

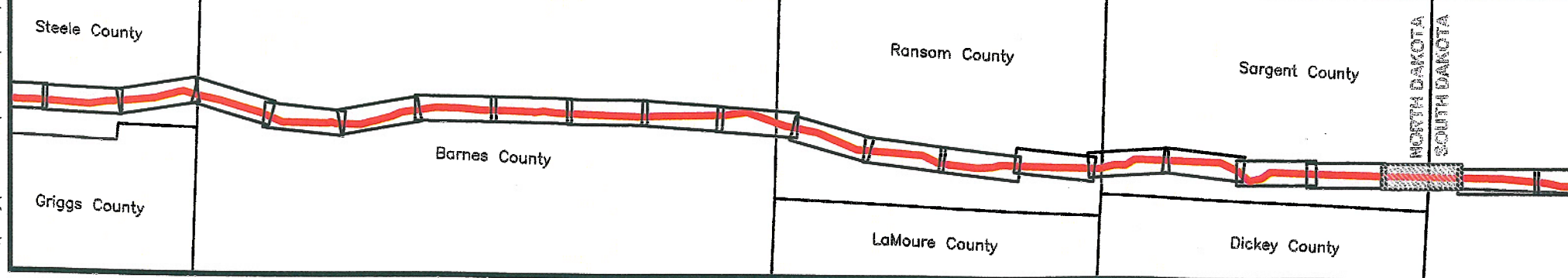
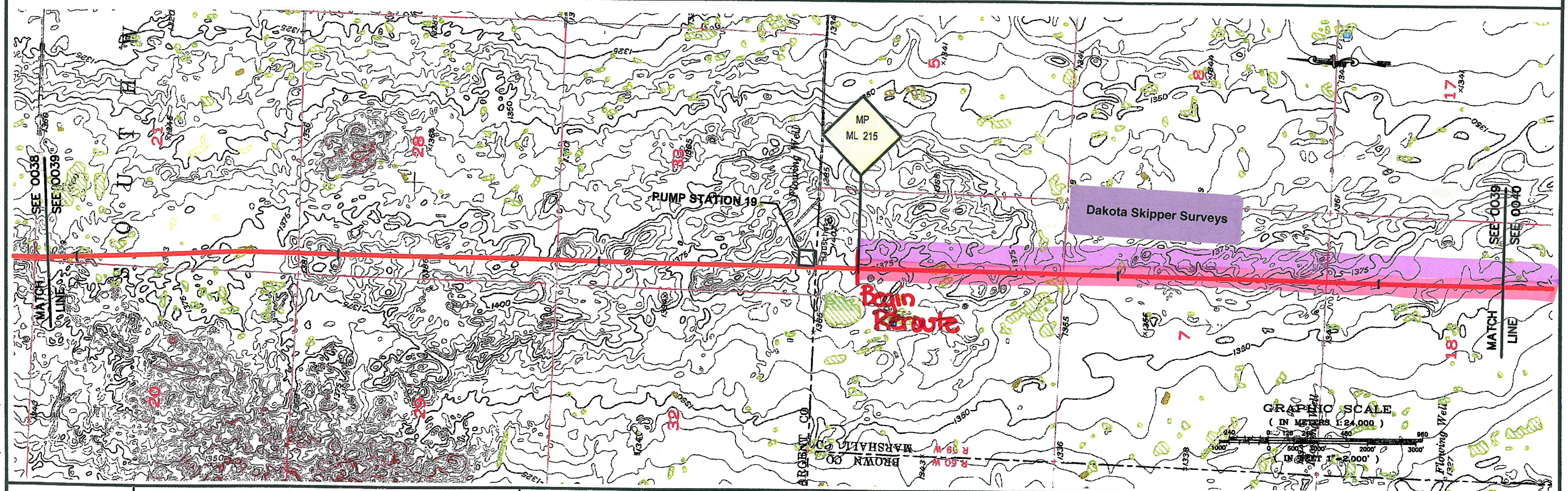
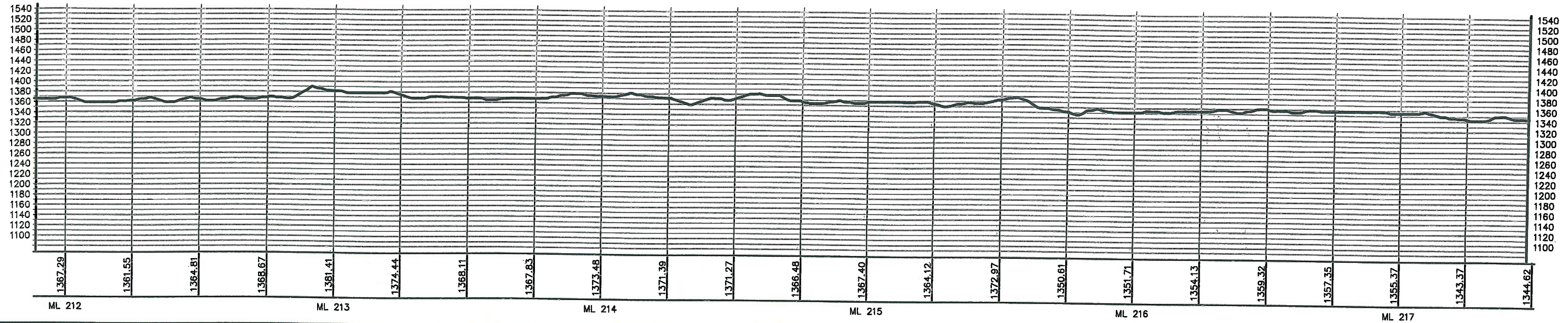
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Table 1
South Dakota Special Status Species
Habitat by County and Mainline Milepost
Keystone Pipeline Project

Species	Status	Suggested Survey Period	Survey Frequency	Survey Protocol Summary	Survey Counties	Miles (mi) of Associated Habitat Crossed by Keystone Pipeline Project					Mainline Milepost(s)
						Grassland (mi)	Forests and Woodlands (mi)	Riparian (mi)	Nonforested Emergent Wetland (mi) ¹	Open Water (mi) (habitat crossed or within 0.5 mi)	
Bald eagle <i>Haliaeetus leucocephalus</i>	FT; SD-T	Nesting sites: 1-Feb to 15-Aug. Winter roost sites: 1-Nov. to 1-April	Conduct breeding and winter roost surveys if construction occurs during the breeding season/ winter roost season along river corridors only	One-mile upstream