

STATEMENT OF ESTIMATED QUANTITIES

ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL ESTIMATED QUANTITIES	TOTAL FINAL QUANTITIES	PORTLAND AVE.		BUFFALO ST.	
					ESTIMATED QUANTITIES	FINAL QUANTITIES	ESTIMATED QUANTITIES	FINAL QUANTITIES
2101.502	CLEARING	EACH	17		12		5	
2101.507	GRUBBING	EACH	12		9		3	
2104.523	SALVAGE CONCRETE APRON	EACH	1		1			
2105.501	COMMON EXCAVATION(P)	CY	353		232		121	
2105.521	GRANULAR BORROW(L.V.)	CY	1800		1430		370	
2105.525	TOPSOIL BORROW(L.V.)	CY	114		64		50	
2211.503	AGGREGATE BASE (C.V.), CLASS 6	CY	386		188		198	
2331.508	TYPE 31 WEARING COURSE MIXTURE	TON	105		60		45	
2340.510	TYPE 31 BINDER COURSE MIXTURE	TON	60				60	
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GAL.	28				28	
2451.509	AGGREGATE BEDDING	CY	136		69		67	
0504.602	ADJUST HYDRANT	EACH	1		1			
0504.605	2" POLYSTYRENE INSULATION	SY	53		53			
0531.602	GEOTEXTILE SPILLWAY	SY	41		41			
2501.511	48" RC PIPE CULVERT, DESIGN 3006 CLASS II	LF	104		104			
2501.511	15" CS PIPE CULVERT	LF	20		20			
2501.515	15" CS PIPE APRON	EACH	2		2			
2501.515	15" RC PIPE SHORT RADIUS BEND	EACH	5		5			
2501.515	48" RC PIPE APRON	EACH	2		2			
2501.521	40" X 65" RC PIPE-ARCH CULVERT, CLASS II	LF	107				107	
2501.525	40" X 65" RC PIPE-ARCH APRON	EACH	2				2	
2501.573	INSTALL CONCRETE APRON	EACH	1		1			
2511.501	RANDOM RIPRAP, CLASS III	CY	39.9		20.1		19.8	
2573.502	SILT FENCE HEAVY DUTY	LF	667		266		401	
2575.505	SODDING TYPE LAWN	SY	1362		764		598	

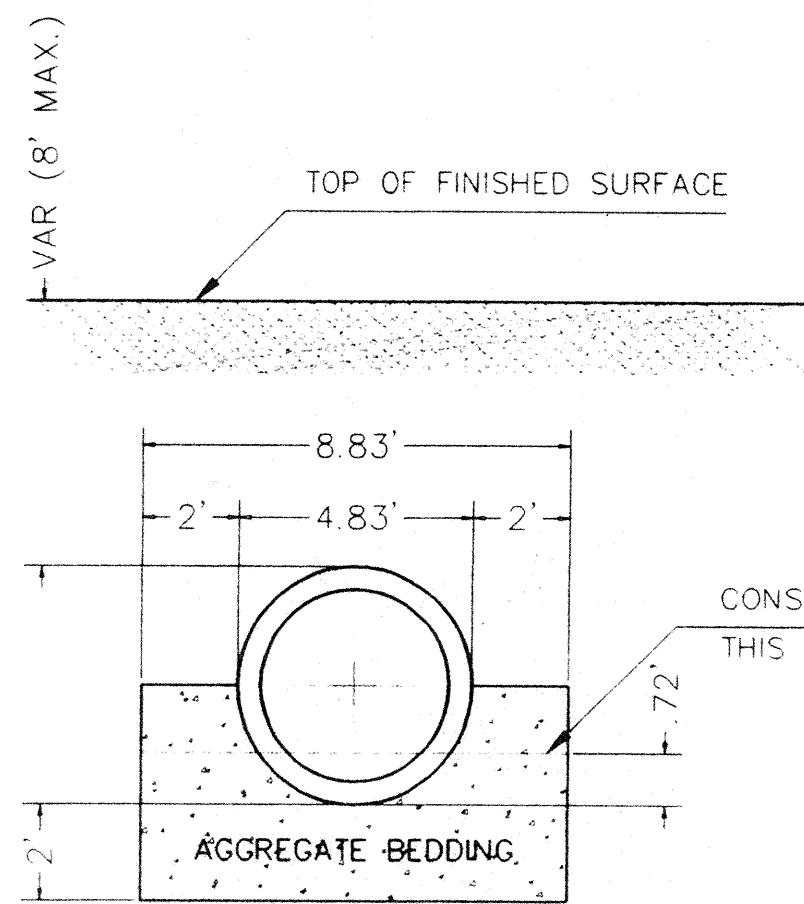
CLEAR & GRUB CHART

STATION	LOCATION	DESCRIPTION	CLEAR	GRUB
PORTLAND				
4+19	LT. 29'	10", 12" TWIN BOXELDER	2	1
4+72	LT. 41'	6", 7", 10" TRIPLE BOXELDER	3	1
4+77	LT. 44'	8" BOXELDER	1	1
4+87	LT. 67'	30" COTTONWOOD	1	1
4+87	LT. 70'	6" BOXELDER	1	1
4+97	LT. 51'	36" COTTONWOOD	1	1
4+94	RT. 52'	8" APPLE	1	1
4+97	RT. 50'	5" ELM	1	1
4+98	RT. 55'	14" ELM	1	1
PORTLAND AVE. SUBTOTAL =			12	9
BUFFALO				
5+18	RT. 28'	30" COTTONWOOD	1	1
5+24	RT. 21'	20" COTTONWOOD	1	1
5+27	RT. 22'	5", 6", 8" TRIPLE BOXELDER	3	1
BUFFALO ST. SUBTOTAL =			5	3
TOTAL CLEAR & GRUB =			17	12

