

GENERAL NOTES

SPECIFICATIONS, STANDARDS AND SPECIAL PROVISIONS

ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", ADOPTED APRIL 1, 2016; THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", THE LATEST REVISION; THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", (IMUTCOD); "THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" JUNE 2014 SEVENTH EDITION, THE "DETAILS" IN THE PLANS AND THE "SPECIAL PROVISIONS" INCLUDED IN THE CONTRACT DOCUMENTS.

ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED AS THE LATEST IDOT HIGHWAY STANDARD.

CODES OF THE IEPA TITLE 35, AND O.S.H.A. SHALL BE ADHERED TO FOR THE CONSTRUCTION OF THIS PROJECT.

ALL TRAFFIC CONTROL AND OTHER ADVISORY SIGNS NEEDED FOR CONSTRUCTION ARE TO BE FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH SECTION 700 OF THE STANDARD SPECIFICATIONS.

ALL REQUIRED PERMITS FROM THE PROPER GOVERNING AGENCY SHALL BE OBTAINED FOR CONSTRUCTION ALONG OR ACROSS EXISTING STREETS OR HIGHWAYS. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE PROPER BRACING, SHEETING, SHORING AND OTHER REQUIRED PROTECTION OF ALL ROADWAYS BEFORE CONSTRUCTION BEGINS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE STREETS OR ROADWAYS AND ASSOCIATED STRUCTURES AND SHALL MAKE REPAIRS AS NECESSARY TO THE SATISFACTION OF THE AGENCY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC.

UTILITIES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL EXISTING UTILITY FACILITIES SO THAT THE UTILITIES AND THEIR APPURTENANCES MAY BE LOCATED AND ADJUSTED OR MOVED, IF NECESSARY, PRIOR TO THE START OF CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS AS PROVIDED FOR IN THE STANDARD SPECIFICATIONS.

THE LOCATIONS OF EXISTING DRAINAGE STRUCTURES, STORM AND SANITARY SEWERS, WATER SERVICE LINES AND OTHER UTILITY LINES ARE APPROXIMATE, AND THE VILLAGE DOES NOT GUARANTEE THEIR ACCURACY. THEIR EXACT HORIZONTAL AND VERTICAL LOCATIONS ARE TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR AT HIS/HER OWN EXPENSE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE COVERED BY THE CONTRACTOR AT HIS/HER OWN EXPENSE.

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 8-1-1 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, GAS AND CABLE.

THE CONTRACTOR SHALL CONTACT IDOT'S BUREAU OF MATERIALS (PHONE 847-705-4337) AT LEAST 24 HOURS BEFORE PLACING HOT-MIX ASPHALT OR PORTLAND CEMENT CONCRETE.

MISCELLANEOUS

DIMENSIONS: IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.

ALL SAWCUTTING SHALL BE PERFORMED PRIOR TO BEGINNING REMOVAL. ANY ITEMS OF WORK REMOVED PRIOR TO SAWCUTTING WILL NOT BE MEASURED FOR PAYMENT.

COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT, SIDEWALK REMOVAL AND REPLACEMENT, DRIVEWAY REMOVAL AND REPLACEMENT, AND STRUCTURES TO BE ADJUSTED WILL BE DETERMINED BY THE ENGINEER IN THE FIELD AND WILL NOT EXCEED THE PLANNED QUANTITY.

THE THICKNESSES OF HOT-MIX ASPHALT MIXTURES SHOWN IN THE PLANS ARE NOMINAL. DEVIATIONS MAY OCCUR DUE TO IRREGULARITIES IN THE SURFACES OR BASIS ON WHICH THEY ARE TO BE PLACED. PLAN THICKNESSES SHOULD BE CONSIDERED THE MINIMUM THICKNESS PERMITTED.

DETECTABLE WARNINGS SHALL BE INSTALLED AT INTERSECTING STREETS, DRIVEWAYS, AND ALLEYS AS SHOWN ON THE PLANS (SEE DETAILS ON SHEETS 16&17).

PAVEMENT GRADES: THE ELEVATIONS INDICATED ON THE PLANS ARE FINISHED GRADES OF PROPOSED PAVEMENT OR SURFACE COURSE, UNLESS OTHERWISE INDICATED.

CONTRACTOR SHALL NOT PLACE SOD UNTIL THE TEMPERATURE IS 80 OR LESS AND THE FORECAST FOR THE NEXT 7 DAYS SHOWS TEMPERATURES OF 80 OR LESS. IF ALL OTHER PAY ITEMS ARE COMPLETED, THE CONTRACTOR WILL NOT BE CHARGED WORKING DAYS FOR DELAYS IN PARKWAY RESTORATION DUE TO TEMPERATURE.

NO CONSTRUCTION SHALL BEGIN UNTIL ALL PROPER TEMPORARY SIGNS AND BARRICADES HAVE BEEN INSTALLED.

AT NO TIME SHALL LESS THAN HALF OF THE STREET BE AVAILABLE FOR PARKING.

CONCRETE FILL BETWEEN NEW CURB AND GUTTER AND EXISTING PAVEMENT: FILLING THE GAP BETWEEN THE EXISTING PAVEMENT AND PROPOSED CURB AND GUTTER REMOVAL AND REPLACEMENT SHALL BE IN ACCORDANCE WITH IDOT HIGHWAY STANDARD 606001.

ALL DETECTABLE WARNING TACTILES SHALL BE FIELD VERIFIED AND THE SIZE TO BE DETERMINED BY THE CONTRACTOR PRIOR TO ORDERING.

	DATE SENT TO UTILITY COMPANY	RESPONSE DATE	COMMENTS
AT&T (DISTRIBUTION) 1000 COMMERCE DRIVE, FLOOR 1 OAKBROOK, ILLINOIS 60523 ATTN: STEVE LARSON Office: 630-573-5450	7/24/2017	8/14/2017	NO CONFLICTS ANTICIPATED
COMCAST 688 INDUSTRIAL DRIVE ELMHURST, IL 60126 ATTN: MARTHA GIERAS Office: 630-600-6352	7/24/2017	7/31/2017	NO CONFLICTS ANTICIPATED
COMED 7601 S. LAWNSDALE AVENUE CHICAGO, IL 60652 ATTN: PETER KRATZER Mobile: 708-518-6209	7/24/2017		
G4S TECHNOLOGY 565 WILLOWBROOK CENTRE PARKWAY WILLOWBROOK, IL 60527 ATTN: DOUG GONES Office: 630-343-2826	7/24/2017		
HBK ENGINEERING 921 W. VAN BUREN STREET CHICAGO, IL 60607 ATTN: JAMES NORTON Office: 312-432-0076	7/24/2017		
NICOR GAS 1844 FERRY ROAD NAPERVILLE, IL 60563 ATTN: BRUCE KOPPANG Office: 630-388-3046	7/24/2017	8/18/2017	NO CONFLICTS ANTICIPATED
SPRINT NEXTEL CORPORATION 5600 N. RIVER ROAD, SUITE 200 ROSEMONT, IL 60018 ATTN: JIM BURTON Mobile: 708-955-6659	7/24/2017	7/26/2017	NO CONFLICTS ANTICIPATED

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HIGHWAY STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
424001-10	CURB RAMPS FOR SIDEWALKS
424006-03	DIAGONAL CURB RAMPS FOR SIDEWALKS
424011-03	CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
424016-04	MID-BLOCK CURB RAMPS FOR SIDEWALKS
442201-03	CLASS C AND D PATCHES
604001-04	FRAME AND LIDS TYPE 1
606001-07	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE
701101-05	OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER, OR CROSSWALK CLOSURE
701901-07	TRAFFIC CONTROL DEVICES
780001-05	TYPICAL PAVEMENT MARKINGS
886001-01	DETECTOR LOOP INSTALLATIONS

DISTRICT 1 STANDARDS

BD-08	FRAMES AND LIDS ADJUSTMENT WITH MILLING
BD-22	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT
BD-24	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
BD-32	BUTT JOINT AND HMA TAPER DETAILS
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
TS-05	STANDARD TRAFFIC SIGNAL DESIGN DETAILS
TS-07	DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING
TC-13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TC-22	ARTERIAL ROAD INFORMATION SIGN

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	CONSTRUCTION
			CODE 0005
			TOTAL QUANTITY
20800150	TRENCH BACKFILL	CU YD	50
28000510	INLET FILTERS	EACH	43
40600290	BITUMINOUS MATERIALS (TACK COAT)	FOUND	9000
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	175
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	693
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	170
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	1385
42300300	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 7 INCH	SQ YD	497
42400800	DETECTABLE WARNINGS	SQ FT	300
44000160	HOT-MIX ASPHALT SURFACE REMOVAL, 2 3/4"	SQ YD	11200
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	497
44000600	SIDEWALK REMOVAL	SQ FT	4164
44201713	CLASS D PATCHES, TYPE I, 6 INCH	SQ YD	250
44201717	CLASS D PATCHES, TYPE II, 6 INCH	SQ YD	250
44201721	CLASS D PATCHES, TYPE III, 6 INCH	SQ YD	250
44201723	CLASS D PATCHES, TYPE IV, 6 INCH	SQ YD	250
550A2320	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 1 1/2"	FOOT	185
60206905	CATCH BASINS, TYPE C, TYPE 1 FRAME, OPEN LID	EACH	1
60234200	INLETS, TYPE A, TYPE 1 FRAME, OPEN LID	EACH	8
60406000	FRAMES AND LIDS, TYPE 1, OPEN LID	EACH	7
60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	9
67100100	MOBILIZATION	LSUM	1
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	LSUM	1
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	LSUM	1
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	LSUM	1
78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	50
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	100
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	235
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	205
78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	340
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
88600600	DETECTOR LOOP REPLACEMENT	FOOT	120
Z0004562	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	1868
Z0013798	CONSTRUCTION LAYOUT	LSUM	1
Z0018700	DRAINAGE STRUCTURE TO BE REMOVED	EACH	8
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	100
X0326862	STRUCTURES TO BE ADJUSTED	EACH	5
X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	21
X4023000	TEMPORARY ACCESS (ROAD)	EACH	6
X4240430	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL	SQ FT	4164
X6022712	CATCH BASINS, TYPE A, 4'-DIAMETER WITH SPECIAL FRAME AND GRATE	EACH	14
X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	18
X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	35
XX006947	HOT-MIX ASPHALT DRIVEWAY REMOVAL AND REPLACEMENT	SQ YD	221

* INDICATES SPECIALTY ITEM
 ** INDICATES SPECIAL PROVISION

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	PLOT DATE = 11/7/2017	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

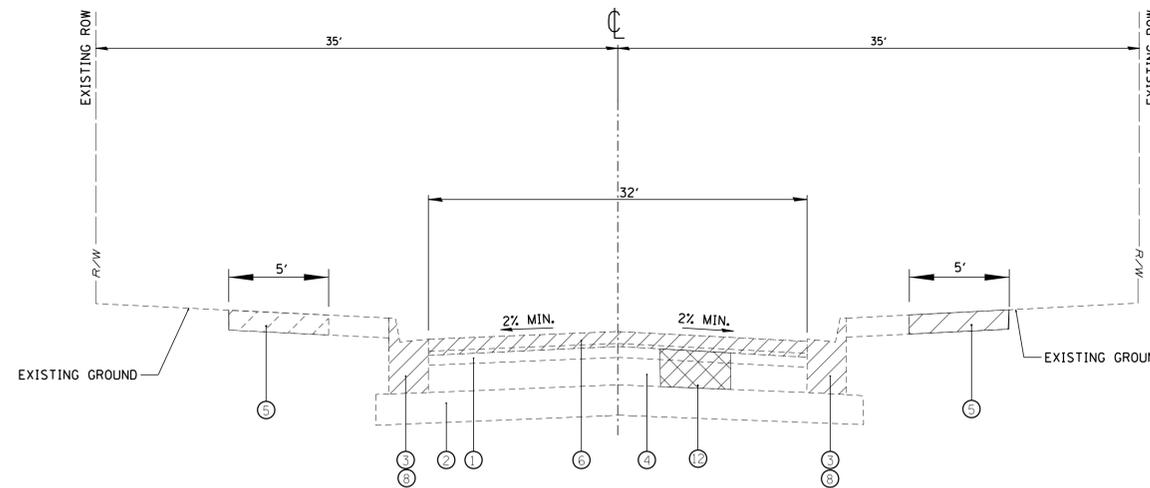
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MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1090 & 4020	17-00060-00-RS	COOK	35	3
CONTRACT NO. 61E19				
ILLINOIS FED. AID PROJECT				

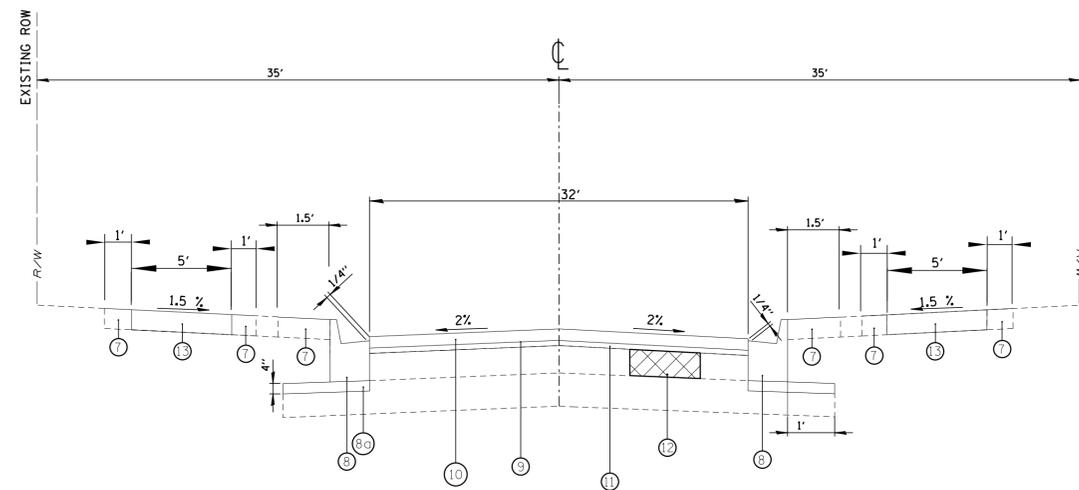
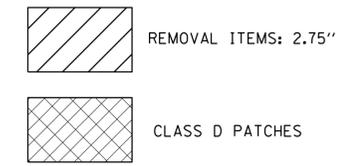
HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
ITEM	VOIDS
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm), 2"	4% @ 50 GYR.
LEVELING BINDER (MACHINE METHOD), N50 - 1"	4% @ 50 GYR.
CLASS D PATCHES, 6 INCH	4% @ 70 GYR.

NOTE:

1. THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE IS 112 LBS/SY/IN.
2. THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.
3. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.
4. THE HIGH SIDE OF THE ROADWAY SHALL BE PAVED FIRST.



EXISTING TYPICAL SECTION
STA. 18+90 TO STA. 34+63, OKETO AVENUE



PROPOSED TYPICAL SECTION
STA. 18+90 TO STA. 34+63, OKETO AVENUE

NOTES:

1. PAVING OF THE FULL ROADWAY WIDTH SHALL BE COMPLETED AT THE END OF EACH DAY OF PAVING TO PREVENT A LONGITUDINAL COLD JOINT FROM APPEARING WHEN OPPOSITE SIDES OF THE ROAD ARE PAVED ON DIFFERENT DAYS. THE CONTRACTOR SHALL ALSO ENSURE THAT AT THE END OF EACH DAY EACH PASS ENDS AT APPROXIMATELY THE SAME STATION TO PREVENT A COLD JOINT.
2. ALL CURB AND GUTTER AND SIDEWALK REMOVAL AND REPLACEMENT SHALL BE SPOT REPAIR ONLY AS DIRECTED BY THE ENGINEER.

LEGEND

- | | |
|--|--|
| ① EXISTING HOT-MIX ASPHALT PAVEMENT | ⑨ PROPOSED BITUMINOUS MATERIAL (TACK COAT) |
| ② EXISTING AGGREGATE SUBBASE | ⑩ HOT-MIX ASPHALT SURFACE COURSE, MIX "D" N50 - 2" |
| ③ EXISTING CURB AND GUTTER | ⑪ LEVELING BINDER (MACHINE METHOD), N50 - 1" |
| ④ EXISTING AGGREGATE BASE | ⑫ CLASS D PATCHES, 6 INCH |
| ⑤ EXISTING PCC SIDEWALK | ⑬ PROPOSED PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH (SPOT REPAIR AS DIRECTED BY THE ENGINEER) (SIDEWALKS THROUGH DRIVEWAYS SHALL BE 7 INCHES THICK - THIS WORK WILL BE INCLUDED IN THE PAY ITEM FOR PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH) |
| ⑥ HOT-MIX ASPHALT SURFACE REMOVAL, 2.75" | |
| ⑦ SODDING, SALT TOLERANT (INCLUDED IN THE COST OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT AND SIDEWALK REMOVAL AND REPLACEMENT PAY ITEMS) | |
| **RESTORATION/LANDSCAPING PAY ITEMS AND BASIS OF PAYMENT WILL BE DECIDED IN PHASE 2 | |
| ⑧ COMBINATION CONCRETE CURB AND GUTTER (B-6.12) REMOVAL AND REPLACEMENT (SPOT REPAIR) (AS DIRECTED BY THE ENGINEER) | |
| ⑬ 4" SUBBASE GRANULAR MATERIAL TYPE B. (INCLUDED IN COST OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT) | |

CORE DETAILS

CORE STATION	CORE NUMBER	ASPHALT TOTAL THICKNESS	SUBBASE THICKNESS
35+48.68	1	8.0"	14"
32+91.02	2	11.7"	14"
29+38.08	3	10.8"	NP
26+83.78	4	11.9"	16"
24+55.64	5	13.0"	NP
22+21.20	6	12.1"	NP
15+54.22	7	4.0"	6"
12+01.58	8	4.0"	9"
23+20.80	9	13.7"	1"
23+29.49	10	11.3"	NP
23+41.18	11	12.6"	NP
23+53.62	12	15.3"	NP
23+60.71	13	8.8"	NP

AVG. (OKETO) 9.4" 7.4"
 AVG. (WILSON) 12.3" 1"
 •NP = GRANULAR BASE NOT PRESENT

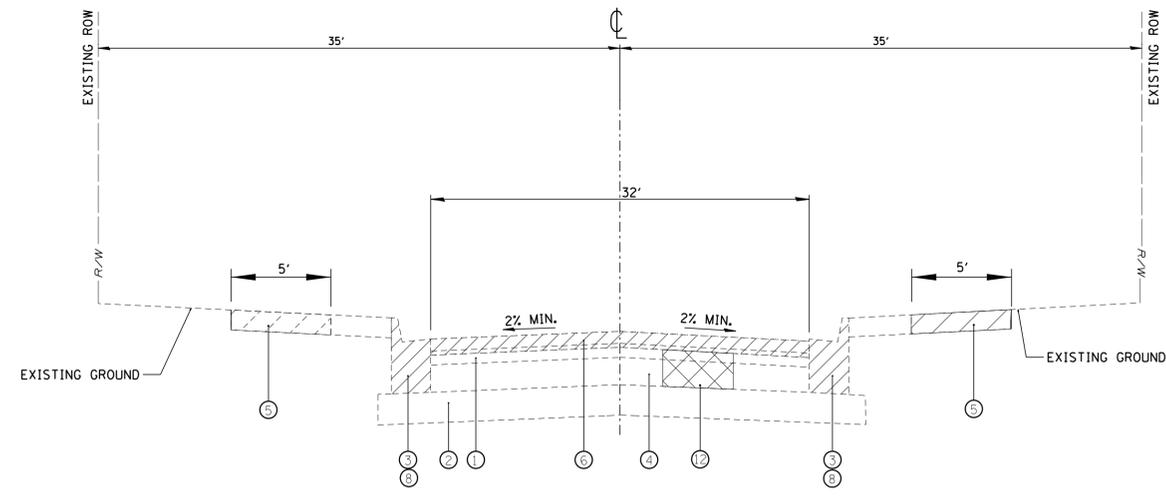
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

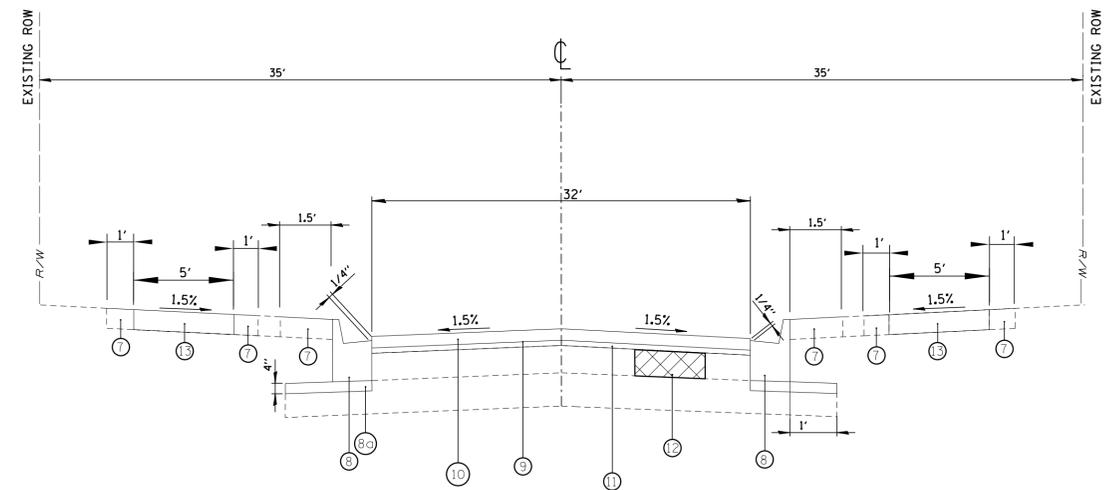
OKETO AVENUE
TYPICAL SECTIONS

SCALE: 50' SHEET NO. 4 OF 35 SHEETS STA. TO STA.

F.A.U. RTE. 1090 & 4020	SECTION 17-00060-00-RS	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 4
			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				



EXISTING TYPICAL SECTION
STA. 40+00 TO STA. 52+74, WILSON AVENUE



PROPOSED TYPICAL SECTION
STA. 40+00 TO STA. 52+74, WILSON AVENUE

NOTES:

- PAVING OF THE FULL ROADWAY WIDTH SHALL BE COMPLETED AT THE END OF EACH DAY OF PAVING TO PREVENT A LONGITUDINAL COLD JOINT FROM APPEARING WHEN OPPOSITE SIDES OF THE ROAD ARE PAVED ON DIFFERENT DAYS. THE CONTRACTOR SHALL ALSO ENSURE THAT AT THE END OF EACH DAY EACH PASS ENDS AT APPROXIMATELY THE SAME STATION TO PREVENT A COLD JOINT.
- ALL CURB AND GUTTER AND SIDEWALK REMOVAL AND REPLACEMENT SHALL BE SPOT REPAIR ONLY AS DIRECTED BY THE ENGINEER.

