P.C.C. OVERLAY

LETTING DATE December 15, 2026

DELAWARE COUNTY

Project Number: FM–C028(110)––55–28

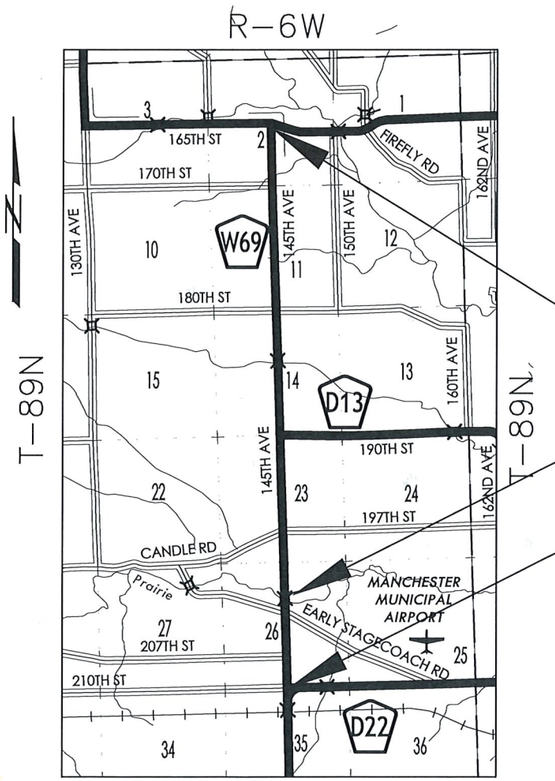
IOWA ONE CALL
800 / 292-8989
TOLL FREE
CALL - BEFORE - YOU - DIG

Windstream, Stephen Kness, 319–790–7678
Maquoketa Valley Rural Electric, 800–927–6068

DRAWING APPROVAL

ALL SHOP DRAWINGS AND FALSEWORK DRAWINGS THAT REQUIRE APPROVAL SHALL BE APPROVED BY THE CONTRACTOR, THEN ACCEPTED BY THE:
DELAWARE COUNTY ENGINEER
2139 Highway 38
Manchester, Iowa 52057
Phone: 563-927-3505
Fax: 563-927-3102

THESE SHOP DRAWINGS SHALL NOT BE SENT TO I.D.O.T. OFFICE OF BRIDGES AND STRUCTURES.



LOCATION MAP

BRIDGE FHWA# 142031

E.O.P.
Sta. 242+96.3

Bridge
Sta. 41+72.5 to Sta. 43+27.5

B.O.P.
Sta. 2+03.33

IOWA | DOT

HIGHWAY DIVISION

PLANS OF PROPOSED IMPROVEMENT ON THE

FARM TO MARKET SYSTEM

DELAWARE COUNTY

P.C.C. OVERLAY

Project Number: FM–C028(110)––55–28

On 145th Avenue, from D22 North 4.6 miles to 165th Street.

REFER TO THE PROPOSAL FORM FOR LIST OF APPLICABLE SPECIFICATIONS.
SEE STANDARD ROAD PLAN TABULATION ON SHEET C.02

Scales: As Noted

SCALE
1 mi 0 1 mi 2 mi

2013 AVERAGE ANNUAL DAILY TRAFFIC: 2360 VEHICLES PER DAY

Project Number: FM–C028(110)––55–28

INDEX OF SHEETS

No.	DESCRIPTION 18 SHEETS
A.01	TITLE SHEET
B.01	TYPICAL SECTIONS
B.02	TYPICAL SECTIONS
B.03	TYPICAL SHOULDER AND PAVEMENT SECTIONS
C.01	ESTIMATE OF QUANTITIES
C.02	GENERAL AND TRAFFIC CONTROL NOTES
C.03	MISC. TABULATIONS
J.01	DETOUR SIGNAGE
K.01	210th St. Rt. INTERSECTION DETAILS
K.02	210th St. Lt. & 207th St. Lt. INTERSECTION DETAILS
K.03	EARLY STAGECOACH ROAD INTERSECTION DETAILS
K.04	CANDLE ROAD Lt.& 197th St. Rt. INTERSECTION DETAILS
K.05	190th St. Rt. INTERSECTION DETAILS
K.06	180th St. Lt. & Rt. INTERSECTION DETAILS
K.07	170th St. Lt. & E.O.P. INTERSECTION DETAILS
V.01	EXPANSION NOTES
V.02	REMOVAL DETAILS
V.03	DECK REPAIR DEFINITIONS

MILEAGE SUMMARY

DIV.		LIN. FT.	MILES
	FROM STA. 2+03.33 TO STA. 41+72.5	3969.17	0.7517
	FROM STA. 41+72.5 TO STA. 43+27.5 (BRIDGE)	155.00	0.0294
	FROM STA. 43+27.5 TO 242+96.3	19968.80	3.7820
	TOTAL	24092.97	4.5631

Approved Delaware County
Board of Supervisors

Jeff Mattes
Dwight Wilkinson
Shirley E. Helmrichs

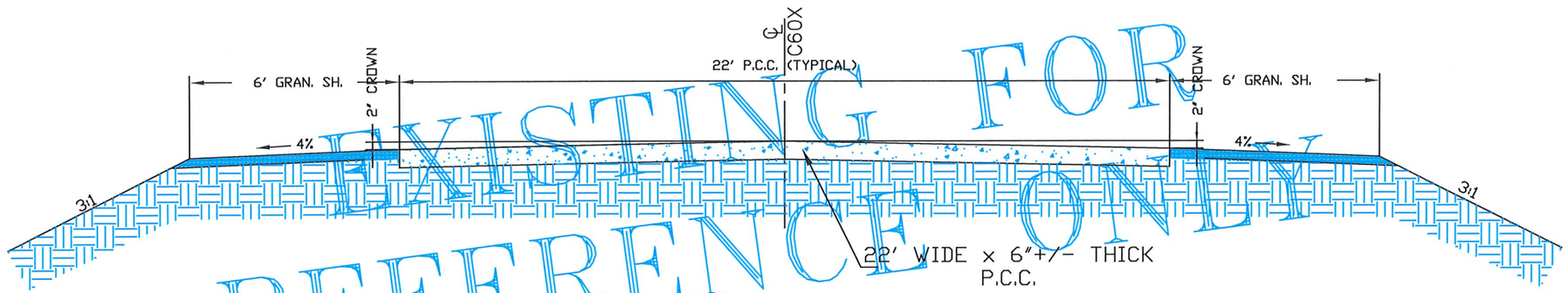
STATE OF IOWA
RAFE KOOPMAN
17130
LICENSED PROFESSIONAL ENGINEER
Official Seal

I hereby certify that this plan was prepared by me or under my direct personal supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Iowa.

Rafe Koopman, P.E. 7/27/26
Rafe Koopman, P.E. Date

My license renewal date is December 31, 2027

Pages or sheets covered by this seal:
A.01,B.01,B.02,C.01,C.02,C.03,J.01,K.01,K.02,K.03 K.04,K.05,K.06,K.07,V.01,V.02 & V.03



EXISTING FOR REFERENCE ONLY

TYPICAL SECTION-EXISTING PAVEMENT

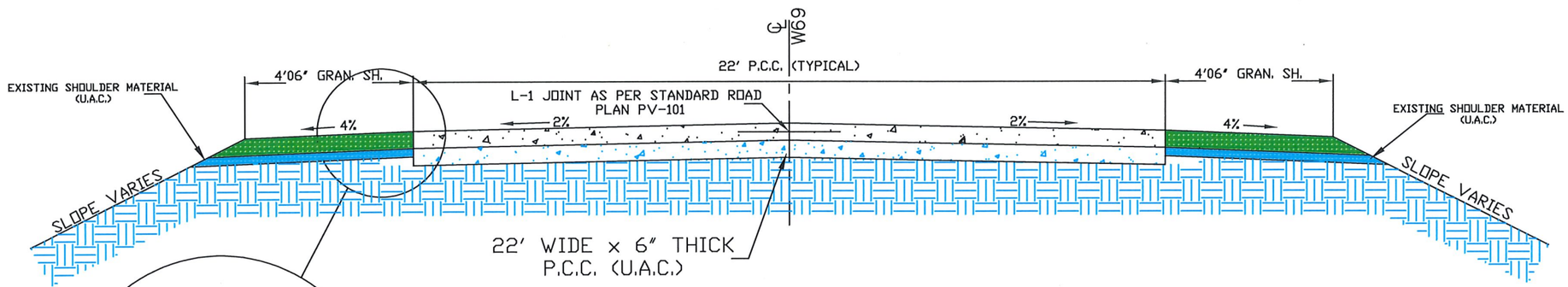
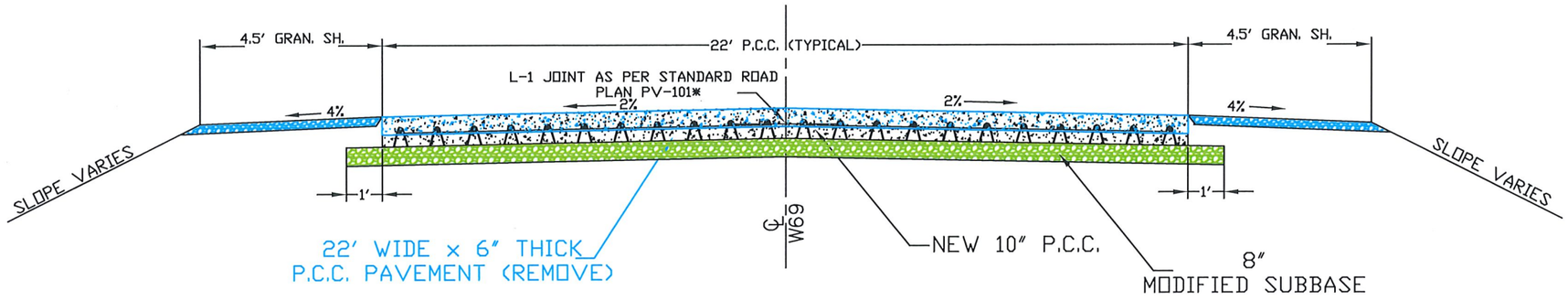


TABLE OF DESIGN QUANTITIES - P.C.C. OVERLAY WITH FABRIC						
LOCATION						
ROAD IDENTIFICATION	STATION	STATION	DEPTH (IN)	LENGTH (FT)	WIDTH (FT)	AREA(SY)
W69	5+13.33	38+72.5	6	3359.17	22	8211.30
W69	46+27.5	239+96.3	6	19368.8	22	47345.96
					TOTAL	**55557.26**

TYPICAL SECTION-PCC OVERLAY WITH FABRIC

PCC Overlay
Located on W69 between D22 and 165th Street
Length; 4.5631
Project No. FM-C028(110)--55-28
Typical Sections
Sheet Number; B.01
Delaware County, Iowa

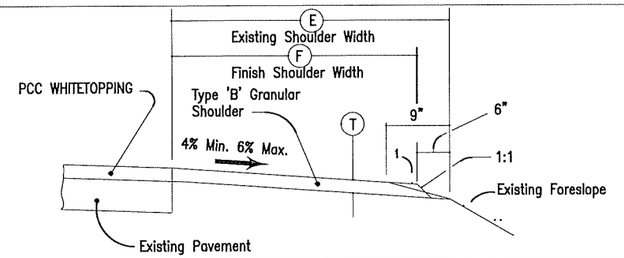


10" P.C.C. TABULATION

	ROAD ID.	STATION TO STATION	LENGTH (ft)	WIDTH (ft)	S.Y.
1	W69	2+03.3 to 5+13.3	310	22	757.78
2	210th St. Rt.	From W69, Easterly 304'	304	Varies	968.90
3	W69	38+72.5 to 41+02.5	230	22	562.22
4	W69	43+97.5 to 46+27.5	230	22	562.22
5	190th Ave. Rt.	From W69 Easterly 55'	55	Varies	329.60
6	W69	239+96.3 to 242+30.3	234	22	572.00
7	W69	242+30.3 to 242+96.3	66	Varies	420.00
				TOTAL	**4172.72**

TYPICAL SECTION-10" P.C.C.
(SEE INTERSECTION DETAILS ON SHEETS K.01, K.05 AND K.07)

PCC Overlay
Located on W69 between D22 and 165th Street
Length; 4.5631
Project No. FM-C028(110)--55-28
Typical Sections
Sheet Number; B.02
Delaware County, Iowa



Notes:

Quantities have been determined on the basis of a design weight of 140 lbs. per cubic foot.

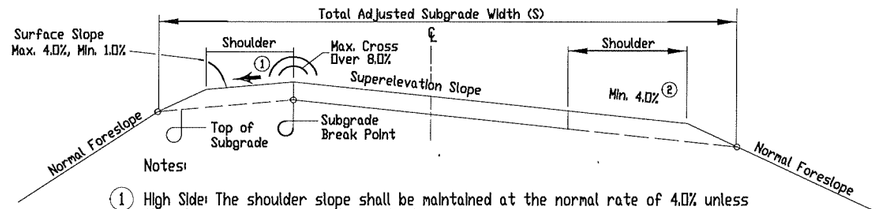
1 Place and compact material to the dashed lines; then blade and shape to foreslope that portion above the solid line in the outer 9" and roll with loaded truck tire.

