STATE OF ILLINOIS

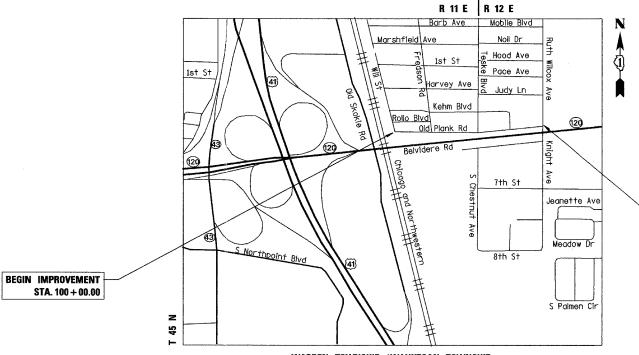
DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

FAP 880 (IL 120 - NORTH FRONTAGE ROAD) SECTION 12 RS-3 WILL AVENUE TO KNIGHT AVENUE **RESURFACING (3P)** LAKE COUNTY

C-91-346-06



WARREN TOWNSHIP / WAUKEGAN TOWNSHIP

LOCATION MAP 1" = 2000'

GROSS AND NET LENGTH OF PROJECT = 1579.85 FT = 0.30 MI.

Ciorba Group, Inc.

DESIGN FIRM REGISTRATION NUMBER

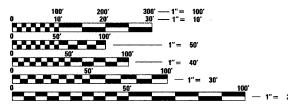
184-001016

CONSULTING ENGINEERS SUITE 402, 5507 NORTH CUMBERLAND AVE CHICAGO, ILLINOIS 60656 :: (773) 775-4009

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 \circ



FOR INDEX OF SHEETS, SEE SHEET NO. 2

THIS IMPROVEMENT IS LOCATED

WITHIN THE CITY OF

TRAFFIC DATA

POSTED SPEED LIMIT - 25 MPH

2005 ADT - 4500

FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

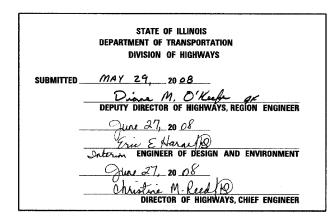
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 OR 811

CONTRACT NO. 60B45

SECTION COUNTY 880 12 RS-3 LAKE 21 🕅 1 ILLINOIS CONTRACT NO. 60B45 FED. ROAD DIST. NO. * 21+3=24



D-91-346-06



LOCATION OF SECTION INDICATED THUS: -

END IMPROVEMENT STA. 115 + 79.85

062-057159

DATE: 5/29/2008 SEAL EXPIRES: 11/30/2009

LIGENSED 7 -- PROFESSIONAL *

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

INDEX OF SHEETS

SHEET NO	DESCRIPTION
1	COVER SHEET
2	INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES
3	SUMMARY OF QUANTITIES
4	TYPICAL SECTIONS
4A	EARTHWORK SCHEDULE
4B	ALIGNMENT & CONTROL POINTS
5-7	ROADWAY AND PAVEMENT MARKING PLAN
8	EROSION AND SEDIMENT CONTROL PLAN
88	EXISTING TRAFFIC SIGNAL PLAN
9	DRIVEWAY DETAILS DISTANCE BETWEEN ROW AND
	FACE OF CURB < 15' (4.5m) (BD-02)
10	BUTT JOINT AND HMA TAPER DETAILS (BD-32)
11	HMA TAPER AT EDGE OF PCC PAVEMENT (BD-33)
12	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS,
	INTERSECTIONS, AND DRIVEWAYS (TC-10)
13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)
14	ARTERIAL ROAD INFORMATION SIGN (TC-22)
15	DISTRICT ONE DETECTOR LOOP INSTALLATION DETAILS
	FOR ROADWAY RESURFACING (TS-07)
16-21	CROSS SECTIONS

STATE STANDARDS

701901

000001 <i>-06</i>	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
280001- 04	TEMPORARY EROSION CONTROL SYSTEMS
442201 -03	CLASS C AND D PATCHES
602001	CATCH BASIN TYPE A
602301 -01	INLET - TYPE A
604086- 01	FRAME AND GRATE TYPE 23
606001- <i>0</i> 3	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701501 - 04	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED

TRAFFIC CONTROL DEVICES

GENERAL NOTES

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. (48 HOUR NOTIFICATIONS IS REQUIRED)
- 2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.
- 3. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- 4. BARRICADES: THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SANDBAGS ON EACH TYPE I OR TYPE II BARRICADE USED - ONE (1) WEIGHTED SANDBAG ACROSS EACH BOTTOM RAIL.
- 5. WHEN ARTIFICIAL LIGHTING IS USED IN NIGHT OPERATIONS THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.
- 6. THE FOLLOWING RATES OF APPLICATION HAVE BEEN ASSUMED IN CALCULATING PLAN QUANTITIES:

BITUMINOUS MATERIALS (PRIME COAT)

0.004 TONS/SQ YD

HOT-MIX ASPHALT SURFACE COURSE

112 LBS/SQ YD/INCH

- 7. WHEN MILLED PAVEMENT IS OPEN IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2" (40 MM) WHERE THE SPEED LIMIT IS 45 MPH (80 KM/H) OR LESS AND 1" (25 MM) WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH (80 KM/H). WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3" (75 MM) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 3:1 (H:V).
- 8. BUTT JOINTS WILL BE INSTALLED AT THE END OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT). IN ACCORDANCE WITH THE "BUTT JOINT AND HMA TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
- 9. FOR PAVEMENT MARKING, REFER TO DISTRICT ONE TYPICAL MARKINGS FOR DETAILS SHOWN.
- 10. MATCH EXISTING PAVEMENT MARKINGS AT PROJECT LIMITS.

\sim	Ciorba G	roup, Inc.
	CONSULTING ENGI	
		nd Avenue, Suite 402
	Chicago, Illinois 6068 Tel. 773,775,4009	6 Fax 773,775,4014

	USER NAME = Jooleman	DESIGNED	-	NT	REVISED	-	
•		DRAWN	-	NT	REVISED	-	
2	PLOT SCALE = 1.00000 '/ IN.	CHECKED	-	WBL	REVISED	-	
4	PLOT DATE = 6/3/2008	DATE	-	MAY 2008	REVISED	-	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	HINNE	ROUT	F 120	NORTH	FRO	NTAGE	ROAL	
	122111011					HINGE	HUME	•
	VA.	III AVE	MILE	TO KNI	CUT /	WENIII	:	
	71	ILL WAL	HOL	IO KIN	Gill F	4A FIAOL	-	
INDEX	UE CHI	ETC CT	ATE	STANDA	DDC	2. CEN	EDAI	MOTES
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A.P TE.	-		SE	CTION			COUNTY	TOTAL	ŝ	SI
380			12	RS-3			LAKE	21	Т	
							CONTRACT	NO. (50	В
En	DOAD	DICT	NO	DITMOTE	EED	A1	D DDO IECT			

	SUMMARY OF QUANTITIES	TOTAL QUANTITY	CONSTRUCTION TYPE	
CODE NO.	DESCRIPTION	UNIT	TOTAL QUANTET	1001. STATE ROADWAY 1000
20200100	EARTH EXCAVATION	CU YD	105	105
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	200	200
20800150	TRENCH BACKFILL	CU YD	60	60
21101615	TOPSOIL FURNISH AND PLACE,4"	SQ YD	2,100	2,100
25200110	SODDING, SALT TOLERANT	SQ YD	2,100	2,100
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	75	75
28000300	TEMPORARY DITCH CHECKS	EACH	10	10
28000400	PERIMETER EROSION BARRIER	FOOT	2,000	2,000
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	5	5
40600300	AGGREGATE (PRIME COAT)	TON	25	25
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	10	10
40600895	CONSTRUCTING TEST STRIP	EACH	2	2
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	175	175
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	2 5 0	250
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	600	600
42300200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT,6 INCH	SQ YD	110	110
44000198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	2,700	2,700
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	120	120
44201749	CLASS D PATCHES, TYPE I, 9 INCH	SQ YD	1,000	1,000
44201753	CLASS D PATCHES, TYPE II, 9 INCH	SQ YD	200	200
44201757	CLASS D PATCHES, TYPE III, 9 INCH	SQ YD	50	50
44201759	CLASS D PATCHES, TYPE IV, 9 INCH	SQ YD	670	670

		SUMMARY OF QUANTITIES	TOTAL QUANTITY	URBAN CONSTRUCTION TYPE CODE	
	CODE NO.	DESCRIPTION	UNIT	TOTAL GUARTITY	1001.STATE ROADWAY IOOO
	44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	1,600	1,600
	48101498	AGGREGATE SHOULDERS, TYPE B4"	SQ YD	1,500	1,500
	55019500	STORM SEWERS, TYPE 1, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV12"	FOOT	230	230
	55037800	STORM SEWERS TO BE CLEANED 12"	FOOT	1,000	1,000
	55038000	STORM SEWERS TO BE CLEANED 18"	FOOT	200	200
	60201330	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 23 FRAME AND GRATE	EACH	2	2
	60237460	INLETS, TYPE A, TYPE 23 FRAME AND GRATE	EACH	1	1
	60500050	REMOVING CATCH BASINS	EACH	1	1
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6
	67100100	MOBILIZATION	L SUM	1	1
	70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1
	70300100	SHORT-TERM PAVEMENT MARKING	FOOT	160	160
	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	55	55
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	3,500	3,500
*	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	230	230
*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	120	120
*	88600600	DETECTOR LOOP REPLACEMENT	F00T	225	225
	X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	26	26
	XX000671	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-4.12	FOOT	350	350
	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1
	Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	7	7
	Z0042200	PORTLAND CEMENT CONCRETE PAVEMENT SURFACE REMOVAL	SQ YD	850	850

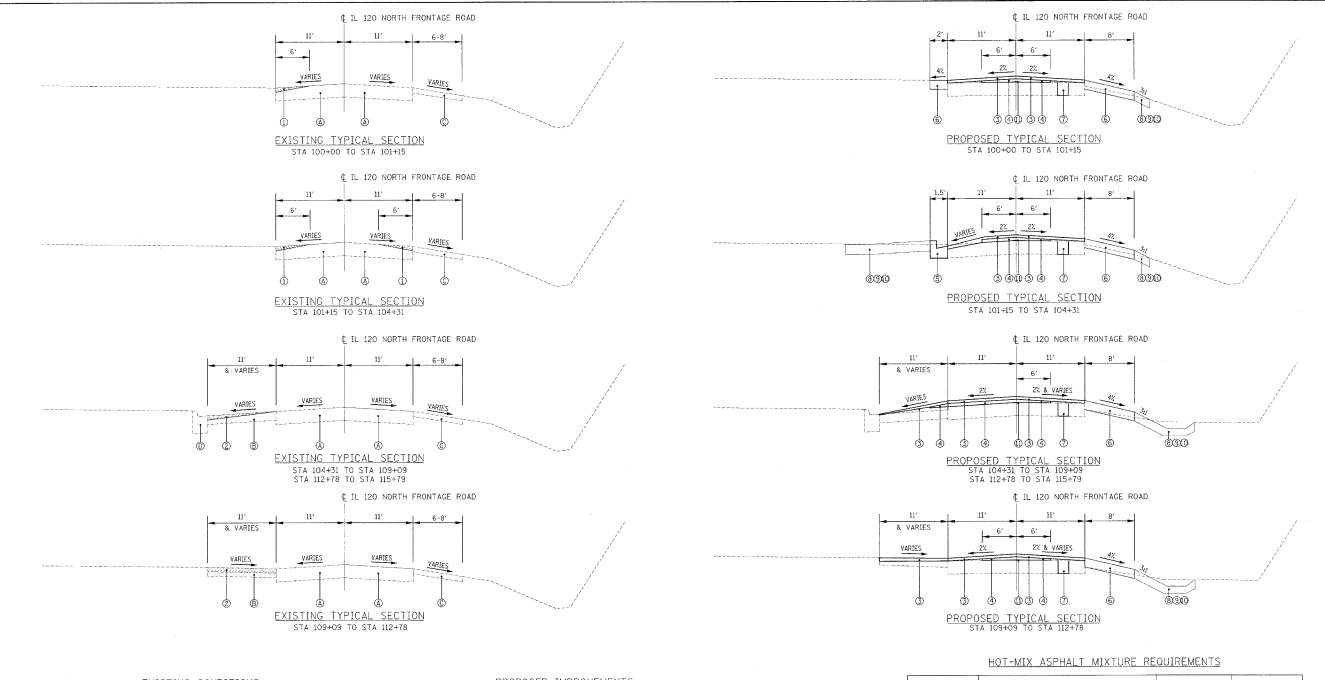
SPECIALTY ITEM

SCALE:

$\alpha \alpha$	Ciorba Group, Inc.	F
	CONSULTING ENGINEERS 5507 North Cumberland Avenue, Suite 402	H
	Chicago, Illinois 60656	H
	Tel. 773.775.4009 Fax 773.775.4014	ı

	USER NAME = Jooleman	DESIGNED	-	NT	REVISED	-
.		DRAWN	-	NT	REVISED	-
22	PLOT SCALE = 1.00000 '/ IN.	CHECKED	-	WBL	REVISED	_
14	PLOT DATE = 6/3/2008	DATE	-	MAY 2008	REVISED	-

ILLINOIS ROUTE 120 NORTH FRONTAGE ROAD	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
WILL AVENUE TO KNIGHT AVENUE	880	12 RS-3	LAKE	21	3
SUMMARY OF QUANTITIES			CONTRACT	NO. 60	DB45
SHEET NO. OF SHEETS STA. TO STA.	FED. R	DAD DIST, NO ILLINOIS FED. A	ID PROJECT		



EXISTING CONDITIONS:

- (A) PORTLAND CEMENT CONCRETE PAVEMENT, 8"
- B HOT-MIX ASPHALT SHOULDER
- C AGGREGATE SHOULDER
- © COMBINATION CURB AND GUTTER

PROPOSED IMPROVEMENTS:

- ① PORTLAND CEMENT CONCRETE PAVEMENT SURFACE REMOVAL (VARIABLE DEPTH), VARIES 0 TO 2 1/2"
- ② HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH, VARIES 0 TO 1 1/2"
- 3 HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 1 1/2"
- 4 LEVELING BINDER (MACHINE METHOD), N50 (IL 9.5 mm), VARIES 3/4" TO 2 1/4"
- (5) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-4.12
- 6 AGGREGATE SHOULDERS, TYPE B 4"
- ① CLASS D PATCHES, 9" (DETERMINED BY ENGINEER IN FIELD)
- 8 EARTH EXCAVATION
- $\ensuremath{\mbox{\Large\ensuremath}}}}}}}}}}}}}}}}$
- ① STRIP REFLECTIVE CRACK CONTROL TREATMENT (24" WIDE)

OPERATIONS	MIXTURE TYPE	AC TYPE	AIR VOIDS
ROADWAY	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL-9,5MM)	PG 64-22	4% @ 50 GYR
RESURFACING	LEVELING BINDER (MACHINE METHOD), N5O (IL 9,5 mm)	PG 64-22*	4% @ 50 GYR
PAVEMENT PATCHING	CLASS D PATCHES, 9" (HMA BINDER IL-19MM)	PG 64-22*	4% @ 70 GYR

THE UNIT WEIGHT USED TO CALCLATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.

 \bullet WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22.

Ciorba G	roup Inc	U
CONSULTING ENGIN	IEERS	
5507 North Cumberle Chicago, Illinois 6065	6 -	P
Tel. 773.775.4009	Fax 773.775.4014	LP

	USER NAME = jcoleman	DESIGNED	-	JCC	REVISED	-
		DRAWN	-	JCC	REVISED	*
	PLOT SCALE = 20.0000 '/ IN.	CHECKED	-	MJL	REVISED	
	PLOT DATE = 6/3/2008	DATE		MAY 2008	REVISED	_
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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

IL	LINOIS ROU						F.A.P. RTE.	SECT	ION	COUNTY	TOTAL	SHEET NO.
WILL AVENUE TO KNIGHT AVENUE				880	12 RS	5-3	LAKE	21	4			
		TYPI	CAL SECT	TIONS						CONTRACT	NO. 6	OB45
SCALE:	SHEET NO.	0F	SHEETS	STA.	TO STA.		FED. RO	DAD DIST. NO I	LLINOIS FED. A	ID PROJECT		

:	EARTHWORK SCHEDULE										
			20200100		20201200						
STATION			EARTH EXCAVATION	EARTH EXCAVATION VOLUME USED (15% SHRINKAGE)	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)				
LINE "IL 120 N	NORTH FROM	NTAGE ROAD"	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)				
100+10.00	то	101+00.00	1	1	11	4	-4				
101+00.00	TO	102+00.00	0	0	7	10	-10				
102+00.00	то	103+00.00	0	0	17	14	-14				
103+00.00	ТО	104+00.00	0	0	14	10	-10				
104+00,00	ТО	105+00.00	12	11	13	2	9				
105+00.00	ТО	106+00.00	15	13	17	0	13				
106+00.00	ТО	107+00.00	11	10	15	0	9				
107+00.00	TO	108+00.00	22	18	19	0	18				
108+00.00	TO	109+00.00	26	22	20	0	21				
109+00.00	ТО	110+00.00	15	12	23	4	9				
110+00.00	ТО	111+00.00	3	2	22	6	-4				
111+00,00	то	112+00.00	0	0	10	2	-2				
112+00.00	TO	113+00.00	0	0	3	1	-1				
113+00.00	TO	114+00,00	0	0	5	2	-2				
114+00.00	то	115+00.00	0	0	3	0	0				
115+00.00	T0	115+98.19	0	0	0	0	0				
	TOTALS		105	89	199	56	33				

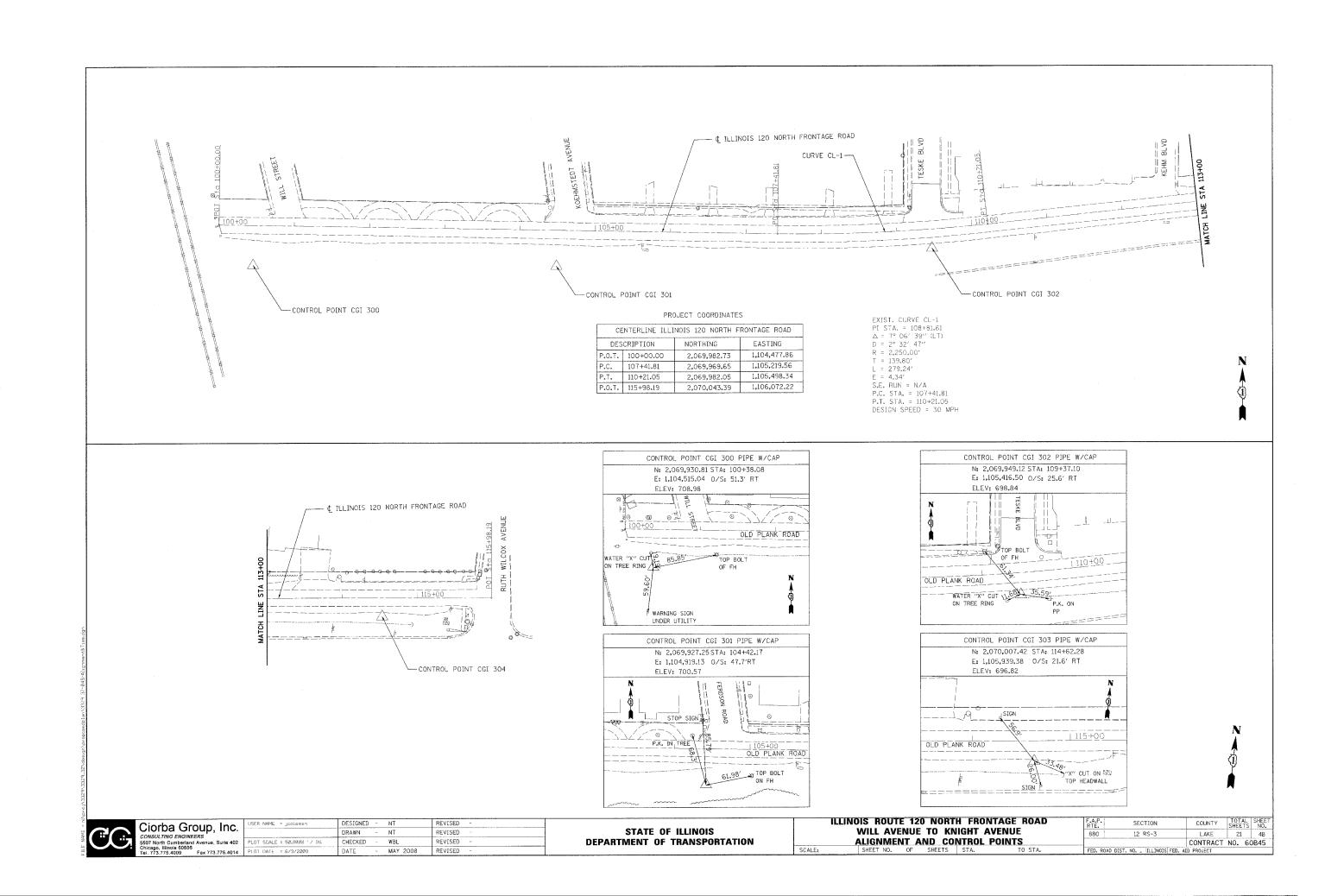
SUMMARY						
20201200	20200100					
REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	EARTH EXCAVATION					
(CU YD)	(CU YD)					
199	105					

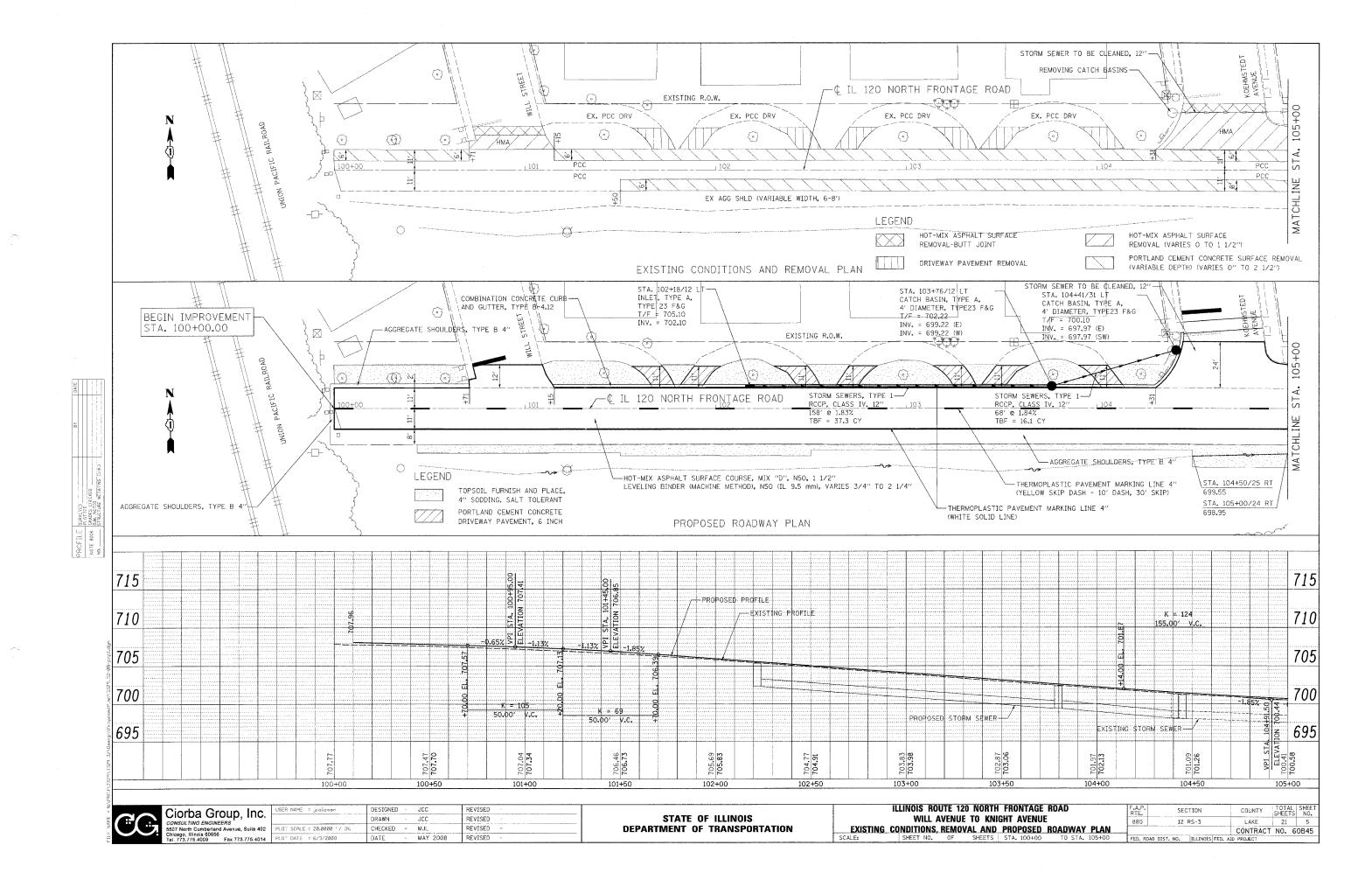
Ciorba Group, Inc. CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402
Chicago, Illinois 60869
Tel. 773.775.4014

_	USER NAME = jcolemen	DESIGNED	-	NT	REVISED -	
٠.		DRAWN	-	NT	REVISED -	
102	PLOT SCALE = 1.00000 '/ IN.	CHECKED	-	WBL	REVISED -	
14	PLOT DATE - 6/3/2008	DATE	-	MAY 2008	REVISED -	•

STATE	OF	ILLINOIS
DEPARTMENT (OF 1	TRANSPORTATION

ILLINOIS ROUTE 120 NORTH FRONTAGE ROAD WILL AVENUE TO KNIGHT AVENUE							SECTION	COUNTY	TOTAL SHEET	SHEET NO.
							12 RS-3	LAKE	21	4A
	EAI	RTHV	VORK S	CHEDULI	E			CONTRACT	NO. 6	OB45
CALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	FED. ROAD D	IST. NO ILLINOIS FED.	AID PROJECT		





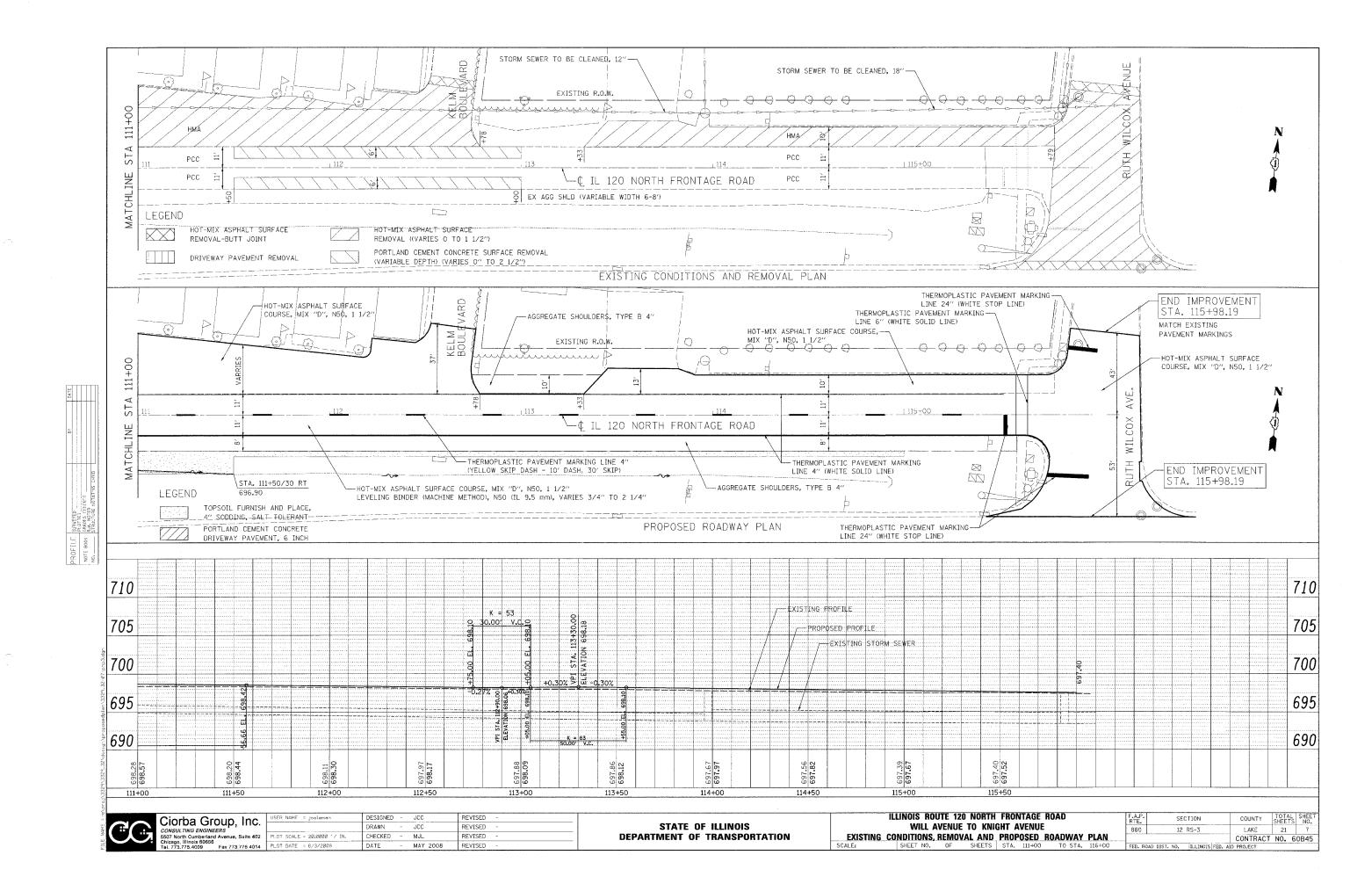
STORM SEWER TO BE CLEANED, 12" -STORM SEWER TO BE CLEANED, 12' (e) -STORM SEWER TO BE CLEANED, 12" EXISTING R.O.W. /HMA/ 7 7 00 PCC ←¢ IL 120 NORTH FRONTAGE ROAD PCC ΔM EX AGG SHLD (VARIABLE WIDTH 6-8') LEGEND HOT-MIX ASPHALT SURFACE HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT REMOVAL (VARIES 0 TO 1 1/2") PORTLAND CEMENT CONCRETE SURFACE REMOVAL © ©_© DRIVEWAY PAVEMENT REMOVAL (VARIABLE DEPTH) (VARIES O" TO 2 1/2") 0 EXISTING CONDITIONS AND REMOVAL PLAN -THERMOPLASTIC PAYEMENT MARKING LINE 4" (YELLOW SKIP DASH - 10' DASH, 30' SKIP) THERMOPLASTIC PAVEMENT MARKING— LINE 24" (WHITE STOP LINE) HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 1 1/2" (e) -HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 1 1/2 THERMOPLASTIC PAVEMENT MARKING |LINE 6" (WHITE SOLID LINE) EXISTING R.O.W. \circ isl 105 +00 — ¢ IL 120 NORTH FRONTAGE ROAD LEGEND THERMOPLASTIC PAVEMENT MARKING STA. 106+00/24 RT STA. 109+00/25 RT LINE 4" (WHITE SOLID LINE) TOPSOIL FURNISH AND PLACE, STA. 107+00/24 RT STA. 111+00/29 RT/ 697.07 STA. 110+00/25 RT ⊙ ⊙ 697.75 4" SODDING, SALT TOLERANT STA. 108+00/25 RT -HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 1 1/2" PORTLAND CEMENT CONCRETE -AGGREGATE SHOULDERS, TYPE B 4" LEVELING BINDER (MACHINE METHOD), N50 (IL 9.5 mm), VARIES 3/4" TO 2 1/4" PROPOSED ROADWAY PLAN DRIVEWAY PAVEMENT, 6 INCH PROFILE NOTE BOOK NO. 710 710 155.00' V.C K = 200 46.00' V.C. 705 705 - EXISTING STORM SEWER ROPOSED PROFILE: - EXISTING PROFILE 700 700 695 695 690 690 K = 3987 698.28 698.87 698.55 698.81 698.99 699,14 699,36 698. **698.** 110+50 111+00 105+50 106+00 106+50 107+00 107+50 108+00 ILLINOIS ROUTE 120 NORTH FRONTAGE ROAD COUNTY TOTAL SHEE SHEETS NO. DESIGNED -SECTION JCC REVISED Ciorba Group, Inc. REVISED STATE OF ILLINOIS WILL AVENUE TO KNIGHT AVENUE DRAWN JCC LAKE CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402
Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014 EXISTING CONDITIONS, REMOVAL AND PROPOSED ROADWAY PLAN
CALE: SHEET NO. OF SHEETS STA. 105+00 TO STA. 111+00 DEPARTMENT OF TRANSPORTATION 2_OT SCALE = 20.00000 '/ IN. CHECKED MJL REVISED CONTRACT NO. 60B45

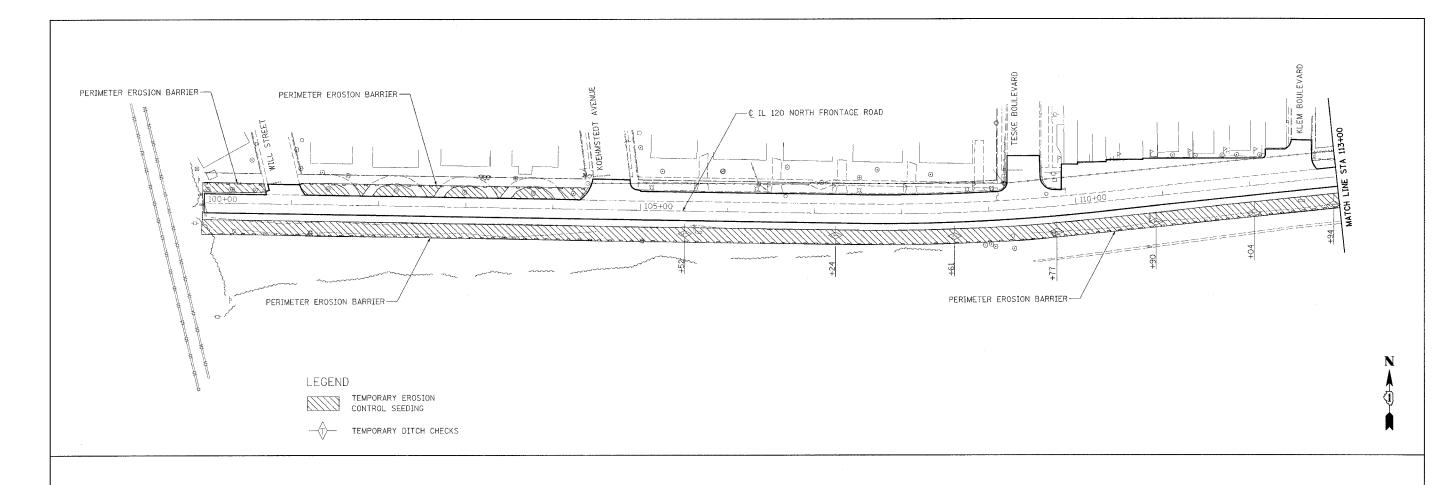
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

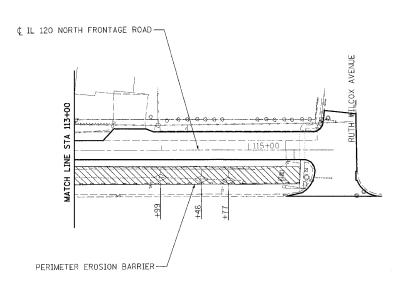
MAY 2008 REVISED

PLOT DATE = 6/3/2008

DATE







LEGEND

TEMPORARY EROSION CONTROL SEEDING

TEMPORARY DITCH CHECKS

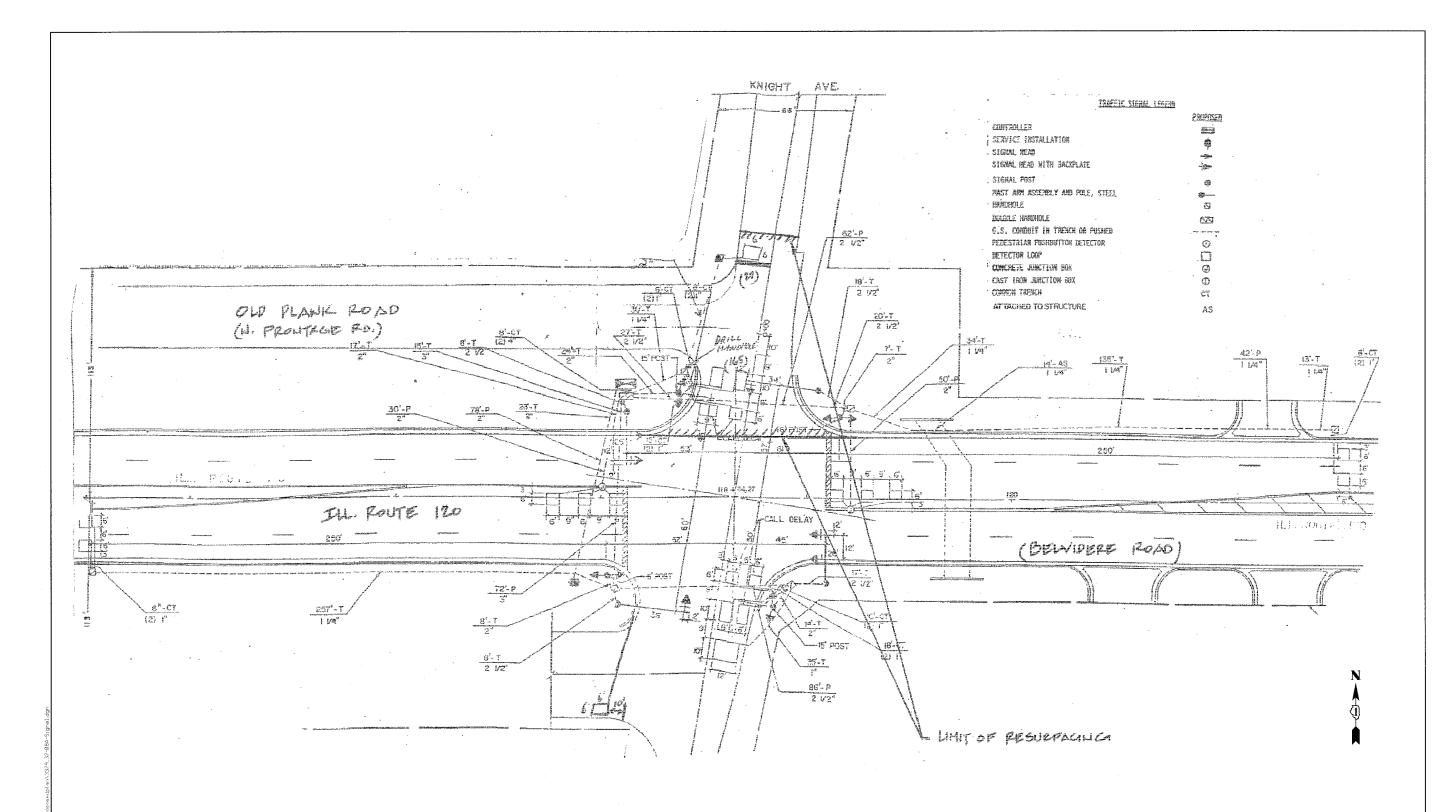
Ciorba Gro	מוור	Inc
CONSULTING ENGINE	ERS	
Chicago, Illinois 60656 Tel. 773.775.4009	Fax 773.	

_	USER NAME = Jooleman	DESIGNED	-	NT	REVISED	
٥.		DRAWN	-	NT	REVISED	-
02	PLOT SCALE = 50.0000 '/ IN.	CHECKED	-	WBL	REVISED	w
14	PLOT DATE = 6/3/2008	DATE	-	MAY 2008	REVISED	-

STATE	OF	ILLINOIS
DEPARTMENT O)F 1	RANSPORTATION

ILLINOIS ROUTE 120 NORTH FRONTAGE ROAD	F,A,P. RTE.	SECTION
WILL AVENUE TO KNIGHT AVENUE	880	12 RS-3
EROSION AND SEDIMENT CONTROL PLAN		
SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD I	DIST. NO ILLINOIS F

F,A,P. RTE.	SE	CTION		COUNTY	TOTAL SHEETS	SHEET NO.
880	12	RS-3		LAKE	21	8
				CONTRACT	NO. 60	DB45
FED. ROAD DIST. NO ILLINOIS FED. AID PROJECT						



FOR INFORMATION ONLY

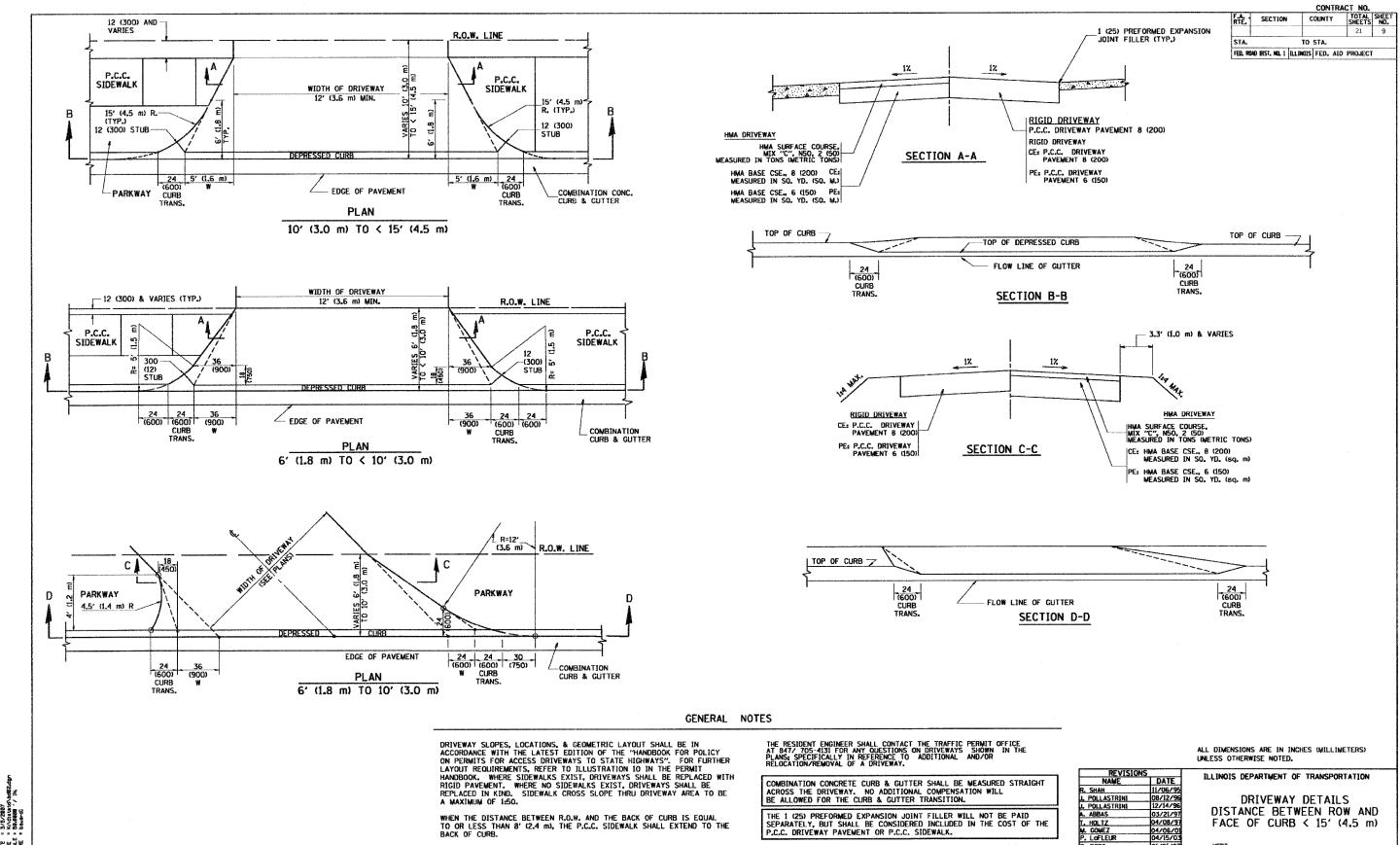


Ciorba Group, Inc.

CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402
Chicago, Illineis 80856
Elit. 773.775.4014

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 120 NORTH FRONTAGE ROAD
WILL AVENUE TO KNIGHT AVENUE
EXISTING TRAFFIC SIGNAL PLAN
SHEET NO. OF SHEETS STA. TO STA.



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

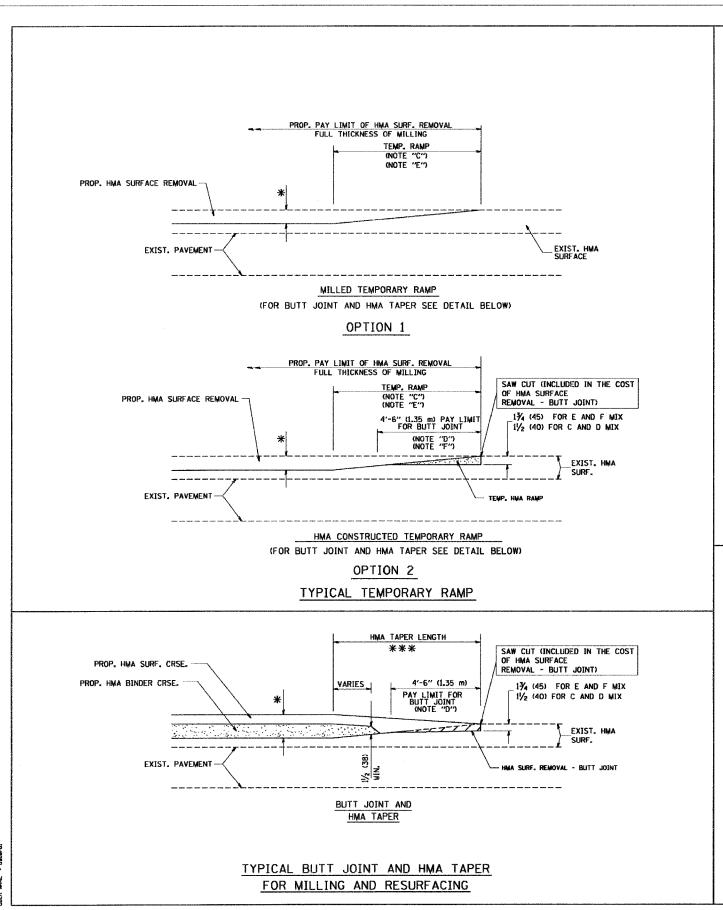
= 3/6/2007 = Xi/distat6/bd62 = 59,8868 / IN. = bauerd1

DATE SCALE NAME 27.7

CHECKED BY BD400-02 (BD-02)

DRAWN BY

SCALE: VERT, NONE



CONTRACT NO. SECTION COUNTY TO STA. FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT PROP. HMA OR PCC
SURFACE REMOVAL - BUTT JOINT
30'-0" (9.0 m) (NOTE "A") SAW CUT (INCLUDED IN THE COST EXIST. HMA OR PCC SURFACE OF HMA OR P.C.C. SURFACE REMOVAL 15'-0" (4.5 m) (NOTE "B") - BUTT JOINT) (NOTE "D") 134 (45) FOR E AND F MIX 11/2 (40) FOR C AND D MIX * * EXIST. PAVEMENT BUTT JOINT DETAIL TAPER LENGTH *** VARIES PROP. HMA SURF. CRSE. 1光 (45) FOR E AND F MIX PROP. HMA BINDER CRSE. 11/2 (40) FOR C AND D MIX * * EXIST. PAVEMENT HMA TAPER DETAIL TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY $\mbox{*}\mbox{*}\mbox{*}\mbox{PC CONCRETE, HWA OR HMA RESURFACED PAVEMENT.}$ 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.
- Es 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")

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

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".

NAME	DATE	
M. DE YONG	6-13-90	
M. DE YONG	7-3-90	
M. DE YONG	3-27-92	
R. SHAH	09/09/94	
R, SHAH	10/25/94	
A. ABBAS	03/21/97	
M. COMEZ	04/06/01	
R. BORO	01/01/07	SCA
		367
	1	

REVISIONS

ILLINOIS DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER DETAILS

CALE: VERT. NONE

CHECKED BY

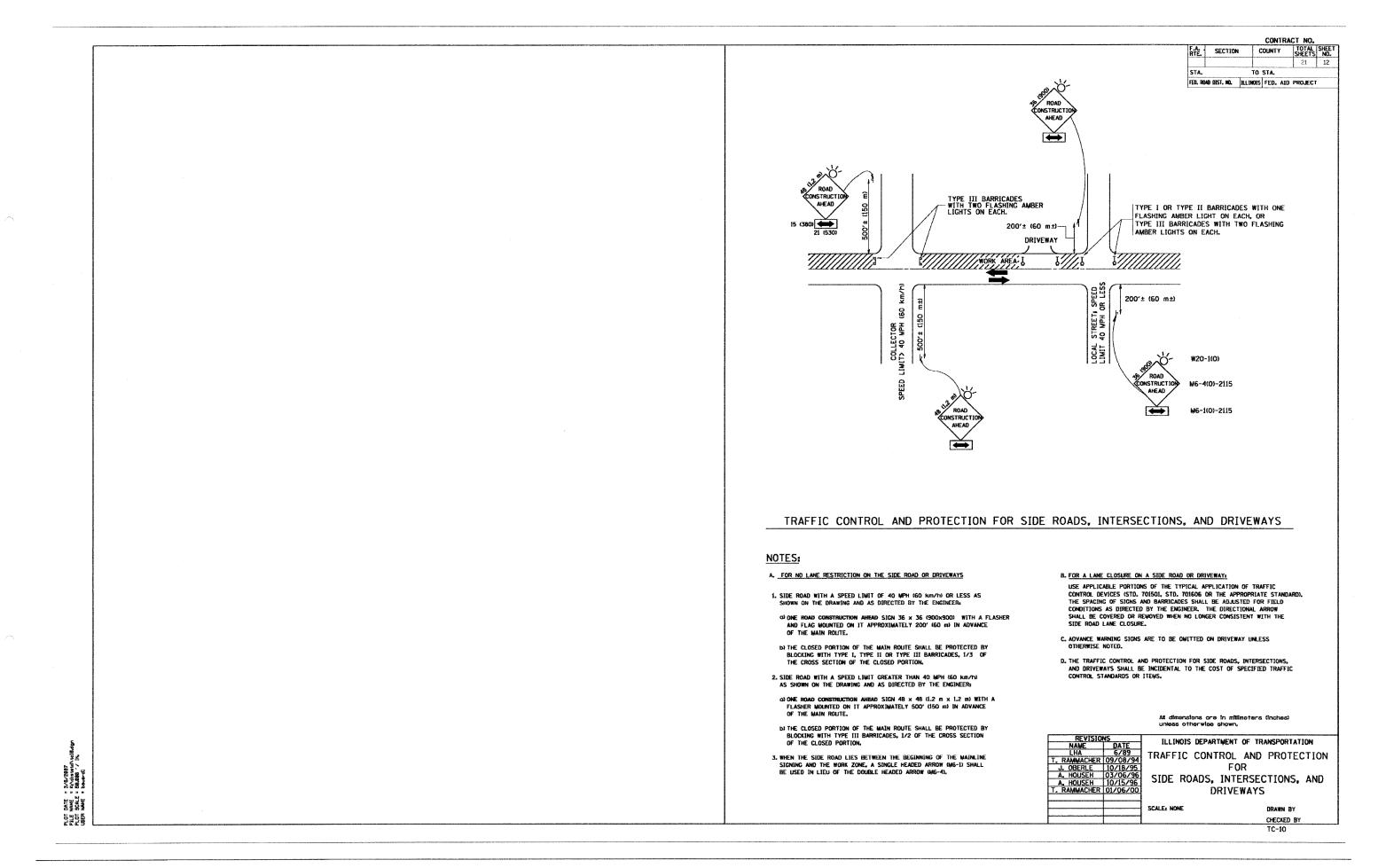
BD400-05 (VI=BD32)

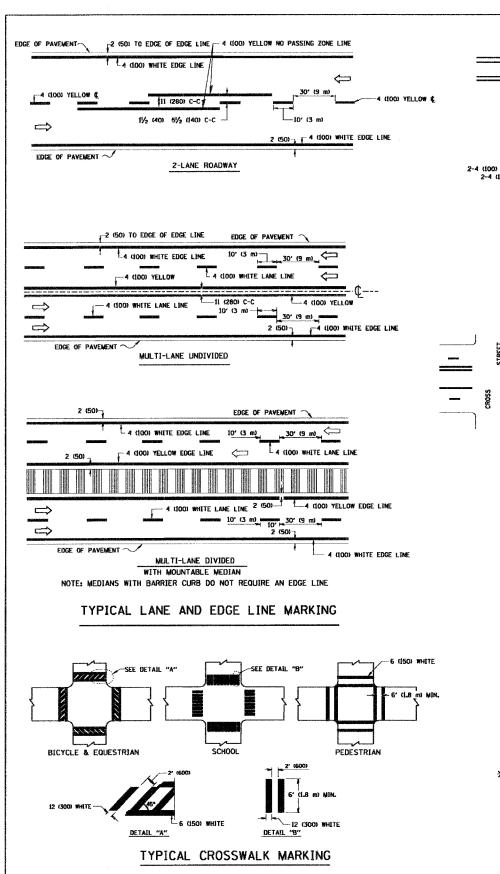
* 3/5/2887 * Khdistat/bd32,dgn * b9,8986 '/ iN, * bauerdl PATE SCALE SCALE

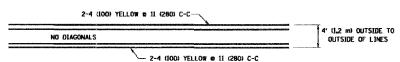
CONTRACT NO.

TOTAL SHEETS NO.

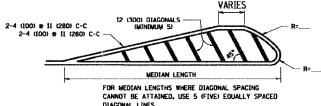
11 SECTION COUNTY TO STA. FED. ROMO DIST. NO. 1 ILLINOIS FED. ATD PROJECT 6'-0" (1.8 m) EXIST. CURB & GUTTER EXIST. P.C. CONCRETE PAVEMENT PROP. PORTLAND CEMENT CONCRETE SURFACE REMOVAL (VAR. DEPTH) IN SQUARE YARD (SQUARE METER) PROP. LEVELING BINDER (MACHINE METHOD) PROP. HMA SURFACE COURSE HMA TAPER AT EDGE OF P.C.C PAVEMENT LEVELING BINDER SURFACE * MILLING AT GUTTER FLAG THICKNESS THICKNESS MIX C OR D 11/2 (38) 1 (25) 11/4 (33) 1¾ (44) ¥ (19) 11/2 (38) ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN, PLOT DATE = 3/5/2007 FILE MAME = KINGENACADESSAGN FLOT SCALE = 56.8060 / IN. USER WANE = beneficial ILLINOIS DEPARTMENT OF TRANSPORTATION HMA TAPER AT EDGE OF P.C.C. PAVEMENT SCALE: VERT. NONE DRAWN BY JIS CHECKED BY A. ABBAS BD400-06 (BD33







4' (1.2 m) WIDE MEDIANS ONLY

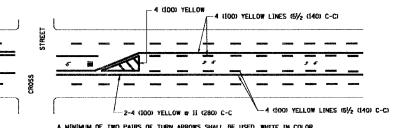


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))

75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))

[50' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

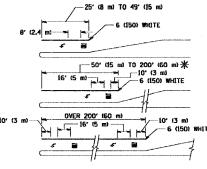


ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING



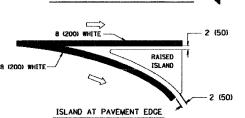
FULL, SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. \P AREA = 15.6 SO. FT. (1.5 m²) M_{\odot}^2 AREA = 20.8 SO. FT. (1.9 m²)

* 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

8 (200) WHITE-12 (300) WHITE DIAGONALS e 10' (3 m) OR LESS SPACING ISLAND OFFSET FROM PAVEMENT EDGE



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 UNDIVEDED PAVEMENT	2 s 4 (100)	SOLID	YELLOW	ii (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 a 4 (100)	SOLID SOLID	AETTOM AETTOM	5½ (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' (L8 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 s 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAM) A. DIAGONALS (BIKE & EQUESTRIAM) B. LONGITUDINAL BARS (SCHOOL)	2 e 6 (150) 12 (300) e 45° 12 (300) e 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (500) APART 2' (500) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSMALK, IF PRESENT. OTHERNISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 g 4 (100) WITH 12 (300) DIAGONALS g 45" NO DIAGONALS USED FOR 4' (1,2 m) WIDE MEDIANS	SOLIO	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE 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" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA 0F1 "R"=3.6 SO. FT. (0.33 m²) EACH "X"=54.0 SO. FT. (5.0 m²)
SHOULDER DIAGONALS	12 (300) e 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 (misimeters) unless otherwise shown.

COUNTY

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

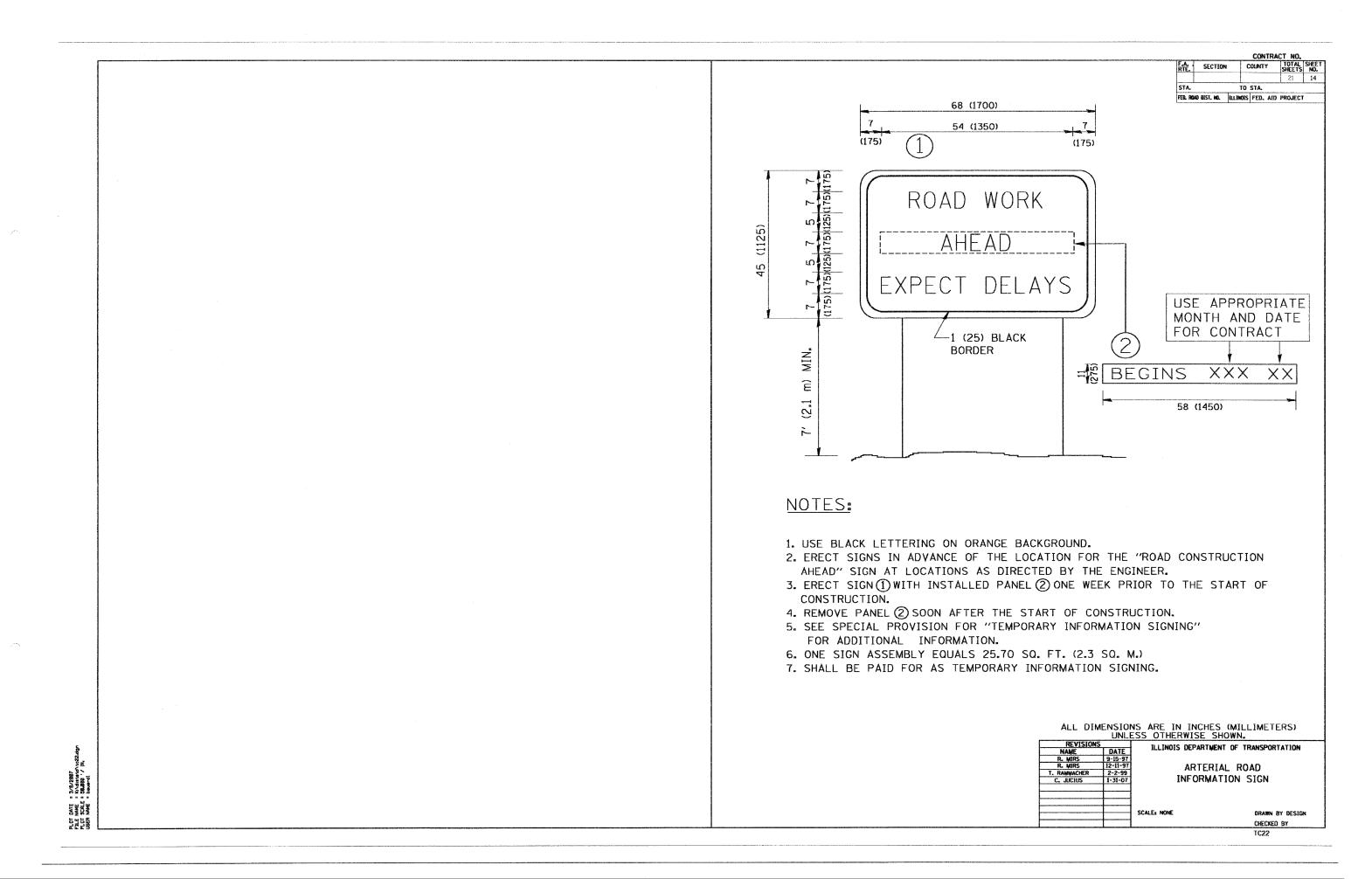
SECTION

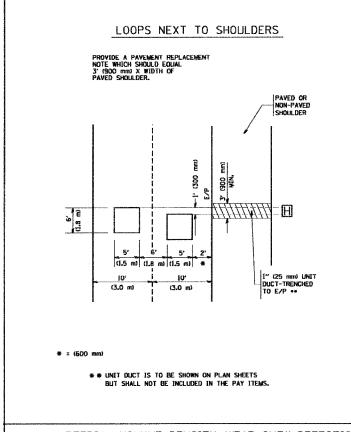
REVISIO	NS I	TILIMOTE D	EPARTMENT OF TRANSPORTATION
NAME	DATE	ILLINOIS D	EFARTMENT OF TRANSFORTATION
EVERS	03-19-90		
T. RAMMACHER	10-27-94		DISTRICT ONE
ALEX HOUSEH	10-09-96		
ALEX HOUSEH	10-17-96	TY	PICAL PAVEMENT
T. RAMMACHER	01-06-00		MARKINGS
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		SCALE# NONE	DRAWN BY CADD
			AUTOUTA PM

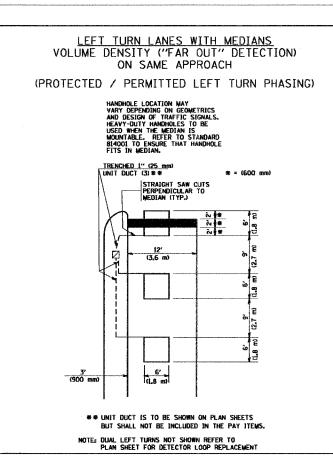
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DATE HAME SCALE NAME

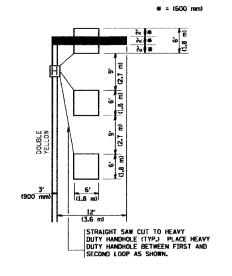






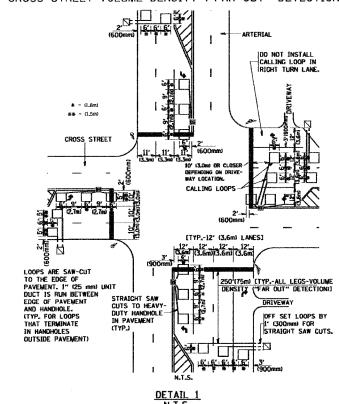
LEFT TURN LANES WITHOUT MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)

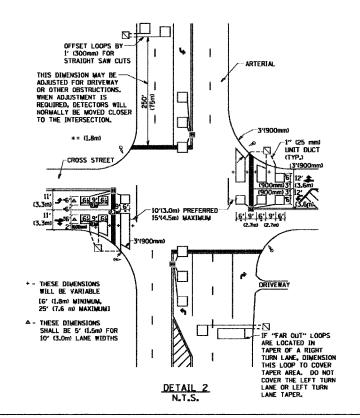


NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION) CROSS STREET-VOLUME DENSITY ("FAR OUT" DETECTION)



ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION) CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)



TOTAL SHEET SHEETS NO. SECTION COUNTY TO STA FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

CONTRACT NO.

NOTES:

VEHICLES LOOP DETECTORS

- * ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATLY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- * ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET
- * EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- * WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
- * WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

PLACEMENT OF DETECTORS

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	TETHOTO DEI WILLIBERT OF TRANSPORTATION
		DISTRICT 1
	-	DETECTOR LOOP
		INSTALLATION DETAILS
		FOR ROADWAY RESURFACING
		DESIGNED BY
		SCALE: NONE DRAWN BY CADD
		CHECKED BY R.K.F.
		TAME

3/7/2867 Ki\distatd\tel 56,8868 // || bouendi DATE MANE SCALE NAME