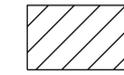
LEGEND

- | | |
|--|--|
| ① EXISTING HOT-MIX ASPHALT PAVEMENT | ⑨ PROPOSED BITUMINOUS MATERIAL (TACK COAT) |
| ② EXISTING AGGREGATE SUBBASE | ⑩ HOT-MIX ASPHALT SURFACE COURSE, MIX "D" N50 - 2" |
| ③ EXISTING CURB AND GUTTER | ⑪ LEVELING BINDER (MACHINE METHOD), N50 - 1" |
| ④ EXISTING AGGREGATE BASE | ⑫ CLASS D PATCHES, 6 INCH |
| ⑤ EXISTING PCC SIDEWALK | ⑬ PROPOSED PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH (SPOT REPAIR AS DIRECTED BY THE ENGINEER) (SIDEWALKS THROUGH DRIVEWAYS SHALL BE 7 INCHES THICK - THIS WORK WILL BE INCLUDED IN THE PAY ITEM FOR PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH) |
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| ⑧ COMBINATION CONCRETE CURB AND GUTTER (8-6.12) REMOVAL AND REPLACEMENT (SPOT REPAIR) (AS DIRECTED BY THE ENGINEER) | |
| ⑧④ 4" SUBBASE GRANULAR MATERIAL TYPE B. (INCLUDED IN COST OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT) | |

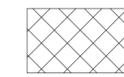
HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
ITEM	VOIDS
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (1L 9.5 mm), 2"	4% @ 50 GYR.
LEVELING BINDER (MACHINE METHOD), N50 - 1"	4% @ 50 GYR.
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NOTE:

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- FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.
- THE HIGH SIDE OF THE ROADWAY SHALL BE PAVED FIRST.



REMOVAL ITEMS: 2.75"

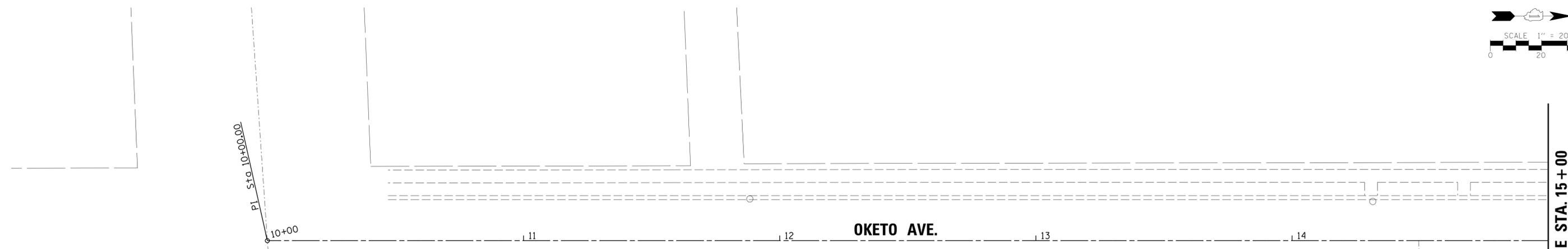
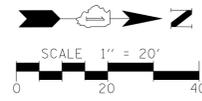


CLASS D PATCHES

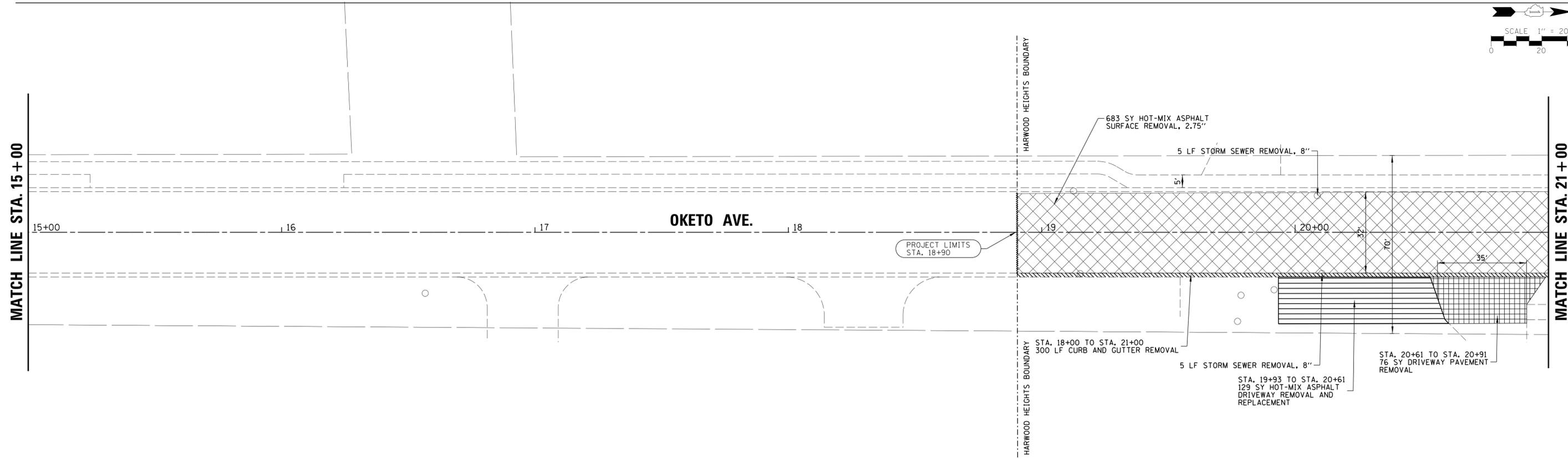
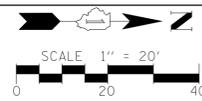
CORE DETAILS

CORE STATION	CORE NUMBER	ASPHALT TOTAL THICKNESS	SUBBASE THICKNESS
35+48.68	1	8.0"	14"
32+91.02	2	11.7"	14"
29+38.08	3	10.8"	NP
26+83.78	4	11.9"	16"
24+55.64	5	13.0"	NP
22+21.20	6	12.1"	NP
15+54.22	7	4.0"	6"
12+01.58	8	4.0"	9"
23+20.80	9	13.7"	1"
23+29.49	10	11.3"	NP
23+41.18	11	12.6"	NP
23+53.62	12	15.3"	NP
23+60.71	13	8.8"	NP

AVG. (OKETO) 9.4" 7.4"
AVG. (WILSON) 12.3" 1"
•NP = GRANULAR BASE NOT PRESENT



- LEGEND:**
- CURB AND GUTTER REMOVAL
 - SIDEWALK REMOVAL
 - HOT-MIX ASPHALT SURFACE REMOVAL, 2.75"
 - FRAMES AND LIDS TO BE ADJUSTED
 - PCC DRIVEWAY REMOVAL
 - HMA DRIVEWAY REMOVAL
 - HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT
 - DRAINAGE STRUCTURES TO BE REMOVED



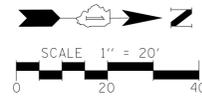
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	PLOT DATE = 11/7/2017	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**OKETO AVENUE
EXISTING CONDITIONS
AND REMOVAL PLAN**

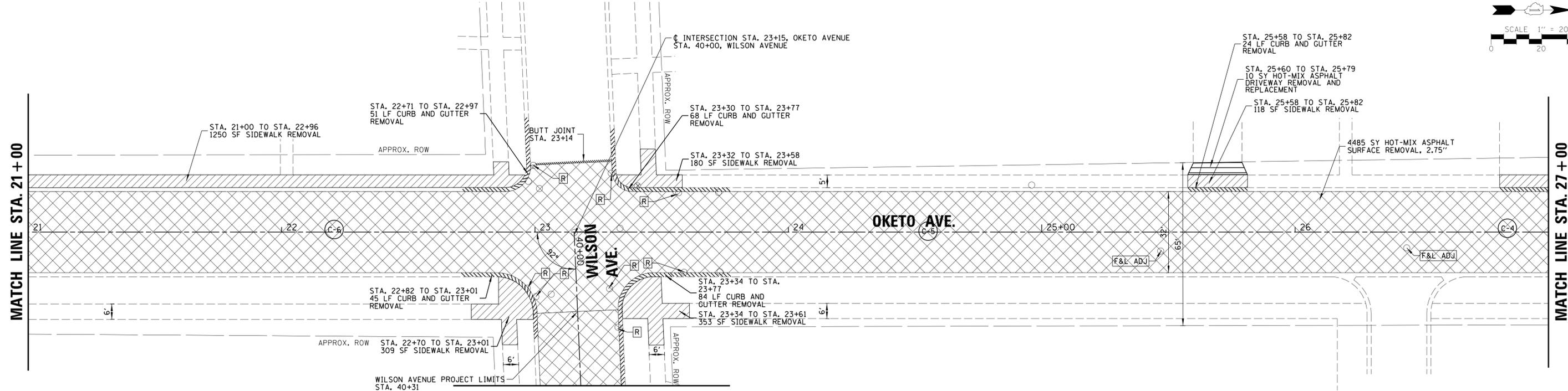
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MUN. RTE. 1090 & 4020	SECTION 17-00060-00-RS	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 6
				CONTRACT NO. 61E19
ILLINOIS FED. AID PROJECT				



MATCH LINE STA. 21 + 00

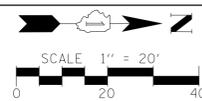
MATCH LINE STA. 27 + 00



MATCH LINE STA. 40 + 60

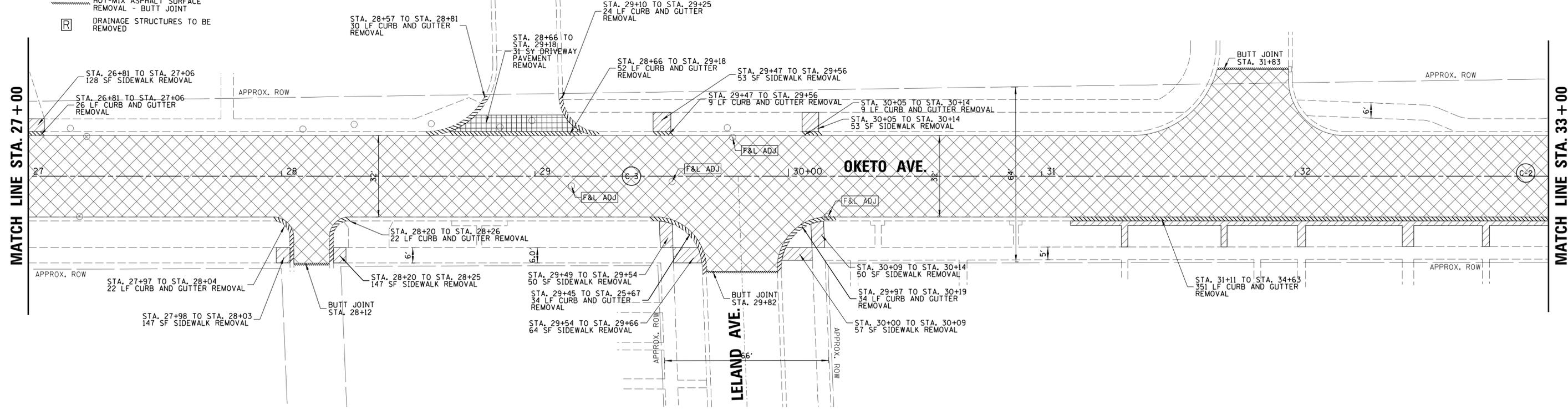
LEGEND:

- CURB AND GUTTER REMOVAL
- SIDEWALK REMOVAL
- HOT-MIX ASPHALT SURFACE REMOVAL, 2.75"
- FRAMES AND LIDS TO BE ADJUSTED
- PCC DRIVEWAY REMOVAL
- HMA DRIVEWAY REMOVAL
- HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT
- DRAINAGE STRUCTURES TO BE REMOVED



MATCH LINE STA. 27 + 00

MATCH LINE STA. 33 + 00



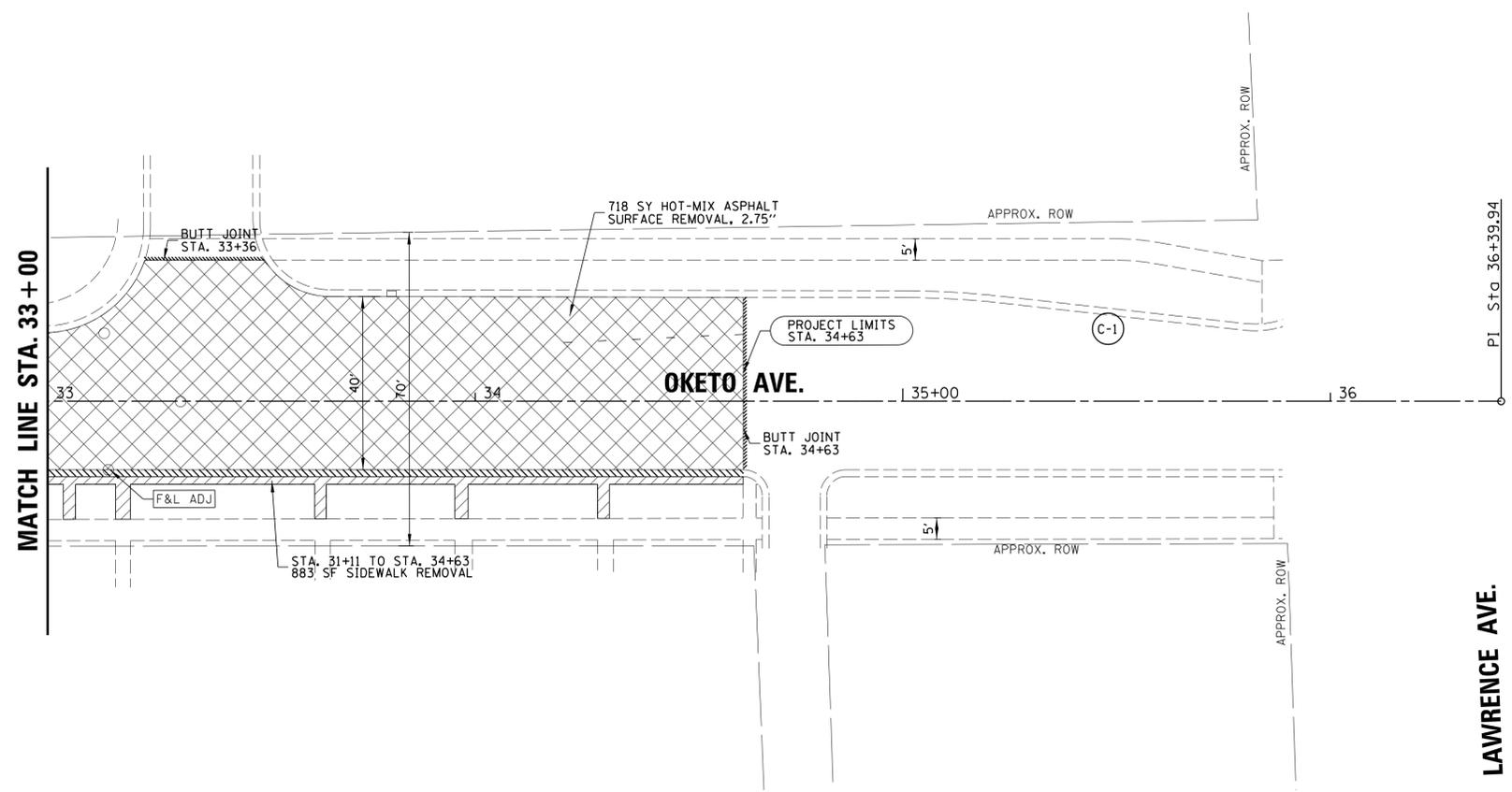
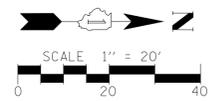
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OKETO AVENUE
EXISTING CONDITIONS
AND REMOVAL PLAN

SCALE: SHEET OF SHEETS STA. TO STA.

MUN. RTE. 1090 & 4020	SECTION 17-00060-00-RS	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 7
				CONTRACT NO. 61E19
ILLINOIS FED. AID PROJECT				



- LEGEND:**
- CURB AND GUTTER REMOVAL
 - SIDEWALK REMOVAL
 - HOT-MIX ASPHALT SURFACE REMOVAL, 2.75"
 - FRAMES AND LIDS TO BE ADJUSTED
 - PCC DRIVEWAY REMOVAL
 - HMA DRIVEWAY REMOVAL
 - HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT
 - DRAINAGE STRUCTURES TO BE REMOVED

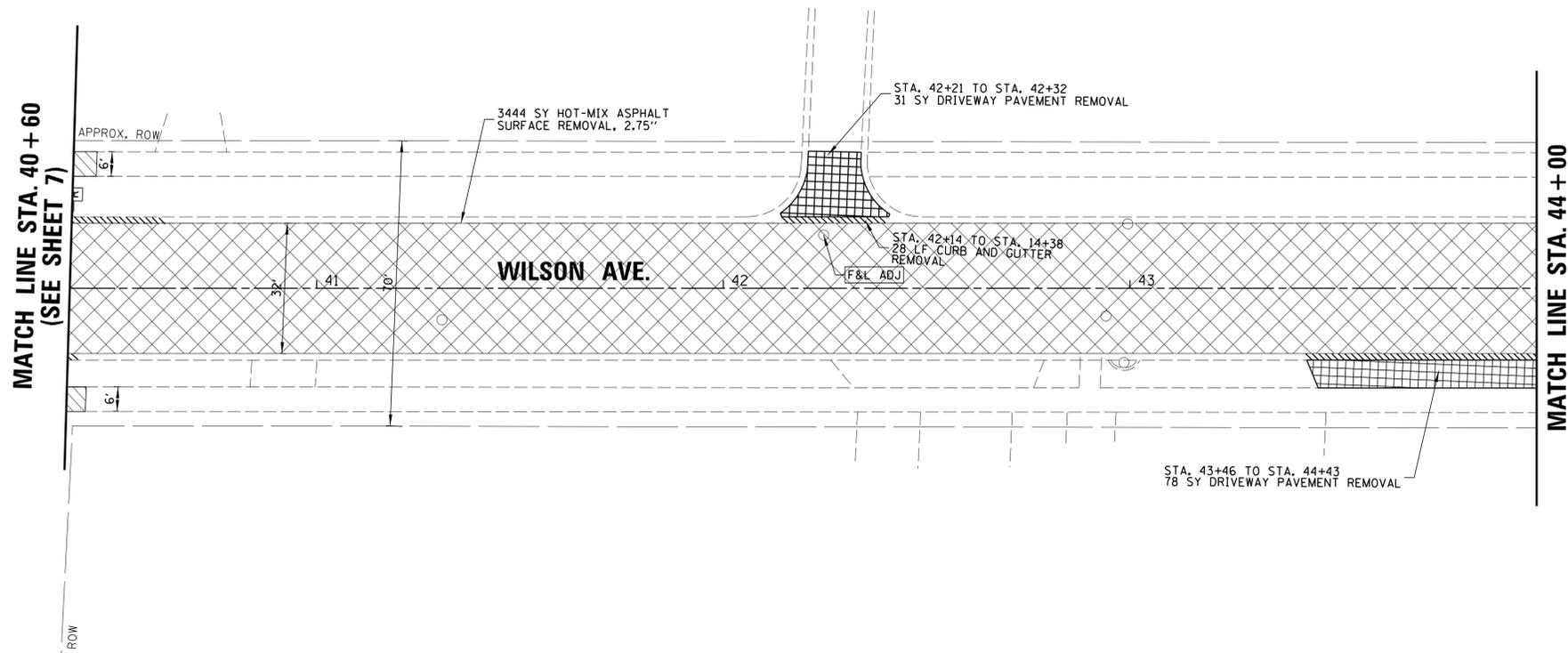
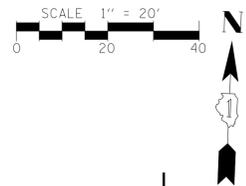
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**OKETO AVENUE
EXISTING CONDITIONS
AND REMOVAL PLAN**

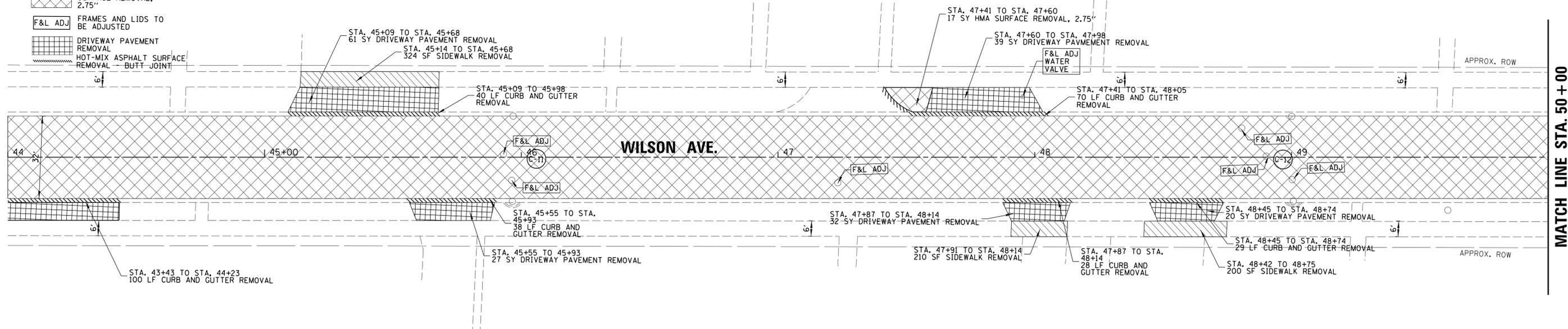
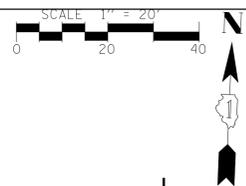
SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
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MUN. RTE. 1090 & 4020	SECTION 17-00060-00-RS	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 8
CONTRACT NO. 61E19				ILLINOIS FED. AID PROJECT



LEGEND:

- CURB AND GUTTER REMOVAL
- SIDEWALK REMOVAL
- HOT-MIX ASPHALT SURFACE REMOVAL, 2.75"
- FRAMES AND LIDS TO BE ADJUSTED
- DRIVEWAY PAVEMENT REMOVAL
- HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT



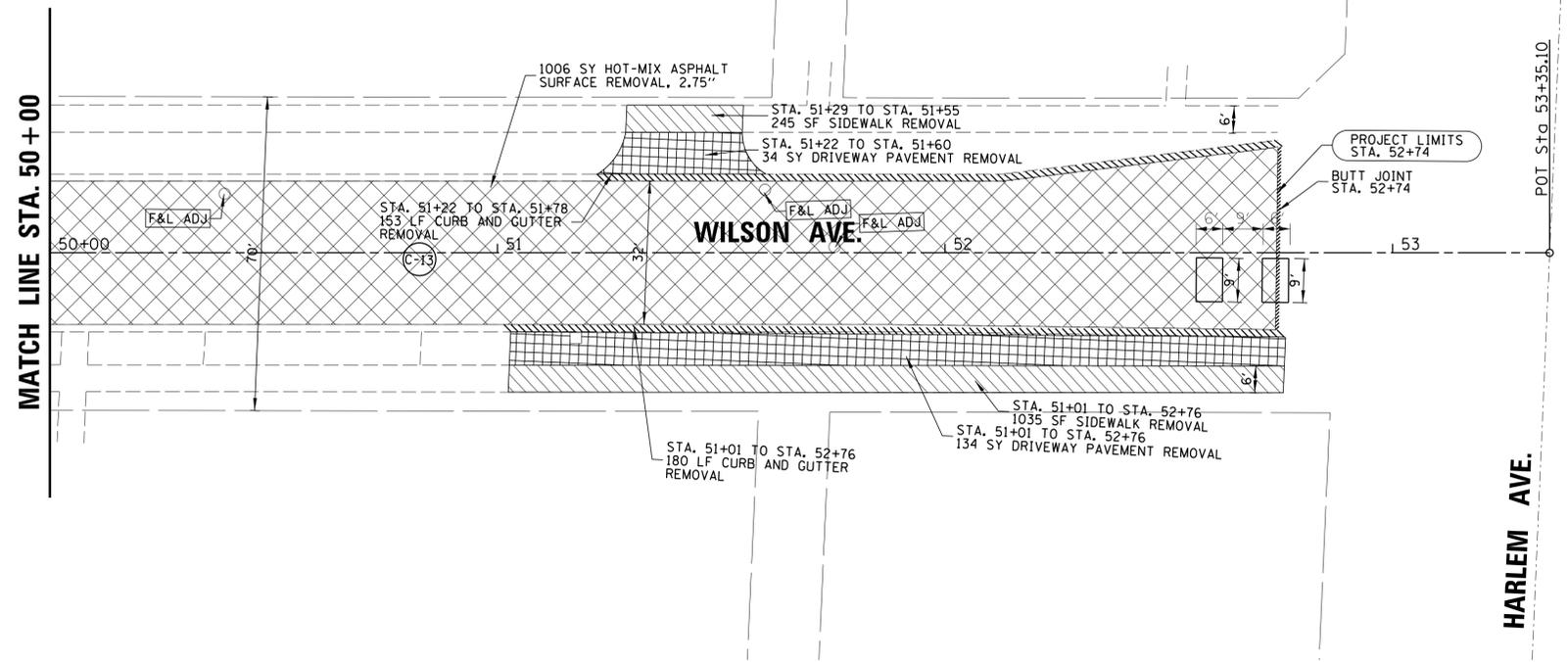
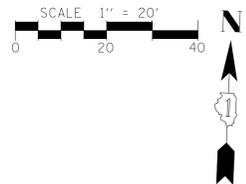
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	PLOT DATE = 11/7/2017	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**OKETO AVENUE
EXISTING CONDITIONS
AND REMOVAL PLAN**

SCALE: SHEET OF SHEETS STA. TO STA.

MUN. RTE. 1090 & 4020	SECTION 17-00060-00-RS	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 9
ILLINOIS FED. AID PROJECT			CONTRACT NO. 61E19	



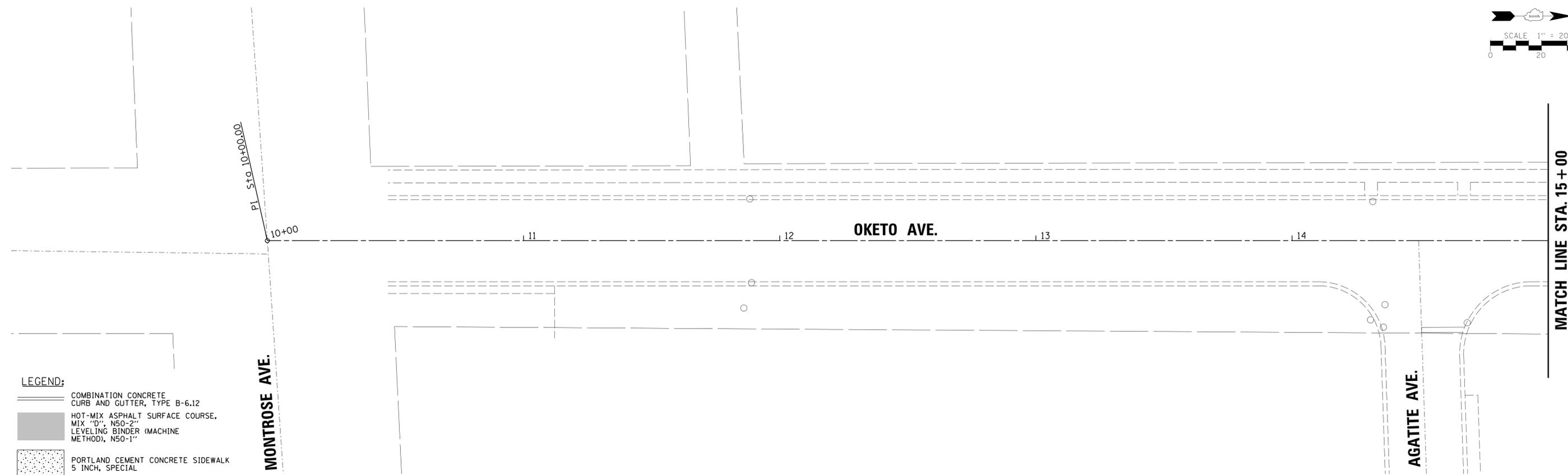
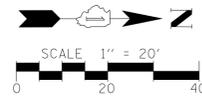
- LEGEND:**
- CURB AND GUTTER REMOVAL
 - SIDEWALK REMOVAL
 - HOT-MIX ASPHALT SURFACE REMOVAL, 2.75"
 - FRAMES AND LIDS TO BE ADJUSTED
 - DRIVEWAY PAVEMENT REMOVAL
 - HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT

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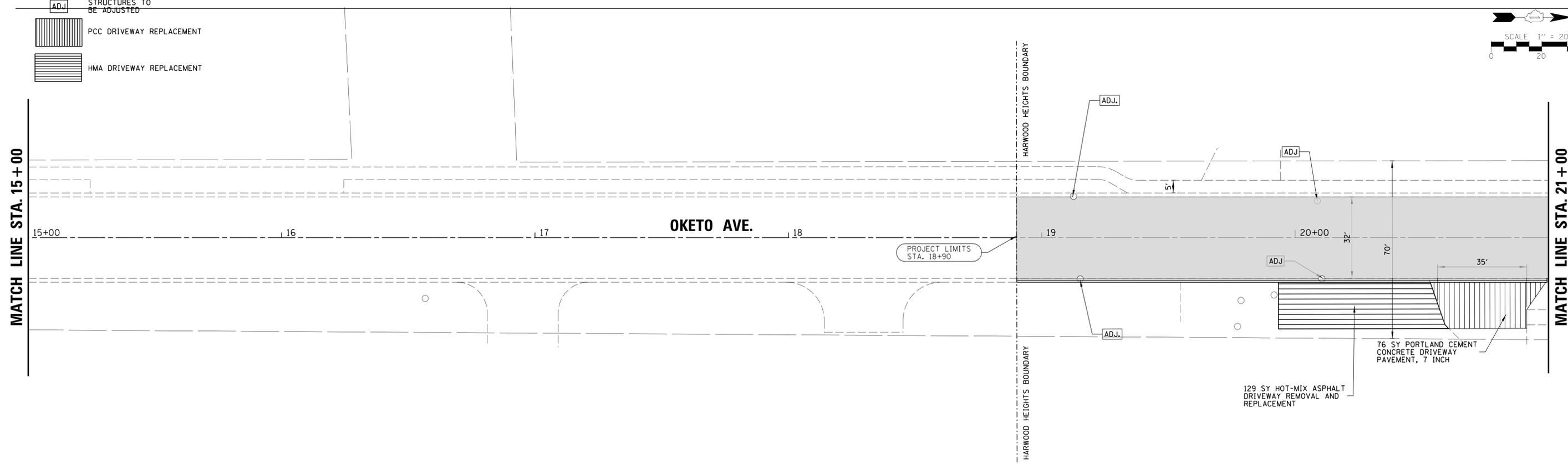
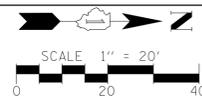
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

OKETO AVENUE EXISTING CONDITIONS AND REMOVAL PLAN			
SCALE:	SHEET	OF	SHEETS
	STA.	TO	STA.

MUN. RTE. 1090 & 4020	SECTION 17-00060-00-RS	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 10
CONTRACT NO. 61E19				
ILLINOIS FED. AID PROJECT				



- LEGEND:**
- COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
 - HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50-2" LEVELING BINDER (MACHINE METHOD), N50-1"
 - PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL
 - DETECTABLE WARNING
 - STRUCTURES TO BE ADJUSTED
 - PCC DRIVEWAY REPLACEMENT
 - HMA DRIVEWAY REPLACEMENT



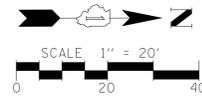
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		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**OKETO AVENUE
PROPOSED PLAN**

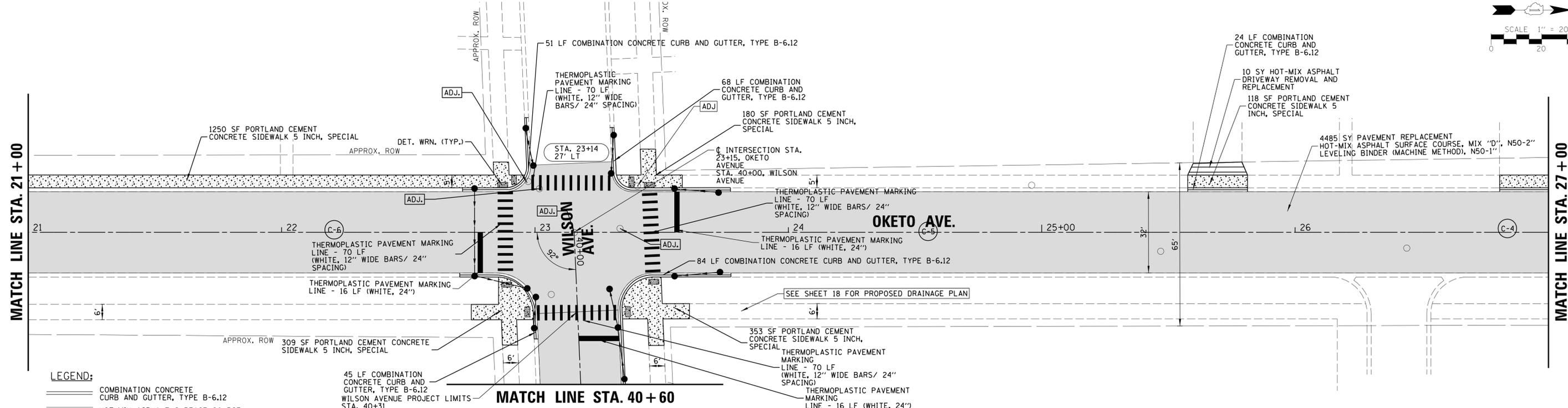
SCALE: SHEET OF SHEETS STA. TO STA.

MUN. RTE. 1090 & 4020	SECTION 17-00060-00-RS	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 11
CONTRACT NO. 61E19				ILLINOIS FED. AID PROJECT



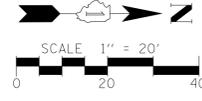
MATCH LINE STA. 21 + 00

MATCH LINE STA. 27 + 00



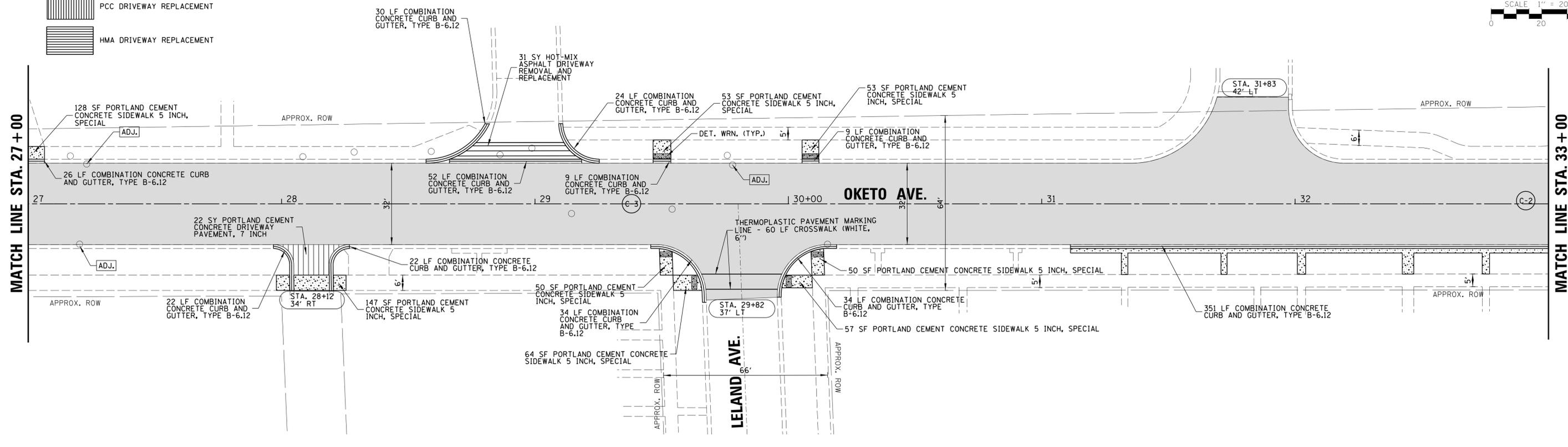
LEGEND:

-  COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
-  HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50-2" LEVELING BINDER (MACHINE METHOD), N50-1"
-  PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL
-  DETECTABLE WARNING
-  STRUCTURES TO BE ADJUSTED
-  PCC DRIVEWAY REPLACEMENT
-  HMA DRIVEWAY REPLACEMENT



MATCH LINE STA. 27 + 00

MATCH LINE STA. 33 + 00



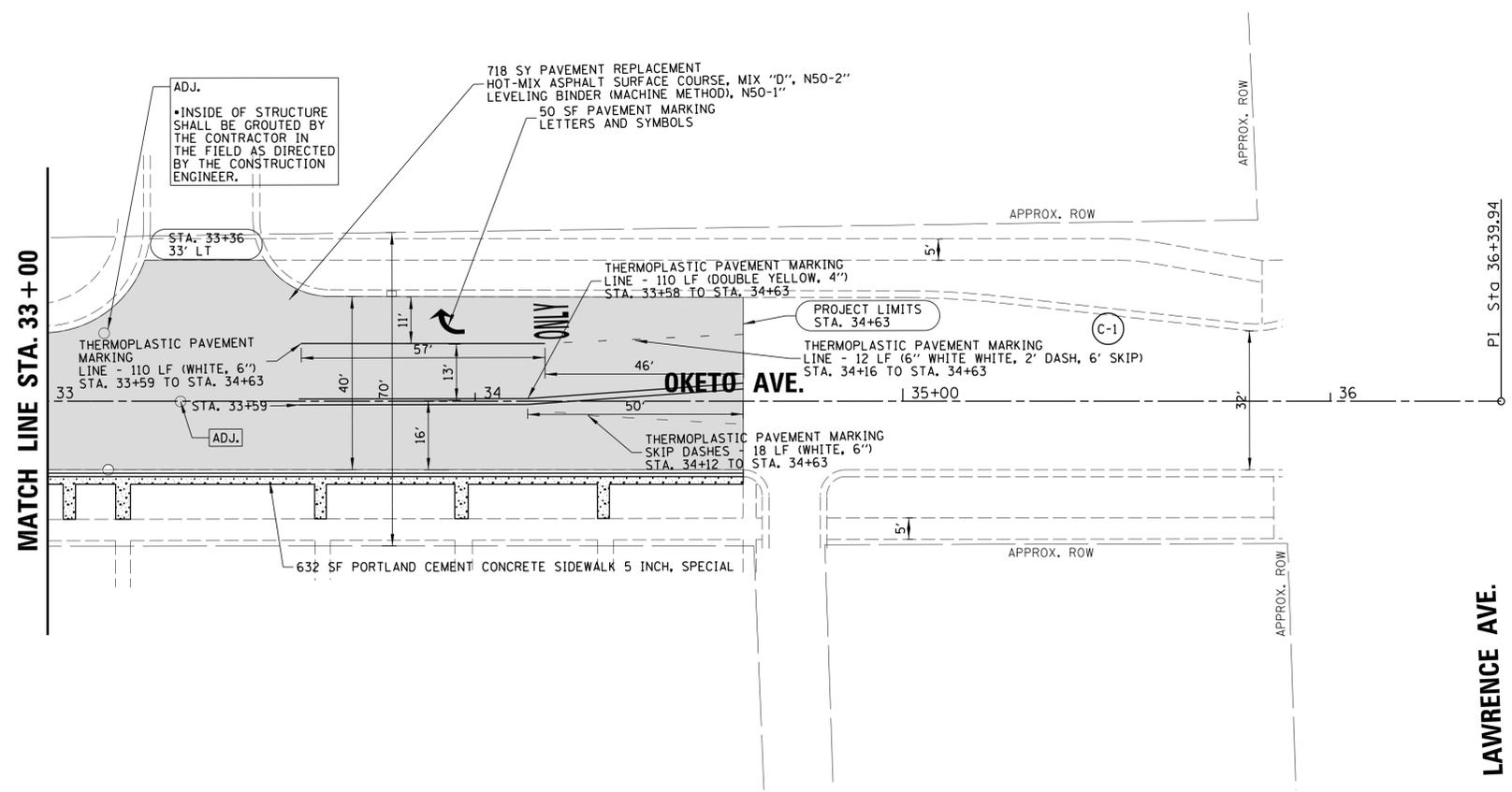
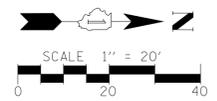
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Default	PLOT SCALE = 20'	CHECKED - LMF	REVISED -
	PLOT DATE = 11/7/2017	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**OKETO AVENUE
PROPOSED PLAN**

SCALE: SHEET OF SHEETS STA. TO STA.

MUN. RTE. 1090 & 4020	SECTION 17-00060-00-RS	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 12
CONTRACT NO. 61E19				
ILLINOIS FED. AID PROJECT				



LEGEND:

-  COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
-  HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50-2" LEVELING BINDER (MACHINE METHOD), N50-1"
-  PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL
-  DETECTABLE WARNING
-  STRUCTURES TO BE ADJUSTED
-  PCC DRIVEWAY REPLACEMENT
-  HMA DRIVEWAY REPLACEMENT

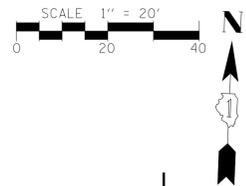
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

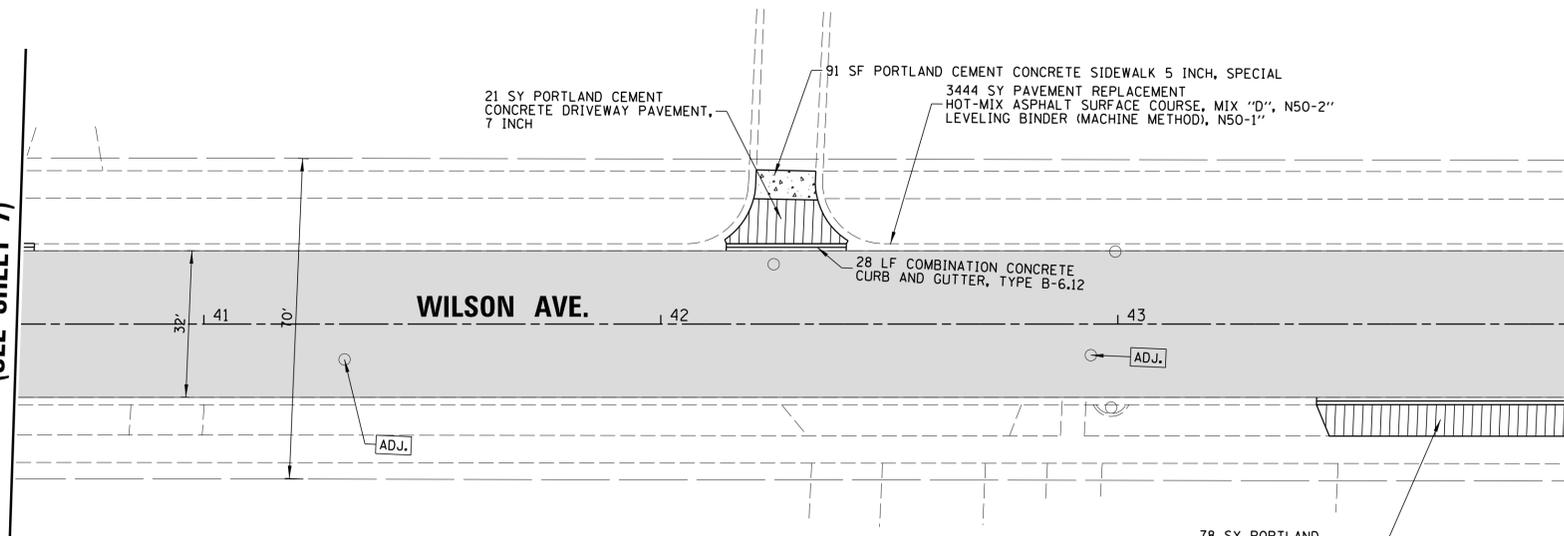
**OKETO AVENUE
PROPOSED PLAN**

SCALE: SHEET OF SHEETS STA. TO STA.

