

A d d e n d u m

Iowa Department of Transportation
Office of Contracts

Date of Letting: September 20, 2016
Date of Addendum: August 19, 2016

B.O.	Proposal ID	Proposal Work Type	County	Project Number	Addendum
103	47-0202-108	PCC PAVEMENT - GRADE AND NEW	IDA	NHSN-020-2(108)--2R-47 NHSN-020-2(120)--2R-47 NHSN-020-2(142)--2R-47 NHSN-020-2(143)--2R-81 NHSN-020-2(145)--2R-81	20sep103a01

Make the following changes to the PROPOSAL SCHEDULE OF PRICES:

Change Proposal Line No. 1360; 2122-5190006 PAVED SHOULDER, P.C.
CONCRETE, 6 IN.:
From: 85,760.800 SY
To: 92,694.300 SY

Change Proposal Line No. 1380; 2122-5500060 PAVED SHOULDER, HOT MIX
ASPHALT MIXTURE, 6 IN.;
From: 85,760.800 SY
To: 92,694.300 SY

Make the following changes to the PLANS: NHSN-020-2(108)--2R-47

Replace the following plan sheets with the attached: C.1, C.2, C.46, C.50, L.11, L.12, L.24, L.25, L.41, L.42, L.46, L.47, L.67, L.68, L.72, and L.73

100-1D 10-18-05 PROJECT DESCRIPTION	
This project involves the grading and paving of the new westbound and eastbound lanes from west of Adams Ave. to west of U.S. 71 in Section 6 of the four lane U.S. 20 corridor project.	

ESTIMATED PROJECT QUANTITIES (1 DIVISION PROJECT)					
Item No.	Item Code	Item	Unit	Total	As Built Qty.
1	2101-0850001	CLEARING AND GRUBBING	ACRE	385.7	
2	2102-0425071	SPECIAL BACKFILL	CY	34,762.2	
3	2102-2624980	CONTRACTOR FURNISHED SELECT TREATMENT	CY	444,110.2	
4	2102-2710070	EXCAVATION, CLASS 10, ROADWAY AND BORROW	CY	1,650,898.0	
5	2102-2710090	EXCAVATION, CLASS 10, WASTE	CY	178,006.0	
6	2102-2712015	EXCAVATION, CLASS 12, BOULDERS OR ROCK FRAGMENTS	CY	750.0	
7	2102-4560000	LOCATING TILE LINES	STA	1,175.00	
8	2105-8425015	TOPSOIL, STRIP, SALVAGE AND SPREAD	CY	566,644.0	
9	2107-0875100	COMPACTION WITH MOISTURE CONTROL	CY	1,269,915.0	
10	2107-3825025	GRANULAR MATERIAL FOR BLANKET AND SUBDRAIN	CY	28,032.0	
11	2111-8174100	GRANULAR SUBBASE	SY	444,646.0	
12	2112-0000100	WICK DRAIN	LF	98,565.0	
13	2115-0100000	MODIFIED SUBBASE	CY	3,977.4	
14	2121-7425010	GRANULAR SHOULDERS, TYPE A	TON	30,051.2	
15	2121-7425020	GRANULAR SHOULDERS, TYPE B	TON	7,425.0	
16	2122-5190501	PAVED SHOULDER, PORTLAND CEMENT CONCRETE (PAVED SHOULDER PANEL FOR BRIDGE END DRAIN)	SY	217.8	
17	2123-7450000	SHOULDER CONSTRUCTION, EARTH	STA	2,137.70	
18	2210-0475290	MACADAM STONE BASE	TON	29,670.0	
19	2301-1003100	STANDARD OR SLIP-FORM PORTLAND CEMENT CONCRETE PAVEMENT, QM-C, CLASS 3 DURABILITY, 10 IN.	SY	373,091.3	
20	2301-9091000	RUMBLE STRIP PANEL (PCC SURFACE)	EACH	3	
21	2312-8260051	GRANULAR SURFACING ON ROAD, CLASS A CRUSHED STONE	TON	20,012.7	
22	2315-8275025	SURFACING, DRIVEWAY, CLASS A CRUSHED STONE	TON	11,944.0	
23	2401-6745650	REMOVAL OF EXISTING STRUCTURES	LS	1.00	
24	2402-0425040	FLOODED BACKFILL	CY	19,497.6	
25	2402-2720100	EXCAVATION, CLASS 20, FOR ROADWAY PIPE CULVERT	CY	49,460.4	
26	2416-0100018	APRONS, CONCRETE, 18 IN. DIA.	EACH	18	
27	2416-0100024	APRONS, CONCRETE, 24 IN. DIA.	EACH	151	
28	2416-0100030	APRONS, CONCRETE, 30 IN. DIA.	EACH	11	
29	2416-0100036	APRONS, CONCRETE, 36 IN. DIA.	EACH	6	
30	2416-0100042	APRONS, CONCRETE, 42 IN. DIA.	EACH	8	
31	2416-0100048	APRONS, CONCRETE, 48 IN. DIA.	EACH	4	
32	2416-0100060	APRONS, CONCRETE, 60 IN. DIA.	EACH	4	
33	2416-0100066	APRONS, CONCRETE, 66 IN. DIA.	EACH	2	
34	2416-0102230	APRON, LOW CLEARANCE CONCRETE, EQUIVALENT DIAMETER 30 IN.	EACH	2	
35	2416-0102242	APRON, LOW CLEARANCE CONCRETE, EQUIVALENT DIAMETER 42 IN.	EACH	4	
36	2416-0102248	APRON, LOW CLEARANCE CONCRETE, EQUIVALENT DIAMETER 48 IN.	EACH	2	
37	2416-0102272	APRON, LOW CLEARANCE CONCRETE, EQUIVALENT DIAMETER 72 IN.	EACH	2	
38	2416-1180018	CULVERT, CONCRETE ROADWAY PIPE, 18 IN. DIA.	LF	676	
39	2416-1180024	CULVERT, CONCRETE ROADWAY PIPE, 24 IN. DIA.	LF	7556	
40	2416-1180030	CULVERT, CONCRETE ROADWAY PIPE, 30 IN. DIA.	LF	898	
41	2416-1180036	CULVERT, CONCRETE ROADWAY PIPE, 36 IN. DIA.	LF	354	
42	2416-1180042	CULVERT, CONCRETE ROADWAY PIPE, 42 IN. DIA.	LF	906	
43	2416-1180048	CULVERT, CONCRETE ROADWAY PIPE, 48 IN. DIA.	LF	402	
44	2416-1180060	CULVERT, CONCRETE ROADWAY PIPE, 60 IN. DIA.	LF	296	
45	2416-1180066	CULVERT, CONCRETE ROADWAY PIPE, 66 IN. DIA.	LF	242	
46	2416-1200230	CULVERT, LOW CLEARANCE CONCRETE ROADWAY PIPE, EQUIVALENT DIAMETER 30 IN.	LF	172	
47	2416-1200242	CULVERT, LOW CLEARANCE CONCRETE ROADWAY PIPE, EQUIVALENT DIAMETER 42 IN.	LF	222	
48	2416-1200248	CULVERT, LOW CLEARANCE CONCRETE ROADWAY PIPE, EQUIVALENT DIAMETER 48 IN.	LF	196	
49	2416-1200272	CULVERT, LOW CLEARANCE CONCRETE ROADWAY PIPE, EQUIVALENT DIAMETER 72 IN.	LF	202	
50	2416-1240024	CULVERT, 3000D CONCRETE ROADWAY PIPE, 24 IN. DIA.	LF	236	
51	2416-1240030	CULVERT, 3000D CONCRETE ROADWAY PIPE, 30 IN. DIA.	LF	254	
52	2416-1240036	CULVERT, 3000D CONCRETE ROADWAY PIPE, 36 IN. DIA.	LF	310	
53	2416-1240060	CULVERT, 3000D CONCRETE ROADWAY PIPE, 60 IN. DIA.	LF	288	
54	2417-0225024	APRONS, METAL, 24 IN. DIA.	EACH	11	
55	2417-0225030	APRONS, METAL, 30 IN. DIA.	EACH	1	
56	2417-1060024	CULVERT, CORRUGATED METAL ROADWAY PIPE, 24 IN. DIA.	LF	544	
57	2417-1060030	CULVERT, CORRUGATED METAL ROADWAY PIPE, 30 IN. DIA.	LF	54	
58	2418-0000010	TEMPORARY STREAM DIVERSION	EACH	4	
59	2422-0360000	UNCLASSIFIED APRONS, 28 X 20 ARCH	EACH	4	
60	2422-0360000	UNCLASSIFIED APRONS, 42 X 29 ARCH	EACH	4	
61	2422-0360000	UNCLASSIFIED APRONS, 49 X 33 ARCH	EACH	4	

