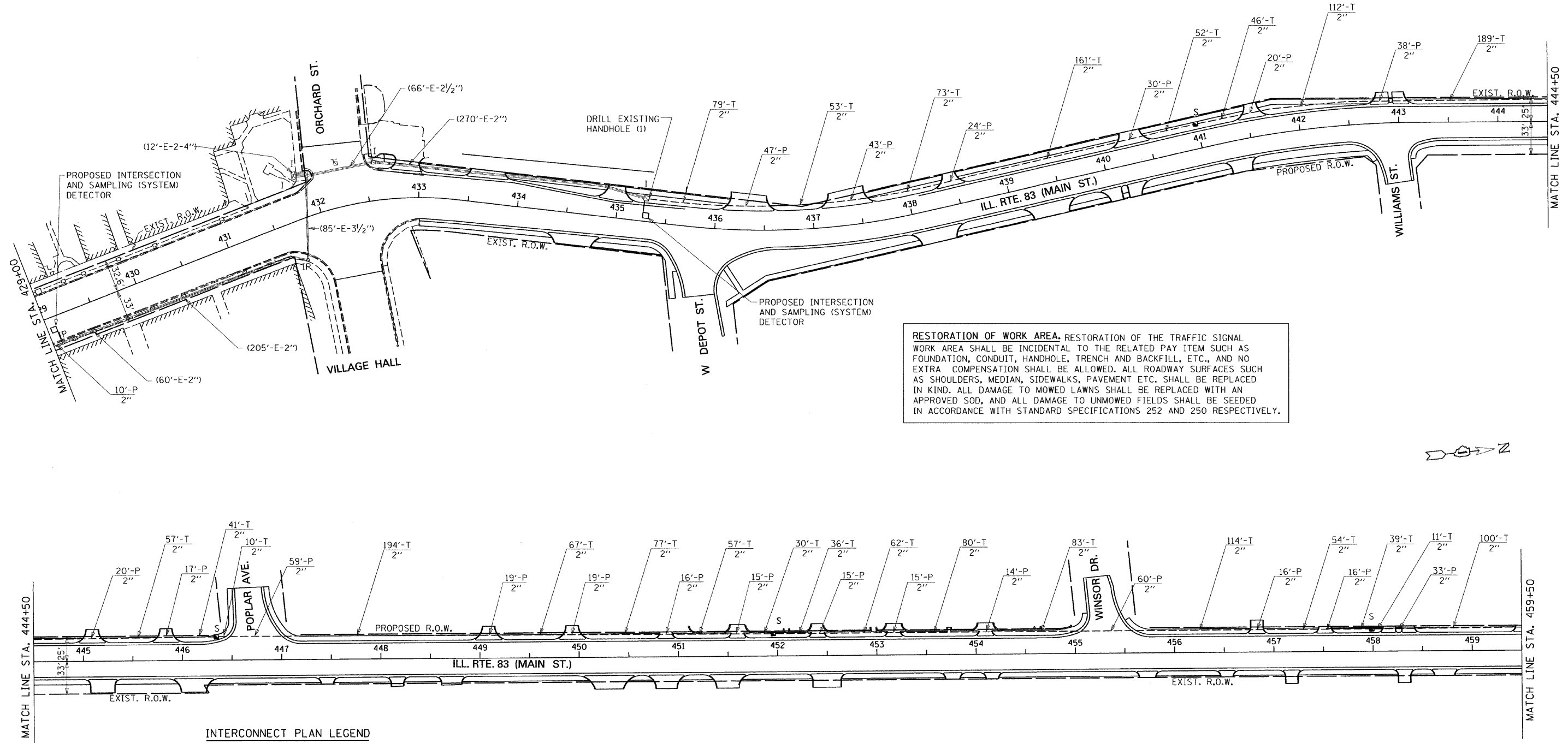
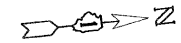


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	*	LAKE	554	301
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT #62700				
* (L-2(W,R); 6,6A & 6EXT)WRS-1				



RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIAN, SIDEWALKS, PAVEMENT ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.



INTERCONNECT PLAN LEGEND

PROPOSED	EXISTING	
		CONTROLLER
		HANDHOLE
		DOUBLE HANDHOLE
		HEAVY DUTY HANDHOLE
		G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
		DETECTOR LOOP
		COMMON TRENCH
		UNIT DUCT
		SYSTEM
		INTERSECTION

REVISIONS	
NAME	DATE

GRAEF ANHALT SCHLOEMER
 & ASSOCIATES, INC.
 CHICAGO, ILLINOIS
 773 399-0112

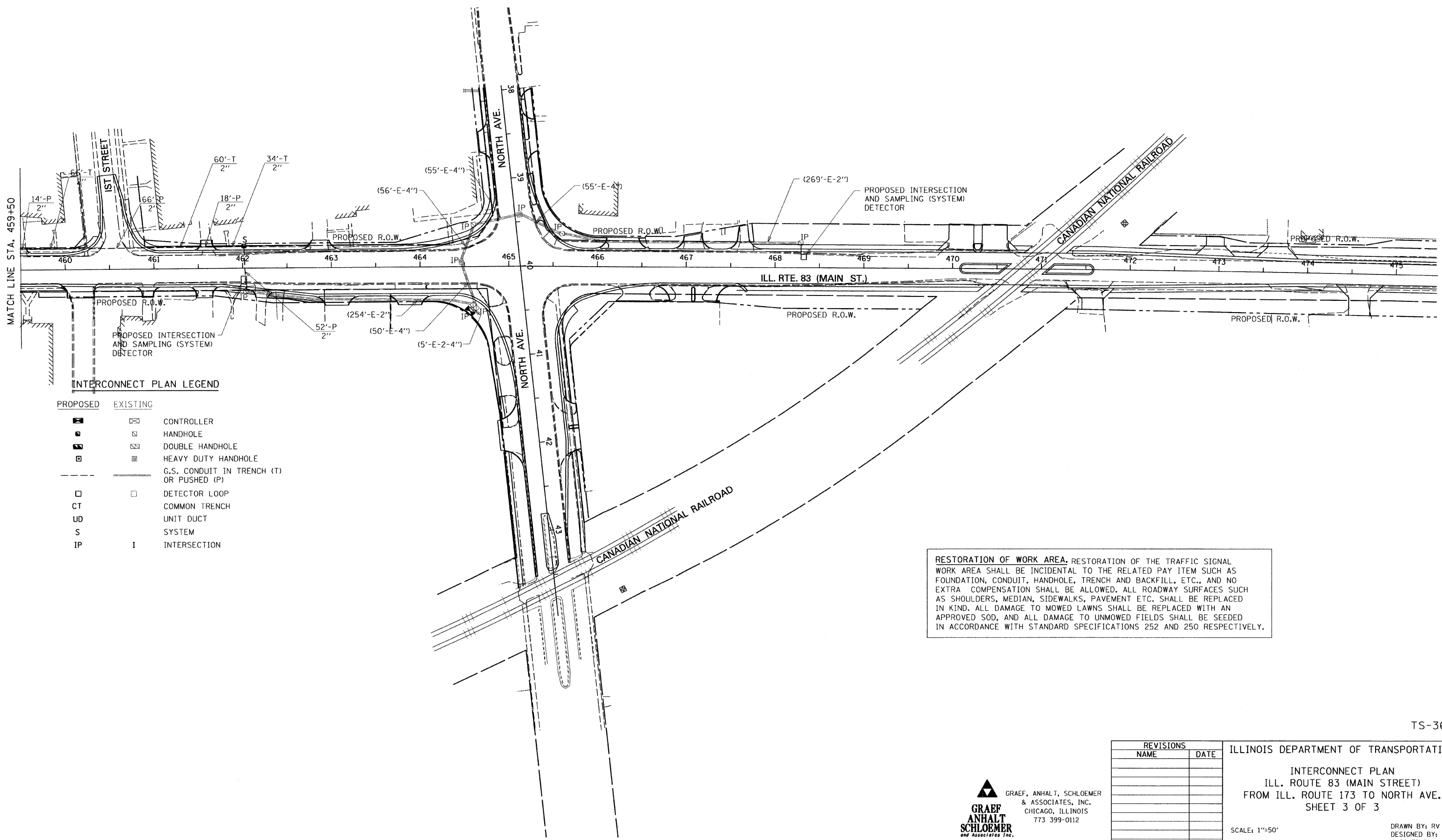
ILLINOIS DEPARTMENT OF TRANSPORTATION
 INTERCONNECT PLAN
 ILL. ROUTE 83 (MAIN STREET)
 FROM ILL. ROUTE 173 TO NORTH AVE.
 SHEET 2 OF 3

SCALE: 1"=50'
 DATE: 1/30/09
 DRAWN BY: RV
 DESIGNED BY: RS
 CHECKED BY: AZ

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 1/27/2009

TS-35

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	*	LAKE	554	302
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT #62700				
* (L-2(W,R); 6,6A & 6EXT)WRS-1				



INTERCONNECT PLAN LEGEND

PROPOSED	EXISTING	
		CONTROLLER
		HANDHOLE
		DOUBLE HANDHOLE
		HEAVY DUTY HANDHOLE
		G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
		DETECTOR LOOP
CT		COMMON TRENCH
UD		UNIT DUCT
S		SYSTEM
IP	I	INTERSECTION

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIAN, SIDEWALKS, PAVEMENT ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

TS-36

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
ILL. ROUTE 83 (MAIN STREET)
FROM ILL. ROUTE 173 TO NORTH AVE.
SHEET 3 OF 3

SCALE: 1"=50'
DATE: 1/30/09

DRAWN BY: RV
DESIGNED BY: RS
CHECKED BY: AZ



GA200904024.N\F\1a Transfer\In\KAM\7-9-08\Contract B\TS-36.sht 1/27/2009

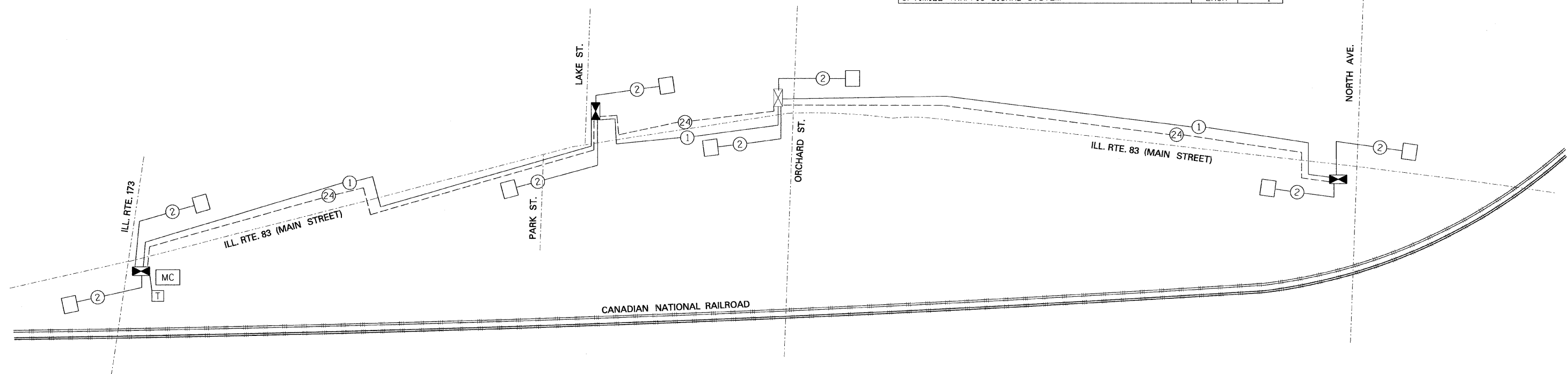
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	*	LAKE	554	303

STA.	TO STA.
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT

CONTRACT #62700
 *(L-2(W,R); 6,6A & 6EXT)WRS-1

INTERCONNECT SCHEDULE OF QUANTITIES

PAY ITEM	UNITS	TOTAL
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	3,393
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	1,566
HANDHOLE	EACH	8
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	3,393
MASTER CONTROLLER	EACH	1
DRILL EXISTING HANDHOLE	EACH	3
ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1C	FOOT	6,994
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	7,072
OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1



INTERCONNECT SCHEMATIC LEGEND

EXISTING INTERSECTION CONTROLLER		PROPOSED SAMPLING (SYSTEM) PREFORMED DETECTORS	
PROPOSED INTERSECTION CONTROLLER		EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	
EXISTING MASTER CONTROLLER		PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	
PROPOSED MASTER CONTROLLER		EXISTING INTERCONNECT CABLE- NO. 62.5/125 12F FIBER OPTIC CABLE	
MASTER MASTER CONTROLLER		PROPOSED INTERCONNECT CABLE- NO. 62.5/125 12F FIBER OPTIC CABLE	
EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS		EXISTING INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED	
PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS		PROPOSED INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED	
EXISTING INTERSECTION LOOP DETECTORS		EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED	
PROPOSED SAMPLING (SYSTEM) DETECTORS		PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED	
EXISTING SAMPLING (SYSTEM) DETECTORS		EXISTING ELECTRIC CABLE, 1/C (AS SPECIFIED)	
PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS		PROPOSED ELECTRIC CABLE, 1/C (AS SPECIFIED)	
EXISTING SAMPLING (SYSTEM) DETECTORS		EXISTING TELEPHONE CONNECTION	
PROPOSED SAMPLING (SYSTEM) DETECTORS		PROPOSED TELEPHONE CONNECTION	
EXISTING PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS			
PROPOSED PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS			
EXISTING SAMPLING (SYSTEM) PREFORMED DETECTORS			

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIAN, SIDEWALKS, PAVEMENT ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

INTERCONNECT SCHEMATIC PLAN
 ILL. ROUTE 83 (MAIN STREET)
 FROM ILL. ROUTE 173 TO NORTH AVE.

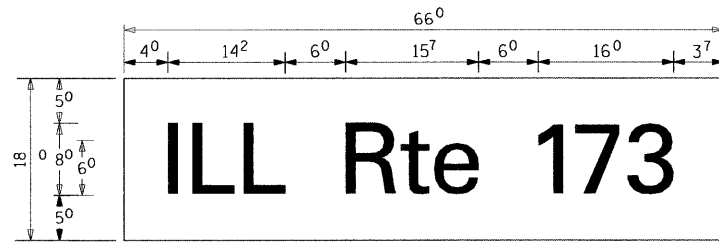
SCALE: NONE
 DATE: 1/30/09

DRAWN BY: RV
 DESIGNED BY: RS
 CHECKED BY: AZ

GRAEF ANHALT SCHLOEMER
 & ASSOCIATES, INC.
 CHICAGO, ILLINOIS
 773 399-0112

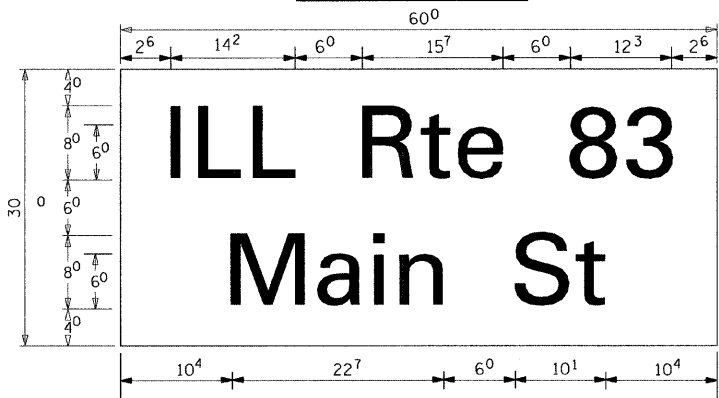
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 1/27/2009

PANEL SIGN DESIGN TYPE 1



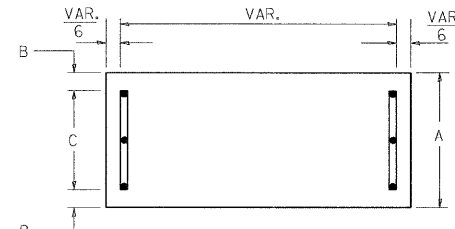
Sq. M. each
8.25 Sq. Ft. each
2 Required
Design Series D

PANEL SIGN DESIGN TYPE 2

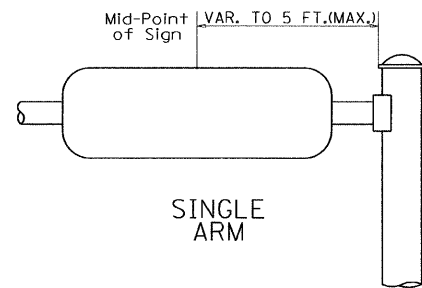


Sq. M. each
12.5 Sq. Ft. each
7 Required
Design Series D

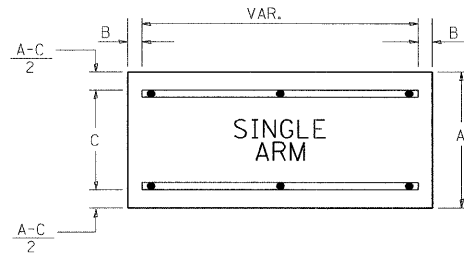
SUPPORTING CHANNELS



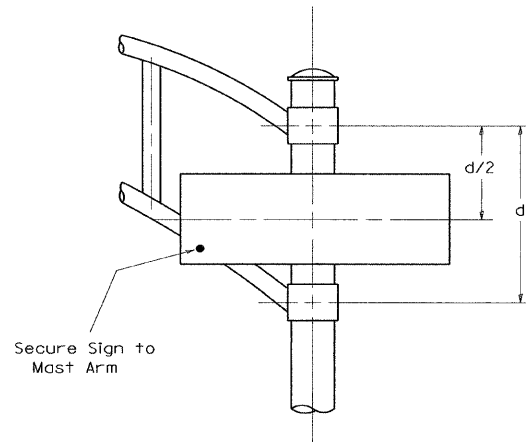
A	B	C
18"	2"	14"



SUPPORTING CHANNELS



A	B	C
18"	2"	12"
30"	2"	22"



SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM
Shall be used. See Note #5.

Upper Case To Lower Case
Spacing Chart 8-6 Inch Series "C & D"

EXAMPLE, 2³ DENOTES 3/8"

SERIES	SECOND LETTER																
	a c d e	g o q	b h i k l	m n p r u	f w	j	s t	v y	x	z							
A W X	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ²	1 ⁴	1 ⁰	1 ¹	1 ⁴	1 ⁰	1 ¹	1 ⁴	1 ⁰	1 ¹	1 ²	1 ²	1 ⁴
B	1 ⁴	1 ⁵	2 ⁰	2 ¹	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁴	1 ⁵	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁶	1 ⁷	
C E G	1 ⁴	1 ⁵	2 ⁰	2 ¹	1 ²	1 ⁴	1 ⁰	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵		
D O O R	1 ⁴	1 ⁵	2 ⁰	2 ¹	1 ⁴	1 ⁵	1 ⁰	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵		
F	0 ⁵	0 ⁶	1 ⁴	1 ⁵	0 ⁶	1 ⁰	0 ⁵	0 ⁶	1 ⁰	0 ⁶	1 ⁰	0 ⁶	1 ⁰	1 ¹	1 ²		
H I M N	2 ⁰	2 ¹	2 ²	2 ⁴	2 ⁰	2 ¹	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ⁶	1 ⁷	2 ⁰	2 ¹	2 ⁰	2 ¹	
J U	2 ⁰	2 ¹	2 ⁰	2 ¹	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ⁶	1 ⁷	1 ⁶	1 ⁷	2 ⁰	2 ¹	
K L	1 ¹	1 ²	1 ⁶	1 ⁷	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴	
P	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ²	1 ⁴	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴	1 ²	1 ⁴	
S	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ²	1 ⁴	1 ²	1 ⁴	1 ²	1 ⁴	1 ²	1 ⁴	
T	1 ¹	1 ²	1 ⁶	1 ⁷	0 ⁶	1 ⁰	0 ⁶	1 ⁰	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴	
V	0 ⁶	1 ⁰	1 ⁴	1 ⁵	1 ¹	1 ²	0 ⁶	1 ⁰	1 ²	1 ⁴	1 ²	1 ⁴	1 ²	1 ⁴	1 ²	1 ⁴	
Y	0 ⁵	0 ⁶	1 ⁴	1 ⁵	0 ⁶	1 ⁰	0 ⁵	0 ⁶	0 ⁵	0 ⁷	0 ⁵	0 ⁶	0 ⁶	1 ⁰	1 ¹	1 ²	
Z	1 ⁶	1 ⁷	2 ²	2 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ⁶	1 ⁷	1 ⁶	1 ⁷	2 ⁰	2 ¹	

Lower Case To Lower Case
Spacing Chart 6 Inch Series "C & D"

SERIES	SECOND LETTER															
	a c d e	g o q	b h i k l	m n p r u	f w	j	s t	v y	x	z						
a d h g i j	1 ⁶	1 ⁷	2 ²	2 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ⁶	1 ⁷
l m n q u																
b f k o p s	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ¹	1 ²	1 ²	1 ⁴	1 ²	1 ⁴	
c e	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ²	1 ⁴	1 ²	1 ⁴	1 ²	1 ⁴	1 ²	1 ⁴
r	0 ⁶	1 ⁰	1 ²	1 ⁴	0 ⁶	1 ⁰	0 ³	0 ³	0 ⁵	0 ⁶	0 ⁵	0 ⁶	0 ⁶	1 ⁰	0 ⁶	1 ⁰
t z	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²
v y	1 ¹	1 ²	1 ⁴	1 ⁵	1 ¹	1 ²	0 ⁵	0 ⁶	0 ⁶	1 ⁰	0 ⁶	1 ⁰	1 ¹	1 ²	1 ¹	1 ²
w	1 ¹	1 ²	1 ⁴	1 ⁵	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²
x	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²

Number To Number
Spacing Chart 8 Inch Series "C & D"

SERIES	SECOND NUMBER																			
	0	1	2	3	4	5	6	7	8	9										
0 9	1 ⁶	1 ⁷	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ⁶	1 ⁷
1	2 ⁰	2 ¹	2 ⁰	2 ¹	2 ⁰	2 ¹	1 ⁶	1 ⁷	1 ⁴	1 ⁵	2 ⁰	2 ¹	2 ⁰	2 ¹	1 ⁴	1 ⁵	2 ⁰	2 ¹	2 ⁰	2 ¹
2 3 4	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁶	1 ⁷	1 ⁴	1 ⁵
5	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ¹	1 ²	1 ¹	1 ²	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁴	1 ⁵	1 ⁴	1 ⁵
6	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ²	1 ⁵	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁴	1 ⁵	1 ⁴	1 ⁵
7	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ²	1 ⁵	0 ⁵	0 ⁶	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁴	1 ⁵	1 ²	1 ⁴
8	1 ⁶	1 ⁷	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ²	1 ⁵	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ⁴	1 ⁵

UPPER AND LOWER CASE
LETTER WIDTHS

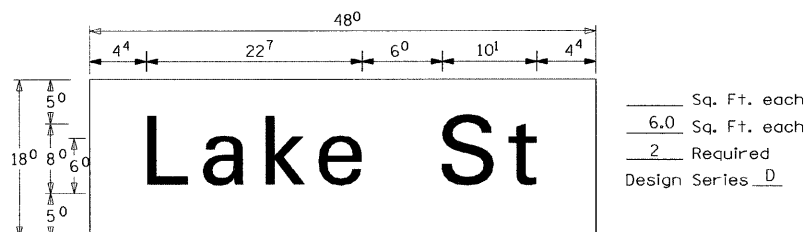
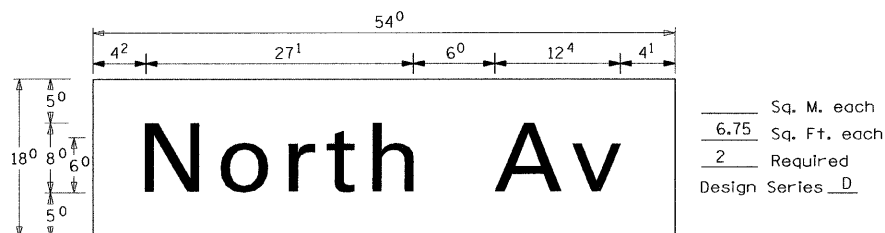
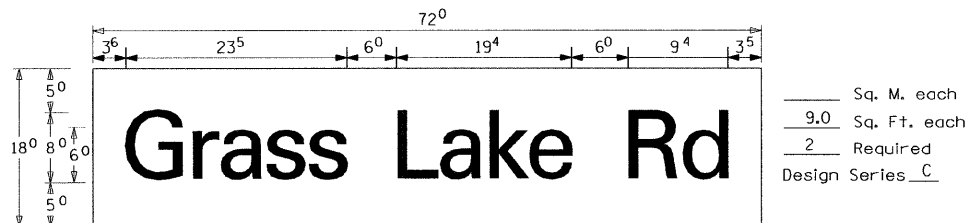
LETTERS	6 INCH UPPER CASE LETTERS		8 INCH UPPER CASE LETTERS		LETTERS	6 INCH LOWER CASE LETTERS	
	SERIES		SERIES			SERIES	
	C	D	C	D		C	D
A	3 ⁶	5 ⁰	5 ⁰	6 ⁵	a	3 ⁵	4 ²
B	3 ²	4 ⁰	4 ³	5 ³	b	3 ⁵	4 ²
C	3 ²	4 ⁰	4 ³	5 ³	c	3 ⁵	4 ¹
D	3 ²	4 ⁰	4 ³	5 ³	d	3 ⁵	4 ²
E	3 ⁰	3 ⁵	4 ⁰	4 ⁷	e	3 ⁵	4 ²
F	3 ⁰	3 ⁵	4 ⁰	4 ⁷	f	2 ³	2 ⁶
G	3 ²	4 ⁰	4 ³	5 ³	g	3 ⁵	4 ²
H	3 ²	4 ⁰	4 ³	5 ³	h	3 ⁵	4 ²
I	0 ⁷	0 ⁷	1 ¹	1 ²	i	1 ¹	1 ¹
J	3 ⁰	3 ⁶	4 ⁰	5 ⁰	j	2 ⁰	2 ²
K	3 ²	4 ¹	4 ³	5 ⁴	k	3 ⁵	4 ²
L	3 ⁰	3 ⁵	4 ⁰	4 ⁷	l	1 ¹	1 ¹
M	3 ⁷	4 ⁵	5 ¹	6 ¹	m	6 ⁰	7 ⁰
N	3 ²	4 ⁰	4 ³	5 ³	n	3 ⁵	4 ²
O	3 ⁴	4 ²	4 ⁵	5 ⁵	o	3 ⁶	4 ³
P	3 ²	4 ⁰	4 ³	5 ³	p	3 ⁵	4 ²
Q	3 ⁴	4 ²	4 ⁵	5 ⁵	q	3 ⁵	4 ²
R	3 ²	4 ⁰	4 ³	5 ³	r	2 ⁶	3 ²
S	3 ²	4 ⁰	4 ³	5 ³	s	3 ⁶	4 ²
T	3 ⁰	3 ⁵	4 ⁰	4 ⁷	t	2 ⁷	3 ²
U	3 ²	4 ⁰	4 ³	5 ³	u	3 ⁵	4 ²
V	3 ⁵	4 ⁴	4 ⁷	6 ⁰	v	4 ²	4 ⁷
W	4 ⁴	5 ²	6 ⁰	7 ⁰	w	5 ⁵	6 ⁴
X	3 ⁴	4 ⁰	4 ⁵	5 ³	x	4 ⁴	5 ¹
Y	3 ⁶	5 ⁰	5 ⁰	6 ⁶	y	4 ⁶	5 ³
Z	3 ²	4 ⁰	4 ³	5 ³	z	3 ⁶	4 ³

NUMBER	6 INCH SERIES		8 INCH SERIES	
	C	D	C	D
1	1 ²	1 ⁴	1 ⁵	2 ⁰
2	3 ²	4 ⁰	4 ³	5 ³
3	3 ²	4 ⁰	4 ³	5 ³
4	3 ⁵	4 ³	4 ⁷	5 ⁷
5	3 ²	4 ⁰	4 ³	5 ³
6	3 ²	4 ⁰	4 ³	5 ³
7	3 ²	4 ⁰	4 ³	5 ³
8	3 ²	4 ⁰	4 ³	5 ³
9	3 ²	4 ⁰	4 ³	5 ³
0	3 ⁴	4 ²	4 ⁵	5 ⁵

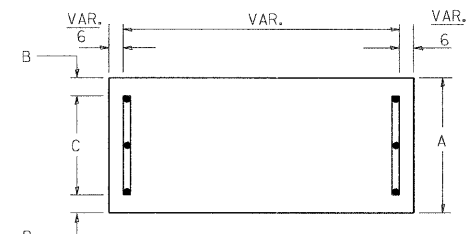
GENERAL NOTES

- WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 834001, 834006 AND 834011, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6

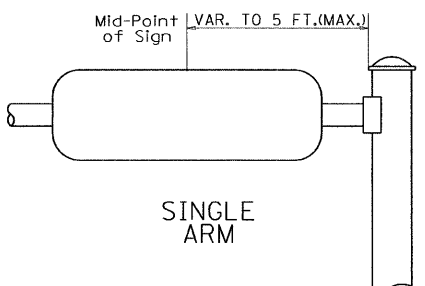
PANEL SIGN DESIGN TYPE 1



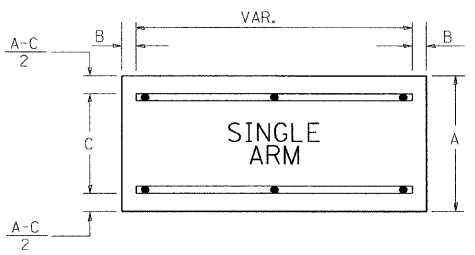
SUPPORTING CHANNELS



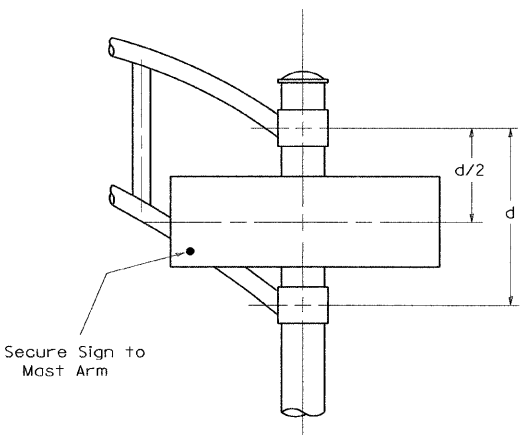
A	B	C
18"	2"	14"



SUPPORTING CHANNELS



A	B	C
18"	2"	12"
30"	2"	22"



DUAL ARM

SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM Shall be used. See Note #5.

EXAMPLE, 2³ DENOTES 3/8

Upper Case To Lower Case Spacing Chart 8-6 Inch Series "C & D"

SERIES	SECOND LETTER															
	a c d e		b h i k l		f w		j		s t		v y		x		z	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
A W X	12	14	14	15	12	14	06	10	11	14	06	10	11	12	12	14
B	14	15	20	21	14	15	11	12	14	15	12	14	12	14	16	17
C E G	14	15	20	21	12	14	06	10	12	14	12	14	14	15	14	15
D O Q R	14	15	20	21	14	15	06	10	12	14	12	14	14	15	14	15
F	05	06	14	15	06	10	05	06	06	10	06	10	06	10	11	12
H I M N	20	21	22	24	20	21	14	15	16	17	16	17	20	21	20	21
J U	20	21	20	21	16	17	14	15	16	17	16	17	16	17	20	21
K L	11	12	16	17	11	12	05	06	11	12	11	12	11	12	12	14
P	12	14	14	15	12	14	05	06	11	12	11	12	12	14	12	14
S	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14
T	11	12	16	17	06	10	06	10	11	12	11	12	11	12	12	14
V	06	10	14	15	11	12	06	10	12	14	12	14	12	14	12	14
Y	05	06	14	15	06	10	05	06	05	07	05	06	06	10	11	12
Z	16	17	22	24	16	17	12	14	16	17	16	17	16	17	20	21

Lower Case To Lower Case Spacing Chart 6 Inch Series "C & D"

SERIES	SECOND LETTER															
	a c d e		b h i k l		f w		j		s t		v y		x		z	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
a d h g i j	16	17	22	24	16	17	12	14	14	15	14	15	16	17	16	17
l m n q u	16	17	22	24	16	17	12	14	14	15	14	15	16	17	16	17
b f k o p s	12	14	16	17	11	12	05	06	11	11	11	12	12	14	12	14
c e	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14
r	06	10	12	14	06	10	03	03	05	06	05	06	06	10	06	10
t z	12	14	16	17	12	14	06	10	11	12	11	12	12	14	12	14
v y	11	12	14	15	11	12	05	06	06	10	06	10	11	12	11	12
w	11	12	14	15	11	12	05	06	11	12	11	12	11	12	12	14
x	12	14	16	17	11	12	05	06	11	12	11	12	11	12	12	14

Number To Number Spacing Chart 8 Inch Series "C & D"

SERIES	SECOND NUMBER																					
	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5						
0 9	16	17	16	17	14	15	12	14	14	15	14	15	16	17	12	14	16	17	16	17		
1	20	21	20	21	20	21	16	17	14	15	20	21	20	21	14	15	20	21	20	21		
2 3 4	14	15	14	15	14	15	12	14	12	14	14	15	14	15	11	12	16	17	14	15		
5	14	15	14	15	14	15	11	12	11	12	14	15	14	15	11	12	14	15	14	15		
6	16	17	14	15	14	15	12	14	14	15	14	15	14	15	11	12	14	15	14	15		
7	12	14	12	14	14	15	12	14	15	05	06	12	14	14	15	11	12	14	15	12	14	
8	16	17	16	17	14	15	12	14	14	15	16	17	12	14	16	17	14	15	16	17	14	15

UPPER AND LOWER CASE LETTER WIDTHS

LETTERS	6 INCH UPPER CASE LETTERS		8 INCH UPPER CASE LETTERS		LETTERS	6 INCH LOWER CASE LETTERS	
	C	D	C	D		C	D
A	36	50	50	65	a	35	42
B	32	40	43	53	b	35	42
C	32	40	43	53	c	35	41
D	32	40	43	53	d	35	42
E	30	35	40	47	e	35	42
F	30	35	40	47	f	23	26
G	32	40	43	53	g	35	42
H	32	40	43	53	h	35	42
I	07	07	11	12	i	11	11
J	30	36	40	50	j	20	22
K	32	41	43	54	k	35	42
L	30	35	40	47	l	11	11
M	37	45	51	61	m	60	70
N	32	40	43	53	n	35	42
O	34	42	45	55	o	36	43
P	32	40	43	53	p	35	42
Q	34	42	45	55	q	35	42
R	32	40	43	53	r	26	32
S	32	40	43	53	s	36	42
T	30	35	40	47	t	27	32
U	32	40	43	53	u	35	42
V	35	44	47	60	v	42	47
W	44	52	60	70	w	55	64
X	34	40	45	53	x	44	51
Y	36	50	50	66	y	46	53
Z	32	40	43	53	z	36	43

NUMBER	6 INCH SERIES		8 INCH SERIES	
	C	D	C	D
1	12	14	15	20
2	32	40	43	53
3	32	40	43	53
4	35	43	47	57
5	32	40	43	53
6	32	40	43	53
7	32	40	43	53
8	32	40	43	53
9	32	40	43	53
0	34	42	45	55

NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

GENERAL NOTES

- WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 834001, 834006 AND 834011, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 6'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
- ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
- THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 6'-0".
- ALL BORDERS SHALL BE 3/4" WIDE AND CORNER RADIUS SHALL BE 2-1/4".
- SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS. LOCAL SUPPLIERS OF THE SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM ARE:
 - * A.K.T. CORPORATION SCHALMBURG, IL
 - * TUCKER COMPANY, INC. WAUWATOSA, WI
 - * AMERICAN FABRICATION CO. CHICAGO HEIGHTS, IL
 - * WESTERN TRAFFIC CONTROL INC. CICERO, IL

PARTS LISTING:

SIGN CHANNEL	PART #HPN053 (MED. CHANNEL)
SIGN SCREWS	1/4" x 14 x 1" H.W.H. #3
	SELF TAPPING WITH NEOPRENE WASHER
BRACKETS	PART #HPN034 (UNIVERSAL)
	CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BACKET OF THE ABOVE PRODUCT.

REVISIONS	
NAME	DATE
D.A.Z./D.A.G.	11/90
	6/98
CADD	10/00

ILLINOIS DEPARTMENT OF TRANSPORTATION

MAST ARM MOUNTED STREET NAME SIGNS

VERT. NONE
SCALE: HORIZ.
DATE: 2-26-79

DRAWN BY: TJR
CHECKED BY: RKF

GA:20080824-N\F\file Transfer\In\KAM\7-9-08\Contract BTS-39.sht 1/27/2009

B.M. 29 = " " on top of Concrete Headwall at Southwest corner Route 83 and Town Line Rd. Sta. 241+29.71, 33.14 Lt., Elev. 781.89

CONTRACT NO. 62700

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1 OF
F.A.P. 866	*	LAKE	554	306	7 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

* (L-2[W,R];6,6A & 6 EXT) WRS-1

GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.
For Total Bill of Material see Sheet 5 of 7.

DESIGN SPECIFICATIONS

1996 AASHTO w/1997, 1998, 1999, 2000 & 2002 Interims.

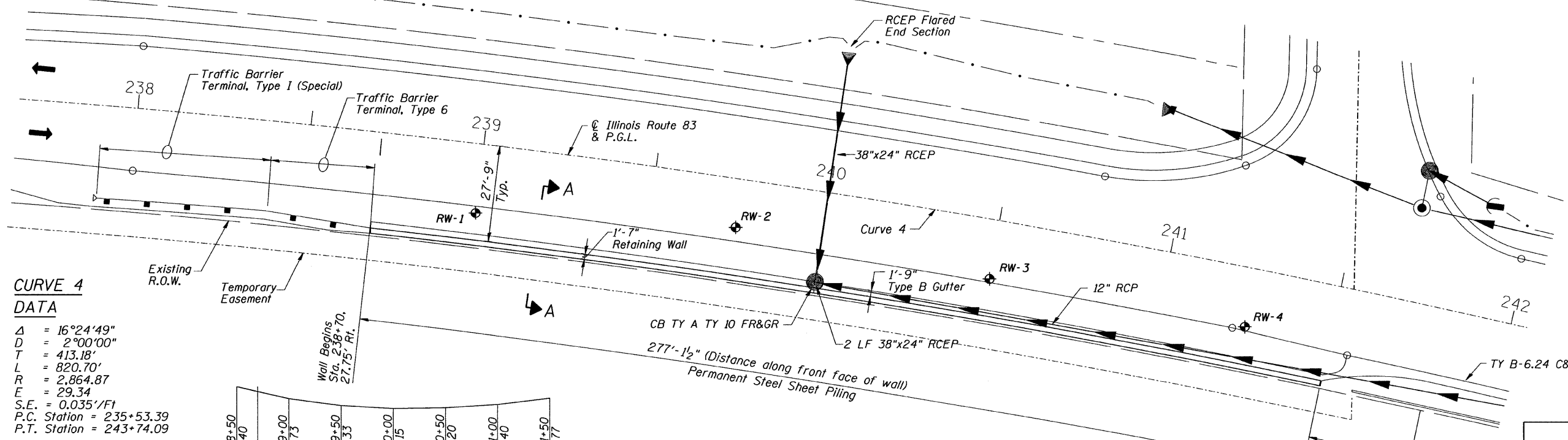
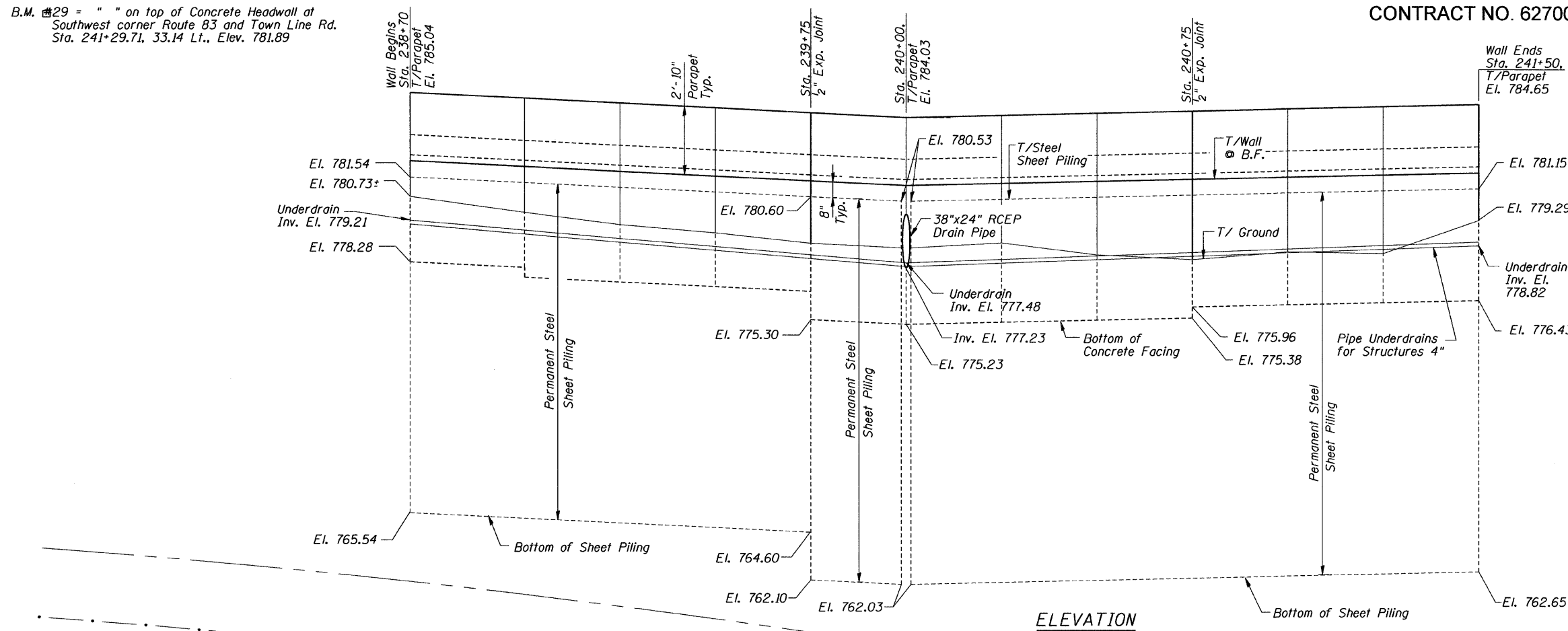
DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinf.)
 $f_y = 38,500$ psi (Sheet Piling)

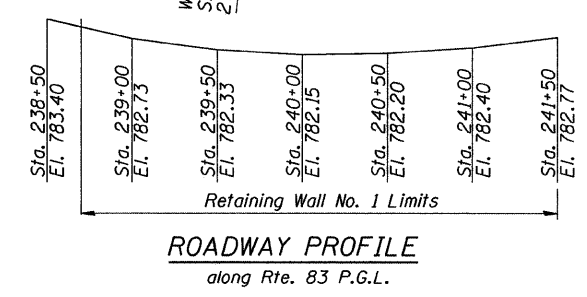
LEGEND

⊕ - Soil Boring
RW-1



CURVE 4 DATA

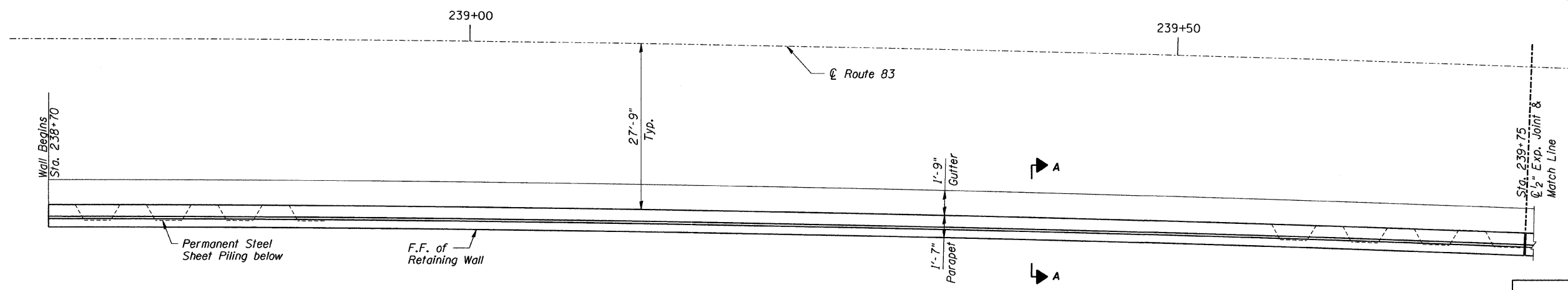
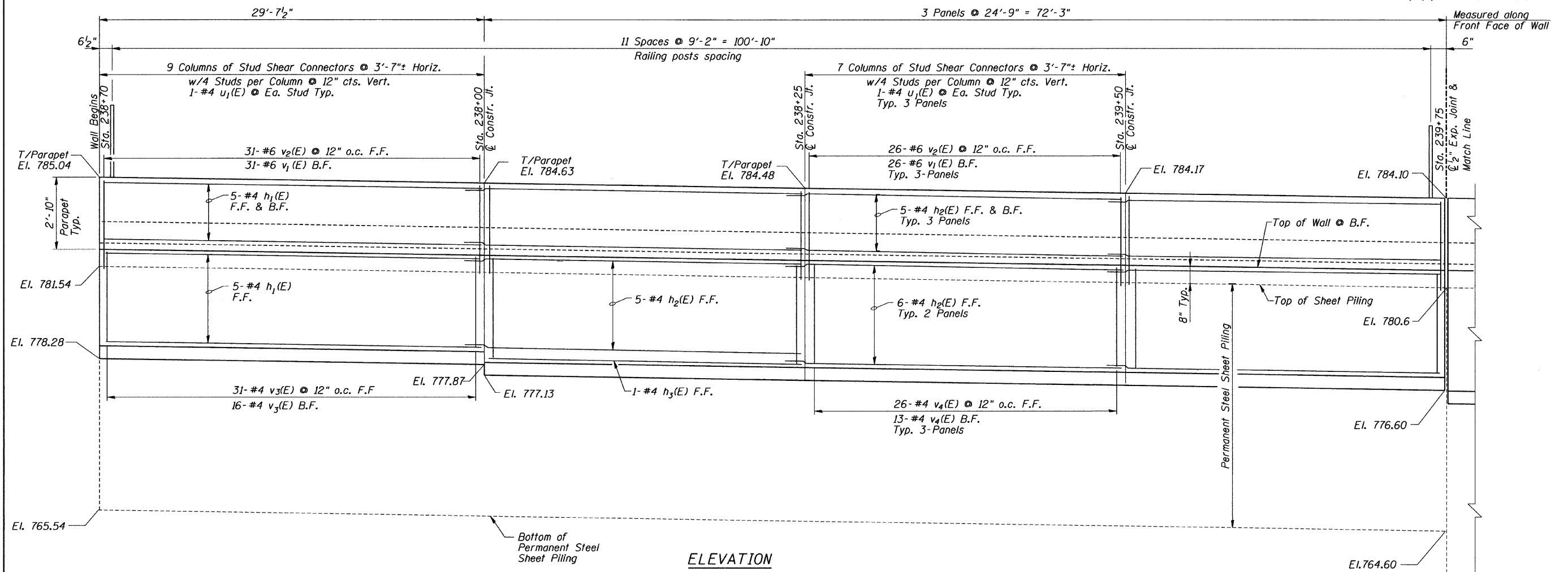
Δ	= 16°24'49"
D	= 2°00'00"
T	= 413.18'
L	= 820.70'
R	= 2,864.87'
E	= 29.34'
S.E.	= 0.035'/ft
P.C. Station	= 235+53.39
P.T. Station	= 243+74.09



RETAINING WALL NO. 1
PLAN & ELEVATION
ILLINOIS ROUTE 83
F.A.P. ROUTE 866
LAKE COUNTY
Sta. 238+70 to Sta. 241+50
DATE: 4/22/09
GRAEF, ANHALT, SCHLOEMER & ASSOCIATES INC
CHICAGO ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 2 OF 7 SHEETS
F.A.P. 866	*	LAKE	554	307	
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT	

* (L-2[W,R];6,6A & 6 EXT) WRS-1



DESIGNED	S.S.T.
CHECKED	J.A.Z.
DRAWN	E.B.
CHECKED	S.S.T.

PLAN

NOTES:
1. For Bill of Material see Sheet 5 of 7.

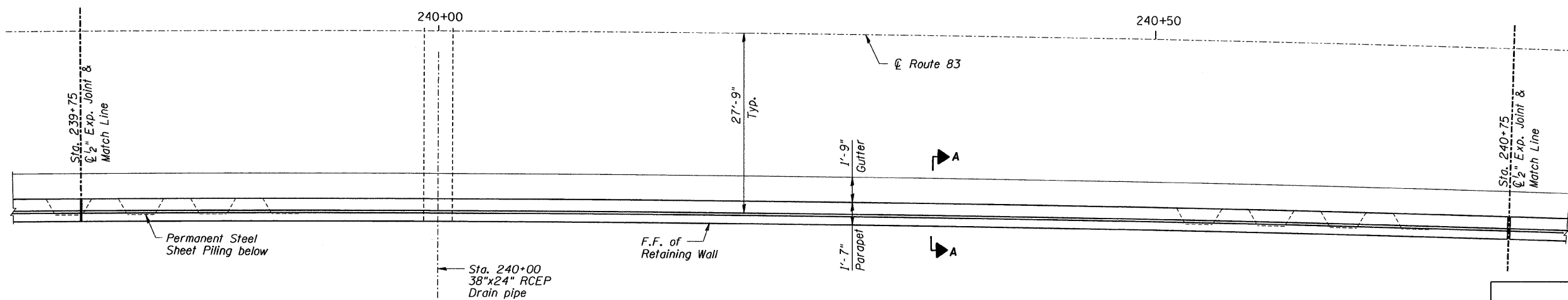
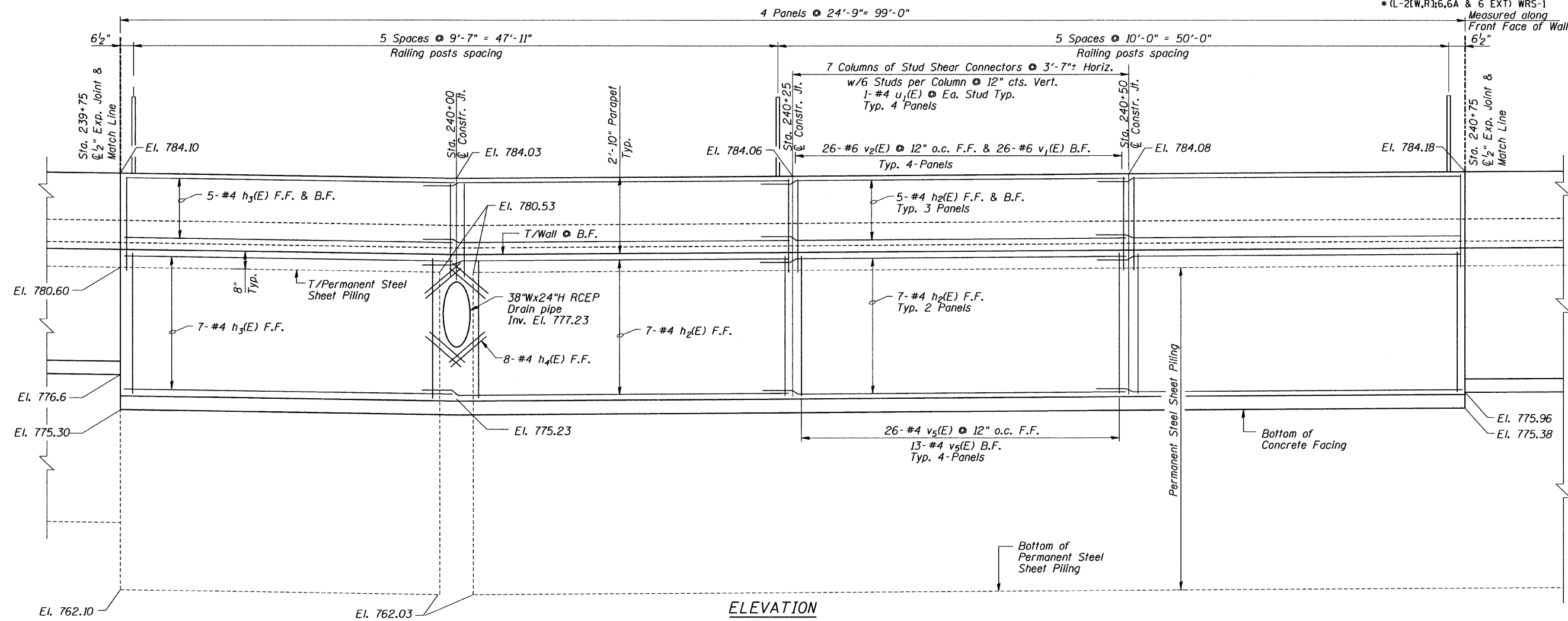
**RETAINING WALL NO. 1
PLAN & ELEVATION I**

ILLINOIS ROUTE 83
F.A.P. ROUTE 866
LAKE COUNTY
Sta. 238+70 to Sta. 241+50

DATE: 4/22/09
GRAEF, ANHALT, SCHLOEMER & ASSOCIATES INC
CHICAGO ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 3 OF 7 SHEETS
F.A.P. 866	*	LAKE	554	308	
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT	

* (L-2(W,R);6,6A & 6 EXT) WRS-1
Measured along
Front Face of Wall
6 1/2"



DESIGNED	S.S.T.
CHECKED	J.A.Z.
DRAWN	E.B.
CHECKED	S.S.T.



NOTES:
1. For Bill of Material see Sheet 5 of 7.

**RETAINING WALL NO. 1
PLAN & ELEVATION II**

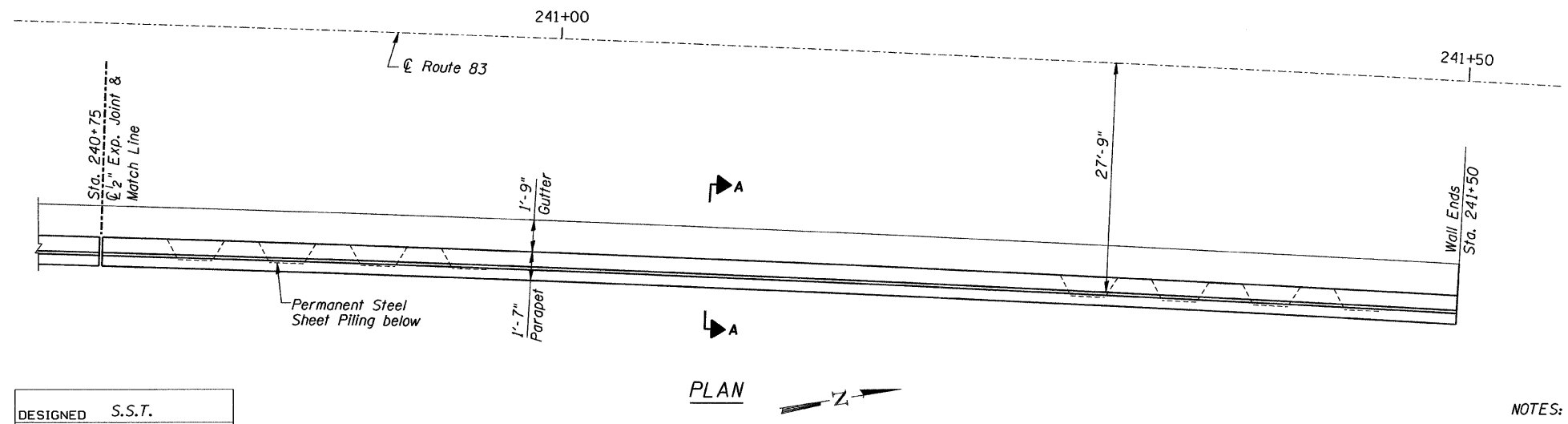
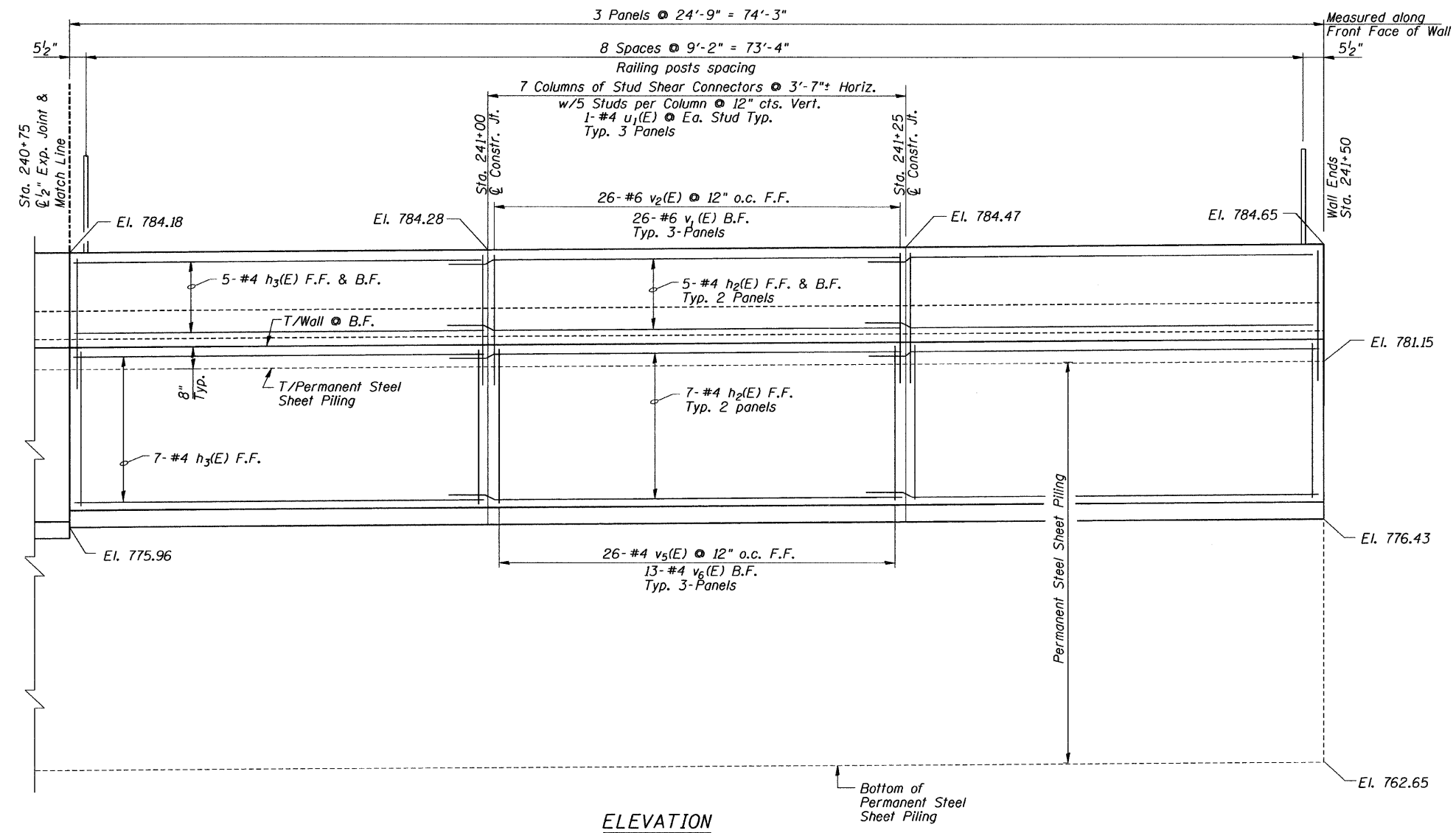
ILLINOIS ROUTE 83
F.A.P. ROUTE 866
LAKE COUNTY
Sta. 238+70 to Sta. 241+50

DATE: 4/22/09

GRAEF, ANHALT, SCHLOEMER & ASSOCIATES INC
CHICAGO ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 4 OF 7 SHEETS
F.A.P. 866	*	LAKE	554	309	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

* (L-2[W,R];6,6A & 6 EXT) WRS-1



DESIGNED	S.S.T.
CHECKED	J.A.Z.
DRAWN	E.B.
CHECKED	S.S.T.

NOTES:
1. For Bill of Material see Sheet 5 of 7.

**RETAINING WALL NO. 1
PLAN & ELEVATION III**

ILLINOIS ROUTE 83
F.A.P. ROUTE 866
LAKE COUNTY
Sta. 238+70 to Sta. 241+50

DATE: 4/22/09
GRAEF, ANHALT, SCHLOEMER & ASSOCIATES INC
CHICAGO ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 5 OF 7 SHEETS
F.A.P. 866	*	LAKE	554	310	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-		

* (L-2[LW,R]6,6A & 6 EXT) WRS-1

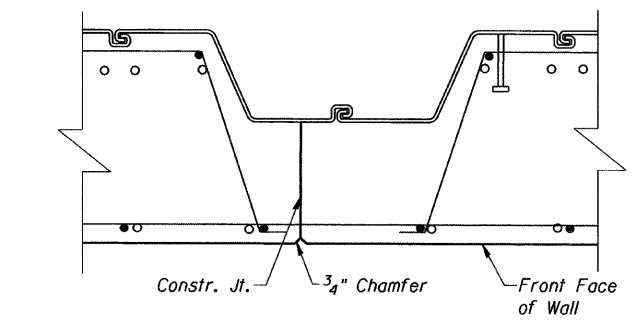
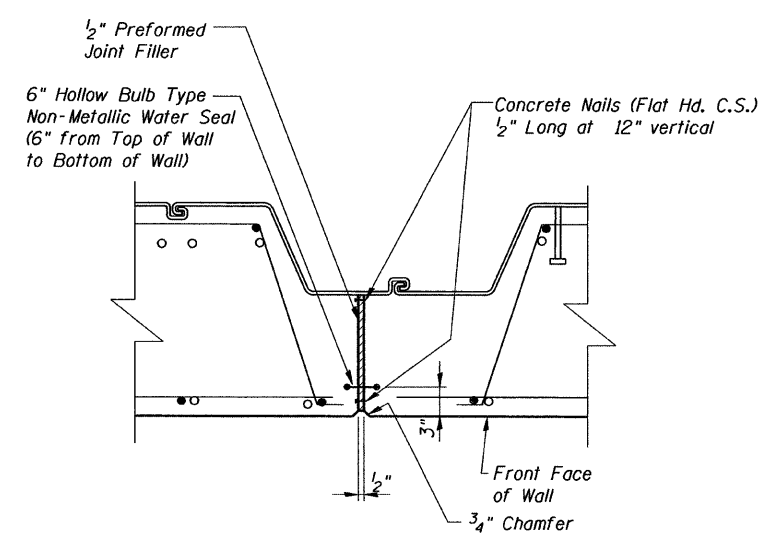
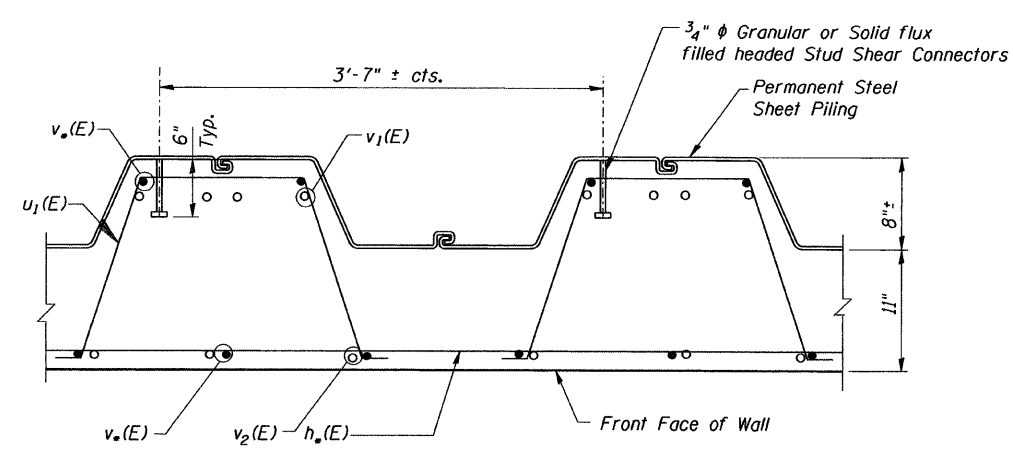
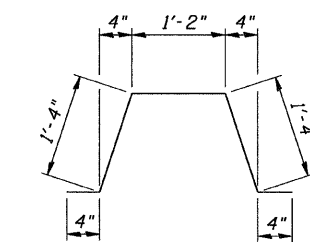
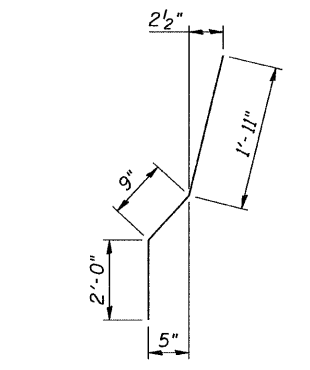
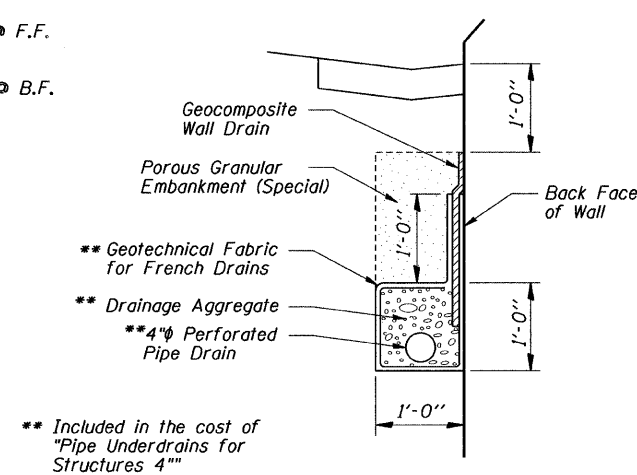
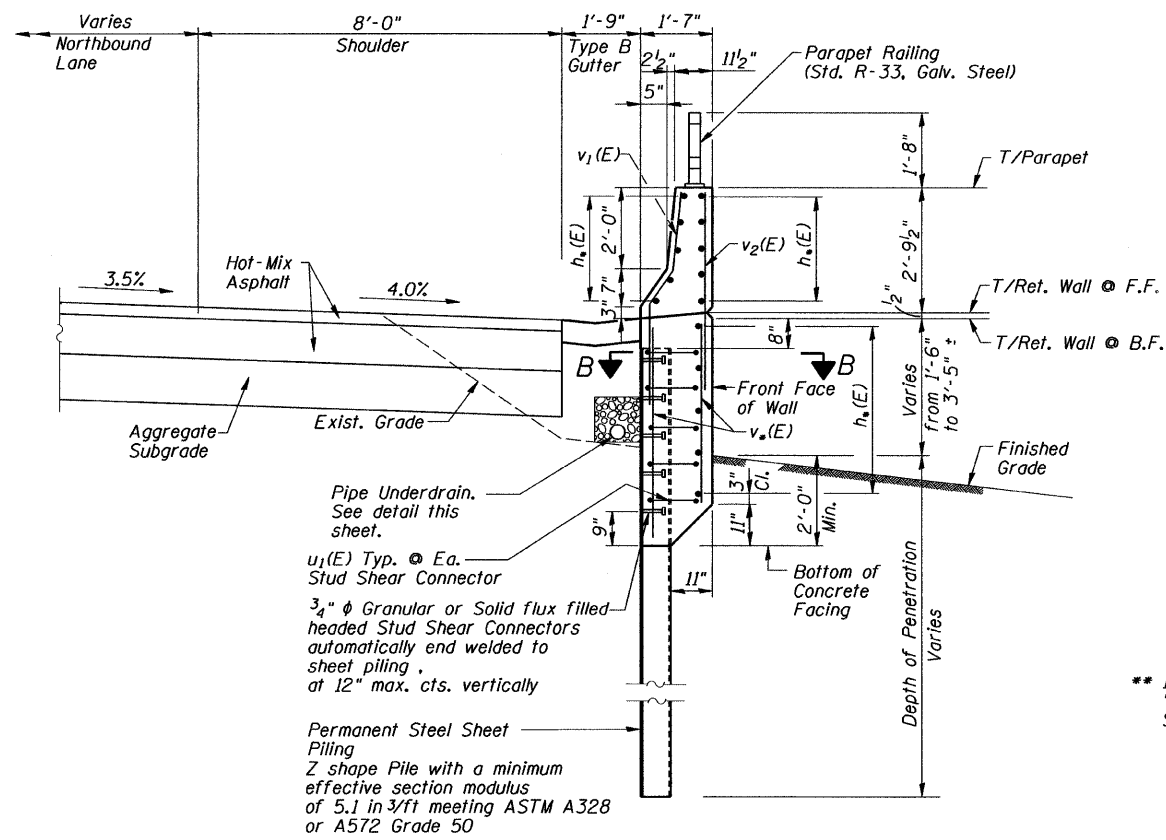
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h1(E)	15	#4	29'-4"	—
h2(E)	132	#4	26'-6"	—
h3(E)	35	#4	24'-5"	—
h4(E)	8	#4	4'-0"	—
u1(E)	393	#4	4'-6"	J
v1(E)	291	#6	4'-8"	J
v2(E)	291	#6	4'-3"	—
v3(E)	47	#4	3'-0"	—
v4(E)	117	#4	3'-9"	—
v5(E)	156	#4	5'-0"	—
v6(E)	117	#4	4'-5"	—

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Reinforcement Bars, Epoxy Coated	Pound	9,560
Concrete Structures	Cu. Yd.	100
Structure Excavation	Cu. Yd.	85
Parapet Railing	Foot	277
Stud Shear Connectors	Each	393
Permanent Steel Sheet Piling	Sq. Ft.	4,868
Pipe Underdrains for Structures 4"	Foot	274
Porous Granular Embankment, Special	Cu Yd.	15.8
Composite Wall Drain	Sq. Yd.	62.5

- NOTES:
1. No reinforcement should pass thru Expansion Joint.
 2. * See Elevation for Bar Number & Size.
 3. Reinforcement bars designated (E) shall be epoxy coated.



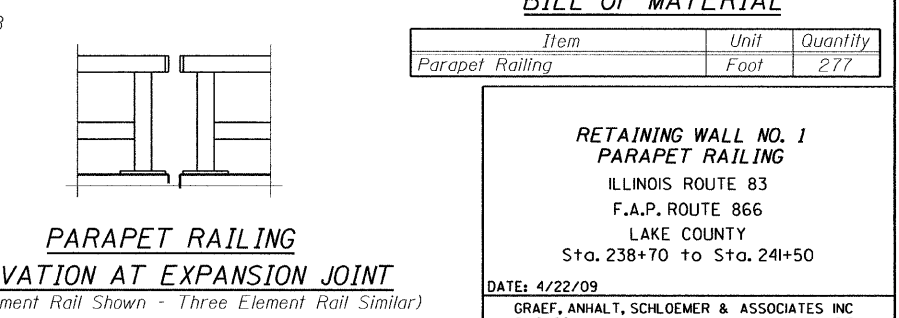
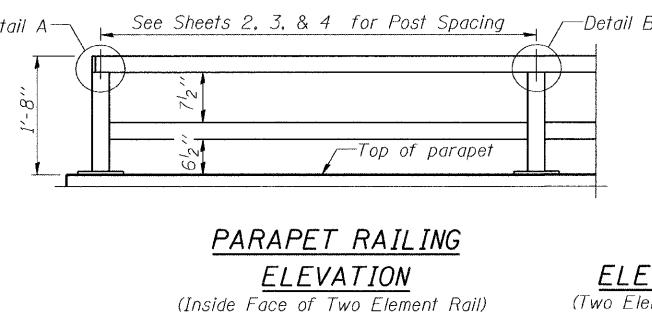
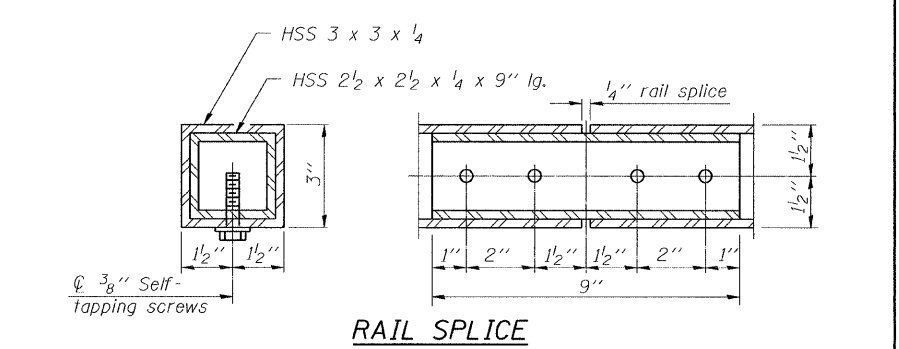
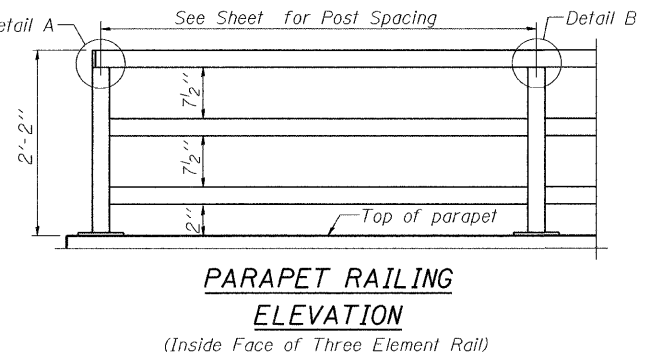
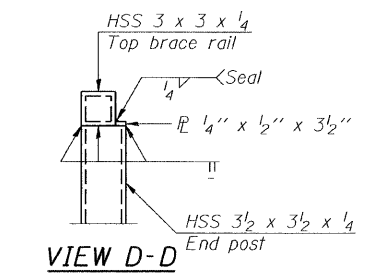
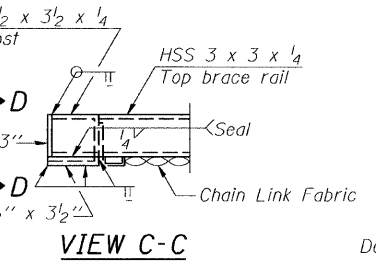
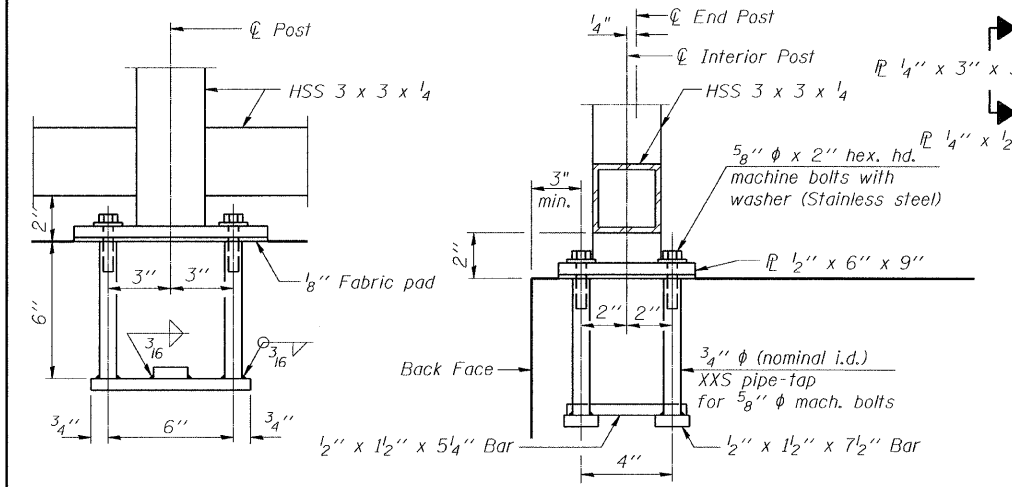
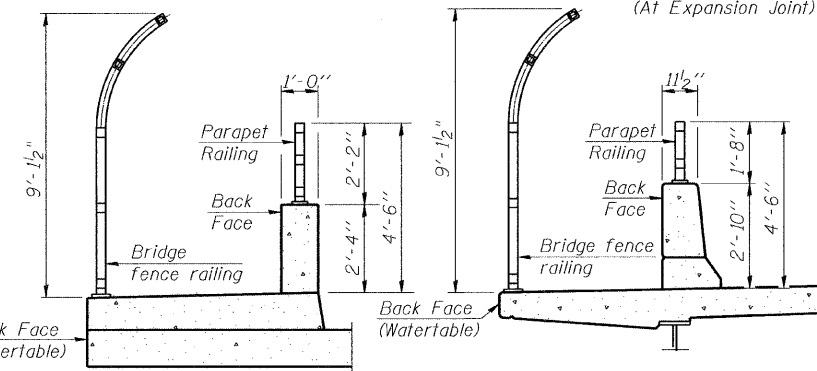
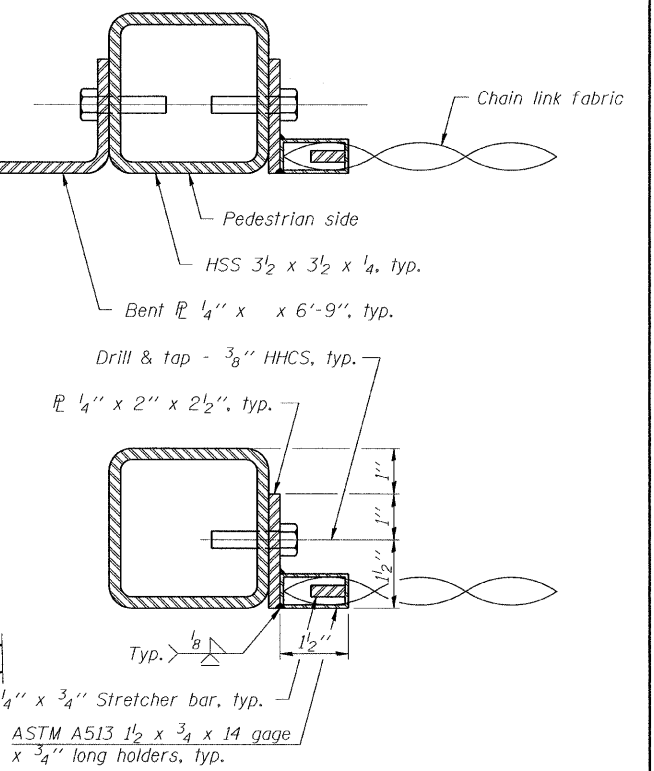
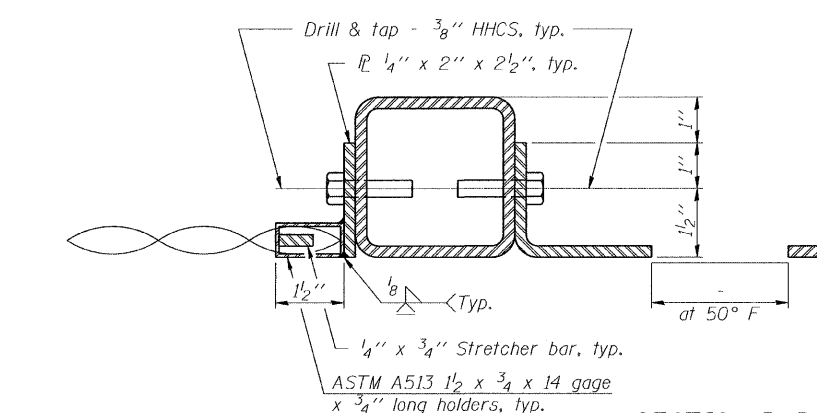
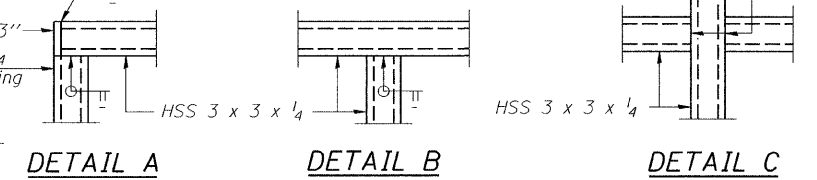
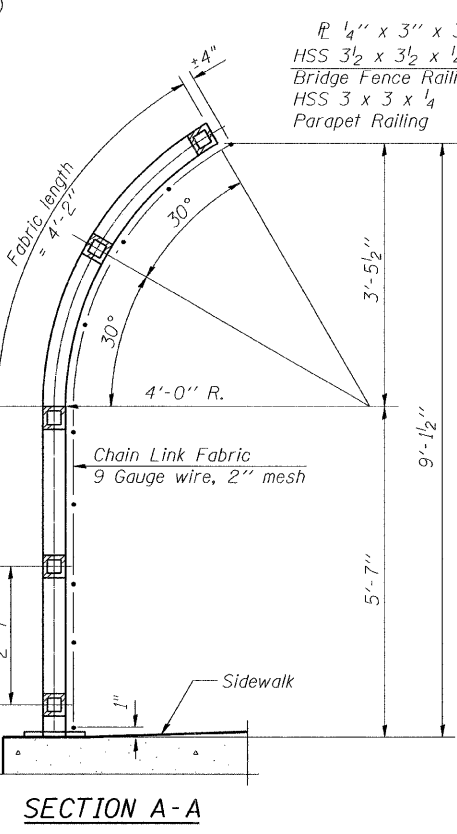
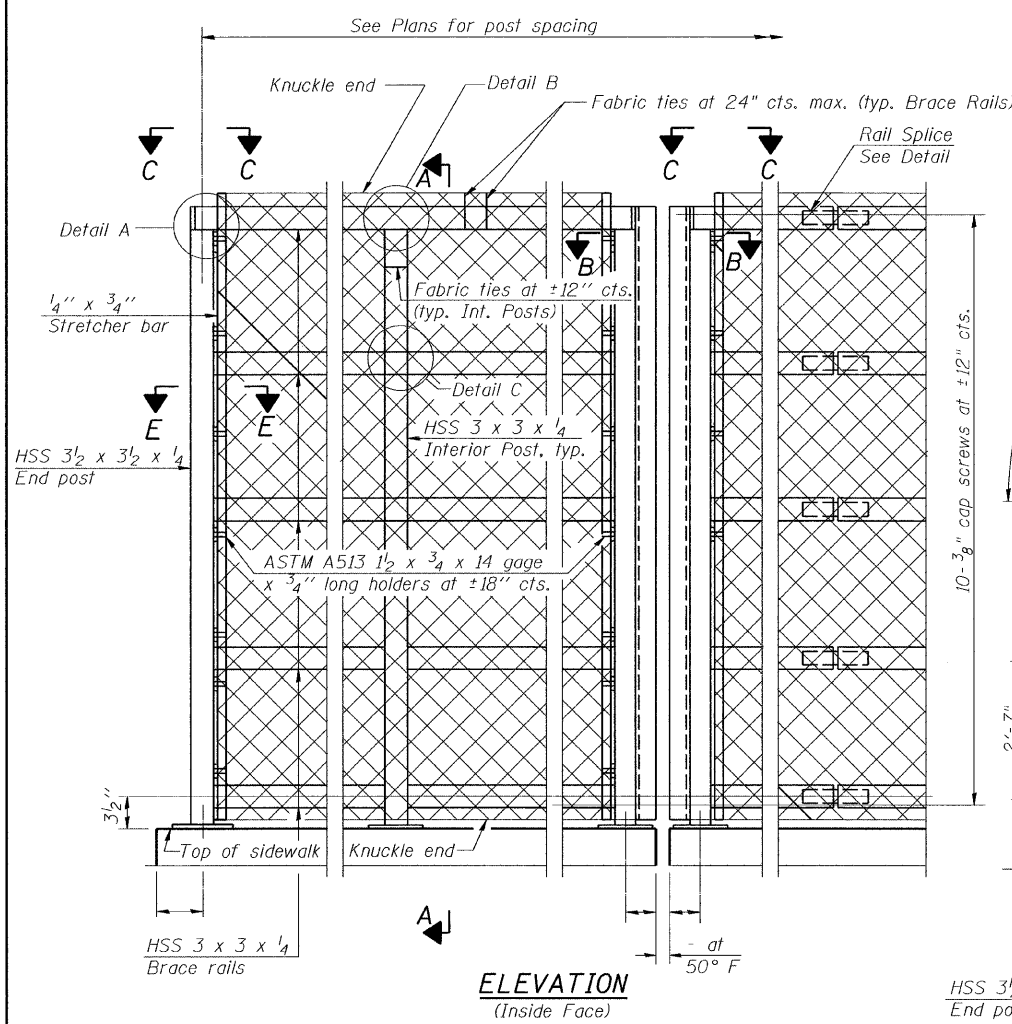
NOTE:
The details for the concrete and reinforcement are based on CZ-67 Sheet Piling.

DESIGNED	S.S.T.
CHECKED	J.A.Z.
DRAWN	E.B.
CHECKED	S.S.T.

RETAINING WALL NO. 1
SECTION, DETAILS & B.O.M.
ILLINOIS ROUTE 83
F.A.P. ROUTE 866
LAKE COUNTY
Sta. 238+70 to Sta. 241+50
DATE: 4/22/09
GRAEF, ANHALT, SCHLOEMER & ASSOCIATES INC
CHICAGO ILLINOIS

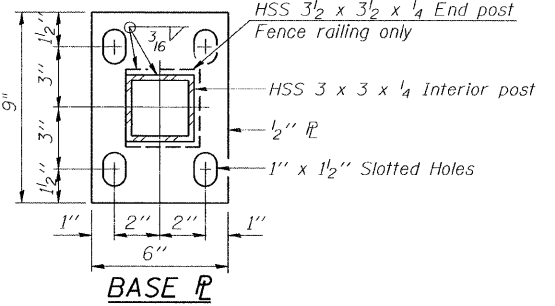
ROUTE NO. F.A.P. 866	SECTION *	COUNTY LAKE	TOTAL SHEETS 554	SHEET NO. 311	SHEET NO. 6 OF 7 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT * (L-2(W,R);6,6A & 6 EXT) WRS-1		

All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.



DESIGNED	S.S.T.
CHECKED	J.A.Z.
DRAWN	E.B.
CHECKED	S.S.T.

R-33 11-1-06 (10'-0" Maximum Post Spacing)



BILL OF MATERIAL

Item	Unit	Quantity
Parapet Railing	Foot	277

RETAINING WALL NO. 1 PARAPET RAILING
ILLINOIS ROUTE 83
F.A.P. ROUTE 866
LAKE COUNTY
Sta. 238+70 to Sta. 241+50
DATE: 4/22/09
GRAEF, ANHALT, SCHLOEMER & ASSOCIATES INC
CHICAGO ILLINOIS
FILE: g:\20004024_N\ms\planset\Rt83-RW2-rail.dgn

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 7 OF 7 SHEETS
F.A.P. 866	*	LAKE	554	312	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-		
* (L-2[W,R];6,6A & 6 EXT) WRS-1					

ILLINOIS DEPARTMENT OF TRANSPORTATION
Testing Service Corporation
STRUCTURE BORING LOG

ROUTE FAP Route 866 DESCRIPTION IL Route 83 Retaining Wall Improvements
SECT. 5VB-BR STRUCT. NO. _____ DRILLED BY TSC/L-50J00
COUNTY Lake LOCATION 250' S of Town Line Road S. 29, TWP. 46 N, RNG. 10 E

Boring No. <u>RW-1</u>	D	B			Surface Water Elev. _____
Station <u>239+00</u>	E	L			Groundwater Elev. _____
Offset <u>20.00ft RT</u>	P	0			when drilling _____ <u>Dry</u>
	T	W	Qu	W	at Completion _____ <u>Dry</u>
Surface Elev. <u>781.50</u> ft	H	S	tsf	%	after _____ Hrs.
9" Gravel Shoulder <u>780.70</u>					
Black CLAY, moist A-7-6 <u>780.40</u>					
		4	B		
		4	2.2	24.7	
		5	15.7		
Very stiff brown and black CLAY, moist A-7-6 <u>778.50</u>					
		7	B		
		8	6.3	18.4	
		12	15.7		
Hard brown CLAY, trace gravel, moist A-6/A-7-6 <u>776.00</u>					
		6	B		
		8	4.6	16.8	
		15	15.7		
Hard brown and gray CLAY, trace gravel, moist A-6 <u>773.80</u>					
		6	B		
		8	4.9	12.4	
		13	15.7		
Very stiff to stiff gray CLAY, trace gravel, moist A-6 <u>768.50</u>					
		7	B		
		10	4.9	14.3	
		12	15.7		
Very stiff to stiff gray CLAY, trace gravel, moist A-6 <u>766.30</u>					
		4	B		
		7	2.4	14.2	
		10	15.7		
Very stiff to stiff gray CLAY, trace gravel, moist A-6 <u>765.50</u>					
		4	B		
		6	1.5	19.3	
		6	15.7		
End of Boring at 20.0 feet					
Mobile B-61 Truck Rig (#144)					
Mobile Automatic Hammer					
4.5" (114 mm) SFA					

SPT, (N) = Sum of last two blow values in sample. (Qu) B-Bulge S-Shear P-Penetration Test
Stations, Depths, Offset, and Elevations are in Feet

ILLINOIS DEPARTMENT OF TRANSPORTATION
Testing Service Corporation
STRUCTURE BORING LOG

ROUTE FAP Route 866 DESCRIPTION IL Route 83 Retaining Wall Improvements
SECT. 5VB-BR STRUCT. NO. _____ DRILLED BY TSC/L-50J00
COUNTY Lake LOCATION 175' S of Town Line Road S. 29, TWP. 46 N, RNG. 10 E

Boring No. <u>RW-2</u>	D	B			Surface Water Elev. _____
Station <u>239+75</u>	E	L			Groundwater Elev. _____
Offset <u>14.00ft RT</u>	P	0			when drilling _____ <u>769.8</u>
	T	W	Qu	W	at Completion _____ <u>767.8</u>
Surface Elev. <u>781.80</u> ft	H	S	tsf	%	after _____ Hrs.
3" Gravel Shoulder <u>781.50</u>					
FILL - Dark brown and gray CLAY, trace organic, moist A-6/A-7-6 <u>777.80</u>					
		4	B		
		4	3.7	20.8	
		6	15.7		
Stiff black SILTY CLAY (topsoil), moist A-7-6 <u>776.30</u>					
		3	B		
		4	1.2	15.6	
		5	15.7	33.9	
Medium stiff brown and gray CLAY, very moist A-6/A-7-6 <u>773.80</u>					
		3	B		
		4	1.0	31.2	
		4	15.7		
Very stiff to hard brown CLAY, trace gravel, moist A-6 <u>773.80</u>					
		4	B		
		7	3.3	17.8	
		12	15.7		
Very stiff to hard brown CLAY, trace gravel, moist A-6 <u>773.80</u>					
		8	B		
		12	5.2	12.9	
		15	15.7		
Hard to very stiff gray CLAY, trace gravel, moist A-6 <u>766.30</u>					
		9	B		
		9	4.3	15.5	
		15	15.7		
Hard to very stiff gray CLAY, trace gravel, moist A-6 <u>765.50</u>					
		4	B		
		6	2.2	17.1	
		10	15.7		
End of Boring at 20.0 feet					
Mobile B-61 Truck Rig (#144)					
Mobile Automatic Hammer					
4.5" (114 mm) SFA					

SPT, (N) = Sum of last two blow values in sample. (Qu) B-Bulge S-Shear P-Penetration Test
Stations, Depths, Offset, and Elevations are in Feet

ILLINOIS DEPARTMENT OF TRANSPORTATION
Testing Service Corporation
STRUCTURE BORING LOG

ROUTE FAP Route 866 DESCRIPTION IL Route 83 Retaining Wall Improvements
SECT. 5VB-BR STRUCT. NO. _____ DRILLED BY TSC/L-50J00
COUNTY Lake LOCATION 100' S of Town Line Road S. 29, TWP. 46 N, RNG. 10 E

Boring No. <u>RW-3</u>	D	B			Surface Water Elev. _____
Station <u>240+50</u>	E	L			Groundwater Elev. _____
Offset <u>17.00ft RT</u>	P	0			when drilling _____ <u>773.1</u>
	T	W	Qu	W	at Completion _____ <u>773.6</u>
Surface Elev. <u>781.60</u> ft	H	S	tsf	%	after _____ Hrs.
4" Gravel Shoulder <u>781.30</u>					
FILL - Brown and dark brown CLAY LOAM, trace organic, moist A-6 <u>778.60</u>					
		8	B		
		9	2.6	12.6	
		10	15.7		
Medium stiff black CLAY LOAM (topsoil), very moist A-6 <u>776.60</u>					
		2	B		
		2	1.0	22.4	
		3	15.7		
Soft brown and gray CLAY LOAM, very moist A-6 <u>773.60</u>					
		2	B		
		2	0.5	22.9	
		2	15.7		
Hard brown CLAY, trace gravel, moist A-6 <u>773.60</u>					
		4	B		
		5	6.3	16.6	
		8	15.7		
Hard brown CLAY, trace gravel, moist A-6 <u>773.60</u>					
		6	B		
		8	6.4	14.3	
		11	15.7		
Very stiff gray CLAY, trace gravel, moist A-6 <u>763.60</u>					
		4	B		
		8	9	17.7	
		9	15.7		
Stiff gray CLAY LOAM, trace gravel, moist A-6 <u>761.60</u>					
		3	B		
		3	1.3	13.7	
		5	15.7		
End of Boring at 20.0 feet					
Mobile B-61 Truck Rig (#144)					
Mobile Automatic Hammer					
4.5" (114 mm) SFA					

SPT, (N) = Sum of last two blow values in sample. (Qu) B-Bulge S-Shear P-Penetration Test
Stations, Depths, Offset, and Elevations are in Feet

ILLINOIS DEPARTMENT OF TRANSPORTATION
Testing Service Corporation
STRUCTURE BORING LOG

ROUTE FAP Route 866 DESCRIPTION IL Route 83 Retaining Wall Improvements
SECT. 5VB-BR STRUCT. NO. _____ DRILLED BY TSC/L-50J00
COUNTY Lake LOCATION 25' S of Town Line Road S. 29, TWP. 46 N, RNG. 10 E

Boring No. <u>RW-4</u>	D	B			Surface Water Elev. _____
Station <u>241+25</u>	E	L			Groundwater Elev. _____
Offset <u>17.00ft RT</u>	P	0			when drilling _____ <u>Dry</u>
	T	W	Qu	W	at Completion _____ <u>Dry</u>
Surface Elev. <u>781.70</u> ft	H	S	tsf	%	after _____ Hrs.
13" Gravel Shoulder					
FILL - Black and brown CLAY, trace organic, moist A-6/A-7-6 <u>779.20</u>					
		4	B		
		5	2.4	21.1	
		6	15.7		
Stiff to very stiff brown and gray CLAY, moist A-7-6 <u>776.20</u>					
		4	B		
		4	1.9	25.1	
		6	15.7		
Very stiff to hard brown CLAY, occasional silt seams, trace gravel, moist A-6 <u>776.20</u>					
		4	B		
		7	3.6	18.6	
		9	15.7		
Hard brown CLAY, trace gravel, moist A-6 <u>776.20</u>					
		6	B		
		7	4.8	16.0	
		9	15.7		
Hard brown CLAY, trace gravel, moist A-6 <u>768.70</u>					
		9	B		
		12	6.5	17.1	
		15	15.7		
Very stiff to hard brown and gray CLAY, trace gravel, moist A-6 <u>768.70</u>					
		6	B		
		8	3.7	18.2	
		10	15.7		
Very stiff to hard brown and gray CLAY, trace gravel, moist A-6 <u>763.70</u>					
		8	B		
		9	4.6	17.4	
		10	15.7		
Very stiff gray CLAY, trace gravel, moist A-6 <u>761.70</u>					
		7	B		
		8	2.9	15.5	
		8	15.7		
End of Boring at 20.0 feet					
Mobile B-61 Truck Rig (#144)					
Mobile Automatic Hammer					
4.5" (114 mm) SFA					

SPT, (N) = Sum of last two blow values in sample. (Qu) B-Bulge S-Shear P-Penetration Test
Stations, Depths, Offset, and Elevations are in Feet

DESIGNED	S.S.T.
CHECKED	J.A.Z.
DRAWN	E.B.
CHECKED	S.S.T.

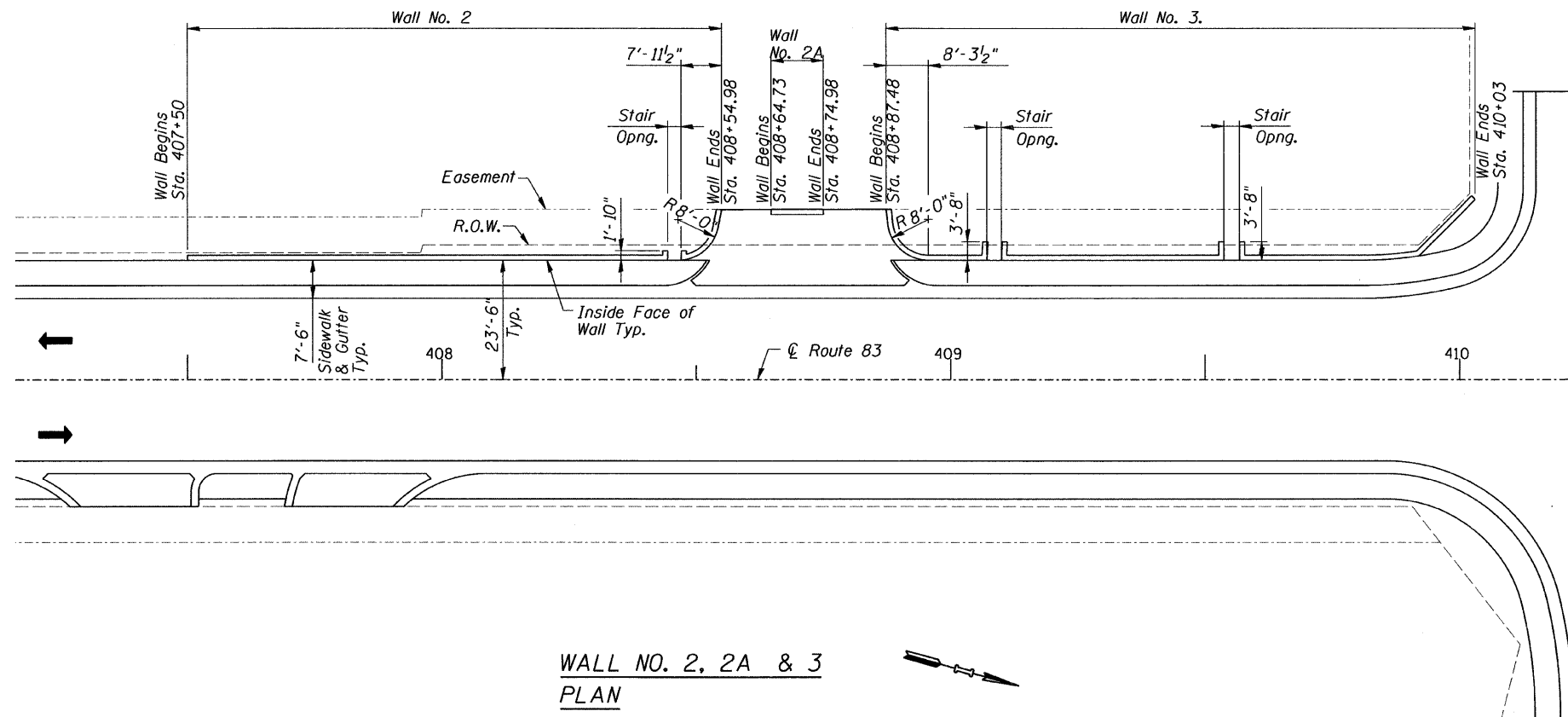
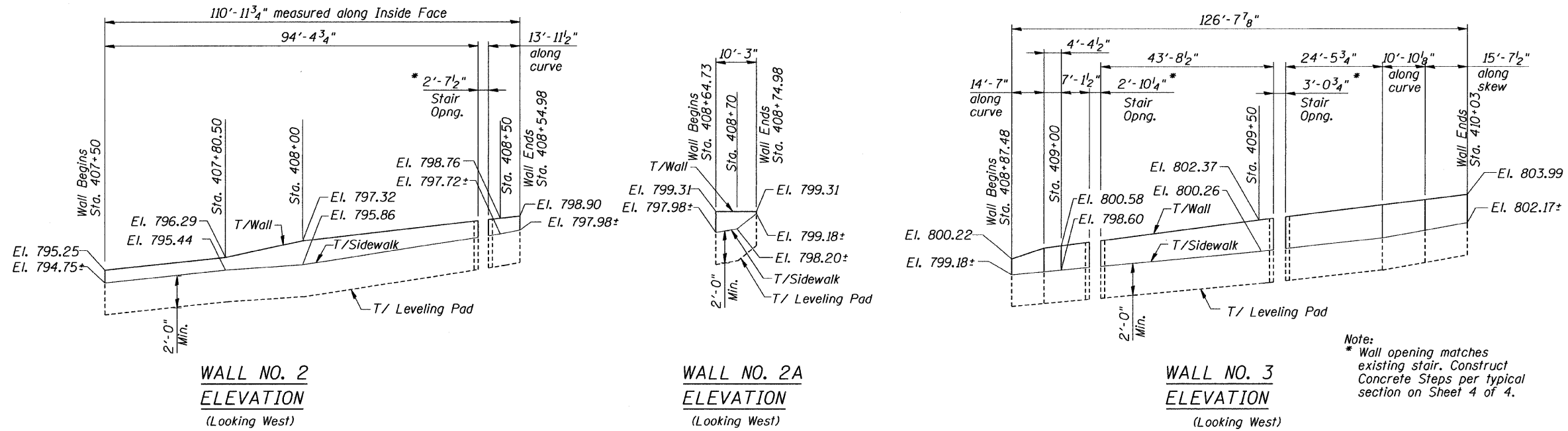
BORING LOGS RW-1 THRU RW-4
ILLINOIS ROUTE 83
F.A.P. ROUTE 866
LAKE COUNTY
Sta. 238+70 to Sta. 241+50
DATE: 4/22/09
GRAEF, ANHALT, SCHLOEMER & ASSOCIATES INC
CHICAGO ILLINOIS

B.M. #6 = "X" cut, Southeast flange bolt of Fire Hydrant at Northeast corner of Route 83 and Chestnut St. Station 410+75.79, 33.85' Rt., Elev. 803.01

CONTRACT NO. 62700

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1 OF 4 SHEETS
F.A.P. 866	*	LAKE	554	313	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-		

*(L-2[W,R];6,6A & 6 EXT) WRS-1



GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.
 For Total Bill of Material see Sheet 4 of 4.

DESIGN SPECIFICATIONS

1996 AASHTO w/1997, 1998, 1999, 2000 & 2002 Interims.

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
 fy = 60,000 psi (Reinf.)



EXPIRES 11-30-2010

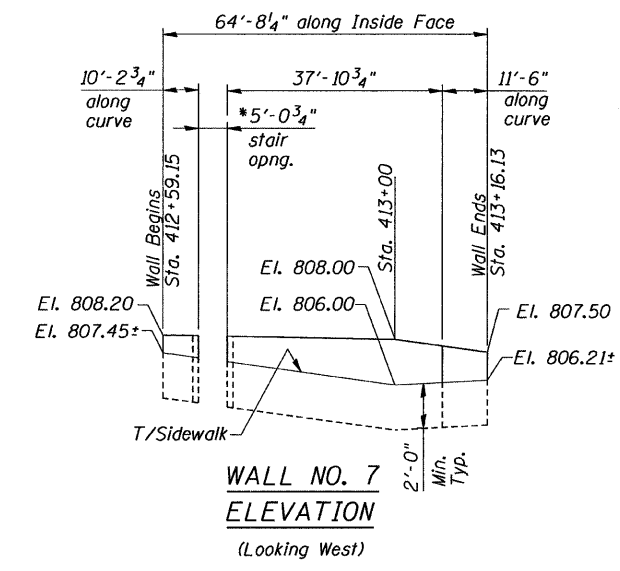
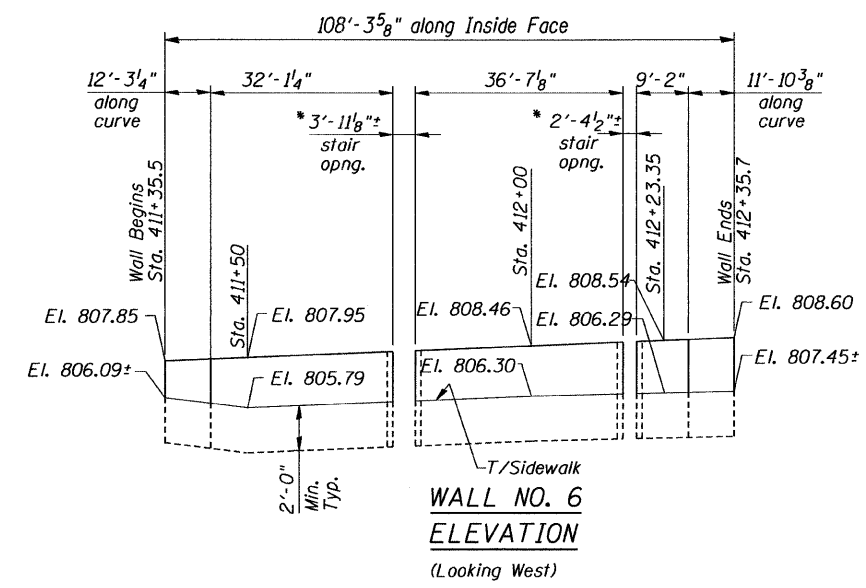
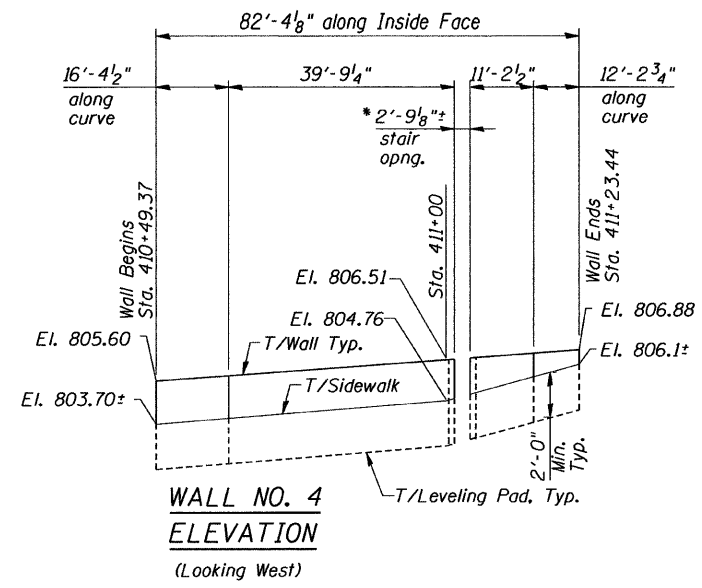
DESIGNED	S.S.T.
CHECKED	J.A.Z.
DRAWN	E.B.
CHECKED	S.S.T.

**RETAINING WALL NO. 2, 2A & 3
 PLAN & ELEVATION**
 ILLINOIS ROUTE 83
 F.A.P. ROUTE 866
 LAKE COUNTY
 Sta. 407+70 to Sta. 454+96.21

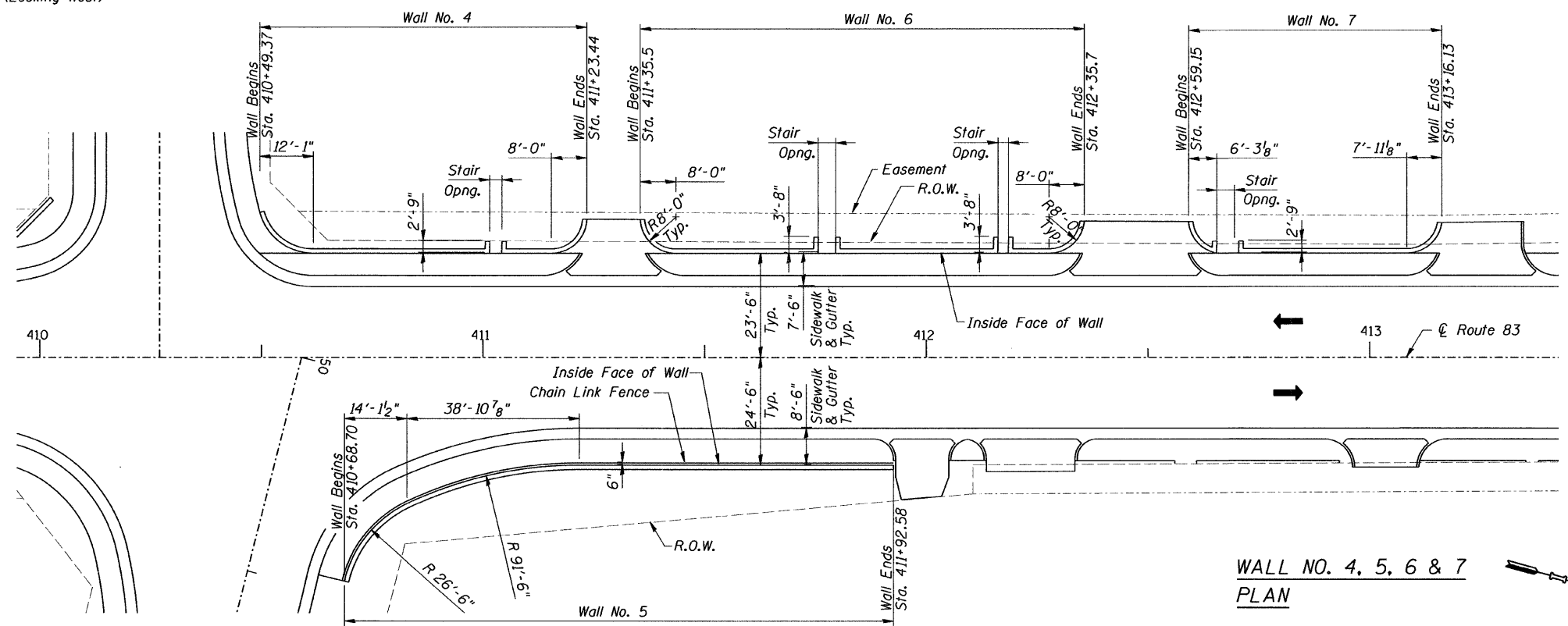
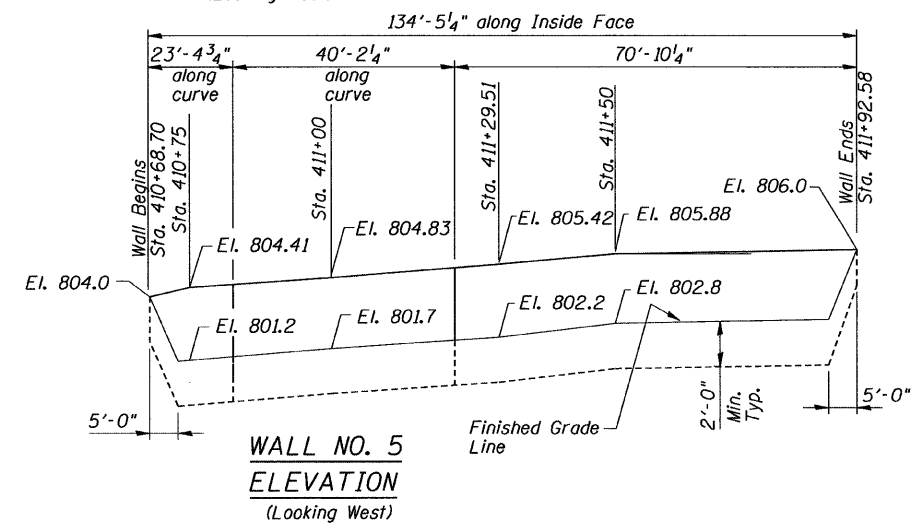
DATE: 1/30/09
 GRAEF, ANHALT, SCHLOEMER & ASSOCIATES INC
 CHICAGO ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 2 OF 4 SHEETS
F.A.P. 866	*	LAKE	554	314	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

* (L-2[W,R];6,6A & 6 EXT) WRS-1



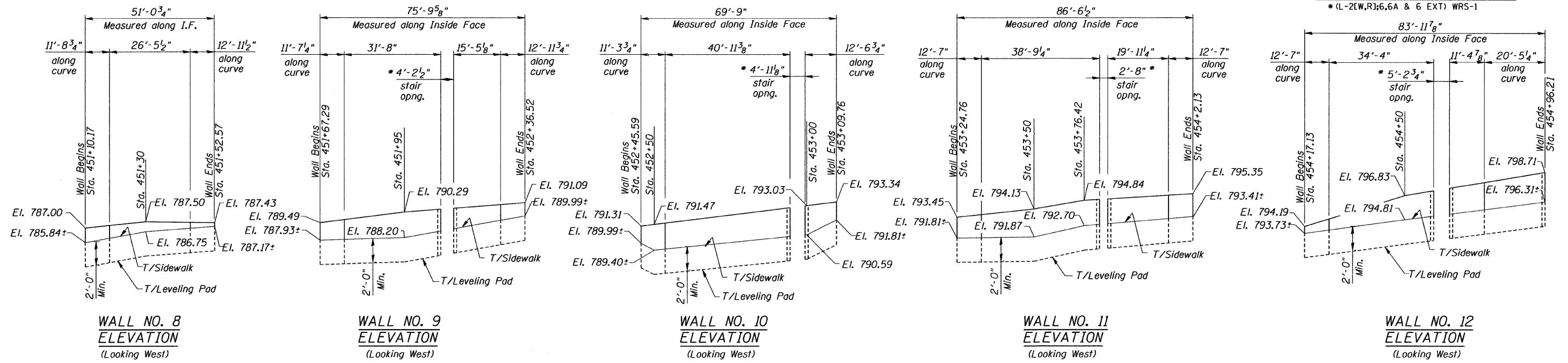
Note:
* Wall opening matches existing stair. Construct Concrete Steps per typical section on Sheet 4 of 4.



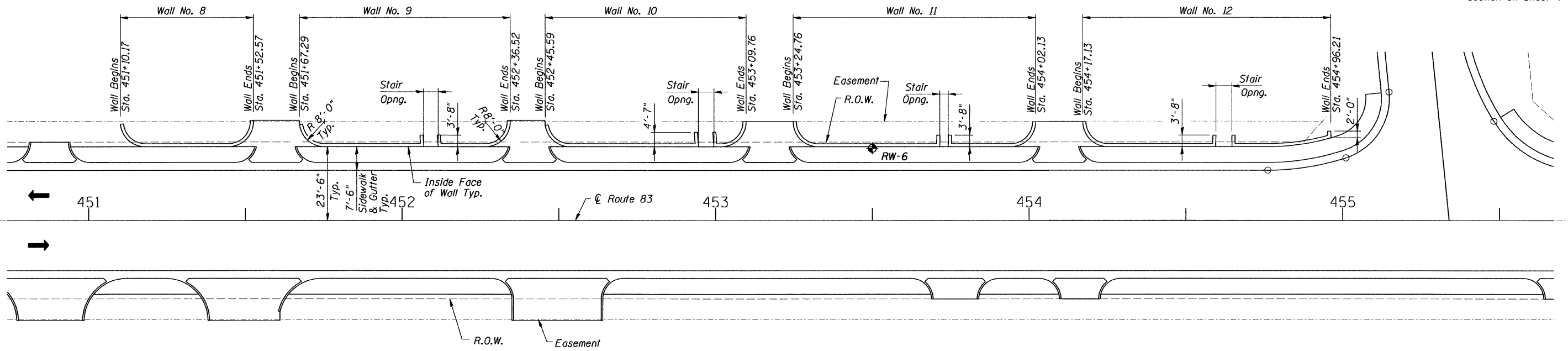
DESIGNED	S.S.T.
CHECKED	J.A.Z.
DRAWN	E.B.
CHECKED	S.S.T.

**RETAINING WALL NO. 4, 5, 6 & 7
PLAN & ELEVATION**
ILLINOIS ROUTE 83
F.A.P. ROUTE 866
LAKE COUNTY
Sta. 407+70 to Sta. 454+96.21
DATE: 1/30/09
GRAEF, ANHALT, SCHLOEMER & ASSOCIATES INC
CHICAGO ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 3 OF 4 SHEETS
F.A.P. 866	*	LAKE	554	315	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-	* (L-2[W,R]:6.6A & 6 EXT) WRS-1		



Note:
 * Wall opening matches existing stair. Construct Concrete Steps per typical section on Sheet 4 of 4.



WALL NO. 8 THRU 12 PLAN

DESIGNED	S.S.T.
CHECKED	J.A.Z.
DRAWN	E.B.
CHECKED	S.S.T.

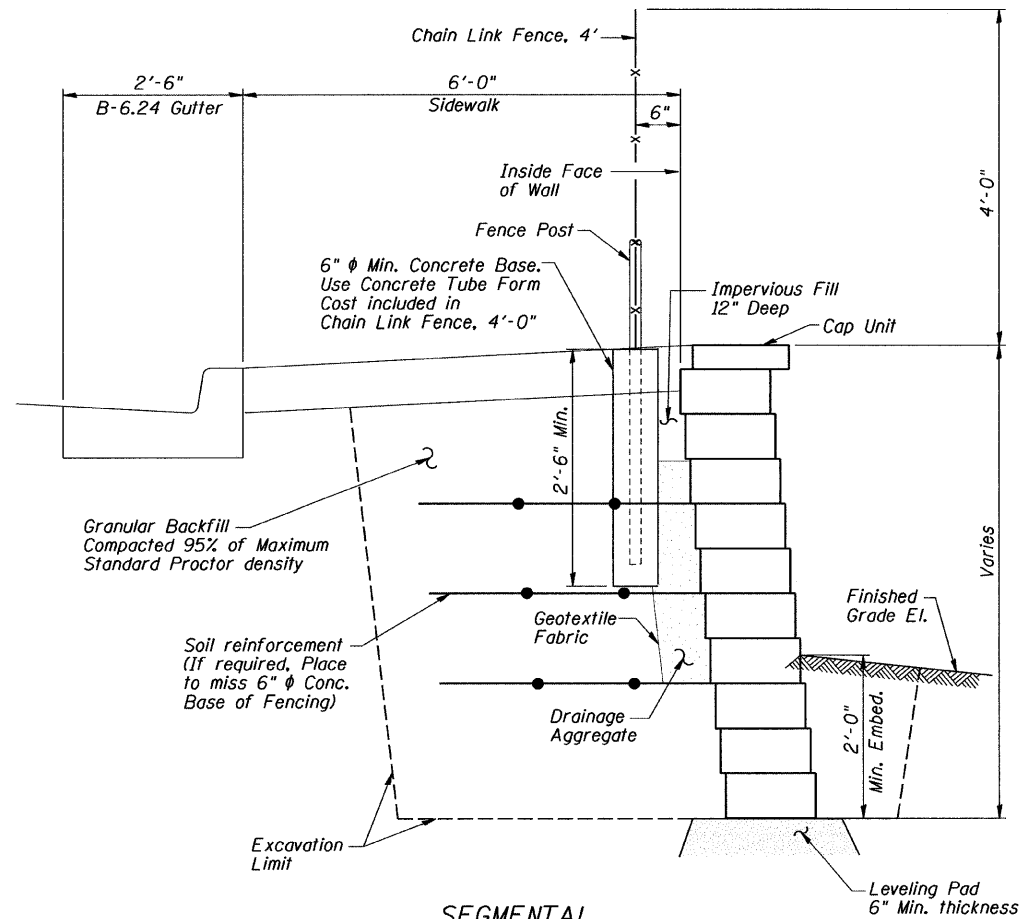
LEGEND
 RW-6 - Soil Boring
 See Sheet 4 of 4 for Boring Log

RETAINING WALL NO. 8 THRU 12 PLAN & ELEVATION
 ILLINOIS ROUTE 83
 F.A.P. ROUTE 866
 LAKE COUNTY
 Sta. 407+70 to Sta. 454+96.21
 DATE: 1/30/09
 GRAEF, ANHALT, SCHLOEMER & ASSOCIATES INC
 CHICAGO ILLINOIS

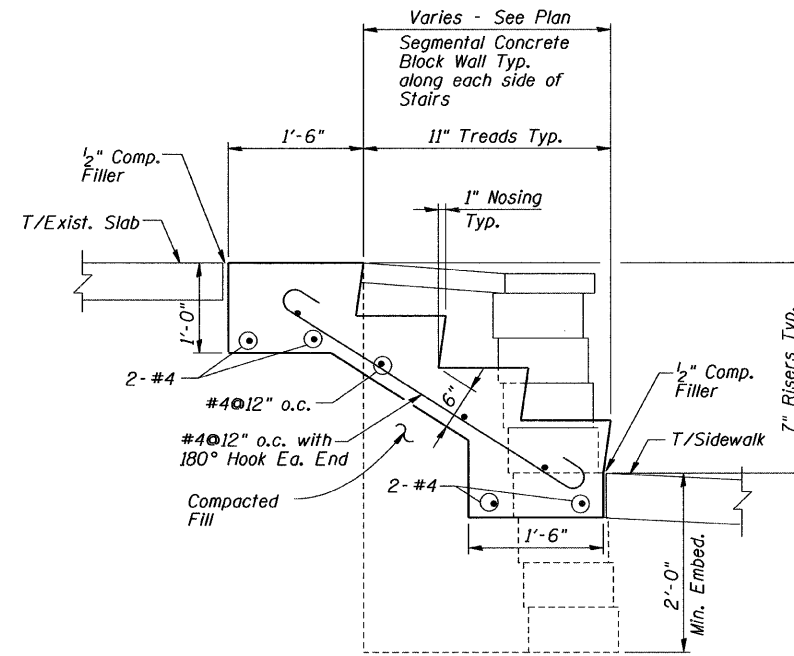
ROUTE NO. F.A.P. 866	SECTION *	COUNTY LAKE	TOTAL SHEETS 554	SHEET NO. 316	SHEET NO. 4 OF 4 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT *(L-2EW,R)6,6A & 6 EXT) WRS-1		

ROUTE	FAP Route 866	DESCRIPTION	IL Route 83 Retaining Wall Improvements
SECT.	5VB-BR	STRUCT. NO.	
COUNTY	Laurel	LOCATION	175'S of First Street S. B., TWP. 46 N., RNC. 10 E.
Boring No.	RW-6	D	B
Station	453+50	L	L
Offset	23.00ft LT	P	O
Surface Elev.	792.00 ft	H	S
		Qu	W
		tsf	%
Surface Water Elev. _____			
Groundwater Elev. when drilling _____			
at Completion _____			
after _____ Hrs. _____			
FILL - Dark brown CLAY LOAM			
	79.50	HA	B
			5.0
			13.5
Hard to very stiff brown CLAY, trace gravel, moist A-6			
		HA	B
			4.2
			15.6
	784.00	HA	B
			3.8
			15.3
Very stiff brown CLAY LOAM, little gravel, moist A-6			
		HA	B
			3.3
			13.7
End of Boring at 10.0 feet			
Boring performed by Hand auger methods.			

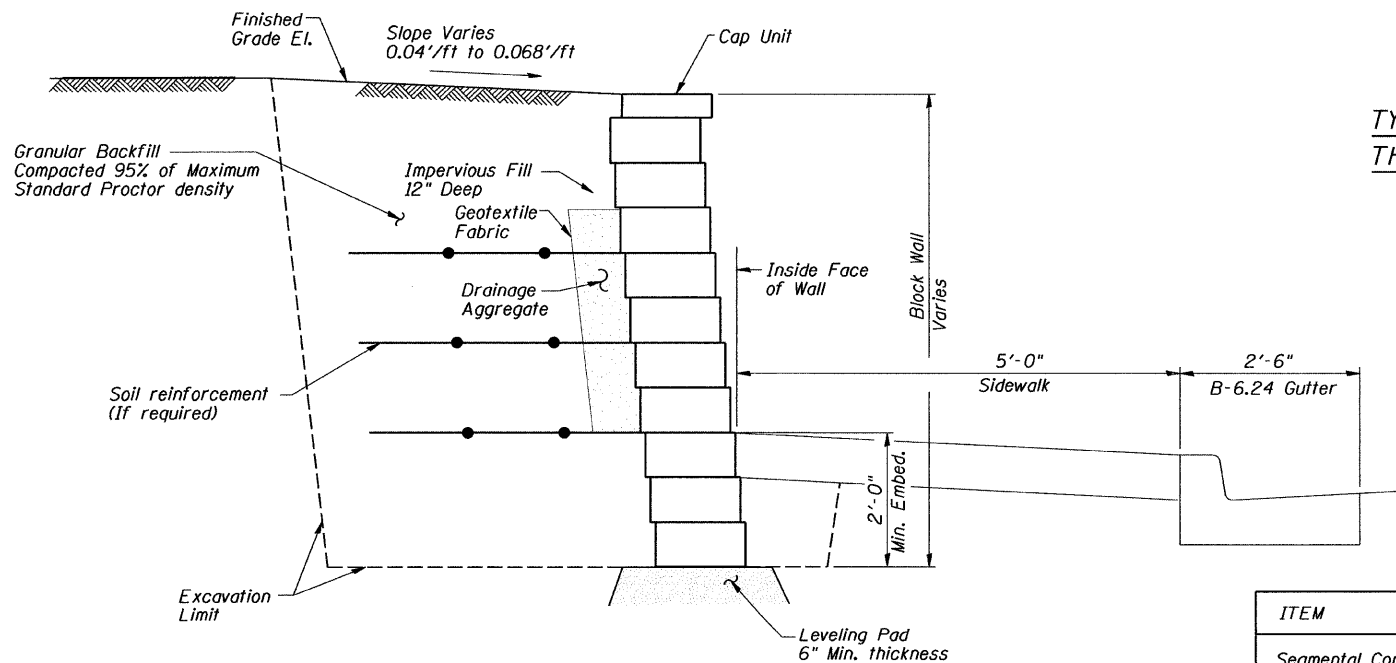
NOTES:
1. CPT, (N) = Sum of last two blow values in sample, (Q) B-Bulge S-Shear P-Penetration Test
2. Stations, Depths, Offset, and Elevations are in Feet



SEGMENTAL
CONCRETE BLOCK WALL NO. 5
CROSS SECTION



TYPICAL SECTION
THRU CONCRETE STEPS



SEGMENTAL
CONCRETE BLOCK WALL
NO. 2 THRU 4 & NO. 6 THRU 12
CROSS SECTION

DESIGNED	S.S.T.
CHECKED	J.A.Z.
DRAWN	E.B.
CHECKED	S.S.T.

TOTAL BILL OF MATERIAL

ITEM	UNIT	Wall No. 2	Wall No. 2A	Wall No. 3	Wall No. 4	Wall No. 5	Wall No. 6	Wall No. 7	Wall No. 8	Wall No. 9	Wall No. 10	Wall No. 11	Wall No. 12	TOTAL
Segmental Concrete Block Wall	Sq. Ft.	342	30	533	311	607	476	224	139	292	308	370	335	3,967
Chain Link Fence, 4'	Foot	-	-	-	-	134	-	-	-	-	-	-	-	134
Concrete Steps	Cu. Yd.	0.4	-	1.2	0.5	-	1.2	0.8	-	0.8	1.1	0.5	1.0	7.5

Note:
1. Cost of Excavation, Geotextile Fabric & Drainage Aggregate included in the Segmental Concrete Block Wall.

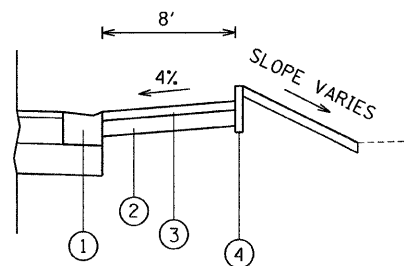
RETAINING WALL
SECTION, DETAILS & B.O.M.

ILLINOIS ROUTE 83
F.A.P. ROUTE 866
LAKE COUNTY
Sta. 407+50 to Sta. 454+96.21

DATE: 1/30/09
GRAEF, ANHALT, SCHLOEMER & ASSOCIATES INC
CHICAGO ILLINOIS

F.A. ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	*	LAKE	554	317
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
*(L-2(LW,R)6,6A & 6 EXT) WRS-1				

MAILBOX TURNOUT WITH CURB AND GUTTER DETAIL

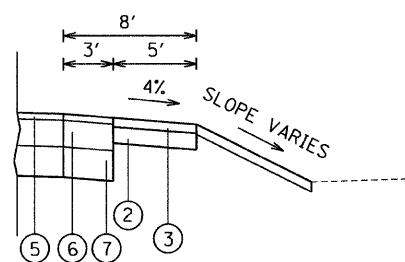


- ① COMBINATION CURB AND GUTTER, TYPE B-6.24
- ② BITUMINOUS BASE COURSE, 6" (PE) OR BITUMINOUS BASE COURSE, 8" (CE)
- ③ INCIDENTAL BITUMINOUS SURFACING, 2"
- ④ CONCRETE CURB TYPE B
- ⑤ BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE MIX "D", N70, 1 1/2"
- ⑥ BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19.0, N70, 1 1/2"
- ⑦ AGGREGATE SUBGRADE, 12"

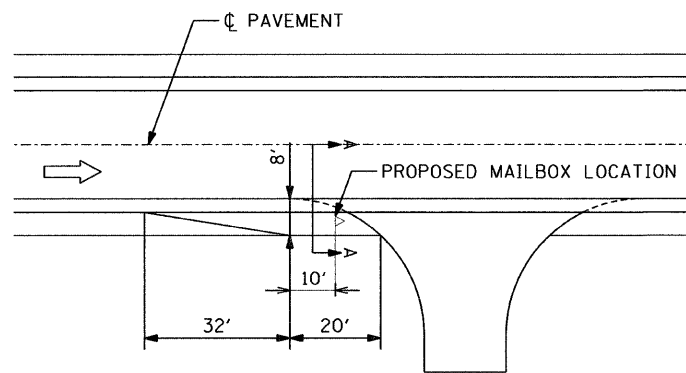
PAID AS BITUMINOUS SHOULDER, 13"

SECTION A-A

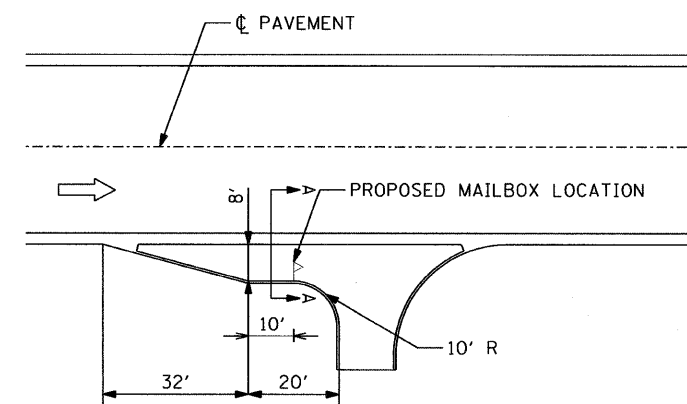
MAILBOX TURNOUT DETAIL



SECTION B-B

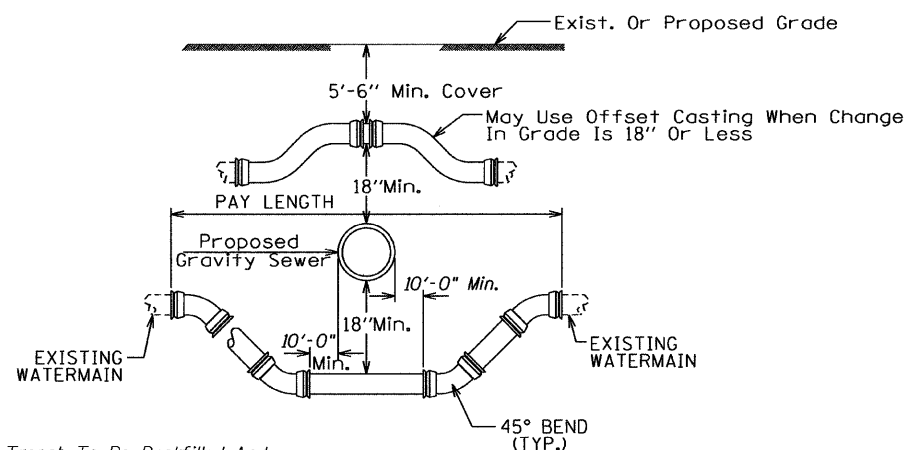


MAILBOX ON NEAR SIDE OF ENTRANCE, SHOULDER SECTION



MAILBOX ON NEAR SIDE OF ENTRANCE, CURB AND GUTTER SECTION

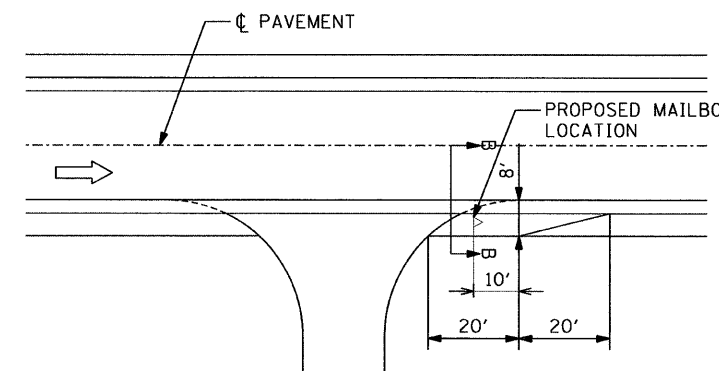
WATERMAIN ADJUSTMENT DETAIL



Trench To Be Backfilled And Compacted As Outlined In The Specifications Under "Trench Backfill".

All Fittings Will Be Mechanical Joints With Retainer Glands.

Proposed Sanitary Sewer To Be Constructed Of Ductile Iron Pipe Class 52 And Shall Extend A Minimum Of 10'-0" Either Side Of The Adjusted Watermain And Paid As Storm Sewer.



MAILBOX ON FAR SIDE OF ENTRANCE, SHOULDER SECTION

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION ILLINOIS ROUTE 83 FROM THE WISCONSIN STATE LINE TO NORTH OF PETITE LAKE ROAD MAILBOX TURNOUT DETAILS
NAME	DATE	
		DATE: 1/30/09 DRAWN BY: TMM CHECKED BY: RJS GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC. CHICAGO, ILLINOIS

F.A. ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	*	LAKE	554	318
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
*(L-2(W,R);6,6A & 6 EXT) WRS-1				

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

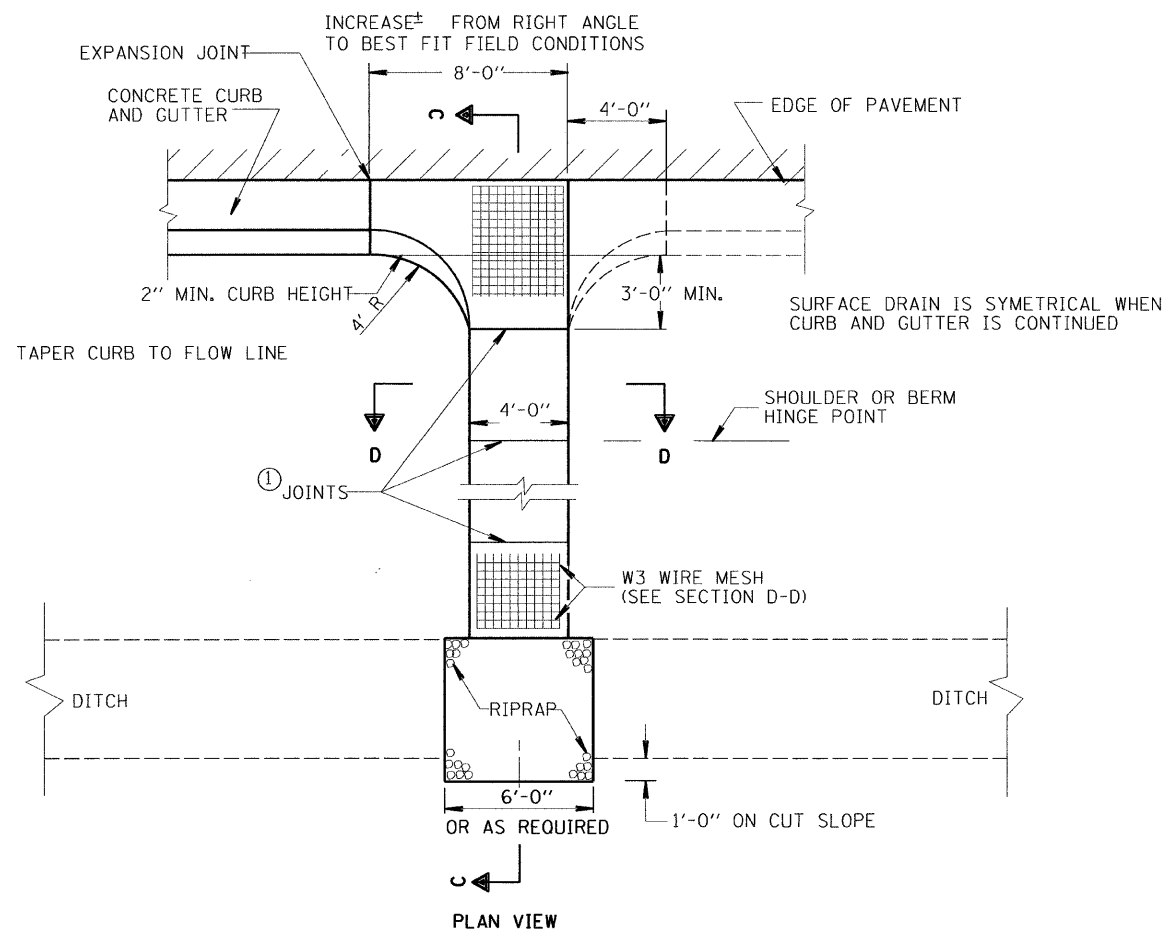
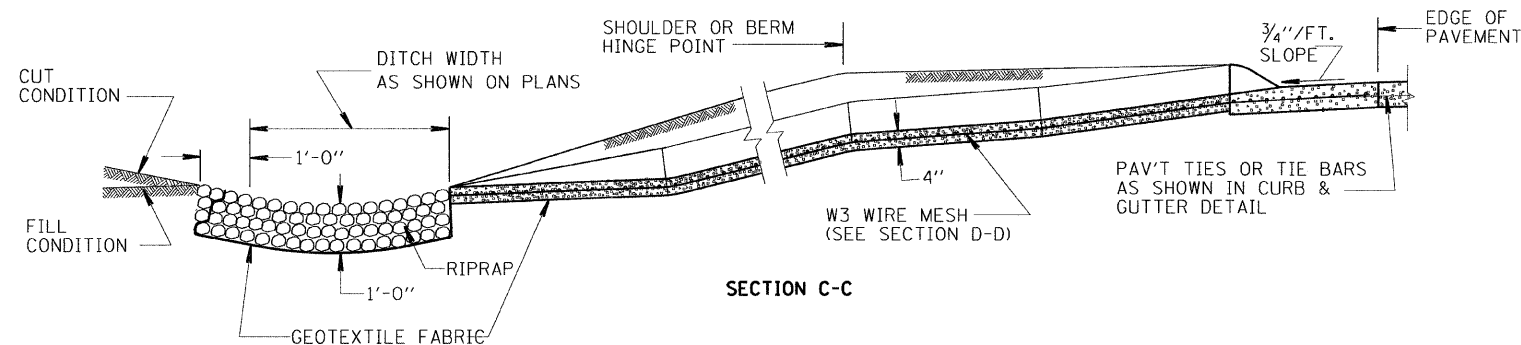
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

JOINTS SHALL BE 1/8 TO 1/4 INCH WIDE BY 1 1/2 INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

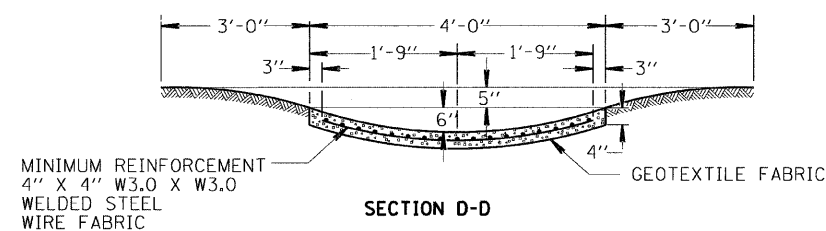
GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

CONCRETE SURFACE DRAINS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR CLASS SI CONCRETE (OUTLET). THE PRICE SHALL INCLUDE FULL COMPENSATION FOR ALL MATERIALS, LABOR, TOOLS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.



CONCRETE SURFACE DRAIN

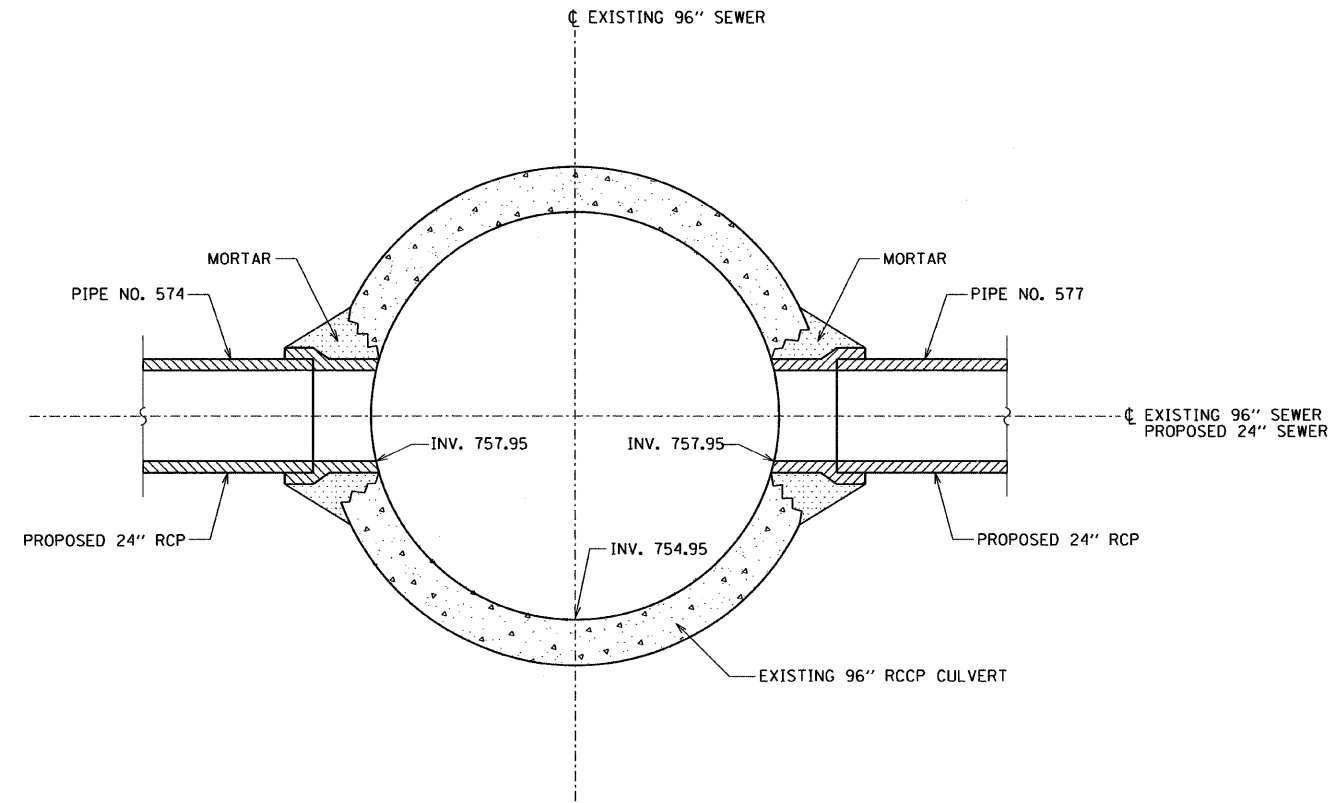


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REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION ILLINOIS ROUTE 83 FROM THE WISCONSIN STATE LINE TO NORTH OF PETITE LAKE ROAD CONCRETE SURFACE DRAIN DETAIL
NAME	DATE	
		DATE: 1/30/09 DRAWN BY: RJS CHECKED BY: RJS GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC. CHICAGO, ILLINOIS

F.A. ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	*	LAKE	554	319
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

*(L-2(W,R);6,6A & 6 EXT) WRS-1



STORM SEWER CONNECTION TO EXISTING SEWER

STA. 435+33

CONSTRUCTION METHODS:

THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.

IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

GENERAL NOTES:

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.

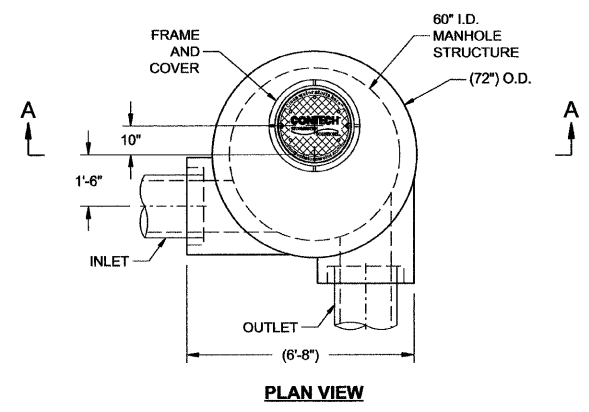
CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

BASIS OF PAYMENT:

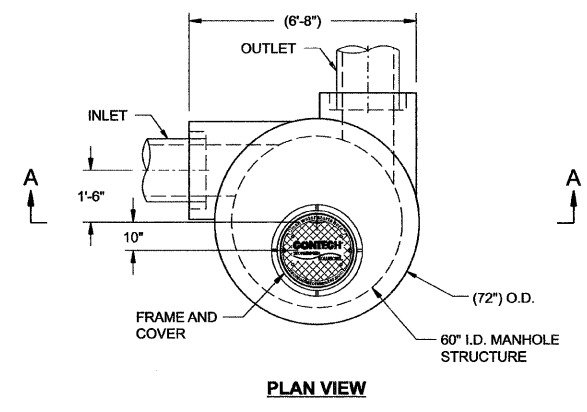
THE COST FOR CONNECTING THE PROPOSED STORM SEWER TO THE EXISTING SEWER WILL NOT BE PAID FOR SEPERATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION ILLINOIS ROUTE 83 FROM THE WISCONSIN STATE LINE TO NORTH OF PETITE LAKE ROAD STORM SEWER CONNECTION TO EXISTING SEWER DETAIL
NAME	DATE	
		DRAWN BY: TMM CHECKED BY: RJS DATE: 1/30/09 GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC. CHICAGO, ILLINOIS

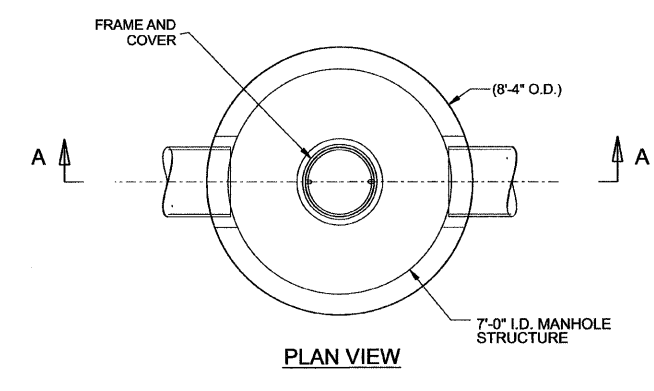
F.A. ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	*	LAKE	554	319A
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
*(L-2[W,R];6,6A & 6 EXT) WRS-1				



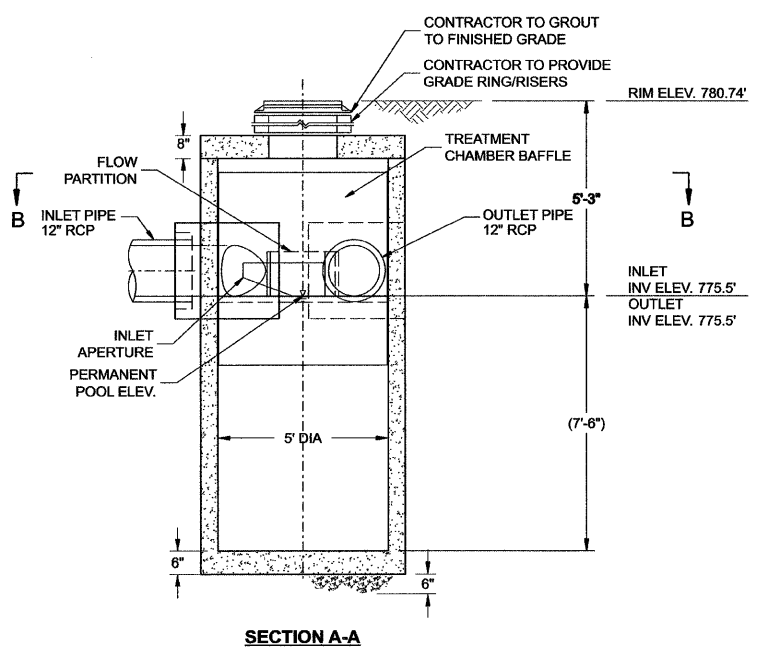
PLAN VIEW



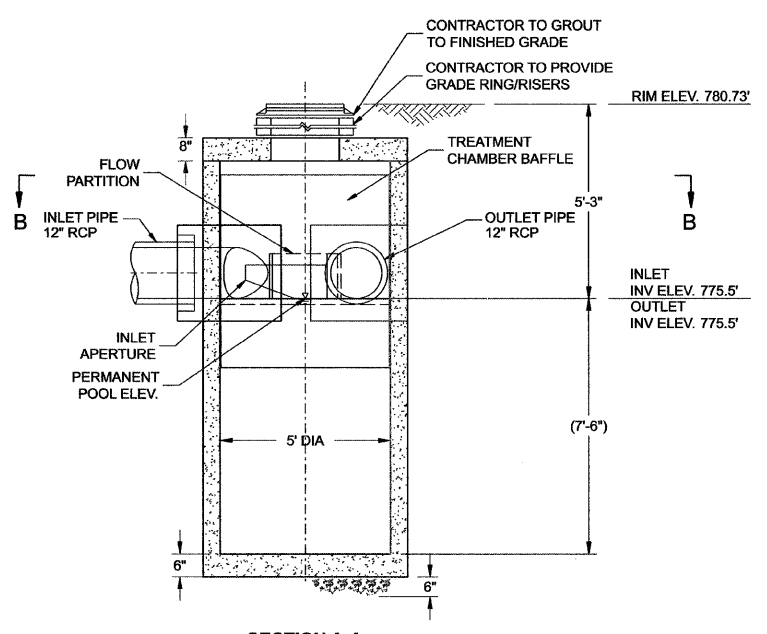
PLAN VIEW



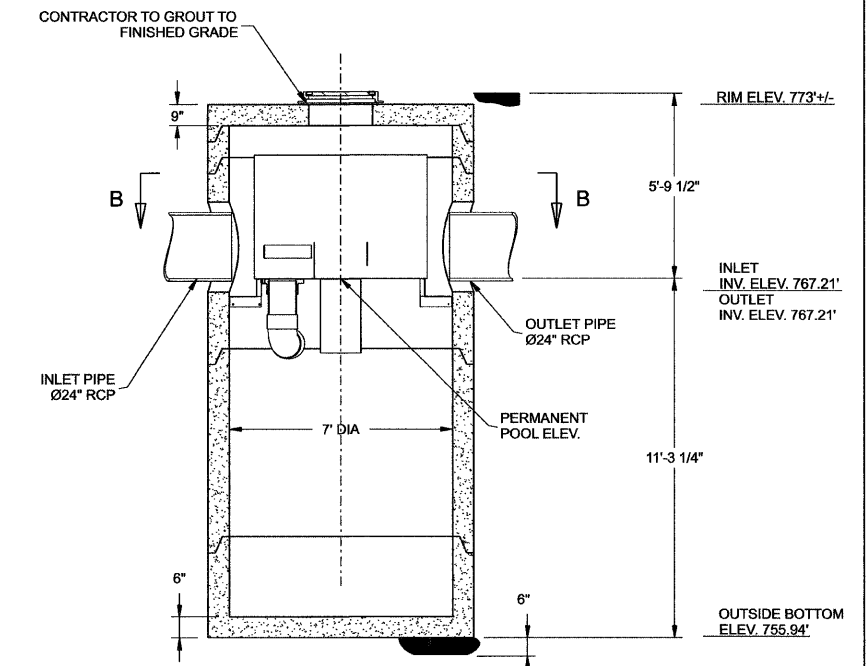
PLAN VIEW



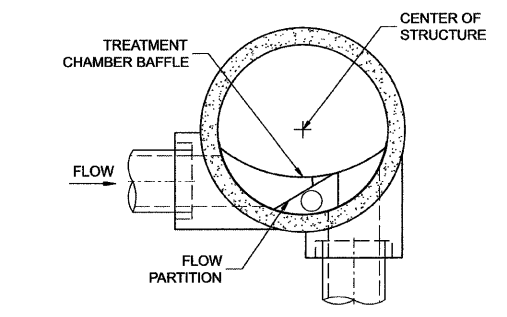
SECTION A-A



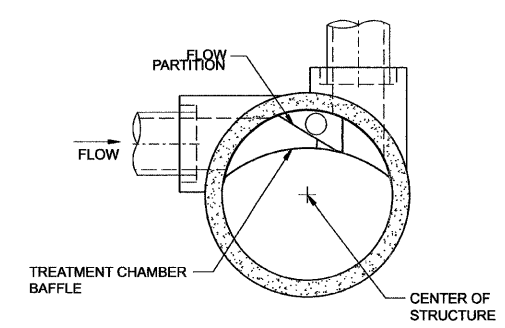
SECTION A-A



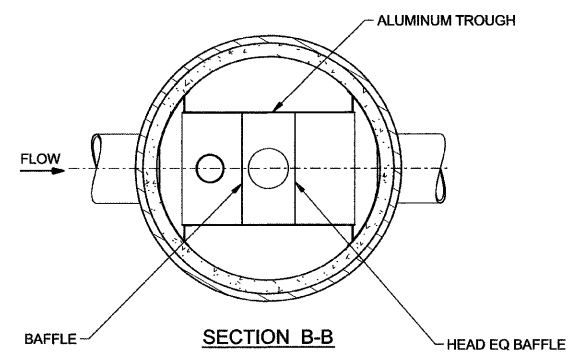
SECTION A-A



SECTION B-B



SECTION B-B



SECTION B-B

STORMWATER TREATMENT UNIT VS50
STRUCTURE NO. 253

STRUCTURE TO BE VORTSENTRY MODEL VS50 BY CONTECH STORMWATER SOLUTIONS, OR APPROVED EQUAL

WATER QUALITY FLOW RATE: 1.1 CFS
MINIMUM SEDIMENT STORAGE: 2.2 CU. YD.
REMOVAL EFFICIENCY: 80% OF TSS (110 MICRON AVG PARTICLE SIZE)

REFER TO THE SPECIAL PROVISIONS FOR ADDITIONAL PERFORMANCE REQUIREMENTS

STORMWATER TREATMENT UNIT VS50
STRUCTURE NO. 258

STRUCTURE TO BE VORTSENTRY MODEL VS50 BY CONTECH STORMWATER SOLUTIONS, OR APPROVED EQUAL

WATER QUALITY FLOW RATE: 1.1 CFS
MINIMUM SEDIMENT STORAGE: 2.2 CU. YD.
REMOVAL EFFICIENCY: 80% OF TSS (110 MICRON AVG PARTICLE SIZE)

REFER TO THE SPECIAL PROVISIONS FOR ADDITIONAL PERFORMANCE REQUIREMENTS

STORMWATER TREATMENT UNIT VS50
STRUCTURE NO. 253

STRUCTURE TO BE VORTSENTRY HS MODEL VS50 BY CONTECH STORMWATER SOLUTIONS, OR APPROVED EQUAL

WATER QUALITY FLOW RATE: 5.6 CFS
MINIMUM SEDIMENT STORAGE: 2.8 CU. YD.
REMOVAL EFFICIENCY: 80% OF TSS (240 MICRON AVG PARTICLE SIZE)

REFER TO THE SPECIAL PROVISIONS FOR ADDITIONAL PERFORMANCE REQUIREMENTS

MATERIALS LIST - PROVIDED BY CONTECH OR APPROVED MANUFACTURER

COUNT	DESCRIPTION	INSTALLED BY
1	INTERNAL ALUM. COMPONENTS	SUPPLIER
1	SEALANT FOR JOINTS	CONTRACTOR
1	Ø24" x 4" FRAME AND COVER	CONTRACTOR

SUPPLIER GENERAL NOTES

- CONTECH OR OTHER APPROVED SUPPLIER TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- DIMENSIONS MARKED WITH () ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
- CONTRACTOR TO PROVIDE FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT.
- STORMWATER TREATMENT UNITS SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
- STRUCTURE AND CASTINGS SHALL MEET AASHTO H20 LOAD RATING.

SUPPLIER INSTALLATION NOTES

- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY THE ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STORMWATER TREATMENT UNIT STRUCTURES (LIFTING CLUTCHES PROVIDED).
- CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
- CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.

STRUCTURE WEIGHT

APPROXIMATE HEAVIEST PICK = 13,000 LBS (VS50 UNITS)
15,000 LBS (VSHS84 UNIT)

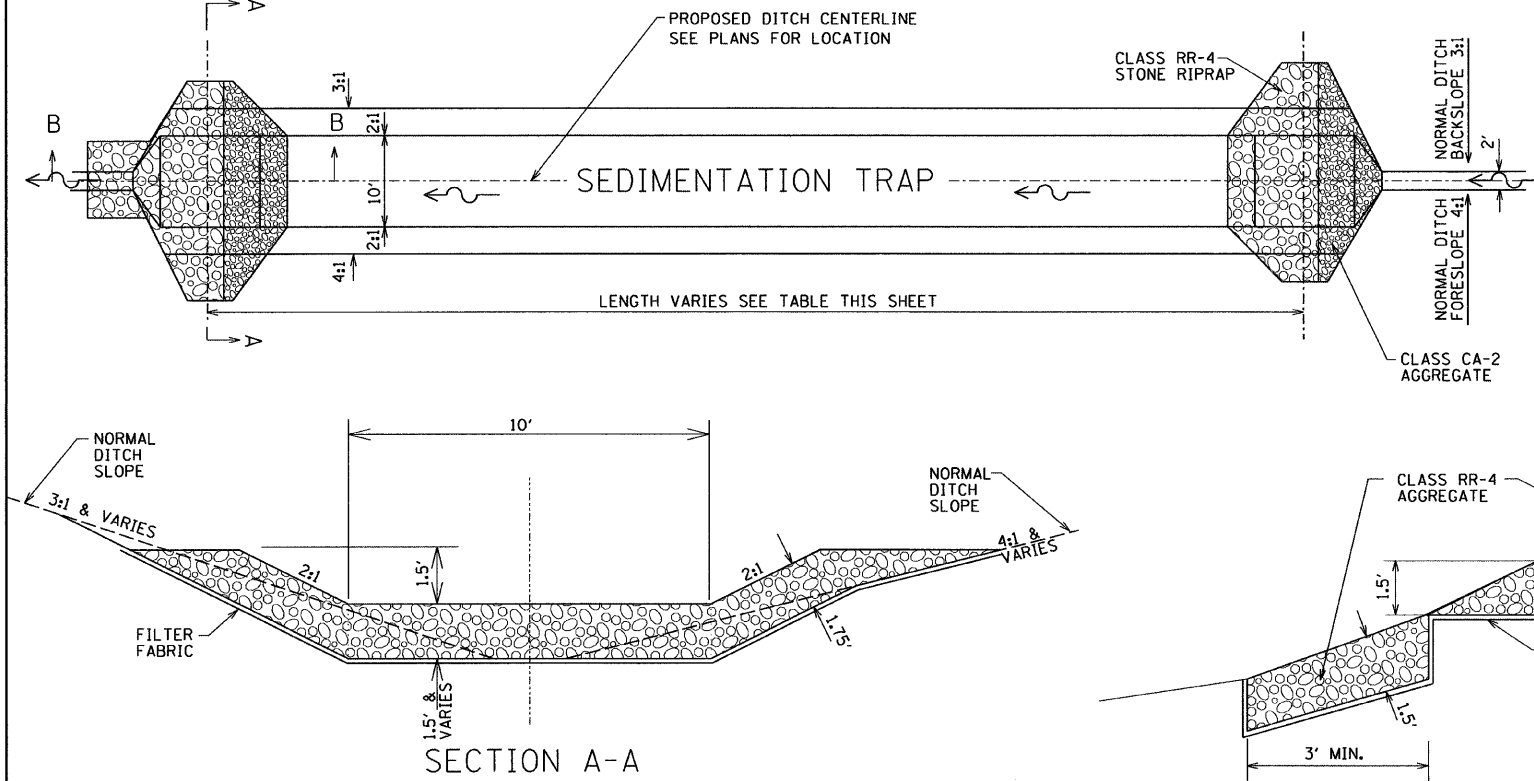
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION FROM THE WISCONSIN STATE LINE TO NORTH OF PETITE LAKE ROAD STORM WATER TREATMENT UNIT DETAILS DATE: 1/30/09
NAME	DATE	
		DRAWN BY: TMM CHECKED BY: RJS



GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC.
CHICAGO, ILLINOIS

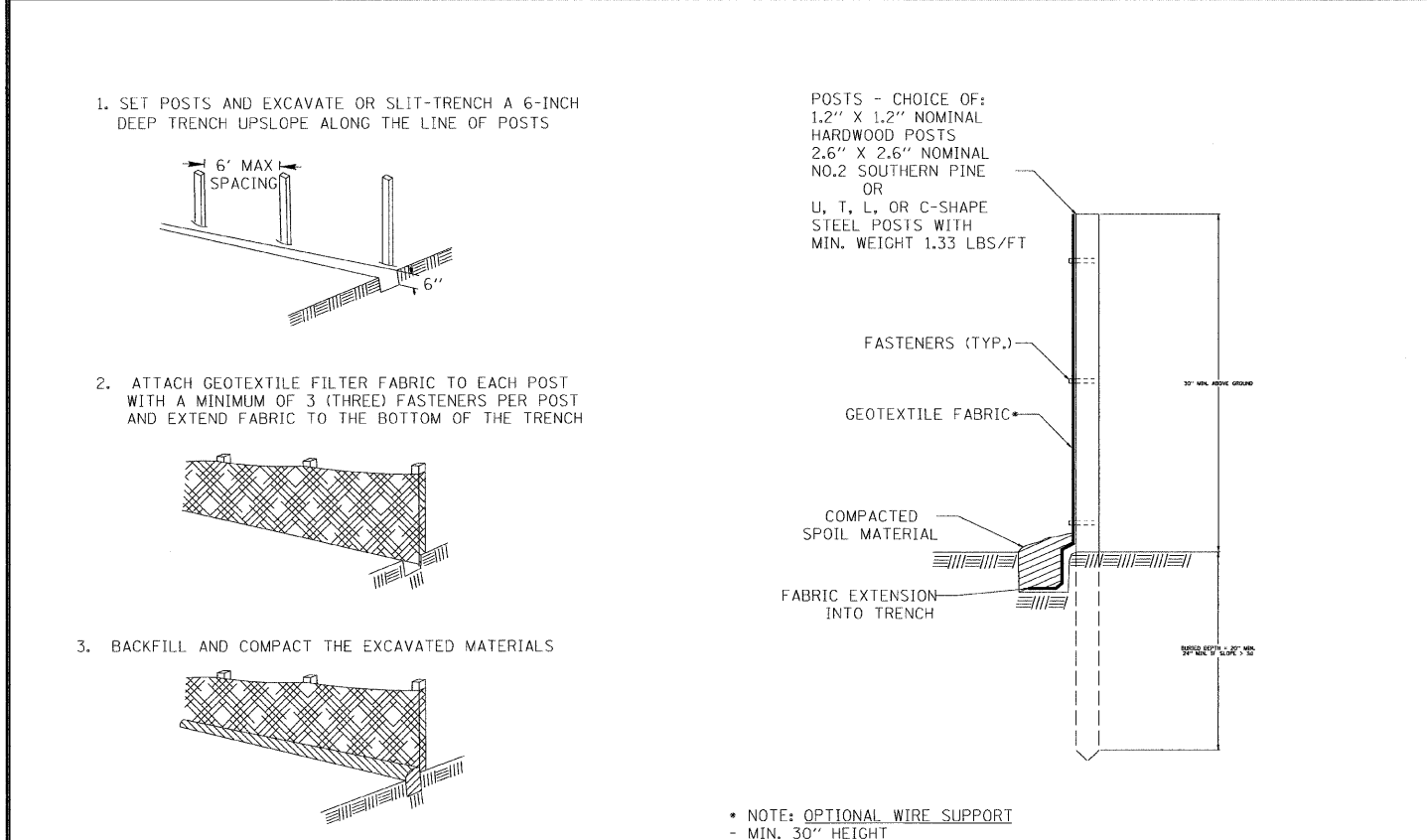
F.A. ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	*	LAKE	554	320
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

* (L-2(W,R);6,6A & 6 EXT) WRS-1

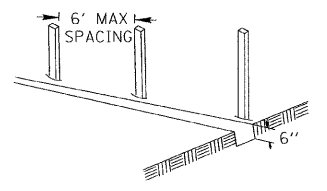


THE UNIT WEIGHT USED TO CALCULATE RR-4 STONE IS 110 PDS/CU FT.
THE UNIT WEIGHT USED TO CALCULATE CA-2 AGGREGATE IS 125 PDS/CU FT..

SEDIMENT TRAP NO.	LOCATION FROM	LOCATION TO	LENGTH	WIDTH	DEPTH	
1	196+68	197+68	LT	100	10	1.5
2A	212+50	213+50	LT	100	10	1.5
2B	213+50	214+50	LT	100	10	1.5
3A	212+50	213+50	RT	100	10	1.5
3B	213+50	214+50	RT	100	10	1.5
4	216+50	217+50	LT	100	10	1.5
5	216+50	217+10	RT	60	10	1.5
6A	223+00	224+00	RT	100	10	1.5
6B	228+50	229+50	RT	100	10	1.5
6C	229+50	230+50	RT	100	10	1.5
7A	224+00	225+00	LT	100	10	1.5
7B	228+00	229+00	LT	100	10	1.5
7C	229+00	230+00	LT	100	10	1.5
8	232+00	233+25	LT	125	10	1.5
9	233+25	234+25	RT	100	10	1.5
10	238+90	239+50	LT	60	10	1.5
11	240+33	240+85	LT	52	10	1.5
12	262+50	263+50	LT	100	10	1.5
13	266+25	267+25	LT	100	10	1.5
14A	274+50	275+50	LT	100	10	1.5
14B	275+50	276+50	LT	100	10	1.5
15A	277+00	278+00	LT	100	10	1.5
15B	278+00	279+00	LT	100	10	1.5
16	287+30	288+10	LT	80	10	1.5
17	306+00	307+00	RT	100	10	1.5
18A	307+50	308+50	RT	100	10	1.5
18B	308+50	309+50	RT	100	10	1.5
19	483+10	483+50	RT	40	10	1.5

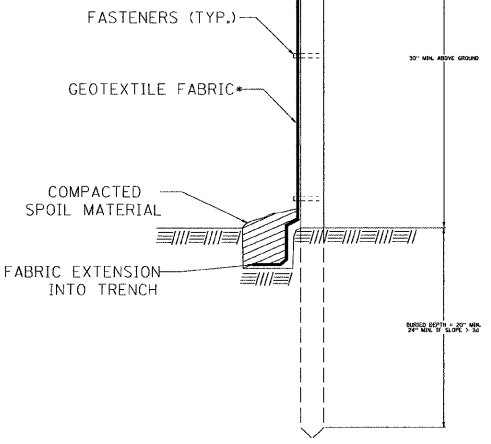
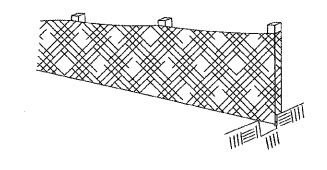


1. SET POSTS AND EXCAVATE OR SLIT-TRENCH A 6-INCH DEEP TRENCH UPSLOPE ALONG THE LINE OF POSTS

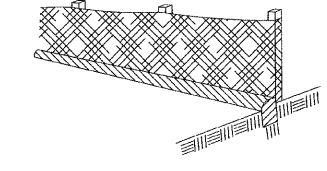


POSTS - CHOICE OF:
1.2" X 1.2" NOMINAL HARDWOOD POSTS
2.6" X 2.6" NOMINAL NO.2 SOUTHERN PINE OR
U, T, L, OR C-SHAPE STEEL POSTS WITH MIN. WEIGHT 1.33 LBS/FT

2. ATTACH GEOTEXTILE FILTER FABRIC TO EACH POST WITH A MINIMUM OF 3 (THREE) FASTENERS PER POST AND EXTEND FABRIC TO THE BOTTOM OF THE TRENCH



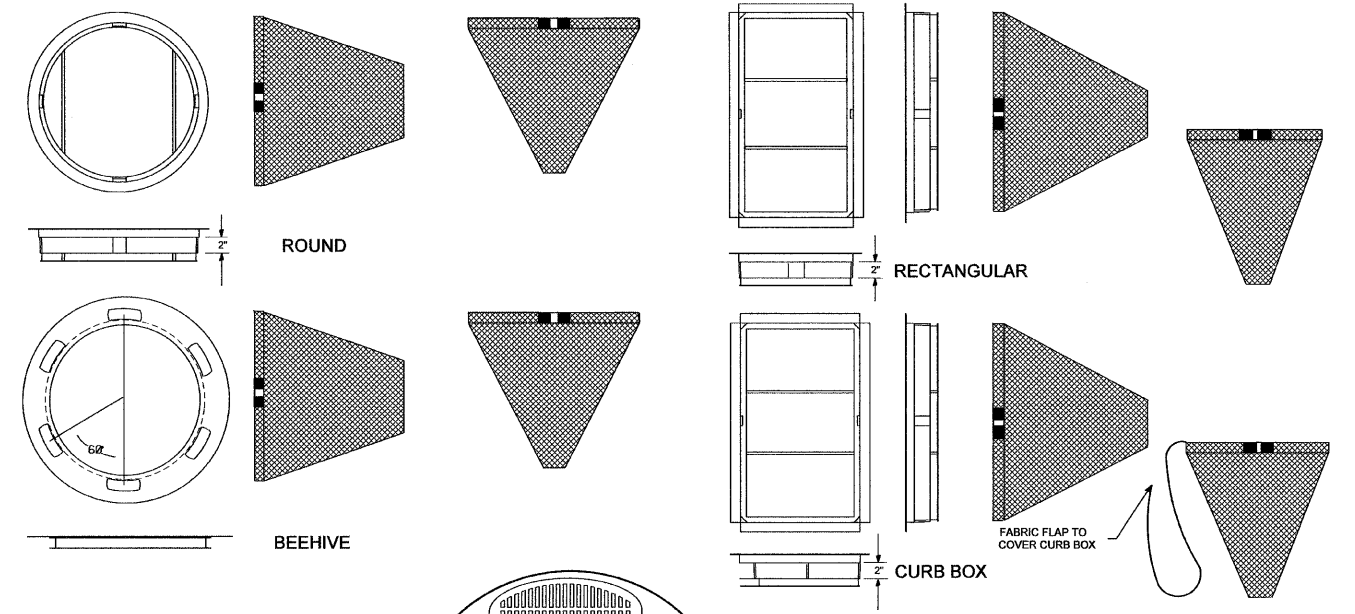
3. BACKFILL AND COMPACT THE EXCAVATED MATERIALS



* NOTE: OPTIONAL WIRE SUPPORT
- MIN. 30" HEIGHT
- MIN. 14 GAUGE WIRE
- MIN. 6 HORIZ. WIRES
- MIN. 6" VERTICAL SPACING

SCALE 1" = 1'

Requirements	Test Methods	Unsupported Silt Fence		
		Wire Backed Supported Silt Fence ^a	Geotextile Elongation >=80% ^b	Geotextile Elongation <50% ^b
Maximum Post Spacing		4 feet	4 feet	6 feet
Grab Strength	ASTM D 4632			
Machine direction		90 lbs	124 lbs	124 lbs
X-Machine direction		90 lbs	100 lbs	100 lbs
Permittivity	ASTM D 4491	0.05 sec ⁻¹	0.05 sec ⁻¹	0.05 sec ⁻¹
Apparent Opening Size	ASTM D 4751	0.024in maximum average roll value		
Ultraviolet stability (retained strength)	ASTM D 4355	70% after 500 hours of exposure		



INLET AND PIPE PROTECTION

DESCRIPTION: This work shall consist of furnishing, installation, and removal of a drainage structure inlet filter assembly, consisting of a frame and filter bag, to collect sediment in surface storm water runoff at locations shown on the plans or as directed by the Engineer.

The Contractor shall inspect the work site and review the plans to determine the number and dimensions of the various types of drainage structure frames (circular and rectangular) into which the inlet filters will be installed prior to ordering materials.

The drainage structure inlet filter assembly shall be installed under the grate on the lip of the drainage structure frame with the fabric bag hanging down into the drainage structure.

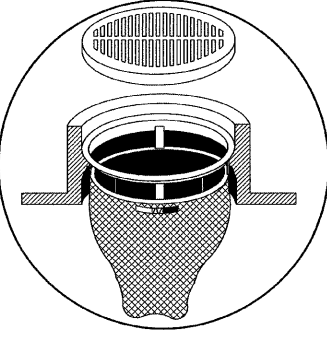
The drainage structure inlet filter assembly shall remain in place until final removal of the assembly is directed by the Engineer. The drainage structure inlet filter assembly shall remain the property of the Contractor.

Final removal of the assembly shall include the disposal of debris or silt that has accumulated in the filter bag at the time of final removal. Periodic cleaning of the filter is paid for separately.

MATERIALS: The drainage structure inlet shall be the (INLET AND PIPE PROTECTION), as furnished by Marathon Materials, Inc. 25523 W. Shultz St., Plainfield, IL 60544, (800) 983-9493, or approved equal. A detailed drawing in the plans depicts the drainage structure inlet filter assembly.

The drainage structure inlet filter assembly shall consist of a steel frame with a replaceable geotextile fabric bag attached with a steel band with locking cap that is suspended from the frame. A clean used bag and used steel frame in good condition, meeting the approval of the Engineer, may be substituted for new materials.

The drainage structure inlet filter assembly frame shall be rigid steel meeting the requirements of ASTM-A36. The frame shall include an overflow feature that is welded to the frame's ring. The overflow feature shall be designed to allow full flow of water into the structure if the filter bag is filled with sediment. The dimensions of the assembly frame shall allow the drainage structure grate to fit into the inlet filter assembly frame opening. The assembly frame shall rest on the inside lip of the drainage structure frame for the full variety of existing and proposed drainage structure frames that are present on this contract.



DRAINAGE STRUCTURE INLET FILTER

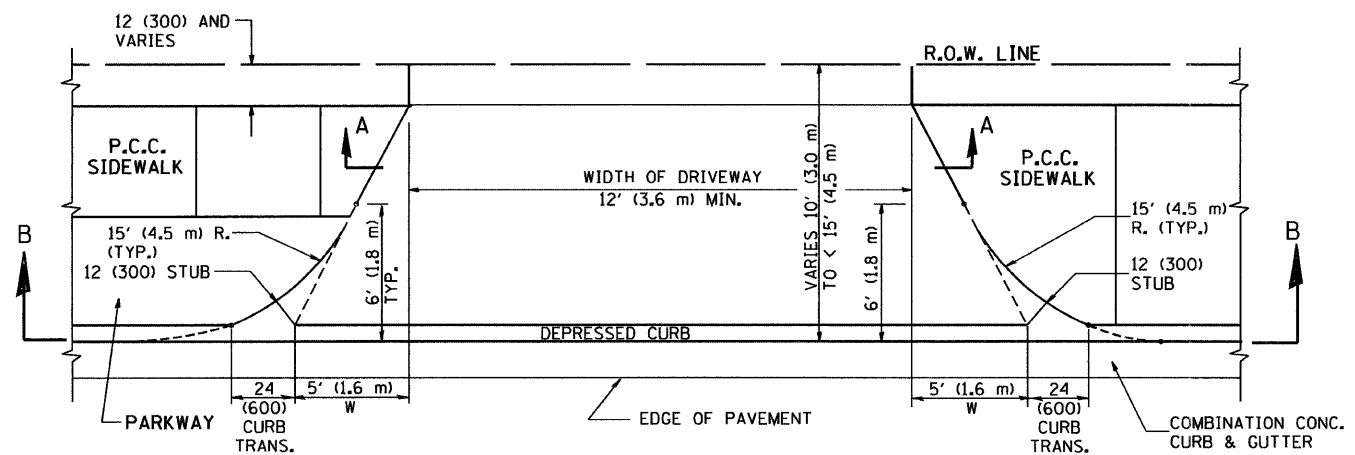
The drainage structure inlet filter assembly bag shall be constructed of polypropylene geotextile fabric with a minimum weight of 4 ounces per square yard, minimum flow rate of 140 gallons per minute per square foot, and designed for minimum silt and debris capacity of 2 cubic feet. The filter bag shall be reinforced with an outer layer of polyester mesh fabric with a minimum weight of 4 ounces per square yard. The filter bag shall be suspended from the steel frame with a stainless steel band and locking cap. The inlet filter assembly frame shall not cause the drainage structure grate to extend higher than 1/8-inch above the drainage structure frame.

BASIS OF PAYMENT: The work will be paid for at the contract unit price per EACH for INLET FILTER, which price shall include all cost of labor, materials, equipment, and incidental items necessary to perform the work.

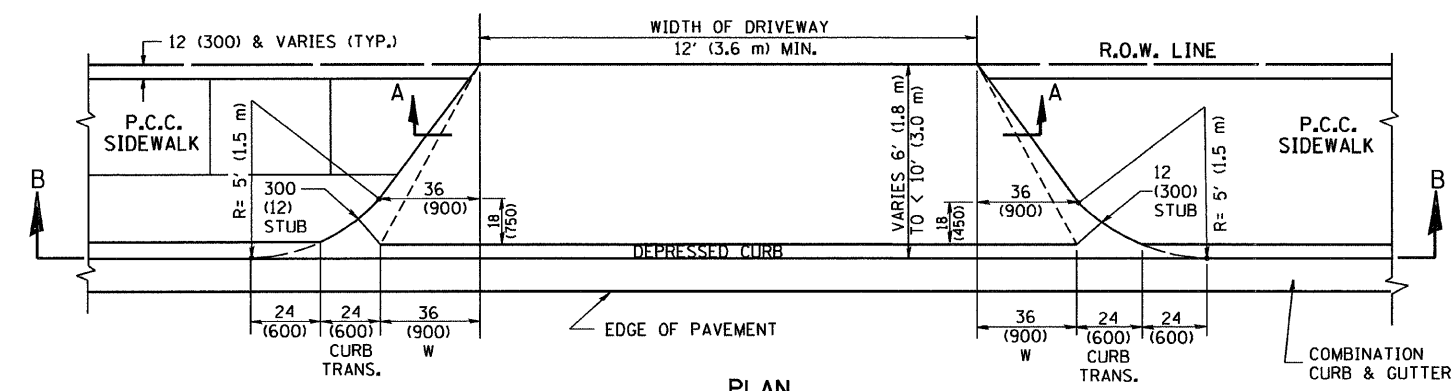
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 83
FROM THE WISCONSIN STATE LINE TO
NORTH OF PETITE LAKE ROAD
EROSION CONTROL & SEDIMENTATION TRAP DETAILS
DATE: 1/30/09
DRAWN BY: TMM
CHECKED BY: RJS

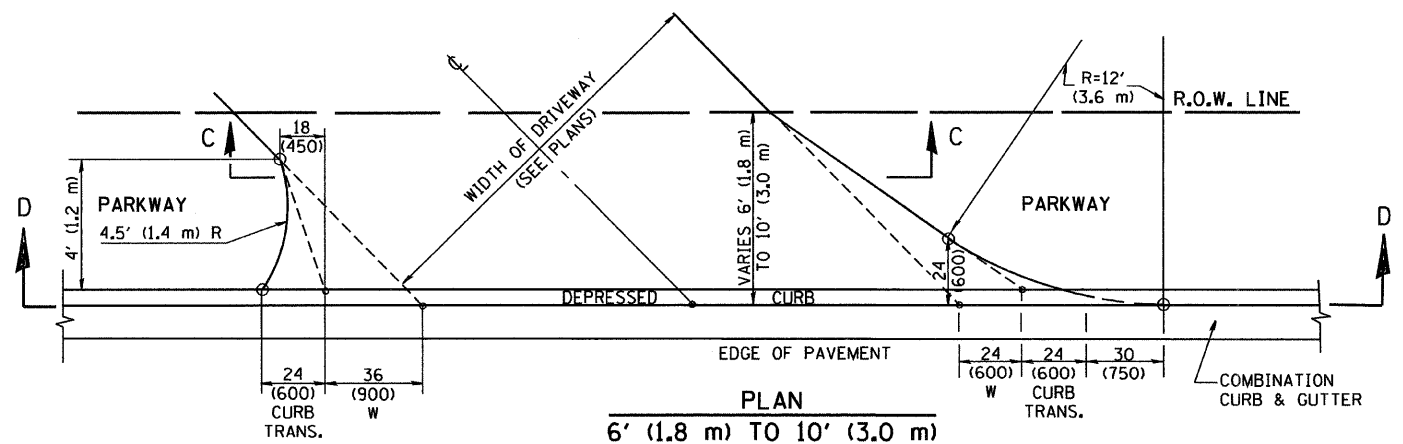
GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC.
CHICAGO, ILLINOIS



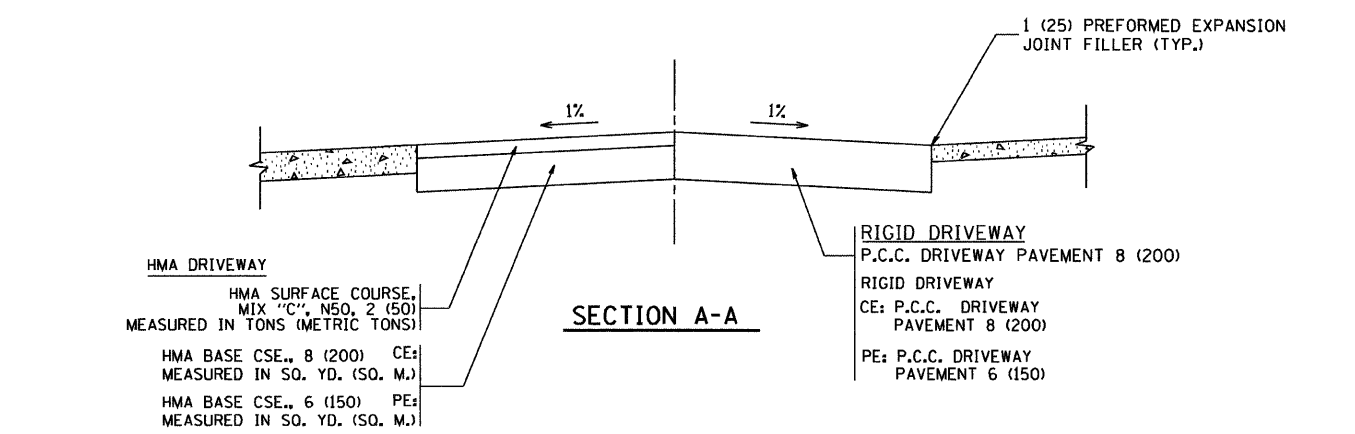
PLAN
10' (3.0 m) TO < 15' (4.5 m)



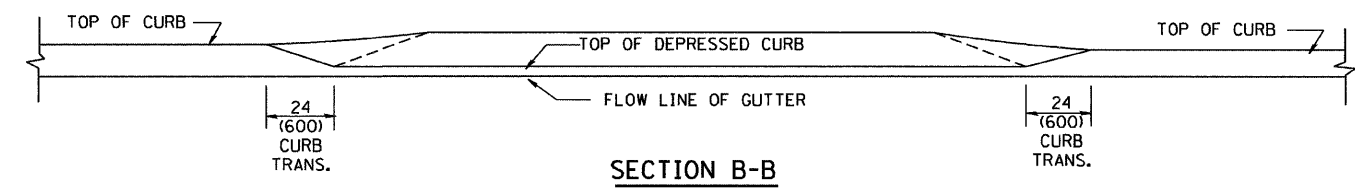
PLAN
6' (1.8 m) TO < 10' (3.0 m)



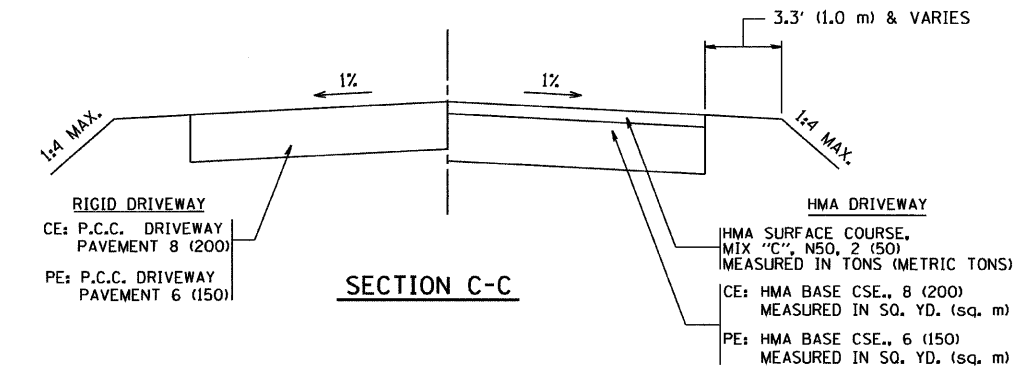
PLAN
6' (1.8 m) TO 10' (3.0 m)



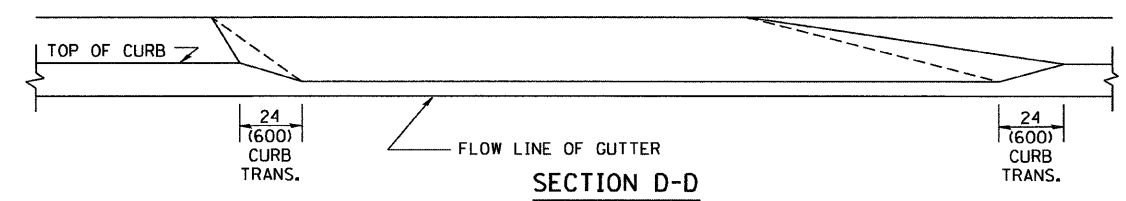
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

GENERAL NOTES

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATION 10 IN THE PERMIT HANDBOOK. WHERE SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED WITH RIGID PAVEMENT. WHERE NO SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED IN KIND. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

WHEN THE DISTANCE BETWEEN R.O.W. AND THE BACK OF CURB IS EQUAL TO OR LESS THAN 8' (2.4 m), THE P.C.C. SIDEWALK SHALL EXTEND TO THE BACK OF CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

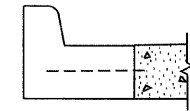
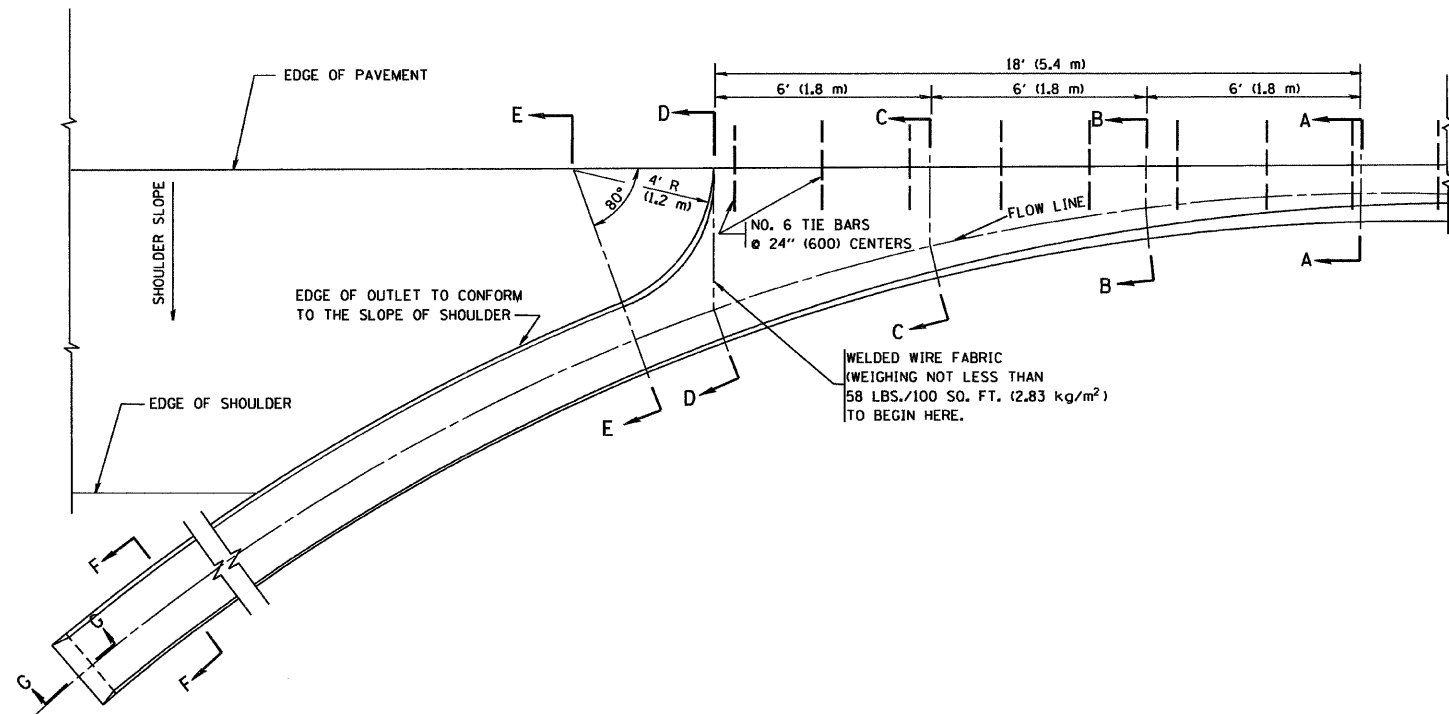
THE 1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

"W" VARIES FROM 36 (900) TO 5' (1.5 m) PROPORTIONAL TO THE LENGTH (L), FROM 6' (1.8 m) TO 10' (3 m).

* (L-2 [W,R]; 6, 6A & 6 EXT) WRS-1

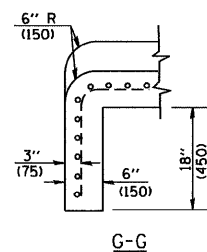
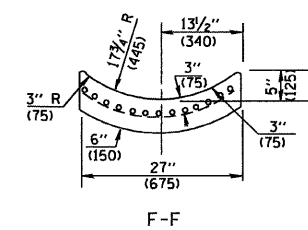
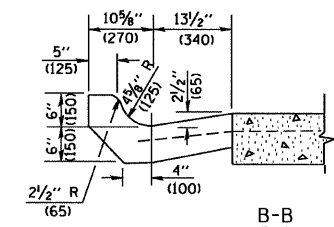
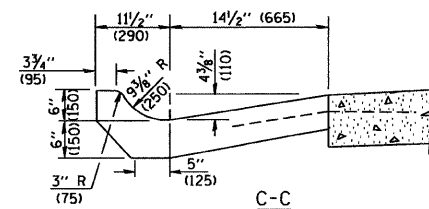
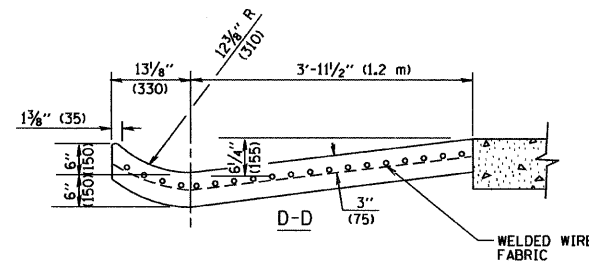
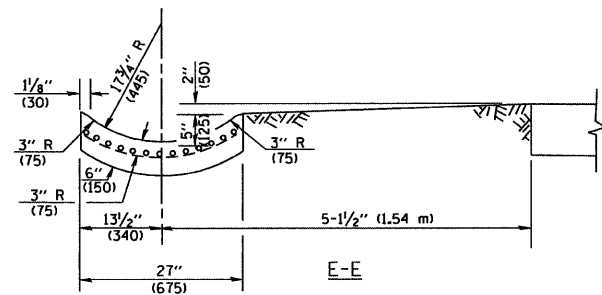
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED.

FILE NAME - W:\diststd\22x34\bd02.dgn	USER NAME - gagiznabt	DESIGNED - R. SHAH	REVISED - T. HOLTZ 04-08-97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DRIVEWAY DETAILS		F.A. - RTE. 866	SECTION - *	COUNTY - LAKE	TOTAL SHEETS - 554	SHEET NO. - 322
	PLOT SCALE = 58.0000' / IN.	DRAWN -	REVISED - M. GOMEZ 04-06-01		DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5 m)		BD400-02 (BD-02)		CONTRACT NO. 62700		
	PLOT DATE = 1/4/2008	CHECKED -	REVISED - P. LaFLEUR 04-15-03		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			
		DATE - 11-06-95	REVISED - R. BORO 01-01-07								



A-A *

* DIMENSIONS OF THE CURB & GUTTER AT SECTION A-A ARE SHOWN ON STATE STANDARD 606001. FOR DETAILS OF OUTLET FOR CONCRETE CURB & GUTTER, TYPE B-6.24 (B-15.60) SEE STATE STANDARD 606006.



GENERAL NOTES

GUTTER OUTLET SHALL BE TIED TO THE PAVEMENT IN ACCORDANCE WITH DETAILS FOR LONGITUDINAL CONSTRUCTION JOINT SHOWN ON STANDARD 420001.

TIE BARS SHALL BE NO. 20 (NO.6) AT 24\" (600) CENTERS UNLESS OTHERWISE SHOWN.

IF THE AVERAGE GRADE OF PAVEMENT FOR THE DISTANCE FROM SECTION A-A TO D-D EXCEEDS 2%, THIS DISTANCE SHALL BE INCREASED 6\" (1.8 m) FOR EACH 1% INCREASE IN GRADE.

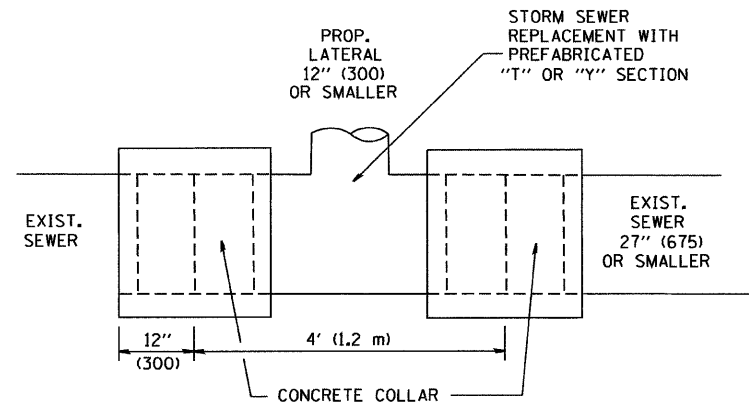
QUANTITIES

FOR SECTION A-A TO E-E AND CURTAIN WALL = 1.25 CU. YDS. (0.96 m³) CLASS S1 CONCRETE (OUTLET) FOR 9\" (225) PAV'T.
1.27 CU. YDS. (0.96 m³) CLASS S1 CONCRETE (OUTLET) FOR 10\" (250) PAV'T.
FOR SECTION F-F = 0.045 CU. YDS. (0.03 m³) CLASS S1 CONCRETE PER FT. (M).

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

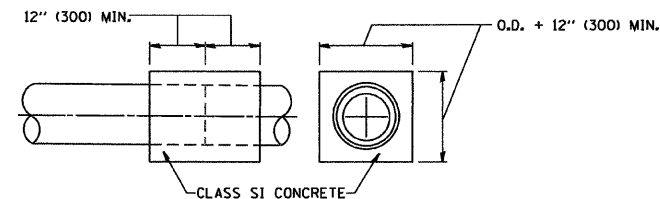
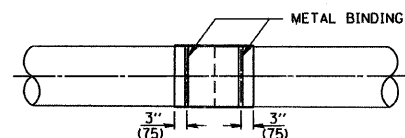
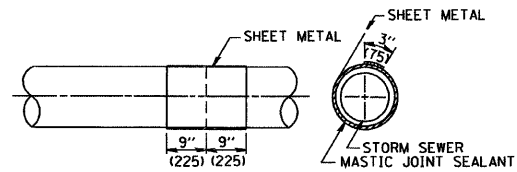
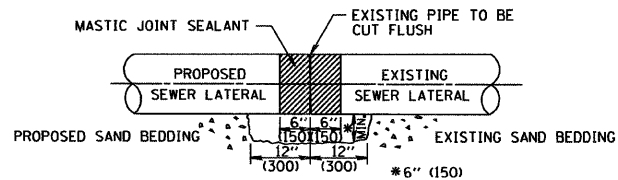
* (L-2 [W,R]; 6, 6A & 6 EXT) WRS-1

FILE NAME = W:\diststd\22x34\bd03.dgn	USER NAME = geg1venobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 09-09-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OUTLET FOR CONCRETE CURB AND GUTER		F.A. RTE. 866	SECTION *	COUNTY LAKE	TOTAL SHEETS 554	SHEET NO. 323	
	PLOT SCALE = 50.0000' / IN.	CHECKED - E. GOMEZ 12-21-00	REVISED - R. SHAH 10-25-94		SCALE: NONE	SHEET NO. 1	OF 1 SHEETS	STA.	TO STA.	CONTRACT NO. 62700		
	PLOT DATE = 1/4/2008	DATE - 08-04-86	REVISED - E. GOMEZ 12-21-00									
			REVISED - -									



DETAIL "A"

LATERAL CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER

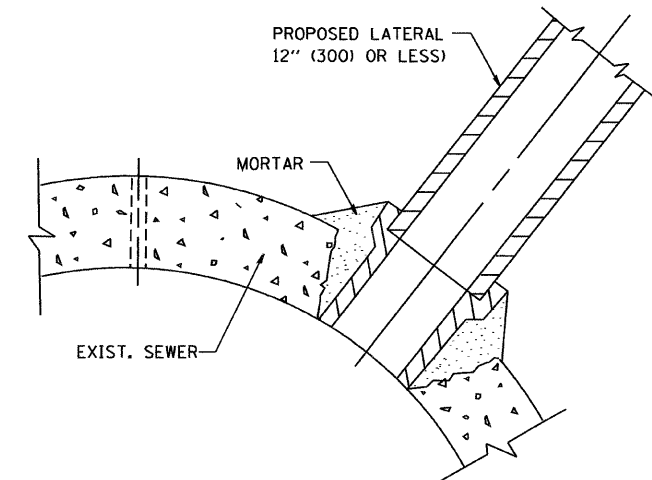


DETAIL "B"

CLASS SI CONCRETE COLLAR

CONSTRUCTION SEQUENCE

- CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT. BRUSH AND CLEAN ALL PIPES.
- APPLY THE MASTIC JOINT SEALANT TO THE FIRST 6" (150) OF EACH PIPE.
- BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 12' x 6' (300 x 150) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
- CUT A PIECE OF SHEET METAL GAGE NO. 19 1.1 (0.0418) 18" (450) WIDE BY THE OUTSIDE CIRCUMFERENCE OF THE PIPE PLUS 3" (75) LONG.
- WRAP THE SHEET METAL AROUND THE PIPES, 9" (225) ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
- LAP THE SHEET METAL AT LEAST 3" (75) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
- PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TIGHTEN.
- WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
- PLACE CLASS SI CONCRETE AROUND THE JOINT.



DETAIL "C"

PROPOSED LATERAL CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER

NOTES

MATERIAL

MATERIAL USED FOR THE TEE OR WYE SECTION SHALL BE COMPATIBLE WITH THE EXISTING STORM SEWER OR THE PROPOSED STORM SEWER.

CONSTRUCTION METHODS

- THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.
- CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:
 - PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE DETAIL "A" AND "B".
 - PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE DETAIL "C".

IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

GENERAL

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.

CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

BASIS OF PAYMENT

TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS, THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.

REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.

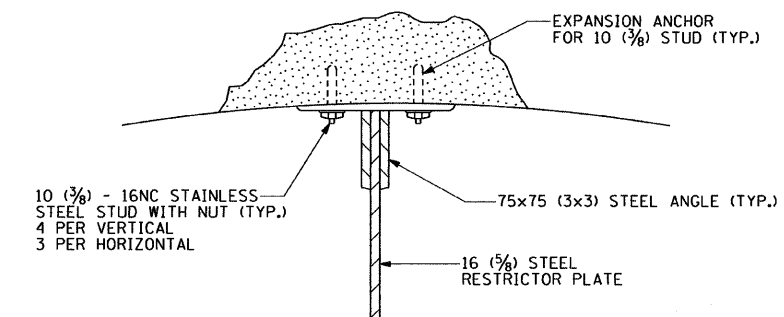
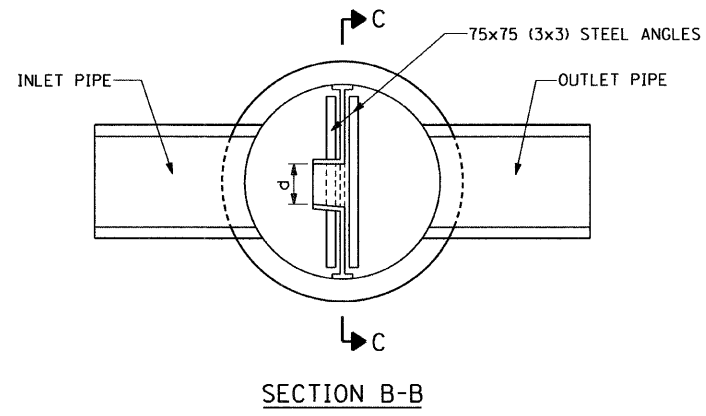
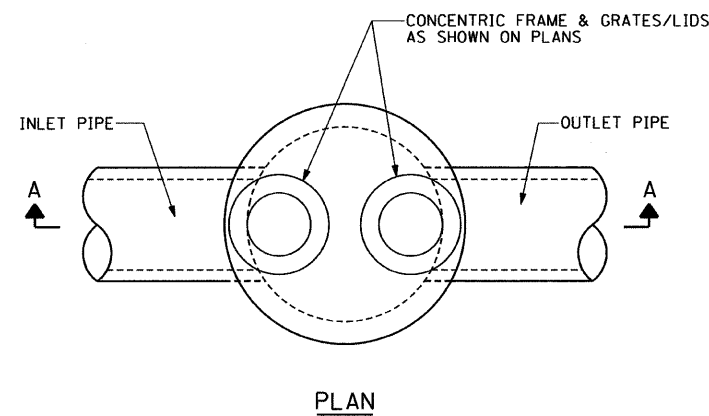
CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

*(I-2 [W,R] ; 6, 6A & 6 EXT) WRS-1

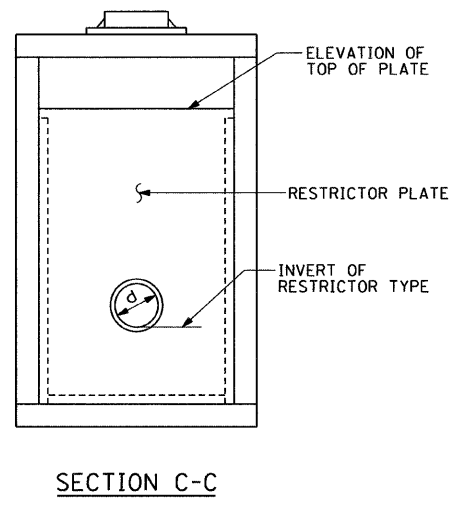
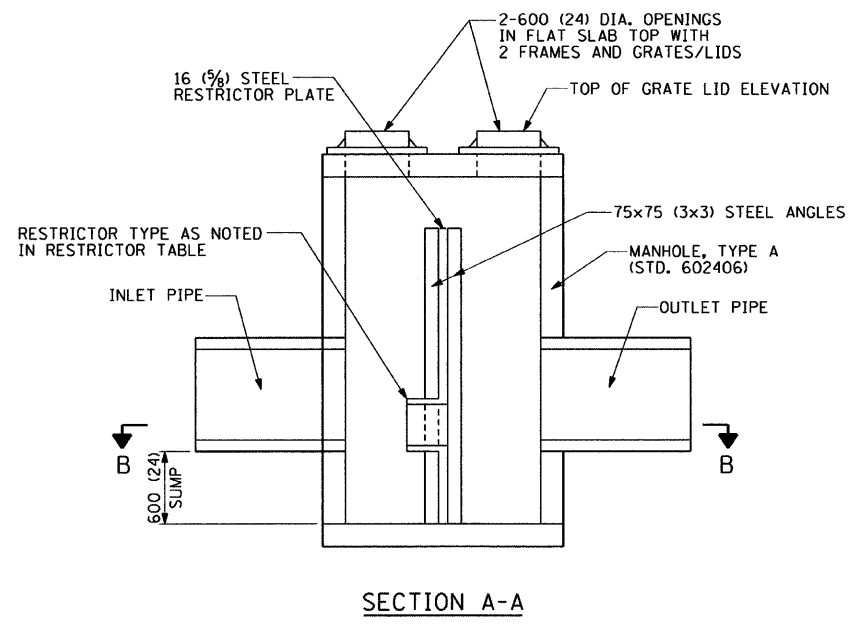
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = M:\distatd\22x34\bd07.dgn	USER NAME = gegl1enobt	DESIGNED - M. DE YONG	REVISED - M. DE YONG 05-08-92	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAIL OF STORM SEWER CONNECTION TO EXISTING SEWER			F.A. RTE. 866	SECTION *	COUNTY LAKE	TOTAL SHEETS 554	SHEET NO. 324
	PLOT SCALE = 50.000' / IN.	DRAWN -	REVISED - R. SHAH 09-09-94		SCALE: NONE	SHEET NO. 1	OF 1 SHEETS	STA.	TO STA.	CONTRACT NO. 62700		
	PLOT DATE = 1/4/2008	CHECKED -	REVISED - R. SHAH 10-25-94		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							
		DATE - 07-25-90	REVISED - R. SHAH 06-12-96									

F.A. ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	*	LAKE	554	325
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
*(L-2[W,R];6,6A & 6 EXT) WRS-1				

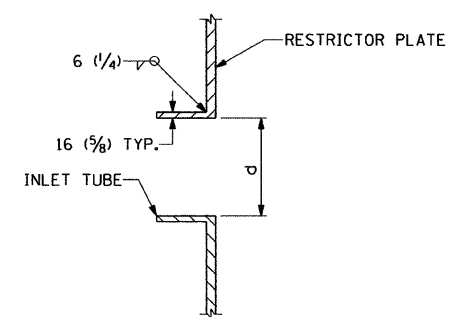


ANGLE FASTENER DETAIL



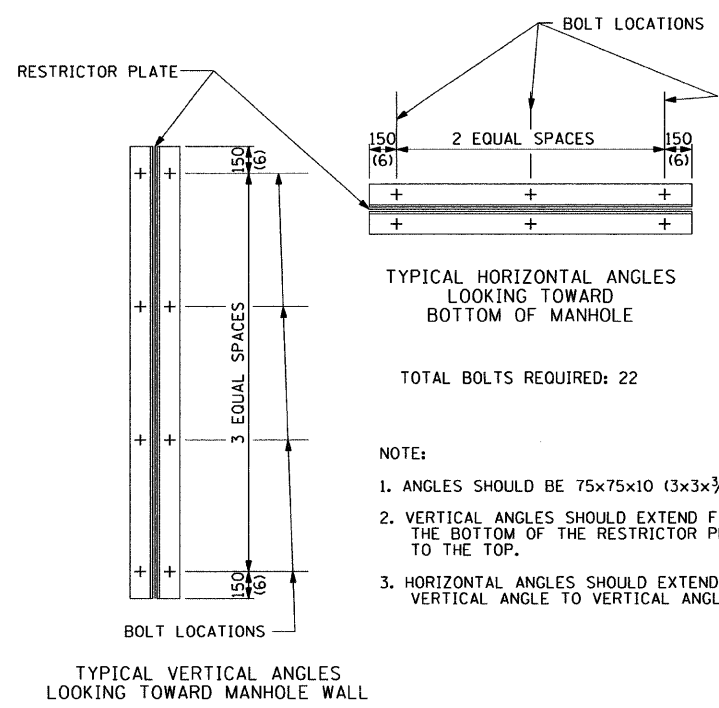
NOTES:

1. ALL STEEL ANGLES AND PLATES TO BE GALVANIZED AFTER FABRICATION.
2. ALL RESTRICTOR PLATES, ANGLES AND HARDWARE TO BE INCLUDED IN THE COST OF THE MANHOLE.
3. BASIS OF PAYMENT: "MANHOLES, TYPE A, 1.8m (6FT.)-DIAMETER, TYPE 1 FRAME, CLOSED LID, RESTRICTOR PLATE" EACH



INLET TUBE DETAIL

ROADWAY	STATION	MANHOLE DIA (ft.)	FRAME & GRATE	RESTRICTOR TYPE	INSIDE RESTRICTOR TYPE DIAMETER (in.)	INVERT OF RESTRICTOR TYPE	ELEVATION OF TOP OF PLATE OVERFLOW	STRUCTURE NUMBER
IL RTE 83	297+28.78	6	TY 1 FR, CL	2	5	782.88	785.04	313
IL RTE 83	297+36.72	6	TY 1 FR, CL	2	6	782.97	784.97	314
IL RTE 83	318+03.30	7	TY 1 FR, CL	2	14	790.25	792.74	371
IL RTE 173	27+70.00	6	TY 1 FR, CL	2	12	785.42	788.92	853
IL RTE 83	405+19.50	6	TY 1 FR, CL	2	14	784.28	788.90	484
NORTH AVE	36+70.00	6	TY 1 FR, CL	2	10	795.88	799.95	726

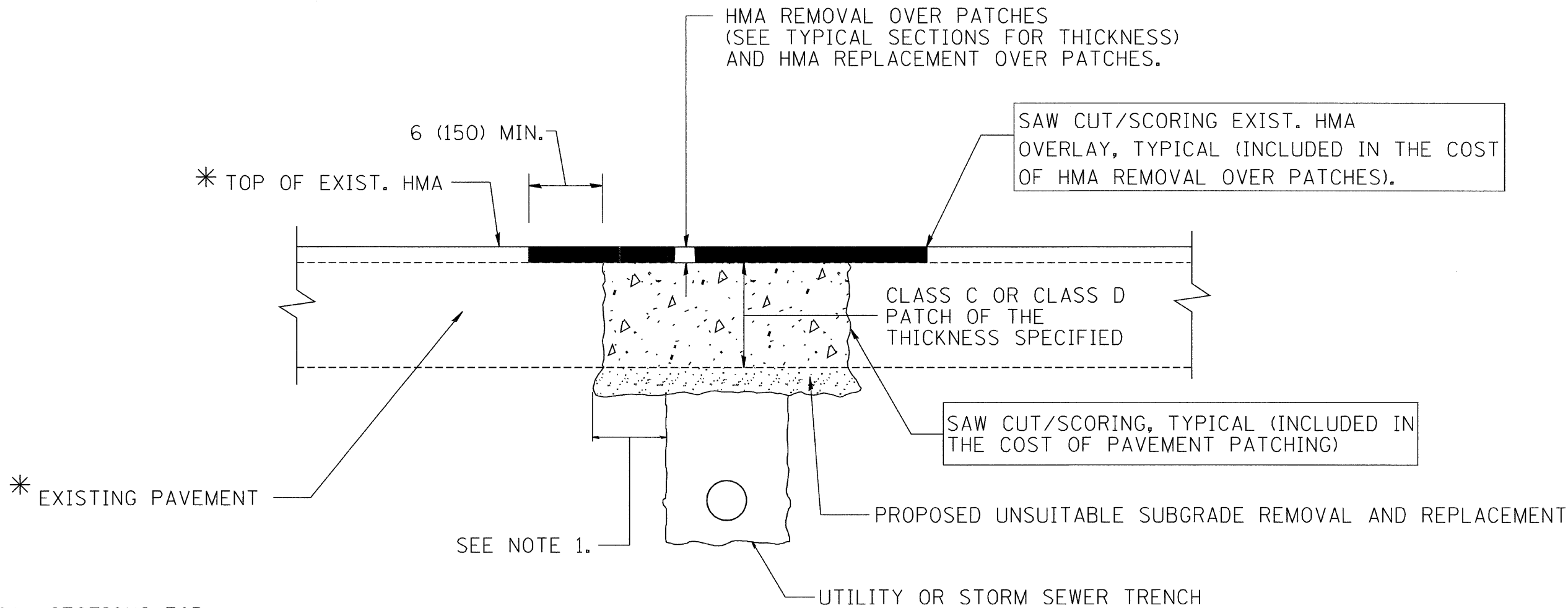


RESTRICTOR TYPE					
1	2	3	4	5	6
RE-ENTRANT TUBE	SHARP EDGED	SQUARE EDGED	RE-ENTRANT TUBE	SQUARE EDGED	ROUNDED
LENGTH: 1/2 TO 1 DIA.		STREAM CLEARS SIDES	LENGTH: 2-1/2 TO 1 DIA.	LENGTH: 2-1/2 TO 1 DIA.	
C=.52	C=.61	C=.61	C=.73	C=.82	C=.98

VALUES OF "C" FOR CIRCULAR AND SQUARE ORIFICES

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION ILLINOIS ROUTE 83 FROM THE WISCONSIN STATE LINE TO NORTH OF PETITE LAKE ROAD
NAME	DATE	
		<p style="text-align: center;">MANHOLE WITH RESTRICTOR PLATE</p> <p style="text-align: right;">DRAWN BY: EUB CHECKED BY: RJS</p> <p style="text-align: right;">DATE: 1/30/09</p> <p style="text-align: right;">GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC. CHICAGO, ILLINOIS</p>



NOTES:

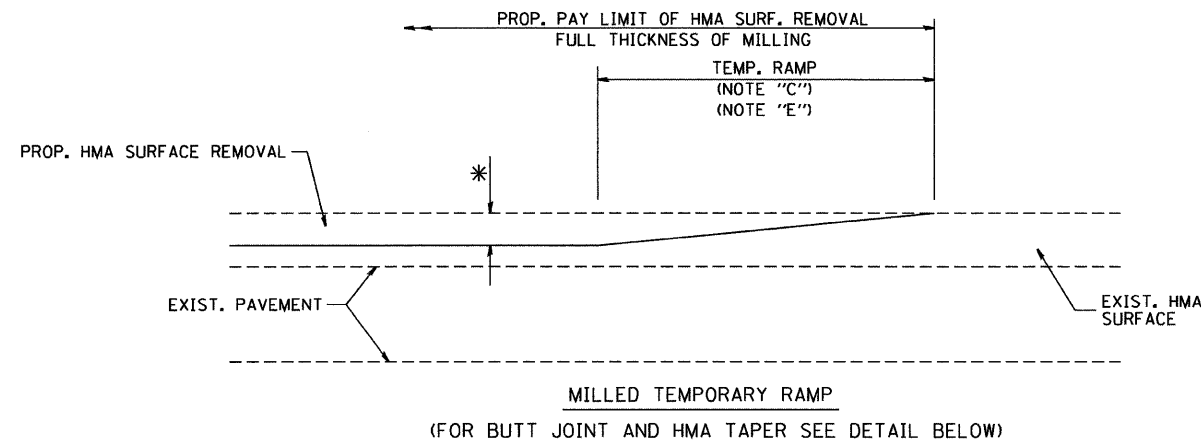
1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

SEQUENCE OF CONSTRUCTION

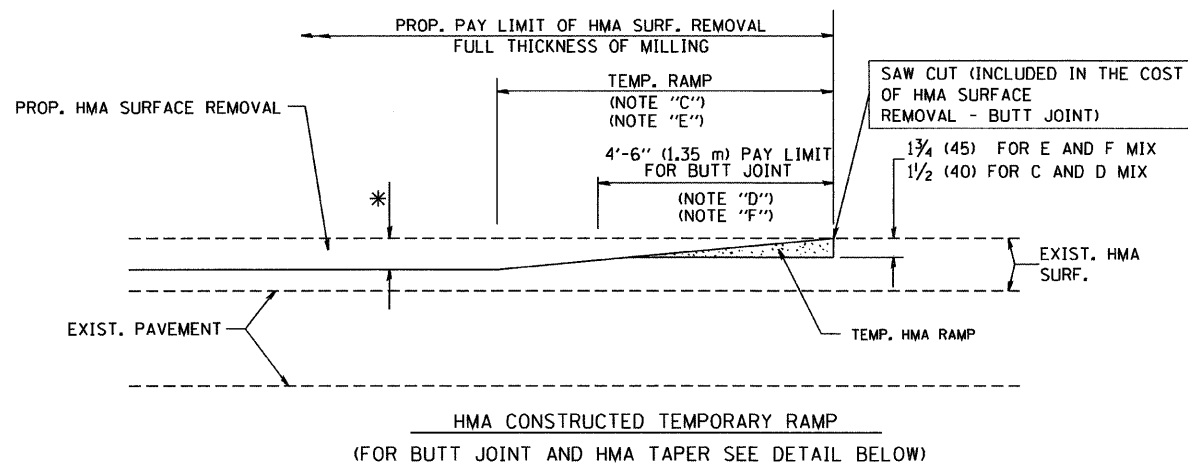
1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE FULL DEPTH PATCHES
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
 *(L-2 [W,R]; 6, 6A & 6 EXT) WRS-1

FILE NAME = M:\diststd\22x34\bd22.dgn	USER NAME = gegljanobt	DESIGNED - R. SHAH	REVISED - A. ABBAS 01-20-98	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT		F.A. RTE. = 866	SECTION *	COUNTY LAKE	TOTAL SHEETS 554	SHEET NO. 326	
	PLOT SCALE = 50,000' / IN.	DRAWN -	REVISED - A. ABBAS 04-27-98		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	BD400-04 (BD-22)		CONTRACT NO. 62700	
	PLOT DATE = 1/4/2008	CHECKED -	REVISED - R. BORO 01-01-07		FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT							
		DATE - 10-25-94	REVISED - R. BORO 09-04-07									

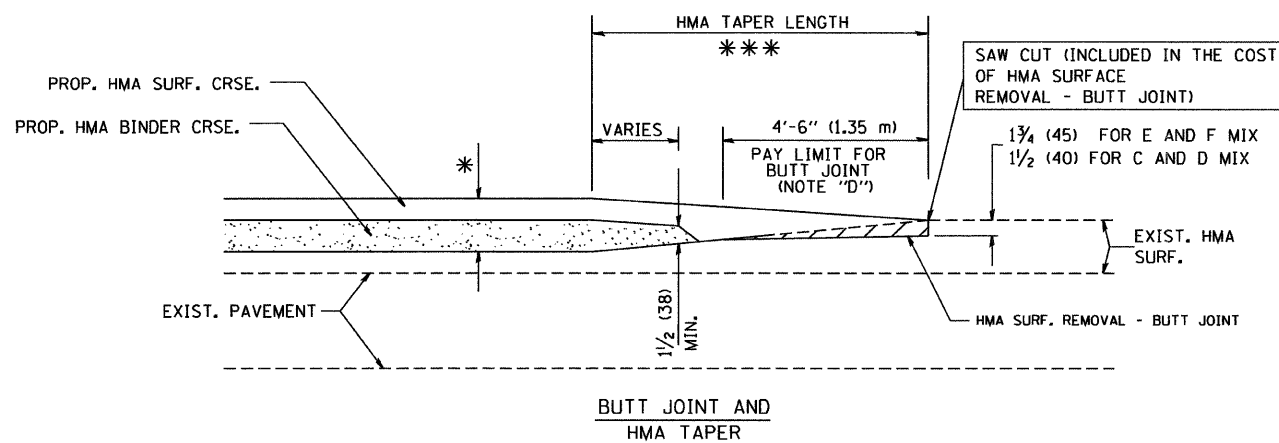


OPTION 1

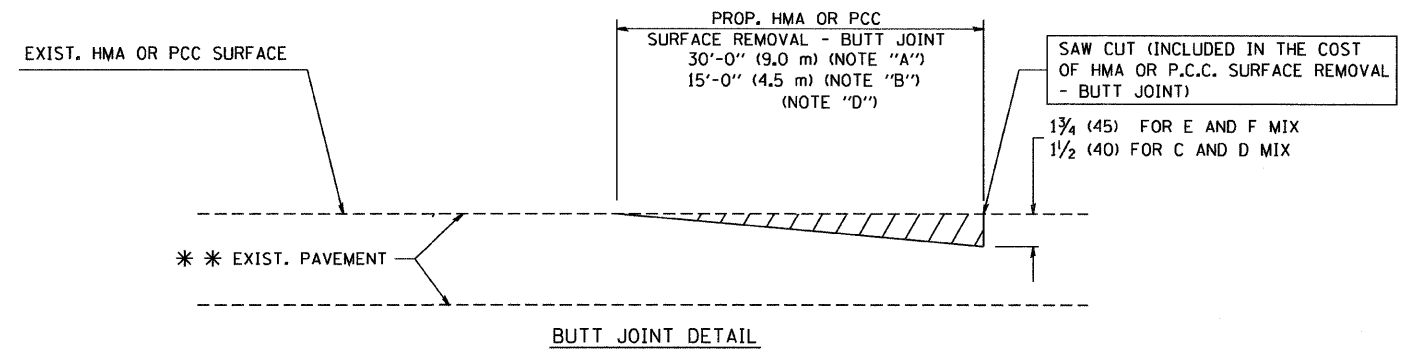


OPTION 2

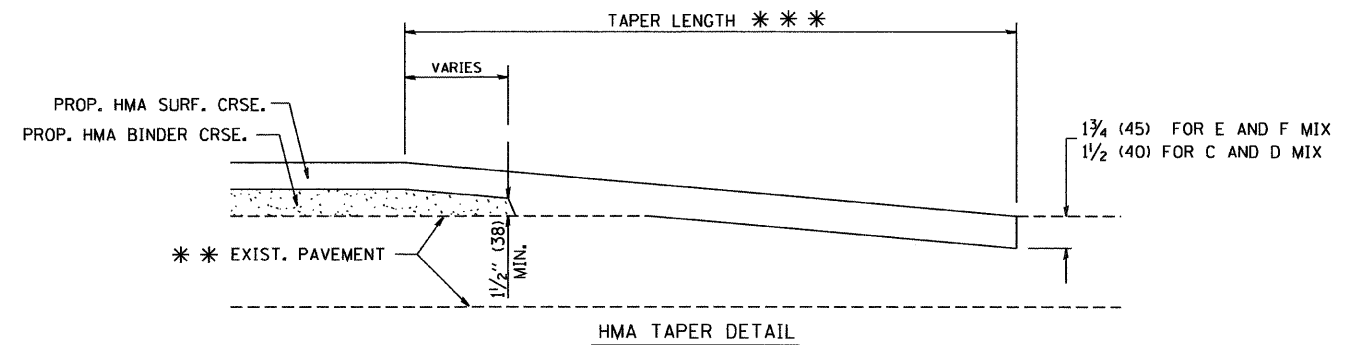
TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

*** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
 - B: MINOR SIDE ROADS.
 - C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
 - D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
 - E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
 - F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
 - G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- *** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
 10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

*(L-2 [W,R]; 6, 6A & 6 EXT) WRS-1

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

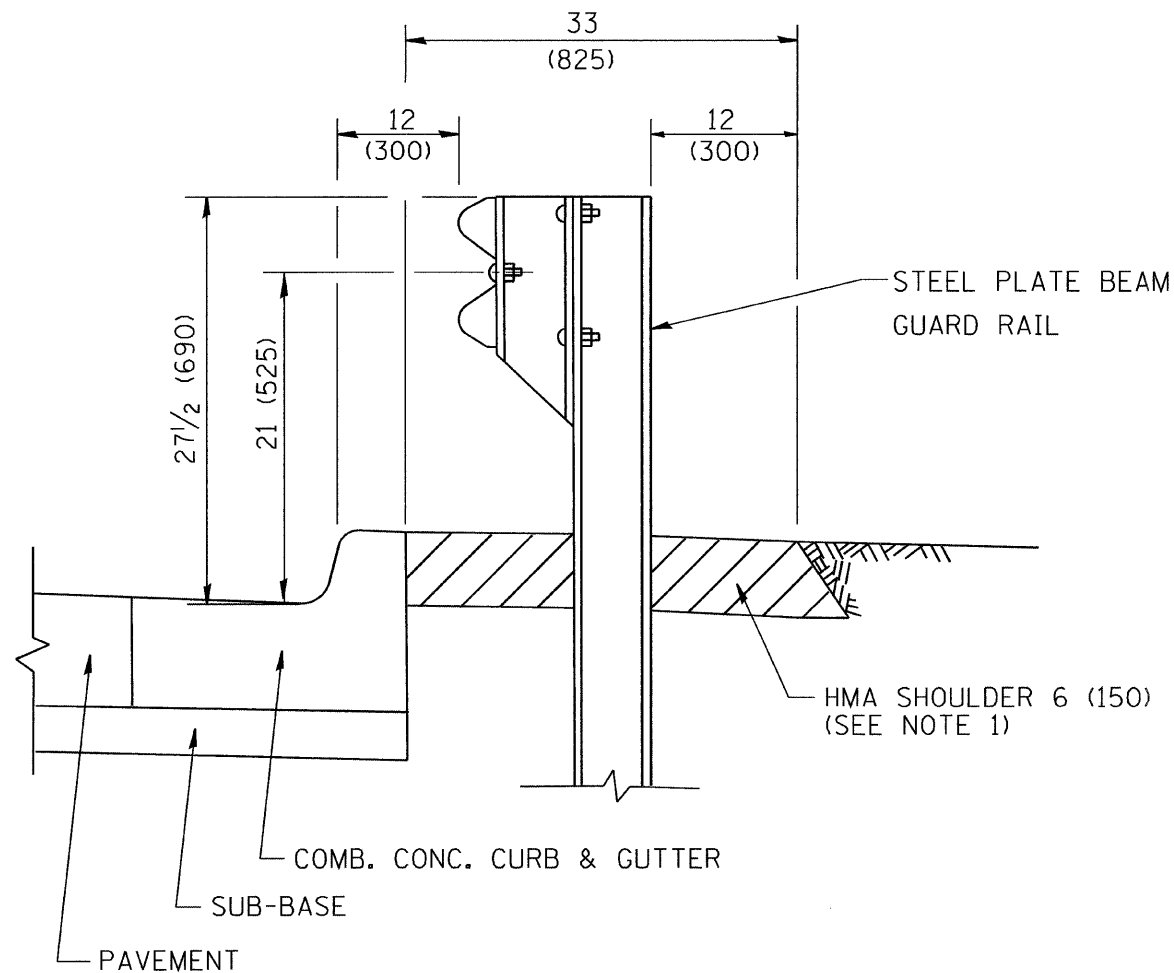
FILE NAME =	USER NAME = gegljanobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
W:\diststd\22x34\bd32.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND
HMA TAPER DETAILS**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE. 866	SECTION *	COUNTY LAKE	TOTAL SHEETS 554	SHEET NO. 327
BD400-05 BD32		CONTRACT NO. 62700		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

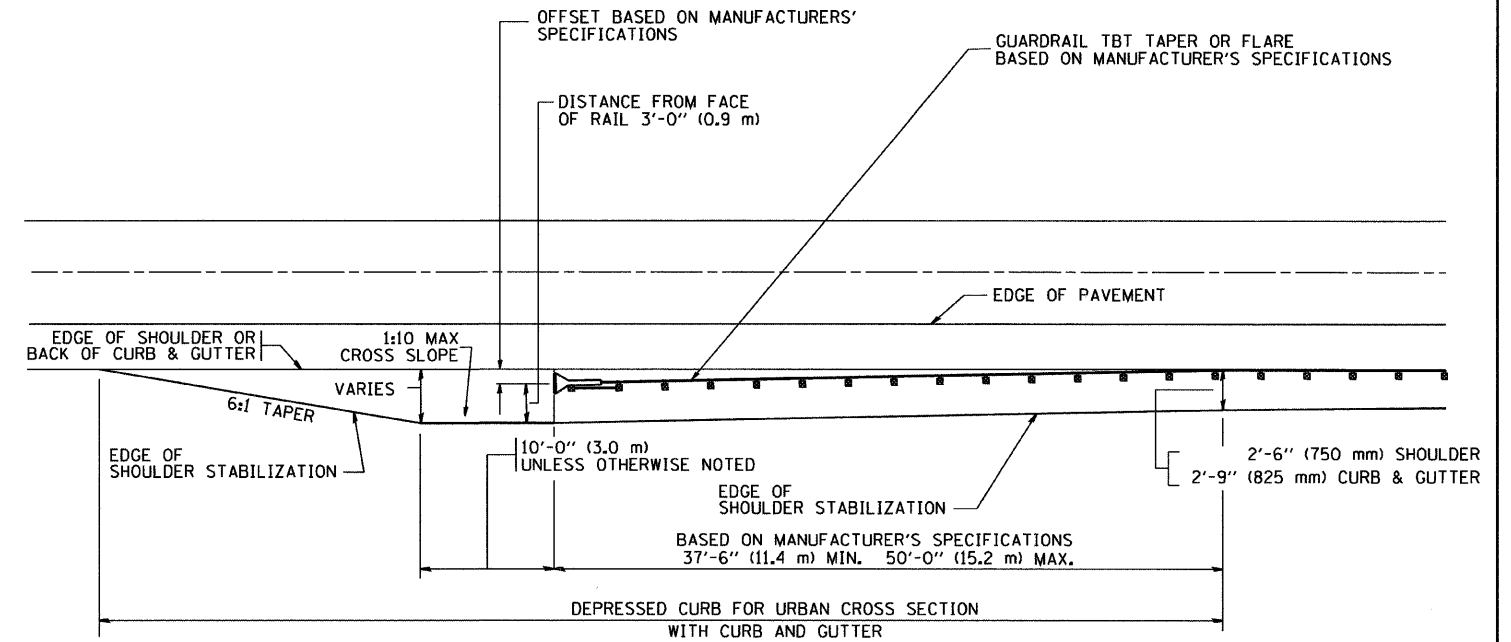


- NOTES: 1. THE HMA SHOULDER SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL
2. GUARD RAIL MAY BE PLACED AT THE BACK OF CURB WHEN DIRECTED BY THE ENGINEER.

BASIS OF PAYMENT: HMA SHOULDER 6 (150) WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SHOULDER 6" (150 mm)".

STEEL PLATE BEAM GUARD RAIL AND TRAFFIC BARRIER TERMINAL, OF THE TYPE SPECIFIED WILL BE PAID FOR SEPARATELY.

**DETAILS FOR STEEL PLATE BEAM
GUARD RAIL ADJACENT TO CURB AND GUTTER
[FOR ROADWAY SPEED 35 MPH (60 kmh) TO 45 MPH (70 kmh)]**



STABILIZATION AT TBT TY. 1 SPL.

* (L-2 [W,R], 6, 6A & 6 EXT) WRS-1

TBT = TRAFFIC BARRIER TERMINAL

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = W:\diststd\22x34\bd34.dgn	USER NAME = goglianobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 02-23-95	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAILS FOR STEEL PLATE BEAM GUARD RAIL ADJACENT TO CURB AND GUTTER STABILIZATION AT TBT TY 1 SPL.	F.A. - RTE. - 866	SECTION *	COUNTY LAKE	TOTAL SHEETS 554	SHEET NO. 328
PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - A. ABBAS 03-21-97	REVISED - E. GOMEZ 08-28-00			BD600-10 (BD 34)		CONTRACT NO. 62700		
PLOT DATE = 1/4/2008	DATE - 09-22-90	REVISED - R. BORO 01-01-07	SCALE: NONE			SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

GENERAL NOTES

ALTERNATE MATERIAL FOR THE WALLS MAY BE CONCRETE MASONRY UNITS, PRECAST REINFORCED CONCRETE SECTIONS OR CAST-IN-PLACE CONCRETE. THE CAST IRON STEPS AS DETAILED HEREON ARE TYPICAL. STEPS OF OTHER DESIGN AND MATERIAL THAT CONFORM TO THE MINIMUM REQUIREMENTS OF THE STEPS SHOWN MAY BE USED WHEN APPROVED BY THE ENGINEER.

CAST IRON STEPS SHALL BE GRAY IRON CONFORMING TO THE REQUIREMENTS OF ARTICLE 1006.14 OF THE STANDARD SPECIFICATIONS.

STEPS SHALL BE EMBEDDED INTO THE WALL A MINIMUM OF THREE (3) INCHES. STEPS SHALL NOT BE EXTENDED ON THE OUTSIDE.

STEPS SHALL BE OMITTED FOR WORK IN COOK COUNTY WHEN THE DEPTH OF THE MANHOLE IS TEN (10') OR LESS.

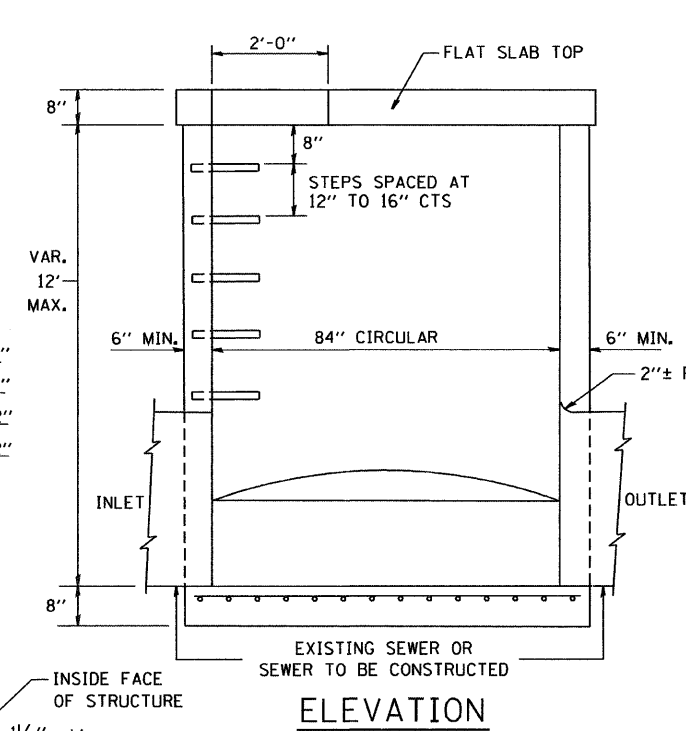
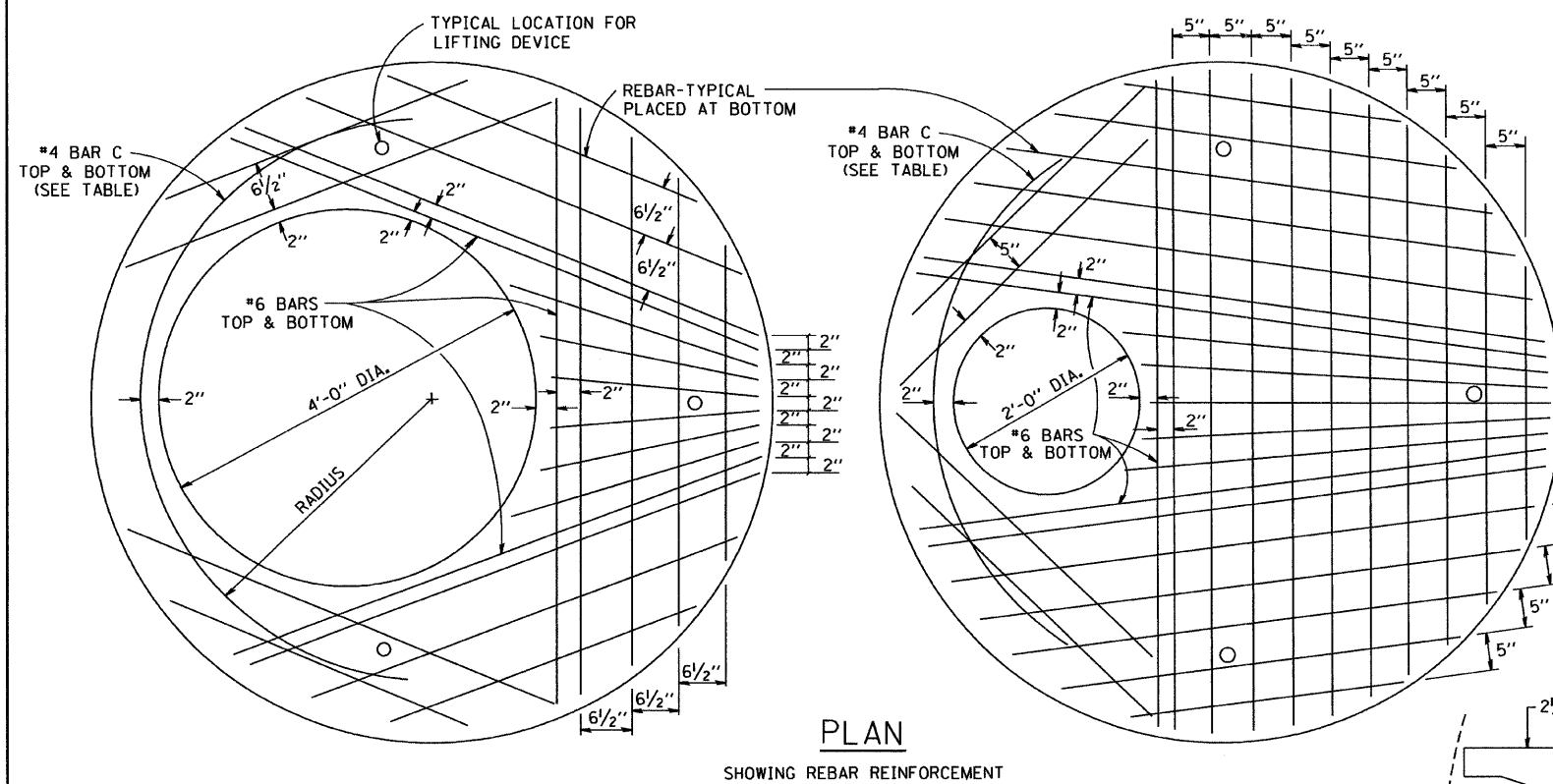
IN ADDITION TO THE REQUIREMENTS OF ARTICLE 612.13 OF THE STANDARD SPECIFICATIONS, THE CONTRACT UNIT PRICE FOR MANHOLES, TYPE A, 7'-DIAMETER SHALL INCLUDE THE SAND CUSHION WHEN REQUIRED, FURNISHING AND INSTALLING STEPS WHEN REQUIRED, FURNISHING AND COMPACTING THE SPECIFIED BACKFILL MATERIAL, AND FURNISHING AND INSTALLING FLAT SLAB TOP.

PRECAST FLAT SLAB TOP SHALL CONFORM TO ARTICLES 505.01 THRU 505.05 OF THE STANDARD SPECIFICATIONS EXCEPT THAT THE CONCRETE STRENGTH SHALL BE 4,000 PSI AFTER 28 DAYS. REINFORCEMENT BARS AND WELDED WIRE FABRIC SHALL CONFORM TO THE REQUIREMENTS OF ARTICLE 1006.10. ONLY GRADE 60 REINFORCEMENT BARS WILL BE PERMITTED.

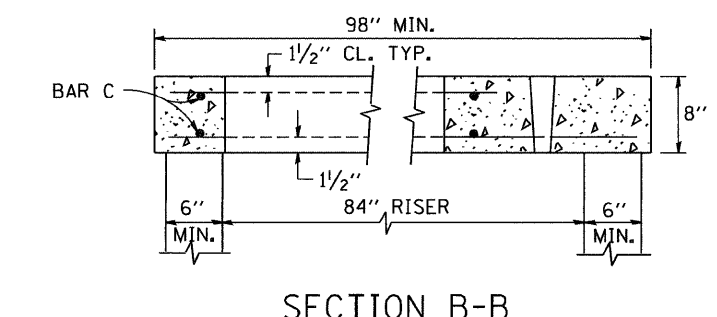
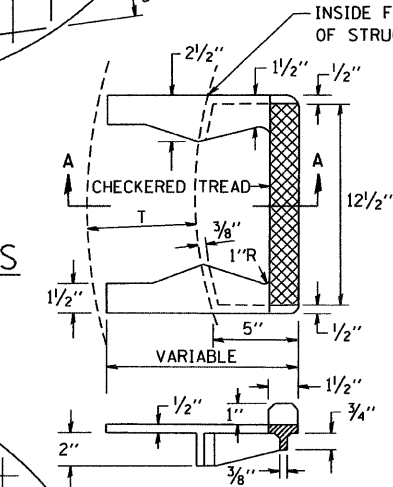
BOTTOM SLAB SHALL BE REINFORCED BY EITHER REINFORCEMENT BARS OR WELDED WIRE FABRIC. THE MINIMUM REINFORCEMENT SHALL BE 0.46 SQUARE INCH PER LINEAR FOOT IN BOTH DIRECTIONS.

JOINT CONFIGURATION AND DIMENSIONS OF FLAT SLAB TOP SHALL MATCH AND FIT THE RISER JOINT DETAIL.

LIFTING DEVICES SHALL BE APPROVED BY THE ENGINEER.

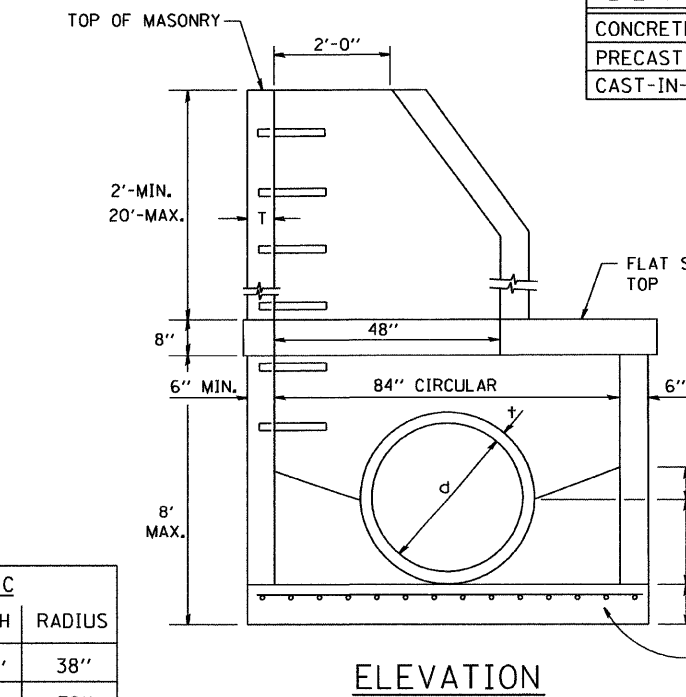
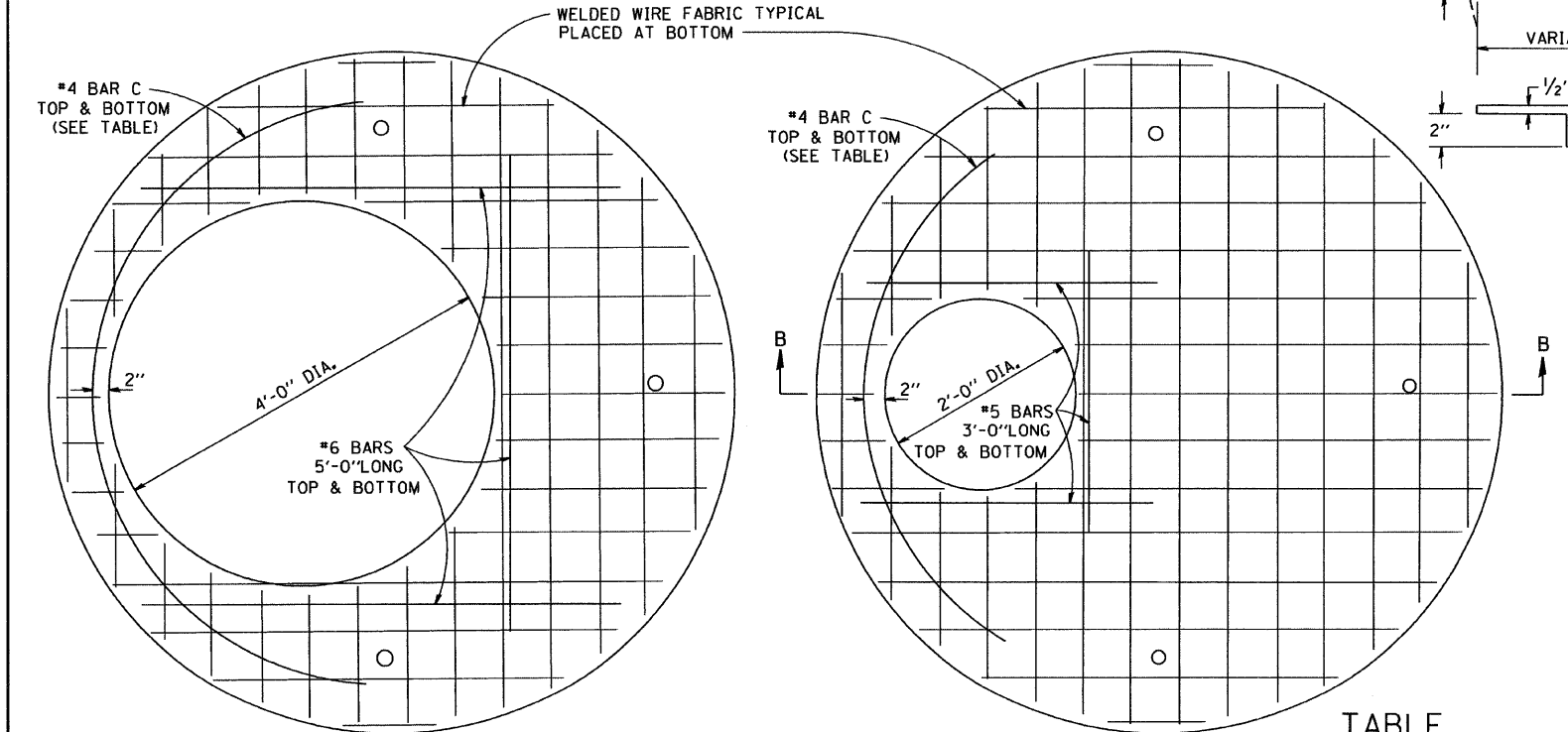


**SEC. A-A
CAST IRON STEPS**

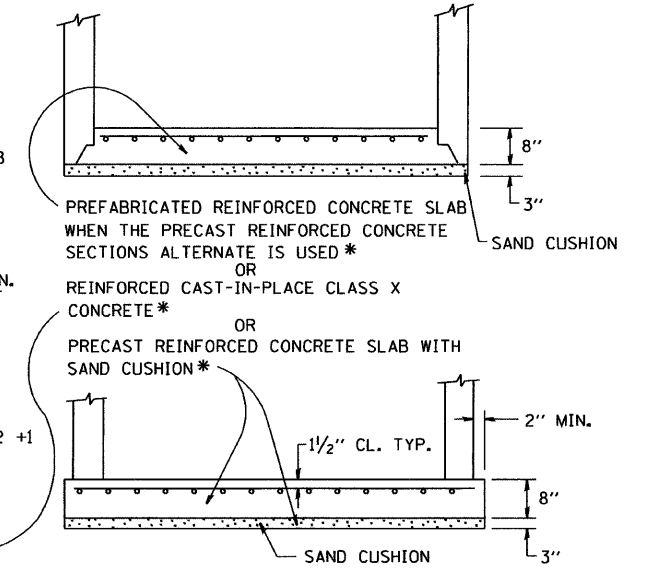


SECTION B-B

ALTERNATE MATERIALS FOR RISERS	T (MIN.)
CONCRETE MASONRY UNITS	5"
PRECAST REINFORCED CONCRETE SECTIONS	4"
CAST-IN-PLACE CONCRETE	6"



ELEVATION

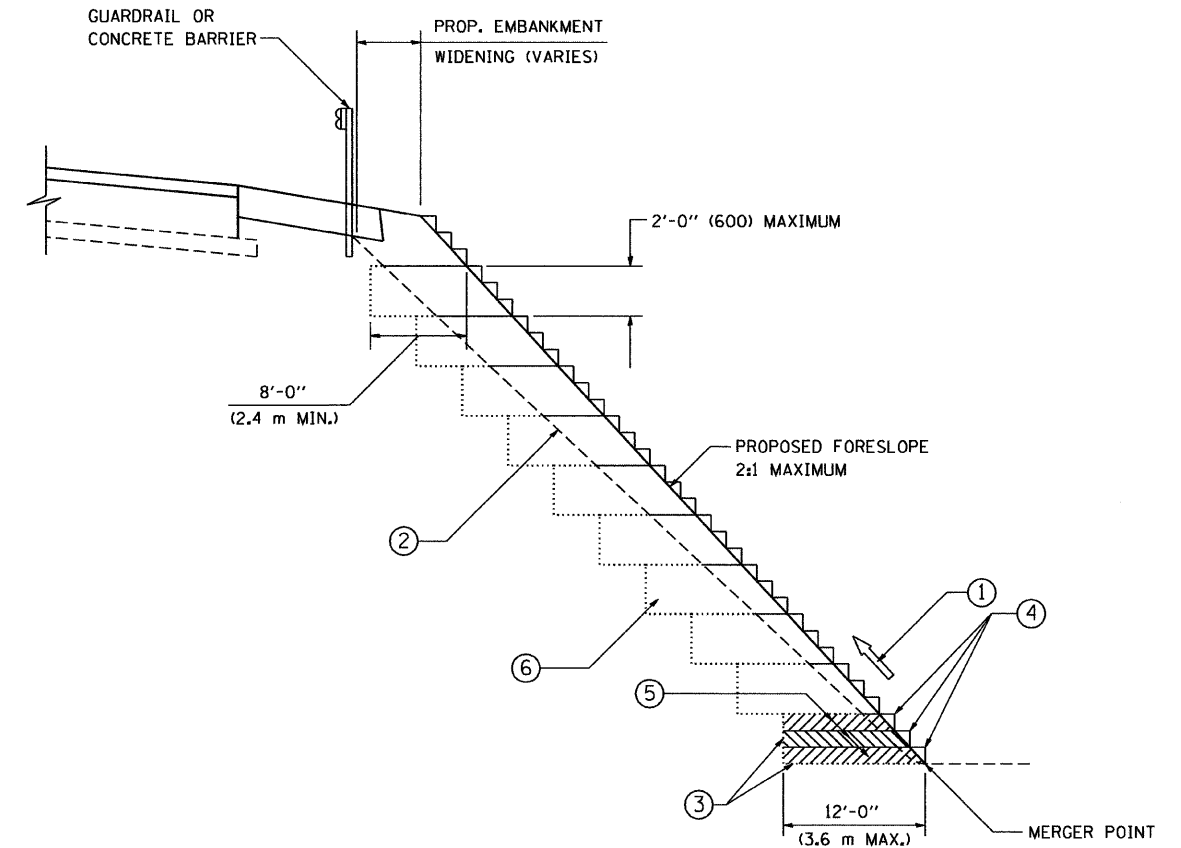


PLAN
SHOWING WELDED WIRE FABRIC REINFORCEMENT
NOTE: THIS STRUCTURE SHOULD BE USED WITH PIPES SIZE 54" DIA. OR SMALLER.

TABLE

DIAMETER OF OPENING	REINFORCEMENT "AS" WWF OR EACH DIRECTION	BAR SIZE	BAR C		
			SIZE	LENGTH	RADIUS
2'-0"	1.06 SQ.IN./LIN.FT.	#6	#4	6'-0"	38"
4'-0"	0.82 SQ.IN./LIN.FT.	#6	#4	9'-0"	38"

* (L-2 [W,R]; 6, 6A & 6 EXT) WRS-1



**TYPICAL BENCHING DETAIL
FOR EMBANKMENT**

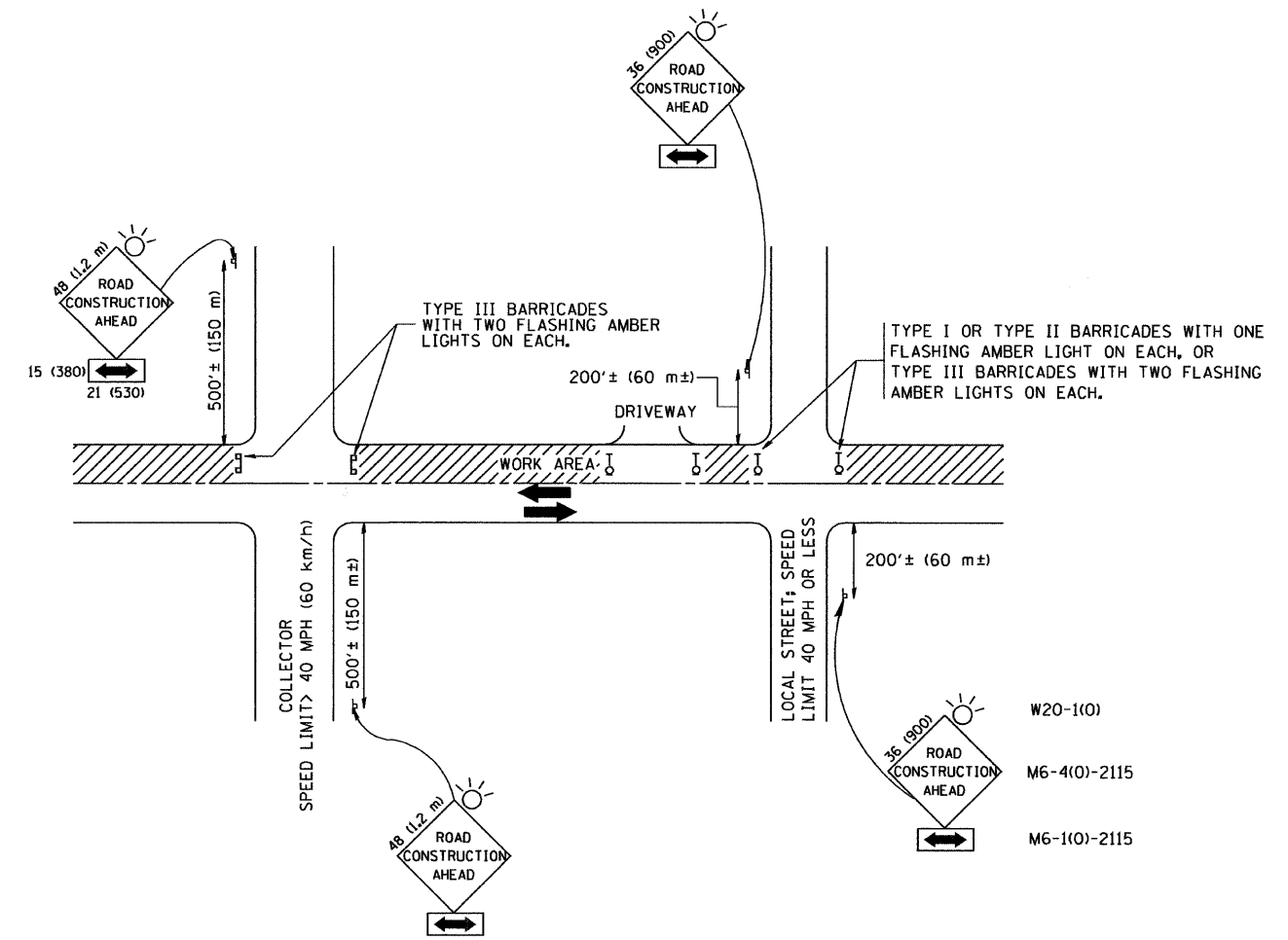
NOTES:

- ① CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
- ② EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
- ③ BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
- ④ TRIM TO FINAL SLOPE.
- ⑤ EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
- ⑥ EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- ⑦ SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m).

* (L-2[W,R]; 6, 6A & 6 EXT) WRS-1

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = W:\diststd\22x34\bd51.dgn	USER NAME = gegl1enobt	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BENCHING DETAIL FOR EMBANKMENT WIDENING		F.A. RTE. 866	SECTION *	COUNTY LAKE	TOTAL SHEETS 554	SHEET NO. 330
	PLOT SCALE = 50.0000' / IN.	DRAWN - CADD	REVISED -				BD-51		CONTRACT NO. 62700		
	PLOT DATE = 1/4/2008	CHECKED - S.E.B.	REVISED -				SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT
	DATE - 06-16-04	REVISED -	REVISED -								



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

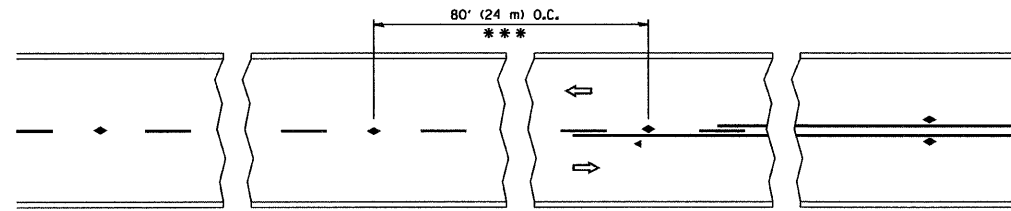
- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

* [L-2 [W,R]; 6, 6A & 6 EXT] WRS-1

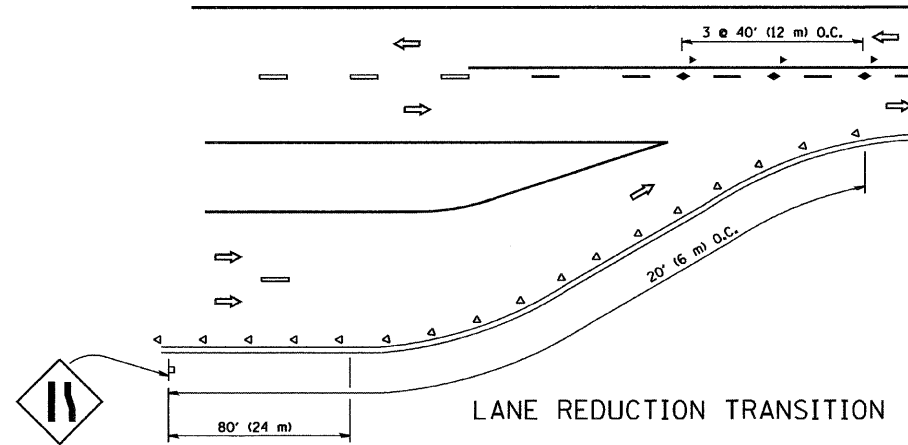
All dimensions are in millimeters (inches) unless otherwise shown.

FILE NAME = W:\diststd\22x34\col0.dgn	USER NAME = gagliano	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS			F.A. RTE. 866	SECTION *	COUNTY LAKE	TOTAL SHEETS 554	SHEET NO. 331	
	PLOT SCALE = 50,000' / IN.	CHECKED -	REVISED - A. HOUSEH 03-06-96		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	TC-10		CONTRACT NO. 62700		
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT								

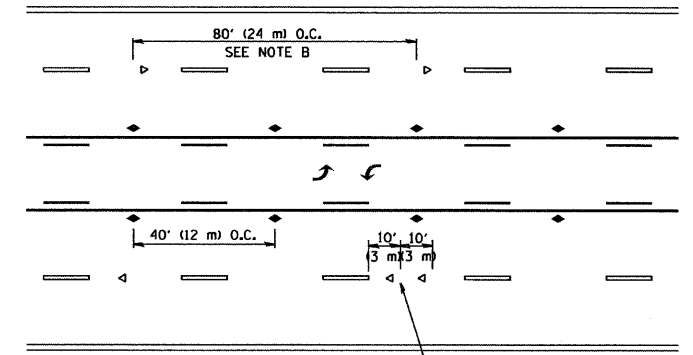


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

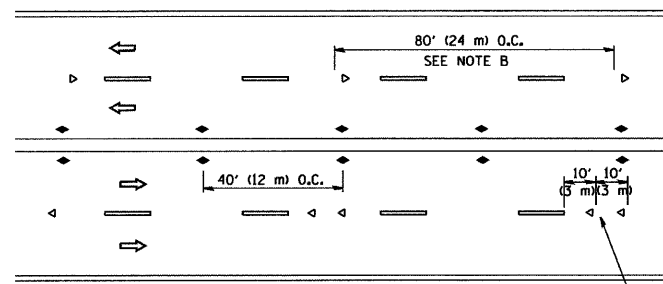
TWO-LANE/TWO-WAY



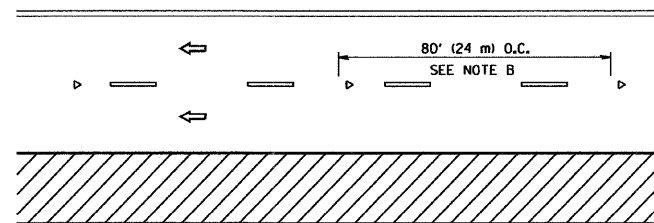
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

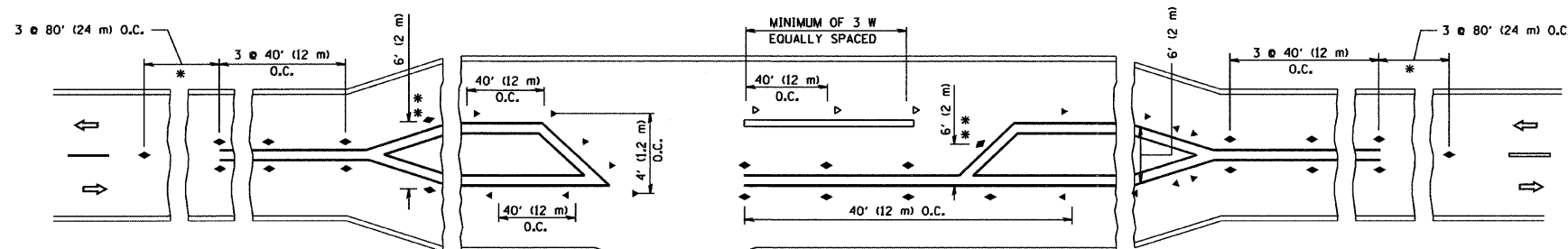
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H. (20 km/h) LOWER THAN POSTED SPEEDS.
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE
 ** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

LEFT TURN

* [L-2[W,R], 6, 6A & 6 EXT] WRS-1

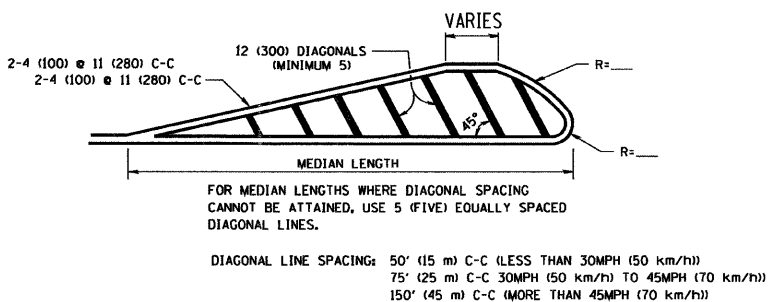
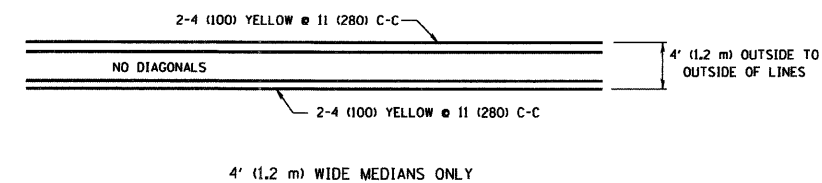
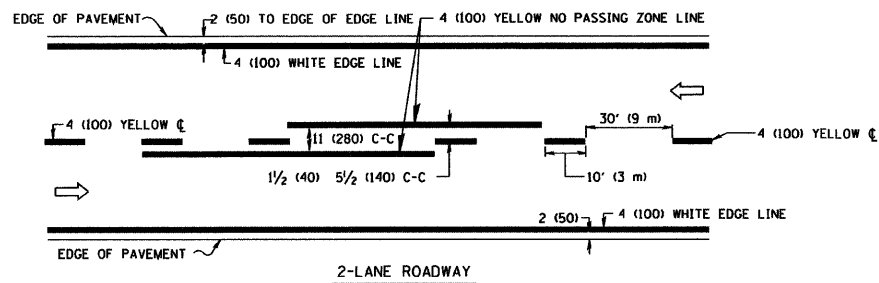
All dimensions are in inches (millimeters) unless otherwise shown.

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		DRAWN -	REVISED - T. RAMMACHER 03-12-99
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - T. RAMMACHER 01-06-00
	PLOT DATE = 1/4/2008	DATE -	REVISED -

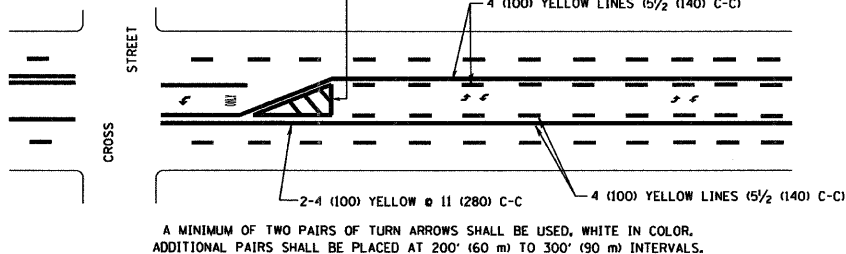
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS			
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)			
SCALE: NONE	SHEET NO. 1	OF 1 SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	*	LAKE	554	332
TC-11			CONTRACT NO. 62700	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

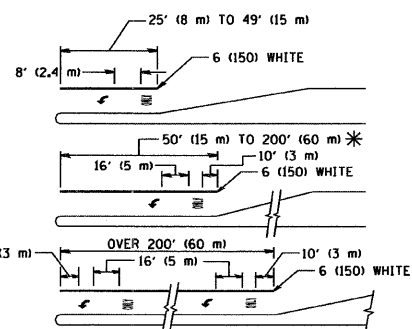


MEDIANS OVER 4' (1.2 m) WIDE



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

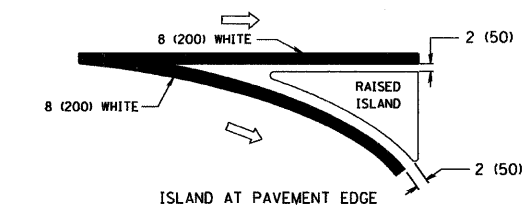
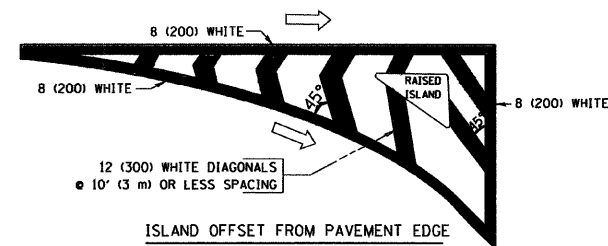


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

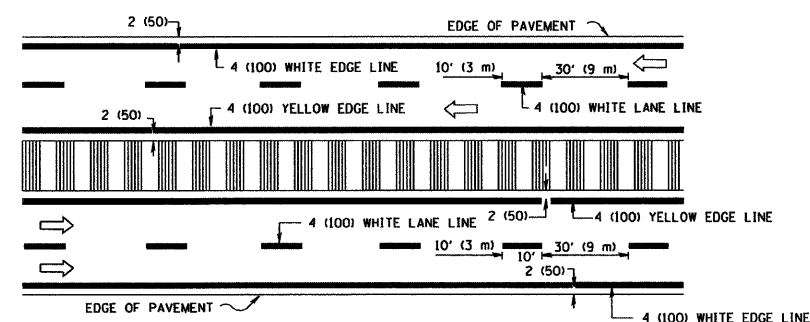
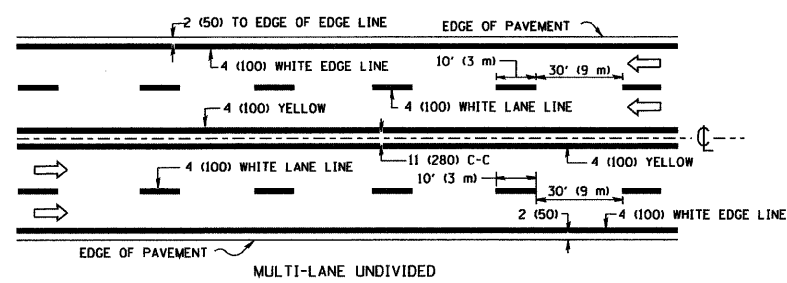


TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
CORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" 15 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

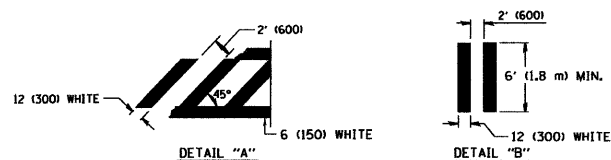
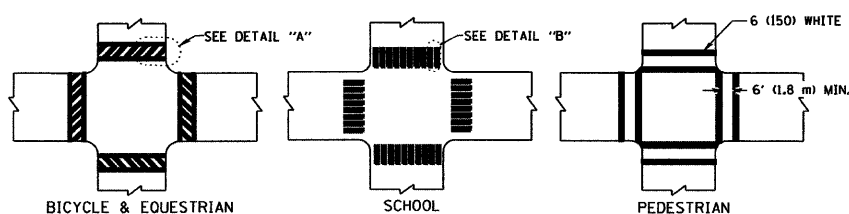
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in inches (millimeters) unless otherwise shown.



NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING

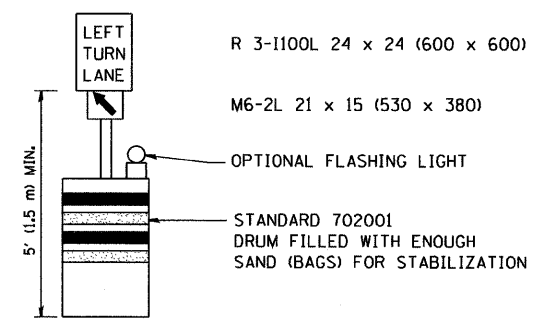
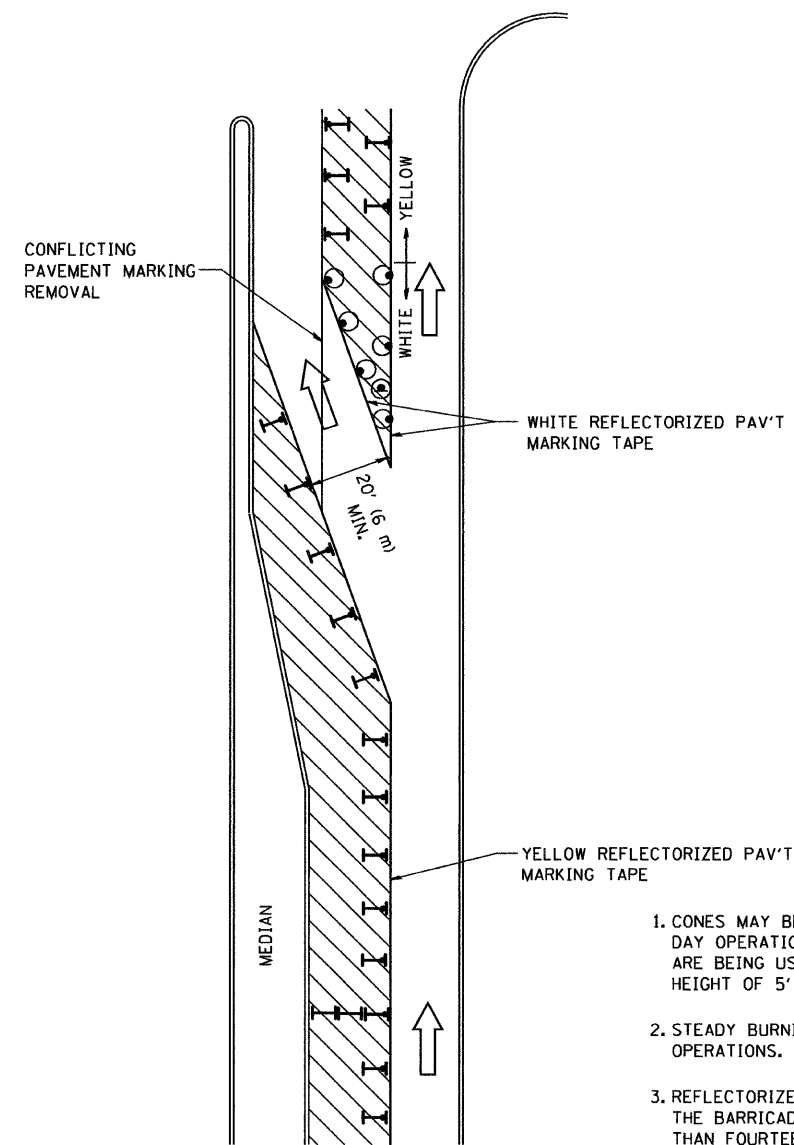
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	PLOT DATE = 1/4/2008	DATE - 03-19-90	REVISED -T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TYPICAL PAVEMENT MARKINGS		866	*	LAKR	554	333
SCALE: NONE		SHEET NO. 1 OF 1 SHEETS		STA.	TO STA.	
		FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

* (L-2 [W,R]; 6, 6A & 6 EXT) WRS-1

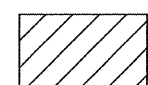





CONTRACT NO. 62700



GENERAL NOTES

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM BT 725 IS REQUIRED.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

LEGEND

-  WORK AREA
-  LANE OPEN TO TRAFFIC
-  TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
-  DRUM WITH STEADY BURN LIGHT
-  DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
-  TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

All dimensions are in inches (millimeters) unless otherwise shown.

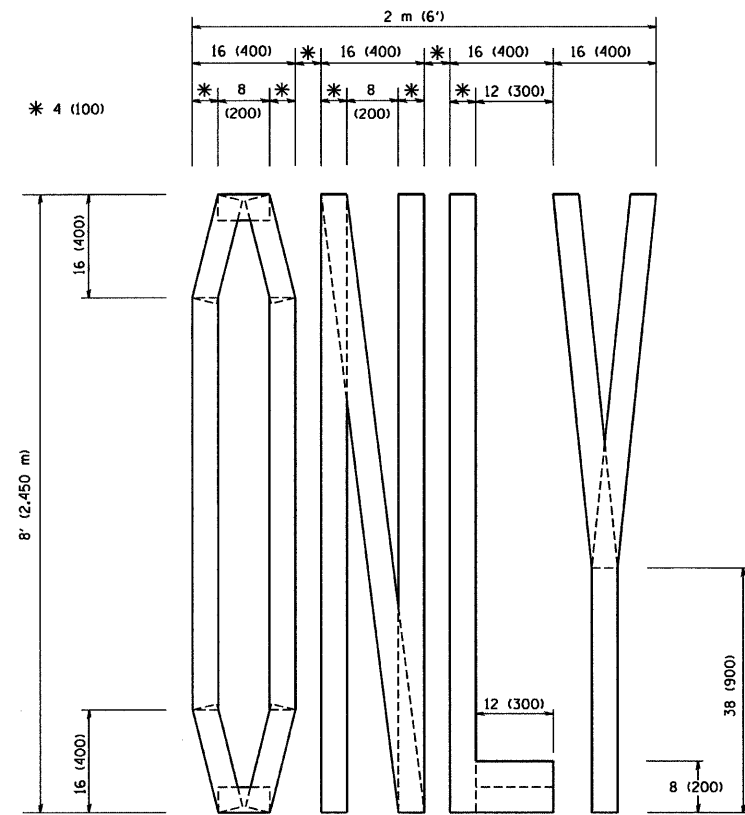
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		DRAWN -	REVISED - A. HOUSEH 11-07-95
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	PLOT DATE = 1/4/2008	DATE -	REVISED -T, RAMMACHER 01-06-00

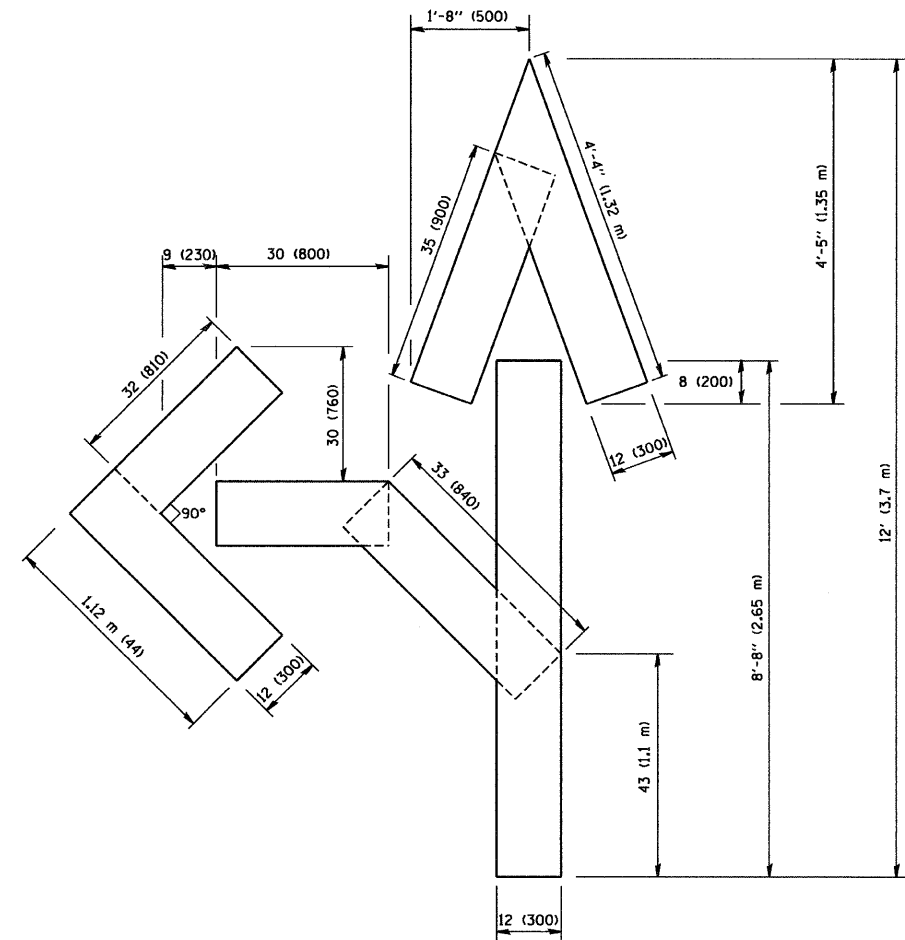
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

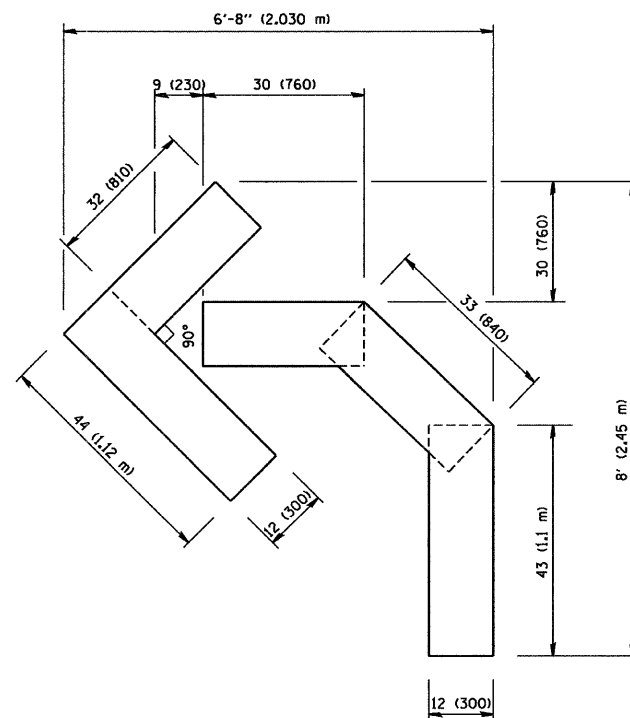
F.A. RTE. 866	SECTION *	COUNTY LAKE	TOTAL SHEETS 554	SHEET NO. 334
TC-14		CONTRACT NO. 62700		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



QUANTITY
 4 (100) LINE = 64.1 ft. (19.7 m)
 21.1 sq. ft. (1.97 sq. m)



QUANTITY
 4 (100) LINE = 82.5 ft. (25.3 m)
 27.5 sq. ft. (2.53 sq. m)



QUANTITY
 4 (100) LINE = 45.5 ft. (13.9 m)
 15.2 sq. ft. (1.39 sq. m)

All dimensions are in inches (millimeters) unless otherwise shown.

* (L-2 [W, R]; 6, 6A & 6 EXT) WRS-1

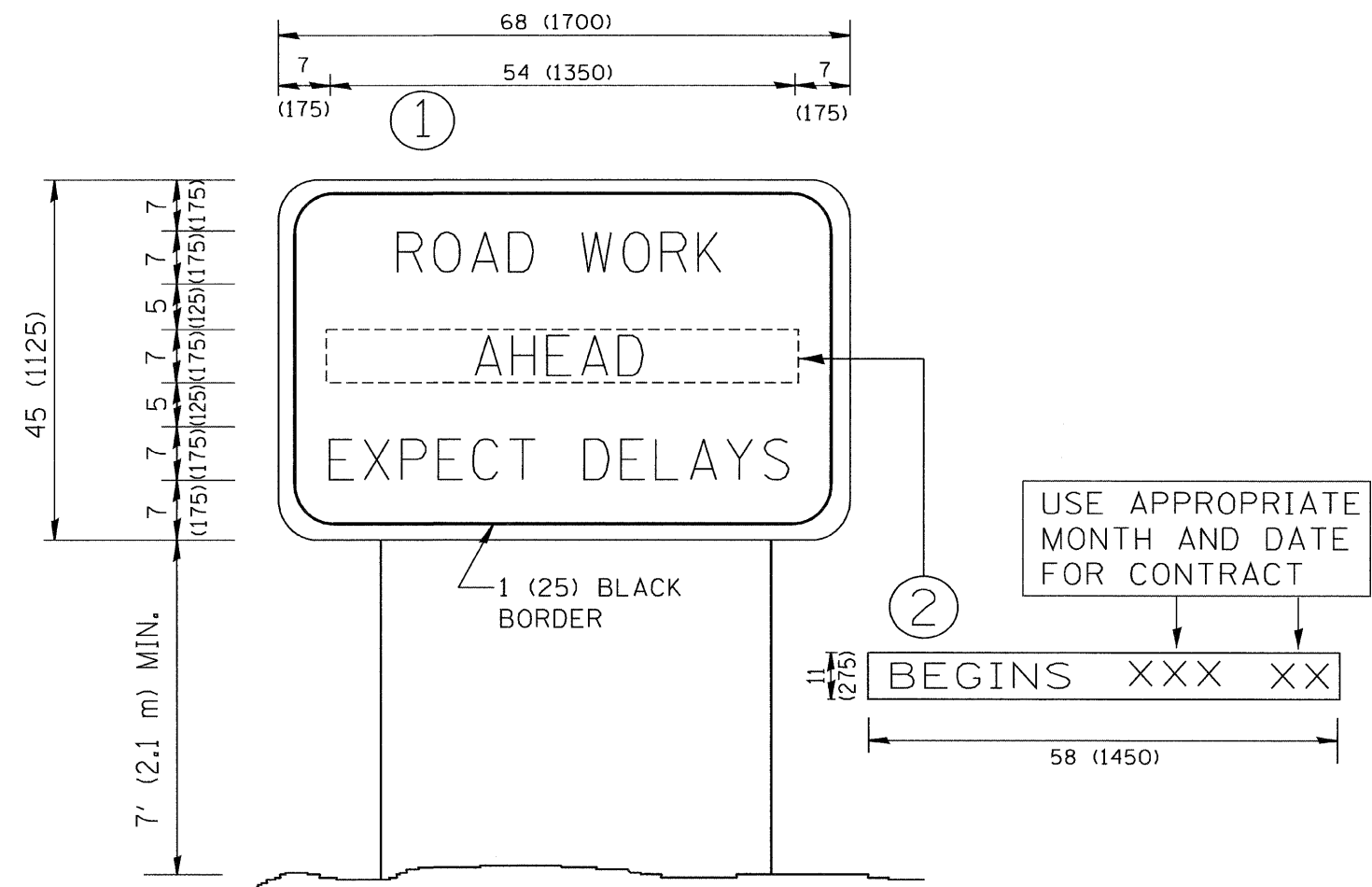
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		DRAWN -	REVISED -T, RAMMACHER 11-04-97
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	PLOT DATE = 1/4/2008	DATE = 09-18-94	REVISED -E. GOMEZ 08-28-00

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS
 FOR TRAFFIC STAGING

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	*	LAKE	554	335
TC-16			CONTRACT NO. 62700	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
 *(L-2[W,R];6,6A & 6 EXT) WRS-1

FILE NAME = W:\diststd\22x34\to22.dgn	USER NAME = geglienobt	DESIGNED -	REVISED - R. MIRS 09-15-97
		DRAWN -	REVISED - R. MIRS 12-11-97
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	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

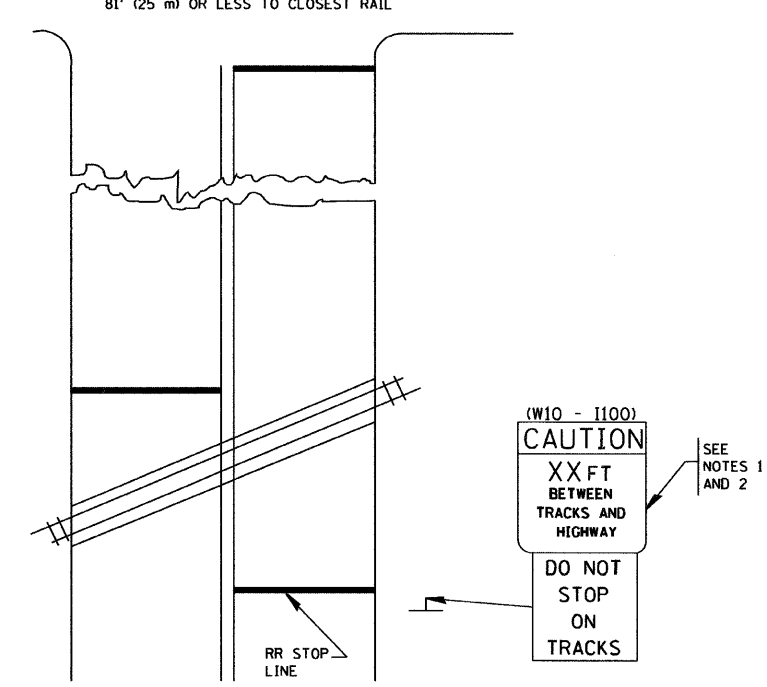
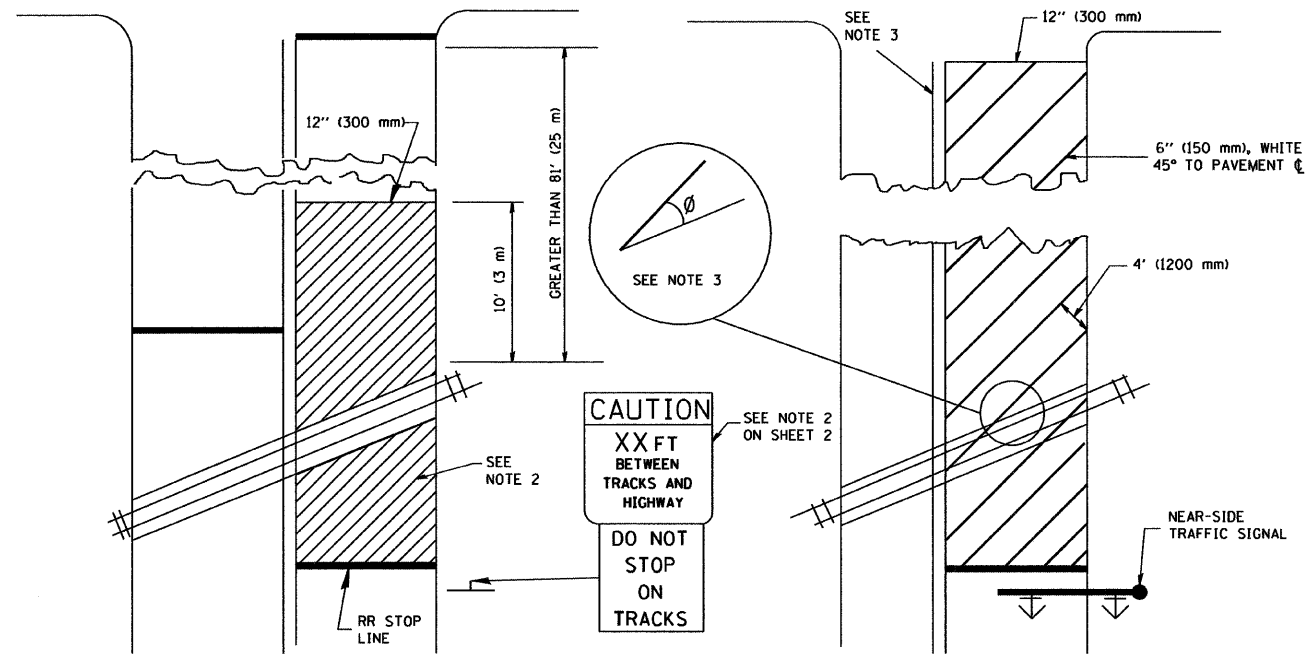
ARTERIAL ROAD INFORMATION SIGN			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A. RTE. 866	SECTION *	COUNTY LAKE	TOTAL SHEETS 554	SHEET NO. 336
TC-22		CONTRACT NO. 62700		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

WITH INTERSECTION TRAFFIC SIGNALS

WITH NEAR-SIDE TRAFFIC SIGNALS

WITH NONSIGNALIZED INTERSECTION
81' (25 m) OR LESS TO CLOSEST RAIL



- NOTES:
- PAVEMENT MARKINGS TO BE INSTALLED ONLY ON APPROACHES TO INTERSECTIONS CONTROLLED BY TRAFFIC SIGNALS WHICH ARE INTERCONNECTED WITH THE RAILROAD WARNING SIGNALS.
 - WHERE NEAR-SIDE TRAFFIC SIGNALS ARE USED, THE PAVEMENT MARKINGS EXTENDS TO THE INTERSECTION.
 - WHERE THE ANGLE BETWEEN THE DIAGONAL STRIPES AND THE TRACK (θ) WOULD BE LESS THAN APPROXIMATELY 20°, THE STRIPES SHOULD BE SLOPED IN THE OPPOSITE DIRECTION FROM THAT SHOWN.

- NOTE :
- DISTANCE TO BE SHOWN ON SIGN MEASURED FROM A POINT 6 FEET (1.8 m) FROM THE RAIL CLOSEST TO THE INTERSECTION TO THE STOP LINE OR CROSSWALK, WHICHEVER IS CLOSEST, ROUNDED DOWN TO THE NEAREST 5 FEET (1.5 m). WHERE THERE IS NO STOP LINE, MEASURE TO POINT WHERE THE DRIVER HAS A VIEW OF APPROACHING TRAFFIC.
 - THE CLEARANCE SIGN IS ALSO TO BE USED AS AN INTERIM MEASURE AT LOCATIONS WITH INTERCONNECTED INTERSECTION TRAFFIC SIGNALS WHERE IT IS PLANNED TO CHANGE THEM TO NEAR-SIDE SIGNALS AT A FUTURE TIME. IN THIS CASE, THE DISTANCE TO BE SHOWN ON THE SIGN IS MEASURED FROM THE EDGE OF THE STRIPED-OUT AREA INSTEAD OF 6- FEET FROM THE RAIL. THE SIGN IS TO BE REMOVED WHEN THE NEAR-SIDE SIGNALS ARE INSTALLED AND THE PAVEMENT MARKINGS EXTEND TO THE INTERSECTION.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

*(L-2[W,R]; 6, 6A & 6 EXT) WRS-1

FILE NAME = W:\distatd\22x34\to23.dgn	USER NAME = geglrenobt	DESIGNED -	REVISED - 01-01-07	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SUPPLEMENTAL SIGNING AND PAVEMENT MARKING TREATMENT FOR RAILROAD CROSSINGS			F.A. RTE. 866	SECTION *	COUNTY LAKE	TOTAL SHEETS 554	SHEET NO. 336A
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -					TC-23				CONTRACT NO. 62700
	PLOT DATE = 1/4/2008	DATE -	REVISED -					SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

F.A. ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	*	LAKE	554	337
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
*(L-2[W,R];6,6A & 6 EXT) WRS-1				

EARTHWORK SCHEDULE

ILLINOIS ROUTE 83			STAGE I					STAGE II						
			TOPSOIL EXCAVATION CU YD	UNSUITABLE EXCAVATION CU YD	EARTH EXCAVATION CU YD	EMBANKMENT CU YD	POROUS GRANULAR EMBANKMENT SUBGRADE CU YD	STORM SEWER EXCAVATION CU YD	TOPSOIL EXCAVATION CU YD	UNSUITABLE EXCAVATION CU YD	EARTH EXCAVATION CU YD	EMBANKMENT CU YD	POROUS GRANULAR EMBANKMENT SUBGRADE CU YD	STORM SEWER EXCAVATION CU YD
STATION	TO	STATION												
191+85		202+00	456.9	0.0	741.5	59.9	0.0	0.0	218.4	0.0	297.3	67.6	0.0	0.0
202+00		214+00	677.3	0.0	1,495.0	13.0	0.0	0.0	702.1	0.0	1,010.5	443.8	0.0	0.0
214+00		226+00	653.0	268.6	1,362.0	180.8	125.6	0.0	804.7	356.3	1,931.7	205.6	181.2	0.0
226+00		238+00	771.2	0.0	1,811.1	648.1	0.0	0.0	714.4	0.0	998.5	838.4	0.0	17.4
238+00		250+00	542.7	0.0	815.1	468.2	0.0	174.4	328.3	80.9	655.0	222.1	34.4	59.5
250+00		262+00	530.6	704.5	561.0	338.6	302.0	0.0	384.7	693.4	134.0	294.7	261.1	392.6
262+00		274+00	803.5	437.4	1,729.5	795.3	134.4	0.0	489.9	329.9	237.7	1,099.3	118.7	117.7
274+00		286+00	791.3	1,055.0	663.2	128.0	472.4	37.0	558.9	709.8	103.7	904.9	331.4	143.0
286+00		298+00	627.5	51.1	456.6	636.0	21.9	187.4	802.6	40.2	853.4	893.5	18.5	44.4
298+00		310+00	647.0	275.0	503.6	312.1	96.0	475.9	689.3	224.7	982.3	374.5	91.4	30.4
310+00		322+00	512.5	138.3	448.9	512.6	52.3	436.6	652.6	213.5	962.1	374.6	70.6	8.4
322+00		334+00	480.1	0.0	527.5	408.1	0.0	288.4	558.6	0.0	847.8	779.1	0.0	241.9
334+00		408+00	449.8	107.5	1,390.2	174.3	25.8	1,135.1	303.0	117.2	1,431.6	76.2	29.1	185.3
408+00		420+00	285.5	18.1	414.3	96.9	4.1	176.0	269.2	20.0	233.2	250.9	5.2	36.2
420+00		431+50	75.8	0.0	114.7	64.2	0.0	1,617.7	45.6	0.0	88.5	31.6	0.0	23.6
431+50		444+00	348.7	252.2	178.9	115.1	97.6	835.5	266.5	162.7	163.8	155.9	63.8	316.0
444+00		456+00	265.3	0.0	306.2	125.0	0.0	59.4	234.0	0.0	234.0	150.1	0.0	0.0
456+00		468+00	305.1	215.6	458.0	126.2	84.9	924.4	361.5	410.1	529.9	107.6	161.8	0.0
468+00		480+00	475.2	0.0	664.6	271.5	0.0	30.8	537.2	0.0	1,105.0	131.0	0.0	20.8
480+00		493+17	417.1	0.0	582.7	370.9	0.0	13.4	643.0	0.0	1,423.4	194.0	0.0	33.2
TOTALS			10,116.1	3,523.3	15,224.6	5,844.8	1,417.0	6,392.0	9,564.5	3,358.7	14,223.4	7,595.4	1,367.2	1,670.4


EARTHWORK SUMMARY

	STAGE I	STAGE II	TOTAL
EARTH EXCAVATION	16,878.9	15,723.7	32,602.6
REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	15,954.2	15,557.6	31,511.8
EMBANKMENT	6,398.1	8,240.3	14,638.4
POROUS GRANULAR EMBANKMENT, SUBGRADE	1,938.8	2,028.9	3,967.7
SUITABLE SEWER EXCAVATION	6,534.3	3,325.5	9,859.8
SEDIMENTATION BASIN EXCAVATION	1,436.0		1,436.0

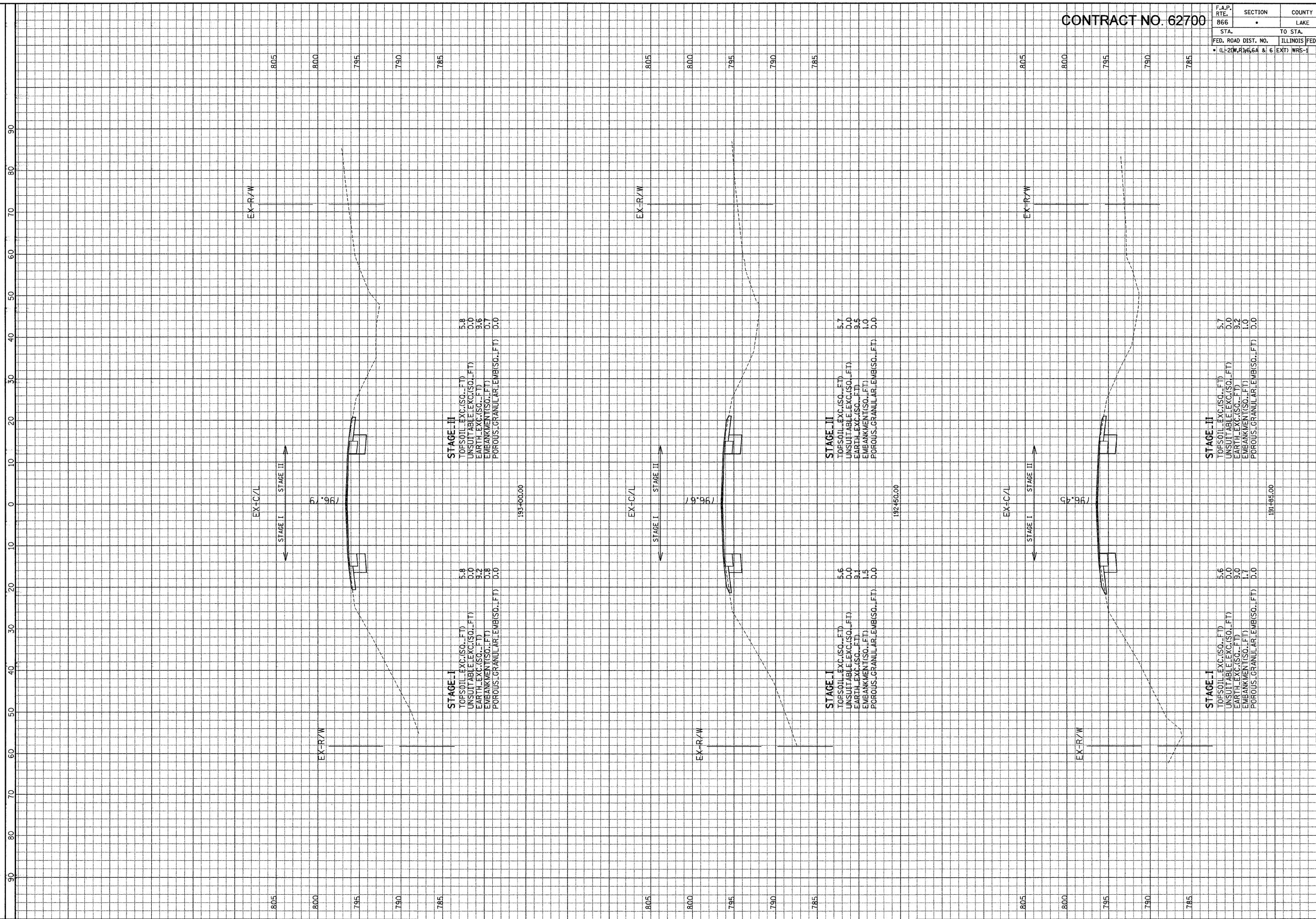
THE PAY ITEM REMOVAL AND DISPOSAL OF UNSUITABLE MATERIALS INCLUDES TOPSOIL EXCAVATION AND UNSUITABLE EXCAVATION. TOPSOIL REMOVAL QUANTITY IS BASED UPON AN AVERAGE 6 INCH THICKNESS.

EARTH EXCAVATION SHRINKAGE FACTOR IS 15%

ILLINOIS ROUTE 173			STAGE I					STAGE II						
			TOPSOIL EXCAVATION CU YD	UNSUITABLE EXCAVATION CU YD	EARTH EXCAVATION CU YD	EMBANKMENT CU YD	POROUS GRANULAR EMBANKMENT SUBGRADE CU YD	STORM SEWER EXCAVATION CU YD	TOPSOIL EXCAVATION CU YD	UNSUITABLE EXCAVATION CU YD	EARTH EXCAVATION CU YD	EMBANKMENT CU YD	POROUS GRANULAR EMBANKMENT SUBGRADE CU YD	STORM SEWER EXCAVATION CU YD
25+88	32+50		237.6	0	603.5	41.3	0	0	216.7	0	436.4	64.7	0	884.2
32+50	36+53		130.8	0	163.5	64.4	0	0	53.6	0	118	45.4	0	0
IL 173 TOTALS			368.4	0	767	105.7	0	0	270.3	0	554.4	110.1	0	884.2
NORTH AVENUE														
35+00	40+00		177.3	266	173.3	83.6	95.1	37.8	182.3	262.2	117.5	58.2	90.1	344.9
40+00	46+00		87	253.7	24.5	26	89.3	0	83.3	75.7	26.2	62.4	29	0
NORTH AVENUE TOTALS			264.3	519.7	197.8	109.6	184.4	37.8	265.6	337.9	143.7	120.6	119.1	344.9
GRASS LAKE ROAD														
13+06	25+00		329.8	832.6	689.5	338	337.4	104.5	354.5	1426.1	802.2	414.2	542.6	426.0
GRASS LAKE RD TOTALS			329.8	832.6	689.5	338	337.4	104.5	354.5	1426.1	802.2	414.2	542.6	426.0

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION ILLINOIS ROUTE 83 FROM THE WISCONSIN STATE LINE TO NORTH OF PETITE LAKE ROAD EARTHWORK SCHEDULE SHEET 1 OF 1
NAME	DATE	
DATE: 1/30/09		DRAWN BY: JJH CHECKED BY: MW
		GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC. CHICAGO, ILLINOIS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	LAKE	LAKE	554	338
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
• (L-2W,R)6,6A & 6 EXT) WRS-1				



STAGE-II
 TOPSOIL EXC.(SQ..FT) 5.8
 UNSUITABLE EXC.(SQ..FT) 0.0
 EARTH EXC.(SQ..FT) 9.6
 EMBANKMENT(SQ..FT) 0.7
 POROUS GRANULAR EMB(SQ..FT) 0.0

STAGE-I
 TOPSOIL EXC.(SQ..FT) 5.8
 UNSUITABLE EXC.(SQ..FT) 0.0
 EARTH EXC.(SQ..FT) 9.2
 EMBANKMENT(SQ..FT) 0.8
 POROUS GRANULAR EMB(SQ..FT) 0.0

STAGE-II
 TOPSOIL EXC.(SQ..FT) 5.7
 UNSUITABLE EXC.(SQ..FT) 0.0
 EARTH EXC.(SQ..FT) 9.5
 EMBANKMENT(SQ..FT) 1.0
 POROUS GRANULAR EMB(SQ..FT) 0.0

STAGE-I
 TOPSOIL EXC.(SQ..FT) 5.6
 UNSUITABLE EXC.(SQ..FT) 0.0
 EARTH EXC.(SQ..FT) 9.1
 EMBANKMENT(SQ..FT) 1.5
 POROUS GRANULAR EMB(SQ..FT) 0.0

STAGE-II
 TOPSOIL EXC.(SQ..FT) 5.7
 UNSUITABLE EXC.(SQ..FT) 0.0
 EARTH EXC.(SQ..FT) 9.2
 EMBANKMENT(SQ..FT) 1.0
 POROUS GRANULAR EMB(SQ..FT) 0.0

STAGE-I
 TOPSOIL EXC.(SQ..FT) 5.6
 UNSUITABLE EXC.(SQ..FT) 0.0
 EARTH EXC.(SQ..FT) 9.0
 EMBANKMENT(SQ..FT) 1.7
 POROUS GRANULAR EMB(SQ..FT) 0.0

ILLINOIS DEPARTMENT OF TRANSPORTATION

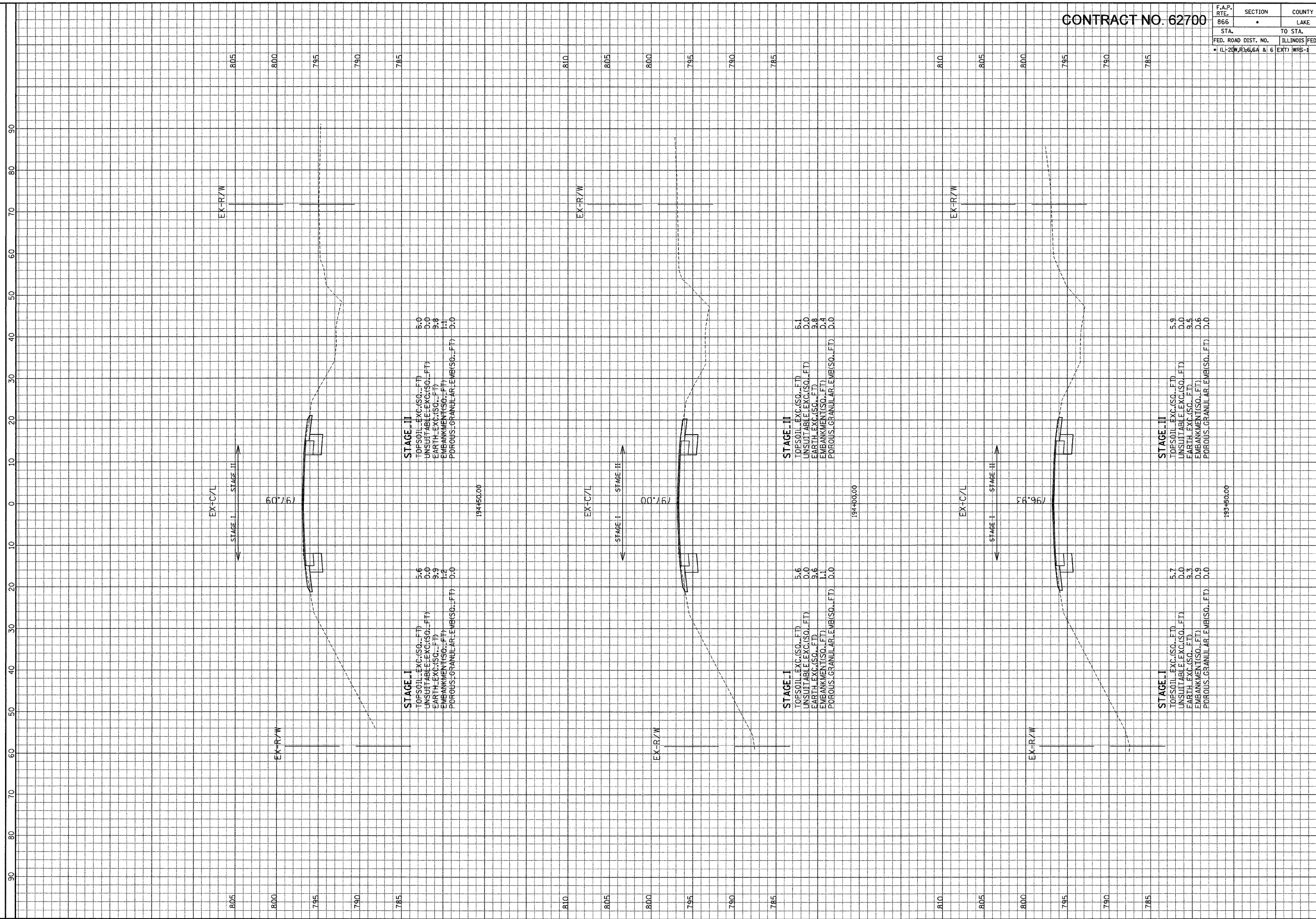
F. A. P. ROUTE 866 (IL ROUTE 83) STA. 191+85 TO STA. 193+00

SCALE: HORIZ. 1" = 10' VERT. 1" = 5'

GRAEF, ANHALT, SOLDWEMER & ASSOCIATES, INC.
 ENGINEERS & SCIENTISTS
 8501 N. Higgins Road, Suite 280
 Chicago, Illinois 60631
 (773) 399-0112

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS NO.	SHEET NO.
866	•	LAKE	554	339
STA.	TO STA.		ILLINOIS FED. AID PROJECT	
FED. ROAD DIST. NO.		• (L-20W,R)6,6A & 6 EXT) WRS-1		



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)
 STA. 193+50 TO STA. 194+50

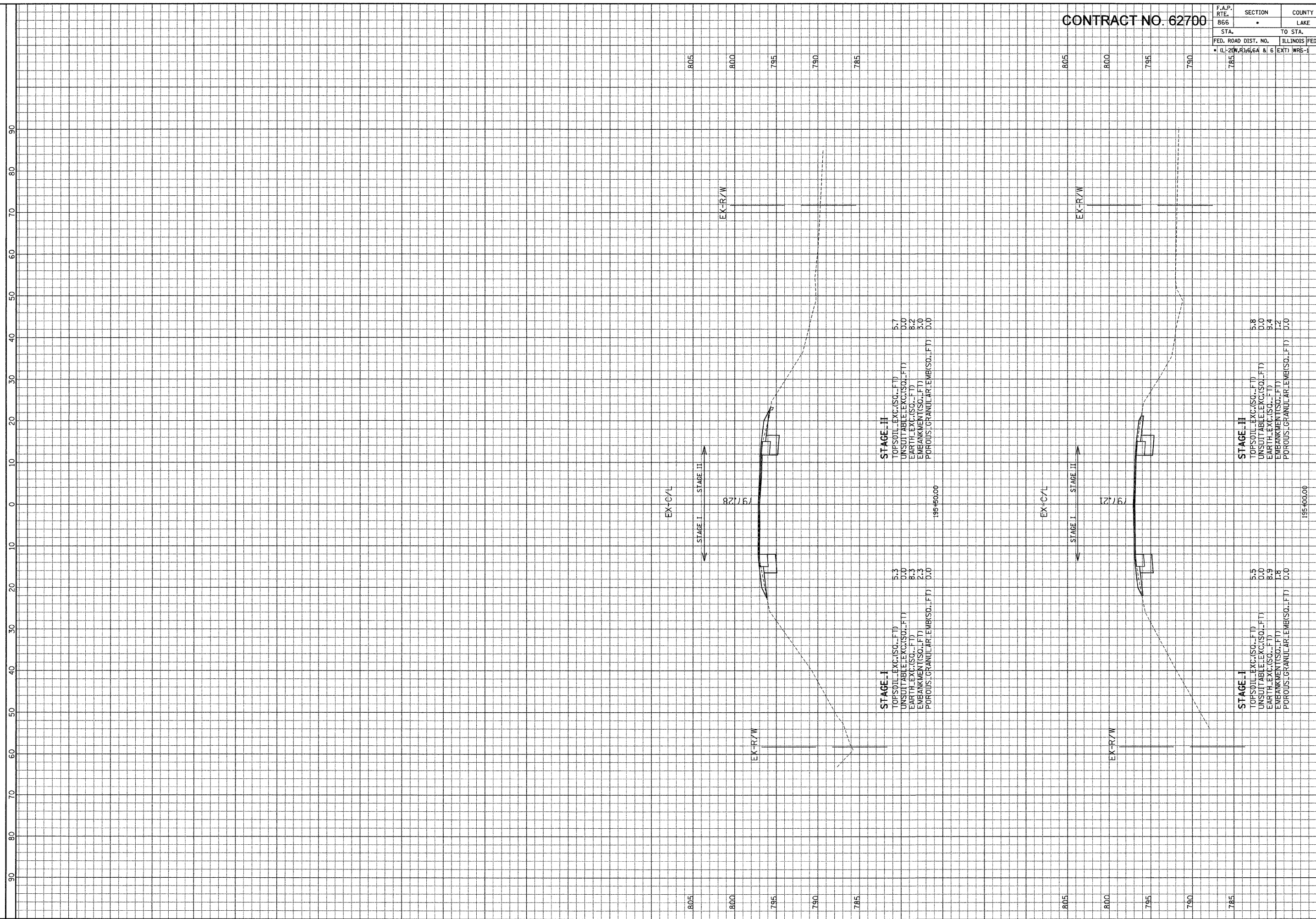
SCALE: HORIZ. 1" = 10'
 VERT. 1" = 5'

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 (773) 399-0111

CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866		LAKE	554	340

FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT
• (L-2) W.R. 16.6A & 6 EXT) WRS-1	



STAGE_II
 TOPSOIL_EXC.(SQ..FT) 5.7
 UNSUITABLE_EXC.(SQ..FT) 0.0
 EARTH_EXC.(SQ..FT) 8.2
 EMBANKMENT.(SQ..FT) 3.0
 POROUS GRANULAR EMB.(SQ..FT) 0.0

STAGE_I
 TOPSOIL_EXC.(SQ..FT) 5.3
 UNSUITABLE_EXC.(SQ..FT) 0.0
 EARTH_EXC.(SQ..FT) 8.3
 EMBANKMENT.(SQ..FT) 2.3
 POROUS GRANULAR EMB.(SQ..FT) 0.0

STAGE_II
 TOPSOIL_EXC.(SQ..FT) 5.8
 UNSUITABLE_EXC.(SQ..FT) 0.0
 EARTH_EXC.(SQ..FT) 9.4
 EMBANKMENT.(SQ..FT) 1.2
 POROUS GRANULAR EMB.(SQ..FT) 0.0

STAGE_I
 TOPSOIL_EXC.(SQ..FT) 5.5
 UNSUITABLE_EXC.(SQ..FT) 0.0
 EARTH_EXC.(SQ..FT) 8.9
 EMBANKMENT.(SQ..FT) 1.8
 POROUS GRANULAR EMB.(SQ..FT) 0.0

ILLINOIS DEPARTMENT
 OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)
 STA. 195+00 TO STA. 195+50

SCALE: HORIZ. 1" = 10'
 VERT. 1" = 5'

ORNEY, ANWALT, SCHLOEMER & ASSOCIATES, INC.
 ENGINEERS & SCIENTISTS
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 Chicago, Illinois 60631
 (773) 399-0172

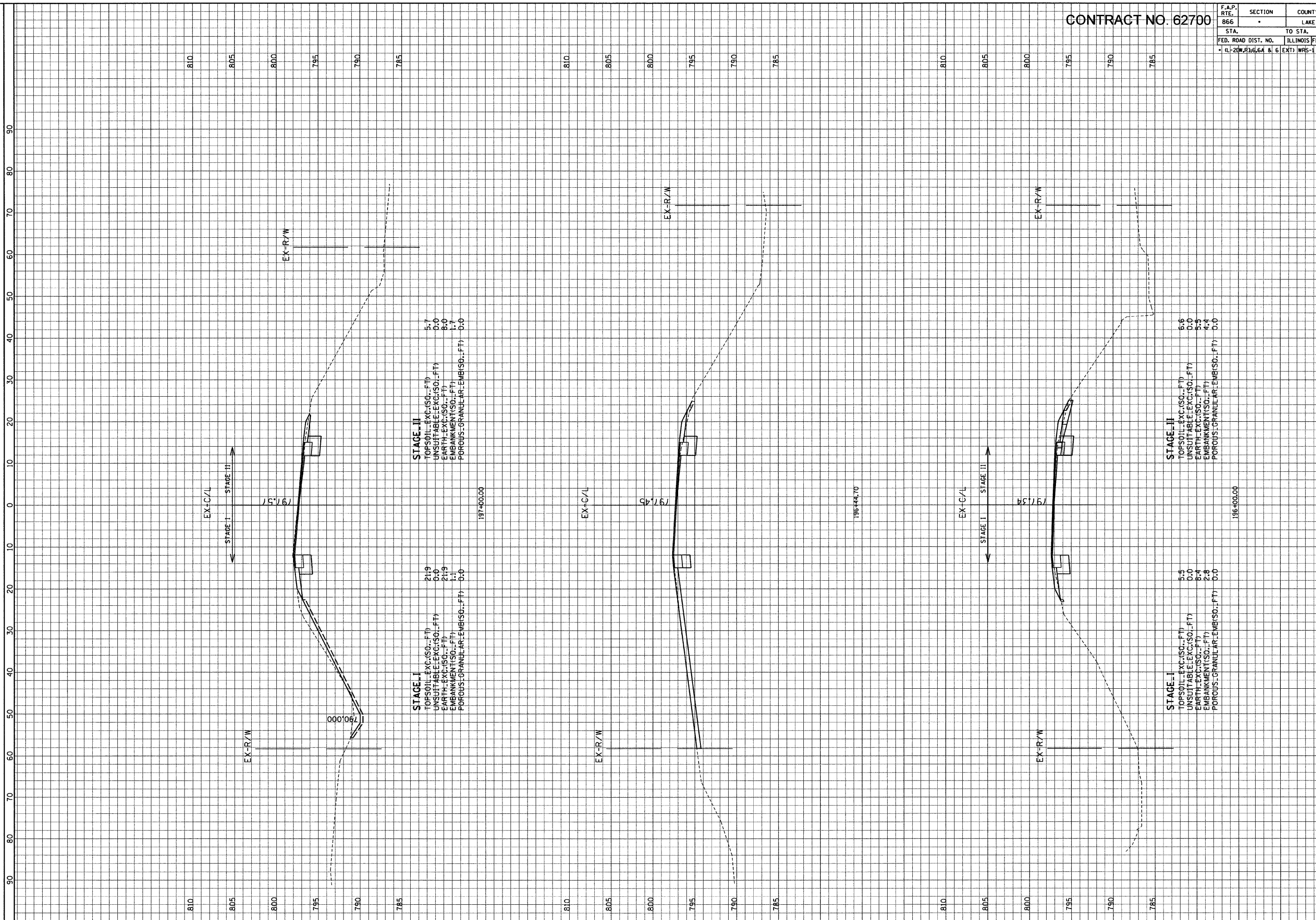
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CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	•	LAKE	554	341

STA.	TO STA.
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT

• (L-2)(W-3)(6.6A & 6 EXT) WRS-1



STAGE II
 TOPSOIL-EXC.(SG.-FT) 5.7
 UNSUITABLE EXC.(SG.-FT) 0.0
 EARTH-EXC.(SG.-FT) 8.0
 EMBANKMENT(SG.-FT) 1.7
 POROUS GRANULAR-EMBI(SG.-FT) 0.0

STAGE I
 TOPSOIL-EXC.(SG.-FT) 21.9
 UNSUITABLE EXC.(SG.-FT) 0.0
 EARTH-EXC.(SG.-FT) 21.9
 EMBANKMENT(SG.-FT) 1.1
 POROUS GRANULAR-EMBI(SG.-FT) 0.0

STAGE II
 TOPSOIL-EXC.(SG.-FT) 6.6
 UNSUITABLE EXC.(SG.-FT) 0.0
 EARTH-EXC.(SG.-FT) 5.3
 EMBANKMENT(SG.-FT) 4.4
 POROUS GRANULAR-EMBI(SG.-FT) 0.0

STAGE I
 TOPSOIL-EXC.(SG.-FT) 5.5
 UNSUITABLE EXC.(SG.-FT) 0.0
 EARTH-EXC.(SG.-FT) 8.4
 EMBANKMENT(SG.-FT) 2.8
 POROUS GRANULAR-EMBI(SG.-FT) 0.0

ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)

SCALE: HORIZ. 1" = 10'

VERT. 1" = 5'

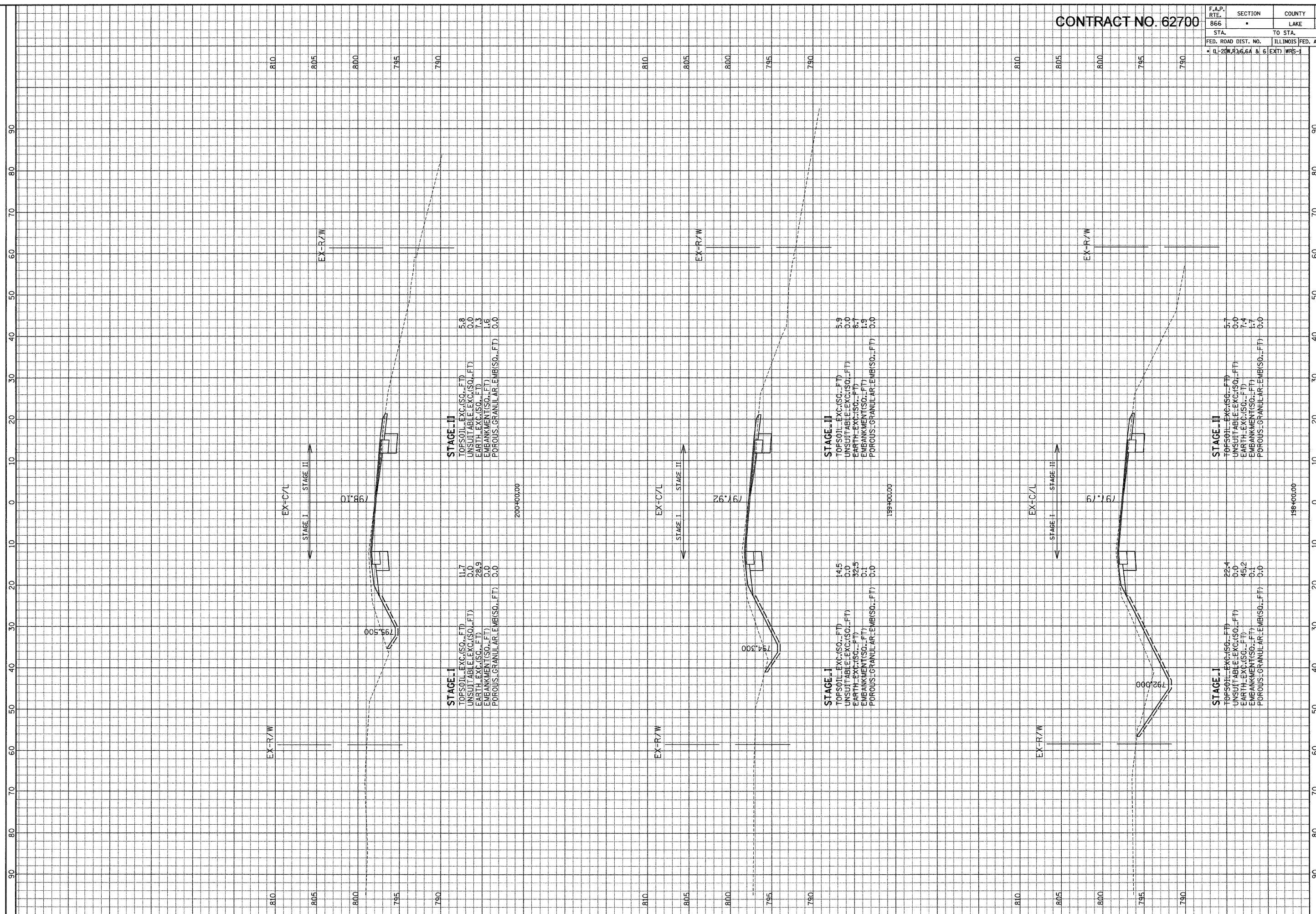
STA. 196+00 TO STA. 197+00

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 8501 Chicago, Illinois 60631
 (773) 399-0112

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CONTRACT NO. 62700

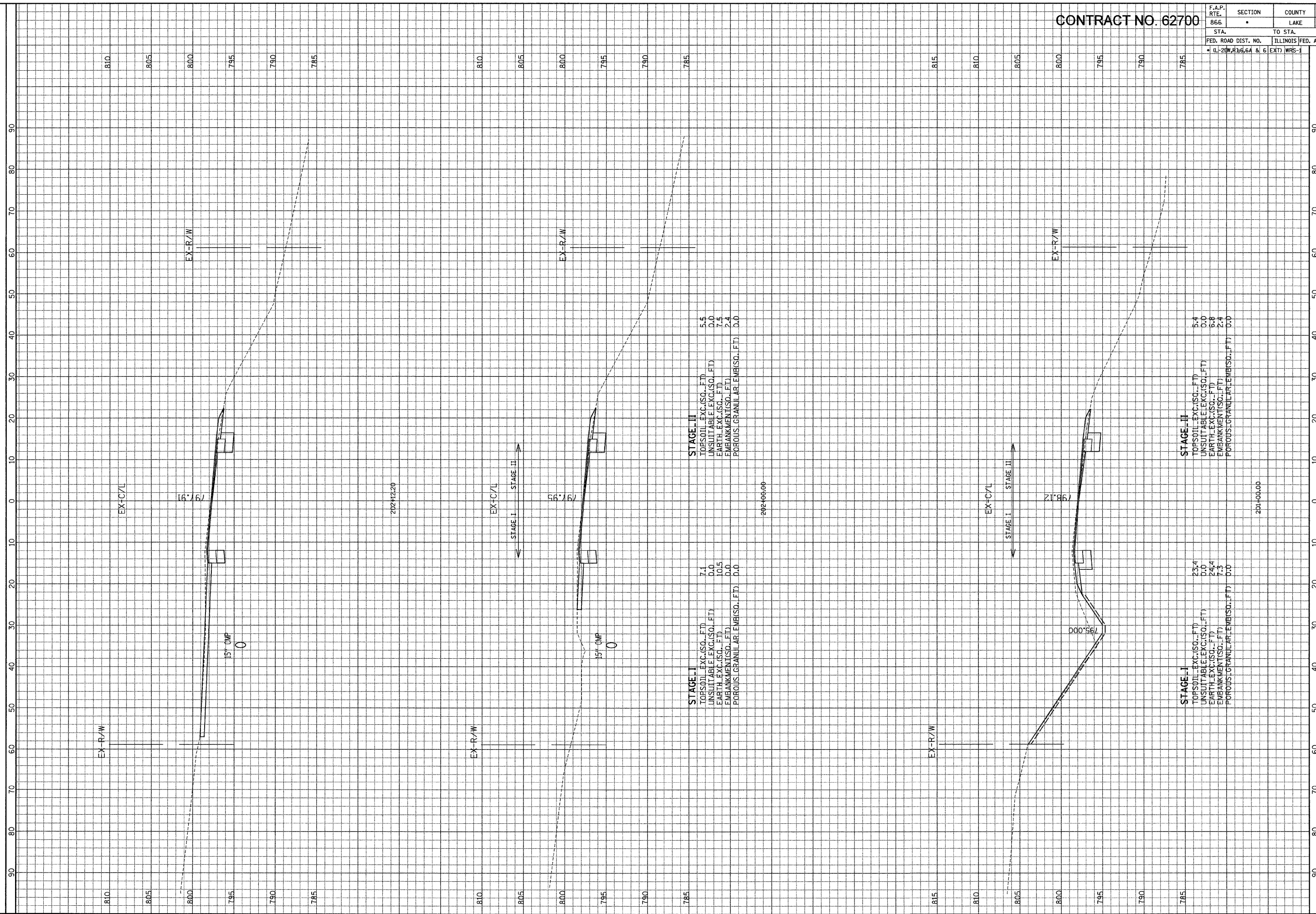
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	LAKE	LAKE	554	342
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID	PROJECT
• (L-20W,R)3,6,6A & 6		EXT) WRS-1		



ILLINOIS DEPARTMENT OF TRANSPORTATION		F. A. P. ROUTE 866 (IL ROUTE 83)		SCALE: HORIZ. 1" = 10'
STA. 198+00 TO STA. 200+00		STA. 198+00 TO STA. 200+00		VERT. 1" = 5'

GRAF, ANHALT, SCHLOMER & ASSOCIATES, INC.
 GRAEF, ANHALT, SCHLOMER & ASSOCIATES, INC.
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 Chicago, Illinois 60631
 (773) 399-0111

F.A.P. RTE. 866	SECTION •	COUNTY LAKE	TOTAL SHEETS 554	SHEET NO. 343
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
• (L-20W,R)36.6A & 6 EXT) WRS-1				



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)

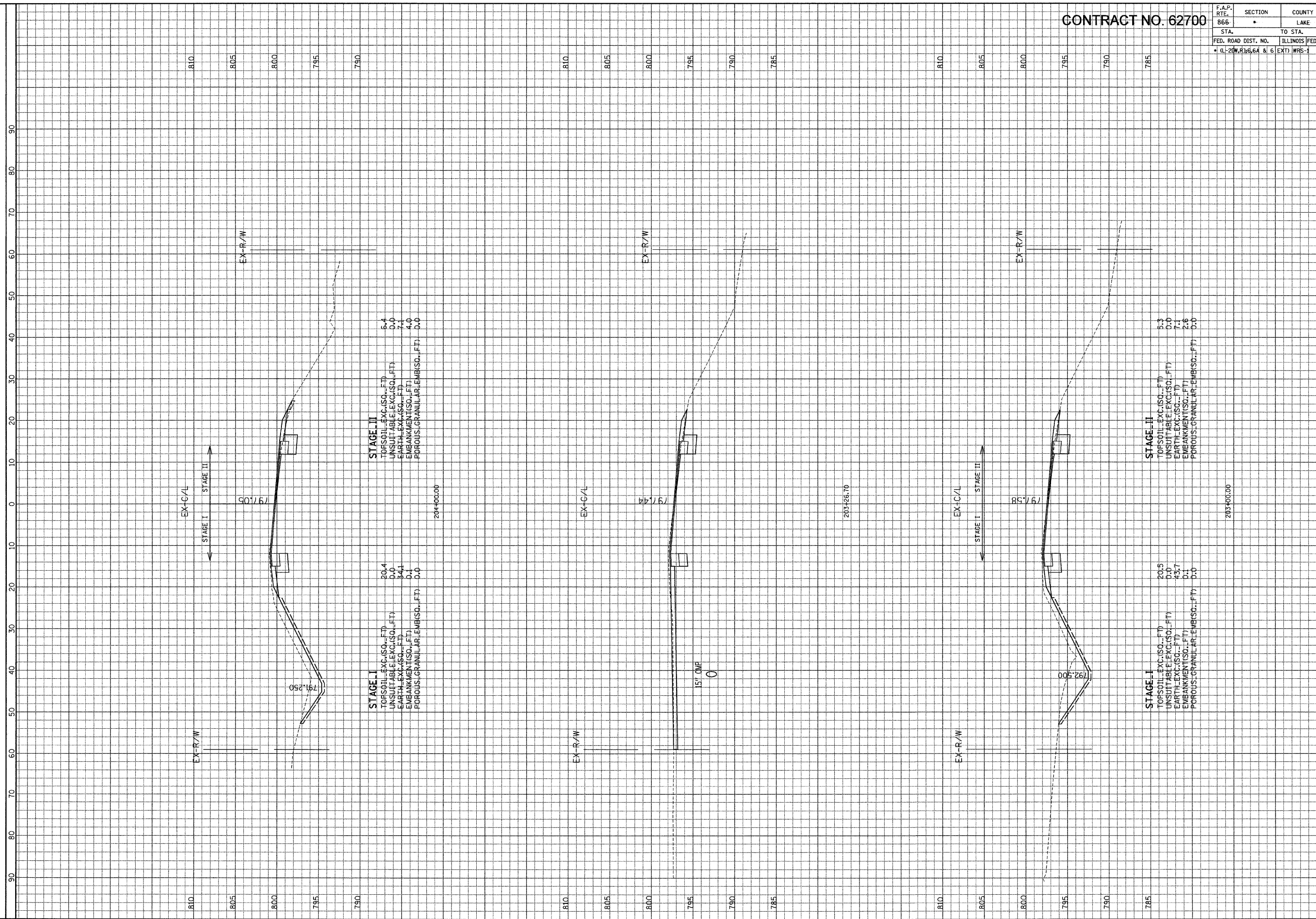
STA. 201+00 TO STA. 202+12.20

SCALE: HORIZ. 1" = 10'
VERT. 1" = 5'

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 (773) 399-0012

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	*	LAKE	554	344
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
* (L-20W,R)16.6A & 6 EXT WRS-1				



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)
STA. 203+00 TO STA. 204+00

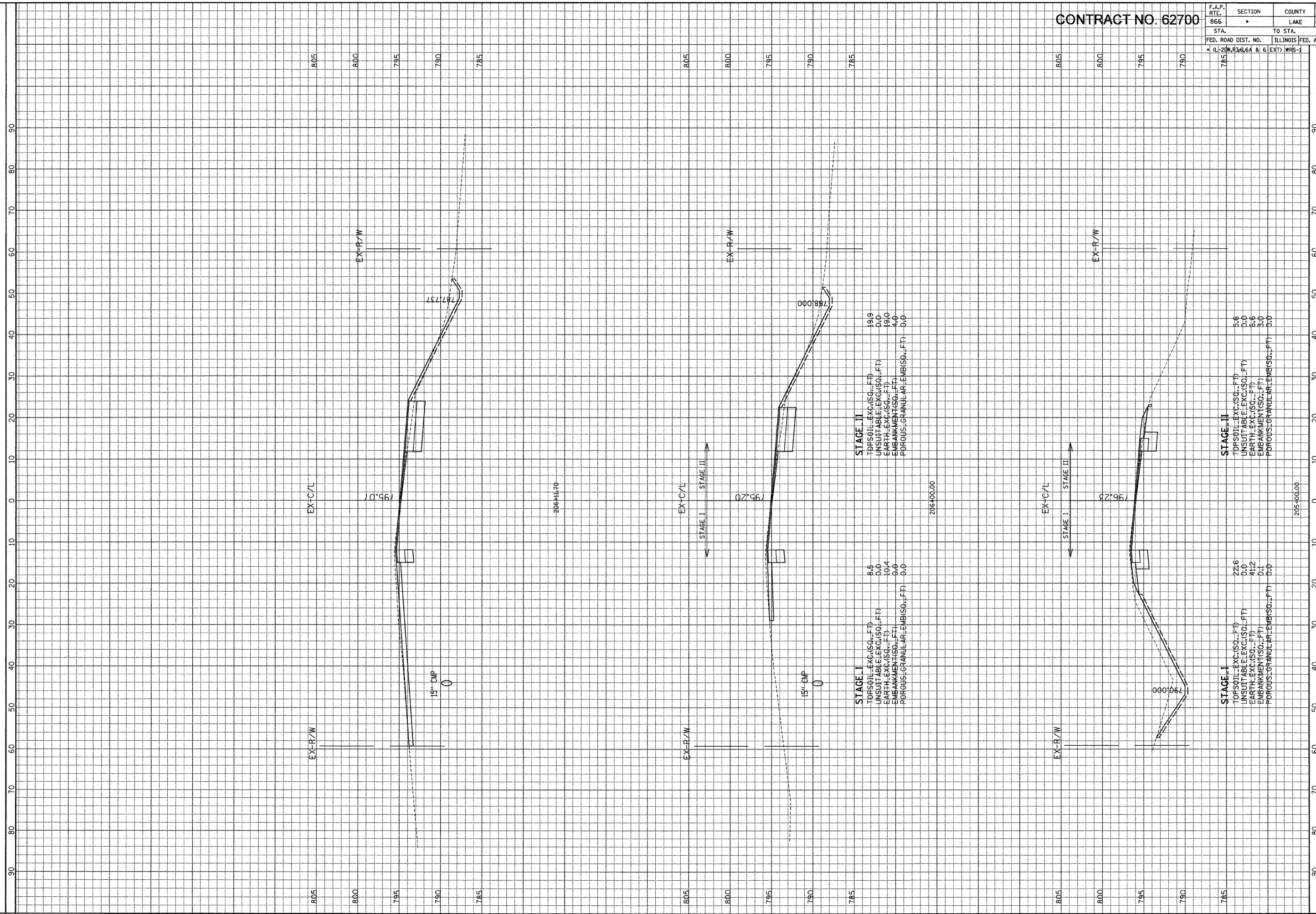
SCALE: HORIZ. 1" = 10'
VERT. 1" = 5'

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ENGINEERS & SCIENTISTS
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DATE: 21-Jan-04 10:16

CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	•	LAKE	554	345
STA. TO STA.		ILLINOIS FED. AID PROJECT		
FED. ROAD DIST. NO.		• IL-206, R36.6A & 6 EXT) WRS-1		



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)
STA. 205+00 TO STA. 206+111.70

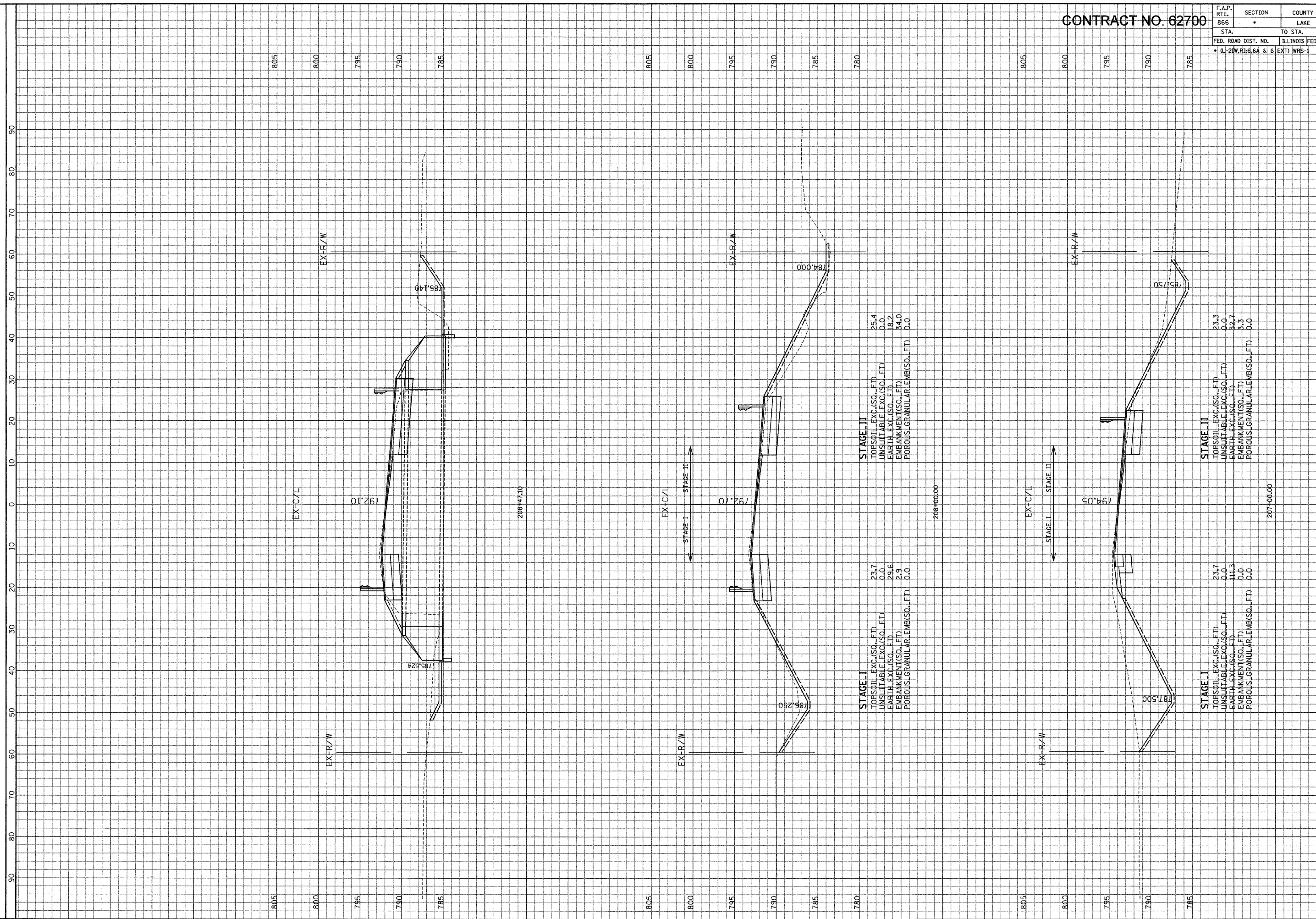
SCALE: HORIZ. 1" = 10'
VERT. 1" = 5'

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ENGINEERS & SCIENTISTS
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DATE: 21-Jan-04 10:16

CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	•	LAKE	554	346
STA.	TO STA.		ILLINOIS FED. AID PROJECT	
			• (L-207,R)16.6A & 6 EXT) WRS-1	



STAGE II
 TOPSOIL_EXC.(SQ.,FT) 25.4
 UNSUITABLE_EXC.(SQ.,FT) 0.0
 EARTH_EXC.(SQ.,FT) 18.2
 EMBANKMENT(SQ.,FT) 34.0
 POROUS GRANULAR_EMB(SQ.,FT) 0.0

STAGE I
 TOPSOIL_EXC.(SQ.,FT) 23.7
 UNSUITABLE_EXC.(SQ.,FT) 0.0
 EARTH_EXC.(SQ.,FT) 29.6
 EMBANKMENT(SQ.,FT) 2.9
 POROUS GRANULAR_EMB(SQ.,FT) 0.0

STAGE II
 TOPSOIL_EXC.(SQ.,FT) 23.3
 UNSUITABLE_EXC.(SQ.,FT) 0.0
 EARTH_EXC.(SQ.,FT) 32.7
 EMBANKMENT(SQ.,FT) 3.3
 POROUS GRANULAR_EMB(SQ.,FT) 0.0

STAGE I
 TOPSOIL_EXC.(SQ.,FT) 23.7
 UNSUITABLE_EXC.(SQ.,FT) 0.0
 EARTH_EXC.(SQ.,FT) 11.3
 EMBANKMENT(SQ.,FT) 0.0
 POROUS GRANULAR_EMB(SQ.,FT) 0.0

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ILLINOIS DEPARTMENT
 OF TRANSPORTATION

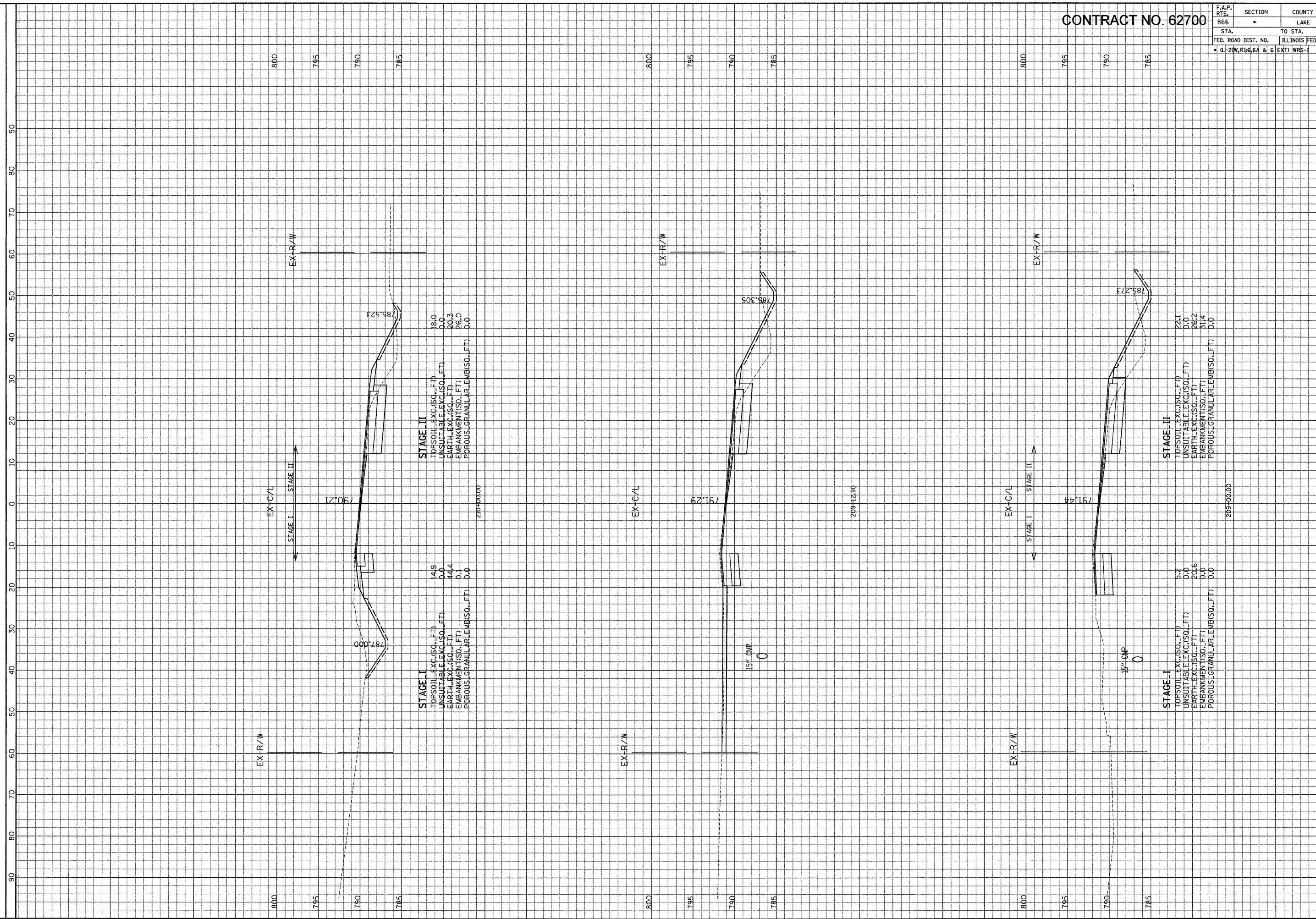
F. A. P. ROUTE 866 (IL ROUTE 83)
 STA. 207+00 TO STA. 208+47.10

SCALE: HORIZ. 1" = 10'
 VERT. 1" = 5'

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 DATE: 21-Jan-04 10:16

CONTRACT NO. 62700

F.A.P. RTE. 866	SECTION •	COUNTY LAKE	TOTAL SHEETS 554	SHEET NO. 347
STA. TO STA.		ILLINOIS FED. AID PROJECT		
FED. ROAD DIST. NO.		• IL-209, R36.6A & 6 EXT WRS-1		



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)
STA. 209+00 TO STA. 210+00

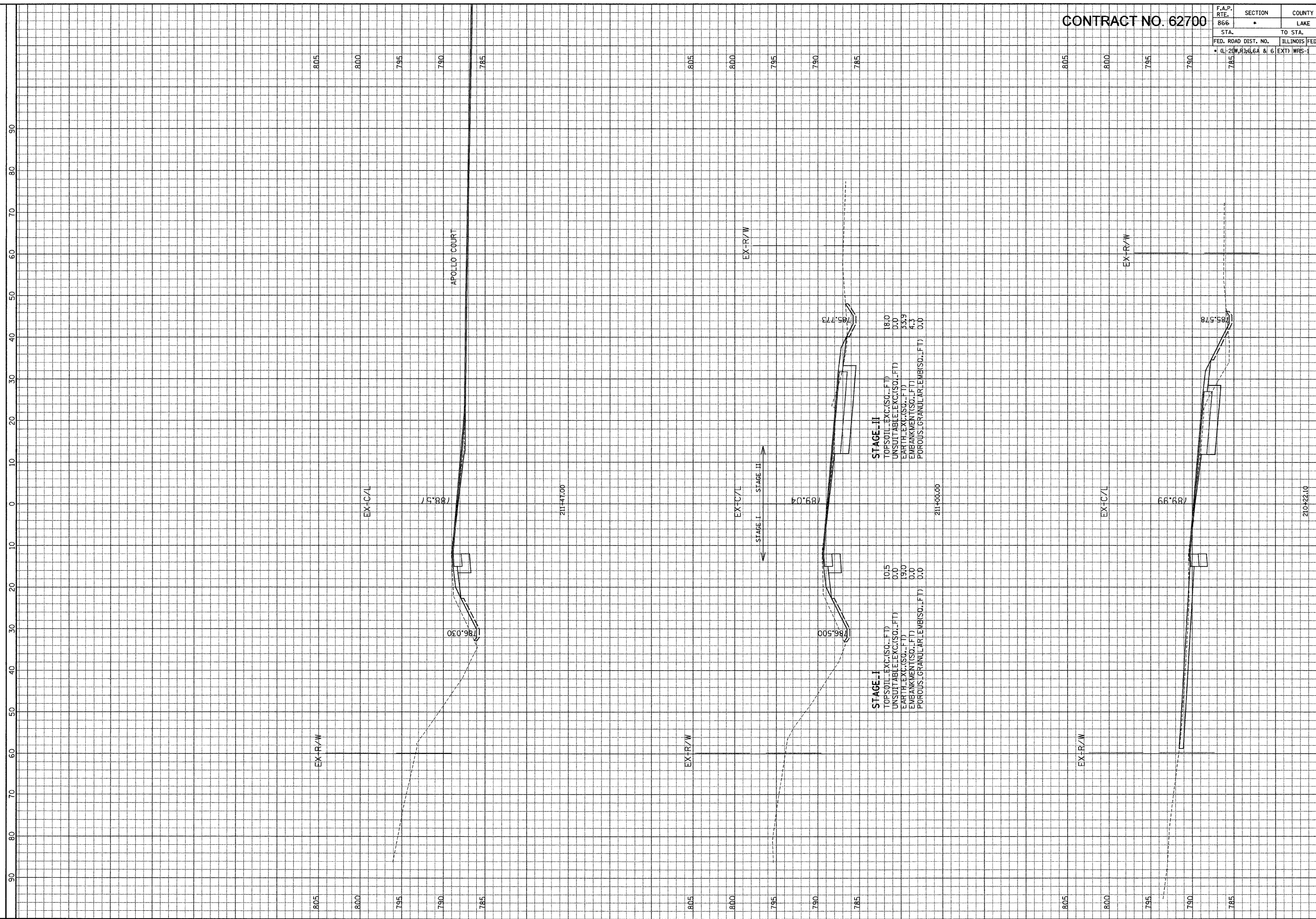
SCALE: HORIZ. 1" = 10'
VERT. 1" = 5'

GRAF, ANHALT, SCHLOEMER & ASSOCIATES, INC.
ENGINEERS & SCIENTISTS
8501 N. Higgins Road, Suite 280
Chicago, Illinois 60631
(773) 359-0172

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DATE: 21-Jan-04 10:16

CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	*	LAKE	554	348
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
	• (L-210+R) 6.6A & 6 (EXT) WRS-1			



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)

STA. 210+22.10 TO STA. 211+47

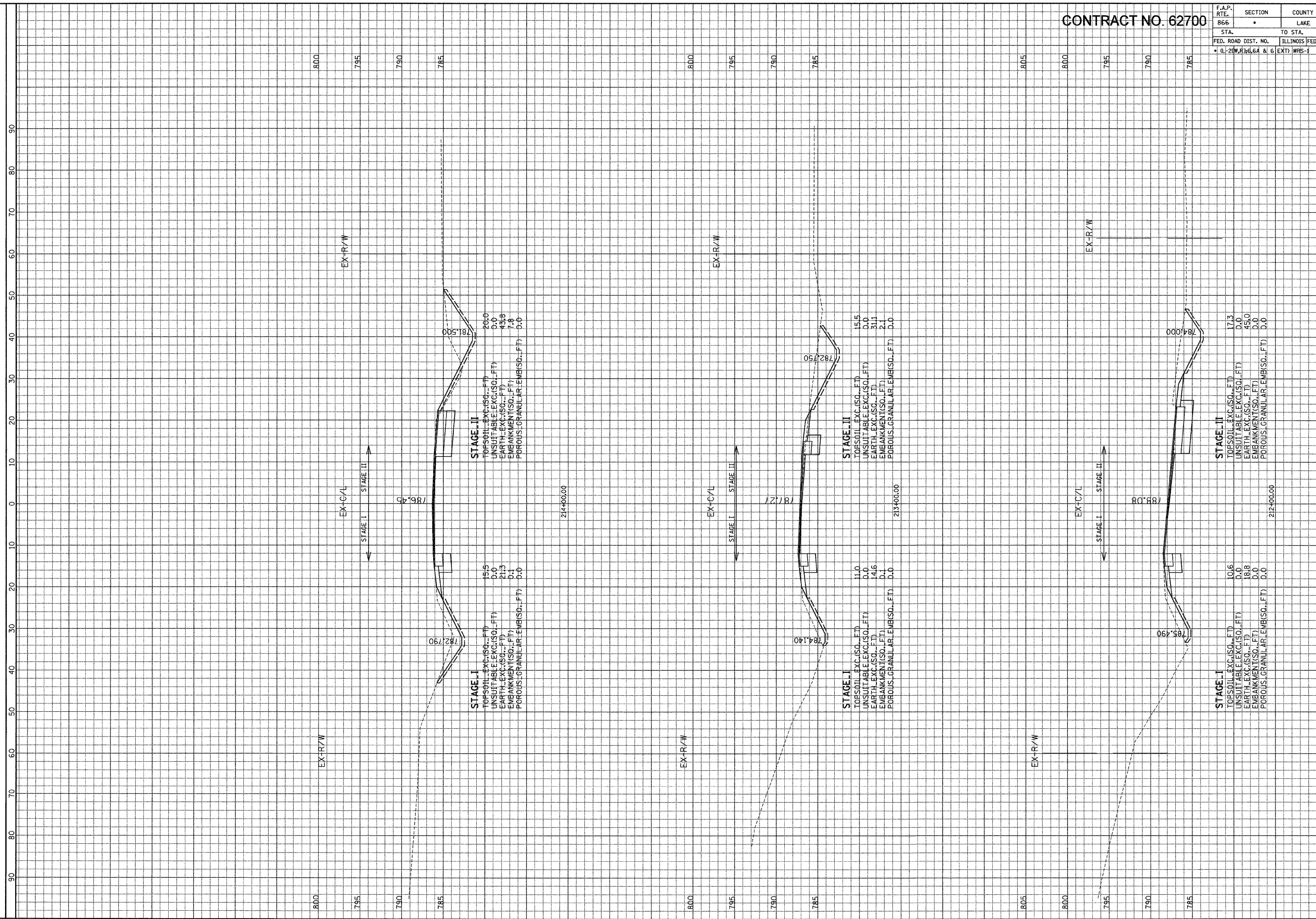
SCALE: HORIZ. 1" = 10'
 VERT. 1" = 5'

GRAF, ANALT, SCHLOMER & ASSOCIATES, INC.
 ENGINEERS & SCIENTISTS
 8501 N. Higgins Road, Suite 280
 Chicago, Illinois 60631
 (773) 399-0112

GALEP
 SCHLOMER
 & ASSOCIATES, INC.
 ENGINEERS & SCIENTISTS

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866		LAKE	554	349
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
• (L-20W,R)6.6A & 6 EXT) WRS-1				



ILLINOIS DEPARTMENT OF TRANSPORTATION

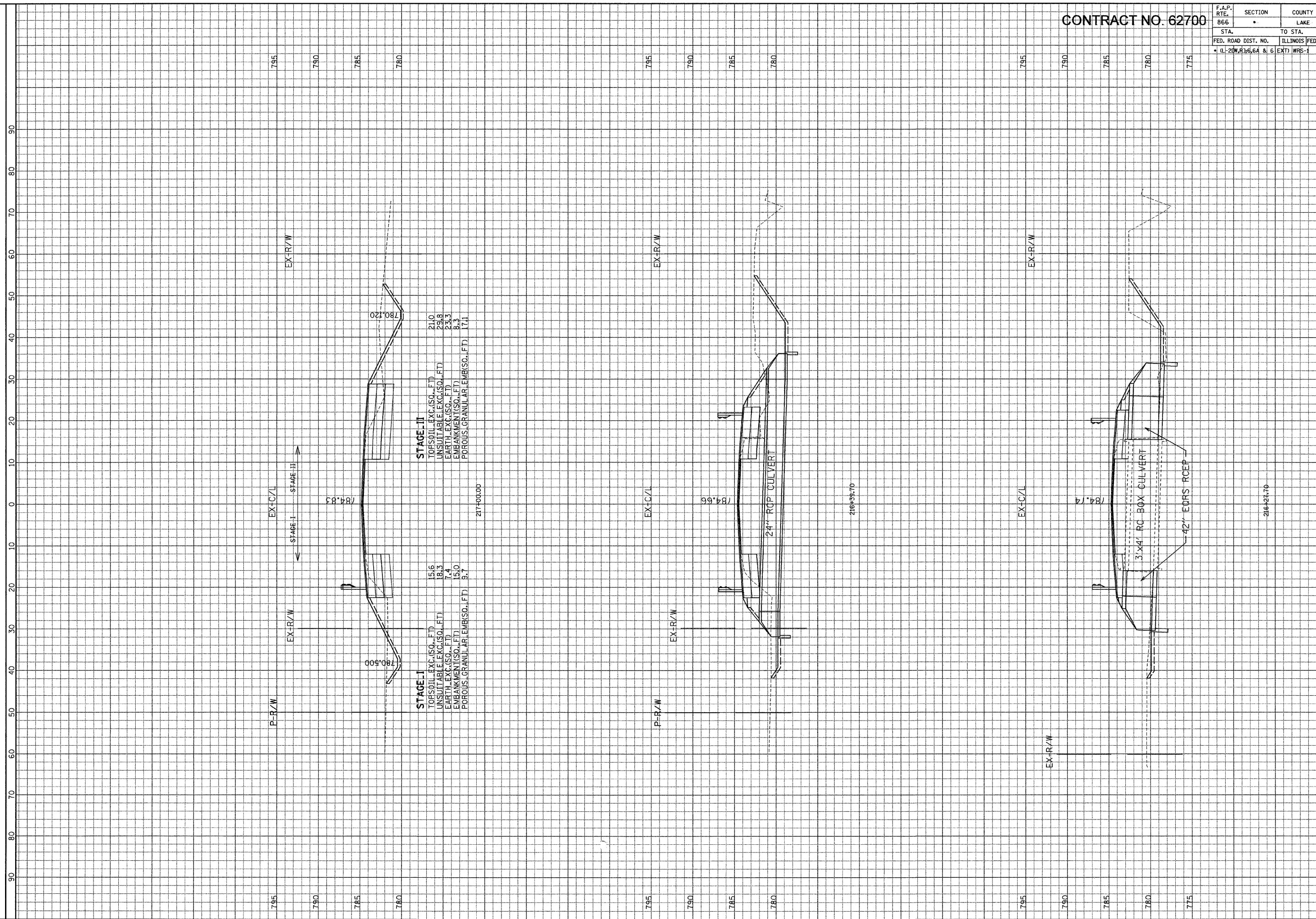
F. A. P. ROUTE 866 (IL ROUTE 83)
STA. 212+00 TO STA. 214+00

SCALE: HORIZ. 1" = 10'
VERT. 1" = 5'

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ENGINEERS & SCIENTISTS
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Chicago, IL 60631
(773) 399-0312

CONTRACT NO. 62700

F.A.P. RTE. 866	SECTION •	COUNTY LAKE	TOTAL SHEETS NO. 554	SHEET NO. 351
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
• CL-211W, R116.6A & 6 EXT WRS-1				



STAGE - II
 TOPSOIL EXC.(SQ.-FT) 21.0
 UNSUITABLE EXC.(SQ.-FT) 29.8
 EARTH EXC.(SQ.-FT) 23.3
 EMBANKMENT(SQ.-FT) 8.3
 POROUS GRANULAR EMB(SQ.-FT) 17.1

STAGE - I
 TOPSOIL EXC.(SQ.-FT) 15.6
 UNSUITABLE EXC.(SQ.-FT) 18.3
 EARTH EXC.(SQ.-FT) 7.4
 EMBANKMENT(SQ.-FT) 15.0
 POROUS GRANULAR EMB(SQ.-FT) 9.7

ILLINOIS DEPARTMENT
OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)
STA. 216+27.70 TO STA. 217+00

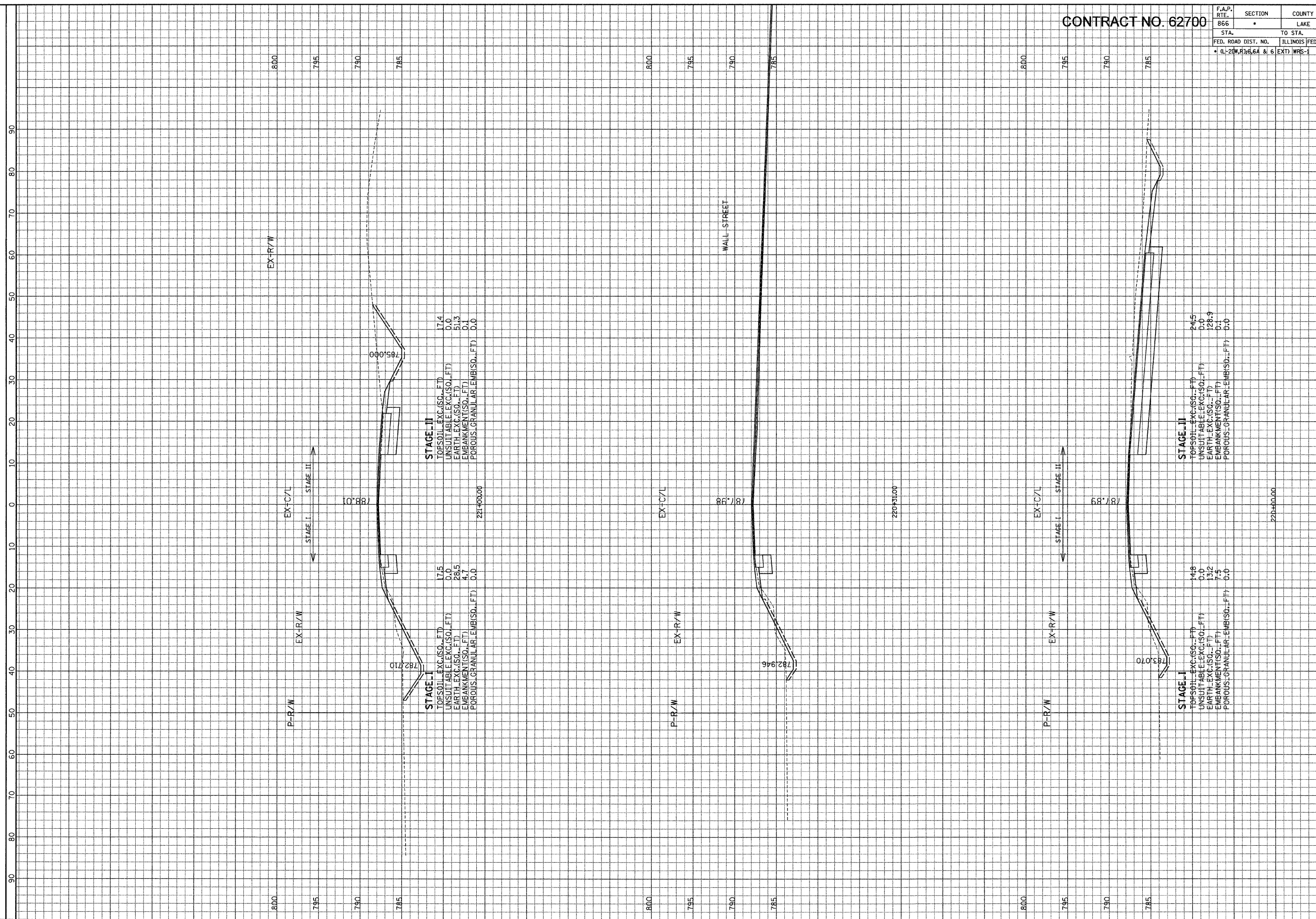
SCALE: HORIZ. 1" = 10'
VERT. 1" = 5'

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8501 N. Higgins Road, Suite 280
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DATE: 21-Jan-04 10:16

CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	•	LAKE	554	353
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
• (L-220,R)3,6,6A & 6 EXT) WRS-1				



STAGE - III
 TOPSOIL-EXC.(SQ.-FT) 17.4
 UNSUITABLE-EXC.(SQ.-FT) 0.0
 EARTH-EXC.(SQ.-FT) 51.3
 EMBANKMENT(SQ.-FT) 0.1
 POROUS-GRANULAR-EMB(SQ.-FT) 0.0

STAGE - I
 TOPSOIL-EXC.(SQ.-FT) 17.5
 UNSUITABLE-EXC.(SQ.-FT) 0.0
 EARTH-EXC.(SQ.-FT) 28.5
 EMBANKMENT(SQ.-FT) 4.7
 POROUS-GRANULAR-EMB(SQ.-FT) 0.0

STAGE - II
 TOPSOIL-EXC.(SQ.-FT) 24.5
 UNSUITABLE-EXC.(SQ.-FT) 0.0
 EARTH-EXC.(SQ.-FT) 128.9
 EMBANKMENT(SQ.-FT) 0.1
 POROUS-GRANULAR-EMB(SQ.-FT) 0.0

STAGE - I
 TOPSOIL-EXC.(SQ.-FT) 14.8
 UNSUITABLE-EXC.(SQ.-FT) 0.0
 EARTH-EXC.(SQ.-FT) 13.2
 EMBANKMENT(SQ.-FT) 7.5
 POROUS-GRANULAR-EMB(SQ.-FT) 0.0

ILLINOIS DEPARTMENT
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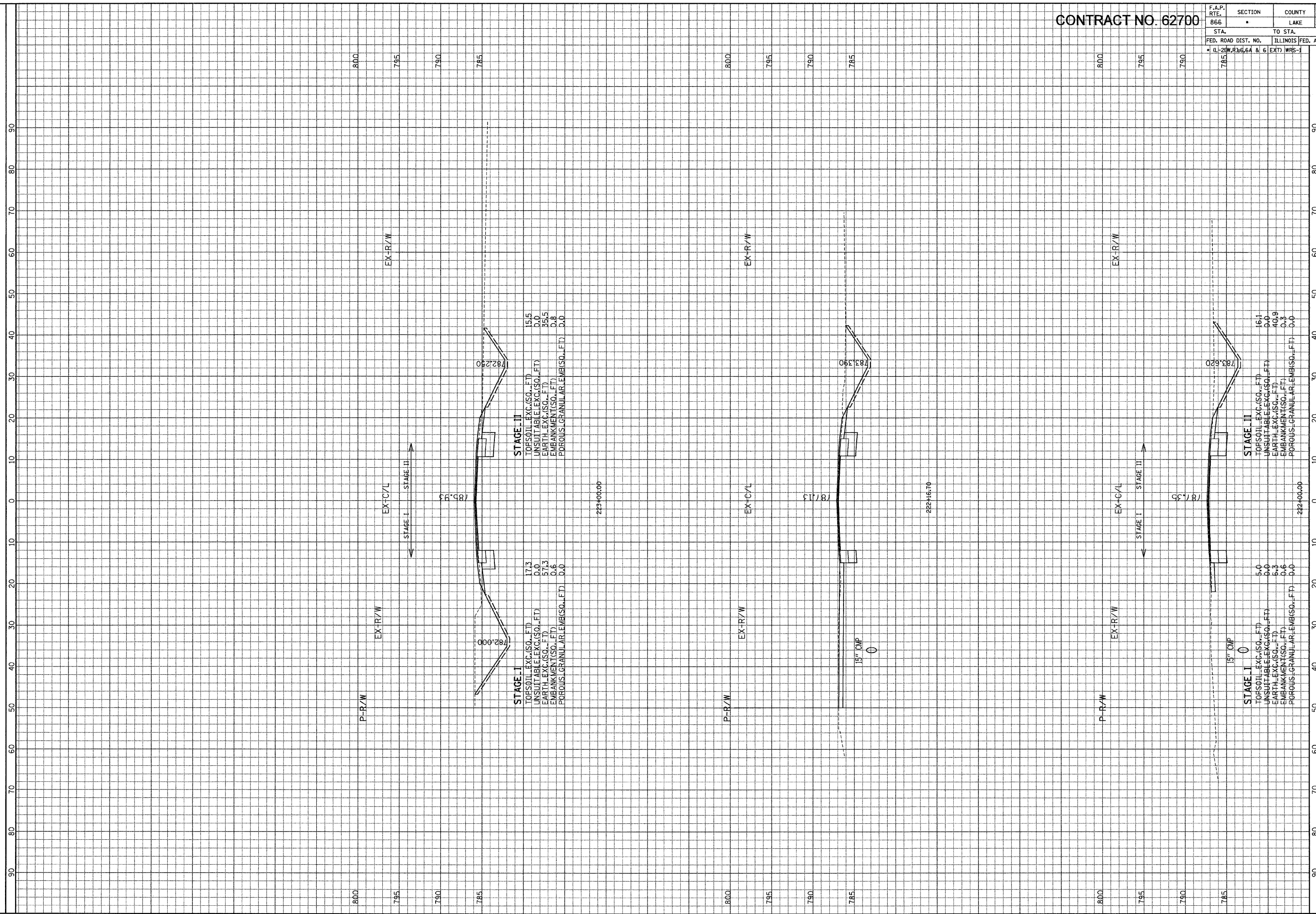
GRAF, ANWALT, SCHLOMER & ASSOCIATES, INC.
 ENGINEERS & SCIENTISTS
 8001 W. Higgins Road, Suite 200
 Chicago, Illinois 60631
 (773) 399-0122

F. A. P. ROUTE 866 (IL ROUTE 83)
 STA. 220+00 TO STA. 221+00
 SCALE: HORIZ. 1" = 10'
 VERT. 1" = 5'

FILE: G:\2008\4924\Ave\Area\BAXSHT_B.dgn
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CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	•	LAKE	554	354
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
	• IL-20W, R36.6A & 6 EXT) WRS-1			



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)

STA. 222+00 TO STA. 223+00

SCALE: HORIZ. 1" = 10'

VERT. 1" = 5'

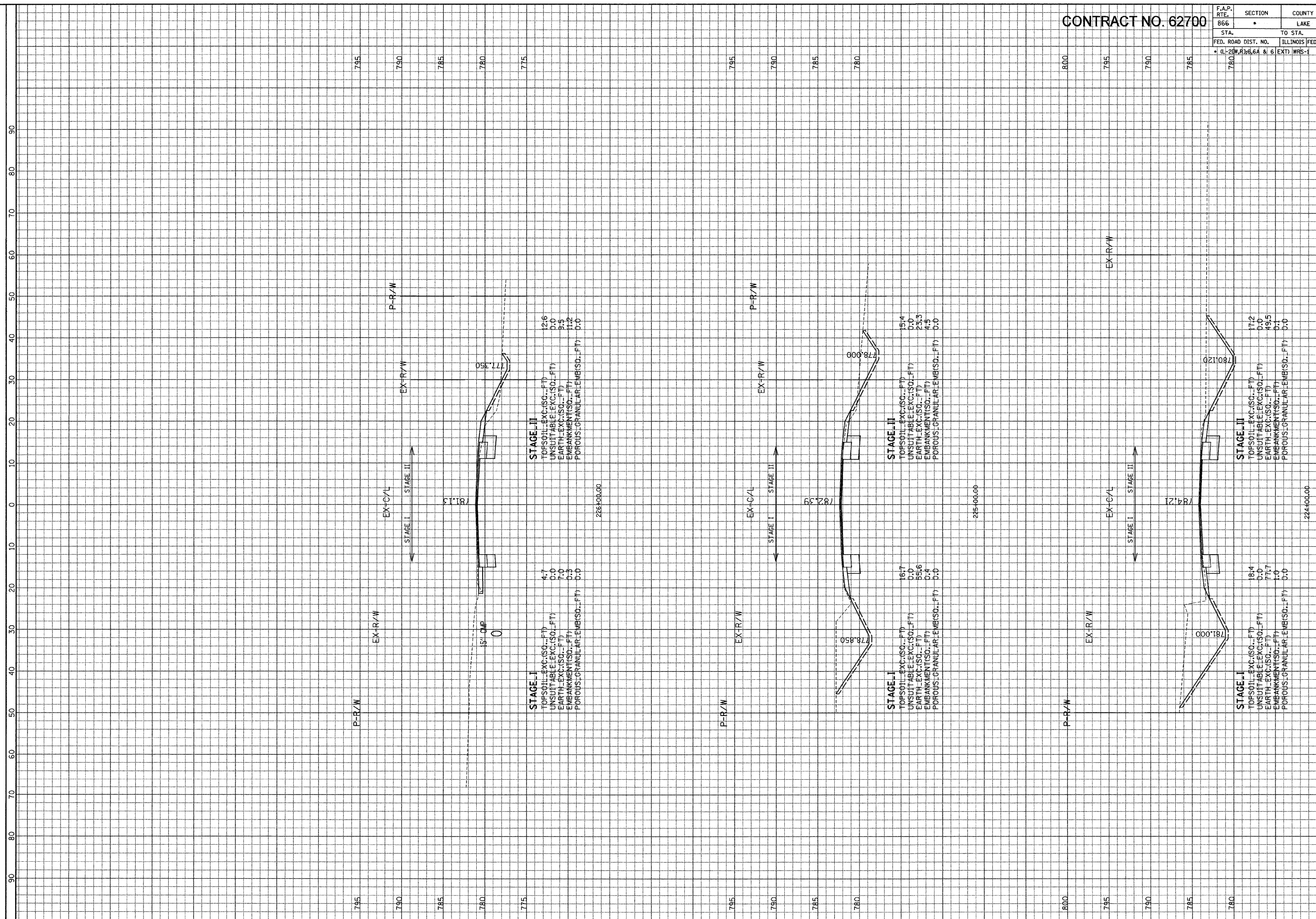
222+00.00

222+16.70

222+00.00

GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC.
 ENGINEERS & SCIENTISTS
 8501 N. Higgins Road, Suite 280
 Chicago, Illinois 60631
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CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	•	LAKE	554	355
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
• (L-2) W.R. 6.6A & 6 (EXT) WRS-1				

ILLINOIS DEPARTMENT OF TRANSPORTATION

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Chicago, Illinois 60631
(773) 399-9111

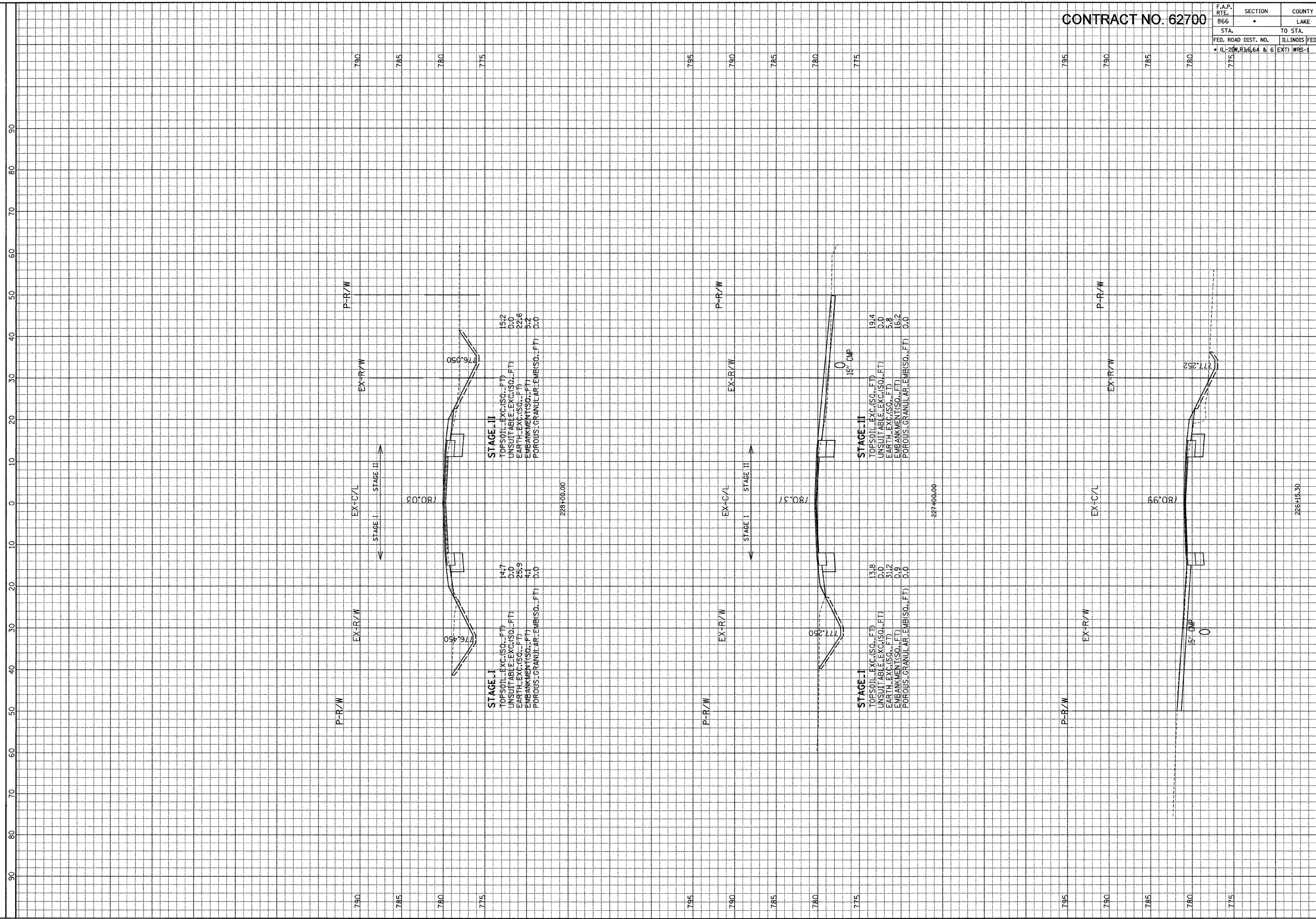
SCALE: HORIZ. 1" = 10'
VERT. 1" = 5'

F. A. P. ROUTE 866 (IL ROUTE 83)
STA. 224+00 TO STA. 226+00

FILE: G:\2004\0424_N\proj\Area\BAXSH1_B.dgn
DATE: 21-Jan-04 10:16

CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	*	LAKE	554	356
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
• (L-20W,R)6.6A & 6		(EXT) WRS-1		



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83) STA. 226+15.30 TO STA. 228+00

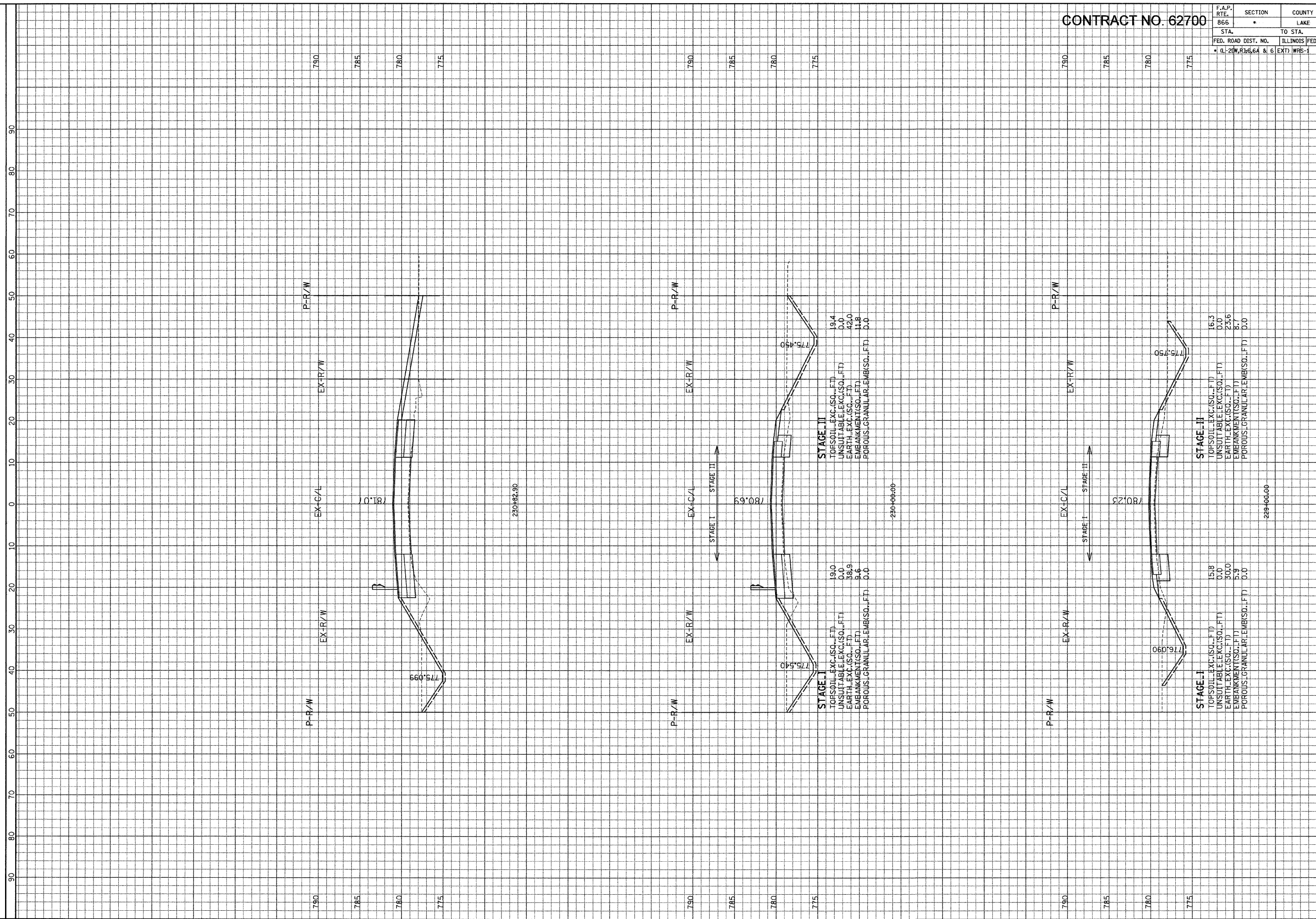
SCALE: HORIZ. 1" = 10' VERT. 1" = 5'

GRAEF, ANHALT, SCHLUEMER & ASSOCIATES, INC.
 ENGINEERS & SCIENTISTS
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CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	•	LAKE	554	357
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
• CL-20W, R16.6A & 6 EXT WRS-1				



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83) STA. 229+00 TO STA. 230+82.90

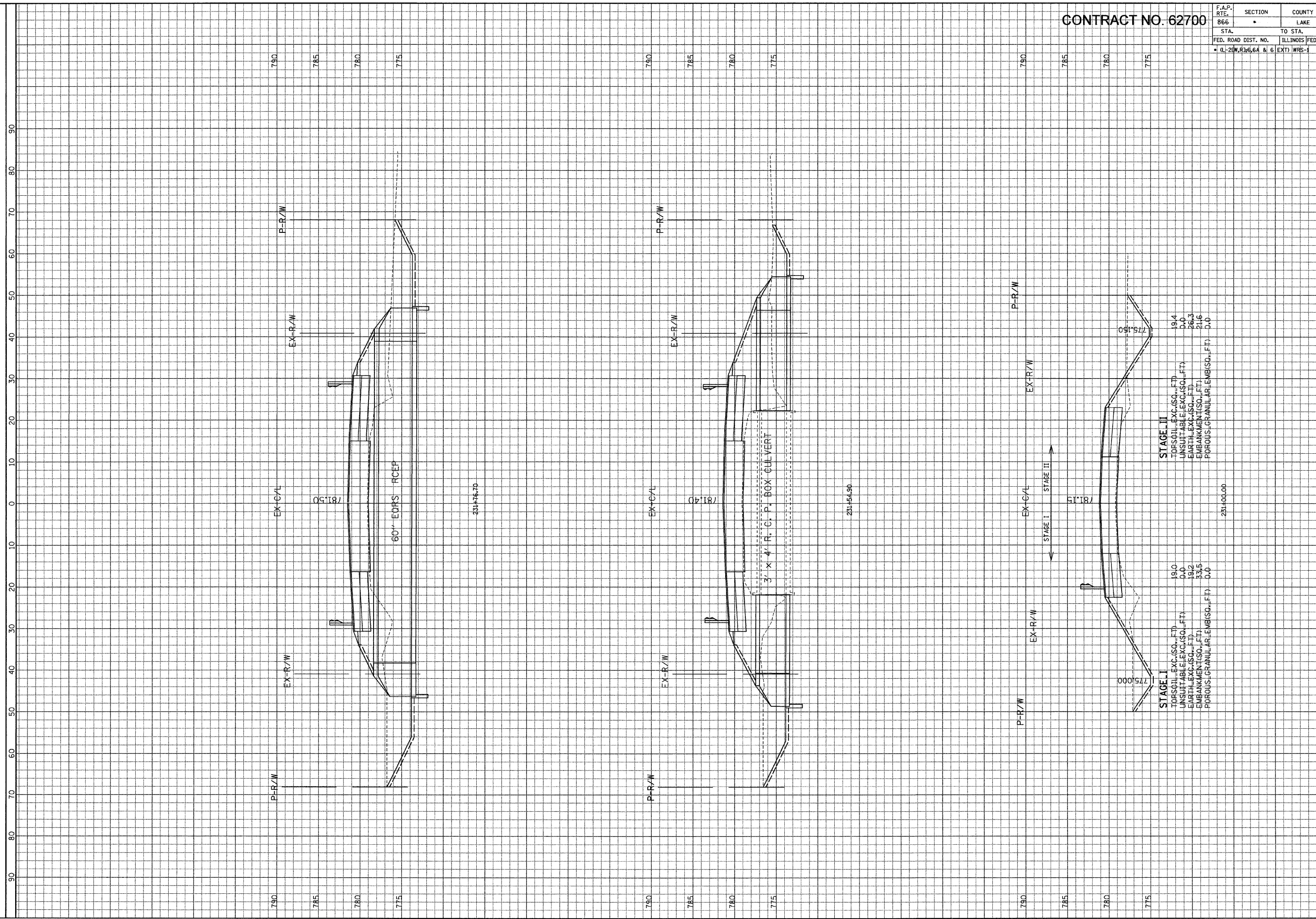
SCALE: HORIZ. 1" = 10' VERT. 1" = 5'

GRAF, ANHALT, SCHLOEMER & ASSOCIATES, INC.
 ENGINEERS & SCIENTISTS
 8501 N. Higgins Road, Suite 280
 Chicago, Illinois 60631
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FILE: G:\2004\0424_N\Area\Area\AXSHT_B.dgn
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CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866		LAKE	554	358
STA. TO STA.		ILLINOIS FED. AID PROJECT		
FED. ROAD DIST. NO.		• (L-20W, R) 6.6A & 6 (EXT) WRS-1		



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)

STA. 231+00 TO STA. 231+76.70

SCALE: HORIZ. 1" = 10'

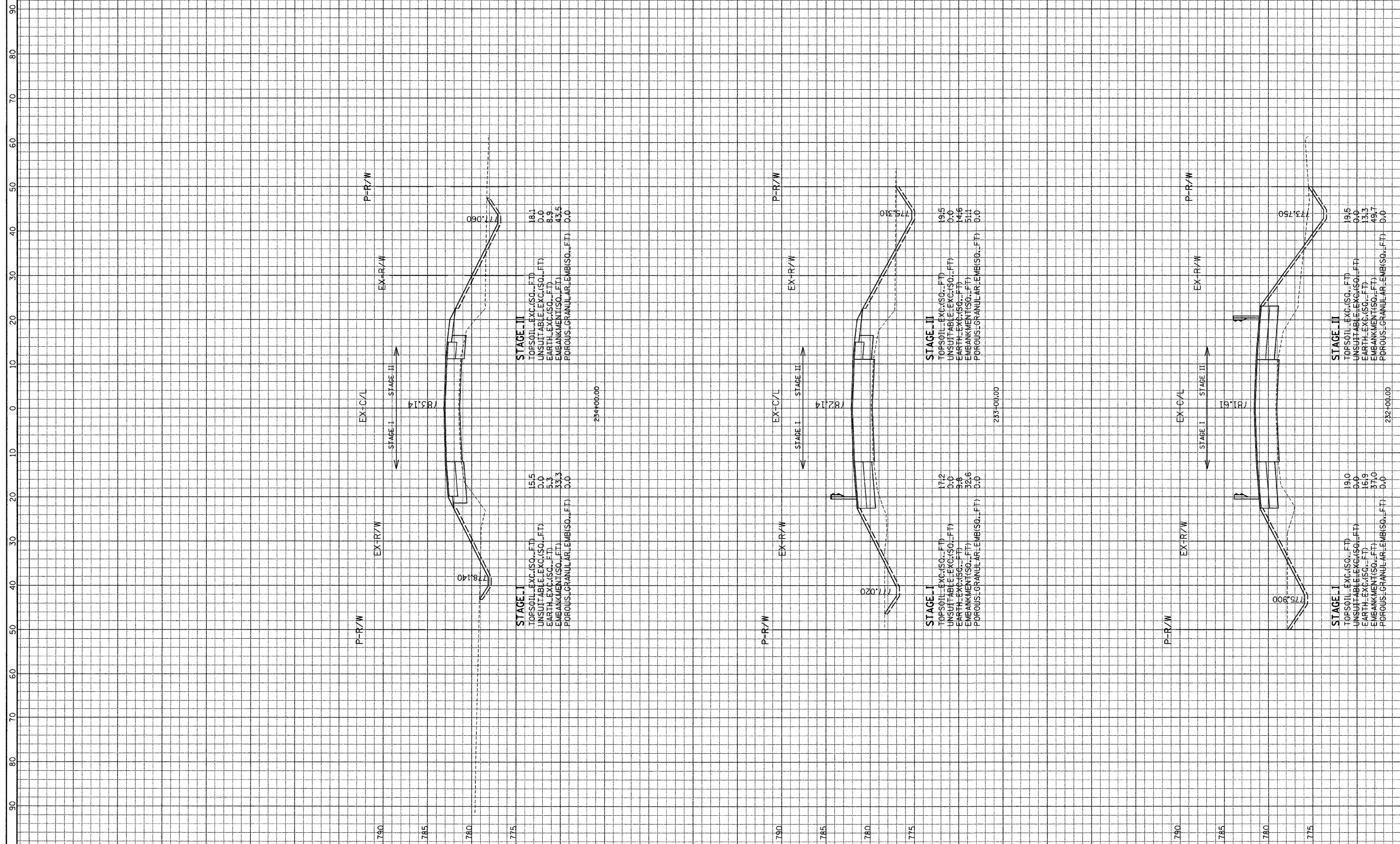
VERT. 1" = 5'

GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC.
 ENGINEERS & SCIENTISTS
 8501 N. Higgins Road, Suite 280
 Chicago, Illinois 60631
 (773) 359-0111

FILE: GA22004024.dwg
 DATE: 21-Jan-04 10:16

CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866		LAKE	554	359
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
• (L-2) W.R. 36.6A & 6 (EXT) WRS-1				



STAGE II
 TOPSOIL-EXC.(SQ.-FT) 18.1
 UNSUITABLE EXC.(SQ.-FT) 0.0
 EARTH-EXC.(SQ.-FT) 8.9
 EMBANKMENT(SQ.-FT) 43.5
 POROUS-GRANULAR EMB(SQ.-FT) 0.0

STAGE I
 TOPSOIL-EXC.(SQ.-FT) 15.5
 UNSUITABLE EXC.(SQ.-FT) 0.0
 EARTH-EXC.(SQ.-FT) 5.3
 EMBANKMENT(SQ.-FT) 33.3
 POROUS-GRANULAR EMB(SQ.-FT) 0.0

STAGE II
 TOPSOIL-EXC.(SQ.-FT) 19.5
 UNSUITABLE EXC.(SQ.-FT) 0.0
 EARTH-EXC.(SQ.-FT) 14.6
 EMBANKMENT(SQ.-FT) 51.1
 POROUS-GRANULAR EMB(SQ.-FT) 0.0

STAGE I
 TOPSOIL-EXC.(SQ.-FT) 17.2
 UNSUITABLE EXC.(SQ.-FT) 0.0
 EARTH-EXC.(SQ.-FT) 9.8
 EMBANKMENT(SQ.-FT) 32.6
 POROUS-GRANULAR EMB(SQ.-FT) 0.0

STAGE II
 TOPSOIL-EXC.(SQ.-FT) 19.5
 UNSUITABLE EXC.(SQ.-FT) 0.0
 EARTH-EXC.(SQ.-FT) 13.3
 EMBANKMENT(SQ.-FT) 49.1
 POROUS-GRANULAR EMB(SQ.-FT) 0.0

STAGE I
 TOPSOIL-EXC.(SQ.-FT) 19.0
 UNSUITABLE EXC.(SQ.-FT) 0.0
 EARTH-EXC.(SQ.-FT) 16.9
 EMBANKMENT(SQ.-FT) 57.0
 POROUS-GRANULAR EMB(SQ.-FT) 0.0

ILLINOIS DEPARTMENT OF TRANSPORTATION

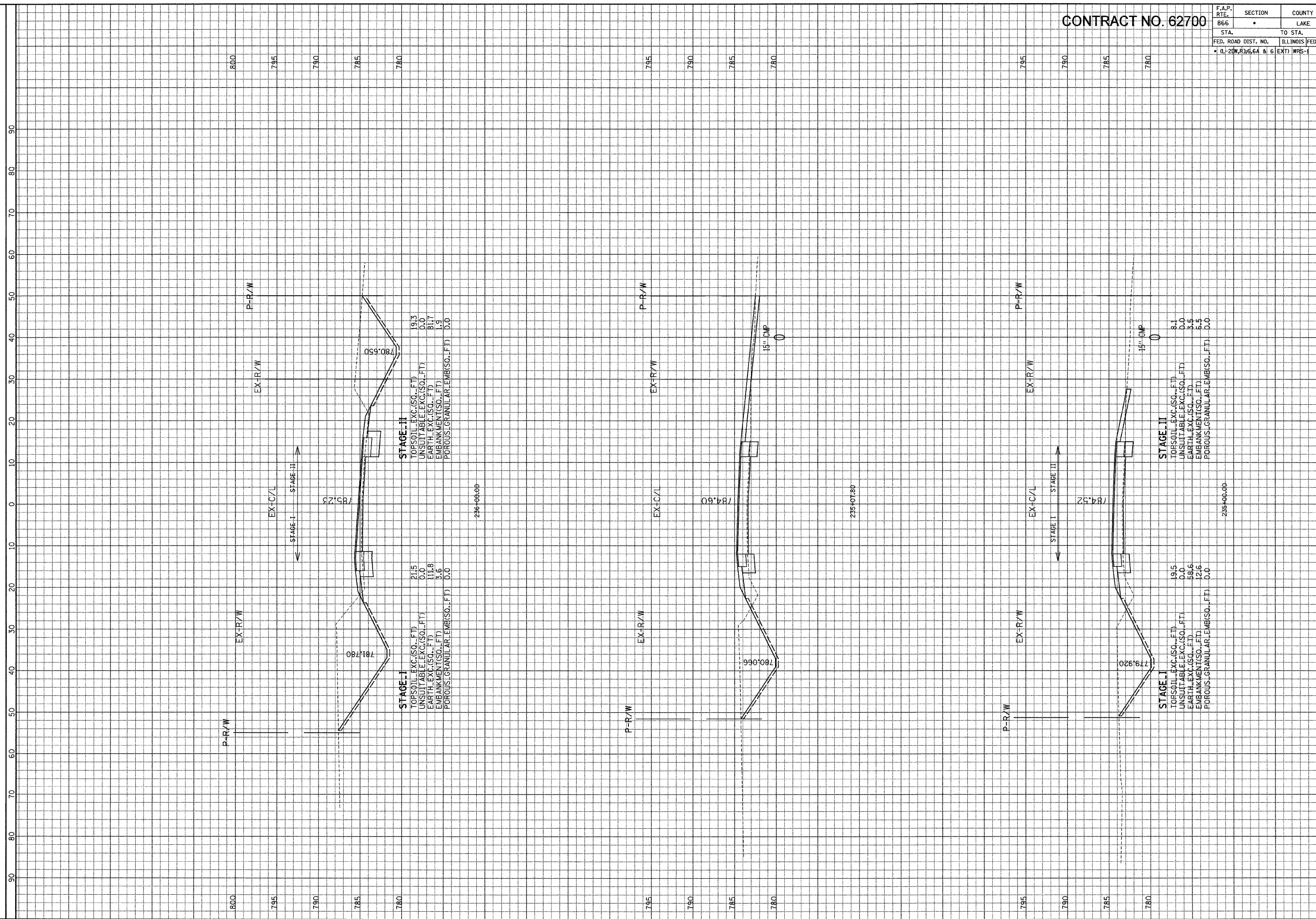
GRAF, ANHALT, SCHLOMER & ASSOCIATES, INC.
 ENGINEERS & SCIENTISTS
 801 W. Higgins Road, Suite 200
 Chicago, Illinois 60631
 (773) 399-0121

SCALE: HORIZ. 1" = 10'
 VERT. 1" = 5'

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 DATE: 21-Jan-04 10:16

CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	*	LAKE	554	360
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
* (L-20W, R3) 6.6A & 6 (EXT) WRS-1				



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)

STA. 235+00 TO STA. 236+00

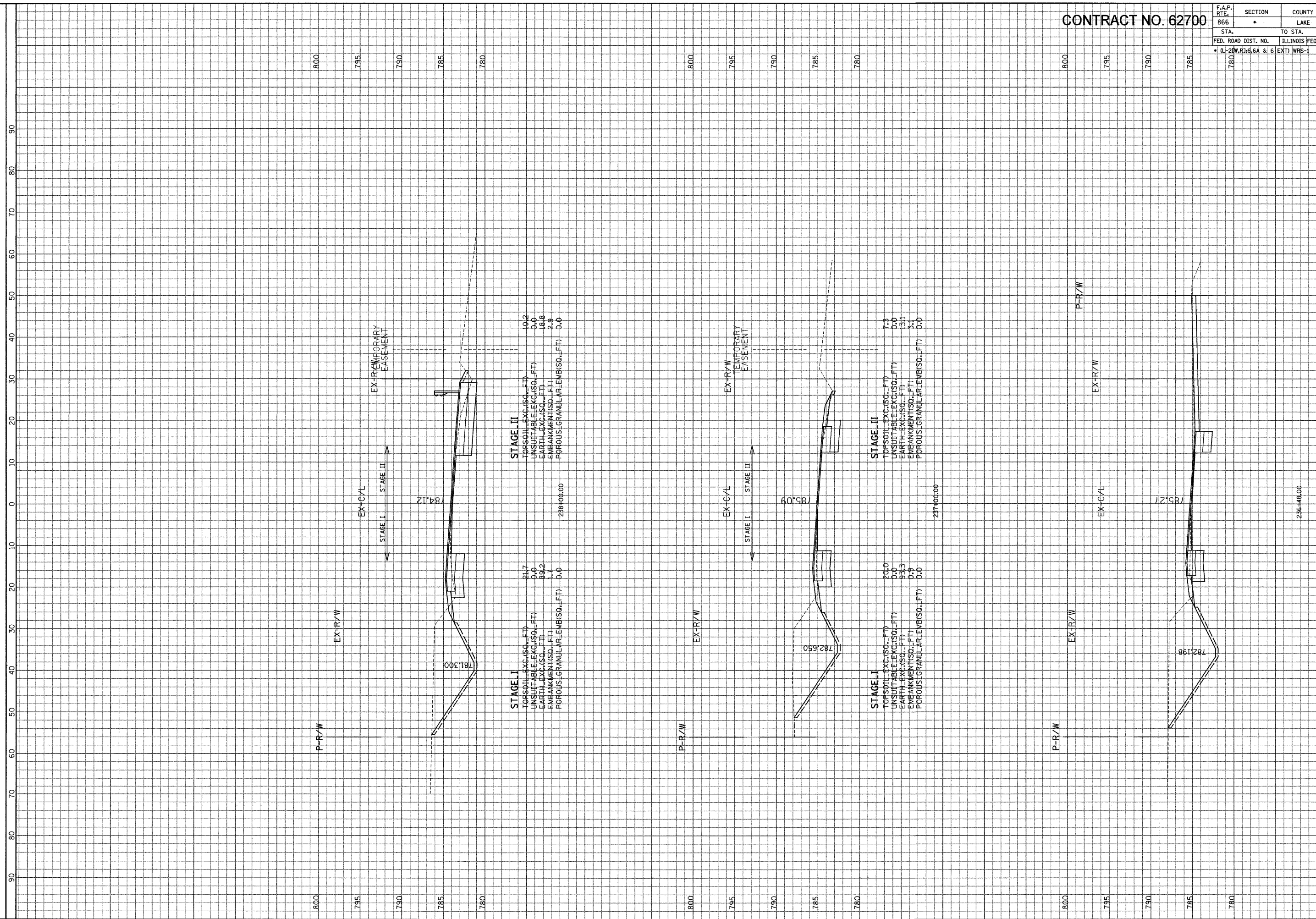
SCALE: HORIZ. 1" = 10'
VERT. 1" = 5'

GRAF, ANALT, SCHLOEMER & ASSOCIATES, INC.
 ENGINEERS & SCIENTISTS
 8501 W. Higgins Road, Suite 280
 Chicago, Illinois 60631
 (773) 399-0111

FILE: G:\2009\4924_N\geop\Area\BAXSH1_B.dgn
 DATE: 21-Jan-04 10:15

CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	*	LAKE	554	361
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
780	IL-20W,RJ:6.6A & 6 EXT) WRS-1			



ILLINOIS DEPARTMENT OF TRANSPORTATION

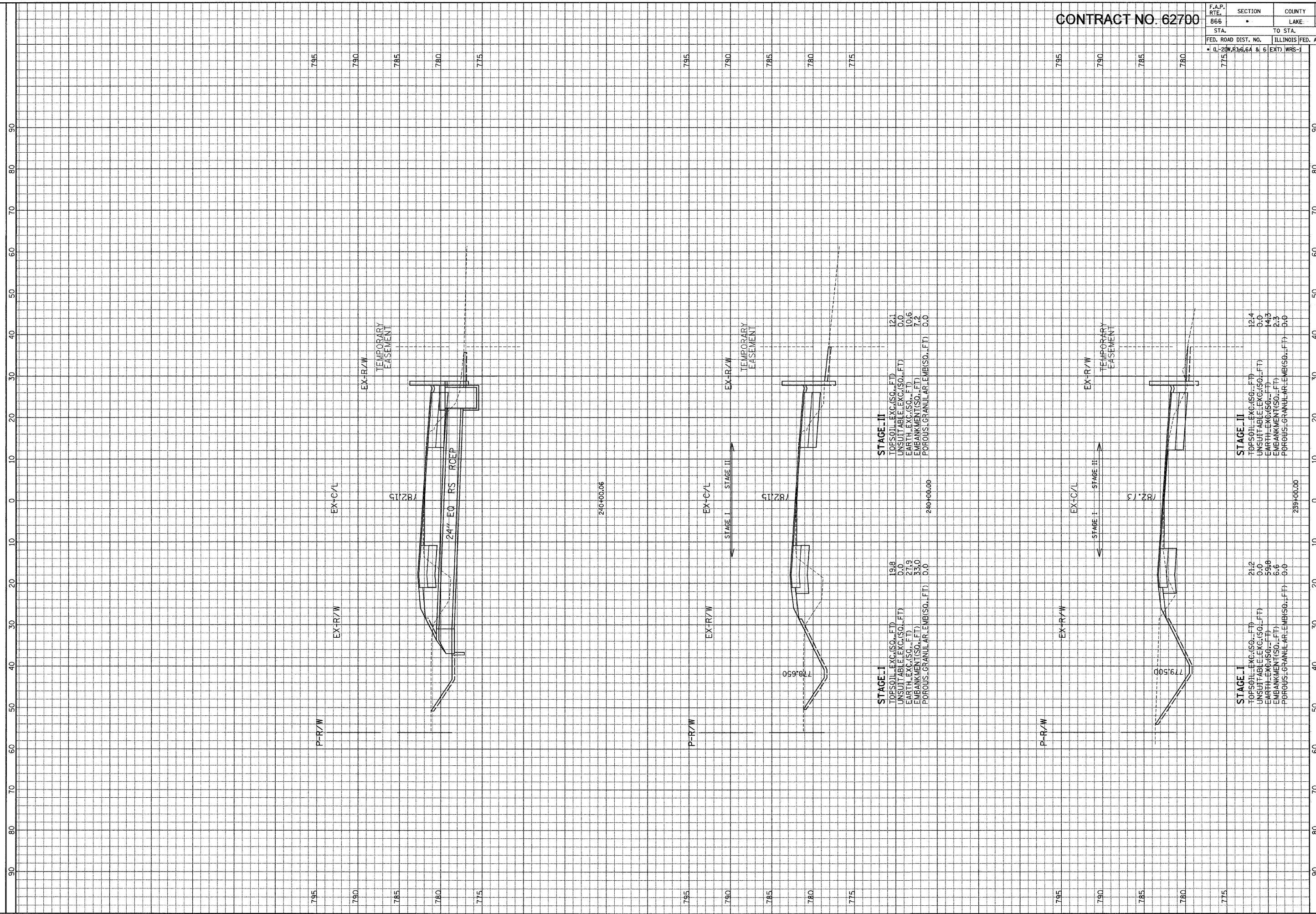
F. A. P. ROUTE 866 (IL ROUTE 83)
STA. 236+48 TO STA. 238+00

SCALE: HORIZ. 1" = 10'
VERT. 1" = 5'

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8501 N. Higgins Road, Suite 280
Chicago, Illinois 60631
(773) 399-0316

FILE: G:\2000\402\4_N\Spec\Area\Area\EX\SH1.R.dgn
DATE: 21-Jan-04 10:16

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	•	LAKE	554	362
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
• IL-20W,R36.6A & 6	EXT) WRS-1			



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)
 STA. 239+00 TO STA. 240+00

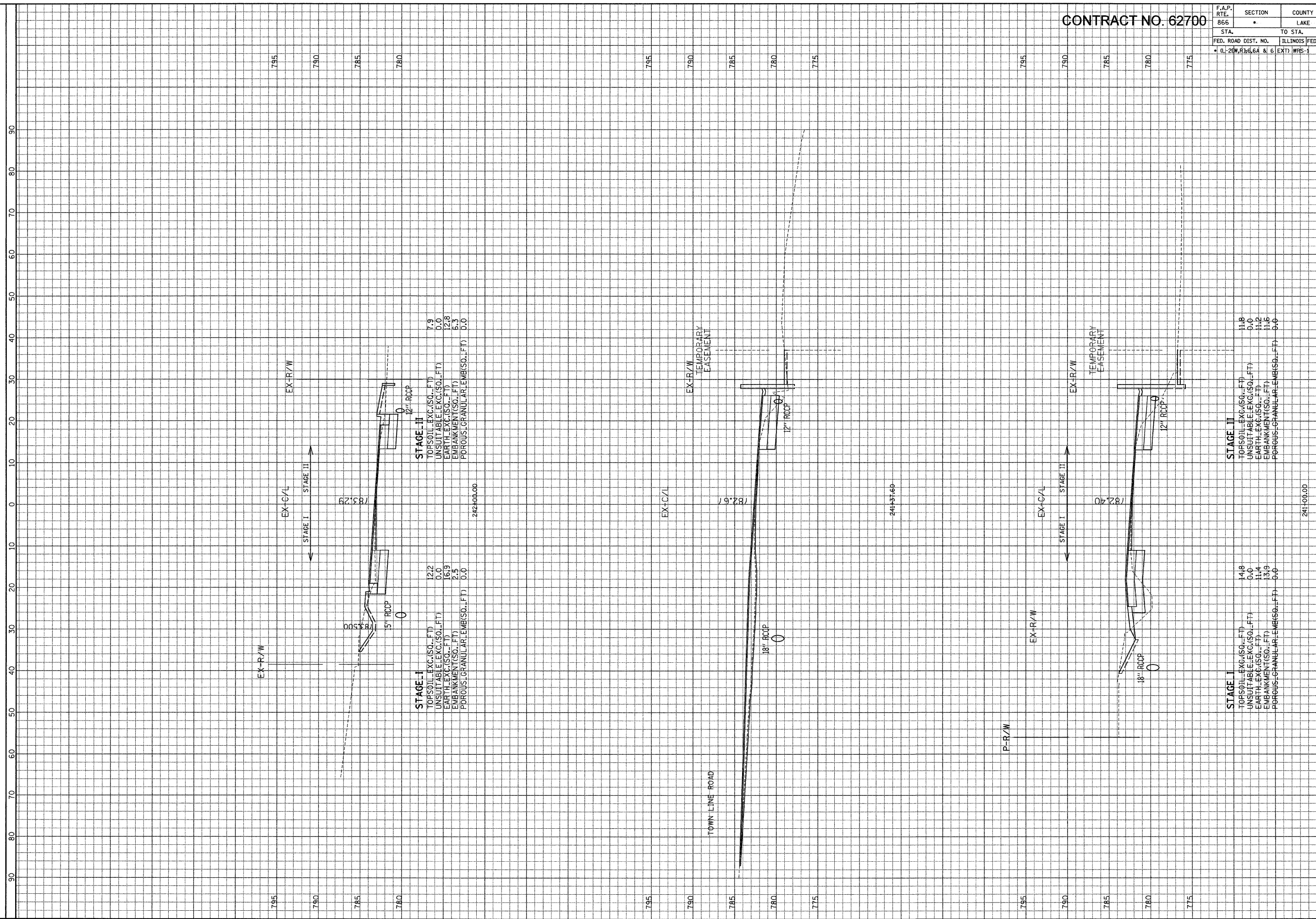
SCALE: HORIZ. 1" = 10'
 VERT. 1" = 5'

GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC.
 ENGINEERS & SCIENTISTS
 8501 N. Higgins Road, Suite 280
 Chicago, Illinois 60631
 (773) 399-9116

CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	•	LAKE	554	363

STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT
		• (L-20W, R) 6.6A & 6 (EXT) WRS-1	



STAGE II

TOPSOIL EXC.(SQ.-FT)	7.9
UNSUITABLE EXC.(SQ.-FT)	0.0
EARTH EXC.(SQ.-FT)	12.8
EMBANKMENT(SQ.-FT)	6.3
POROUS GRANULAR EMB(SQ.-FT)	0.0

STAGE I

TOPSOIL EXC.(SQ.-FT)	12.2
UNSUITABLE EXC.(SQ.-FT)	0.0
EARTH EXC.(SQ.-FT)	16.9
EMBANKMENT(SQ.-FT)	2.5
POROUS GRANULAR EMB(SQ.-FT)	0.0

STAGE II

TOPSOIL EXC.(SQ.-FT)	11.8
UNSUITABLE EXC.(SQ.-FT)	0.0
EARTH EXC.(SQ.-FT)	11.2
EMBANKMENT(SQ.-FT)	11.6
POROUS GRANULAR EMB(SQ.-FT)	0.0

STAGE I

TOPSOIL EXC.(SQ.-FT)	14.8
UNSUITABLE EXC.(SQ.-FT)	0.0
EARTH EXC.(SQ.-FT)	11.4
EMBANKMENT(SQ.-FT)	13.9
POROUS GRANULAR EMB(SQ.-FT)	0.0

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 Chicago, Illinois 60631
 (773) 359-0112

ILLINOIS DEPARTMENT
 OF TRANSPORTATION

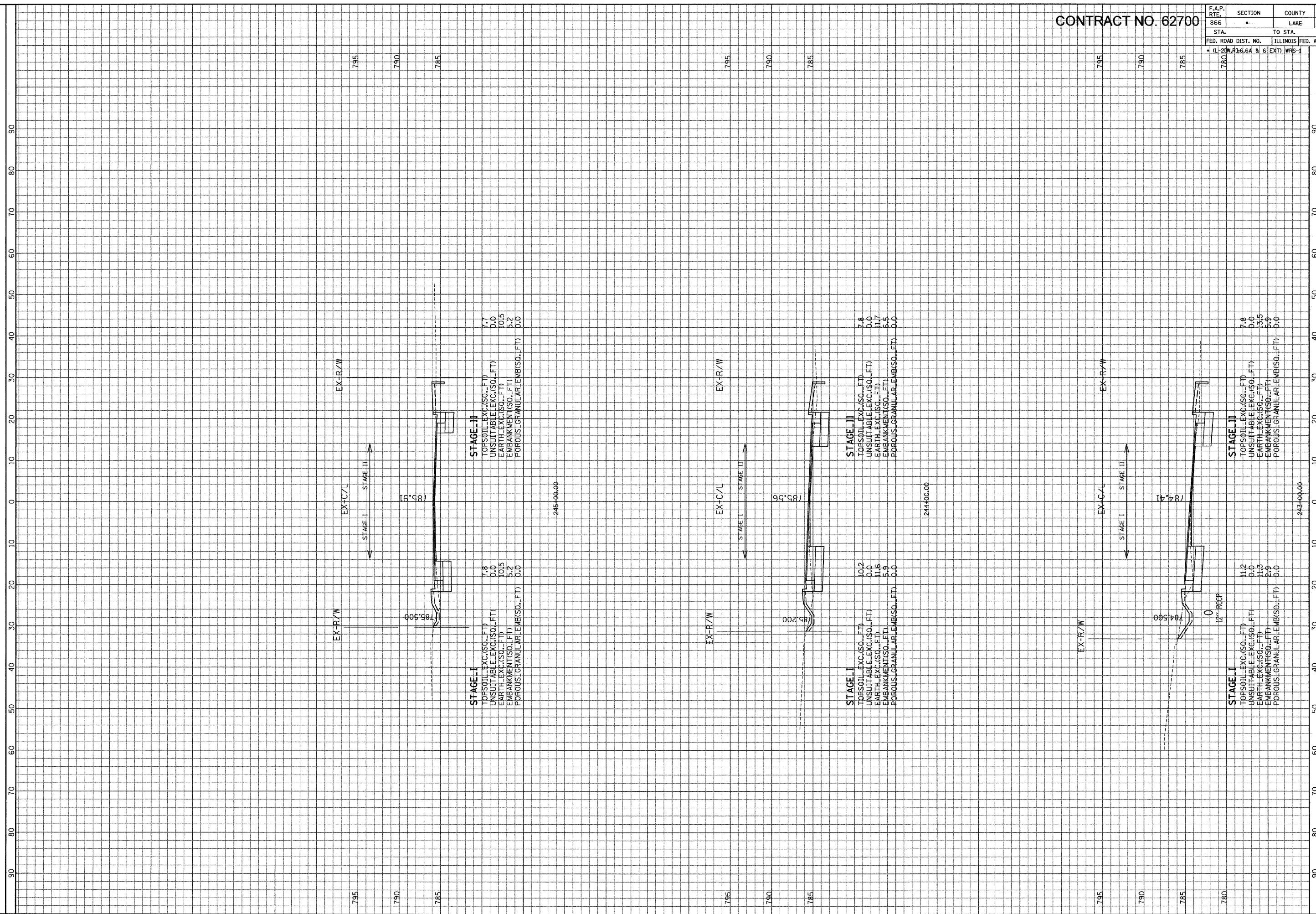
F. A. P. ROUTE 866 (IL ROUTE 83)
 STA. 241+00 TO STA. 242+00

SCALE: HORIZ. 1" = 10'
 VERT. 1" = 5'

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CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	•	LAKE	554	364
STA. TO STA.		ILLINOIS FED. AID PROJECT		
866 TO 870		CL-20W, R16.6A & 6 EXT WRS-1		

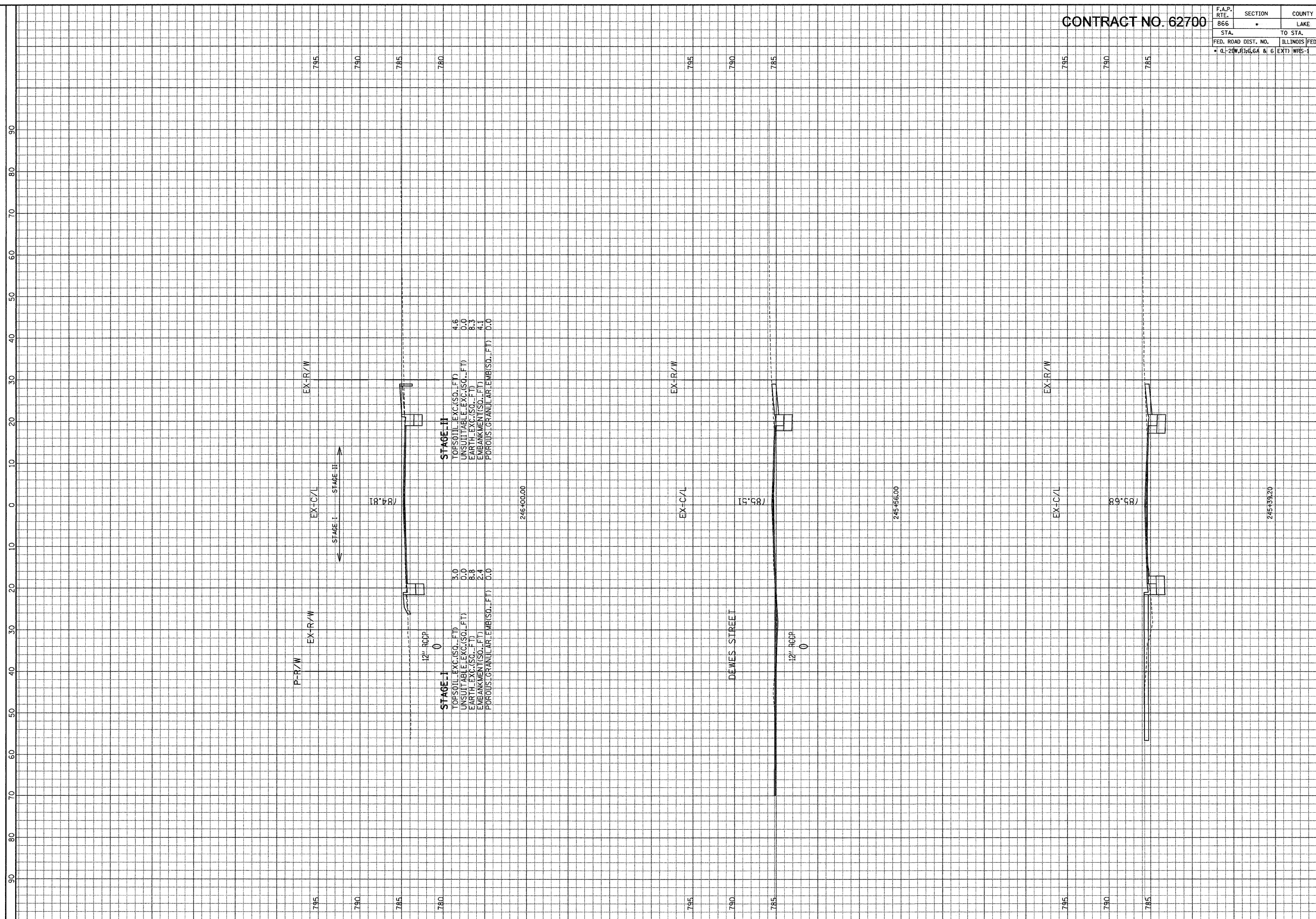


ILLINOIS DEPARTMENT OF TRANSPORTATION	F. A. P. ROUTE 866 (IL ROUTE 83)	SCALE: HORIZ. 1" = 10'
	STA. 243+00 TO STA. 245+00	VERT. 1" = 5'

GREF, ANWALT, SCHLOMER & ASSOCIATES, INC.
 ENGINEERS & SCIENTISTS
 8501 N. Higgins Road, Suite 280
 Chicago, Illinois 60631
 (773) 399-0122

CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	•	LAKE	554	365
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
• QL-20W.RJ:6.6A & 6		EXTI WRS-1		



STAGE-II
 TOPSOIL EXC.(SQ..FT) 4.6
 UNSUITABLE EXC.(SQ..FT) 0.0
 EARTH EXC.(SQ..FT) 8.3
 EMBANKMENT(SQ..FT) 4.1
 POROUS GRANULAR LEM(SQ..FT) 0.0

STAGE-I
 TOPSOIL EXC.(SQ..FT) 3.0
 UNSUITABLE EXC.(SQ..FT) 0.0
 EARTH EXC.(SQ..FT) 8.8
 EMBANKMENT(SQ..FT) 2.4
 POROUS GRANULAR LEM(SQ..FT) 0.0

SCALE: HORIZ. 1" = 10'
 VERT. 1" = 5'

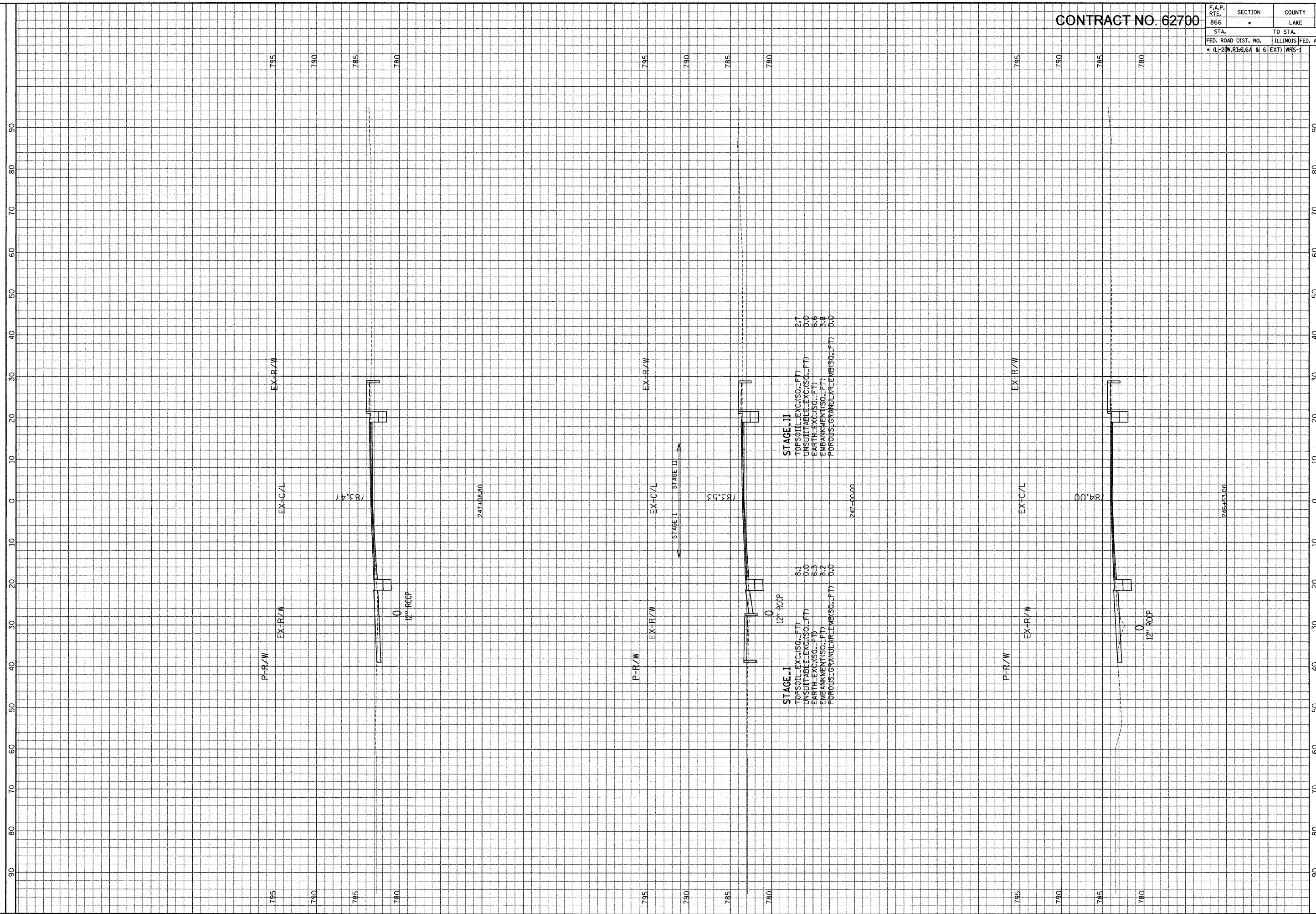
F. A. P. ROUTE 866 (IL ROUTE 83)
 STA. 245+39.20 TO STA. 246+00

ILLINOIS DEPARTMENT OF TRANSPORTATION

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 ENGINEERS & SCIENTISTS
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 Chicago, Illinois 60631
 (773) 399-0111

CONTRACT NO. 62700

F.A.P. RTE. 866	SECTION •	COUNTY LAKE	TOTAL SHEETS 554	SHEET NO. 366
STA. 795		TO STA. 780		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
• (L-20W,R)36.6A & 6 (EXT) WRS-1				



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)

SCALE: HORIZ. 1" = 10'
VERT. 1" = 5'

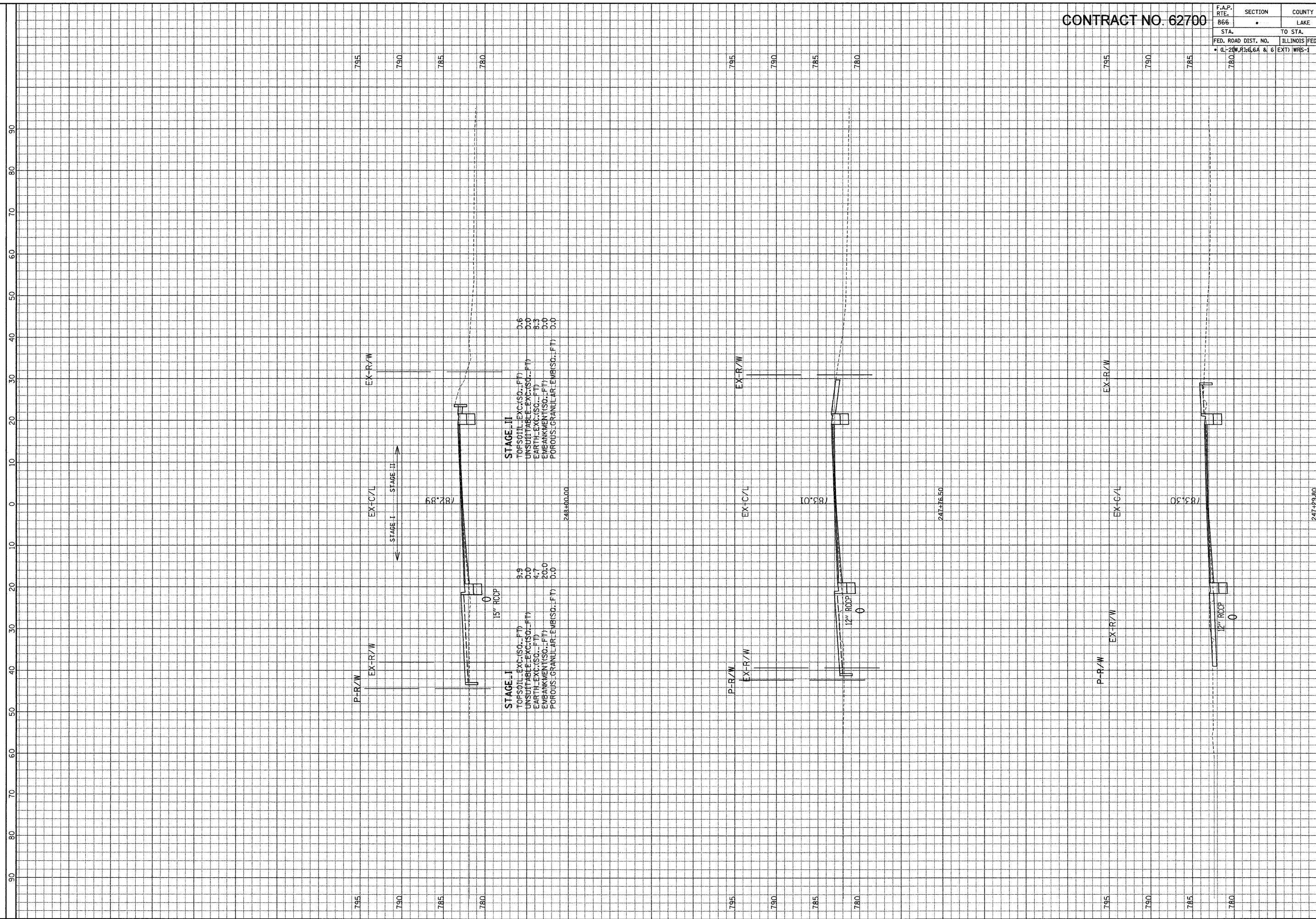
STA. 246+53 TO STA. 247+08.80

GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC.
ENGINEERS & SCIENTISTS
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Chicago, Illinois 60631
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DATE: 06-Jan-04 09:22

CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS NO.	SHEET NO.
866		LAKE	554	367
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
	• IL-217W.R3:6.6A & 6 EXT) WRS-1			



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)
STA. 247+29.80 TO STA. 248+00

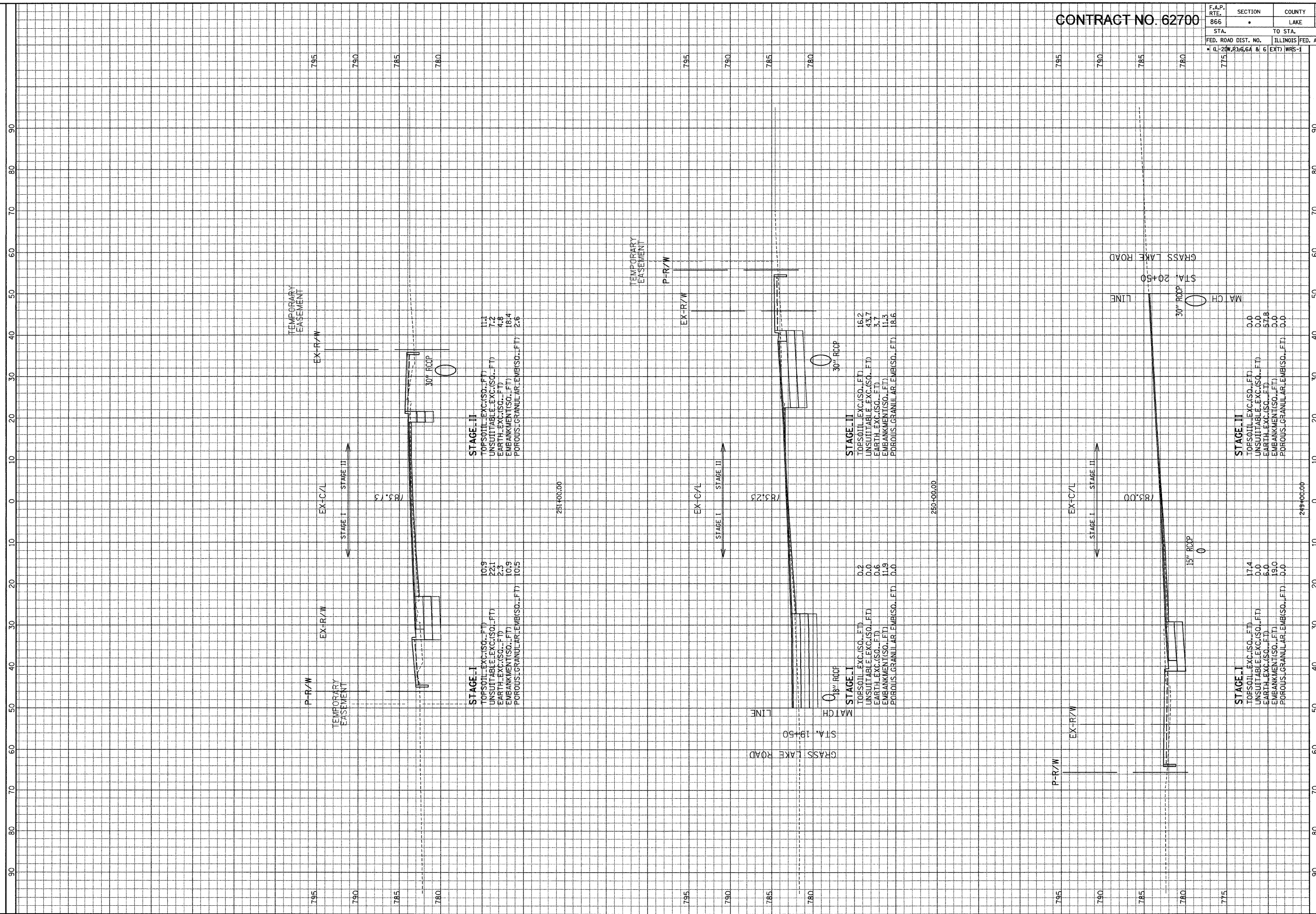
SCALE: HORIZ. 1" = 10'
VERT. 1" = 5'

GRAEF, ANHALT, SCHUEMME & ASSOCIATES, INC.
ENGINEERS & SCIENTISTS
8501 N. Higgins Road, Suite 280
Chicago, Illinois 60631
(773) 399-0312

G.A.P. ENGINEERS & SCIENTISTS
SOUTH AUSTIN, TEXAS
2010 UNIVERSITY BLVD.
SOUTH AUSTIN, TEXAS 78746

FILE: GA200404024_NXgpo\Area\CXSH1_C.dgn
DATE: 06-Jan-04 09:22

F.A.P. RT.:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	•	LAKE	554	368
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
• IL-20W.R3:6.6A & 6	EXT) WRS-1			



STAGE II

TOPSOIL - EXC.(SQ. FT)	11.1
UNSUITABLE - EXC.(SQ. FT)	7.2
EARTH - EXC.(SQ. FT)	4.8
EMBANKMENT (SQ. FT)	18.4
POROUS GRANULAR EMB.(SQ. FT)	2.6

STAGE I

TOPSOIL - EXC.(SQ. FT)	10.9
UNSUITABLE - EXC.(SQ. FT)	22.1
EARTH - EXC.(SQ. FT)	2.5
EMBANKMENT (SQ. FT)	10.9
POROUS GRANULAR EMB.(SQ. FT)	10.5

STAGE II

TOPSOIL - EXC.(SQ. FT)	16.2
UNSUITABLE - EXC.(SQ. FT)	43.7
EARTH - EXC.(SQ. FT)	3.7
EMBANKMENT (SQ. FT)	11.5
POROUS GRANULAR EMB.(SQ. FT)	18.6

STAGE I

TOPSOIL - EXC.(SQ. FT)	0.2
UNSUITABLE - EXC.(SQ. FT)	0.0
EARTH - EXC.(SQ. FT)	0.6
EMBANKMENT (SQ. FT)	11.9
POROUS GRANULAR EMB.(SQ. FT)	0.0

STAGE II

TOPSOIL - EXC.(SQ. FT)	0.0
UNSUITABLE - EXC.(SQ. FT)	0.0
EARTH - EXC.(SQ. FT)	57.8
EMBANKMENT (SQ. FT)	0.0
POROUS GRANULAR EMB.(SQ. FT)	0.0

STAGE I

TOPSOIL - EXC.(SQ. FT)	17.4
UNSUITABLE - EXC.(SQ. FT)	0.0
EARTH - EXC.(SQ. FT)	6.0
EMBANKMENT (SQ. FT)	19.0
POROUS GRANULAR EMB.(SQ. FT)	0.0

ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)

SCALE: HORIZ. 1" = 10'

VERT. 1" = 5'

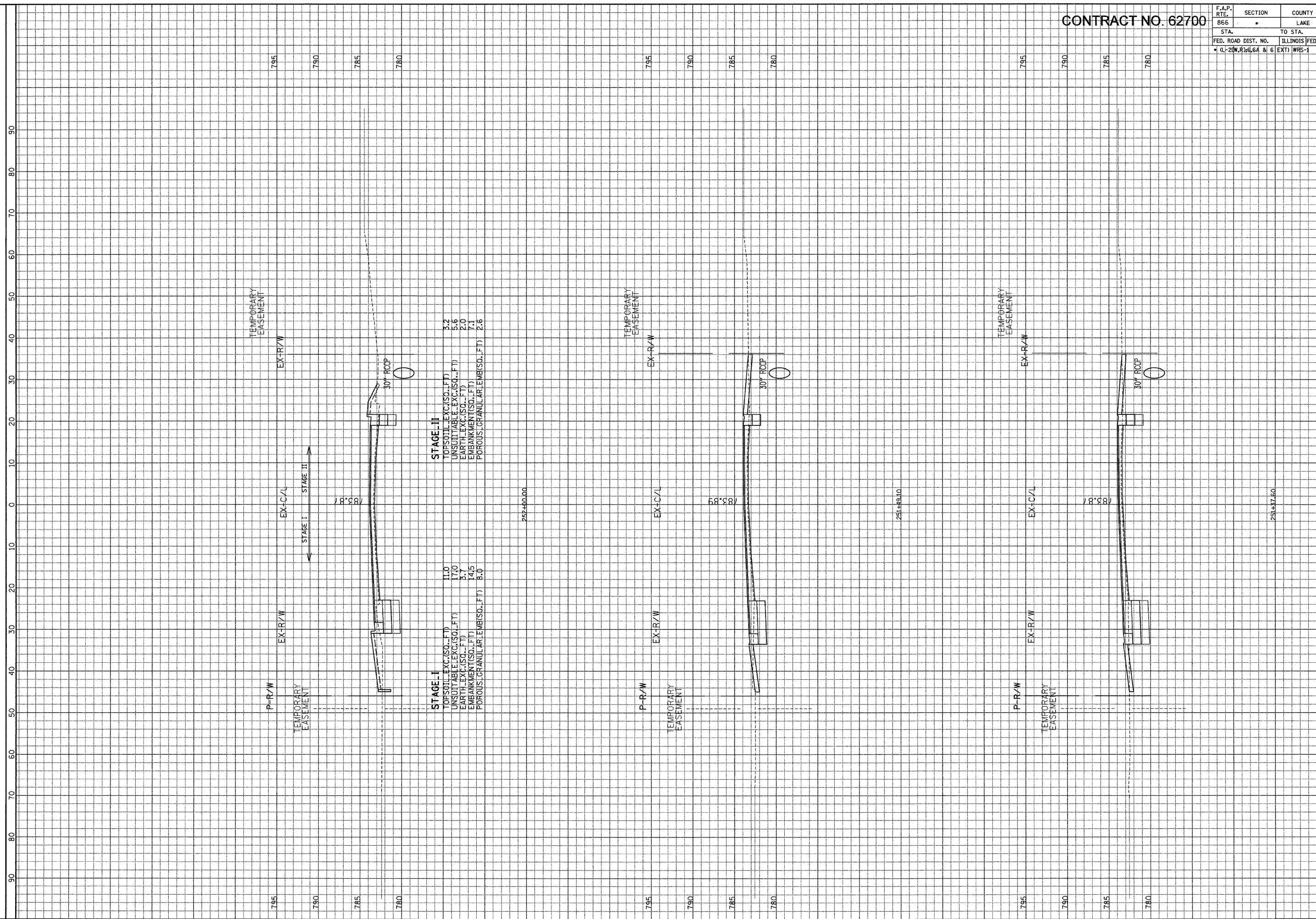
STA. 249+00 TO STA. 251+00

GRAEF, ANHALT, SCHUEMME & ASSOCIATES, INC.
 ENGINEERS & SCIENTISTS
 8501 N. Higgins Road, Suite 280
 Chicago, Illinois 60631
 (773) 399-0112

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CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	•	LAKE	554	369
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
• (L-20W,R)6.6A & 6 (EXT) WRS-1				



STAGE - II
 TOPSOIL_EXC.(SQ.FT) 3.2
 UNSUITABLE_EXC.(SQ.FT) 5.6
 EARTH_EXC.(SQ.FT) 2.0
 EMBANKMENT(SQ.FT) 7.1
 POROUS GRANULAR_EMBS(SQ.FT) 2.6

STAGE - I
 TOPSOIL_EXC.(SQ.FT) 11.0
 UNSUITABLE_EXC.(SQ.FT) 17.0
 EARTH_EXC.(SQ.FT) 3.7
 EMBANKMENT(SQ.FT) 14.5
 POROUS GRANULAR_EMBS(SQ.FT) 8.0

ILLINOIS DEPARTMENT
 OF TRANSPORTATION

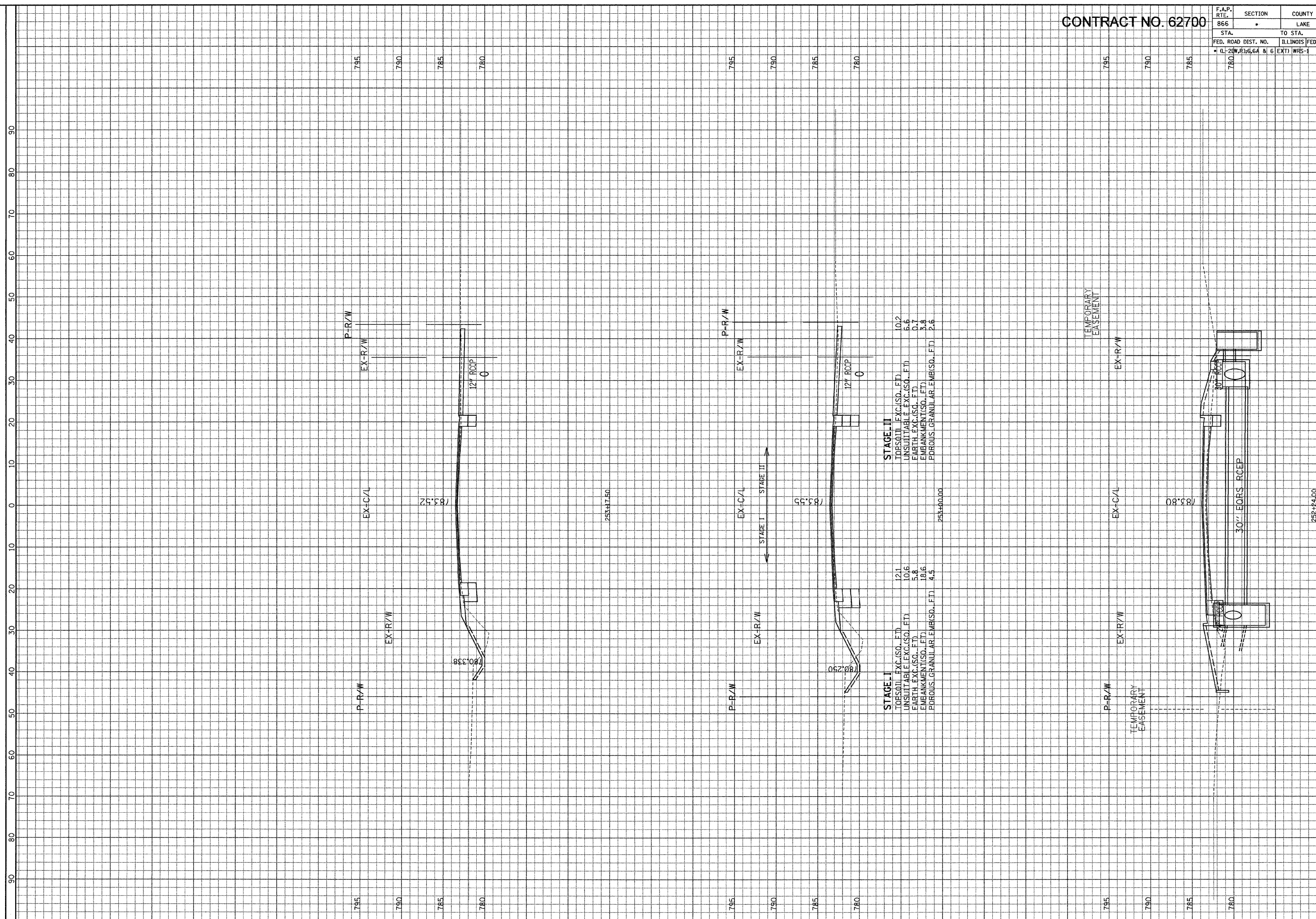
GRAF, ANWALT, SCHLOMER & ASSOCIATES, INC.
 ENGINEERS & SCIENTISTS
 8501 N. Higgins Road, Suite 280
 Chicago, Illinois 60631
 (773) 399-9112

F. A. P. ROUTE 866 (IL ROUTE 83)
 STA. 251+37.60 TO STA. 252+00
 SCALE: HORIZ. 1" = 10'
 VERT. 1" = 5'

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 DATE: 05-Jan-04 09:22

CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS NO.	SHEET NO.
866	•	LAKE	554	370
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
• (L-20W,R)16.6A & 6 (EXT) WRS-1				



STAGE II
 TOPSOIL EXC.(SQ. FT) 10.2
 UNSUITABLE EXC.(SQ. FT) 6.6
 EARTH EXC.(SQ. FT) 0.7
 EMBANKMENT(SQ. FT) 3.8
 POROUS GRANULAR EMB.(SQ. FT) 2.6

STAGE I
 TOPSOIL EXC.(SQ. FT) 12.1
 UNSUITABLE EXC.(SQ. FT) 10.6
 EARTH EXC.(SQ. FT) 5.8
 EMBANKMENT(SQ. FT) 18.6
 POROUS GRANULAR EMB.(SQ. FT) 4.5

SCALE: HORIZ. 1" = 10'
 VERT. 1" = 5'

F. A. P. ROUTE 866 (IL ROUTE 83)
 STA. 252+24 TO STA. 253+17.50

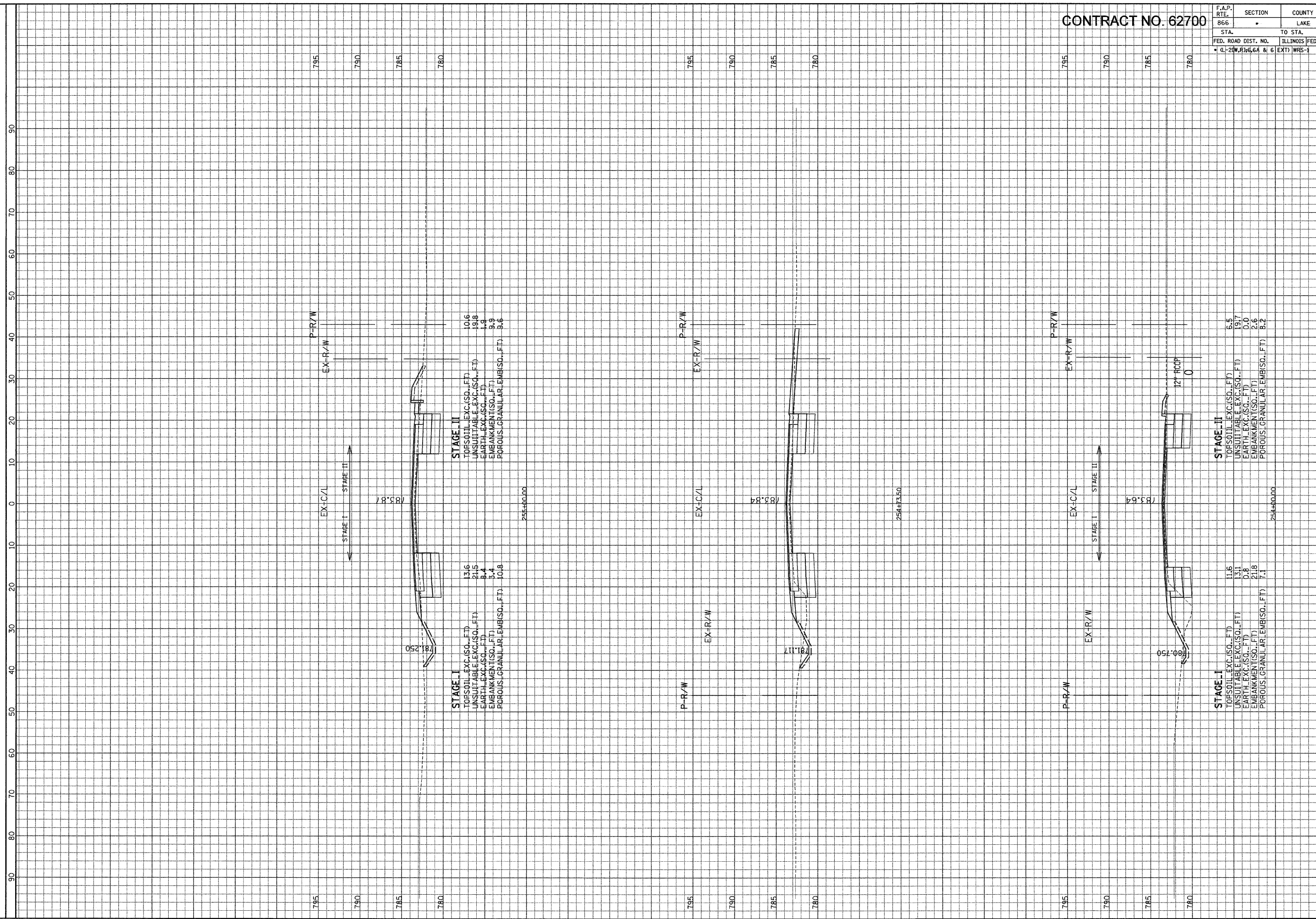
ILLINOIS DEPARTMENT
 OF TRANSPORTATION

GRAF, ANHALT, SCHLODNER & ASSOCIATES, INC.
 ENGINEERS & SCIENTISTS
 8501 N. Higgins Road, Suite 280
 Chicago, Illinois 60631
 (773) 399-0111

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CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	•	LAKE	554	371
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
• 0-20W, R316.6A & 6		EXT) WRS-1		



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)
STA. 254+00 TO STA. 255+00

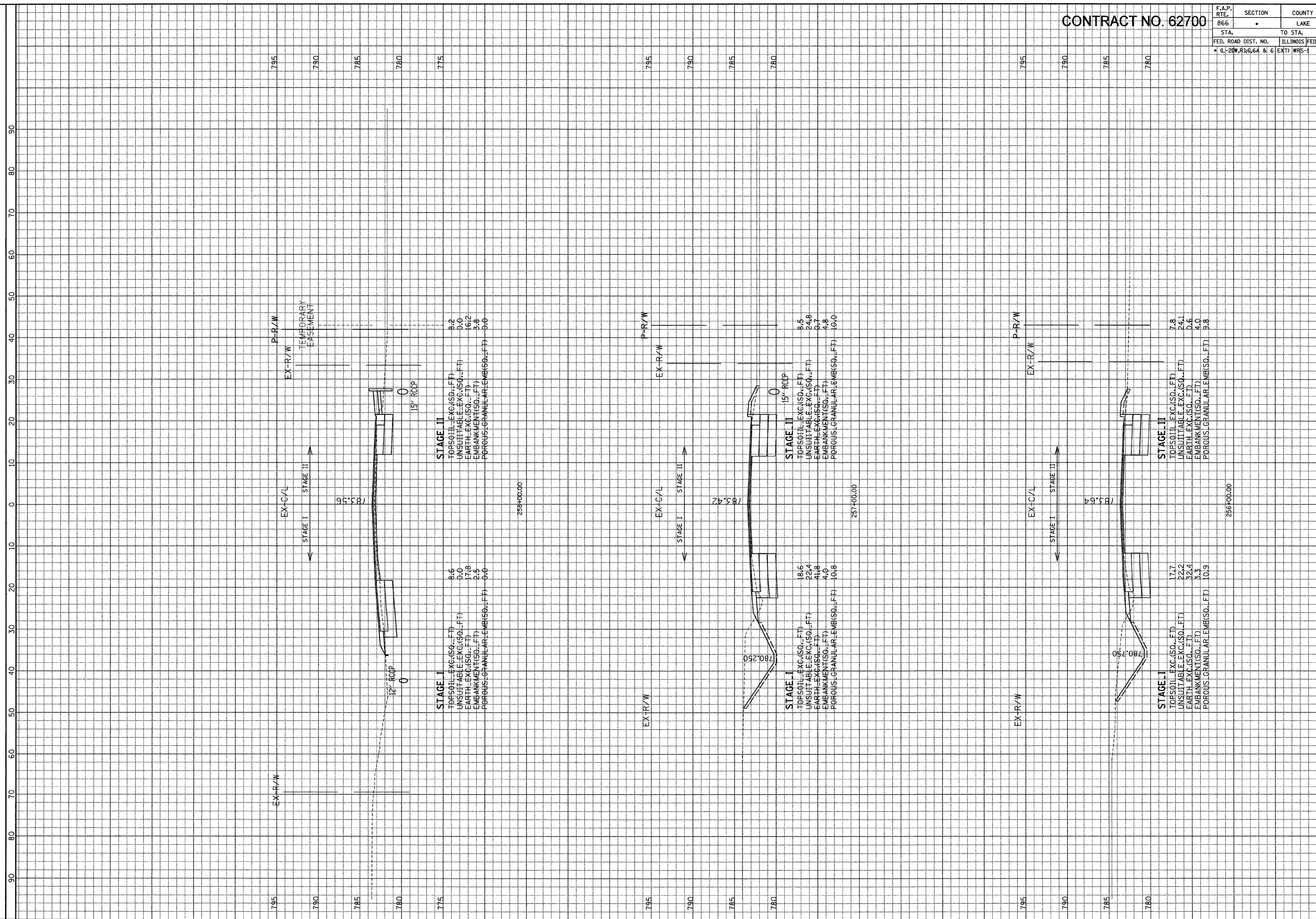
SCALE: HORIZ. 1" = 10'
VERT. 1" = 5'

GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC.
ENGINEERS & SCIENTISTS
8501 W. Higgins Road, Suite 280
Chicago, Illinois 60631
(773) 399-0111

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DATE: 05-Jan-04 09:22

CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	•	LAKE	554	372
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
• CL-20W,R16.6A & 6		EXT	WRS-1	



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)

SCALE: HORIZ. 1" = 10'

VERT. 1" = 5'

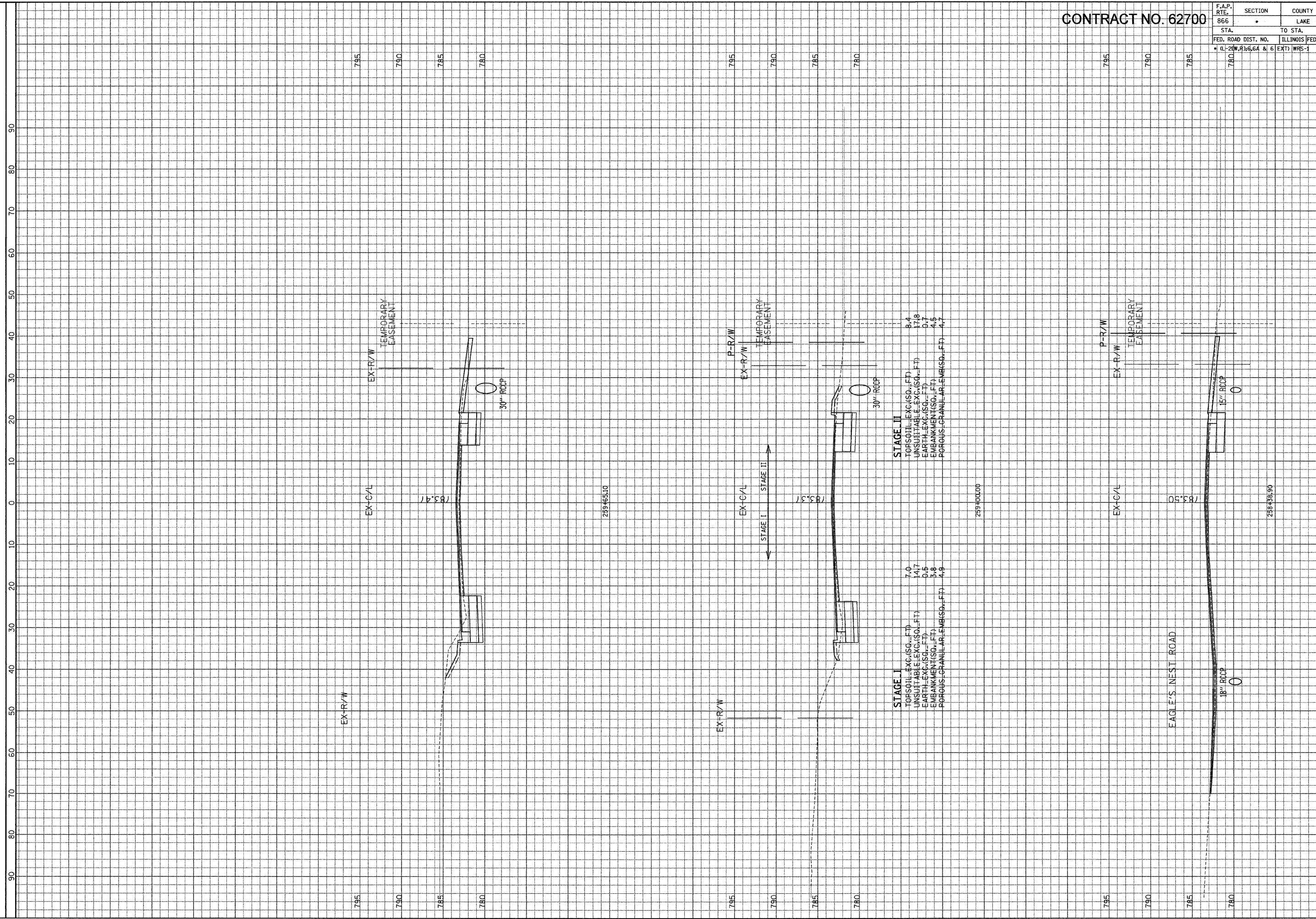
STA. 256+00 TO STA. 258+00

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 ENGINEERS & SCIENTISTS
 8501 N. Higgins Road, Suite 280
 Chicago, Illinois 60631
 (773) 399-0111

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 DATE: 05-Jan-04 09:22

CONTRACT NO. 62700

F.A.P. RT. 866	SECTION *	COUNTY LAKE	TOTAL SHEETS 554	SHEET NO. 373
STA. 259+65.10		TO STA. 258+38.90		
FED. ROAD DIST. NO. ILLINOIS		FED. AID PROJECT		
* IL-211, R1, 6.6A & 6		EXTD WRS-1		



STAGE II
 TOPSOIL-EXC.(SQ.-FT) 8.4
 UNSUITABLE-EXC.(SQ.-FT) 17.8
 EARTH-EXC.(SQ.-FT) 0.7
 EMBANKMENT(SQ.-FT) 4.5
 POROUS-GRANULAR-EMB(SQ.-FT) 4.7

STAGE I
 TOPSOIL-EXC.(SQ.-FT) 7.0
 UNSUITABLE-EXC.(SQ.-FT) 14.7
 EARTH-EXC.(SQ.-FT) 0.5
 EMBANKMENT(SQ.-FT) 3.8
 POROUS-GRANULAR-EMB(SQ.-FT) 4.3

ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)

STA. 258+38.90 TO STA. 259+65.10

SCALE: HORIZ. 1" = 10'

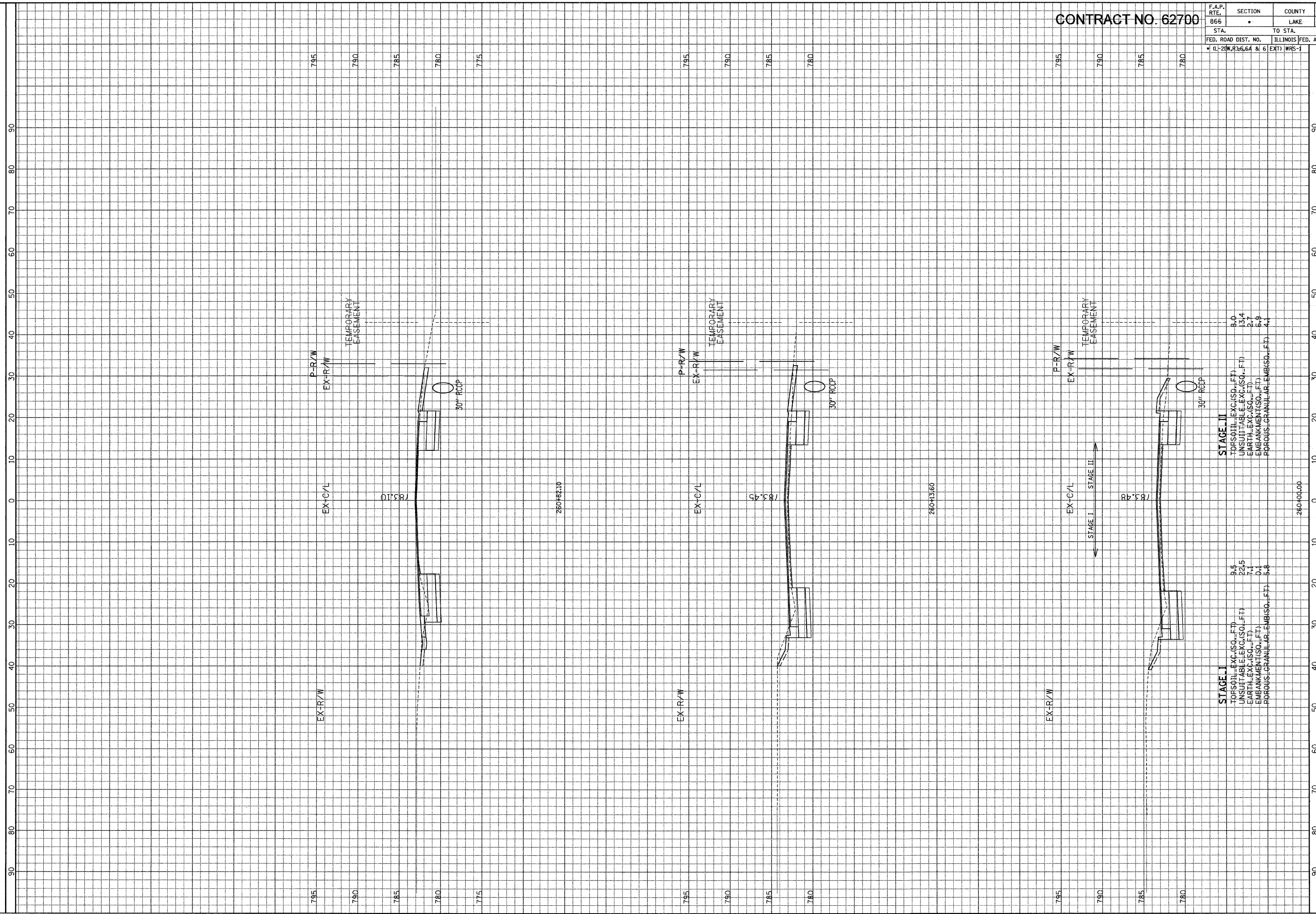
VERT. 1" = 5'

GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC.
 ENGINEERS & SCIENTISTS
 8501 N. Higgins Road, Suite 280
 Chicago, Illinois 60631
 (773) 399-9012

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CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	•	LAKE	554	374
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
• IL-21W, R3, 6.64 & 6		EXT) WRS-1		



STAGE I	STAGE II
TOPSOIL - EXC. (SQ. FT)	TOPSOIL - EXC. (SQ. FT)
UNSUITABLE EXC. (SQ. FT)	UNSUITABLE EXC. (SQ. FT)
EARTH EXC. (SQ. FT)	EARTH EXC. (SQ. FT)
EMBANKMENT (SQ. FT)	EMBANKMENT (SQ. FT)
POROUS GRANULAR EMB. (SQ. FT)	POROUS GRANULAR EMB. (SQ. FT)
9.5	8.0
22.5	13.4
7.4	2.7
0.1	5.9
5.8	4.1

ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)

STA. 260+00 TO STA. 260+82.10

SCALE: HORIZ. 1" = 10'

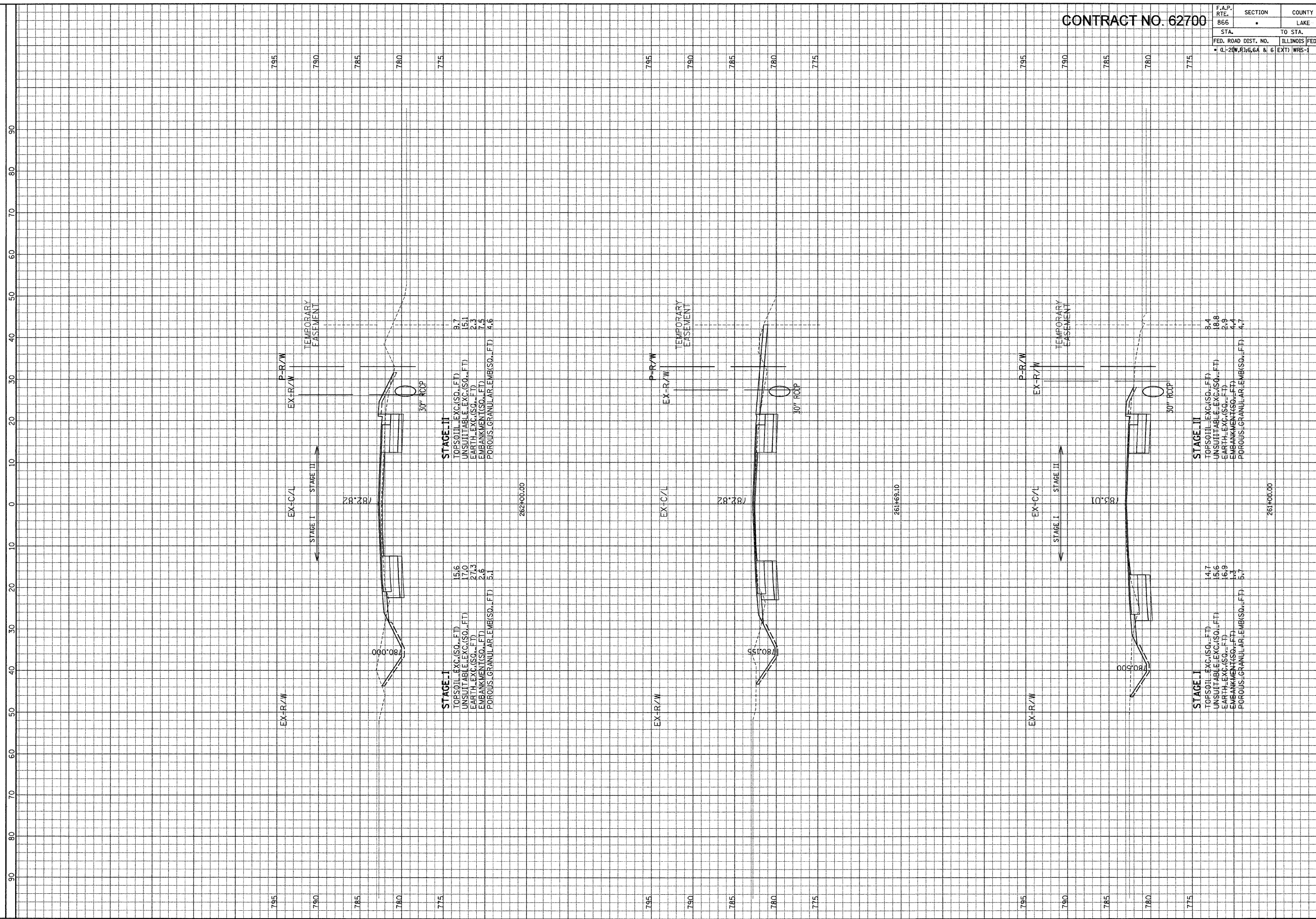
VERT. 1" = 5'

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 ENGINEERS & SCIENTISTS
 8501 N. Higgins Road, Suite 280
 Chicago, Illinois 60631
 (773) 399-0016

FILE: G:\2000\4074_N\pgo\Area_C\XSHRT_C.dgn
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CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866		LAKE	554	375
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CL-20W.R316.6A & 6	EXT	WRS-1		



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)

STA. 261+00 TO STA. 262+00

SCALE: HORIZ. 1" = 10'

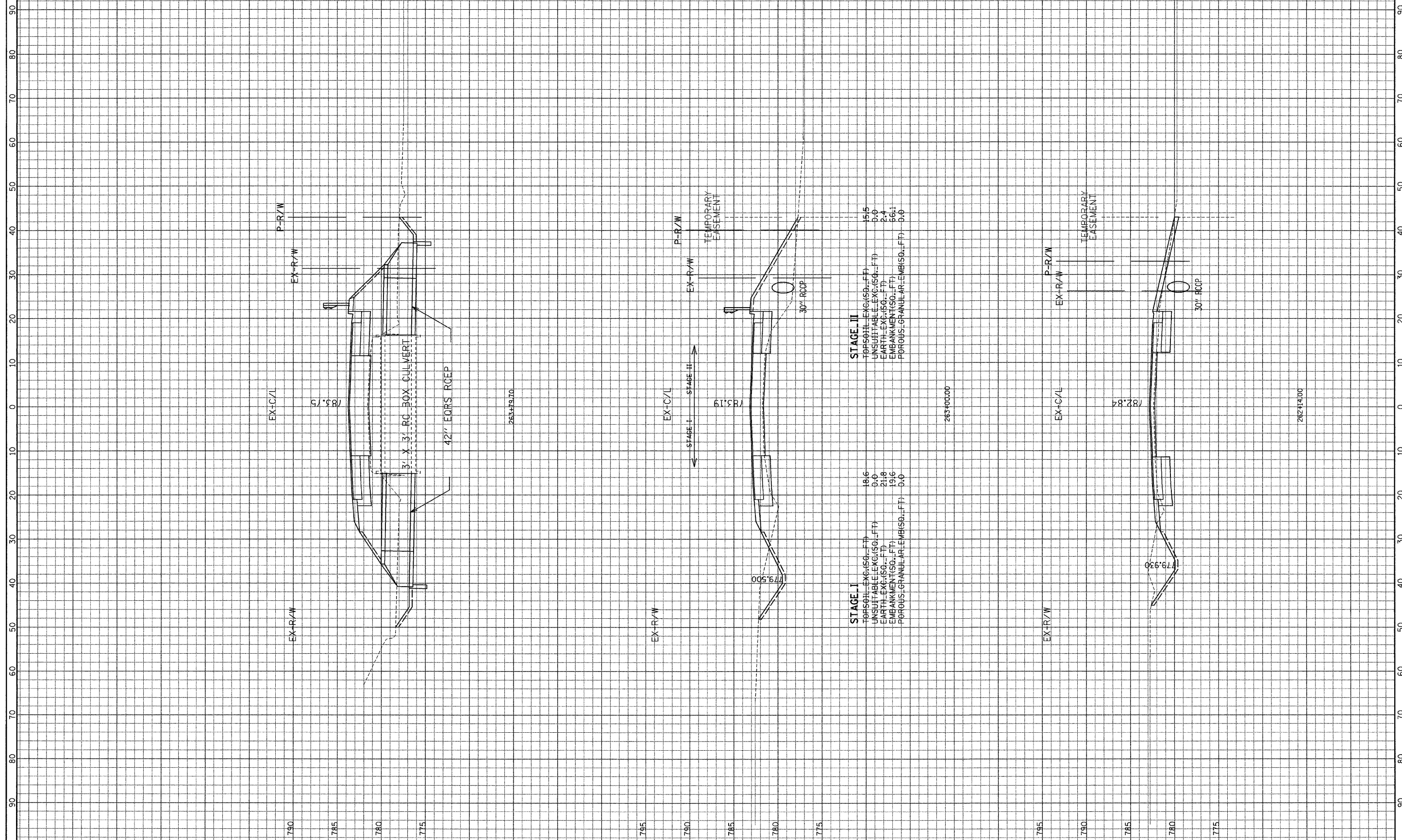
VERT. 1" = 5'

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 8501 N. Higgins Road, Suite 280
 Chicago, Illinois 60631
 (773) 359-9116

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	•	LAKE	554	376
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
• (L-20W,R);6.6A & 6	EXT)	WRS-1		



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83) STA. 262+14 TO STA. 263+79.70

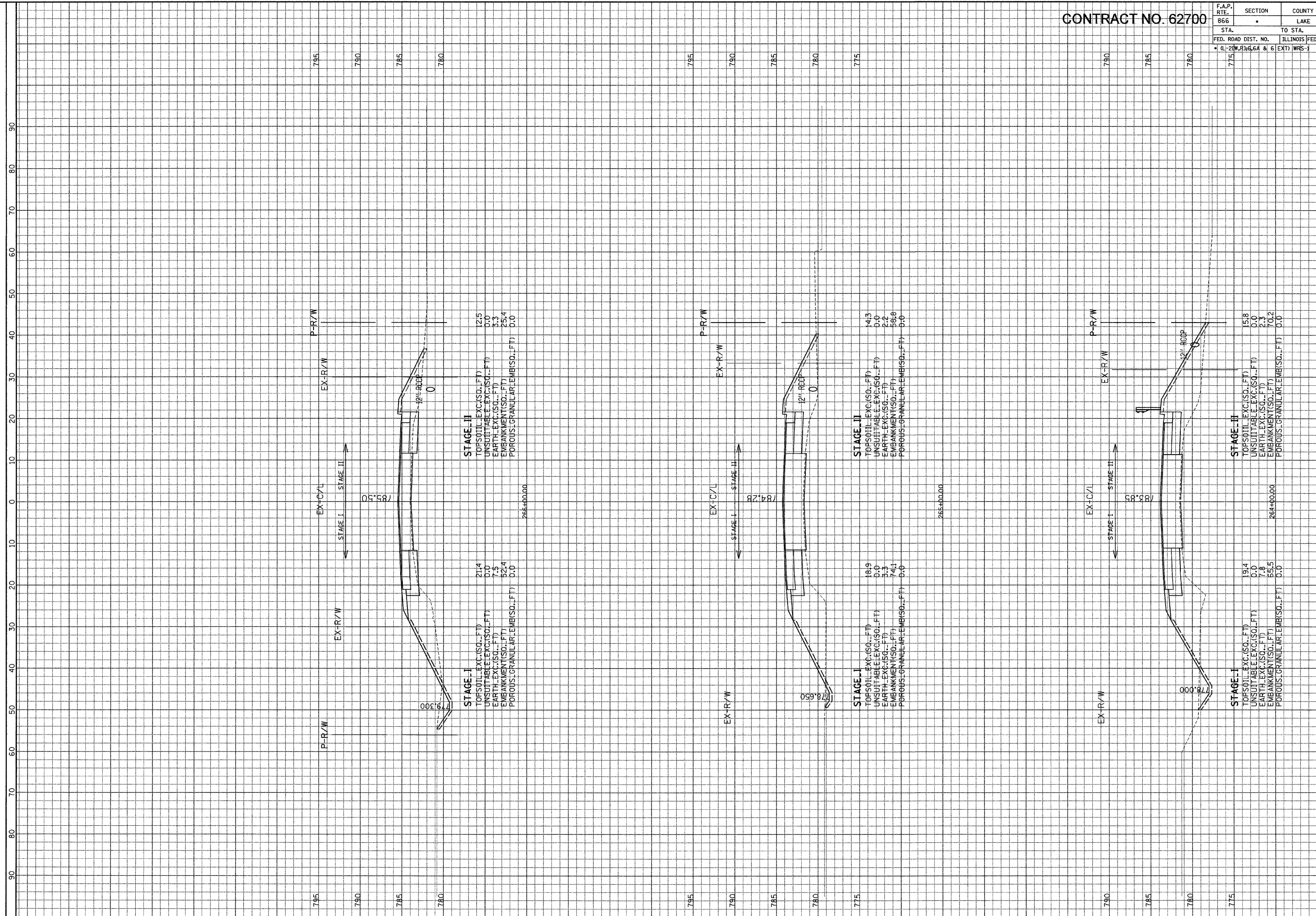
SCALE: HORIZ. 1" = 10' VERT. 1" = 5'

GRAF, ANHALT, SCHLOMER & ASSOCIATES, INC.
 GRAEF
 ENGINEERS & SCIENTISTS
 8501 N. Higgins Road, Suite 280
 Chicago, Illinois 60631
 (773) 339-0112

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS NO.	SHEET NO.
866		LAKE	554	377

STA.	TO STA.
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT
• (L-2) W.R. 66A & 6	(EXT) WRS-1



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)

STA. 264+00 TO STA. 266+00

SCALE: HORIZ. 1" = 10'

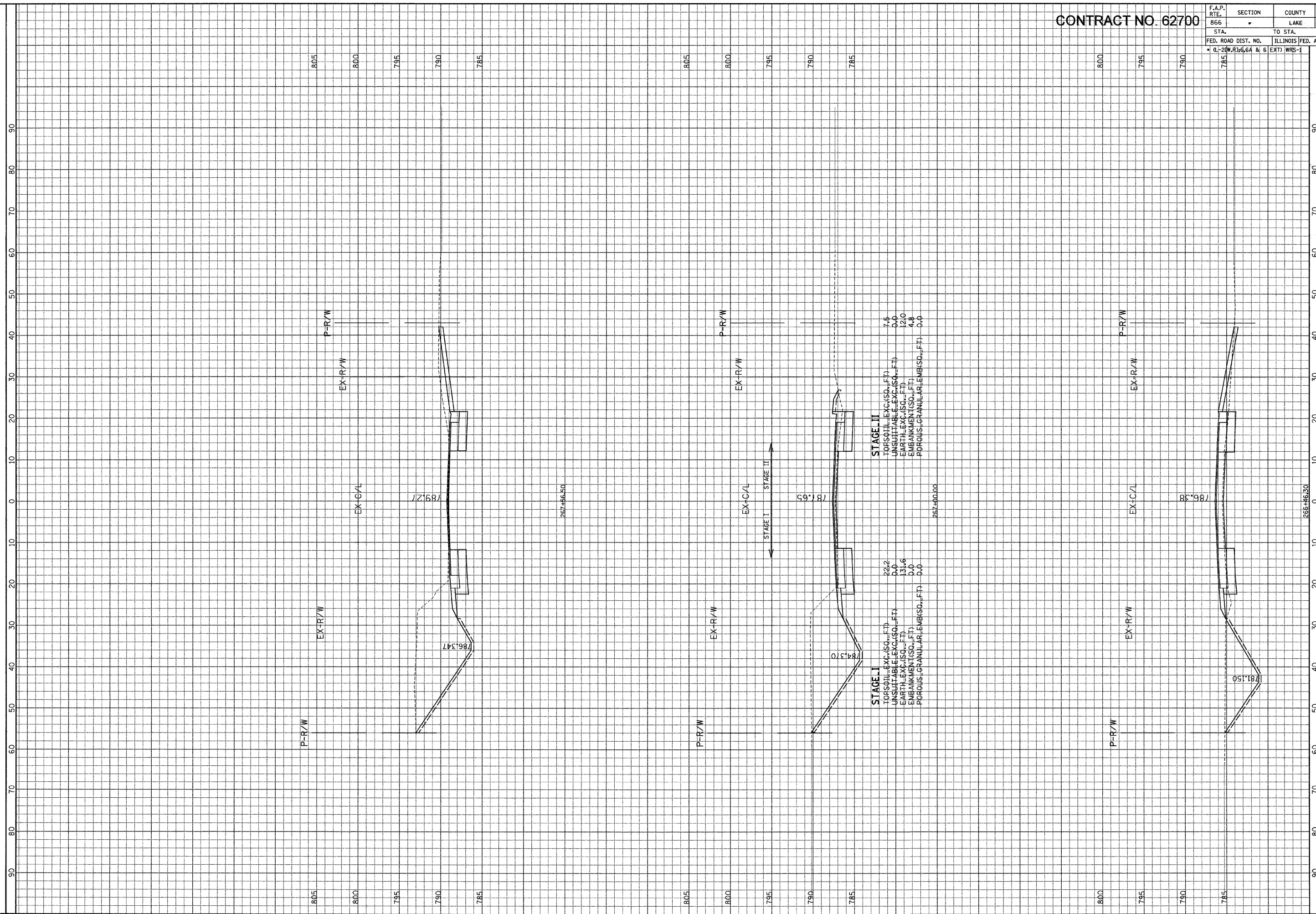
VERT. 1" = 5'

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 Chicago, Illinois 60631
 (773) 399-0122

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CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866		LAKE	554	378
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
	CL-2(W,R)36.6A & 6 EXT) WRS-1			



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)

STA. 266+46.30 TO STA. 267+56.50

SCALE: HORIZ. 1" = 10'

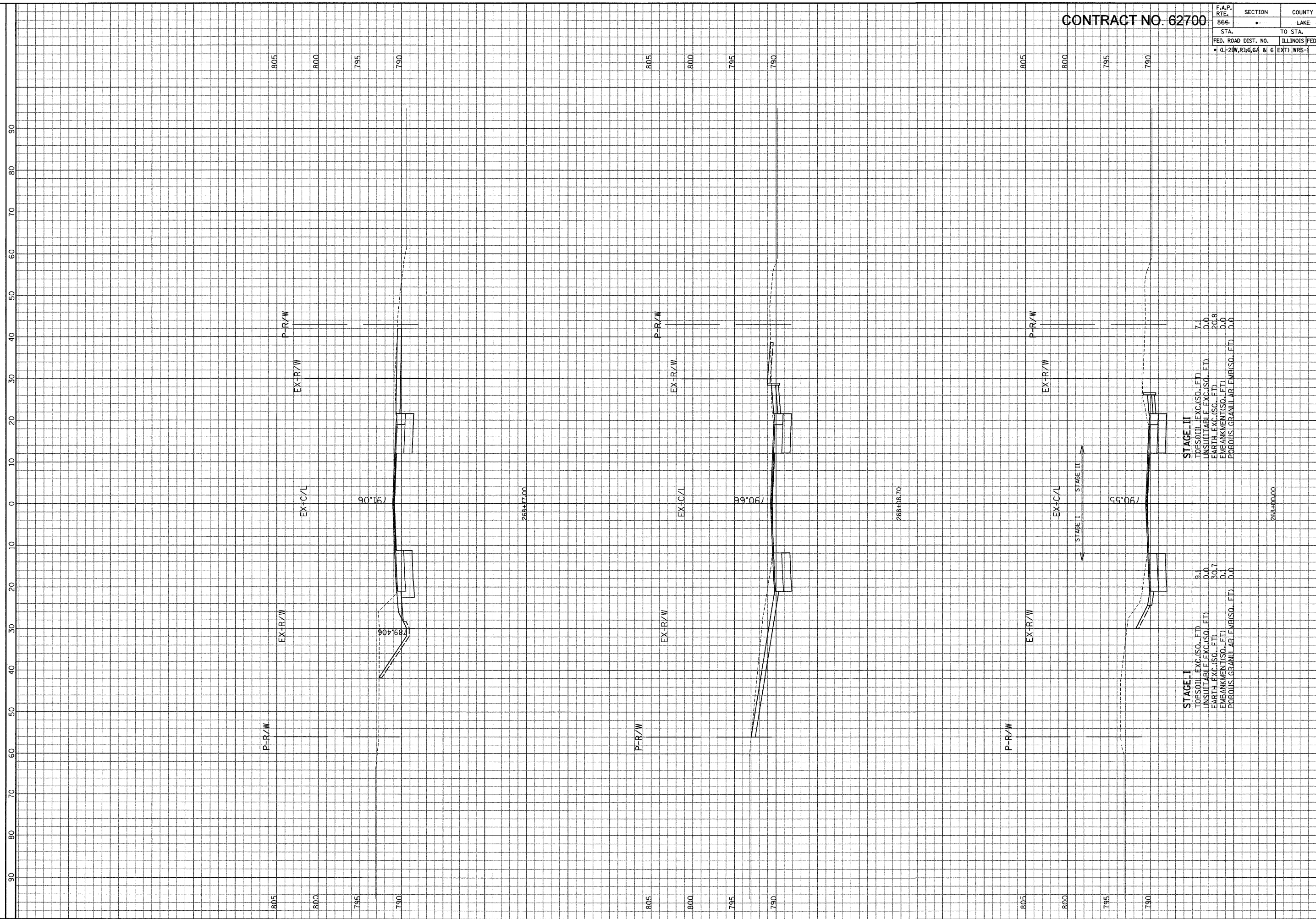
VERT. 1" = 5'

GRAF, ANWALT, SCHUEMME & ASSOCIATES, INC.
 ENGINEERS & SCIENTISTS
 8501 N. Higgins Road, Suite 280
 Chicago, Illinois 60631
 (773) 399-0312

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CONTRACT NO. 62700

F.A.P. RTE. 866	SECTION •	COUNTY LAKE	TOTAL SHEETS 554	SHEET NO. 379
STA. TO STA.		ILLINOIS FED. AID PROJECT		
FED. ROAD DIST. NO.		CL-20W,R3:6.6A & 6 EXT) WRS-1		



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)
STA. 268+00 TO STA. 268+77

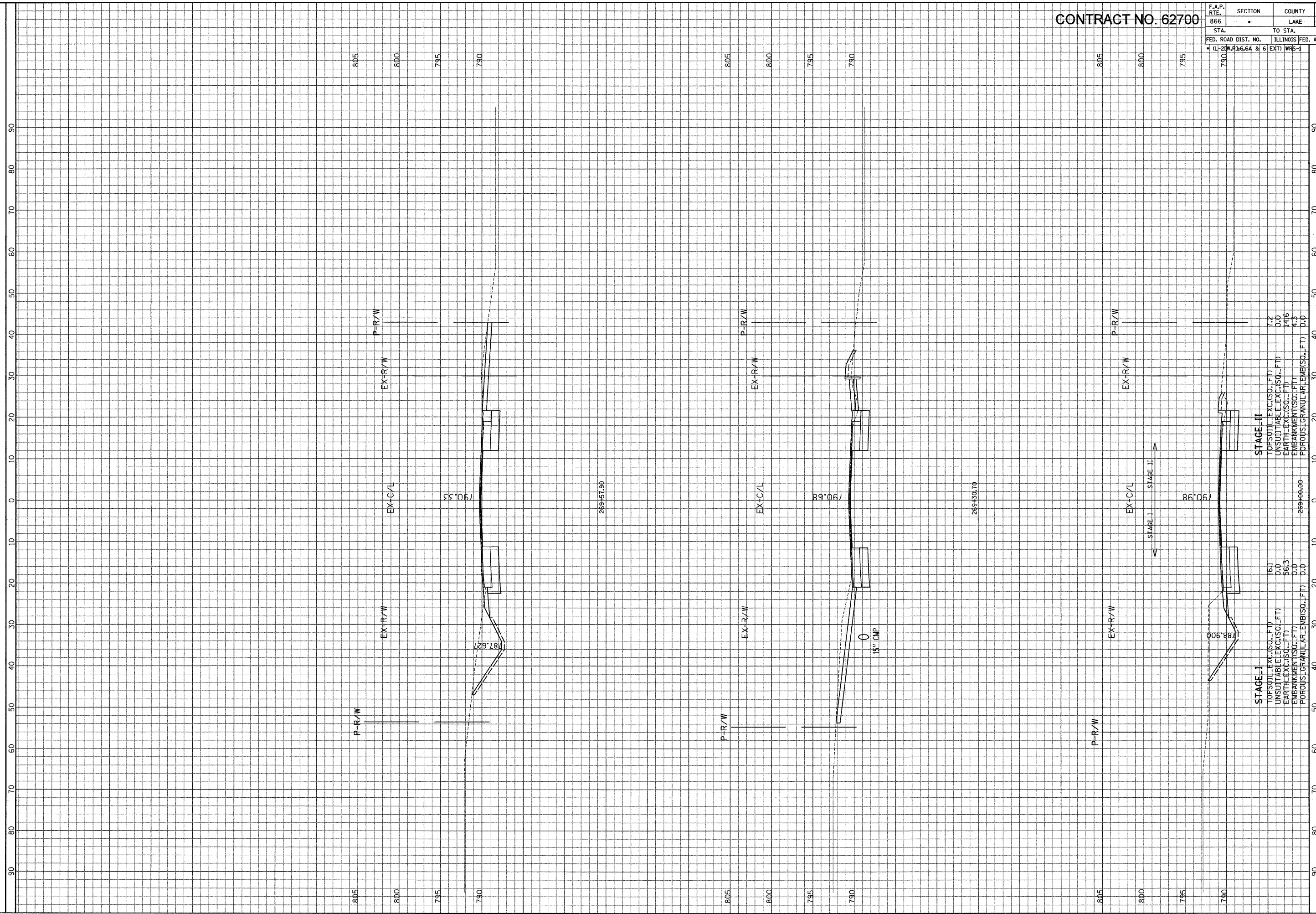
SCALE: HORIZ. 1" = 10'
VERT. 1" = 5'

GRAEF, ANHALT, SCHUEMME & ASSOCIATES, INC.
ENGINEERS & SCIENTISTS
8501 W. Higgins Road, Suite 280
Chicago, Illinois 60631
(773) 399-9312

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CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	•	LAKE	554	380
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
• CL-20W, R3, 6.64 & 6 EXT	WRS-1			



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)

STA. 269+00 TO STA. 269+57.90

SCALE: HORIZ. 1" = 10'

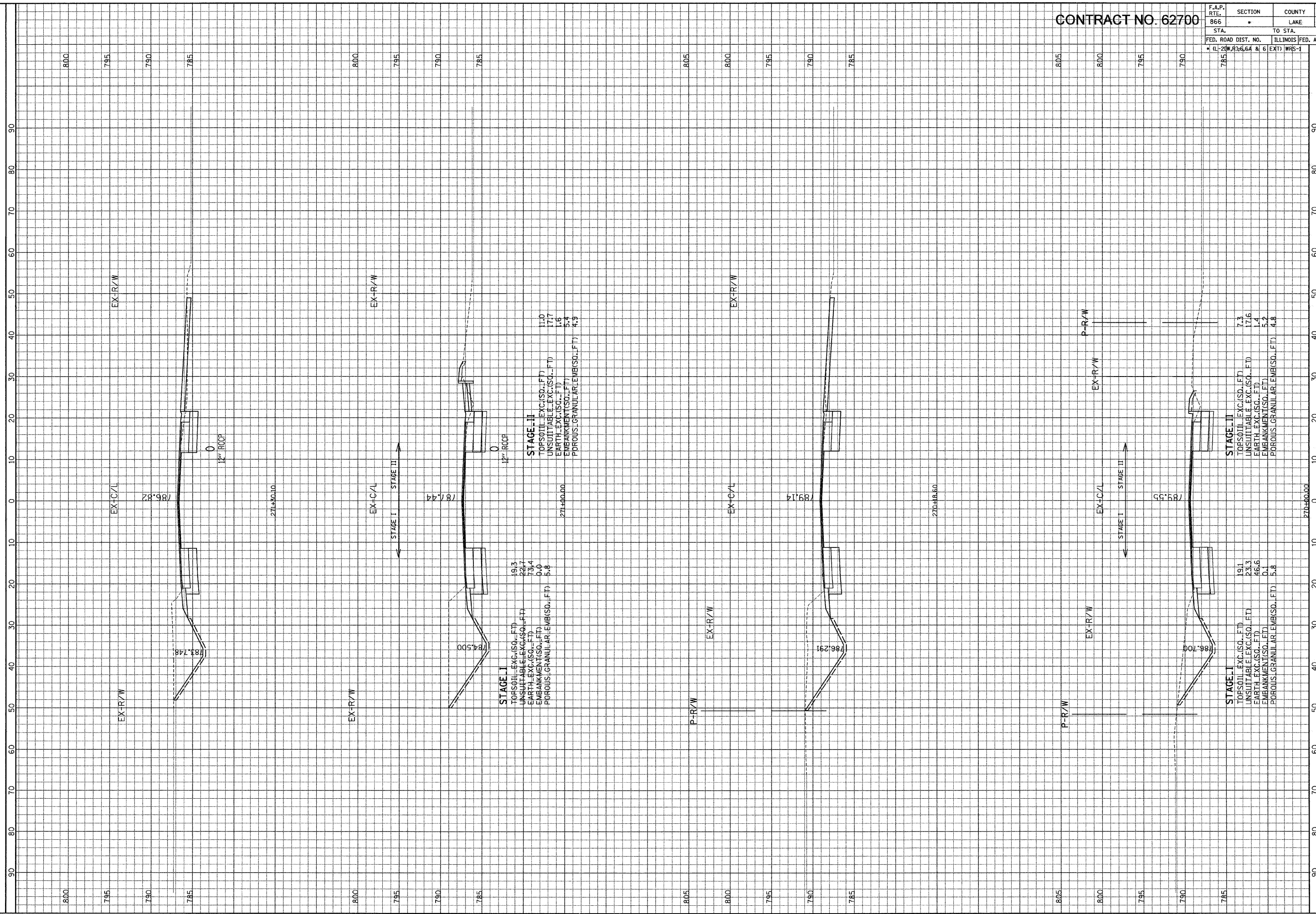
VERT. 1" = 5'

GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC.
 ENGINEERS & SCIENTISTS
 8501 W. Higgins Road, Suite 280
 Chicago, IL 60631
 (773) 399-0012

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CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	*	LAKE	554	381
STA. TO STA.		ILLINOIS FED. AID PROJECT		
FED. ROAD DIST. NO.		* IL-270, R3, 6.6A & 6 EXT) WRS-1		



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)

STA. 270+00 TO STA. 271+30.10

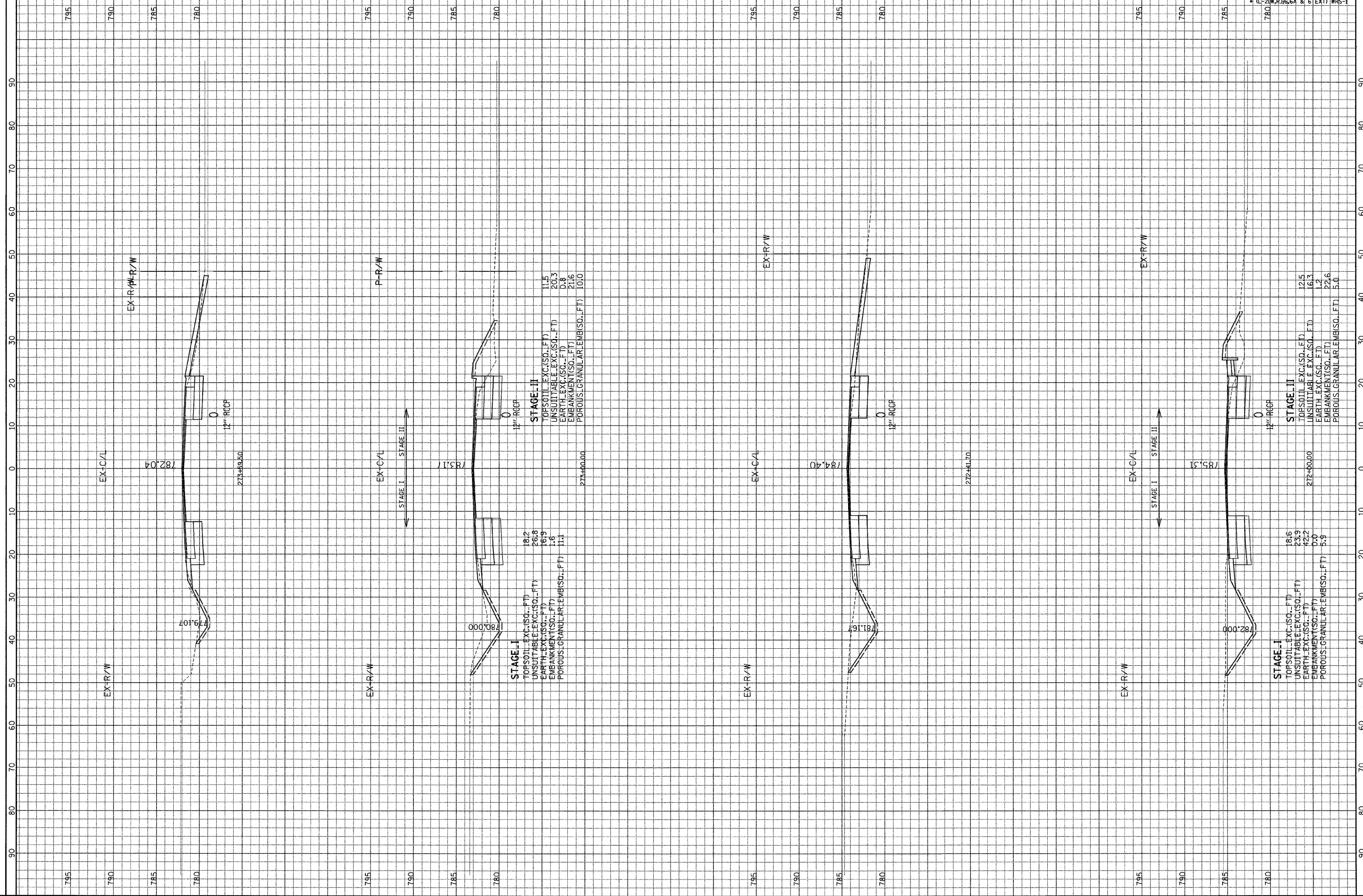
SCALE: HORIZ. 1" = 10'
VERT. 1" = 5'

GRAEF, ANHALT, SCHLUMMER & ASSOCIATES, INC.
 ENGINEERS & SCIENTISTS
 8501 N. Higgins Road, Suite 280
 Chicago, Illinois 60631
 (773) 359-0111

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CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	•	LAKE	554	382
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
•	CL-20W, R3:6.6A & 6 EXT) WRS-1			



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)
 STA. 272+00 TO STA. 273+59.50

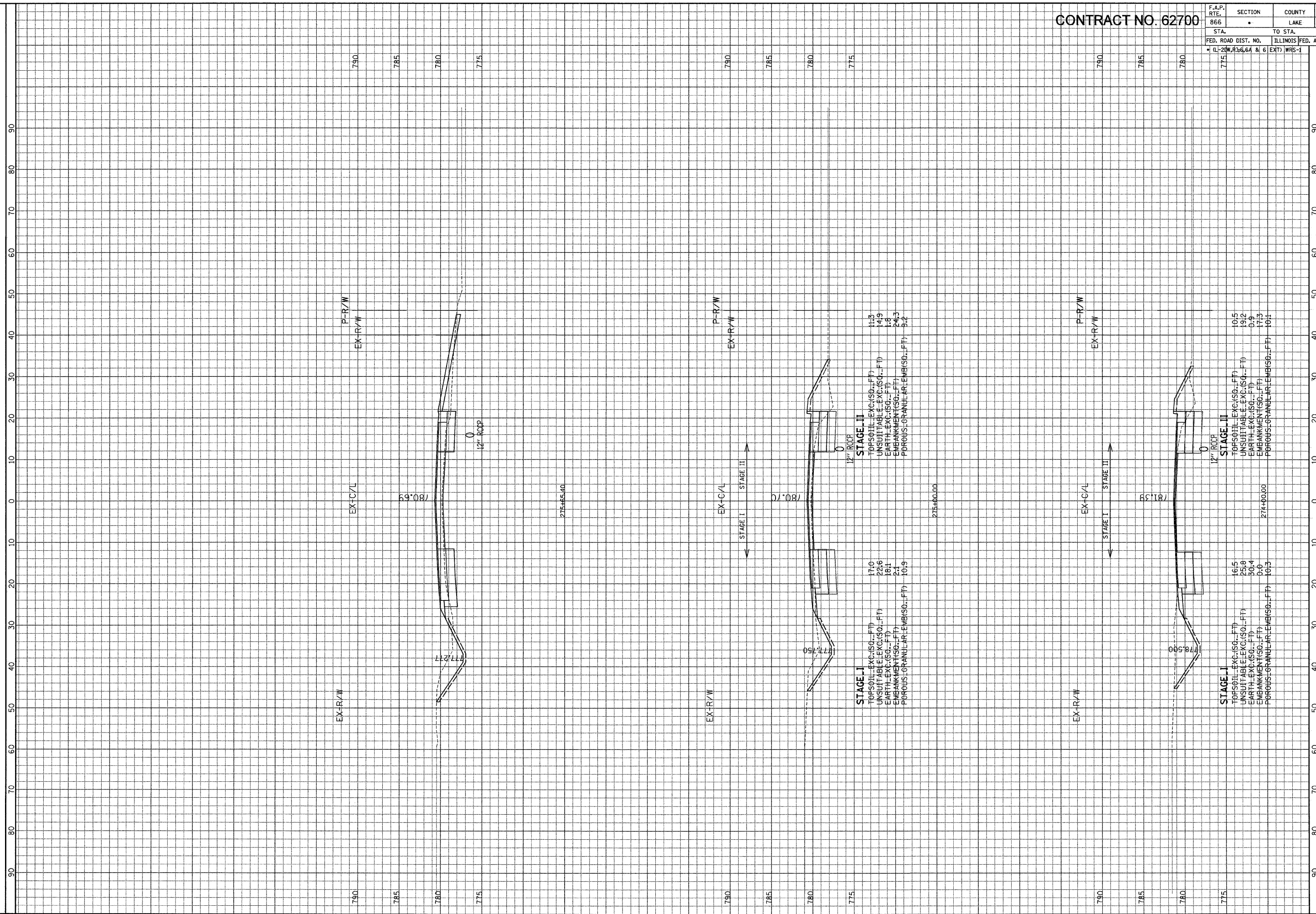
SCALE: HORIZ. 1" = 10'
 VERT. 1" = 5'

GRAF, ANHALT, SCHLOEMER & ASSOCIATES, INC.
 ENGINEERS & SCIENTISTS
 8501 W. Higgins Road, Suite 280
 Chicago, Illinois 60631
 (773) 399-0112

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CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	•	LAKE	554	383
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
• (L-2) W, R, 6.6A & 6 (EXT) WRS-1				



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)

STA. 274+00 TO STA. 275+65.40

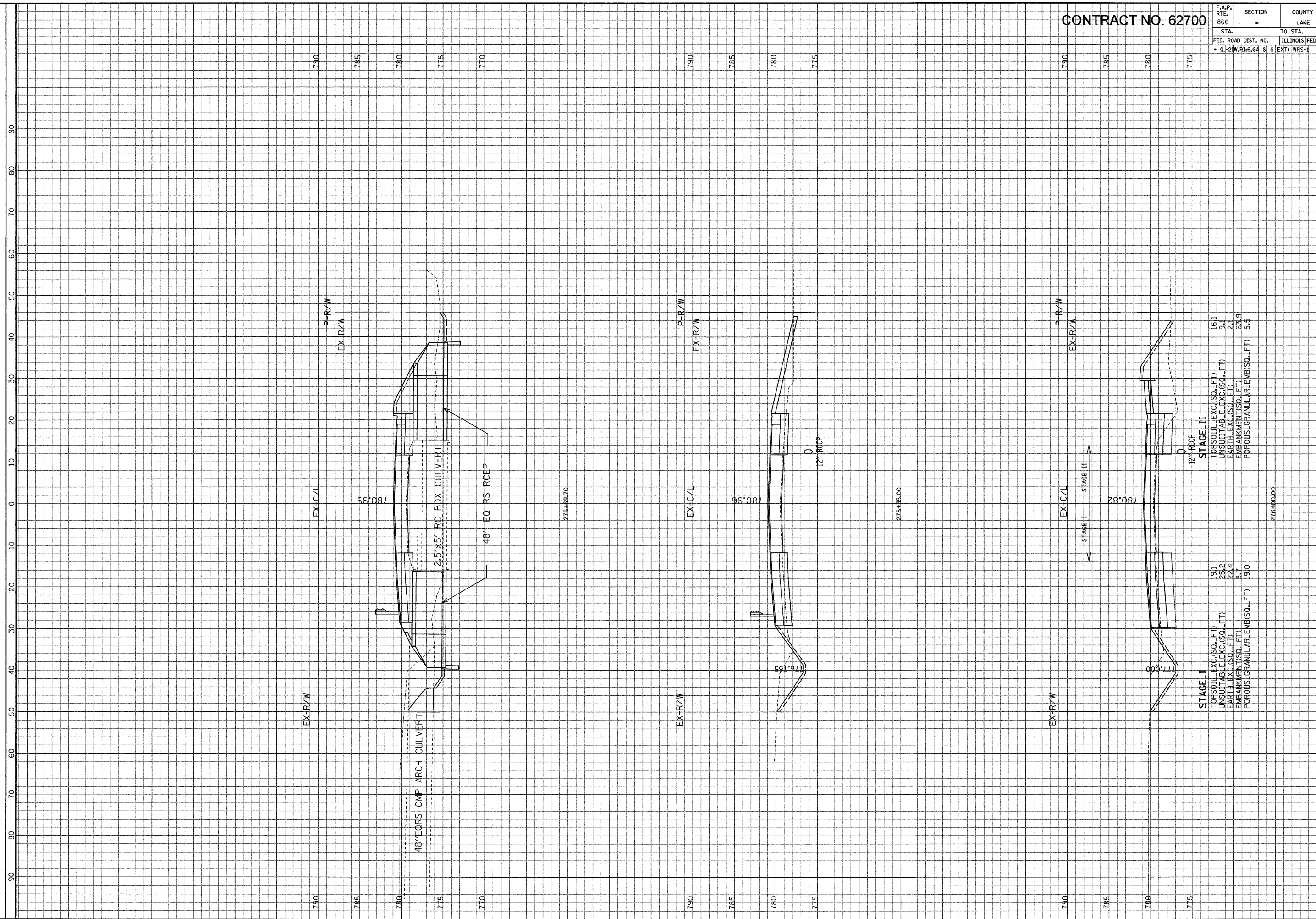
SCALE: HORIZ. 1" = 10'
VERT. 1" = 5'

GRAEF, ANHALT, SCHUEMME & ASSOCIATES, INC.
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CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	•	LAKE	554	384
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
• IL-20W,R;6.6A & 6 EXT) WRS-1				



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)
STA. 276+00 TO STA. 276+69.70

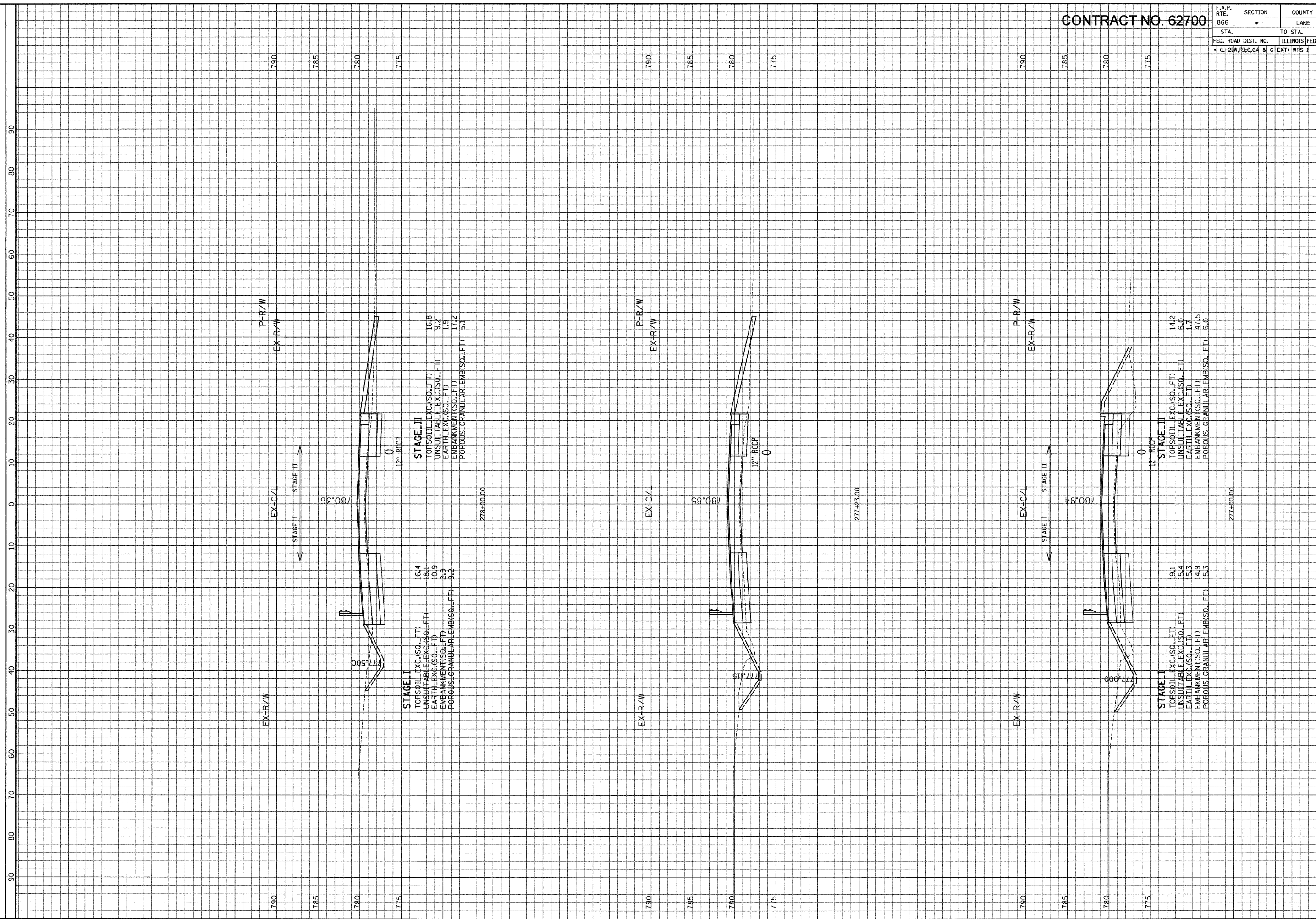
SCALE: HORIZ. 1" = 10'
VERT. 1" = 5'

GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC.
ENGINEERS & SCIENTISTS
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Chicago, Illinois 60631
(773) 399-0112

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CONTRACT NO. 62700

F.A.P. RT. 866	SECTION	COUNTY LAKE	TOTAL SHEETS 554	SHEET NO. 385
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT		CL-20W, R3, 6.6A & 6 EXT) WRS-1	



ILLINOIS DEPARTMENT OF TRANSPORTATION

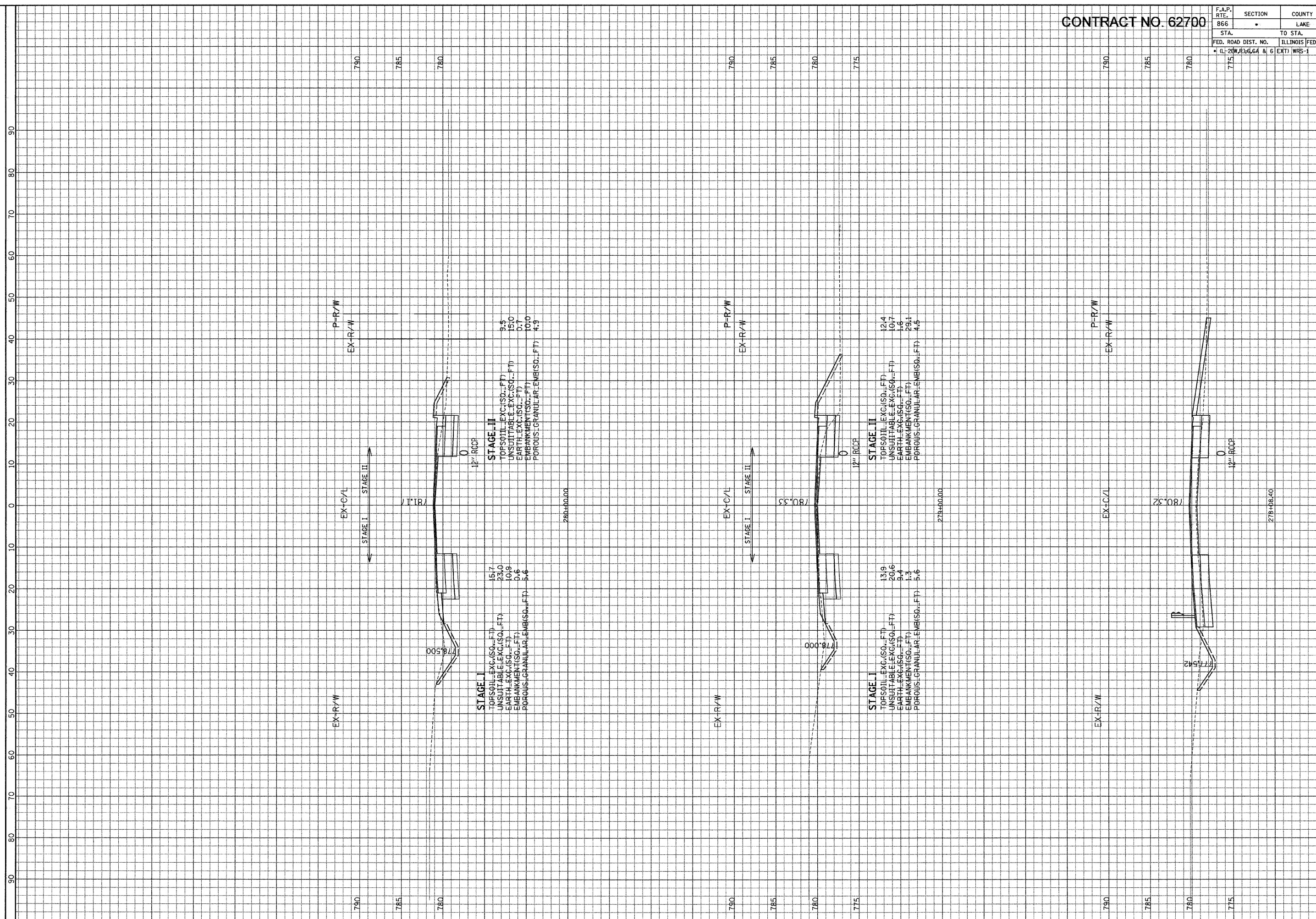
F. A. P. ROUTE 866 (IL ROUTE 83) STA. 277+00 TO STA. 278+00

SCALE: HORIZ. 1" = 10' VERT. 1" = 5'

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 ENGINEERS & SCIENTISTS
 8501 W. Higgins Road, Suite 280
 Chicago, Illinois 60631
 (773) 399-0112

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	•	LAKE	554	386
STA.	TO STA.		ILLINOIS FED. AID PROJECT	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
• CL-20W,R1;6.6A & 6 EXT) WRS-1				



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)

STA. 278+08.40 TO STA. 280+00

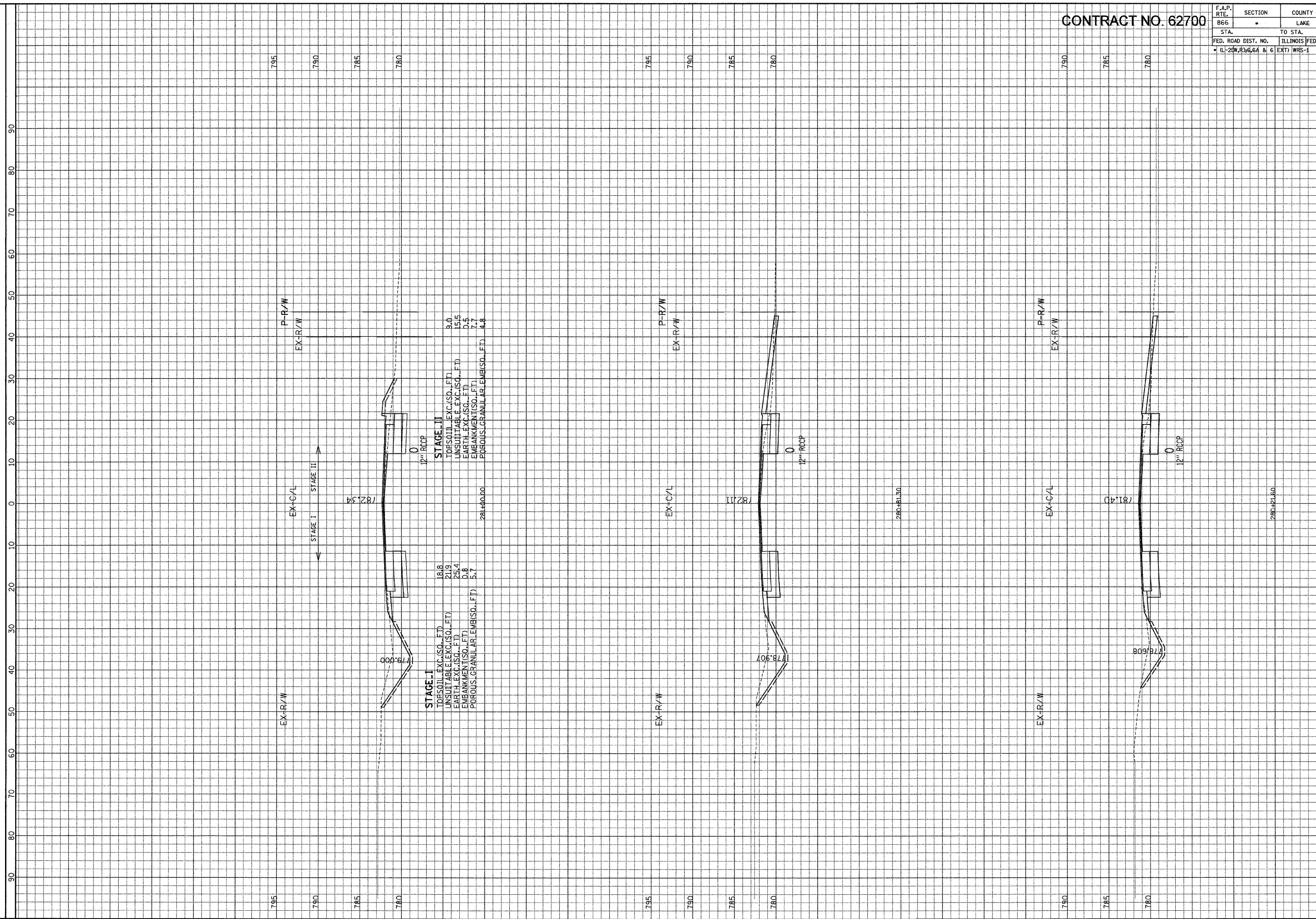
SCALE: HORIZ. 1" = 10' VERT. 1" = 5'

GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC.
 ENGINEERS & SCIENTISTS
 8601 N. Higgins Road, Suite 280
 Chicago, Illinois 60631
 (773) 399-0112

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 DATE: 06-Jan-04 09:22

CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	•	LAKE	554	387
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
• CL-20W, R3, 6.6A & 6	EXT	WRS-1		



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)
STA. 280+21.60 TO STA. 281+00

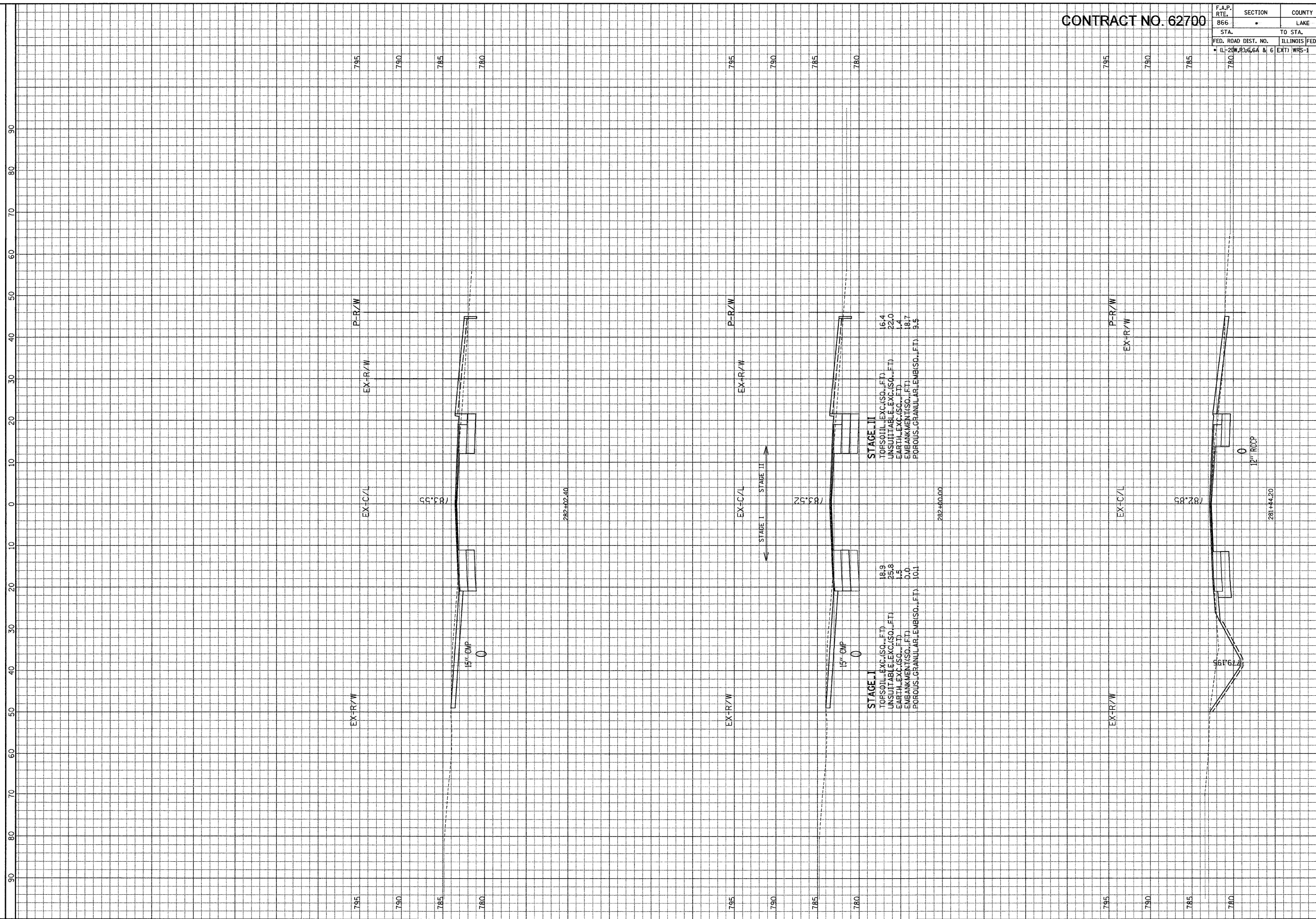
SCALE: HORIZ. 1" = 10'
VERT. 1" = 5'

GRAF, ANHALT, SCHLOEMER & ASSOCIATES, INC.
ENGINEERS & SCIENTISTS
8501 N. Higgins Road, Suite 280
Chicago, Illinois 60631
(773) 399-9112

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DATE: 06-Jan-04 09:22

CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	•	LAKE	554	388
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
• CL-20W,R3:6.6A & 6 EXT) WRS-1				



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)
 STA. 281+44.20 TO STA. 282+02.40

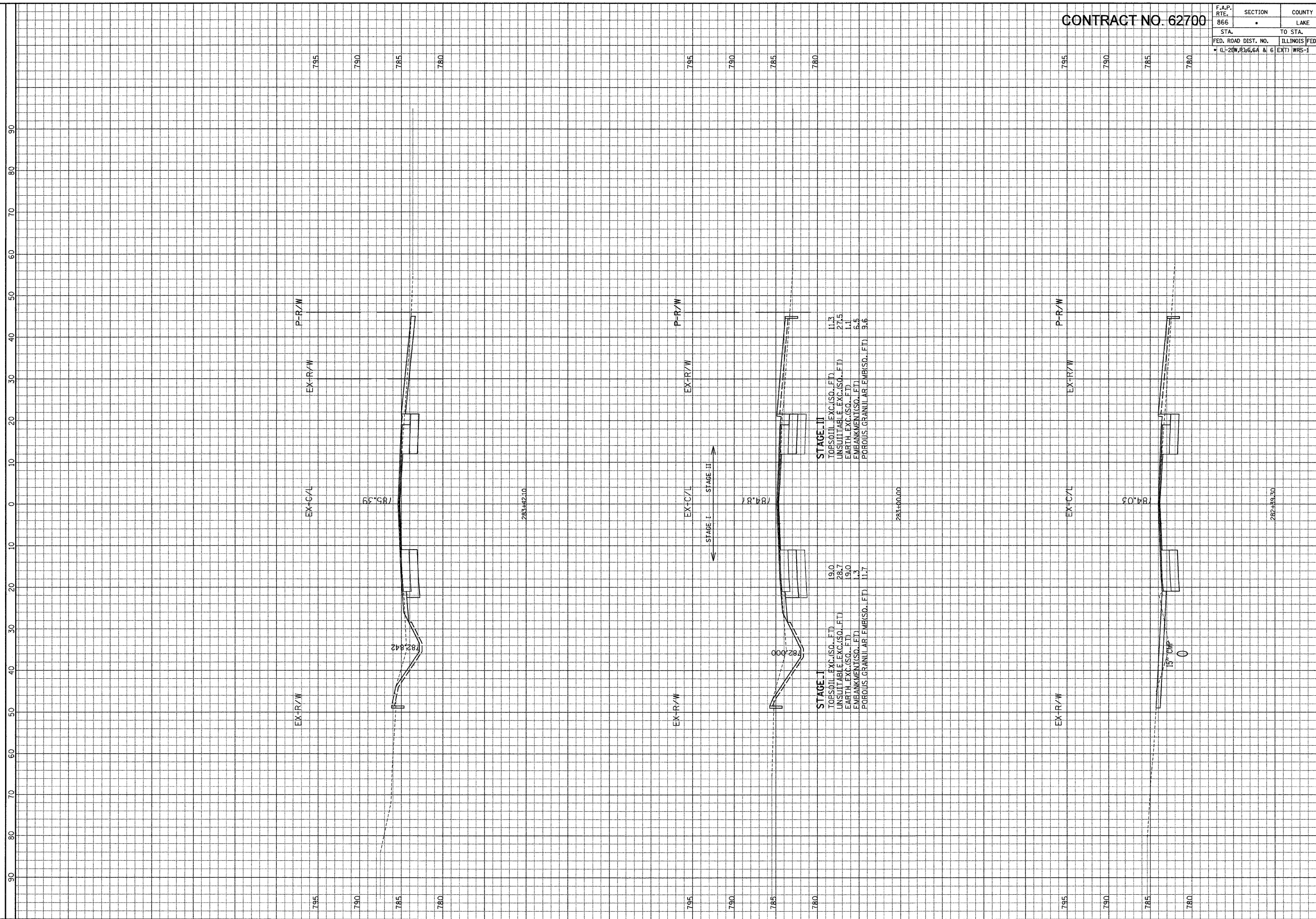
SCALE: HORIZ. 1" = 10'
 VERT. 1" = 5'

GRAF, ANWALT, SCHLOEMER & ASSOCIATES, INC.
 ENGINEERS & SCIENTISTS
 8501 N. Higgins Road, Suite 280
 Chicago, Illinois 60631
 (773) 399-0112

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 DATE: 09-Jan-04 09:22

CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	•	LAKE	554	389
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
• CL-20W, R3, 6.6A & 6	EXT	WRS-1		



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)

STA. 282+39.30 TO STA. 283+42.10

SCALE: HORIZ. 1" = 10'
 VERT. 1" = 5'

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CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866		LAKE	554	390
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
	CL-20W, R16.6A & 6	EXT) WRS-1		



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)

STA. 284+00 TO STA. 285+00

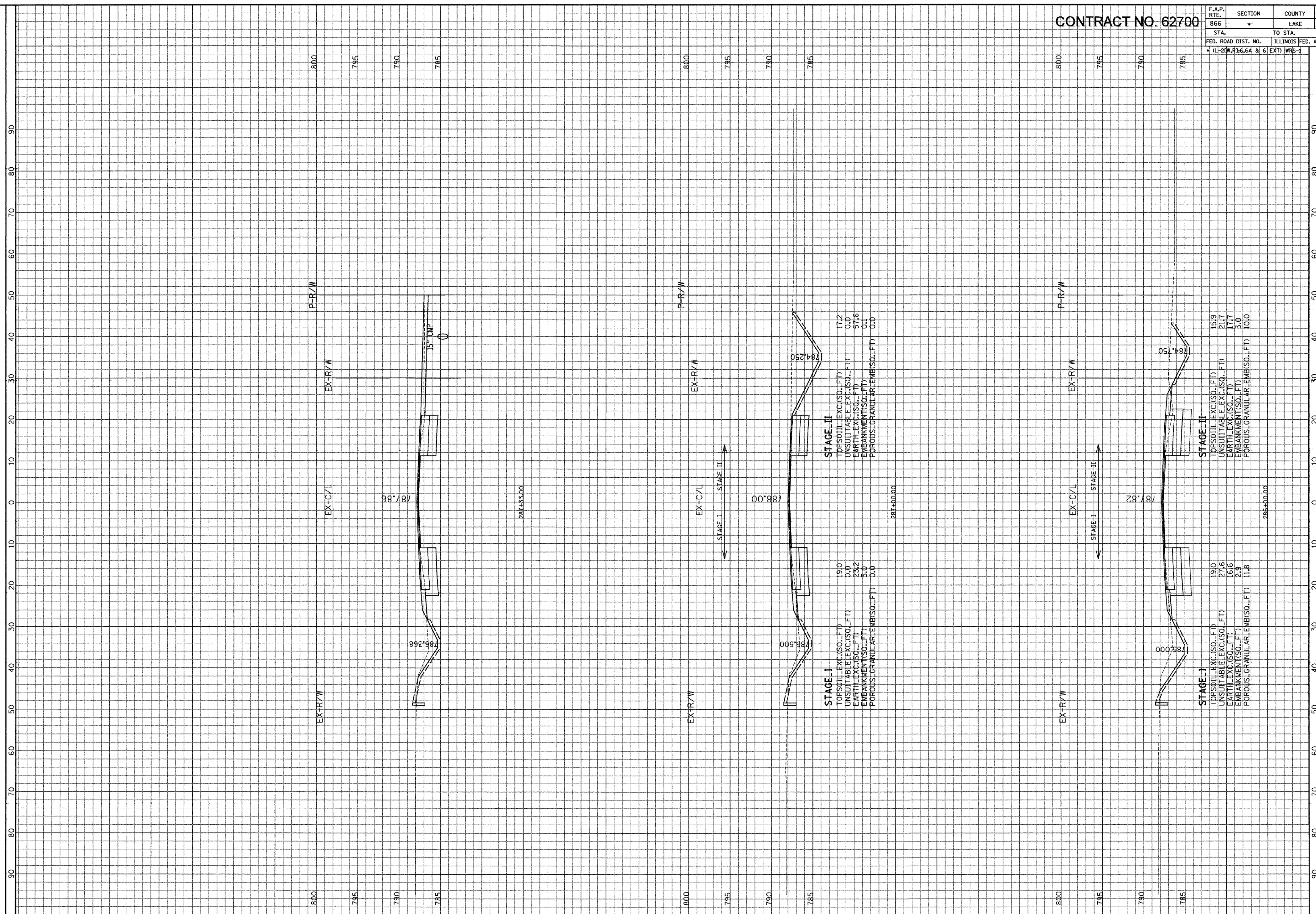
SCALE: HORIZ. 1" = 10'
VERT. 1" = 5'

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 8501 N. Higgins Road, Suite 800
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CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	LAKE	LAKE	554	391
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
• (L-20W,R)16.6A & 6 (EXT) WRS-1				



STAGE III
 TOPSOIL EXC.(SQ..FT) 17.2
 UNSUITABLE EXC.(SQ..FT) 0.0
 EARTH EXC.(SQ..FT) 57.6
 EMBANKMENT(SQ..FT) 0.1
 POROUS GRANULAR EMB.(SQ..FT) 0.0

STAGE I
 TOPSOIL EXC.(SQ..FT) 19.0
 UNSUITABLE EXC.(SQ..FT) 0.0
 EARTH EXC.(SQ..FT) 23.2
 EMBANKMENT(SQ..FT) 5.0
 POROUS GRANULAR EMB.(SQ..FT) 0.0

STAGE III
 TOPSOIL EXC.(SQ..FT) 15.9
 UNSUITABLE EXC.(SQ..FT) 21.7
 EARTH EXC.(SQ..FT) 17.7
 EMBANKMENT(SQ..FT) 3.0
 POROUS GRANULAR EMB.(SQ..FT) 10.0

STAGE I
 TOPSOIL EXC.(SQ..FT) 19.0
 UNSUITABLE EXC.(SQ..FT) 27.6
 EARTH EXC.(SQ..FT) 16.6
 EMBANKMENT(SQ..FT) 2.9
 POROUS GRANULAR EMB.(SQ..FT) 11.8

ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)

STA. 286+00 TO STA. 287+33

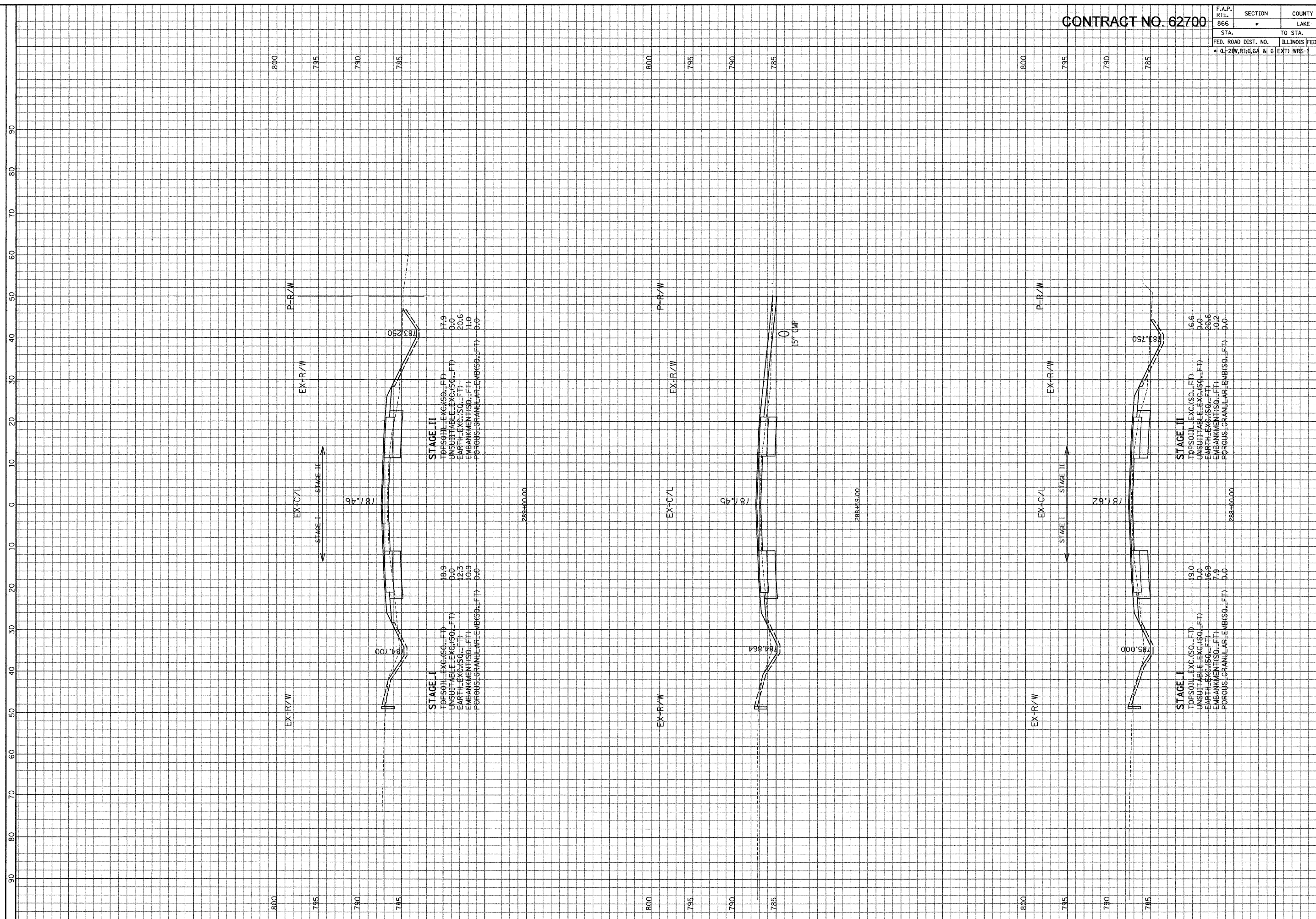
SCALE: HORIZ. 1" = 10'
 VERT. 1" = 5'

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FILE: GA220004024_A\960\Area\A\XSH1.dwg
 DATE: 06-Jan-04 09:22

CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	•	LAKE	554	392
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID	PROJECT
• QL-2(W,R);6,6A & 6		EXT)	WRS-1	



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)

STA. 288+00 TO STA. 289+00

SCALE: HORIZ. 1" = 10'

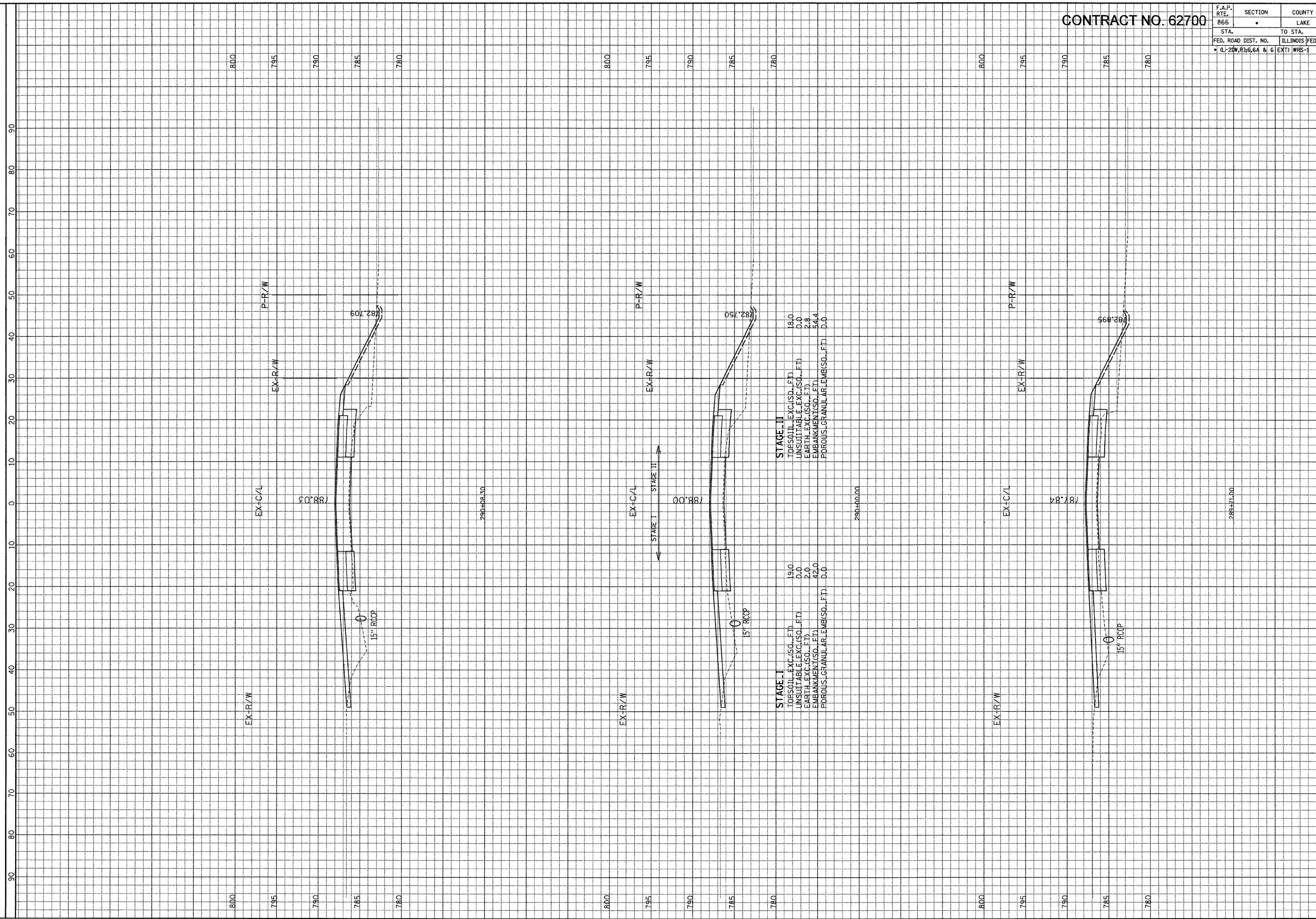
VERT. 1" = 5'

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CONTRACT NO. 62700

F.A.P. RTE. 866	SECTION •	COUNTY LAKE	TOTAL SHEETS 554	SHEET NO. 393
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
• CL-20W,R3,6.6A & 6		EXT) WRS-1		



STAGE II
 TOP SOIL EXC. (SQ. FT) 18.0
 UNSUITABLE EXC. (SQ. FT) 0.0
 EARTH EXC. (SQ. FT) 2.8
 EMBANKMENT (SQ. FT) 54.4
 POROUS GRANULAR EMB. (SQ. FT) 0.0

STAGE I
 TOP SOIL EXC. (SQ. FT) 19.0
 UNSUITABLE EXC. (SQ. FT) 0.0
 EARTH EXC. (SQ. FT) 2.0
 EMBANKMENT (SQ. FT) 42.0
 POROUS GRANULAR EMB. (SQ. FT) 0.0

ILLINOIS DEPARTMENT
OF TRANSPORTATION

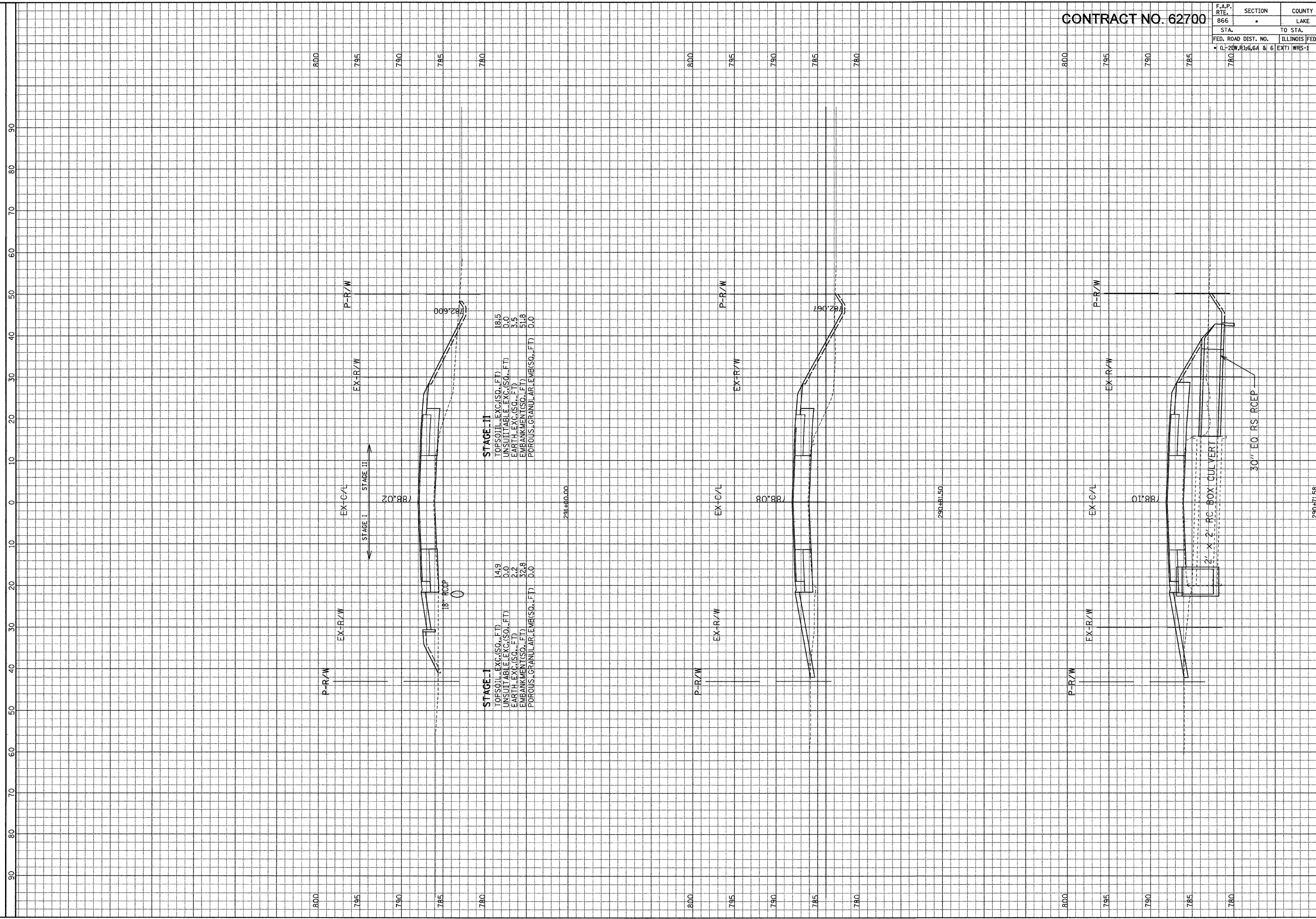
F. A. P. ROUTE 866 (IL ROUTE 83)
STA. 289+71 TO STA. 290+08.30

SCALE: HORIZ. 1" = 10'
VERT. 1" = 5'

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DATE: 06-24-09 09:22

F.A.P. RTE. 866	SECTION •	COUNTY LAKE	TOTAL SHEETS 554	SHEET NO. 394
STA. TO STA.		ILLINOIS FED. AID PROJECT		
FED. ROAD DIST. NO.		CL-21W, R3, 6.6A & 6 EXT) WRS-1		



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)

STA. 290+71.58 TO STA. 291+00

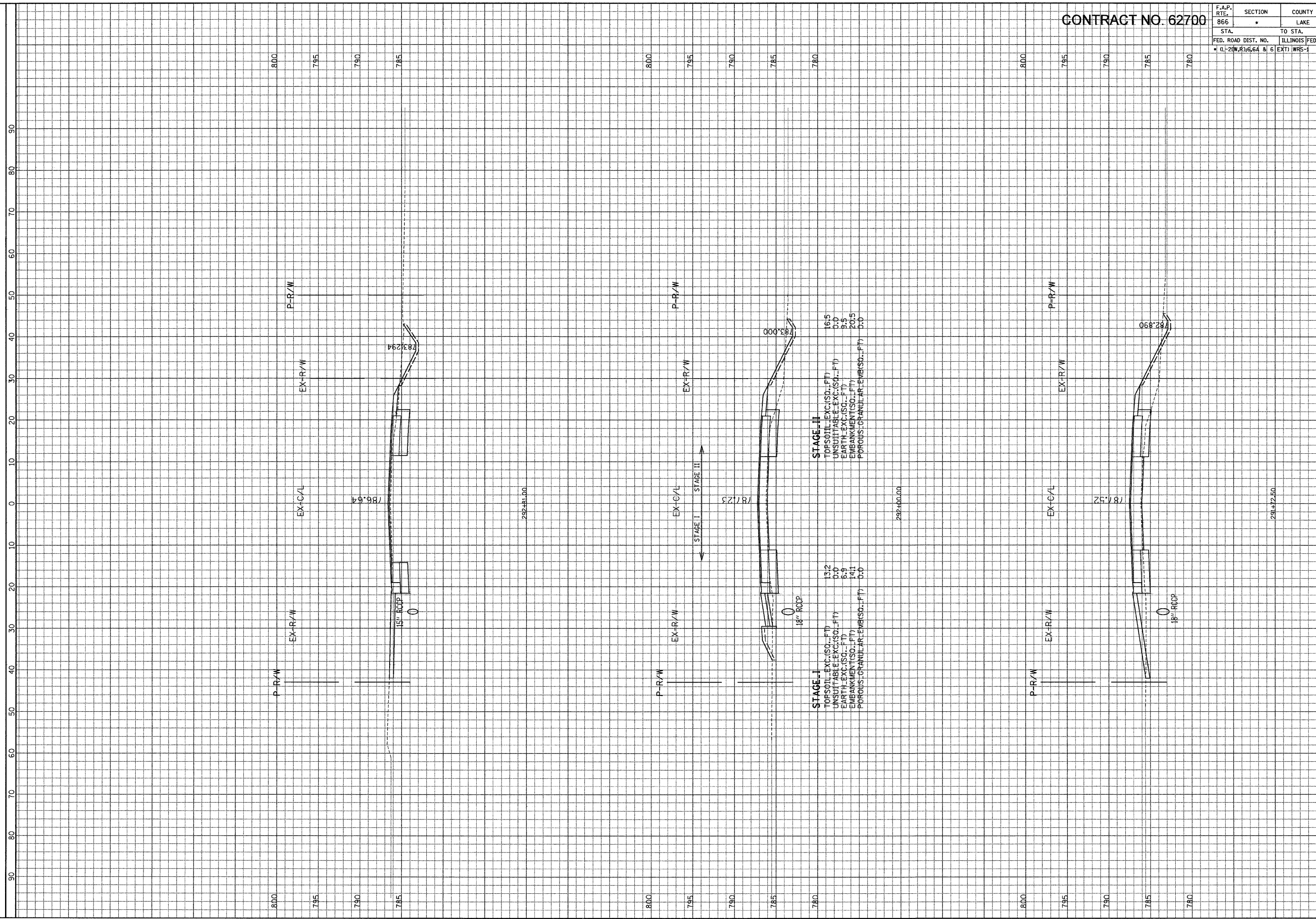
SCALE: HORIZ. 1" = 10'
 VERT. 1" = 5'

GRAEF, ANHALT, SCHLOBER & ASSOCIATES, INC.
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 8501 N. Higgins Road, Suite 280
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 (773) 355-9016

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 DATE: 06-14-04 09:22

CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866		LAKE	554	395
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
• (L-20W.R) 6.64 & 6		(EXT) WRS-1		



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)
 STA. 291+72.50 TO STA. 292+81

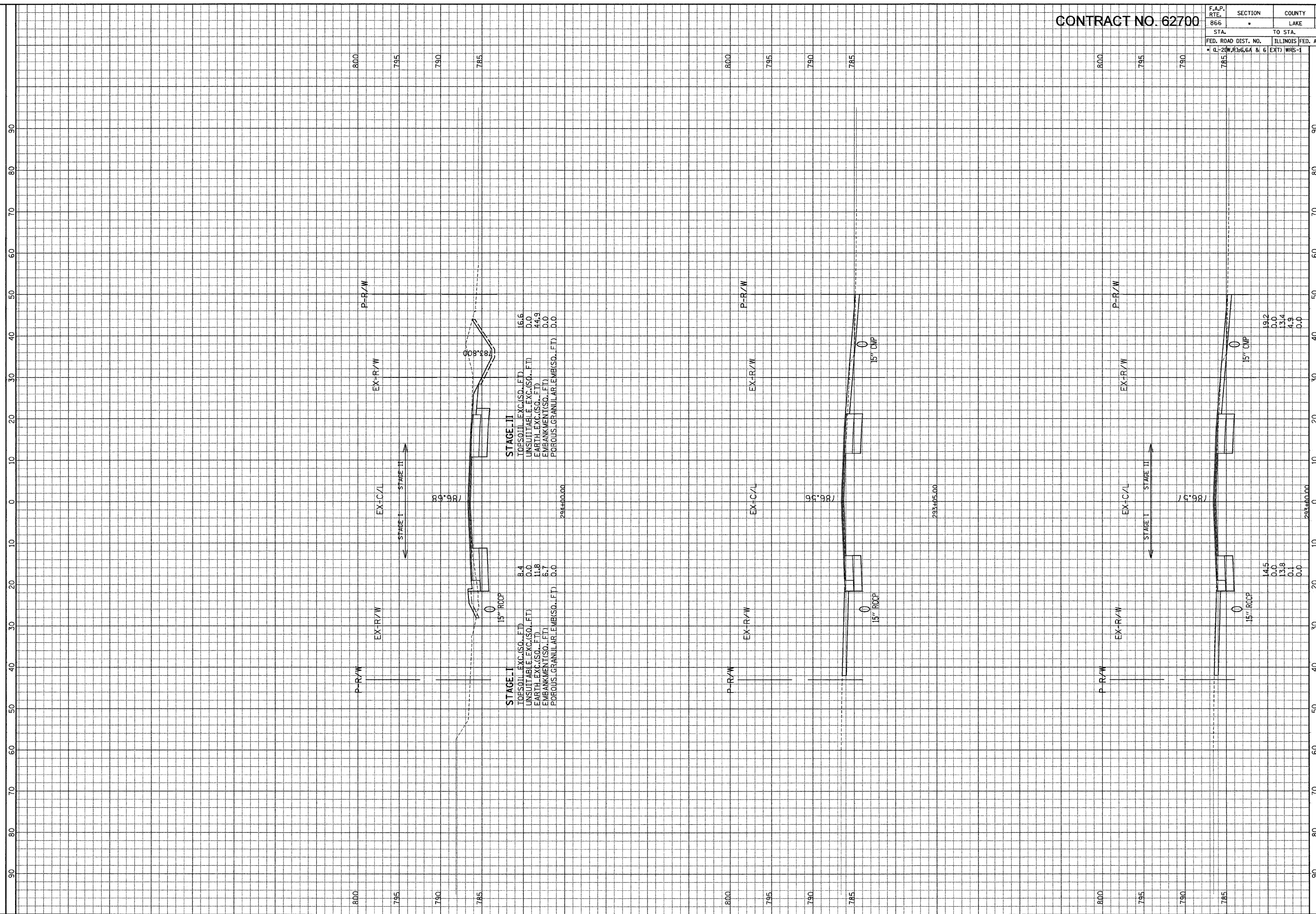
SCALE: HORIZ. 1" = 10'
 VERT. 1" = 5'

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 8501 N. Higgins Road, Suite 280
 Chicago, Illinois 60631
 (773) 399-0012

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CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	LAKE	554	396	
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CL-20W, R176.6A & 6	EXT	WRS-1		



ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)

STA. 293+00 TO STA. 294+00

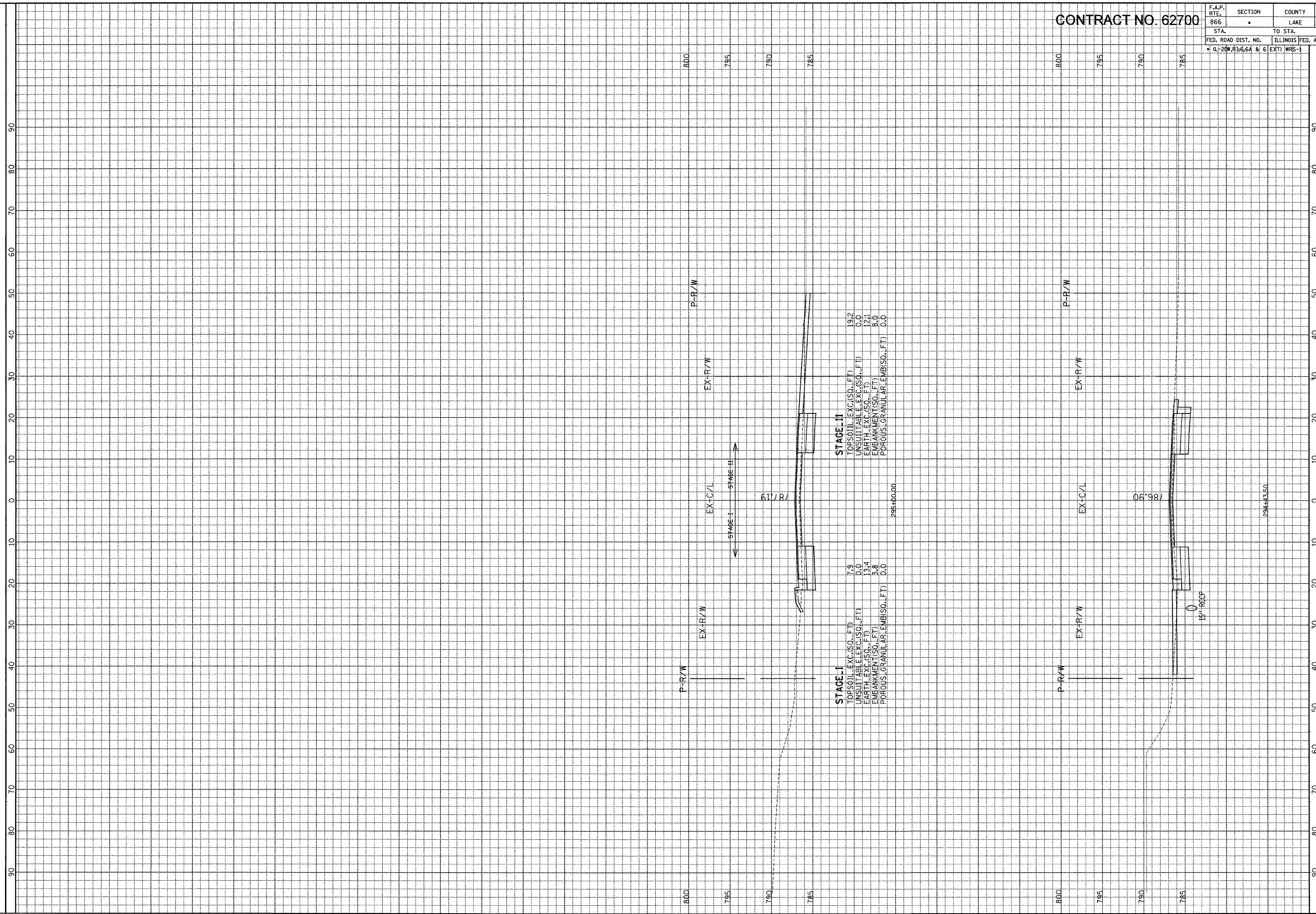
SCALE: HORIZ. 1" = 10'
VERT. 1" = 5'

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DATE: 06-Jan-04 09:22

CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866		LAKE	554	397
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
• IL-20W,R3:6.6A & 6		EXTD WRS-1		



STAGE-II

TOPSOIL EXC.(SQ. FT)	19.2
UNSUITABLE EXC.(SQ. FT)	0.0
EARTH EXC.(SQ. FT)	12.1
EMBANKMENT(SQ. FT)	8.0
POROUS GRANULAR EMB(SQ. FT)	0.0

STAGE-I

TOPSOIL EXC.(SQ. FT)	7.9
UNSUITABLE EXC.(SQ. FT)	0.0
EARTH EXC.(SQ. FT)	13.4
EMBANKMENT(SQ. FT)	3.8
POROUS GRANULAR EMB(SQ. FT)	0.0

ILLINOIS DEPARTMENT OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)
STA. 294+43.50 TO STA. 295+00

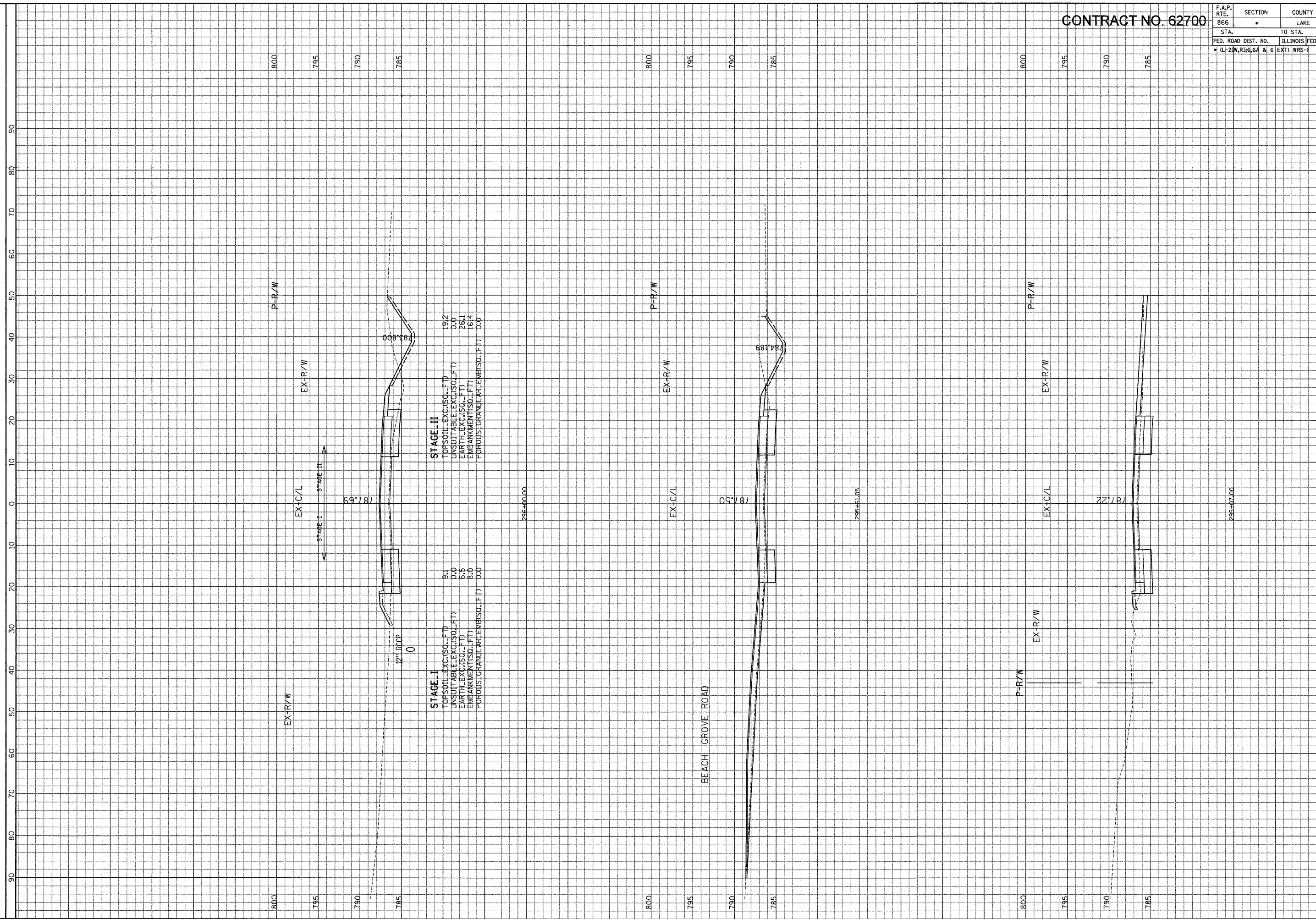
SCALE: HORIZ. 1" = 10'
VERT. 1" = 5'

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8501 N. Higgins Road, Suite 280
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(773) 399-0312

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DATE: 06-24-04 09:22

CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866		LAKE	554	398
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
CL-20W,R3:6.6A & 6 EXT) WRS-1				



ILLINOIS DEPARTMENT OF TRANSPORTATION

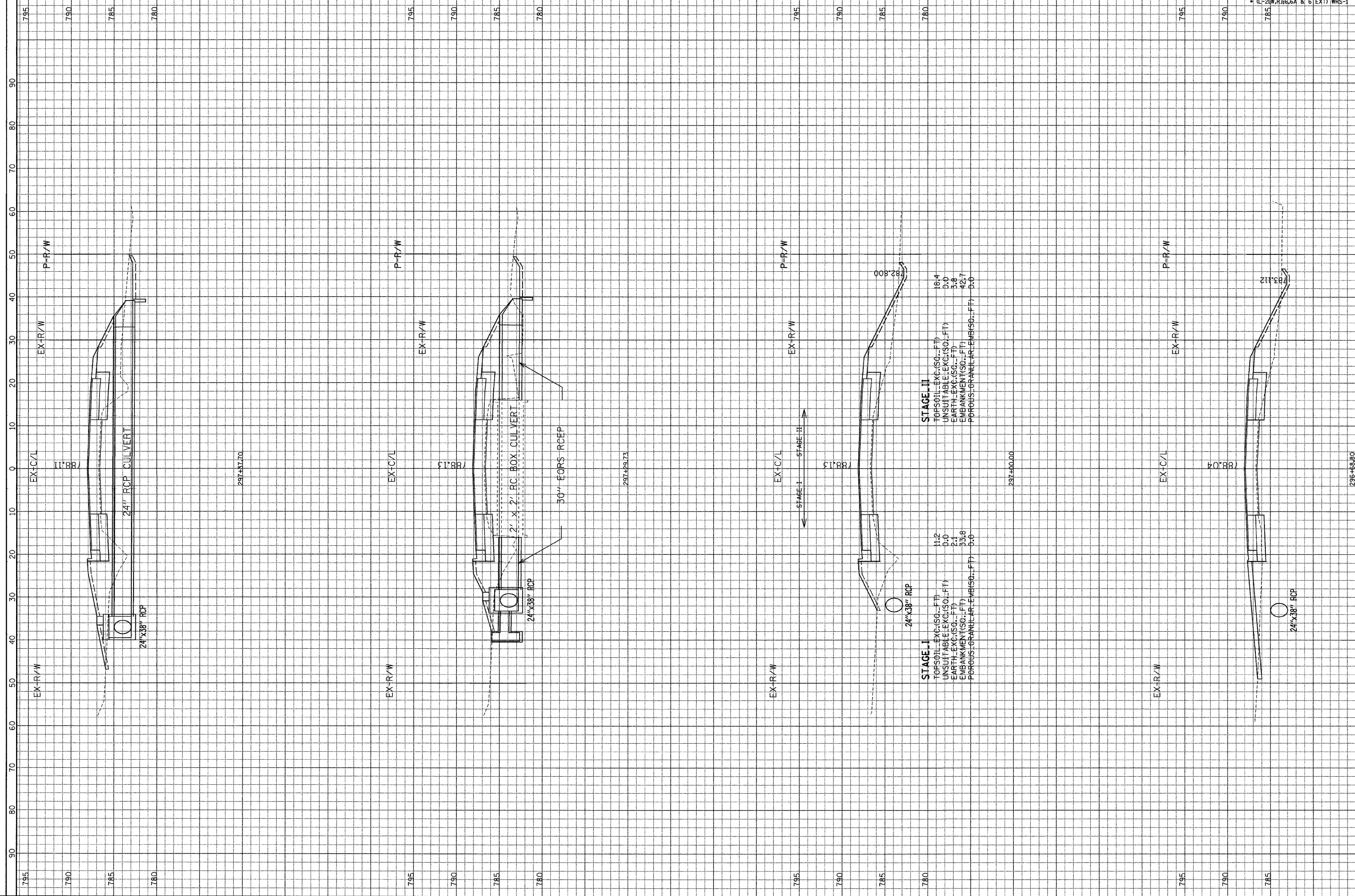
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 ENGINEERS & SCIENTISTS
 8501 W. Higgins Road, Suite 280
 Chicago, Illinois 60631
 (773) 399-0112

SCALE: HORIZ. 1" = 10'
 VERT. 1" = 5'

F. A. P. ROUTE 866 (IL ROUTE 83)
 STA. 295+07 TO STA. 296+00

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F.A.P. RTE. 866	SECTION LAKE	COUNTY LAKE	TOTAL SHEETS 554	SHEET NO. 399
STA. TO STA.		ILLINOIS FED. AID PROJECT		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
LAKE 20W.R316.6A & 6		EXT) WRS-1		



ILLINOIS DEPARTMENT OF TRANSPORTATION

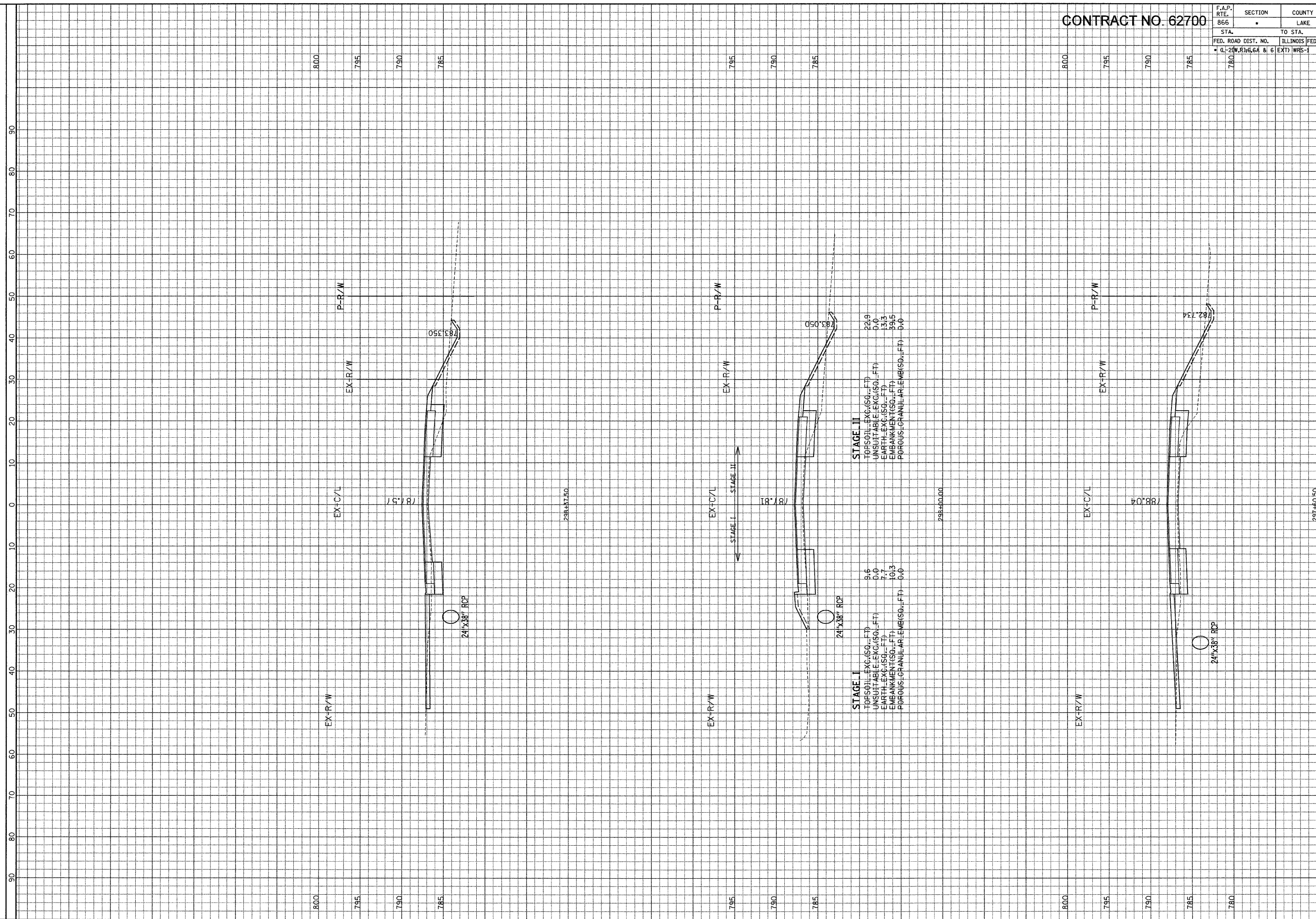
F. A. P. ROUTE 866 (IL ROUTE 83)
 STA. 296+68.80 TO STA. 297+37.70

SCALE: HORIZ. 1" = 10'
 VERT. 1" = 5'

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 ENGINEERS & SCIENTISTS
 8501 N. Higgins Road, Suite 280
 Chicago, Illinois 60631
 (773) 359-0111

CONTRACT NO. 62700

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
866	•	LAKE	554	400
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
•	CL-20W,R3:6.6A & 6 EXT) WRS-1			



STAGE II
 TOPSOIL-EXC.(SQ.-FT) 22.9
 UNSUITABLE EKG.(SQ.-FT) 0.0
 EARTH-EXC.(SQ.-FT) 13.3
 EMBANKMENT(SQ.-FT) 39.5
 POROUS-GRANULAR-EMB.(SQ.-FT) 0.0

STAGE I
 TOPSOIL-EXC.(SQ.-FT) 9.6
 UNSUITABLE EKG.(SQ.-FT) 0.0
 EARTH-EXC.(SQ.-FT) 7.7
 EMBANKMENT(SQ.-FT) 10.3
 POROUS-GRANULAR-EMB.(SQ.-FT) 0.0

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 Chicago, Illinois 60631
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ILLINOIS DEPARTMENT
 OF TRANSPORTATION

F. A. P. ROUTE 866 (IL ROUTE 83)
 STA. 297+60.50 TO STA. 298+37.50

SCALE: HORIZ. 1" = 10'
 VERT. 1" = 5'

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