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CONTRACT NO. 61E19				ILLINOIS FED. AID PROJECT



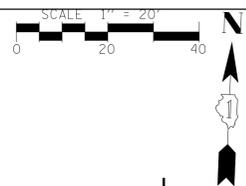
MATCH LINE STA. 40 + 60
(SEE SHEET 7)



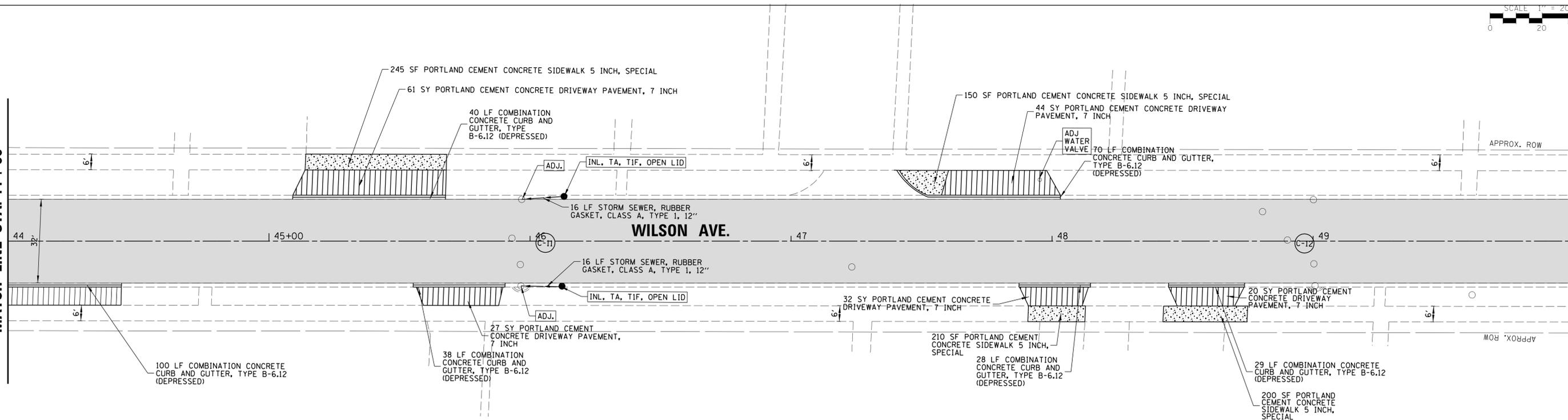
MATCH LINE STA. 44 + 00

LEGEND:

-  COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
-  HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50-2" LEVELING BINDER (MACHINE METHOD), N50-1"
-  PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL
-  DETECTABLE WARNING
-  STRUCTURES TO BE ADJUSTED
-  PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 7 INCH



MATCH LINE STA. 44 + 00



MATCH LINE STA. 50 + 00

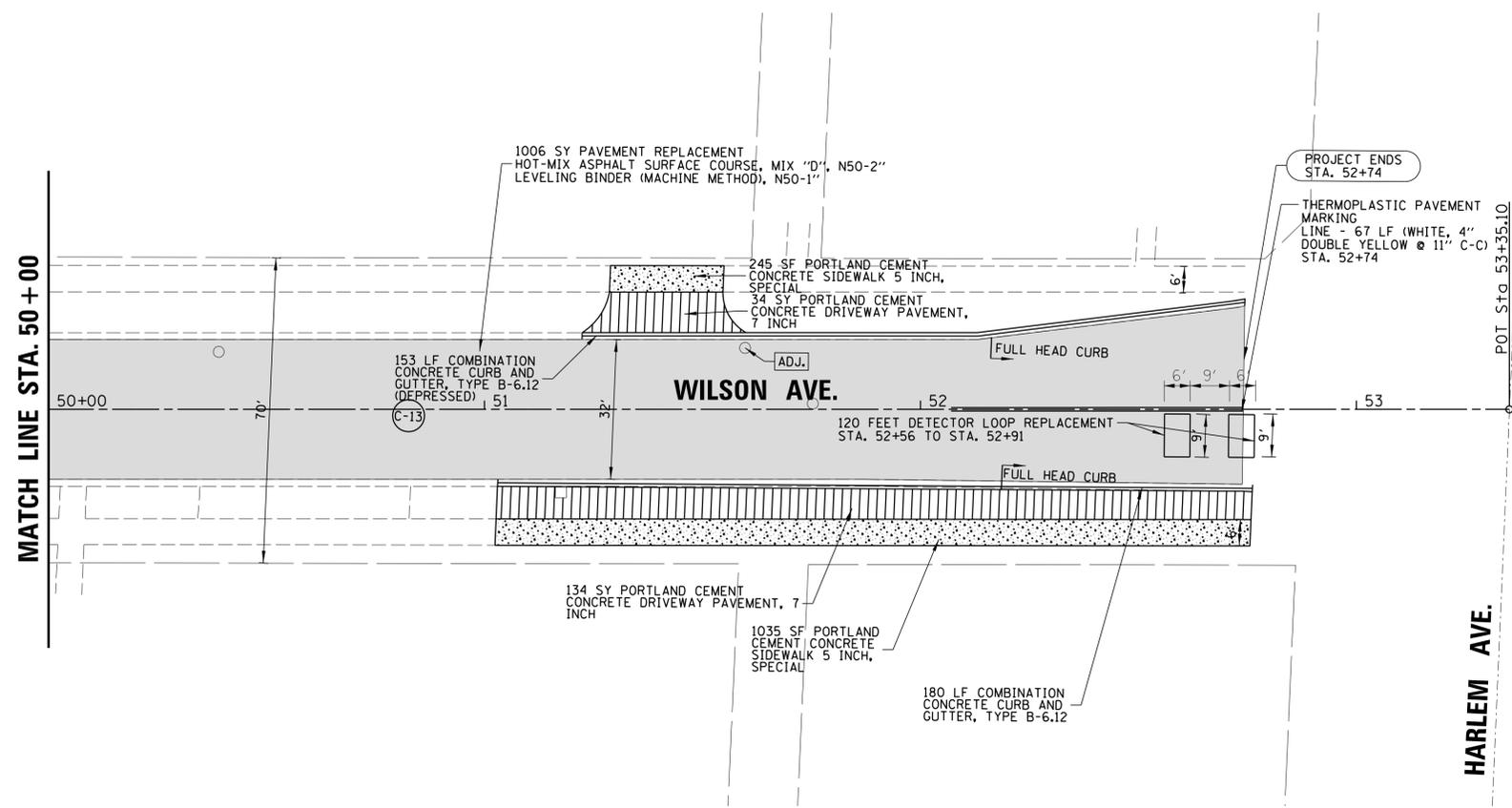
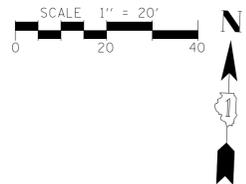
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WILSON AVENUE
PROPOSED PLAN**

SCALE: SHEET OF SHEETS STA. TO STA.

MUN. RTE. 1090 & 4020	SECTION 17-00060-00-RS	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 14
				CONTRACT NO. 61E19
ILLINOIS FED. AID PROJECT				



- LEGEND:**
- COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
 - HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50-2" LEVELING BINDER (MACHINE METHOD), N50-1"
 - PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL
 - DETECTABLE WARNING
 - STRUCTURES TO BE ADJUSTED
 - PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 7 INCH

FILE NAME =	USER NAME = jhouseh	DESIGNED - JEH	REVISED -
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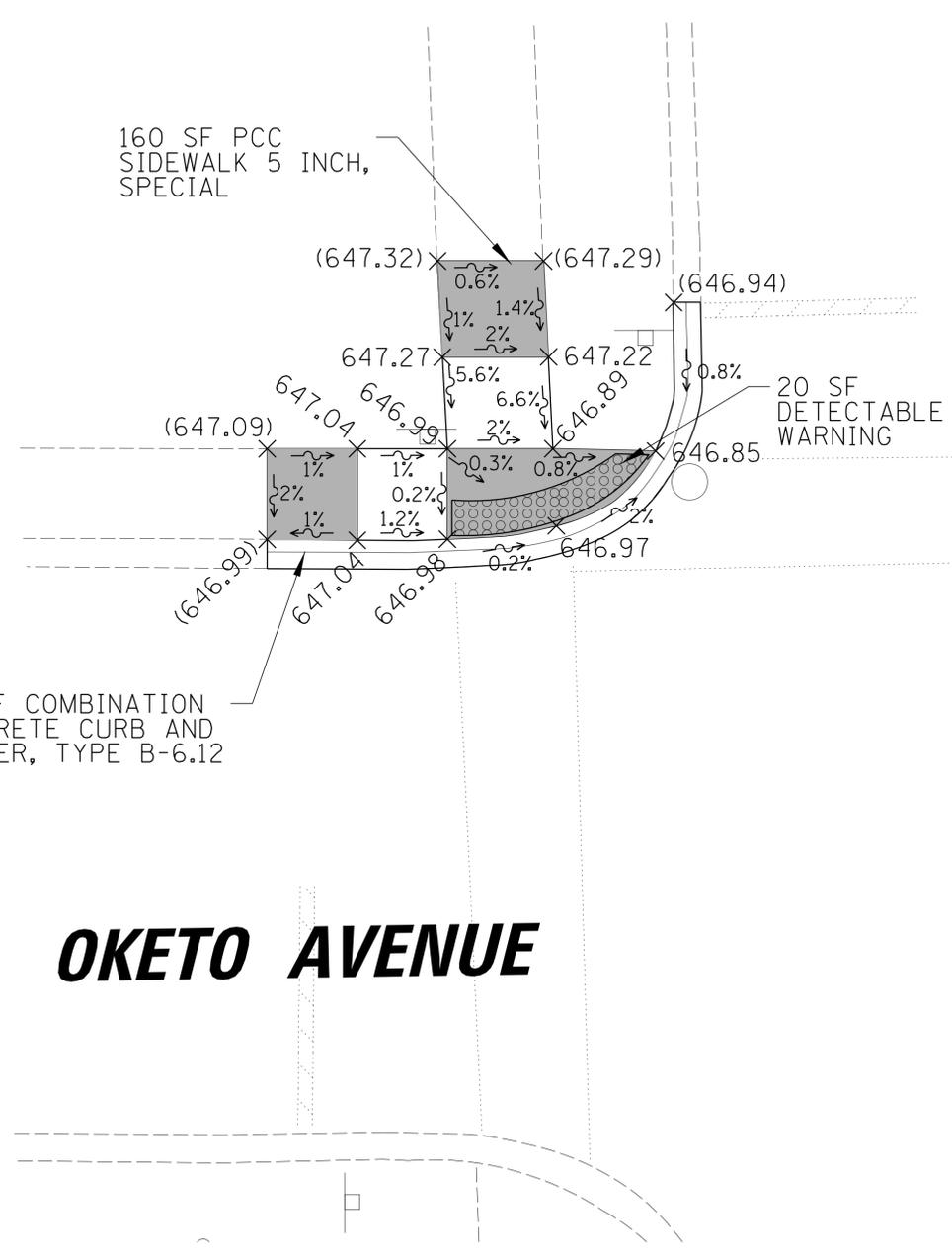
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WILSON AVENUE
PROPOSED PLAN**

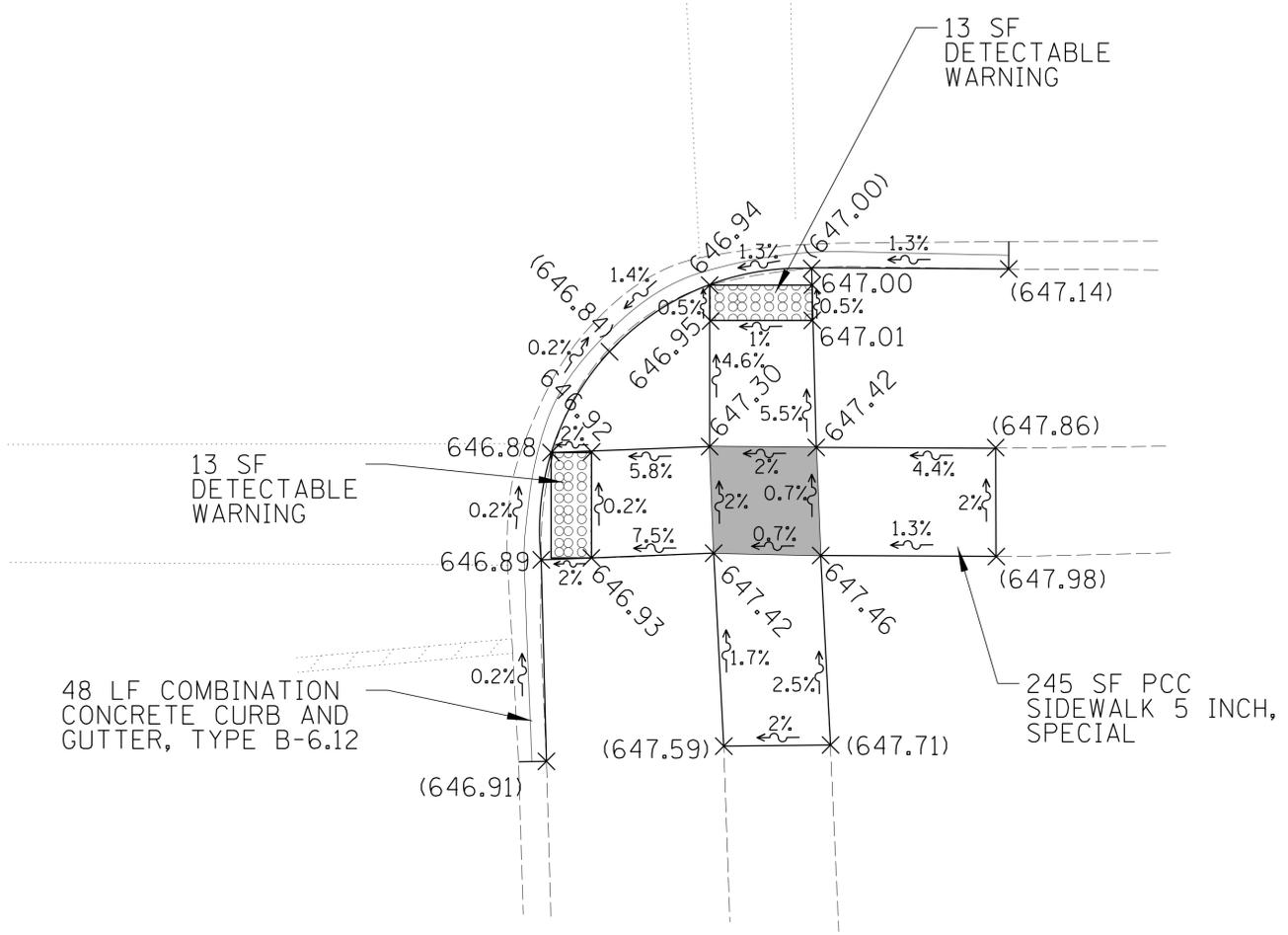
SCALE: SHEET OF SHEETS STA. TO STA.

MUN. RTE. 1090 & 4020	SECTION 17-00060-00-RS	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 15
CONTRACT NO. 61E19				ILLINOIS FED. AID PROJECT

OKETO AVENUE



WILSON AVENUE



LEGEND:

(XXX.XX) = EXISTING SPOT GRADE
 XXX.XX = PROPOSED SPOT GRADE

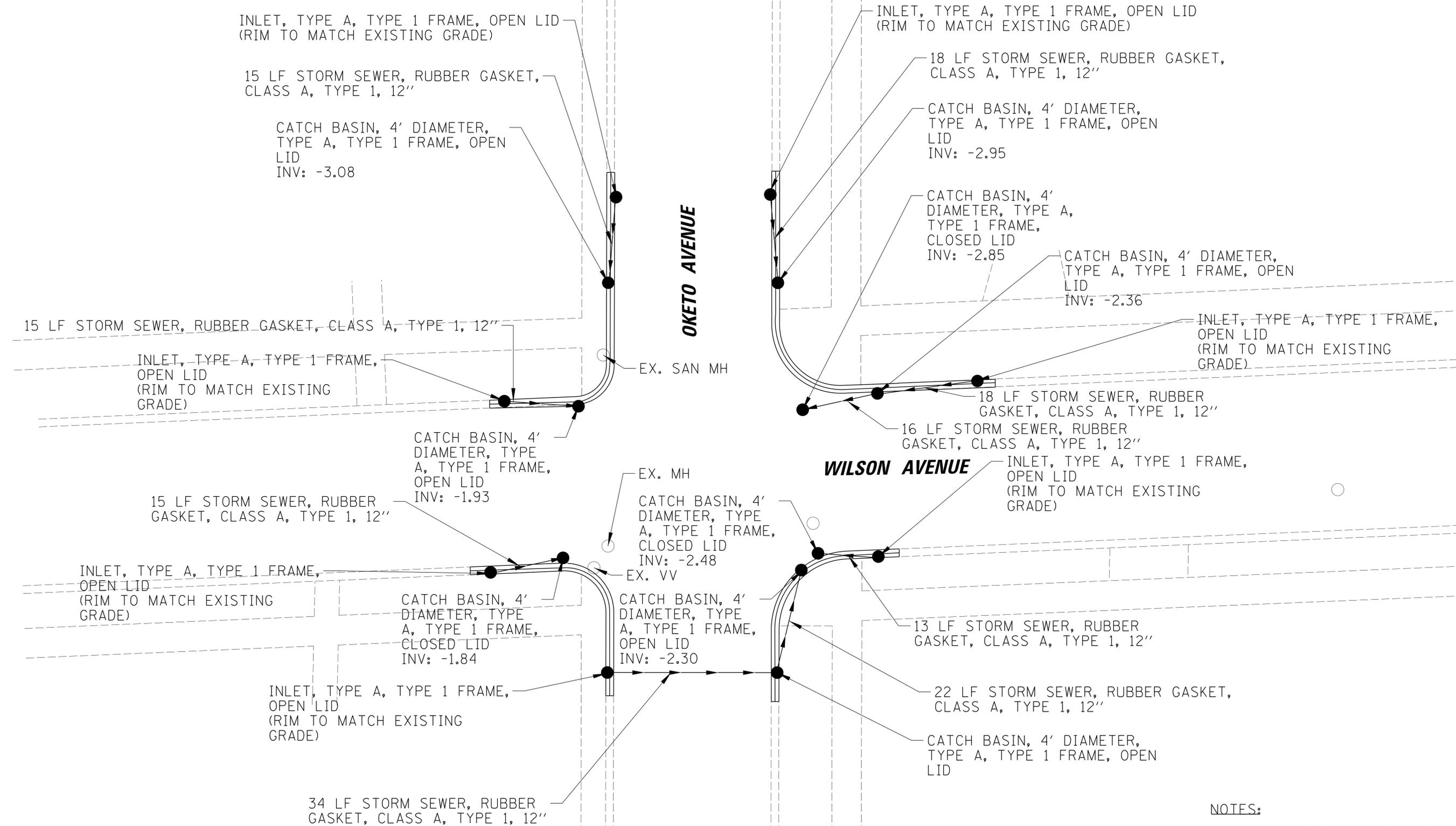
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**OKETO AND WILSON AVENUE
 SOUTHWEST AND NORTHEAST CORNER
 SIDEWALK REPLACEMENT PLAN**

SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.
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MUN. RTE. 1090 & 4020	SECTION 17-00060-00-RS	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 16
CONTRACT NO. 61E19				
ILLINOIS FED. AID PROJECT				



- NOTES:**
1. ALL STORM SEWER TO BE INSTALLED AT MINIMUM 0.5% SLOPE. FINAL INVERTS TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
 2. ALL PROPOSED STRUCTURES TO RECEIVE FLAT TOP SLABS.

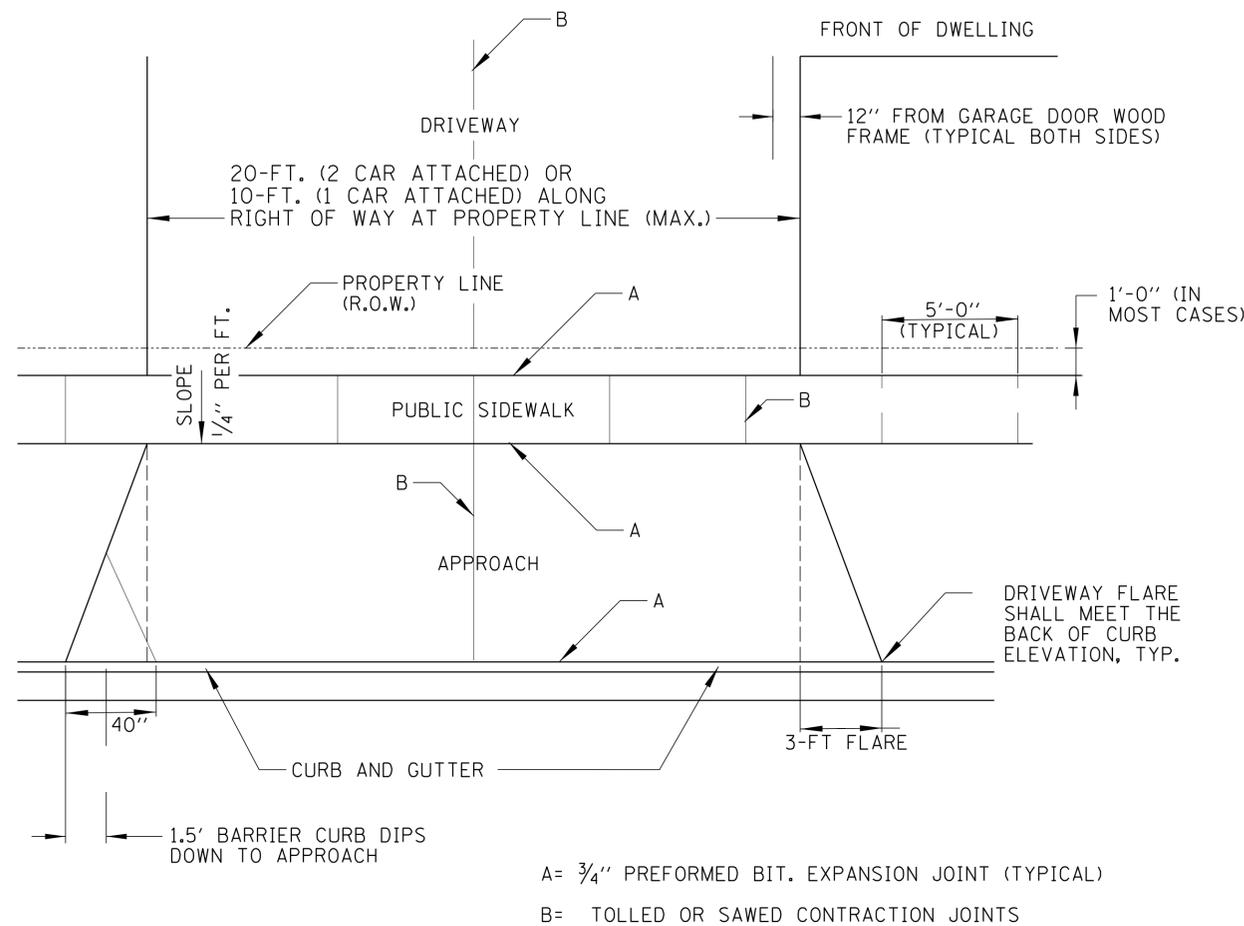
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DATE = 10/5/2017		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PROPOSED DRAINAGE PLAN

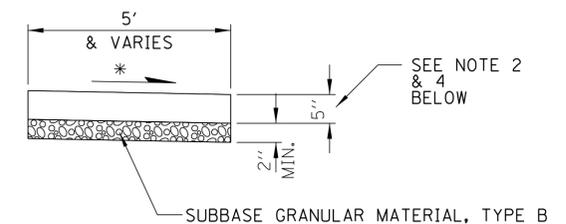
SCALE: SHEET OF SHEETS STA. TO STA.

