



**Eastern Irrigation District
County of Newell**

**Drain Rehabilitation
3 Year Plan**

2011/2012 to 2013/2014

Drain Rehabilitation Plan

2011/2012 to 2013/2014

Main Index

Year	Page
2011/2012 Projects	7
2012/2013 Projects	-
2013/2014 Projects	-

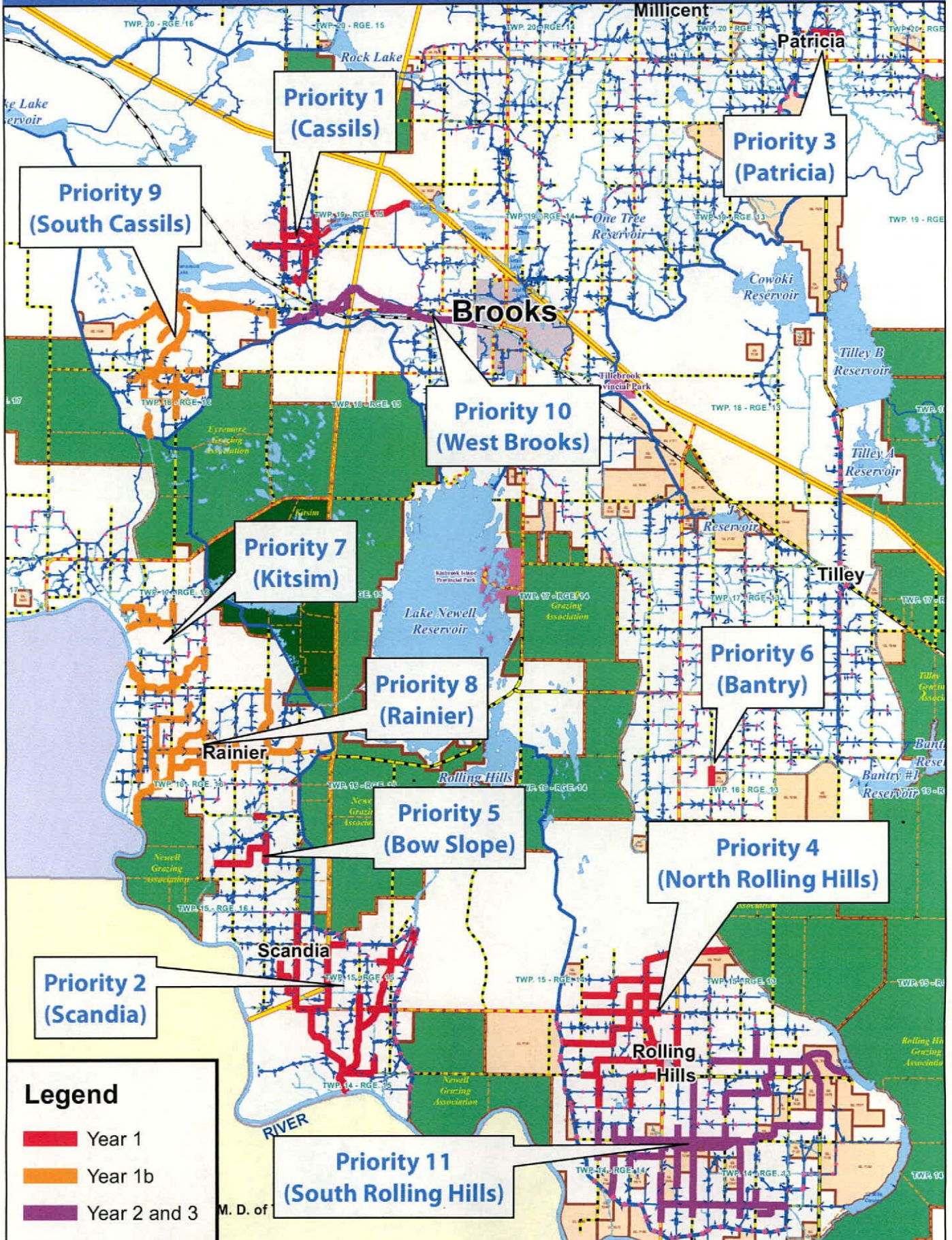
Drain Rehabilitation Plan

2011/2012 to 2013/2014

Priority	Area of Drainage	Proposed Construction Year	Page
1	Cassils	1	8
2	Scandia	1	12
3	Patricia	1	16
4	North Rolling Hills	1	20
5	Bow Slope	1	24
6	Bantry	1	28
7	Kitsim	1b	32
8	Rainier	1b	36
9	South Cassils	1b	40
10	West Brooks	2 and 3	44
11	South Rolling Hills	2 and 3	48

- We propose to construct priorities 1 through 6 in the first year and priorities 7, 8 and 9 if possible, (time and money allowing).
- Survey and design priorities 10 and 11 for future construction.
- Complete the rating of drains to fill in 2nd and 3rd year of plan by summer so survey and design can start.

General Site Plan - 2011/2012



Eastern Irrigation District County of Newell

Area of Drainage: 01 (Cassils)
Proposed Construction Year: 1

Notes:

Existing drains are flat, EID drains don't work very well.

Need to do extensive surveys because most road ditches don't drain.

Existing road drains along sections 8 and 17 have too steep of side slopes and need extra right-of-way.
Need to look at lowering Johnsons Lake to create grade.

It is desirable to construct drains along roads east and north sides of section 7, but existing are deeper than EID drains and therefore don't drain and just become long ponds.

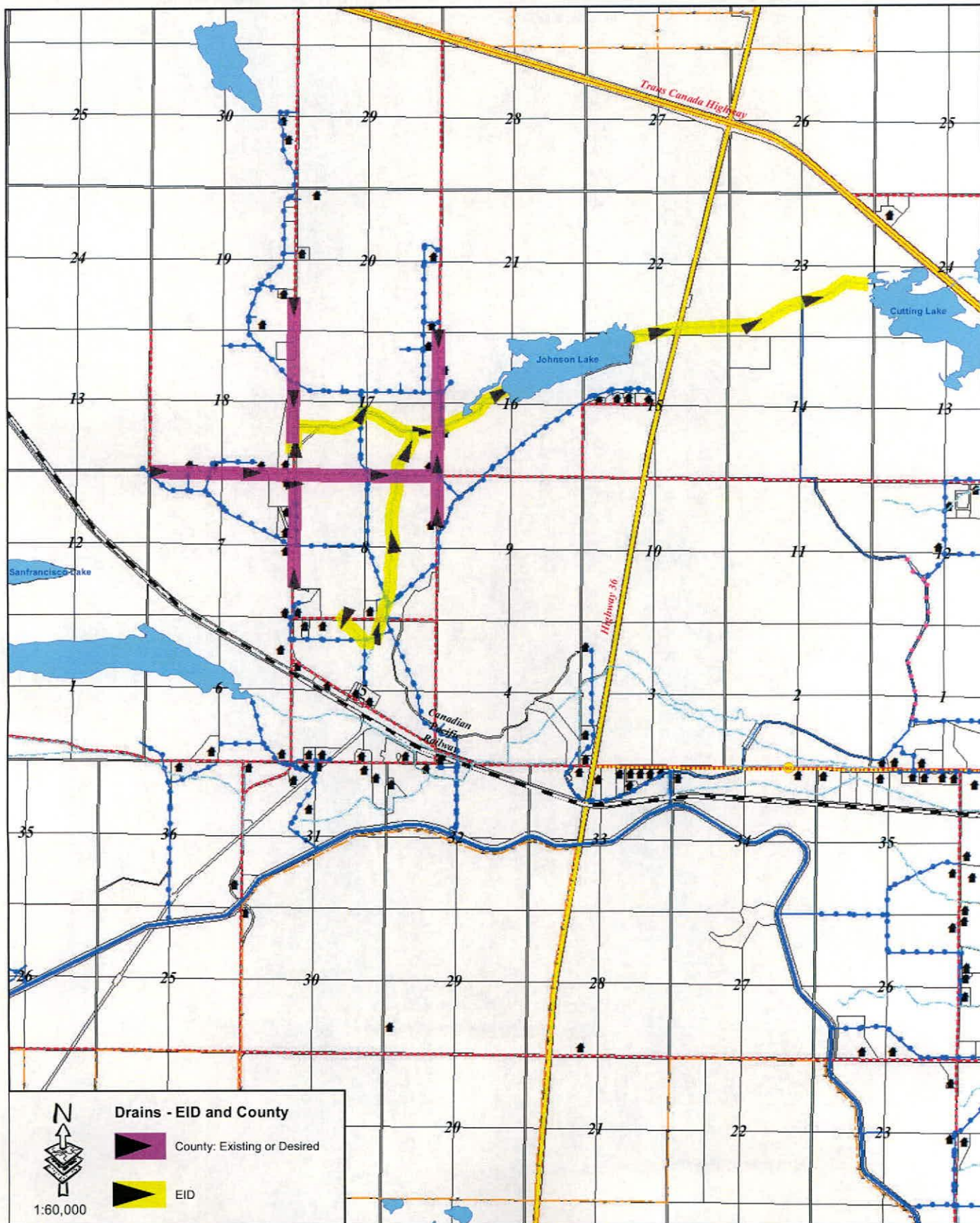
Need to replace at least 3 road crossings and possibly 4 farm crossings.