ESTIMATED PROJECT QUANTITIES (1 DIVISION PROJECT)					
Item No.	Item Code	Item	Unit	Total	As Built Qty.
62	2422-0360000	UNCLASSIFIED APRONS, 64 X 43 ARCH	EACH	6	
63	2422-0360024	APRONS, UNCLASSIFIED, 24 IN. DIA.	EACH	108	
64	2422-0360030	APRONS, UNCLASSIFIED, 30 IN. DIA.	EACH	4	
65	2422-0360036	APRONS, UNCLASSIFIED, 36 IN. DIA.	EACH	6	
66	2422-0360066	APRONS, UNCLASSIFIED, 66 IN. DIA.	EACH	2	
67	2422-1720000	UNCLASSIFIED PIPE CULVERT, 28 X 20 ARCH	LF	115	
68	2422-1720000	UNCLASSIFIED PIPE CULVERT, 42 X 29 ARCH	LF	90	
69	2422-1720000	UNCLASSIFIED PIPE CULVERT, 49 X 33 ARCH	LF	106	
70	2422-1720000	UNCLASSIFIED PIPE CULVERT, 64 X 43 ARCH	LF	221	
71	2422-1722024	CULVERT, UNCLASSIFIED ENTRANCE PIPE, 24 IN. DIA.	LF	3694	
72	2422-1722030	CULVERT, UNCLASSIFIED ENTRANCE PIPE, 30 IN. DIA.	LF	54	
73	2422-1722036	CULVERT, UNCLASSIFIED ENTRANCE PIPE, 36 IN. DIA.	LF	137	
74	2422-1722066	CULVERT, UNCLASSIFIED ENTRANCE PIPE, 66 IN. DIA.	LF	47	
75	2422-1723024	CULVERT, UNCLASSIFIED ROADWAY PIPE, 24 IN. DIA.	LF	62	
76	2422-1723030	CULVERT, UNCLASSIFIED ROADWAY PIPE, 30 IN. DIA.	LF	88	
77	2422-1723036	CULVERT, UNCLASSIFIED ROADWAY PIPE, 36 IN. DIA.	LF	78	
78	2502-8212024	SUBDRAIN, LONGITUDINAL, (BACKSLOPE) 4 IN. DIA.	LF	5,145.0	
79	2502-8212034	SUBDRAIN, LONGITUDINAL, (SHOULDER) 4 IN. DIA.	LF	118,137.0	
80	2502-8212204	SUBDRAIN, PERFORATED PLASTIC PIPE, 4 IN. DIA.	LF	2015	
81	2502-8221304	SUBDRAIN OUTLET, DR-304	EACH	619	
82	2502-8221305	SUBDRAIN OUTLET, DR-305	EACH	23	
83	2503-0500402	BRIDGE END DRAIN, DR-402	EACH	4	
84	2505-4008120	REMOVAL OF STEEL BEAM GUARDRAIL	LF	642.6	
85	2505-4008300	STEEL BEAM GUARDRAIL	LF	513.0	
86	2505-4008400	STEEL BEAM GUARDRAIL BARRIER TRANSITION SECTION	EACH	4	
87	2505-4021720	STEEL BEAM GUARDRAIL TANGENT END TERMINAL, BA-205	EACH	4	
88	2506-4984000	FLOWABLE MORTAR	CY	1,044.0	
89	2507-3250005	ENGINEERING FABRIC	SY	7,414.7	
90	2507-6800061	REVTMENT, CLASS E	TON	3,231.0	
91	2507-8029000	EROSION STONE	TON	2,556.4	
92	2510-6745850	REMOVAL OF PAVEMENT	SY	186,417.7	
93	2515-2475006	DRIVEWAY, P.C. CONCRETE, 6 IN.	SY	1,275.8	
94	2518-6910000	SAFETY CLOSURE	EACH	192	
95	2519-2000010	FENCE, CHANNEL CROSSING, TYPE A	LF	3,673.7	
96	2519-3280000	FENCE, FIELD	LF	105,190.9	
97	2519-3300400	FIELD FENCE BRACE PANELS	EACH	746	
98	2520-3350010	FIELD LABORATORY	EACH	1	
99	2526-8285000	CONSTRUCTION SURVEY	LS	1.00	
100	2527-9263109	PAINTED PAVEMENT MARKING, WATERBORNE OR SOLVENT-BASED	STA	7,923.80	
101	2528-8445110	TRAFFIC CONTROL	LS	1.00	
102	2528-8445113	FLAGGERS	EACH	See Proposal	
103	2533-4980005	MOBILIZATION	LS	1.00	
104	2538-6970010	SALVAGE, REMOVAL, AND DISPOSAL OF OBSTRUCTIONS	LS	1.00	
105	2548-0000200	MILLED SHOULDER RUMBLE STRIPS, PCC SURFACE	STA	1,157.3	
106	2599-9999001	('ACRES' ITEM) SUBGRADE STABILIZATION	ACRE	37.0	
107	2601-2633100	MOWING	ACRE	736.0	
108	2601-2634100	MULCHING	ACRE	368.0	
109	2601-2634105	MULCHING, BONDED FIBER MATRIX	ACRE	1.0	
110	2601-2636043	SEEDING AND FERTILIZING (RURAL)	ACRE	107.0	
111	2601-2640350	SPECIAL DITCH CONTROL, WOOD EXCELSIOR MAT	SQ	1,098.0	
112	2601-2642100	STABILIZING CROP - SEEDING AND FERTILIZING	ACRE	368.0	
113	2601-2643110	WATERING FOR SOD, SPECIAL DITCH CONTROL, OR SLOPE PROTECTION	MGAL	220.00	
114	2601-2643300	MOBILIZATION FOR WATERING	EACH	3	
115	2602-0000020	SILT FENCE	LF	17,162.5	
116	2602-0000030	SILT FENCE FOR DITCH CHECKS	LF	82,645.5	
117	2602-0000050	SILT BASINS	EACH	630	
118	2602-0000071	REMOVAL OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS	LF	49,904.1	
119	2602-0000080	REMOVAL OF SILT BASINS	EACH	315	
120	2602-0000101	MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECK	LF	9,980.9	
121	2602-0000130	TEMPORARY SEDIMENT CONTROL BASIN	EACH	20	
122	2602-0000135	REMOVAL OF TEMPORARY SEDIMENT CONTROL BASIN	EACH	20	
123	2602-0000140	MAINTENANCE OF TEMPORARY SEDIMENT CONTROL BASIN	EACH	60	
124	2602-0000150	STABILIZED CONSTRUCTION ENTRANCE	LF	1,500.0	
125	2602-0000160	ROCK CHECK DAM	LF	8745	
126	2602-0000170	MAINTENANCE OF ROCK CHECK DAM	EACH	1640	
127	2602-0000180	REMOVAL OF ROCK CHECK DAM	EACH	547	
128	2602-0000212	FLOATING SILT CURTAIN (HANGING)	LF	700.0	
129	2602-0000240	MAINTENANCE OF FLOATING SILT CURTAIN	LF	350.0	
130	2602-0000312	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 12 IN. DIA.	LF	1,000.0	
131	2602-0000320	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 20 IN. DIA.	LF	7,000.0	
132	2602-0000350	REMOVAL OF PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE	LF	8,000.0	
133	2602-0010010	MOBILIZATIONS, EROSION CONTROL	EACH	1	
134	2602-0010020	MOBILIZATIONS, EMERGENCY EROSION CONTROL	EACH	1	
135	2612-0000520	ROADSIDE SPRAY FOR WEED CONTROL	ACRE	36.0	
136	2122-5190006	ALTERNATE AA: OPTION 1, PCC SHOULDERS PAVED SHOULDER, P.C. CONCRETE, 6 IN.	SY	92,694.3	
137	2548-0000200	MILLED SHOULDER RUMBLE STRIPS, PCC SURFACE	STA	1,157.3	

FILE NO.	ENGLISH	DESIGN TEAM	Flattery\Bell\Smyth	Ida/Sac	COUNTY	PROJECT NUMBER	NHSN-020-2(108)- -2R-47	SHEET NUMBER	C.1
----------	---------	-------------	---------------------	---------	--------	----------------	-------------------------	--------------	-----

Changed By Addenda

100-1A 07-15-97 ESTIMATED PROJECT QUANTITIES (1 DIVISION PROJECT)					
Item No.	Item Code	Item	Unit	Total	As Built Qty.

[illegible]

ESTIMATE REFERENCE INFORMATION

Item No.	Item Code	Description
1	2101-0850001	CLEARING AND GRUBBING Quantity includes all disturbed areas. Removal of field fence shall be incidental to the bid item.
-	-	-
2	2102-0425071	SPECIAL BACKFILL Refer to Tab. 112-9 for additional information.
-	-	-
3	2102-2624980	CONTRACTOR FURNISHED SELECT TREATMENT Includes a shrinkage factor of 10%.
-	-	-
		Overhaul shall be incidental to the bid item.
		Contractor may elect to substitute special backfill with a thickness of 1' according to Spec. 2102.03F3A(2).
		Refer to B Sheet Typical, Tab. 103-11, Cross Sections, and T Sheets for additional information.
-	-	303,796 cu. yds of select loam material is available in the project cut, which may be used for select treatment.
-	-	-
4	2102-2710070	EXCAVATION, CLASS 10, ROADWAY AND BORROW Refer to T sheets for additional information.
-	-	-
		Overhaul will not be measured or paid for, but shall be considered incidental to roadway excavation on this project.
-	-	-
5	2102-2710090	EXCAVATION, CLASS 10, WASTE The 54,987 cu. yds. identified in the cross sections and T Sheets as well as all other excavation material not incorporated into the project shall be wasted, as per Article 1106.07 of the current specifications.
-	-	-
		Refer to T sheets and cross sections for additional information.
-	-	-
		Overhaul shall be incidental to the bid item.
-	-	-
6	2102-2712015	EXCAVATION, CLASS 12, BOULDERS OR ROCK FRAGMENTS A. Refer to Tab. 103-7 in the CS sheets. B. Dispose of excess material according to Article 1106.07 of the current specifications.
-	-	-
7	2102-4560000	LOCATING TILE LINES Estimated at twice the project length.
-	-	-
8	2105-8425015	TOPSOIL, STRIP, SALVAGE AND SPREAD Refer to T Sheets and Tab. 103-10 and 112-9 for additional information.
-	-	-
		93,213 cu. yds. available for Earth Shoulder Construction.
-	-	-
		Waste any excess on project foreslopes.
-	-	-
9	2107-0875100	COMPACTION WITH MOISTURE CONTROL Refer to Tab. 103-6 in the CS sheets and the T sheets for additional information.
-	-	-
		Cubic yards shown on the contract documents as determined by the total fill adjusted volume.
-	-	-
		Shrinkage will not be included in the moisture control quantity.
-	-	-
10	2107-3825025	GRANULAR MATERIAL FOR BLANKET AND SUBDRAIN Includes 17,590 cu. yds. for working blankets. Refer to Tab. 104-5C in CS Sheets.
-	-	-
		Includes 10,442 cu. yds. for wick drains. Refer to Tab. 104-6 in CS Sheets.
-	-	-
11	2111-8174100	GRANULAR SUBBASE Refer to Tab. 100-24 and B Sheet Typical for additional information.
-	-	-
12	2112-0000100	WICK DRAIN Refer to Q sheets and Tab. 104-6 in the CS sheets for additional information.
-	-	-
13	2115-0100000	MODIFIED SUBBASE Refer to B Sheet Typical and Tab. 100-24 for additional information.
-	-	-
14	2121-7425010	GRANULAR SHOULDERS, TYPE A Refer to B sheets and Tab. 112-9 for additional information.
-	-	-
15	2121-7425020	GRANULAR SHOULDERS, TYPE B Includes quantity for use on detour route as determined by Engineer. Estimated as 2 applications in 2017 (spring and fall) and one application in spring 2018 at a rate of 75 tons per side per mile per application.
-	-	-
16	2122-5190501	PAVED SHOULDER, PORTLAND CEMENT CONCRETE (PAVED SHOULDER PANEL FOR BRIDGE END DRAIN) Refer to Tab. 104-8A for additional information.
-	-	-
17	2123-7450000	SHOULDER CONSTRUCTION, EARTH Refer to Tabs. 103-10 and 112-9 for additional information.
-	-	-
		93,213 cu. yds. topsoil from project cut available to use as earth shoulder construction.
-	-	-
		Refer to T Sheets for additional information.
-	-	-