2 Tons per side per station.

LOCATION			TONS	(T)	(E)	(F)
ROAD IDENTIFICATION	STATION TO STATION		SIDE	②	Inches	Feet	Feet
W69	2+03.33	242+96.3	Left	22.06	6" *	6'00"	4'06"
W69	2+03.33	242+96.3	Right	22.06	6" *	6'00"	4'06"

TYPICAL SECTION FOR TYPE 'B' GRANULAR SHOULDER

* Quantities have been increased 20% to make up for the existing shoulder being low and the overlay design profile possibly being thicker.

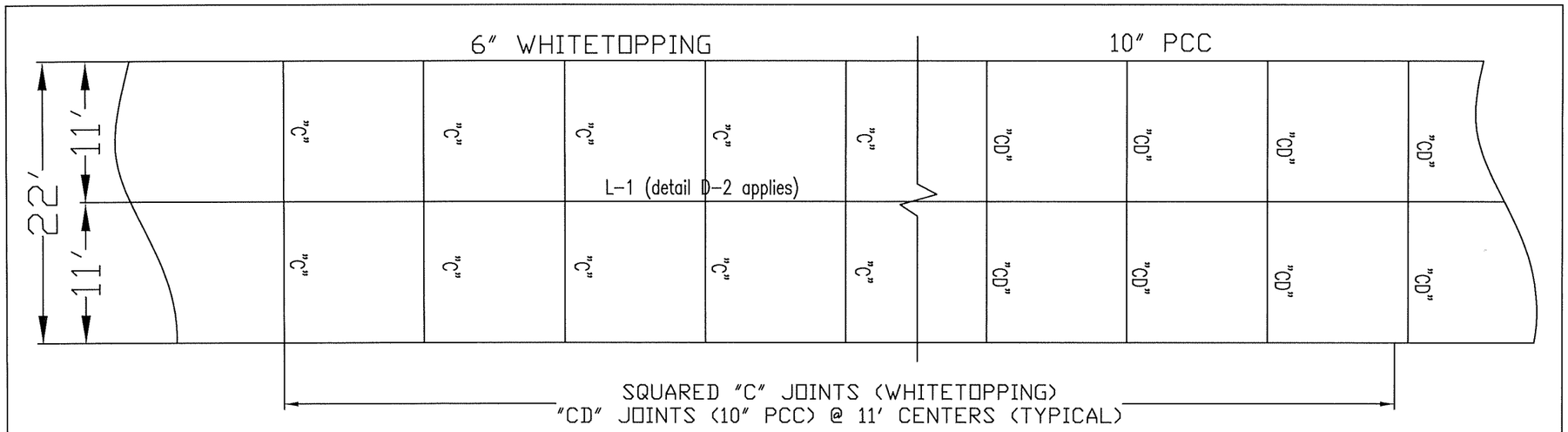


Notes:

(1) High Side: The shoulder slope shall be maintained at the normal rate of 4.0% unless this slope produces a grade break with adjacent pavement of more than 8.0%. The shoulder slope shall then be determined by a 8.0% break with adjacent pavement.

(2) Low Side: The shoulder slope shall be maintained at normal rate of 4.0% unless the adjacent pavement slope is steeper, in which case the shoulder will slope at the same slope as adjacent pavement.

TYPICAL CROSS SECTION SUPERELEVATION FOR MAINLINE ROADWAYS WITH NON-PAVED SHOULDERS (6% MAXIMUM SUPERELEVATION)



TYPICAL JOINT LAYOUT 6" PCC WHITETOPPING AND 10 INCH STANDARD/SLIPFORM PAVEMENT

PCC Overlay
Located on W69 between D22 and 165th Street
Length; 4.5631
Project No. FM-C028(110)--55-28
Typical Shoulder and Pavement Sections
Sheet Number; B.03
Delaware County, Iowa

ESTIMATED PROJECT QUANTITIES

PROJECT NUMBER: FM-C028(110)--55-28

P.C.C. OVERLAY

REF. #	ITEM CODE	ITEM DESCRIPTION	UNIT	TOTAL
1	2102-2710090	EXCAVATION, CLASS 10, WASTE	CY	1135.40
2	2115-0100000	MODIFIED SUBBASE	CY	1048.50
3	2121-7425020	GRANULAR SHOULDERS, TYPE B	TON	11131.00
4	2213-7100400	RELOCATION OF MAILBOXES	EACH	15.00
5	2301-0685550	BRIDGE APPROACH SECTION, AS PER PLAN	SY	387.82
6	2301-1034080	STD/SLIPFORM PCC PAVEMENT, CLASS C 3i DURA, 8 IN.	SY	2801.10
7	2301-1034100	STD/SLIPFORM PCC PAVEMENT, CLASS C 3i DURA, 10 IN.	SY	4172.72
8	2310-5151040	PCC OVERLAY, FURNISH ONLY	CY	11575.00
9	2310-5151045	PCC OVERLAY, PLACEMENT ONLY	SY	55557.30
10	2310-8300550	PAVEMENT INTERLAYER GEOTEXTILE	SY	57325.00
11	2315-8275025	SURFACING, DRIVEWAY, CLASS "A" CRUSHED STONE	TON	1408.00
12	2316-0000110	PAYMENT ADJUSTMENT INC/DISINC FOR PCC PVMT SMOOTHNES	EACH	43886.00
13	2401-6750001	REMOVALS, AS PER PLAN	LS	1.00
14	2403-0100000	STRUCTURAL CONCRETE (MISC.)	CY	13.60
15	2413-0698074	DECK REPAIR, CLASS A	SY	10.00
16	2413-1200000	STEEL EXTRUSION JOINT WITH NEOPRENE	LF	72.50
17	2413-1200100	NEOPRENE GLAND INSTALLATION AND TESTING	LF	72.50
18	2510-6745850	REMOVAL OF PAVEMENT	SY	4172.72
19	2515-2475106	DRIVEWAY, REINFORCED P.C.CONCRETE, 6 INCH	SY	55.90
20	2515-6745600	REMOVAL OF PAVED DRIVEWAY	SY	55.90
21	2526-8285040	CONSTRUCTION SURVEY, LOCATION SURVEY	LS	1.00
22	2527-9263209	PAINTED PVMT. MARKINGS, WATERBORNE/SOLVENT	STA.	458.94
23	2528-2518000	SAFETY CLOSURE	EACH	24.00
24	2528-8445110	TRAFFIC CONTROL	LS	1.00
25	2528-8445113	FLAGGERS	EACH	SEE PROPOSAL
26	2533-4980005	MOBILIZATION	LS	1.00

ESTIMATED REFERENCE INFORMATION

Data listed is for informational purposes only and shall not constitute a basis for any extra work orders

NO.	ITEM CODE	DESCRIPTION
1	2102-2710090	EXCAVATION, CLASS 10, WASTE; FOR THE CORE OUTS IN THE 10" PCC AREAS IN ORDER TO ACCOMMODATE THE MODIFIED SUBBASE. THIS MATERIAL IS TO BECOME THE PROPERTY OF THE CONTRACTOR AND REMOVED FROM THE PROJECT.
2	2115-0100000	MODIFIED SUBBASE; TO BE PLACED 8" DEEP UNDER AND EXTEND 1' OUTSIDE THE FORM LINE AT THE 10"PCC LOCATIONS. SEE TYPICAL ON SHEET B.02 AND THE TABULATION BLOCK ON SHEET C.03
3	2121-7425020	GRANULAR SHOULDERS, TYPE B; CONSISTS OF FURNISHING, PLACING AND COMPACTING CLASS A SHOULDER STONE. SEE TYPICAL ON SHEET B.03. QUANTITIES HAVE BEEN INCREASED TO FILL LOW SHOULDERS. THE CONTRACTOR SHALL "BEE LINE" THE NEW SHOULDER IN ORDER FOR THE OUTSIDE EDGE OF THE NEW SHOULDER TO BLEND INTO THE EXISTING FORESLOPES.
4	2213-7100400	RELOCATION OF MAILBOXES; ITEM TO INCLUDE MOVING MAILBOXES DURING THE PAVING/SHOULDERING OPERATIONS TO A CENTRAL LOCATION DETERMINED BETWEEN THE CONTRACTOR AND THE POSTOFFICES, THEN REINSTALLING BACK AT THE ORIGINAL LOCATIONS AT THE PROPER HEIGHT. THE ENGINEER WILL COUNT THE NUMBER OF MAILBOXES RELOCATED AND PAY THE CONTRACT UNIT PRICE OFF OF THAT COUNT. ONLY BOXES THAT U.S.P.S. IS DELIVERED TO WILL BE PAID FOR. SEE TABULATION BLOCK ON SHEET C.03.
5	2301-0685550	BRIDGE APPROACH PAVEMENT, AS PER PLAN; SEE TABULATION BLOCK ON SHEET C.03. METHOD OF MEASUREMENT WILL BE BASED OFF THE SQUARE YARDS SHOWN IN THE CONTRACT DOCUMENTS AND PAYMENT WILL BE BASED OFF OF THE CONTRACT UNIT PRICE PER SQUARE YARD.
6	2301-1034080	STD/SLIPFORM PCC PAVEMENT, CLASS C, 3i DURA. 8 INCH; SEE SHEETS K.02, K.03, K.04, K.06 AND K.07 FOR TYPICALS AND LOCATIONS. CERTIFIED PLANT INSPECTION PER SPECIFICATION 2521, SHALL APPLY TO THIS ITEM. ANY PREPARATION NEEDED TO ACHIEVE THE DESIRED THICKNESS SHALL BE INCLUDED IN THIS ITEM.
7	2301-1034100	STD/SLIPFORM PCC PAVEMENT, CLASS C, 3i DURA. 10 INCH; SEE SHEETS B.02, K.01, K.05 AND K.07 FOR TYPICALS AND LOCATIONS. JOINT SPACING ON THE MAINLINE TO BE 11' PLACED PERPENDICULAR TO THE CENTERLINE OF THE ROADWAY HAVE DOWELED BASKETS.

ESTIMATED REFERENCE INFORMATION

Data listed is for informational purposes only and shall not constitute a basis for any extra work orders