Drain Area Location Plan

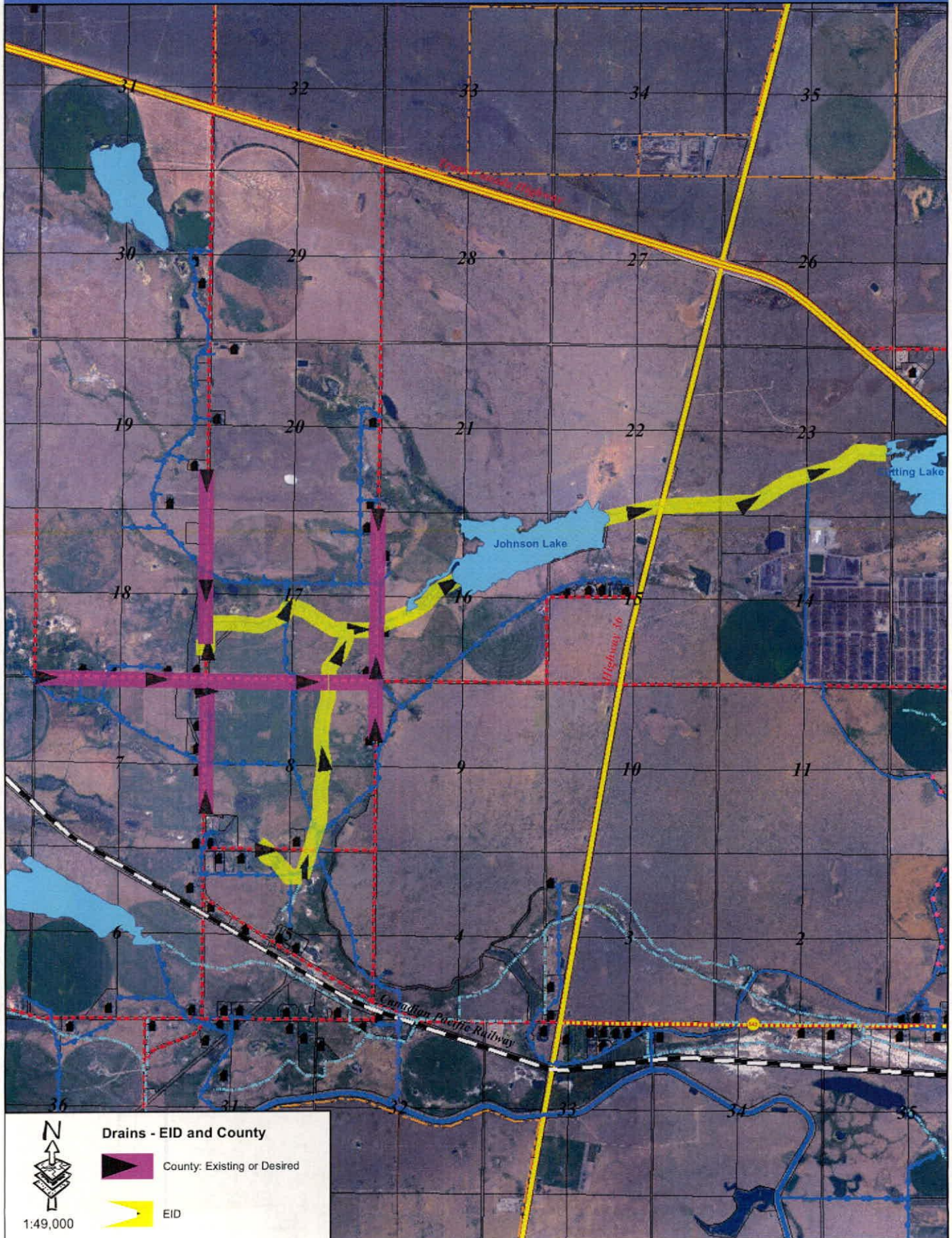
Area of Drainage

01 (Cassils)

Year 1



Drainage Area Site Plan



Eastern Irrigation District County of Newell

Area of Drainage: 06 (Scandia) Proposed Construction Year: 1

Notes:

Road drain along West side of Sect. 20 and 29 is deep and steep. Culvert to yard appears to block flow. Need right-of-way and move power lines or move drain in NW Sect. 20 Twp. 15 Rge. 15 W4M totally into property (owned by the County of Newell) and deepen the drain in the SE Sect. 20 Twp. 15 Rge. 15.

Eid drain needs cleaning through Sect. 8 and 17 Twp. 15 Rge. 15 W4M.

Main drain from Sect. 22 Twp. 15 Rge. 15 W4M to botton needs to be re-done.

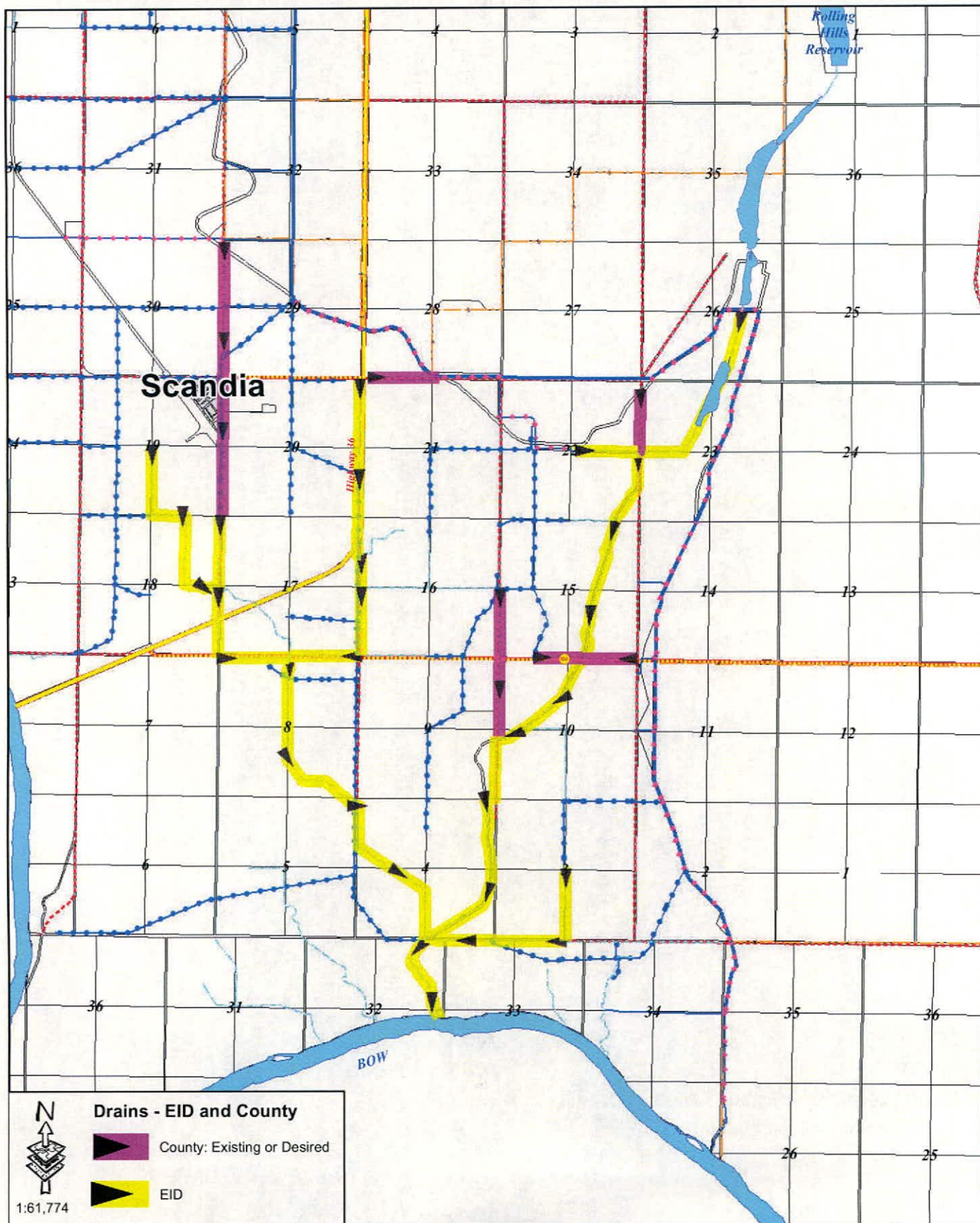
County requires (would like to get) drain along North and East of Sect. 21 Twp. 15 Rge. 15 W4M and between Sect. 9 and 10 Twp. 15 Rge. 15 W4M, doesn't go anywhere today. Will require right-of-way, power and/or telephone lines are in the way.

Drain Area Location Plan

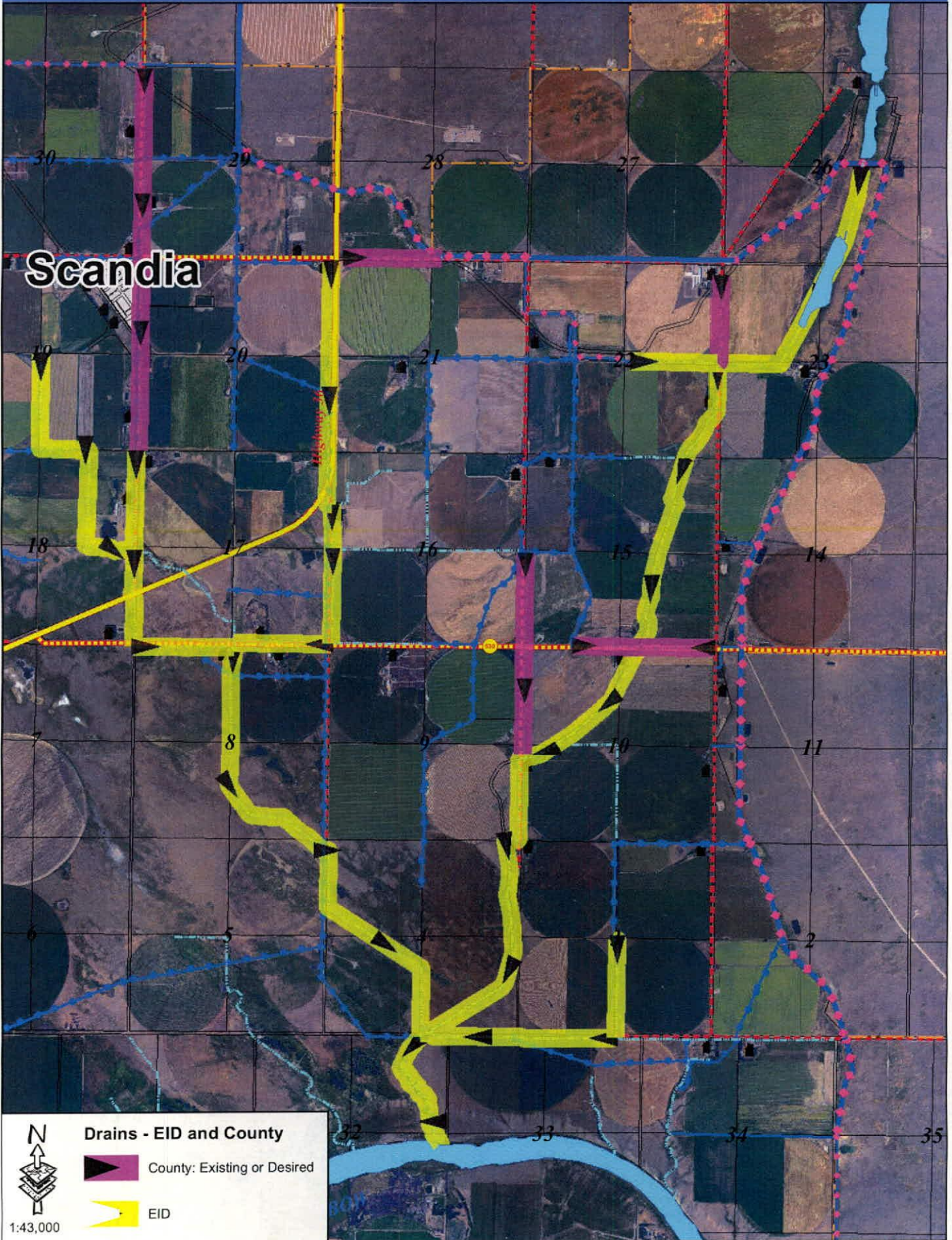
Area of Drainage

06 (Scandia)

Year 1



Drainage Area Site Plan



1991-1992

1992-1993

1993-1994

1994-1995

1995-1996

1996-1997

1997-1998

1998-1999

Eastern Irrigation District County of Newell

**Area of Drainage: 10 (Patricia)
Proposed Construction Year: 1**

Notes:

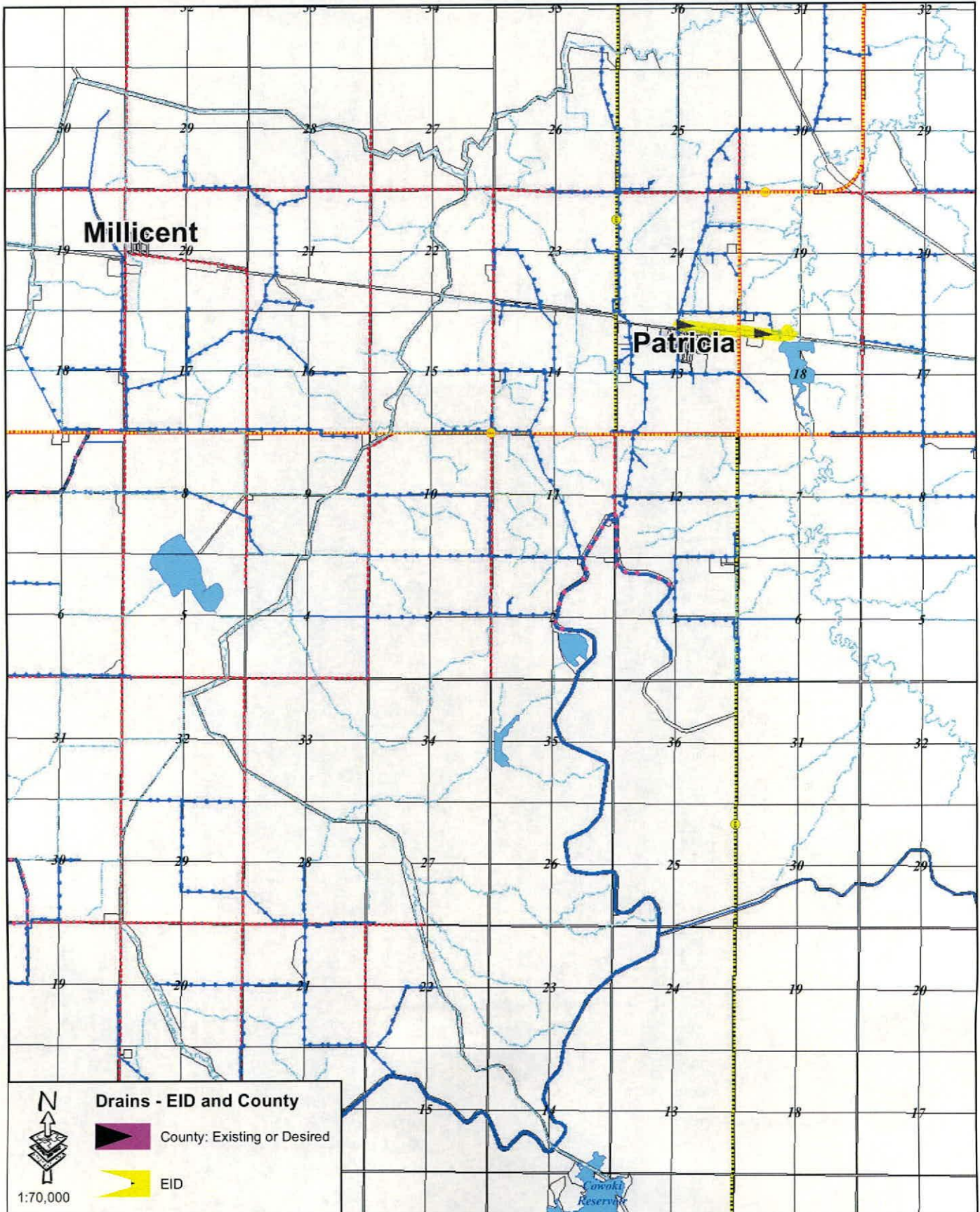
EID drain for first 1/2 mile needs to be lowered, second 1/2 mile may need grade control to accept water from the Hamlet of Patricia.

Drain Area Location Plan

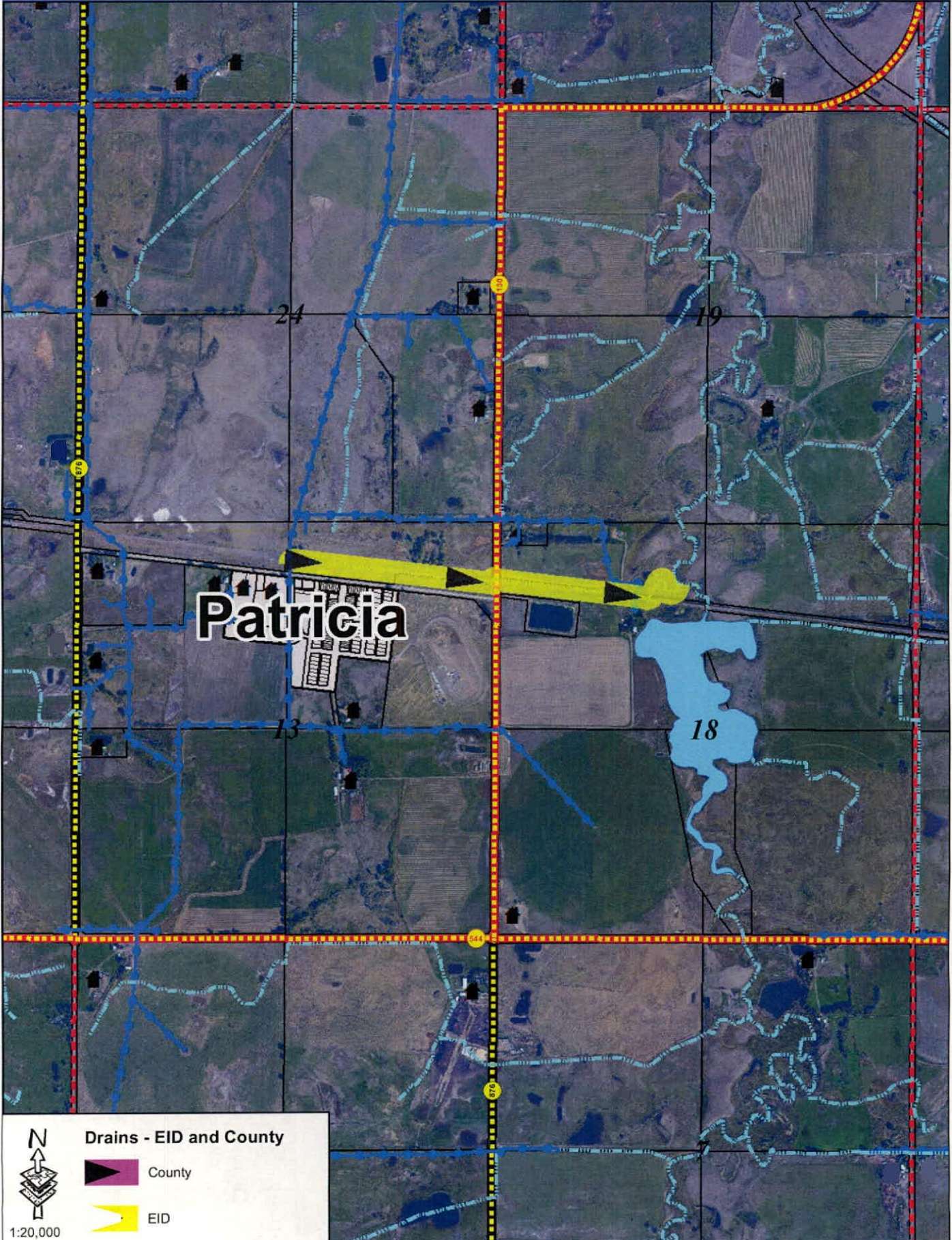
Area of Drainage

10 (Patricia)

Year 1



Drainage Area Site Plan



Eastern Irrigation District County of Newell

Area of Drainage: 08 (North Rolling Hills) Proposed Construction Year: 1

Notes:

Main drain from Hamlet of Rolling Hills down to Highway 525 needs to be re-done. It is overgrown and impeding flow.

Road drainage west of Rolling Hills and south branches need to be re-done. Overgrown with trees and the culverts are in poor shape.

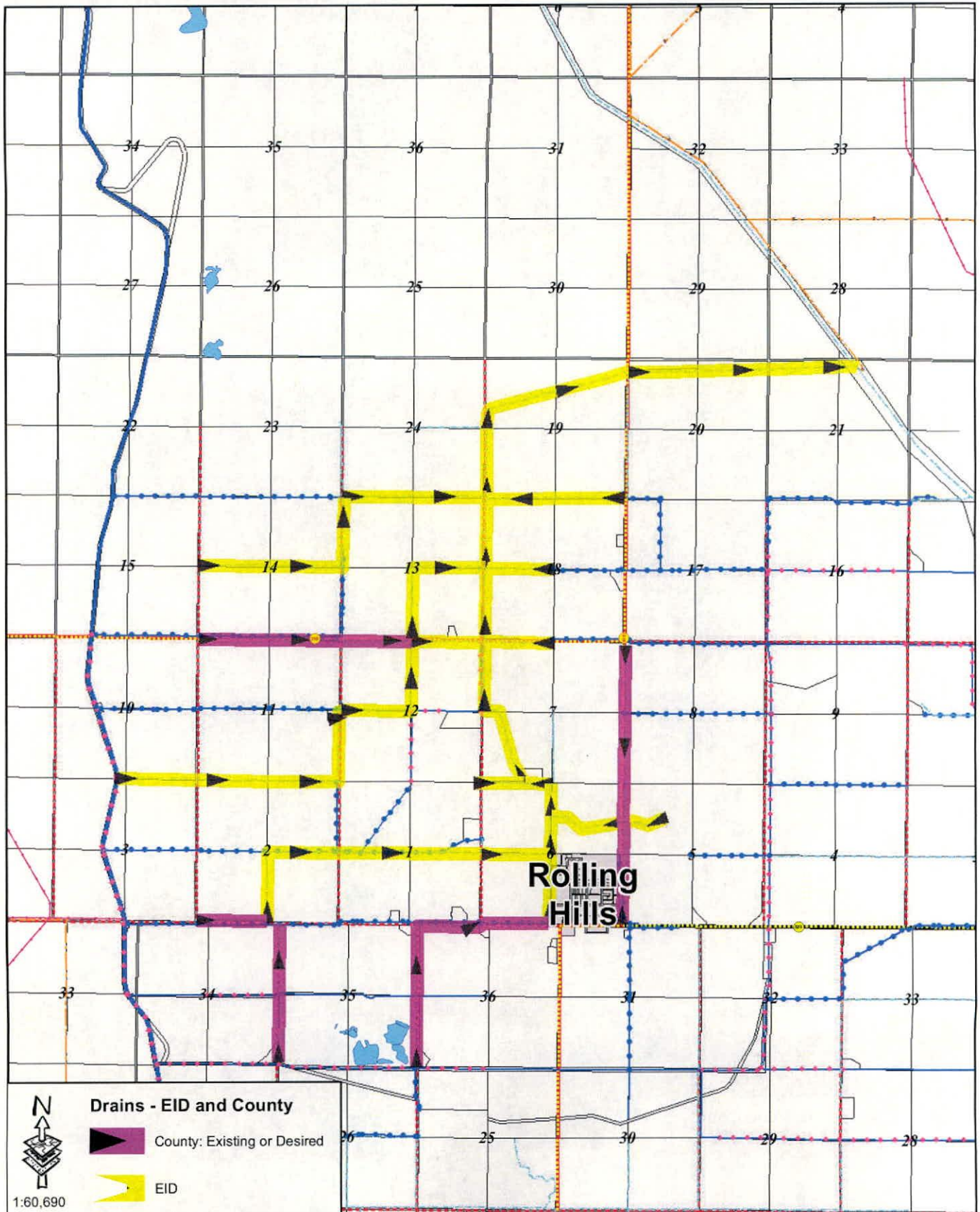
Rest of drain needs to be re-surveyed and improved where required, some road culverts and tree growth.