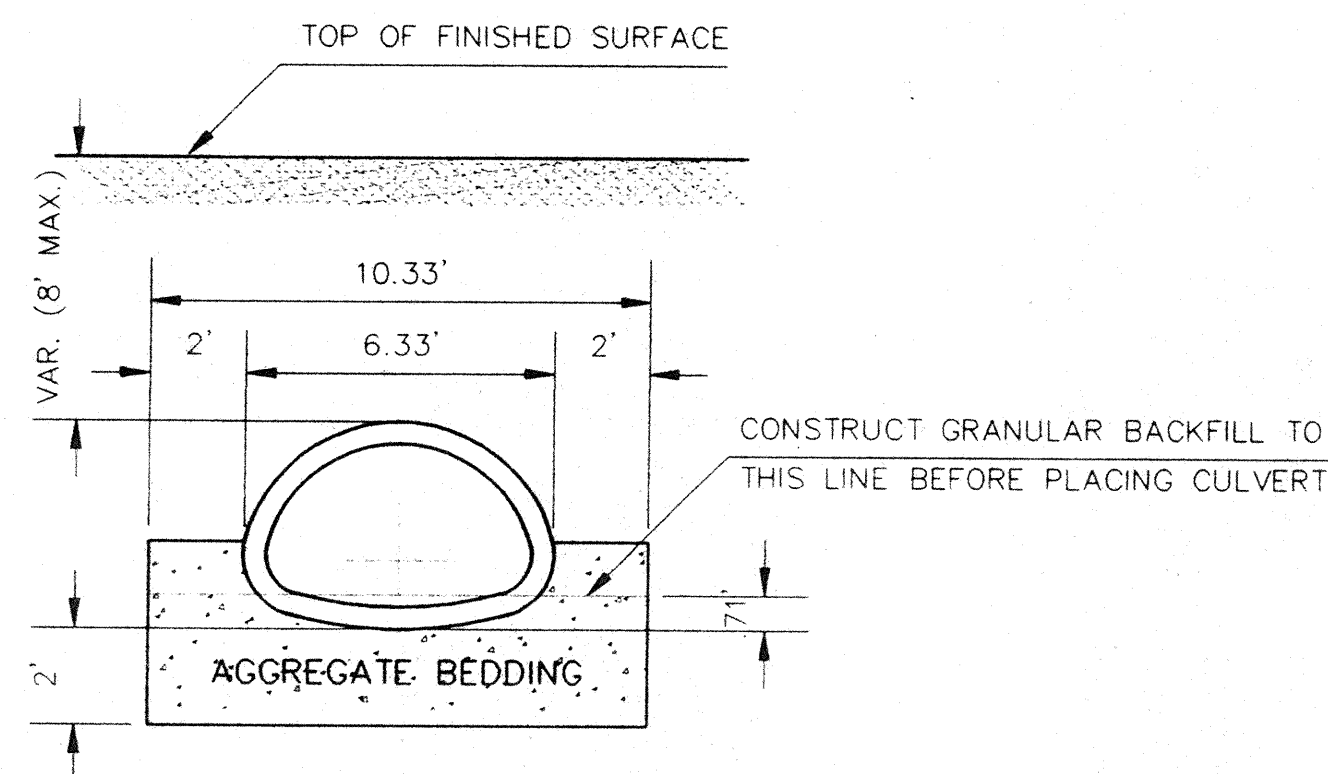
STANDARD DETAIL PLATES

THE FOLLOWING STANDARD PLATES, APPROVED BY THE DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION, SHALL APPLY ON THIS PROJECT.

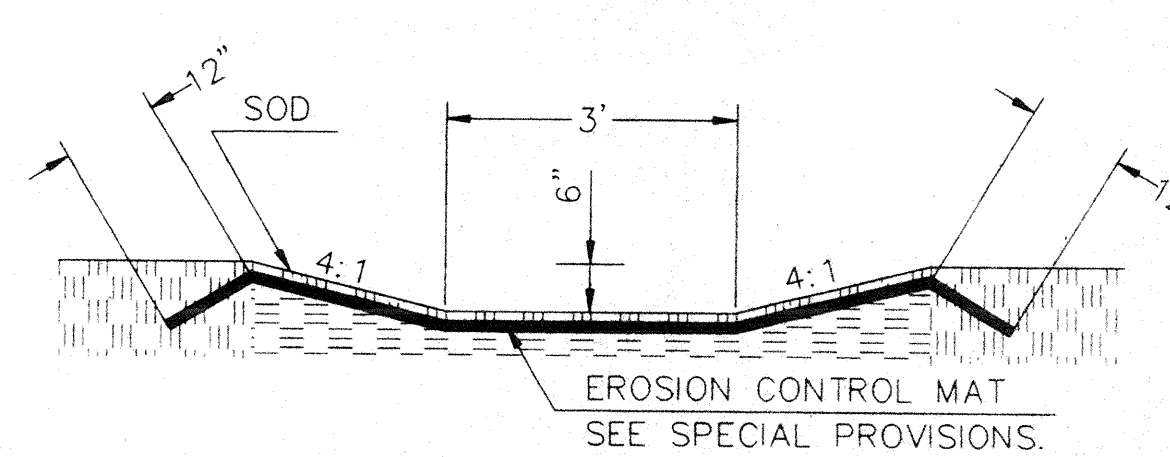
PLATE NO.	DESCRIPTION
0005 A	SPECIFICATION REFERENCE TO STANDARD PLATES
3000 L	REINFORCED CONCRETE PIPE
3006 F	GASKET JOINT FOR REINFORCED CONCRETE PIPE
3100 G	CONCRETE APRON FOR REINFORCED CONCRETE PIPE
3110 G	CONCRETE APRON FOR REINFORCED CONCRETE PIPE-ARCH
3123 J	METAL APRON FOR CS PIPE
3124 B	METAL APRON CONNECTION
3133 B	RIPRAP AT RCP OUTLETS
3134 B	RIPRAP AT CMP OUTLETS
3145 E	CONCRETE PIPE TIES
8000 I	STANDARD BARRICADE
9102 D	TURF ESTABLISHMENT AREAS AT PIPE CULVERT ENDS