NO.	ITEM CODE	DESCRIPTION
8 9	2310-5151040 2310-5151045	PCC OVERLAY, FURNISH ONLY AND PCC PLACEMENT ONLY; STRENGTH OF PCC USING THE MATURITY METHOD SHALL APPLY. A MATURITY CURVE SHALL BE ESTABLISHED BEFORE THE START OF PAVING. CERTIFIED PLANT INSPECTION PER STANDARD SPECIFICATION 2521 SHALL APPLY. PAVEMENT SMOOTHNESS SPECIFICATION 2316 SHALL APPLY TO THIS PROJECT. L-1 JOINT TO BE PLACED AT THE CENTERLINE. TRANSVERSE "C" JOINTS SHALL BE PLACED AT 11' SPACING PERPENDICULAR TO THE CENTERLINE. THE CENTERLINE JOINT SHALL BE CUT AND SEALED. SEE TYPICAL AND TABULATION ON SHEET B.02. CLASS 3i STONE WILL BE REQUIRED IN THE MIX. QUANTITY OF PCC FURNISH ITEM HAS BEEN INCREASED BY 25% IN ORDER TO COMPENSATE FOR DEVIATIONS IN THE DESIGN PROFILE.
10	2310-8300550	PAVEMENT INTERLAYER GEOTEXTILE; SEE TABULATION BLOCK ON SHEET C.03 FOR LOCATIONS AND TYPICAL ON SHEET B.02 FOR DETAILS. CARE SHALL BE TAKEN NOT TO TEAR OR DISPLACE THE FABRIC DURING PLACEMENT. ANY DAMAGE OF EXCESSIVE WRINKLES SHALL BE REPLACED BEFORE ANY OVERLAY CONCRETE IS PLACED. REFER TO DS-15042 FOR THIS ITEM.
11	2315-8275025	SURFACING, DRIVEWAY, CLASS "A" STONE; TO BE PLACED AT ALL ENTRANCES AND INTERSECTIONS. ESTIMATED AT 16 TON PER ENTRANCE AND 32 TON PER SIDE ROAD INTERSECTION (TOTAL FOR PROJECT 47 ENTRANCES AND 9 INTERSECTIONS). EXTRA QUANTITY HAS BEEN FIGURED IN TO ALLOW FOR PLACEMENT OF ROCK WEDGES TO GET PROPERTY OWNERS ONTO THE PAVEMENT BEFORE THE SHOULDERING IS COMPLETED.
12	2316-0000110	PAYMENT ADJUSTMENT INCENTIVE/DISINCENTIVE FOR PCC PAVEMENT SMOOTHNESS (BY SCHEDULE; PRICE SHOWN IS DETERMINED BY THE I.D.O.T. DESIGN MANUAL (CHAPTER 1). THIS PRICE IS FOR BUDGETING PURPOSES ONLY. THE ACTUAL PAYMENT FOR THIS ITEM WILL BE DETERMINED BY THE PROFILOMETER REPORTS AFTER THE PAVING IS COMPLETED.
13	2401-6750001	REMOVALS, AS PER PLAN; SEE SHEET V.02 FOR LOCATIONS AND REMOVAL LIMITS.
14	2403-0100000	STRUCTURAL CONCRETE (MISC.); CERTIFIED PLANT INSPECTION WILL BE REQUIRED FOR THIS ITEM. SEE SHEETS C.03 AND V.02 FOR LOCATIONS AND QUANTITIES.
15	2413-0698074	DECK REPAIR, CLASS A; SEE NOTES ON SHEET V.03.
16	2413-1200000	STEEL EXTRUSION JOINT WITH NEOPRENE; INCLUDES ALL NECESSARY HARDWARE AND ACCESSORIES INCLUDING THE ANCHORAGE SYSTEM, TEMPORARY ERECTION MATERIAL AND THE 3/8" STEEL CURB PLATES WITH THEIR ANCHORAGE SYSTEM. EXCLUDES INSTALLATION OF THE NEOPRENE GLAND. SHOP DRAWING SHALL BE PROVIDED TO THE PROJECT ENGINEER FOR APPROVAL BEFORE ANY FABRICATION TAKES PLACE.
17	2413-1200100	NEOPRENE GLAND INSTALLATION AND TESTING; INCLUDES INSTALLATION OF NEOPRENE GLAND AND WATER TESTING.
18	2510-6745850	REMOVAL OF PAVEMENT; SEE TABULATION ON SHEET C.03.
19 20	2515-2475106 2515-6745600	DRIVEWAY, REINFORCED P.C. CONCRETE, 6 INCH AND REMOVAL OF PAVED DRIVEWAY; ITEMS ARE TO REMOVE AND REPLACE CONCRETE DRIVES AT THE LOCATIONS NOTED ON SHEET C.03. CERTIFIED PLANT INSPECTION IS REQUIRED FOR THIS ITEM.
21	2526-8285040	CONSTRUCTION SURVEY, LOCATION SURVEY; THE CONTRACTOR SHALL PERFORM A TOPOGRAPHICAL SURVEY OF THE ROAD AND DEVELOPE A FINAL ALIGNMENT AND PROFILE TO BE SUBMITTED AND APPROVED BY DELAWARE COUNTY FOR USE WITH EITHER STRING OR STRINGLESS PAVING. CONTRACTOR IS TO ESTABLISH ALL CONTROL POINTS, BENCH MARKS ETC. TO TOPO AND CONSTRUCT THE OVERLAY. THE CONTRACTOR WILL ALSO PRESERVE AND REESTABLISH ALL SECTION CORNERS. EXISTING PAVEMENT PLANS AND CORNER CERTIFICATES ARE AVAILABLE AT THE DELAWARE COUNTY ENGINEERS OFFICE. THE PRELIMINARY SURVEY FOR PLAN DEVELOPEMENT WAS DONE USING THE RTN ELKADER REGIONAL COORDINATES.
22	2527-9263209	PAINTED PAVEMENT MARKINGS, WATERBORNE/SOLVENT BASED; TWO GUN SYSTEM WITH THE 10" SPACE AT CENTERLINE TO BE USED AND ALL MARKINGS SHALL BE PLACED WITHIN AN ACCURACY TOLERANCE OF 2"+/- FROM THE SPECIFIED APPLICATION LINE OR IT SHALL BE CORRECTED AS DIRECTED BY THE PROJECT ENGINEER. SEE SHEET C.03 FOR TABULATIONS. THE CURING COMPOUND SHALL BE REMOVED BEFORE ANY PAINT IS PLACED.
23	2528-2518000	SAFETY CLOSURE; CONTRACTOR SHALL FURNISH, ERECT AND MAINTAIN SAFETY CLOSURE AT THE LOCATIONS SHOWN ON SHEET C.03. SAFETY CLOSURES SHALL ALSO BE PLACED AT DAYS END HEADERS.
24	2528-8445110	TRAFFIC CONTROL; ITEM INCLUDES ALL ROAD CLOSURE AND DETOUR SIGNAGE. SEE SHEET C.02 FOR TRAFFIC CONTROL NOTES AND SHEET J.01 FOR DETOUR SIGNAGE.
25	2528-8445113	FLAGGERS; TO BE USED AS NEEDED DURING THE COURSE OF THE PROJECT.

PCC Overlay

Located on W69 between D22 and 165th Street

Length; 4.5631

Project No. FM-C028(110)--55-28

Estimated Quantities

Sheet Number; C.01

Delaware County, Iowa

GENERAL NOTES & INFORMATION

UNLESS OTHERWISE DIRECTED OR AUTHORIZED, ALL ASPHALTIC CEMENT CONCRETE AND OTHER BITUMINOUS MATERIALS WHICH ARE NOT SPECIFICALLY ADDRESSED OR DESCRIBED IN THE PLANS SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

THE CONTRACTOR IN ACCORDANCE WITH CURRENT RULES AND REGULATIONS OF THE IOWA DEPARTMENT OF NATURAL RESOURCES MAY;

1. WITH THE APPROVAL OF THE ENGINEER, BLEND OR OTHERWISE PROCESS THE MATERIAL FOR USE WITH SHOULDER OR SPECIAL BACKFILL AGGREGATE FOR USE ON THIS PROJECT.
2. WITH THE APPROVAL OF THE ENGINEER, PLACE WITH MATERIAL DESIGNATED BY THE ENGINEER AS SOIL AGGREGATE SUBBASE WITHOUT EXTRA CHARGE.
3. REMOVE THE MATERIAL FROM THE PROJECT AND STOCKPILE FOR THE CONTRACTORS FUTURE USE.

TRAFFIC CONTROL PLAN

THIS ROAD WILL BE CLOSED TO THROUGH TRAFFIC DURING CONSTRUCTION. LOCAL TRAFFIC TO ADJACENT PROPERTIES WILL BE MAINTAINED AS PROVIDED FOR IN ARTICLE 1107.08 OF THE CURRENT STANDARD SPECIFICATIONS. TRAFFIC CONTROL DEVICES, PROCEDURES AND LAYOUTS SHALL BE AS PER PART VI OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCO) FOR STREET AND HIGHWAYS AS ADOPTED BY THE DEPARTMENT PER 761 OF THE IOWA ADMINISTRATIVE CODE (IAC) CHAPTER 130.

1. AS SOON AS PAVEMENT REACHES MATURITY FOR EACH DAY OF PAVING, THE CONTRACTOR SHALL FURNISH AND PLACE SIGNING TO AND ALLOW FOR RESIDENT ACCESS ONLY. GRANULAR WEDGES SHALL BE PLACED AT THIS TIME AT EACH DRIVE.

2. ROAD CLOSURE CONFIGURATION TC–252 (SAFETY CLOSURE, CLOSED TO THROUGH TRAFFIC ETC.) SHALL BE ADJUSTED AS THE PAVING PROGRESSES.

3. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED AND REMOVED BY THE CONTRACTOR.

4. AS APPLICABLE PERMANENT EDGE LINES, CENTER LINES AND LANE LINES SHALL BE PLACED BEFORE THE ROADWAY IS RETURNED TO NORMAL TRAFFIC.

5. PERMANENT SIGNING THAT CONVEYS A MESSAGE CONTRARY TO THE MESSAGE OF THE TEMPORARY SIGNING AND NOT APPLICABLE TO THE WORKING CONDITIONS SHALL BE COVERED BY THE CONTRACTOR WHEN DIRECTED BY THE ENGINEER.

6. PROPOSED CHANGES OF THE TRAFFIC CONTROL PLAN SHALL BE REVIEWED BY THE ENGINEER BEFORE CHANGES ARE MADE.

7. "BUMP" OR "ROUGH ROAD" SIGNS SHALL BE ERECTED IN ADVANCE OF SCARIFICATION AREAS. "NO PAVEMENT MARKING" SIGNS SHALL BE ERECTED AND KEPT IN PLACE UNTIL THE PAVEMENT MARKINGS ARE COMPLETED.

8. THE CONTRACTOR SHALL COORDINATE TRAFFIC CONTROL WITH OTHER PROJECTS IN THE AREA.

9. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO WORK WITH THE ADJOINING PROPERTY OWNERS IN ORDER TO PROVIDE THEM ACCESS DURING THE PROJECT. ANY PROBLEMS THAT ARISE CONCERNING ACCESS FOR THE ADJOINING PROPERTY OWNERS SHALL BE THE CONTRACTORS RESPONSIBILTY, NOT DELAWARE COUNTY'S.

10. THE CONTRACTOR SHALL SET UP AND MAINTAIN THE DETOUR FOR THIS PROJECT SEE SHEET J.01 FOR SIGNAGE LAYOUT. DELAWARE COUNTY WILL PROVIDE THE D22 ROUTE MARKER SIGNS TO THE CONTRACTOR FOR THE DETOUR AND THEY SHALL BE RETURNED TO DELAWARE COUNTY AFTER THE PROJECT IS COMPLETED.

STANDARD ROAD PLANS

Number	Date	Sheets	Title
BR-101	04/21/26	2	BRIDGE APPROACH SECTION (GENERAL DETAILS)
BR-104	10/17/17	1	BRIDGE APPROACH SECTION (AT EXISTING PCC PAVEMENT)
DR-306	04/19/22	2	PRECAST CONCRETE HEADWALL FOR SUBDRAIN OUTLETS
PM-110	10/15/24	4	LINE TYPES
PV-101	01/01/26	8	JOINTS
TC-213	04/18/23	1	LANE CLOSURE WITH FLAGGER
TC-233	10/17/17	2	PAVEMENT MARKING OPERATION, TWO LANE
TC-252	10/20/26	4	ROUTES CLOSED TO TRAFFIC
TC-284	10/15/19	1	NO CENTERLINE MARKINGS ON NON-PRIMARY ROADS

CERTIFIED PLANT INSPECTION

CERTIFIED PLANT INSPECTION SHALL APPLY TO ALL ITEMS INVOLVING CONCRETE ON THIS PROJECT.

CONSTRUCTION STAGING

THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A PROPOSED SEQUENCE OF WORK ACTIVITIES PRIOR TO THE BEGINNING OF WORK.

PCC Overlay
Located on W69 between D22 and 165th Street
Length; 4.5631
Project No. FM-C028(110)--55-28
General Notes
Sheet Number; C.02
Delaware County, Iowa

CLASS 10 WASTE TABULATION (Item #1)

Location		area	depth	total
Sta.	Sta.	(s.f.)	(inches)	(c.y.)
2+03.33	5+13.33	7440.0	9	206.7
210th St. Rt.		9369.0	9	260.3
38+72.5	41+02.5	5520.0	9	153.3
43+97.5	46+27.5	5520.0	9	153.3
190th St. Rt.		3117.0	10	96.2
239+96.3	242+30.3	5616.0	9	156.0
242+30.3	242+96.3	3947.3	9	109.6
Total				1135.4

TABULATION OF FABRIC REINFORCEMENT FOR CONTROL OF REFLECTIVE CRACKING (Item #10)

BEGIN STATION	END STATION	SIDE	WIDTH	LENGTH	AREA	AREA
			Feet	Feet	Sq. Ft.	Sq. Yds.
5+13.33	38+72.5	both	22.7	3359.17	76253.159	8,472.6
46+27.5	239+96.3	both	22.7	19368.8	439671.76	48,852.4
					TOTAL	57,325.0

MODIFIED SUBBASE TABULATION (Item #2)

Sta.	Sta.	length (ft)	width (ft)	depth (inches)	total s.f.	total (c.y.)
160+16	163+16	310	24	8	7440	183.8
210th St. Rt.		Varies	Varies	8	9369	231.5
38+72.5	41+02.5	230	24	8	5520	137.0
41+02.5	41+52.5	50	24	4**	1200	14.7
41+52.5	41+72.5	20	34	4**	680	8.3
43+27.5	43+47.5	20	34	4**	680	8.3
43+47.5	43+97.5	50	24	4**	1200	14.7
43+97.5	46+27.5	230	24	8	5520	137.0
190th St. Rt.		Varies	Varies	8	3117	77.0
239+96.3	242+30.3	234	24	8	5616	138.7
242+30.3	242+96.3	66	Varies	8	3947	97.5
					TOTAL	1048.4

REMARKS;
*Width varies due to the intersection geometry. See K sheets for details.
** 4" of modified subbase under the bridge approaches is incidental to the bridge approach item. Plans require 8" of modified subbase to be placed under the bridge approaches so the additional 4" will be paid under this item.