Drain Area Location Plan

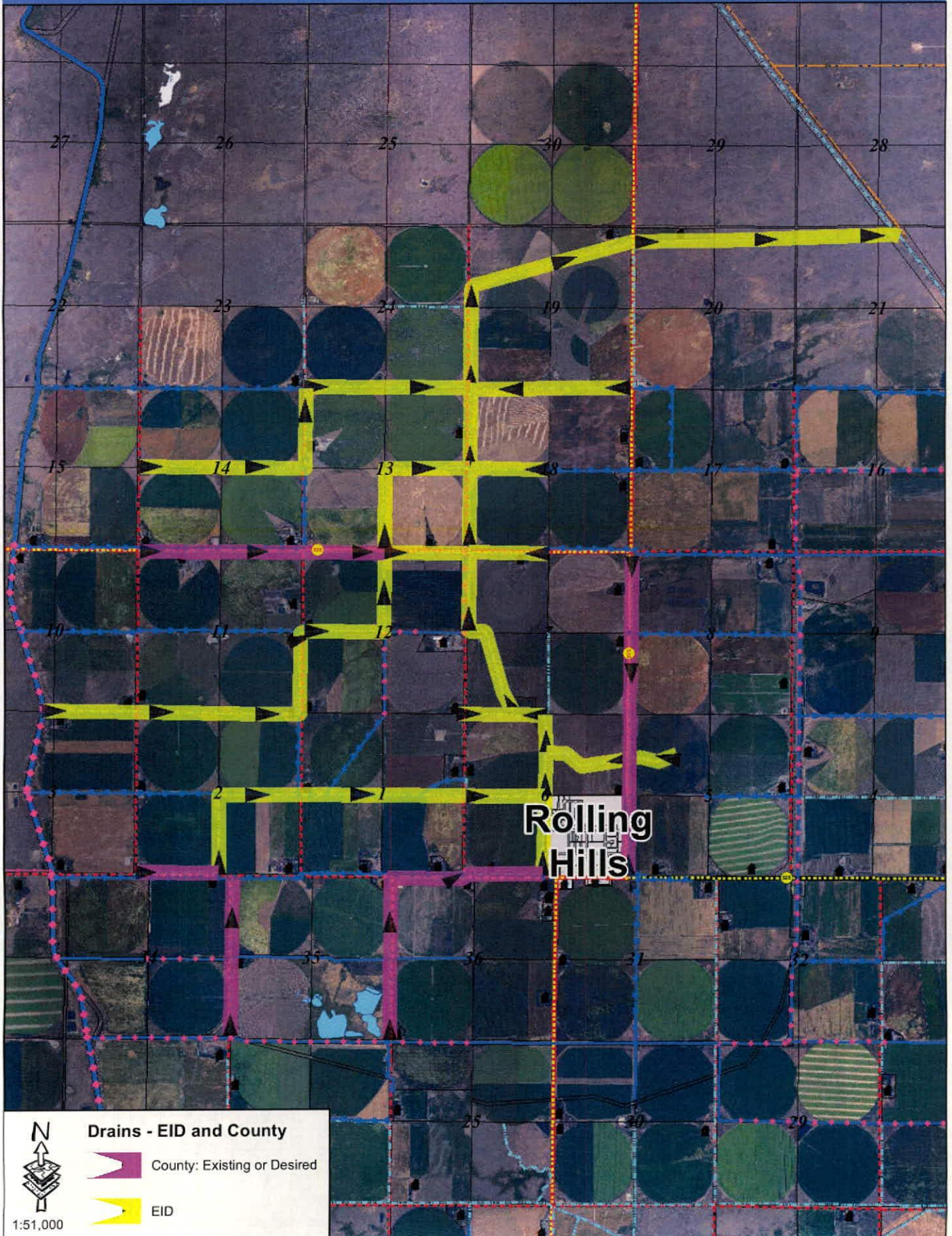
Area of Drainage

08 (North Rolling Hills)

Year 1



Drainage Area Site Plan



Eastern Irrigation District County of Newell

**Area of Drainage: 07 (Bow Slope)
Proposed Construction Year: 1b**

Notes:

EID drain in most cases is good, but road drain is overgrown with trees and floods a house. It needs right-of-way and to be re-done.

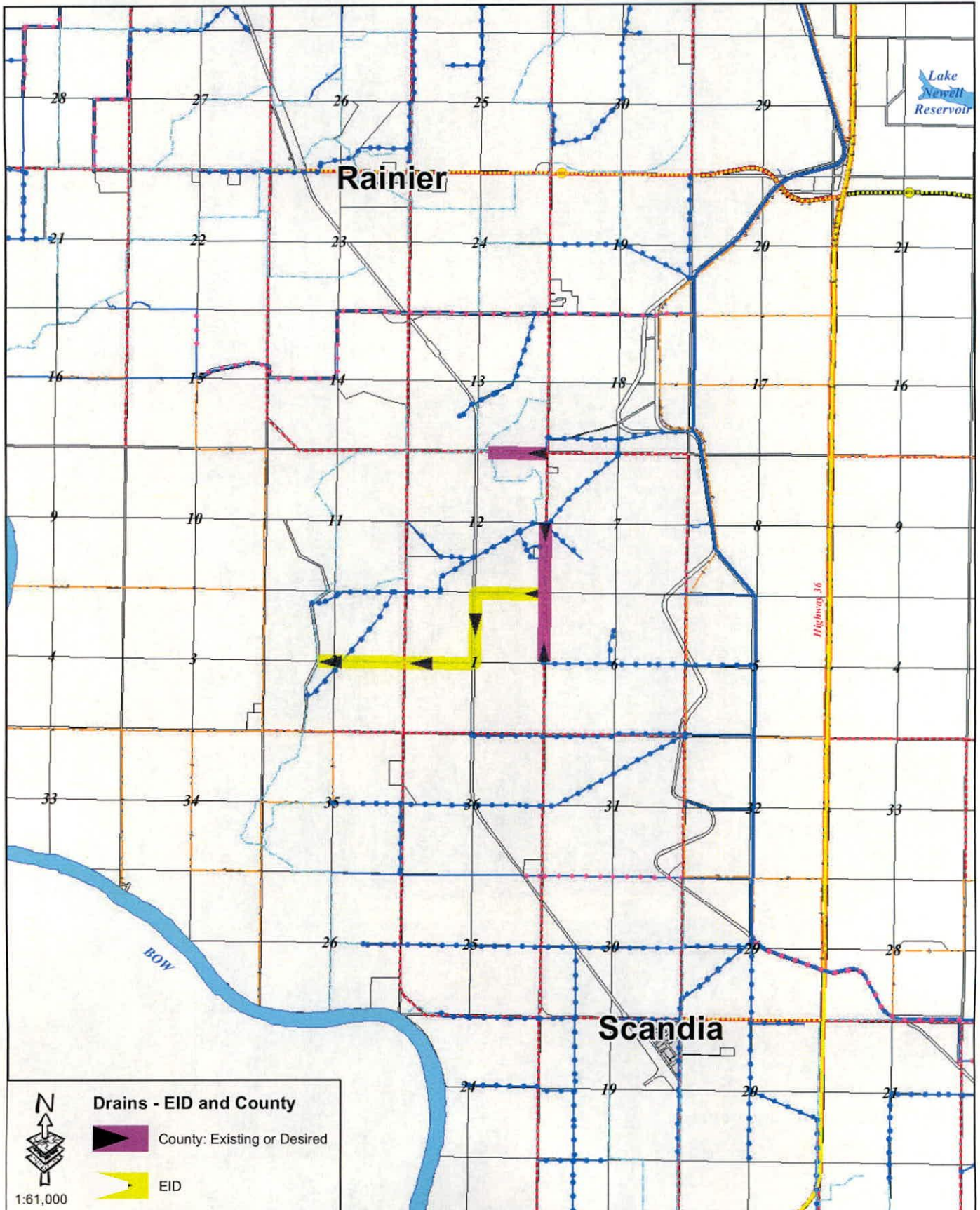
Road drain along NE Sect. 12 Twp. 16 Rge. 16 W4M dug for road construction but does'nt drain.

