

05-24-13 SPECIAL LETTING ITEM 069

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED

MAIN STREET BRIDGE
VILLAGE OF ROYALTON
F.A.S. ROUTE 898
SECTION 10-00009-00-BR
PROJECT NO. BROS-0055 (072)
JOB NO. C-99-516-11
CONTRACT NO. 99502

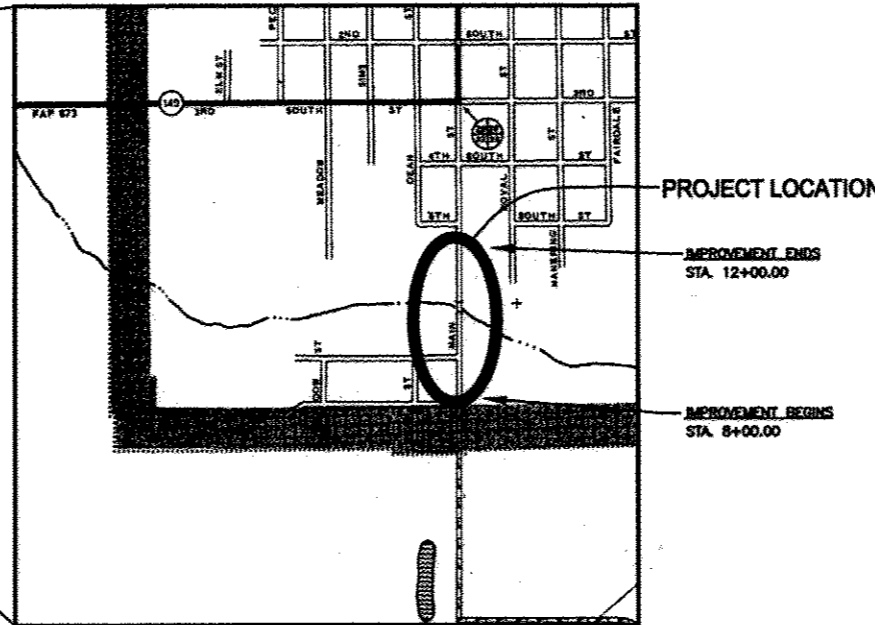
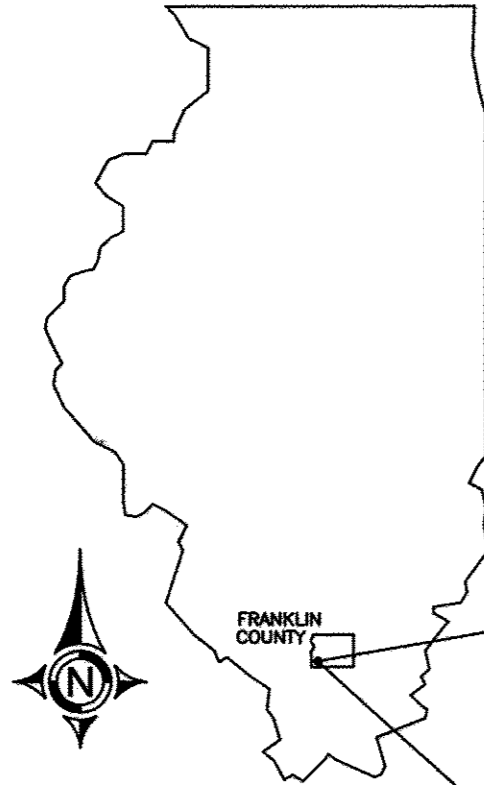
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	10-00009-00-BR	FRANKLIN	11	1
VILLAGE OF ROYALTON			MAIN STREET	

CONTRACT NO. 99502

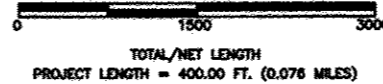
FUNCTIONAL CLASS: Local
ADT (09): 350
DESIGN SPEED: 30 MPH

INDEX OF SHEETS

- 1 COVER SHEET
- 2 SUMMARY OF QUANTITIES & TYPICAL SECTIONS
- 3 GENERAL PLAN AND ELEVATION
- 4-5 DECK BEAM DETAILS
- 6 ABUTMENT DETAILS
- 7 STEEL RAILING DETAILS
- 8 PLAN AND PROFILE
- 9-10 CROSS SECTIONS
- 11 TYPICAL WATERMAIN DETAILS



LOCATION MAP



STANDARDS

- 280001-07 TEMPORARY EROSION CONTROL
- 515001-03 NAME PLATE
- 542301-03 PRECAST REINFORCED CONCRETE FLARED END SECTION
- 701901-02 TRAFFIC CONTROL
- BLR 21-9 TRAFFIC CONTROL

ALL EXISTING UTILITIES AND LOCATIONS TO BE CONFIRMED BY J.U.L.I.E. 800-892-0123

Jim W. Brown
Jim W. Brown as President of Date: March 7, 2013
Illinois Professional Design Firm
Land Survey & Prof. Eng. Corp
Number 184-002518
Expires April 30, 2013



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROVED March 8, 2013
Charles Brandon
CHARLES BRANDON, VILLAGE PRESIDENT

PASSED MARCH 13, 2013
Dennis W. Hill
DISTRICT 9 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID
BASED ON LIMITED
REVIEW MARCH 13, 2013
Jeffrey L. Keirn
JEFFREY L. KEIRN, P.E. DWH
DEPUTY DIRECTOR OF HIGHWAYS
REGION FIVE ENGINEER

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	10-00009-00-BR	FRANKLIN	11	2
VILLAGE OF ROYALTON		MAIN STREET		

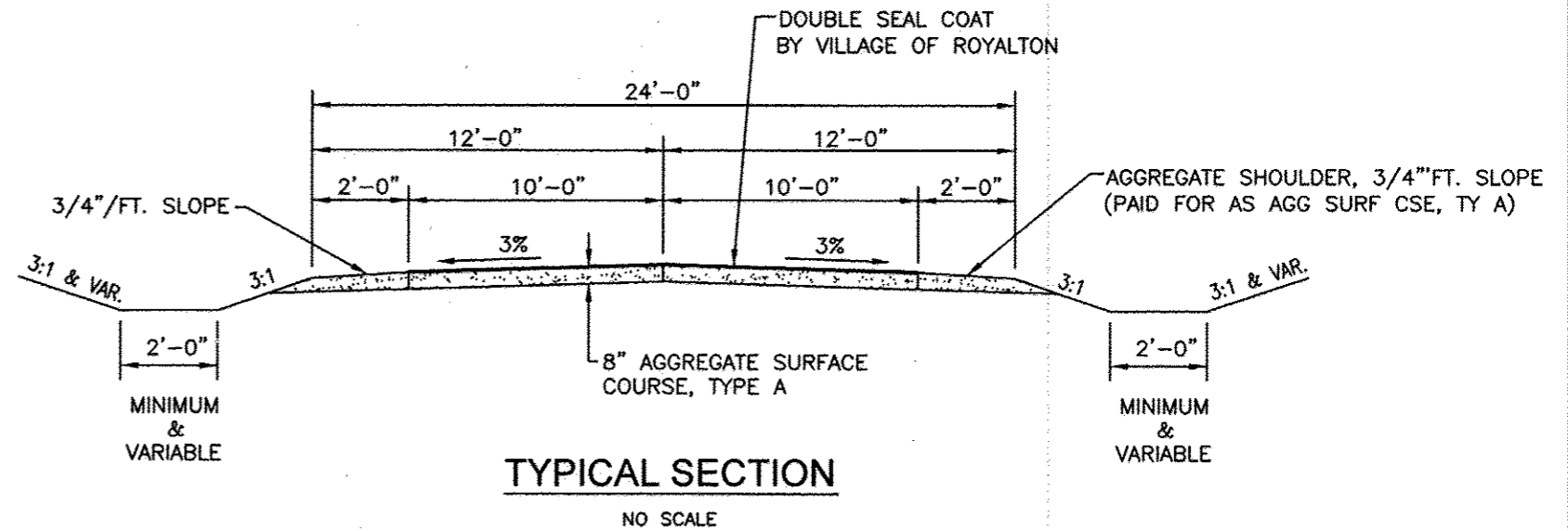
CONTRACT NO. 99502

SUMMARY OF QUANTITIES

* - SPECIAL PROVISION

CODE NO.	PAY ITEM	UNIT	QUANTITY
X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.5
Δ * XX004731	CONNECTION TO EXISTING WATERMAIN	EACH	2
Δ * XX005890	DETECTION WIRE	FOOT	340
Δ * XX006538	WATER MAIN 6, BORED	FOOT	300
Δ * XX003796	TAP + CORR., 1"	EACH	1
20200100	EARTH EXCAVATION	CU YD	200
20400100	BORROW EXCAVATION	CU YD	300
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	150
*28000305	TEMPORARY DITCH CHECKS	FOOT	80
28100807	STONE DUMPED RIPRAP, CLASS A4	TON	250
40200100	AGGREGATE SURFACE COURSE, TYPE A	TON	475
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50105220	PIPE CULVERT REMOVAL	FOOT	70
50300225	CONCRETE STRUCTURES	CU YD	22.6
50300280	CONCRETE ENCASMENT	CU YD	3.5
50400605	PRECAST PRESTRESSED CONCRETE DECK BEAMS (33" DEPTH)	SQ FT	1560
50800105	REINFORCEMENT BARS	POUND	2680
Δ 50900205	STEEL RAILING, TYPE S1	FOOT	130
51201400	FURNISHING STEEL PILES HP10X42	FOOT	550
51202305	DRIVING PILES	FOOT	550
51500100	NAME PLATES	EACH	1
542A0229	PIPE CULVERTS, CLASS A, TYPE 1 24"	FOOT	65
542A0241	PIPE CULVERTS, CLASS A, TYPE 1 36"	FOOT	100
54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS, 24"	EACH	2
54213681	PRECAST REINFORCED CONCRETE FLARED END SECTIONS, 36"	EACH	1
Δ * 56100600	WATER MAIN 6	FOOT	40
60221700	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 8 GRATE	EACH	1
67100100	MOBILIZATION	L SUM	1

Δ SPECIALTY ITEMS



ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	10-00009-00-BR	FRANKLIN	10	3
VILLAGE OF ROYALTON		MAIN STREET		

CONTRACT NO. 99502

Solvaqe-- Existing steel beams shall be stockpiled on the jobsite for salvage by the Village of Royalton.

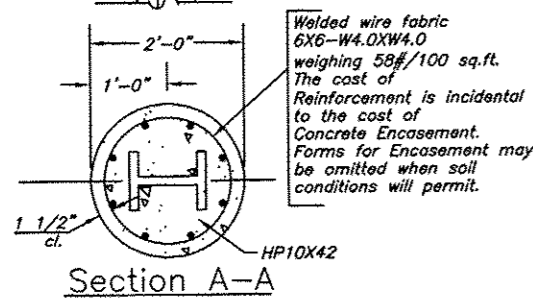
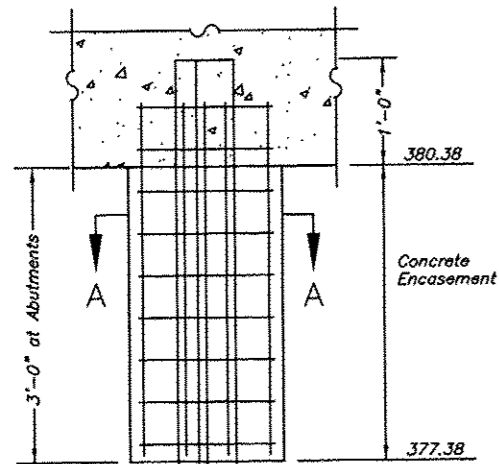
GENERAL NOTES

- The Contractor shall drive 0 test piles, as specified, in a permanent location as directed by the Engineer before ordering the remaining piles.
- See Special Provisions for boring logs.
- A Corrosion inhibitor, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams.
- The Steel H-piles shall be according to AASHTO M270 Grade 50.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub.		Total
			Piers	Abuts.	
Removal of Existing Structures	L. Sum				1
Concrete Structures	Cu. Yd.			22.6	22.6
Precast Prestressed Concrete Deck Beams (33" Depth)	Sq. Ft.	1560			1560
Steel Bridge Rail, Type S-1	Foot	130			130
Reinforcement Bars	Pound			2680	2680
Furnishing Steel Piles HP 10X42	Foot			550	550
Driving Piles	Foot			550	550
Name Plates	Each				1
Concrete Encasement	Cu. Yd.			3.5	3.5

DETAIL OF HP PILE ENCASEMENT



QUANTITIES/LIN. FT. OF ENCASEMENT (STEEL PILES)

PILE SIZE	ITEM	QUANTITY
HP 10	CONCRETE ENCASEMENT	0.086 C.Y.
HP 12	CONCRETE ENCASEMENT	0.112 C.Y.

DESIGN SPECIFICATIONS
2007 LRFD Specification - 4th ed.

SEISMIC DATA

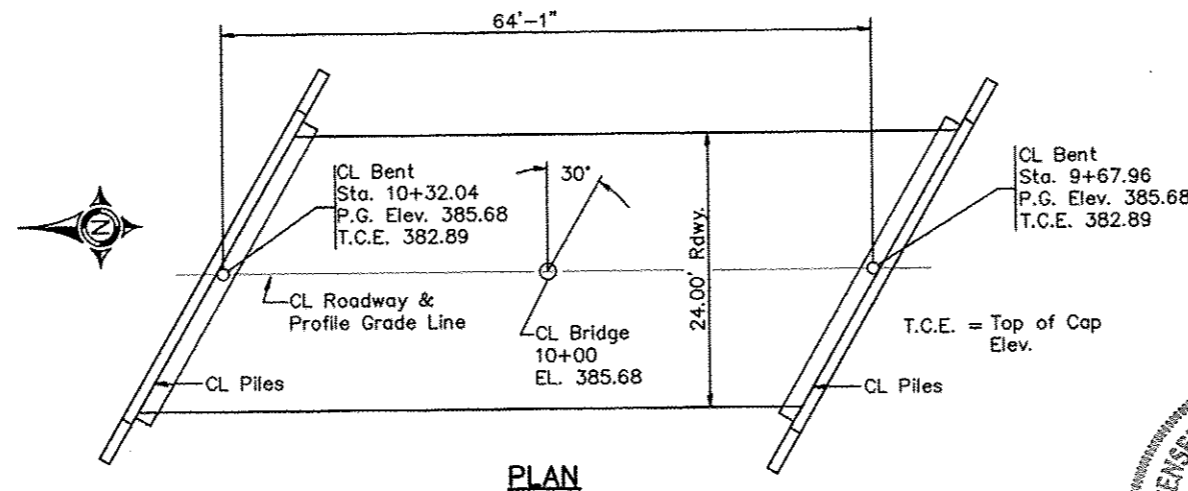
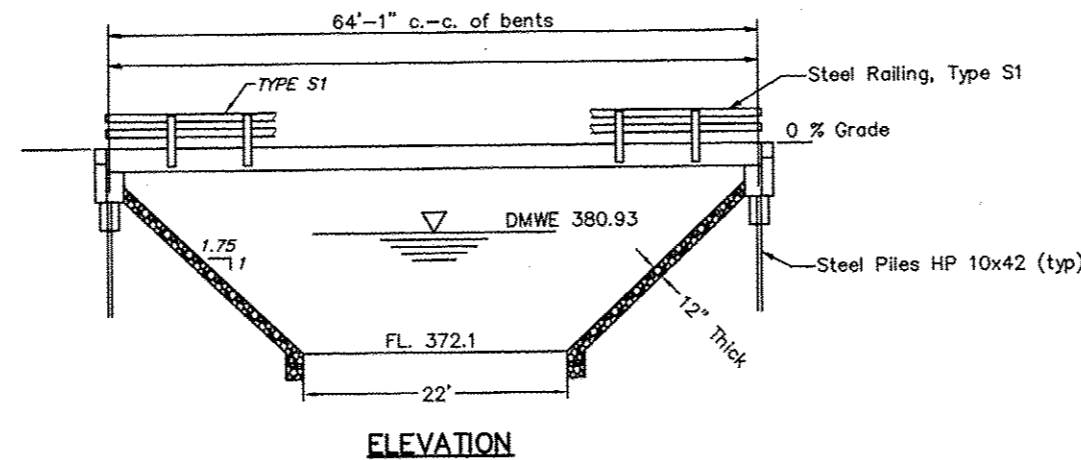
Seismic Performance Zone (SPZ) = 2
Design Spectral Acceleration at 1.0 sec. (S_{01}) = 0.253
Design Spectral Acceleration at 0.2 sec (S_{05}) = 0.690
Site Soil Class = C

PILE DATA (2-ABUTS.)

Type	STEEL HP 10X42
Estimated Length	55 Feet
Number Required	10
Nominal Required Bearing	335 KIPS
Allowable Resistance Available	111 KIPS

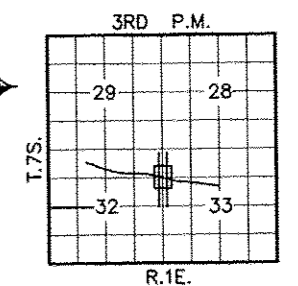
LOADING HL-93

ALLOW 50#/SQ.FT. FOR FUTURE WEARING SURFACE

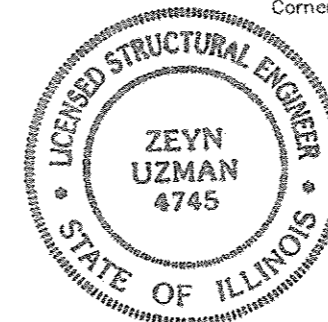


STATION 10+00
UNNAMED CREEK
SEC. 10-00009-00-BR BUILT 2013
VILLAGE OF ROYALTON
LOADING HL93
STR. NO. 028-6005

LETTERING FOR NAME PLATE
Locate Name Plate at SOUTHWEST Corner of Bridge



LOCATION SKETCH



I certify that to the best of knowledge, information and belief, this bridge/box culvert design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current AASHTO Standard Specifications for Highway Bridges.

Signature: *[Signature]* 2/27/13
Illinois Structural No. 4745
Expires: 11/30/14

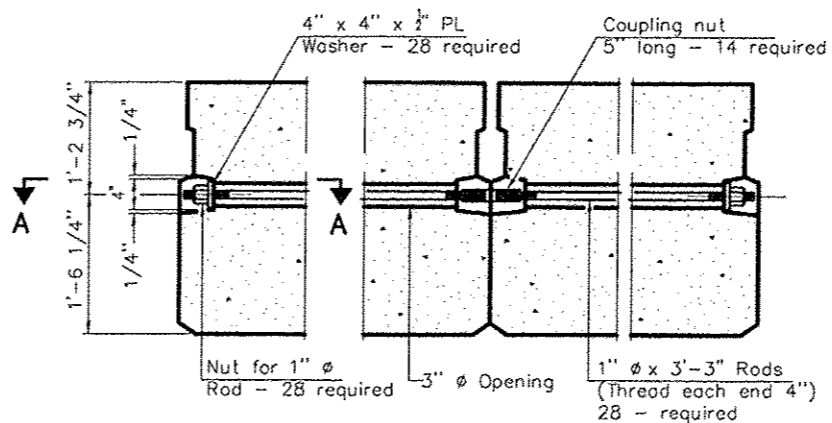
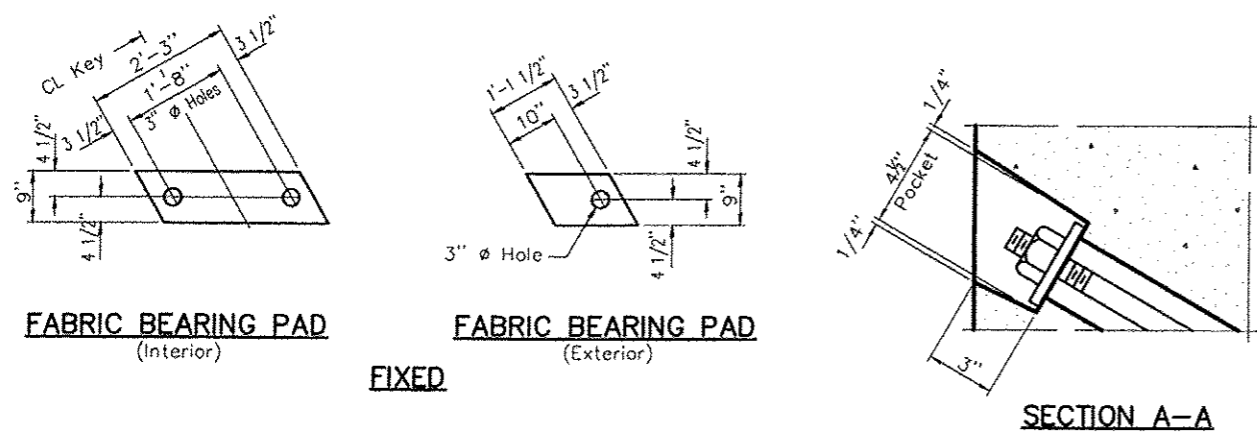
WATERWAY INFORMATION

Drainage Area = 3.67 S.M. Low Grade Elev. = 384.4 @ Sta. 7+50									
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	50	1850	242	351	380.9	0.50	0.38	361.44	381.31
Base	100	2170	274	411	381.7	0.58	0.37	382.25	382.04
Overtopping									
Max. Calc.	500	3000	329	470	383.3	0.93	0.51	384.20	383.79

GENERAL PLAN & ELEVATION
MAIN STREET OVER TRIBUTARY TO BIG MUDDY RIVER
SECTION 10-00009-00-BR
VILLAGE OF ROYALTON
STATION 10+00

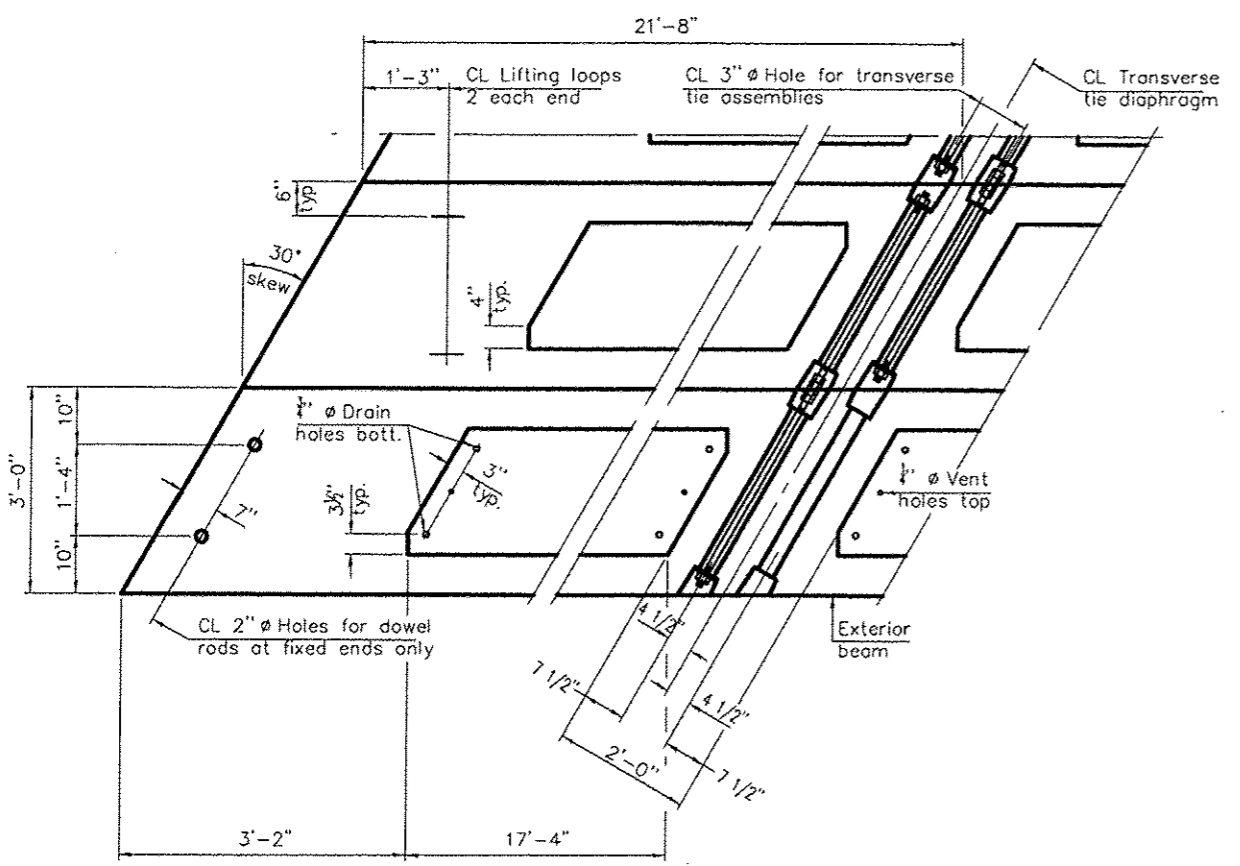
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	10-00009-00-BR	FRANKLIN	11	4
VILLAGE OF ROYALTON		MAIN STREET		

CONTRACT NO. 99502

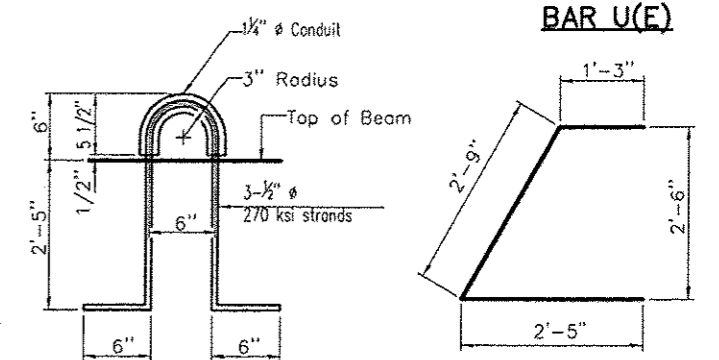
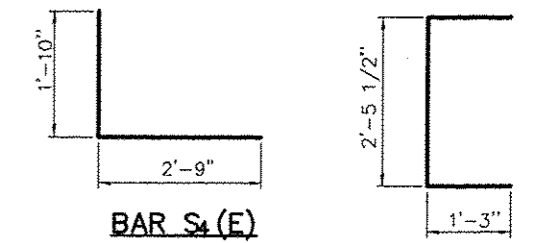
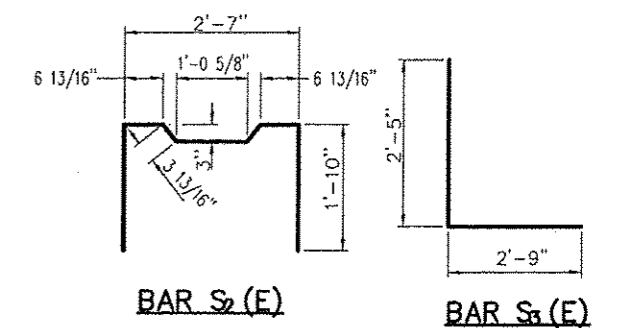
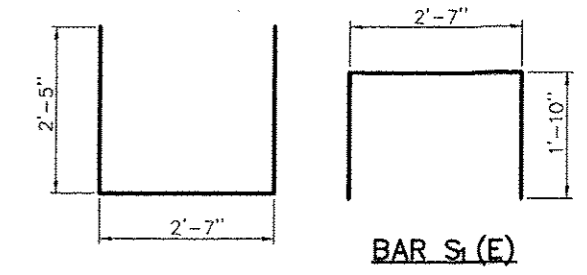


SECTION A-A

TYPICAL TRANSVERSE TIE ASSEMBLY



PLAN VIEW



LIFTING LOOP DETAIL

BAR U(E)

NOTES

Note: Connect beams in pairs with the transverse tie configuration shown.

- Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 7/8" and the nominal cross-sectional area shall be 0.153 sq. in.
- The 1" ø rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.
- Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions).
- Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.
- A minimum 2 1/2" ø lifting pin shall be used to engage the lifting loops during handling.
- Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
- Compressive strength of prestressed concrete, f_c, shall be 6000 psi.
- Compressive strength of prestressed concrete at release, f_{ci}, shall be 5000 psi.

BILL OF MATERIAL

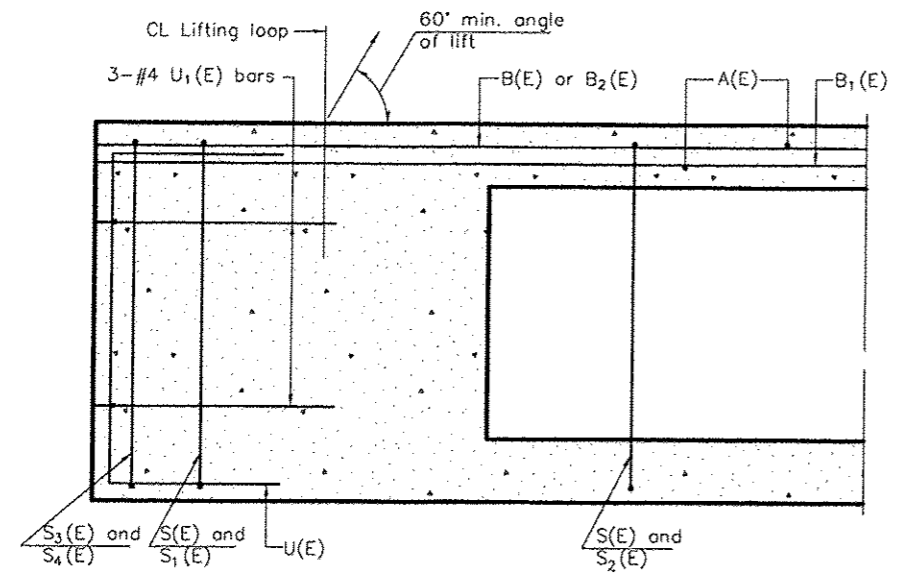
Precast Prestressed Conc. Deck Bms. (33" depth)	Sq. Ft. 1560
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33" X 36" PPC DECK BEAM DETAILS
 STRUCTURE NO. 028-6005

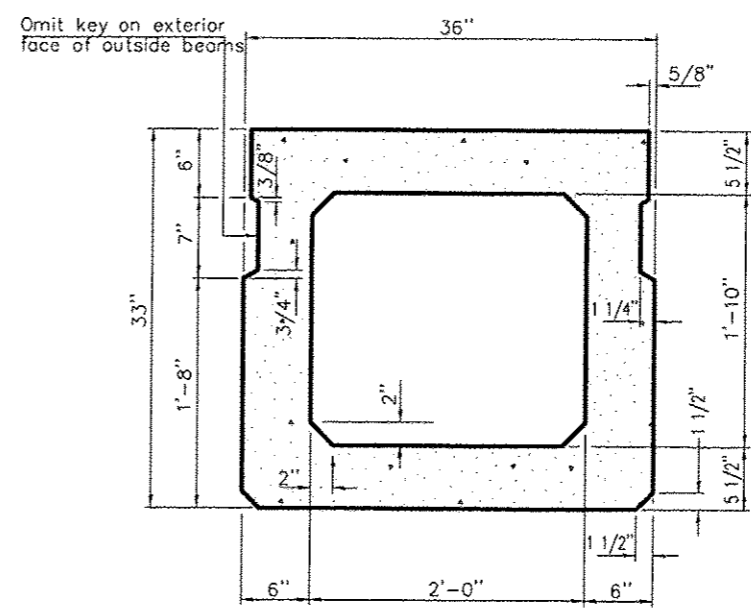
SECTION 10-00009-00-BR
 VILLAGE OF ROYALTON

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	10-0009-00-BR	FRANKLIN	11	5
VILLAGE OF ROYALTON		MAIN STREET		

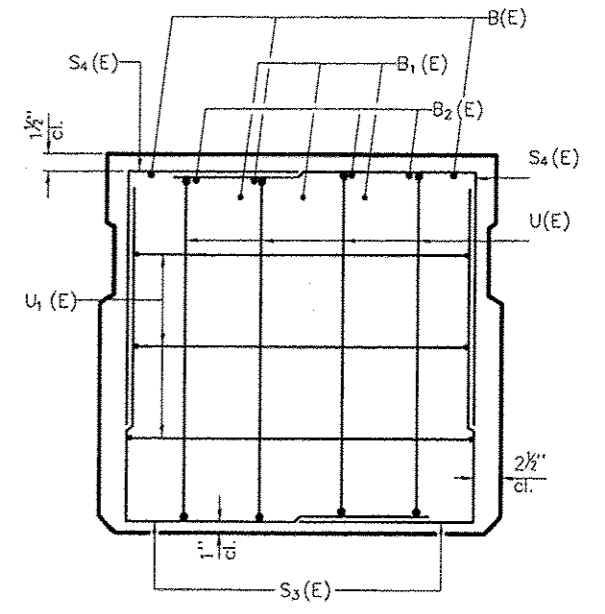
CONTRACT NO. 99502



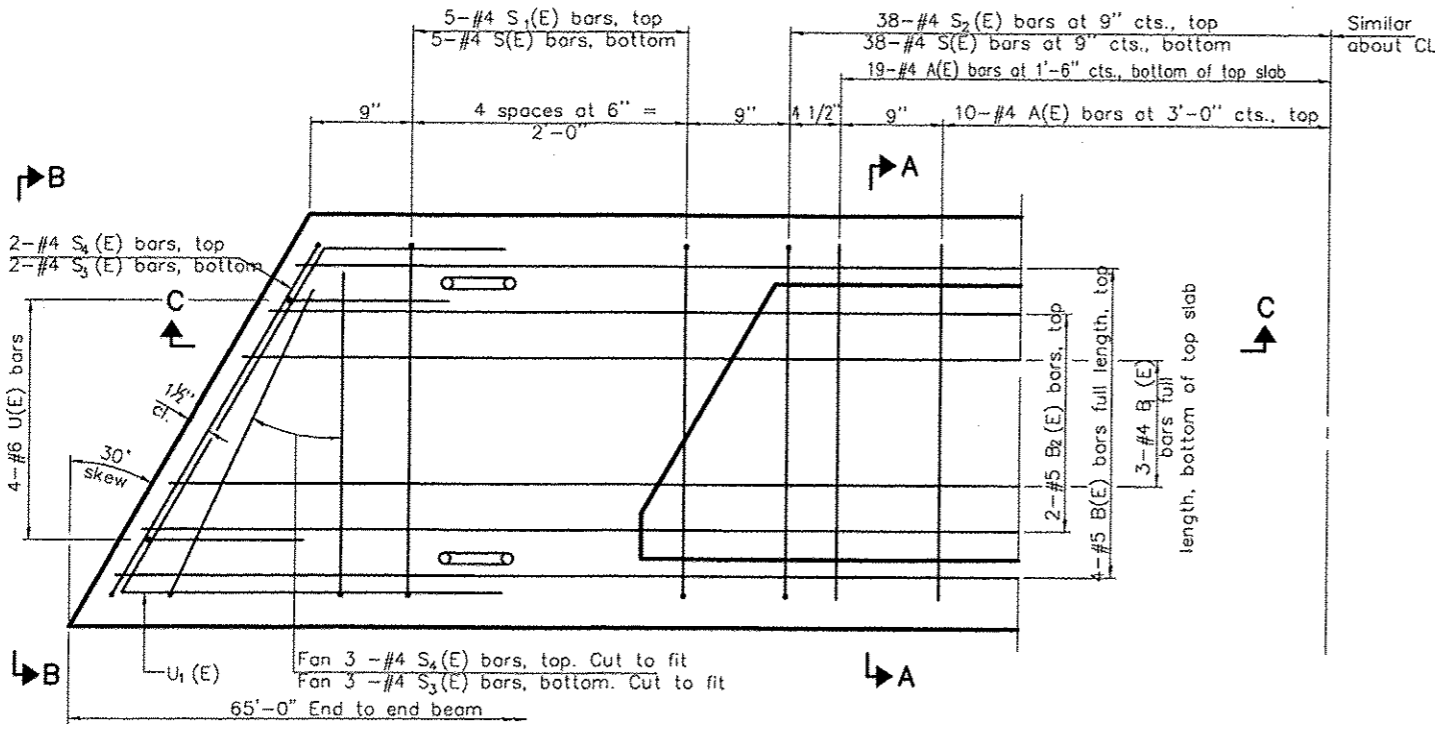
SECTION C-C



SECTION A-A
(Showing dimensions)

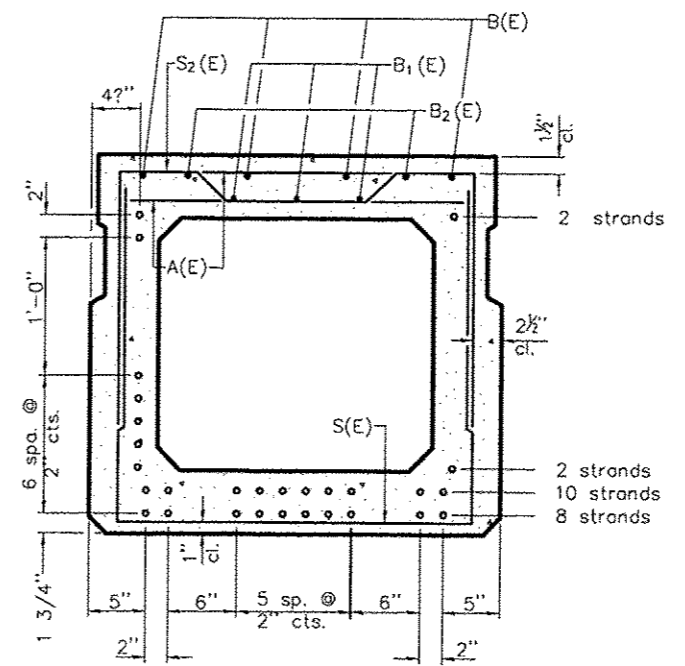


VIEW B-B



PLAN VIEW

Note: Spacing of S(E) and S(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.



SECTION A-A

(Showing reinforcement and permissible strand locations)

Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

BAR LIST
ONE BEAM ONLY
(For information only)

Bar	No.	Size	Length	Shape
A(E)	58	#4	2'-7"	—
B(E)	12	#5	26'-8"	—
B1(E)	9	#4	26'-8"	—
B2(E)	6	#5	26'-8"	—
S(E)	86	#4	7'-5"	U
S1(E)	10	#4	6'-3"	U
S2(E)	76	#4	6'-6"	U
S3(E)	10	#4	5'-2"	U
S4(E)	10	#4	4'-7"	U
U(E)	8	#6	5'-0"	U
U1(E)	6	#4	6'-5"	U

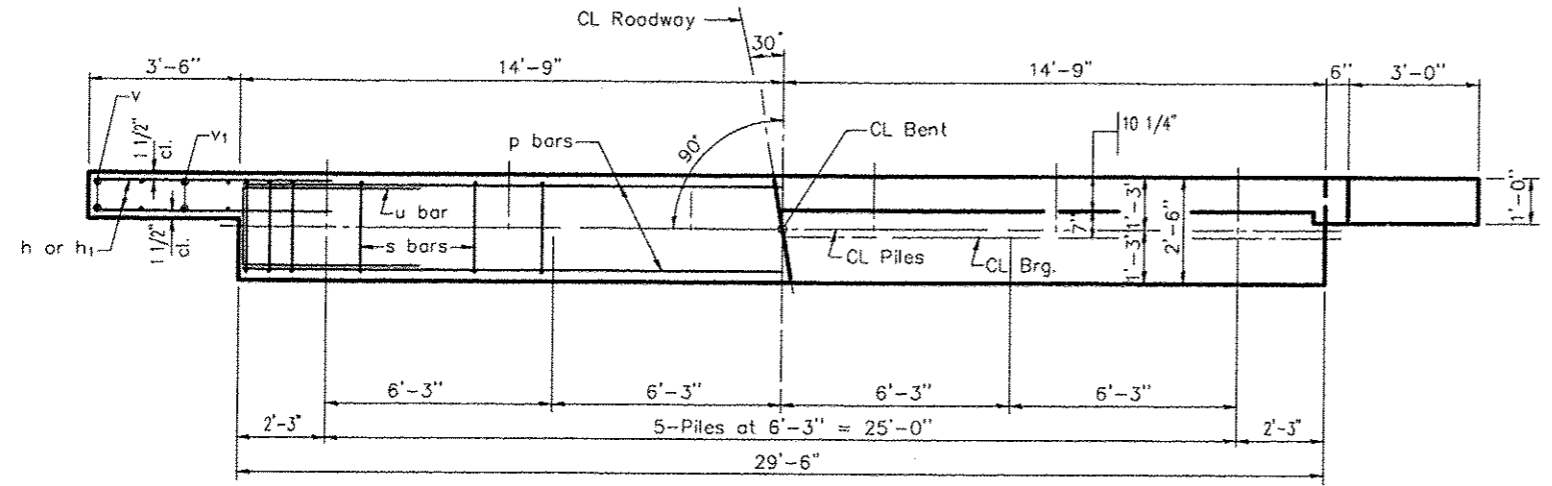
Note: See sheet 4 of 10 for additional details and Bill of Material.

33" x 36" PPC DECK BEAM
STRUCTURE NO. 028-6005

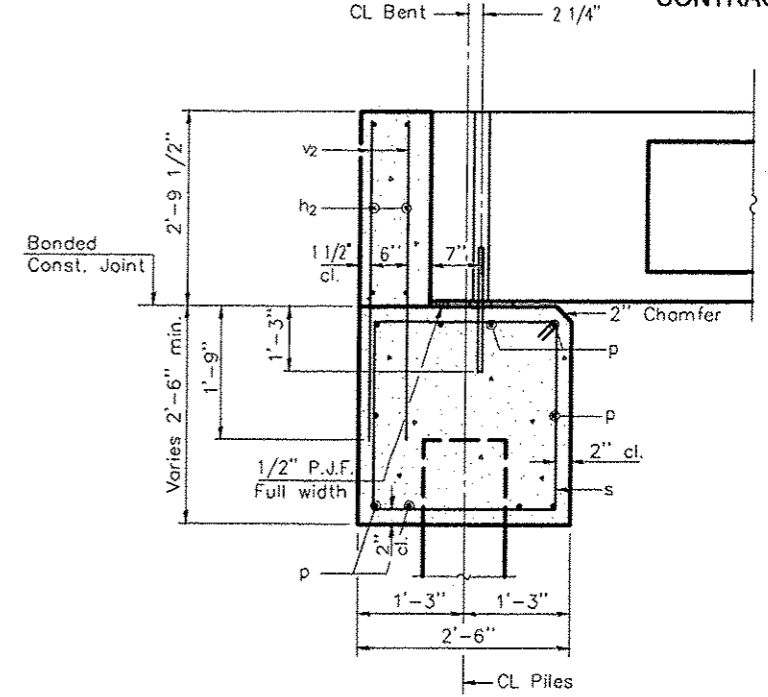
SECTION 10-0009-00-BR
VILLAGE OF ROYALTON

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	10-00009-00-BR	FRANKLIN	11	6
VILLAGE OF ROYALTON		MAIN STREET		

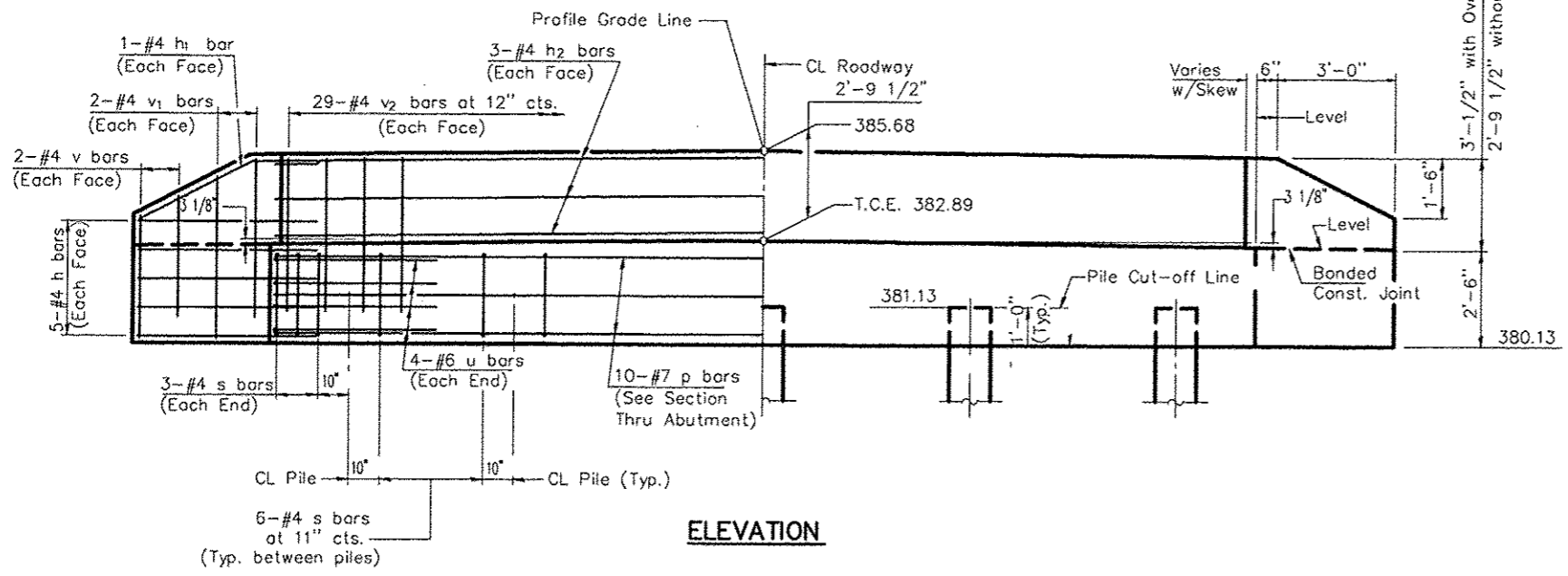
CONTRACT NO. 99502



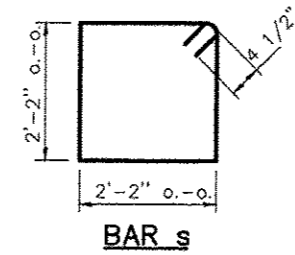
PLAN



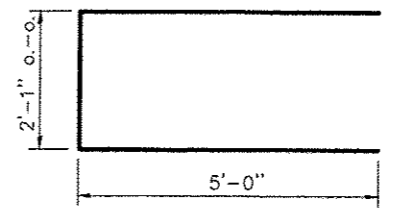
SECTION THRU ABUTMENT
(At Right Angles)



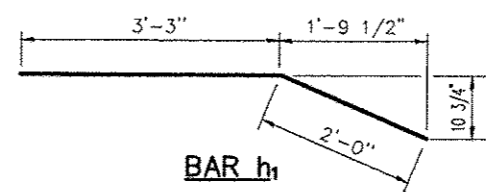
ELEVATION



BAR s



BAR u



BAR h1

NOTES

1. The Backwall and the portion of the Wingwalls above the bonded construction joint shall be cast against the in-place beam.
2. Reinforcement bars shall conform to the requirements of A.A.S.H.T.O. M-31 or M-322, Grade 60.
3. Splice reinforcement in cap to miss anchor bolts.

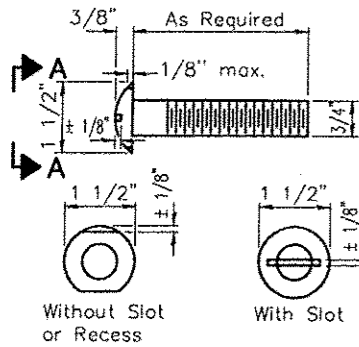
DESIGN STRESSES

f'c = 3,500 psi
fy = 60,000 psi

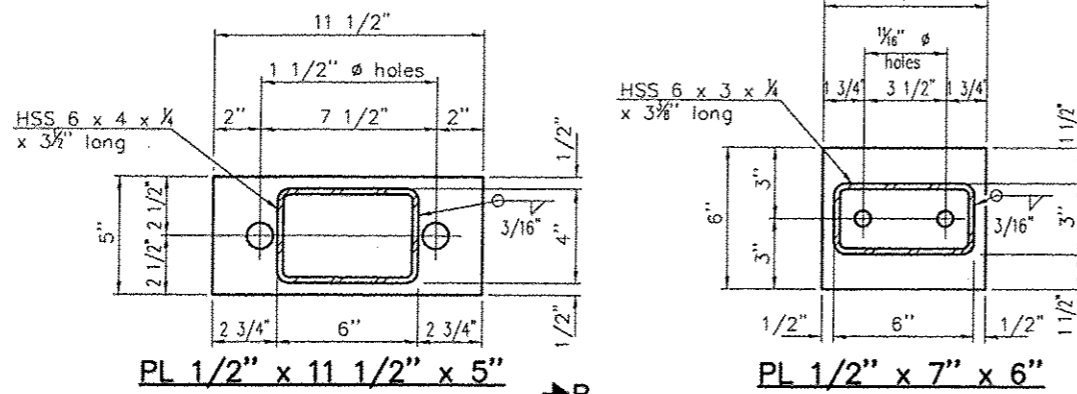
BILL OF MATERIAL FOR ONE ABUTMENT

Bar	No.	Size	Length	Shape
h	20	#4	5'-0"	—
h1	4	#4	5'-3"	—
h2	6	#4	29'-2"	—
p	10	#7	29'-2"	—
s	30	#4	9'-5"	□
u	8	#6	12'-1"	□
v	8	#4	3'-8"	—
v1	8	#4	4'-8"	—
v2	58	#4	4'-5"	—
Concrete Structures			11.3 Cu. Yds.	
Reinforcement Bars			1340 Lb.	

P.P.C. DECK BEAMS PILE BENT ABUTMENT		
24' RDWY.	33" BMS.	'D'=30'
SECTION 10-00009-00-BR VILLAGE OF ROYALTON		



VIEW A-A
ROUND HEAD BOLT

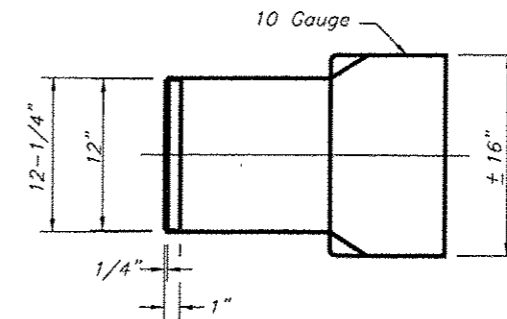
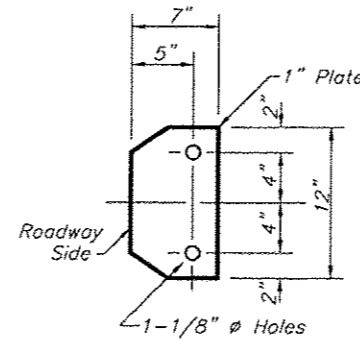


PL 1/2" x 11 1/2" x 5"

PL 1/2" x 7" x 6"

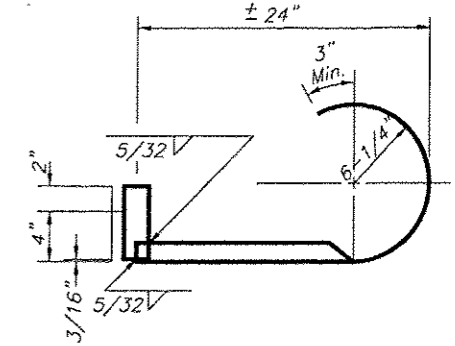
CURLED END SECTION DETAILS

- Notes:
 1) Curled End Sections shall be included with the Steel Railing, Type S1 pay item.
 2) Two (2) Curled End Sections will be required.

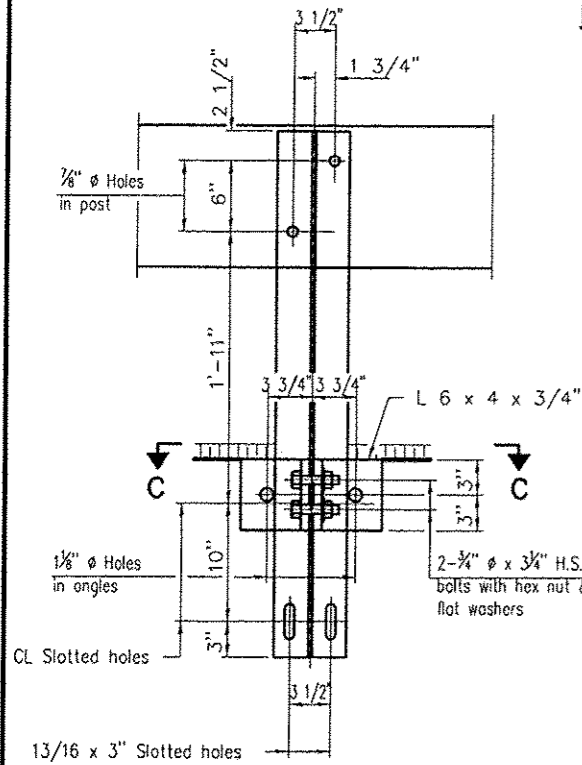


ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	10-00009-00-BR	FRANKLIN	11	7
VILLAGE OF ROYALTON		MAIN STREET		

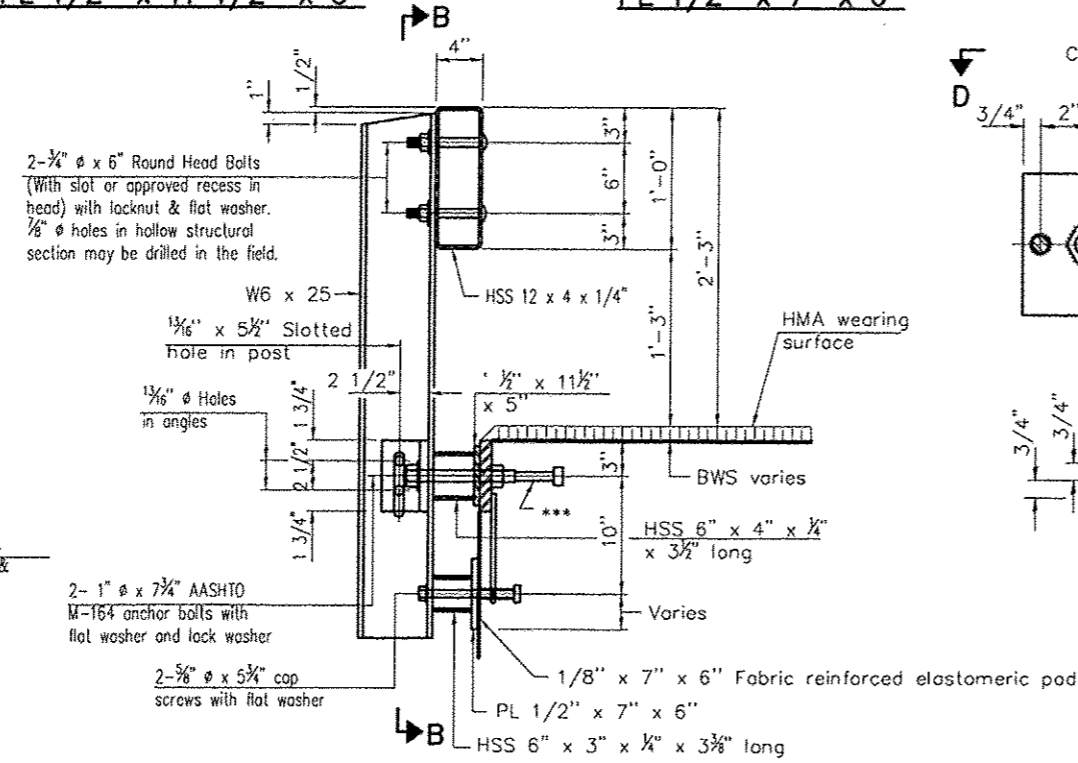
CONTRACT NO. 99502



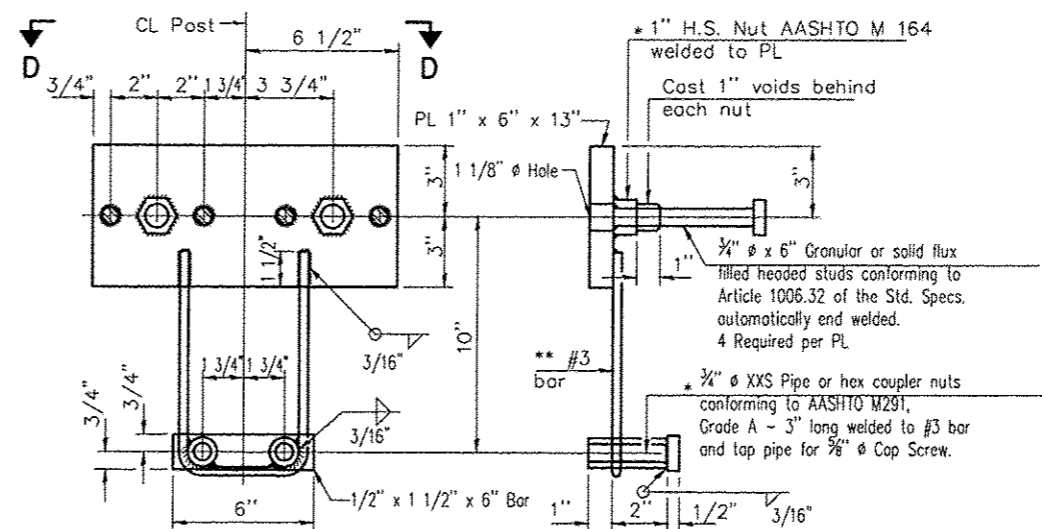
- Notes:
 All field drilled holes shall be coated with an approved zinc rich paint before erection.
 For multi-span bridges, sufficient 1/2" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S-1.
 All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
 The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.



SECTION B-B

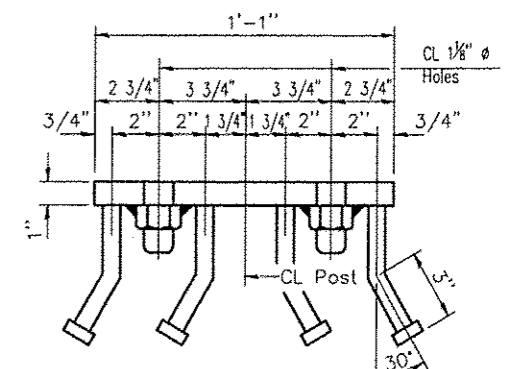


SECTION AT RAILING POST

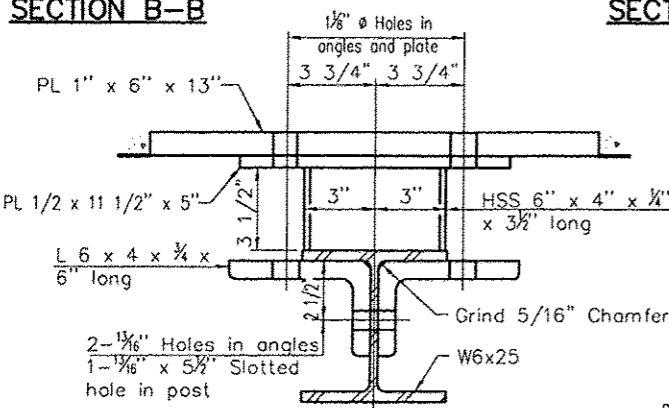


ANCHOR DEVICE

* Threaded areas shall be plugged or blocked off during casting of beam.

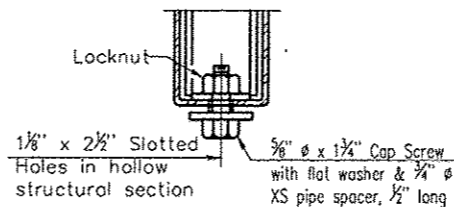


VIEW D-D

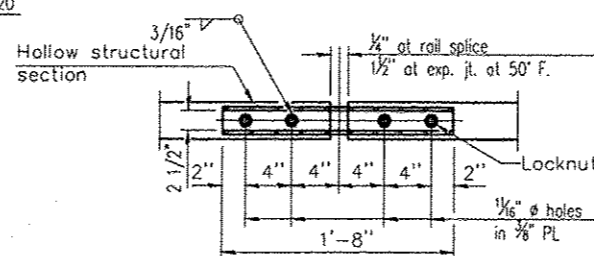


SECTION C-C

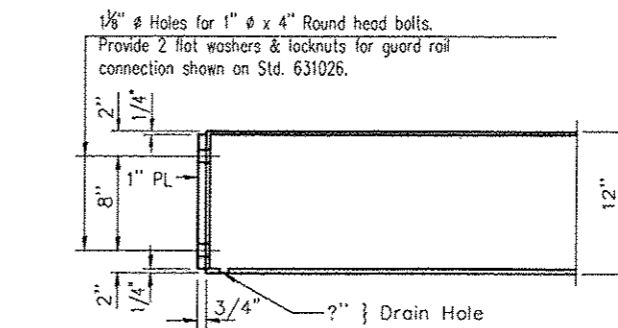
** Whenever the lower insert assemblies interfere with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed 1/2\".



RAIL SPICE CONNECTION AT EXPANSION JT.



PLAN-BOTT. SPICE TYPICAL



END OF RAIL DETAILS

BILL OF MATERIAL

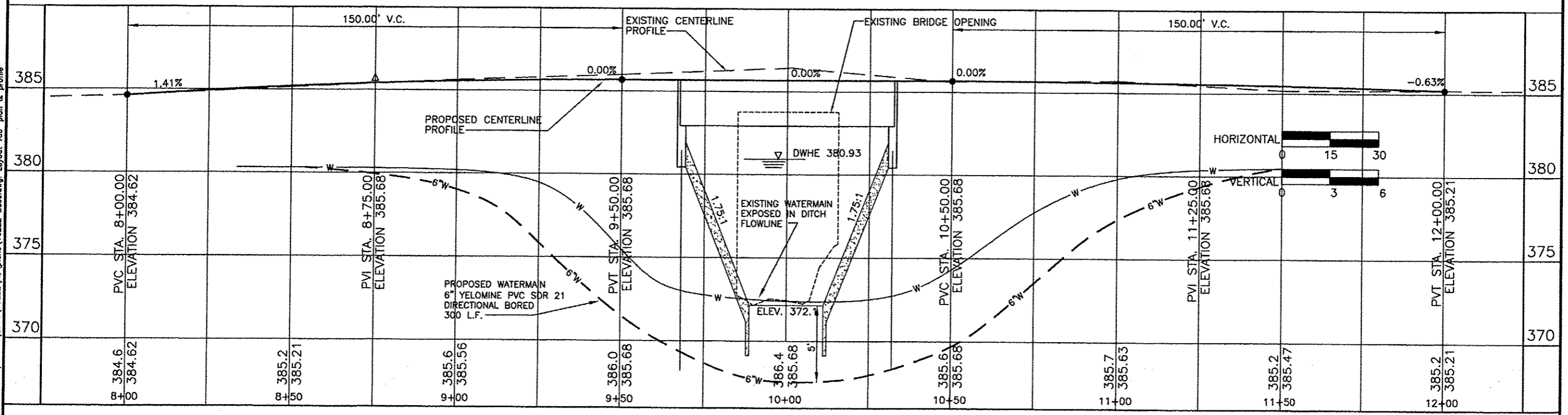
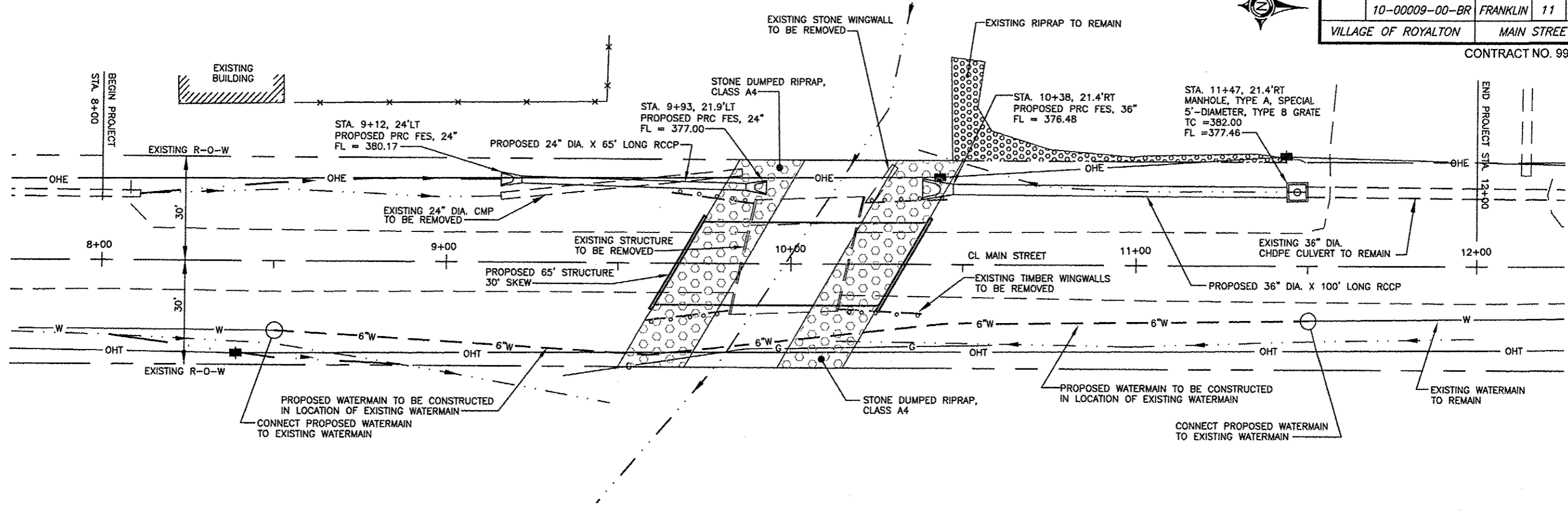
Item	Unit	Quantity
Steel Railing, Type S-1	Foot	130

STEEL RAILING, TYPE S-1
STRUCTURE NO. 028-6005

SECTION 10-00009-00-BR
VILLAGE OF ROYALTON

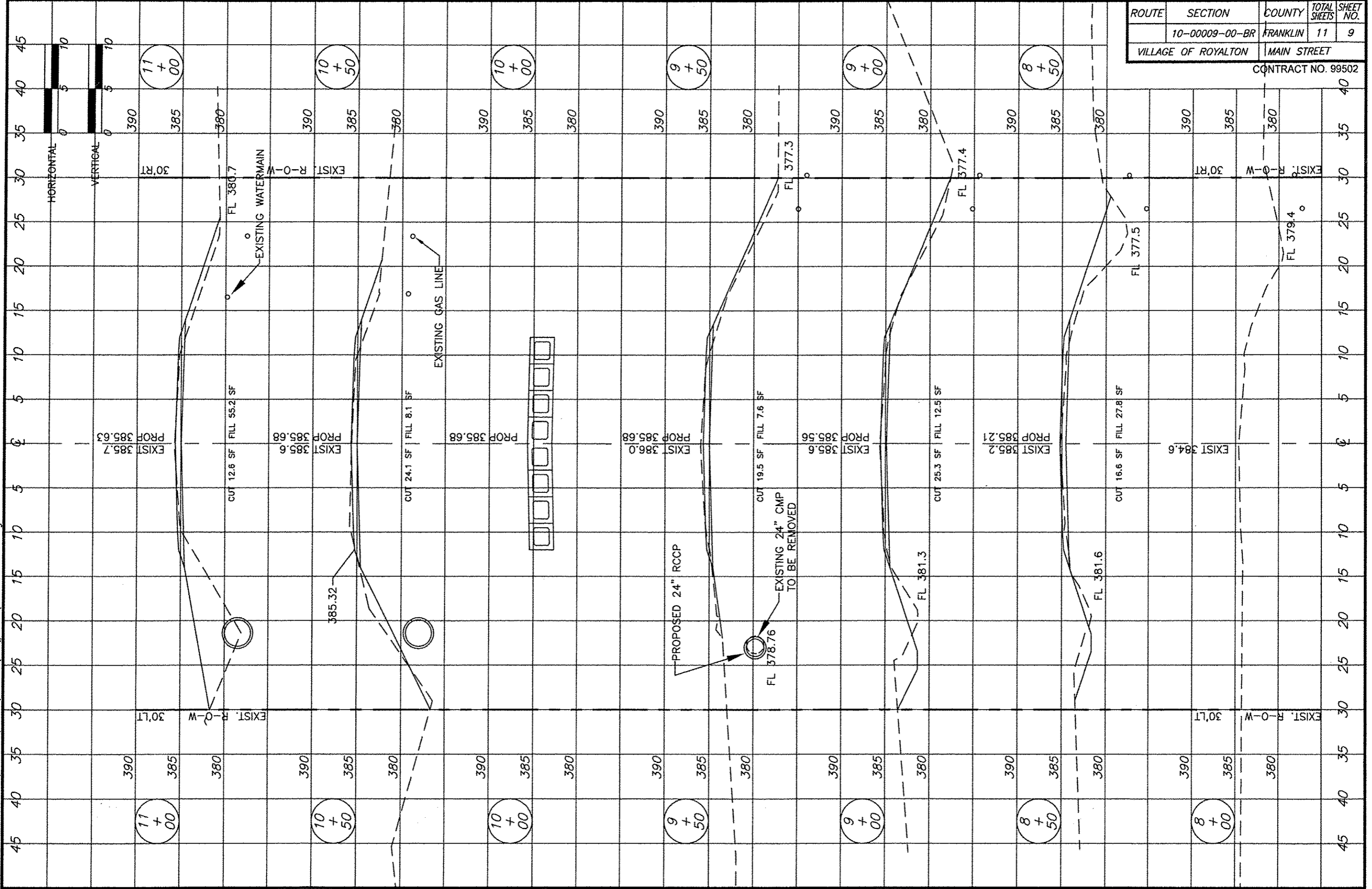
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	10-00009-00-BR	FRANKLIN	11	8
VILLAGE OF ROYALTON		MAIN STREET		

CONTRACT NO. 99502



28 Feb 2013 - 3:35pm X:\2010\10222\AC\plans\10222 Base.dwg: Layout Tab 'plan & profile'

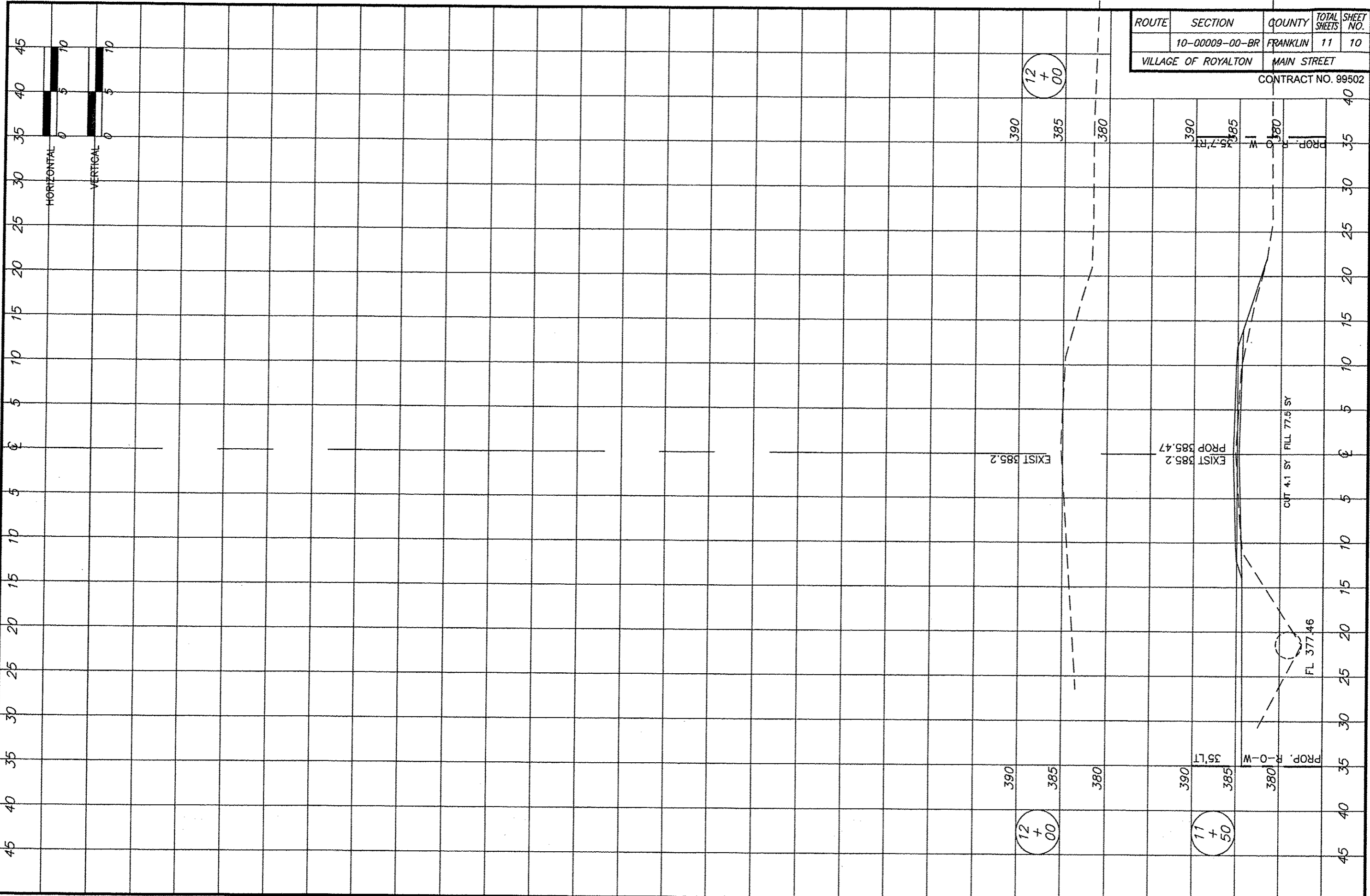
28 Feb 2013 - 3:35pm X:\2010\10222\AC\plans\10222 Base.dwg



ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	10-00009-00-BR	FRANKLIN	11	9
VILLAGE OF ROYALTON		MAIN STREET		

CONTRACT NO. 99502

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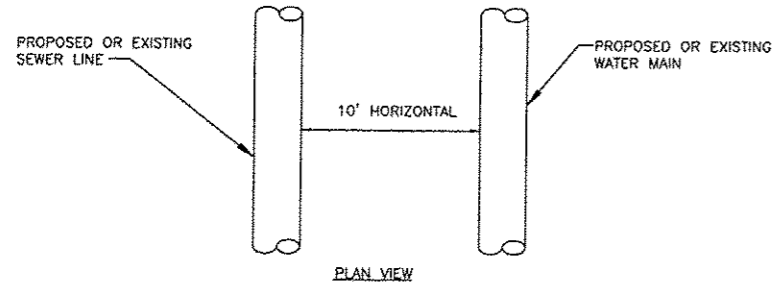
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-00009-00-BR		FRANKLIN	11	10

VILLAGE OF ROYALTON MAIN STREET

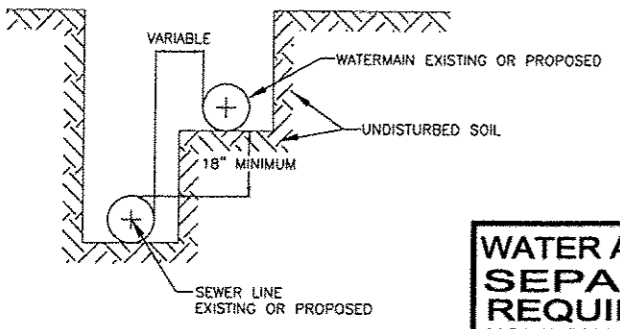
CONTRACT NO. 99502

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	10-00009-00-BR	FRANKLIN	11	11
VILLAGE OF ROYALTON		MAIN STREET		

WHEN PROPOSED SEWER (OR WATER) IS LOCATED 10 FEET OR MORE FROM EXISTING WATER (OR SEWER), NO SPECIAL CONSTRUCTION REQUIRED. SEE SECTION 41-2.01B (1)



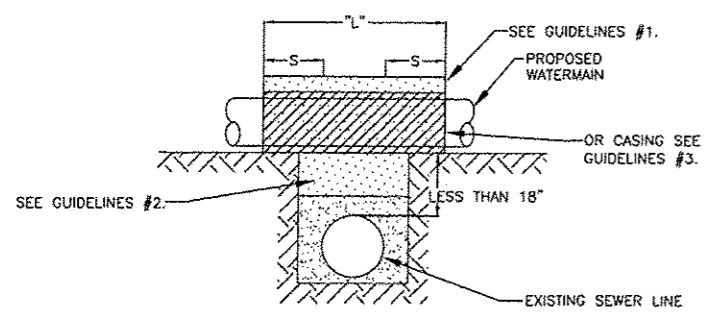
WHEN PROPOSED SEWER (OR WATER) IS LOCATED LESS THAN 10 FEET FROM EXISTING WATER (OR SEWER), DETAILS BELOW SHALL APPLY. SEE SECTION 41-2.01B (2)



WATER AND SEWER SEPARATION REQUIREMENTS HORIZONTAL SEPARATION

PROPOSED WATERMAIN ABOVE EXISTING SEWER LINE WITH LESS THAN 18" VERTICAL SEPARATION.

NOTE: COMPACTION REQUIREMENTS REFER TO 20-2.20B



GUIDELINES

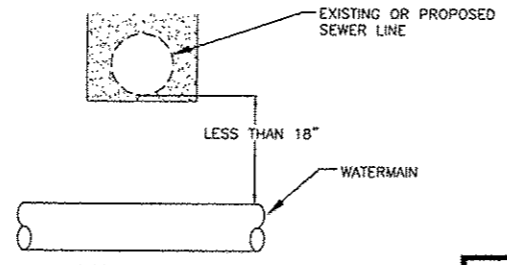
- OMIT SELECT GRANULAR EMBEDMENT AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF WATERMAIN AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT THE LENGTH OF "L".
- IF SELECT GRANULAR BACKFILL EXISTS, REMOVE WITHIN WIDTH OF EXISTING SEWER LINE TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT.
- USE "L" FEET OF WATER MAIN MATERIAL FOR CASING OF PROPOSED WATERMAIN AND SEAL ENDS OF CASING.
- POINT LOADS SHALL NOT BE ALLOWED BETWEEN MAIN CASING AND SEWER.

NOTE: "S" THE LENGTH NECESSARY TO PROVIDE 10 FEET OF SEPARATION AS MEASURED PERPENDICULAR TO EXISTING SEWER LINE.

WATER AND SEWER SEPARATION REQUIREMENTS VERTICAL SEPARATION

NOTE:
THE CONSTRUCTION OF THE WATER MAINS ON THIS PROJECT SHALL BE PERFORMED ACCORDING TO THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", 5TH EDITION, MAY 1996, AS REQUIRED BY 35 IL. ADM CODE 652.102(a).

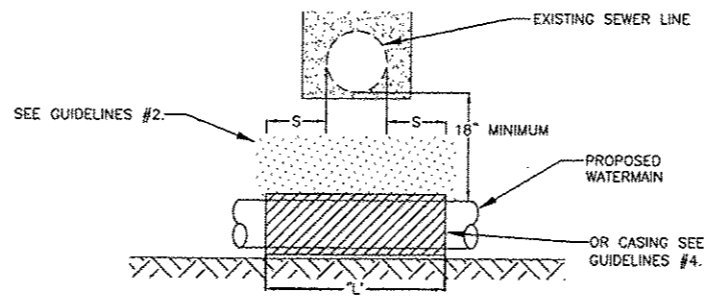
PLACEMENT OF WATERMAIN BELOW EXISTING OR PROPOSED SEWER LINE WITH LESS THAN 18" MINIMUM VERTICAL SEPARATION. NOT ALLOWED



WATER AND SEWER SEPARATION REQUIREMENTS VERTICAL SEPARATION

PROPOSED WATERMAIN BELOW EXISTING SEWER LINE WITH 18" MINIMUM VERTICAL SEPARATION.

NOTE: COMPACTION REQUIREMENTS REFER TO 20-2.20B

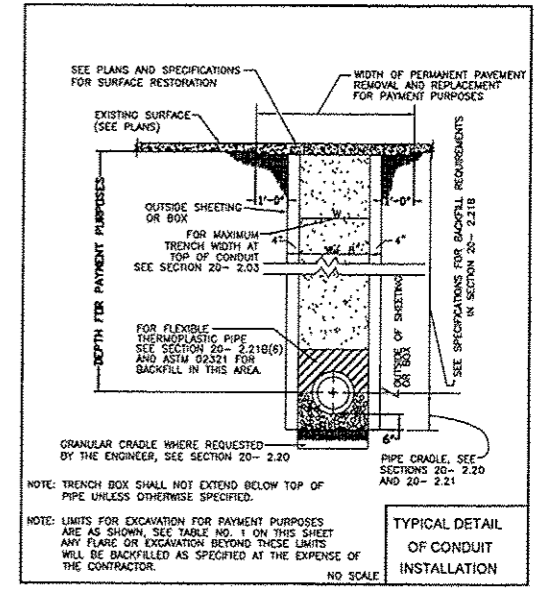
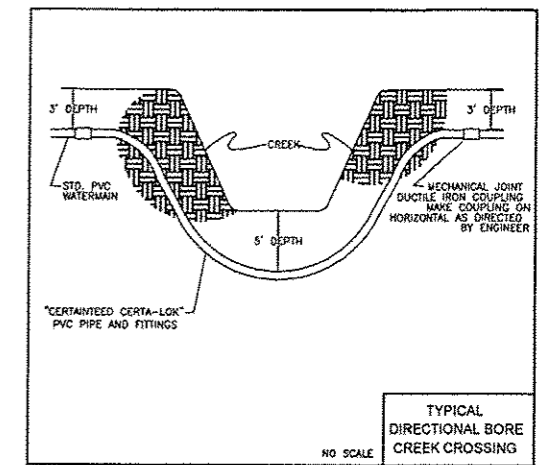
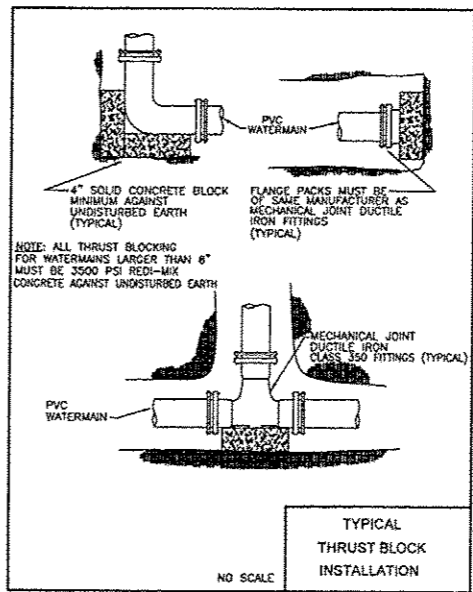
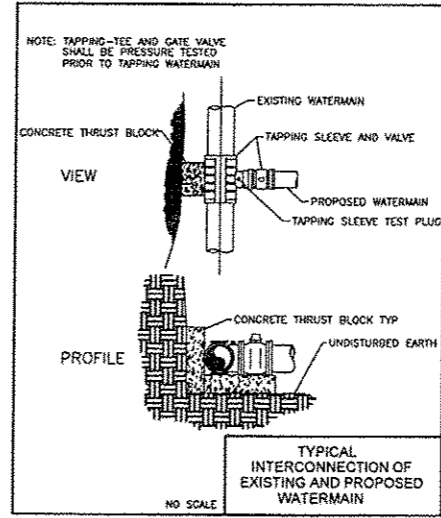


NOTE: "S" THE LENGTH NECESSARY TO PROVIDE 10 FEET OF SEPARATION AS MEASURED PERPENDICULAR TO EXISTING SEWER LINE.

GUIDELINES

- OMIT SELECT GRANULAR EMBEDMENT AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF WATERMAIN AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT THE LENGTH OF "L".
- IF SELECT GRANULAR BACKFILL EXISTS, REMOVE WITHIN WIDTH OF EXISTING SEWER LINE TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT.
- PROVIDE ADEQUATE SUPPORT FOR EXISTING SEWER LINE TO PREVENT DAMAGE DUE TO SETTLEMENT.
- USE "L" FEET OF WATER MAIN MATERIAL FOR CASING OF PROPOSED WATERMAIN AND SEAL ENDS OF CASING.

WATER AND SEWER SEPARATION REQUIREMENTS VERTICAL SEPARATION



INSIDE DIAMETER OF CONDUIT IN INCHES	PAYMENT QUANTITIES PER FOOT OF CONDUIT									
	SECT. 20-2.03 MAXIMUM TRENCH WIDTH AT TOP OF CONDUIT W+8"	SECT. 20-2.21C SELECT BACKFILL CU. YDS./FT. OF DEPTH W+8"	SECT. 20-2.20B CONCRETE CRADLE CU. YDS./FT. W+8"	PERMANENT TYPE PAYT. OR DRIVE REMOVAL & REPLACEMENT SQ. YDS./FT. W+2-8"	CURB OR GUTTER & REPLACEMENT W+2-8"	CONCRETE OR BRICK SIDEWALK REMOVAL & REPLACEMENT SQ. FT./FT. W+2-8"	SECT. 21-2.01A(1) TEMPORARY SURFACE OVER TRENCH CU. YDS./FT. W+8"	GRANULAR BACKFILL OVER TOP OF PIPE CU. YDS./FT. W+8"		
6	0.117	0.09	0.37	5.17	5.17	0.06	0.15			
8	0.117	0.11	0.57	5.17	5.17	0.06	0.16			
10	0.117	0.12	0.77	5.17	5.17	0.06	0.17			
12	0.12	0.13	0.97	5.33	5.33	0.06	0.18			
14	0.13	0.13	1.17	5.50	5.50	0.06	0.20			
16	0.14	0.15	1.37	5.63	5.63	0.07	0.22			
18	0.16	0.16	1.57	5.83	5.83	0.07	0.23			
20	0.17	0.17	1.77	6.00	6.00	0.08	0.24			
22	0.18	0.18	1.97	6.17	6.17	0.08	0.25			
24	0.19	0.19	2.17	6.33	6.33	0.08	0.26			
26	0.20	0.20	2.37	6.50	6.50	0.09	0.27			
28	0.21	0.21	2.57	6.67	6.67	0.09	0.28			
30	0.22	0.22	2.77	6.83	6.83	0.09	0.29			
32	0.23	0.23	2.97	7.00	7.00	0.10	0.30			
34	0.24	0.24	3.17	7.17	7.17	0.10	0.31			
36	0.25	0.25	3.37	7.33	7.33	0.11	0.32			
38	0.26	0.26	3.57	7.50	7.50	0.11	0.33			
40	0.27	0.27	3.77	7.67	7.67	0.12	0.34			
42	0.28	0.28	3.97	7.83	7.83	0.12	0.35			
44	0.29	0.29	4.17	8.00	8.00	0.13	0.36			
46	0.30	0.30	4.37	8.17	8.17	0.13	0.37			
48	0.31	0.31	4.57	8.33	8.33	0.14	0.38			
50	0.32	0.32	4.77	8.50	8.50	0.14	0.39			
52	0.33	0.33	4.97	8.67	8.67	0.15	0.40			
54	0.34	0.34	5.17	8.83	8.83	0.15	0.41			
56	0.35	0.35	5.37	9.00	9.00	0.16	0.42			
58	0.36	0.36	5.57	9.17	9.17	0.16	0.43			
60	0.37	0.37	5.77	9.33	9.33	0.17	0.44			
62	0.38	0.38	5.97	9.50	9.50	0.17	0.45			
64	0.39	0.39	6.17	9.67	9.67	0.18	0.46			
66	0.40	0.40	6.37	9.83	9.83	0.18	0.47			
68	0.41	0.41	6.57	10.00	10.00	0.19	0.48			
70	0.42	0.42	6.77	10.17	10.17	0.19	0.49			
72	0.43	0.43	6.97	10.33	10.33	0.20	0.50			
74	0.44	0.44	7.17	10.50	10.50	0.20	0.51			
76	0.45	0.45	7.37	10.67	10.67	0.21	0.52			
78	0.46	0.46	7.57	10.83	10.83	0.21	0.53			
80	0.47	0.47	7.77	11.00	11.00	0.22	0.54			
82	0.48	0.48	7.97	11.17	11.17	0.22	0.55			
84	0.49	0.49	8.17	11.33	11.33	0.23	0.56			
86	0.50	0.50	8.37	11.50	11.50	0.23	0.57			
88	0.51	0.51	8.57	11.67	11.67	0.24	0.58			
90	0.52	0.52	8.77	11.83	11.83	0.24	0.59			
92	0.53	0.53	8.97	12.00	12.00	0.25	0.60			
94	0.54	0.54	9.17	12.17	12.17	0.25	0.61			
96	0.55	0.55	9.37	12.33	12.33	0.26	0.62			
98	0.56	0.56	9.57	12.50	12.50	0.26	0.63			
100	0.57	0.57	9.77	12.67	12.67	0.27	0.64			

NOTES:

TABLE 1

PAYMENT QUANTITIES PER FOOT OF CONDUIT

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