MUN. RTE. 1090 & 4020	SECTION 17-00060-00-RS	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 18
CONTRACT NO. 61E19			ILLINOIS FED. AID PROJECT	



DRIVEWAY WITH A CURB AND GUTTER

- GENERAL NOTES:
1. DRIVEWAY SHALL HAVE A MIN. SLOPE OF 2% AND MAX. SLOPE OF 6%.
 2. APPROACH SHALL HAVE A MIN. SLOPE OF 2% AND MAX. OF 6%.
 3. ALL AGGREGATE SUB-BASE SHALL BE MECHANICALLY COMPACTED. (95% PROCTOR)
 4. PUBLIC SIDEWALK SHALL BE 6" AT RESIDENTIAL DRIVEWAYS AND 8" AT COMMERCIAL/INDUSTRIAL DRIVEWAYS. (NO WIRE MESH)
 5. MINIMUM THICKNESS FOR APPROACH. (NO WIRE MESH). THIS WILL BE PAID FOR BY THE FOLLOWING ITEMS:
 - A. 7" THK. P.C. CONCRETE ON 2" AGGREGATE BASE COURSE TYPE B OR
 - B. 3" THK. HOT-MIX ASPHALT SURFACE, MIX "D" N50 ON 6" AGGREGATE BASE COURSE TYPE B
 6. SODDING, SALT TOLERANT AND TOPSOIL, 4" (100) RESTORATION SHALL BE INCLUDED IN THE COST OF THIS WORK.



- CROSS SLOPE 2% OR AS SHOWN ON CROSS SECTIONS
1. ALL REQUIRED EARTH EXCAVATION TO CONSTRUCT P.C.C. SIDEWALK SHALL BE INCLUDED IN THE COST OF P.C.C. SIDEWALK 5 INCH, SPECIAL.
 2. WHEN FORMS ARE REMOVED FROM THE SIDEWALK EITHER THE SIDEWALK SHALL BE BARRICADED OR BACKFIELD WITHIN 24 HOURS.
 3. SODDING, SALT TOLERANT AND TOPSOIL, 4" (100) RESTORATION WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF P.C.C. SIDEWALK 5 INCH, SPECIAL.
 4. PUBLIC SIDEWALK SHALL BE 6" AT RESIDENTIAL DRIVEWAYS AND 8" AT COMMERCIAL/INDUSTRIAL DRIVEWAYS.

P.C.C. SIDEWALK DETAIL

FILE NAME =	USER NAME = jhouseh	DESIGNED - JEH	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

SCALE: SHEET OF SHEETS STA. TO STA.

MUN. RTE. 1090 & 4020	SECTION 17-00060-00-RS	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 19
CONTRACT NO. 61E19				ILLINOIS FED. AID PROJECT

VARIABLE - TO MEET EXISTING DIMENSIONS AND FIELD CONDITIONS (SEE NOTE ②)

PROP. CONC. CURB OR CURB AND GUTTER REPLACEMENT IN ACCORDANCE WITH STATE STANDARD 606001. (SEE NOTE ②)

SAW CUT FULL DEPTH - INCLUDED IN THE COST OF SIDEWALK, DRIVEWAY OR MEDIAN SURFACE REMOVAL PAY ITEM.

SEE STATE STANDARD 606001

18" (450) MAX.

EXISTING OR PROPOSED HMA SURFACE (IF APPLICABLE)

1/4" (5) **

EXISTING SIDEWALK, DRIVEWAY, MEDIAN SURFACE, SOD OR GROUND.

PROPOSED SIDEWALK, DRIVEWAY PAVEMENT, MEDIAN SURFACE OR SODDING SALT TOLERANT WITH TOP SOIL, 4" (100) SOD RESTORATION (SEE NOTE ①).

EXISTING CONCRETE PAVEMENT, CONCRETE BASE COURSE OR FLEXIBLE PAVEMENT

3" (75) MIN.

SUITABLE BACKFILL MATERIAL (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT)

PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USUABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

BASIS OF PAYMENT:

THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

** IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.

SODDING, SALT TOLERANT AND TOP SOIL, FURNISH AND PLACE 4" WILL BE INCLUDED IN THE COST OF THIS WORK.

② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED

③ CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

④ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

⑤ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑥ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.

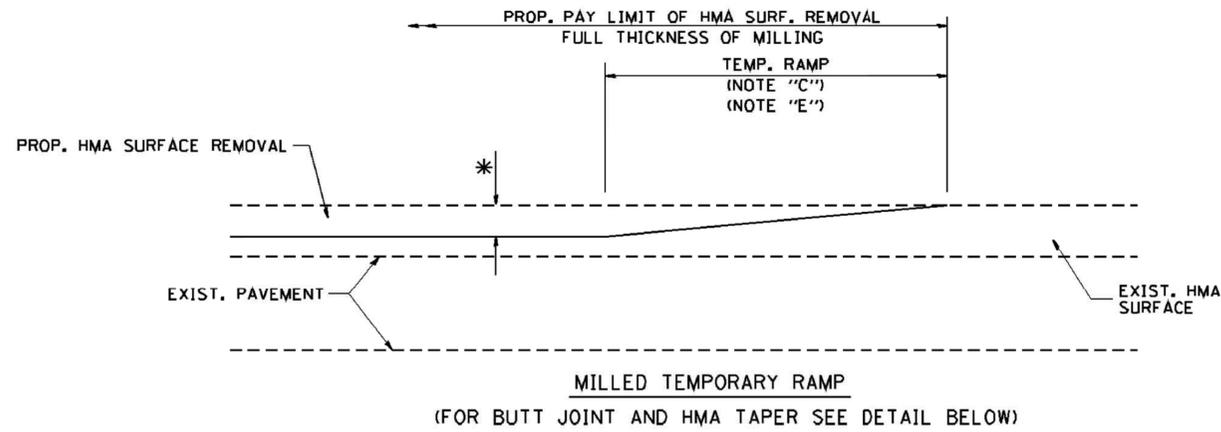
⑦ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

⑧ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

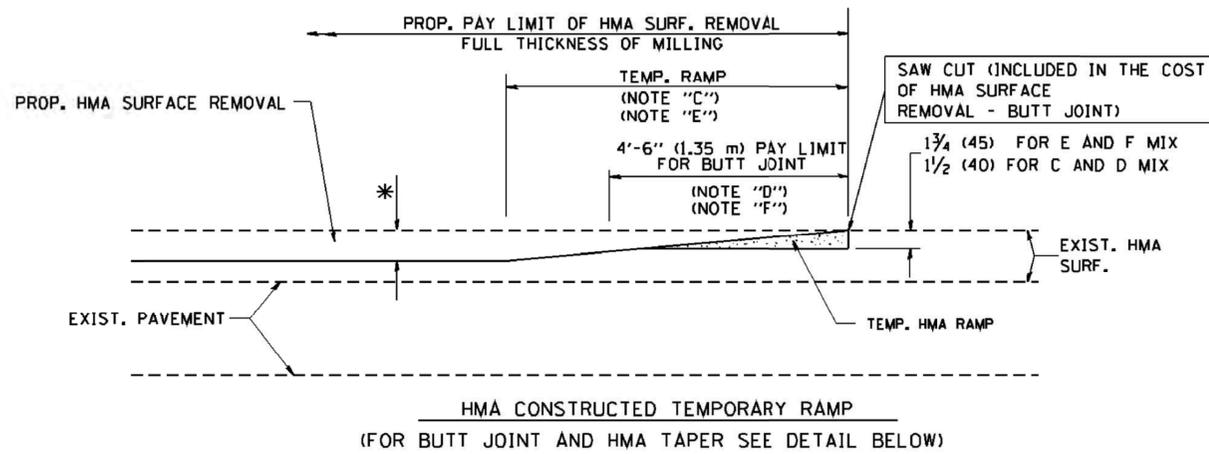
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAME =	USER NAME = drivakosgn	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
24.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97			17-00060-00-RS	COOK	35	20	
PLOT SCALE = 50.000' / IN.		CHECKED -	REVISED - M. GOMEZ 01-22-01			BD600-06 (BD-24)			CONTRACT NO. 61E19	
PLOT DATE = 12/15/2009		DATE - 03-11-94	REVISED - R. BORO 12-15-09			FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
					SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.		

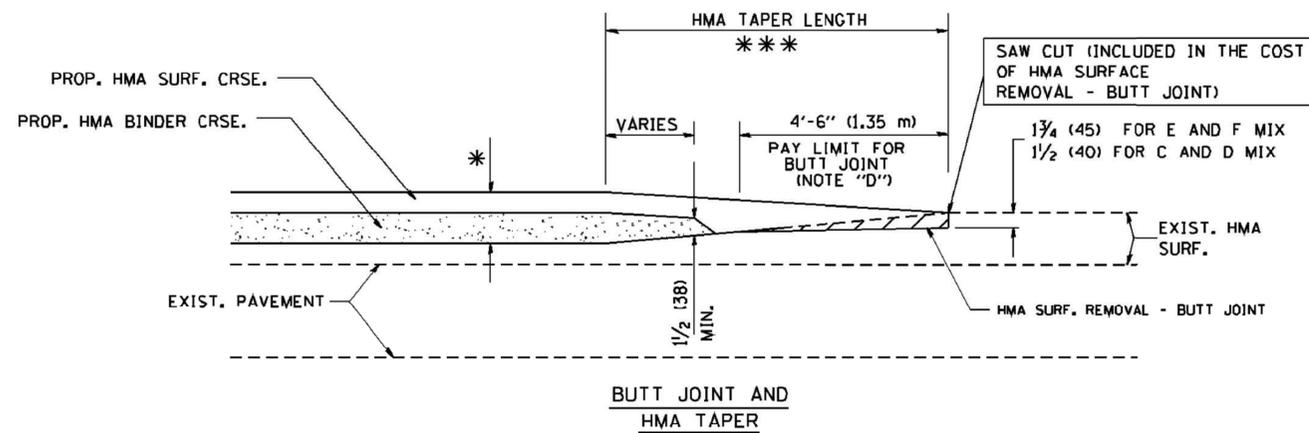


OPTION 1

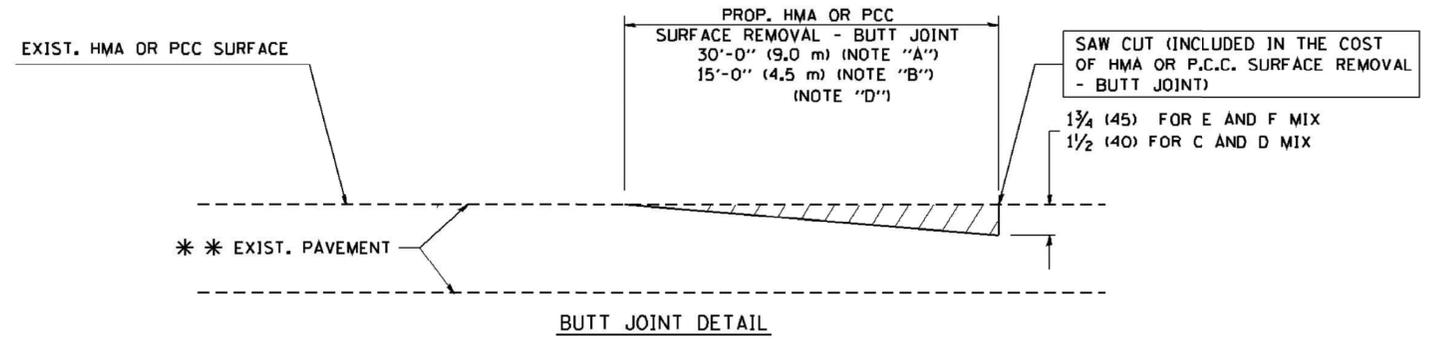


OPTION 2

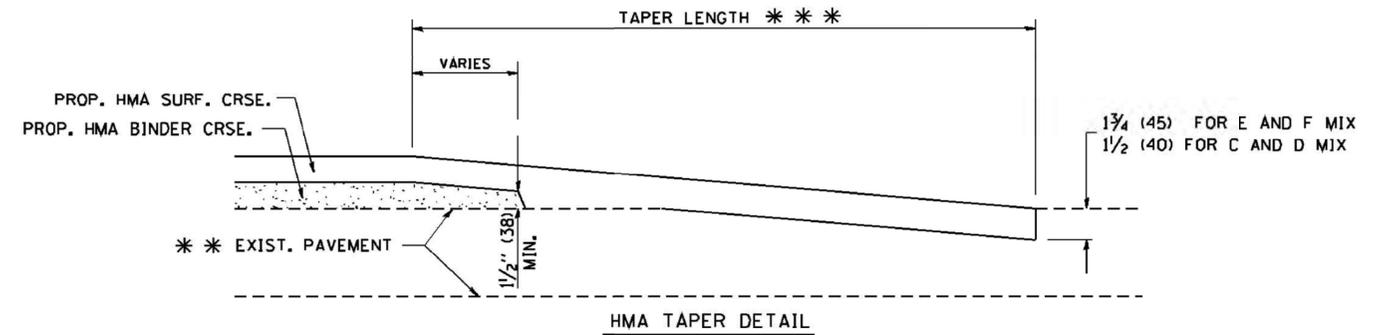
TYPICAL TEMPORARY RAMP



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".

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

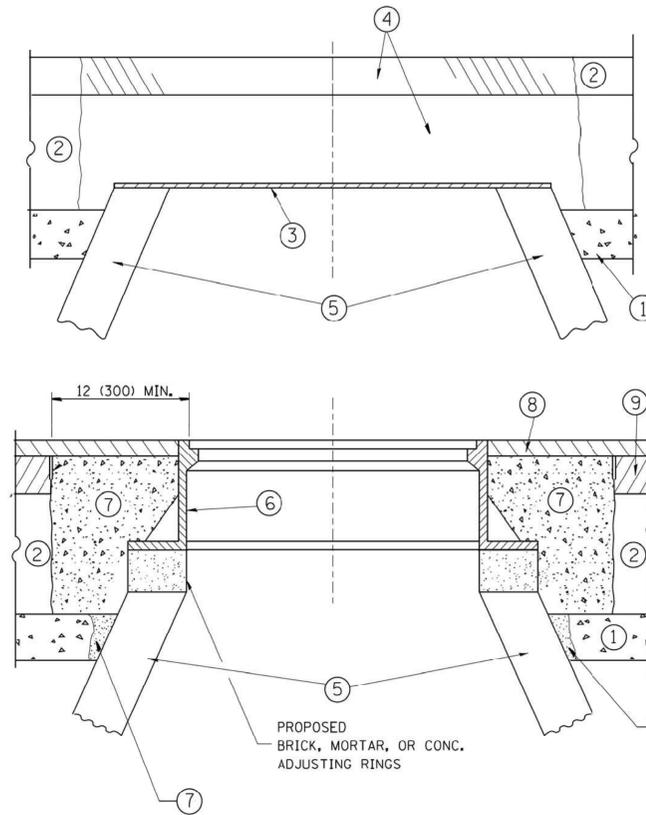
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	PLOT SCALE = 50.0000 / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

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.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1730 AND 1030	17-00060-00-RS	COOK	35	21
BD400-05 BD32		CONTRACT NO. 61E19		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1 1/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-1* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

LEGEND

- ① SUB-BASE GRANULAR MATERIAL
- ② EXISTING PAVEMENT
- ③ 36 (900) DIAMETER METAL PLATE
- ④ PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- ⑤ EXISTING STRUCTURE
- ⑥ FRAME AND LID (SEE NOTES)
- ⑦ CLASS PP-1* CONCRETE
- ⑧ PROPOSED HMA SURFACE COURSE
- ⑨ PROPOSED HMA BINDER COURSE

LOCATION OF STRUCTURES:

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

BASIS OF PAYMENT:

REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."

THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

NOTES:

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

VILLAGE OF HARWOOD HEIGHTS CASTINGS ARE THE PROPERTY OF THE VILLAGE AND THE CONTRACTOR SHALL NOTIFY THE VILLAGE FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

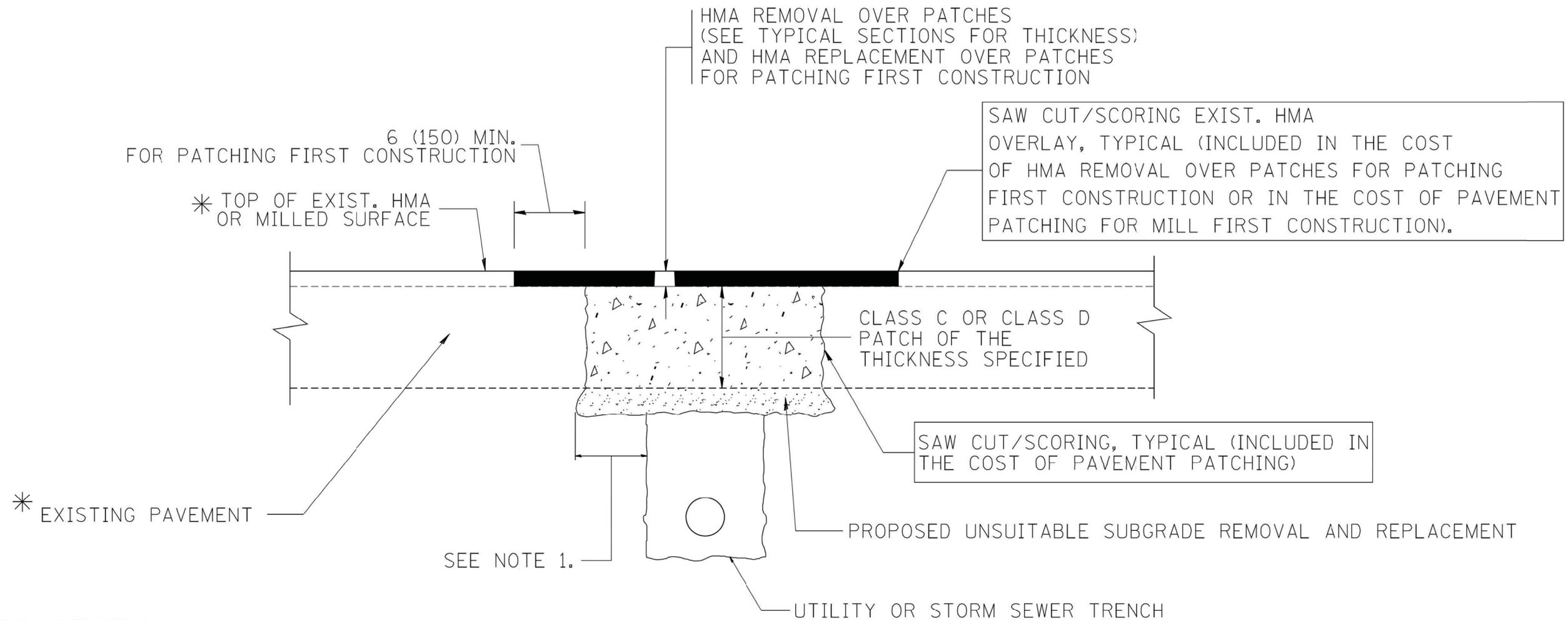
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PLOT SCALE = 1/8" = 1'-0"		CHECKED -	REVISED - R. BORO 03-09-11
PLOT DATE = 12/6/2011		DATE - 10-25-94	REVISED - R. BORO 12-06-11

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DETAILS FOR
FRAMES AND LIDS ADJUSTMENT WITH MILLING**

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

F.A. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17-00060-00-RS	COOK	35	22	
BD600-03 (BD-8)	CONTRACT NO. 61E19			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

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 (PATCHING FIRST)

1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

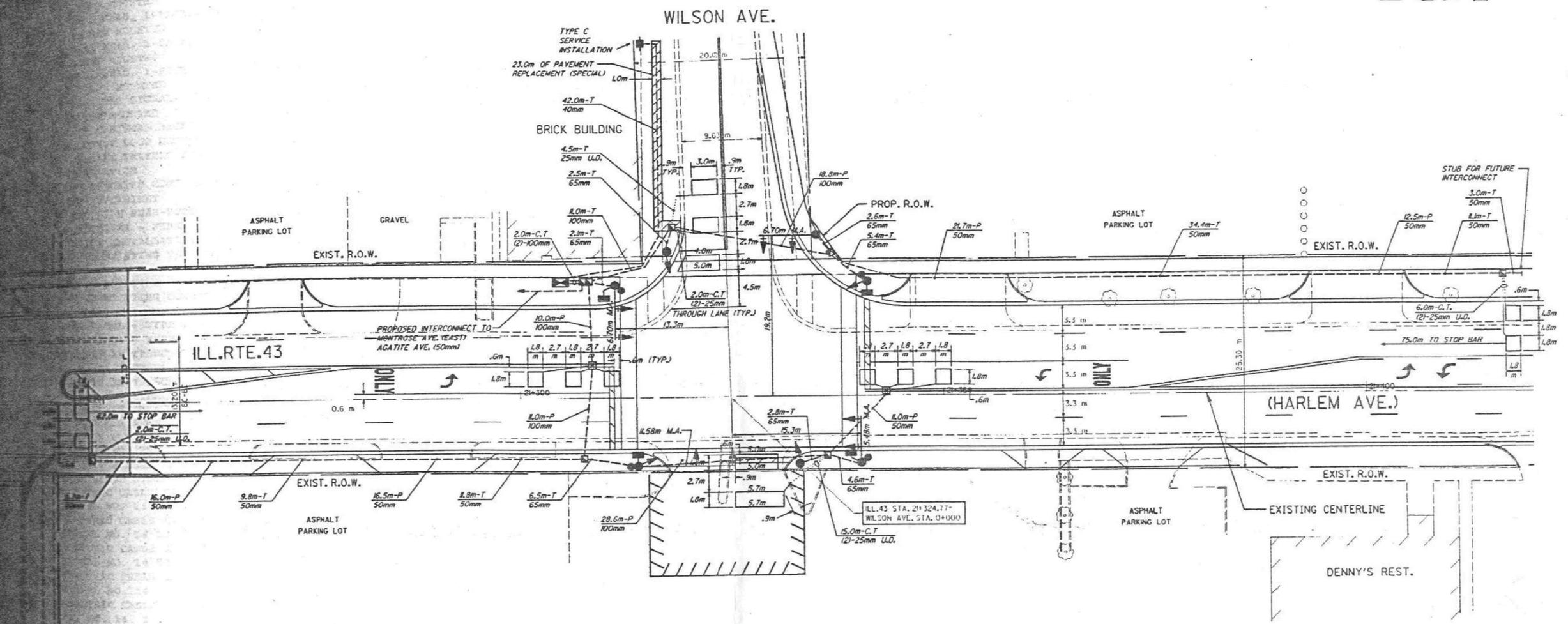
SEQUENCE OF CONSTRUCTION (MILLING FIRST)