112-9 Modified																									
SHOULDERS																									
① Lane(s) to which the shoulder is adjacent. ② Bid Item ③ Applies only for Paved Shoulders constructed on project with existing granular shoulders. ④ Does not include shrink.																									
Calculations assume a HMA unit weight (lbs/cf) of 145, a Special Backfill unit weight (lbs/cf) of 140, and a Granular Shoulder unit weight (lbs/cf) of 140.																									
Location				P	G	L	Class 13 Excavation	Quantities														Remarks			
Road Identification	① Direction Of Traffic	Station to Station	Side					Hot Mix Asphalt	Binder: 6%	Paved Shoulder	Reinforced Paved Shoulder	Special Backfill				Modified Subbase	Granular Shoulder		Earth Shoulder Construction Alternates						
												HMA Alternate	PCC Alternate		TON		TON/STA	TON	TON/STA	CY	TON		TON/STA	STA	HMA CY
FT	FT	FT	CY	TON	TON/STA	TONS	SY	SY	TON	TON/STA	TON	TON/STA	TON	TON/STA	TON	TON/STA	TON	TON/STA	TON	TON/STA	TON	TON/STA	TON	TON/STA	
		Project Start																							
	WB	11914+00.00	11971+17.00	OUT	4.0	4.0	5717.0		882.8	15.4	53.0	2540.9		2341.5	41.0	2341.5	41.0		800.4	14.0	57.2	1382.3	1382.3		
	WB	11974+45.00	12181+83.07	OUT	4.0	4.0	20738.1		3202.5	15.4	192.1	9216.9		8493.7	41.0	8493.7	41.0		2903.3	14.0	207.4	5014.4	5014.4		
	WB	12185+20.00	12187+44.81	OUT		6.0	224.8												109.6	48.8	2.2	59.4	59.4		
	WB	12346+93.00	12452+28.02	OUT	4.0	4.0	10535.0		1604.0	15.2	96.2	4682.2		4351.0	41.3	4351.0	41.3		1474.9	14.0	105.4	2547.3	2547.3		
	WB	12455+75.66	12457+27.92	OUT	10.6		152.3		58.6	38.5	3.5	179.8		122.6	80.5	122.6	80.5				1.5	36.8	36.8		
	WB	12457+27.92	12457+65.32	OUT	10.6 to 12.1		37.4		15.4	41.2	0.9	47.2		32.5	87.0	32.5	87.0				0.4	9.0	9.0		
	WB	12457+65.32	12457+97.44	OUT	12.1		32.1		14.1	43.9	0.8	43.2		30.0	93.5	30.0	93.5				0.3	7.8	7.8		
	WB	12457+97.44	12486+19.99	OUT	4.0	4.0	2822.6		435.9	15.4	26.2	1254.5		1165.7	41.3	1165.7	41.3		395.2	14.0	28.2	679.5	679.5		
	WB	12187+64.61	12343+65.00	OUT	4.0	4.0	15600.4		3540.1	22.7	212.4	6933.5		6443.0	41.3	6443.0	41.3		3276.1	21.0	156.0	3755.6	3755.6		
		Project End																							
		Project Start																							
	WB	11914+00.00	11917+46.00	MED	4.0	2.0	346.0		53.4	15.4	3.2	153.8		92.9	26.8	92.9	26.8		24.2	7.0	3.5	91.5	91.5		
	WB	11917+46.00	11917+92.69	MED		6.0	46.7												22.8	48.8	0.5	12.3	12.3		
		Adams Ave.																							
	WB	11918+66.17	11921+46.50	MED		6.0	280.3												136.7	48.8	2.8	74.1	74.1		
	WB	11921+46.50	11921+86.00	MED		6 to 2	39.5												5.5	14.0	0.4	10.4	10.4		
	WB	11921+86.00	11934+16.00	MED	4.0	2.0	1230.0		189.9	15.4	11.4	546.7		330.2	26.8	330.2	26.8		86.1	7.0	12.3	325.2	325.2		
	WB	11934+16.00	11935+35.23	MED		6.0	119.2												58.1	48.8	1.2	31.5	31.5		
		M27 S. / Orchard Ave.																							
	WB	11936+10.34	11936+55.00	MED		6.0	44.7												21.8	48.8	0.4	11.8	11.8		
	WB	11938+95.00	11939+35.00	MED		6 to 2	40.0												5.6	14.0	0.4	10.6	10.6		
	WB	11939+35.00	11972+31.00	MED	4.0	2.0	3296.0		509.0	15.4	30.5	1464.9		884.8	26.8	884.8	26.8		230.7	7.0	33.0	871.4	871.4		
	WB	11972+31.00	11972+72.86	MED		6.0	41.9												20.4	48.8	0.4	11.1	11.1		
		M27 N. / Armstrong Ave.																							
	WB	11973+47.98	11976+28.00	MED		6.0	280.0												136.5	48.8	2.8	74.0	74.0		
	WB	11976+28.00	11976+68.00	MED		6 to 2	40.0												5.6	14.0	0.4	10.6	10.6		
	WB	11976+68.00	11986+80.00	MED	4.0	2.0	1012.0		156.3	15.4	9.4	449.8		271.7	26.8	271.7	26.8		70.8	7.0	10.1	267.6	267.6		
	WB	11986+80.00	11987+98.84	MED		6.0	118.8												57.9	48.8	1.2	31.4	31.4		
		Pioneer Ave.																							
	WB	11988+73.14	11991+58.00	MED		6.0	284.9												138.9	48.8	2.8	75.3	75.3		
	WB	11991+58.00	11991+98.00	MED		6 to 2	40.0												5.6	14.0	0.4	10.6	10.6		
	WB	11991+98.00	12025+40.00	MED	4.0	2.0	3342.0		516.1	15.4	31.0	1485.3		897.2	26.8	897.2	26.8		233.9	7.0	33.4	878.8	878.8		
	WB	12025+40.00	12025+81.86	MED		6.0	41.9												20.4	48.8	0.4	11.1	11.1		
		Bettin Ave.																							
	WB	12026+56.96	12029+37.00	MED		6.0	280.0												136.5	48.8	2.8	74.0	74.0		
	WB	12029+37.00	12029+77.00	MED		6 to 2	40.0												5.6	14.0	0.4	10.6	10.6		
	WB	12029+77.00	12039+66.00	MED	4.0	2.0	989.0		152.7	15.4	9.2	439.6		265.5	26.8	265.5	26.8		69.2	7.0	9.9	260.1	260.1		
	WB	12039+66.00	12040+84.93	MED		6.0	118.9												58.0	48.8	1.2	31.4	31.4		
		M31 S. / Quail Ave.																							
	WB	12041+59.14	12044+43.93	MED		6.0	284.8												138.9	48.8	2.8	75.3	75.3		
	WB	12044+43.93	12044+84.03	MED		6 to 2	40.1												5.6	14.0	0.4	10.6	10.6		
	WB	12044+84.03	12078+13.95	MED	4.0	2.0	3329.9		514.2	15.4	30.9	1480.0		893.9	26.8	893.9	26.8		233.1	7.0	33.3	880.4	880.4		
	WB	12078+13.95	12078+55.85	MED		6.0	41.9																		

SHOULDERS

- ① Lane(s) to which the shoulder is adjacent.
- ② Bid Item
- ③ Applies only for Paved Shoulders constructed on project with existing granular shoulders.
- ④ Does not include shrink.

Calculations assume a HMA unit weight (lbs/cf) of 145, a Special Backfill unit weight (lbs/cf) of 140, and a Granular Shoulder unit weight (lbs/cf) of 140.

[illegible]

RUMBLE STRIP PANELS

Refer to Standard Road Plan PV-10.

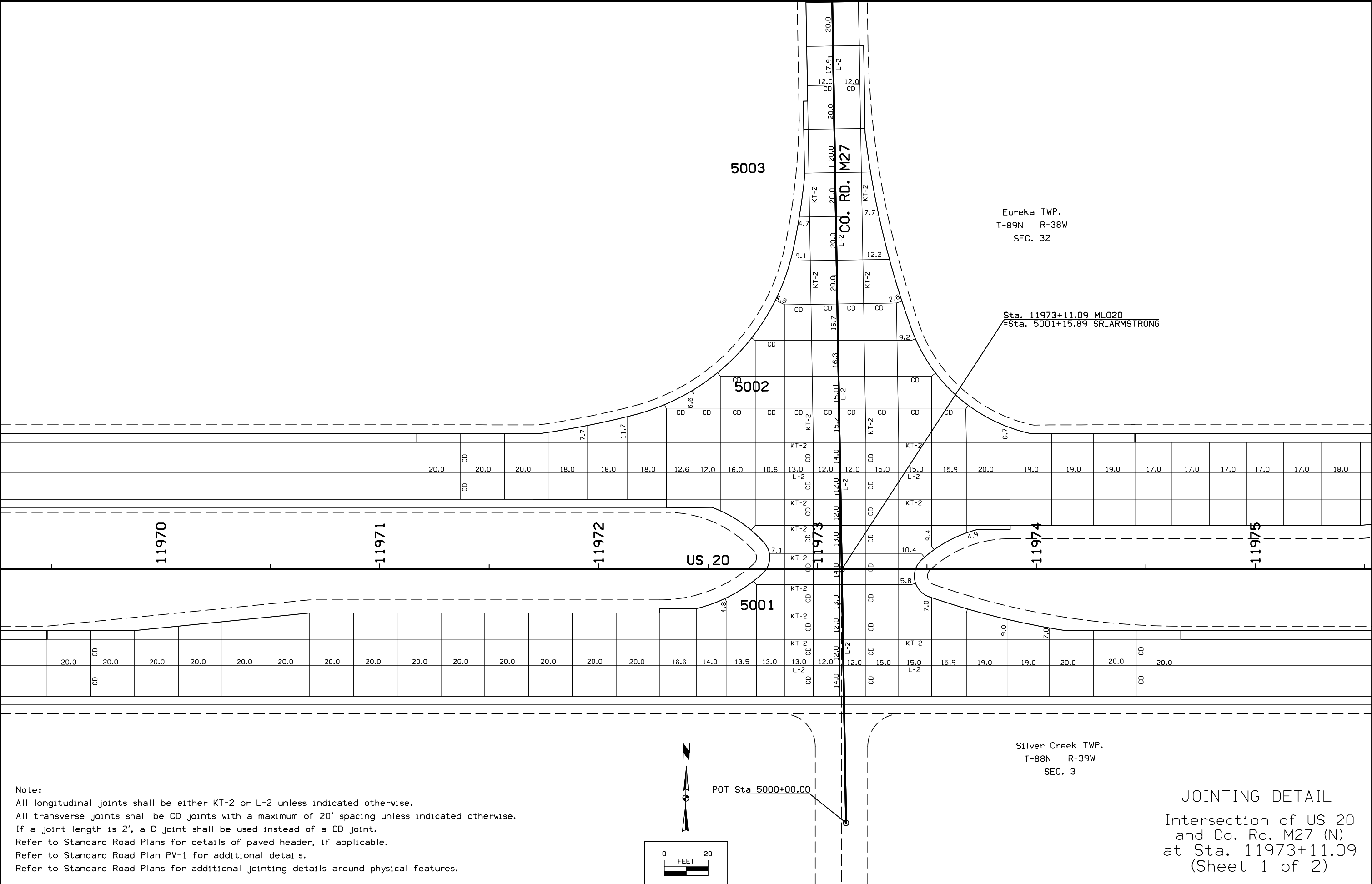
[illegible]