Drain Area Location Plan

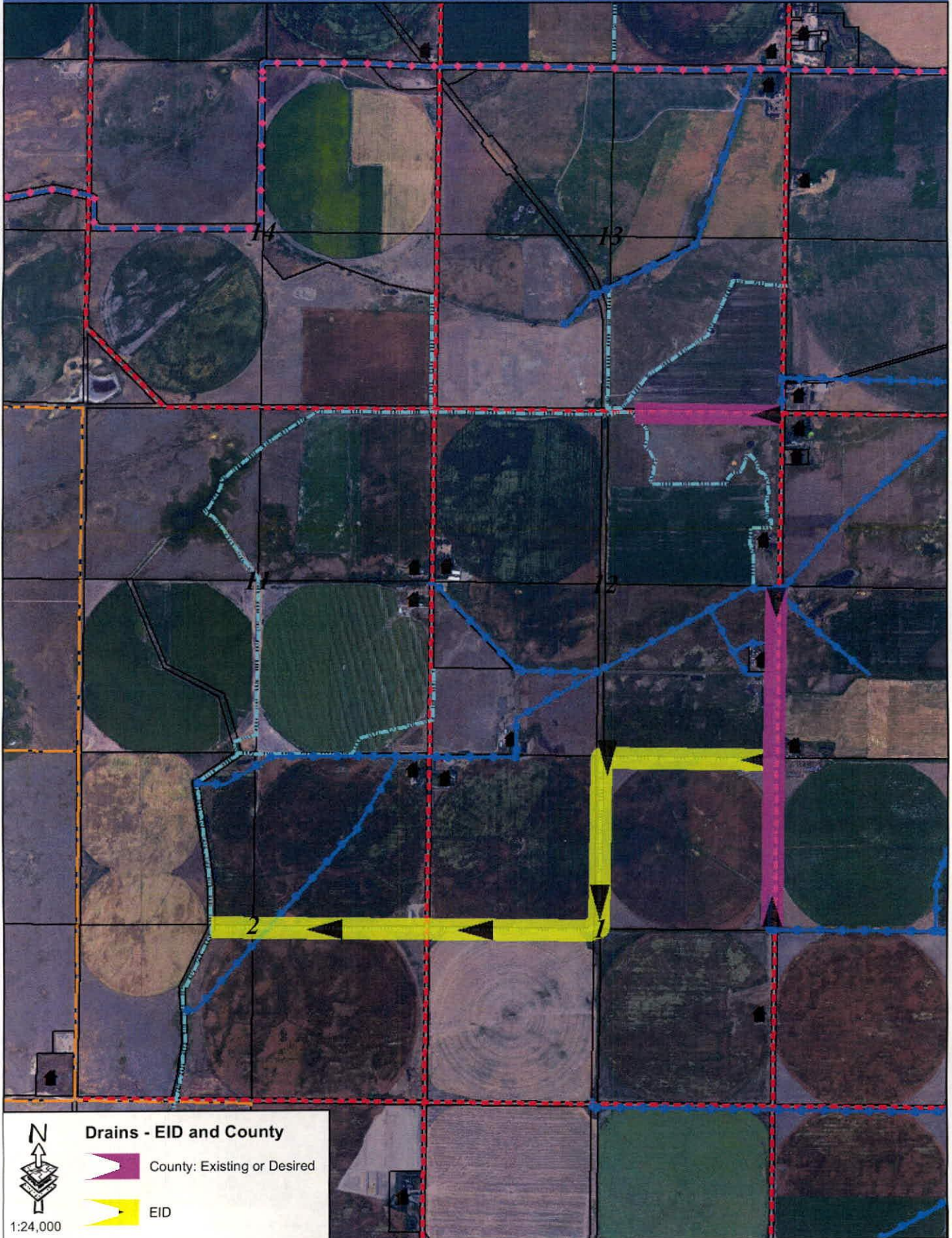
Area of Drainage

07 (Bow Slope)

Year 1b



Drainage Area Site Plan



Eastern Irrigation District County of Newell

**Area of Drainage: 11 (Bantry)
Proposed Construction Year: 1**

Notes:

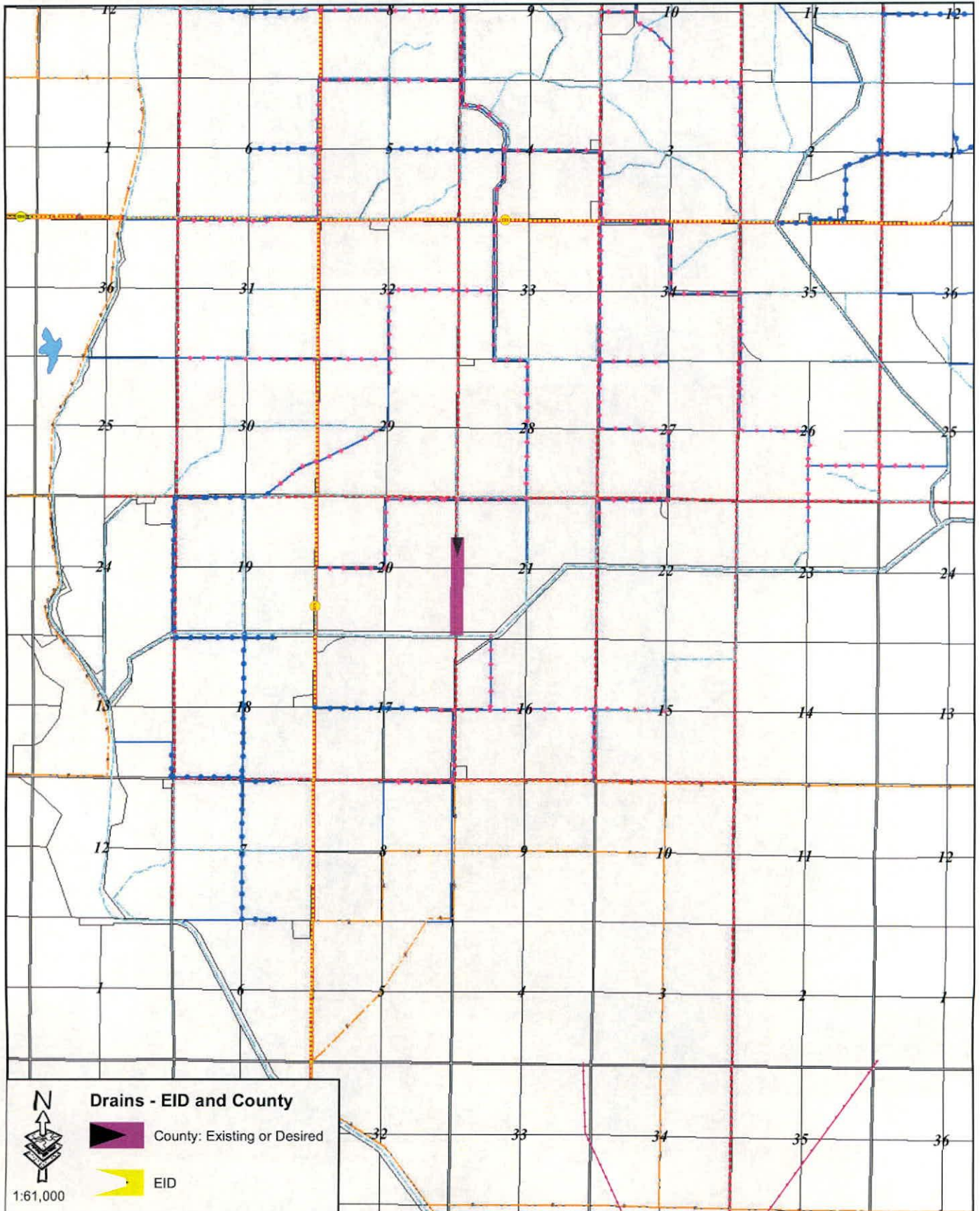
Drain too deep and steep, need to move into EID property.

Drain Area Location Plan

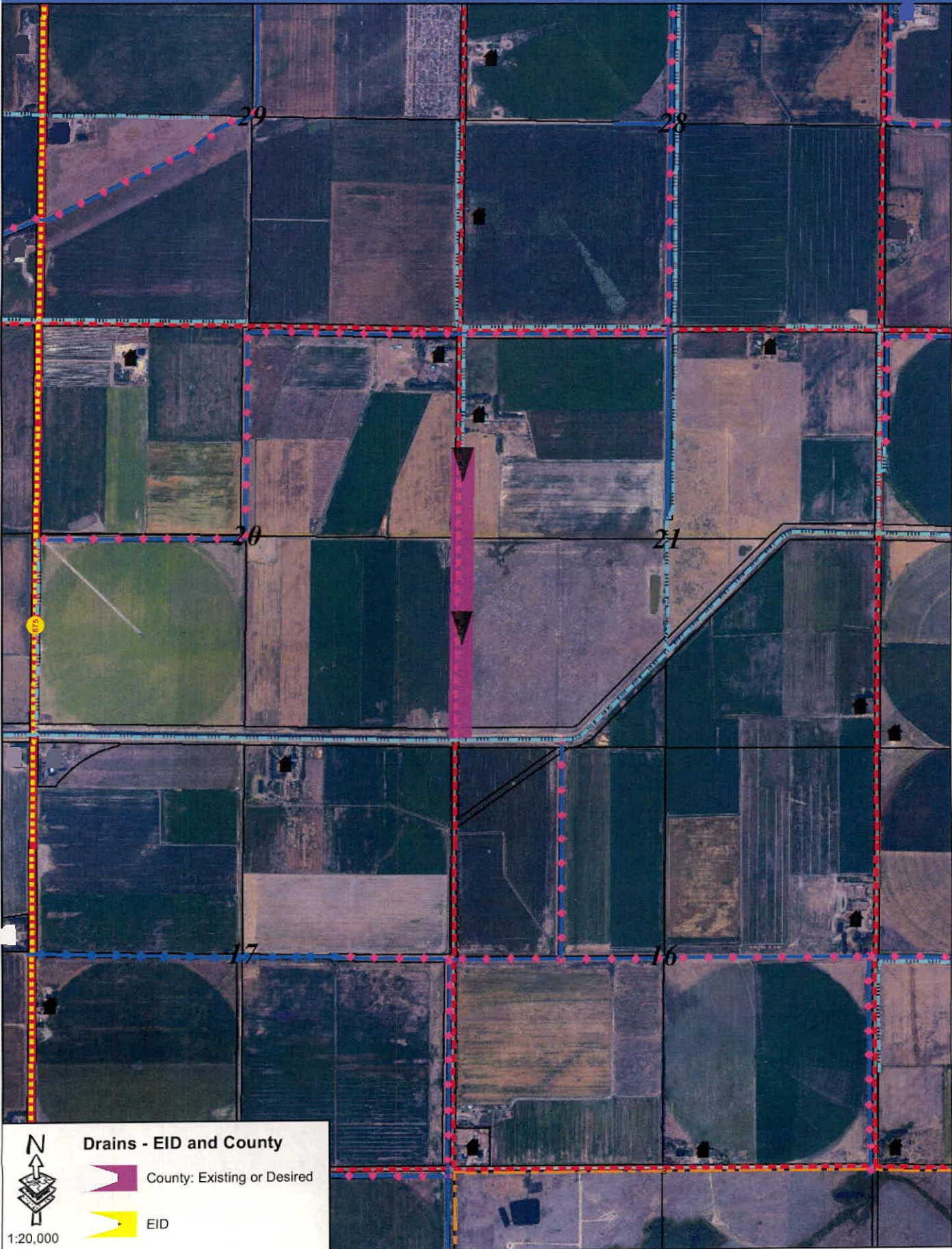
Area of Drainage

11 (Bantry)


Year 1





Drainage Area Site Plan



Drains - EID and County

 N

 County: Existing or Desired

 EID

1:20,000

Eastern Irrigation District County of Newell

Area of Drainage: 04 (Kitsim)
Proposed Construction Year: 1b

Notes:

Road drain and pipeline along NW Sect. 9 and NE Sect. 8 should be deepened to provide some additional grade at upper half. Small job but requires right-of-way and a gas line to be lowered.

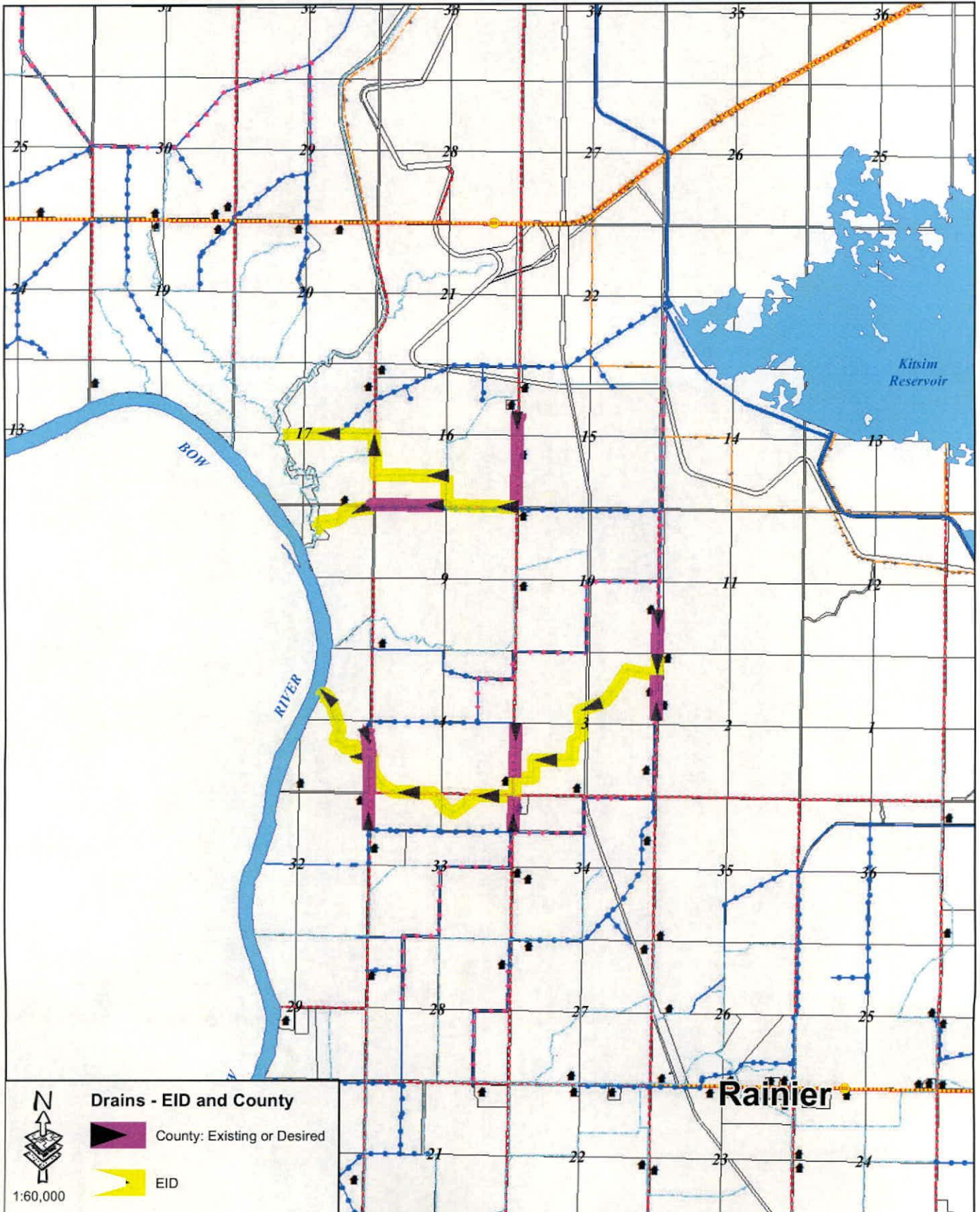
EID drain needs cleaning in a few places (approx. 1/3 of it) to create grade away from road drain.
County road drain along E Sect. 10 and E Sect. 3 Twp. 17 Rge. 16 W4M is not tied into EID drain, needs road culvert and drain to be deepened or road built up for 100 m to 200 m.

Drain Area Location Plan

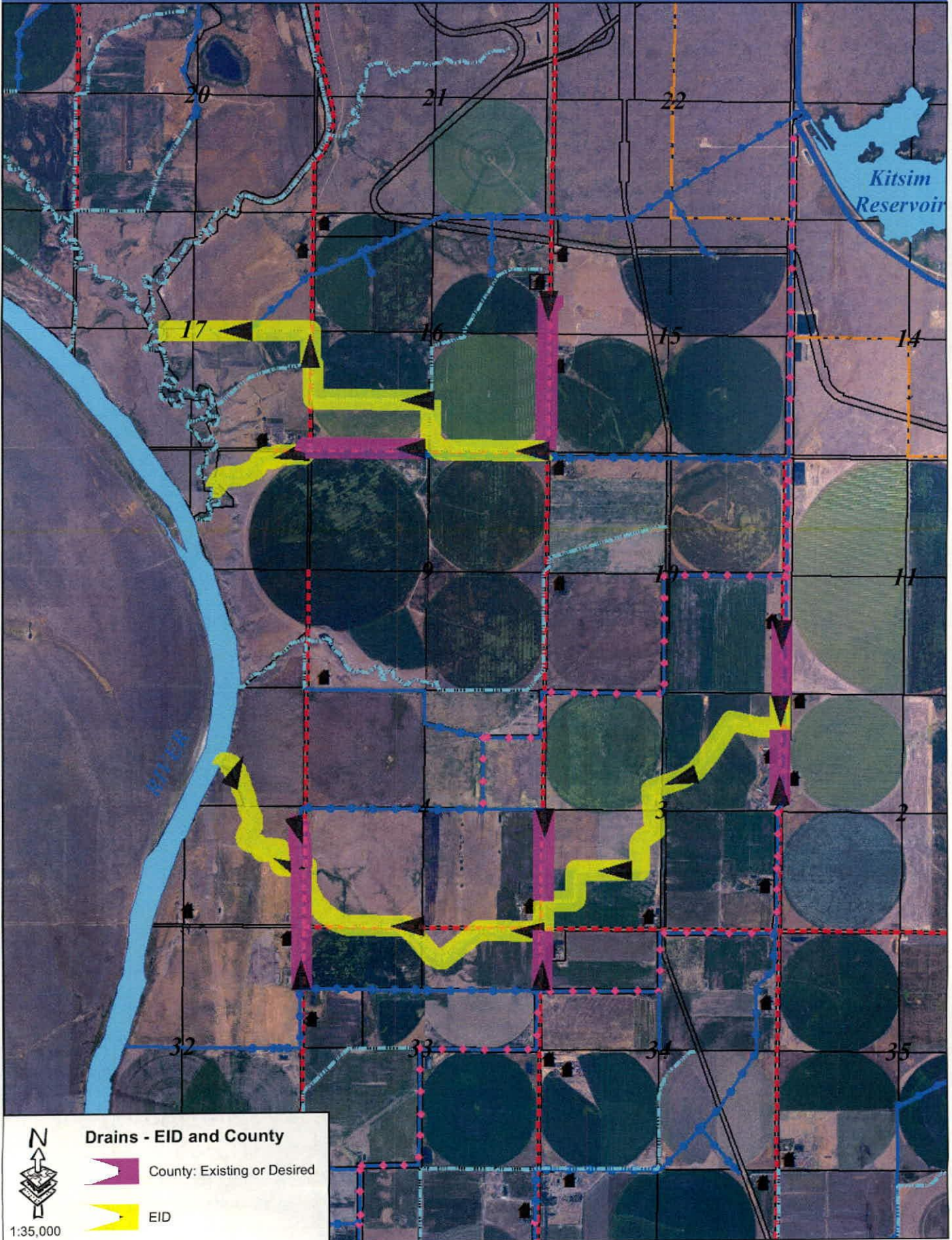
Area of Drainage

04 (Kitsim)

Year 1b



Drainage Area Site Plan



Eastern Irrigation District County of Newell

Area of Drainage: 05 (Rainier) Proposed Construction Year: 1b

Notes:

Main drains are pretty good, road crossings and farm crossings held back water last year.

Road drain in Sect. 36 Twp. 16 Rge. 16 W4M doesn't work and needs to be re-done.

Road drain on East side of SE Sect. 26 Twp. 16 Rge. 16 W4M is very deep and dangerous, needs survey, right-of-way and to be re-done.

Road drains East of Sect. 20 and 29 Twp. 16 Rge. 16 W4M doesn't drain properly and needs a survey and right-of-way and to be re-done.

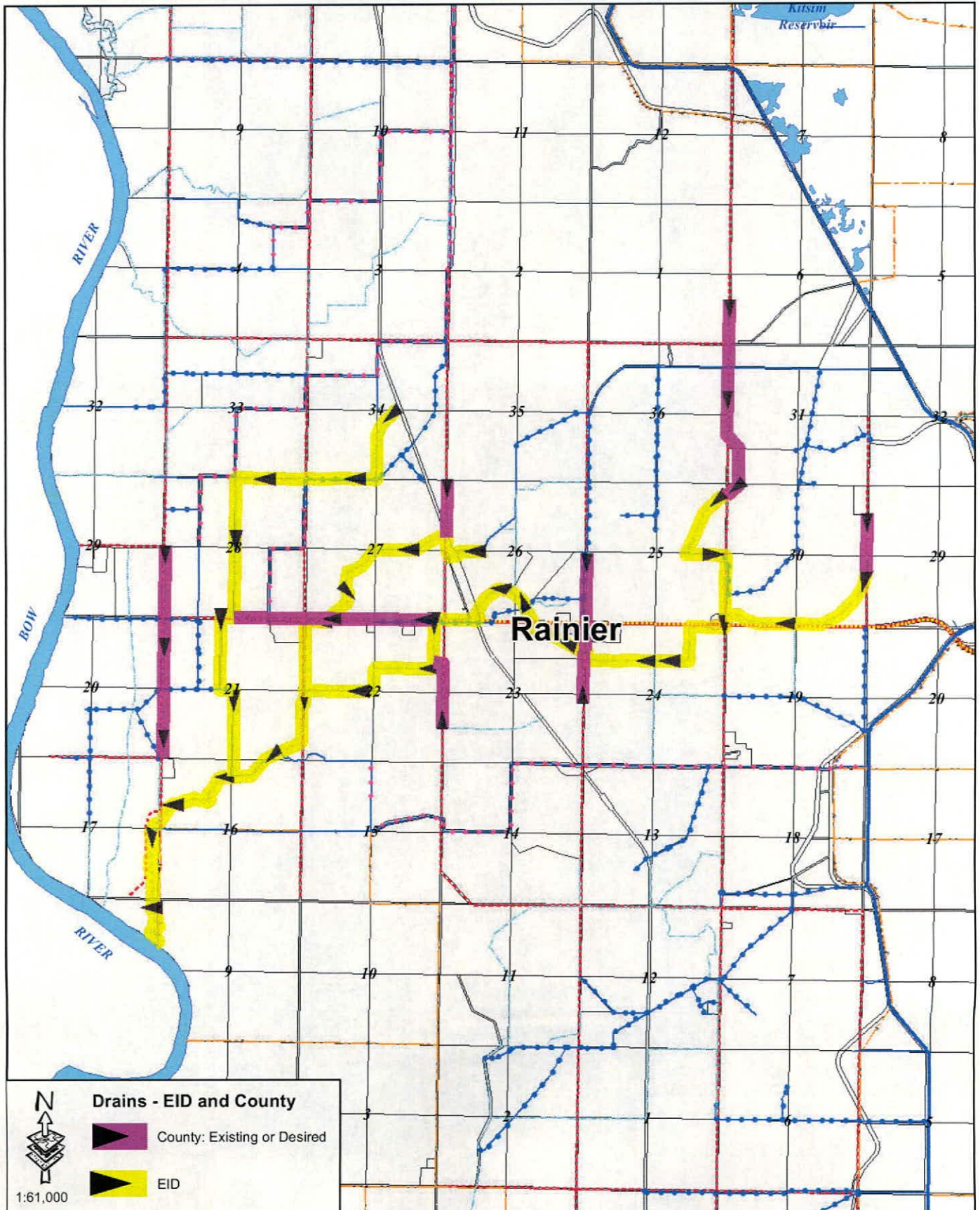
Road drain along E Sect. 22 Twp. 16 Rge. 16 W4M needs right-of-way and to be re-done.

Drain Area Location Plan

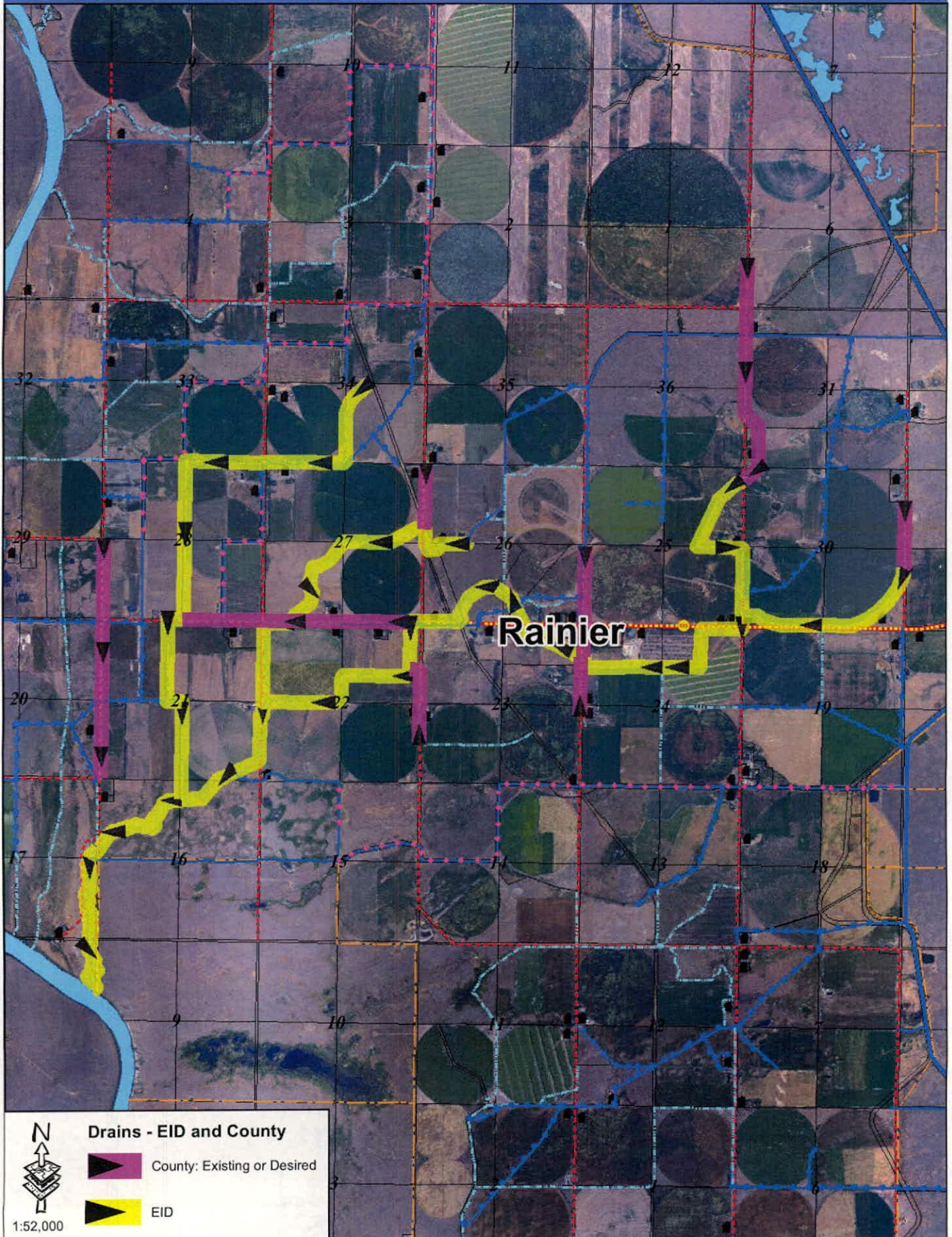
Area of Drainage

05 (Rainier)

Year 1b



Drainage Area Site Plan



Eastern Irrigation District County of Newell

Area of Drainage: 02 (South Cassils) Proposed Construction Year: 1b

Notes:

The North East Branch from Sanfrancisco Lake back to the east side of Sec. 35 Twp. 18 Rge. 16 W4M needs to be cleaned, hopefully enough grade can be found to accept road drainage which now does not drain in Sect. 2 and 3 Twp. 19 Rge. 16 W4M.

Road drain along east side of Sect. 16 and 21 Twp. 18 Rge. 16 W4M have too steep of side slopes and are sloughing in. Need extra right-of-way and be re-done.

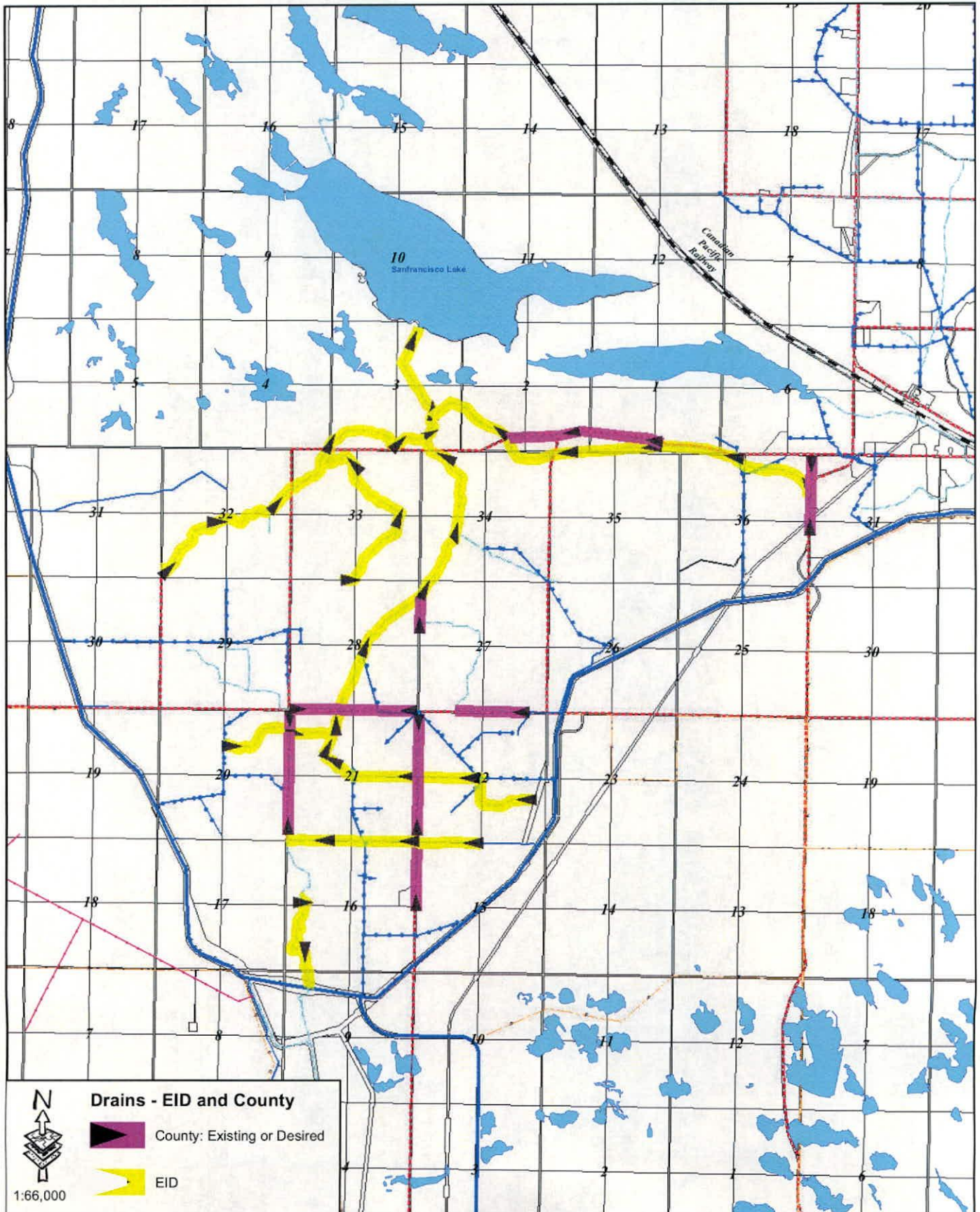
Most of the main drain is OK, needs cleaning in places, appears some road and farm crossings are holding back water.