and one-mile downstream of suitable habitat crossed by project	Yankton					Yankton: 0.5 (James River, Missouri River)	Yankton: 417.9 - 418.0 (James River), 431.9-432.3 (Missouri River)
Interior least tern <i>Sterna antillarum athalassos</i>	FE; SD-E	Nesting Season: 15-April to 15-Sept.	One ground survey prior to any constr. if constr. takes place during the breeding season	Missouri River only	Yankton					Yankton: 0.4 (Missouri River)	Yankton: 431.9-432.3 (Missouri River)
Piping plover <i>Charadrius melodus</i>	FT; SD-T	Nesting Season: 15-April to 15-Sept.	One ground survey prior to any constr. if constr. takes place during the breeding season	Missouri River only	Yankton (Missouri River between Yankton County, South Dakota and Cedar County, Nebraska is designated as critical habitat by USFWS)					Yankton: 0.4 (Missouri River)	Yankton: 431.9-432.3 (Missouri River)
Topeka shiner <i>Notropis topeka</i>	FE; SD-SC	Spawning Season: 15-May to 31-July	Possibly one survey prior to construction (Depnding on crossing method and time of year)	SDGFP: "Ok with cutting stream channels if they are dry. If the channels are running or if pools of water occur at the pipeline crossings, the SDGFP recommends that further habitat analysis occur to determine if the channel could be open cut, or if it should be drilled."	Beadle Clark Hanson Hutchinson Kingsbury McCook Miner Yankton					Beadle: 0.1 (Shue Creek, Middle Fork Pearl Creek) Clark: 0.1 (Foster Creek, Various Tributaries) Hanson: 0.1 (Wolf Creek) Hutchinson: 0.1 (Wolf Creek) Kingsbury: 0.1 (South Fork Pearl Creek) McCook: 0.1 (Wolf Creek) Miner: 0.2 (Restone Creek, Rock Creek) Yankton: 0.3 (James River, Missouri River)	Beadle: 305.7, 307.4, 308.0, 309.4, 310.1, 311.4 (Shue Creek), 311.9 (Pearl Creek), 314.0, 314.9, 315.8, 316.6 (Middle Fork Pearl Creek) Clark: 294.3, 295.3 (Clark Creek), 300.4, 300.5, 301.4, 301.9, 302.5 (intermittent tributaries to Pearl, Middle Pearl, Shue, and Redstone creeks in SW Clark County) Hanson: 371.9, 373.9 (Wolf Creek) Hutchinson: 387.2, 387.6 (Wolf Creek) Kingsbury: 322.2, 322.4 (South Fork Pearl Creek) McCook: 380.3, 380.5, 380.8 (Wolf Creek) Miner: 339.4 (Redstone Creek), 357.7, 358.4, 358.6 (Rock Creek) Yankton: 417.9-418.0 (James River), 431.9-432.3 (Missouri River)
Dakota skipper <i>Hesperia dacotae</i>	FC; SD-SC	Flying Period: mid-June to August 1 Peak: 1st week of July	Survey prior to construction	Suitable native prairie within 100 meters of ROW. Adults must be surveyed for in a short time frame. Adults only fly for 1-2 weeks, usually peaking in the first week of July	Clark Day Marshall Yankton	Clark: 4.5 Day: 6.7 Marshall: 5.1 Yankton: 2.1					Clark: 277.5 - 302.6 Day: 250.6 - 268.1 Marshall: 215.0 - 222.8 Yankton: 415.0 - 425.1
Mussels <i>various species</i>		Late July	One survey prior to construction	Suggest survey of the James River crossing for mussel beds. It is possible that the crossing site could harbor a significant mussel bed that might include rare species, if not T&E species	Yankton					Yankton: 0.1 (James River)	Yankton: 417.9-418.0 (James River)
Western prairie fringed orchid <i>Platanthera praeclara</i>	FT; SD-SC	Flowering Period: 15-June to 15-July	One ground survey prior to construction	Results of survey should be submitted to the State Service Field Office to determine if further section 7 consultation is necessary	Clark Day Yankton	Clark: 4.5 Day: 6.7 Yankton: 2.1			<i>data pending</i> <i>data pending</i> <i>data pending</i>		Clark: 277.5 - 302.6; <i>data pending</i> Day: 250.6 - 268.1; <i>data pending</i> Yankton: 415.0 - 425.1; <i>data pending</i>

¹ Data pending; waiting on completion of wetland/waterbody surveys to determine total wetland habitat crossed by project.

ELEVATIONS SHOWN IN FEET - VERTICAL=10x HORIZONTAL SCALE



PREPARED BY:
TROW ENGINEERING CONSULTANTS, INC.
1300 Metropolitan Boulevard, Suite 200
Tallahassee, Florida 32308
Phone: 1-850-385-5441
Fax: 1-850-385-5523

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DRAWING NUMBER	DRAWN BY	CHECKED BY
K-38-P-900-A-0039	AH	BLS

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**KEYSTONE PIPELINE PROJECT
PROPOSED ROUTE BOOK**

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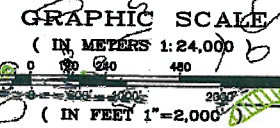
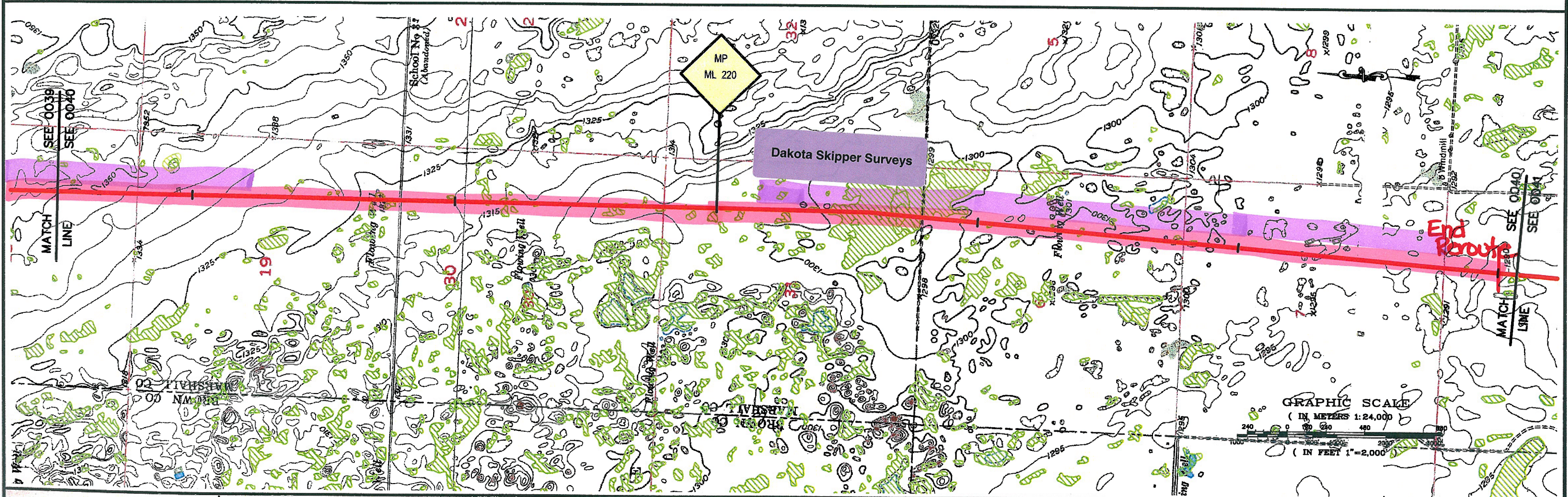
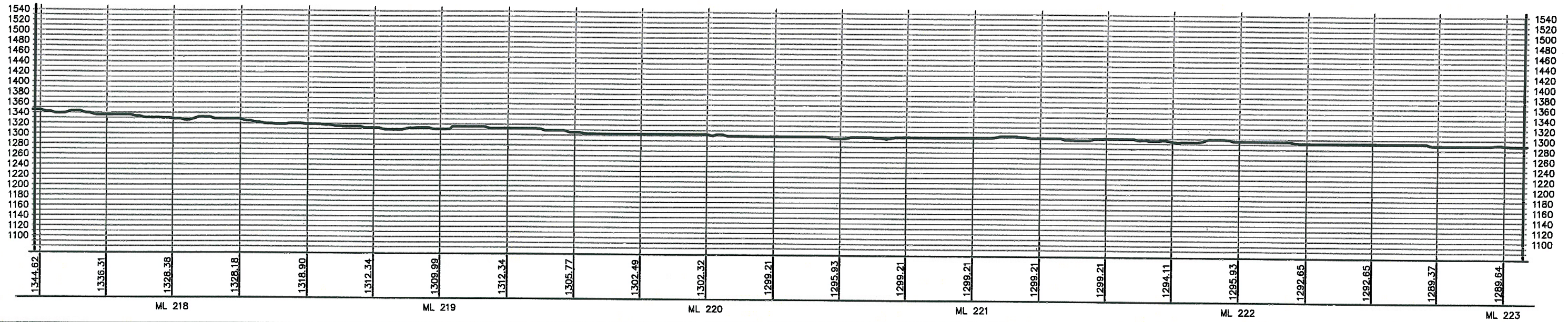
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SHEET:	0039

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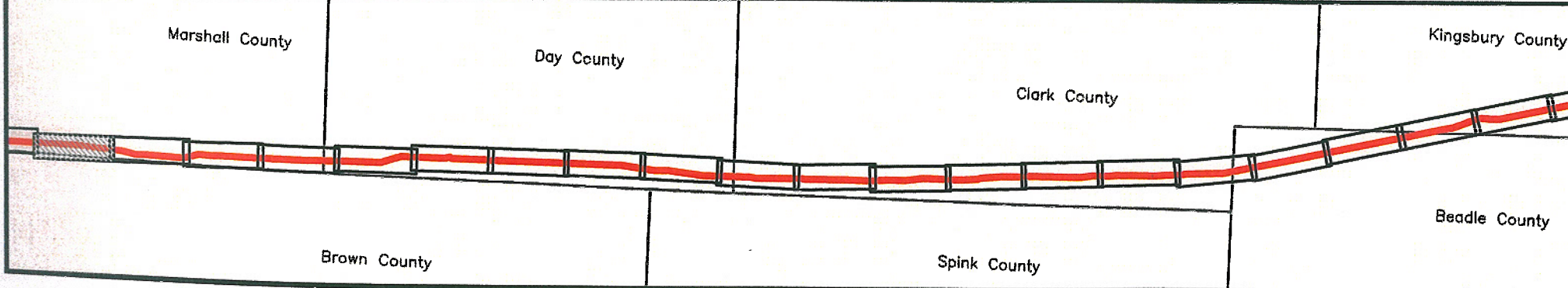
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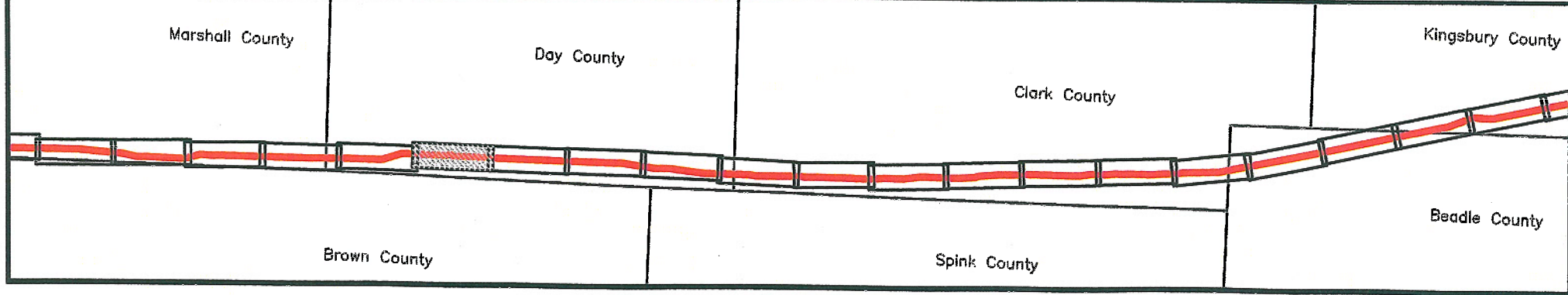
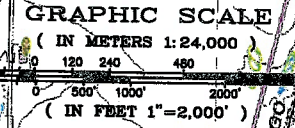
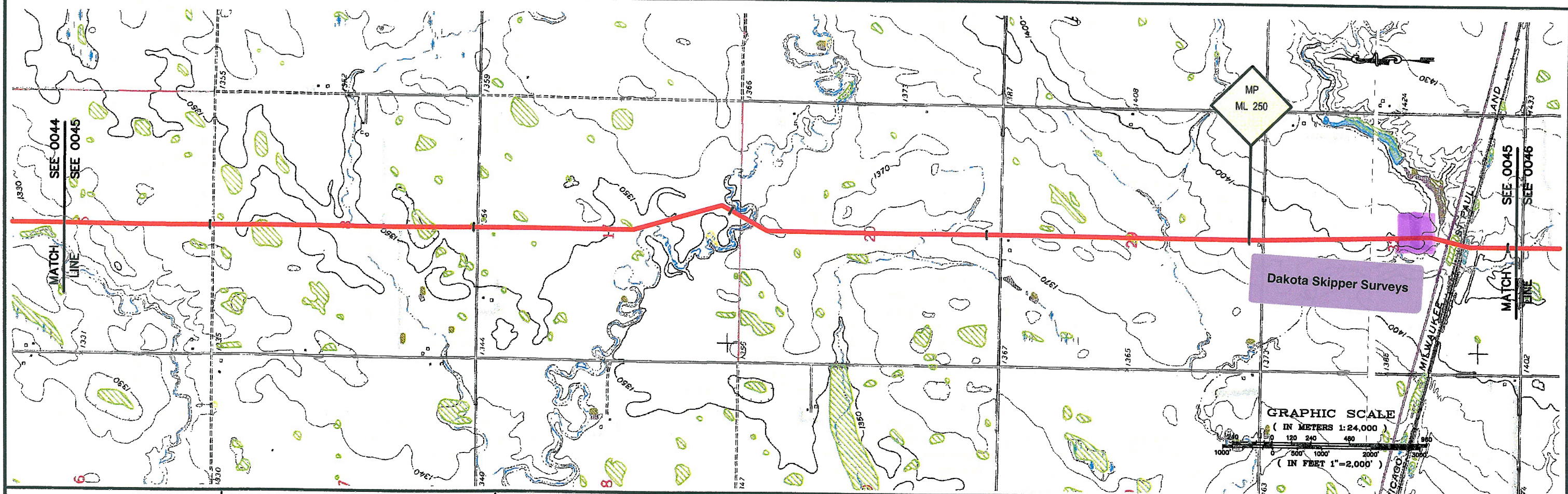
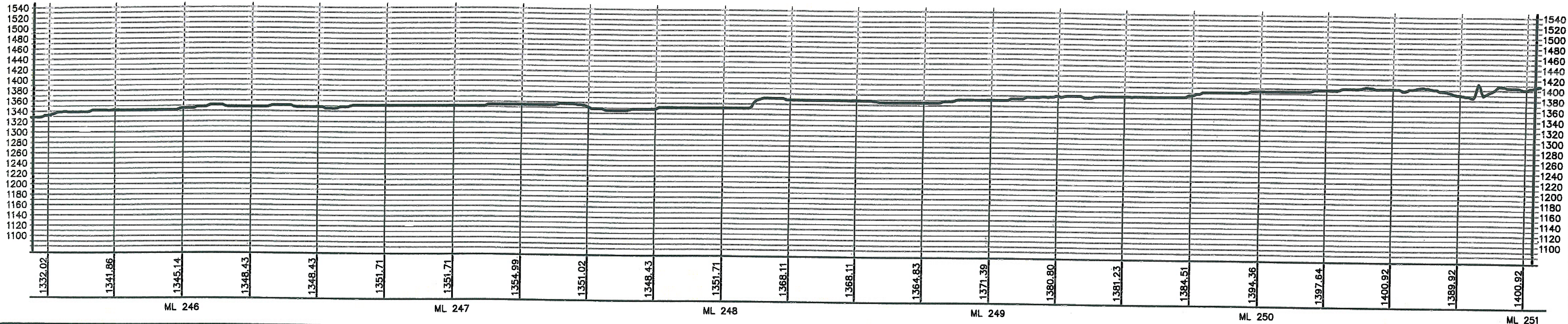


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PREPARED BY:
TROW ENGINEERING CONSULTANTS, INC.
 1300 Metropolitan Boulevard, Suite 200
 Tallahassee, Florida 32308
 Phone: 1-850-385-5441
 Fax: 1-850-385-5523

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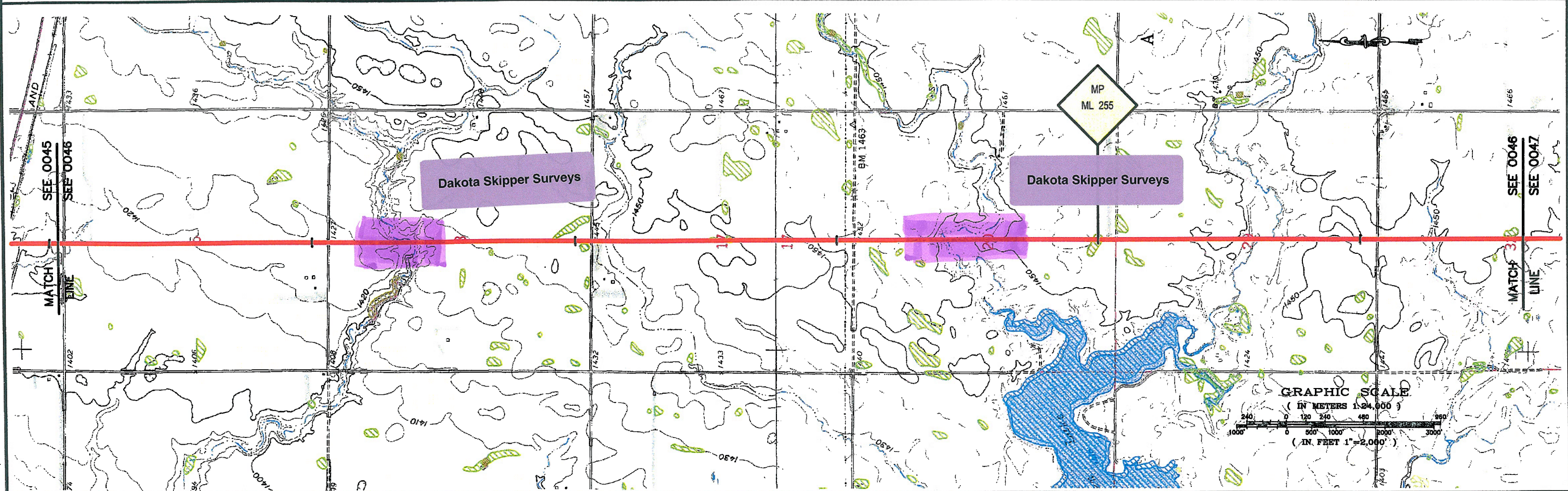
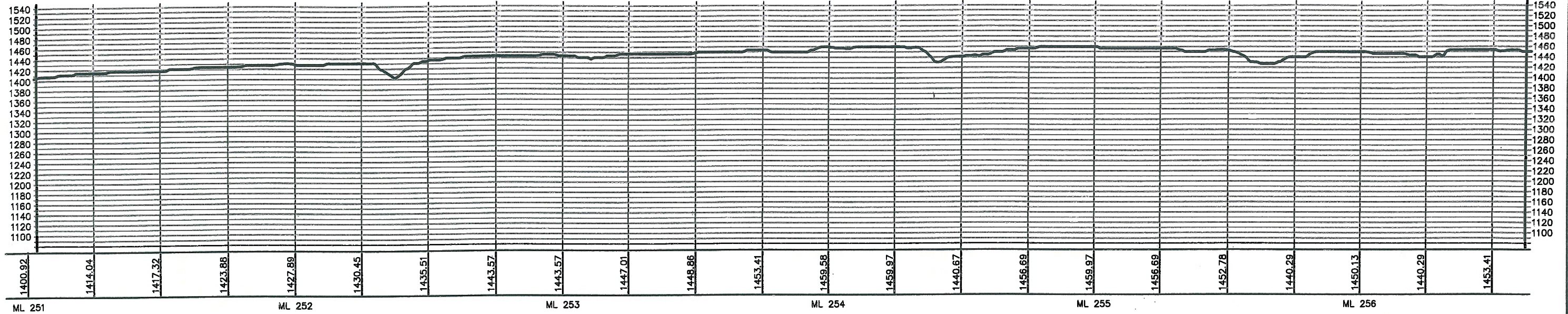
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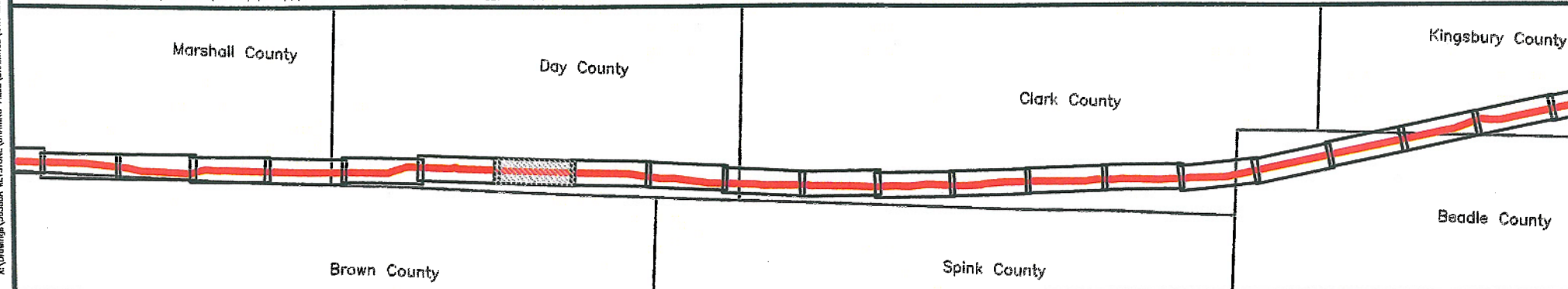
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PREPARED BY:
TROW ENGINEERING CONSULTANTS, INC.
 1300 Metropolitan Boulevard, Suite 200
 Tallahassee, Florida 32308
 Phone: 1-850-385-5441
 Fax: 1-850-385-5523


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