1. MILL HMA FIRST IF THERE IS AT LEAST 4 1/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

FILE NAME = c:\projects\diststd22x34\bd22.dgn	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT			F.A. RTE. 17-00060-00-RS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED - R. BORO 01-01-07		SCALE: NONE	SHEET NO. 1	OF 1 SHEETS	STA.	TO STA.	COOK	35	23
		PLOT SCALE = 50.000' / IN.	REVISED - R. BORO 09-04-07		BD400-04 (BD-22)			CONTRACT NO. 61E19				
		PLOT DATE = 10/27/2008	REVISED - K. ENG 10-27-08		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	*	COOK	325	179
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
* (3134 & 3134 Y-1) R				



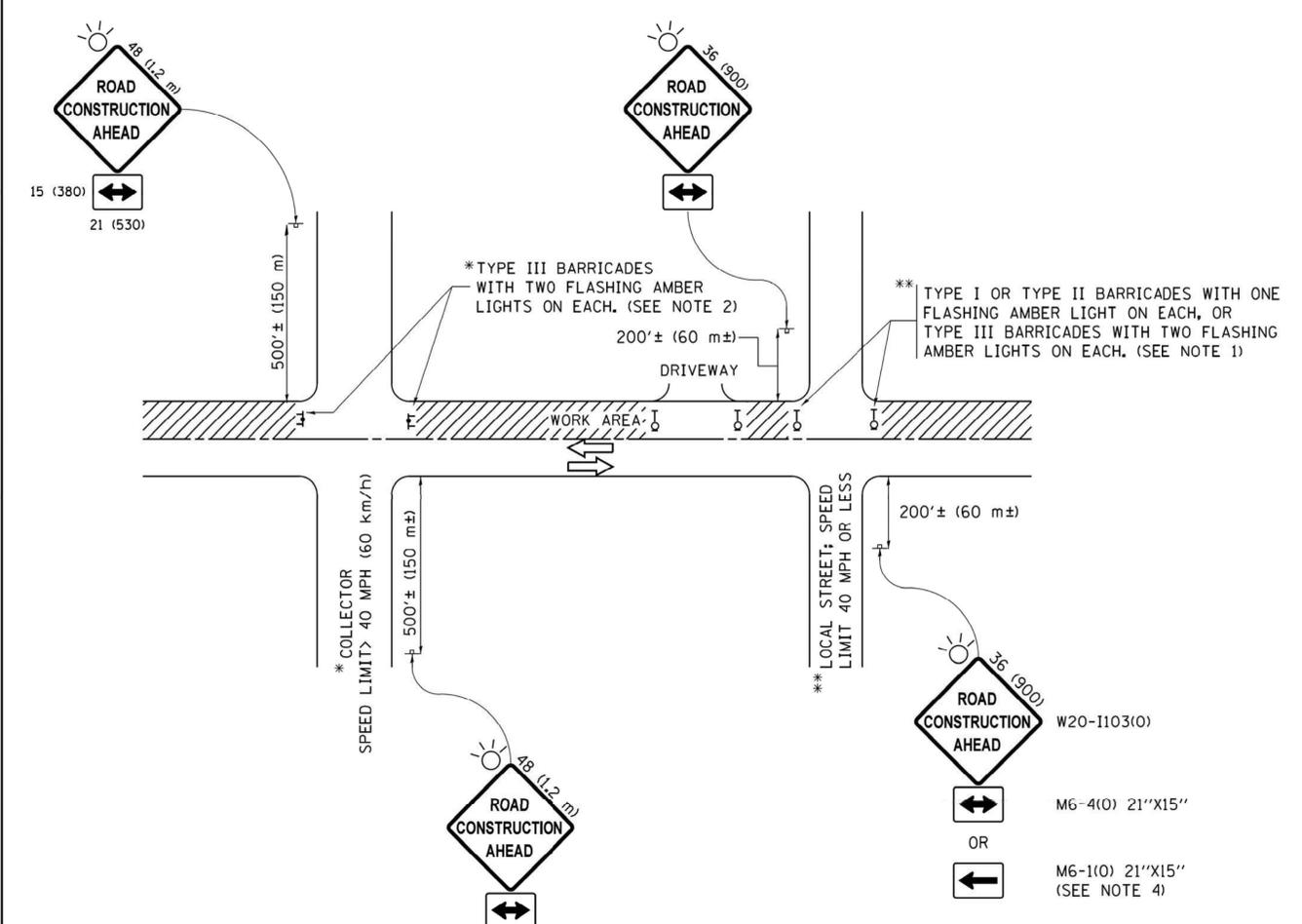
TRAFFIC SIGNAL LEGEND

PROPOSED	EXISTING		PROPOSED	EXISTING
		G.S. CONDUIT IN TRENCH OR PUSHED		
		PEDESTRIAN PUSHBUTTON DETECTOR		
		DETECTOR LOOP		
		CAST IRON JUNCTION BOX		
		EMERGENCY VEHICLE SYSTEM DETECTOR		
		CONFIRMATION BEACON		
		SIGNAL HEAD OPTICALLY PROGRAMMED		
		CONDUIT SPLICE		
		WOOD POLE		
		RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		
		VEHICLE DETECTOR, NON-COMPENSATED MAGNETIC TYPE		
		RAILROAD CONTROL CABINET		

NOTE:
PROPOSED CENTERLINE ALIGNMENT IS OFFSET 2.34m LEFT OF EXISTING CENTERLINE ALIGNMENT.

****THIS EXHIBIT IS FOR INFORMATIONAL PURPOSES ONLY****

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		TRAFFIC SIGNAL INSTALLATION ILL. RTE. 43 (HARLEM AVE.) AT WILSON AVENUE SCALE 1:250 DATE 7-3-96 DRAWN BY GW3 DESIGNED BY JRD CHECKED BY JWC



NOTES:

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 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. 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.
4. 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).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

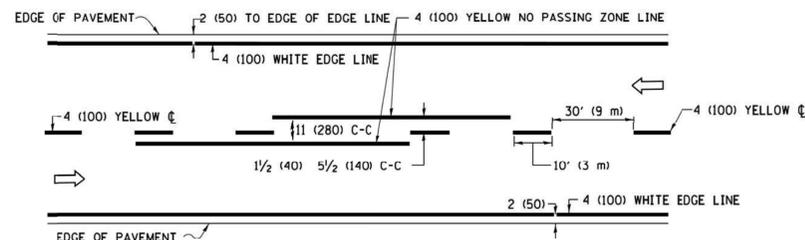
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	PLOT DATE = 9/15/2016		REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

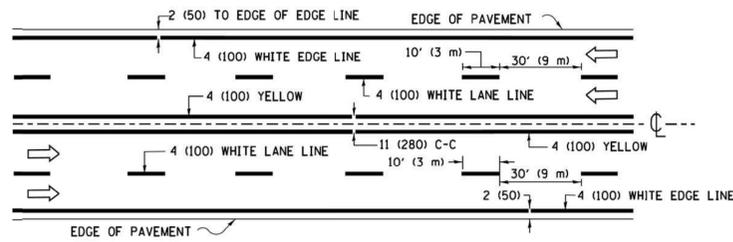
**TRAFFIC CONTROL AND PROTECTION FOR
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

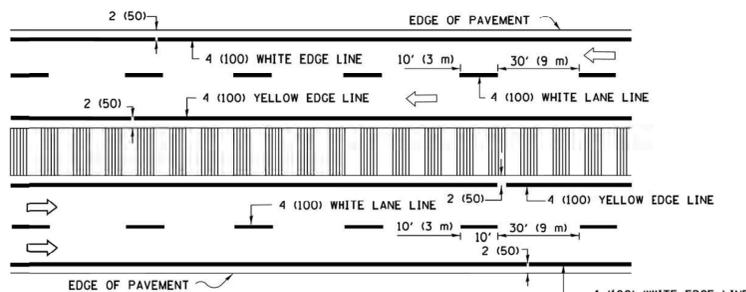
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17-00060-00-RS	TC-10	COOK	35	25
ILLINOIS FED. AID PROJECT			CONTRACT NO. 61E19	



2-LANE ROADWAY

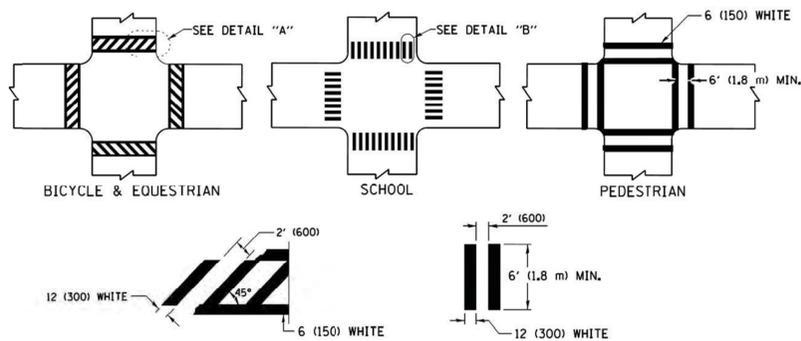


MULTI-LANE UNDIVIDED



MULTI-LANE DIVIDED WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING

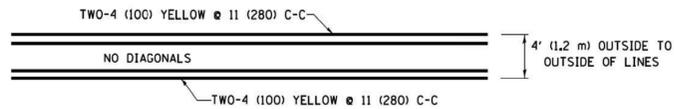


DETAIL "A"

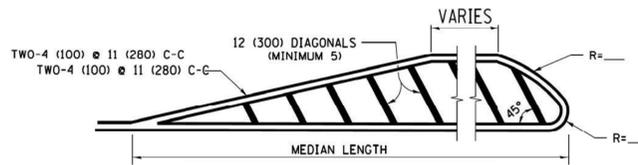
DETAIL "B"

TYPICAL CROSSWALK MARKING

* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES

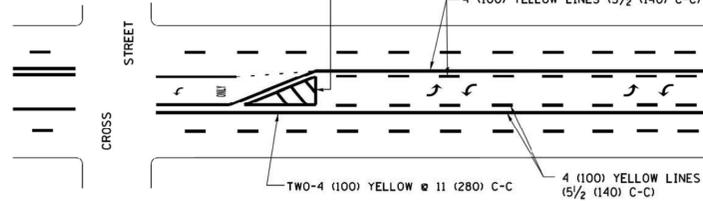


4' (1.2 m) WIDE MEDIANS ONLY

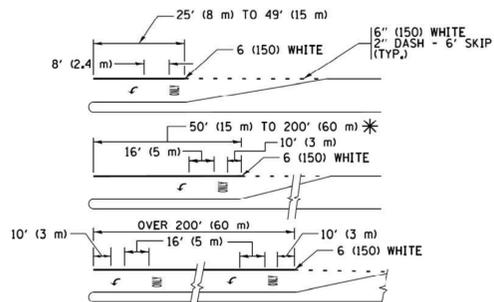


MEDIANS OVER 4' (1.2 m) WIDE

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)
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))



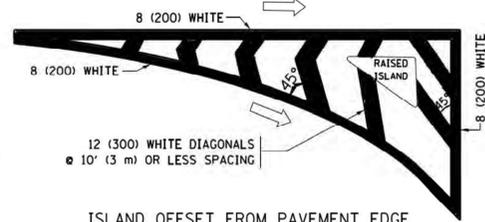
MEDIAN WITH TWO-WAY LEFT TURN LANE
TYPICAL PAINTED MEDIAN MARKING



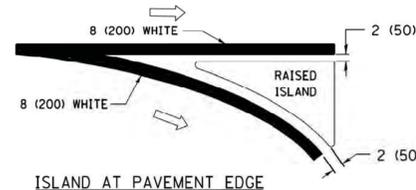
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)
* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

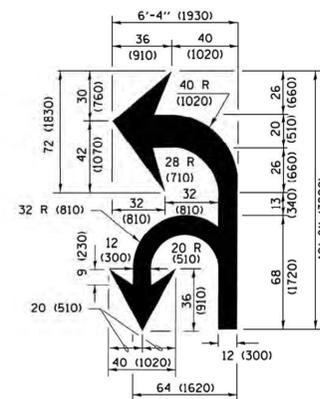


ISLAND OFFSET FROM PAVEMENT EDGE

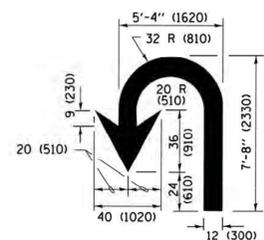


ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING



COMBINATION LEFT AND U-TURN



U-TURN

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

LANE REDUCTION TRANSITION

* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

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 1/2 (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 MEDIANS IN YELLOW
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 1/2 (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 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.
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 OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	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))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

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.

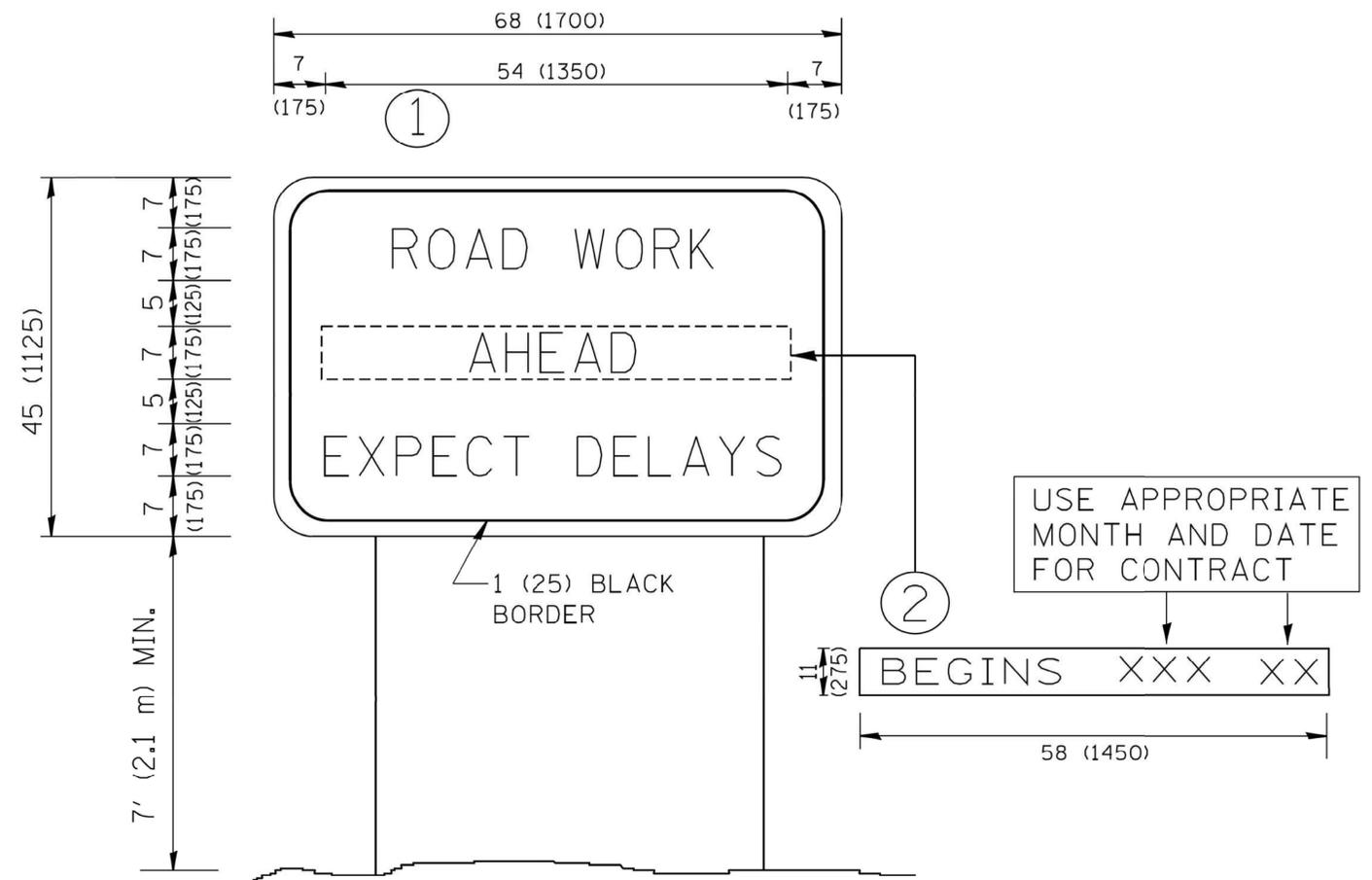
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	PLOT DATE = 4/13/2015		REVISED - C. JUCIUS 04-12-16

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
TYPICAL PAVEMENT MARKINGS**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17-00060-00-RS	COOK	35	26	
TC-13	CONTRACT NO.	61E19		
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.

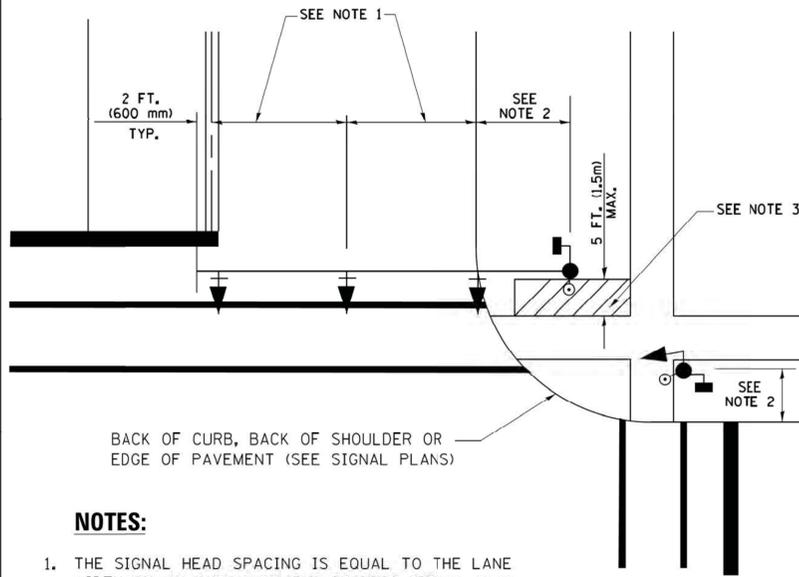
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		DRAWN -	REVISED - R. MIRS 12-11-97		SCALE: NONE	SHEET NO. 1	OF 1	SHEETS	STA.	TO STA.	COOK	35	27
		CHECKED -	REVISED - T. RAMMACHER 02-02-99								CONTRACT NO.	61E19	
		DATE -	REVISED - C. JUCIUS 01-31-07								FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		

TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED
CONTROLLER CABINET			HANDHOLE -SQUARE -ROUND	 	 	SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD		
COMMUNICATION CABINET			HEAVY DUTY HANDHOLE -SQUARE -ROUND	 	 	SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE		
MASTER CONTROLLER			DOUBLE HANDHOLE			PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS		
MASTER MASTER CONTROLLER			JUNCTION BOX			PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER		
UNINTERRUPTABLE POWER SUPPLY			RAILROAD CANTILEVER MAST ARM			ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"	 	
SERVICE INSTALLATION -(P) POLE MOUNTED			RAILROAD FLASHING SIGNAL			NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE. ALL DETECTOR LOOP CABLE TO BE SHIELDED		
SERVICE INSTALLATION -(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED	 	 	RAILROAD CROSSING GATE			GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)		
TELEPHONE CONNECTION			RAILROAD CROSSBUCK			ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C		
STEEL MAST ARM ASSEMBLY AND POLE			RAILROAD CONTROLLER CABINET			COAXIAL CABLE		
ALUMINUM MAST ARM ASSEMBLY AND POLE			UNDERGROUND CONDUIT (UC), GALVANIZED STEEL			VENDOR CABLE		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE			TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY			SYSTEM ITEM			FIBER OPTIC CABLE -NO. 62.5/125, MM12F -NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F	 	
WOOD POLE			INTERSECTION ITEM			GROUND ROD -(C) CONTROLLER -(M) MAST ARM -(P) POST -(S) SERVICE	 	
GUY WIRE			REMOVE ITEM					
SIGNAL HEAD			RELOCATE ITEM					
SIGNAL HEAD WITH BACKPLATE			ABANDON ITEM					
SIGNAL HEAD OPTICALLY PROGRAMMED			CONTROLLER CABINET AND FOUNDATION TO BE REMOVED					
FLASHER INSTALLATION -(FS) SOLAR POWERED	 	 	MAST ARM POLE AND FOUNDATION TO BE REMOVED					
PEDESTRIAN SIGNAL HEAD			SIGNAL POST AND FOUNDATION TO BE REMOVED					
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON	 	 	DETECTOR LOOP, TYPE I					
RADAR DETECTION SENSOR			PERFORMED DETECTOR LOOP					
VIDEO DETECTION CAMERA			SAMPLING (SYSTEM) DETECTOR					
RADAR/VIDEO DETECTION ZONE			INTERSECTION AND SAMPLING (SYSTEM) DETECTOR					
PAN, TILT, ZOOM (PTZ) CAMERA			QUEUE AND SAMPLING (SYSTEM) DETECTOR					
EMERGENCY VEHICLE LIGHT DETECTOR			WIRELESS DETECTOR SENSOR					
CONFIRMATION BEACON			WIRELESS ACCESS POINT					
WIRELESS INTERCONNECT								
WIRELESS INTERCONNECT RADIO REPEATER								