RELOCATION OF MAILBOXES (Item #4)

#	ROAD	911 ADDRESS	SIDE	NUMBER
1	W69	1668	Lt.	1
2	W69	1736	Lt.	1
3	W69	1739	Lt.	1
4	W69	1779	Lt.	1
5	W69	1922	Rt.	1
6	W69	1927	Rt.	1
7	W69	1949	Rt.	1
8	W69	1951	Rt.	1
9	W69	1953	Rt.	1
10	W69	1966	Rt.	1
11	W69	2012	Lt.	1
12	W69	2026	Lt.	1
13	W69	2034	Lt.	1
14	W69	2053	Lt.	1
15	W69	2085	Lt.	1
			TOTAL	15

Only boxes that U.S.P.S. delivers to will be paid for. Paper boxes are not included in this bid item.

Centerline Pavement Marking Tabulation (yellow) (Item #23)

Station	Station	LF	Meas. Factor	Stations
0+47	22+75	2228	0.84	18.72
22+75	30+25	750	1.33	9.98
30+25	40+08	983	0.84	8.26
40+08	103+81	6373	0.17	10.83
103+81	114+99	1118	0.84	9.39
114+99	115+60	61	1.33	0.81
115+06	126+52	1146	0.84	9.63
126+52	167+05	4053	0.17	6.89
167+05	174+40	735	0.84	6.17
174+40	176+74	234	0.17	0.40
176+74	184+37	763	0.84	6.41
184+37	188+27	390	0.17	0.66
188+27	197+93	966	0.84	8.11
197+93	198+75	82	0.17	0.14
198+75	208+22	947	0.84	7.95
208+22	232+00	2378	0.17	4.04
232+00	242+91	1091	0.84	9.16
210 St. Rt.		330	1.33	4.39
190th St. Rt.		50	1.33	0.67
			Total	122.61

Edgeline Pavement Marking Tabulation (white)

Station	Station	Side	LF	Meas. Factor	Stations
0+00	242+96.3	Left	24296.3	0.67	162.79
0+00	242+96.3	Right	24296.3	0.67	162.79
210th St.		Left	360	0.67	2.41
210th St.		Right	350	0.67	2.35
190th St.		Left	90	0.67	0.60
190th St.		Right	90	0.67	0.60
				Total	331.53

Stop Bars (white)

Location	Side	Length (ft)	Meas. Factor	Stations
0+00	Left	11	4.00	0.44
210th St.	Right	33	4.00	1.32
190th St.	Right	32	4.00	1.28
242+81	Right	44	4.00	1.76
			Total	4.80
Remarks: Stop bars to be placed per IDOT standard				
ITEM TOTAL				458.94

BRIDGE APPROACH SECTION (Item #5)

Refer to the BR Series.

* Not a bid item

This Data Entry Sheet fills Tab 112-6 effective 04-18-17

Location				Approach Pavement					Standard Road Plans BR Series			Subdrain								
Bridge Station	End	Skew Ahead Degrees LEFT	Skew Ahead Degrees RIGHT	T Thickness	Pay Length	Non-Reinf. Pavement Area	Single-Reinf. Pavement Area	Double-Reinf. Pavement Area	Approach	Fixed or Movable Abutment	Abutting Pavement	* Perforated Subdrain 4"	* Subdrain Outlet		* Porous Backfill	* Class 'A' Crushed Stone Backfill	* Modified Subbase	* Polymer Grid	* Special Backfill	Remarks
												LF	STA	Side	CY	CY	TON	SY	TON	
41+72.5	South	30		10	70	122.22	71.69	0	BR-104	Fixed	PCC	40	41+12.5	Rt.	2.05	0.14	45.7	220		Reinforced section is 33'02"x 20'measured along centerline
43+27.5	North	30		10	70	122.22	71.69	0	BR-104	Fixed	PCC	40	43+87.5	Rt.	2.05	0.14	45.7	220		Reinforced section is 33'02'x 20'measured along centerline

STD/SLIPFORM PCC PAVEMENT, CLASS C 3i DURA, 8 IN. (ITEM #6)

LOCATION		AREA	AREA	PLAN SHEET THE DETAILS	Remarks
Intersection	Side	sq. ft.	sq. yds.	ARE ON	
210th St.	Lt.	2463	273.7	K.02	THE BOTTOM OF THE FILLET IS TO MATCH THE EXISTING GRAVEL (TOP OF FILLET 8" HIGHER THAN THE EXISTING GRAVEL) AT THE END OF THE FILLET. ANY PREPARATION REQUIRED TO ACHIEVE THE DESIRED DEPTH SHALL BE INCIDENTAL TO THIS BID ITEM.
207th St.	Lt.	2463	273.7	K.02	
Early Stagecoach Road	Lt.	3699	411.0	K.03	
Early Stagecoach Road	Rt.	3869	429.9	K.03	
Candle Road	Lt.	2904	322.7	K.04	
197th St.	Rt.	2421	269.0	K.04	
180th St.	Lt.	2463	273.7	K.06	
180th St.	Rt.	2463	273.7	K.06	
170th St	Lt.	2463	273.7	K.07	
TOTAL			2801.1		

TABULATION OF SAFETY CLOSURES (Item #24)

REFER TO 2528 OF THE STANDARD SPECIFICATIONS

LOCATION	SIDE	EACH	REMARKS
B.O.P. Sta. 2+00		1	THIS LIST MAY NOT BE ALL INCLUSIVE, ADDITIONAL SAFETY CLOSURES MAY BE NEEDED AS THE PROJECT PROGRESSES. THE PROJECT ENGINEER MAY APPROVE ADDITIONAL SAFETY CLOSURES IF THE NEED ARISES.
210th St.	Right	1	
210th St.	Left	1	
207th St.	Left	1	
Early Stagecoach Road	Right	1	
Early Stagecoach Road	Left	1	
South End Bridge Approach		1	
North End Bridge Approach		1	
Candle Road	Left	1	
197th St.	Right	1	
190th St.	Right	1	
180th St.	Right	1	
180th St.	Left	1	
170th St.	Left	1	
E.O.P.		1	
End of day		9	
TOTAL		24	

REMOVAL/REPLACE CONCRETE DRIVES (Items 19 & 20)

LOCATION		LENGTH	WIDTH	AREA	AREA	SAW CUT	SAW CUT
911 Address	SIDE	feet	feet	sq. ft.	sq. yds.	ft. from CL OF w69	lin. Ft.
1927	Lt.	28' 09"	Varies	503.1	55.9	39'09"	14' 05"
TOTAL					55.9		

Reinforcement placement in the new drive shall be at least #4 epoxy or 7/16" fiberglass bars placed at 18" centers and chaired to the center of the slab.

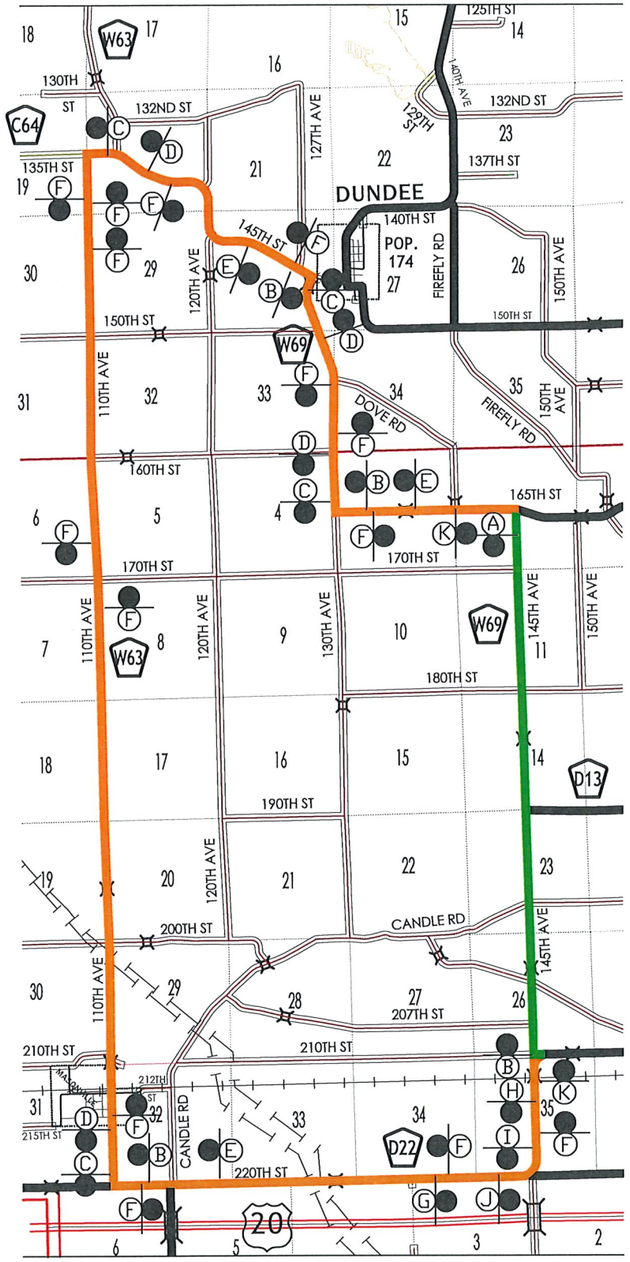
REMOVAL OF PAVEMENT (Item #18)

Station to Station		Pavement Type	Length (feet)	Width (feet)	Area (sq. yds.)	Saw Cut* (lin. Feet)	Remarks
2+03.3	5+13.3	6" PCC	310	22	757.78	22	ALL PAVEMENT REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND REMOVED FROM THE PROJECT. PCC MAY BE THICKER IN SOME AREAS DUE TO PATCHES, NO EXTRA COMPENSATION WILL BE MADE FOR REMOVING EXTRA DEPTH PAVEMENT. ANY H.M.A. PATCHES IN THE PAVEMENT REMOVAL AREAS SHALL BE CONSIDERED INCIDENTAL TO THE PAVEMENT REMOVAL.
210th St. Rt.		6" PCC	304	Varies	968.90	22	
38+72.5	41+02.5	6" PCC	230	22	562.22	22	
43+97.5	46+27.5	6" PCC	230	22	562.22	22	
190th Ave. Rt.		4" H.M.A.	55	Varies	329.60	24	
239+96.3	242+30.3	6" PCC	234	22	572.00	22	
242+30.3	242+96.3	6" PCC	66	Varies	420.00	134	
* NOT A PAY ITEM				TOTAL	4172.72		

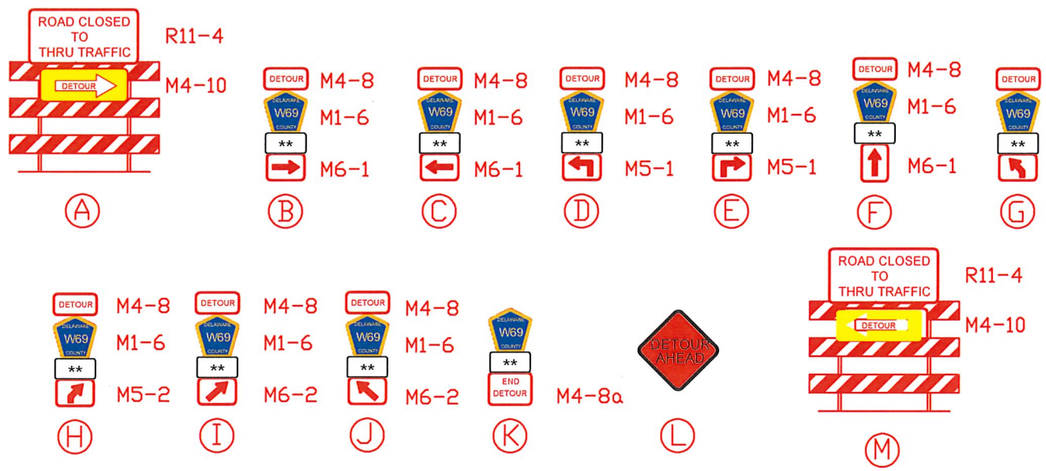
STRUCTURAL CONCRETE MISC. (one abutment)
Item # 14

LOCATION	Volume cu. ft.	Volume cu. yds.
Deck	103.46	3.8
Curbs (2)	7.76	0.3
Diaphragm	15.12	0.6
Backwall	29.24	1.1
Wing (2)	14.23	0.5
Wing Post (2)	14.43	0.5
TOTAL ONE ABUTMENT		6.8
TOTAL ITEM AMOUNT		13.6

PCC Overlay
Located on W69 between D22 and 165th Street
Length; 4.5631
Project No. FM-C028(110)--55-28
Misc. Tabulations
Sheet Number; C.03
Delaware County, Iowa