MILLED RUMBLE STRIPS

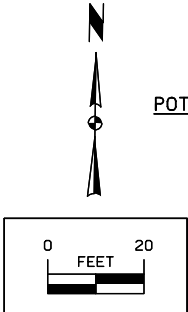
See PV-12 and PV-13.

* Calculated at 18" width for Shoulder.

[illegible]



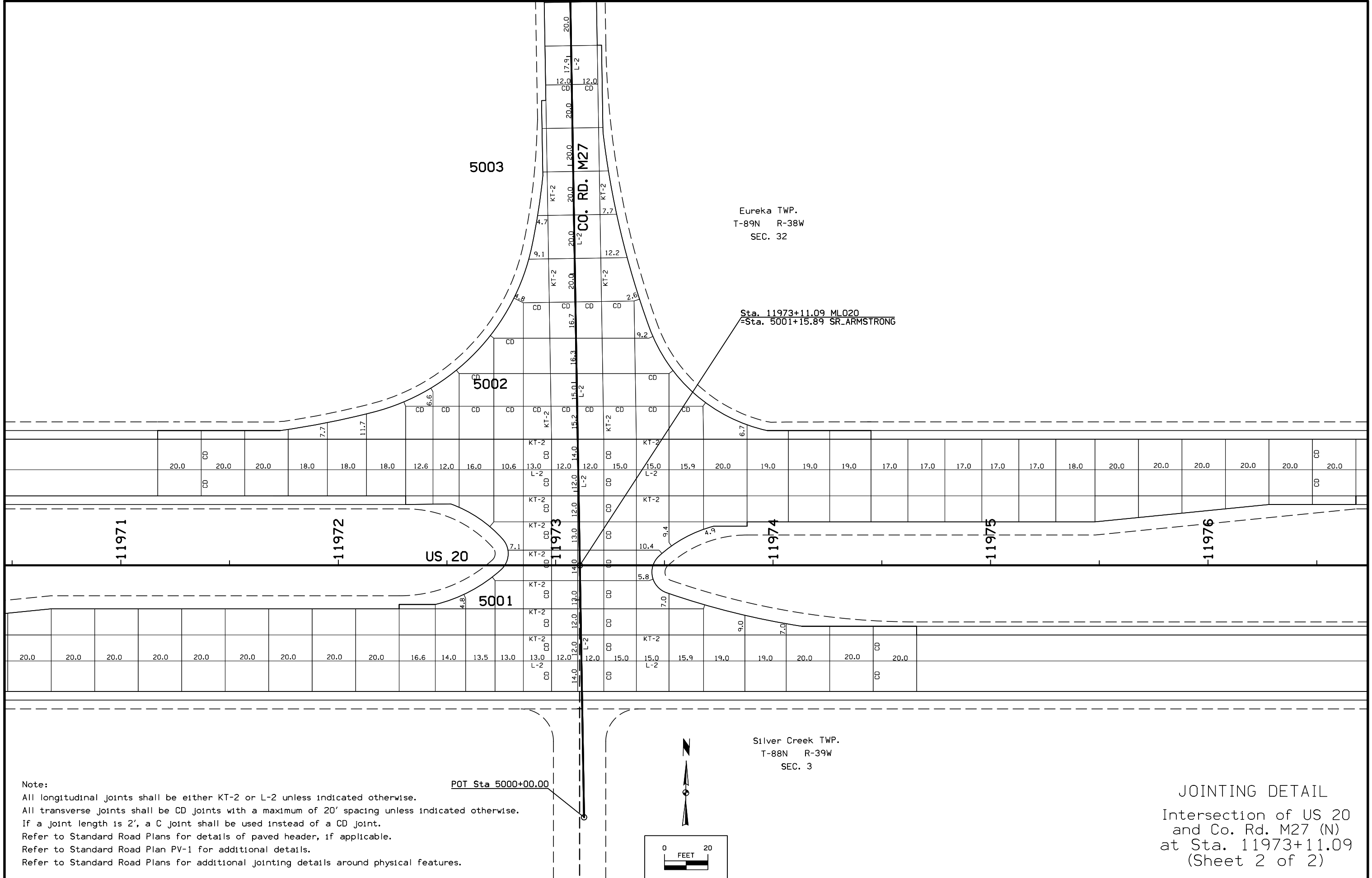
Note:
All longitudinal joints shall be either KT-2 or L-2 unless indicated otherwise.
All transverse joints shall be CD joints with a maximum of 20' spacing unless indicated otherwise.
If a joint length is 2', a C joint shall be used instead of a CD joint.
Refer to Standard Road Plans for details of paved header, if applicable.
Refer to Standard Road Plan PV-1 for additional details.
Refer to Standard Road Plans for additional jointing details around physical features.



POT Sta 5000+00.00

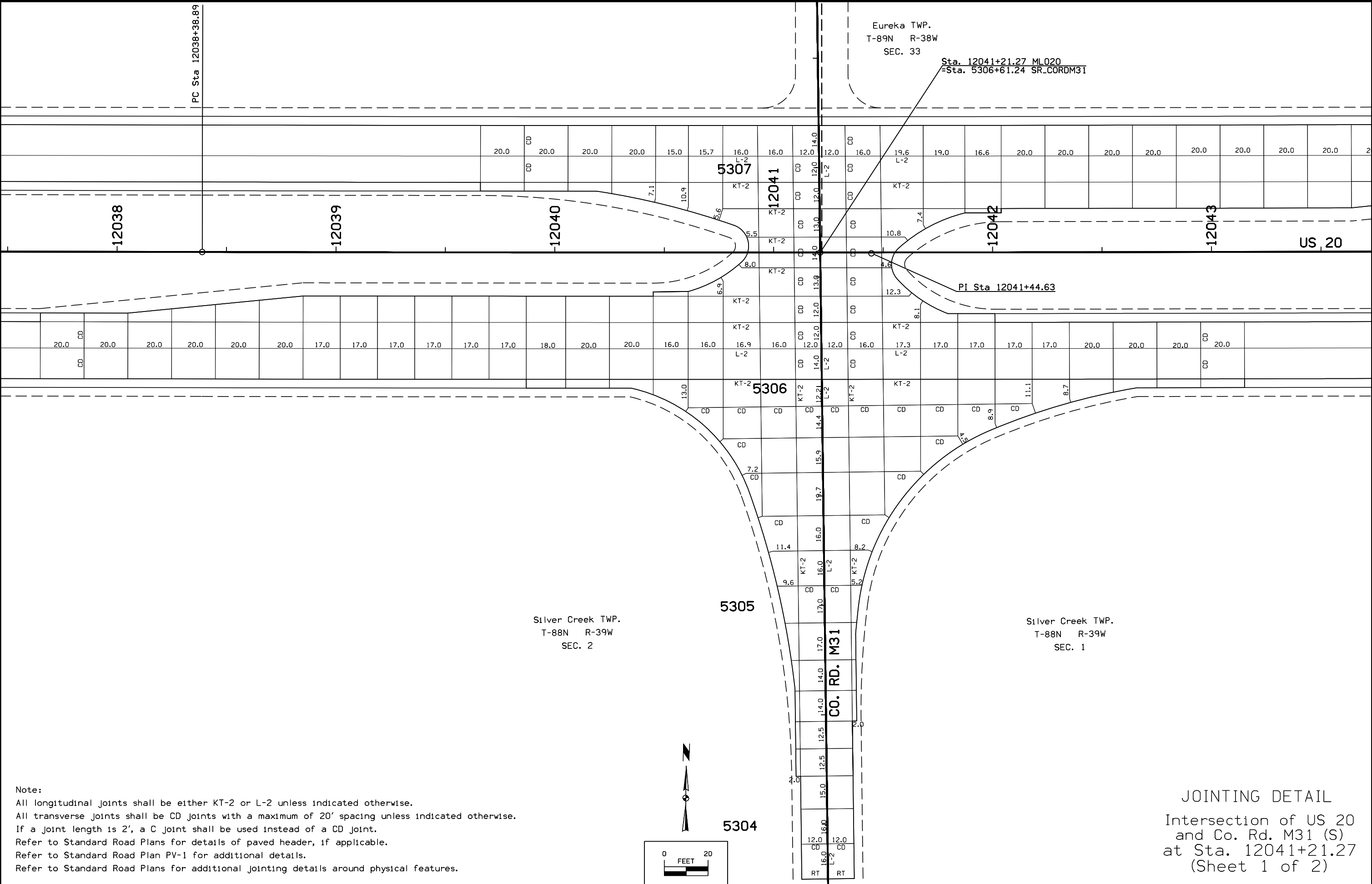
Silver Creek TWP.
T-88N R-39W
SEC. 3

JOINTING DETAIL
Intersection of US 20
and Co. Rd. M27 (N)
at Sta. 11973+11.09
(Sheet 1 of 2)