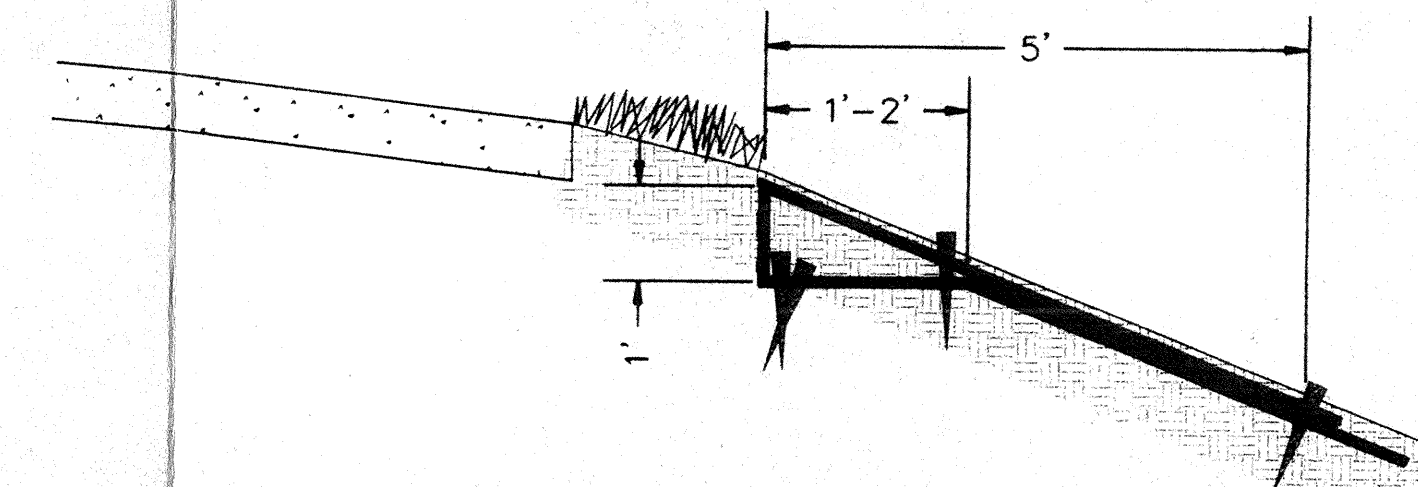
48" ROUND PIPE BEDDING DETAIL



40"X65" ARCH PIPE BEDDING DETAIL

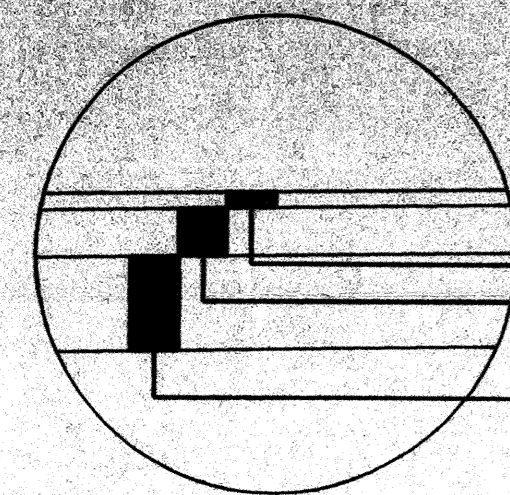
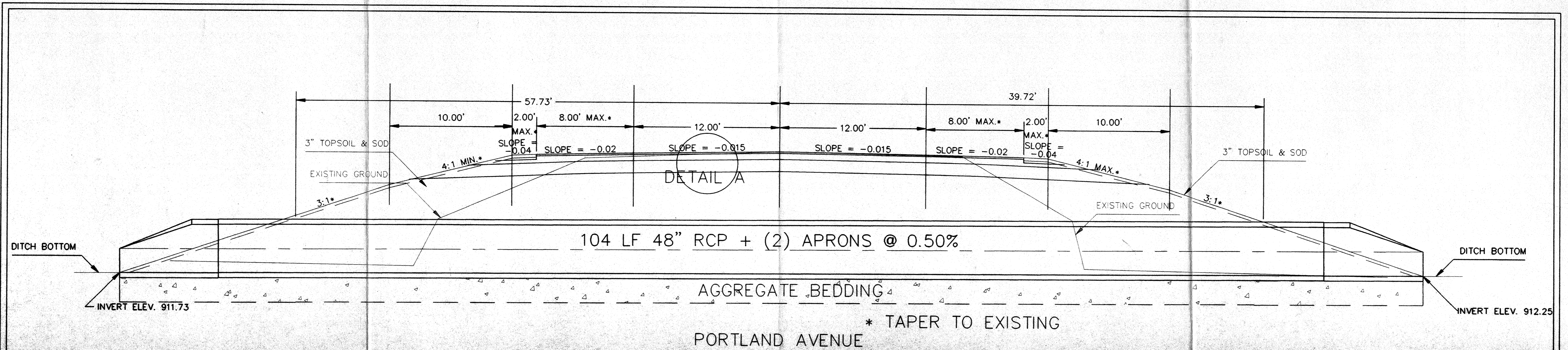


SPILLWAY DETAIL



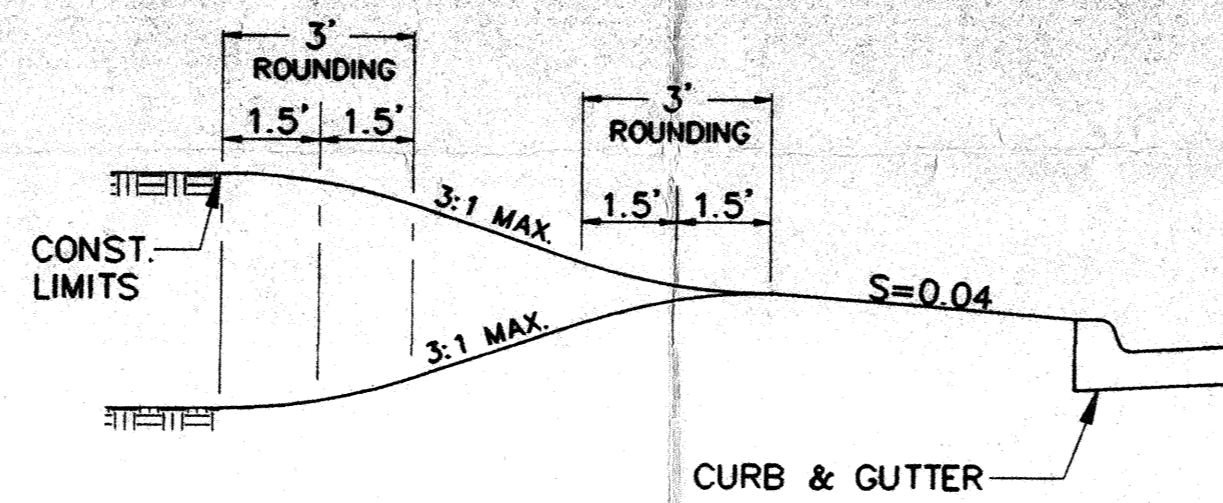
SHOULDER TREATMENT DETAIL

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER LAWS OF THE STATE OF MINNESOTA.  
*David A. Shell*  
 REG. NO. 14257 DATE 5-8-95