DETOUR MAP



** THE APPROPRIATE (NORTH/SOUTH) CARDINAL DIRECTION SIGNS SHALL BE PLACED ON ALL SIGN ASSEMBLIES

DETOUR SIGNAGE

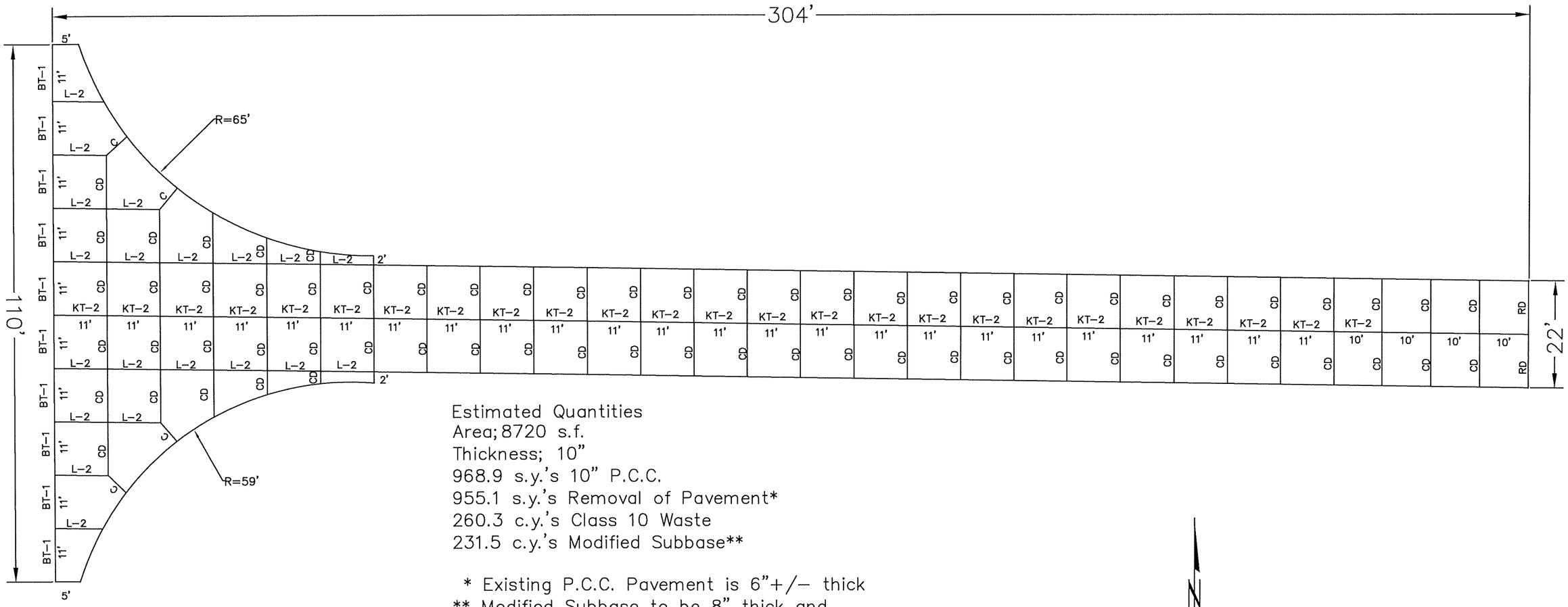
PROJECT LOCATION
DETOUR ROUTE
PAVEMENTS
GRAVELS

PCC Overlay
Located on W69 between D22 and 165th Street
Length; 4.5631
Project No. FM-C028(110)--55-28

Detour Details

Sheet Number; J.01

Delaware County, Iowa



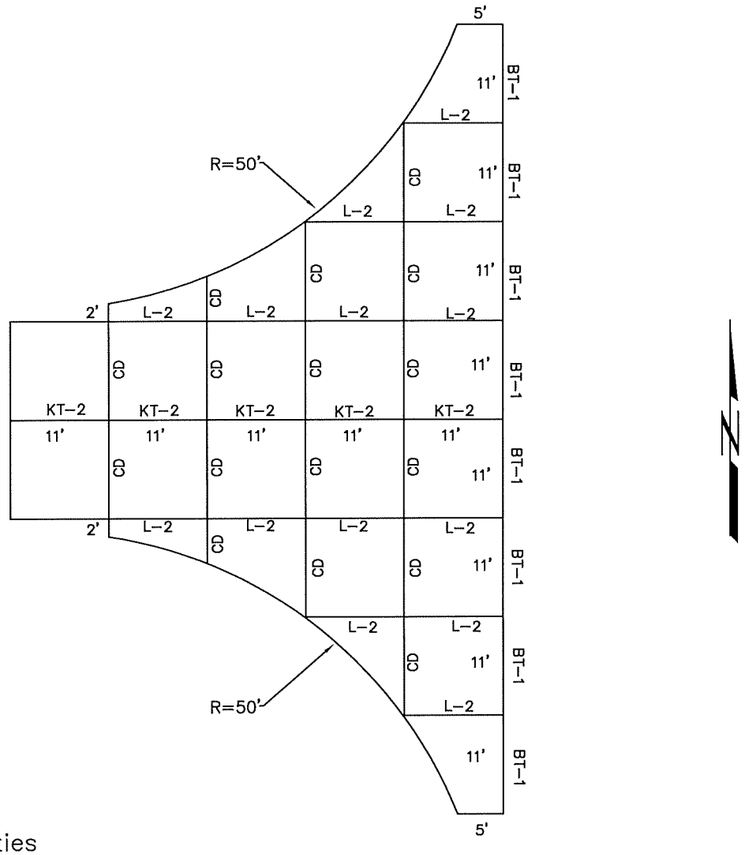
Estimated Quantities
Area; 8720 s.f.
Thickness; 10"
968.9 s.y.'s 10" P.C.C.
955.1 s.y.'s Removal of Pavement*
260.3 c.y.'s Class 10 Waste
231.5 c.y.'s Modified Subbase**

* Existing P.C.C. Pavement is 6"+/– thick
** Modified Subbase to be 8" thick and extend 1' past the edge of the pavement.

L–2 Joints may be substituted for the KT–2 Joints.

210th St. Right
INTERSECTION DETAILS
Sta. 4+59 Rt.

PCC Overlay
Located on W69 between D22 and 165th Street
Length; 4.5631
Project No. FM-C028(110)--55-28
210th St. Rt. Details
Sheet Number; K.01
Delaware County, Iowa

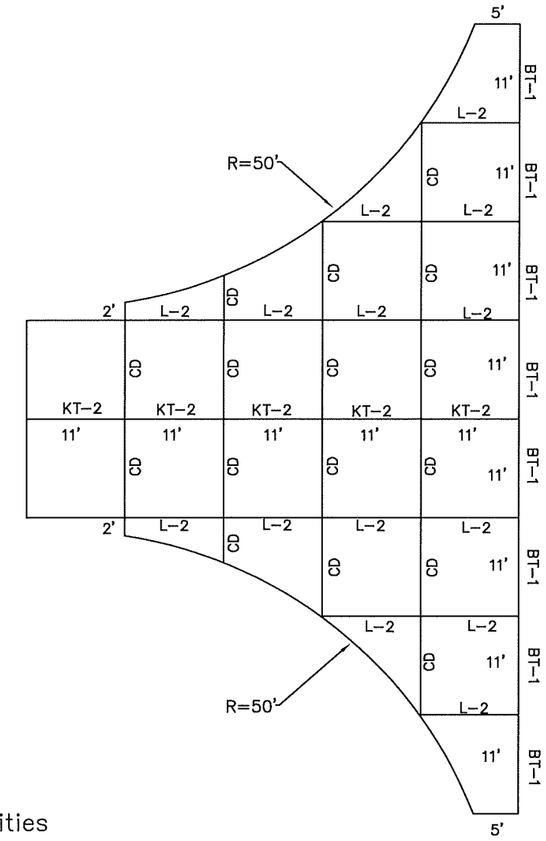


Estimated Quantities
Area; 2463 s.f.
Thickness; 8"
273.7 s.y.'s 8" P.C.C.

The bottom of the end of the fillet is to match the existing gravel. Any prep work required to achieve the desired depth will be incidental to the 8" P.C.C. bid item.

L-2 Joints may be substituted for the KT-2 Joints.

210th St. Left
INTERSECTION DETAILS
Sta. 4+59 Lt.



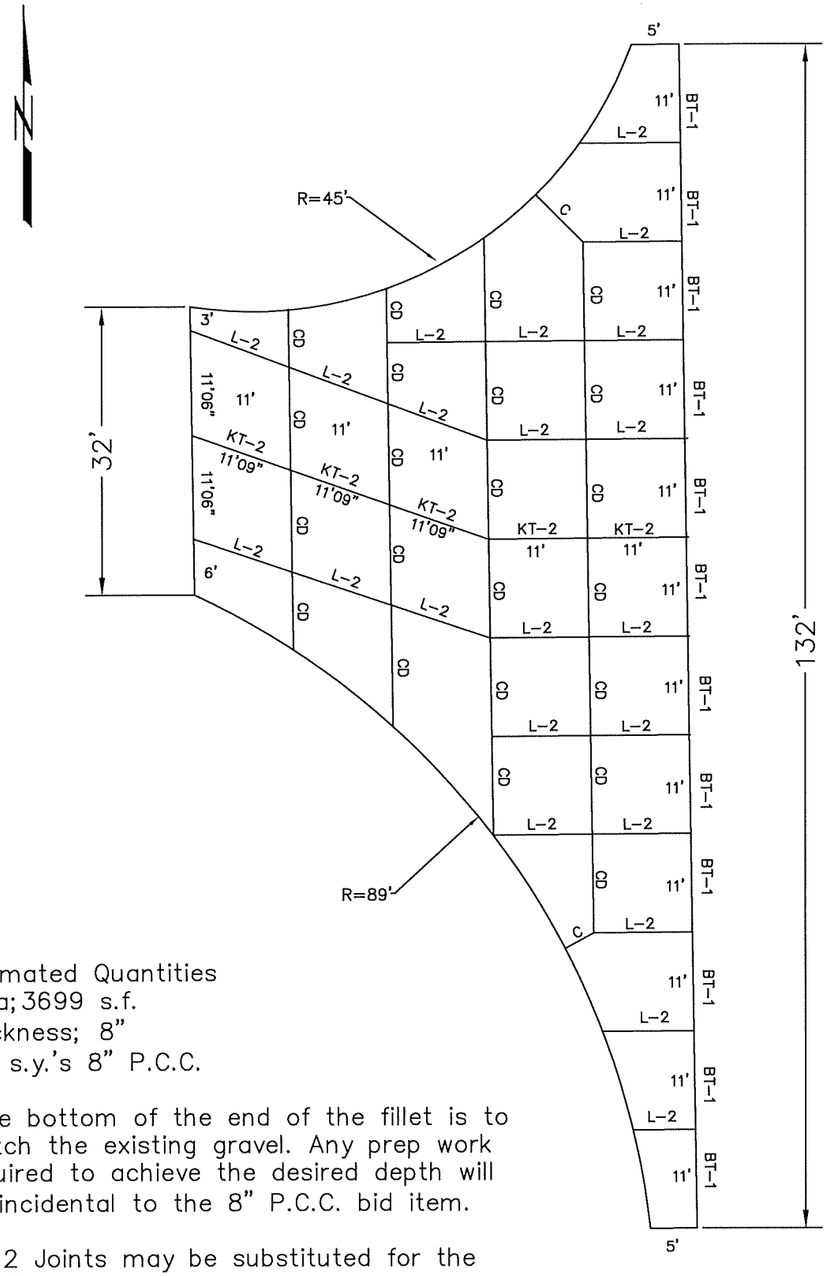
Estimated Quantities
Area; 2463 s.f.
Thickness; 8"
273.7 s.y.'s 8" P.C.C.

The bottom of the end of the fillet is to match the existing gravel. Any prep work required to achieve the desired depth will be incidental to the 8" P.C.C. bid item.

L-2 Joints may be substituted for the KT-2 Joints.

207th St. Left
INTERSECTION DETAILS
Sta. 17+96 Lt.

