

SUMMARY OF QUANTITIES  
INTERSTATE 55 (I-55) AT CENTRAL AVENUE

CODE NUMBER	PAY ITEM	UNIT	TOTAL QUANTITY	FUNDING BREAKDOWN - 90% FEDERAL, 10% STATE															
				URBAN		L01 ACIM		LIC ACBWT		L01 ACIM		LIC ACBWT		L01 ACIM					
				ROAD 0003	LAND SCAPE 0003	BRIDGE SNO16-0724 0013	BRIDGE SNO16-3240 0013	BRIDGE SNO16-3241 0013	RETAIN WALLS 0040	LIGHT-ING 0021	TRAF. SIGNAL 0021	ROAD 0003	LAND SCAPE 0003	BRIDGE SNO16-0724 0013	BRIDGE SNO16-3240 0013	BRIDGE SNO16-3241 0013	RETAIN WALLS 0040	LIGHT-ING 0021	TRAF. SIGNAL 0021
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	388		388														
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	174		174														
20101000	TEMPORARY FENCE	FOOT	200	200															
20101100	TREE TRUNK PROTECTION	EACH	19		19														
20200100	EARTH EXCAVATION	CU YD	13225	13225															
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	1345	1345															
20800150	TRENCH BACKFILL	CU YD	512	512															
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	46421		46421														
25000210	SEEDING, CLASS 2A	ACRE	10		10														
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	900		900														
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	900		900														
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	900		900														
25000750	MOWING	ACRE	10		10														
25100115	MULCH, METHOD 2	ACRE	10		10														
25100630	EROSION CONTROL BLANKET	SQ YD	46421		46421														
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	1000		1000														
28000305	TEMPORARY DITCH CHECKS	EACH	42		42														
28000510	INLET FILTERS	EACH	149		149														
28100107	STONE RIPRAP, CLASS A4	SQ YD	288	10			278												
28200200	FILTER FABRIC	SQ YD	306				306												
31101200	SUB-BASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	2318.0		2318														
31101400	SUBBASE GRANULAR MATERIAL, TYPE B 6"	SQ YD	2872		2872														
31200502	STABILIZED SUBBASE - HOT-MIX ASPHALT, 4 1/2"	SQ YD	37089		37089														
35101500	AGGREGATE BASE COURSE, TYPE B	CU YD	308		308														
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	7.4		7.4														
40600895	CONSTRUCTING TEST STRIP	EACH	3		3														
40603085	HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N70	TON	1924		1924														
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	221		221														

\* - INDICATES SPECIALTY ITEM  
 \*\* - SEE BILL OF MATERIALS FOR INDIVIDUAL RETAINING WALL QUANTITIES  
 Δ - NON-PARTICIPATING (100% STATE)

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				URBAN		L01 ACIM		LIC ACBWT		L01 ACIM		LIC ACBWT		L01 ACIM					
				ROAD 0003	LAND SCAPE 0003	BRIDGE SNO16-0724 0013	BRIDGE SNO16-3240 0013	BRIDGE SNO16-3241 0013	RETAIN WALLS 0040	LIGHT-ING 0021	TRAF. SIGNAL 0021	ROAD 0003	LAND SCAPE 0003	BRIDGE SNO16-0724 0013	BRIDGE SNO16-3240 0013	BRIDGE SNO16-3241 0013	RETAIN WALLS 0040	LIGHT-ING 0021	TRAF. SIGNAL 0021
40603595	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90	TON	1928	1928															
42000521	PORTLAND CEMENT CONCRETE PAVEMENT 11" (JOINTED)	SQ YD	24176	24176															
42000570	PORTLAND CEMENT CONCRETE PAVEMENT 15" (JOINTED)	SQ YD	4768	4768															
42001300	PROTECTIVE COAT	SQ YD	38676	38676															
42001420	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	SQ YD	3650	3650															
42100390	CONTINUOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT, 15"	SQ YD	3181	3181															
42100615	PAVEMENT REINFORCEMENT	SQ YD	6831	6831															
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	2768	2768															
42400800	DETECTABLE WARNINGS	SQ FT	232	232															
44000100	PAVEMENT REMOVAL	SQ YD	21065	21065															
44000156	HOT-MIX ASPHALT SURFACE REMOVAL, 1 3/4"	SQ YD	19443	19443															
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	6586	6586															
44000600	SIDEWALK REMOVAL	SQ FT	2582	2582															
44004250	PAVED SHOULDER REMOVAL	SQ YD	15,267	15,267															
44200614	CLASS A PATCHES, TYPE IV, 13 INCH	SQ YD	54	54															
44213000	PATCHING REINFORCEMENT	SQ YD	54	54															
44213204	TIE BARS 3/4"	EACH	18	18															
48101500	AGGREGATE SHOULDERS, TYPE B 6"	SQ YD	1035	1035															
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1				1												
50102400	CONCRETE REMOVAL	CU YD	2255			1489.5	182.4	469.7	113.4										
50104000	BRIDGE RAIL REMOVAL	FOOT	6531.7			3767.3	1292.4	953.0	319.0										
50157300	PROTECTIVE SHIELD	SQ YD	11209.5			1681.1	3886.3	5642.1											
50200100	STRUCTURE EXCAVATION	CU YD	11,238.3			9135.3	124.6	956.0	1023.0										
50200300	COFFERDAM EXCAVATION	CU YD	927				927												

TYLIN INTERNATIONAL	USER NAME = #USER#	DESIGNED - AZ	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CENTRAL AVENUE OVER I-55 SUMMARY OF QUANTITIES			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = #SCALE#	DRAWN - AZ	REVISED -		I-55	0711.2R & 1011.1BR	COOK	741	4			
	PLOT DATE = 4/29/2011	CHECKED - DMJ	REVISED -		SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.			CONTRACT NO. 60999				
		DATE - 03/25/2011	REVISED -		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			Rev. 6-7-11				

SUMMARY OF QUANTITIES  
INTERSTATE 55 (I-55) AT CENTRAL AVENUE

CODE NUMBER	PAY ITEM	UNIT	TOTAL QUANTITY	FUNDING BREAKDOWN - 90% FEDERAL, 10% STATE							
				ROAD 0003	LAND SCAPE 0003	BRIDGE SNO16-0724 0013	BRIDGE SNO16-3240 0013	BRIDGE SNO16-3241 0013	RETAIN WALLS 0040	LIGHT-ING 0021	TRAF. SIGNAL 0021
50202901	COFFERDAM (LOCATION-1)	EACH	1			1					
50202902	COFFERDAM (LOCATION-2)	EACH	1			1					
50300225	CONCRETE STRUCTURES	CU YD	6945.6			4742.4	616.5	917.8	668.9		
50300255	CONCRETE SUPERSTRUCTURE	CU YD	7963.2			4169.3	2242.7	1551.2			
50300260	BRIDGE DECK GROOVING	SQ YD	19548			9439	5800	4309			
50300300	PROTECTIVE COAT	SQ YD	32553			17566	8375	6005	607		
50500305	ERECTING STRUCTURAL STEEL	L SUM	1			0.81	0.11	0.08			
50500505	STUD SHEAR CONNECTORS	EACH	80,513			47,410	9533	23570			
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2,977,420			1,616,230	687,000	593,530	80,660		
50800515	BAR SPLICERS	EACH	5187			2699	770	1718			
50900105	ALUMINUM RAILING, TYPE L	FOOT	2888.2			257.5	1334.3	971.4	325.0		
51200957	FURNISHING METAL SHELL PILES 12" X 0.250"	FOOT	48,293			40,138		2799	5356		
51202305	DRIVING PILES	FOOT	48,293			40,138		2799	5356		
51203200	TEST PILE METAL SHELLS	EACH	27			19		6	2		
51500100	NAME PLATES	EACH	3			1	1	1			
* 51603000	DRILLED SHAFT IN SOIL	CU YD	611.9				611.9				
* 51604000	DRILLED SHAFT IN ROCK	CU YD	8.1				8.1				
52000110	PREFORMED JOINT STRIP SEAL	FOOT	460			350.0		110.0			
52100210	ERECTING ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	128				46	82			
52100220	ERECTING ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	58				20	38			
52100230	ERECTING ELASTOMERIC BEARING ASSEMBLY, TYPE III	EACH	17				17				
52100520	ANCHOR BOLTS, 1"	EACH	652			268	132	252			
52100530	ANCHOR BOLTS, 1 1/4"	EACH	16			8	8				
52100540	ANCHOR BOLTS, 1 1/2"	EACH	112			36	76				
52100560	ANCHOR BOLTS, 2"	EACH	16			16					

\* - INDICATES SPECIALTY ITEM  
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54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	1	1							
54213693	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 48"	EACH	1	1							
54247130	GRATING FOR CONCRETE FLARED ENDSECTION 24"	EACH	1	1							
54247190	GRATING FOR CONCRETE FLARED ENDSECTION 48"	EACH	1	1							
550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	9	9							
550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	3990	3990							
550A0410	STORM SEWERS, CLASS A, TYPE 2 24"	FOOT	310	310							
550A0480	STORM SEWERS, CLASS A, TYPE 2 48"	FOOT	17	17							
550A0640	STORM SEWERS, CLASS A, TYPE 3 12"	FOOT	6	6							
550A0710	STORM SEWERS, CLASS A, TYPE 3 24"	FOOT	140	140							
55100100	STORM SEWER REMOVAL 4"	FOOT	11	11							
55100200	STORM SEWER REMOVAL 6"	FOOT	25	25							
55100300	STORM SEWER REMOVAL 8"	FOOT	129	129							
55100400	STORM SEWER REMOVAL 10"	FOOT	296	296							
55100500	STORM SEWER REMOVAL 12"	FOOT	906	906							
55100800	STORM SEWER REMOVAL 16"	FOOT	23	23							
55200900	STORM SEWERS JACKED IN PLACE, 24"	FOOT	81	81							
58700300	CONCRETE SEALER	SQ FT	53649.0			41371	4368	7910			
59000200	EPOXY CRACK INJECTION	FOOT	65.7				66				
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	893				268	625			
59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	45	45							
60108300	PIPE UNDERDRAINS 8" (SPECIAL)	FOOT	8226	8226							
60200105	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	15	15							
60200205	CATCH BASINS, TYPE A, 4'- DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	3	3							

<b>TYLIN INTERNATIONAL</b>	USER NAME = #USER#	DESIGNED - AZ	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CENTRAL AVENUE OVER I-55 SUMMARY OF QUANTITIES</b>	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEET NO.	
	PLOT SCALE = #SCALE#	DRAWN - AZ	REVISED -			I-55	0711.2R & 1011.LBR	COOK	741	5
	PLOT DATE = 4/29/2011	CHECKED - DMJ	REVISED -			CONTRACT NO. 60999				
				SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.		FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				

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INTERSTATE 55 (I-55) AT CENTRAL AVENUE

CODE NUMBER	PAY ITEM	UNIT	TOTAL QUANTITY	FUNDING BREAKDOWN - 90% FEDERAL, 10% STATE						
				ROAD 0003	*** 0003	BRIDGE SNO16-0724-0013	BRIDGE SNO16-3240-0013	BRIDGE SNO16-3241-0013	RETAIN WALLS 0040	LIGHTING 0021
X2070304	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	1412				342	1070		
X2130010	EXPLORATION TRENCH, SPECIAL	FOOT	300	300						
X4400198	CONCRETE BARRIER REMOVAL (SPECIAL)	FOOT	1801	1801						
X4403300	CONCRETE MEDIAN REMOVAL	SO FT	306	306						
X5080600	MECHANICAL SPLICERS	EACH	675		308	34	96	237		
X5200220	FINGER PLATE EXPANSION JOINT, 6" (ERECT ONLY)	FOOT	116			116				
X6013700	PIPE UNDERDRAIN REMOVAL (SPECIAL)	FOOT	7351	7351						
X6022810	MANHOLES, SANITARY, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2		2					
X6370159	CONCRFTE BARRIER, SINGLE FACE, 32 INCH HEIGHT (SPECIAL)	FOOT	989	989						
X6640300	CHAIN LINK FENCE REMOVAL	FOOT	3046	3046						
X6700410	ENGINEER'S FIELD OFFICE, TYPE A, (SPECIAL)	CAL MO	18	18						
X6700600	ENGINEER'S FIELD LABORATORY (SPECIAL)	CAL MO	18	18						
X7010216	TRAFFIC CONTROL AND PROTECTION (SPECIAL) -	L SUM	1	1						
X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	L SUM	1	1						
X7013820	TRAFFIC CONTROL SURVEILLANCE, EXPRESSWAYS	CAL DA	548	548						
X7030025	WET REFLECTIVE TEMPORARY TAPE TYPE III - LETTERS AND SYMBOLS	SO FT	2	1680						
X7030030	WET REFLECTIVE TEMPORARY TAPE TYPE III, 4 IN	FOOT	126471	126471						
X7030035	WET REFLECTIVE TEMPORARY TAPE TYPE III, 5 IN	FOOT	15330	15330						
X7030040	WET REFLECTIVE TEMPORARY TAPE TYPE III, 6 IN	FOOT	7798	7798						
X7030045	WET REFLECTIVE TEMPORARY TAPE TYPE III, 8 IN	FOOT	14857	14857						
X7030050	WET REFLECTIVE TEMPORARY TAPE TYPE III, 12 IN	FOOT	2205	2205						
X7030055	WET REFLECTIVE TEMPORARY TAPE TYPE III, 24 IN	FOOT	27	27						
X7333100	OVERHEAD SIGN STRUCTURE - MONOTUBE (SPECIAL)	FOOT	165.7							165.7
X8040310	ELECTRICAL SERVICE DISCONNECT	EACH	2							2
X8140105	HANDHOLE (SPECIAL)	EACH	7							7

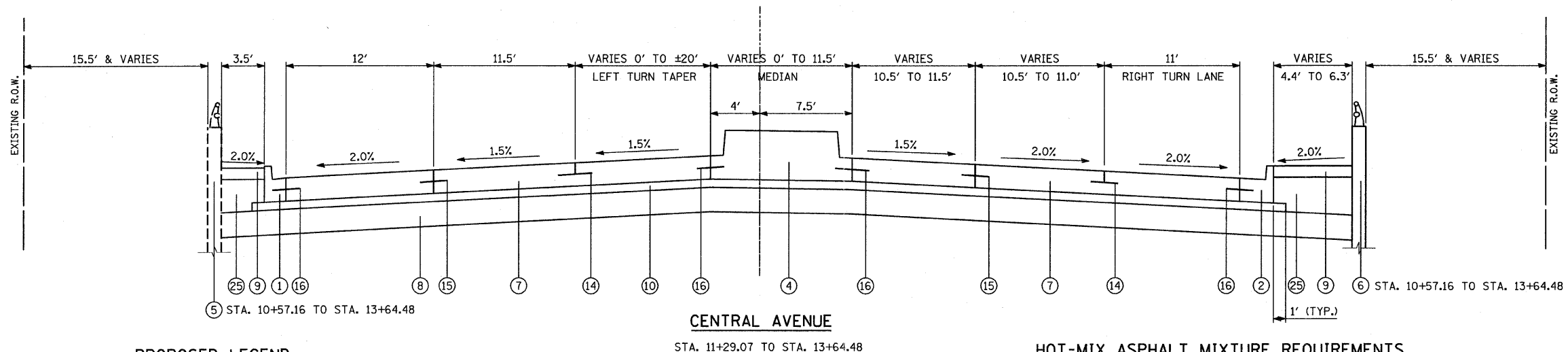
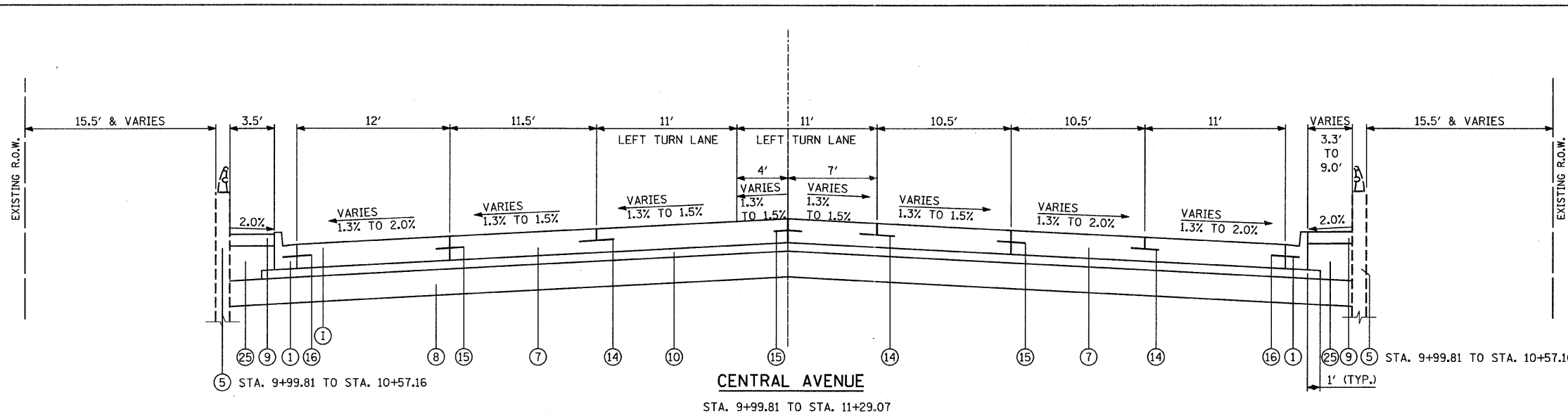
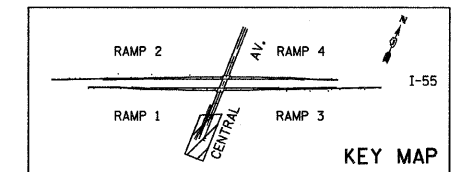
\* - INDICATES SPECIALTY ITEM  
 \*\* - SEE BILL OF MATERIALS FOR INDIVIDUAL RETAINING WALL QUANTITIES  
 \*\*\* - 100% CENTRAL STICKNEY SANITARY DISTRICT