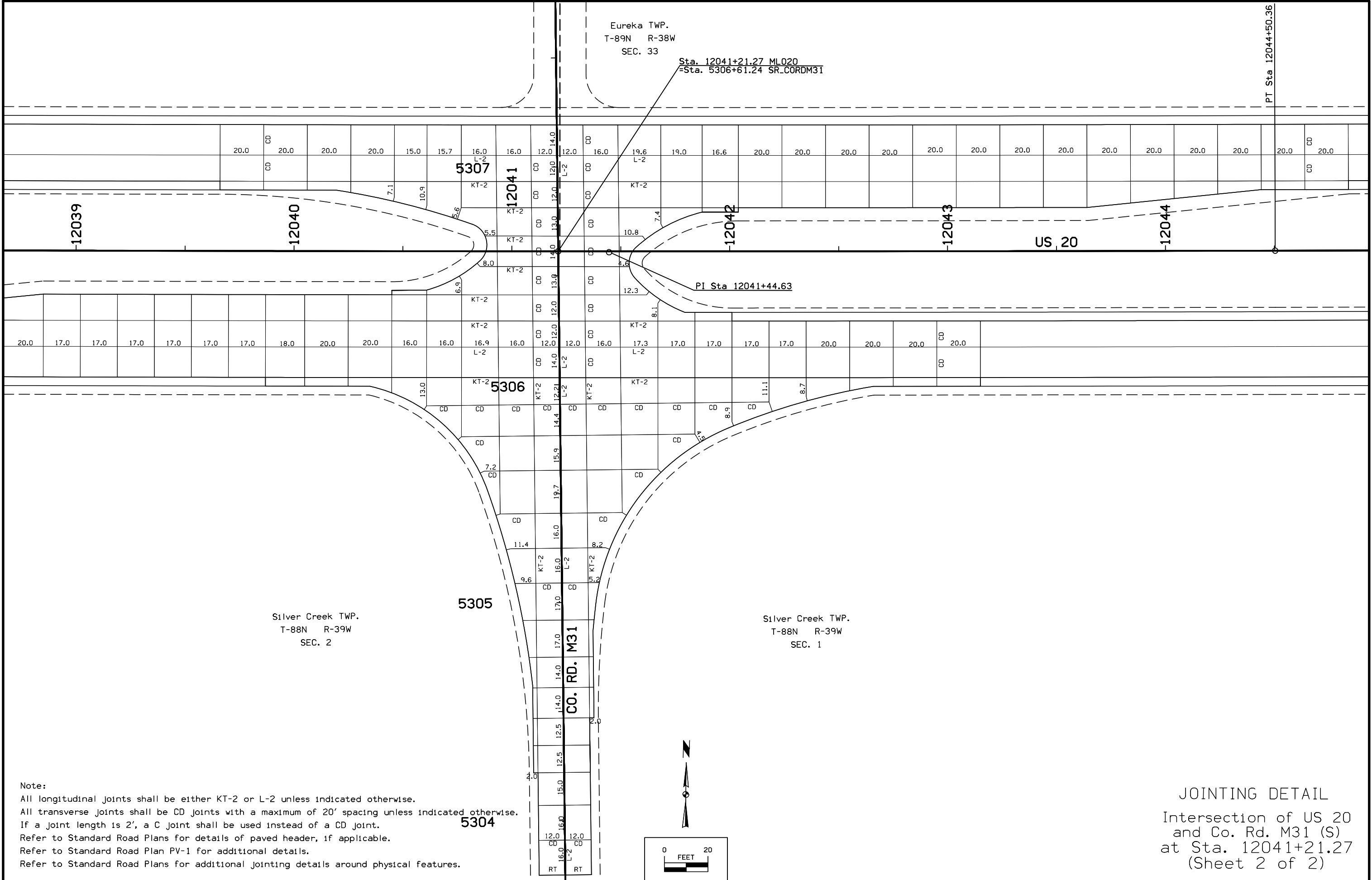
Note:
All longitudinal joints shall be either KT-2 or L-2 unless indicated otherwise.
All transverse joints shall be CD joints with a maximum of 20' spacing unless indicated otherwise.
If a joint length is 2', a C joint shall be used instead of a CD joint.
Refer to Standard Road Plans for details of paved header, if applicable.
Refer to Standard Road Plan PV-1 for additional details.
Refer to Standard Road Plans for additional jointing details around physical features.

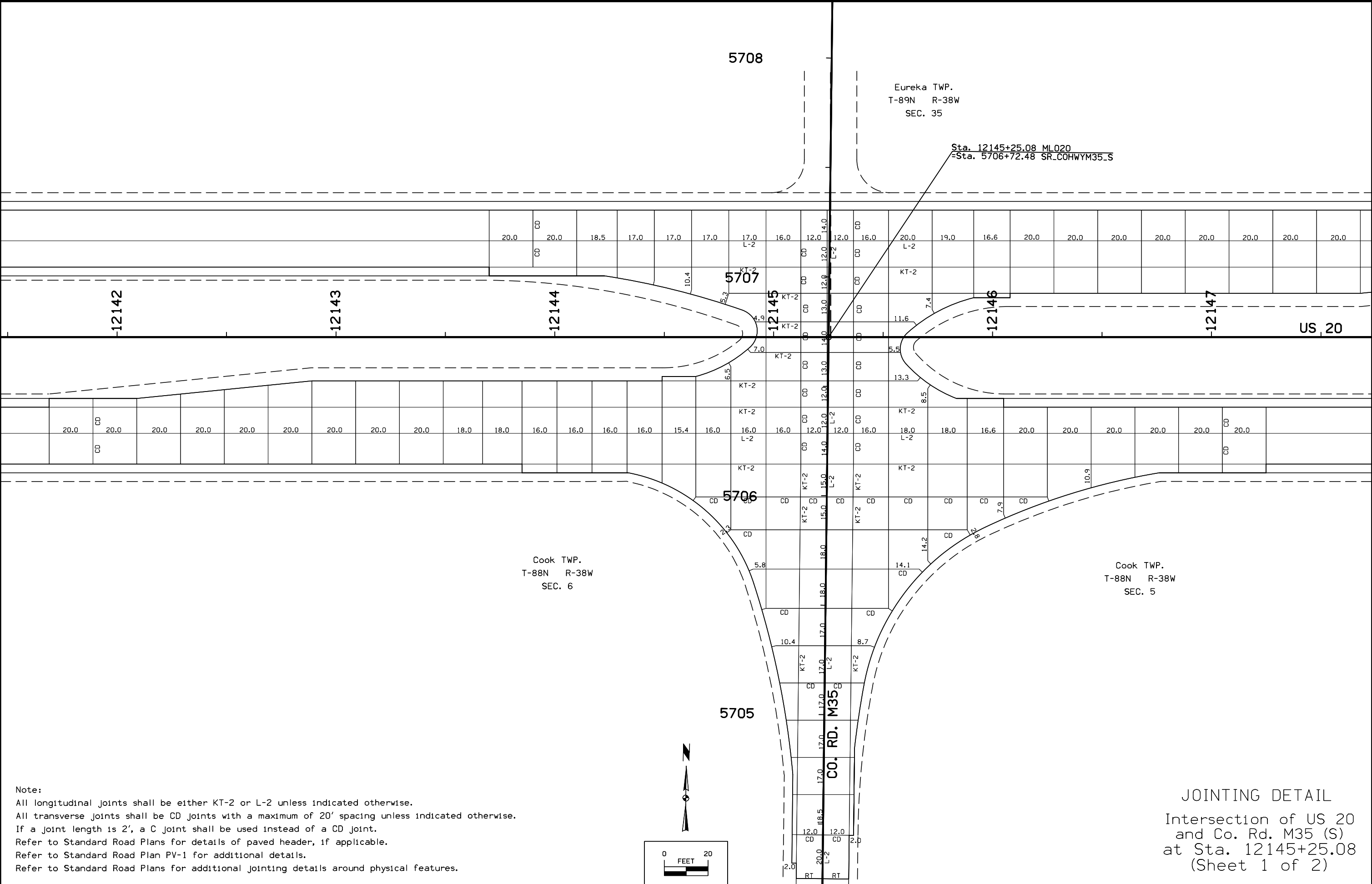
JOINTING DETAIL
Intersection of US 20
and Co. Rd. M27 (N)
at Sta. 11973+11.09
(Sheet 2 of 2)