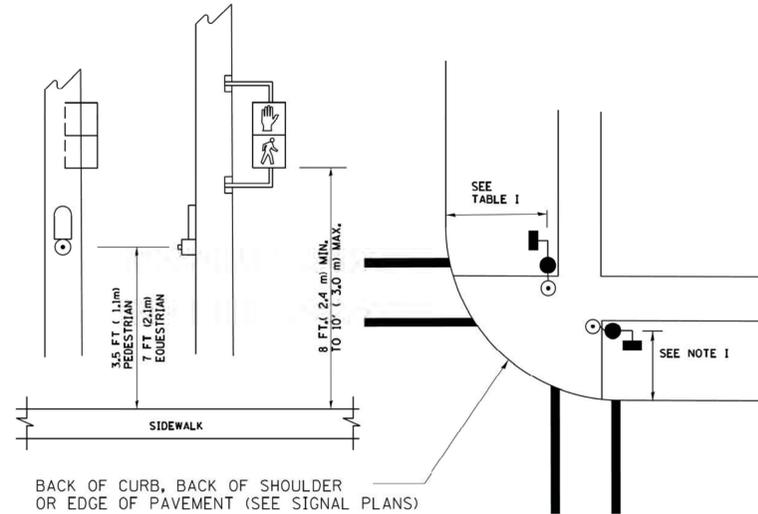
**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR
FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN
WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.**



NOTES:

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

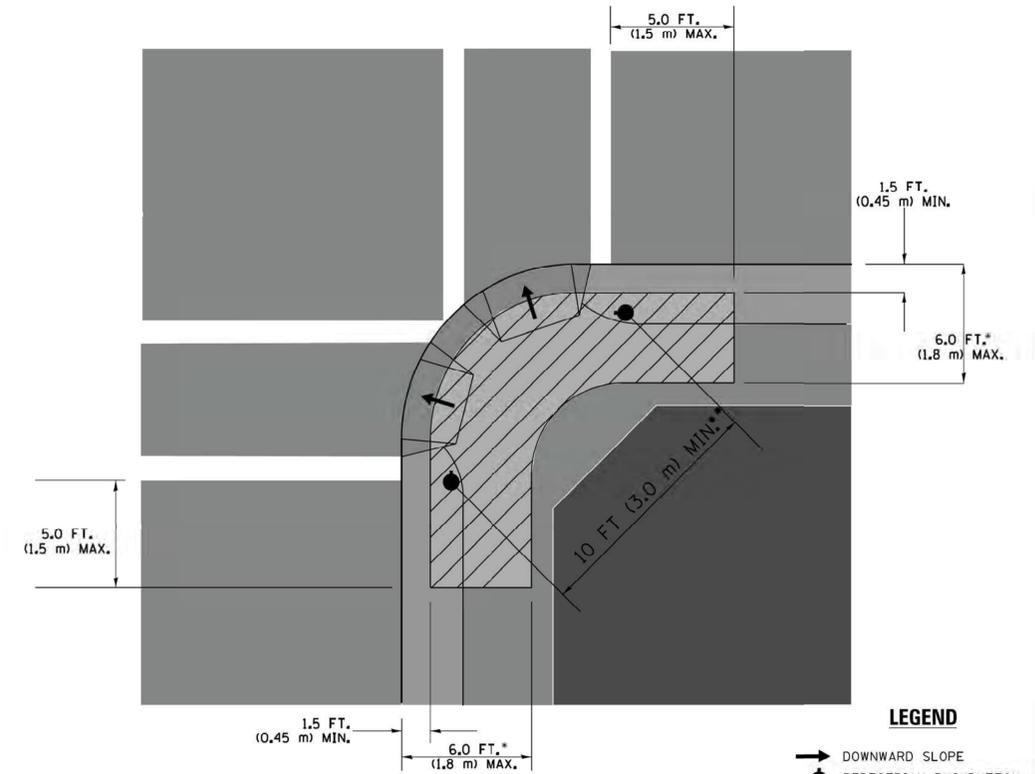
**PEDESTRIAN SIGNAL POST
AND
PEDESTRIAN PUSH BUTTON POST**



NOTES:

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

RECOMMENDED PUSHBUTTON LOCATIONS



LEGEND

- DOWNWARD SLOPE
- PEDESTRIAN PUSHBUTTON
- RECOMMENDED PUSHBUTTON LOCATIONS

- WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPARATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

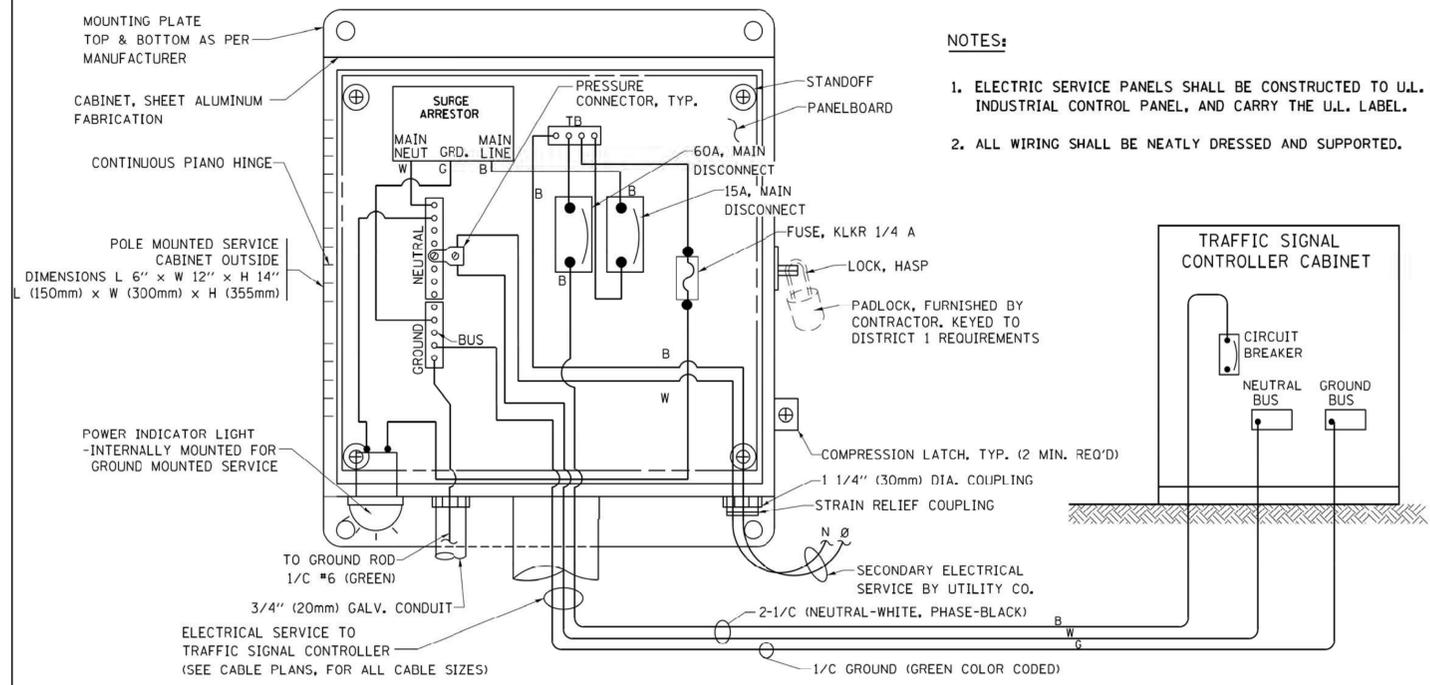
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

TRAFFIC SIGNAL EQUIPMENT OFFSET

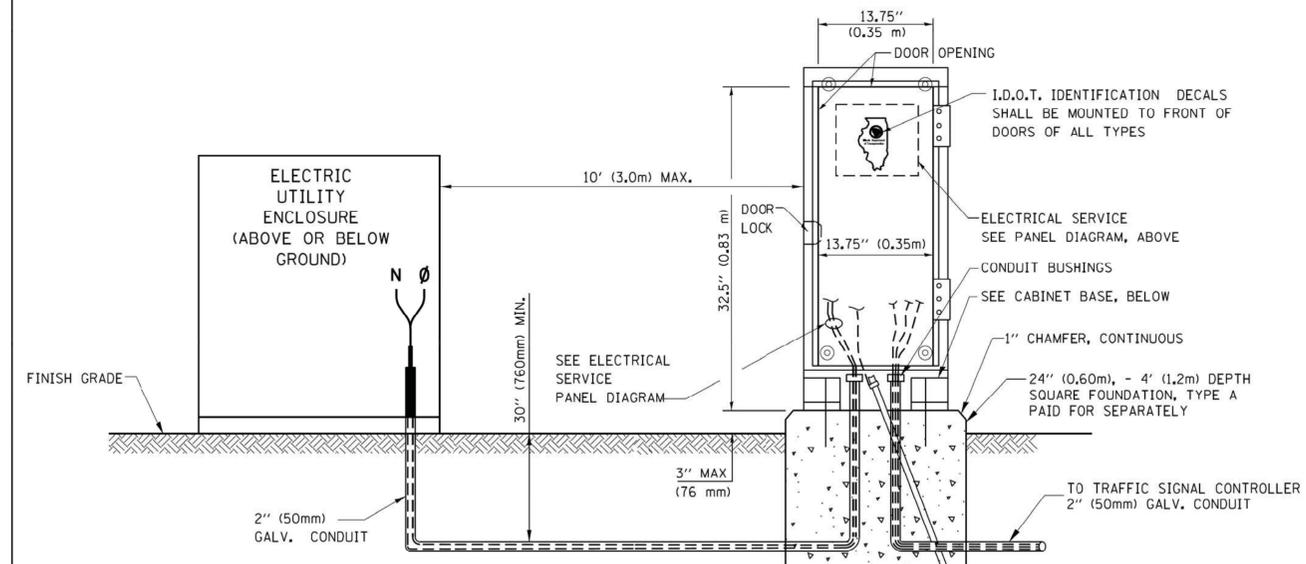
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

NOTES:

1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD AFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

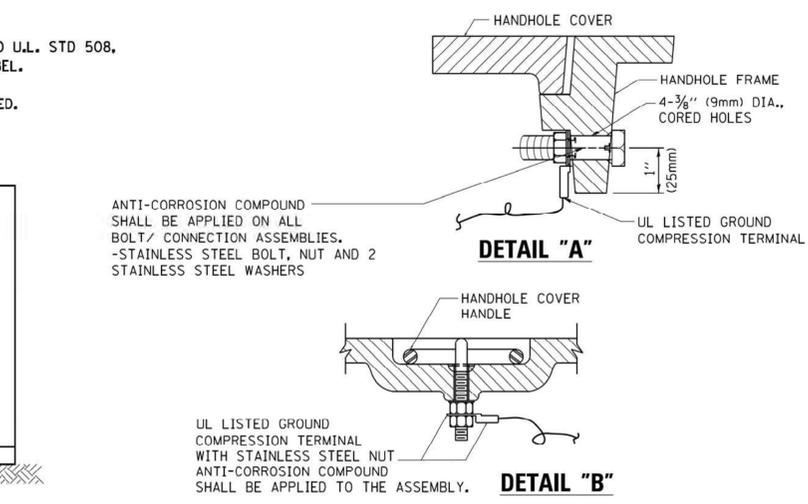
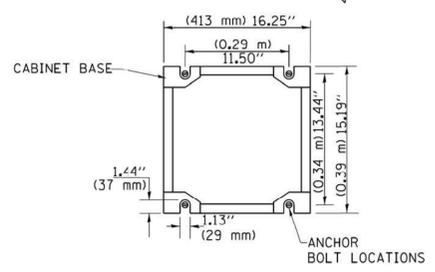


ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE) SERVICE INSTALLATION POLE MOUNT (SHOWN) (NOT TO SCALE)



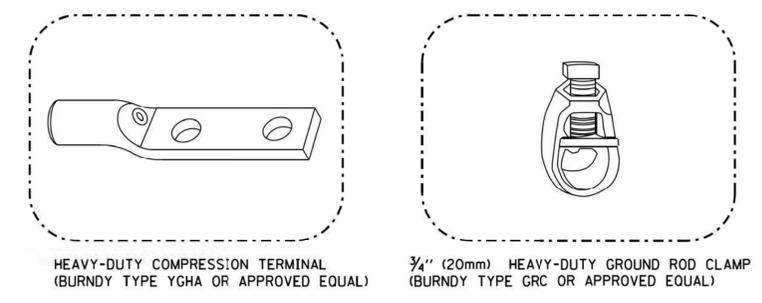
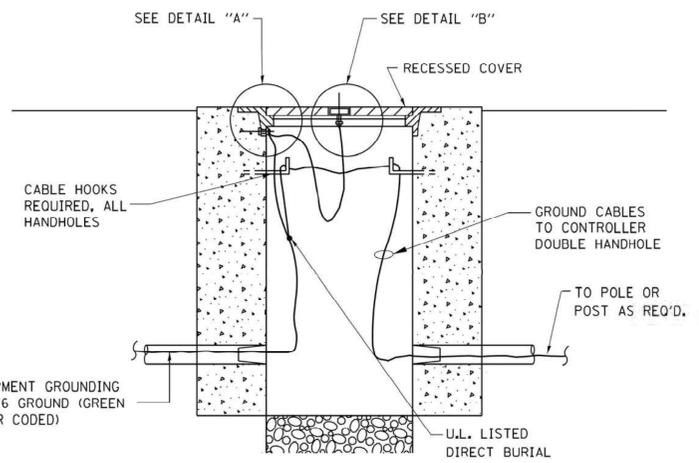
SERVICE INSTALLATION GROUND MOUNT (NOT TO SCALE)

CABINET - BASE BOLT PATTERN (NOT TO SCALE)



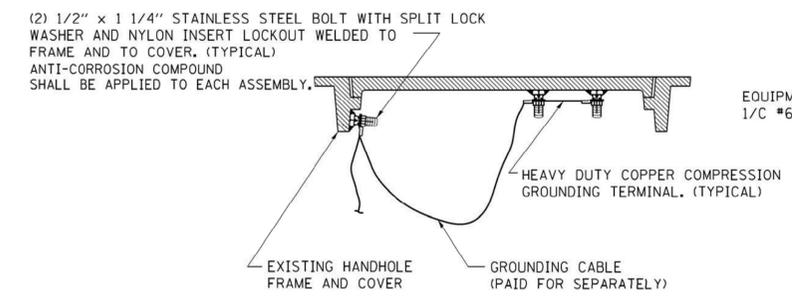
NOTES:
GROUNDING SYSTEM

1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

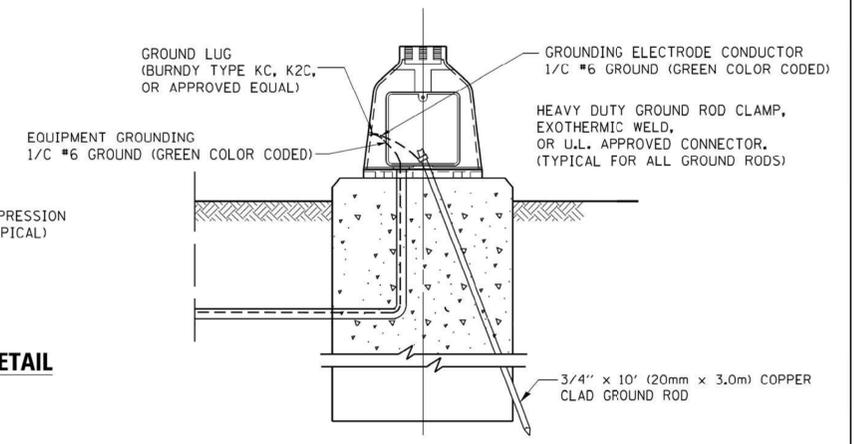


NOTES:

- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.

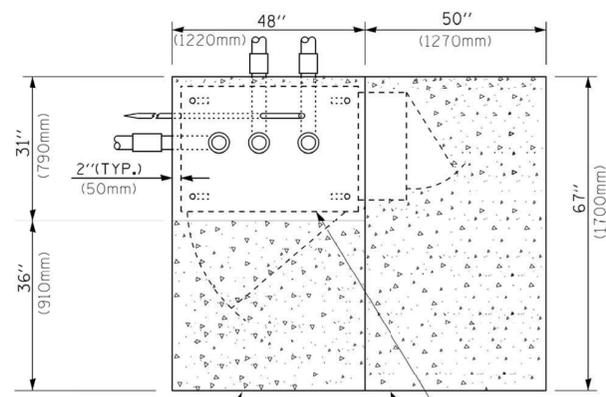


EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL (NOT TO SCALE)

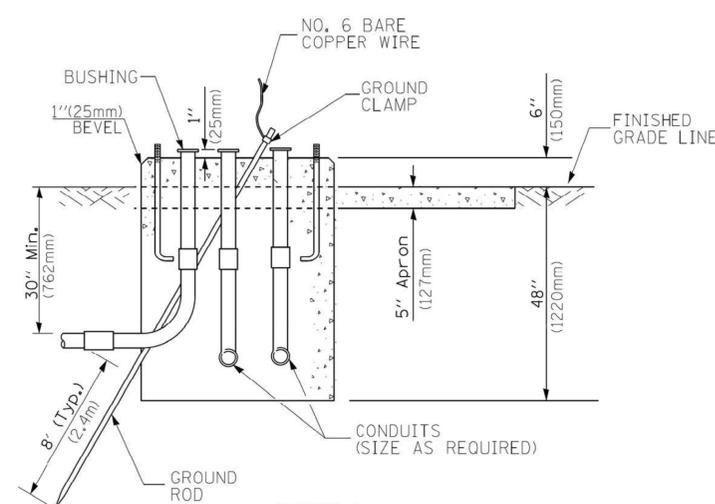


MAST ARM POLE / POST-GROUNDING DETAIL (NOT TO SCALE)

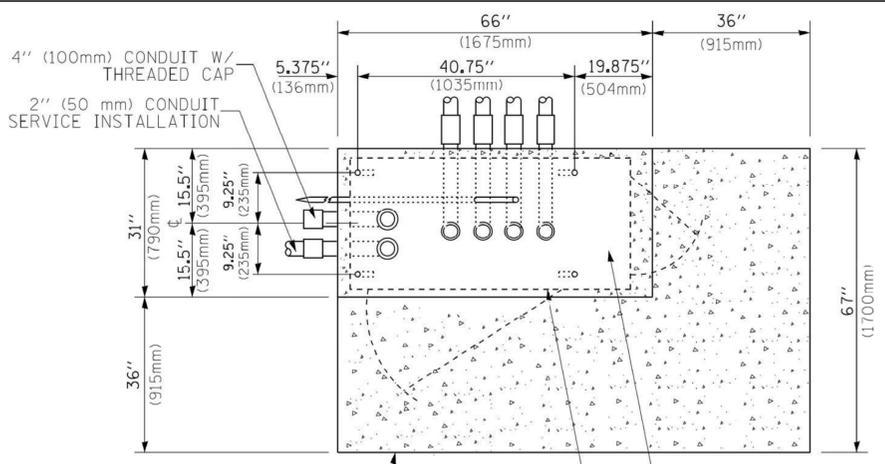
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		DATE - 10-28-09	REVISED -					FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



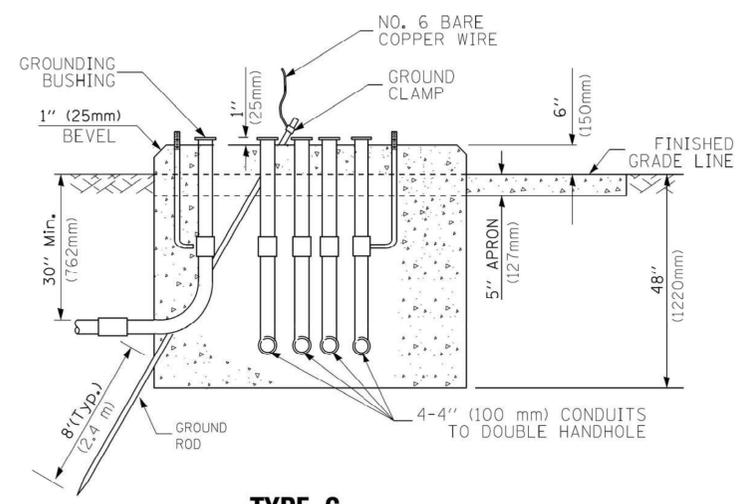
TOP VIEW



**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**



TOP VIEW



**TYPE C
FOR GROUND MOUNTED
SUPER P (TYPE IV) AND SUPER R (TYPE V)
CONTROLLER CABINETS**

NOTE:
TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

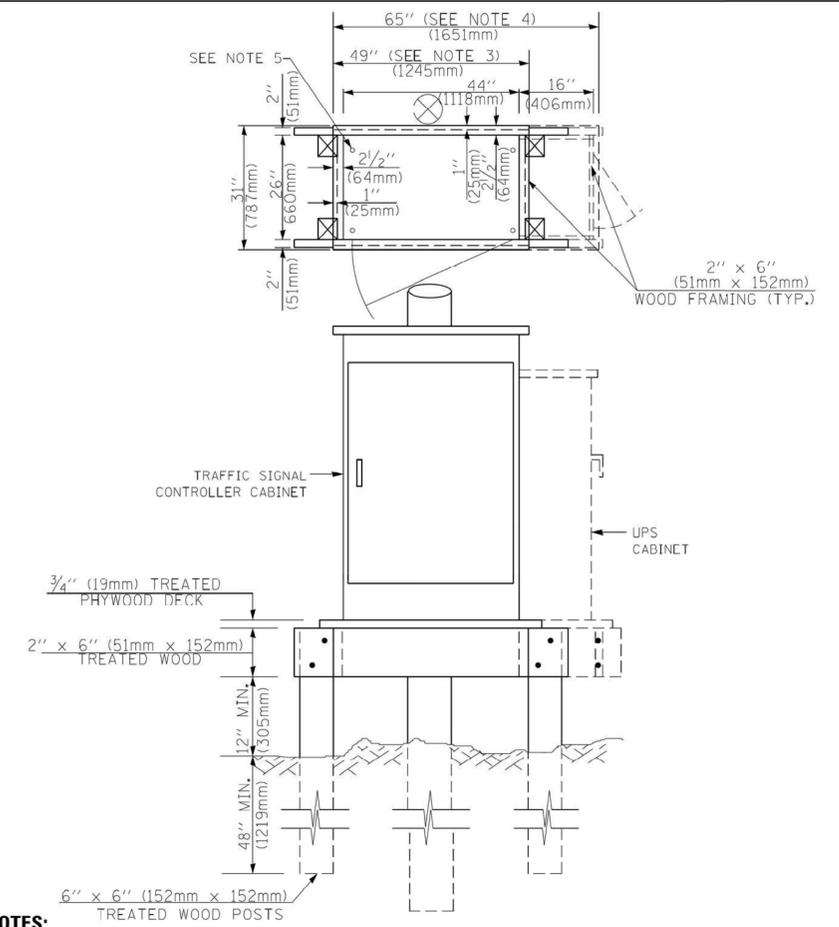
CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0=L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

VERTICAL CABLE LENGTH

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

DEPTH OF FOUNDATION



NOTES:

- BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
- BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
- PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
- PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
- DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
- FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

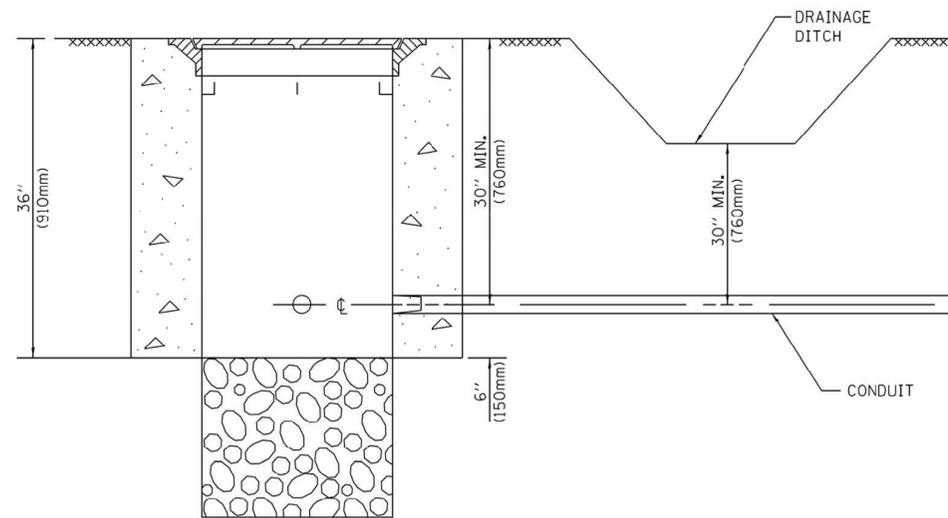
**TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM**

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

- These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (q_u) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & Structures should be contacted for a revised design if other conditions are encountered.
- Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
- Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations
- For mast arm assemblies with dual arms refer to state standard 878001.