CODE NUMBER	PAY ITEM	UNIT	TOTAL QUANTITY	FUNDING BREAKDOWN - 90% FEDERAL, 10% STATE						
				ROAD 0003	LAND SCAPE 0003	BRIDGE SNO16-0724-0013	BRIDGE SNO16-3240-0013	BRIDGE SNO16-3241-0013	RETAIN WALLS 0040	LIGHTING 0021
X8140210	HEAVY-DUTY HANDHOLE (SPECIAL)	EACH	9							9
X8140220	DOUBLE HANDHOLE (SPECIAL)	EACH	5							5
X8140230	HANDHOLE, COMPOSITE CONCRETE (SPECIAL)	EACH	10							10
X8730245	ELECTRIC CABLE IN CONDUIT, NO. 18, 2 PAIR TWISTED, SHIELDED	FOOT	1239							1239
X8808120	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4							4
X8850102	INDUCTION LOOP	FOOT	312							312
X8950130	MODIFY EXISTING LIGHTING CONTROLLER	EACH	1							1
Z0001050	AGGREGATE SUBGRADE 12"	SO YD	38458	38458						
Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	63			31	32			
Z0001904	STRUCTURAL STEEL REMOVAL	L SUM	1			0.55	0.45			
Z0001905	STRUCTURAL STEEL REPAIR	POUND	45090				45090			
Z0003802	REMOVAL OF EXISTING BEARINGS	EACH	96			30	66			
Z0004552	APPROACH SLAB REMOVAL	SO YD	1022	1022						
Z0007101	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 1	L SUM	1				1			
Z0007102	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 2	L SUM	1				1			
Z0010501	CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1				1			
Z0010502	CLEANING AND PAINTING STEEL BRIDGE NO. 2	L SUM	1				1			
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SO FT	161				161			
Z0012755	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SO FT	128			40	88			
Z0013797	STABILIZED CONSTRUCTION ENTRANCE	SO YD	900	900						
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1						
Z0016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SO YD	20			20				
Z0016200	DECK SLAB REPAIR (PARTIAL)	SO YD	20			20				

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	PLOT SCALE = #SCALE*	DRAWN - AZ	REVISED -			I-55	0711.2R & 1011.1BR	COOK	741 10
	PLOT DATE = 4/29/2011	CHECKED - DMJ	REVISED -	SCALE: NONE	SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 60999	Rev. 4-8-11

**CENTRAL AVENUE**

STRUCTURAL DESIGN TRAFFIC:	YEAR 2014
PV = 28,698	SU = 3,742 MU = 1,888
ROAD/STREET CLASSIFICATION:	CLASS 1
PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:	P = 8% S = 37% M = 37%
TRAFFIC FACTOR:	ACTUAL TF = 13.72 AC TYPE = XX
	MINIMUM TF = 4.96
SUBGRADE SUPPORT RATING:	
SSR = 2.00 (STA. to )	
SSR = X.XX (STA. to )	



**PROPOSED LEGEND**

- ① COMBINATION CONC. CURB & GUTTER, TYPE B-6.12
- ② COMBINATION CONC. CURB & GUTTER, TYPE B-6.24
- ③ AGGREGATE SHOULDERS, TYPE B, 6"
- ④ CONCRETE MEDIAN, TYPE SB-6.12
- ⑤ CONCRETE RETAINING WALL (EXISTING)
- ⑥ MECHANICALLY STABILIZED EARTH RETAINING WALL (PROPOSED)
- ⑦ PORTLAND CEMENT CONCRETE PAVEMENT, 11" (JOINTED)
- ⑧ AGGREGATE SUBGRADE, 12"
- ⑨ PORTLAND CEMENT CONCRETE SIDEWALK, 5"
- ⑩ STABILIZED SUBBASE - HOT-MIX ASPHALT, 4 1/2"
- ⑪ EROSION CONTROL BLANKET
- ⑫ TOPSOIL FURNISH AND PLACE, 4"
- ⑬ SEEDING, CLASS 2A
- ⑭ SAWED LONGITUDINAL JOINT WITH NO. 6 TIE BARS @ 30" CENTERS (INCLUDED IN COST OF PCC PAVEMENT)
- ⑮ LONGITUDINAL CONSTRUCTION JOINT WITH NO. 6 TIE BARS @ 24" CENTERS (INCLUDED IN COST OF PCC PAVEMENT)
- ⑯ CONSTRUCTION JOINT WITH NO. 6 TIE BARS @ 24" CENTERS (INCLUDED IN COST OF CURB AND GUTTER OR MEDIAN)
- ⑰ LONGITUDINAL CONSTRUCTION JOINT WITH NO. 6 TIE BARS @ 24" CENTERS (INCLUDED IN COST OF PCC PAVEMENT)
- ⑱ STEEL PLATE BEAM GUARDRAIL, TYPE A
- ⑲ PORTLAND CEMENT CONCRETE PAVEMENT, 15" (JOINTED)
- ⑳ CRC PAVEMENT, 15"
- ㉑ HOT-MIX ASPHALT SURFACE COURSE MIX "D", N70, 1-1/2"
- ㉒ HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N70, 12"
- ㉓ HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N70, 13.5"
- ㉔ SUBBASE GRANULAR MATERIAL, TYPE B 6"
- ㉕ AGGREGATE BASE COURSE, TYPE B
- ㉖ BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)
- ㉗ MOMENT SLAB (SEE MSE WALL PLANS)
- ㉘ REINFORCED SOIL MASS (SEE MSE WALL PLANS)
- ㉙ PROPOSED SINGLE FACE CONCRETE BARRIER (SPECIAL)
- ㉚ PROPOSED CONCRETE BARRIER BASE (SPECIAL)
- ㉛ PROPOSED PIPE UNDERDRAINS, 8" SPECIAL (36" BELOW PAVED SURFACE)
- ㉜ POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1 1/2"

**HOT-MIX ASPHALT MIXTURE REQUIREMENTS**

SHOULDERS	% AIR VOIDS @ndes
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90; 1 1/2" OR 1 3/4"	4% @ 90 Gyr.
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5 mm); 1 1/2"	4% @ 70 Gyr.
HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N70; 12"; 13.5"	4% @ 70 Gyr.
<b>TEMPORARY PAVEMENT</b>	
TEMPORARY PAVEMENT (INTERSTATE) (HMA SURFACE COURSE, MIX "D", N70) (IL 9.5 mm); 1 1/2"	4% @ 70 Gyr.
TEMPORARY PAVEMENT (INTERSTATE) (HMA BINDER IL-19mm); 10 1/2"	4% @ 70 Gyr.
<b>STABILIZED SUB-BASE</b>	
STABILIZED SUBBASE - HOT-MIX ASPHALT, 4 1/2" ; 4 1/2"	3% @ 50 Gyr.

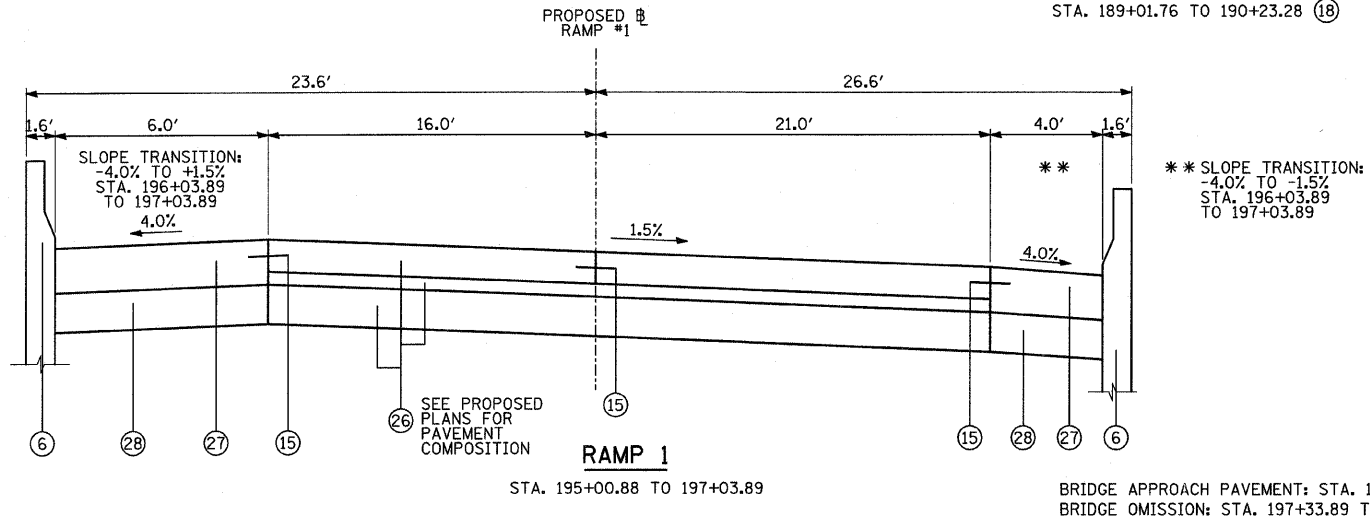
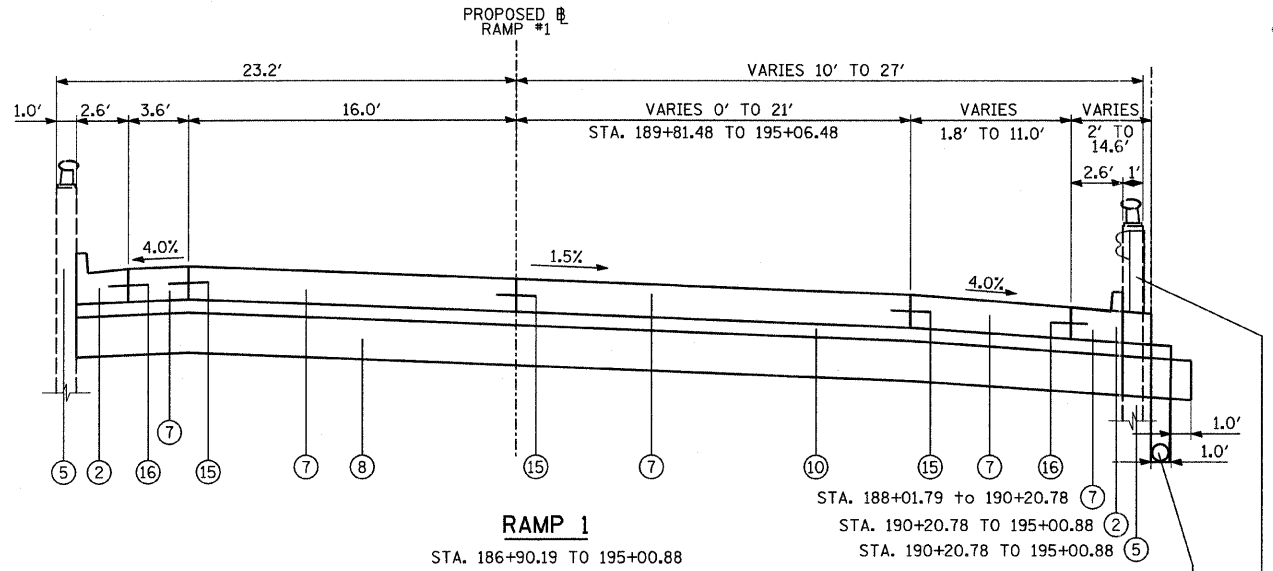
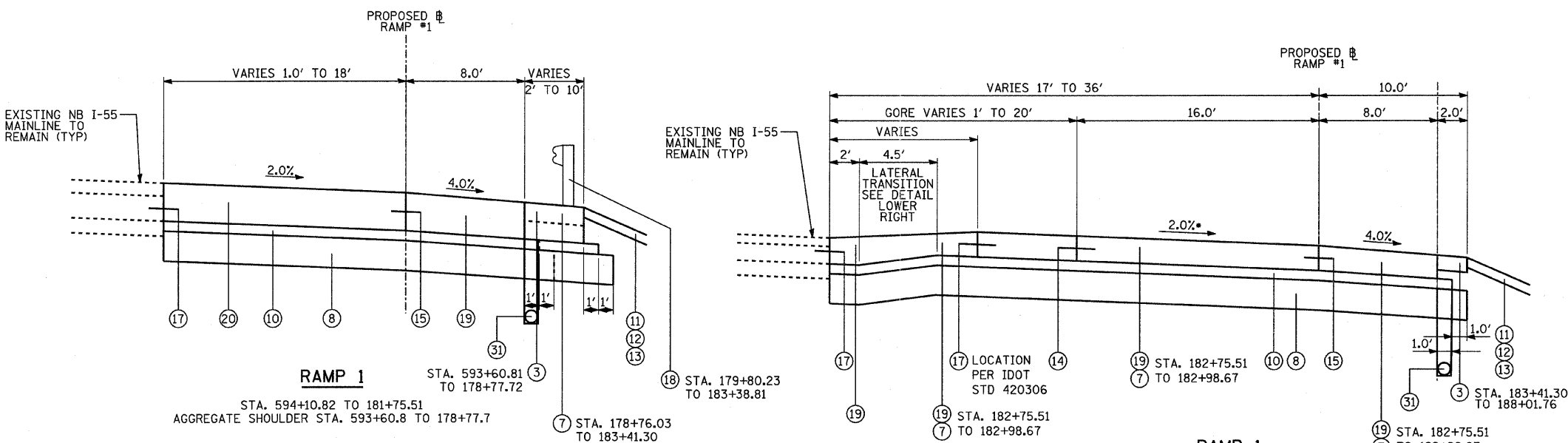
**NOTES:**

- (1) THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.
- (2) THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PF 70-22" 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) ALL TEMPORARY PAVEMENT (INTERSTATE) WITHIN IDOT JURISDICTION SHALL BE, AT THE OPTION OF THE CONTRACTOR, EITHER (1) 8 1/2" PORTLAND CEMENT CONCRETE BASE COURSE, OR (2) 12" HMA PAVEMENT CONSISTING OF 1 1/2" HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 OVER 10 1/2" TEMPORARY PAVEMENT (INTERSTATE) (HMA BINDER IL-19). TEMPORARY PAVEMENT (INTERSTATE) SHALL BE PLACED OVER 4" OF AGGREGATE SUBBASE, BUT MAY BE INCREASED TO 12" IN AREAS OF SOFT SUBGRADE SOILS (IBR < 2.5) AS DIRECTED BY THE ENGINEER.

<b>TYLIN INTERNATIONAL</b>	USER NAME = #USER*	DESIGNED - AZ	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CENTRAL AVENUE OVER I-55 PROPOSED TYPICAL SECTIONS - CENTRAL AVENUE</b>			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = #SCALE*	DRAWN - AZ	REVISED -		I-55	0711.2R & 1011.1BR	COOK	741	13			
	PLOT DATE = 4/28/2011	CHECKED - DMJ	REVISED -		SCALE: NONE	SHEET NO. 3 OF 8 SHEETS	STA. TO STA.	CONTRACT NO. 60999				
		DATE - 03/25/2011	REVISED -				FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

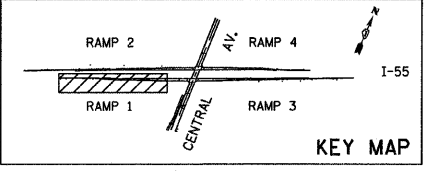
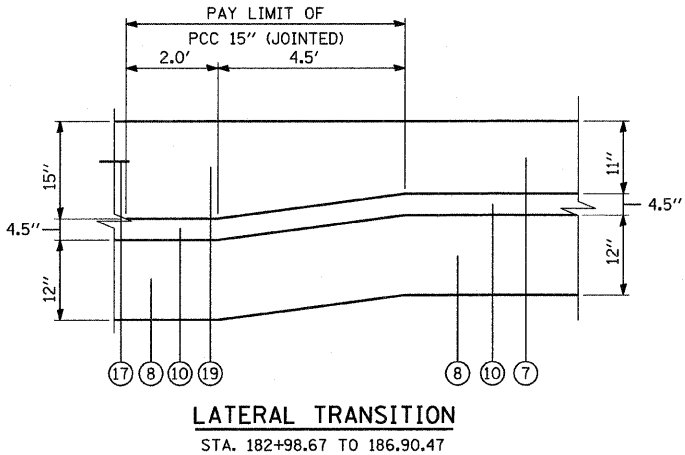
Rev. 6-8-11

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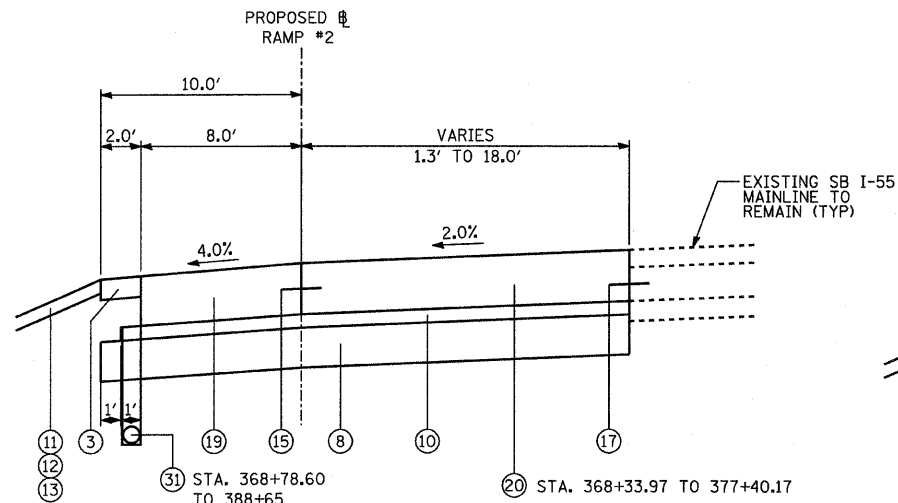
**RAMPS**

STRUCTURAL DESIGN TRAFFIC: YEAR 2014  
PV = 10,357 SU = 1,052 MU = 2,255  
ROAD/STREET CLASSIFICATION: CLASS 1  
PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:  
P = 100% S = 100% M = 100%  
TRAFFIC FACTOR: ACTUAL TF = 34.47 AC TYPE = XX  
MINIMUM TF = 11.17  
AC GRADE: BINDER = XXX SURFACE = XXX  
SUBGRADE SUPPORT RATING:  
SSR = 2.00 (STA. +o )  
SSR = X.XX (STA. +o )

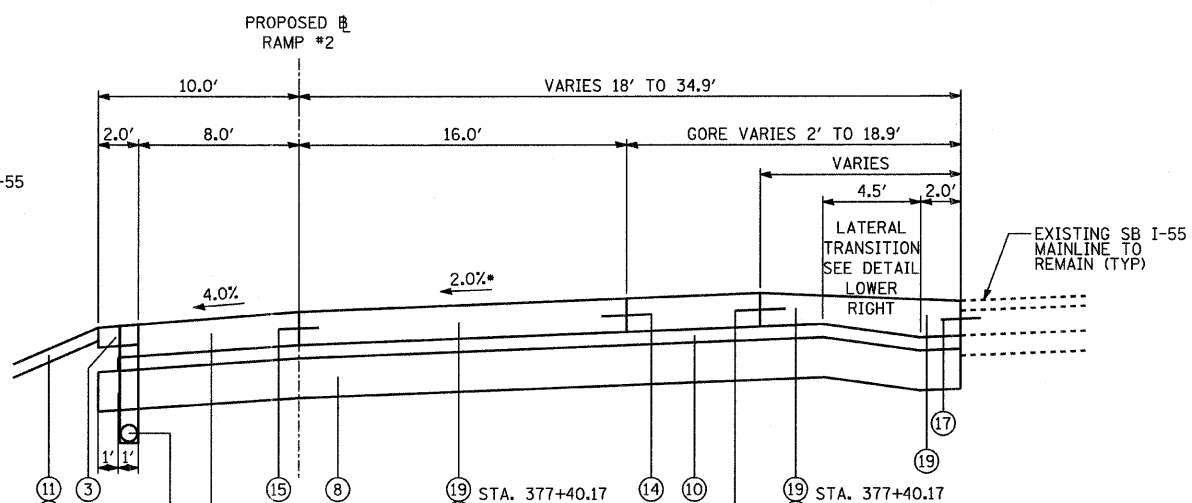


- PROPOSED LEGEND**
- ① COMBINATION CONC. CURB & GUTTER, TYPE B-6.12
  - ② COMBINATION CONC. CURB & GUTTER, TYPE B-6.24
  - ③ AGGREGATE SHOULDERS, TYPE B, 6"
  - ④ CONCRETE MEDIAN, TYPE SB-6.12
  - ⑤ CONCRETE RETAINING WALL (EXISTING)
  - ⑥ MECHANICALLY STABILIZED EARTH RETAINING WALL (PROPOSED)
  - ⑦ PORTLAND CEMENT CONCRETE PAVEMENT, 11" (JOINTED)
  - ⑧ AGGREGATE SUBGRADE, 12"
  - ⑨ PORTLAND CEMENT CONCRETE SIDEWALK, 5"
  - ⑩ STABILIZED SUBBASE - HOT-MIX ASPHALT, 4 1/2"
  - ⑪ EROSION CONTROL BLANKET
  - ⑫ TOPSOIL FURNISH AND PLACE, 4"
  - ⑬ SEEDING, CLASS 2A
  - ⑭ SAWED LONGITUDINAL JOINT WITH NO. 6 TIE BARS @ 30" CENTERS (INCLUDED IN COST OF PCC PAVEMENT)
  - ⑮ LONGITUDINAL CONSTRUCTION JOINT WITH NO. 6 TIE BARS @ 24" CENTERS (INCLUDED IN COST OF PCC PAVEMENT)
  - ⑯ CONSTRUCTION JOINT WITH NO. 6 TIE BARS @ 24" CENTERS (INCLUDED IN COST OF CURB AND GUTTER OR MEDIAN)
  - ⑰ LONGITUDINAL CONSTRUCTION JOINT WITH NO. 6 TIE BARS @ 24" CENTERS DRILL AND GROUT IN PLACE (INCLUDED IN COST OF PCC PAVEMENT)
  - ⑱ STEEL PLATE BEAM GUARDRAIL, TYPE A
  - ⑲ PORTLAND CEMENT CONCRETE PAVEMENT, 15" (JOINTED)
  - ⑳ CRC PAVEMENT, 15"
  - ㉑ HOT-MIX ASPHALT SURFACE COURSE MIX "D", N70, 1-1/2"
  - ㉒ HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N70, 12"
  - ㉓ HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N70, 13.5"
  - ㉔ SUBBASE GRANULAR MATERIAL, TYPE B 6"
  - ㉕ AGGREGATE BASE COURSE, TYPE B
  - ㉖ BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)
  - ㉗ MOMENT SLAB (SEE MSE WALL PLANS)
  - ㉘ REINFORCED SOIL MASS (SEE MSE WALL PLANS)
  - ㉙ PROPOSED SINGLE FACE CONCRETE BARRIER (SPECIAL)
  - ㉚ PROPOSED CONCRETE BARRIER BASE (SPECIAL)
  - ㉛ PROPOSED PIPE UNDERDRAINS, 8" SPECIAL (36" BELOW PAVED SURFACE)
  - ㉜ POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1 1/2"

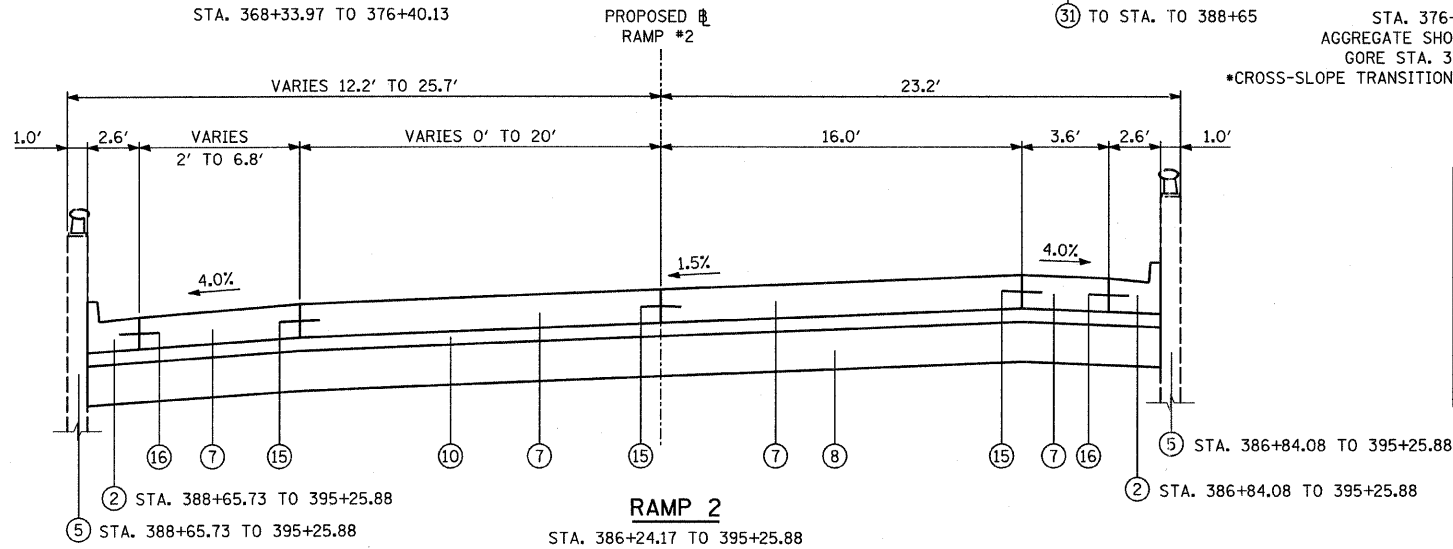
<b>TYLIN INTERNATIONAL</b>	USER NAME = #USER#	DESIGNED - RLB	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CENTRAL AVENUE OVER I-55 PROPOSED TYPICAL SECTIONS - RAMP 1</b>		F.A.I. RTE. I-55	SECTION 0711.2R & 1011.1BR	COUNTY COOK	TOTAL SHEETS 741	SHEET NO. 14	
	PLOT SCALE = #SCALE#	DRAWN - RLB	REVISED -		SCALE: NONE	SHEET NO. 4 OF 8 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		CONTRACT NO. 60999		
	PLOT DATE = 4/28/2011	CHECKED - AZ	REVISED -									
		DATE - 03/25/2011	REVISED -									



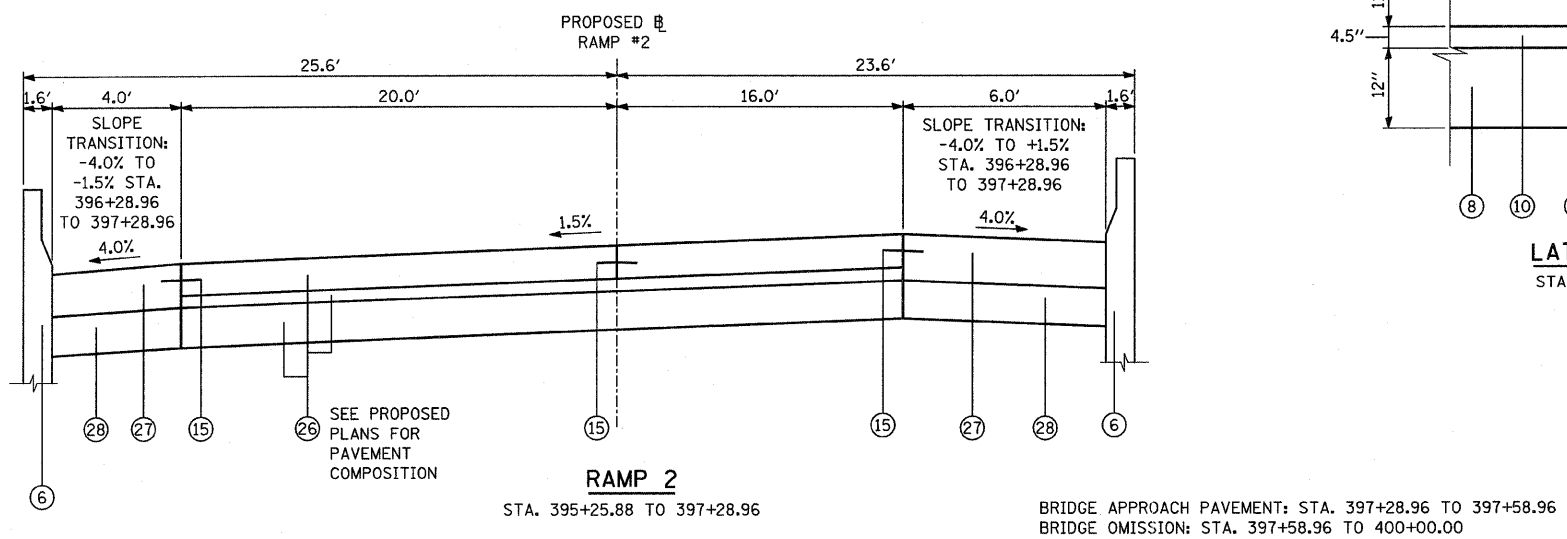
**RAMP 2**  
STA. 368+33.97 TO 376+40.13



**RAMP 2**  
STA. 376+40.13 TO 386+24.17  
AGGREGATE SHOULDER TO STA. 388+65.73  
GORE STA. 376+40.13 TO 386+84.07  
\*CROSS-SLOPE TRANSITION: STA. 379+50 (2%) TO 379+75 (1.5%)



**RAMP 2**  
STA. 386+24.17 TO 395+25.88

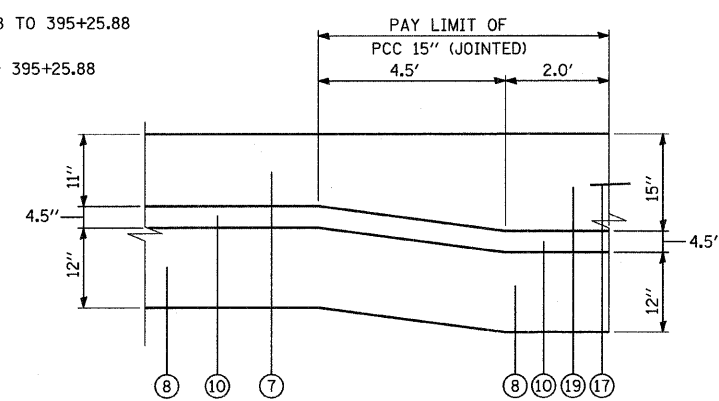


**RAMP 2**  
STA. 395+25.88 TO 397+28.96

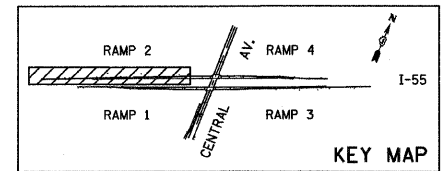
BRIDGE APPROACH PAVEMENT: STA. 397+28.96 TO 397+58.96  
BRIDGE OMISSION: STA. 397+58.96 TO 400+00.00

**RAMPS**

STRUCTURAL DESIGN TRAFFIC:	YEAR 2014
PV = 10,357	SU = 1,052 MU = 2,255
ROAD/STREET CLASSIFICATION:	CLASS 1
PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:	
P = 100%	S = 100% M = 100%
TRAFFIC FACTOR:	ACTUAL TF = 34.47 AC TYPE = XX
	MINIMUM TF = 11.17
AC GRADE:	BINDER = XXX SURFACE=XXX
SUBGRADE SUPPORT RATING:	
SSR = 2.00 (STA. to )	
SSR = X.XX (STA. to )	



**LATERAL TRANSITION**  
STA. 377+63.17 TO 386+84.09



**PROPOSED LEGEND**

- ① COMBINATION CONC. CURB & GUTTER, TYPE B-6.12
- ② COMBINATION CONC. CURB & GUTTER, TYPE B-6.24
- ③ AGGREGATE SHOULDERS, TYPE B, 6"
- ④ CONCRETE MEDIAN, TYPE SB-6.12
- ⑤ CONCRETE RETAINING WALL (EXISTING)
- ⑥ MECHANICALLY STABILIZED EARTH RETAINING WALL (PROPOSED)
- ⑦ PORTLAND CEMENT CONCRETE PAVEMENT, 11" (JOINTED)
- ⑧ AGGREGATE SUBGRADE, 12"
- ⑨ PORTLAND CEMENT CONCRETE SIDEWALK, 5"
- ⑩ STABILIZED SUBBASE - HOT-MIX ASPHALT, 4 1/2"
- ⑪ EROSION CONTROL BLANKET
- ⑫ TOPSOIL FURNISH AND PLACE, 4"
- ⑬ SEEDING, CLASS 2A
- ⑭ SAWED LONGITUDINAL JOINT WITH NO. 6 TIE BARS @ 30" CENTERS (INCLUDED IN COST OF PCC PAVEMENT)
- ⑮ LONGITUDINAL CONSTRUCTION JOINT WITH NO. 6 TIE BARS @ 24" CENTERS (INCLUDED IN COST OF PCC PAVEMENT)
- ⑯ CONSTRUCTION JOINT WITH NO. 6 TIE BARS @ 24" CENTERS (INCLUDED IN COST OF CURB AND GUTTER OR MEDIAN)
- ⑰ LONGITUDINAL CONSTRUCTION JOINT WITH NO. 6 TIE BARS @ 24" CENTERS DRILL AND GROUT IN PLACE (INCLUDED IN COST OF PCC PAVEMENT)
- ⑱ STEEL PLATE BEAM GUARDRAIL, TYPE A
- ⑲ PORTLAND CEMENT CONCRETE PAVEMENT, 15" (JOINTED)
- ⑳ CRC PAVEMENT, 15"
- ㉑ HOT-MIX ASPHALT SURFACE COURSE MIX "D", N70, 1-1/2"
- ㉒ HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N70, 12"
- ㉓ HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N70, 13.5"
- ㉔ SUBBASE GRANULAR MATERIAL, TYPE B 6"
- ㉕ AGGREGATE BASE COURSE, TYPE B
- ㉖ BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)
- ㉗ MOMENT SLAB (SEE MSE WALL PLANS)
- ㉘ REINFORCED SOIL MASS (SEE MSE WALL PLANS)
- ㉙ PROPOSED SINGLE FACE CONCRETE BARRIER (SPECIAL)
- ㉚ PROPOSED CONCRETE BARRIER BASE (SPECIAL)
- ㉛ PROPOSED PIPE UNDERDRAINS, 8" SPECIAL (36" BELOW PAVED SURFACE)
- ㉜ POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1/2"

**TYLIN INTERNATIONAL**

USER NAME = #USER#	DESIGNED - RLB	REVISED -
PLOT SCALE = #SCALE#	DRAWN - RLB	REVISED -
PLOT DATE = 4/28/2011	CHECKED - AZ	REVISED -
	DATE - 03/25/2011	REVISED -

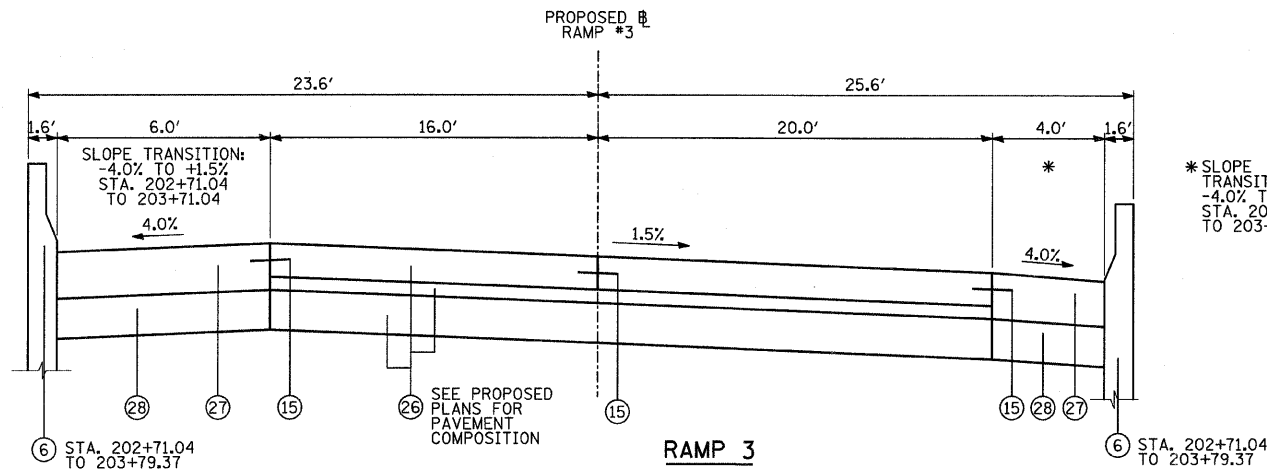
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>CENTRAL AVENUE OVER I-55 PROPOSED TYPICAL SECTIONS - RAMP 2</b>		
SCALE: NONE	SHEET NO. 5 OF 8 SHEETS	STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-55	0711.2R & 1011.1BR	COOK	741	15
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 60999	

Rev. 6-8-11

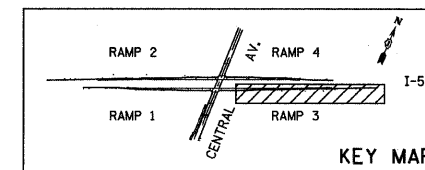
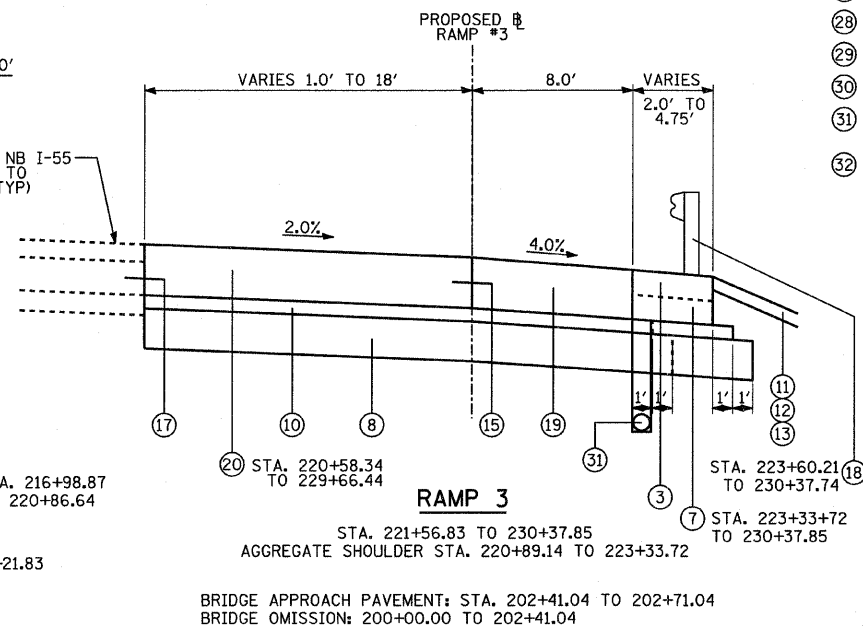
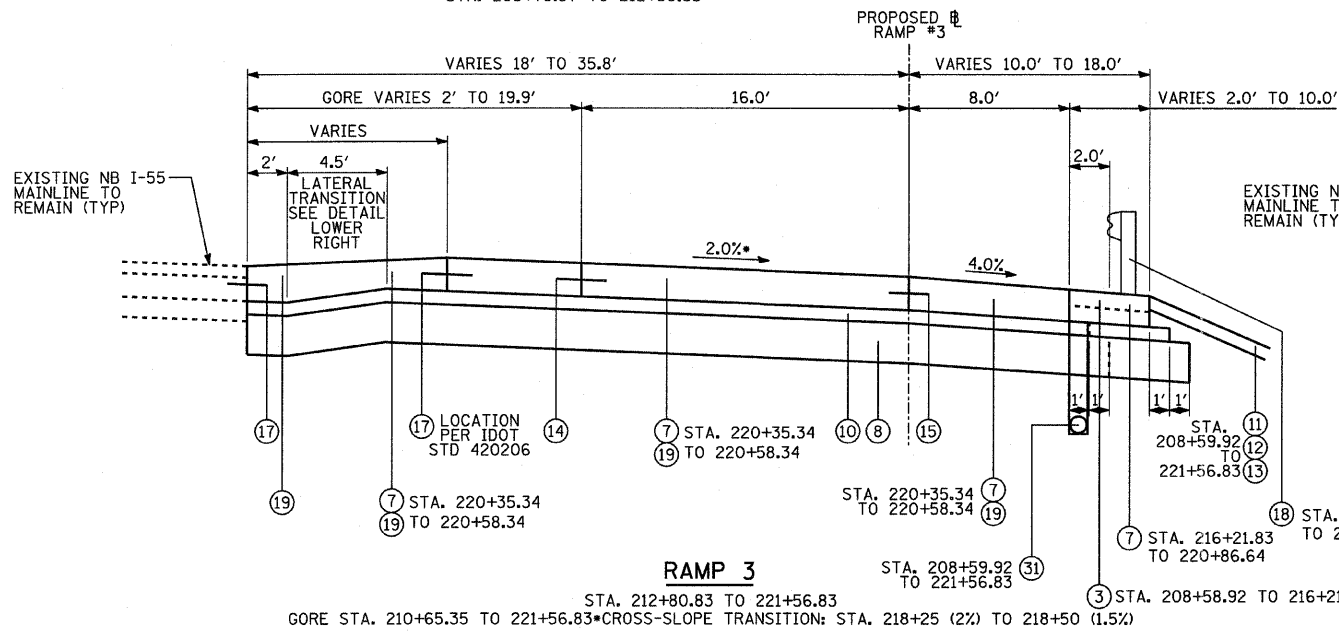
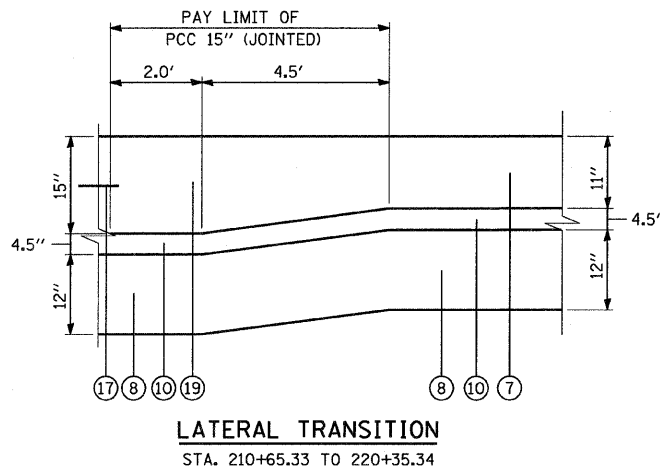
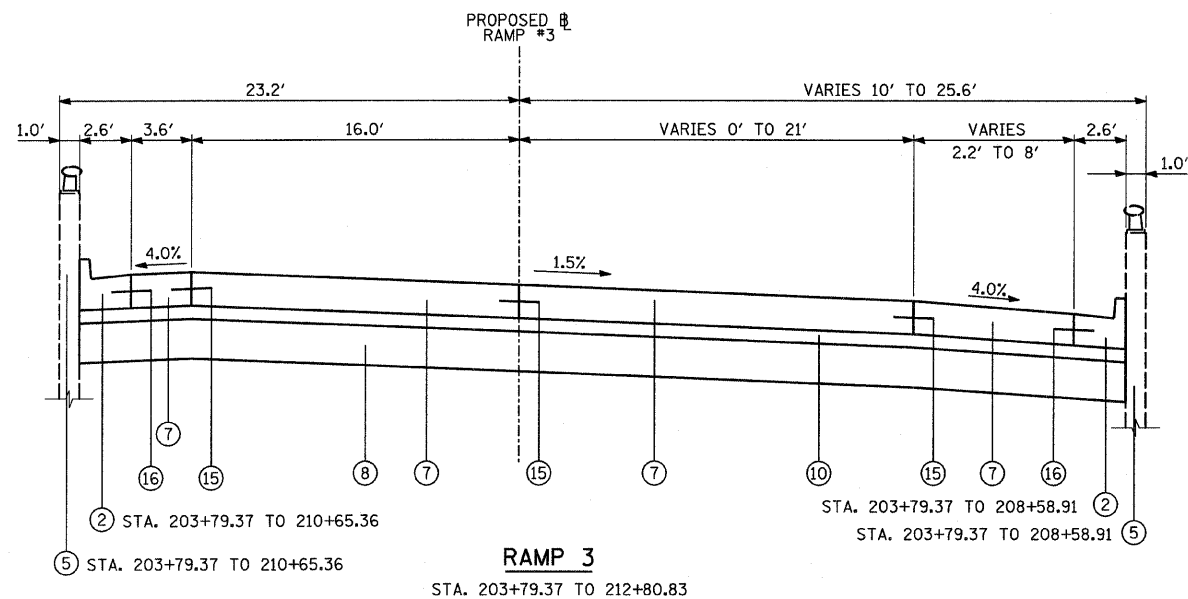




\*SLOPE TRANSITION: -4.0% TO -1.5% STA. 202+71.04 TO 203+71.04

RAMPS	
STRUCTURAL DESIGN TRAFFIC:	YEAR 2014
PV = 10,357	SU = 1,052 MU = 2,255
ROAD/STREET CLASSIFICATION:	CLASS 1
PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:	
P = 100%	S = 100% M = 100%
TRAFFIC FACTOR:	ACTUAL TF = 34.47 AC TYPE = XX
	MINIMUM TF = 11.17
AC GRADE:	BINDER = XXX SURFACE=XXX
SUBGRADE SUPPORT RATING:	
SSR = 2.00 (STA. )	+o )
SSR = X.XX (STA. )	+o )

