MICROFILMED
JUN 2 '198

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	STATE	

JEF-7-13.53
JEFFERSON COUNTY.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
JEF-7-13.53
JEFFERSON COUNTY
STEUBENVILLE TOWNSHIP
VILLAGE OF MINGO JUNCTION

1965 SPECIFICATIONS

CONVENTIONAL SIGNS

Corporation Line
Center Line
Property Line
Existing L/A Line — L/A
Right of Way Line — Existing — Proposed
Fence Line
Guard Rail — Existing — Proposed
Pole Line — Telephone — Electric
Trees and Stumps — Existing — To Be Removed
Railroad
Drain Pipe — New — Old

INDEX OF SHEETS

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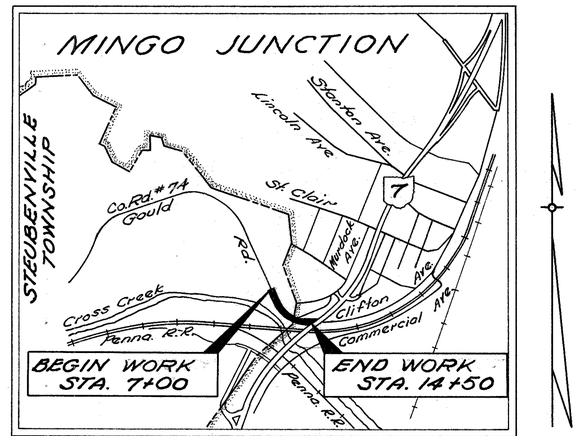
Right Of Way Plan	" "	23-24

LINE DATA

Length of Project = 0.00 Lin. ft. or 0.00 Miles
Begin Work Co.Rd. No.74 Sta. 7+00
End Work Clifton Ave. Sta. 14+50
No Additions Or Deductions
Net Length Of Work 750.00 Lin. Ft. or 0.142 Mile



DELIVERY POINT: Mingo Junction
AVERAGE HAUL: Penna R.R. 1 Mile

LOCATION MAP

Scale 0 400' 800'

Portion to be improved
State Highways
Village Streets

SCALES

Plan 0 10' 20'
Profile (Horizontal) 0 10 20'
(Vertical) 0 5'
Cross Sections 0 3' 10'

The Standard Specifications of The State of Ohio, Department of Highways, including changes and Supplemental Specifications listed in the proposal shall govern this improvement.

I hereby approve these plans and declare that the making of this improvement will not require the closing to traffic of the highway, and that provisions for maintenance and safety of traffic will be as set forth in these plans and estimates.

The right of way for this improvement will be provided by the State of Ohio.

Approved Earl W. Nelson
Date 3-24-66 Division Deputy Director

Approved
Date Engineer of Bridges

Approved R.N. Ricketts
Date 8-3-66 Engineer of Location and Design

Approved R.F. Shultz
Date 8-3-66 Deputy Director of Design and Construction

Approved T.H. Bowers
Date 8-12-66 Deputy Director of Right of Way

Approved F.W. Wilson
Date 8-16-66 Deputy Director of Planning and Programming

Approved
Date First Assistant Director

Approved P.E. Masheter
Date 8/12/66 Director of Highways

FILE No	JEF-7-13.53
	DATE OF LETTING _____ 196__
	CONTRACT NO. _____

STANDARD DRAWINGS

F-3	6-1-65	GR-2A	9-1-65	MH-1	6-1-65
BP-5	6-1-65			MH-1A	8-1-66
BP-7	1-1-66	I-2A	6-1-65		
CB 2-2-A&B	6-1-65	L-1	6-1-65		
CB 3	6-1-65	MC-1	6-1-65		
F-1	6-1-65	MC-3	5-1-66		
GR-1	6-1-65	MC-4	6-1-65		

SUPPLEMENTAL SPECIFICATIONS

814	3-16-66
1001	3-21-66

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2/24

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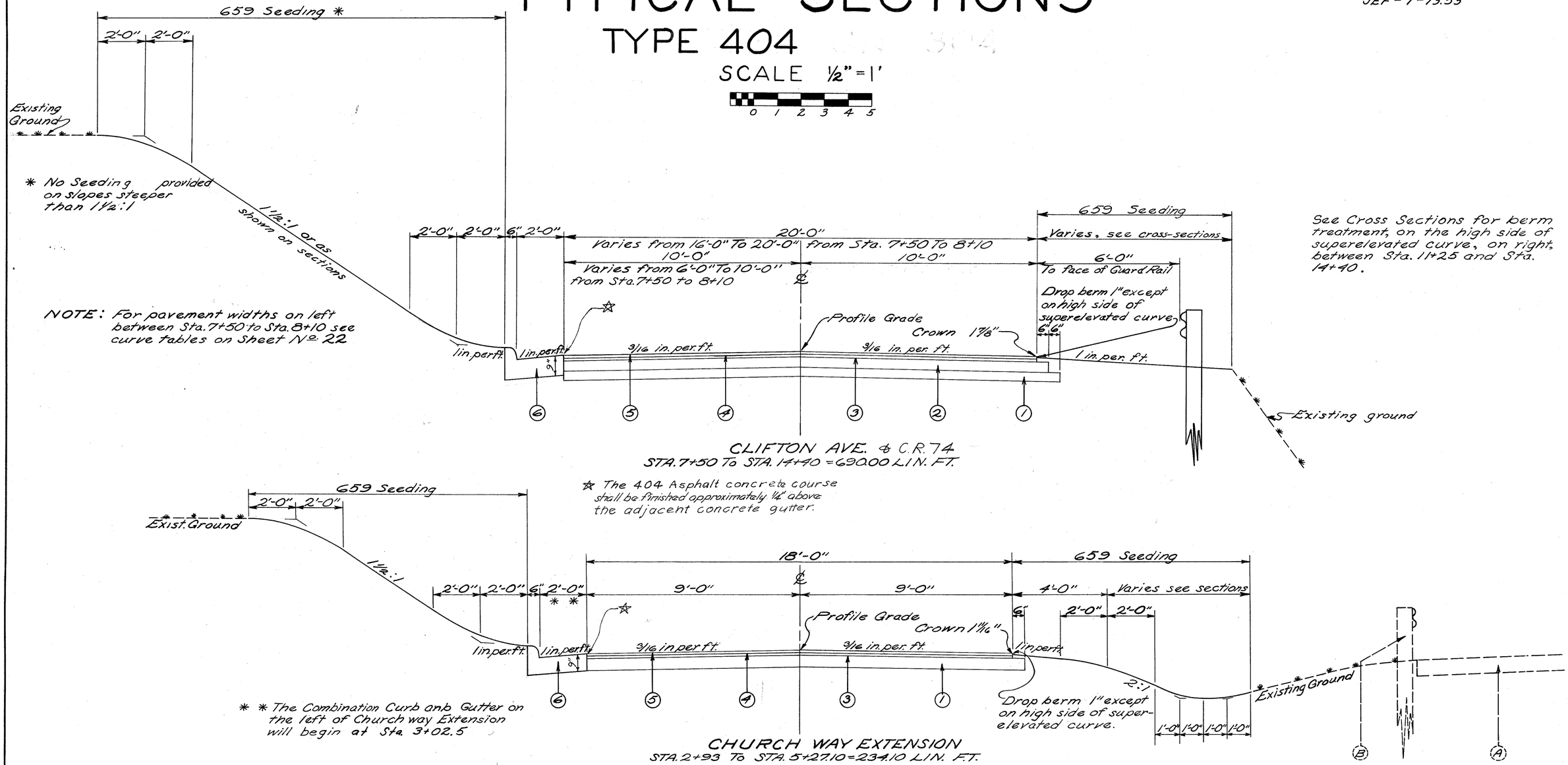
TYPICAL SECTIONS

TYPE 404

SCALE ½" = 1'

0 1 2 3 4 5



KEY

- (A) — Existing Stabilized Shoulder On Existing S.R. 7.
- (B) — Existing Guard Rail On Existing S.R. 7.
- (1) — Item 310, 6" Subbase, Grading C or D
- (2) — Item 304, 5" Aggregate Base
- (3) — Item 408, Bituminous Prime Coat, 702.09 RT-2 or RT-3 applied at the rate of 0.4 gal. per sq. yd.
- (4) — Item 403, 1¼" Asphalt Concrete (70-85)
- (5) — Item 404, 1¼" Asphalt Concrete (70-85)
- (6) — Item 609, Combination Curb and Gutter, Standard Type 2

GENERAL NOTES

FIELD OFFICE: The Contractor shall, in addition to the requirements of 105.152, provide a suitable field office having a minimum of 150 sq.ft. of floor space. The Contractor shall have a telephone installed and maintained in this field office during the construction of this project. The Contractor shall also provide and maintain sanitary provisions as per 107.06. All the above is included in the lump sum price bid for Field Office. This office shall be provided within 10 days after work is started on the contract.

ROUNDING OF CORNERS SHOWN ON CROSS SECTIONS: The rounded corners shown on Standard Drawing MC-1, as modified by the typical sections, apply to all cross sections, even though otherwise shown on these plans.

UNDERGROUND UTILITIES: The locations of the underground utilities shown on the plans have been obtained by diligent field checks and searches of available records. It is believed that they are essentially correct, but the State of Ohio does not guarantee their accuracy or completeness.

CONSTRUCTION LAYOUT STAKES: See note in proposal describing the work included in this lump sum pay item.

SUPERELEVATION: Superelevated curves shall be built without crown. The crown shall be worked out of the pavement in the portion between the beginning of the transition and the point where the superelevation equals twice the crown.

PART-WIDTH CONSTRUCTION: Because of the necessity of building portions of this project under traffic and constructing the pavement part at a time, extreme care shall be taken to prevent the construction of a butt joint on centerline in the 304 and 310 courses.

This shall be accomplished by building the 304 and 310 courses placed with the first portion of the pavement built, at least eighteen (18) inches beyond the centerline and by surfacing no closer than eighteen (18) inches to this edge of the above courses. When the second portion of the pavement is built, at least twelve (12) inches of these projecting courses shall be broken down and thoroughly keyed in with the newly placed corresponding courses in the second portion of the pavement built. Payment for this operation shall be included in the unit prices bid for the pertinent pavement items.

REMOVAL OF EXISTING PIPE: The removal of all existing pipe drains which would normally be removed in various excavation items shall be included for payment in the unit prices bid for the respective excavation items, unless otherwise itemized in the plans.

MAINTENANCE OF SEWER FLOWS: The Contractor shall conduct his operations so as to maintain at all times sewer flows through existing facilities to remain in place and through existing facilities to be replaced until new facilites are completed and placed into use.

Payment for any additional costs involved in maintaining these flows by pumping or by any other means approved by the Engineer shall be included in the unit prices bid for the respective items of 603 Conduit.

REMOVAL OF TREES AND STUMPS: All trees and stumps specifically marked for removal within the construction limits of this project shall be removed under the lump sum price bid for Item 201 Clearing and Grubbing, except that those trees for which protection and preservation work is indicated elsewhere in these plans shall not be removed.

The following is an approximate estimate of the number of trees and stumps to be removed.

Tree Sizes	18"	30"	48"	60"
No. Removed	7	3	0	0

The above estimate is approximate and the State of Ohio reserves the right to order the removal of additional trees or stumps outside of the limits of construction but within the right-of-way and/or easement lines. Payment for the removal of these additional trees or stumps shall be included in the lump sum price bid for Item 201, Clearing and Grubbing.

SEEDING: Quantities for seeding are calculated for the soil areas between the work limits, as shown on the cross sections.

ITEM 604, MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN: This item shall consist of the careful removal of the existing manhole down to the spring line and reconstruction of the manhole to the new grade, conforming as nearly as practicable to the existing dimensions and type of construction and using the salvaged manhole frame and cover.

CONNECTIONS TO EXISTING PIPE: At places where the plans provide for proposed pipe to be connected to existing pipe, it shall be the responsibility of the Contractor to locate the existing pipe both as to line and grade before he starts to lay the proposed pipe. The cost of this operation shall be included in the unit price bid for the pertinent 603 conduit item.

CUT-OFF WALLS FOR RIPRAP: The cut-off walls for Item 601, Riprap, using 6" Reinforced Concrete Slab, as per plan, shall be included for payment with this 601 Item.

STD. No. 2 A-6 & 2A-12 PAVED SHOULDER INLETS MODIFIED AS PER PLAN

The modification shall consist of building a concrete gutter plate 2'-0" wide in lieu of the 5'-0" depressed pavement area shown on Std. Dwg. I-2A.

UTILITIES & ADDRESS:
Ohio Power, Canton, Ohio.
Ohio Bell, N 5TH. St., Steubenville, Ohio
Ohio Valley Gas, Sunset Blvd., Steubenville, Ohio
Village of Mingo Junction, Water Dept., Mingo Junction Ohio.

Item 607 Chainlink Fence Removed and Rebuilt.
See note in proposal describing the work included in this Item.

MAINTAINING TRAFFIC: The Contractor shall maintain traffic at all times by use of either the existing pavement, the proposed pavement, or temporary roadways surfaced with 410 aggregate and stabilized with Item 614, calcium chloride.

One-way traffic will be permitted over the grade of the new streets, for minimum periods of time consistent with the requirements of the specifications for protection of completed asphaltic concrete courses, during paving operations where construction overlaps existing pavement.

Temporary roadways shall be surfaced with 410 material, treated with calcium chloride and the surface maintained daily in a manner satisfactory to the Engineer. Two-way traffic lanes shall be surfaced with aggregate at least twenty (20) feet wide and one-way traffic lanes shall have the surfacing aggreate not less than twelve (12) feet wide.

The length of one-way traffic zones shall be kept to a minimum consistent with the requirements of the work. Maximum use shall be made of the existing pavement for traffic maintenance, holding the length and duration of use of temporary roadways to a minimum.

Payment for all of the above except for 410 aggregate and 614 calcium chloride and water shall be included in the lump sum bid for Item 614, Maintaining Traffic.

WATER LINE: All applicable provisions of Item 814 shall apply to this work. The Contractor accepts the responsibility of continuous service at all times.

When the new system is completed and service restored, the existing pipe which is in the construction area shall be removed by excavation, and the remaining pipe shall remain in place.

SEWERS: The exact location of the 6" V.S.P., Lt. of Sta. 13+87, could not be determined in the field. 200 Lin. Ft. of 6" Conduit, 706.08 Type C has been added to the General Summary, to outlet this pipe to the nearest Basin when encountered during Construction.

EARTHWORK AND SEEDING

Station From	Station To	From Sheet	Exc. Cu.Yds.		Emb. Cu.Yds.		Seeding Sq.Yds.	Lime Lbs.	Fertilizer Lbs.	
Clifton Ave.										
7+00	14+50	6	7726		13		2513	2262	452	
Church Way Ext.										
2+93	5+45	20	312		181		573	516	103	
Totals			8038		194		3086	2778	555	
								1.39 ton	0.27	

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CALCULATIONS

PAVEMENT AREA:

CLIFTON AVE.
- Begin pavement and transition : Sta. 7+50
- End transition : Sta. 8+10
- Transition area : 60 × 18.47 (avg.) ÷ 9 = 123 Sq.Yds.
- Begin full width pavement : Sta. 8+10
- End pavement : Sta. 14+40
- Full pavement area : 630 × 20 ÷ 9 = 1400 Sq.Yds.
- Total area Clifton Ave : 1523 Sq.Yds.

CHURCH WAY EXT.
- Begin approach : Sta. 2+93
- End approach : Sta. 5+27.23
- Approach pavement area : 234.23 × 18 ÷ 9 = 468 Sq.Yds.

TOTAL PAVEMENT AREA : 1991 SQ.YDS.

ITEM 203, SUBGRADE PREPARATION.

CLIFTON AVE.
- 60 × 20.97 (avg.) ÷ 9 = 140 Sq.Yds.
- 630 × 22.5 ÷ 9 = 1575 Sq.Yds.
- Total Clifton Ave. : 1715 Sq.Yds.

CHURCH WAY EXT.
- 234.23 × 18 ÷ 9 = 468 Sq.Yds.
- Add for under curb and gutter : 184 × 2.5 ÷ 9 = 51 Sq.Yds.
- Total Church Way : 519 Sq.Yds.

TOTAL SUBGRADE PREPARATION : 2234 SQ.YDS.

ITEM 310, SUBBASE.

CLIFTON AVE
- 60 × 19.47 (avg.) ÷ 9 = 129.8 × 6 ÷ 36 = 22 Cu.Yds.
- 630 × 21 ÷ 9 = 1470 × 6 ÷ 36 = 245 Cu.Yds.
- Total Clifton Ave. 267 Cu.Yds.

CHURCH WAY EXT.
- 9.5 × 19 ÷ 9 = 20.1 × 6 ÷ 36 = 3 Cu.Yds.
- 224.73 × 18.5 ÷ 9 = 461.9 × 6 ÷ 36 = 77 Cu.Yds.
- Total Church Way Ext. 80 Cu.Yds.

TOTAL SUBBASE : 347 CU.YDS.

ITEM 304, AGGREGATE BASE.

CLIFTON AVE.
- 60 × 18.97 (avg.) ÷ 9 = 126.5 × 5 ÷ 36 = 18 Cu.Yds.
- 630 × 20.5 ÷ 9 = 1435 × 5 ÷ 36 = 199 Cu.Yds.

TOTAL AGGREGATE BASE : 217 CU.YDS.

ITEM 408, PRIME COAT.

CLIFTON AVE.
- 60 × 18.97 (avg.) ÷ 9 = 126.5 × 0.4 = 51 Gals.
- 630 × 20.5 ÷ 9 = 1435 × 0.4 = 574 Gals.

CHURCHWAY
- 224.73 × 18.5 ÷ 9 = 462 × 0.4 = 185 Gals.

TOTAL 810 Gals.

ITEM 403, ASPHALT CONCRETE.

CLIFTON AVE.
- 1523 × 1¼ ÷ 36 = 53 Cu.Yds.

CHURCH WAY EXT.
- 468 × 1¼ ÷ 36 = 16 Cu.Yds.

TOTAL ASPHALTIC CONCRETE : 69 CU.YDS.

ITEM 404, ASPHALT CONCRETE.

CLIFTON AVE.
- 1523 × 1¼ ÷ 36 = 53 Cu.Yds.

CHURCH WAY EXT.
- 468 × 1¼ ÷ 36 = 16 Cu.Yds.

TOTAL ASPHALTIC CONCRETE : 69 CU.YDS.

ITEM 304, WATER.

219 × 5 ÷ 1000 = 1 M.GALS.

ITEM 203, WATER.

(Embankment + Subbase)
(194 + 348) × 5 ÷ 1000 = 3 M.GALS.

ITEM 410, TRAFFIC COMPACTED SURFACE.

- CLIFTON AVE. STA. 7+00 TO STA. 14+50 = 750.00 LIN.FT.
- CHURCH WAY EXT. STA. 2+93 TO STA. 5+27.23 = 234.23 LIN.FT.
- TOTAL LENGTH : 984.23 LIN.FT.
- 984.23 × 100 ÷ 100 = 984 Cu.Yds. USE 1000 Cu.Yds.
- TYPE A OR B = 1000 × 25 % = 250 CU.YDS.
- TYPE C = 1000 × 75 % = 750 CU.YDS.

ITEM 616, CALCIUM CHLORIDE.

1000 ÷ 50 = 20 TONS

ITEM 616, WATER.

ESTIMATED 5 M.GALS.

SUMMARY OF QUANTITIES

* Extra quantities to be placed where directed by the Engineer.

TOTALS CARRIED FROM SHEET 3	4	5	6	7				20	22	23	*	Item	QUANT.	UNIT	DESCRIPTION
															~ ROADWAY ~
Lump												201	Lump	Sum	Clearing And Grubbing.
			77	33								202	110	Cu.Yds.	Portions Of Existing Structures Removed.
				4				54				202	58	Lin.Ft.	Pipe Removed, 15" And Under.
				18								202	18	Lin.Ft.	Pipe Removed, Over 15".
			46									202	46	Sq.Yds.	Existing Pavement Removed And Disposed Of.
			54	704								202	758	Sq.Ft.	Existing Sidewalk Removed And Disposed Of.
			20									202	20	Lin.Ft.	Existing Curb Removed And Disposed Of.
			13	168				55				202	236	Lin.Ft.	Existing Curb And Gutter Removed And Disposed Of.
				112.5								202	112.5	Lin.Ft.	Guard Rail Removed For Re-use.
								38				202	38	Lin.Ft.	Fence Removed For Storage.
8038												203	8038	Cu.Yds.	Excavation Not Including Embankment Construction.
194												203	194	Cu.Yds.	Embankment.
	2234											203	2234	Sq.Yds.	Subgrade Preparation.
	3											203	3	M.Gals.	Water.
	250											410	250	Cu.Yds.	Traffic Compacted Surface, Type A or B.
	750											410	750	Cu.Yds.	Traffic Compacted Surface, Type C.
			3	1								604	4	Each	Standard Monument Assembly.
		964.4	501.06	40								606	637.5	Lin.Ft.	Guard Rail, Type 4.
				112.5								606	112.5	Lin.Ft.	Guard Rail Rebuilt.
								250				607	250	Lin.Ft.	Chain Link Fence Removed and Rebuilt, as per plan
			30	660								608	690	Sq.Ft.	4" Concrete Walk.
	5											616	5	M.Gals.	Water.
	20											616	20	Tons.	Calcium Chloride.
0.27												659	0.27	Tons	Commercial Fertilizer (12-12-12).
1.39												659	1.39	Tons	Agricultural Liming.
3086												659	3086	Sq.Yds.	Seeding And Mulching.
										Lump		202	Lump	Lump	Parcel 222 Remove 1½ story frame residence, Frame Tool Shed & one Frame Garage.
															~ DRAINAGE ~
				1				1				202	2	Each	Inlet Removed.
								30				601	30	Sq.Yds.	Riprap, Using 6" Reinforced Concrete Slab, as per plan.
200												603	200	Lin.Ft.	6" Conduit, 706.08, Type C with Class B Bedding.
								10				603	10	Lin.Ft.	8" Conduit, Type F
			36									603	36	Lin.Ft.	12" Conduit, Type F
								78				603	78	Lin.Ft.	15" Conduit, Type B With Class B Bedding.
				146								603	146	Lin.Ft.	15" Conduit, Type C with Class B Bedding, 706.02 Class III or 706.08 E.S.
								1				604	1	Each	Standard Nº 1 Manhole.
								1				604	1	Each	Standard 2A-6 Paved Shoulder Inlet, modified as per plan.
				1								604	1	Each	Standard 2A-12 Paved Shoulder Inlet, modified as per plan.
			1									604	1	Each	Standard Nº 2-2-B Catch Basin.
			1					1				604	2	Each	Standard Nº 3 Catch Basin.
				1				1				604	3	Each	Adjusting Existing Manhole To Grade.
								1				604	1	Each	Manhole Reconstructed to Grade as per plan.
															~ WATER LINE ~
															For Water Line Quantities See Sheet No. 8
															~ PAVEMENT ~
			18									609	18	Lin.Ft.	Concrete Curb, Standard Type 6.
		50	445	163				184				609	842	Lin.Ft.	Combination Curb And Gutter, Standard Type 2.
	347								1			310	348	Cu.Yds.	Subbase, Grading C or D.
	217		2									304	217	Cu.Yds.	Aggregate Base.
	1											304	1	M.Gals.	Water.
	810											408	810	Gals.	Bituminous Prime Coat, 702.09 RT-2 or RT-3.
	69								1			403	70	Cu.Yds.	Asphalt Concrete (70-85).
	69		1						1			404	71	Cu.Yds.	Asphalt Concrete (70-85).
Lump													Lump	Lump	Construction Layout Stakes.
Lump													Lump	Lump	Field Office.
Lump												614	Lump	Lump	Maintaining Traffic.

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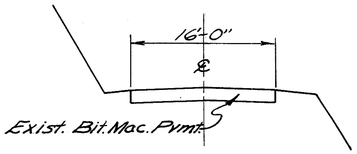
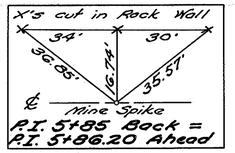
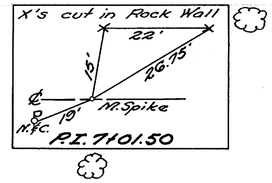
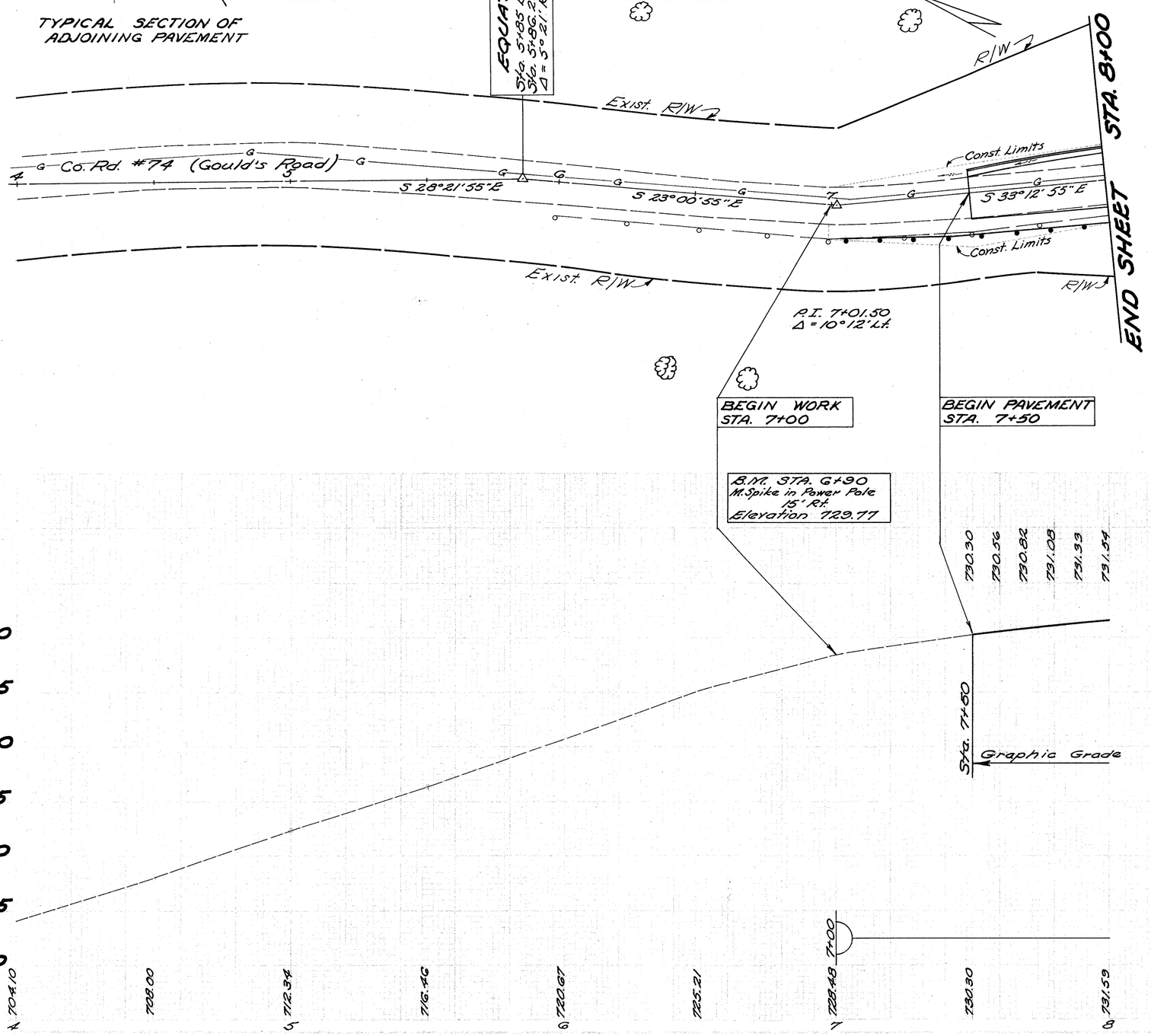


TYPICAL SECTION OF ADJOINING PAVEMENT



EQUATION
Sta. 5+85 Back =
Sta. 5+86.20 Ahead
Δ = 3°21' Rt.





GUARD RAIL				
Station		Side	Item 606 Guard Rail Type 4	
From	To	℄	Lin. Ft.	
7+03.56	8+00	Rt.	96.44	
TOTAL			96.44	

COMBINATION CURB AND GUTTER					
Station		Side	See	Item 609 Std. Type 2	
From	To	℄	Sheet	Lin. Ft.	
7+50	8+00	Lt.	5	50	
TOTAL				50	

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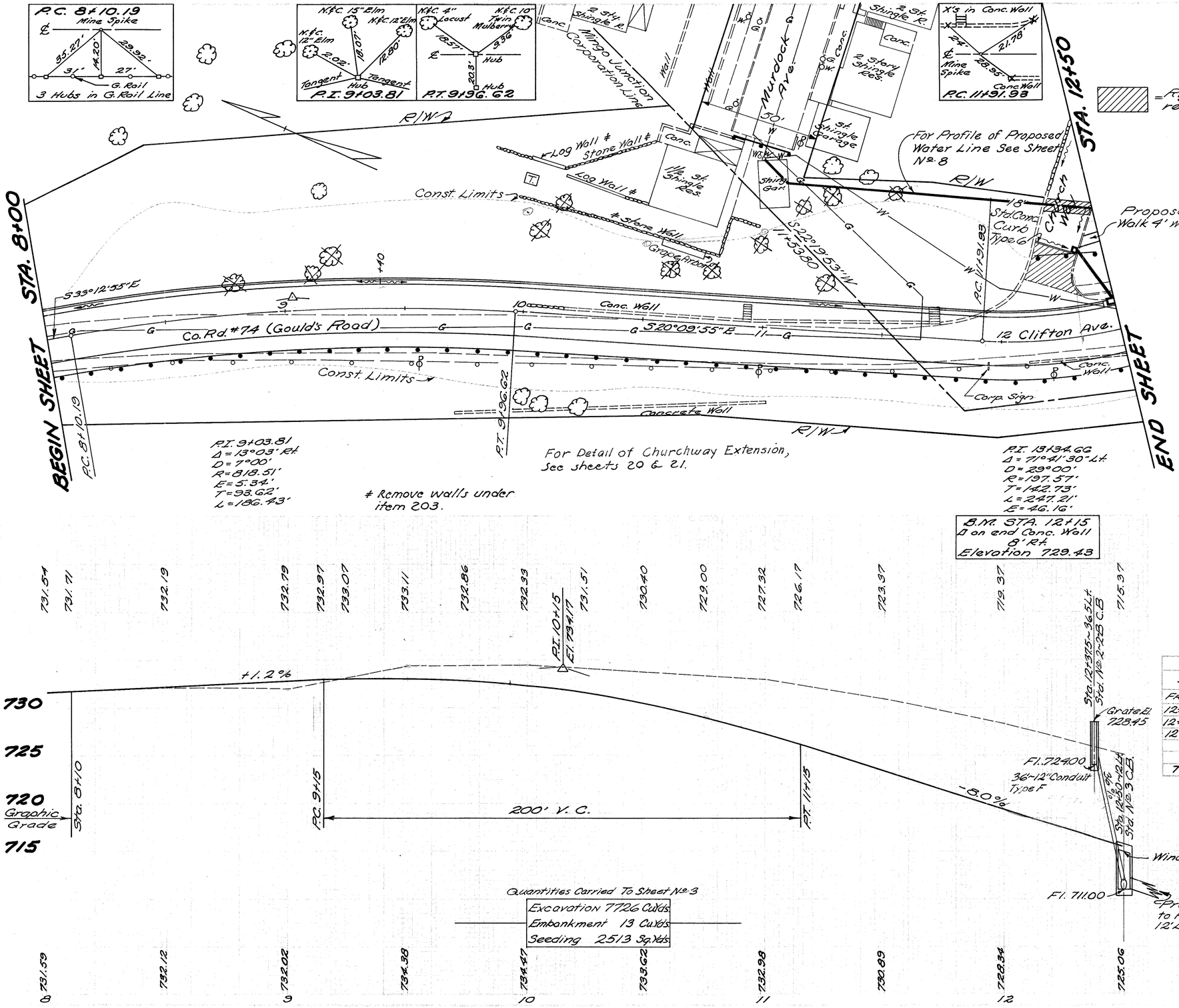

= Rigid pavement removal area

GUARD RAIL				
STATION		SIDE ℄	ITEM 606 GUARD RAIL TYPE 4 LIN. FT.	
FROM	TO			
8+00	12+50	Rt.	451.06	
12+15	12+47	Lt.	25.00	
10+82	11+07	Lt.	25.00	
TOTAL			501.06	

CURB - CURB AND GUTTER						
STATION		SIDE ℄	ITEM 609 - LIN. FT. STD. CONC. CURB & GUTTER TYPE 2	STD. CONC. CURB TYPE 6	ITEM 202 - REMOVAL EXIST. CURB LIN. FT.	EXIST. CURB & GUTTER LIN. FT.
FROM	TO					
8+00	12+46	Lt.	445			
12+13	12+38	Lt.		18		
12+36		Lt.			20	
12+37.5	12+50	Lt.				13
TOTALS			445	18	20	13

SIDEWALK				
STATION		SIDE ℄	ITEM 608 4" CONC. WALK SQ. FT.	EXIST. CONC. SIDEWALK & COND. DISPOSED OF SQ. FT.
FROM	TO			
12+34	12+50	Lt.		54
12+40	12+50	Lt.	30	
TOTALS			30	54

MISCELLANEOUS REMOVALS ITEM 202							
STATION		SIDE ℄	PORTIONS OF EXISTING STRUC. REMOVE CU. YDS.		EXIST. PVMT. SQ. YDS.	ITEM 304 5" AGGR. BASE CU. YDS.	ITEM 404 2" SURFACE CU. YDS.
FROM	TO		STEMS & FOOTERS	STEPS			
10+17	10+92	Lt.	20				
10+93		Lt.		1			
10+95	11+70	Lt.	18				
11+72		Lt.		1			
11+74	12+11	Lt.	12				
12+12	12+50	Rt.	25				
12+16	12+22	Lt.			36		
12+23	12+98	Lt.			10	2	1
TOTALS			77		46	2	1

DRAINAGE							
STATION		SIDE ℄	SEE SHEET	ITEM 604 STD. No. 2-2.28 CATCH BASIN EACH	ITEM 603 CONDUIT 12" - TYPE "F" LIN. FT.	ITEM 604 STD. No. 3 CATCH BASIN EACH	
FROM	TO						
12+37.5		Lt.	6 & 17	1			
12+37.5	12+50	Lt.	6 & 17		36		
12+50		Lt.	6 & 17			1	
TOTALS				1	36	1	

MISCELLANEOUS				
STATION	SIDE ℄	ITEM 604 & MONUMENT ASSEMBLIES EACH		
8+10.19	℄	1		
9+96.62	℄	1		
11+91.93	℄	1		
TOTAL		3		

Quantities Carried To Sheet No. 3

Excavation	7726 Cu. Yds.
Embankment	13 Cu. Yds.
Seeding	2513 Sq. Yds.

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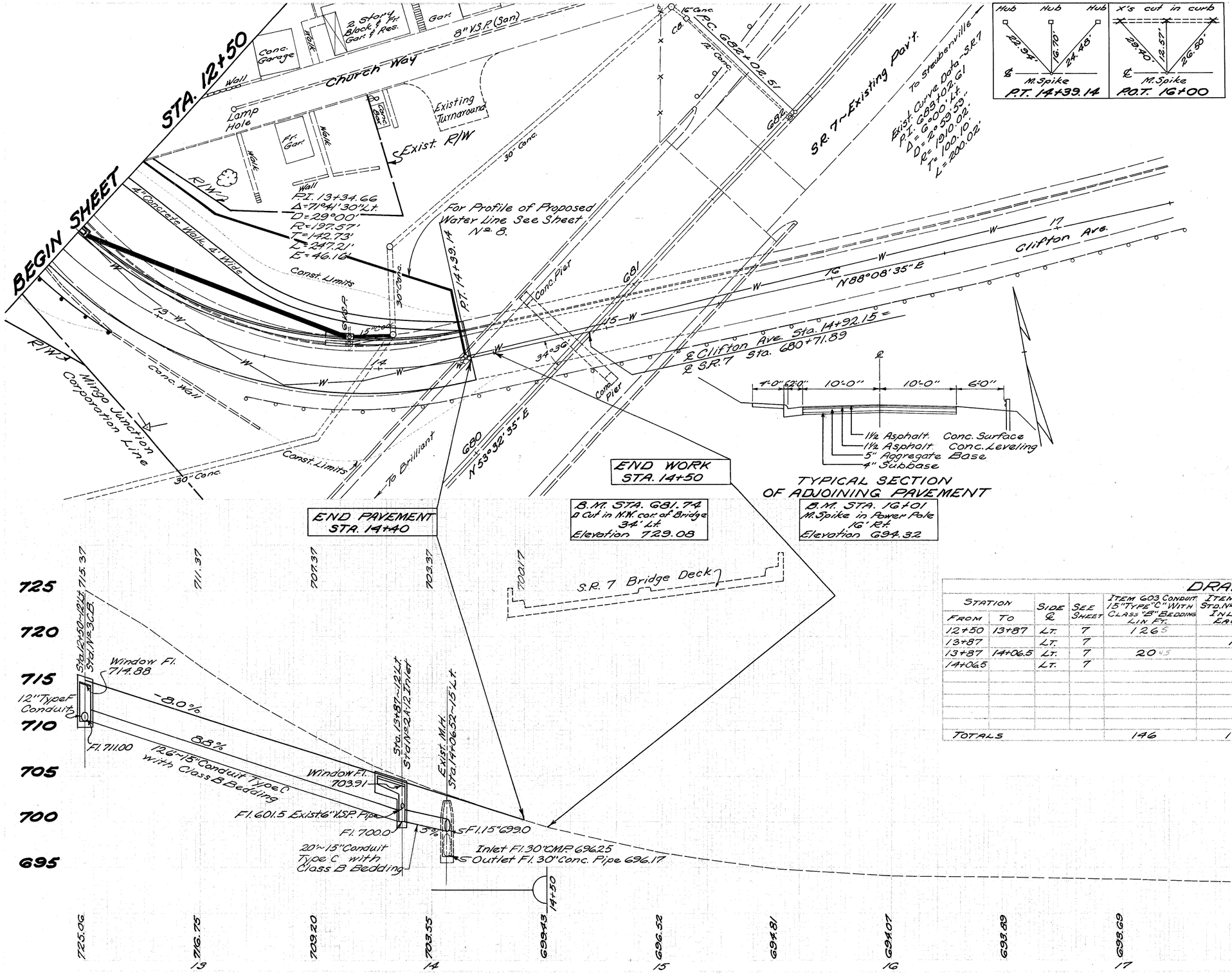


GUARD RAIL

Station From	Station To	Side ℄	Item 606 Guard Rail Type F Lin. Ft.	Item 202 Guard Rail Removed For Reuse Lin. Ft.	Item 606 Guard Rail Rebuilt Lin. Ft.
12+50	12+87	Rt.	40.00		
13+46	14+49	Rt.		112.5	
13+46	14+49	Rt.			112.5
Total			40.00	112.5	112.5

SIDEWALK

Station From	Station To	Side ℄	Item 202 Exist. Walk Rmvd. & Disposed Of Sq. Ft.	Item 608 4" Conc. Walk Sq. Ft.
12+50	14+40	Lt.	704	
12+50	14+40	Lt.		660
Total			704	660

COMBINATION CURB AND GUTTER

Station From	Station To	Side ℄	Item 202 Exist. Curb & Gutter Removed Lin. Ft.	Item 609 Comb. Curb & Gutter Std. Type 2 Lin. Ft.
12+50	12+76	Lt.	118	
12+88	14+40	Lt.	50	
12+54	13+77	Lt.		115.2
13+89	14+40	Lt.		47.8
Total			168	163.0

ITEM 202 REMOVALS

Station From	Station To	Side ℄	Removal Of Portion Of Exist. Structures Cu. Yds. Stems & Footers	Upper Part Of Stem
12+50	12+88	Rt	22.2	
12+88	13+55	Rt.		10.4
Total			33	

DRAINAGE

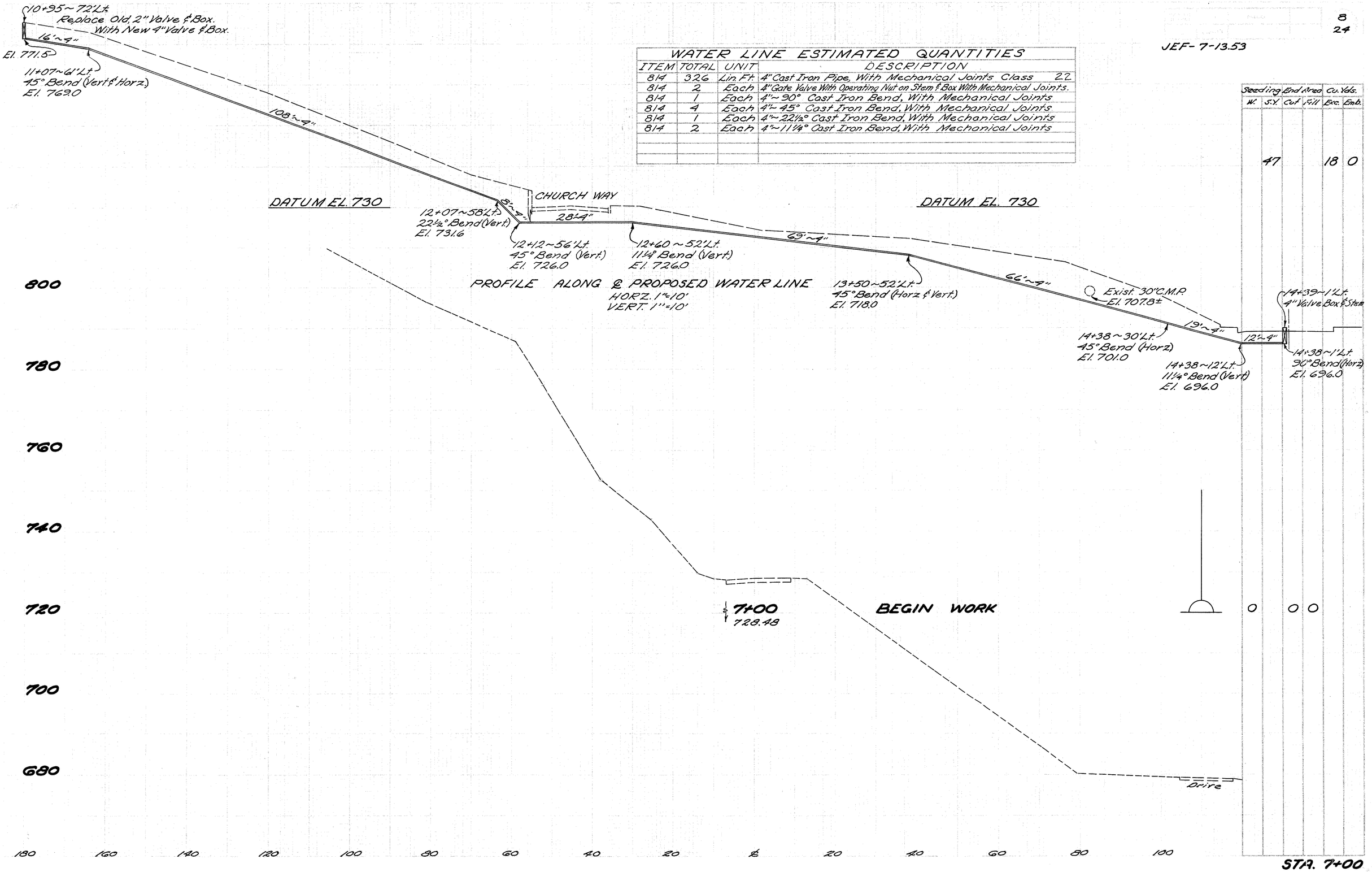
Station From	Station To	Side ℄	See Sheet	Item 603 Conduit 15" Type "C" With Class "B" Bedding Lin. Ft.	Item 604 Std. No. 2A-12 Inlet Each	Item 202 Pipe Removed Lin. Ft. 15" & Under	Item 202 Pipe Removed Lin. Ft. Over 15"	Item 202 Inlet Removed Each	Item 604 M.H. Adjusted To Grade (Storm) Each
12+50	13+87	Lt.	7	126.5					
13+87		Lt.	7		1	4		1	
13+87	14+06.5	Lt.	7	20.5			18		
14+06.5		Lt.	7						1
Totals				146	1	4	18	1	1

MISCELLANEOUS

Station	Side ℄	Item 604 ℄ Monument Assemblies Each
14+39.14	℄	1
Total		1

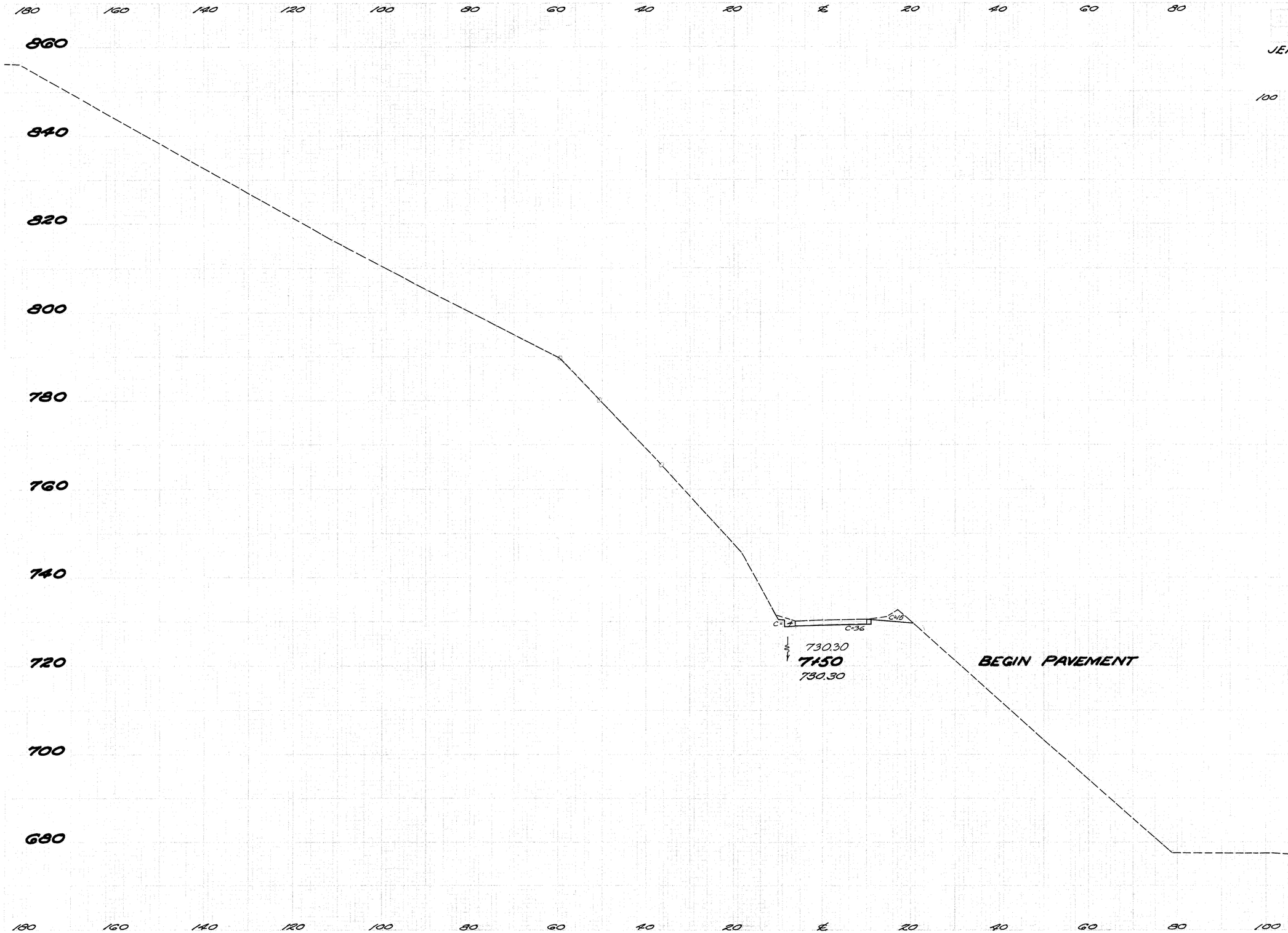
JEF- 7-13.53

WATER LINE ESTIMATED QUANTITIES			
ITEM	TOTAL	UNIT	DESCRIPTION
814	326	Lin. Ft.	4" Cast Iron Pipe, With Mechanical Joints Class 22
814	2	Each	4" Gate Valve With Operating Nut on Stem & Box With Mechanical Joints.
814	1	Each	4"~ 90° Cast Iron Bend, With Mechanical Joints
814	4	Each	4"~ 45° Cast Iron Bend, With Mechanical Joints
814	1	Each	4"~ 22½° Cast Iron Bend, With Mechanical Joints
814	2	Each	4"~ 11¼° Cast Iron Bend, With Mechanical Joints



Seeding		End Area		Cu. Yds.	
W.	S.Y.	Cut	Fill	Exc.	Emb.
	47			18	0
	0		0	0	

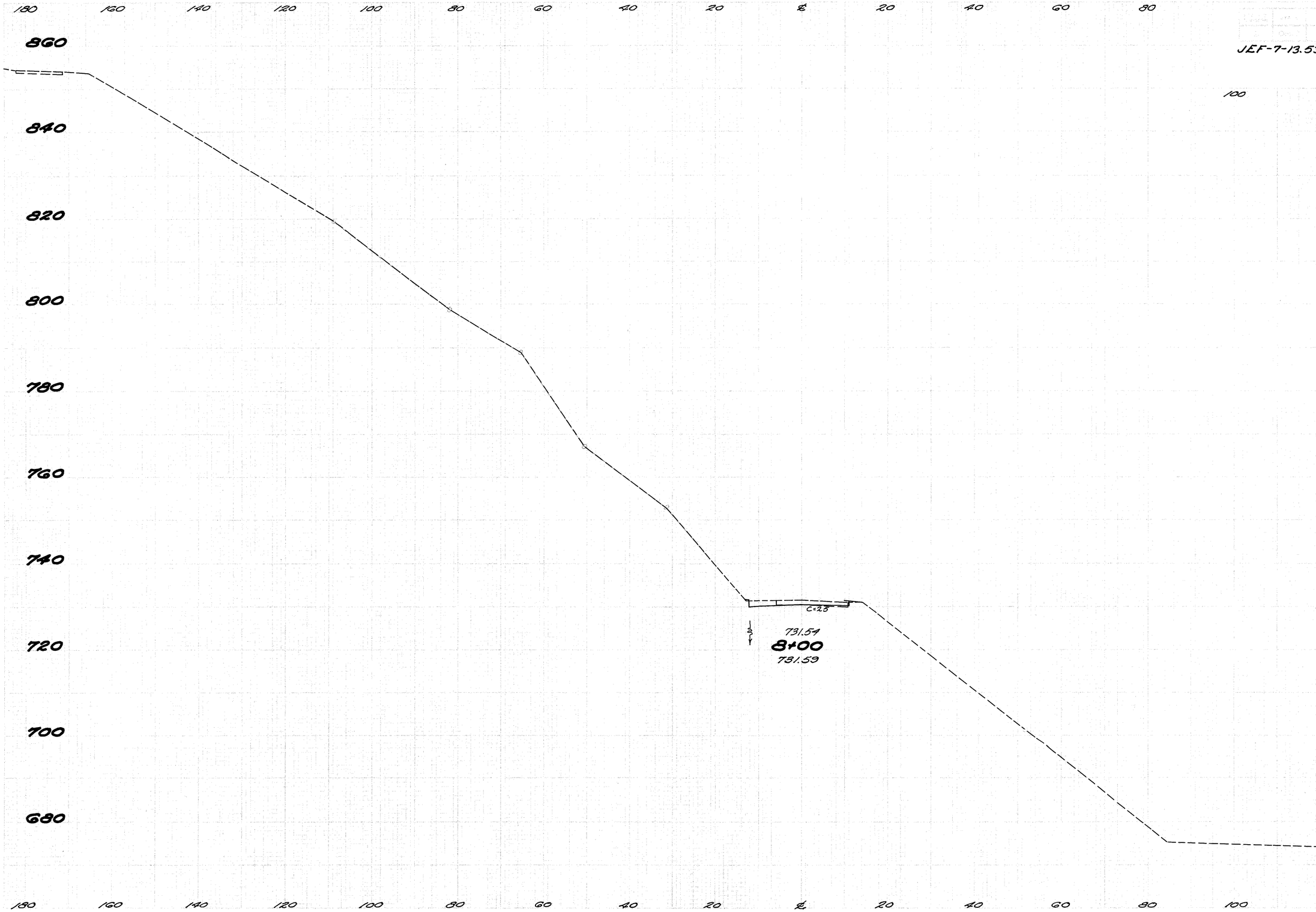
JEF-7-13.53



	Seeding		End Area		Cu. Yds.	
	W.	S.Y.	Cut	Fill	Exc.	Emb.
		72			56	0
AHEAD	17		36	0		
BACK			19	0		

STA. 7+50

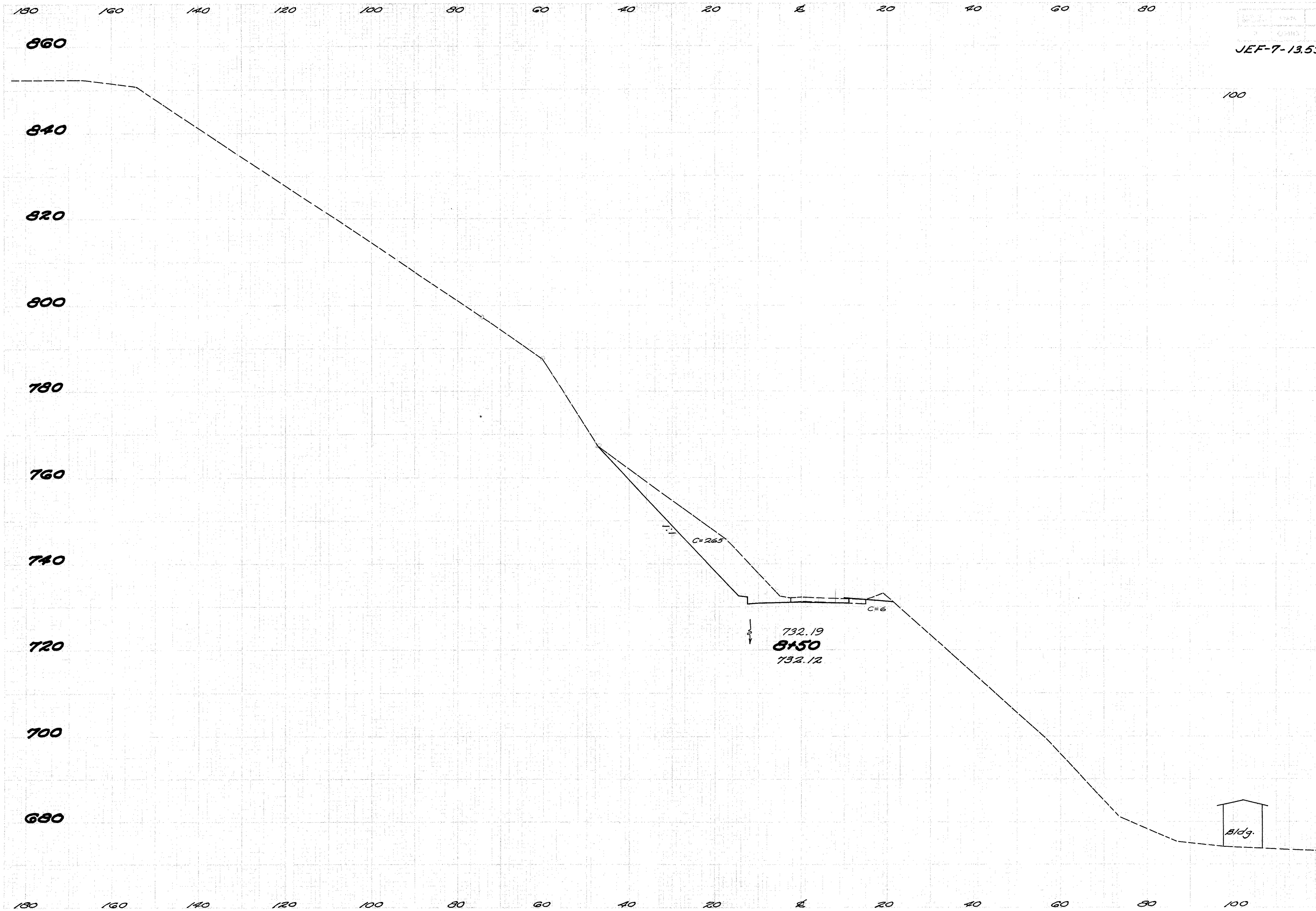
JEF-7-13.53



Seeding		End Areas		Cu. Yds.	
W.	S.Y.	Cut	Fill	Exc.	Emb.
	72			274	0
9		25	0		

STA. 8+00

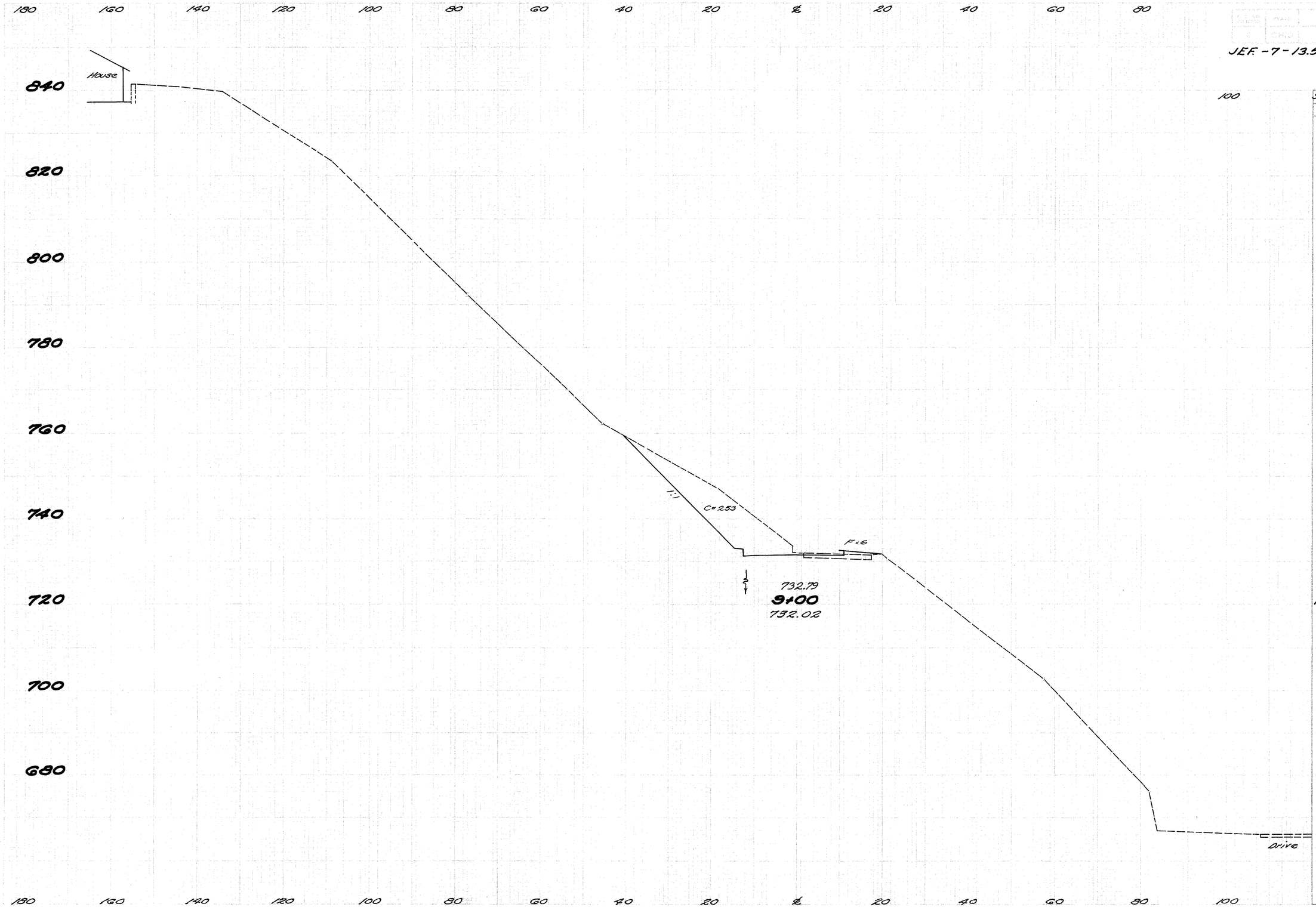
JEF-7-13.53



Seeding		End Area		Cu. Yds.	
W.	S.Y.	Cut	Fill	Exc.	Emb.
	92			485	6
17		271	0		

STA. 8+50

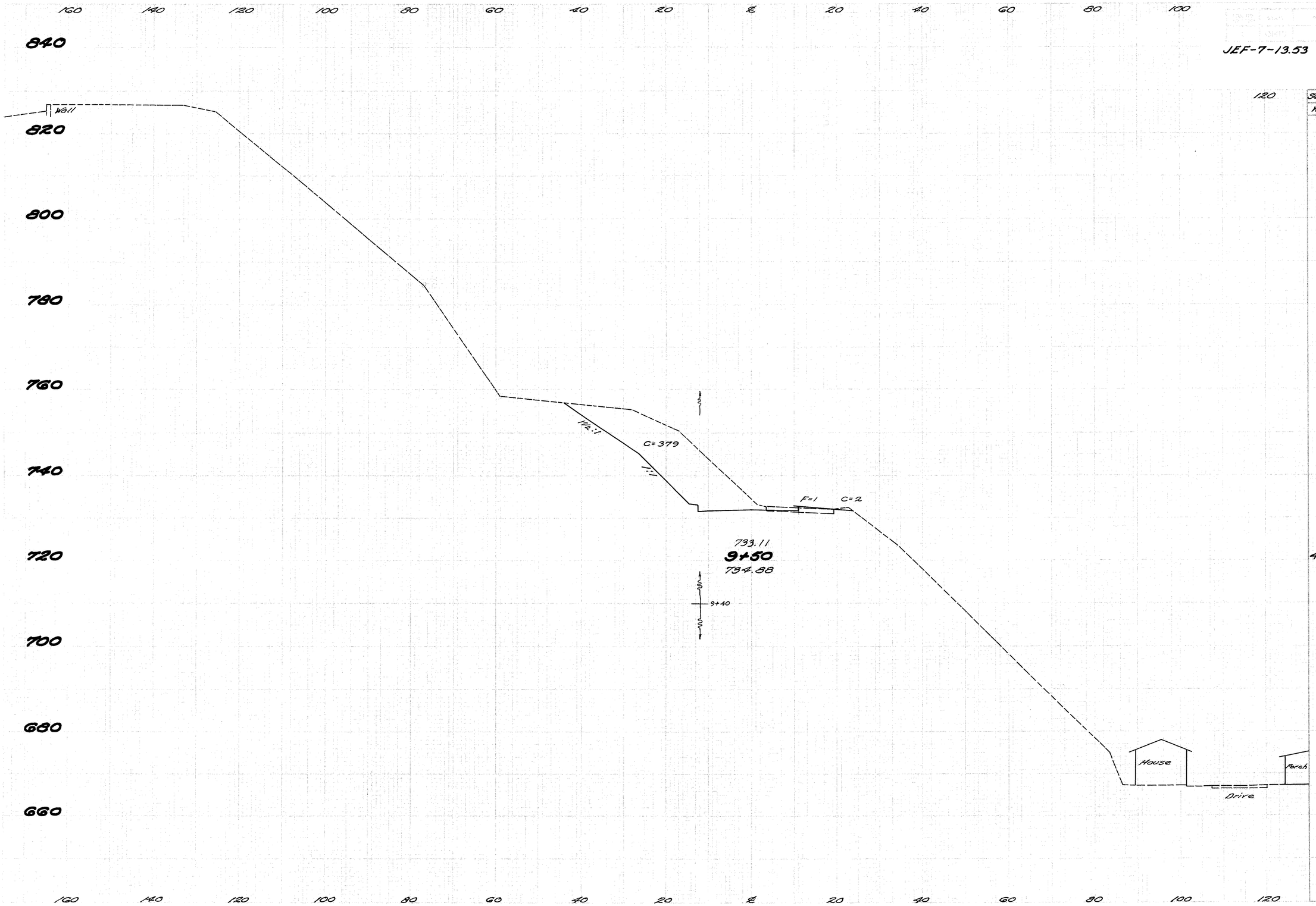
JEF-7-13.53



Seeding		End Area		Cu. Yds.	
W.	S.Y.	Cut	Fill	Exc.	Emb.
	158			587	6
16		253		6	

STA. 9+00

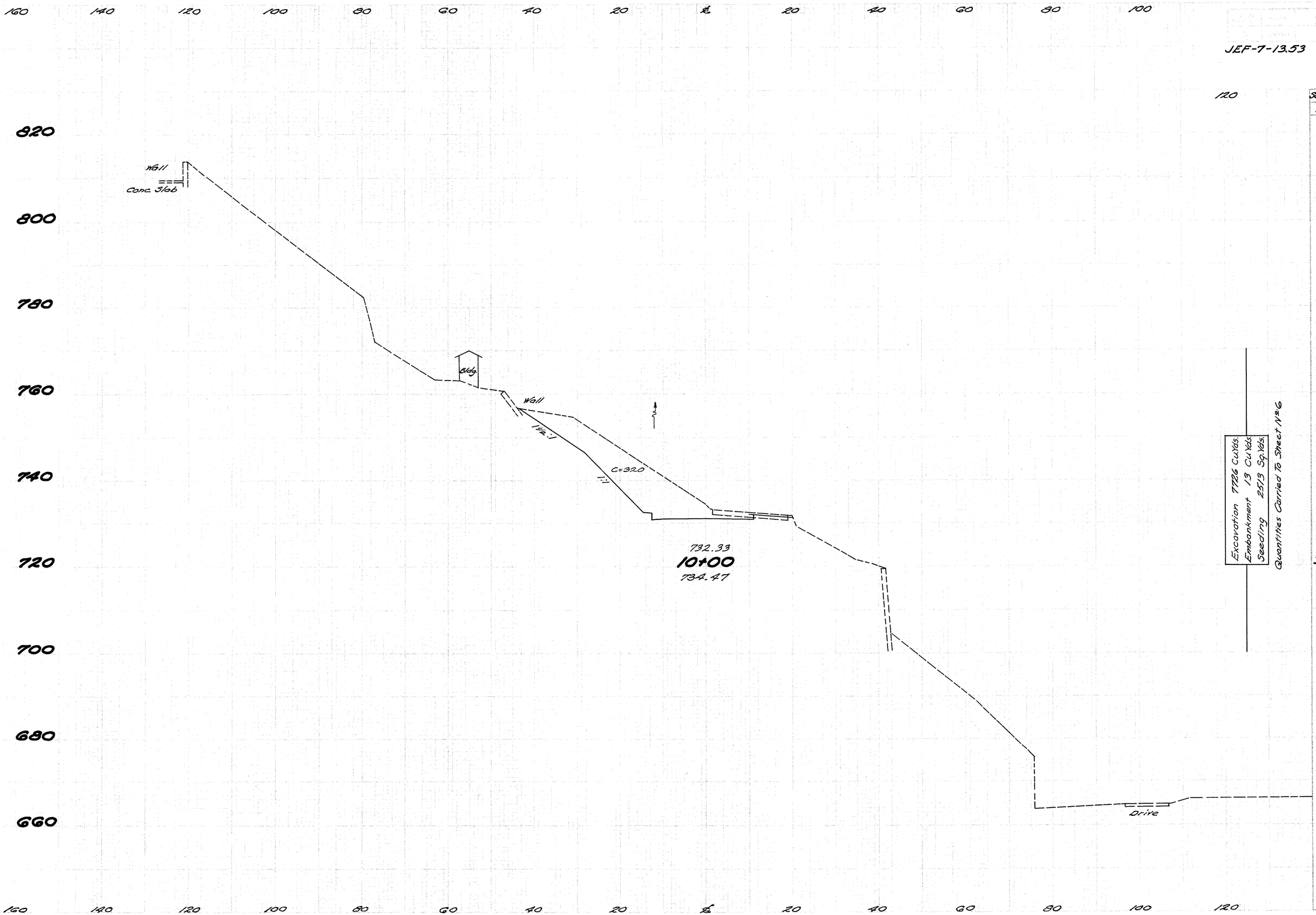
JEF-7-13.53



Seeding		End Area		Cu. Yds.	
W.	SY.	Cut	Fill	Exc.	Emb.
	208			649	1
				41	381 1

STA. 9+50

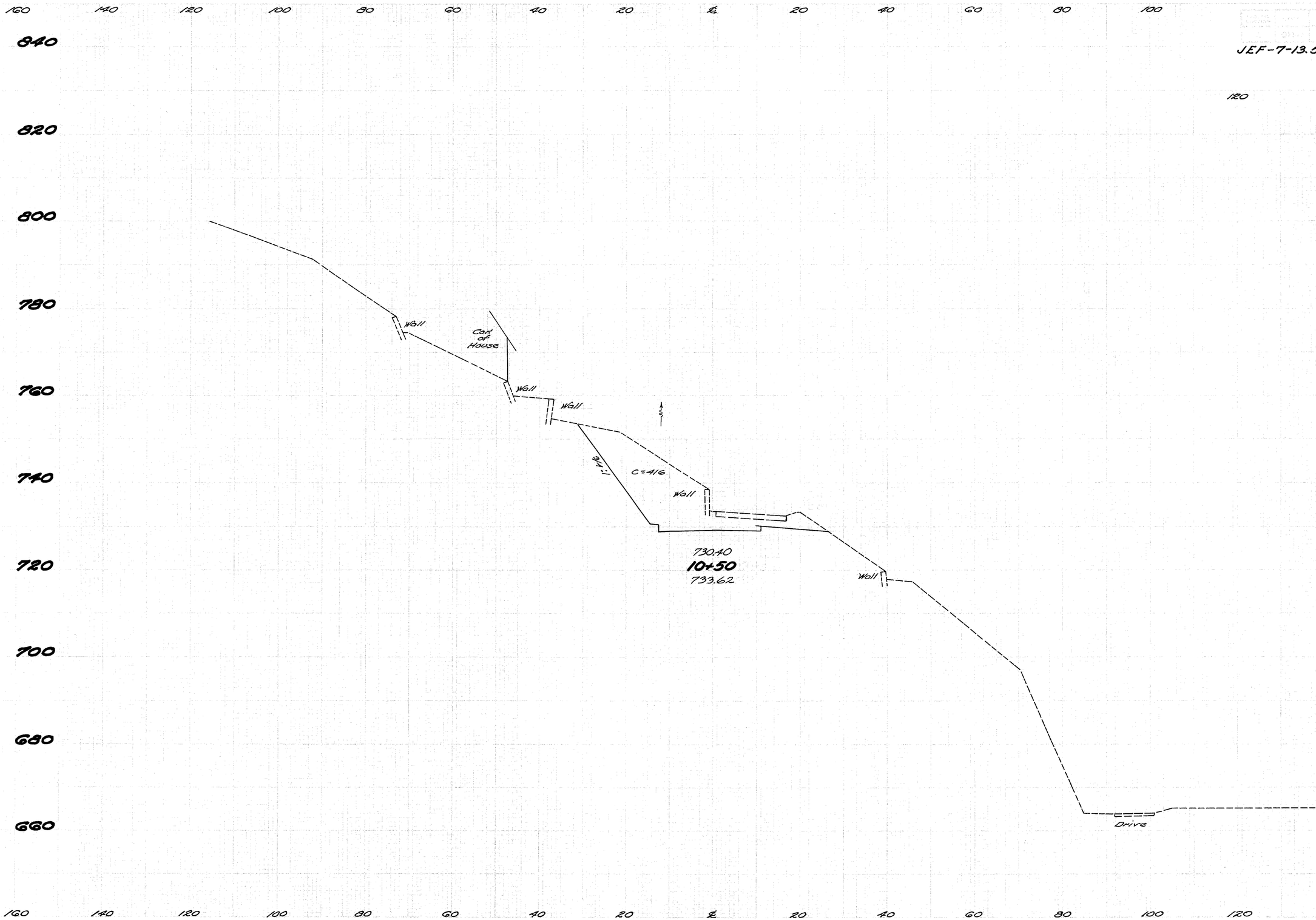
JEF-7-13.53



Seeding		End Area		Cu. Yds.	
W.	S.Y.	Cut	Fill	Exc.	Emb.
	158			681	0
	34		320	0	

STA. 10+00

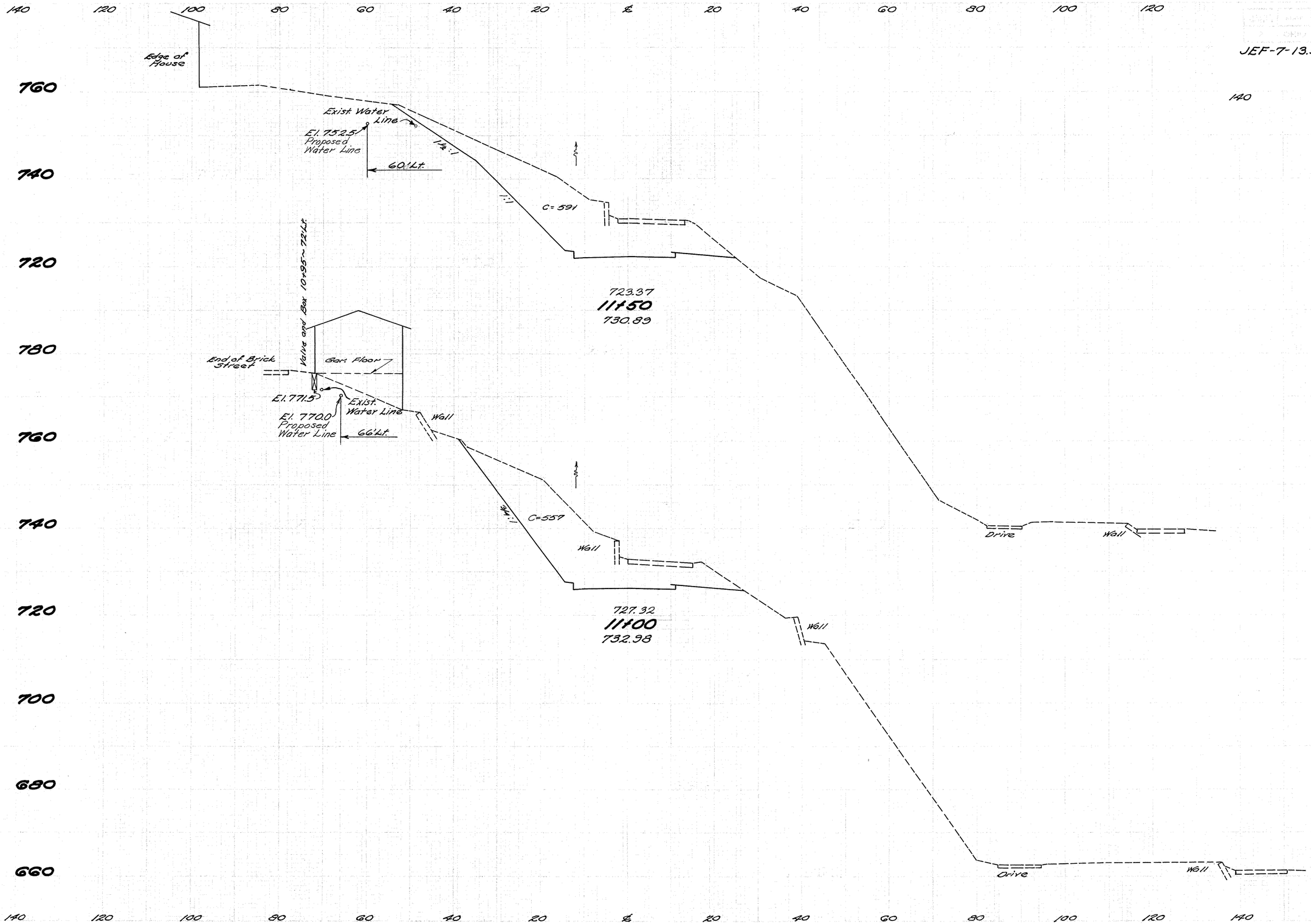
JEF-7-13.53



Seeding		End Area		Cu Yds.	
W.	S.Y.	Cut	Fill	Exc.	Emb.
	128			901	0
				23	416 0

STA. 10+50

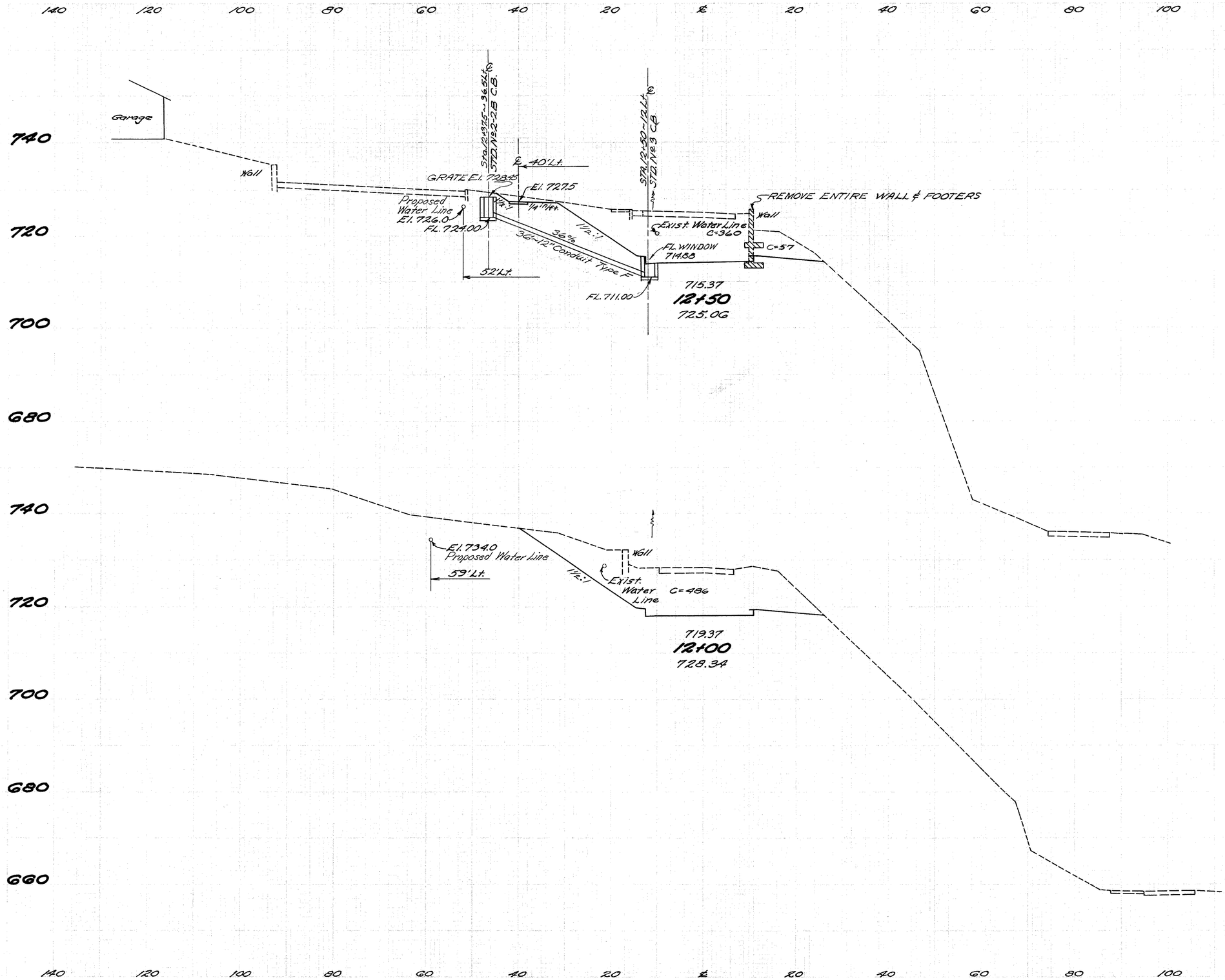
JEF-7-13.53



Seeding		End Area		Cu. Yds.	
W.	S.Y.	Cut	Fill	Exc.	Emb.
	275			997	0
46		591	0		
	192			1063	0
23		557	0		

STA. 11+00 TO STA. 11+50

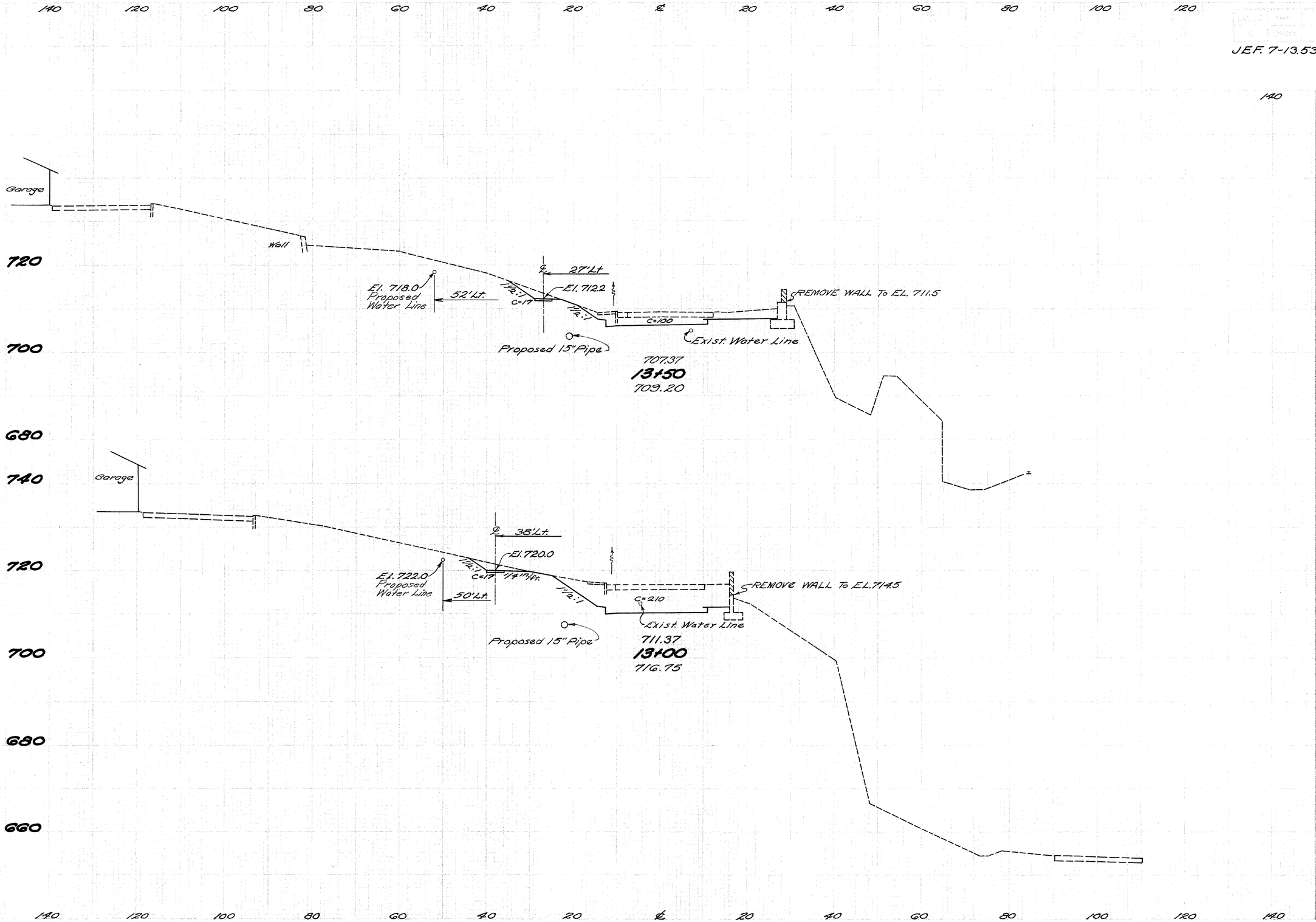
JEF-7-13.53



	Seeding		End Area		Cu. Yds.	
	W.	S.Y.	Cut	Fill	Exc.	Emb.
140						
		253			596	0
	52		417	0		
		292			836	0
	53		486	0		

STA. 12+00 TO STA. 12+50

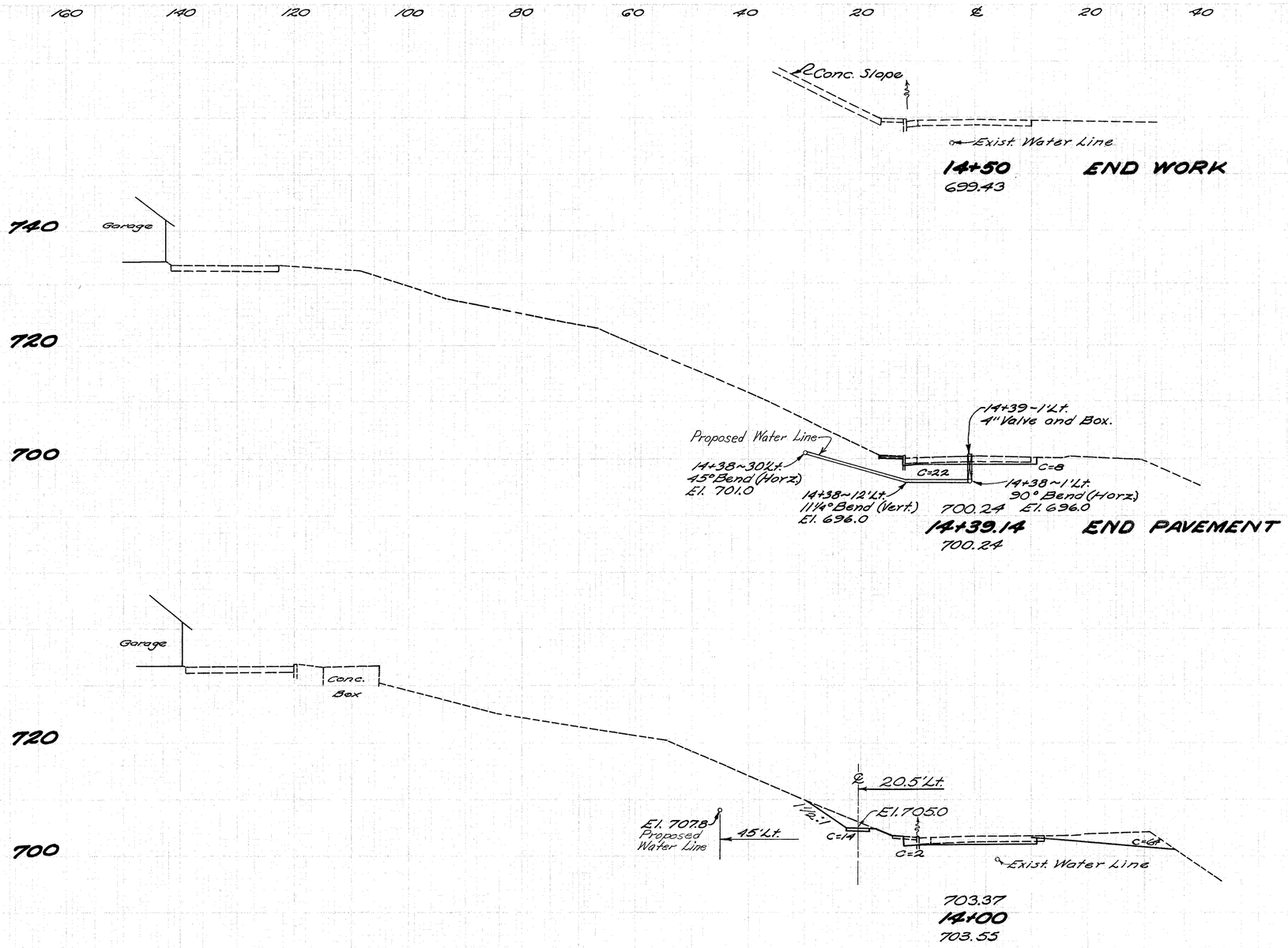
J.E.F. 7-13.53



	Seeding		End Area		Cu. Yds.	
	W.	S.Y.	Cut	Fill	Exc.	Emb.
140		236			182	0
	40		117	0		
		219			319	0
	39		227	0		

STA. 13+00 TO STA. 13+50

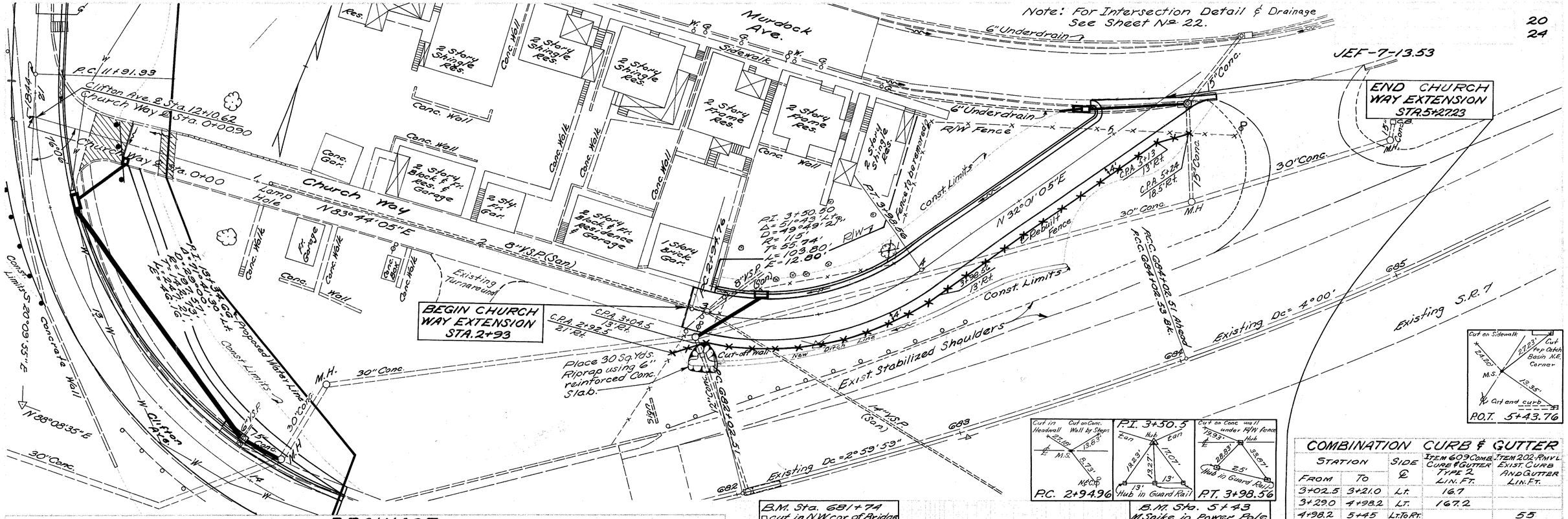
JEF-7-13.53



	Seeding W.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
120	0		0	0		
		2			1	0
AHEAD 4			8	0		
BACK			30	0		
		109			81	0
	45		80	0		

STA. 14+00 TO STA. 14+50

Note: For Intersection Detail & Drainage See Sheet No. 22.

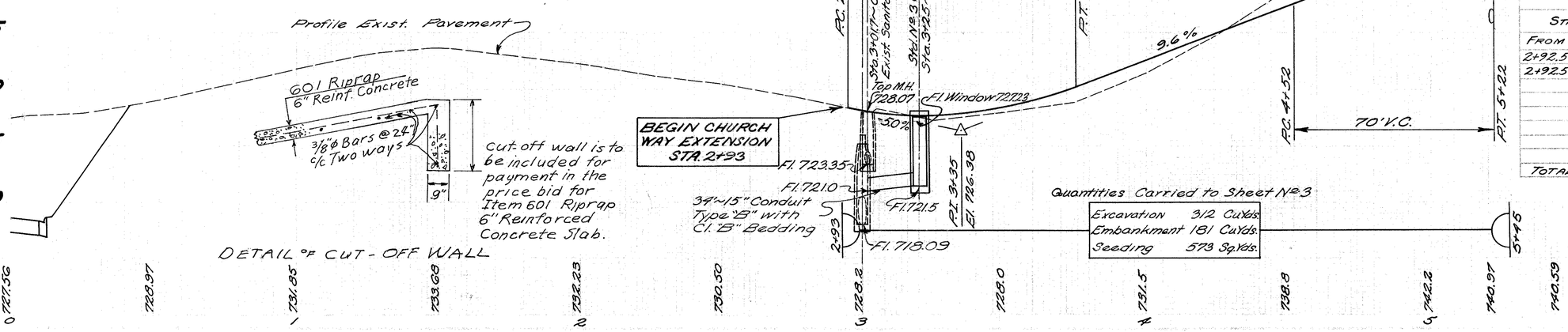


COMBINATION CURB & GUTTER

Station From	Station To	Side ℄	Item 609 Comb. Curb & Gutter Type 2 Lin. Ft.	Item 202 Rmvl Exist. Curb and Gutter Lin. Ft.
3+02.5	3+21.0	Lt.	16.7	
3+29.0	4+98.2	Lt.	167.2	
4+98.2	5+45	Lt. To Rt.		55
Totals			184	55

DRAINAGE

Station From	Station To	Side ℄	See Sheet	Item 602 M.H. Reconst. Each: Storm	Item 602 M.H. Adjust. Each: Sanitary	Item 603 Conduit Lin. Ft. 8" Type "F" W/ Cl. "C" Bedding	Item 603 Conduit Lin. Ft. 15" Type "B" W/ Cl. "B" Bedding	Item 601 Riprap 6" Reinf. Conc. Slab Sq. Yds.	Item 604 Each: Std. No. 3 Catch Basin	Item 604 Each: Std. No. 2 & 6 Inlet	Item 604 Each: Std. No. 1 Man Hole	Item 202 Removals 15" Pipe Under Lin. Ft.	Item 202 Removals Inlet Each
3+00		Rt.	20 & 21	1									
3+00	3+25	Rt. To Lt.	20 & 21				34						
3+01.7		℄	20		1								
3+04.5		Rt.	20 & 21					30					
3+25		Lt.	20 & 21						1				
4+86.5	4+96.2	Lt.	20 & 22			10							
4+86.5	5+33.2	Lt. To Rt.	20 & 22									54	
4+96.2		Lt.	20 & 22							1			
4+96.2	5+33.2	Lt. To Rt.	20 & 22				44						
5+33.2		Rt.	20 & 22								1		1
Totals				1	1	10	78	30	1	1	1	54	1

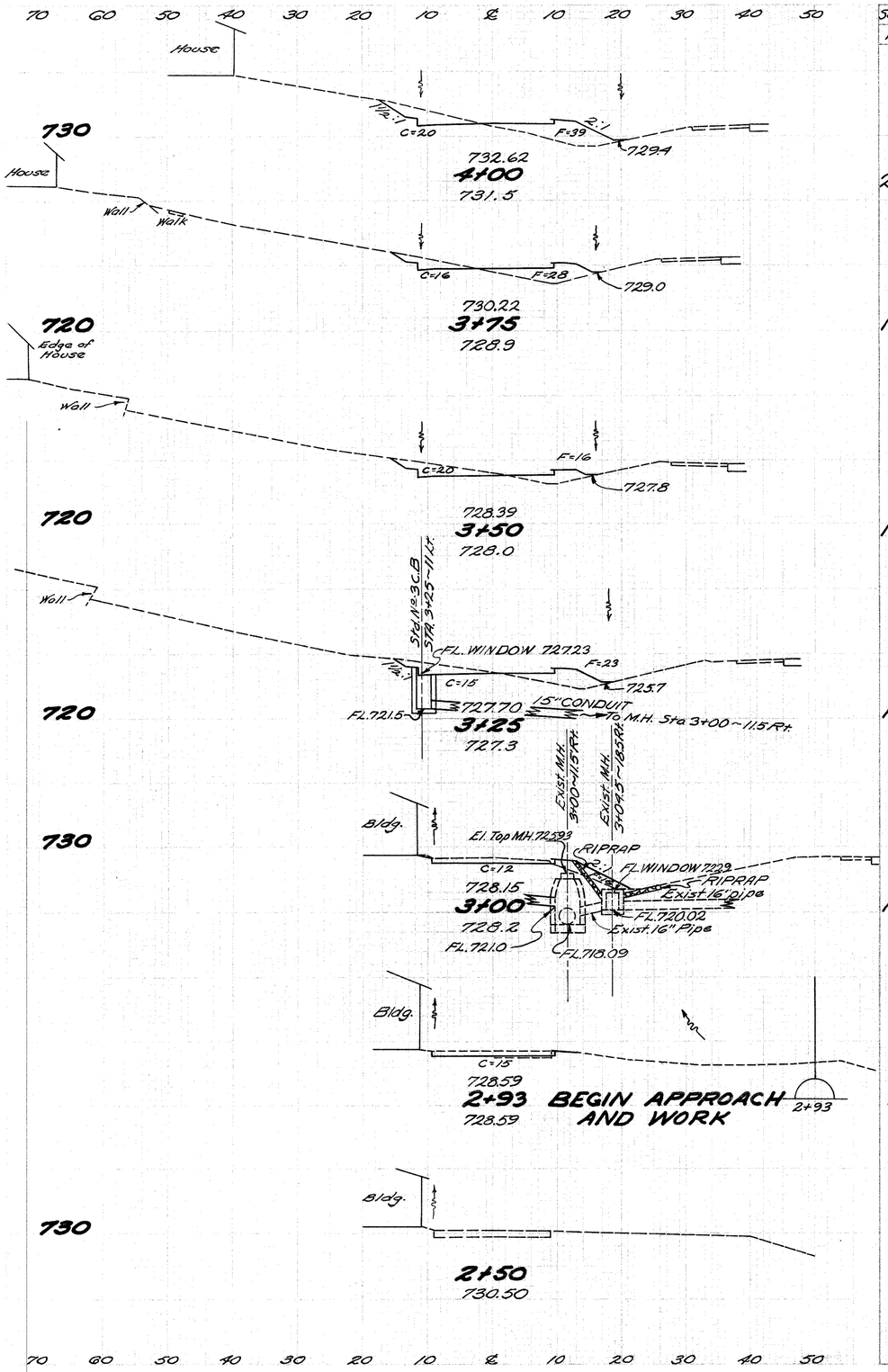


FENCE

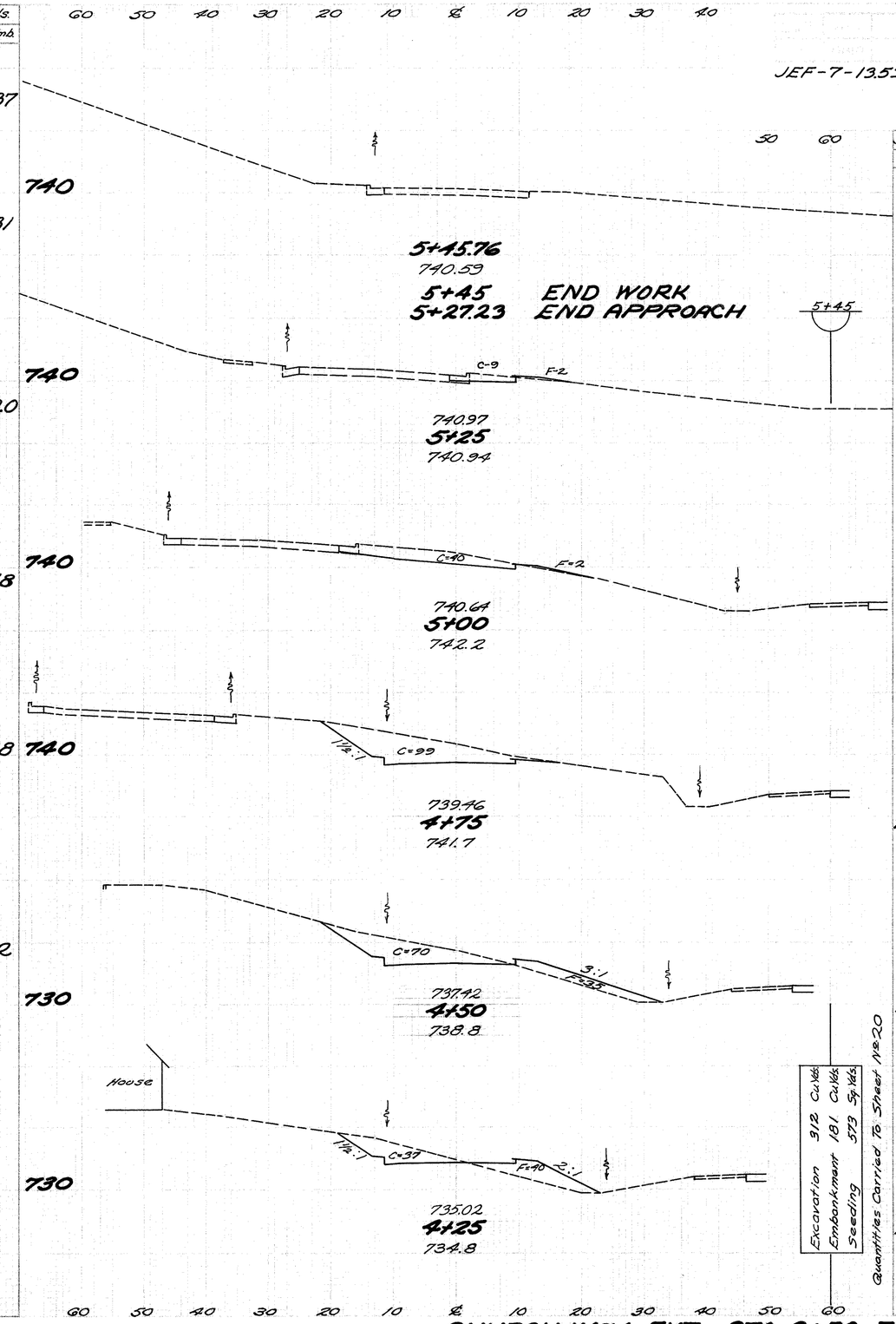
Station From	Station To	Side ℄	Item 202 Fence Removed Lin. Ft. Storage	Item 607 Fence Type "C" Rebuilt Lin. Ft.
2+92.5	5+24	Rt. & Lt.	38	
2+92.5	5+24	Rt.		250
Totals			38	250

CHURCH WAY EXTENSION

JEF-7-13.53



Seeding W.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
	71			26	37
23		20	39		
	57			17	31
18		16	28		
	49			17	20
17		20	16		
	49			16	18
18		15	23		
	49			13	18
17		12	16		
	10			4	2
9		15	0		



Seeding W.	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Exc.	Cu. Yds. Emb.
0		0	0		
	12			4	1
11		9	2		
	36			23	2
15		40	2		
	54			64	1
24		99	0		
	90			78	16
41		70	35		
	96			50	35
28		37	40		

Excavation	912	Cu.Yds.
Embankment	181	Cu.Yds.
Seeding	573	Sq.Yds.

Quantities Carried To Sheet No. 20

CHURCH WAY EXT. STA. 2+50 TO STA. 5+27.23

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

22/24

JEF-7-13.53

CURVE TABLES

CLIFTON AVE

P.C. 8+10.19			D = 7°00' RT.		P.T. 9+96.62		
LEFT			TABLE Nº 1		RIGHT		
EDGE PVMT. ELEV.	DEDUCT CROWN	WIDTH	℄ STATION	PROFILE GRADE	WIDTH	DEDUCT CROWN	EDGE PVMT. ELEV.
730.10	OBTAINED GRAPHICALLY	6.0'	7 +50	730.30	10'	OBTAINED GRAPHICALLY	730.50
730.37		7.1'	+60	730.56			730.72
730.66		8.0'	+70	730.82			730.93
730.94		8.8'	+80	731.08			731.11
731.18		9.4'	+90	731.33			731.27
731.39		9.8'	8 +00	731.54			731.41
731.55	0.16	10'	+10	731.71		0.16	731.55
731.55			P.C. +10.19	731.71			731.55
731.73			+25	731.89			731.73
732.03			+50	732.19			732.03
732.33			+75	732.49			732.33
732.63			9 +00	732.79			732.63
732.91			+25	733.07			732.91
732.95			+50	733.11			732.95
732.70			+75	732.86			732.70
732.26	0.16	10'	P.T. +96.62	732.42	10'	0.16	732.26

CLIFTON AVE

P.C. = 11+91.93			D = 29°00' LT.		P.T. = 14+39.14		
LEFT			TABLE Nº 2		RIGHT		
EDGE PVMT. ELEV.	DEDUCT CROWN	WIDTH	℄ STATION	PROFILE GRADE	WIDTH	ADD SUPER	EDGE PVMT. ELEV.
725.21	0.16	10'	11 +25	725.37	10'	0.16	725.21
723.21			+50	723.37		OBTAINED GRAPHICALLY	723.25
721.21			+75	721.37			721.32
719.86			P.C. + 91.93	720.02			720.02
719.21			12 +00	719.37			719.39
717.21			+25	717.37			717.46
715.21			+50	715.37			715.51
713.21			+75	713.37		0.32	713.53
711.21			13 +00	711.37			711.53
709.21			+25	709.37			709.53
707.21			+50	707.37			707.53
705.21			+75	705.37		0.32	705.53
703.21	0.16		14 +00	703.37			703.41
701.23	OBT. GRAPH.		+25	701.37		OBT. GRAPH.	701.29
700.18			P.T. + 39.14	700.24			700.23
700.12		10'	+40	700.17	10'		700.16

CHURCH WAY EXTENSION

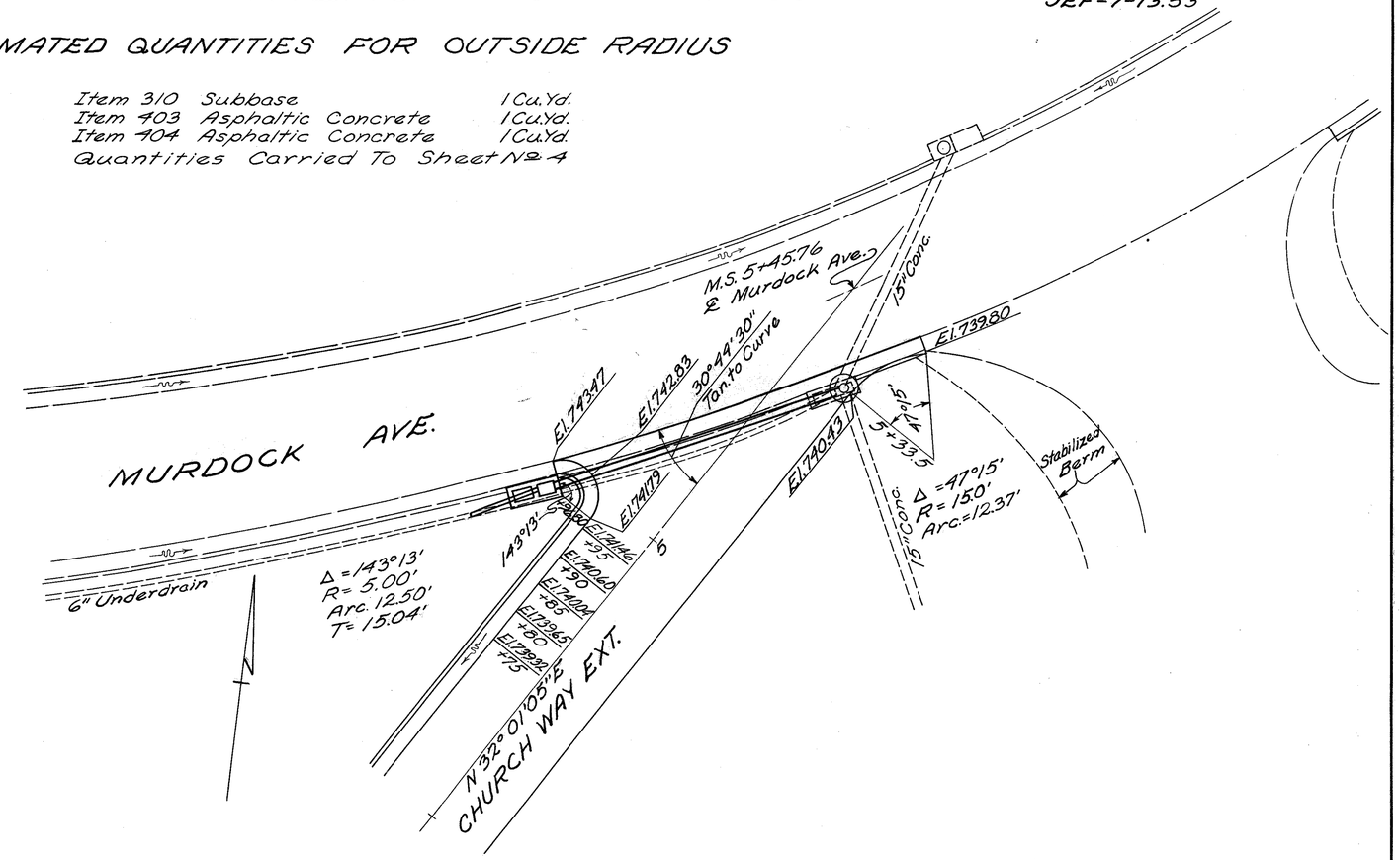
P.C. = 2+94.76			D = 49°49'21" LT.		P.T. = 3+98.56		
LEFT			TABLE Nº 3		RIGHT		
EDGE PVMT. ELEV.	DEDUCT CROWN	WIDTH	℄ STATION	PROFILE GRADE	WIDTH	ADD SUPER	EDGE PVMT. ELEV.
728.39	Exist.	9.0'	2 +93	728.48	9.0'	Exist.	728.42
728.25	0.14		P.C. + 94.76	728.39		0.14	728.25
728.01			3 +00	728.15		0.14	728.01
727.56			+25	727.70			727.72
728.25			+50	728.39		OBT. GRAPH.	728.53
730.08			+75	730.22			730.22
732.34	0.14	9.0'	P.T. + 98.56	732.48	9.0'	0.14	732.34

INTERSECTION DETAILS

ESTIMATED QUANTITIES FOR OUTSIDE RADIUS

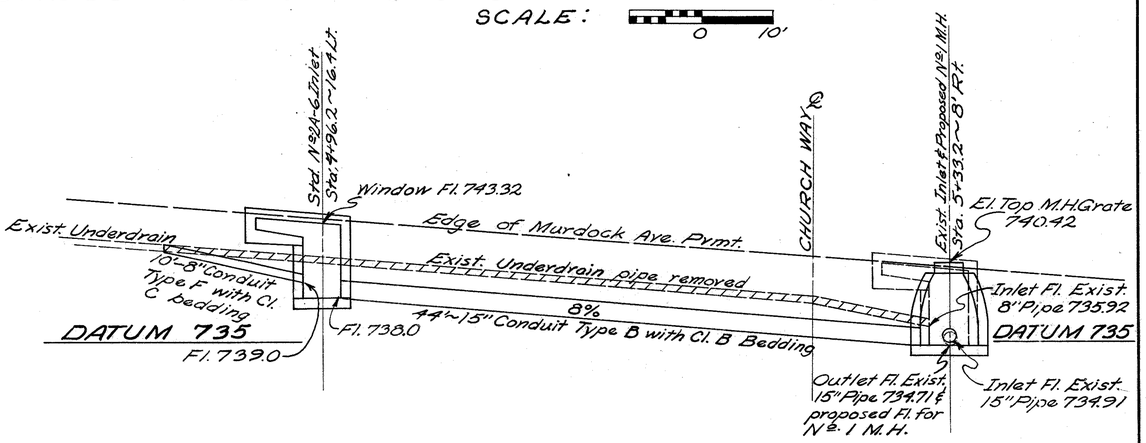
Item 310	Subbase	1 Cu. Yd.
Item 403	Asphaltic Concrete	1 Cu. Yd.
Item 404	Asphaltic Concrete	1 Cu. Yd.

Quantities Carried To Sheet Nº 4



PLAN VIEW MURDOCK AVE AND CHURCH WAY INTERSECTION

SCALE: 0 10'



DRAINAGE PLAN AT MURDOCK ST. & CHURCH WAY EXTENSION

SCALE: HORZ. & VERT. 0 5'

CURVE TABLES AND INTERSECTION DETAIL

FED. RD DIVISION	STATE	PROJECT	
2	OHIO		

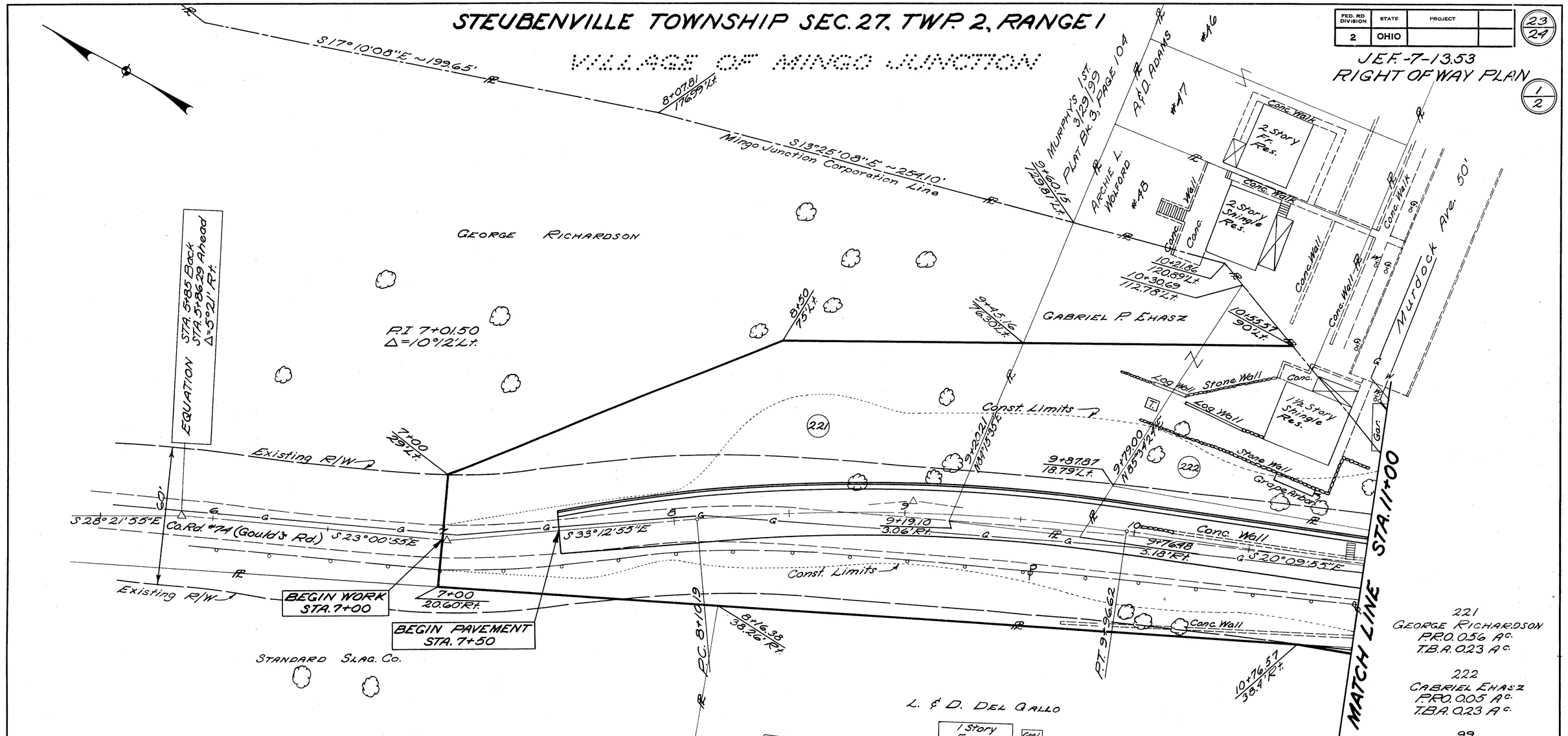
23/24

JEF-7-13.53
RIGHT OF WAY PLAN

1/2

STEUBENVILLE TOWNSHIP SEC. 27, TWP. 2, RANGE 1

VILLAGE OF MINGO JUNCTION



221
GEORGE RICHARDSON
P.R.O. 0.56 Ac.
T.B.A. 0.23 Ac.

222
GABRIEL EHASZ
P.R.O. 0.05 Ac.
T.B.A. 0.23 Ac.

99
L. & D. DEL GALLO
P.R.O. 0.01 Ac.
T.B.A. 0.004 Ac.

100% STATE FUNDS

SUMMARY OF ADDITIONAL RIGHT OF WAY REQ'D.

Parcel No.	Owners	Deed Record Volume	Deed Record Page	Deed Area	To Be Acquired Land	To Be Acquired Bldg's.	Residue Left	Residue Right	Sheet No.	Remarks
98A-SL	P.B. & W. R.R. Co.				0.03 Ac.				2	Slope Easement
99	L. & D. DEL GALLO	421	113	1.62 Ac.	0.04 Ac.			1.57 Ac.	1 & 2	
100A	JOHN ZABEN	191	63	*180000 S.F.	799.98 S.F.		122531 S.F.		2	Prior Easement 2603.21 S.F. (**)
104A	GLEN J. MURPHY	416	504	35170 S.F.	407.51 S.F.		2812.15 S.F.		2	Prior Easement 293.34 S.F.
105A	HAROLD K. McDONALD	410	291	2541.55 S.F.	354.78 S.F.		1598.08 S.F.		2	Prior Easement 588.64 S.F.
221	GEORGE RICHARDSON	186	56	20 Ac.	0.23 Ac.		0.61 Ac.		1 & 2	
222	GABRIEL P. EHASZ	415	237	0.35 Ac.	0.23 Ac.	Yes	0.07 Ac.		1 & 2	
223	ANNA MARIE STEWART	429	618	3608.75 S.F.	3089.67 S.F.		519.08 S.F.		2	Residue Lot 1 (1409.08 S.F.) Lot 2 (391.13 S.F.)

* Calculated Area from deed

(**) 171.5 S.F. from original deed to Village for Street Purposes

COMPLETION DATE	

R/W STA. 5+50 to 11+00

STEUBENVILLE TOWNSHIP SECS. 26 & 27. TWP. 2. RANGE 1

FED. RD DIVISION	STATE	PROJECT	
2	OHIO		

24/24

JEF.-7-13.53
RIGHT OF WAY PLAN

2/2

223
ANNA MARIE STEWART
T.B.A. 3289.67 S.F.

100-A
JOHN ZABEN
T.B.A. 799.98 S.F.

104-A
GLEN J. MURPHY
T.B.A. 407.51 S.F.

105-A
HAROLD K. McDONALD
T.B.A. 354.78 S.F.

98A-SL.
P.B. & W. R.R. Co.

PI = 3+50.50
Δ = 51°43' Lt.
D = 49°49'21"
R = 115'
T = 55.74
L = 103.80'
E = 12.80'

PRIOR EASEMENT

#48 ARCHIE L. WOLFORD
#47 A.&D. ADAMS
#46
#45 AMERIGO Y. DIPILLO
#44 N. & E. BUELAC
#43 R.S. DEBACO
#42 THEODORE MUNIS

VILLAGE OF AMPO JUNCTION

Existing R/W Line

MURPHY'S 1ST 3/29/99
PLAT BK. #3, PAGE 104

Murdock AVE. 50'

MATCH LINE STA. 11+00

Corporation Line

Const. Limits

Exist. R/W

Alley

Garage

1 Story Shingle Garage
2 Story Shingle Res.
2 Story Fr. Res.
1 Story Brick Gar.
2 Story Brick & Fr. Gar. & Res.
2 Story Fr. Gar.
Conc. Garage
Gar.

#1 ANNA MARIE STEWART
#2
#3 L.&D. RANDALPH
#4 M.&G. MARTINEZ
#5 G. STEWART
#6 J.&G. KOSHUN
#7 G.&H. MURPHY
#8 GLEN J. MURPHY
HAROLD K. McDONALD
#9 ANGELINA CARANDA
#10 JOHN ZABEN
PEELERS 1ST.

Conc. Wall
Conc. Walk
Conc. Wall
Conc. Walk

P.C. 11+91.93
CLIFTON AVE. STA. 12+10.62
CHURCH WAY EXT. STA. 0+0.90

Church Way ~ 20'
8" V.S.P. (San)
Lamp Hole
N 83°44'05" E
Existing R/W

Exist. Cuide Sac

PRIOR EASEMENT

Proposed Water Line

END PAVEMENT STA. 14+40

END WORK STA. 14+50

S 72°50'E
S 3472.50 to Sec. Corner
STA. 681+44.54
N 84°58'30" W

SEC. 27 ~ TWP. 2 ~ RANGE 1
SEC. 26 ~ TWP. 2 ~ RANGE 1

Existing LA

Clifton Ave.
N 88°08'35" E

CLIFTON AVE. STA. 14+92.15 = STA. 680+71.89

To Brilliant N 53°32'35" E

P.B. & W. R.R. CO.

CROSS CREEK

DEL GALLO

P.C. 682+02.51
P.C.C. 684+02.51 Ahead

To Steubenville

N 32°01'05" E

PRIOR EASEMENT
Recorded 8/31/59
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P.I. 13+34.66
Δ = 71°41'30" Lt.
D = 29°00'
R = 197.57'
T = 142.73'
L = 247.21'
E = 46.16'

COMPLETION DATE

R/W STA. 11+00 to 17+00