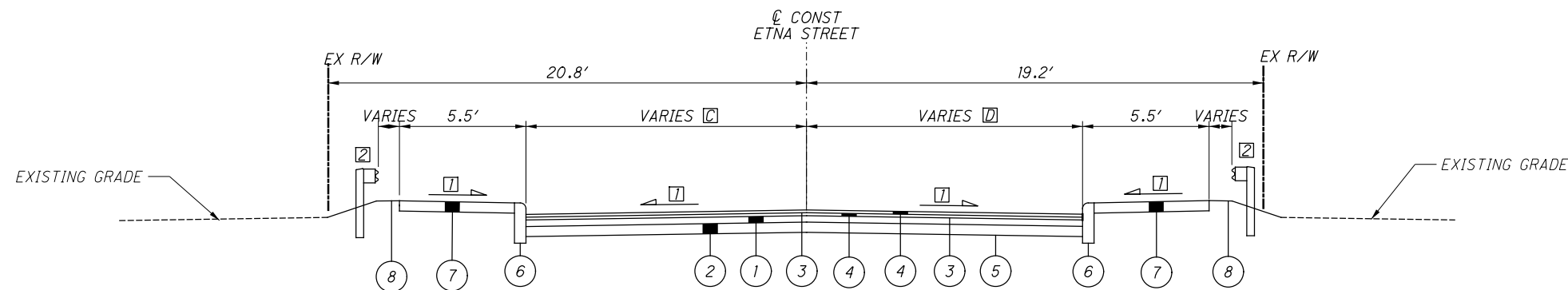
TYPICAL SECTION #1 - ETNA STREET

SECTION APPLIES:
STA 11+50.00 TO STA 12+13.16

SECTION APPLIES:
STA 11+75.00 TO STA 12+13.16

A VARIES: 11.7' AT STA 11+50.00 TO 12.0' AT STA 11+75.00

B VARIES: 10.8' AT STA 11+50.00 TO 12.0' AT STA 11+50.00

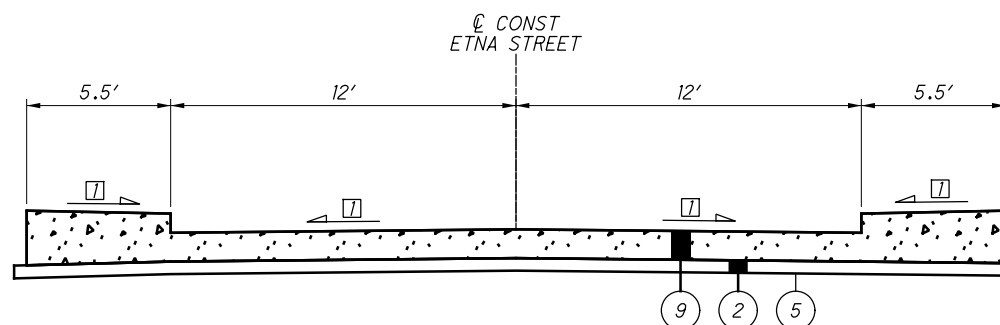


TYPICAL SECTION #2 - ETNA STREET

SECTION APPLIES:
STA 12+13.16 TO STA 12+17.56
STA 12+82.24 TO STA 13+25.00

C VARIES: 12.0' AT STA 13+00.00 TO 12.2' AT STA 13+25.00

D VARIES: 12.0' AT STA 13+00.00 TO 11.2' AT STA 13+25.00



TYPICAL SECTION #3 - ETNA STREET (BRIDGE & APPROACH SLABS)

SECTION APPLIES:
STA 12+17.56 TO STA 12+32.56 (APPROACH SLAB)
STA 12+32.56 TO STA 12+67.24 (BRIDGE)
STA 12+67.24 TO STA 12+82.24 (APPROACH SLAB)

LEGEND

- 1 ITEM 301 - ASPHALT CONCRETE BASE (T=4")
- 2 ITEM 304 - AGGREGATE BASE (T=6")
- 3 ITEM 407 - NON-TRACKING TACK COAT (0.055 GAL/SY) (FOR FULL-DEPTH)
- 4 ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), PG64-22 (T=1.5")
- 5 ITEM 205 - SUBGRADE COMPACTION
- 6 ITEM 609 - CURB, STRAIGHT 18"
- 7 ITEM 608 - 4" CONCRETE WALK
- 8 ITEM 659 - SEEDING AND MULCHING, CLASS 1
- 9 SEE STRUCTURE SHEETS FOR APPROACH SLAB AND BRIDGE DETAILS

NOTES:

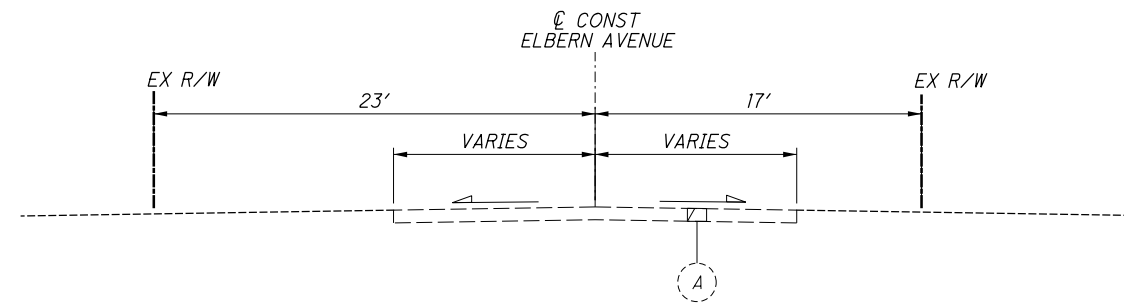
- 1 CROSS-SLOPE = 1.6%
- 2 SEE PLAN AND PROFILE SHEET FOR GUARDRAIL LOCATIONS

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TYPICAL SECTIONS

FRA-ETNA ST/
ELBERN AVE

[A] VARIES: 10.37 AT STA 11+50.00 TO 12.00 AT STA 11+75.00
 [B] VARIES: 10.53 AT STA 11+50.00 TO 12.00 AT STA 11+75.00



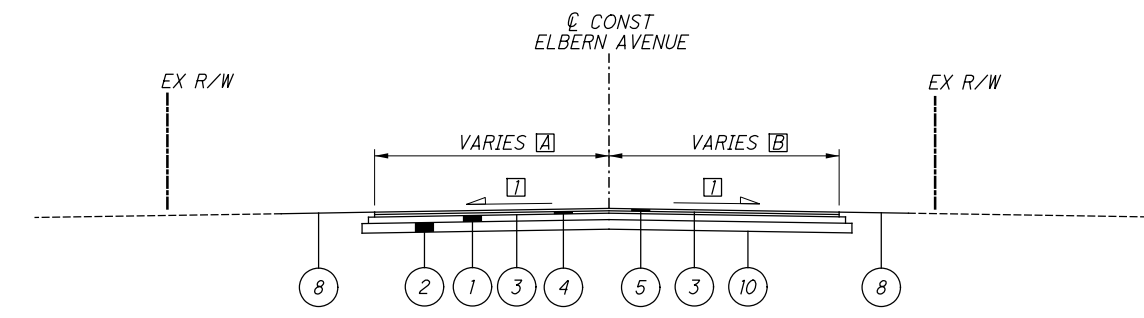
TYPICAL SECTION - EXISTING

NOT TO SCALE

SECTION APPLIES:
STA 11+50.00 TO STA 13+45.00

NOTES:

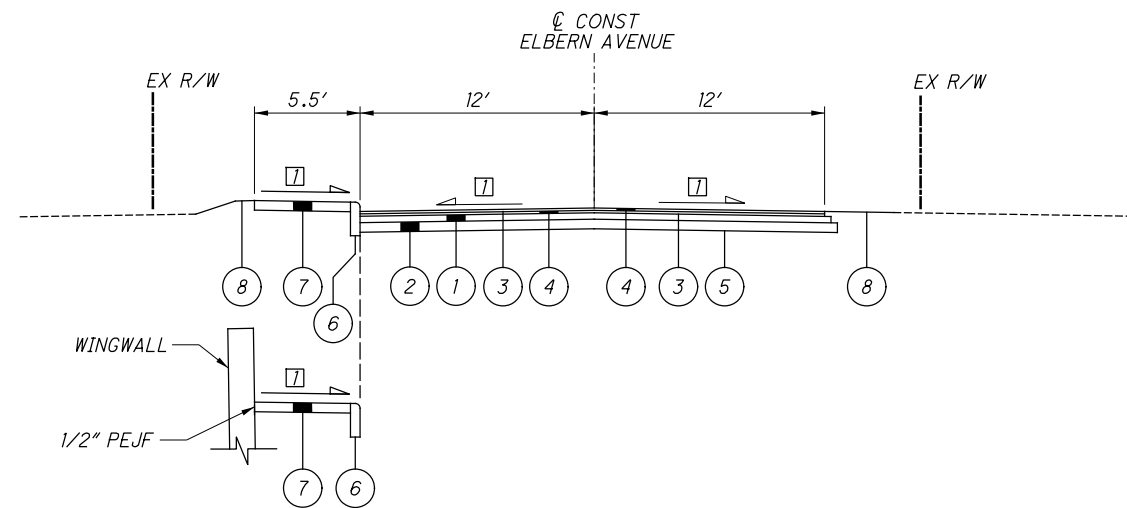
[7] CROSS-SLOPE = 1.6%



TYPICAL SECTION #1 - ELBERN AVENUE

NOT TO SCALE

SECTION APPLIES:
STA 11+50.00 TO STA 11+83.78

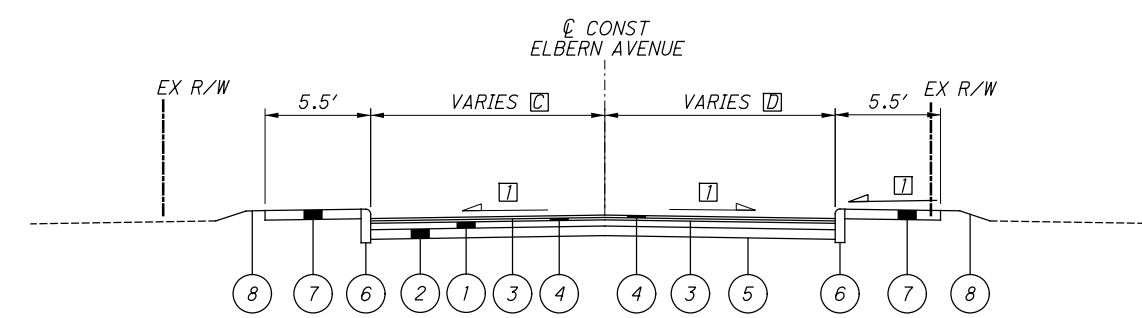


TYPICAL SECTION #2 - ELBERN AVENUE

NOT TO SCALE

SECTION APPLIES:
STA 11+83.78 TO STA 12+53.40

SECTION APPLIES:
STA 11+83.78 TO STA 12+12.28



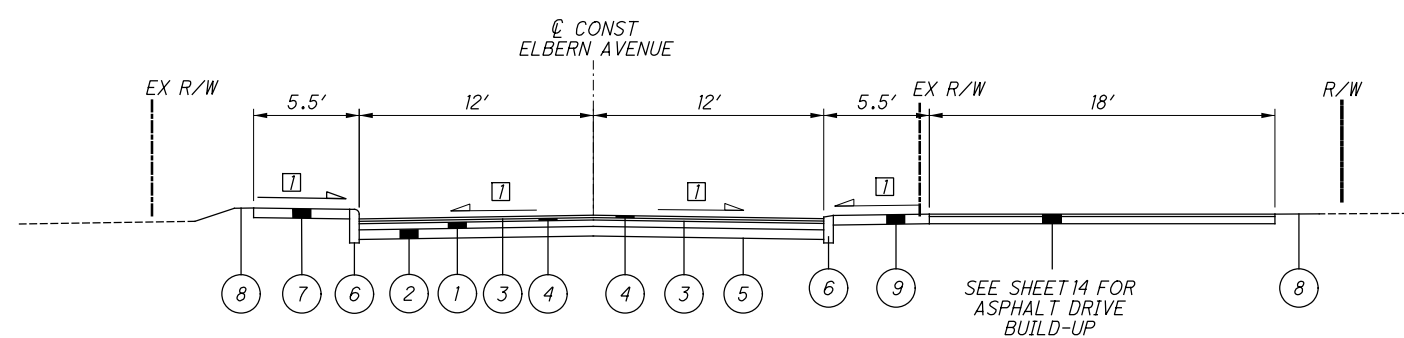
TYPICAL SECTION #3 - ELBERN AVENUE

NOT TO SCALE

SECTION APPLIES:
STA 12+53.40 TO STA 12+89.23
STA 13+16.23 TO STA 13+45.00

[C] VARIES: 12.0 AT STA 13+20.00 TO 15.8 AT STA 14+45.00

[D] VARIES: 12.0 AT STA 13+22.60 TO 11.2 AT STA 14+45.00



TYPICAL SECTION #4 - ELBERN AVENUE

NOT TO SCALE

SECTION APPLIES:
STA 12+89.23 TO STA 13+16.23

LEGEND

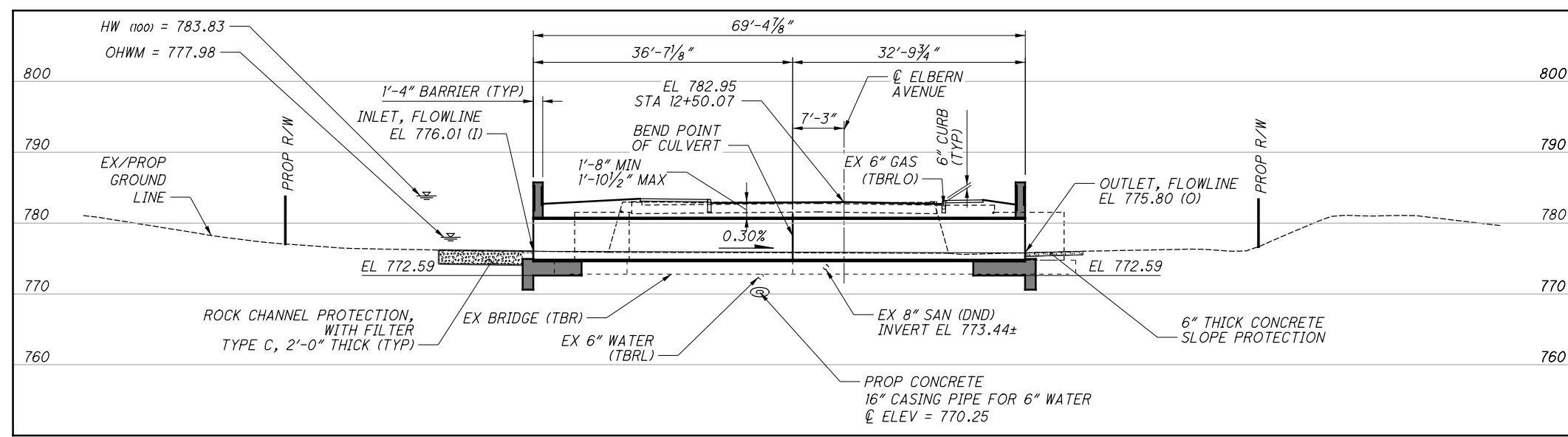
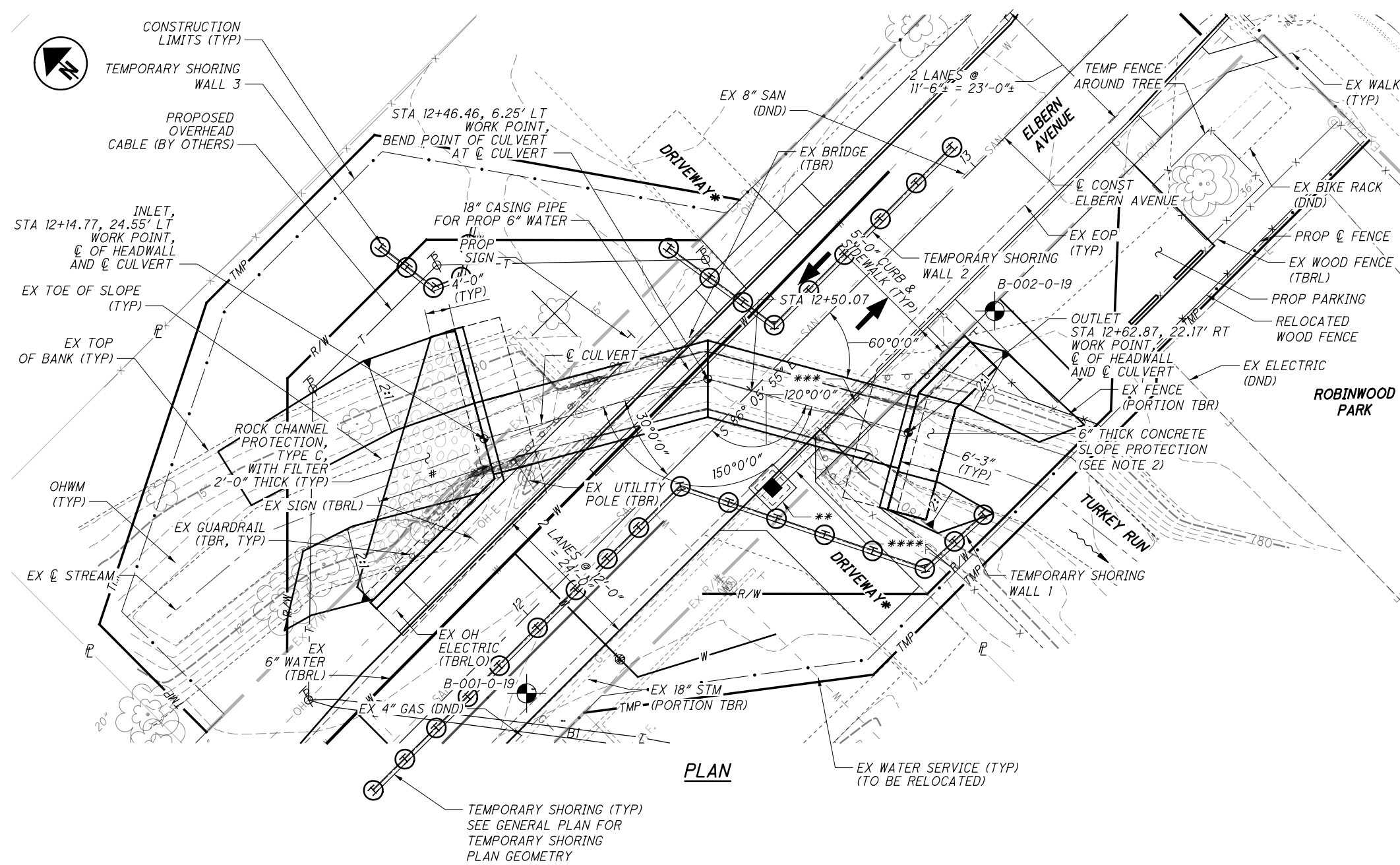
- | | |
|---|--|
| (1) ITEM 301 - ASPHALT CONCRETE BASE (T=4") | (7) ITEM 608 - 4" CONCRETE WALK |
| (2) ITEM 304 - AGGREGATE BASE (T=6") | (8) ITEM 659 - SEEDING AND MULCHING, CLASS 1 |
| (3) ITEM 407 - NON-TRACKING TACK COAT (0.055 GAL/SY) (FOR FULL-DEPTH) | (9) ITEM 608 - 6" CONCRETE WALK |
| (4) ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), PG64-22 (T=1.5") | (10) ITEM SPEC - GRAVEL REINFORCEMENT GRID |
| (5) ITEM 204 - SUBGRADE COMPACTION | (11) ITEM 304 - AGGREGATE BASE (T=8") |
| (6) ITEM 609 - CURB, STRAIGHT 18" | (A) EXISTING ASPHALT PAVEMENT |

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TYPICAL SECTIONS

FRA-ETNA ST/
ELBERN AVE

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PROFILE ALONG CULVERT

BENCHMARK DATA

BM#1 ELEVATION = 782.40
CHISELED SQUARE ON THE NORTHEAST CORNER OF A CONCRETE BIKE RACK PAD LOCATED AT THE SOUTHWEST CORNER OF THE INTERSECTION OF ELBERN AVENUE AND ROBINWOOD AVENUE.

BM#2 ELEVATION = 784.18
CHISELED "X" ON THE NORTH RIM OF A SANITARY SEWER MANHOLE LOCATED IN THE CENTER OF ELBERN AVENUE BEING IN-BETWEEN THE DRIVEWAYS FOR RESIDENCES 3851 AND 3857 AND ALSO BEING 300 FEET WEST FROM THE INTERSECTION WITH ROBINWOOD AVENUE.

NOTES

- EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.
- #4 DOWEL BARS SHALL BE PLACED AT 18" CENTERS ALONG ALL BUTT JOINTS TO THE EXISTING 6" THICK CONCRETE SLOPE PROTECTION.

LEGEND

- BORING LOCATION
- WORKPOINT
- * - ACCESS TO RESIDENTIAL DRIVEWAY SHALL BE MAINTAINED DURING CONSTRUCTION
- ** - PROPOSED CATCH BASIN
- *** - EX AERIAL GAS (TBR BY OTHERS)
- **** - PROPOSED CORRUGATED ALUMINUM PIPE (707.22) (PAID FOR WITH ITEM 611)
- # - 18'-6 3/8"

HYDRAULIC DATA

DRAINAGE AREA = 1.95 SQ. MILES

Q (10) = 360 CFS V (10) = 5.19 FPS
HW EL (10) = 783.33

Q (25) = 495 CFS V (25) = 5.28 FPS
HW EL (25) = 783.70

Q (100) = 530 CFS V (100) = 5.45 FPS
HW EL (100) = 783.83
STRUCTURE DOES NOT CLEAR THE 100 YEAR DESIGN

EXISTING STRUCTURE

TYPE: REINFORCED CONCRETE SLAB AND CONCRETE ABUTMENTS
SPANS: 10'-4 3/4"± OR 18'-0"± CLEAR SPAN
ROADWAY: 28'-6"± F/F SAFETY CURB
LOADING: UNKNOWN
SKEW: 30°00'± OR 60°00'±
APPROACH SLABS: NONE
ALIGNMENT: TANGENT
CROWN: 3/16"/FT±
STRUCTURAL FILE NUMBER: 2567695
DATE BUILT: 07/01/1940
DISPOSITION: TO BE REMOVED

PROPOSED STRUCTURE

TYPE: 11'-8" SPAN x 5'-9" RISE, ALUMINUM BOX CULVERT WITH REINFORCED CONCRETE HEADWALLS
SPAN: 11'-8" CLEAR SPAN MEASURED NORMAL TO CULVERT
ROADWAY: 24'-0" F/F CURB WITH 5'-0" SIDEWALKS LEFT AND RIGHT
LOADING: HL-93 WITH 60 PSF FWS
SKEW: 29°22'39" RF
APPROACH SLABS: NONE
ALIGNMENT: TANGENT
CROWN: NORMAL
COORDINATES: LATITUDE N 39°58'01.16"
LONGITUDE W 82°53'49.27"

DESIGN AGENCY: **EMIT**

DATE: 12-22-20

REVIEWED: CAS

DRAWN: MSM

DESIGNED: MSM

FRANKLIN COUNTY

STA. 12+43.33

STA. 12+56.81

SITE PLAN

FRA-M1485-00380

ELBERN AVENUE BRIDGE OVER TURKEY RUN

FRA-ETNA ST / ELBERN AVE PID No. 108702

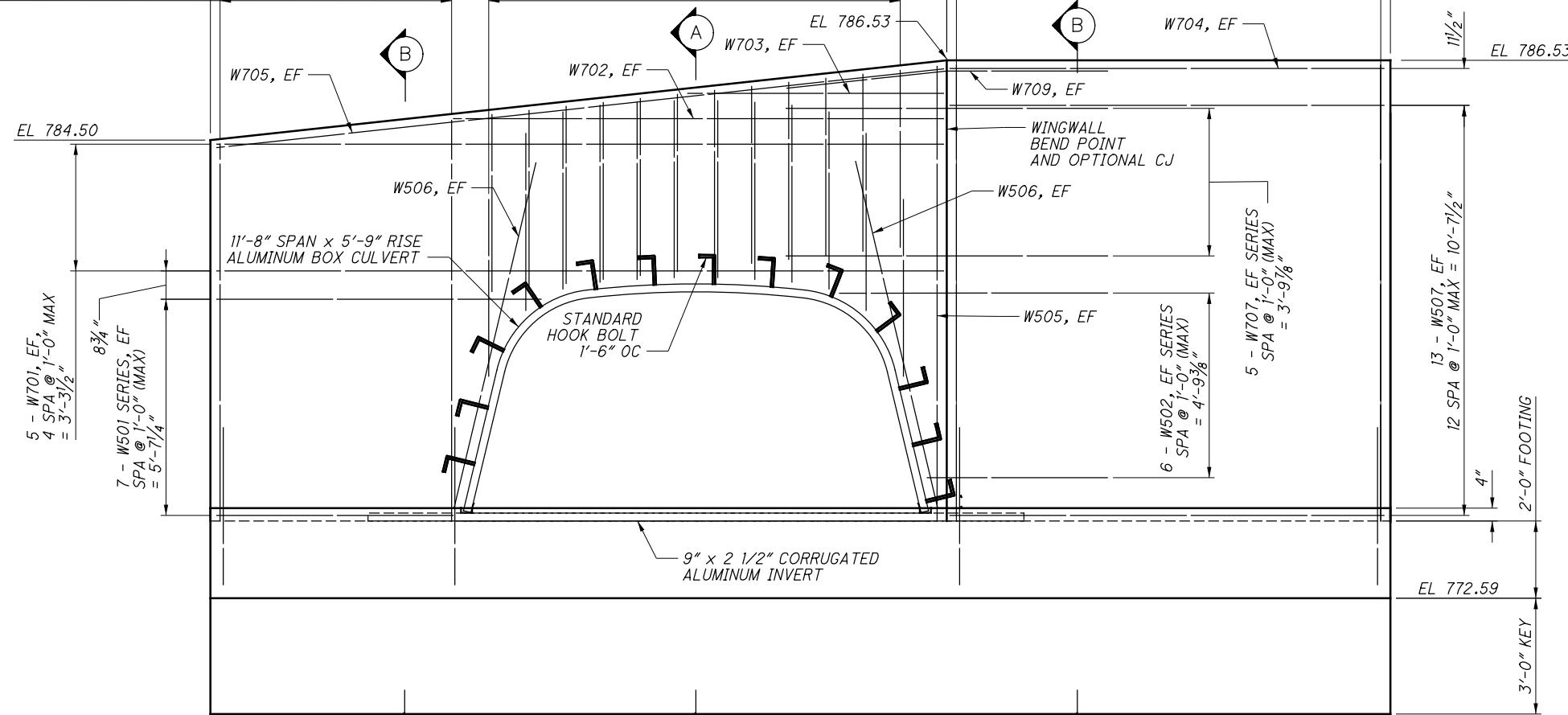
1 / 10

17 / 29

13 - W601 SERIES & 13 - F605 DOWELS, FF, SPA @ 6" MAX,
 7 - W503 SERIES, NF, SPA @ 1'-0" = 6'-0"

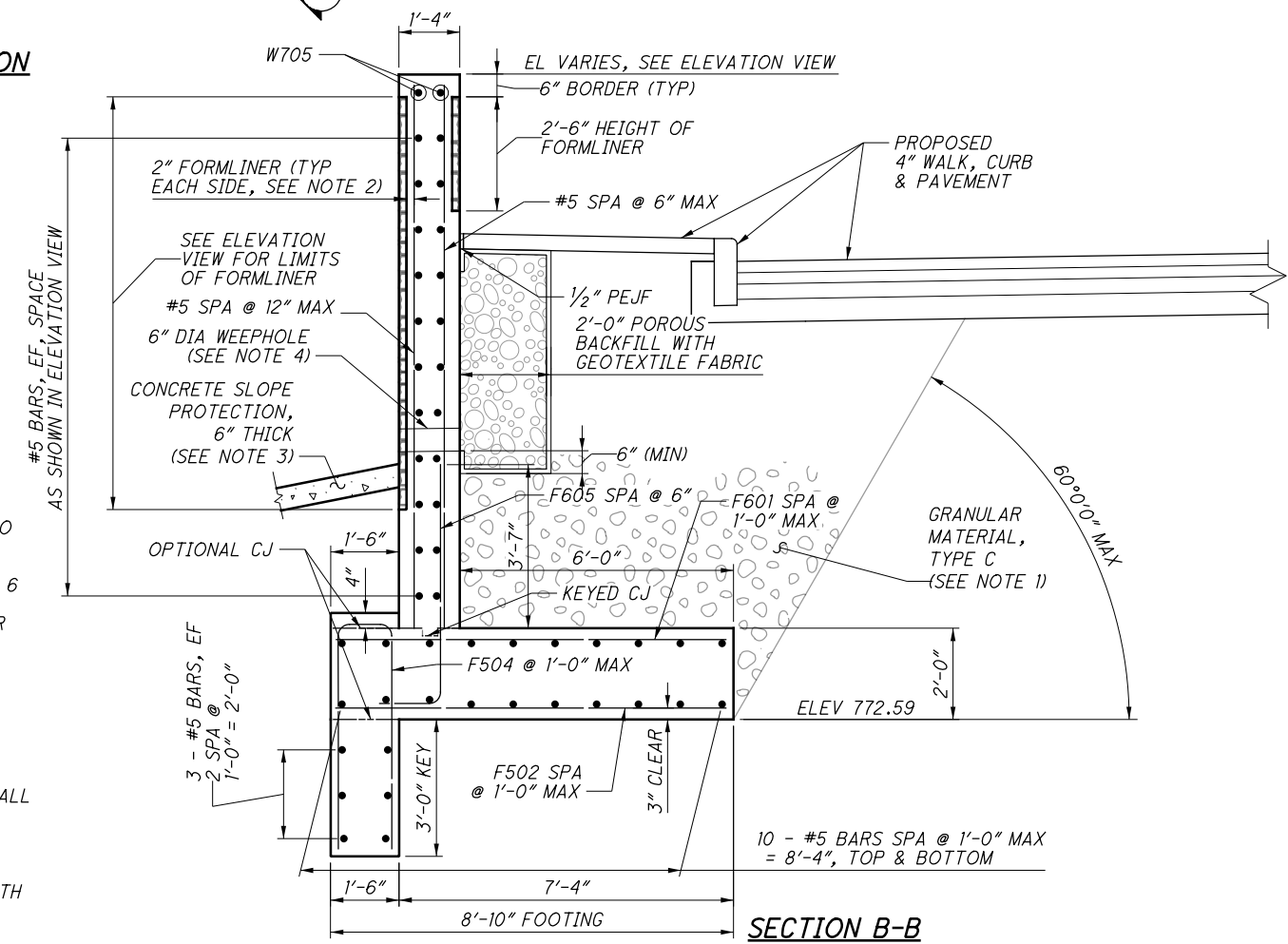
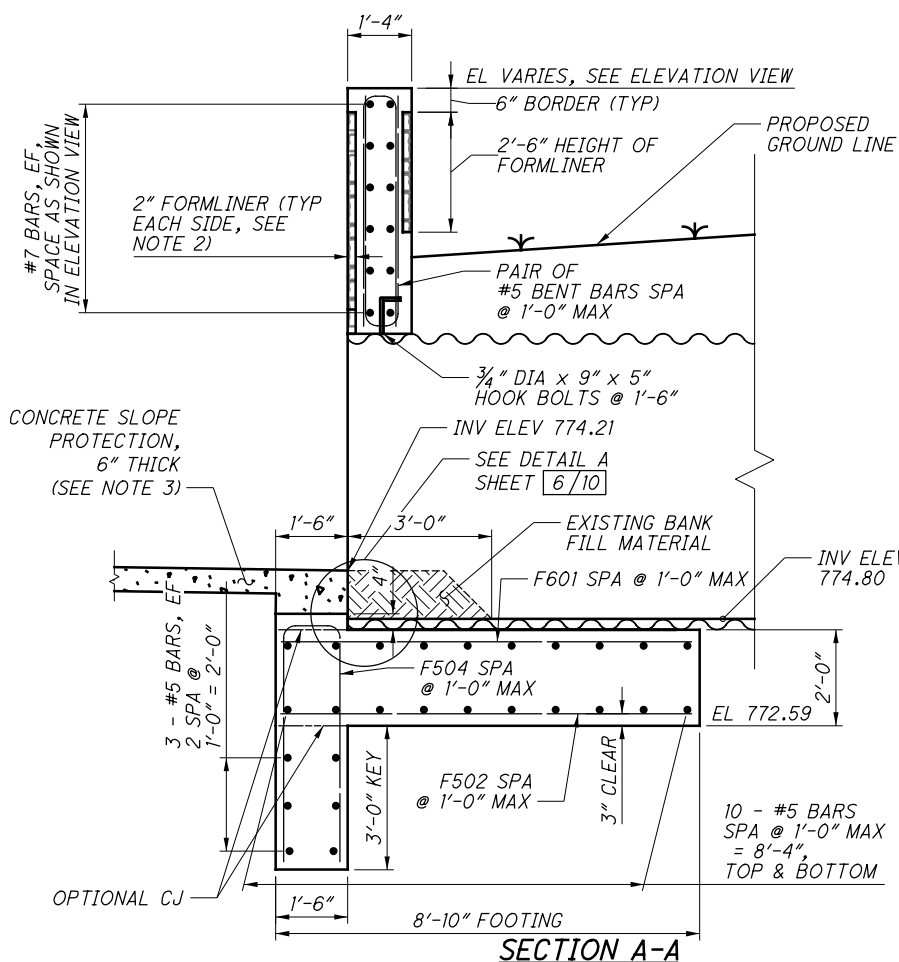
12 SETS OF
 2 - W504 SPA @ 1'-0" (MAX) = 10'-8"

23 - W602, FF, & 23 - F605 DOWELS, FF, SPA @ 6"
 12 - W505, NF, SPA @ 1'-0" = 11'-0"



SOUTH (OUTLET) WINGWALL ELEVATION

(CONCRETE FORMLINER LIMITS NOT SHOWN FOR CLARITY)



NOTES

1. GRANULAR MATERIAL, TYPE C SHALL CONFORM TO CMS 703.16C AND HAVE A MINIMUM INTERNAL FRICTION ANGLE OF 34°. PLACE GRANULAR MATERIAL IN COMPACTED LIFTS NOT TO EXCEED 6 INCHES. GRANULAR MATERIAL SHALL BE PLACED UP TO TOP OF POROUS BACKFILL ELEVATION OR BOTTOM OF PAVEMENT SUBGRADE. GRANULAR BACKFILL SHALL BE INCLUDED WITH ITEM 203, GRANULAR MATERIAL TYPE C, FOR PAYMENT.
2. FORMLINER PATTERN SHOWN IS FOR REFERENCE ONLY. FORMLINER SHALL BE APPLIED TO THE LIMITS SHOWN IN THE PLANS.
3. CONCRETE SLOPE PROTECTION AT SOUTH WINGWALL SHOWN. NORTH WINGWALL SIMILAR WITH ROCK CHANNEL PROTECTION AS SHOWN IN PLAN AND ELEVATION.
4. 6" DIAMETER WEEPHOLES SHALL BE INCLUDED WITH ITEM 518 - POROUS BACKFILL WITH GEOTEXTILE FABRIC, FOR PAYMENT.

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DESIGN AGENCY EMH	
DRAWN MSM	REVIEWED CAS
DATE 12-22-20	STRUCTURE FILE NUMBER 2567696
DESIGNED MSM	CHECKED RUE
FRA-ETNA ST / ELBERN AVE PID No. 108702	
SOUTH WINGWALL DETAILS FRA-M1485-00380 ELBERN AVENUE BRIDGE OVER TURKEY RUN	
9 / 10	
25 / 29	