- PROPOSED LEGEND**
- ① COMBINATION CONC. CURB & GUTTER, TYPE B-6.12
  - ② COMBINATION CONC. CURB & GUTTER, TYPE B-6.24
  - ③ AGGREGATE SHOULDERS, TYPE B, 6"
  - ④ CONCRETE MEDIAN, TYPE SB-6.12
  - ⑤ CONCRETE RETAINING WALL (EXISTING)
  - ⑥ MECHANICALLY STABILIZED EARTH RETAINING WALL (PROPOSED)
  - ⑦ PORTLAND CEMENT CONCRETE PAVEMENT, 11" (JOINTED)
  - ⑧ AGGREGATE SUBGRADE, 12"
  - ⑨ PORTLAND CEMENT CONCRETE SIDEWALK, 5"
  - ⑩ STABILIZED SUBBASE - HOT-MIX ASPHALT, 4 1/2"
  - ⑪ EROSION CONTROL BLANKET
  - ⑫ TOPSOIL FURNISH AND PLACE, 4"
  - ⑬ SEEDING, CLASS 2A
  - ⑭ SAWED LONGITUDINAL JOINT WITH NO. 6 TIE BARS @ 30" CENTERS (INCLUDED IN COST OF PCC PAVEMENT)
  - ⑮ LONGITUDINAL CONSTRUCTION JOINT WITH NO. 6 TIE BARS @ 24" CENTERS (INCLUDED IN COST OF PCC PAVEMENT)
  - ⑯ CONSTRUCTION JOINT WITH NO. 6 TIE BARS @ 24" CENTERS (INCLUDED IN COST OF CURB AND GUTTER OR MEDIAN)
  - ⑰ LONGITUDINAL CONSTRUCTION JOINT WITH NO. 6 TIE BARS @ 24" CENTERS DRILL AND GROUT IN PLACE (INCLUDED IN COST OF PCC PAVEMENT)
  - ⑱ STEEL PLATE BEAM GUARDRAIL, TYPE A
  - ⑲ PORTLAND CEMENT CONCRETE PAVEMENT, 15" (JOINTED)
  - ⑳ CRC PAVEMENT, 15"
  - ㉑ HOT-MIX ASPHALT SURFACE COURSE MIX "D", N70, 1-1/2"
  - ㉒ HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N70, 12"
  - ㉓ HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N70, 13.5"
  - ㉔ SUBBASE GRANULAR MATERIAL, TYPE B 6"
  - ㉕ AGGREGATE BASE COURSE, TYPE B
  - ㉖ BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)
  - ㉗ MOMENT SLAB (SEE MSE WALL PLANS)
  - ㉘ REINFORCED SOIL MASS (SEE MSE WALL PLANS)
  - ㉙ PROPOSED SINGLE FACE CONCRETE BARRIER (SPECIAL)
  - ㉚ PROPOSED CONCRETE BARRIER BASE (SPECIAL)
  - ㉛ PROPOSED PIPE UNDERDRAINS, 8" SPECIAL (36" BELOW PAVED SURFACE)
  - ㉜ POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1 1/2"



**TYLIN INTERNATIONAL**

USER NAME = #USER#  
 PLOT SCALE = #SCALE#  
 PLOT DATE = 4/28/2011

DESIGNED - RLB  
 DRAWN - RLB  
 CHECKED - AZ  
 DATE - 03/25/2011

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

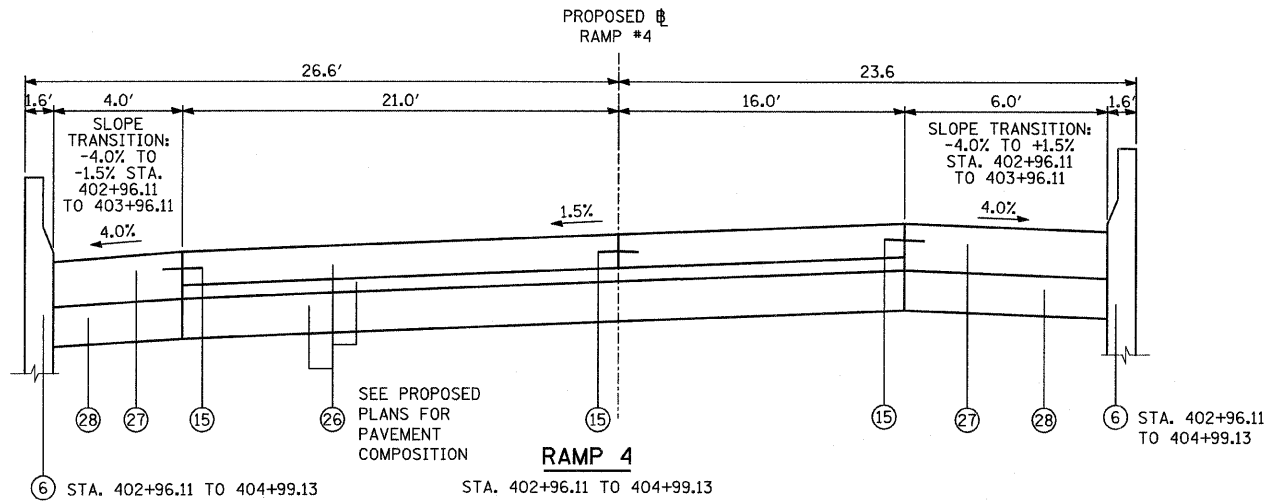
**CENTRAL AVENUE OVER I-55  
 PROPOSED TYPICAL SECTIONS - RAMP 3**

SCALE: NONE SHEET NO. 6 OF 8 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-55	0711.2R & 1011.1BR	COOK	741	16
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 60999	

Rev. 6-8-11

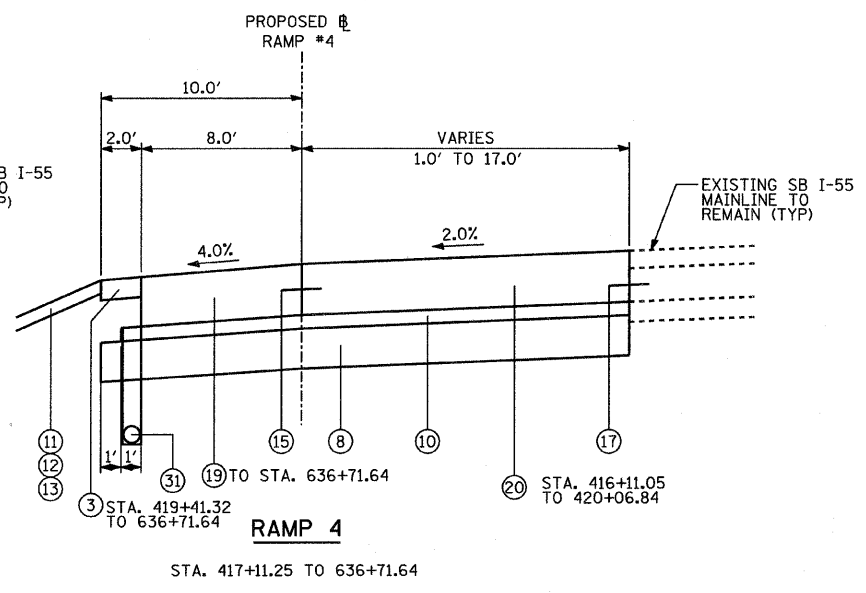
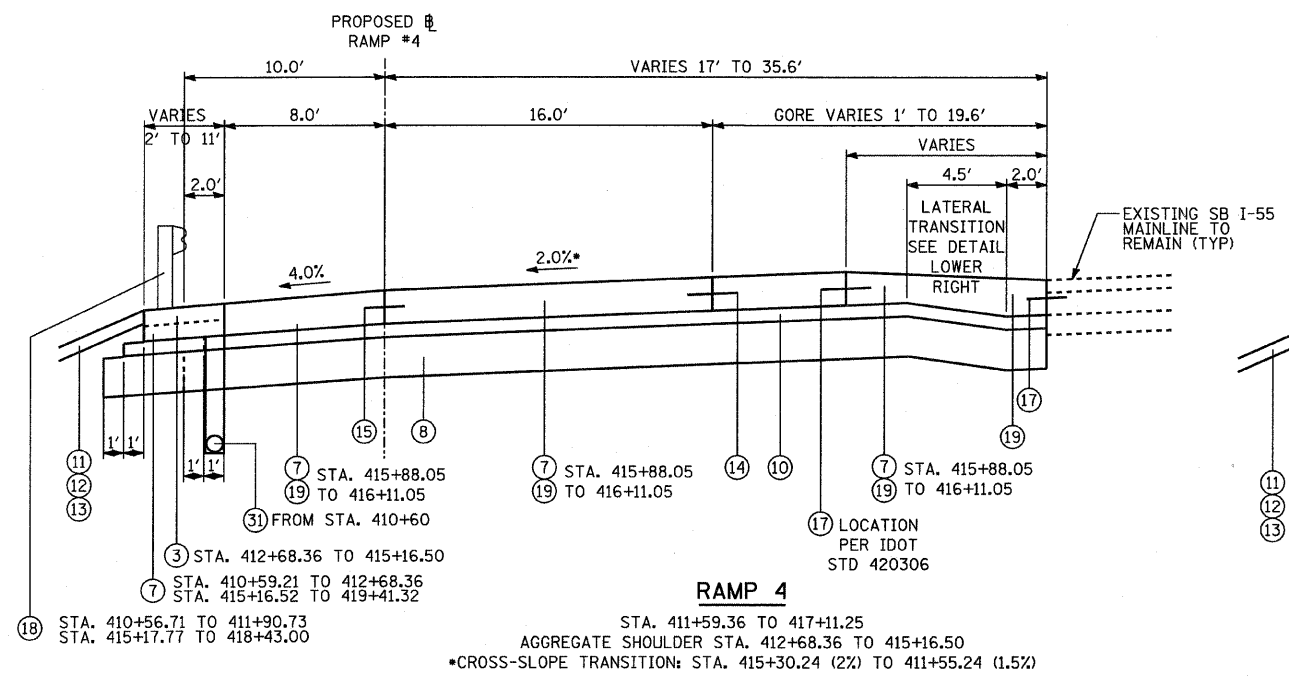
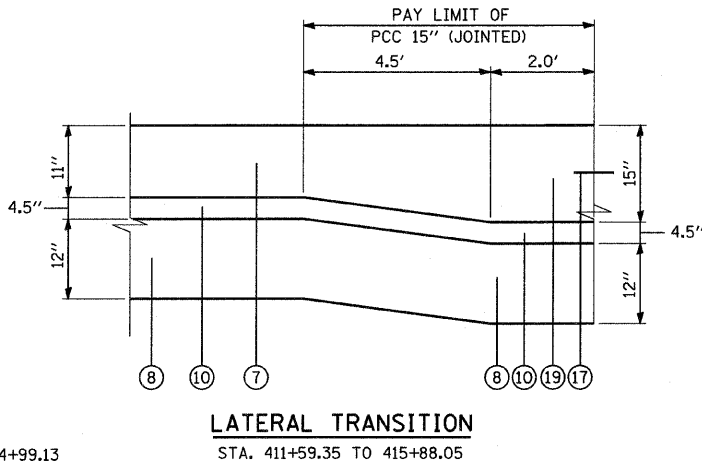
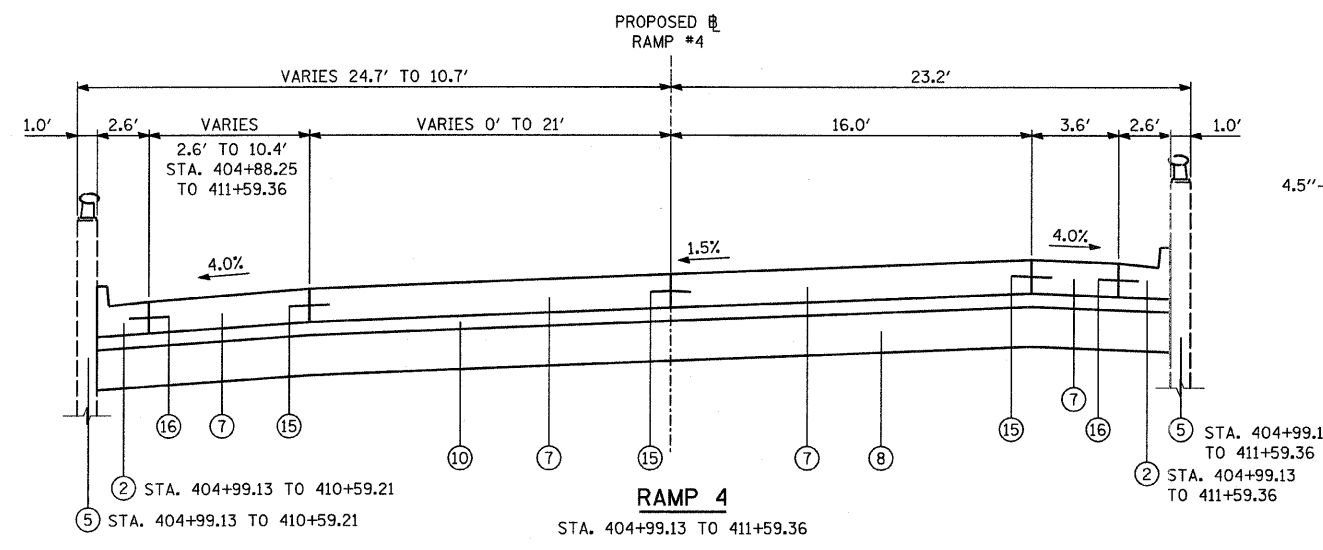
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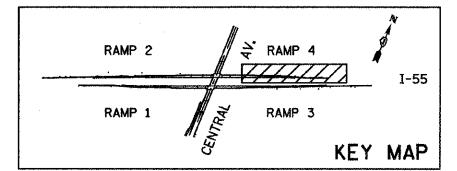
### RAMPS

STRUCTURAL DESIGN TRAFFIC:	YEAR 2014
PV = 10,357	SU = 1,052 MU = 2,255
ROAD/STREET CLASSIFICATION:	CLASS 1
PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:	P = 100% S = 100% M = 100%
TRAFFIC FACTOR:	ACTUAL TF = 34.47 AC TYPE = XX
	MINIMUM TF = 11.17
AC GRADE:	BINDER = XXX SURFACE=XXX
SUBGRADE SUPPORT RATING:	
SSR = 2.00 (STA. to )	
SSR = X.XX (STA. to )	

BRIDGE APPROACH PAVEMENT: STA. 402+66.11 TO 402+96.11  
 BRIDGE OMISSION: STA. 400+00.00 TO 402+66.11



- ### PROPOSED LEGEND
- 1 COMBINATION CONC. CURB & GUTTER, TYPE B-6.12
  - 2 COMBINATION CONC. CURB & GUTTER, TYPE B-6.24
  - 3 AGGREGATE SHOULDERS, TYPE B, 6"
  - 4 CONCRETE MEDIAN, TYPE SB-6.12
  - 5 CONCRETE RETAINING WALL (EXISTING)
  - 6 MECHANICALLY STABILIZED EARTH RETAINING WALL (PROPOSED)
  - 7 PORTLAND CEMENT CONCRETE PAVEMENT, 11" (JOINTED)
  - 8 AGGREGATE SUBGRADE, 12"
  - 9 PORTLAND CEMENT CONCRETE SIDEWALK, 5"
  - 10 STABILIZED SUBBASE - HOT-MIX ASPHALT, 4 1/2"
  - 11 EROSION CONTROL BLANKET
  - 12 TOPSOIL FURNISH AND PLACE, 4"
  - 13 SEEDING, CLASS 2A
  - 14 SAWED LONGITUDINAL JOINT WITH NO. 6 TIE BARS @ 30" CENTERS (INCLUDED IN COST OF PCC PAVEMENT)
  - 15 LONGITUDINAL CONSTRUCTION JOINT WITH NO. 6 TIE BARS @ 24" CENTERS (INCLUDED IN COST OF PCC PAVEMENT)
  - 16 CONSTRUCTION JOINT WITH NO. 6 TIE BARS @ 24" CENTERS (INCLUDED IN COST OF CURB AND GUTTER OR MEDIAN)
  - 17 LONGITUDINAL CONSTRUCTION JOINT WITH NO. 6 TIE BARS @ 24" CENTERS DRILL AND GROUT IN PLACE (INCLUDED IN COST OF PCC PAVEMENT)
  - 18 STEEL PLATE BEAM GUARDRAIL, TYPE A
  - 19 PORTLAND CEMENT CONCRETE PAVEMENT, 15" (JOINTED)
  - 20 CRC PAVEMENT, 15"
  - 21 HOT-MIX ASPHALT SURFACE COURSE MIX "D", N70, 1-1/2"
  - 22 HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N70, 12"
  - 23 HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N70, 13.5"
  - 24 SUBBASE GRANULAR MATERIAL, TYPE B 6"
  - 25 AGGREGATE BASE COURSE, TYPE B
  - 26 BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)
  - 27 MOMENT SLAB (SEE MSE WALL PLANS)
  - 28 REINFORCED SOIL MASS (SEE MSE WALL PLANS)
  - 29 PROPOSED SINGLE FACE CONCRETE BARRIER (SPECIAL)
  - 30 PROPOSED CONCRETE BARRIER BASE (SPECIAL)
  - 31 PROPOSED PIPE UNDERDRAINS, 8" SPECIAL (36" BELOW PAVED SURFACE)
  - 32 POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1 1/2"



TYLIN INTERNATIONAL	USER NAME = #USER#	DESIGNED - RLB	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CENTRAL AVENUE OVER I-55 PROPOSED TYPICAL SECTIONS - RAMP 4</b>			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = #SCALE#	DRAWN - RLB	REVISED -		I-55	0711.2R & 1011.1BR	COOK	741	17			
	PLOT DATE = 4/28/2011	CHECKED - AZ	REVISED -		SCALE: NONE	SHEET NO. 7 OF 8 SHEETS	STA.	TO STA.	CONTRACT NO. 60999			
		DATE - 03/25/2011	REVISED -				FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT				





**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES**

1. Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts 7/8-in.  $\phi$ , holes 15/16-in.  $\phi$ , unless otherwise noted.
2. Calculated weight of Structural Steel =  
Grade 50 = 4,418,700 lbs \*\*  
Grade 36 = 405,950 lbs \*\*
3. The Organic Zinc Rich Primer/Epoxy/Urethane paint system shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception that the exterior surfaces and bottom of the bottom flange of the fascia beams, masked off connection surfaces, and field installed fasteners, all of which shall be touched up and finish coated in the field. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Reddish Brown - Munsell No 2.5YR 3/4. See Special Provision for "Cleaning and Painting New Metal Structures".
4. No field welding is permitted except as specified in the contract documents.
5. Anchor bolts shall be set before bolting diaphragms and cross frames over supports.
6. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60.
7. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
8. Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
9. Concrete Sealer shall be applied to the designated areas of the new bridge seats at C Abutments 1 and 4, Pier 3 of Ramps and the East and West Abutments of Ramps.
10. Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.

11. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
12. Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using approved bar splicer or anchorage system. Cost included to "Concrete Removal".
13. SB denotes Southbound I-55  
NB denotes Eastbound I-55  
NF denotes Near Face  
FF denotes Far Face.
14. Reinforcement bars designated (E) shall be epoxy coated.
15. If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.
16. The Contractor shall retain the services on an engineering firm prequalified in the IDOT consultant selection category of Highway Bridges Complex, for preparation of the Structural Assessment Report. Contractor's pre-approval shall not be applicable for this project. See Special Provision.

**Current Ratings on File for Existing Structure**

Inventory: HS 27.1  
Operating: HS 41.8  
Live Load Restrictions: No

Inventory and Operating Ratings and Live Load Restrictions are provided for information only. Inventory and Operating Ratings are based on HS loading and configurations. Live Load Restrictions are based on Illinois legal loads and configurations. The Ratings and Live Load Restrictions are not necessarily representative of capacities to support the Contractors Equipment.

17. Slipforming of the parapets is not allowed.

\*\* Structural steel furnished under a separate contract shall be erected under pay item Erecting Structural Steel. The listed weights include structural steel framing comprised of girders, diaphragms, fill plates, connection plates, bolts and steel extensions.

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	MAINLINE		
		SUPER	SUB	TOTAL
REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1		1
CONCRETE REMOVAL	CU YD		1,489.5	1,489.5
REMOVAL OF EXISTING SUB-STRUCTURES - ABUTMENT TYPE 1	EACH		4	4
REMOVAL OF EXISTING SUB-STRUCTURES - ABUTMENT TYPE 2	EACH		2	2
REMOVAL OF EXISTING SUB-STRUCTURES - PIER	EACH		19	19
BRIDGE RAIL REMOVAL	FOOT	3150		3150
PROTECTIVE SHIELD	SQ YD	1681.1		1681.1
STRUCTURE EXCAVATION	CU YD		3,967.3	3,967.3
CONCRETE STRUCTURES	CU YD	59.0	4,423.1	4,482.1
CONCRETE SUPERSTRUCTURE	CU YD	3,515.1		3,515.1
BRIDGE DECK GROOVING	SQ YD	9439		9439
PROTECTIVE COAT	SQ YD	11418		11418
ERECTING STRUCTURAL STEEL	L SUM	0.81		0.81
STUD SHEAR CONNECTORS	EACH	47,410		47,410
REINFORCEMENT BARS, EPOXY COATED	POUND	877,240	637,190	1,514,430
BAR SPLICERS	EACH	2637	62	2699
FURNISHING METAL SHELL PILES 12"X 0.250"	FOOT		38,018	38,018
DRIVING PILES	FOOT		38,018	38,018
TEST PILE METAL SHELLS	EACH		18	18
TEMPORARY SHEET PILING	SQ FT		13,566	13,566
NAME PLATES	EACH	1		1
CONCRETE SEALER	SQ FT		41,371	41,371
FIELD MEASUREMENTS	L SUM		0.30	0.30
DRAINAGE SCUPPERS, DS-12	EACH	16		16
STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5")	SQ FT		40	40
MODULAR EXPANSION JOINT-SWIVEL 6" (ERECT ONLY)	FOOT	186		186
HIGH LOAD MULTI-ROTATIONAL BEARINGS, FIXED, 250K (ERECT ONLY)	EACH	20		20
HIGH LOAD MULTI-ROTATIONAL BEARINGS, FIXED, 500K (ERECT ONLY)	EACH	2		2
HIGH LOAD MULTI-ROTATIONAL BEARINGS, GUIDED EXPANSION, 150K (ERECT ONLY)	EACH	40		40
ERECTING HIGH LOAD MULTI-ROTATIONAL BEARINGS, GUIDED EXPANSION, 250K	EACH	40		40
HIGH LOAD MULTI-ROTATIONAL BEARINGS, GUIDED EXPANSION, 350K (ERECT ONLY)	EACH	4		4
HIGH LOAD MULTI-ROTATIONAL BEARINGS, GUIDED EXPANSION, 900K (ERECT ONLY)	EACH	4		4
HIGH LOAD MULTI-ROTATIONAL BEARINGS, NON-GUIDED EXPANSION, 150K (ERECT ONLY)	EACH	34		34
HIGH LOAD MULTI-ROTATIONAL BEARINGS, NON-GUIDED EXPANSION, 800K (ERECT ONLY)	EACH	4		4
HIGH LOAD MULTI-ROTATIONAL BEARINGS, NON-GUIDED EXPANSION, 1500K (ERECT ONLY)	EACH	4		4
DRAINAGE SYSTEM	L SUM	0.28		0.28
ANCHOR BOLTS, 1"	EACH	268		268
ANCHOR BOLTS, 1 1/2"	EACH	36		36
ANCHOR BOLTS, 2"	EACH	16		16
DECK SLAB REPAIR (PARTIAL)	SQ YD	20		20
DECK SLAB REPAIR (FULL DEPTH, TYPE 1)	SQ YD	20		20
PILE EXTRACTION	EACH		86	86
MECHANICAL SPLICERS	EACH		308	308
ALUMINUM RAILING, TYPE L	FOOT	257.5		257.5
ANCHOR BOLTS, 1 1/4"	EACH	8		8
DRAINAGE SCUPPERS, DS-33	EACH	6		6
PREFORMED JOINT STRIP SEAL	FOOT	350		350
BRACED EXCAVATION	CU YD		323	323

**GEN. NOTES & BILL OF MATERIALS  
STRUCTURE NO. 016-0724**

Rev. 6-8-11

<b>TYLIN INTERNATIONAL</b>	DESIGNED -				SHEET NO. 2  239 SHEETS	F.A.I RTE. 55	SECTION 0711.2R & 1011.1BR	COUNTY COOK	TOTAL SHEETS 741	SHEET NO. 326
	CHECKED - AMD,	NAME	DATE							
	DRAWN -									
	CHECKED - AMD,									
	DATE - 03/25/2011									
						CONTRACT NO. 60999 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

5/10/2011 5:53:36 PM

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5/10/2011

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

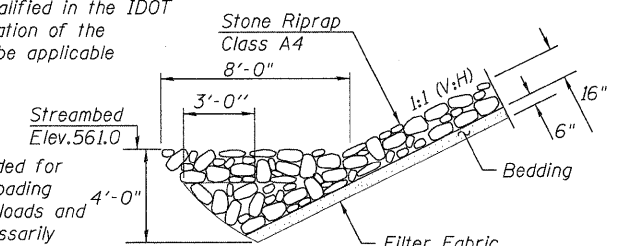
TOTAL BILL OF MATERIAL

GENERAL NOTES

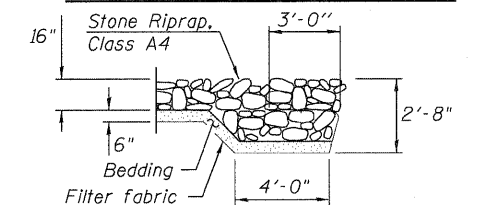
- Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts 7/8-in. φ, holes 15/16-in. φ, unless otherwise noted.
  - Calculated weight of Structural Steel =  
Grade 50 = 589,460 lbs. \*\*  
Grade 36 = 130,850 lbs. \*\*
  - The Organic Zinc Rich Primer/Epoxy/Urethane paint system shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception that the exterior surfaces and bottom of the bottom flange of the fascia beams, masked off connection surfaces, and field installed fasteners, all of which shall be touched up and finish coated in the field. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Reddish Brown, Munsell No. 2.5YR 3/4. See Special Provision for "Cleaning and Painting New Metal Structures".
  - No field welding is permitted except as specified in the contract documents.
  - Anchor bolts shall be set before bolting diaphragms and cross frames over supports.
  - Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60.
  - Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
  - Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
  - Concrete Sealer shall be applied to the designated areas of the all new exposed surfaces of pier 9.
  - Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.
  - Cleaning and painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All beams, bearings, and other structural steel within 5 ft (measured along the beam) on either side of the proposed deck joints shall be cleaned per Near White Blast Cleaning - SSPC-SPI0. The exterior surfaces and the bottom flange of the fascia beams shall be cleaned per Commercial Grade Power Tool Cleaning - SSPC - SPI5. All remaining structural steel shall be cleaned per Power Tool Cleaning - Modified SSPC-SP3.
- \*\* Structural steel furnished under a separate contract shall be erected under pay item Erecting Structural Steel. The listed weights include structural steel framing comprised of girders, diaphragms, fill plates, connection plates, bolts and steel extensions.
- The designated areas cleaned per Near White Blast Cleaning and per Commercial Grade Power Tool Cleaning shall be painted according to the requirements of Paint System 1 - OZ/E/U. The designated areas cleaned per Power Tool Cleaning - Modified SSPC-SP3 shall be painted according to the requirements of Paint System 2 - PS/EM/U. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Reddish Brown, Munsell No. 2.5YR 3/4.
  - The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
  - Any reinforcement bars that are damaged during concrete removal operations for piers shall be repaired or replaced using approved bar splicer or anchorage system. Cost included to "Concrete Removal".
  - All information (layout, details, quantities) for C. Abut. 4 is included in plans for S.N. 016-0724.
  - Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.  
As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer.  
Any cracks that cannot be removed by grinding 1/4 inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.
  - Details and quantity for the Strip Seal Joint at C. Abut. 4 are presented in Central Ave./I-55 Mainline (S.N. 016-0724).
  - Reinforcement bars designated (E) shall be epoxy coated.
  - If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each if these additional bracket locations.
  - Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
  - The Contractor shall test the existing welds by non-destructive methods within 2 ft. of the end of the existing cover plates for cracks after removal of the existing concrete deck. Dye penetrant (PT), magnetic particle (MT), or other approved testing method shall be performed by qualified personnel approved by the Engineer. If cracks are found, report them to the Bureau of Bridges and Structures for disposition. The cost of testing is included in Removal of Existing Concrete Deck. The cost of crack repair, if necessary, will be paid for according to Article 109.04 of the Standard Specifications.

ITEM	UNIT	NORTH APPROACH		TOTAL
		SUPER	SUB	
STONE RIPRAP, CLASS A4	SQ YD		278	278
FILTER FABRIC	SQ YD		306	306
PROTECTIVE COAT	SQ YD	8,375		8,375
CONCRETE REMOVAL	CU YD	10.8	171.6	182.4
BRIDGE RAIL REMOVAL	FOOT	1,292.4		1,292.4
REMOVAL OF EXISTING BEARINGS	EACH	30		30
PROTECTIVE SHIELD	SQ YD	3,886.3		3,886.3
STRUCTURE EXCAVATION	CU YD		124.6	124.6
COFFERDAM EXCAVATION	CU YD		927	927
COFFERDAM (LOCATION-1)	EACH		1	1
COFFERDAM (LOCATION-2)	EACH		1	1
CONCRETE STRUCTURES	CU YD		616.5	616.5
CONCRETE SUPERSTRUCTURE	CU YD	2,242.7		2,242.7
BRIDGE DECK GROOVING	SQ YD	5,800		5,800
ERECTING STRUCTURAL STEEL	L SUM	0.11		0.11
STUD SHEAR CONNECTORS	EACH	9,533		9,533
STRUCTURAL STEEL REMOVAL	L SUM	0.55		0.55
CLEANING AND PAINTING STEEL BRIDGE NO. 2	L SUM	1.0		1.0
CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 2	L SUM	1.0		1.0
REINFORCEMENT BARS, EPOXY COATED	POUND	465,830	221,170	687,000
BAR SPLICERS	EACH	770		770
ALUMINUM RAILING, TYPE L	FEET	1,334.3		1,334.3
NAME PLATES	EACH	1		1
FINGER PLATE EXPANSION JOINT, 6" (ERECT ONLY)	FOOT	116.0		116.0
DRILLED SHAFT IN SOIL	CU YD		611.9	611.9
ERECTING ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	46		46
ERECTING ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	20		20
ERECTING ELASTOMERIC BEARING ASSEMBLY, TYPE III	EACH	17		17
HIGH LOAD MULTI-ROTATIONAL BEARINGS, GUIDED EXPANSION, 450 K (ERECT ONLY)	EACH	17		17
ANCHOR BOLTS, 1"	EACH	132		132
ANCHOR BOLTS, 1 1/4"	EACH	8		8
ANCHOR BOLTS, 1 1/2"	EACH	76		76
CONCRETE SEALER	SQ FT		4,368.0	4,368.0
EPOXY CRACK INJECTION	FEET		66.0	66.0
DRAINAGE SCUPPERS, DS-12	EACH	26		26
STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ FT		88.0	88.0
DRAINAGE SYSTEM	L SUM	0.54		0.54
REMOVAL OF EXISTING CONCRETE DECK NO. 2	EACH	1		1
JACK AND REMOVE EXISTING BEARINGS	EACH	31		31
JACKING EXISTING SUPERSTRUCTURE	L SUM	0.45		0.45
DRAINAGE SCUPPER, DS-11	EACH	3		3
DRAINAGE SCUPPER, DS-33	EACH	12		12
FIELD MEASUREMENTS	L SUM		0.52	0.52
DRILLED SHAFT IN ROCK	CU YD		8.1	8.1
MECHANICAL SPLICERS	EACH		34	34

22. The Contractor shall retain the services of an engineering firm prequalified in the IDOT consultant selection category of Highway Bridges Complex, for preparation of the Structural Assessment Report. Contractor's pre-approval shall not be applicable for this project. See Special Provisions.  
Current Ratings on File for Existing Structure  
Inventory: HS 20 Operating: HS 27.3  
Live Load Restrictions: No  
Inventory and Operating Ratings and Live Load Restrictions are provided for information only. Inventory and Operating Ratings are based on HS loading and configuration. Live Load Restrictions are based on Illinois legal loads and configurations. The Ratings and Live Load Restrictions are not necessarily representative of capacities to support the Contractor's equipment.