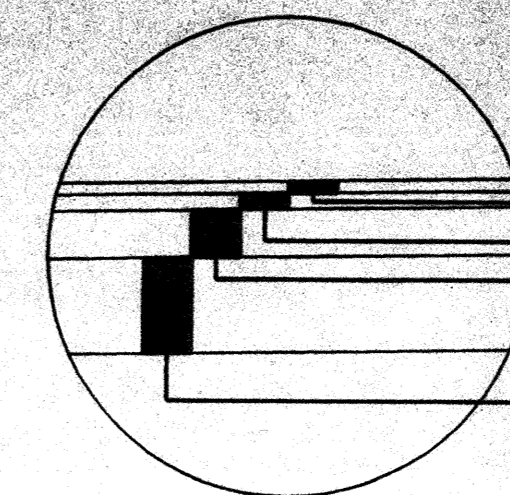


DETAIL A  
Portland Avenue Typical

- 1 1/2" TYPE 31 WEARING COURSE MIXTURE
- 6" AGGREGATE BASE CLASS 6 PLACED
- 1' SUBCUT FOR UNIFORMITY & COMPACTION

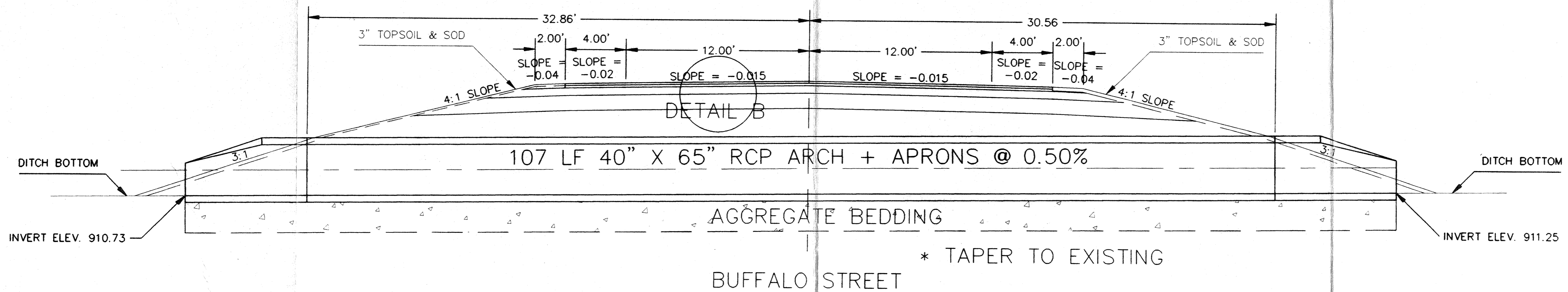


SLOPE ROUNDING DETAIL



DETAIL B  
Buffalo Street Typical

- 1 1/2" TYPE 31 WEARING COURSE MIXTURE
- 2" TYPE 31 BINDER COURSE MIXTURE
- 6" AGGREGATE BASE CLASS 6 PLACED
- 1' SUBCUT FOR UNIFORMITY & COMPACTION

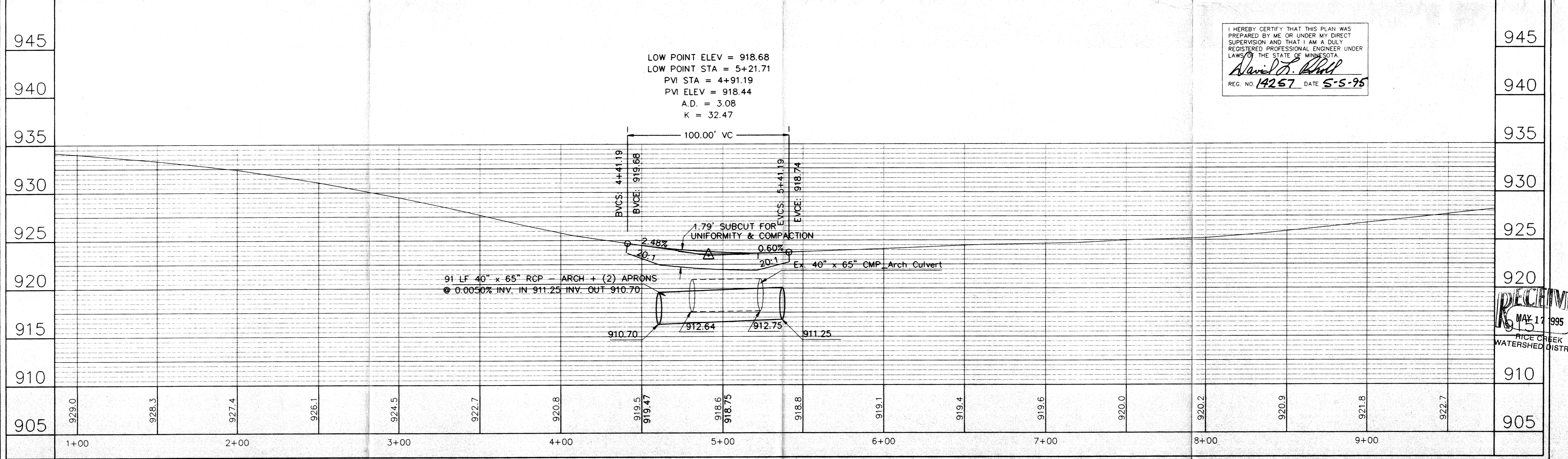
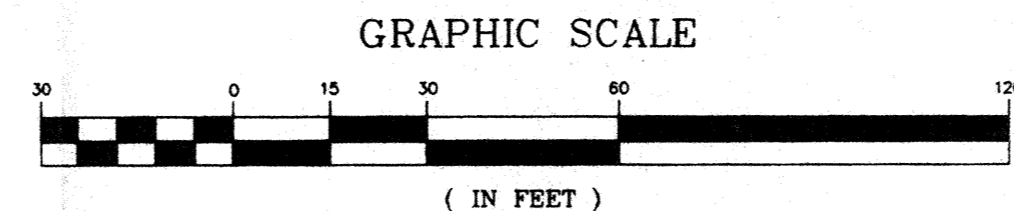
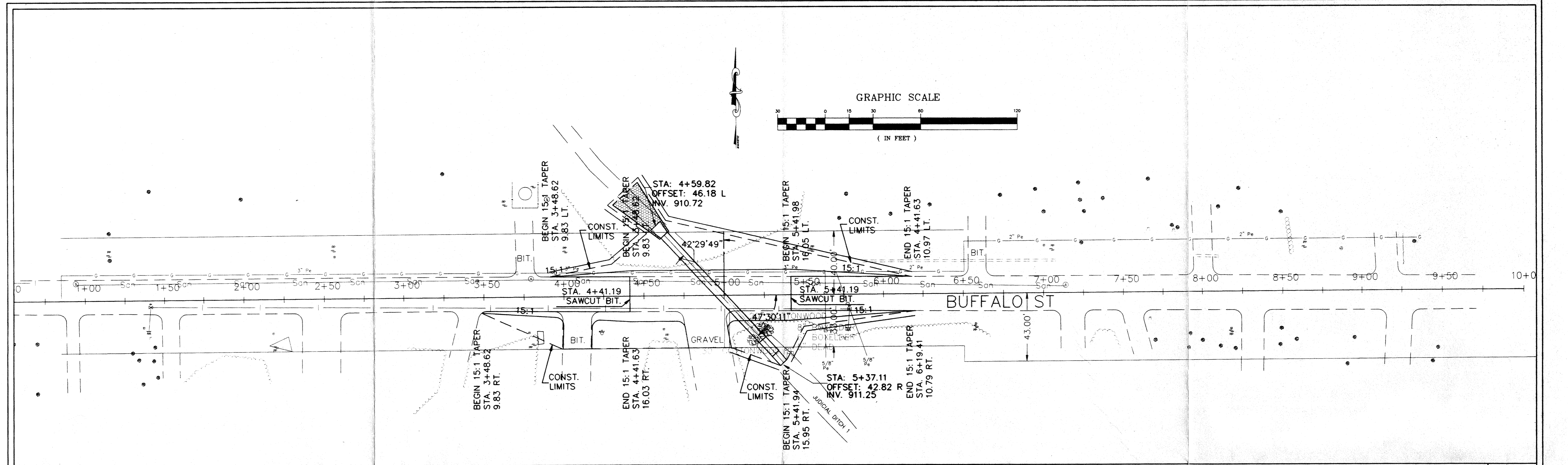


HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER LAWS OF THE STATE OF MINNESOTA.