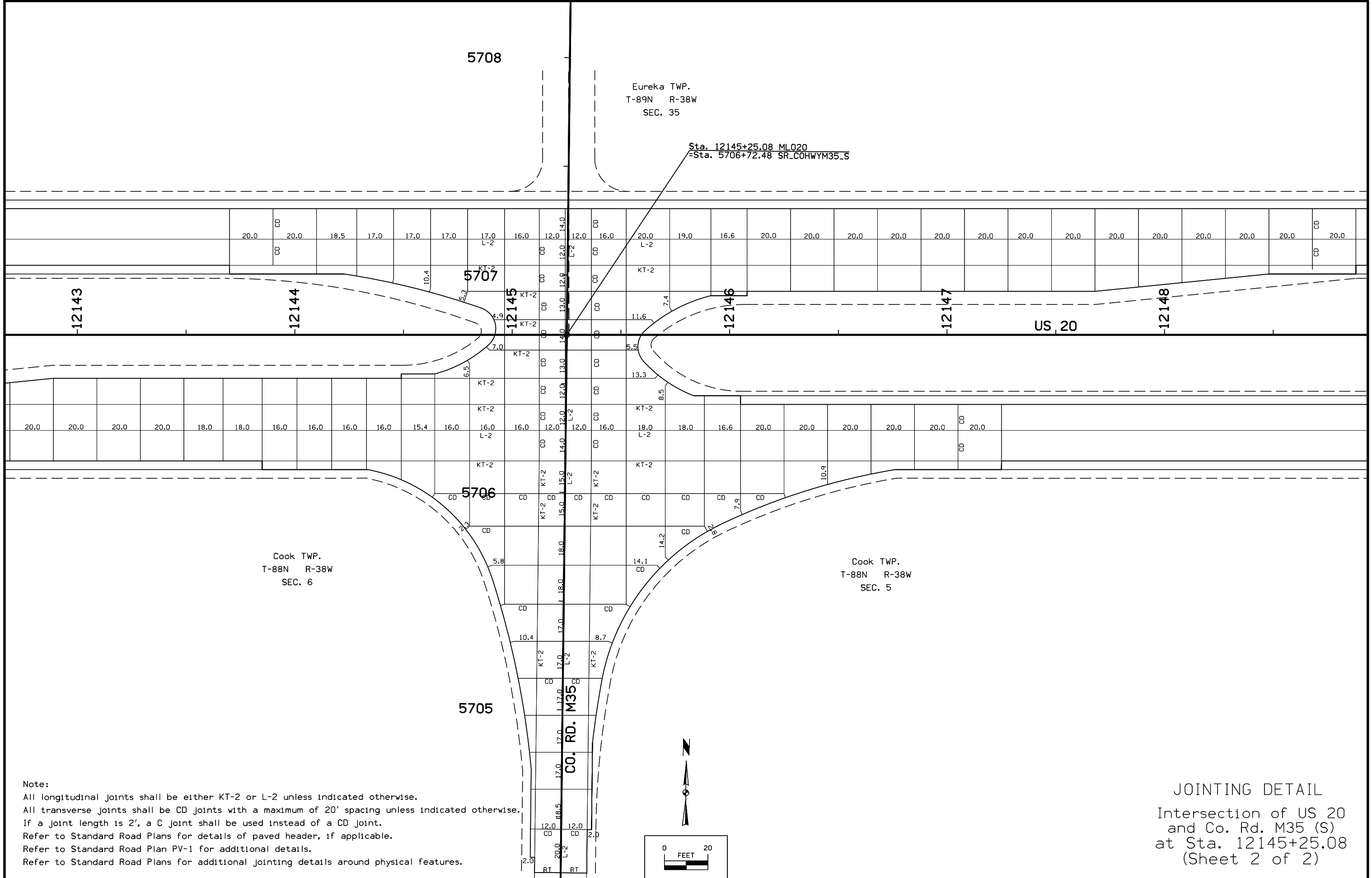


Note:
All longitudinal joints shall be either KT-2 or L-2 unless indicated otherwise.
All transverse joints shall be CD joints with a maximum of 20' spacing unless indicated otherwise.
If a joint length is 2', a C joint shall be used instead of a CD joint.
Refer to Standard Road Plans for details of paved header, if applicable.
Refer to Standard Road Plan PV-1 for additional details.
Refer to Standard Road Plans for additional jointing details around physical features.

JOINTING DETAIL
Intersection of US 20
and Co. Rd. M31 (S)
at Sta. 12041+21.27
(Sheet 1 of 2)

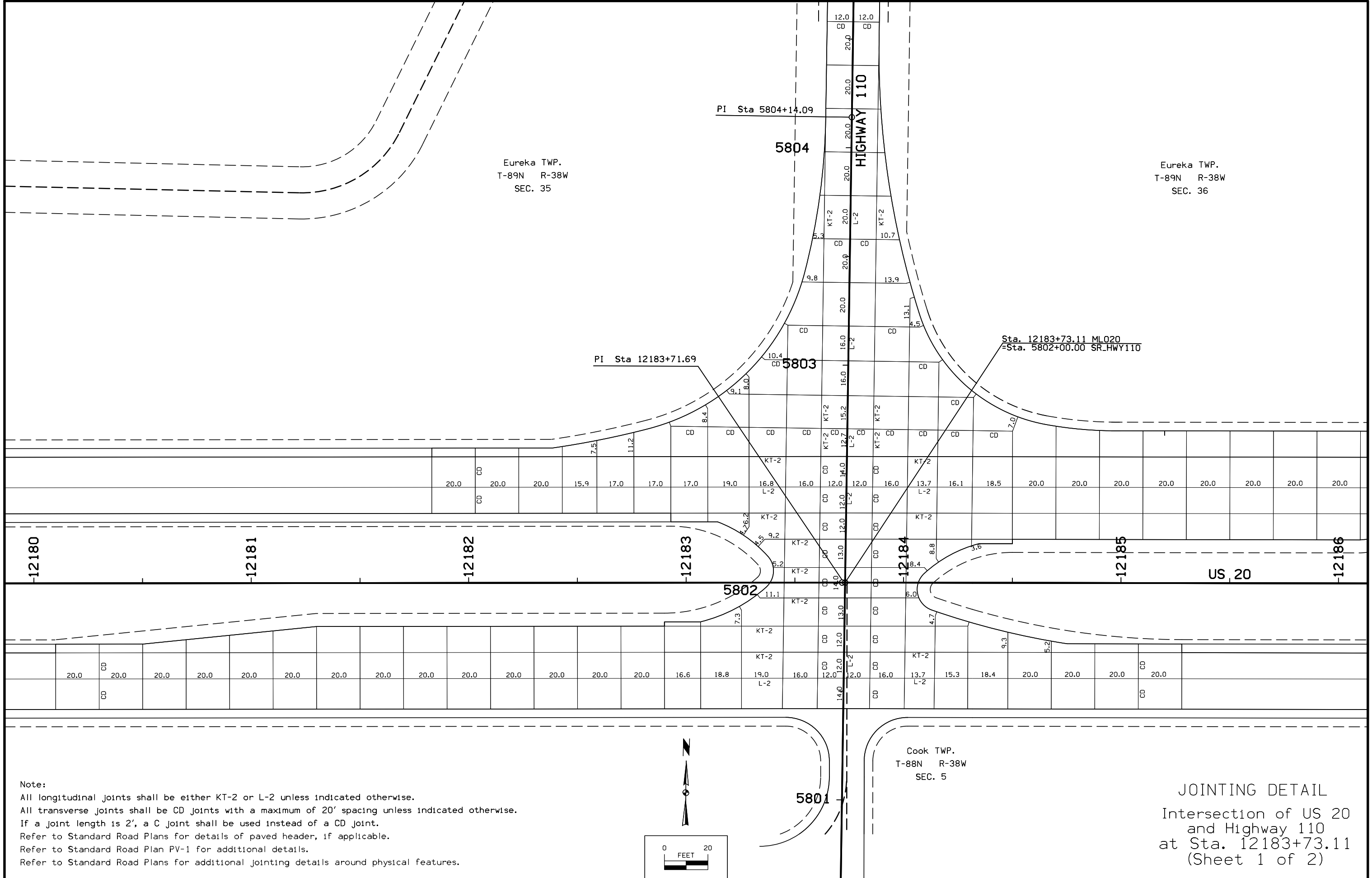






Note:
All longitudinal joints shall be either KT-2 or L-2 unless indicated otherwise.
All transverse joints shall be CD joints with a maximum of 20' spacing unless indicated otherwise.
If a joint length is 2', a C joint shall be used instead of a CD joint.
Refer to Standard Road Plans for details of paved header, if applicable.
Refer to Standard Road Plan PV-1 for additional details.
Refer to Standard Road Plans for additional jointing details around physical features.

JOINTING DETAIL
Intersection of US 20
and Co. Rd. M35 (S)
at Sta. 12145+25.08
(Sheet 2 of 2)

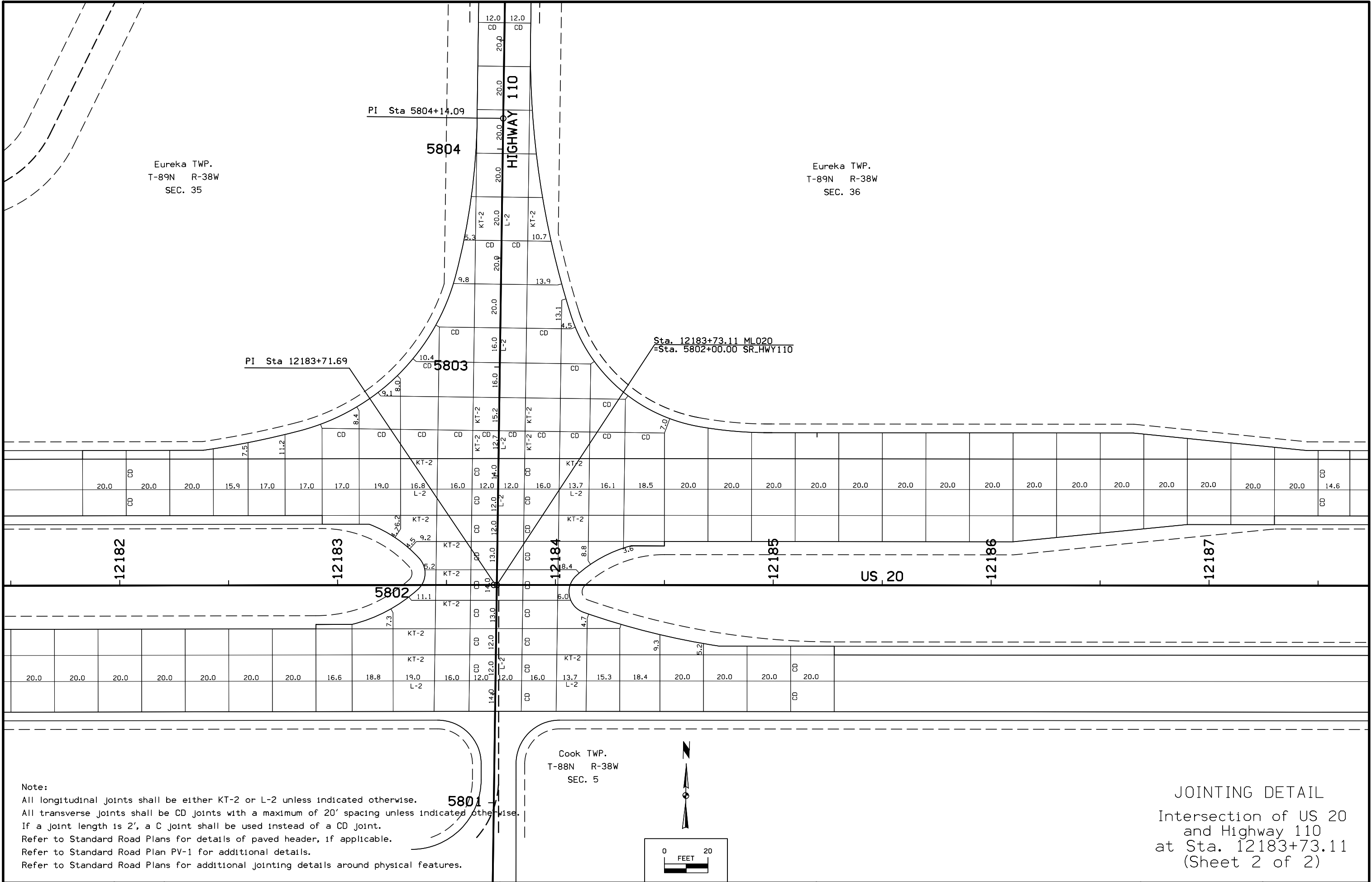


Note:
All longitudinal joints shall be either KT-2 or L-2 unless indicated otherwise.
All transverse joints shall be CD joints with a maximum of 20' spacing unless indicated otherwise.
If a joint length is 2', a C joint shall be used instead of a CD joint.
Refer to Standard Road Plans for details of paved header, if applicable.
Refer to Standard Road Plan PV-1 for additional details.
Refer to Standard Road Plans for additional jointing details around physical features.