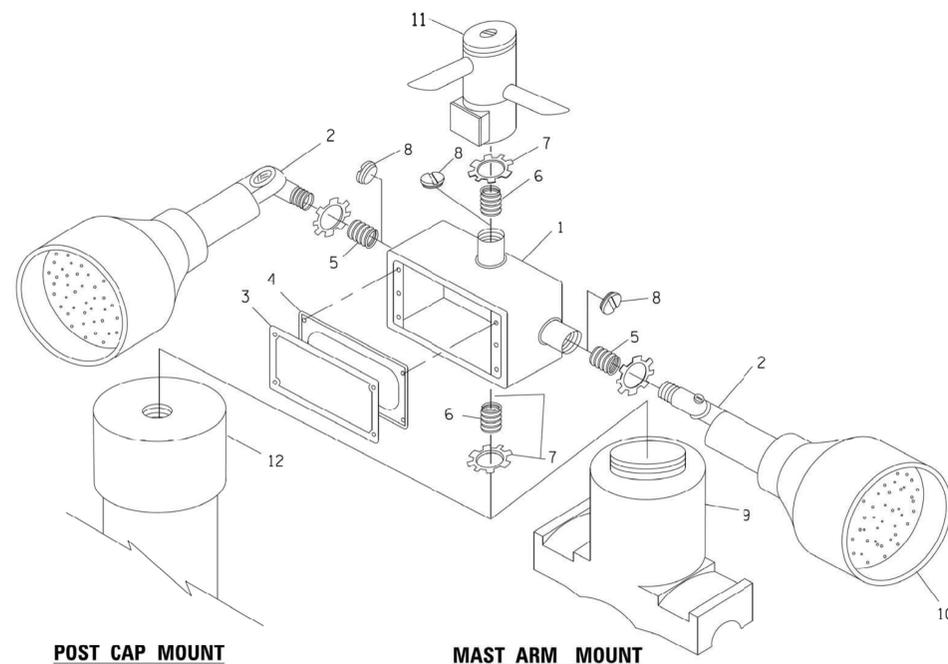
DEPTH OF MAST ARM FOUNDATIONS, TYPE E



NOTES:

1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

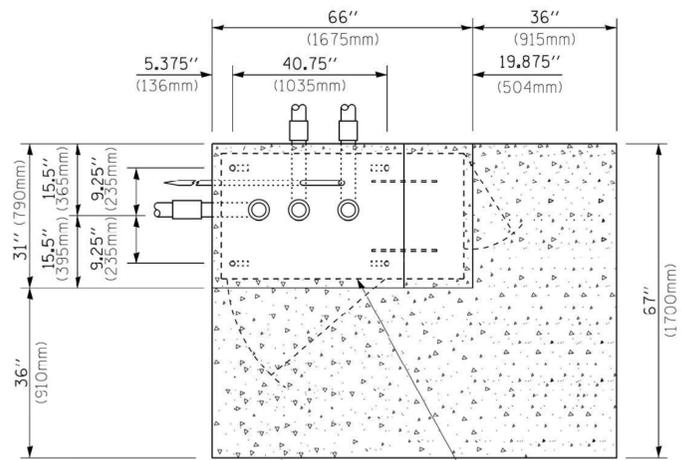
HANDHOLE WITH MINIMUM CONDUIT DEPTH
(NOT TO SCALE)



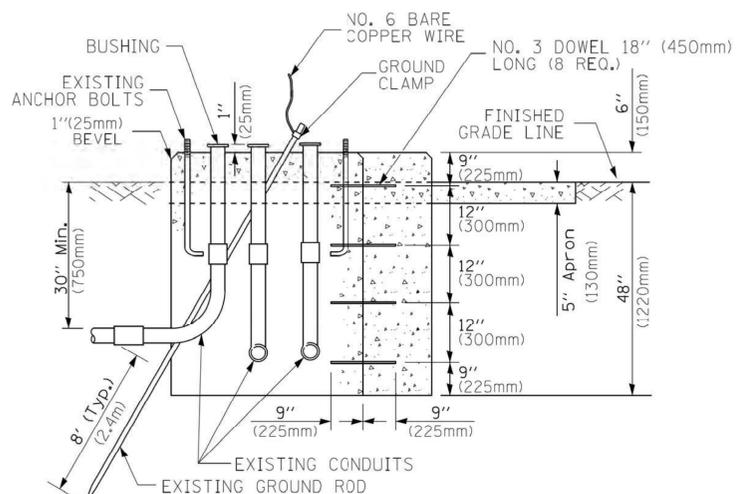
POST CAP MOUNT

MAST ARM MOUNT

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL



TOP VIEW
(NOT TO SCALE)

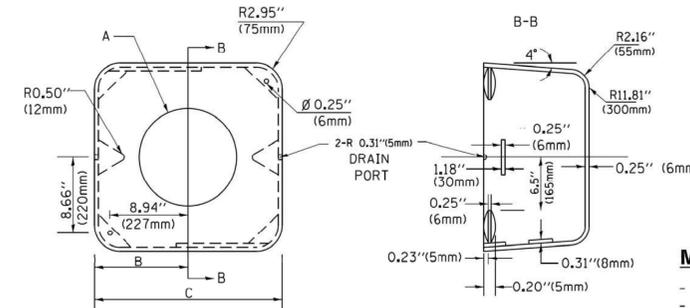


MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION
(NOT TO SCALE)

ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0,000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4" (19 mm) CLOSE NIPPLE
7	3/4" (19 mm) LOCKNUT
8	3/4" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

NOTES:

1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
- ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4" (19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



MATERIAL:

- ASTM A36 STEEL
- ASTM A-123 HOT DIPPED GALVANIZED

A	B	C	HEIGHT	WEIGHT
VARIES	9.5" (241mm)	19" (483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75" (273mm)	21.5" (546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13.0" (330mm)	26" (660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18.5" (470mm)	37" (940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

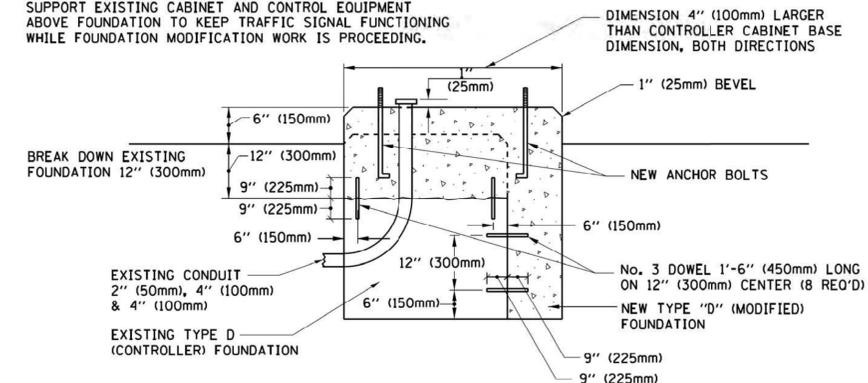
SHROUD

NOTES:

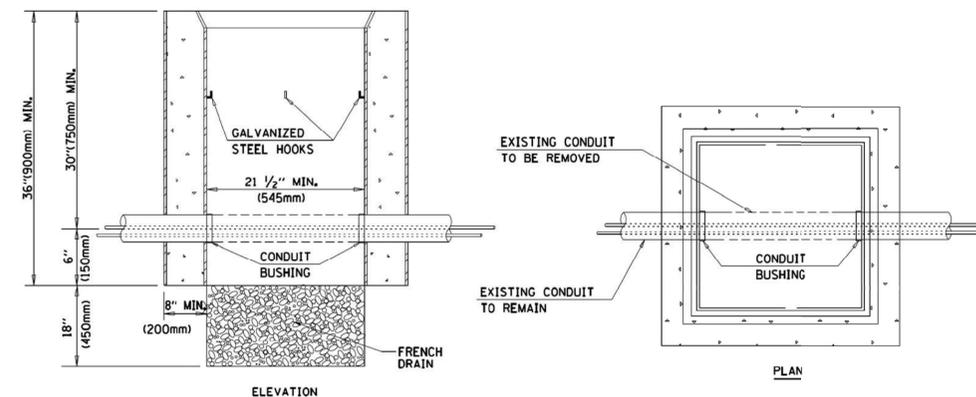
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

NOTE:

SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



MODIFY EXISTING TYPE "D" FOUNDATION



NOTES:

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

HANDHOLE TO INTERCEPT EXISTING CONDUIT

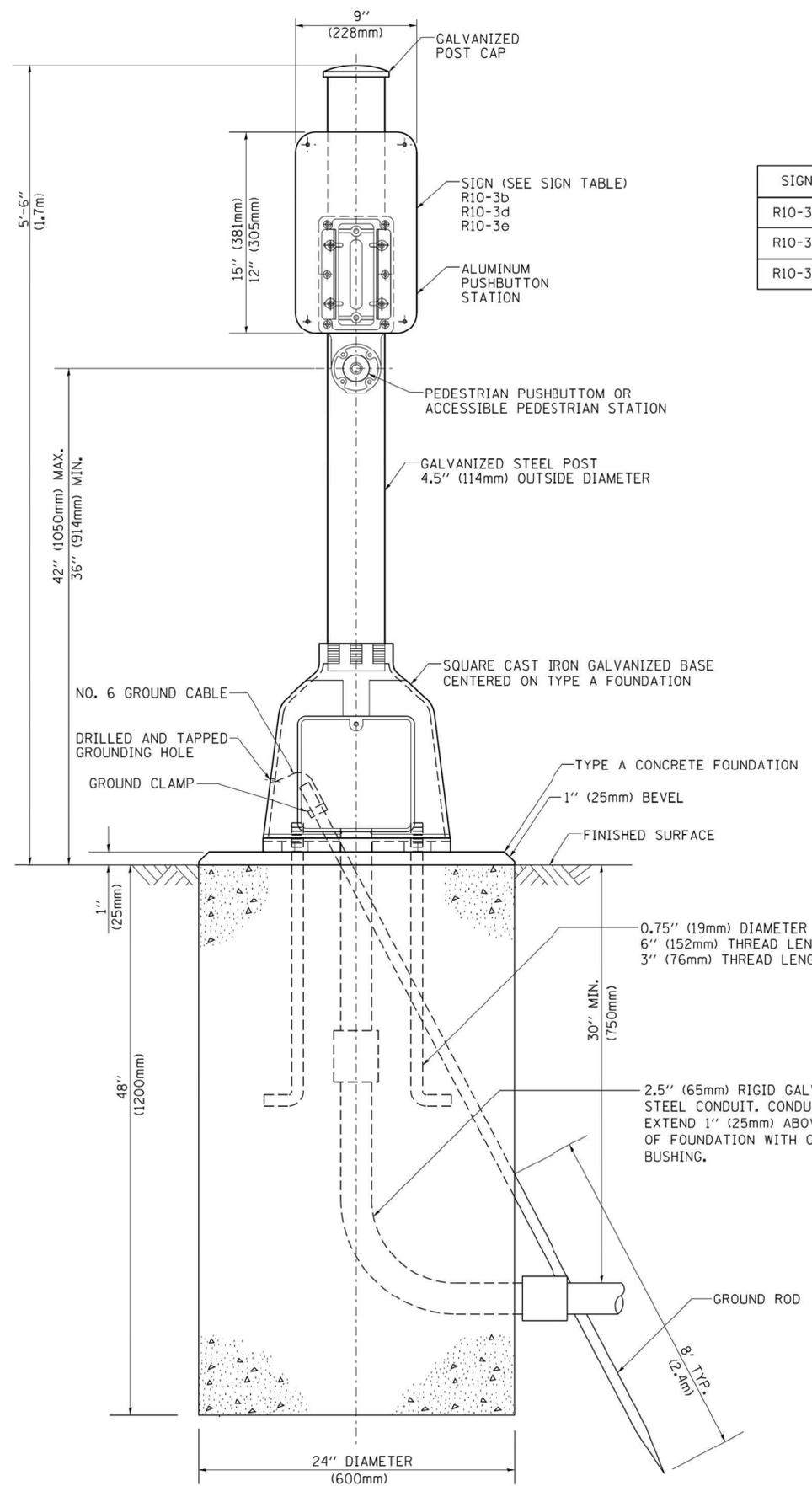
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

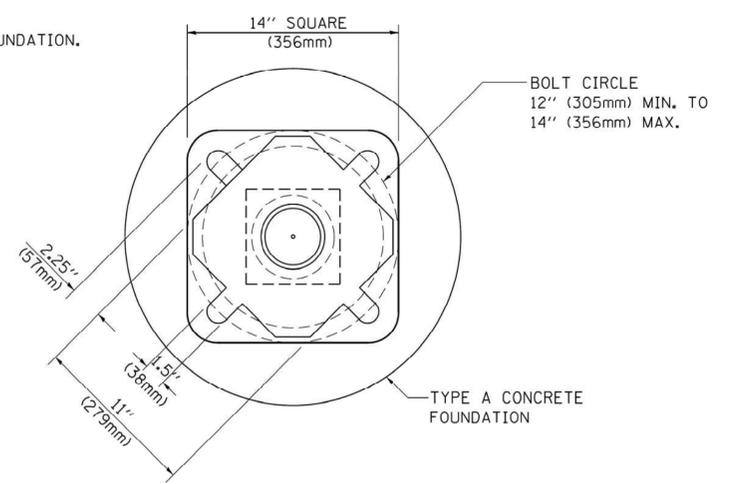
SCALE: NONE SHEET NO. 6 OF 7 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1700	17-00060-00-RS	COOK	35	33
	TS-05	CONTRACT NO.	61E19	
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				



SIGN TABLE

SIGN	DIMENSIONS
R10-3b	9" (228mm) X 12" (305mm)
R10-3d	9" (228mm) X 12" (305mm)
R10-3e	9" (228mm) X 15" (381mm)



BOLT PATTERN
PEDESTRIAN PUSH BUTTON POST, TYPE A

FILE NAME = c:\pwwork\pwwork\footemj\d0188315\ts05.dgn	USER NAME = footemj	DESIGNED - DAG	REVISED - DAG 1-1-14
		DRAWN - GND	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

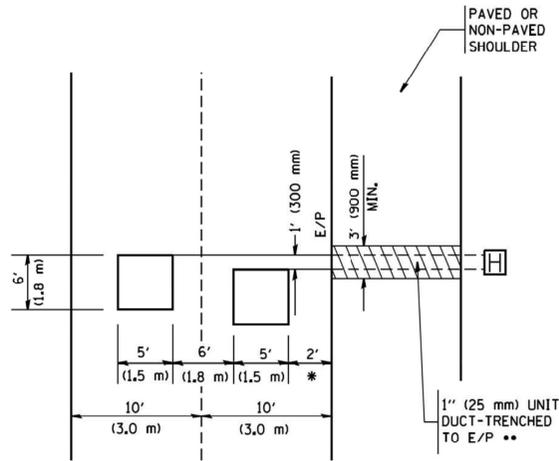
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE SHEET NO. 7 OF 7 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17-00060-00-RS	COOK	35	34	
TS-05		CONTRACT NO. 61E19		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

LOOPS NEXT TO SHOULDERS

PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER.

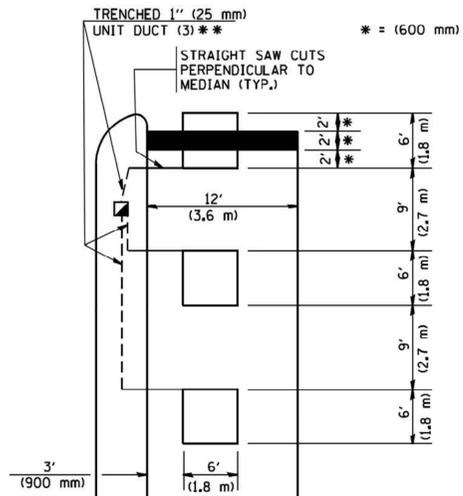


* = (600 mm)

** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

**LEFT TURN LANES WITH MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH
(PROTECTED / PERMITTED LEFT TURN PHASING)**

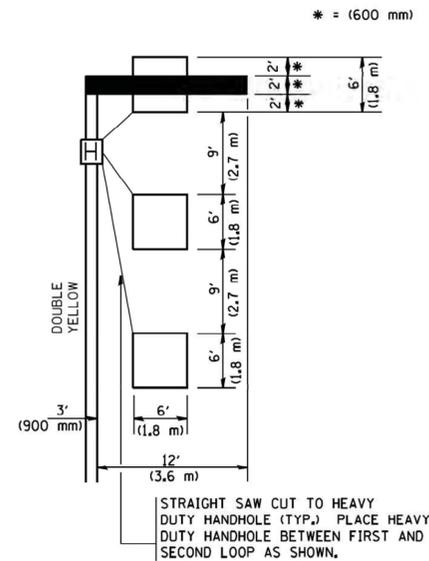
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

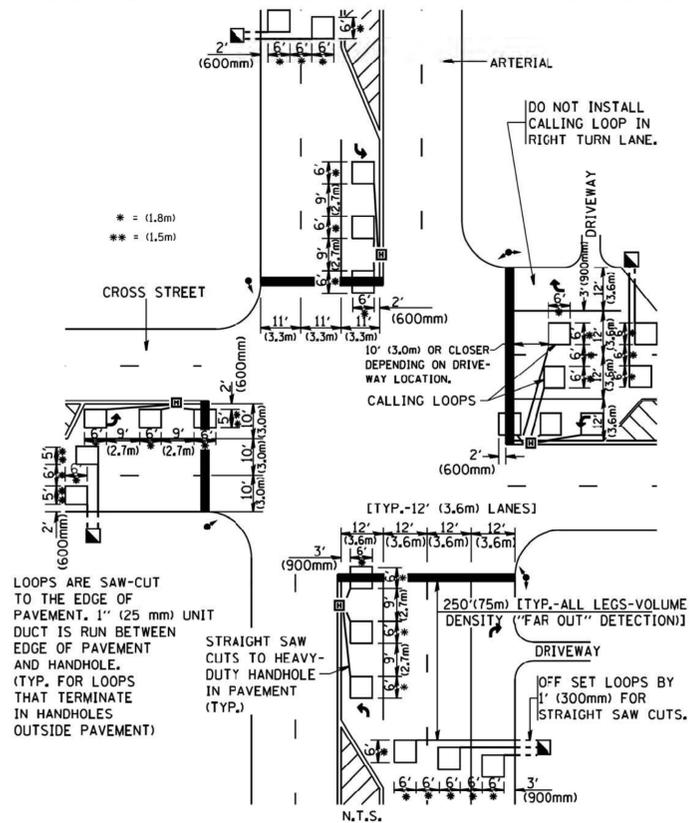
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

**LEFT TURN LANES WITHOUT MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH
(PROTECTED / PERMITTED LEFT TURN PHASING)**



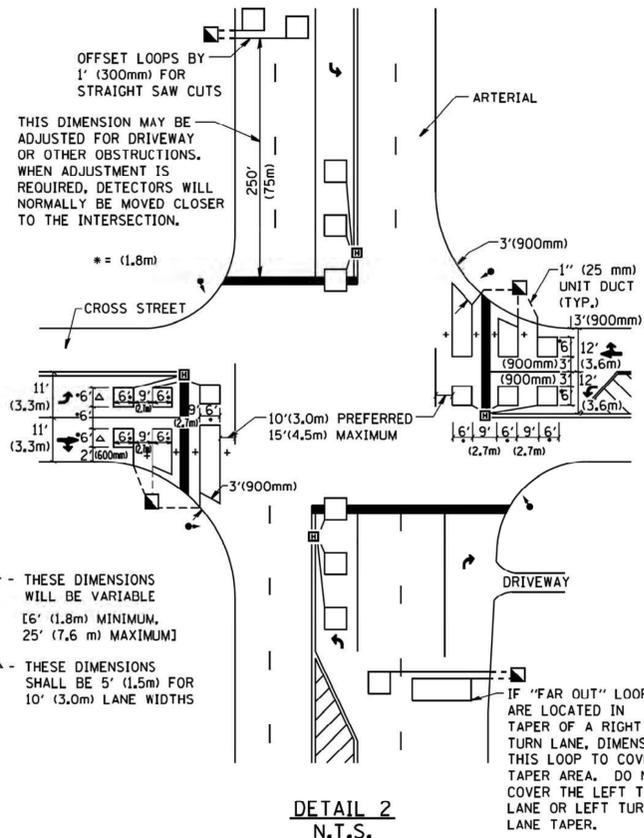
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



**DETAIL 1
N.T.S.**

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



**DETAIL 2
N.T.S.**

NOTES:

VEHICLES LOOP DETECTORS

- * ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- * 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 SEPARATELY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- * ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- * 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.

NOTE:

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.

FILE NAME = W:\diststd\22x34\ts07.dgn	USER NAME = geglano	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING			F.A. RTE. 17-00060-00-RS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 50,0000' / IN.	CHECKED - R.K.F.	DRAWN -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	COOK	35	35	
PLOT DATE = 1/4/2008	DATE -	CHECKED -	REVISED -						CONTRACT NO. 61E19			
		DATE -	REVISED -						FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT			