

# ANOKA COUNTY HIGHWAY DEPARTMENT

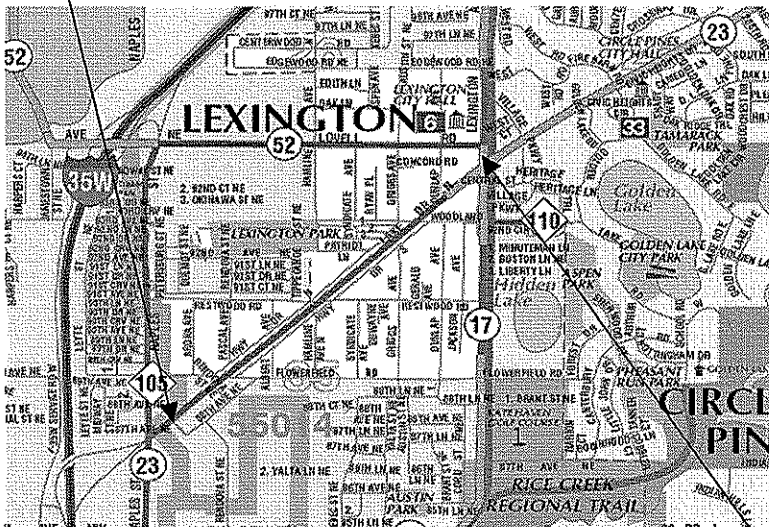
CONSTRUCTION PLAN FOR:

BIT. MILL, BIT. OVERLAY,  
WIDENING

CSAH NO: 23  
FROM Naples St.  
TO Lexington Ave.  
FROM  
TO

COUNTY PROJECT NO: 06-38-23  
GROSS LENGTH 6390 FT 1.2 MI  
BRIDGES LENGTH 0 FT 0 MI  
EXCEPTION LENGTH 0 FT 0 MI  
NET LENGTH 6390 FT 1.2 MI

--BEGIN PROJECT C.P. 06-38-23 STATION 12+00



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30 to 34	EXIST. LOOP LAYOUTS

END PROJECT C.P. 06-38-23 STATION 75+00

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

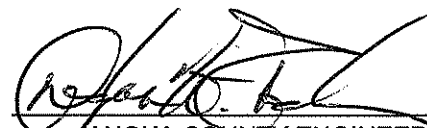
  
ANDREW J. WITTER, P.E.

LIC. NO. 42757 DATE 6/9/06

**GOVERNING SPECIFICATIONS:**

THE 2000 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MMUTCD, INCLUDING "FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS - JANUARY 2004."

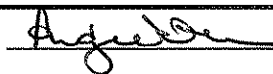
APPROVED 6/14, 2006

  
ANOKA COUNTY ENGINEER

**STATEMENT OF ESTIMATED QUANTITIES**

TAB NO.	ITEM NO.	ITEM	NOTE NO.	UNIT	TOTAL EST. QUANT.
	2021.501	MOBILIZATION		LUMP SUM	1
	2104.501	REMOVE PIPE CULVERTS		LIN FT	289
	2104.501	REMOVE CURB AND GUTTER		LIN FT	223
	2104.503	REMOVE BITUMINOUS PAVEMENT		SQ FT	35487
	2104.503	REMOVE BITUMINOUS MEDIAN	3	SQ FT	1515
	2104.505	REMOVE CONCRETE MEDIAN	2	SQ YD	468
	2104.509	REMOVE HANDHOLE	2	EACH	1
	2104.513	SAW BITUMINOUS PAVEMENT (FULL DEPTH)	2,3,5	LIN FT	1582
	2105.501	COMMON EXCAVATION (EV)	4,5	CU YD	3473
	2105.522	SELECT GRANULAR BORROW (LV)	4,5	CU YD	50
	2105.525	TOPSOIL BORROW (LV)		CU YD	198
	2123.509	DOZER		HOUR	20
	2131.502	WATER		GALLON	1000
	2211.501	AGGREGATE BASE CLASS 5	4,5	TON	608
	2231.603	PAVEMENT CRACKING		SQ YD	19170
	2231.603	PAVEMENT SEATING		SQ YD	19170
	2232.501	MILL BITUMINOUS SURFACE MAINLINE (3.0")		SQ YD	40198
	2357.502	BITUMINOUS MATERIAL FOR TACK COAT	5,8	GALLON	6963
	2360.609	TYPE MV3 WEARING COURSE MIXTURE ( MVWE35035 E ) 2.0"	4,5	TON	5192
	2360.609	TYPE MV3 NON-WEARING (MVNW35035 B) 2.0"	4,5	TON	5650
	2360.609	TYPE MV3 WEARING COURSE MIXTURE FOR PATCHING (MVWE35035 E )		TON	58
	2360.609	TYPE LV5 NON-WEARING MIXTURE FOR LEVELING (LV5NW35200 B) 0.5"	13	TON	1293
	2501.511	12" CS PIPE CULVERT		LIN FT	48
	2501.511	18" CS PIPE CULVERT		LIN FT	190
	2501.567	12" GS SAFETY APRON AND GRATE		EACH	2
	2501.567	18" GS SAFETY APRON AND GRATE		EACH	4
	2504.602	ADJUST GATE VALVE AND BOX		EACH	1
	2506.522	ADJUST FRAME AND RING CASTING		EACH	3
	2521.501	4" CONCRETE WALK		SQ FT	452
	2531.501	CONCRETE CURB AND GUTTER DESIGN B418		LIN FT	458
	2531.501	CONCRETE CURB AND GUTTER DESIGN B618		LIN FT	140
	2531.503	CONCRETE MEDIAN (6.0")	2,3	SQ YD	1116
	2531.602	CONCRETE ENTRANCE NOSE DES 7113		EACH	4
	2540.602	INSTALL MAIL BOX SUPPORT		EACH	1
	2545.602	HANDHOLE	2	EACH	1

CERTIFIED BY



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LIC. NO. 42757 DATE 6/9/06

## STATEMENT OF ESTIMATED QUANTITIES

TAB NO.	ITEM NO.	ITEM	NOTE NO.	UNIT	TOTAL EST. QUANT.
	2563.601	TRAFFIC CONTROL	9	LUMP SUM	1.2
	2564.602	PAVEMENT MESSAGE (LT ARROW) - HEAT FUSED	10	EACH	4
	2564.602	PAVEMENT MESSAGE (RT ARROW) - HEAT FUSED	10	EACH	6
	2564.603	4" SOLID LINE WHITE - TEMPORARY PAINT ( TURN LANE LINE )	11	LIN FT	1400
	2564.603	4" SOLID LINE YELLOW - TEMPORARY PAINT	11	LIN FT	1920
	2564.603	4" DOUBLE SOLID LINE YELLOW - TEMPORARY PAINT	11	LIN FT	6220
	2564.603	4" SOLID LINE WHITE - EPOXY	10	LIN FT	25990
	2564.603	4" SOLID LINE YELLOW - EPOXY	10	LIN FT	1920
	2564.603	4" DOUBLE SOLID LINE YELLOW - EPOXY	10	LIN FT	6220
	2564.603	24" SOLID LINE YELLOW - EPOXY	10	LIN FT	403
	2564.603	24" SOLID LINE WHITE - HEAT FUSED	7	LIN FT	60
	2564.604	ZEBRA CROSSWALK - HEAT FUSED	7	SQ FT	540
	2565.602	LOOP DETECTOR 6'X6'	6	EACH	9
	2573.502	SILT FENCE, TYPE MACHINED SLICED	12	LIN FT	368
	2573.602	ROCK DITCH CHECK	12	EACH	1
	2573.603	BIOROLL	12	LIN FT	40
	2575.523	EROSION CONTROL BLANKET	1	SY	9107

## BASIS OF PLANNED QUANTITIES

2357.502	BITUMINOUS MATERIAL FOR TACK COAT	.05 GAL / SQ YD
2360.609	TYPE MV3 WEARING COURSE MIXTURE ( MVWE35035 E )	(SQ YD * IN * 115 LBS) / 2000 = TONS
2360.609	TYPE MV3 NON- WEARING COURSE MIXTURE ( MVNW35035 B )	(SQ YD * IN * 115 LBS) / 2000 = TONS

## NOTES

- 1 SEED, FERTILIZER, TOPSOIL, AND BLANKET ALL INCIDENTAL TO EROSION CONTROL BLANKET.
- 2 CENTER MEDIAN CONSTRUCTION @ LAKE AND LEXINGTON.
- 3 CENTER MEDIAN CONSTRUCTION @ LAKE AND 88 TH AVE.
- 4 2 FT PAVED SHOULDER ALONG WIDENING.
- 5 INCLUDES STREET APPROACHES.
- 6 NEED TO BE PLACED ON EXISTING CONC. AHEAD OF PAVING OPERATION.
- 7 MARKINGS TO BE INPLACE PRIOR TO OPENING TO TRAFFIC.
- 8 TACK FOR MILLED BITUMINOUS AREAS. EST AT 0.05 GAL PER SY YD.
- 9 CONTRACTOR TO PLACE ALL MEDIAN SIGNS ON TEMP STANDS DURING MEDIAN CONSTRUCTION.
- 10 TEMP PAINT MAKINGS TO BE PLACED ON NEW MAT AT THE END OF EACH DAYS PAVING.
- 11 TEMP PAINT MAKINGS TO BE PLACED ON MILLED AREA AT THE END OF EACH DAYS MILLING.
- 12 EROSION CONTROL AS NEEDED DIRECTED BY ENGINEER.
- 13 TYPE LV5 NON-WEARING 0.5" IS FOR PAVING A THIN LIFT OVER THE CRACK AND SEAT.

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ANDREW J. WITTER, P.E.

LIC. NO. 42757 DATE 6/9/06

C.P. 06-38-23

SHEET NO.3 OF 34 SHEETS

# EARTHWORK SUMMARY SHEET

E

EXCAVATION (EV)	LAKE DR. WIDEN	SIDE STREETS	TOTAL
COMMON	530	1277	1807
SUB-CUT	919	0	919
TOPSOIL STRIPPING (DISTURBED AREA X 0.25' DEPTH)	763	210	973

PAY ITEM COMMON EXCAVATION

COMMON + SUB-CUT + TOPSOIL STRIPPING

1581      919      973
3473 (EV) CU YDS

EMBANKMENT (CV)	LAKE DR. WIDEN	SIDE STREETS	TOTAL
GRANULAR COMMON	991	142	1133
GRANULAR SUB-CUT	919	0	919
TOPSOIL STRIPPING (DISTURBED AREA X 0.25' DEPTH)	610	327	937

SELECT GRANULAR FOR COMMON EMBANKMENT:  
 GRANULAR EMBANKMENT - (COMMON EXCAVATION (EV) \* SHRINKAGE FACTOR) = 1133 - (1807 \* 0.80) = 313.0 EXCESS

SELECT GRANULAR FOR SUB-CUT EMBANKMENT:  
 GRANULAR SUB-CUT EMBANKMENT - ((SUB-CUT EXCAVATION (EV) \* SHRINKAGE FACTOR) = 919 - (919 \* 0.85) = 138 SHORTAGE  
 BORROW QUANTITY = 138 (CV) \* 125% = 172 (LV) CU YD

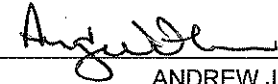
PAY ITEM SELECT GRANULAR BORROW  
 SELECT GRANULAR BORROW + SELECT SUB-CUT = 172 - 313 = 140 EXCESS 50 (LV) CU YD

PAY ITEM TOPSOIL BORROW  
 973 (EV) \* (0.80) = 778 CY  
 778 CY - 937 CY = 159 \* 125% = 198 (LV) CU YD

**SOIL FACTORS**

(1) REGULAR GRADING (EV TO CV):	80 % SHRINKAGE
(2) SUB-CUT COMPACTION (EV TO CV):	85 % SHRINKAGE
(3) SELECT GRANULAR BORROW (CV TO LV):	125 % SWELL

CERTIFIED BY

  
 \_\_\_\_\_  
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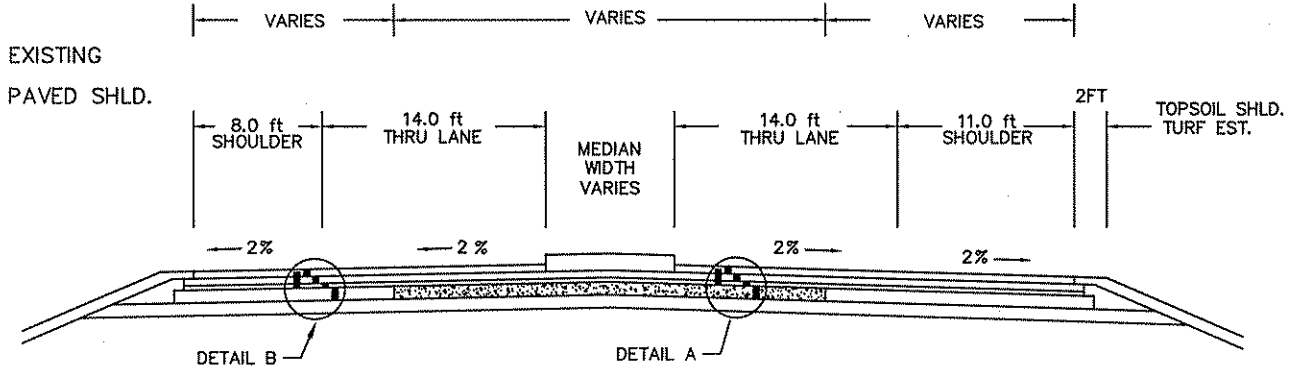
LIC. NO. 42757 DATE 6/9/06

C.P. 06-38-23

SHEET NO.4 OF 34 SHEETS

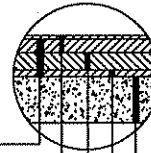
# TYPICAL SECTIONS

CSAH 23  
STANDARD SECTION  
STATION 12+00



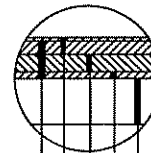
## DETAIL A-PROPOSED MAINLINE

- MILL EXISTING 3" BIT. PAVT FULL WIDTH
- CONSTRUCT 2.0" TYPE MV3 WEARING COURSE MIXTURE ( MVWE35035 E )
- CONSTRUCT 2.0" TYPE MV3 NON WEAR COURSE MIXTURE (MVNW35035 B )
- CONSTRUCT 0.5" TYPE LV5 NON WEAR LEVELING COURSE (LV5NW35200 B )
- CRACK AND SEAT EXISTING 27" WIDE X 7" DEPTH CONCRETE



## DETAIL B-PROPOSED SHOULDER

- MILL EXISTING 3" BIT. PAVT FULL WIDTH
- CONSTRUCT 2.0" TYPE MV3 WEARING COURSE MIXTURE ( MVWE35035 E )
- CONSTRUCT 2.0" TYPE MV3 NON WEAR COURSE MIXTURE (MVNW35035 B )
- CONSTRUCT 0.5" TYPE LV5 NON WEAR LEVELING COURSE (LV5NW35200 B )
- EXISTING BITUMINOUS 5" DEPTH



NOTE: NOT TO SCALE

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LIC. NO. 42757 DATE 6/9/06

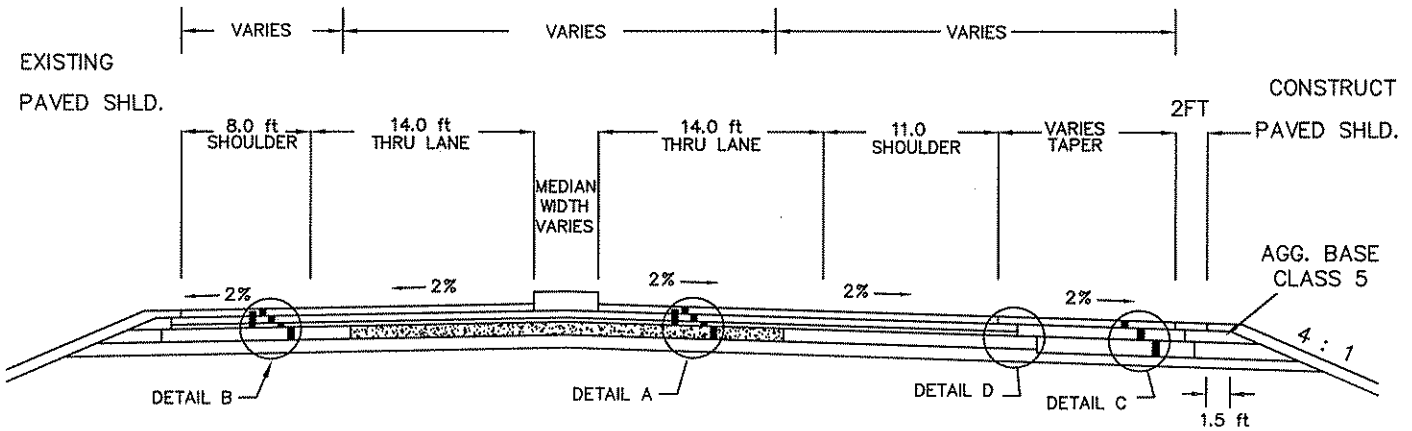
C.P. 06-38-23

SHEET NO. 5 OF 34 SHEETS

# TYPICAL SECTIONS

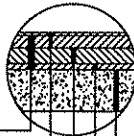
CSAH 23  
TAPER 15:1 SECTION

STATION 12+00 -14+32

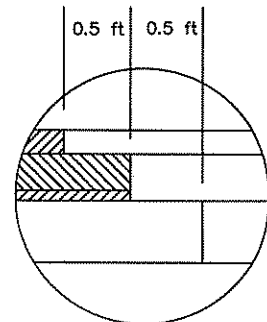


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- CRACK AND SEAT EXISTING 27" WIDE X 8" DEPTH CONCRETE

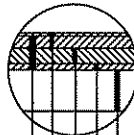


DETAIL D- STEP



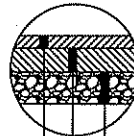
DETAIL B-PROPOSED SHOULDER

- MILL EXISTING 3" BIT. PAVT FULL WIDTH
- CONSTRUCT 2.0" TYPE MV3 WEARING COURSE MIXTURE ( MVWE35035 E )
- CONSTRUCT 2.0" TYPE MV3 NON WEAR COURSE MIXTURE ( MVNW35035 B )
- CONSTRUCT 0.5" TYPE LV5 NON WEAR LEVELING COURSE ( LV5NW35200 B )
- EXISTING BITUMINOUS 8" DEPTH



DETAIL C-PROPOSED NEW SHOULDER

- CONSTRUCT 2.0" TYPE MV3 WEARING COURSE MIXTURE ( MVWE35035 E )
- CONSTRUCT 4.0" TYPE MV3 NON WEAR COURSE MIXTURE ( MVNW35035 B )
- CONSTRUCT 9.0" AGGRAGATE BASE CLASS 5



NOTE: NOT TO SCALE

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ANDREW J. WITTER, P.E.

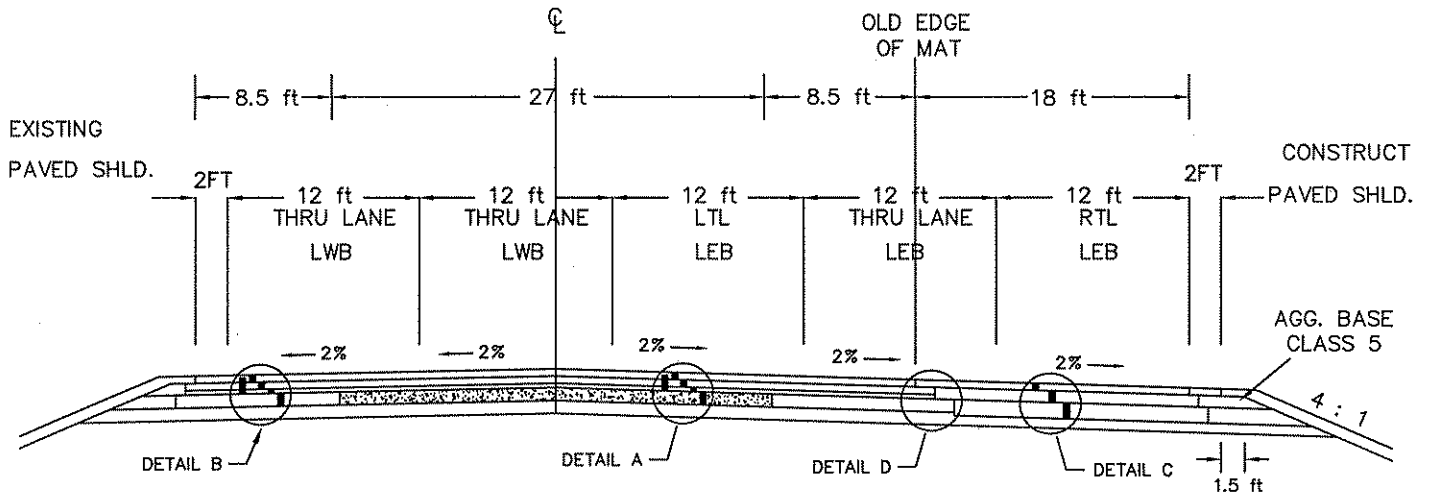
LIC. NO. 42757 DATE 6/1/00

C.P. 06-38-23

SHEET NO. 6 OF 34 SHEETS

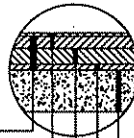
# TYPICAL SECTIONS

CSAH 23  
LEB WIDENING SECTION  
STATION 14+32 - 32+92

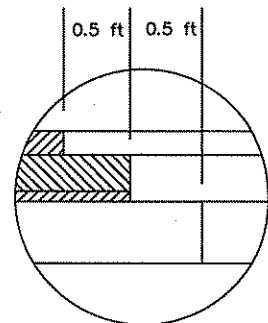


## DETAIL A-PROPOSED MAINLINE

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- CONSTRUCT 2.0" TYPE MV3 WEARING COURSE MIXTURE ( MVWE35035 E )
- CONSTRUCT 2.0" TYPE MV3 NON WEAR COURSE MIXTURE (MVNW35035 B )
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- CRACK AND SEAT EXISTING 27' WIDE X 8" DEPTH CONCRETE

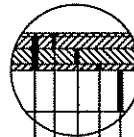


## DETAIL D- STEP



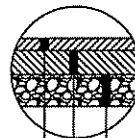
## DETAIL B-PROPOSED SHOULDER

- MILL EXISTING 3" BIT. PAVT FULL WIDTH
- CONSTRUCT 2.0" TYPE MV3 WEARING COURSE MIXTURE ( MVWE35035 E )
- CONSTRUCT 2.0" TYPE MV3 NON WEAR COURSE MIXTURE (MVNW35035 B )
- CONSTRUCT 0.5" TYPE LV5 NON WEAR LEVELING COURSE (LV5NW35200 B )
- EXISTING BITUMINOUS 8" DEPTH



## DETAIL C-PROPOSED NEW SHOULDER

- CONSTRUCT 2.0" TYPE MV3 WEARING COURSE MIXTURE ( MVWE35035 E )
- CONSTRUCT 4.0" TYPE MV3 NON WEAR COURSE MIXTURE (MVNW35035 B )
- CONSTRUCT 9.0" AGGRAGATE BASE CLASS 5



NOTE: NOT TO SCALE

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ANDREW J. WITTER, P.E.

C.P. 06-38-23

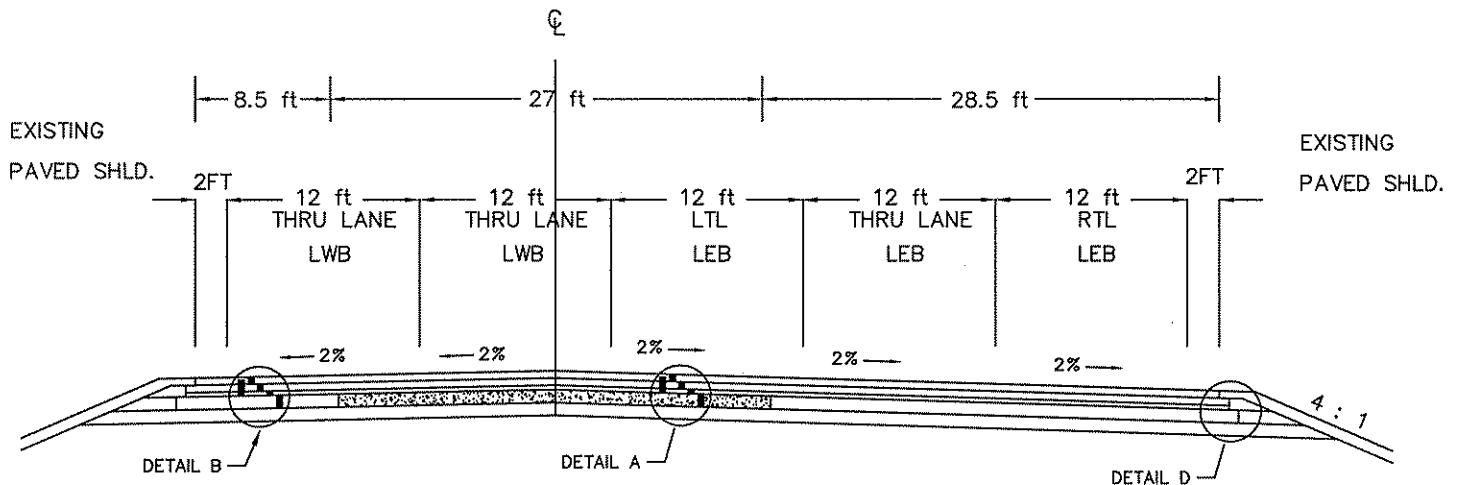
LIC. NO. 42757 DATE \_\_\_\_\_

SHEET NO. 7 OF 34 SHEETS

# TYPICAL SECTIONS

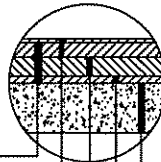
## CSAH 23 STANDARD OVERLAY SECTION

STATION 32+92 - 75+90

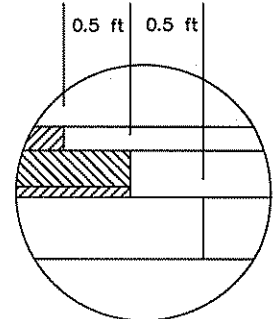


### DETAIL A-PROPOSED MAINLINE

- MILL EXISTING 3" BIT. PAVT FULL WIDTH
- CONSTRUCT 2.0" TYPE MV3 WEARING COURSE MIXTURE ( MVWE35035 E )
- CONSTRUCT 2.0" TYPE MV3 NON WEAR COURSE MIXTURE (MVNW35035 B )
- CONSTRUCT 0.5" TYPE LV5 NON WEAR LEVELING COURSE (LV5NW35200 B )
- CRACK AND SEAT EXISTING 27' WIDE X 8" DEPTH CONCRETE

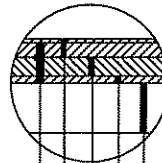


### DETAIL D- STEP



### DETAIL B-PROPOSED SHOULDER

- MILL EXISTING 3" BIT. PAVT FULL WIDTH
- CONSTRUCT 2.0" TYPE MV3 WEARING COURSE MIXTURE ( MVWE35035 E )
- CONSTRUCT 2.0" TYPE MV3 NON WEAR COURSE MIXTURE (MVNW35035 B )
- CONSTRUCT 0.5" TYPE LV5 NON WEAR LEVELING COURSE (LV5NW35200 B )
- EXISTING BITUMINOUS 8" DEPTH



NOTE: NOT TO SCALE

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LIC. NO. 42757 DATE \_\_\_\_\_

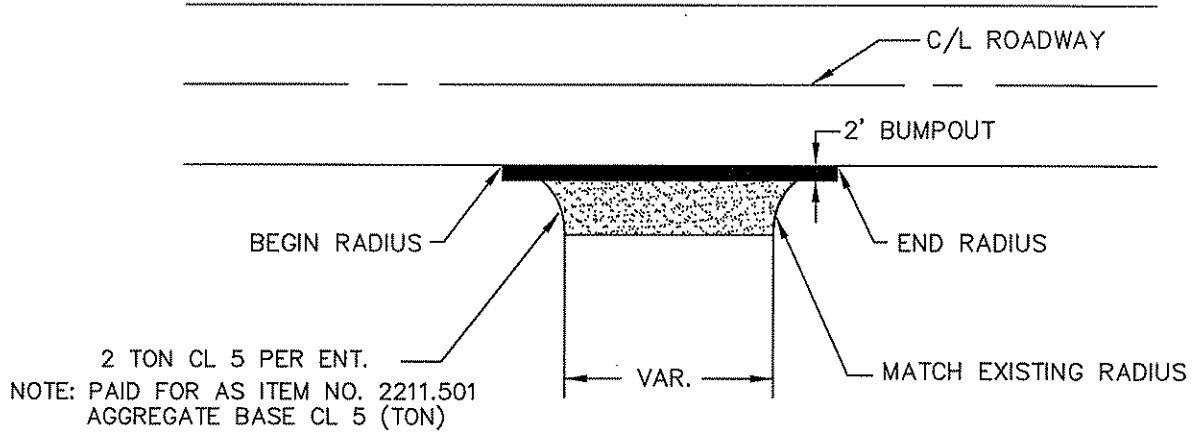
C.P. 06-38-23

SHEET NO. 8 OF 34 SHEETS

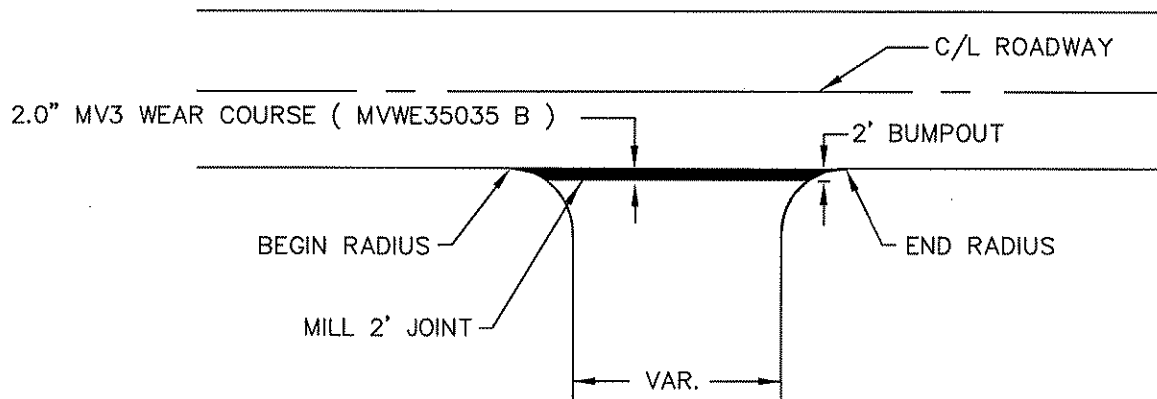


# TYPICAL SECTIONS

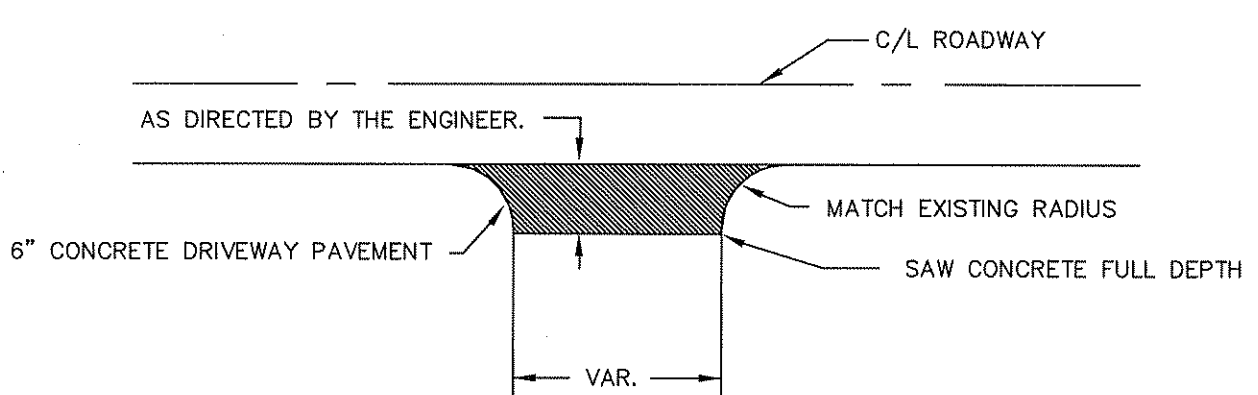
## FIELD AND UNPAVED ENTRANCES



## PAVED DRIVEWAYS



## CONCRETE DRIVEWAY



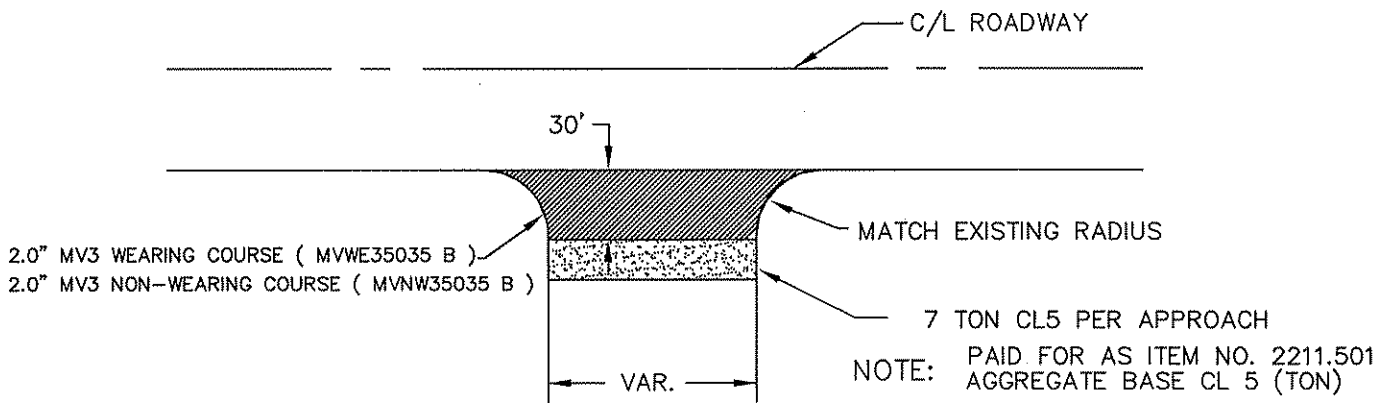
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ANDREW J. WITTER, P.E.  
C.P. 05-38-06

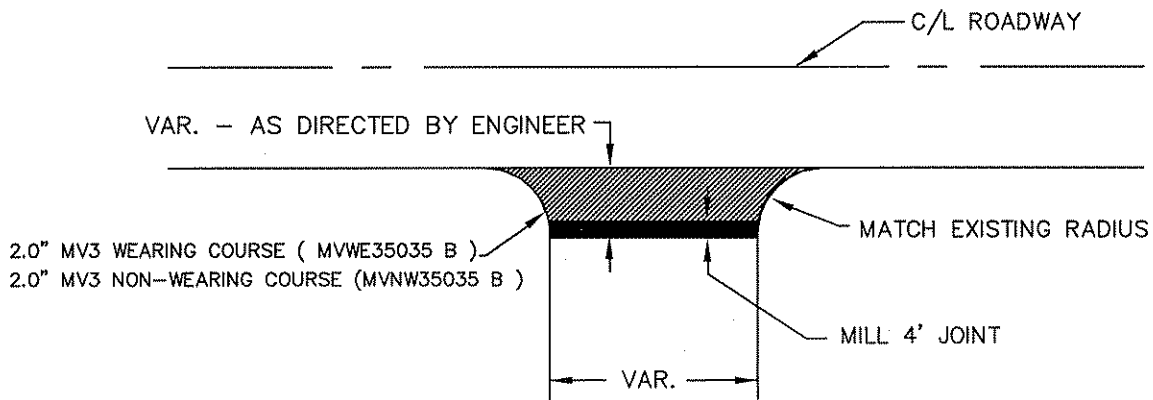
LIC. NO. 42757 DATE 6/1/06  
SHEET NO. 9 OF 34 SHEETS

# TYPICAL SECTIONS

## UNPAVED STREET APPROACHES



## PAVED STREET APPROACHES



NOTE: NOT TO SCALE

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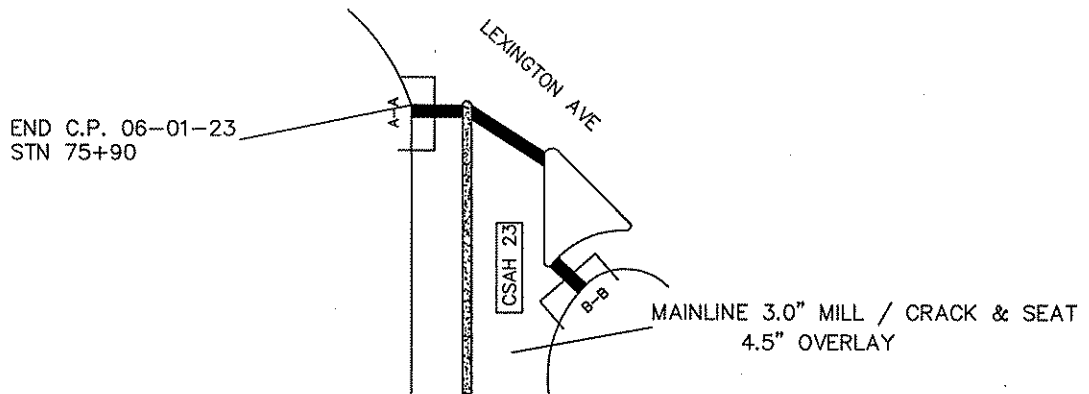
C.P. 05-38-06

LIC. NO. 42757 DATE 6/1/00

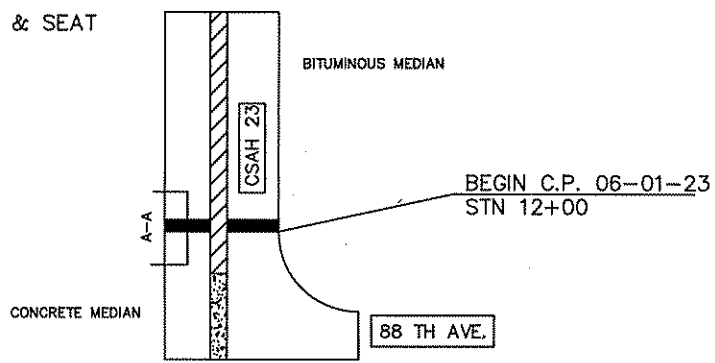
SHEET NO. 10 OF 34 SHEETS

# TYPICAL SECTIONS

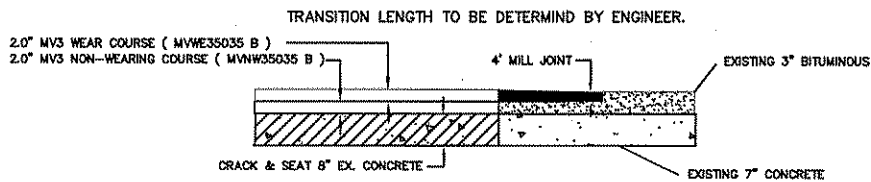
## JOINT DETAILS



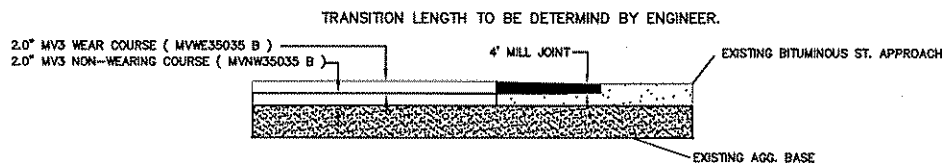
MAINLINE 3" MILL / CRACK & SEAT  
4.5" OVERLAY



MILL DETAIL A-A  
BEGIN & END



MILL DETAIL B-B  
PAVED STREET APPROACHES

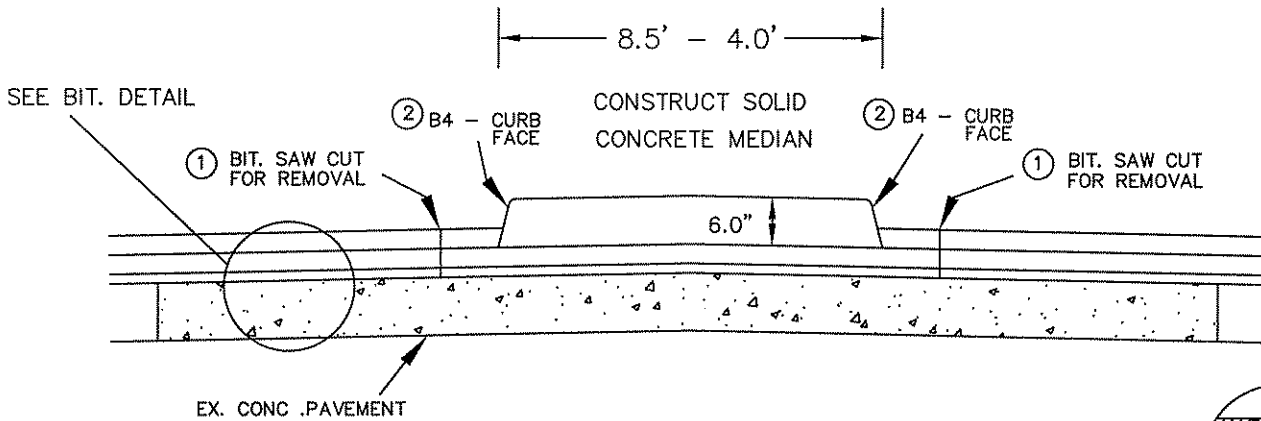


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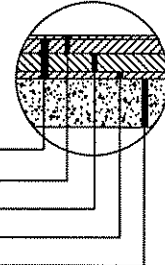
LIC. NO. 42757 DATE 6/9/06  
SHEET NO. 11 OF 34 SHEETS

# CONCRETE MEDIAN DETAIL A

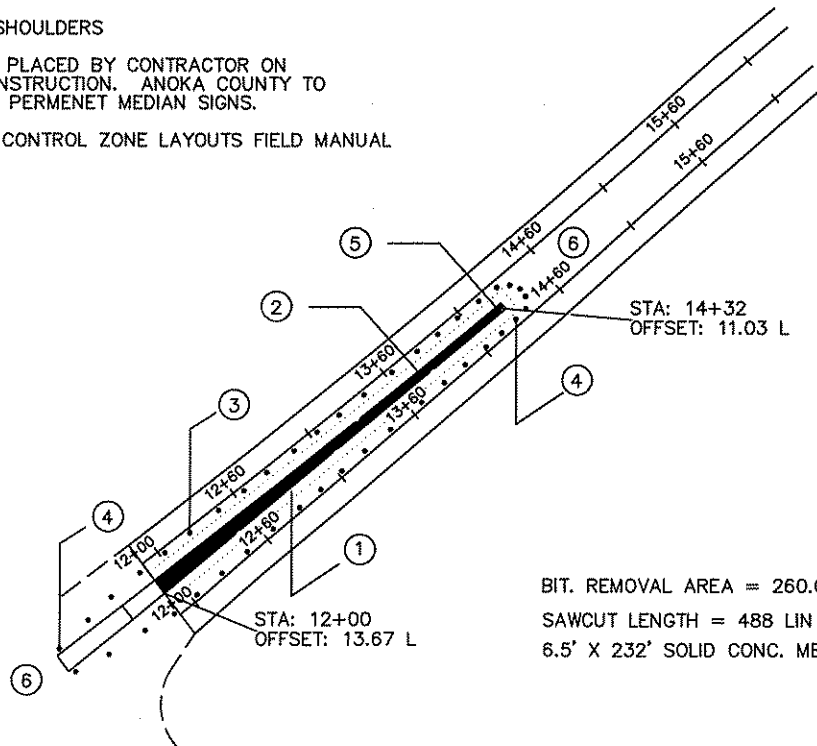


## BIT. DETAIL-PROPOSED MAINLINE

MILL EXISTING 3" BIT. PAV'T FULL WIDTH  
 CONSTRUCT 2.0" TYPE MV3 WEARING COURSE MIXTURE ( MVWE35035 E )  
 CONSTRUCT 2.0" TYPE MV3 NON WEAR COURSE MIXTURE (MVNW35035 B )  
 CONSTRUCT 0.5" TYPE LV5 NON WEAR LEVELING COURSE (LV5NW35200 B )  
 CRACK AND SEAT EXISTING 27' X 7' X 8" CONCRETE



- ① SAW-CUT LOC. 2' FROM FACE OF EX. BIT. CURB
- ② 6.0" SOLID CONCRETE MEDIAN, 4" EXPOSED ABOVE BIT.
- ③ RETROREFLECTIVE DRUMS
- ④ CHANNELIZE TRAFFIC TO SHOULDERS
- ⑤ ALL MEDIAN SIGNS TO BE PLACED BY CONTRACTOR ON TEMP STANDS DURING CONSTRUCTION. ANOKA COUNTY TO SUPPLY AND INSTALL ALL PERMENET MEDIAN SIGNS.
- ⑥ SEE TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS FIELD MANUAL FOR TRAFFIC CONTROL.



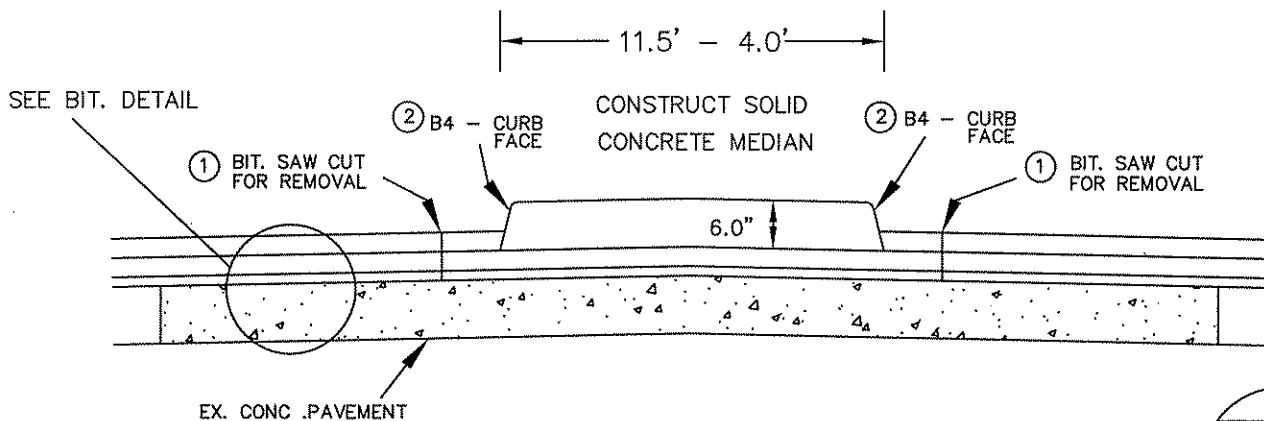
BIT. REMOVAL AREA = 260.00 SQ YDS  
 SAWCUT LENGTH = 488 LIN FT  
 6.5' X 232' SOLID CONC. MEDIAN = 167.56 SQ YDS

NOTE: NOT TO SCALE

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 ANDREW J. WITTER, P.E.  
 C.P. 06-38-23

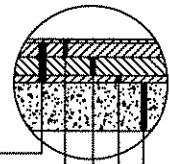
LIC. NO. 42757 DATE 6/9/06  
 SHEET NO. 12 OF 34 SHEETS

# CONCRETE MEDIAN DETAIL B

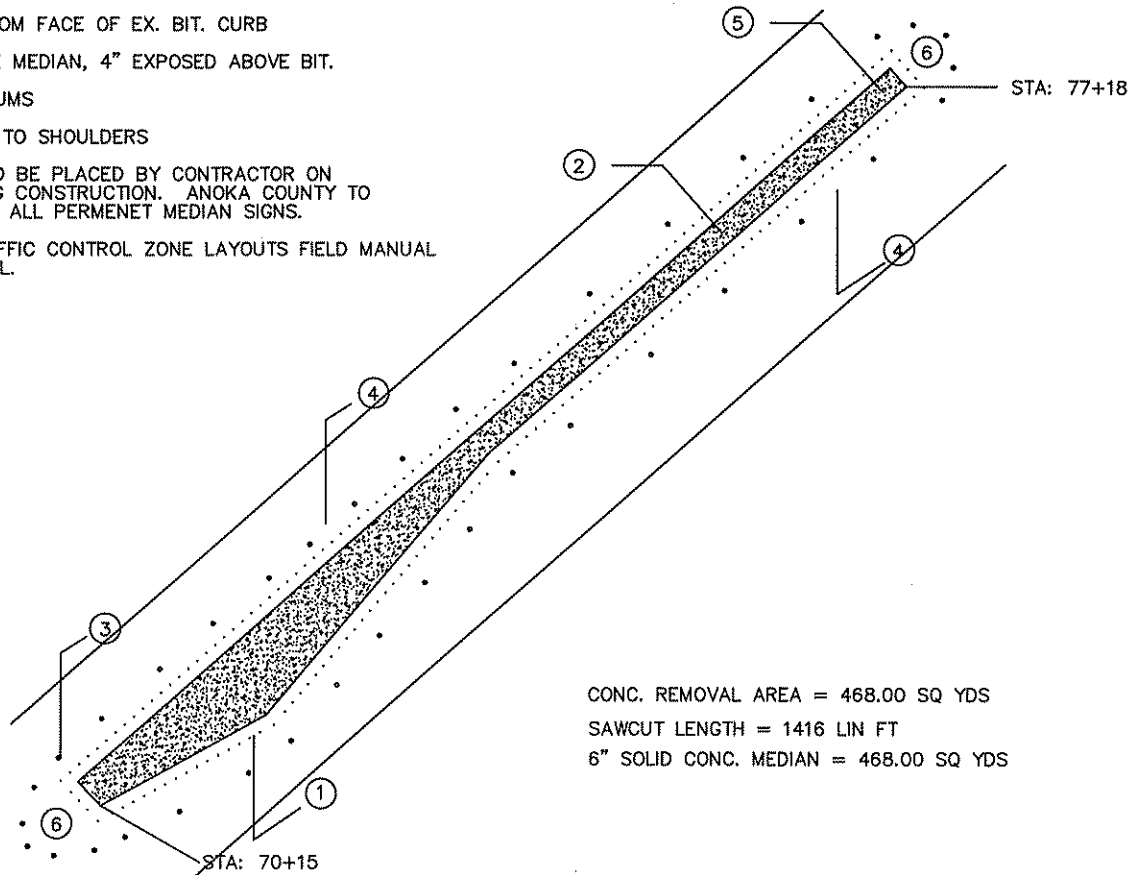


## BIT. DETAIL - PROPOSED MAINLINE

MILL EXISTING 3" BIT. PAV'T FULL WIDTH  
 CONSTRUCT 2.0" TYPE MV3 WEARING COURSE MIXTURE ( MVWE35035 E )  
 CONSTRUCT 2.0" TYPE MV3 NON WEAR COURSE MIXTURE ( MVNW35035 B )  
 CONSTRUCT 0.5" TYPE LV5 NON WEAR LEVELING COURSE ( LV5NW35200 B )  
 CRACK AND SEAT EXISTING 27' X 7' X 8" CONCRETE



- ① SAW-CUT LOC. 2' FROM FACE OF EX. BIT. CURB
- ② 6.0" SOLID CONCRETE MEDIAN, 4" EXPOSED ABOVE BIT.
- ③ RETROREFLECTIVE DRUMS
- ④ CHANNELIZE TRAFFIC TO SHOULDERS
- ⑤ ALL MEDIAN SIGNS TO BE PLACED BY CONTRACTOR ON TEMP STANDS DURING CONSTRUCTION. ANOKA COUNTY TO SUPPLY AND INSTALL ALL PERMENET MEDIAN SIGNS.
- ⑥ SEE TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS FIELD MANUAL FOR TRAFFIC CONTROL.

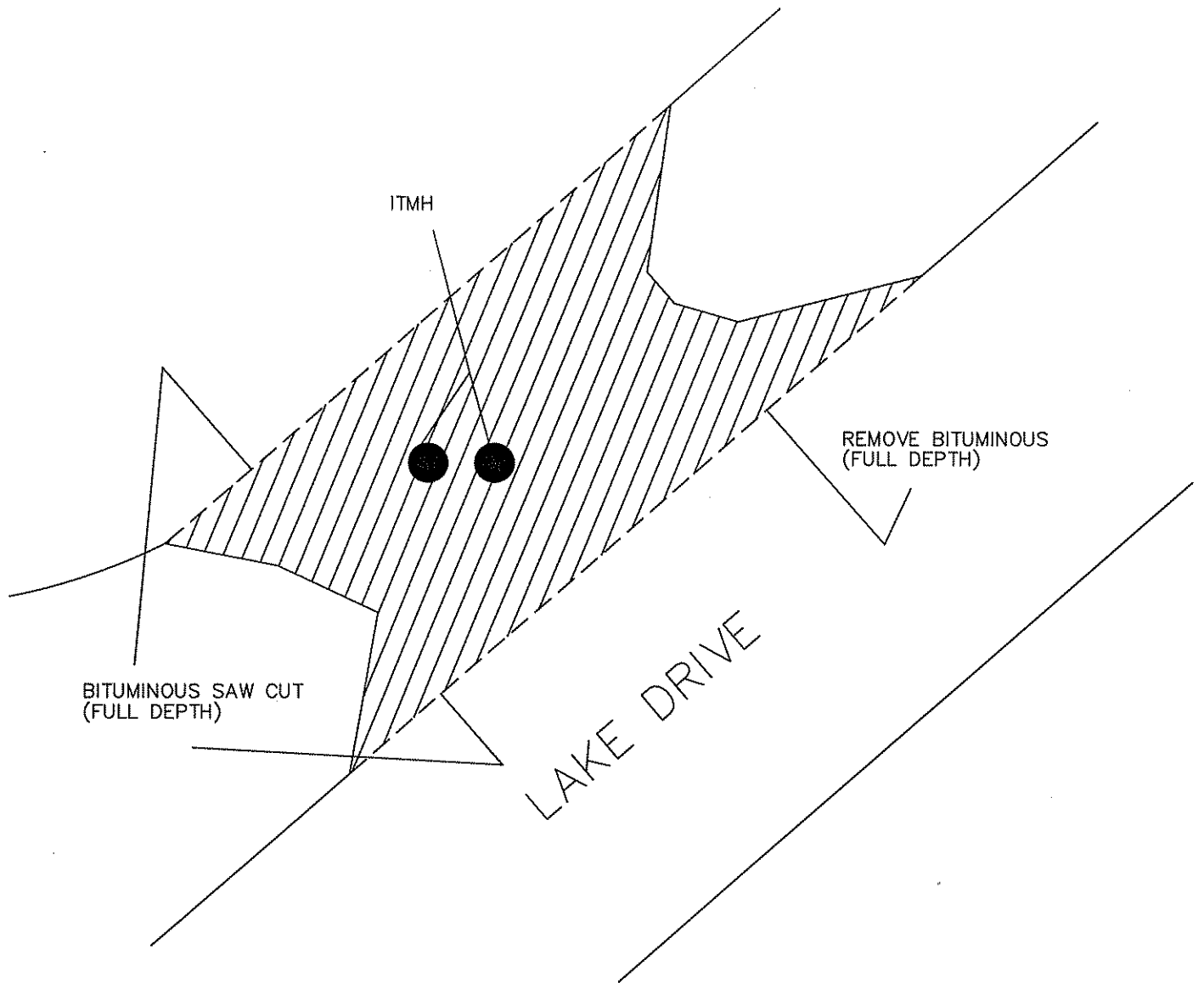


NOTE: NOT TO SCALE

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LIC. NO. 42757 DATE 6/9/06  
 SHEET NO. 13 OF 34 SHEETS

# REMOVAL FLOWERFIELD WEST



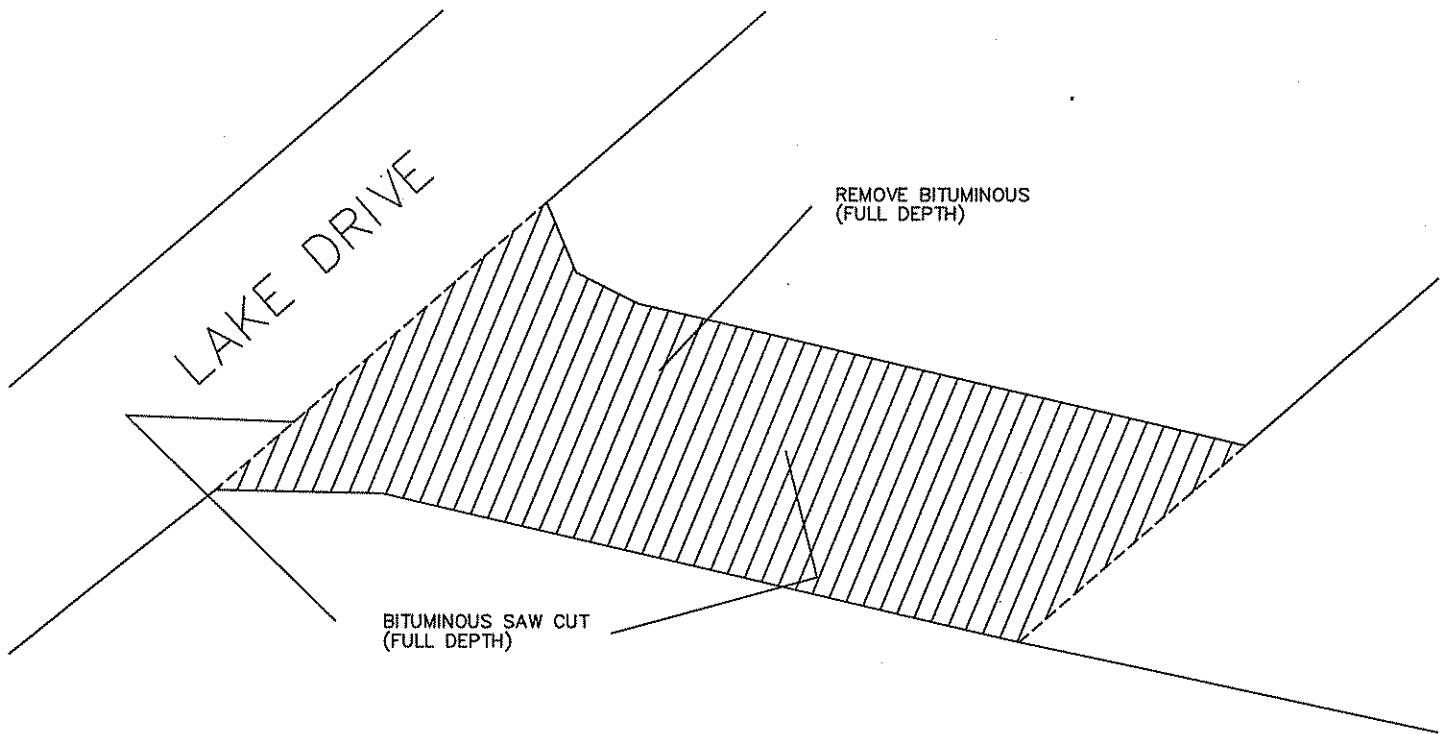
ITEM NUMBER	DESCRIPTION	UNITS	TOTAL
2104.505	REMOVE BITUMINOUS (FULL DEPTH) SIDE STREETS	SQ YD	418
2104.513	SAW BITUMINOUS (FULL DEPTH)	LN FT	262
2105.501	COMMON EXCAVATION	CU YD	63
2105.525	TOPSOIL BORROW	CU YD	97
2575.523	EROSION CONTROL	SQ YD	874

NOTE: NOT TO SCALE

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 C.P. 06-38-23

LIC. NO. 42757 DATE 6/1/06  
 SHEET NO. 14 OF 34 SHEETS

# REMOVAL FLOWERFIELD EAST



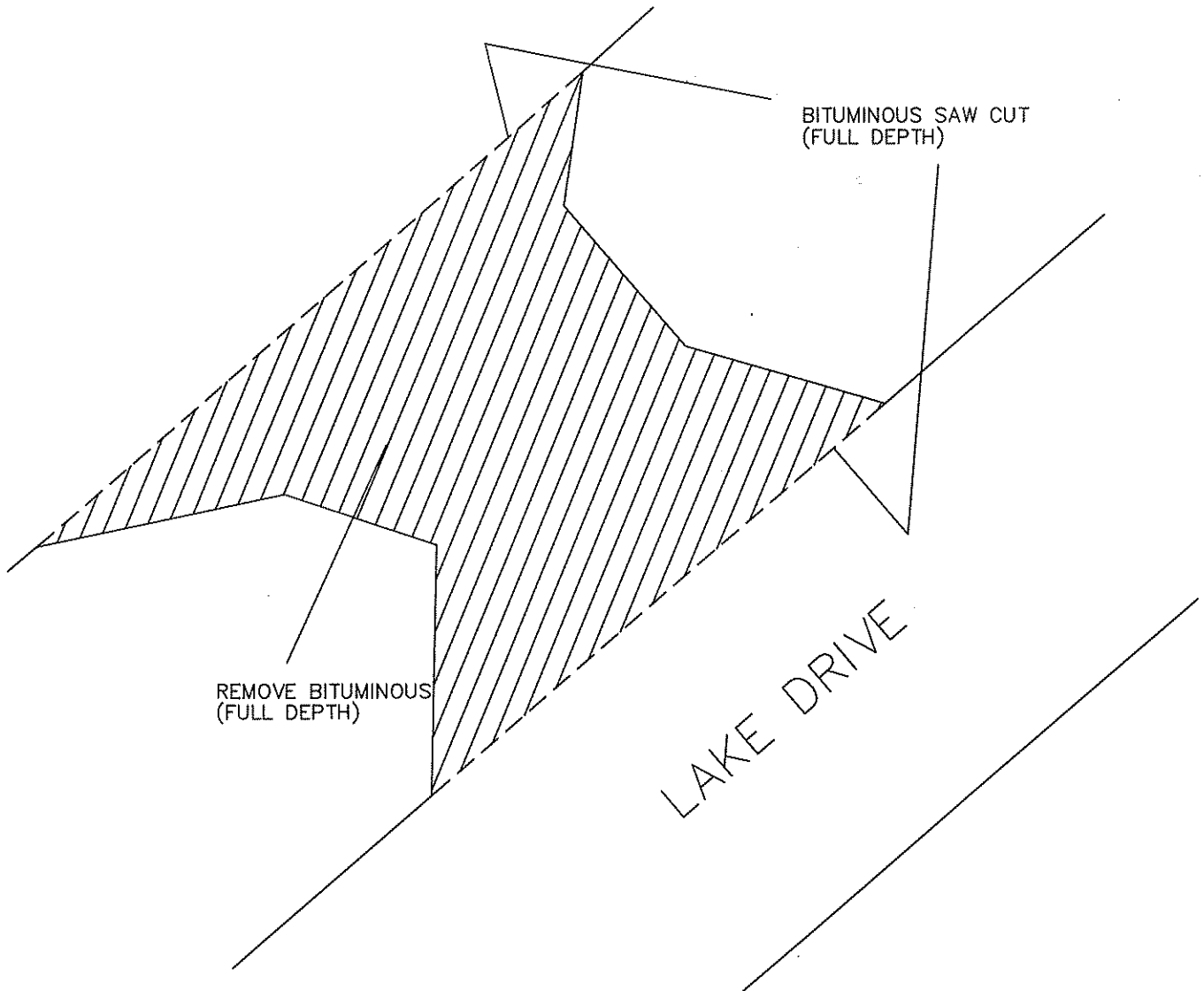
ITEM NUMBER	DESCRIPTION	UNITS	TOTAL
2104.505	REMOVE BITUMINOUS (FULL DEPTH) SIDE STREETS	SQ YD	746
2104.513	SAW BITUMINOUS (FULL DEPTH)	LN FT	132
2105.501	COMMON EXCAVATION	CU YD	90
2105.525	TOPSOIL BORROW	CU YD	107
2575.523	EROSION CONTROL	SQ YD	968

NOTE: NOT TO SCALE

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 C.P. 06-38-23

LIC. NO. 42757 DATE 6/9/00  
 SHEET NO. 15 OF 34 SHEETS

# REMOVAL SERVICE RD WEST 1



ITEM NUMBER	DESCRIPTION	UNITS	TOTAL
2104.505	REMOVE BITUMINOUS (FULL DEPTH) SIDE STREETS	SQ YD	336
2104.513	SAW BITUMINOUS (FULL DEPTH)	LN FT	176
2105.501	COMMON EXCAVATION	CU YD	175
2105.525	TOPSOIL BORROW (LV)	CU YD	51
2575.523	EROSION CONTROL BLANKET	SQ YD	460

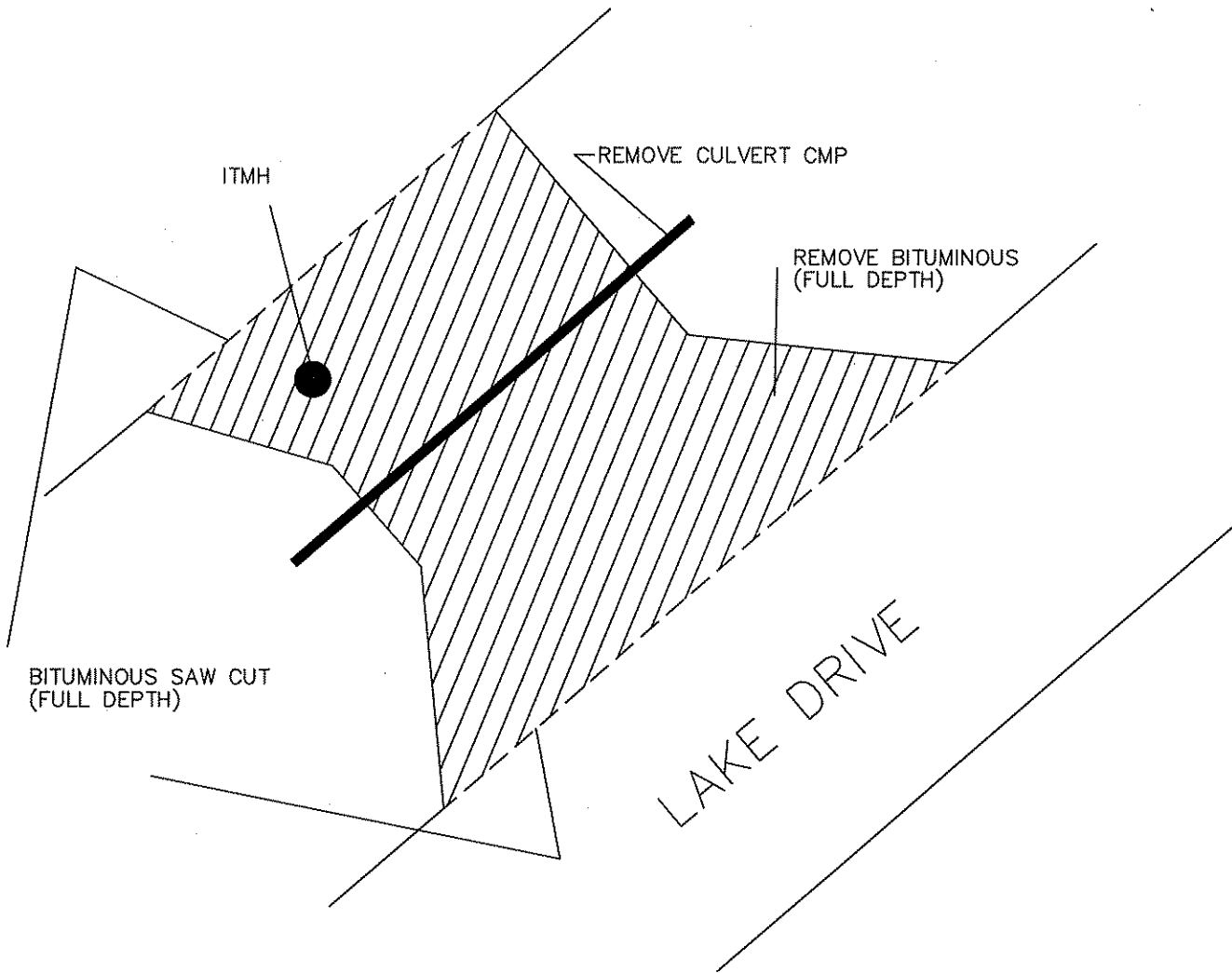
NOTE: NOT TO SCALE

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 C.P. 06-38-23

LIC. NO. 42757 DATE 6/1/06  
 SHEET NO. 16 OF 34 SHEETS



# REMOVAL SERVICE RD WEST 2



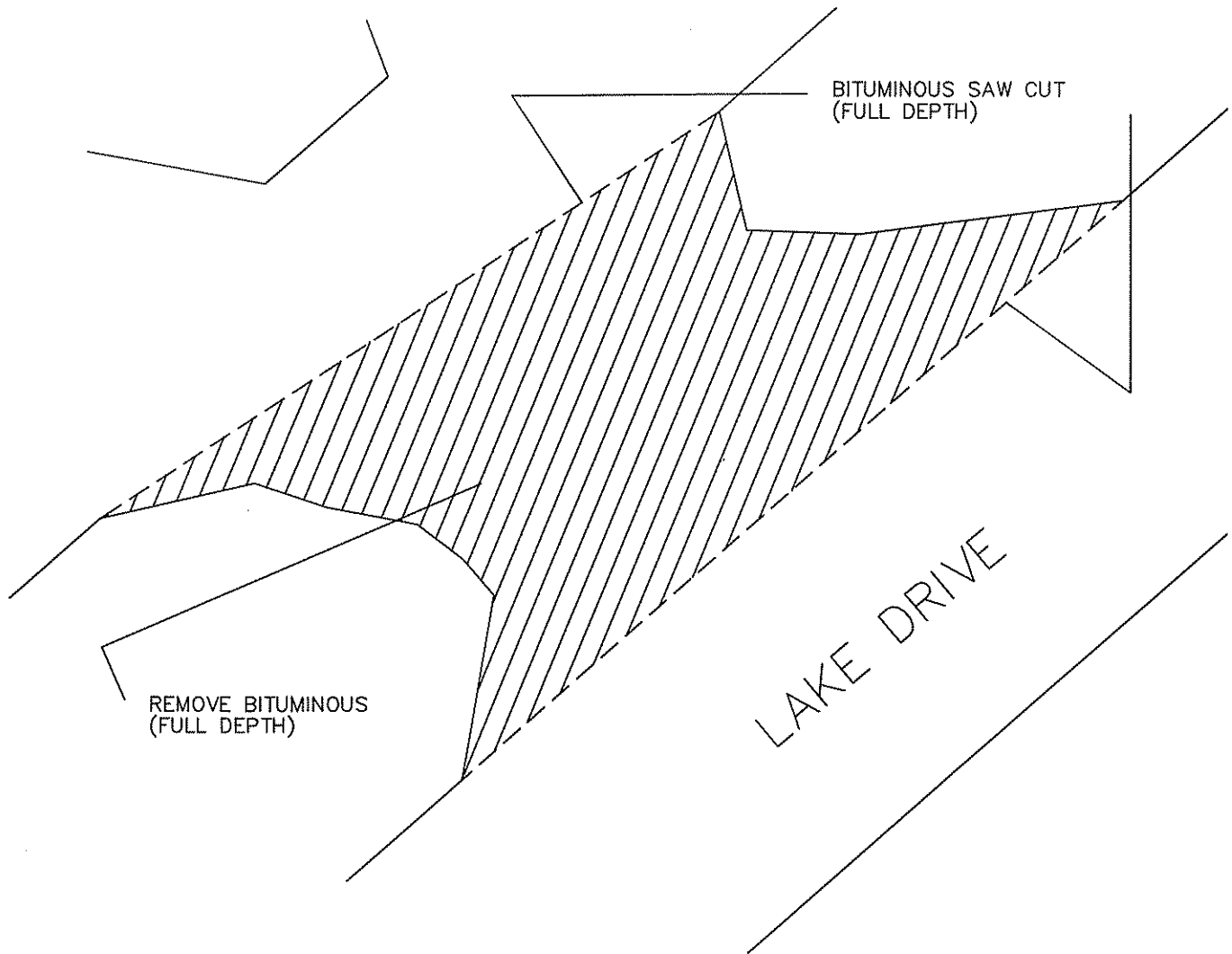
ITEM NUMBER	DESCRIPTION	UNITS	TOTAL
2104.501	REMOVE PIPE CULVERTS	LN FT	48
2104.505	REMOVE BITUMINOUS SURFACE (FULL DEPTH) SIDE STREETS	SQ YD	340
2104.513	SAW BITUMINOUS (FULL DEPTH)	LN FT	156
2105.501	COMMON EXCAVATION	CU YD	177
2105.525	TOPSOIL BORROW (LV)	CU YD	73
2575.523	EROSION CONTROL BLANKET	SQ YD	519

NOTE: NOT TO SCALE

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LIC. NO. 42757 DATE 6/9/06  
 SHEET NO. 17 OF 34 SHEETS

# REMOVAL RESTWOOD WEST



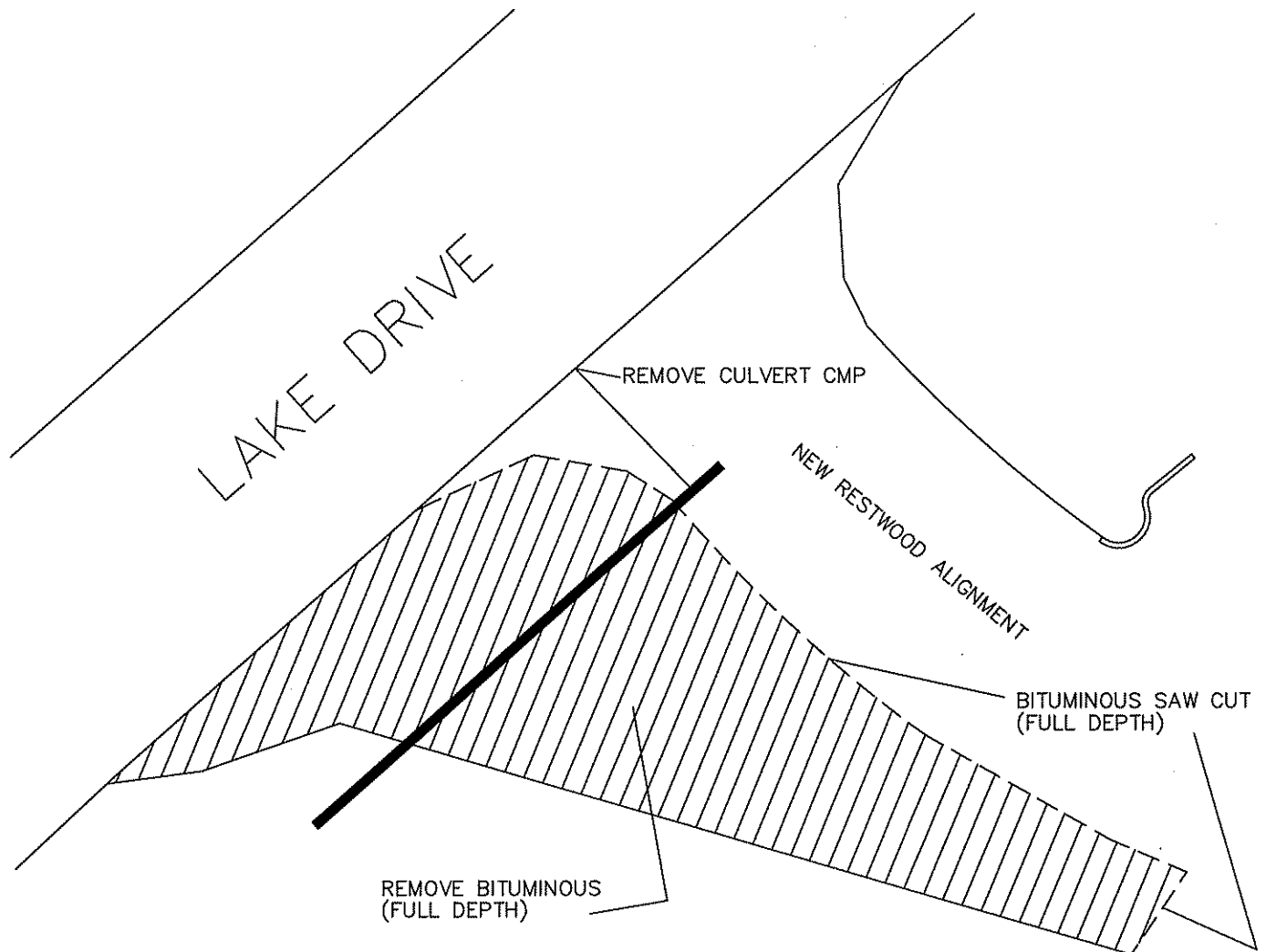
ITEM NUMBER	DESCRIPTION	UNITS	TOTAL
2104.505	REMOVE BITUMINOUS (FULL DEPTH) SIDE STREETS	SQ YD	517
2104.513	SAW BITUMINOUS (FULL DEPTH)	LN FT	226
2105.501	COMMON EXCAVATION	CU YD	10
2105.525	TOPSOIL BORROW (LV)	CU YD	73
2575.523	EROSION CONTROL BLANKET	SQ YD	660

NOTE: NOT TO SCALE

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 C.P. 06-38-23

LIC. NO. 42757 DATE 6/9/00  
 SHEET NO. 18 OF 34 SHEETS

# REMOVAL RESTWOOD EAST



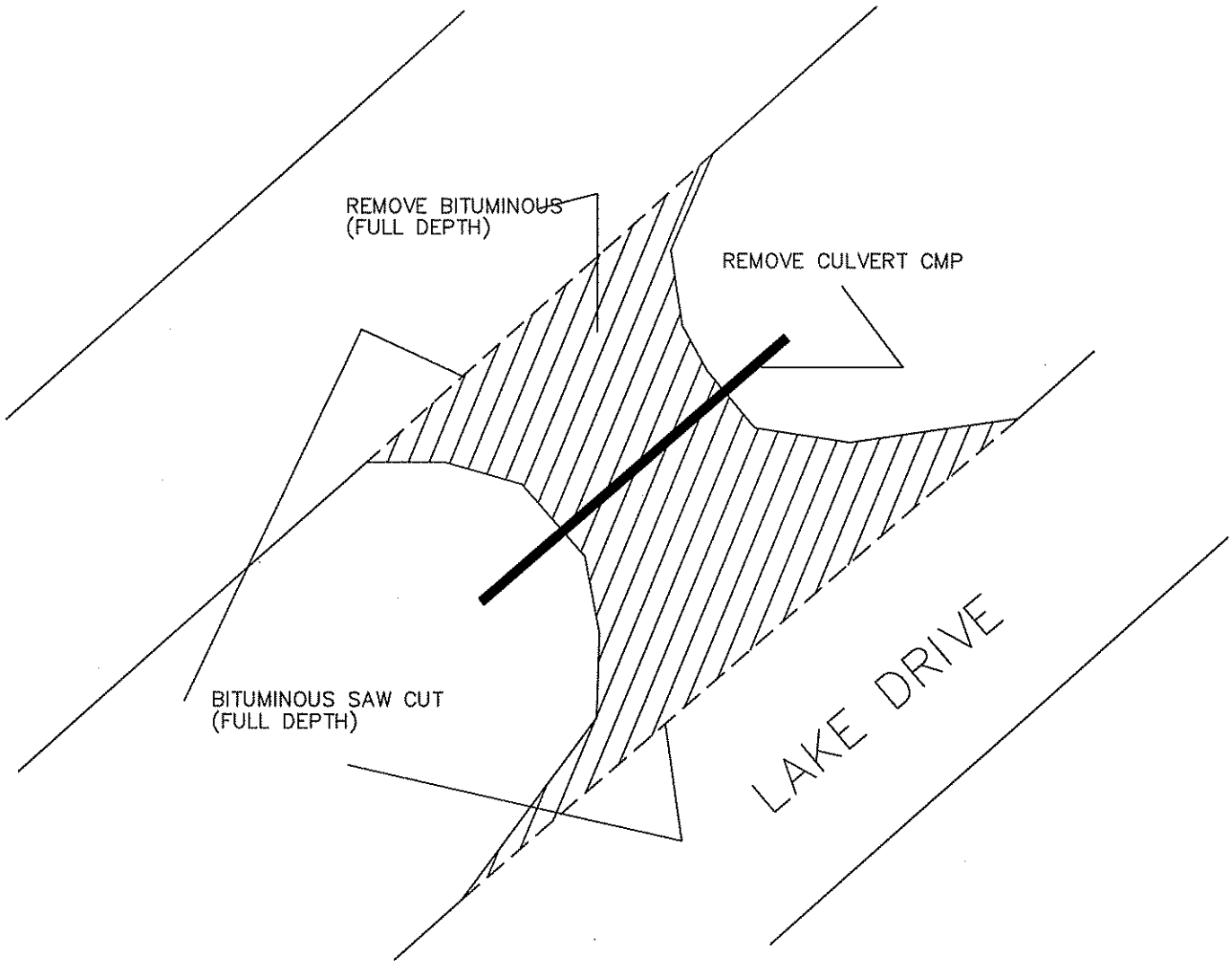
ITEM NUMBER	DESCRIPTION	UNITS	TOTAL
2104.501	REMOVE PIPE CULVERTS	LN FT	120
2104.501	REMOVE CURB AND GUTTER	LN FT	30
2104.505	REMOVE BITUMINOUS (FULL DEPTH) SIDE STREETS	SQ YD	697
2104.513	SAW BITUMINOUS (FULL DEPTH)	LN FT	158
2105.501	COMMON EXCAVATION	CU YD	537
2105.525	TOPSOIL BORROW (LV)	CU YD	162
2575.523	EROSION CONTROL BLANKET	SQ YD	832

NOTE: NOT TO SCALE

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 C.P. 06-38-23

LIC. NO. 42757 DATE 6/9/00  
 SHEET NO. 19 OF 34 SHEETS

# REMOVAL SERVICE RD WEST 3



ITEM NUMBER	DESCRIPTION	UNITS	TOTAL
2104.501	REMOVE PIPE CULVERTS	LN FT	52
2104.501	REMOVE CURB AND GUTTER	LN FT	93
2232.501	REMOVE BITUMINOUS (FULL DEPTH) SIDE STREETS	SQ YD	268
2104.513	SAW BITUMINOUS (FULL DEPTH)	LN FT	179
2105.501	COMMON EXCAVATION	CU YD	226
2105.525	TOPSOIL BORROW (LV)	CU YD	52
2575.523	EROSION CONTROL BLANKET	SQ YD	467

NOTE: NOT TO SCALE

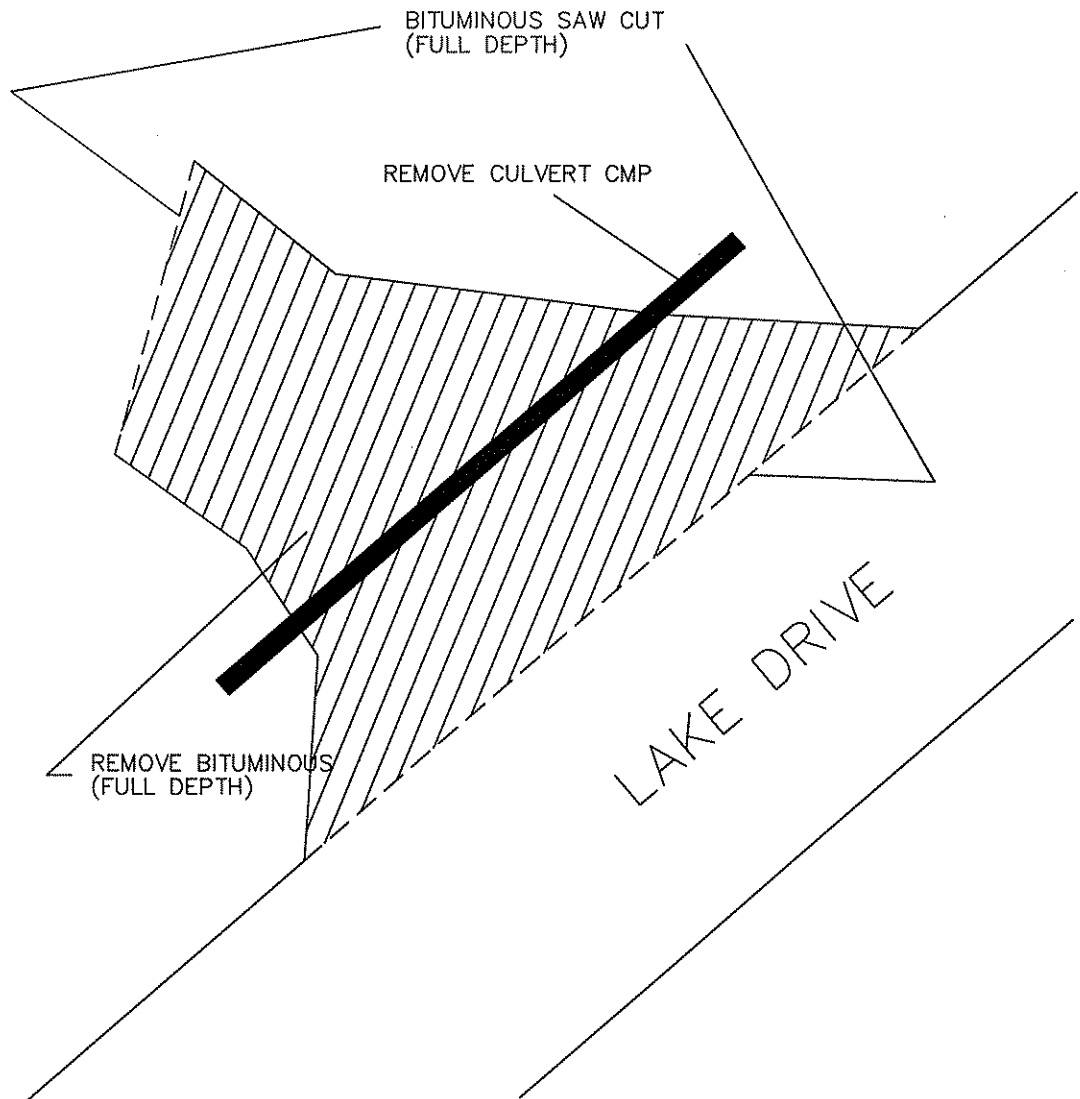
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ANDREW J. WITTER, P.E.

LIC. NO. 42757 DATE 6/9/06

C.P. 06-38-23

SHEET NO. 20 OF 34 SHEETS

# REMOVAL WOODLAND WEST



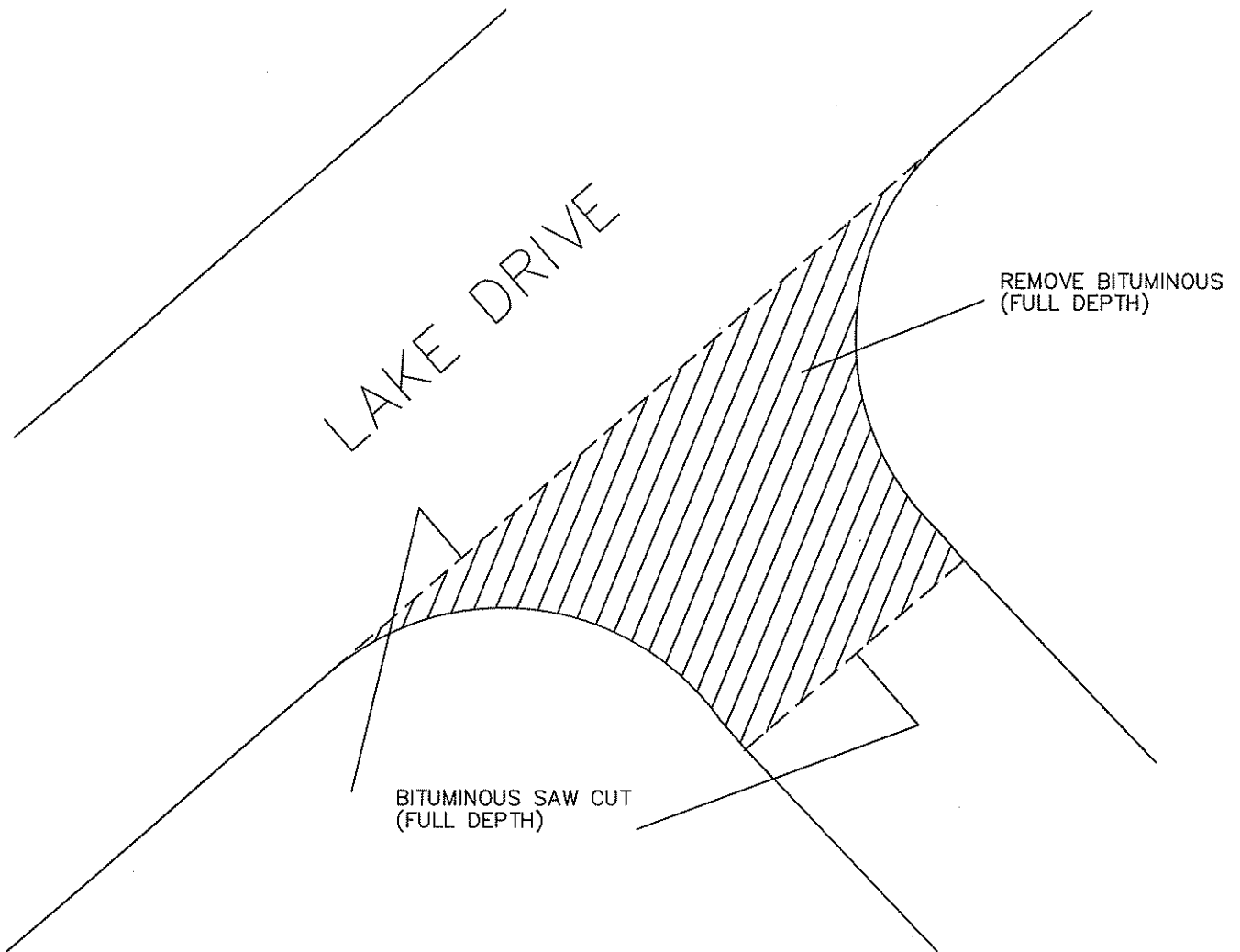
ITEM NUMBER	DESCRIPTION	UNITS	TOTAL
2104.501	REMOVE PIPE CULVERTS	LN FT	69
2104.501	REMOVE CURB AND GUTTER	LN FT	20
2232.501	REMOVE BITUMINOUS (FULL DEPTH) SIDE STREETS	SQ YD	278
2104.513	SAW BITUMINOUS (FULL DEPTH)	LN FT	117
2105.525	TOPSOIL BORROW (LV)	CU YD	27
2575.523	EROSION CONTROL BLANKET	SQ YD	249

NOTE: NOT TO SCALE

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ANDREW J. WITTER, P.E.  
 C.P. 06-38-23

LIC. NO. 42757 DATE 6/9/00  
 SHEET NO. 21 OF 34 SHEETS

# REMOVAL WOODLAND EAST

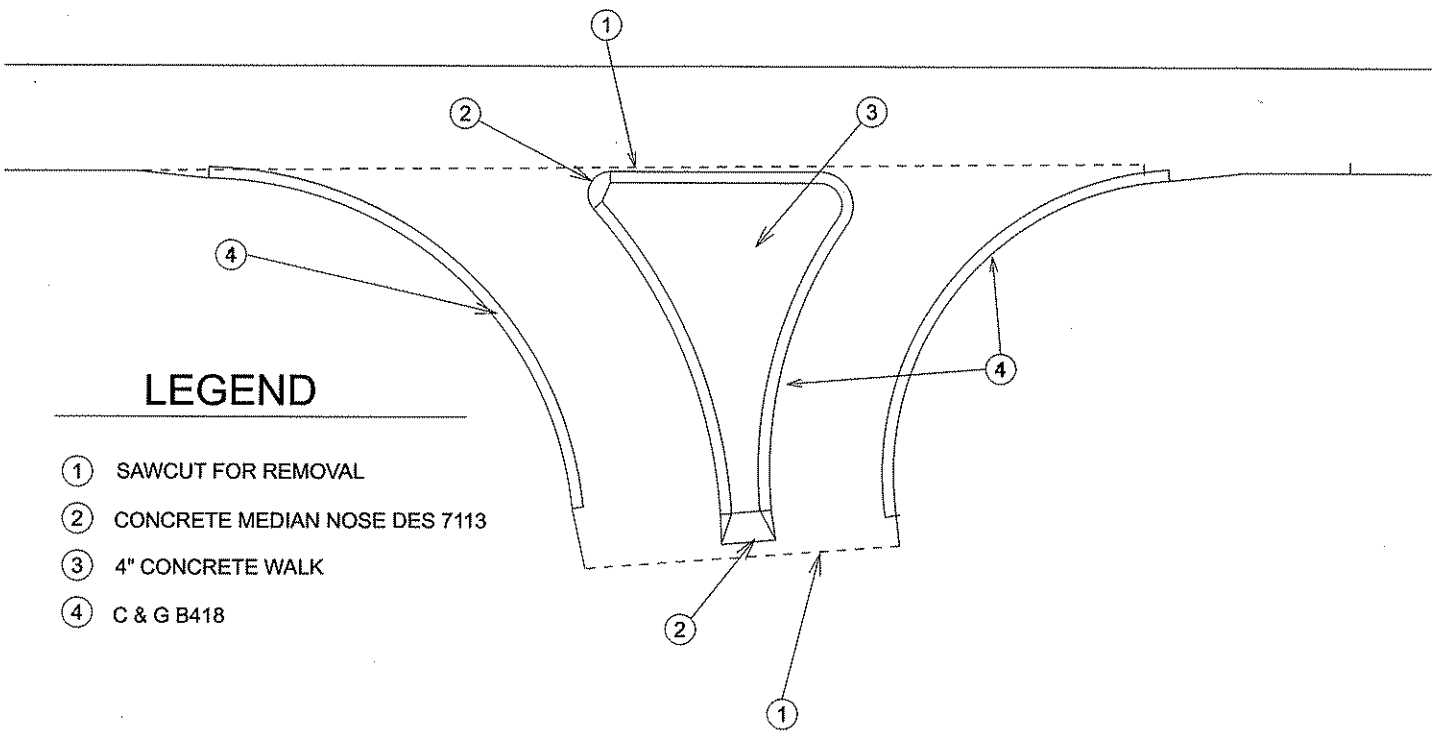


ITEM NUMBER	DESCRIPTION	UNITS	TOTAL
2104.501	REMOVE CURB AND GUTTER	LN FT	80
2104.505	REMOVE BITUMINOUS (FULL DEPTH) SIDE STREETS	SQ YD	343
2104.513	SAW BITUMINOUS (FULL DEPTH)	LN FT	176
2105.525	TOPSOIL BORROW	CU YD	24
2575.523	EROSION CONTROL	SQ YD	215

NOTE: NOT TO SCALE

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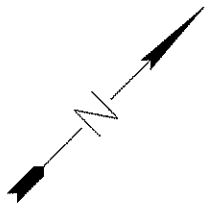
LIC. NO. 42757 DATE 6/9/06  
 SHEET NO. 22 OF 34 SHEETS

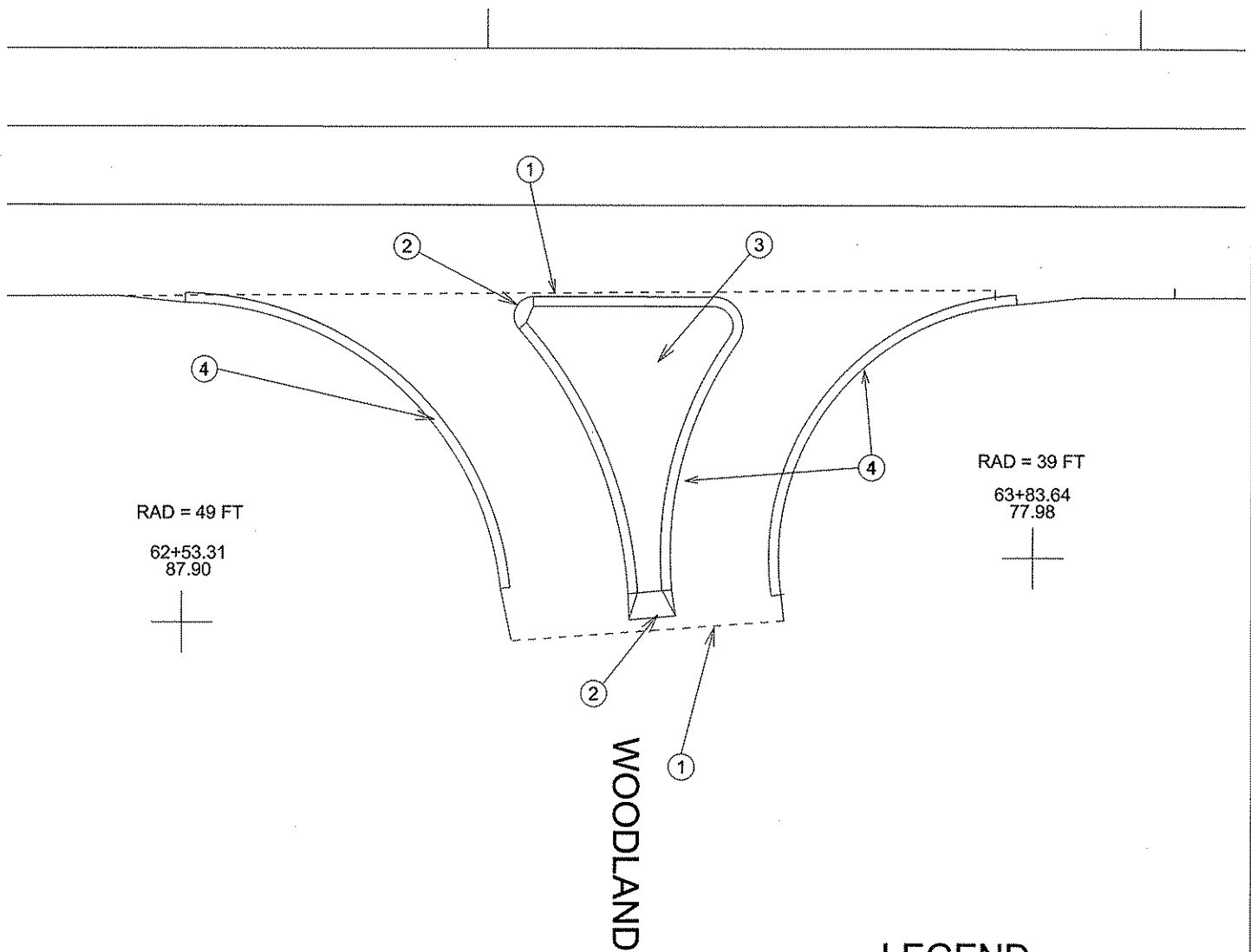


**LEGEND**

- ① SAWCUT FOR REMOVAL
- ② CONCRETE MEDIAN NOSE DES 7113
- ③ 4" CONCRETE WALK
- ④ C & G B418

**WOODLAND**





### LEGEND

①	SAWCUT FOR REMOVAL	177 FT
②	CONCRETE MEDIAN NOSE DES 7113	2 EACH
③	4" CONCRETE WALK	66 SY
④	C & GB418	255FT

CERTIFIED BY \_\_\_\_\_ REG. NO. \_\_\_\_\_ DATE \_\_\_\_\_

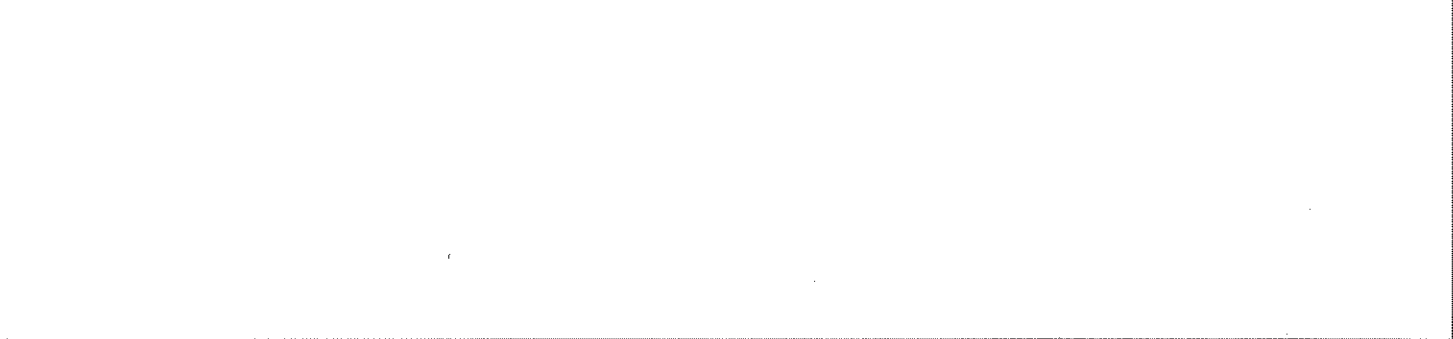
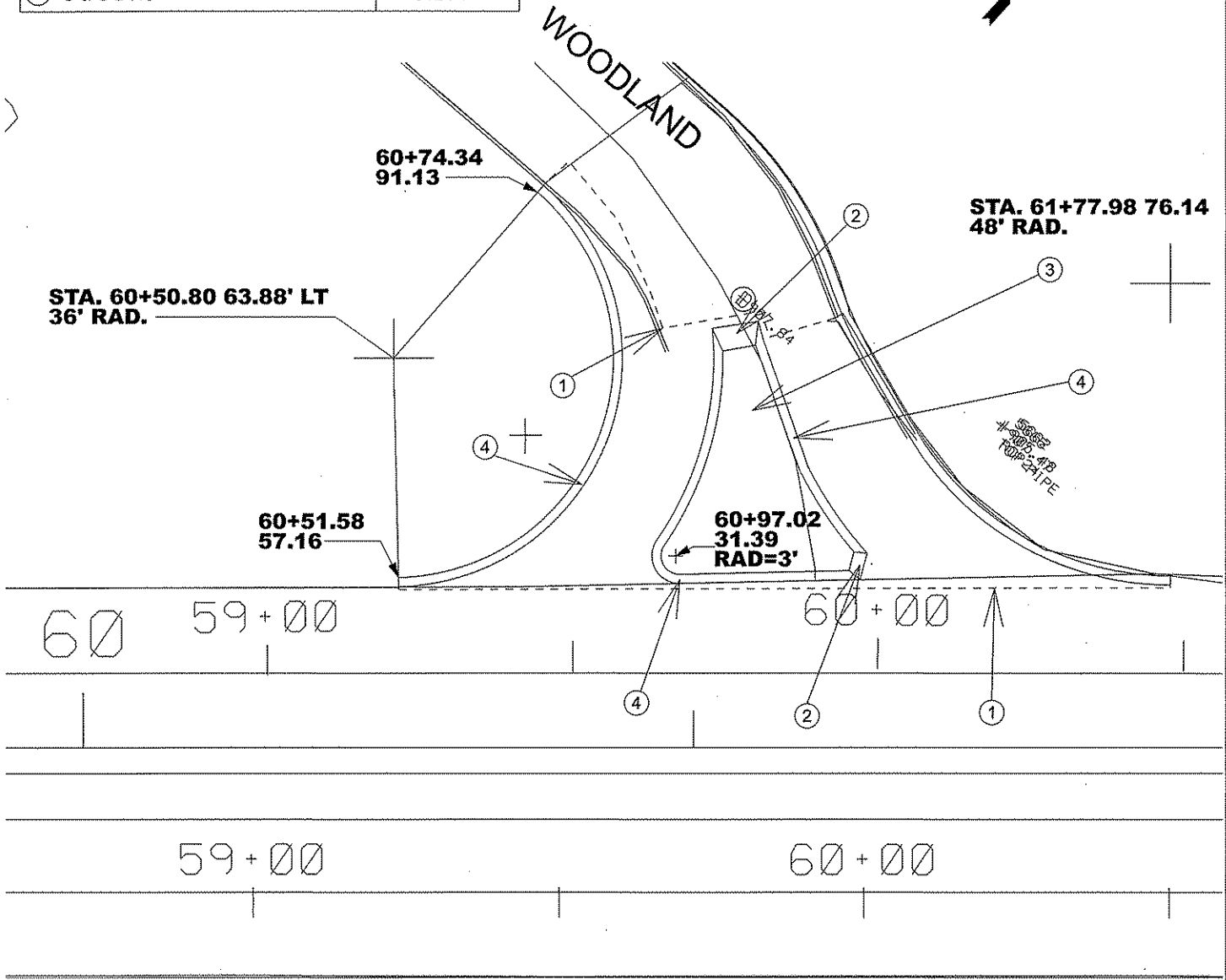
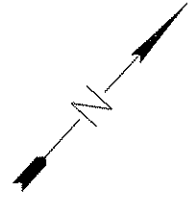
COUNTY PROJECT 06-38-23

SHEET 23 OF 34 SHEETS



# LEGEND

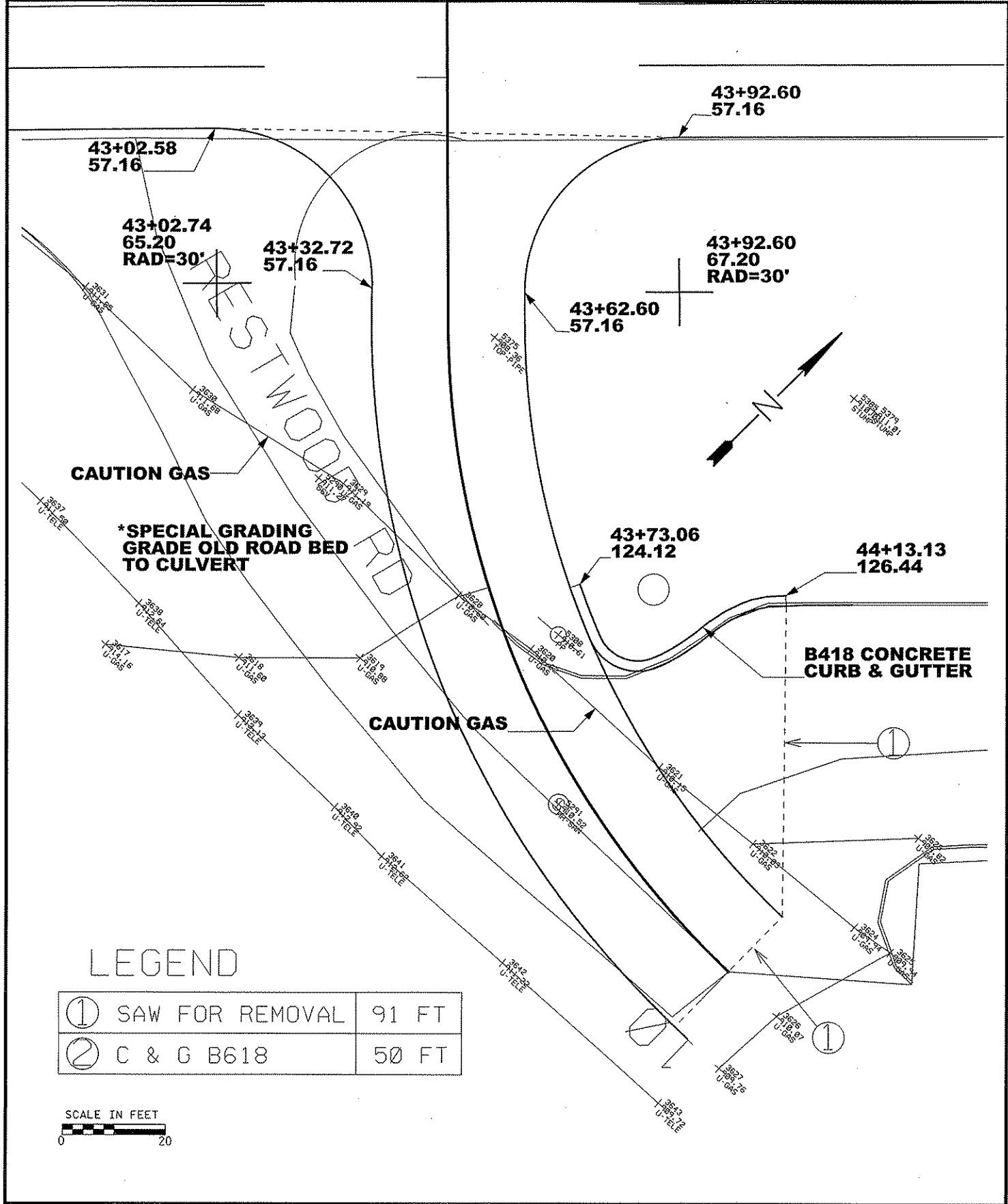
① SAWCUT FOR REMOVAL	196 FT
② CONCRETE MEDIAN NOSE DES 7113	2 EACH
③ 4" CONCRETE WALK	67 SY
④ C & G B418	312 FT



CERTIFIED BY \_\_\_\_\_ REG. NO. \_\_\_\_\_ DATE \_\_\_\_\_

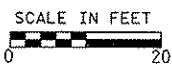
COUNTY PROJECT 06-38-23

SHEET 24 OF 34 SHEETS

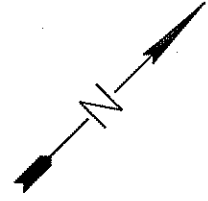


LEGEND

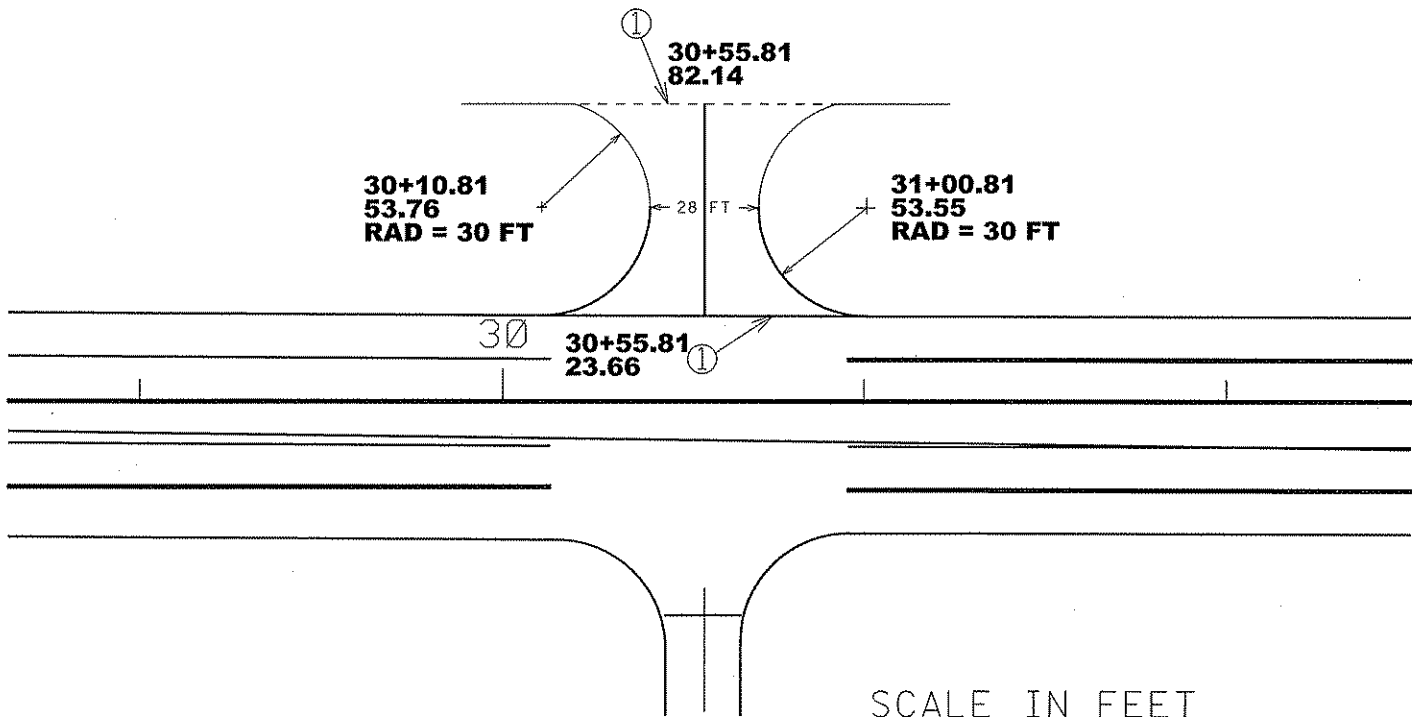
①	SAW FOR REMOVAL	91 FT
②	C & G B618	50 FT



CERTIFIED BY \_\_\_\_\_ REG. NO. \_\_\_\_\_ DATE \_\_\_\_\_  
 COUNTY PROJECT 06-38-23 SHEET 25 OF 34 SHEETS



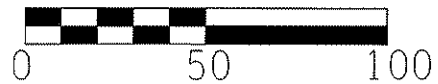
# NEW SERVICE RD. ENTRANCE



## LEGEND

① SAWCUT FOR REMOVAL 72 FT

SCALE IN FEET



CERTIFIED BY \_\_\_\_\_ REG. NO. \_\_\_\_\_ DATE \_\_\_\_\_

COUNTY PROJECT 06-38-23

SHEET 26 OF 34 SHEETS