Cook TWP.
T-88N R-38W
SEC. 5

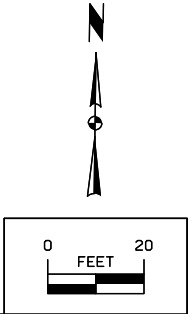
JOINTING DETAIL
Intersection of US 20
and Highway 110
at Sta. 12183+73.11
(Sheet 1 of 2)

FILE NO.	ENGLISH	DESIGN TEAM	Flattery \ Bell \ Smyth	IDA/SAC	COUNTY	PROJECT NUMBER	NHSN-020-2(108)--2R-47	SHEET NUMBER	L.46
----------	---------	-------------	-------------------------	---------	--------	----------------	------------------------	--------------	------

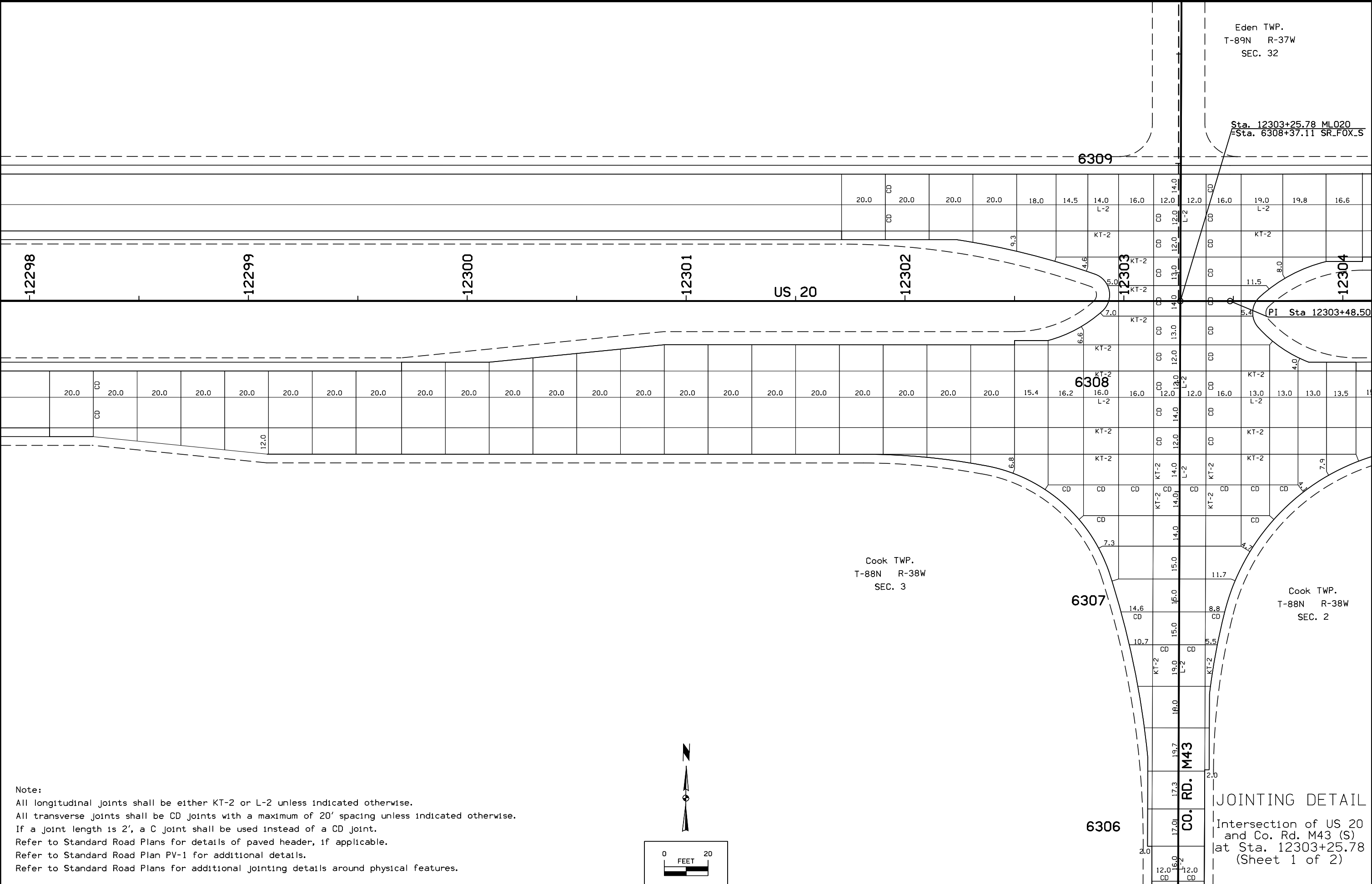


Note:
All longitudinal joints shall be either KT-2 or L-2 unless indicated otherwise.
All transverse joints shall be CD joints with a maximum of 20' spacing unless indicated otherwise.
If a joint length is 2', a C joint shall be used instead of a CD joint.
Refer to Standard Road Plans for details of paved header, if applicable.
Refer to Standard Road Plan PV-1 for additional details.
Refer to Standard Road Plans for additional jointing details around physical features.

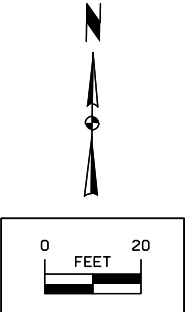
Cook TWP.
T-88N R-38W
SEC. 5

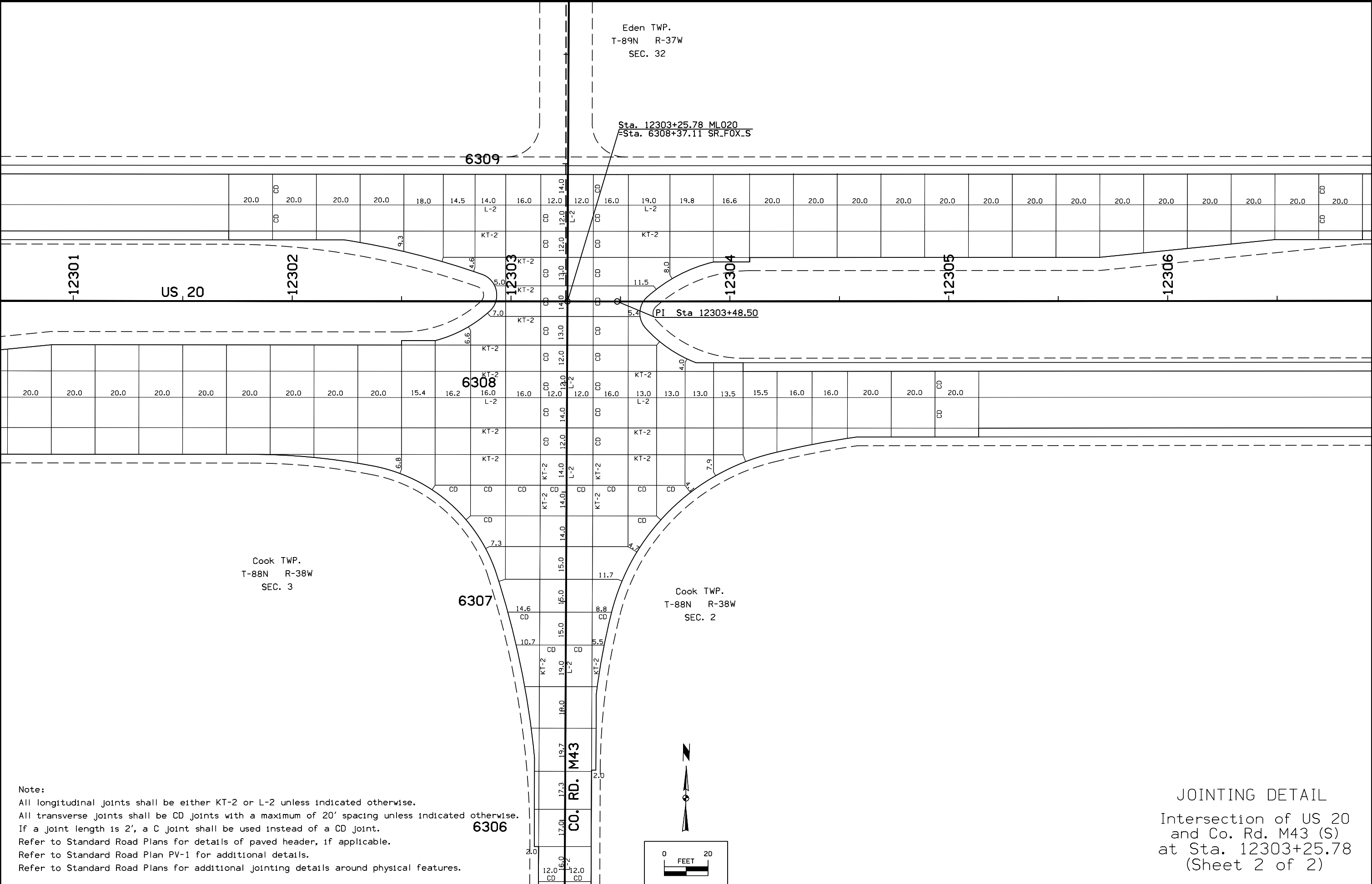


JOINTING DETAIL
Intersection of US 20
and Highway 110
at Sta. 12183+73.11
(Sheet 2 of 2)

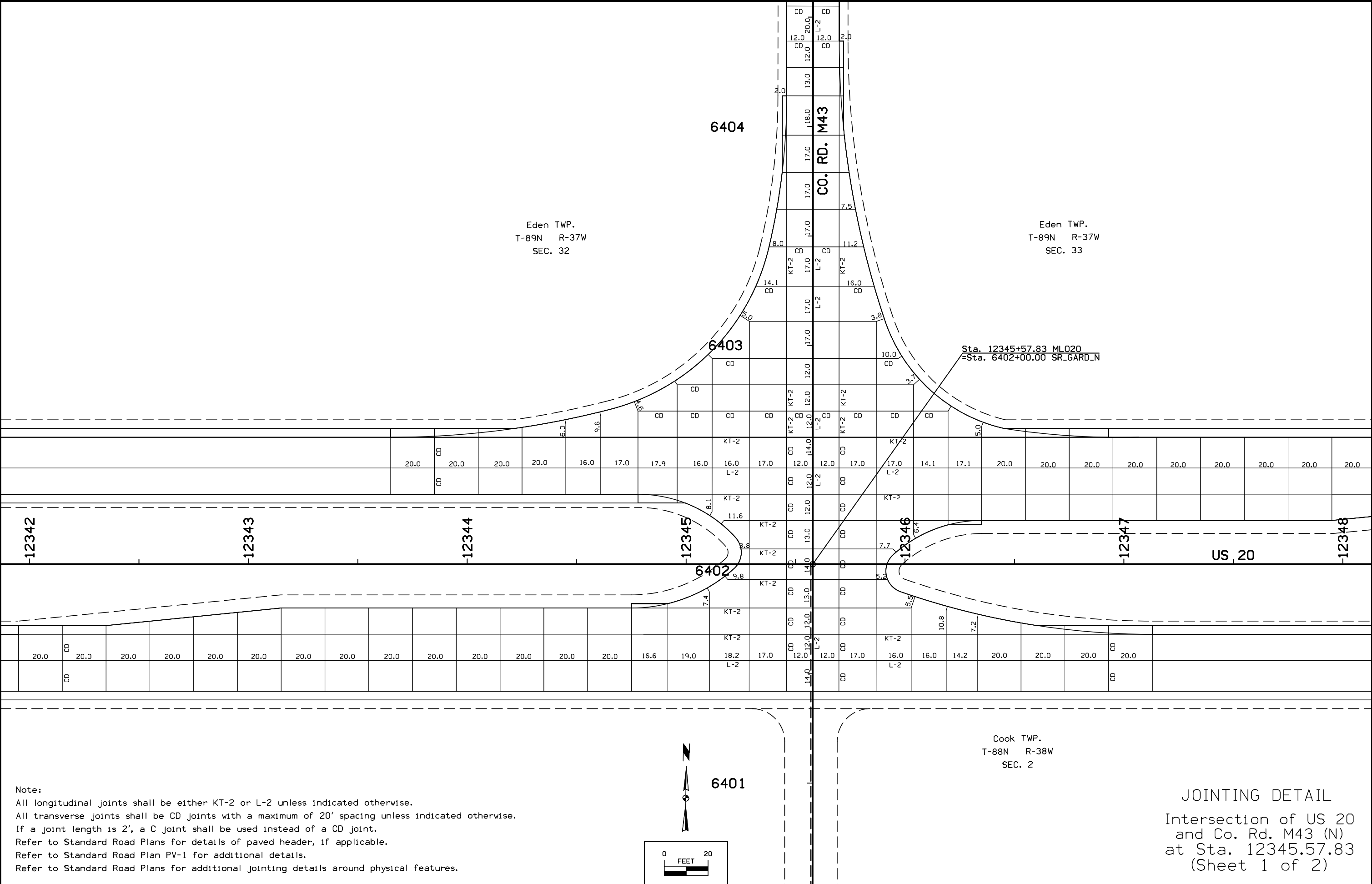


Note:
All longitudinal joints shall be either KT-2 or L-2 unless indicated otherwise.
All transverse joints shall be CD joints with a maximum of 20' spacing unless indicated otherwise.
If a joint length is 2', a C joint shall be used instead of a CD joint.
Refer to Standard Road Plans for details of paved header, if applicable.
Refer to Standard Road Plan PV-1 for additional details.
Refer to Standard Road Plans for additional jointing details around physical features.

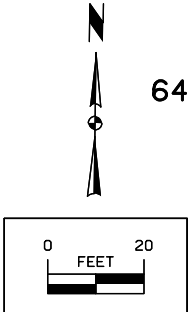




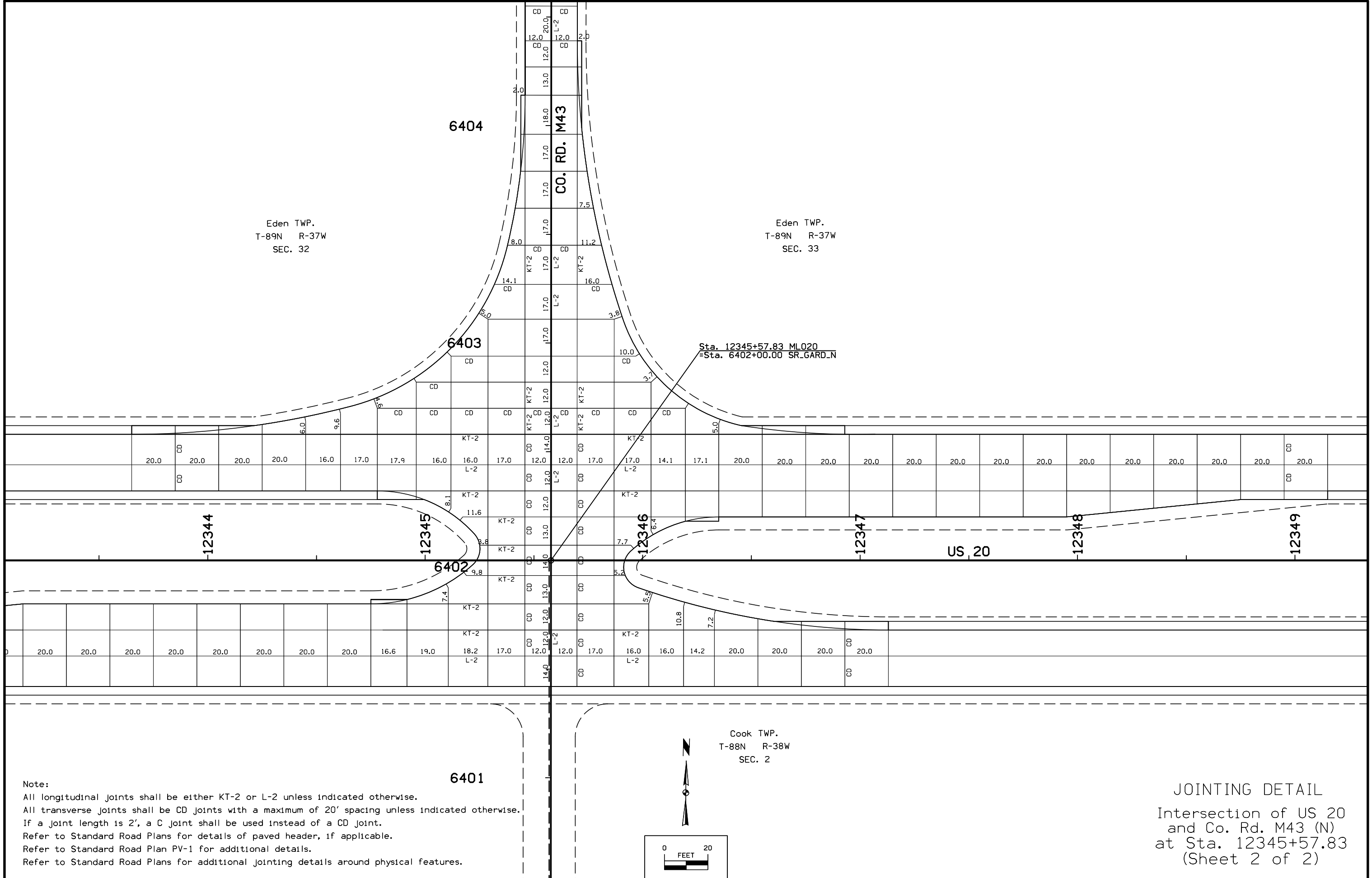
Note:
All longitudinal joints shall be either KT-2 or L-2 unless indicated otherwise.
All transverse joints shall be CD joints with a maximum of 20' spacing unless indicated otherwise.
If a joint length is 2', a C joint shall be used instead of a CD joint.
Refer to Standard Road Plans for details of paved header, if applicable.
Refer to Standard Road Plan PV-1 for additional details.
Refer to Standard Road Plans for additional jointing details around physical features.



Note:
All longitudinal joints shall be either KT-2 or L-2 unless indicated otherwise.
All transverse joints shall be CD joints with a maximum of 20' spacing unless indicated otherwise.
If a joint length is 2', a C joint shall be used instead of a CD joint.
Refer to Standard Road Plans for details of paved header, if applicable.
Refer to Standard Road Plan PV-1 for additional details.
Refer to Standard Road Plans for additional jointing details around physical features.



JOINTING DETAIL
Intersection of US 20
and Co. Rd. M43 (N)
at Sta. 12345.57.83
(Sheet 1 of 2)



Note:
All longitudinal joints shall be either KT-2 or L-2 unless indicated otherwise.
All transverse joints shall be CD joints with a maximum of 20' spacing unless indicated otherwise.
If a joint length is 2', a C joint shall be used instead of a CD joint.
Refer to Standard Road Plans for details of paved header, if applicable.
Refer to Standard Road Plan PV-1 for additional details.
Refer to Standard Road Plans for additional jointing details around physical features.

JOINTING DETAIL
Intersection of US 20
and Co. Rd. M43 (N)
at Sta. 12345+57.83
(Sheet 2 of 2)