PCC Overlay
Located on W69 between D22 and 165th Street
Length; 4.5631
Project No. FM-C028(110)--55-28
210th St. Lt. & 207th St. Lt. Details
Sheet Number; K.02
Delaware County, Iowa

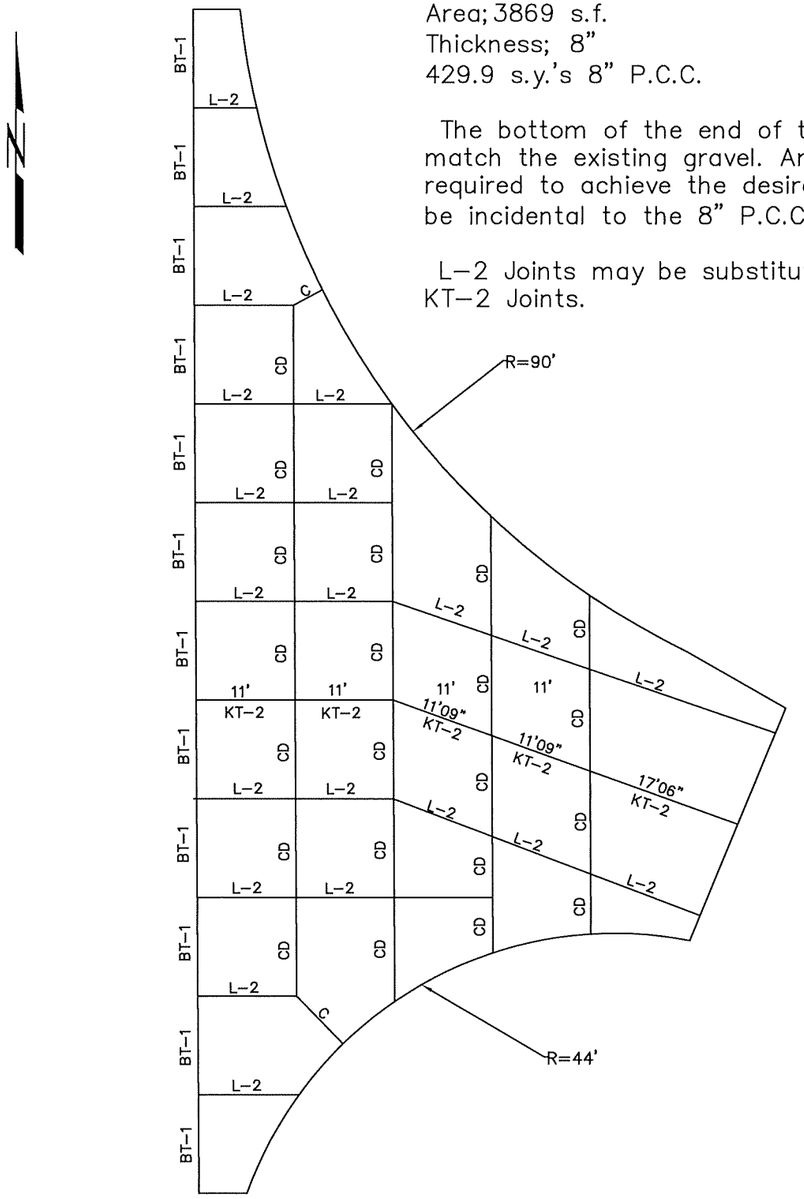


Estimated Quantities
Area; 3699 s.f.
Thickness; 8"
411 s.y.'s 8" P.C.C.

The bottom of the end of the fillet is to match the existing gravel. Any prep work required to achieve the desired depth will be incidental to the 8" P.C.C. bid item.

L-2 Joints may be substituted for the KT-2 Joints.

Early Stagecoach Road, Left
INTERSECTION DETAILS
Sta. 36+71 Lt.



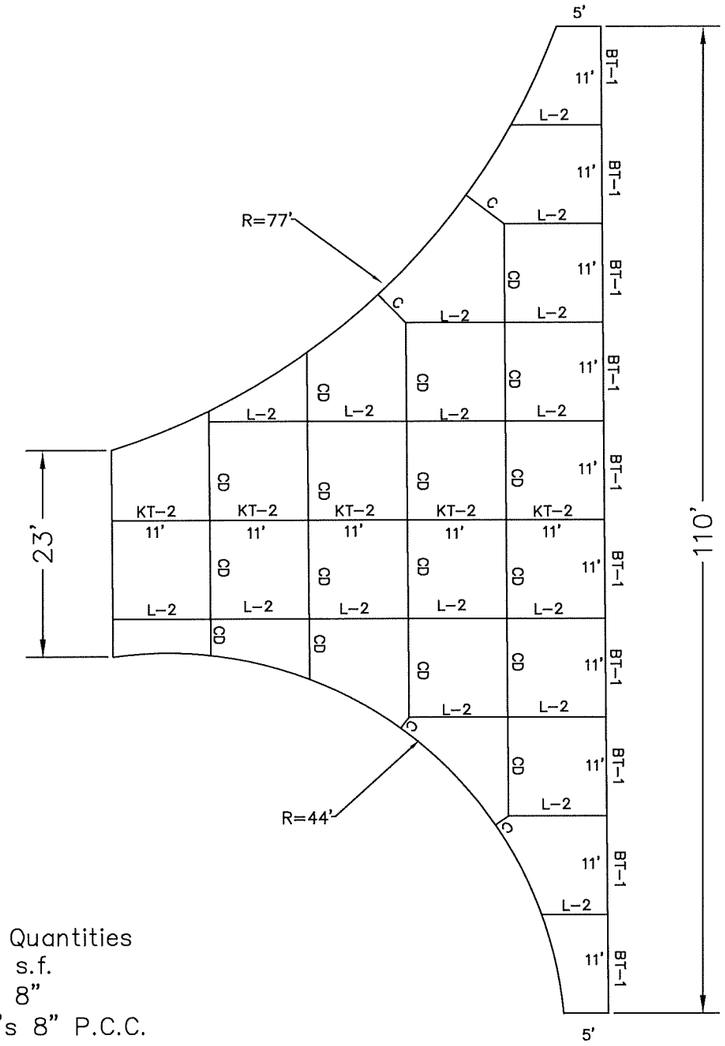
Estimated Quantities
Area; 3869 s.f.
Thickness; 8"
429.9 s.y.'s 8" P.C.C.

The bottom of the end of the fillet is to match the existing gravel. Any prep work required to achieve the desired depth will be incidental to the 8" P.C.C. bid item.

L-2 Joints may be substituted for the KT-2 Joints.

Early Stagecoach Road, Right
INTERSECTION DETAILS
Sta. 36+50 Rt.

PCC Overlay
Located on W69 between D22 and 165th Street
Length; 4.5631
Project No. FM-C028(110)--55-28
Early Stagecoach Rd. Lt. & Rt. Details
Sheet Number; K.03
Delaware County, Iowa

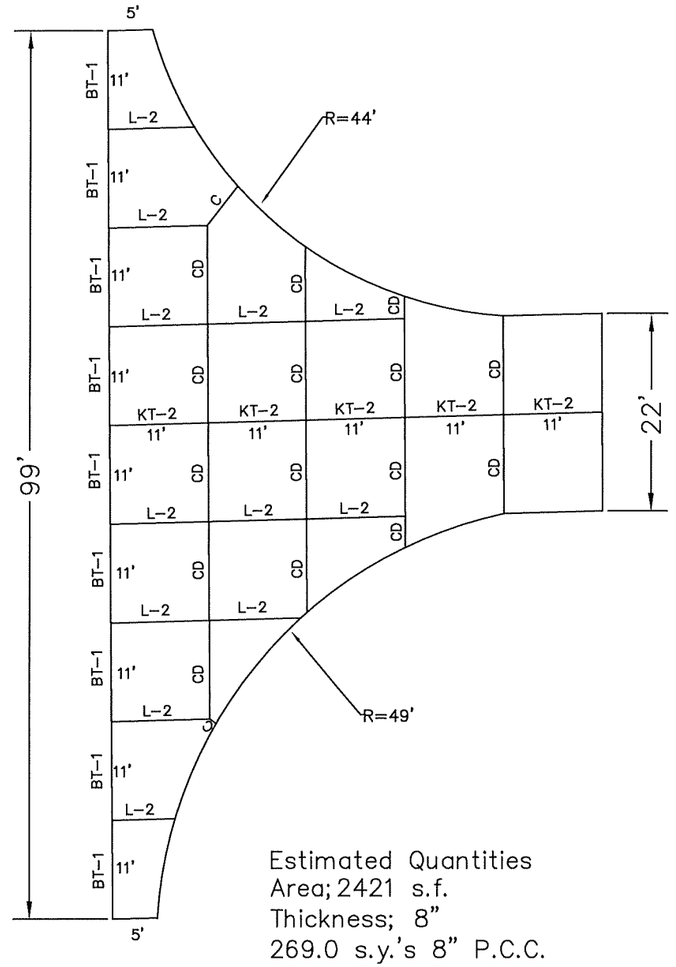


Estimated Quantities
Area; 2904 s.f.
Thickness; 8"
322.7 s.y.'s 8" P.C.C.

The bottom of the end of the fillet is to match the existing gravel. Any prep work required to achieve the desired depth will be incidental to the 8" P.C.C. bid item.

L–2 Joints may be substituted for the KT–2 Joints.

Candle Road, Left
INTERSECTION DETAILS
Sta. 70+65 Lt.



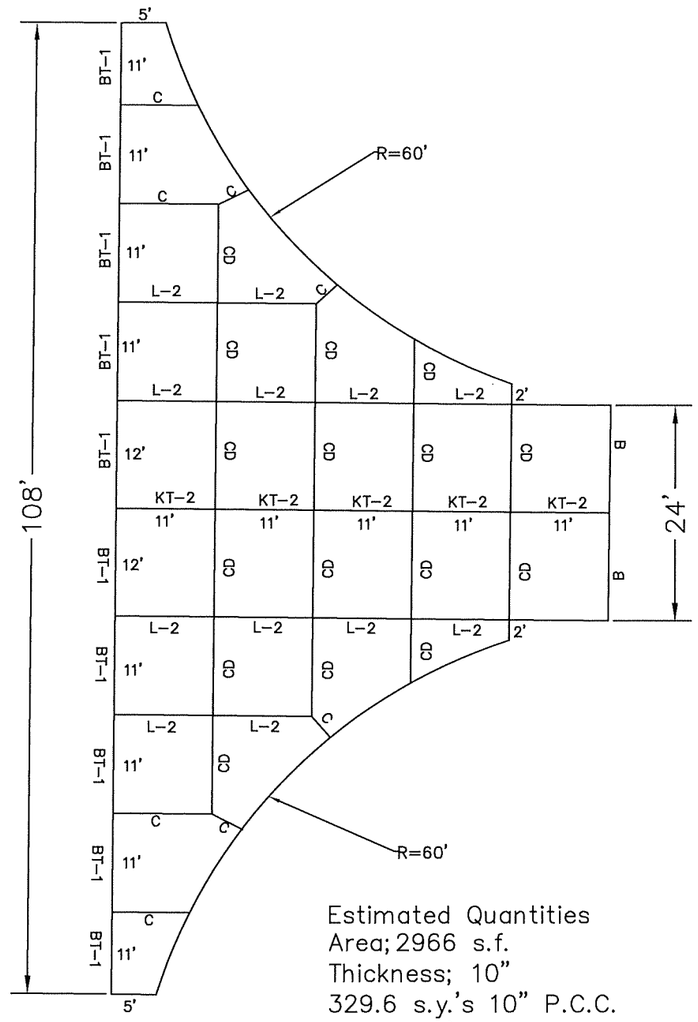
Estimated Quantities
Area; 2421 s.f.
Thickness; 8"
269.0 s.y.'s 8" P.C.C.

The bottom of the end of the fillet is to match the existing gravel. Any prep work required to achieve the desired depth will be incidental to the 8" P.C.C. bid item.

L–2 Joints may be substituted for the KT–2 Joints.

197th St., Right
INTERSECTION DETAILS
Sta. 70+88 Rt.

PCC Overlay
Located on W69 between D22 and 165th Street
Length; 4.5631
Project No. FM-C028(110)--55-28
Candle Rd. Lt. & 197th St. Rt. Details
Sheet Number; K.04
Delaware County, Iowa



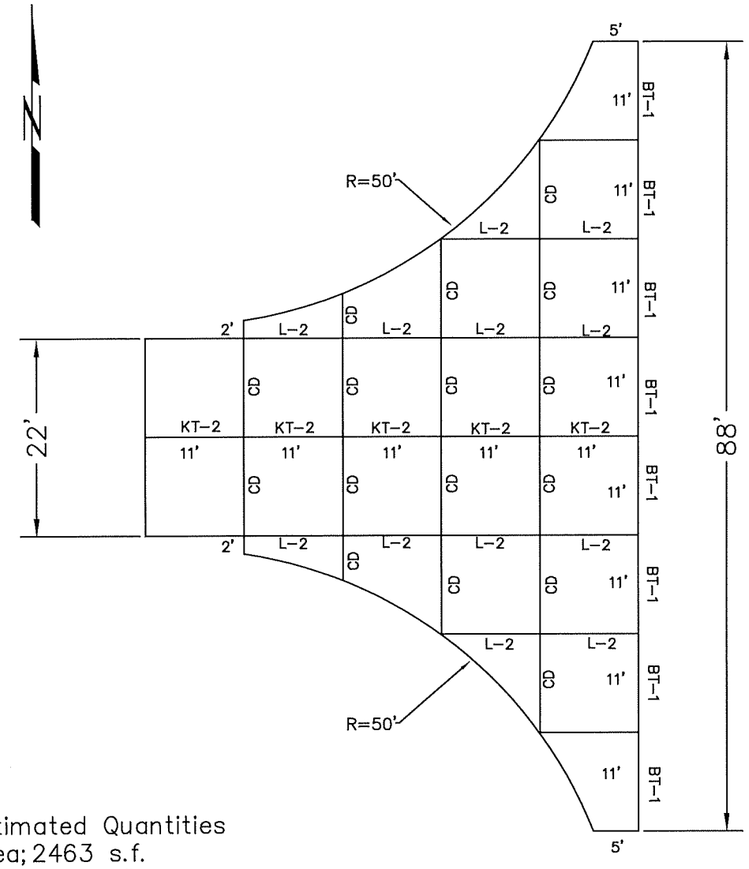
Estimated Quantities
Area; 2966 s.f.
Thickness; 10"
329.6 s.y.'s 10" P.C.C.
340.2 s.y's Removal of Pavement*
96.2 c.y.'s Class 10 Waste
77.0 c.y.'s Modified Subbase**

* Existing H.M.A Pavement is 4"+/– thick
** Modified Subbase to be 8" thick and extend 1' past the edge of the pavement.

L–2 Joints may be substituted for the KT–2 Joints.

190th St. Right
INTERSECTION DETAILS
Sta. 111+46 Rt.

PCC Overlay
Located on W69 between D22 and 165th Street
Length; 4.5631
Project No. FM-C028(110)--55-28
190th St. Rt. Details
Sheet Number; K.05
Delaware County, Iowa

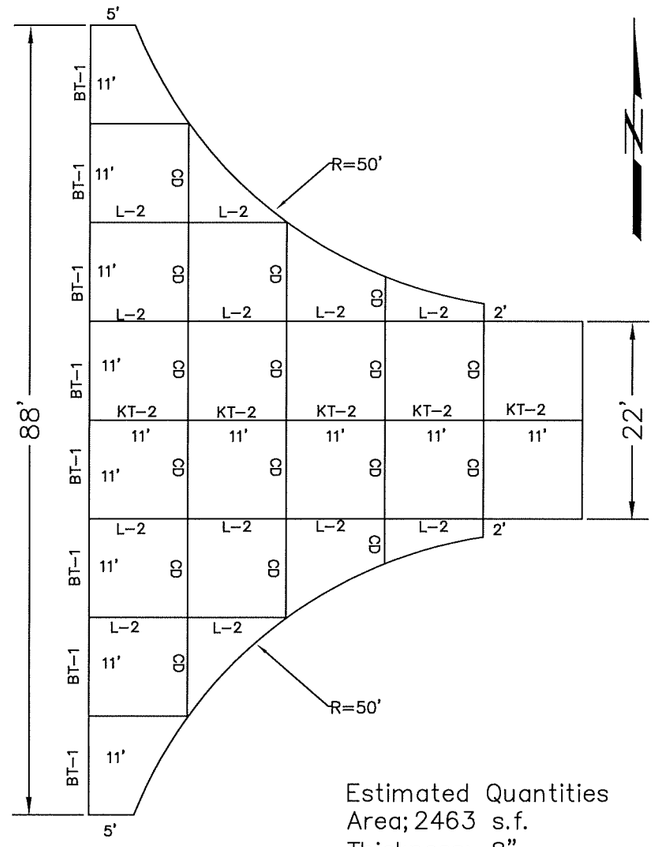


Estimated Quantities
Area; 2463 s.f.
Thickness; 8"
273.7 s.y.'s 8" P.C.C.

The bottom of the end of the fillet is to match the existing gravel. Any prep work required to achieve the desired depth will be incidental to the 8" P.C.C. bid item.

L-2 Joints may be substituted for the KT-2 Joints.

180th St., Left
INTERSECTION DETAILS
Sta. 163+86 Lt.



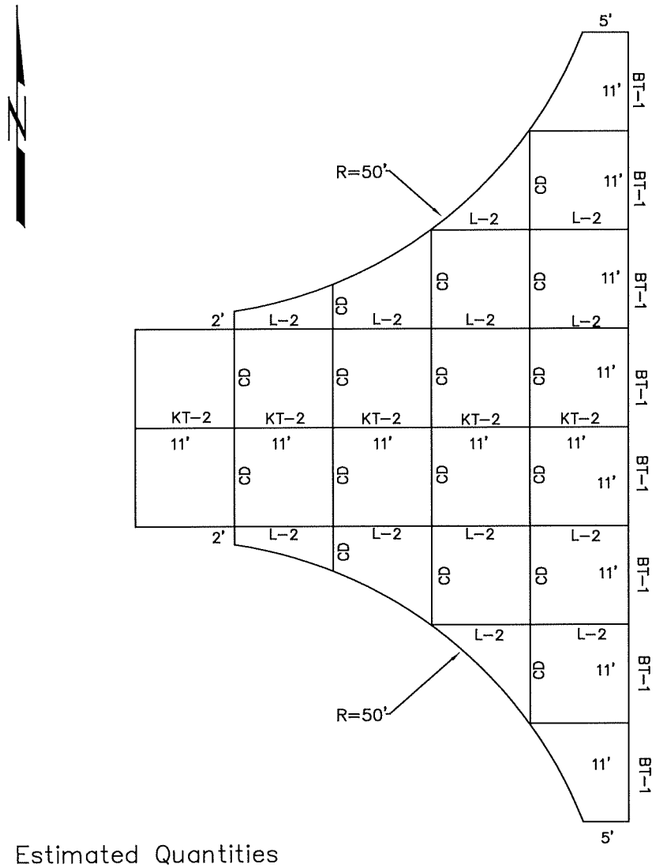
Estimated Quantities
Area; 2463 s.f.
Thickness; 8"
273.7 s.y.'s 8" P.C.C.

The bottom of the end of the fillet is to match the existing gravel. Any prep work required to achieve the desired depth will be incidental to the 8" P.C.C. bid item.

L-2 Joints may be substituted for the KT-2 Joints.

180th St., Right
INTERSECTION DETAILS
Sta. 163+79 Rt.

PCC Overlay
Located on W69 between D22 and 165th Street
Length; 4.5631
Project No. FM-C028(110)--55-28
180th St. Rt.& 180 St. Lt. Details
Sheet Number; K.06
Delaware County, Iowa

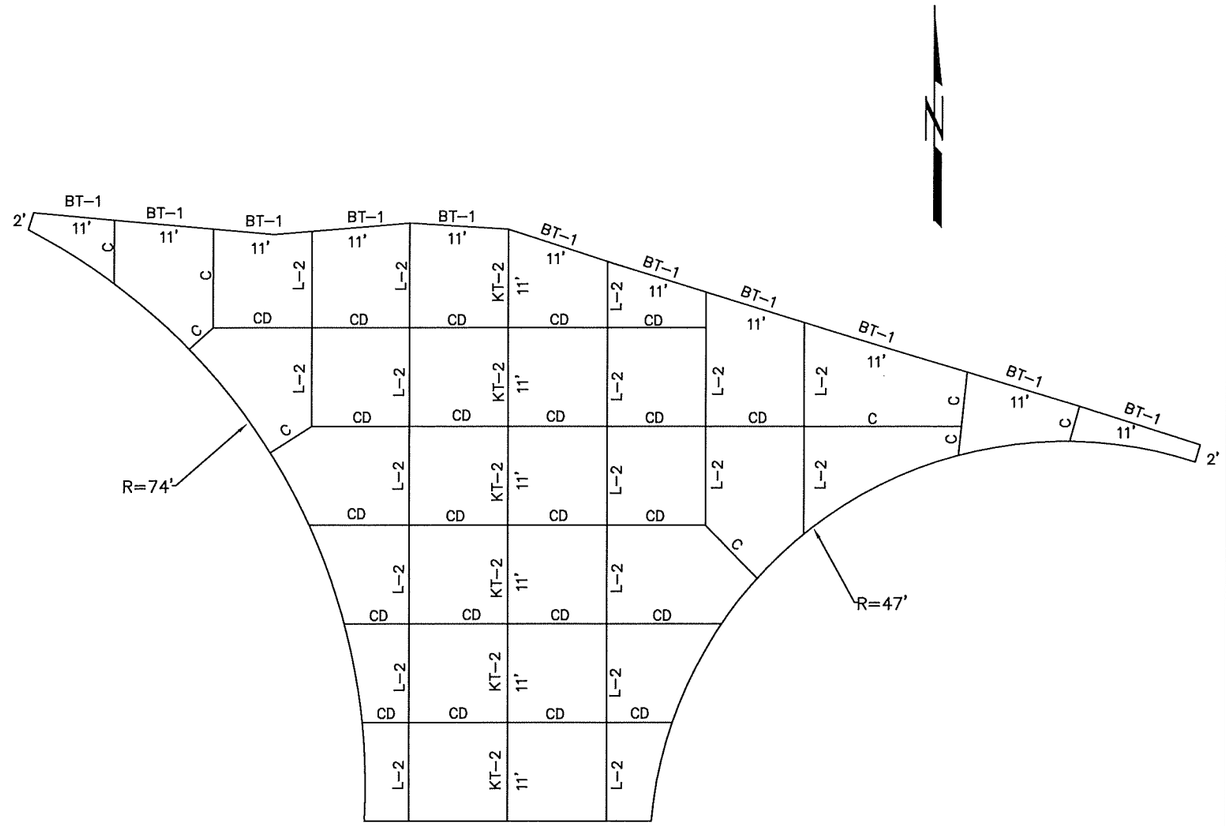


Estimated Quantities
Area; 2463 s.f.
Thickness; 8"
273.7 s.y.'s 8" P.C.C.

The bottom of the end of the fillet is to match the existing gravel. Any prep work required to achieve the desired depth will be incidental to the 8" P.C.C. bid item.

L-2 Joints may be substituted for the KT-2 Joints.

170th St. Left
INTERSECTION DETAILS
Sta. 216+93 Lt.



Estimated Quantities
Area; 3780 s.f.
Thickness; 10"
420.0 s.y.'s 10" P.C.C.
349.5 s.y's Removal of Pavement*
109.6 c.y.'s Class 10 Waste
97.5 c.y.'s Modified Subbase**

* Existing P.C.C. Pavement is 6"+/- thick
** Modified Subbase to be 8" thick and extend 1' past the edge of the pavement.

L-2 Joints may be substituted for the KT-2 Joints.

E.O.P.
INTERSECTION DETAILS
Sta. 242+96

PCC Overlay
Located on W69 between D22 and 165th Street
Length; 4.5631
Project No. FM-C028(110)--55-28
170th St. Lt. & E.O.P. Details
Sheet Number; K.07
Delaware County, Iowa

Steel Extrusion Notes:

The Contractor shall submit for approval shop drawings of the expansion devices showing layout, material to be used, and provisions for the holding device during placement of concrete.

The expansion device shall be galvanized after welding. All curb plates including their anchorages shall be galvanized.

The expansion device is to be parallel to grade.

Cap screws shall be countersunk $\frac{1}{16}$" below top of the plate. The minimum grade of structural steel for the expansion device shall be ASTM A36.

Blackout details may be altered from those shown provided the gland may be installed and removed if necessary and the curb area remains watertight.

Shop splices of the steel extrusion will be permitted. Prior to making shop splices steel extrusion pieces shall have a minimum length of 15 feet. The individual length of pieces shall be chosen so that a minimum number of splices is required. All pieces shall be joined with a prequalified partial penetration single groove weld detailed on the shop drawing. All surfaces not in contact with concrete are to be ground flush. No weld shall be permitted in the internal section of the extrusion where the neoprene gland is to be installed.

The number of feet of steel extrusion installed shall be paid for at the contract price per foot based on plan quantities. The price bid for "Steel Extrusion Joint w/Neoprene" shall include the cost of furnishing but not the cost of installing the neoprene gland. The contract price bid for "Steel Extrusion Joint w/Neoprene" shall be full compensation for furnishing and installing steel extrusions.This work will consist of furnishing all required materials, (including the $\frac{3}{8}$" plates at the curbs and their anchorage systems), and the installation and adjustment of the expansion joints and cover plates in accordance with the details shown on the plans and as directed by the Engineer. The furnishing and installation of all necessary hardware and accessories as supplied by the Expansion Joint Manufacturer are to be included in this work, including the anchorage system and any temporary erection material. All work and materials for the installation of the expansion joints are to comply with the written recommendations of the Expansion Joint Manufacturer.

Watertight Integrity Testing And Repair Notes:

After installation of each neoprene gland, the Contractor shall perform watertight integrity tests at the deck level to detect any leakage. The tests are to check for leakage at the upturned ends of the expansion device and for leakage along the expansion device across the deck. The Contractor may conduct a single test of the entire device including upturned ends or may conduct separate tests of upturned ends and one or more tests of overlapping lengths between the upturned end.

At each upturned end of the expansion device, the Contractor shall block out on the deck at least 3 feet of the expansion device leading to the upturned end and flood the area. A minimum water depth of 3" shall be maintained at the gutter line for at least 30 minutes. During the test, the Inspector shall observe for any overflow at the upturned end. At the conclusion of the test the Inspector will examine the underside of the joint for leakage. The expansion device is considered watertight 1f the Inspector observes no overflow during the test and if no dripping water or water droplets are visible in the under deck areas near the upturned end.

The Contractor shall test the expansion device between upturned ends by blocking out and covering the device with ponded or flowing water to a depth of at least 1" at all points, for at least 30 minutes. Vertical curb surfaces may be tested with an unnozzled hose delivering approximately one gallon per minute directed to flow over the entire curb height for 30 minutes. At the conclusion of the test, the inspector will examine the underside of the joint for leakage. The expansion device is considered watertight if no dripping water or water droplets are visible in the under deck areas along the full length of the expansion joint. Damp concrete that does not show dripping water or water droplets is not considered a sign of leakage.

If the expansion device leaks at an upturned end or along its length, the Contractor shall locate the leak(s) and take repair measures to stop the leakage. The repair measures shall be as recommended by the Manufacturer and approved by the Engineer prior to beginning corrective work.

If measures to eliminate leakage are taken, the Contractor shall perform subsequent watertight integrity tests subject to the same conditions as the original test.

Neoprene Gland Notes:

The neoprene gland is to be placed as one continuous piece from end toe of the steel extrusion.

The neoprene gland shall conform to ASTM–2628 modified to exclude recover test and compression set.

The Contractor shall install the gland above the minimum temperature of 45° and the minimum joint opening and corresponding maximum deck temperature shown in these plans. The deck temperature shall be measured by recording the surface temperatures on the underside of the deck adjacent to the joints. If the deck temperature does not fall within the specified temperature range before the Contractor has completed all other required work, it will be necessary for the Contractor to return to the project site to complete installation and testing of the neoprene gland. If the Contractor is required to return to the project site after all other required work has been completed, the Contractor shall complete installation and testing of neoprene gland at no extra charge to Delaware County.

The number of feet of neoprene gland installed shall be paid for at the contract price per foot based on plan quantities. The price for "Neoprene Gland Installation and Testing" shall be full compensation for installing and testing of the new neoprene gland. This work will consist of cleaning the extrusion, installation of the neoprene gland and water tight testing of the expansion joint system. All work and materials necessary for the installation of the neoprene gland shall comply with the recommendations of the Expansion Joint Manufacturer. The price bid for "Neoprene Gland Installation and Testing" shall include all watertight integrity testing, leak repairs as directed by the Engineer, and subsequent watertight testing until a leak free installation is achieved.

Field Construction Notes

If the steel extrusion is spliced in the field, the splice location shall be detailed on the shop drawings. The connection details shall include tab plates and prepared ends to accommodate the necessary welding. See details in these plans.

Galvanized coating damage by field welding shall be repaired in accordance with Construction and Materials I.M. 410.

Barrier Plate Note:

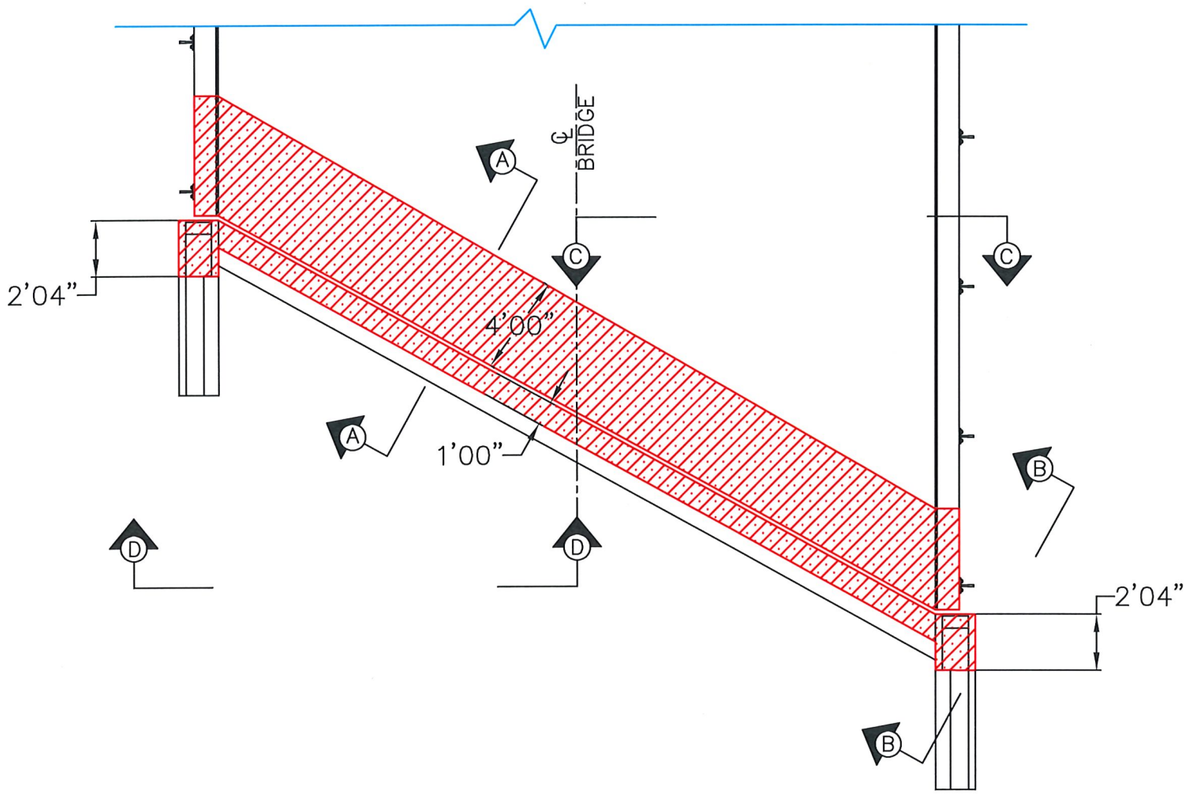
The material used for the barrier plates is to be ASTM A36 steel. The bolts shall meet the requirements of ASTM A307. The plates bolts, nuts and cap screws are to be galvanized in accordance with Article 4100.07 of the Standard Specifications.

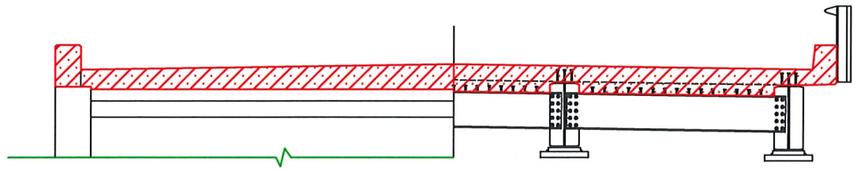
DRAWING APPROVAL

ALL SHOP DRAWINGS AND FALSEWORK DRAWINGS THAT REQUIRE APPROVAL SHALL BE APPROVED BY THE CONTRACTOR, THEN ACCEPTED BY THE;
DELAWARE COUNTY ENGINEER
2139 Highway 38
Manchester, Iowa 52057
Phone; 563–927–3505
Fax; 563–927–3102

THESE SHOP DRAWINGS SHALL NOT BE SENT TO I.D.O.T. OFFICE OF BRIDGES AND STRUCTURES.

PCC Overlay
Located on W69 between D22 and 165th Street
Length; 4.5631
Project No. FM-C028(110)--55-28
EXPANSION NOTES
Sheet Number; V.01
Delaware County, Iowa





SECTION C–C SECTION D–D

REMOVAL AREAS

Removal Notes:

The removal lines shall be cut to a minimum of 1" deep. Care shall be taken to insure that these lines stay undamaged. Any damage to these cut lines shall be repaired by the contractor at the contractors expense.

All existing reinforcing shall be cleaned and incorporated back into the new work. The contractor will have the option to use new reinforcing where the existing is totally freed up due to the concrete removal such as the transverse deck bars at the contractors expense. Any bar where part of it will still be incorporated into the existing shall be saved and reused to prevent any drilling of dowels. If any of these are damaged, they shall be fixed as directed by the project engineer.

All shear lugs are to be worked around and incorporated back into the new work.

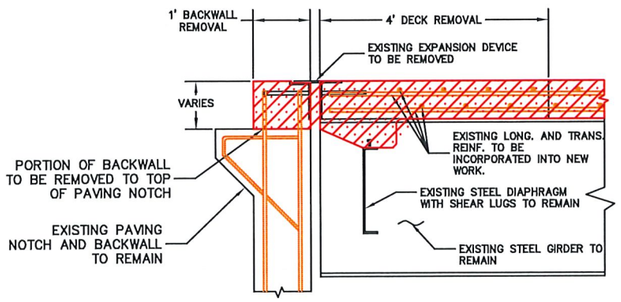
See IOWA STATE HIGHWAY COMMISSION Series V16– –70 plan set for existing reinforcing steel and shear lug locations.

Bridge Notes:

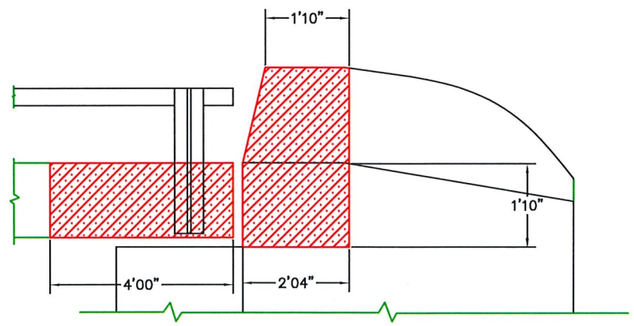
The bridge is a 155' x 30' steel I beam bridge with a concrete deck with a 30° Left Ahead Skew.

FHWA# 142031.

The bridge was built using the Iowa DOT Standard V16 series standard plans.



SECTION A–A



SECTION B–B

PCC Overlay

Located on W69 between D22 and 165th Street

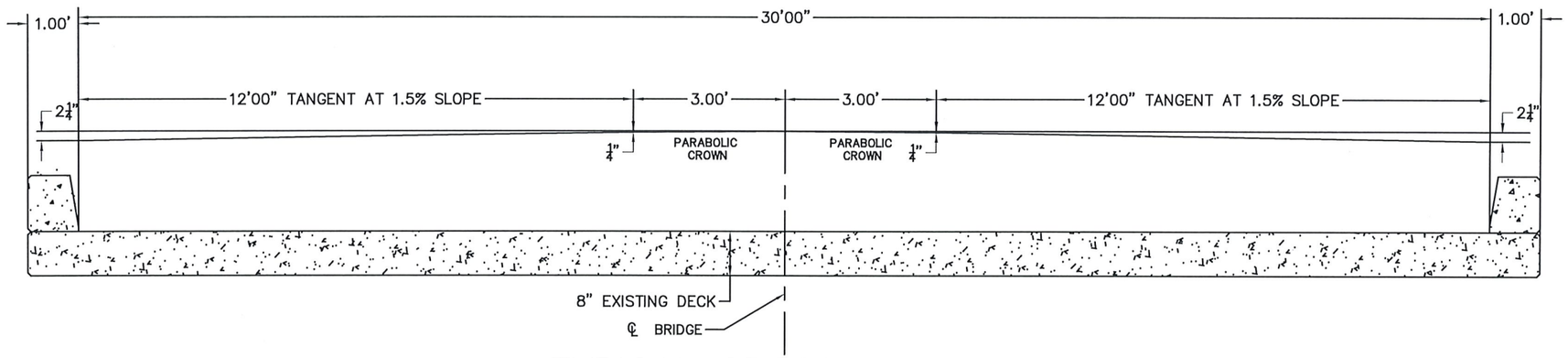
Length; 4.5631

Project No. FM-C028(110)--55-28

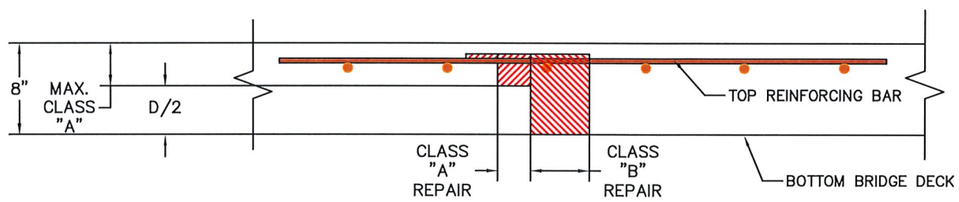
EXPANSION REMOVAL DETAILS

Sheet Number; V.02

Delaware County, Iowa



TYPICAL CROSS SECTION



REPAIR DEFINITION

Class A Repair Notes::

The majority of the Class A repair areas will be taken out with the removal for the new expansions.

The contractor is to sound the remaining deck areas to see if there will be a need for any additional Class A repairs.

The project Engineer is to be present during the sounding to determine if there will be a need for any Class A repairs.

No Class B repair areas are anticipated on this project.

Bridge Notes:

The bridge is a 155' x 30' steel I beam bridge with a concrete deck with a 30° Left Ahead Skew.

FHWA# 142031.

The bridge was built using the Iowa DOT Standard V16 series standard plans.

PCC Overlay

Located on W69 between D22 and 165th Street

Length; 4.5631

Project No. FM-C028(110)--55-28

DECK REPAIR DEFINITIONS

Sheet Number; V.03

Delaware County, Iowa