TOE STONE RIPRAP DETAIL



FLANK STONE RIPRAP TREATMENT

GENERAL NOTES, INDEX OF SHEETS AND BILL OF MATERIAL  
STRUCTURE NO. 016-3240

INDEX OF SHEETS

1	GENERAL PLAN AND ELEVATION	24-25	SUPERSTRUCTURE CROSS SECTION - SPANS 14, 15 & 16	39	GIRDER ELEVATIONS - I SPANS 11, 12 & 13
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3	STAGE I CONSTRUCTION	27	SUPERSTRUCTURE DETAILS - 1	41	GIRDER ELEVATIONS SPANS 14 & 15
4	STAGE II CONSTRUCTION	28	SUPERSTRUCTURE DETAILS - 2	42	EXIST. GIRDER ELEVATIONS
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5	MAINTAINING OF TRAFFIC CROSSOVER DETAILS	29	FINGER PLATE PLAN & SECTIONS - EAST	44	CROSS FRAMES SPANS 11, 12 & 13
6	REMOVAL PLAN	30	FINGER PLATE PLAN & SECTIONS - WEST	45	CROSS FRAMES SPANS 14 & 15
7	TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION	31	FINGER PLATE DETAILS 1	46	FRAMING DETAILS CONNECTIONS
8	TOP OF SLAB ELEVATIONS - LAYOUT SPANS 11, 12 & 13	32	FINGER PLATE DETAILS 2	47	FRAMING DETAILS FIELD SPLICES 1 & 2
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17 - 19	TOP OF SLAB ELEVATIONS SPANS 7-9	34B	DRAINAGE SCUPPER DS-33	51	ELASTOMERIC BEARINGS TYPE II
20	SUPERSTRUCTURE SPANS 11, 12 & 13	35	ALUMINUM RAILING, TYPE	52	ELASTOMERIC BEARINGS TYPE III
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				56	PIER 7 DETAILS
				57	PIER 8 WIDENING
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				59	PIER 9 REPLACEMENT & WIDENING - EAST
				60	PIER 9 REPLACEMENT & WIDENING - WEST
				61	PIER 10 WIDENING
				62	PIER 10 DETAILS
				63	PIER 11 WIDENING
				64	PIER 11 DETAILS
				65	DRILLED SHAFTS
				66	SUBSTRUCTURE REPAIRS
				67	BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
				68-73	BORING LOGS

TYLIN INTERNATIONAL

DESIGNED - DY, LS	REVISIONS	
CHECKED - AMD, LS	NAME	DATE
DRAWN - DY, LS	Δ Revised A.M.D.	06/03/2011
CHECKED - AMD, LS		
DATE - 03/25/2011		

SHEET NO. 2	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
73 SHEETS	55	0711.2R & 1011.1BR	COOK	741	605
			CONTRACT NO. 60999		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT		

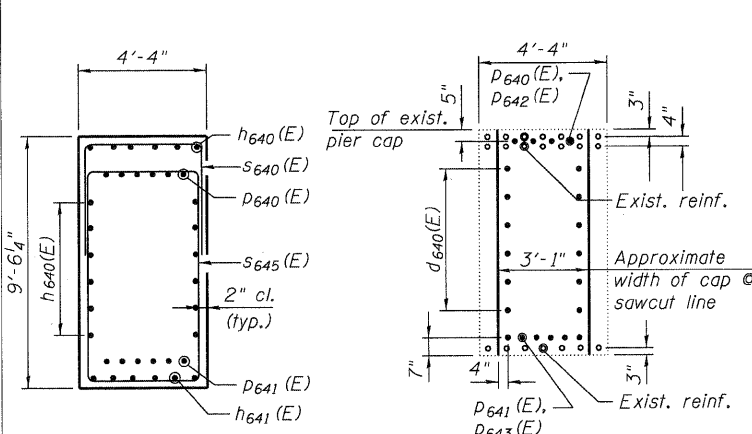
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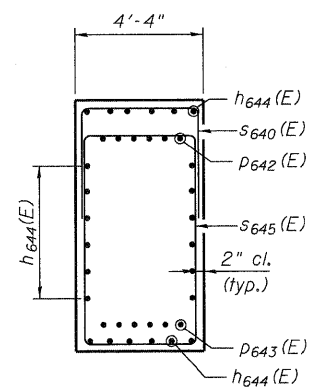
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BILL OF MATERIAL

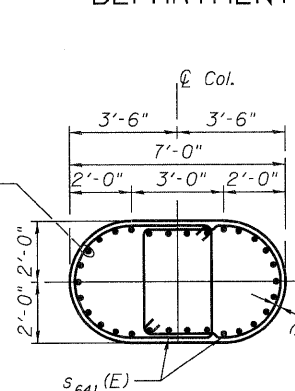


SECTION A-A

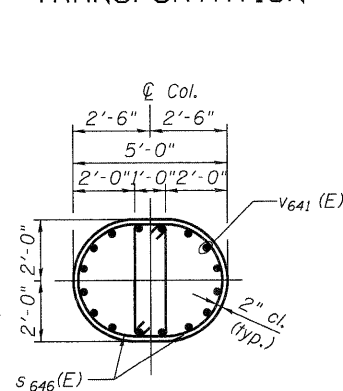
SECTION B-B &  
(SECTION C-C)



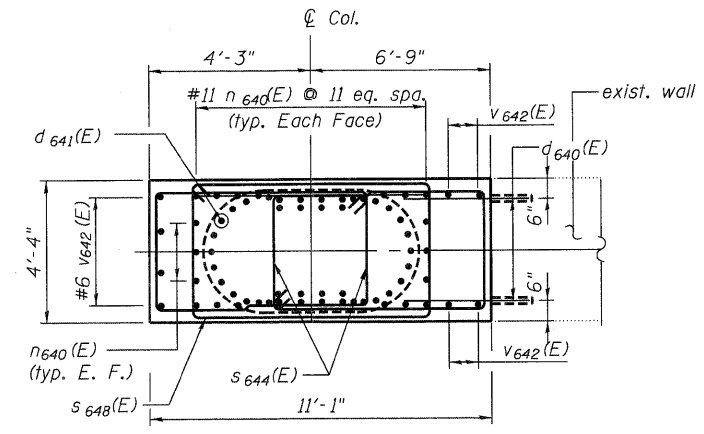
SECTION D-D



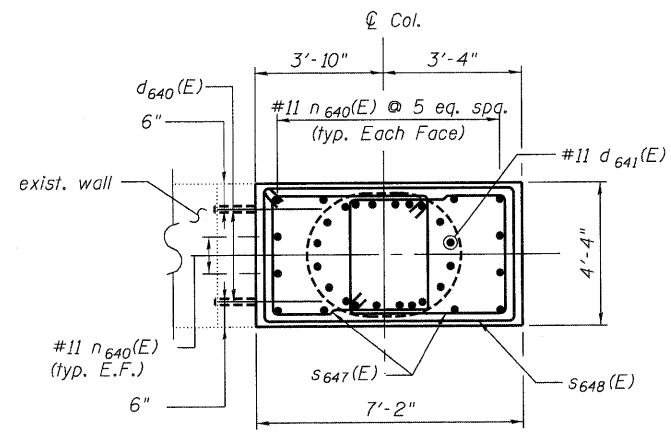
SECTION E-E



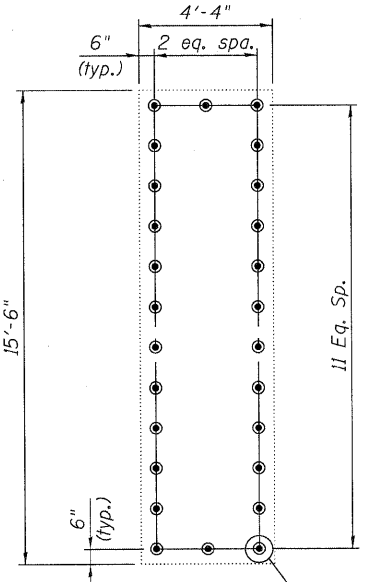
SECTION F-F



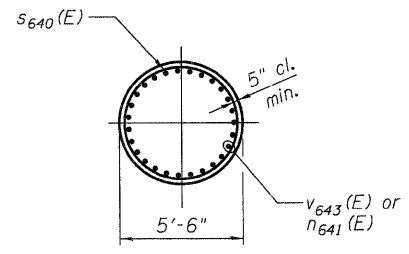
SECTION G-G



SECTION H-H

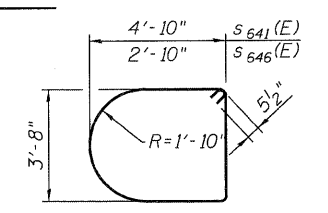


SECTION J-J

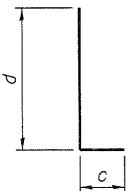


SECTION K-K

BAR s643(E)

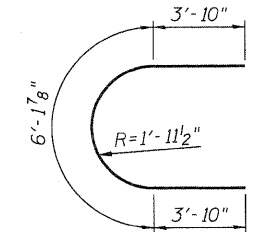


BAR s641(E) & s646(E)

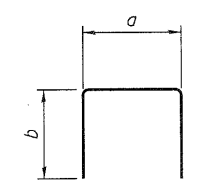


BAR p640(E), p642(E), n640(E),  
h641(E) & h643(E)

Bar	c	d
p640(E)	1'-7"	9'-6"
p641(E)	1'-2"	9'-6"
p642(E)	1'-7"	9'-10"
p643(E)	1'-2"	9'-10"
n640(E)	2'-0"	15'-0"
h641(E)	1'-8"	10'-9"
h643(E)	1'-8"	7'-8"



BAR u640(E) & u641(E)



BAR s640(E) & t640(E)

Bar	a	b
s640(E)	4'-0"	3'-6"
t640(E)	20'-6"	2'-0"

MINIMUM BAR LAPS

Bar Size	Min. Lap
#6	3'-10"
#9	8'-7"
#11	10'-2"

Bar	e	f
s642(E)	9'-6"	5'-0"
s644(E)	4'-0"	7'-6"
s645(E)	7'-6"	4'-0"
s647(E)	4'-0"	5'-11"
s648(E)	4'-0"	6'-10"

BAR s642(E), s644(E), s645(E),  
s647(E) & s648(E)

ANCHOR BOLT LAYOUT

Girder	Angle	a'	b'
NG13	21°39'15"	1'-0 3/4"	5 1/8"
P	21°39'15"	1'-0 3/4"	5 1/8"
NG11	22°8'40"	1'-0 3/4"	5 3/16"
NG12	22°37'52"	1'-0 1/16"	5 5/16"

Bar	No.	Size	Length	Shape
d640(E)	76	#5	2'-8"	—
d641(E)	46	#11	20'-4"	—
h640(E)	24	#5	8'-0"	—
h641(E)	6	#9	12'-5"	—
h642(E)	32	#6	19'-8"	—
h643(E)	6	#9	9'-4"	—
h644(E)	24	#5	8'-8"	—
n640(E)	46	#11	27'-1"	—
n641(E)	88	#9	15'-2"	—
p640(E)	4	#9	11'-1"	—
p641(E)	6	#7	10'-8"	—
p642(E)	4	#9	11'-5"	—
p643(E)	6	#7	11'-0"	—
s640(E)	18	#5	11'-0"	—
s641(E)	54	#5	16'-5"	—
s642(E)	256	#5	29'-11"	—
s643(E)	68	#5	13'-8"	—
s644(E)	32	#5	23'-11"	—
s645(E)	26	#5	23'-11"	—
s646(E)	52	#5	12'-5"	—
s647(E)	32	#5	20'-9"	—
s648(E)	8	#5	22'-7"	—
t640(E)	28	#11	24'-6"	—
t641(E)	28	#11	20'-8"	—
u640(E)	16	#6	13'-10"	—
v640(E)	14	#5	9'-3"	—
v641(E)	46	#11	29'-5"	—
v642(E)	12	#6	15'-2"	—
v643(E)	88	#9	41'-10"	—
*SD640(E)	4	#5	42'-3"	—
Drilled Shaft in Soil	CU YD		146.1	
Drilled Shaft in Rock	CU YD		2.9	
Structure Excavation	CU YD		72.2	
Concrete Structures	CU YD		239.3	
Reinforcement Bars, Epoxy Coated	POUND		64,810	

\* Length is height of spiral.

PIER 11 DETAILS  
STRUCTURE NO. 016-3240

TYLIN INTERNATIONAL

DESIGNED	BY	LS	REVISIONS
CHECKED	AMD	LS	NAME
DRAWN	DY	LS	DATE
CHECKED	AMD	LS	
DATE	03/25/2011		

DESIGNED	BY	LS	REVISIONS
CHECKED	AMD	LS	NAME
DRAWN	DY	LS	DATE
CHECKED	AMD	LS	
DATE	06/03/2011		

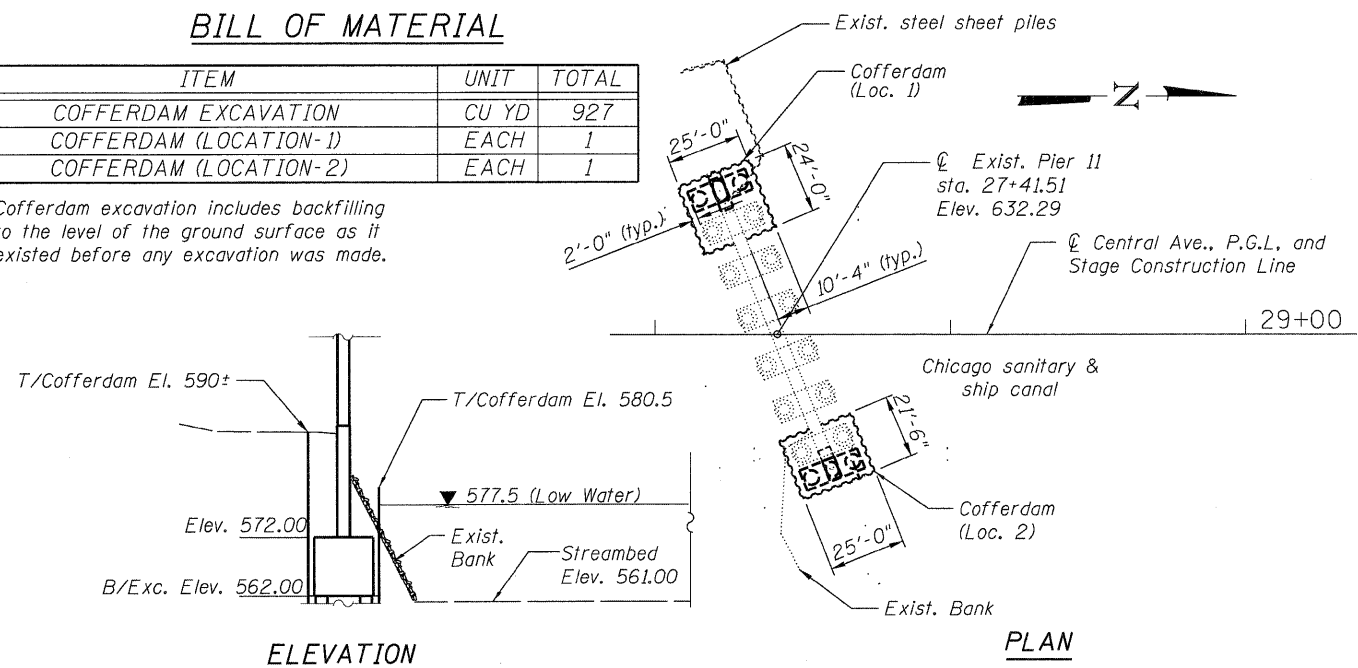
SHEET NO.	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	55	0711.2R & 1011.1BR	COOK	741	667
73 SHEETS					CONTRACT NO. 60999
		FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	



**BILL OF MATERIAL**

ITEM	UNIT	TOTAL
COFFERDAM EXCAVATION	CU YD	927
COFFERDAM (LOCATION-1)	EACH	1
COFFERDAM (LOCATION-2)	EACH	1

Cofferdam excavation includes backfilling to the level of the ground surface as it existed before any excavation was made.



**ELEVATION**

**PLAN**

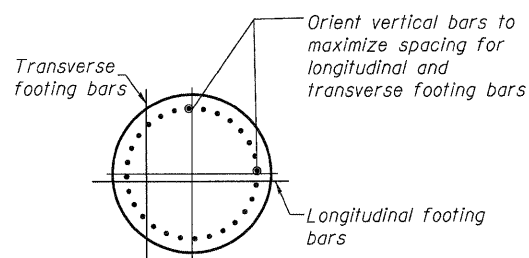
**DRILLED SHAFT SCHEDULE**

Pier	Size		Reinforcement				Top of Shaft Elevation	Bottom of Shaft Elevation	Allowable Bearing Pressure (tsf)	
	Shaft Diameter	Shaft Length "L"	Vertical Bars "A"	Vertical Bars "B"	Dowel Bars "C"	Spiral Bars			Exist	New
7	4'-0"	73'-0"	19-#9 V 601(E)	19-#9 V 601(E)	19-#9 V 601(E)	#5 SP 601(E)	589.50	516.50	20.0	15.6
8	5'-0"	75'-6"	16-#9 V 612(E)	16-#9 V 612(E)	16-#9 V 611(E)	#5 SP 611(E)	595.00	519.50	20.0	17.9
9	4'-9"	75'-6"	19-#11 V 623(E)	19-#11 V 623(E)	19-#11 V 620(E)	#5 SP 621(E)	595.00	519.50	20.0	17.6
10	6'-6"	72'-0"	31-#11 V 632(E)	31-#11 V 632(E)	31-#11 V 630(E)	#5 SP 631(E)	592.00	520.00	20.0	16.8
11	5'-6"	42'-6"	22-#9 V 643(E)	--	22-#9 V 641(E)	#5 SP 640(E)	562.00	519.50	20.0	15.8

**NOTES:**

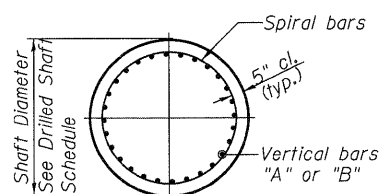
- Drilled shafts shall be installed according to article 516 of the Standard Specifications.
- Elevations, shaft lengths, and reinforcement lengths shown are estimates and should be verified and adjusted in the field as directed by the engineer.
- In constructing the drilled shafts, the Contractor may encounter pavements, fill, foundations, abandoned utilities, boulders, and other obstructions. No separate payment will be made for removal of any such obstructions, and the cost for removing such obstructions shall be included in the contract unit price for caisson shafts.
- Adjacent new caissons may be constructed simultaneously provided that they are not closer than 16.5 feet on centers. At least 36 hours shall have elapsed after the completion of a caisson before excavation for adjacent caissons closer than 16.5 feet on center is started.
- Temporary casing specified shall be used to mitigate soil and ground water contamination, and to ensure that adjacent existing caissons and/or piles are not undermined during excavation for new caissons. The Contractor shall submit, for the Engineer's approval, his/her proposed methods, equipment and procedures for the installation and removal of the temporary casing so as not to undermine or damage the existing caissons and piles. The extraction of the casing shall be performed so as not to disturb the caisson reinforcing cage or impair the structural integrity of the constructed caisson.
- If field conditions dictate a shorter shaft length than shown, the Contractor shall cut the reinforcement bars to the required length. If the shaft length is longer than indicated, the Contractor shall extend the reinforcement by providing additional reinforcement of equal size and lapping with the minimum lap length shown, either mechanically spliced or lapped splice in accordance with Section 516.11.

- The caisson shaft and reinforcement shall be adjusted as required by the Engineer. These additional quantities required by the Engineer and furnished by the Contractor will be paid for at the unit price bid for the work.
- At all locations where reinforcement bar laps are not in direct contact, the Contractor shall provide sufficient spacing between the vertical bars, equal to the size of the largest concrete aggregate plus 1/2".
- For location of drilled shafts See sheets 55 thru 64.
- For Bill of Material see sheets 2.

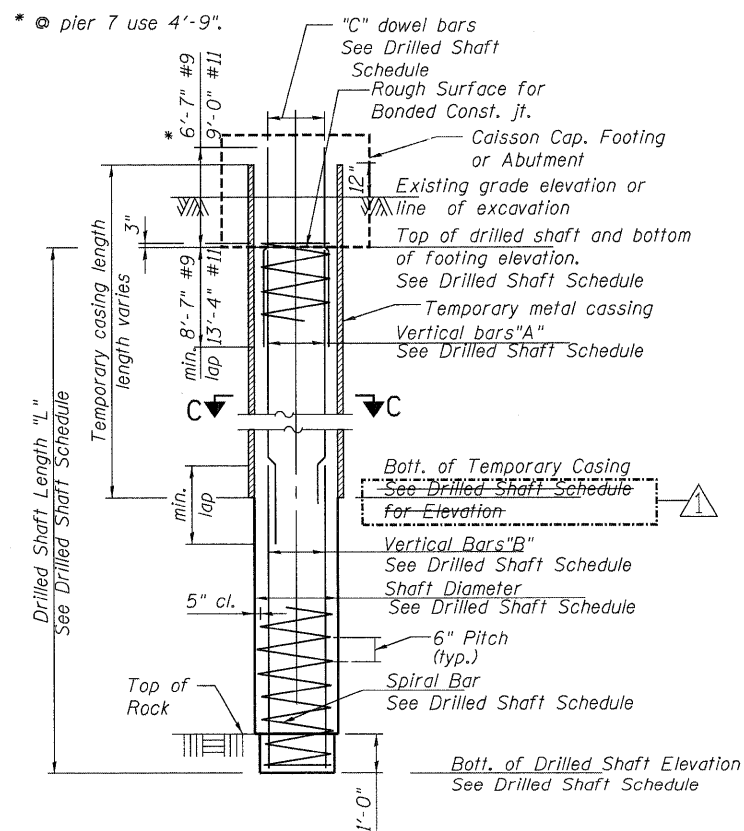


**TOP PLAN**

Showing orientation of vertical bars



**SECTION C-C**



**CAISSON SECTION**

**DRILLED SHAFTS  
STRUCTURE NO. 016-3240**

**TYLIN INTERNATIONAL**

DESIGNED	BY	LS	REVISIONS	
CHECKED	BY	LS	NAME	DATE
DRAWN	BY	LS	Revised A.M.D.	06/03/2011
CHECKED	BY	LS		
DATE				03/25/2011

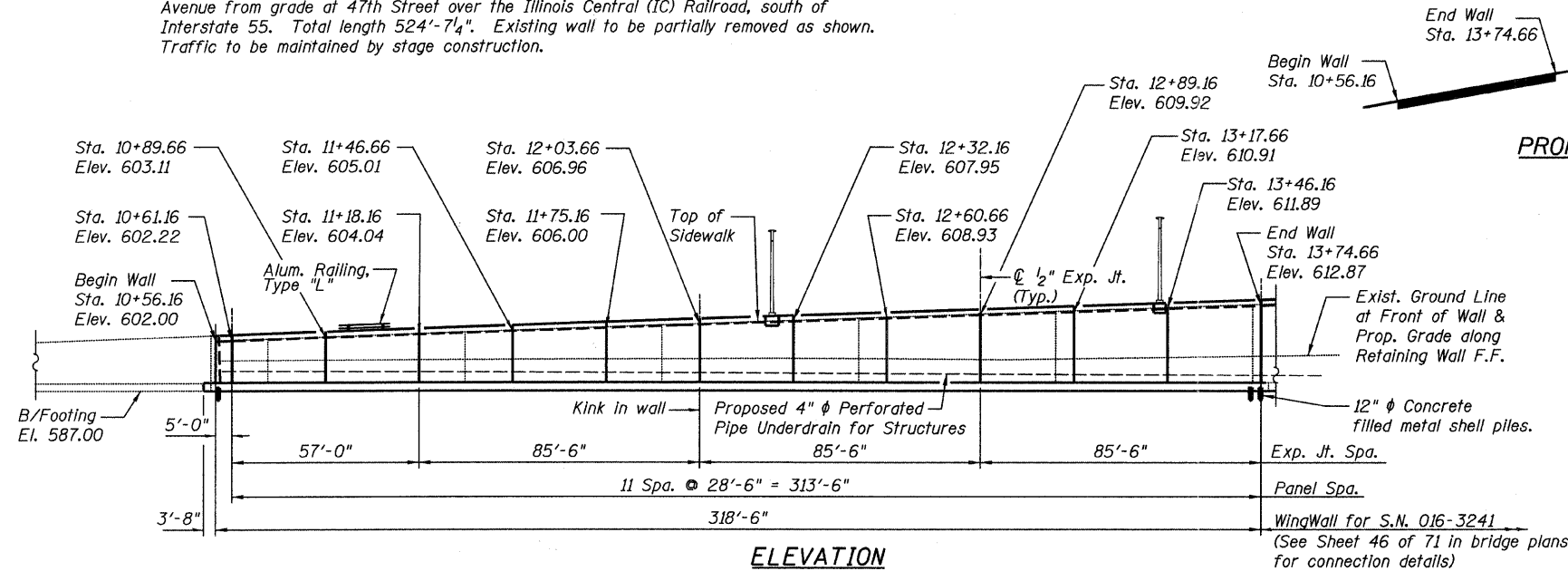
SHEET NO.	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
65	55	0711.2R & 1011.1BR	COOK	741	668
73 SHEETS			CONTRACT NO. 60999		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

DATE \$ FILES \$ TIME \$

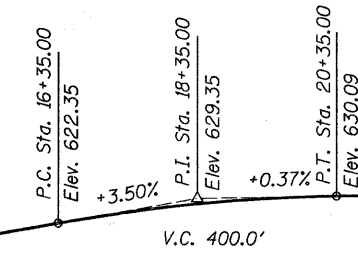
Benchmark: N 1874267.729 E 1140141.340 EL. 621.124  
 Cut square on top of pier at N retaining wall of SE Ramp.  
 Approx. 1050 Feet E of Central Ave.

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

Existing Structure: Structure Number 016-3241 built in 1964. Sec. 207-1011.1-C.F.  
 Reinforced concrete cantilever retaining wall, supported on timber pile footing, adjacent to east side of Central Avenue, south of south approach structure which carries Central Avenue from grade at 47th Street over the Illinois Central (IC) Railroad, south of Interstate 55. Total length 524'-7 1/4". Existing wall to be partially removed as shown. Traffic to be maintained by stage construction.

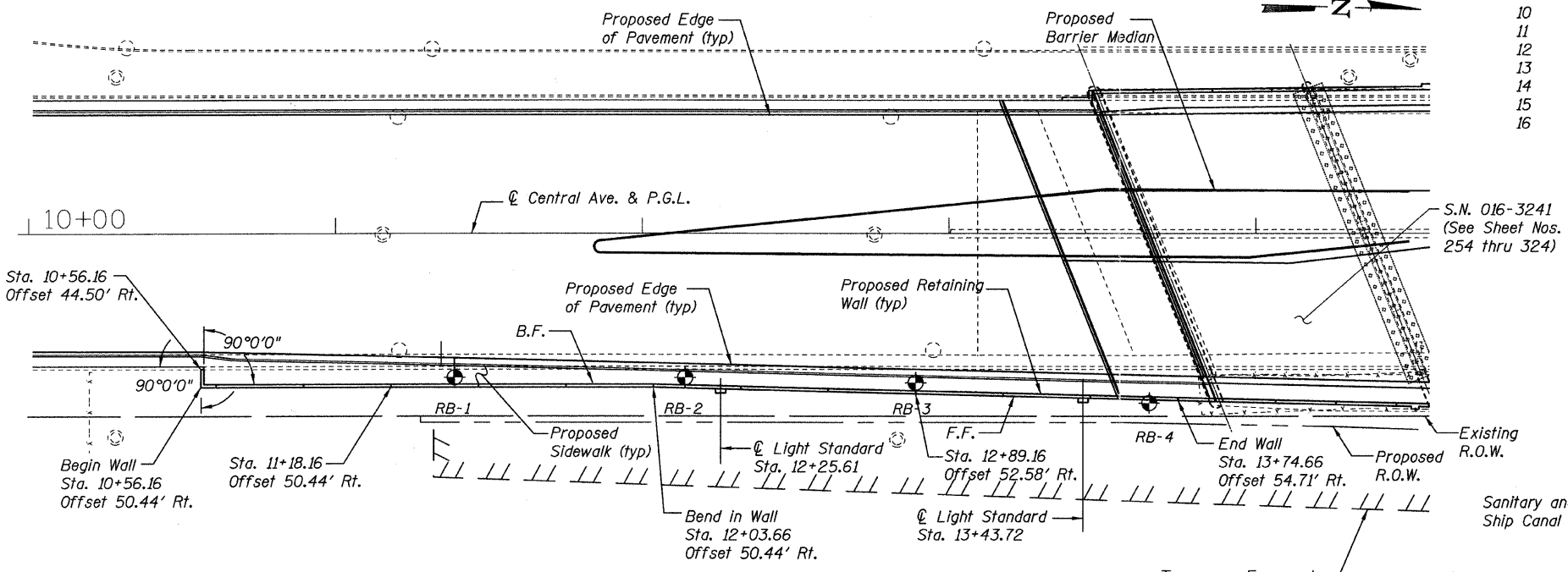


PROFILE GRADE CENTRAL AVE.



INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	GENERAL PLAN AND ELEVATION
2	TYPICAL WALL SECTIONS & DRAINAGE DETAILS
3	TEMPORARY CONCRETE BARRIER
4	PLAN & ELEVATION (Sta. 10+56.16 to Sta. 11+18.16)
5	PLAN & ELEVATION (Sta. 11+18.16 to 12+03.66)
6	PLAN & ELEVATION (Sta. 12+03.66 to 12+89.16)
7	PLAN & ELEVATION (Sta. 12+89.16 to 13+74.66)
8	WALL CROSS-SECTIONS AND DETAILS 1
9	WALL CROSS-SECTIONS AND DETAILS 2
10	WALL CROSS-SECTIONS AND DETAILS 3
11	ALUMINUM RAILING, TYPE L
12	METAL SHELL PILE DETAILS
13	BORING LOGS 1
14	BORING LOGS 2
15	BORING LOGS 3
16	BORING LOGS 4



BORING LOCATIONS

No.	Station	*Offset
RB-1	11+37.9	47.3' R
RB-2	12+14.1	47.3 R
RB-3	12+89.2	49.0' R
RB-4	13+65.3	55.6' R

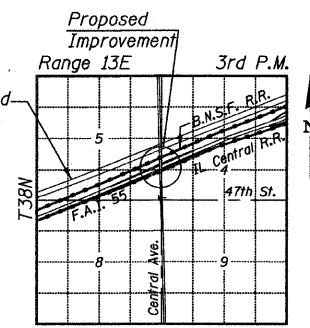
\* Offset from @ Central Avenue

APPROVED  
 FOR STRUCTURAL ADEQUACY ONLY  
 [Signature]  
 ENGINEER OF BRIDGES AND STRUCTURES

Wall offsets are measured from @ Central Avenue to front face of wall.

LEGEND

- F.F. indicates Front Face
- B.F. indicates Back Face
- ◆ Boring Location



TOTAL BILL OF MATERIAL

ITEM	UNIT	QTY.
Porous Granular Embankment (Special)	Cu Yd	1,070
Concrete Removal	Cu Yd	113.4
Structure Excavation	Cu Yd	1,023
Concrete Structures	Cu Yd	668.9
Reinforcement Bars, Epoxy Coated	Pound	80,660
Aluminum Railing, Type L	Foot	325
Furnishing Metal Shell Piles, 12"x0.25'	Foot	5,356
Driving Piles	Foot	5,356
Test Pile Metal Shells	Each	2
Geocomposite Wall Drain	Sq Yd	625
Protective Coat	Sq Yd	607
Bridge Rail Removal	Foot	319
Pipe Underdrains for Structures, 4"	Foot	323
Mechanical Splicers	Each	237

DESIGN STRESSES

FIELD UNITS

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

DESIGN SPECIFICATION

2002 AASHTO Standard Specifications for Highway Bridges

GENERAL NOTES

- Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60.
- Reinforcement bars designated (E) shall be epoxy coated.
- Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- The contractor shall drive 2 concrete test piles in a permanent location, one at each end of retaining wall as directed by the Engineer before ordering the remainder of piles.
- Protective Coat shall be applied to the exposed surfaces of the parapet and front face of the wall above the ground line.



Signed Anna M. Dukes  
 Anna M. Dukes, S.E. IL Lic. No. 081-005598  
 Expires 11-30-2012  
 Date March 25, 2011

GENERAL PLAN & ELEVATION  
 CENTRAL AVENUE RETAINING WALL  
 F.A.I. RTE. 55 - SEC. 0711.2R & 1011.1BR  
 COOK COUNTY  
 STATION 10+56.16 TO STATION 13+74.66  
 STRUCTURE NO. 016-W821

TYLIN INTERNATIONAL

DESIGNED -	MMB	REVISIONS	NAME	DATE
CHECKED -	AMD,			
DRAWN -	MMB			
CHECKED -	AMD,			
DATE -	03/25/2011			

SHEET NO. 1	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
16 SHEETS	55	0711.2R & 1011.1BR	COOK	741	677
			CONTRACT NO. 60999		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

5/18/10 PM

01345 Structural Retaining Wall 11-15-10.dwg

5/10/2011