*David L. Blund*

REG. NO. 14257 DATE 5-5-95

**RECEIVED**  
MAY 17 1995  
RICE CREEK  
WATERSHED DISTRICT



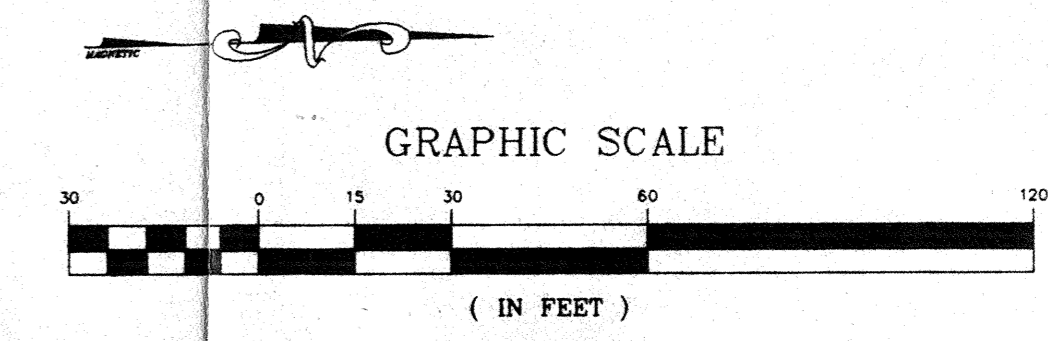
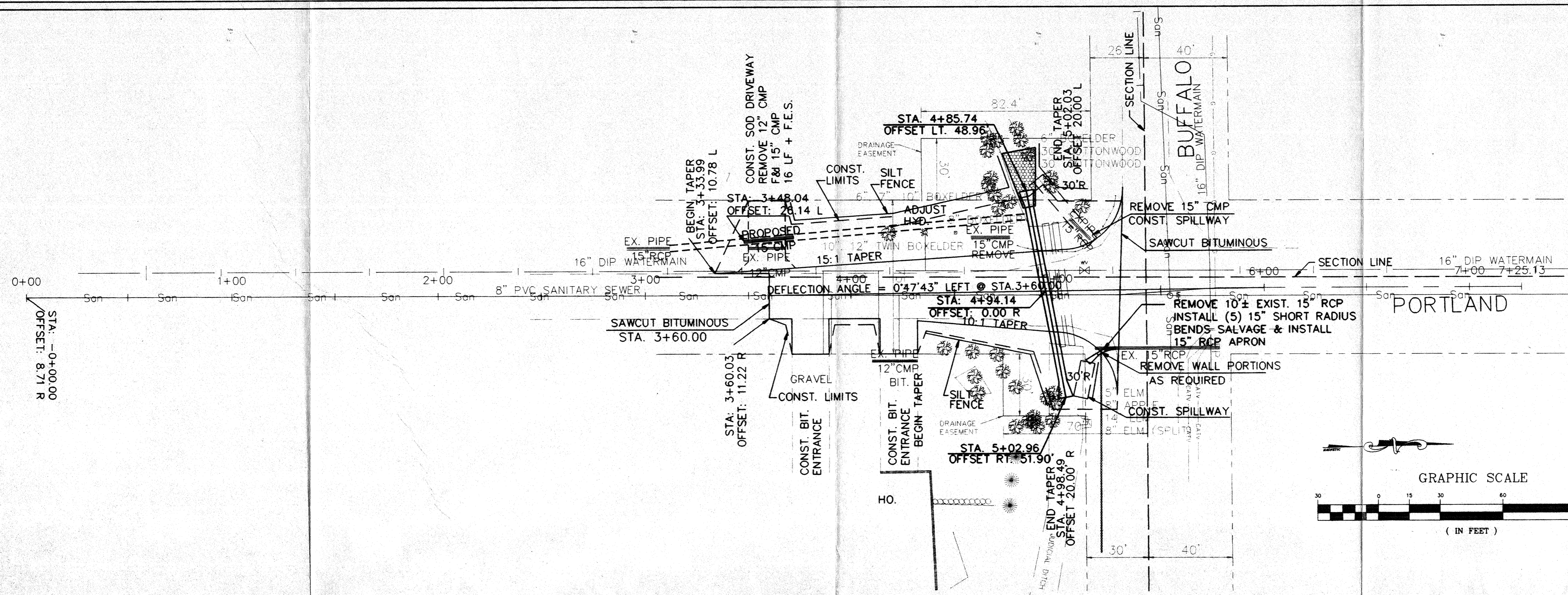
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER LAWS OF THE STATE OF MINNESOTA.  
*David L. Hall*  
 REG. NO. 14257 DATE 5-5-95

RECEIVED  
 MAY 17 1995  
 PRICE CREEK  
 WATERSHED DISTRICT

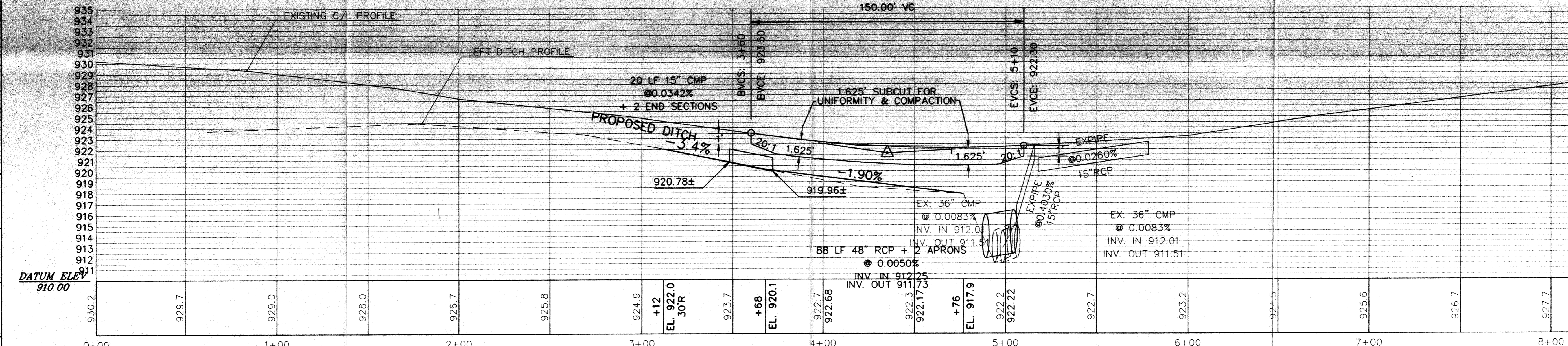
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■ BUFFALO ST.

SHEET NO. OF SHEETS



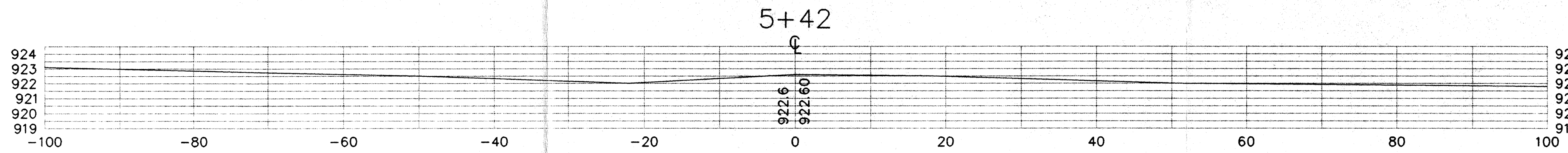
LOW POINT ELEV = 922.12  
 LOW POINT STA = 4+70.29  
 PVI STA = 4+35  
 PVI ELEV = 921.63  
 A.D. = 3.40  
 K = 44.12  
 150.00' VC



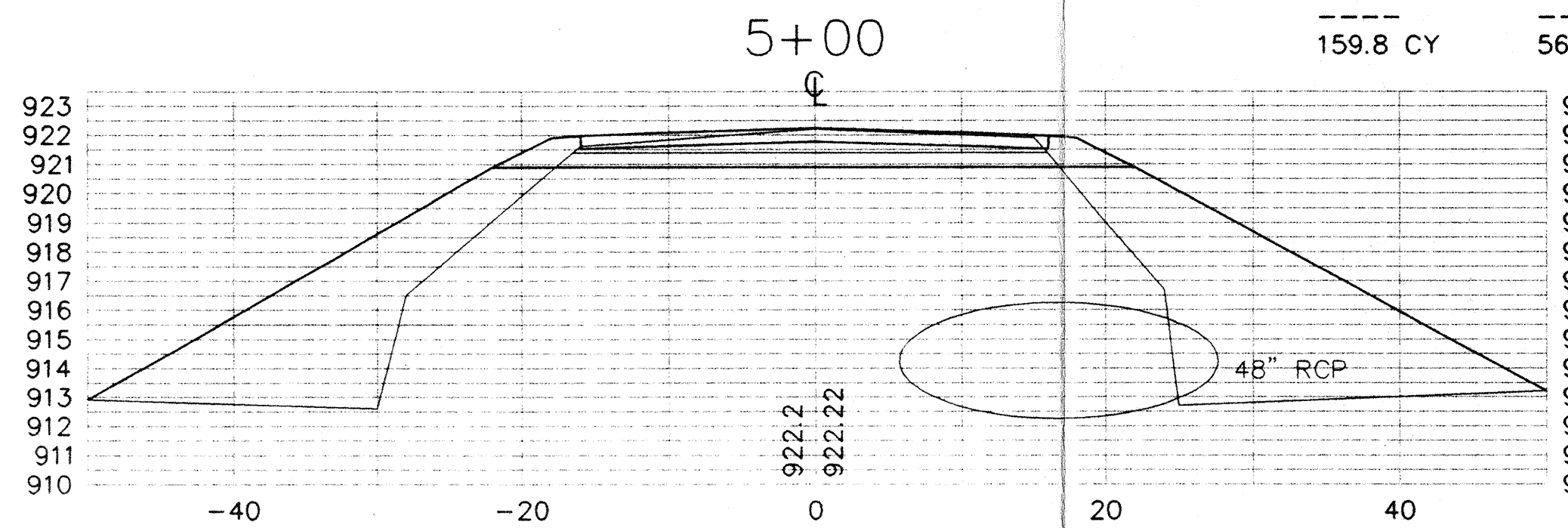
**RECEIVED**  
 MAY 25 1995  
 RICE CREEK  
 WATERSHED DISTRICT

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER LAWS OF THE STATE OF MINNESOTA.  
*David S. Shell*  
 REG. NO. 14257 DATE 5-5-95

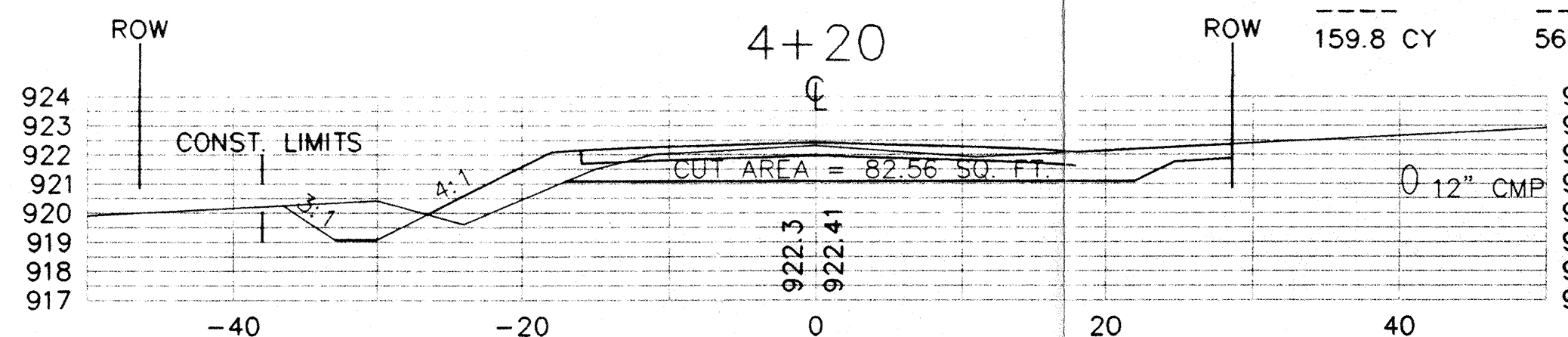
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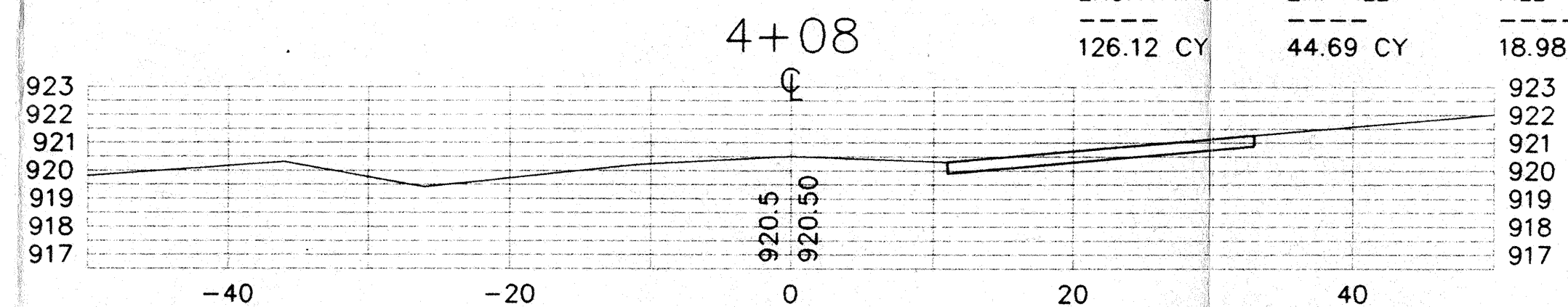
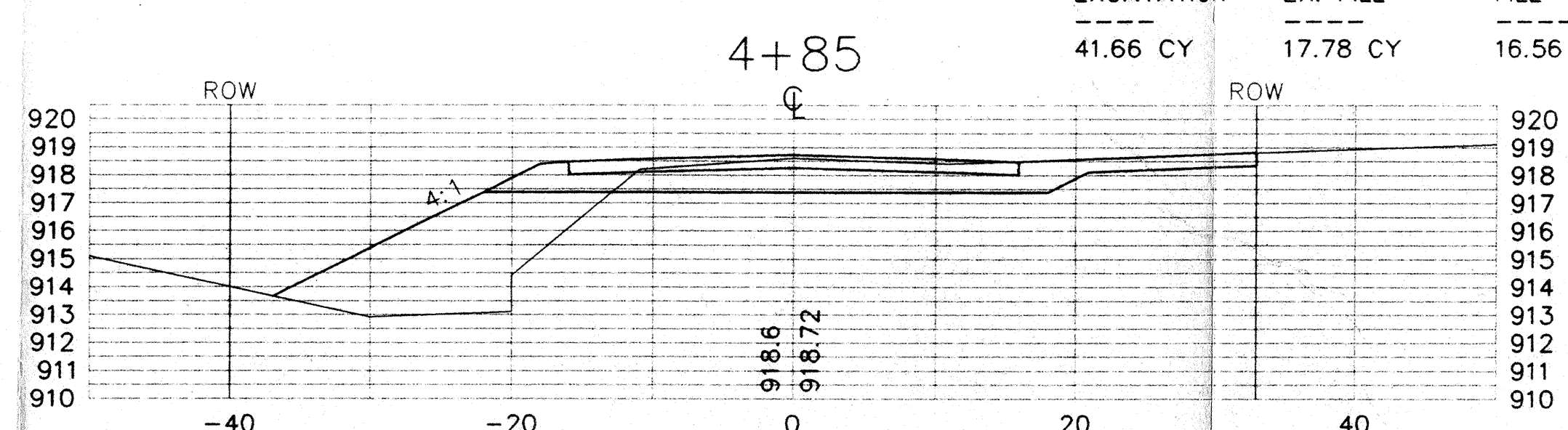
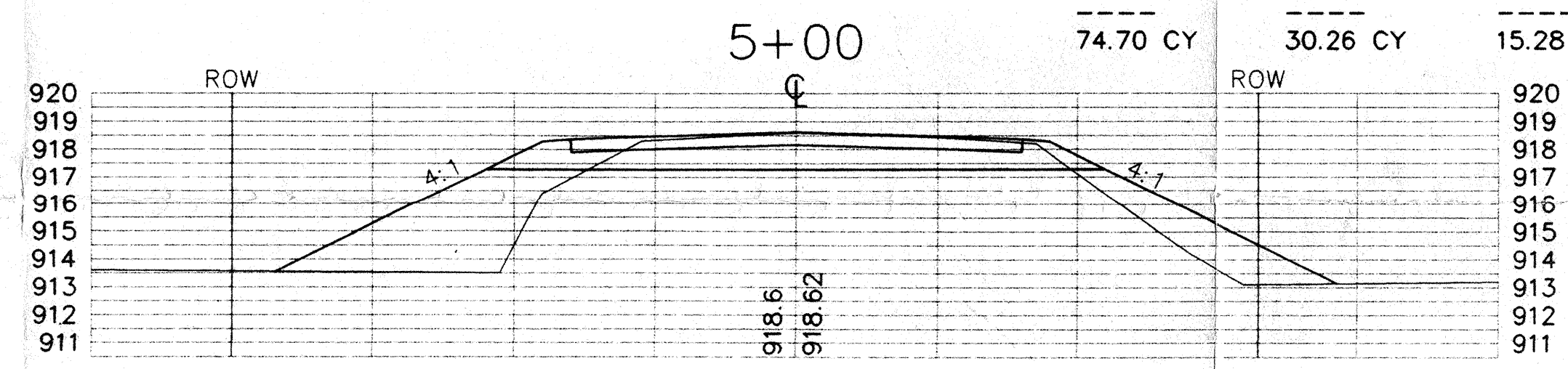
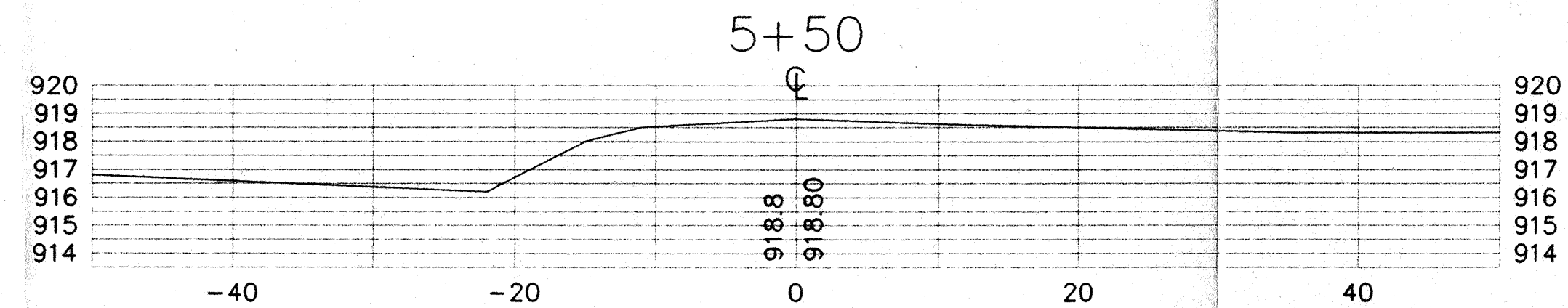
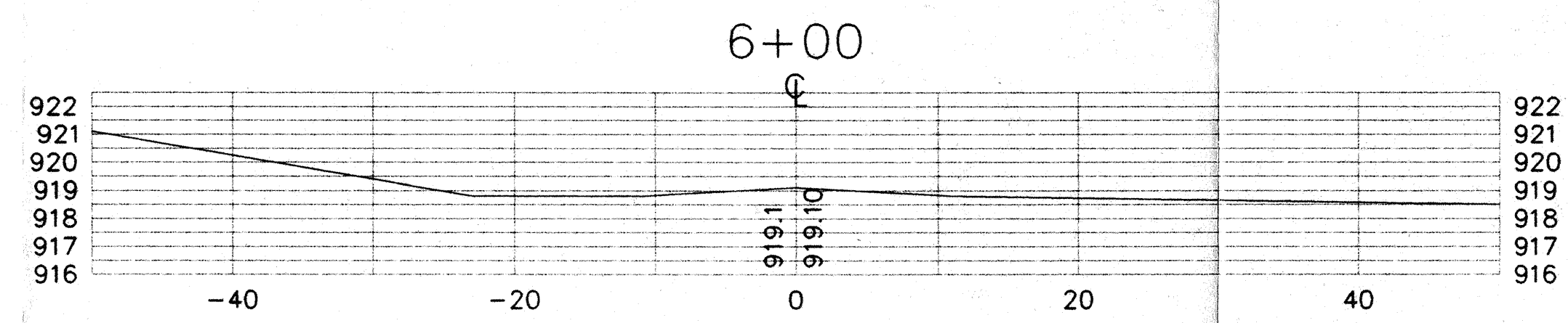
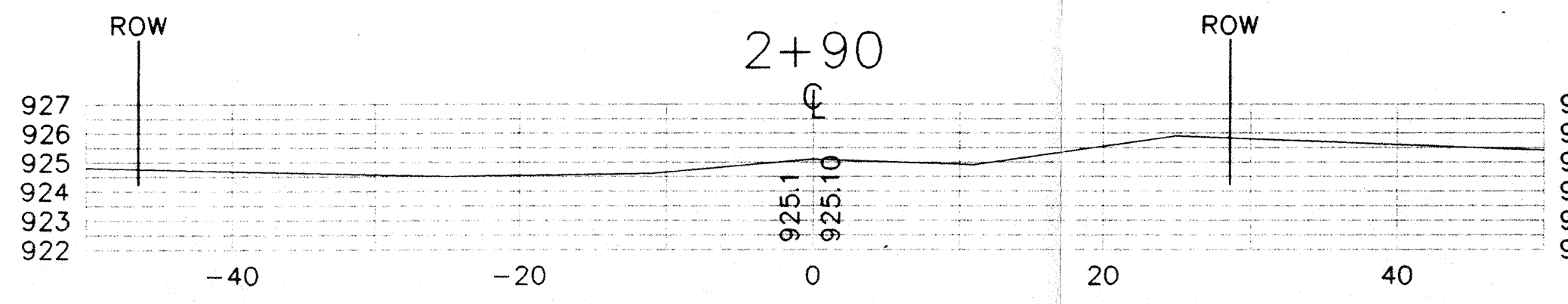
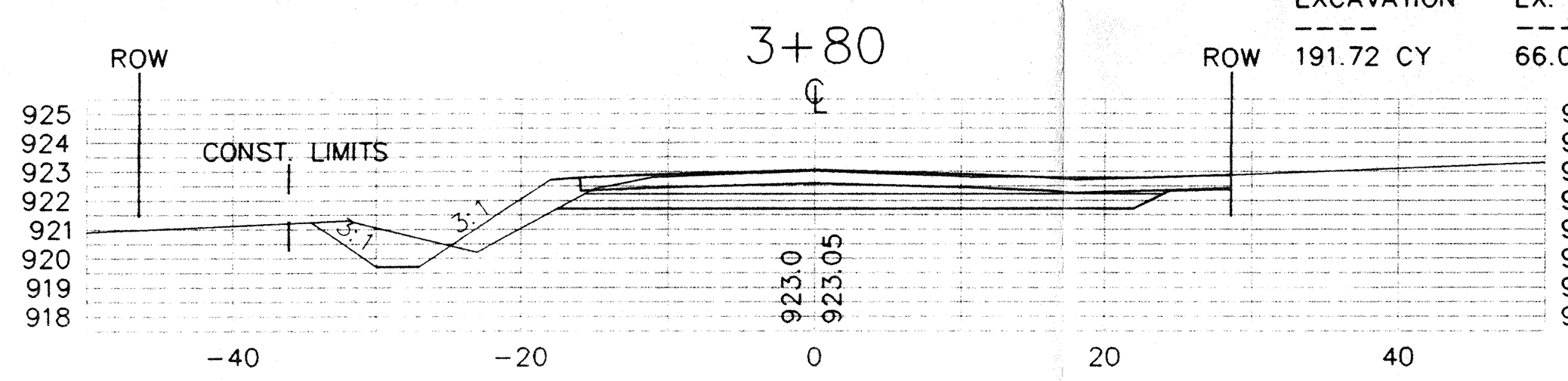
COMMON EXCAVATION	COMMON EX. FILL	EMBANKMENT FILL	GRANULAR BORROW
159.8 CY	56.18 CY	52.86 CY	1100.00 CY



COMMON EXCAVATION	COMMON EX. FILL	EMBANKMENT FILL	GRANULAR BORROW
159.8 CY	56.18 CY	79.52 CY	---



COMMON EXCAVATION	COMMON EX. FILL	EMBANKMENT FILL	GRANULAR BORROW
191.72 CY	66.0 CY	25.1 CY	---



COMMON EXCAVATION	COMMON EX. FILL	EMBANKMENT FILL	GRANULAR BORROW
74.70 CY	30.26 CY	15.28 CY	74.70 CY

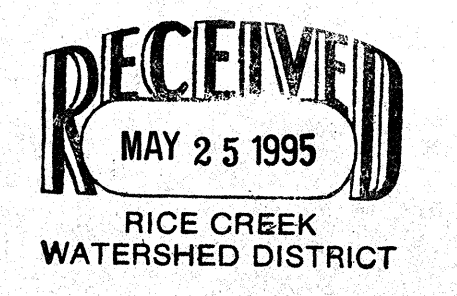
COMMON EXCAVATION	COMMON EX. FILL	EMBANKMENT FILL	GRANULAR BORROW
41.66 CY	17.78 CY	16.56 CY	52.96 CY

COMMON EXCAVATION	COMMON EX. FILL	EMBANKMENT FILL	GRANULAR BORROW
126.12 CY	44.69 CY	18.98 CY	156.79 CY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER LAWS OF THE STATE OF MINNESOTA.  
*David L. Rhall*  
 REG. NO. 14257 DATE 5-3-95

PORTLAND AVE.

BUFFALO ST.



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