



US Army Corps
of Engineers
St Paul District

APPLICANT: Minnesota Department
of Transportation,
District 2

Public Notice

ISSUED: 19 May 2014

EXPIRES: 19 June 2014

REFER TO: 2013-04496-WAB

SECTION: 404 - Clean Water Act

1. APPLICATION FOR PERMIT TO permanently discharge dredged or fill material into 10.95 acres of unnamed wetlands, and temporarily impact 4.31 acres of wetlands for a total of 15.26 acres of impacts to aquatic resources for the construction of three four-lane passing sections, three left turn lanes, nine right turn lanes, and one bypass lane within an overall 38-mile long segment of Trunk Highway 2 (TH2) extending between Cass Lake and Deer River, Minnesota. The western passing lane (WPL 1) would begin 1,500 feet west of Cass County State Aid Highway (CSAH) 10 and terminate at Forest Road 2930. The center passing lane (CPL 2) would begin 1,500 feet west of CSAH 91 and terminate at Forest Road 3033. The eastern passing lane (EPL 3) would begin 5,000 feet west of Forest Road 2162 and would terminate 3,000 feet east of Forest Road 2162.

2. SPECIFIC INFORMATION.

APPLICANT'S ADDRESS: Mr. Darren Laesch
Minnesota Department of Transportation
District 2
3920 Highway 2 West
Bemidji, Minnesota 56601

PROJECT LOCATION: The project sites are located in the following areas:

WPL 1 - T145N, R30W, Sections 14, 15, 16.
East Bound Left Turn (EBLT) 1 – T145N, R30W, Section 16.
East Bound Right Turn (EBRT) 2 - T145N, R30W, Section 16.
EBRT 3 - T145N, R30W, Section 14.
EBRT 4 - T145N, R30W, Section 13.
West Bound Right Turn (WBRT) 5 - T145N, R29W, Section 20.
WBRT 6 - T145N, R29W, Section 21.
EBLT 7 - T145N, R28W, Section 29.
CPL 2 – T145N, R28W, Sections 28, 29 and 30.
EBRT 8 - T145N, R28W, Section 28.
EBLT 9 – T145N, R28W, Section 25.
West Bound Bypass Lane (WBBL) 10 – T145N, R27W, Section 32.
WBRT 11 – T145N, R27W, Section 36.
EPL 3 – T145N, R26W, Sections 31 and 32.
WBRT 12 – T145N, R26W, Section 31.
EBRT 13 – T145N, R26W, Section 31.

The approximate UTM coordinates for this project begin at latitude/longitude 47.371376/-94.480900 and end at 47.328962/-94.008404.

Operations - Regulatory (2013-04496-WAB)
SUBJECT: Notice of Application for Permit

DESCRIPTION OF PROJECT: The applicant proposes to construct three four-lane passing sections, three left turn lanes, nine right turn lanes and one bypass lane on TH2, between Cass Lake and Deer River, Minnesota. Each of the three passing lanes would provide a one mile passing opportunity in each direction. The passing lane section would consist of four 12-foot driving lanes with 8-foot paved shoulders. To construct the passing lane section, TH2 would be widened 12 feet on each side of the existing roadway. The length of the passing lanes is based on the highest existing daily traffic flow rate, which is estimated to be approximately 400 vehicles per hour.

TH2 is the primary east-west interregional corridor across northern Minnesota that connects Duluth-Superior, Grand Rapids, Bemidji and Grand Forks-East Grand Forks, a distance of 264 miles. TH2 is predominantly a two-lane rural highway system between Duluth and Cass Lake, and a four-lane divided highway system between Cass Lake and East Grand Forks. This 38-mile stretch is the last remaining segment of TH2 from North Dakota to Wisconsin without adequately spaced passing lanes or a four-lane cross section. This segment has a posted speed limit of 60 mph and has limited passing opportunities, which hinders mobility of faster moving vehicles. During peak travel periods, passing opportunities are inadequate, resulting in long traffic queues and slower speeds.

The proposed project would include bituminous resurfacing, culvert replacement, roadway and shoulder widening. In slopes will be built with a slope of 1:4 (V:H) and the backslopes with slope of 1:3.

QUANTITY, TYPE, AND AREA OF FILL: The project proposes impacts to wetlands in eighteen locations, in addition to wetland areas that have developed in portions of the existing highway ditches. Total proposed impacts to aquatic resources include: 8.31 acres shrub carr/alder thicket (5.94 acres permanent, 2.37 acres temporary) wetlands; 1.49 acres hardwood swamp/coniferous swamp (0.83 acres permanent, 0.66 acres conversion); 4.14 acres open bog or coniferous bog (2.87 acres permanent, 1.27 acres temporary); and, 1.31 acres of wetlands that have become established in the existing roadside ditches. Permanent wetland impacts are proposed in association with placement of fill and areas impacted by excavation and grading. Temporary impacts would be associated with the temporary placement of topsoil along the construction corridor. All temporary impacts would be restored to the original wetland type after construction is complete.

VEGETATION IN AFFECTED AREA: Shrub carr/alder swamp wetlands primarily support shrubs and other low growing woody vegetation with sparse herbaceous layer beneath the shrub canopy. Woody species typical of shrub carr plant communities include various willow species, alders, and red osier dogwood with an understory of various grasses and sedges. Hardwood swamps typically support ash, aspen and balsam poplar, while coniferous swamps typically support black spruce and white cedar. Emergent plants such as reed canary grass and shrubs are often found at the fringe and in forest openings.

SOURCE OF FILL MATERIAL: Fill material would be clean material and either excavated on site or purchased from commercial sources.

SURROUNDING LAND USE: The project is located within the Chippewa National Forest, which is dominated by forest. Trunk Highway 2 runs parallel to several other linear projects, including

Operations - Regulatory (2013-04496-WAB)
SUBJECT: Notice of Application for Permit

railroad, high voltage transmission line and several petroleum pipelines. Land use also includes occasional residential and seasonal dwellings, particularly near CPL 2.

DESCRIPTION OF DREDGING OR EXCAVATION: There are existing ditches alongside the current roadway and these areas would be shaped and graded to a uniform slope. Cross sectional drawings indicate changes to the existing ditch bottom elevations would be minimal.

THE FOLLOWING POTENTIALLY TOXIC MATERIALS COULD BE USED AT THE PROJECT SITE: The applicant has indicated that only clean fill material would be used for road construction. It is anticipated that any potentially toxic materials used at the site would be consistent with materials found at other highway construction projects.

THE FOLLOWING PRECAUTIONS TO PROTECT WATER QUALITY HAVE BEEN DESCRIBED BY THE APPLICANT: Best Management Practices to protect water quality in the form of temporary and permanent erosion and sediment control measures would be used throughout the project corridor and shall conform to the MN/DOT 2005 specification manual regarding erosion and sediment control.

MITIGATION: Temporary wetland impacts would be restored to pre-construction contours and planted with an appropriate native seed mix. Forested wetlands impacted by conversion would be planted with a native seed mix and allowed to naturally re-grow to a forested wetland plant community over time.

Compensatory mitigation for new unavoidable wetland impacts is proposed to occur through the purchase of credits from the Minnesota Local Government Road Wetland Replacement Program wetland bank cooperative. The credits are proposed to be debited from the Vesledahl mitigation bank account, which is located in Bank Service Area 3.

3. REPLIES/COMMENTS.

Interested parties are invited to submit to this office written facts, arguments, or objections within 30 days of the date of this notice. These statements should bear upon the suitability of the location and the adequacy of the project and should, if appropriate, suggest any changes believed to be desirable. Comments received may be forwarded to the applicant.

Replies may be addressed to Regulatory Branch, St. Paul District, Corps of Engineers, 180 Fifth Street East, Suite 700, Saint Paul, MN 55101-1678.

Or, IF YOU HAVE QUESTIONS ABOUT THE PROJECT, call Bill Baer at the Bemidji Regulatory Field office of the Corps, telephone number (651) 290 - 5338.

To receive Public Notices by e-mail, go to:

http://mvp-extstp.mvp.usace.army.mil/list_server/ and add your information in the New Registration Box.

Operations - Regulatory (2013-04496-WAB)
SUBJECT: Notice of Application for Permit

4. FEDERALLY-LISTED THREATENED OR ENDANGERED WILDLIFE OR PLANTS OR THEIR CRITICAL HABITAT.

None were identified by the applicant or are known to exist in the permit area. However, Cass County is within the known or historic range of the following Federally-listed threatened (T) and endangered (E) species:

<u>Species</u>	<u>Habitat</u>
Canada lynx (T) <i>Lynx canadensis</i>	Northern forested areas

This application is being coordinated with the U.S. Fish and Wildlife Service. Any comments it may have concerning Federally-listed threatened or endangered wildlife or plants or their critical habitat will be considered in our final assessment of the described work. Because the project is located within the Chippewa National Forest, the U.S. Department of Agriculture has primary responsibility for reviewing the project's compliance with the Endangered Species Act. The Corps intends to reference the findings of their review.

5. JURISDICTION.

This application is being reviewed in accordance with the practices for documenting Corps jurisdiction under Sections 9 & 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act identified in Regulatory Guidance Letter 08-02. We have made an initial determination that the aquatic resources that would be impacted by the proposed project are regulated by the Corps of Engineers under Section 404 of the Clean Water Act and/or Section(s) 9 & 10 of the Rivers and Harbors Act. The Corps will prepare an approved or preliminary jurisdictional determination prior to making a permit decision. Approved jurisdictional determinations are posted on the St. Paul District web page at <http://www.mvp.usace.army.mil/Missions/Regulatory.aspx>.

THE APPLICANT HAS STATED THAT THE FOLLOWING STATE, COUNTY, AND/OR LOCAL PERMITS HAVE BEEN APPLIED FOR/ISSUED:

NPDES, MNDNR Public Waters Work Permit.

6. STATE SECTION 401 WATER QUALITY CERTIFICATION.

Valid Section 404 permits cannot be issued for any activity unless state or U.S. Environmental Protection Agency (EPA) water quality certification for the activity is granted or waived pursuant to Section 401 of the Clean Water Act. The Section 401 authority on non-reservation lands in Minnesota is the Pollution Control Agency (MPCA). The Section 401 authority within the Leech Lake Reservation is the EPA. This project is located within the Leech Lake Reservation.

The EPA has indicated that this public notice serves as its public notice of the application for Section 401 water quality certification under the Clean Water Act. Any comments relative to the EPA 401 certification for the activity proposed in this public notice may be sent to: Ms. Janice Cheng, U.S. EPA, Watersheds & Wetlands Branch, WW-16J, 77W. Jackson Blvd., Chicago IL 60604; email: cheng.janice@epa.gov.

Operations - Regulatory (2013-04496-WAB)
SUBJECT: Notice of Application for Permit

7. HISTORICAL/ARCHAEOLOGICAL.

Because the project is located within the Chippewa National Forest, the U.S. Department of Agriculture has primary responsibility for reviewing the project's compliance with the National Historic Preservation Act. The Corps intends to reference the findings of the U.S.D.A. review.

8. PUBLIC HEARING REQUESTS.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, in detail, the reasons for holding a public hearing. A request may be denied if substantive reasons for holding a hearing are not provided or if there is otherwise no valid interest to be served.

9. PUBLIC INTEREST REVIEW.

The decision whether to issue a permit will be based on an evaluation of the probable impact, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production and, in general, the needs and welfare of the people. Environmental and other documents will be available for review in the St. Paul District Office.

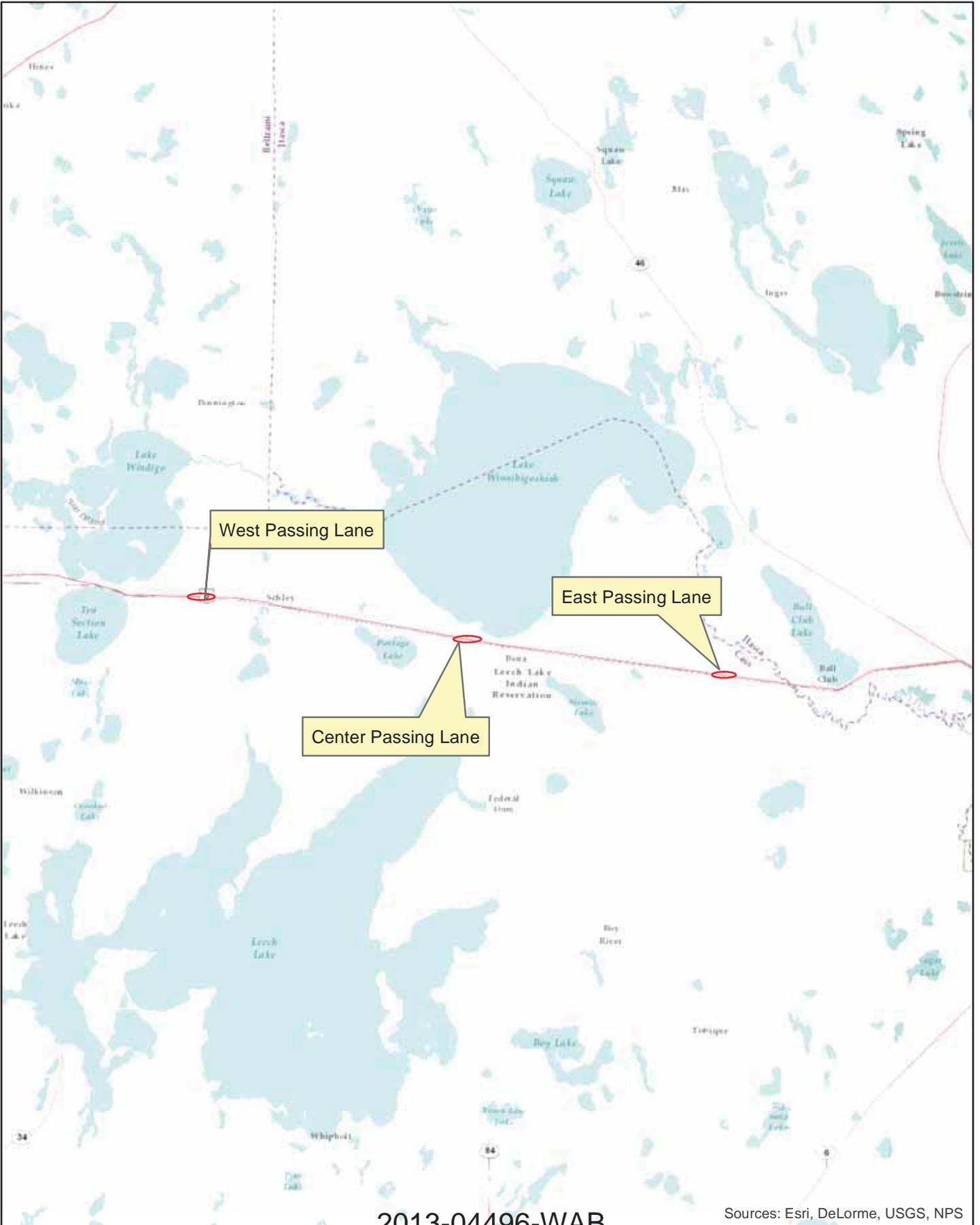
The Corps of Engineers is soliciting comments from the public; Federal, State, and local agencies and officials; Indian tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Desiree Morningstar
Acting Chief, Northwest Section

Enclosures

Operations - Regulatory (2013-04496-WAB)
SUBJECT: Notice of Application for Permit

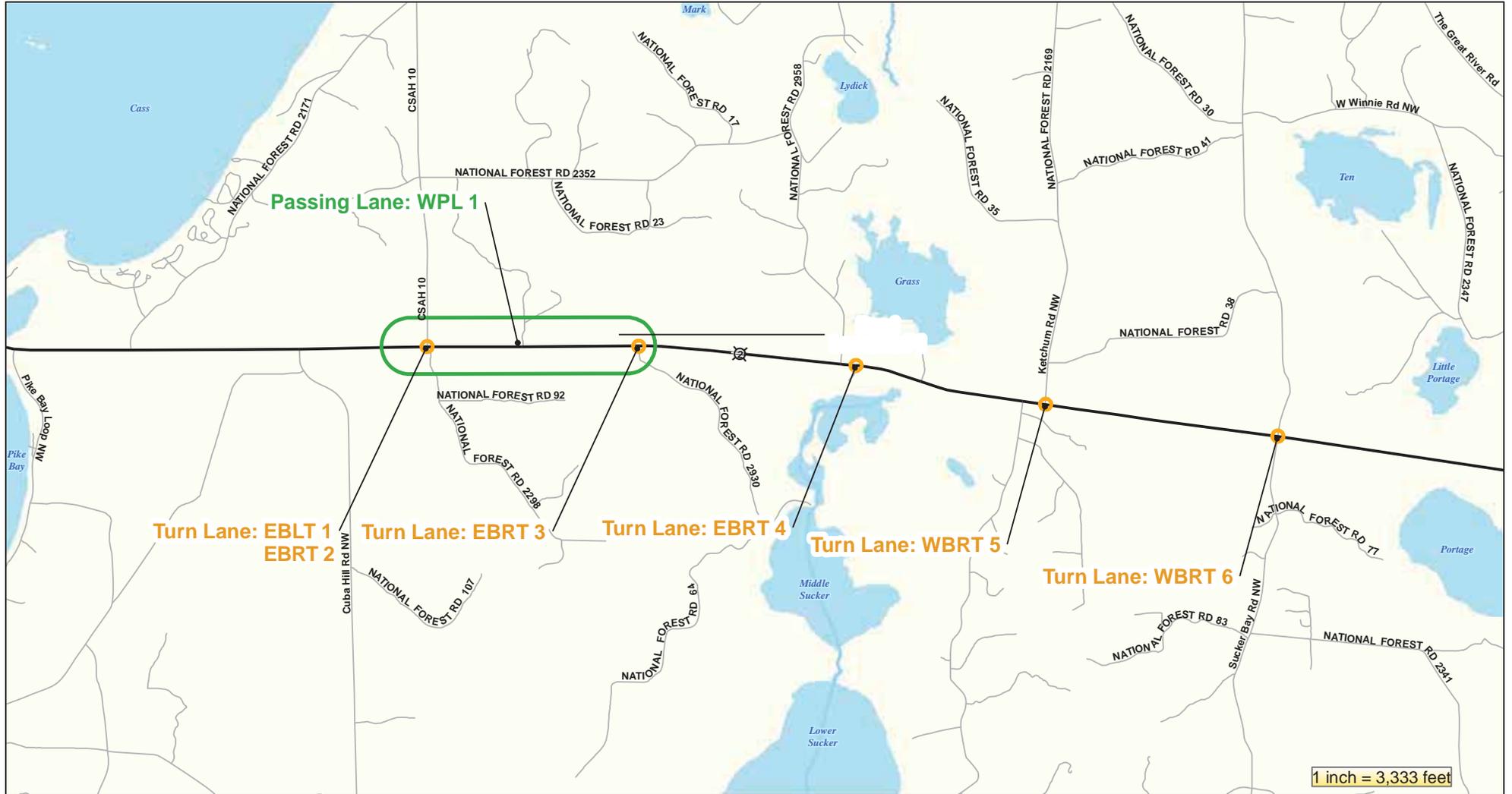
NOTICE TO EDITORS: This public notice is provided as background information and is not a request or contract for publication.



2013-04496-WAB

Sources: Esri, DeLorme, USGS, NPS

TH 2 Passing Lane and Turn Lane Proposed Improvements Cass Lake to Deer River - West Passing Lane #1



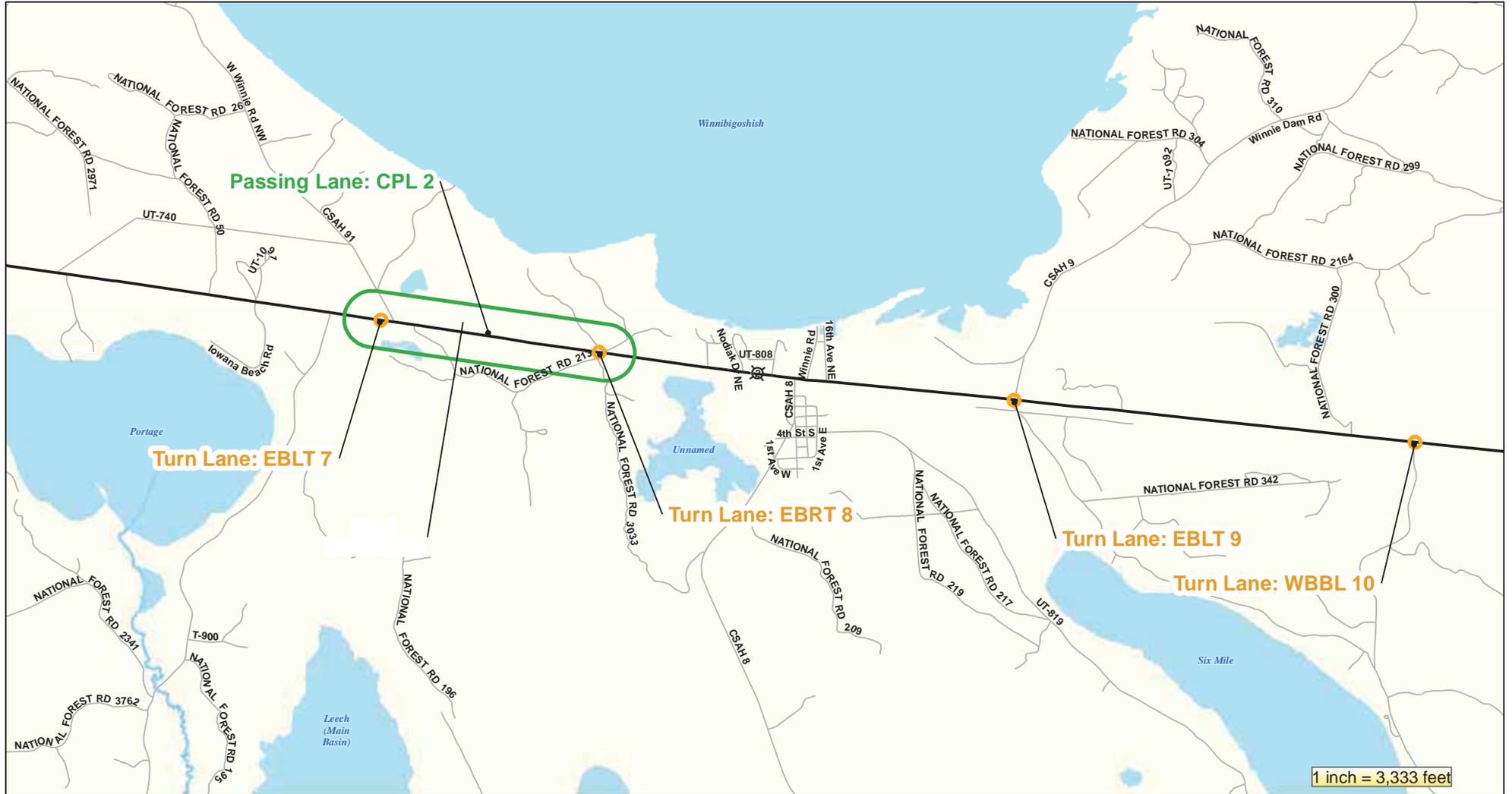
Legend

- Turn Lane Improvement
- Passing Lane



Document Path: \\mnspe-gis-file\GIS\Proj\mndot\224838\map_docs\MeetingMap_TH2 Passing Lanes_20130121.mxd

TH 2 Passing Lane and Turn Lane Proposed Improvements Cass Lake to Deer River - Central Passing Lane #2



Legend

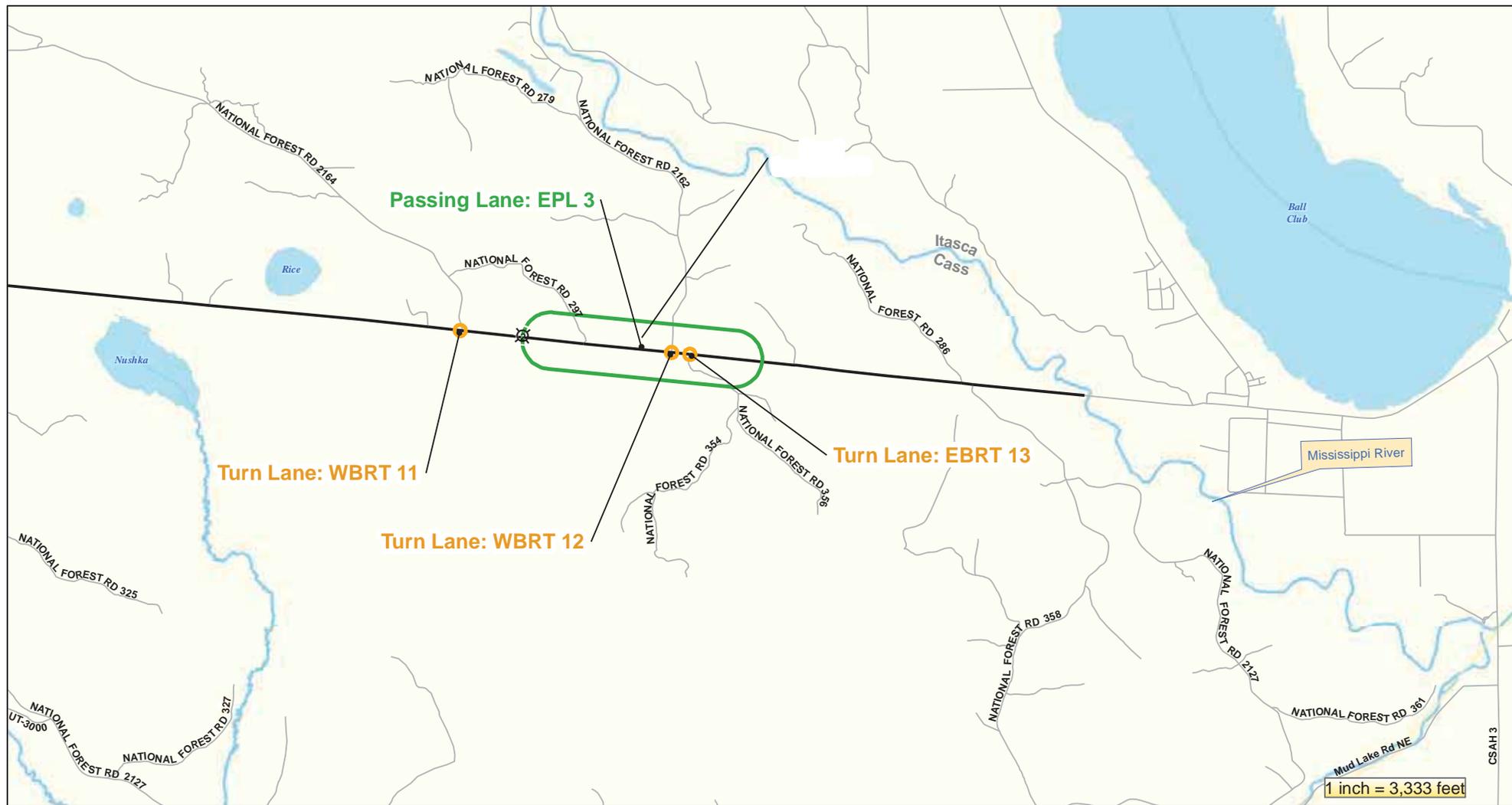
- Turn Lane Improvement
- Passing Lane

2013-04496-WAB
Page 3 of 20



Document Path: \\mnspe-gis-file\GIS\Proj\mndot\224838\map_docs\MeetingMap_TH2 Passing Lanes_20130121.mxd

TH 2 Passing Lane and Turn Lane Proposed Improvements Cass Lake to Deer River - East Passing Lane #3



Legend

- Turn Lane Improvement
- Passing Lane

2013-04496-WAB
Page 4 of 20



Document Path: \\mnspe-gis-file\GIS\Projects\mndot\224838\map_docs\MeetingMap_TH2 Passing Lanes_201301121.mxd

TH 2 S.P. 1102-62 Wetland Impacts

Station	UTM ZONE 15E	ID OF WETLAND BASIN IMPACTED	Twp, Range, Section	WETLAND CIRC. 39 TYPE / WETLAND PLANT COMMUNITY TYPE2	WETLAND IMPACT [Cut & Fill] (SF)	WETLAND IMPACT [Cut & Fill] (Acres)	Cut (SF)	Fill (SF)	Temp Fill (SF)	Wet Ditch
Passing Lane #1										
460+00	17216164.864, 1276627.966	1	T145N R30W Sect. 15	Type 7 Hardwood Swamp	1,567	0.04		1,567	1,865	
463+00-467+00	17216139.343, 1276995.712	2	T145N R30W Sect. 15	Type 7 Hardwood Swamp	4,691	0.11	1,636	3,055	4,465	
468+00-482+00	17216108.671, 1277515.944		T145N R30W Sect. 15	Wet Ditch						9,370
467+00-482+00	17216031.921, 1277477.915		T145N R30W Sect. 15	Wet Ditch						7,948
482+00-488+00	17216067.830, 1278985.825	3	T145N R30W Sect. 14	Type 6 Shrub Swamp	7,267	0.17	2,493	4,774	4,458	
482+00-490+00	17215869.273, 1278875.315	4	T145N R30W Sect. 14	Type 7 Hardwood Swamp	8,563	0.19	3,118	5,445	5,585	
488+00-495+00	17216051.743, 1279548.029		T145N R30W Sect. 14	Wet Ditch						6,083
495+00-501+00	17216034.734, 1280224.612	5	T145N R30W Sect. 14	Type 6 Shrub Swamp	5,747	0.14	1,575	4,172	5,082	
497+00-502+00	17215827.318, 1280502.490	6	T145N R30W Sect. 14	Type 7 Hardwood Swamp	2,933	0.07		2,933	3,891	
Turnlane										
580+00-585+00	17214978.291, 1289201.035	7	T145N R30W Sect. 13	Type 6 Shrub Swamp	3,536	0.08		3,536	5,240	
Turnlane										
740+00-743+00	17212025.411, 1304394.796	8		Type 6 Shrub Swamp	2,317	0.05		2,317	2,370	
Turnlane Extension										
279+00-282+00	No GPS	9	T145N R28W Sect. 29	Type 6 Shrub Swamp	1,641	0.04		1,641	2,825	
Passing Lane # 2										
299+00-305+00	17207605.403, 1328713.017		T145N R28W Sect. 29	Wet Ditch						8,710
297+00-313+00	17207588.056, 1328481.824		T145N R28W Sect. 29	Wet Ditch						21,616
305+00-308+00	17207518.371, 1329287.629	10	T145N R28W Sect. 29	Type 6 Shrub Swamp	8,772	0.20	6,484	2,288	3,871	
309+00-313+00	17207443.331, 1329659.581		T145N R28W Sect. 29	Wet Ditch						3,500
313+00-338+00	17207363.881, 1330101.733	11	T145N R28W Sect 29/28	Type 8 Coniferous Swamp	59,679	1.37	42,058	17,621	25,150	
313+00-338+00	17207299.203, 1330077.030	12	T145N R28W Sect 29/28	Type 8 Coniferous Swamp	65,460	1.50	46,625	18,835	30,325	
Passing Lane #3										
848+00-862+00	17199879.150, 1382692.443	13	T145N R26W Sect 36	Type 7 Hardwood Swamp	18,156	0.42	9,953	8,203	12,863	
848+00-865+00	17199879.140, 1382692.433	14	T145N R26W Sect 36	Type 6 Shrub Swamp	43,144	1.00		43,114	16,937	
867+00-896+00	17199268.363, 1386777.623	15	T145N R26W Sect 31	Type 6 Shrub Swamp	17,921	1.62	1,248	69,684	19,141	
875+00-885+00	17199338.907, 1386663.423	16	T145N R26W Sect 31	Type 6 Shrub Swamp	17,921	0.87	25,273	12,640	10,372	
908+00-913+00	17199033.995, 1388961.464	17	T145N R26W Sect 31	Type 6 Shrub Swamp	10,822	0.25	10,822		5,299	

TH 2 S.P. 1102-62 Wetland Impacts

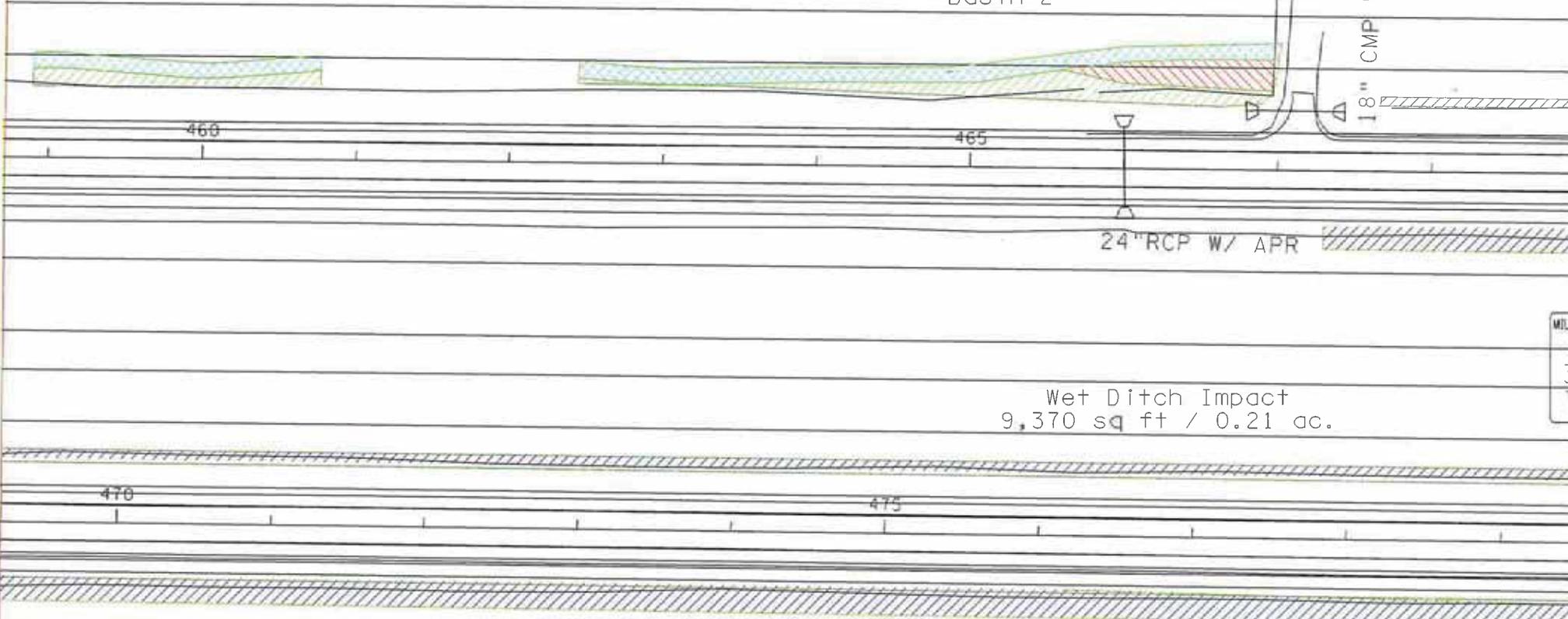
Station	UTM ZONE 15E	ID OF WETLAND BASIN IMPACTED	Twp, Range, Section	WETLAND CIRC. 39 TYPE/ WETLAND PLANT COMMUNITY TYPE2	WETLAND IMPACT [Cut & Fill] (SF)	WETLAND IMPACT [Cut & Fill] (Acres)	Cut (SF)	Fill (SF)	Temp Fill (SF)	Wet Ditch
913+00-929+00	17198905.868, 1389477.695	18	T145N R26W Sect 31/32	Type 6 Shrub Swamp	35,876	0.82	35,876		15,850	
917+00-929+00	17198925.869, 1389866.544	19	T145N R26W Sect 31/32	Type 6 Shrub Swamp	30,481	0.70	30,481		12,007	
				TOTALS ACRES		9.64 ac.	5.0 ac.	4.64 ac.	4.31 ac.	1.31ac.
				TOTAL SQ. FT.	419,467		217,642	201,825	187,596	57,227

PASSING LANE #1

Approx Wetland Impact
 1,567 sq ft / 0.04 ac. fill
 1,865 sq ft / 0.04 ac. temp
 Type 7
 Basin 1

Approx Wetland Impact
 3,055 sq ft / 0.07 ac. fill
 1,636 sq ft / 0.04 ac. cut
 4,465 sq ft / 0.10 ac. temp
 Type 7
 Basin 2

CMP W/SAFETY APR



Wet Ditch Impact
 9,370 sq ft / 0.21 ac.

Wet Ditch Impact
 7,948 sq ft / 0.18 ac.

EROSION CONTROL / WETLAND IMPACT LEGEND	
	DRAINAGE FLOW ARROW
	DITCH CHECK TYPE 1
	DITCH CHECK TYPE 2
	DITCH CHECK TYPE 3
	DITCH CHECK TYPE 5
	DITCH CHECK TYPE 7
	RIPRAP NON-STANDARD
	EROSION CONTROL BLANKET MAT
	MS SILT FENCE, MACHINE SLICED
	BR SILT FENCE, BIOROLL
	WETLAND IMPACT (FILL)
	WETLAND IMPACT (CUT)
	WETLAND IMPACT (TEMP.)
	RIPRAP OUTLET
	WET DITCH

I HEREBY CERTIFY THAT THIS PLAN SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

ENGINEER *John Hill* LIC. NO. 47554

2013-04496-WAB

Page 7 of 20

WETLAND IMPACT PLAN SHEET

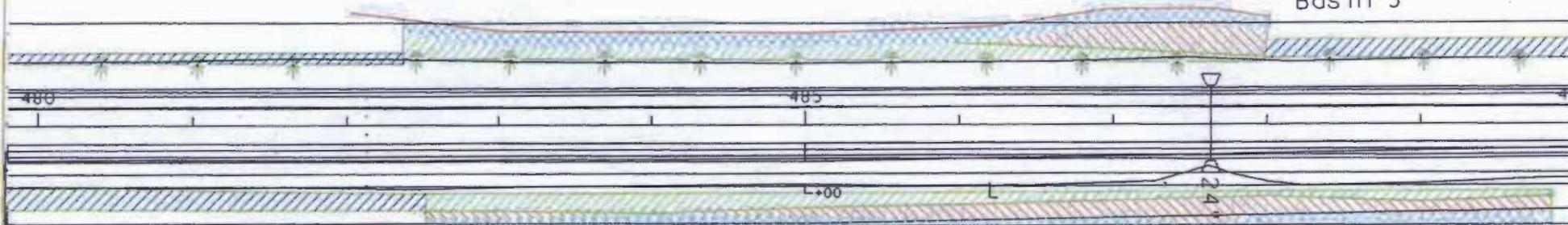
S.P. 1102-62 T.H 2

SHEET OF SHEETS

PASSING LANE #1

Approx. Wetland Impact
 4,774 sq ft / 0.11 ac. fill
 2,493 sq ft / 0.06 ac. cut
 4,458 sq ft / 0.10 ac. temp

Type 6
 Basin 3



Approx Wetland Impact
 5,445 sq ft / 0.12 ac. fill
 3,118 sq ft / 0.07 ac. cut
 5,585 sq ft / 0.13 ac. temp

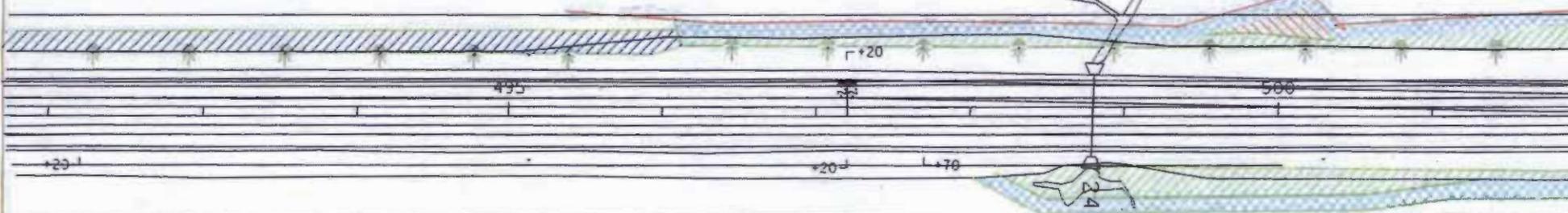
Type 7
 Basin 4

24" RCP W/ APR

Wet Ditch Impact
 6,083 sq ft / 0.14 ac.

Approx. Wetland Impact
 4,172 sq ft / 0.10 ac fill
 1,575 sq ft / 0.04 ac cut
 5,082 sq ft / 0.11 temp

Type 6
 Basin 5



Approx. Wetland Impact
 2,933 sq ft / 0.07 ac fill
 3,891 sq ft / 0.09 ac temp

Type 7
 Basin 6

24" RCP W/ APR

I HEREBY CERTIFY THAT THIS PLAN SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

ENGINEER

John Hill

LIC. NO. 47554

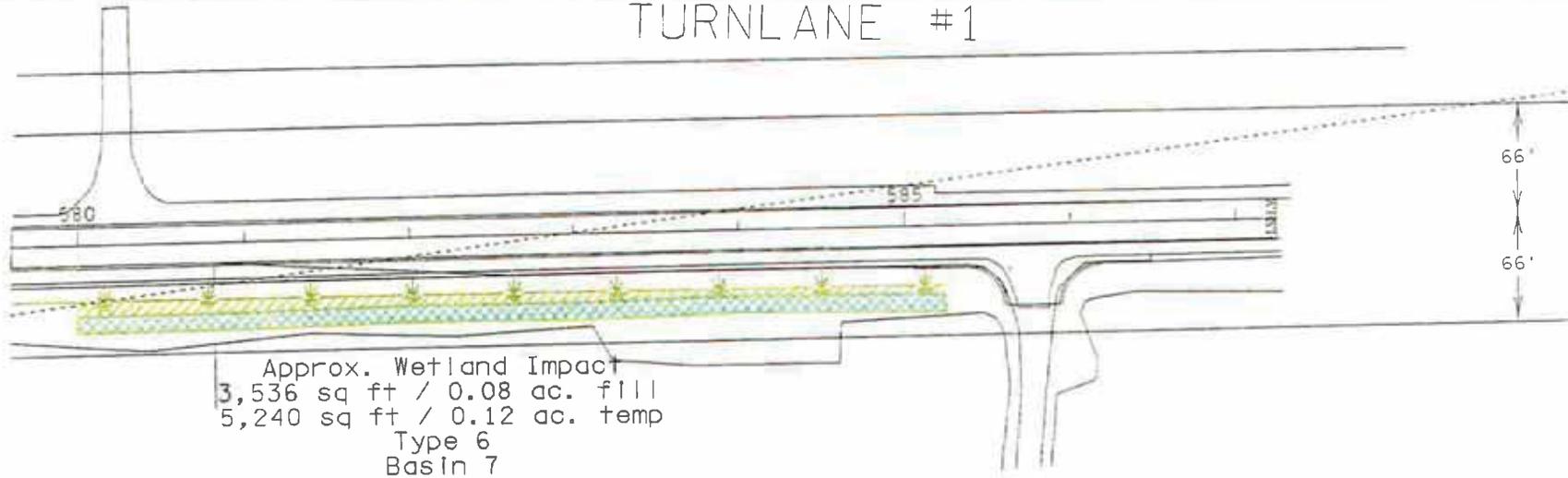
2013-04496-WAB

WETLAND IMPACT PLAN SHEET

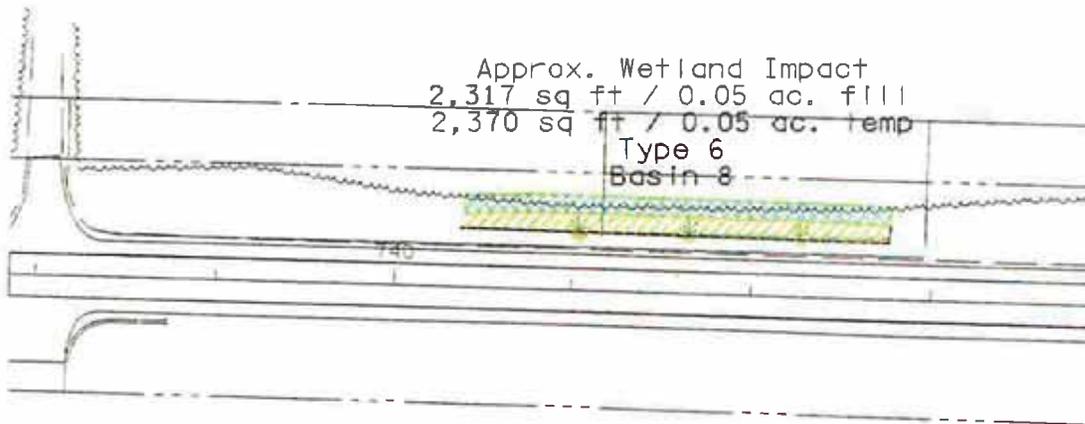
S.P. Page 8 of 20 H 2

SHEET OF SHEETS

TURNLANE #1



TURNLANE #2



EROSION CONTROL / WETLAND IMPACT LEGEND	
	RAINAGE FLOOR ARROW
	DITCH CHECK TYPE 1
	DITCH CHECK TYPE 2
	DITCH CHECK TYPE 3
	DITCH CHECK TYPE 4
	DITCH CHECK TYPE 5
	STORM INLET
	WET LOT
	AERIAL NON-STANDARD
	EROSION CONTROL BLANKET CAT 3
	SILT FENCE, MACHINE RICED
	SILT FENCE, BIOBROLL
	WETLAND IMPACT (FILL)
	WETLAND IMPACT (CUT)
	WETLAND IMPACT (TEMP.)

I HEREBY CERTIFY THAT THIS PLAN SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

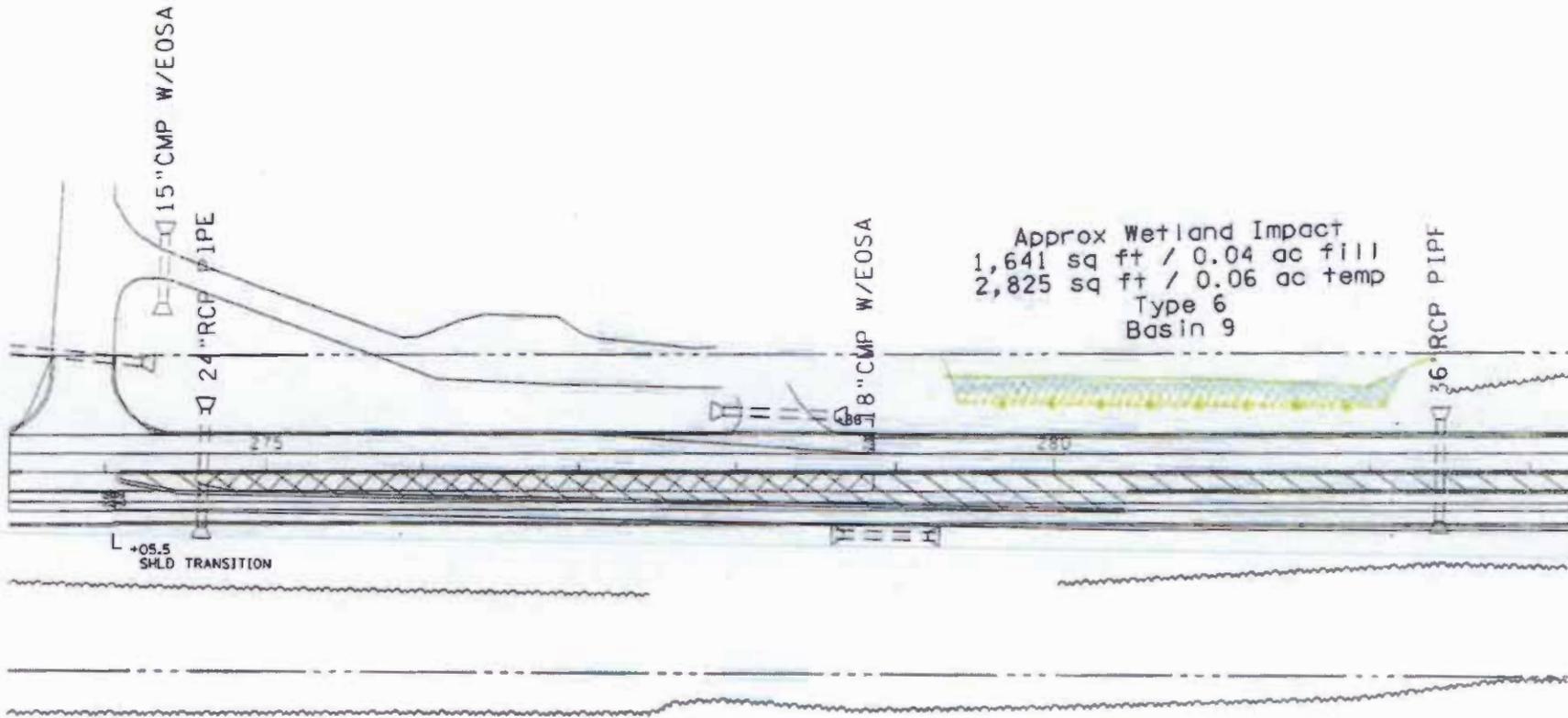
ENGINEER Sam Hill LIC. NO. 47584

2013-04496-WAB WETLAND IMPACT PLAN SHEET

S.P. 1102-62 T.H. 2

SHEET OF SHEETS

TURNLANE EXTENSION



I HEREBY CERTIFY THAT THIS PLAN SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN.

ENGINEER Tom Bell LIC. NO. 37557

S.P. 1102-62 T.H. 2

WETLAND IMPACT PLAN SHEET

2013-04496-WAB
Page 10 of 20

SHEET OF SHEETS

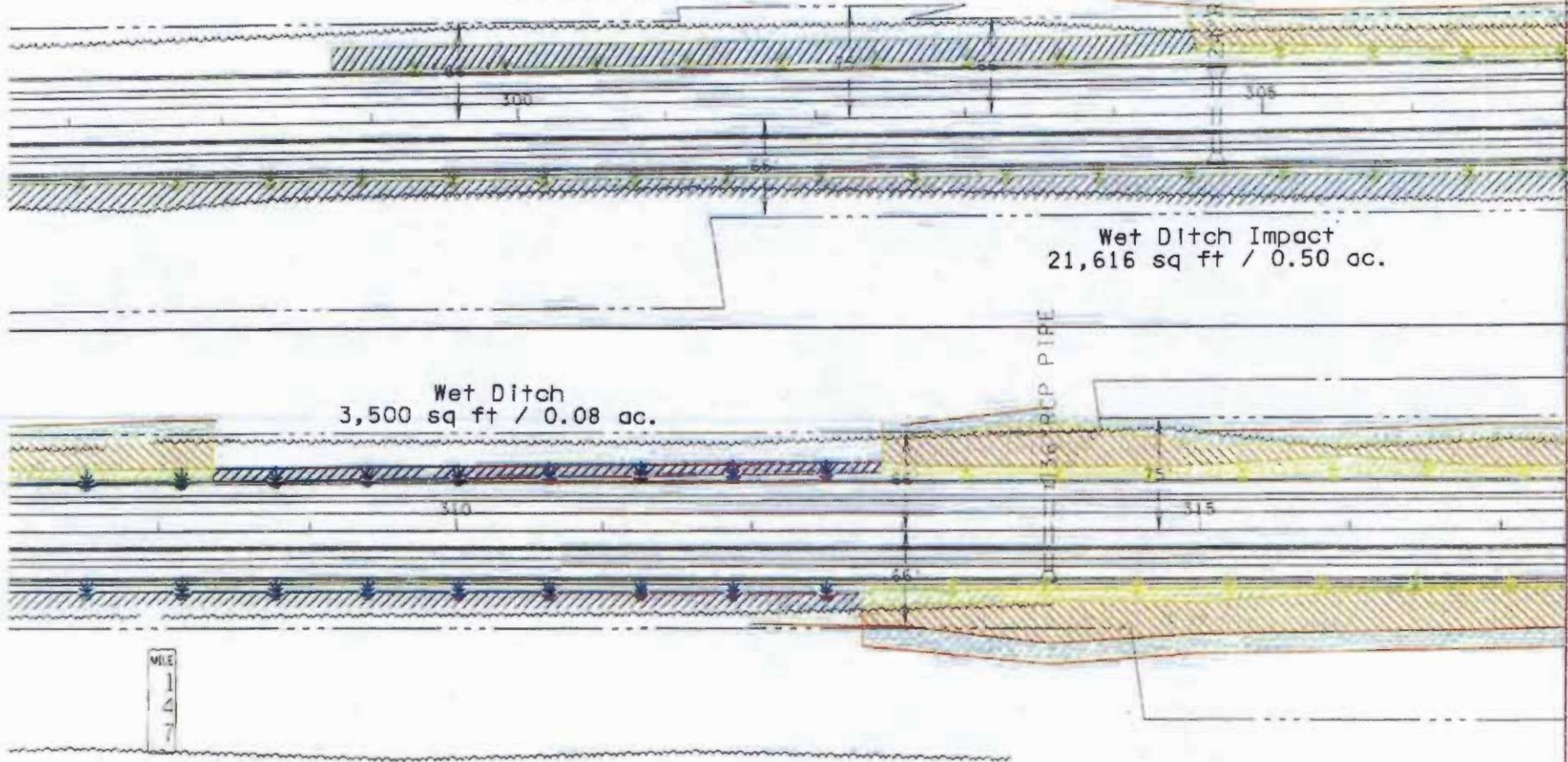
PASSING LANE #2

Approx. Wetland Impact
 2,288 sq. ft. / 0.05 ac. fill
 6,484 sq. ft. / 0.15 ac. cut
 3,871 sq. ft. / 0.09 ac. temp
 Type 6
 Basin 10

Wet Ditch Impact
 8,710 sq ft / 0.20 ac.

Wet Ditch Impact
 21,616 sq ft / 0.50 ac.

Wet Ditch
 3,500 sq ft / 0.08 ac.



I HEREBY CERTIFY THAT THIS PLAN SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

ENGINEER *[Signature]* L.I.C. NO. 47553

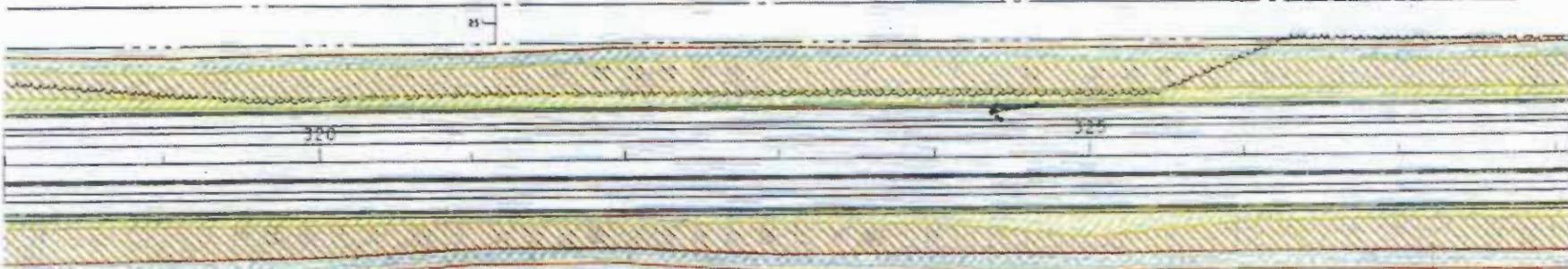
WETLAND IMPACT PLAN SHEET

S.P. 1102-62 I.H. 2

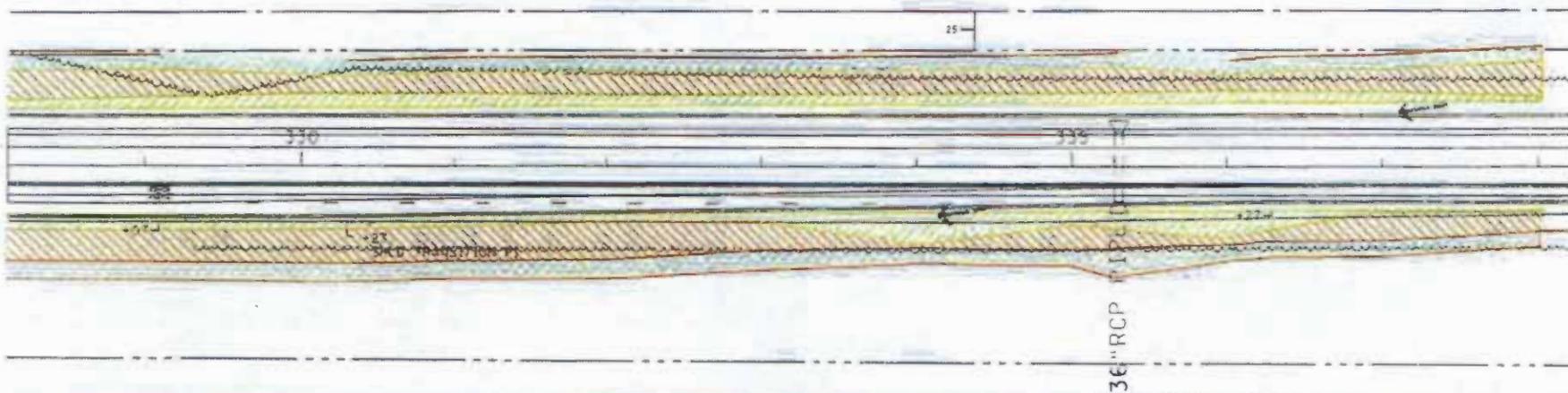
SHEET OF SHEETS

PASSING LANE #2

Approx. Wetland Impact
17,621 sq ft / 0.40 ac. fill
42,058 sq ft / 0.97 ac. cut
25,150 sq ft / 0.58 ac temp
Type 8
Basin 11



Approx. Wetland Impact
18,835 sq ft / 0.43 ac. fill
46,625 sq ft / 1.1 ac cut
30,325 sq ft / 0.67 ac. temp
Type 8
Basin 12



I HEREBY CERTIFY THAT THIS PLAN SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN.

ENGINEER [Signature] C.I.C. NO. 37500

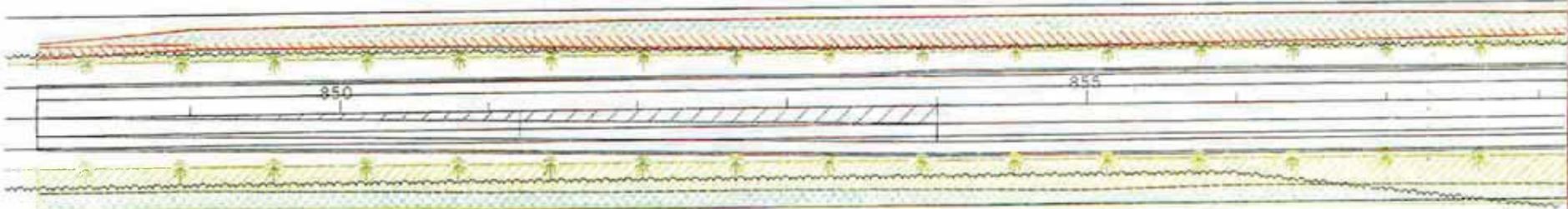
S.P. 1102-62 T.H. 2

WETLAND IMPACT PLAN SHEET

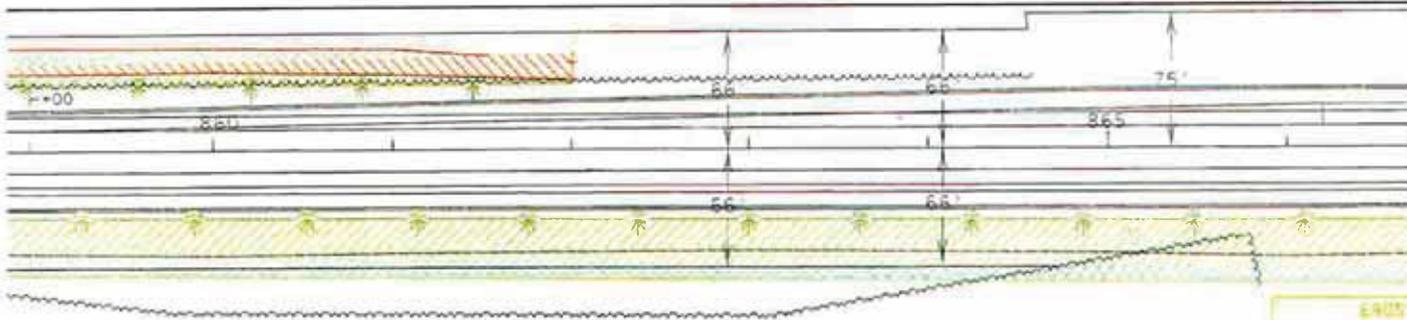
SHEET OF SHEETS

PASSING LANE #3

Approx. Wetland Impact
 8,203 sq ft / 0.19 ac. fill
 9,953 sq ft / 0.23 ac. cut
 12,863 sq ft / 0.30 ac. temp
 Type 7
 Basin 13



Approx. Wetland Impact
 43,114 sq ft / 1.0 ac. fill
 16,937 sq ft / 0.39 ac. temp
 Type 6
 Basin 14

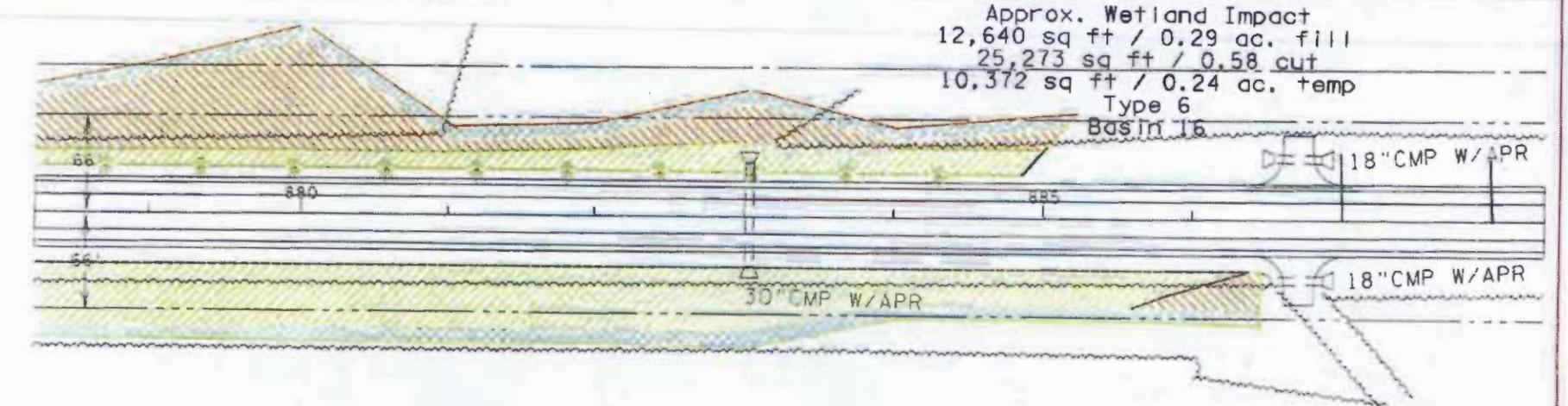


I HEREBY CERTIFY THAT THIS PLAN SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 ENGINEER *John H. Hars* LIC. NO. 47554

PASSING LANE #3



Approx. Wetland Impact
 69,684 sq ft / 1.60 ac. fill
 1,248 sq ft / 0.03 ac. cut
 19,141 sq ft / 0.44 ac. temp
 Type 6
 Basin 15



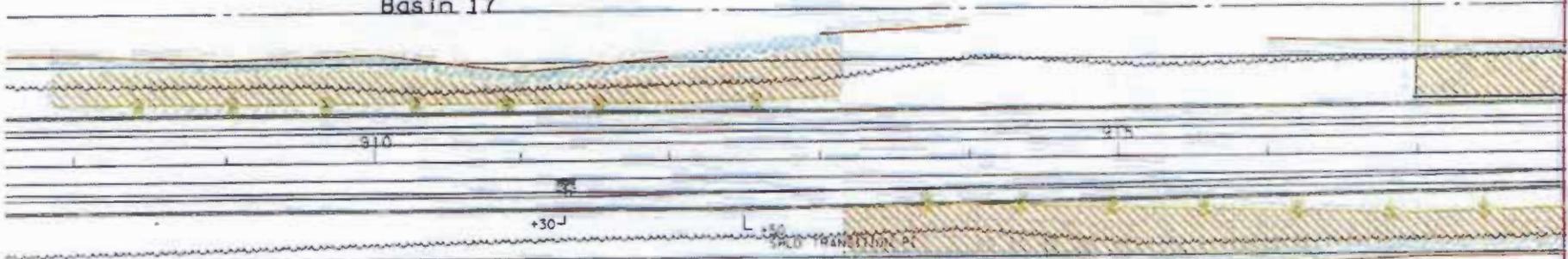
Approx. Wetland Impact
 12,640 sq ft / 0.29 ac. fill
 25,273 sq ft / 0.58 ac. cut
 10,372 sq ft / 0.24 ac. temp
 Type 6
 Basin 16

I HEREBY CERTIFY THAT THIS PLAN SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A GULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 ENGINEER _____ LIC. NO. 47114

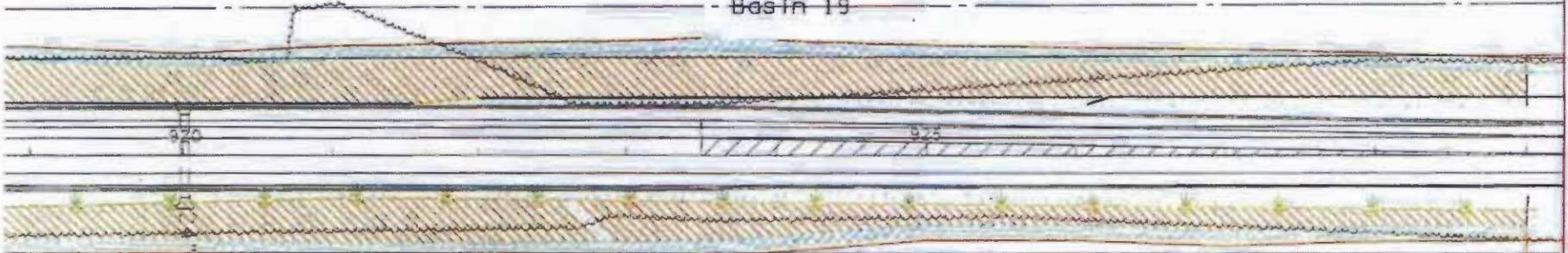
WETLAND IMPACT PLAN SHEET
 S.P. 1102-62 I.H. 2 SHEET OF SHEETS

PASSING LANE #3

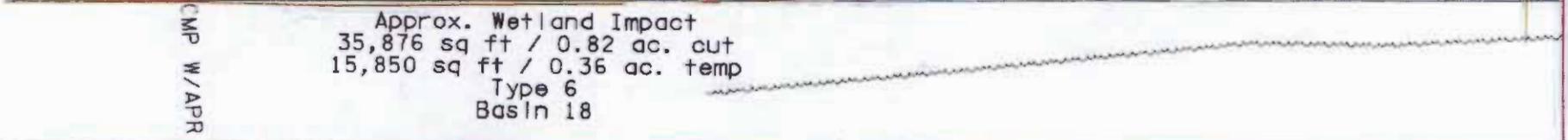
Approx. Wetland Impact
10,822 sq ft / 0.25 ac. cut
5,299 sq ft / 0.12 ac. temp
Type 6
Basin 17



Approx. Wetland Impact
30,481 sq ft / 0.70 ac. cut
12,007 sq ft / 0.28 ac. temp
Type 6
Basin 19



Approx. Wetland Impact
35,876 sq ft / 0.82 ac. cut
15,850 sq ft / 0.36 ac. temp
Type 6
Basin 18



I HEREBY CERTIFY THAT THIS PLAN SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

ENGINEER

LIC. NO.

07094

WETLAND IMPACT PLAN SHEET

S.P.

1102-62 T.H. 2

SHEET OF SHEETS

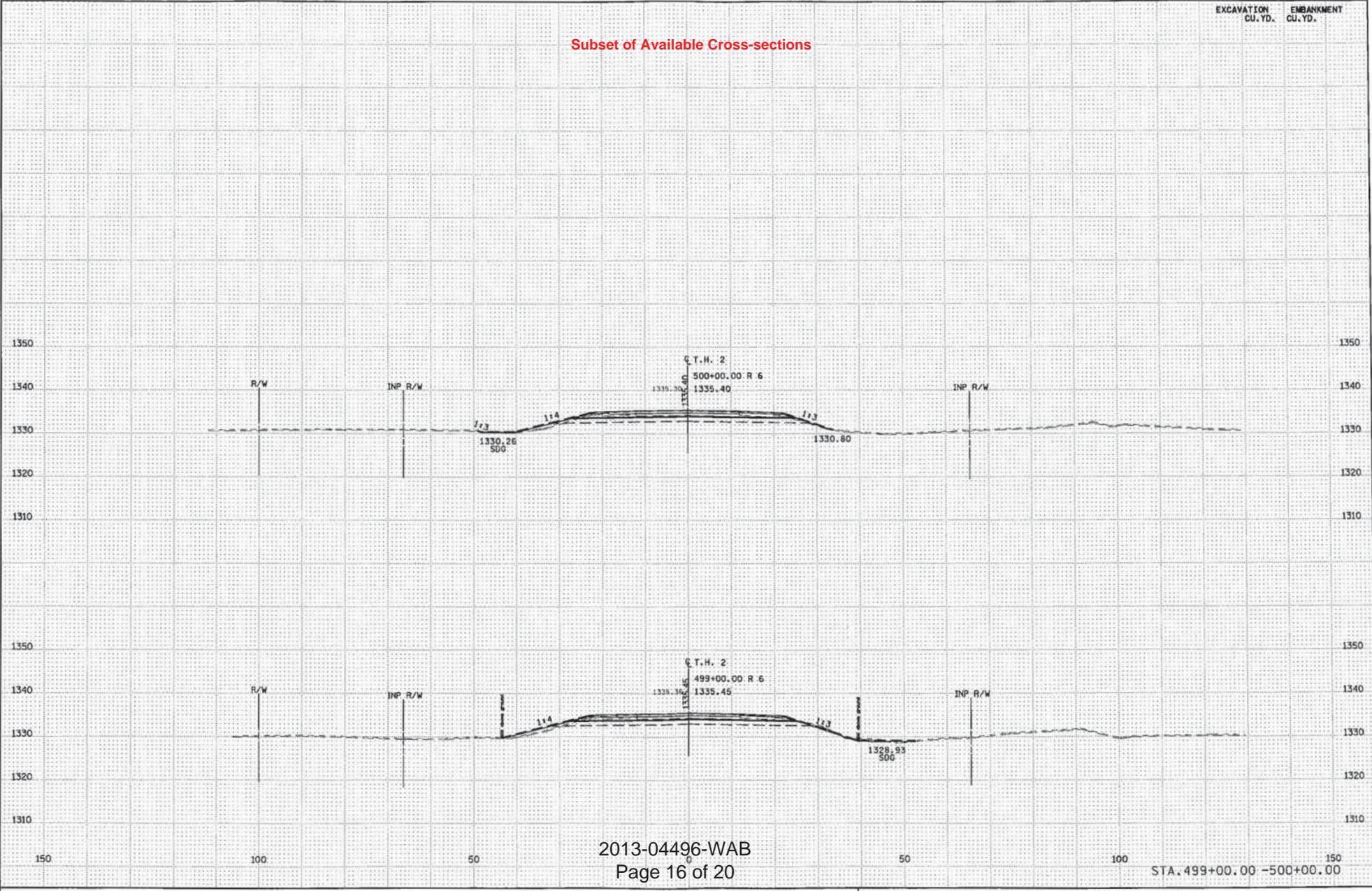
EXCAVATION
CU. YD.

EMBANKMENT
CU. YD.

Subset of Available Cross-sections

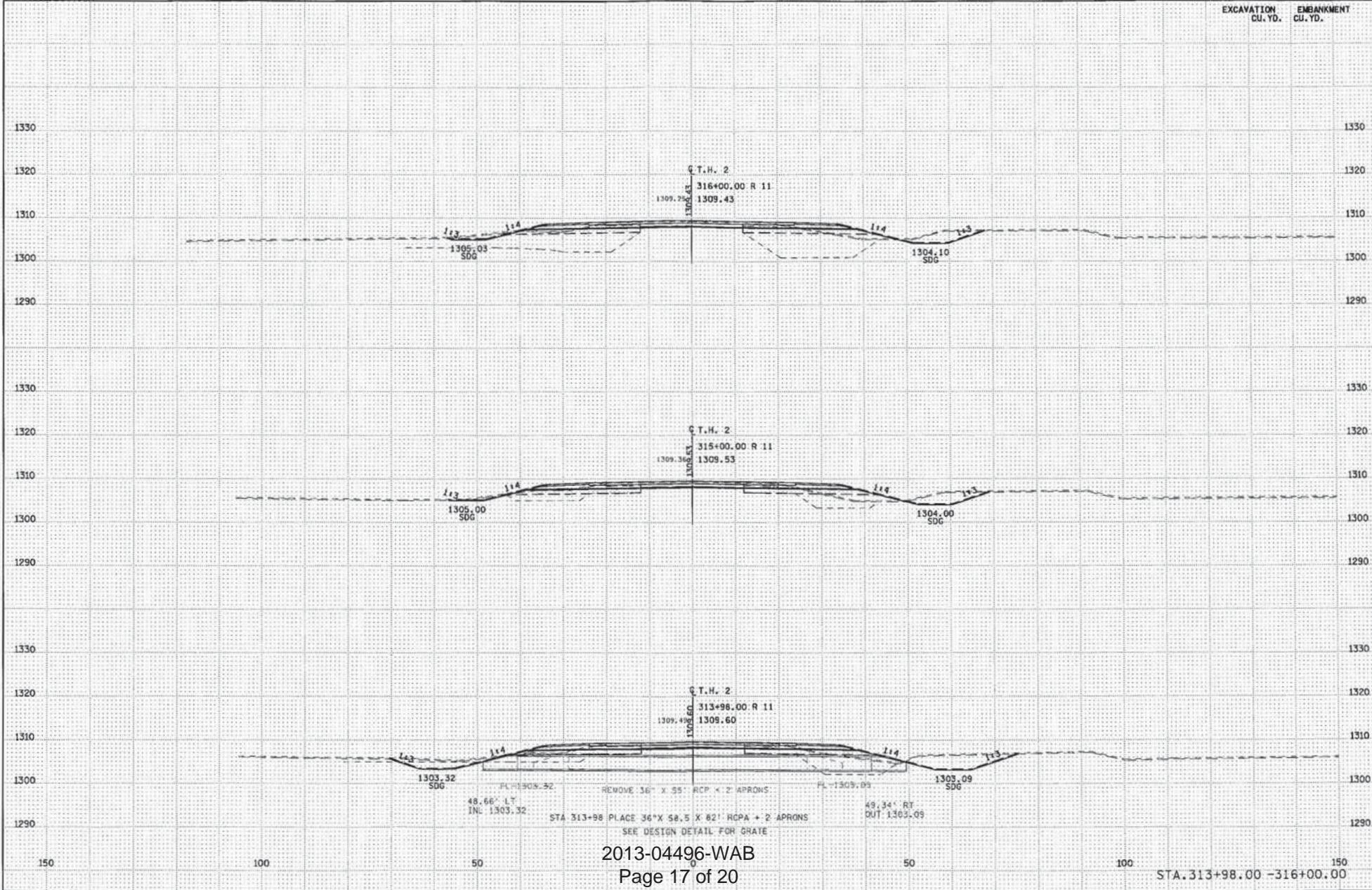
PLOTTED/REVISED: 18-MAR-2014

DISTRICT: 0 - Bismarck
 IFLDT NAME: 22110252.dwg
 PATH & FILENAME: Proj\02\02_BMU\002\1102\062\Design\22110252_rpt.dgn



EXCAVATION
CU. YD.

EMBANKMENT
CU. YD.



2013-04496-WAB
Page 17 of 20

STA. 313+98.00 - 316+00.00

STATE PROJ. NO. 1102-62 (TH 2) SHEET NO. X71 OF X100 SHEETS

DISTRICT #: Bcm6/jj
 IPLOT NAME: 20130222.vp
 PATH & FILENAME: Projects\02_BM\1002\1002\062\Design\20130222_vp.dgn

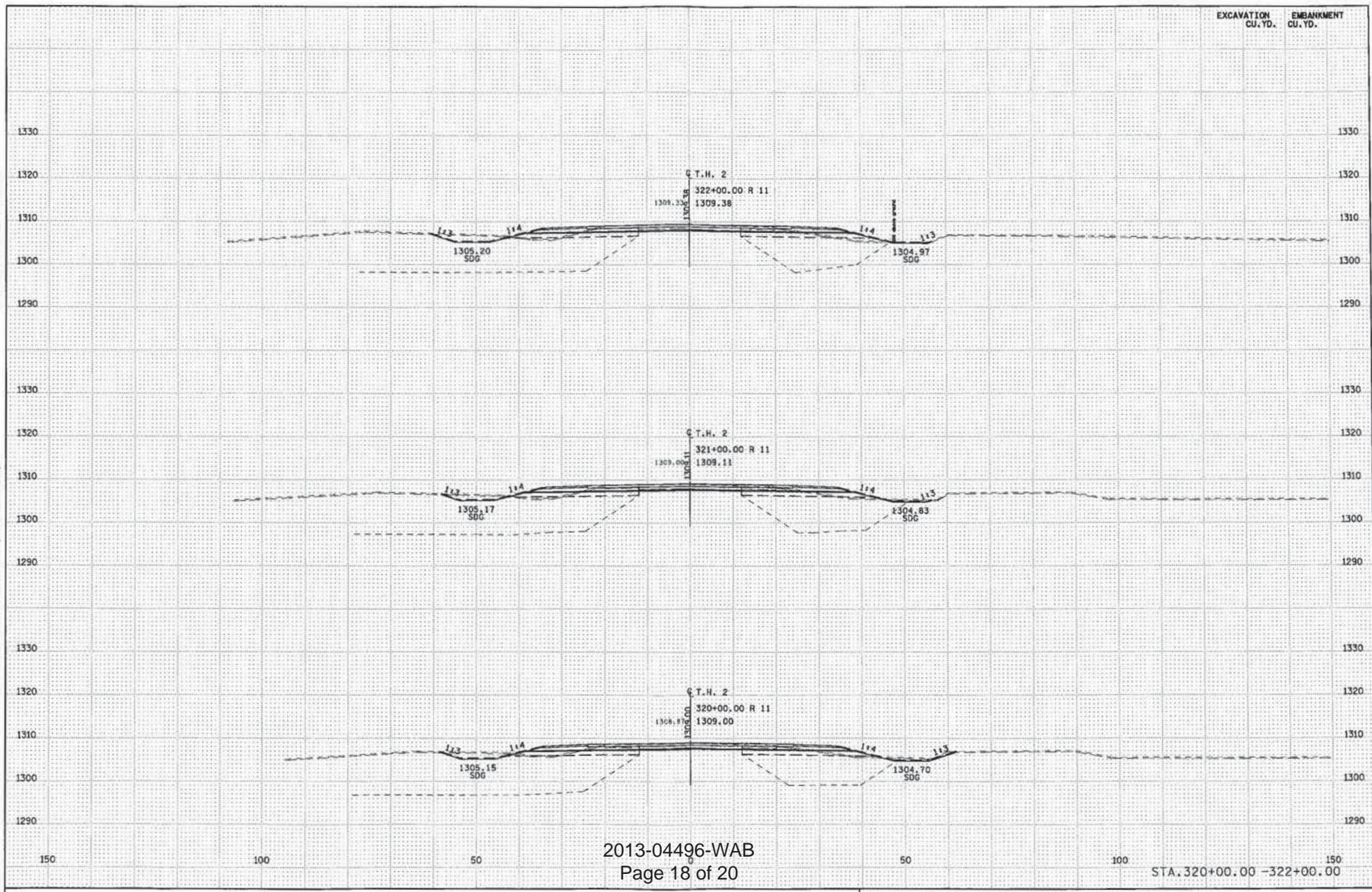
PLOTTED/REVISED: 18-MAR-2014

EXCAVATION
CU. YD.

EMBANKMENT
CU. YD.

PLOTTED/REVISED: 18-MAR-2014

DISTRICT: 11 - Board II
 PLOT NAME: 20110262.rpl
 PATH & FILENAME: Proj\11\1102-62\1102-62\Design\20110262.rpl.dgn

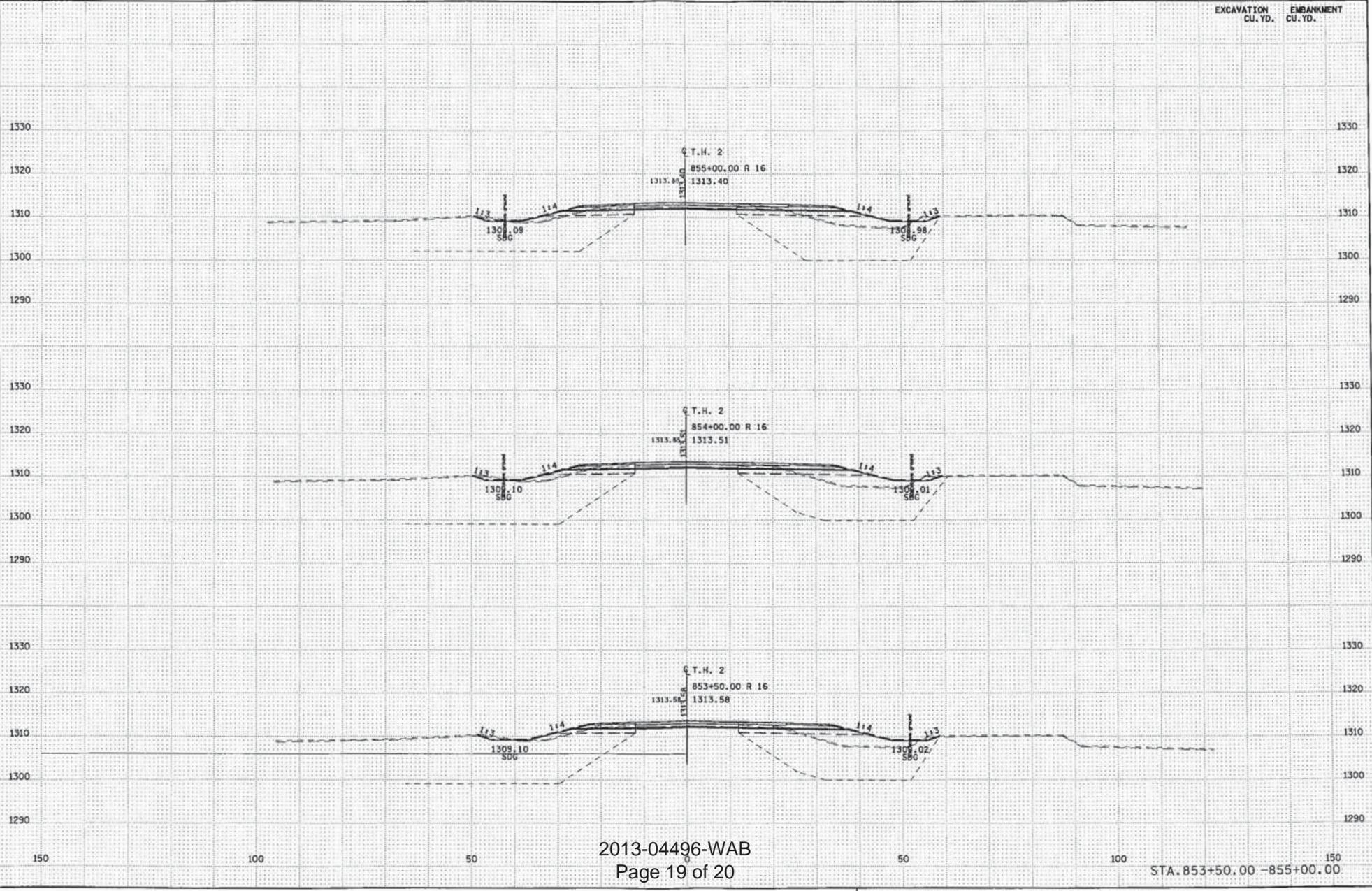


EXCAVATION
CU. YD.

EMBANKMENT
CU. YD.

PLOTTED/REVISED: 19-MAR-2014

DISTRICT: 1 Bawdell
PLOT NAME: 2010262.dwg
PATH & FILENAME: Projects\02-BMU\002\1102\662\Design\2010262_plt.dgn



2013-04496-WAB
Page 19 of 20

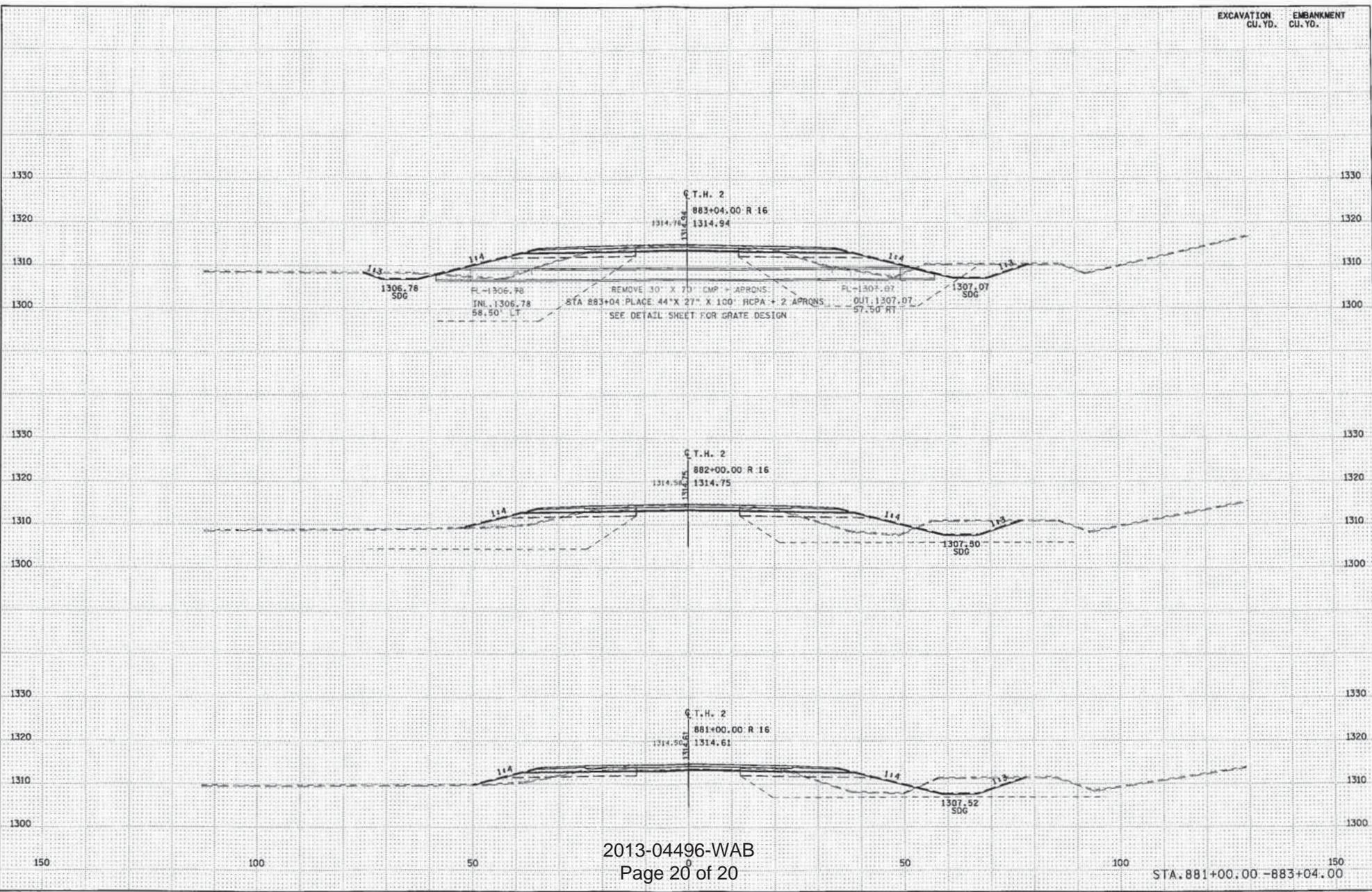
STA. 853+50.00 - 855+00.00

STATE PROJ. NO. 1102-62 (TH 2) SHEET NO. X96 OF X100 SHEETS

EXCAVATION
CU. YD.

EMBANKMENT
CU. YD.

PLOTTED/REVISED: 18-MAR-2014



DISTRICT: - Bend/JJ
 PLOT NAME: 20130222.plt
 PATH & FILENAME: Projects\02_BNA\002\1102\062\Design\20130222.plt.dgn