Drain Area Location Plan

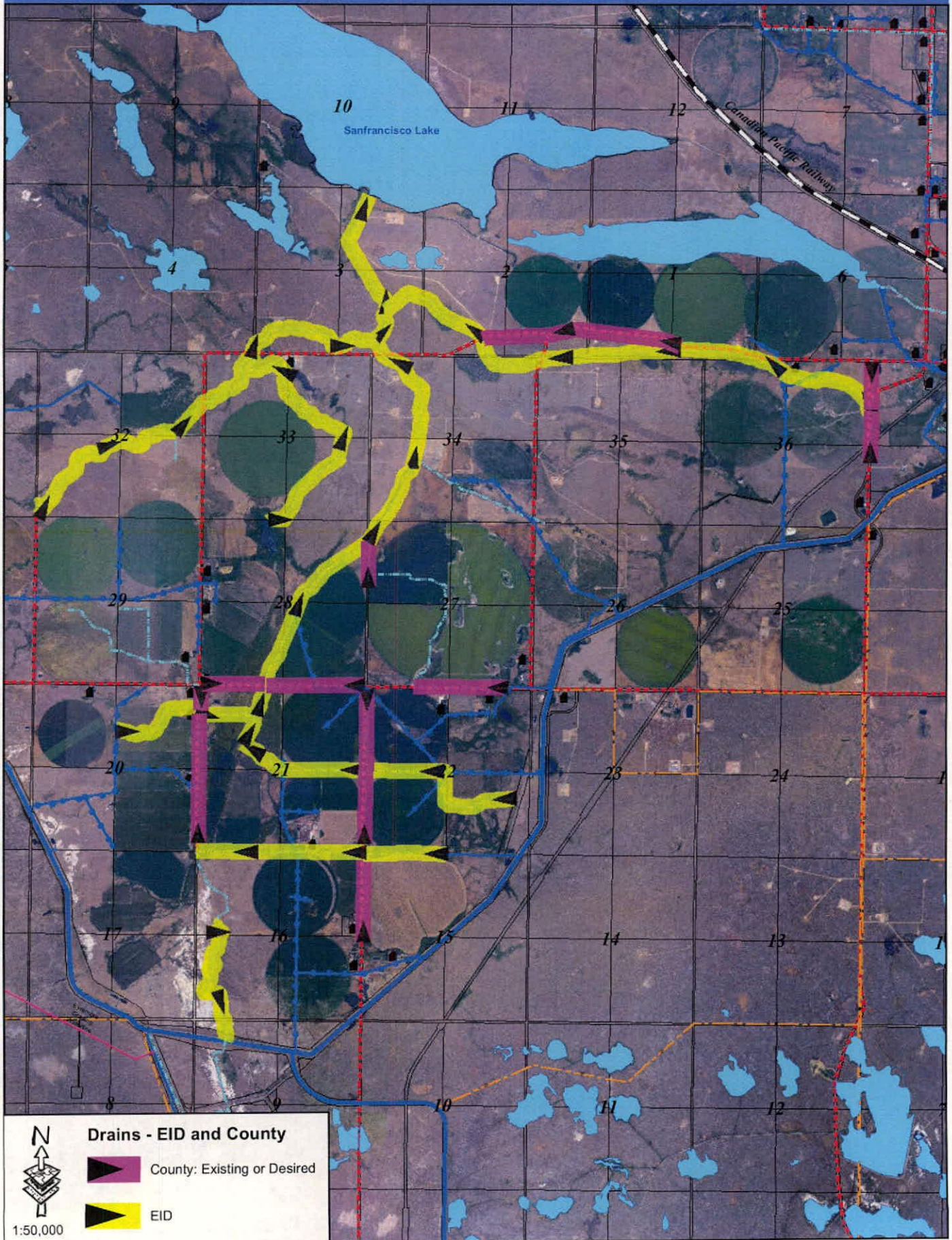
Area of Drainage

02 (South Cassils)

Year 1b



Drainage Area Site Plan



Eastern Irrigation District County of Newell

Area of Drainage: 03 (West Brooks) Proposed Construction Year: 1b

Notes:

Existing drains are not working very well in upper reaches.

Drainage along road in front of acreages (between sections 3 and 4) does not tie into EID drain.

Drain should be cleaned.

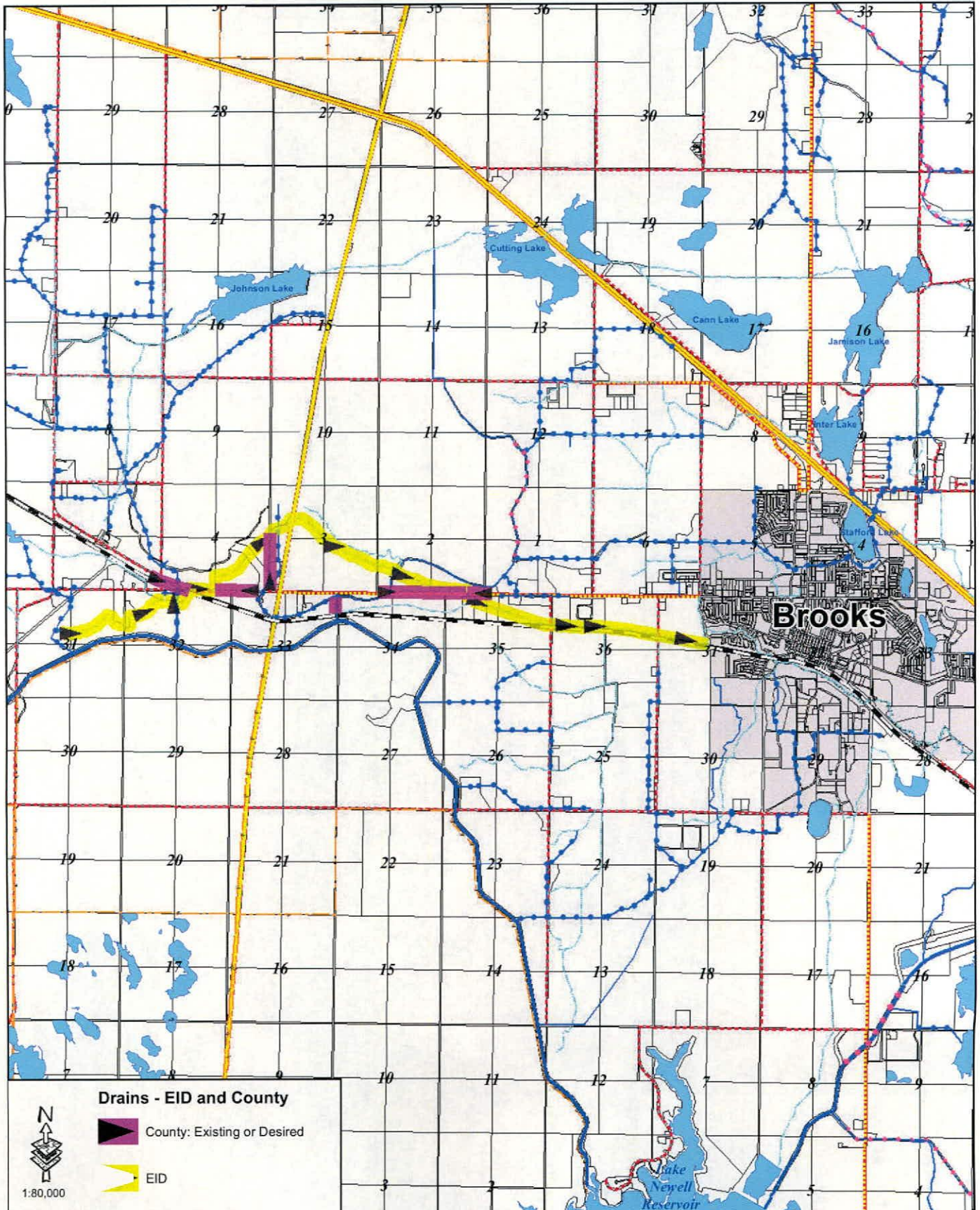
County would like to construct new drain paralleling cassils syphon (East of section 33) to drain road in subdivision.

Drain Area Location Plan

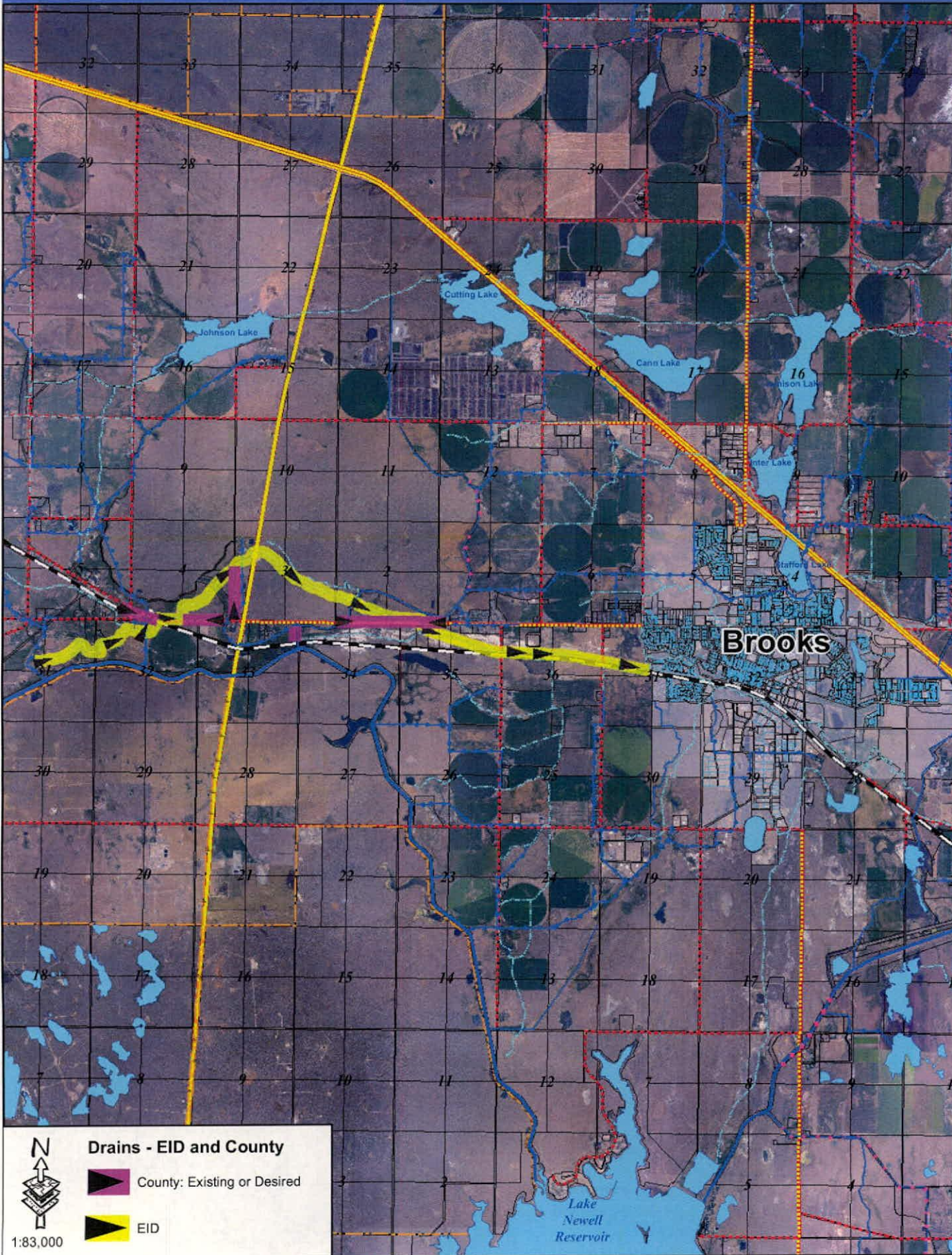
Area of Drainage

03 (West Brooks)

Year 1b



Drainage Area Site Plan



Eastern Irrigation District County of Newell

Area of Drainage: 09 (South Rolling Hills) Proposed Construction Year: 2 and 3

Notes:

Most of EID drainage appears to be good, need to survey and check.

Many of the road ditches do not appear to drain.

Lack of right-of-way is the cause, need to survey them all, design and acquire right-of-way.

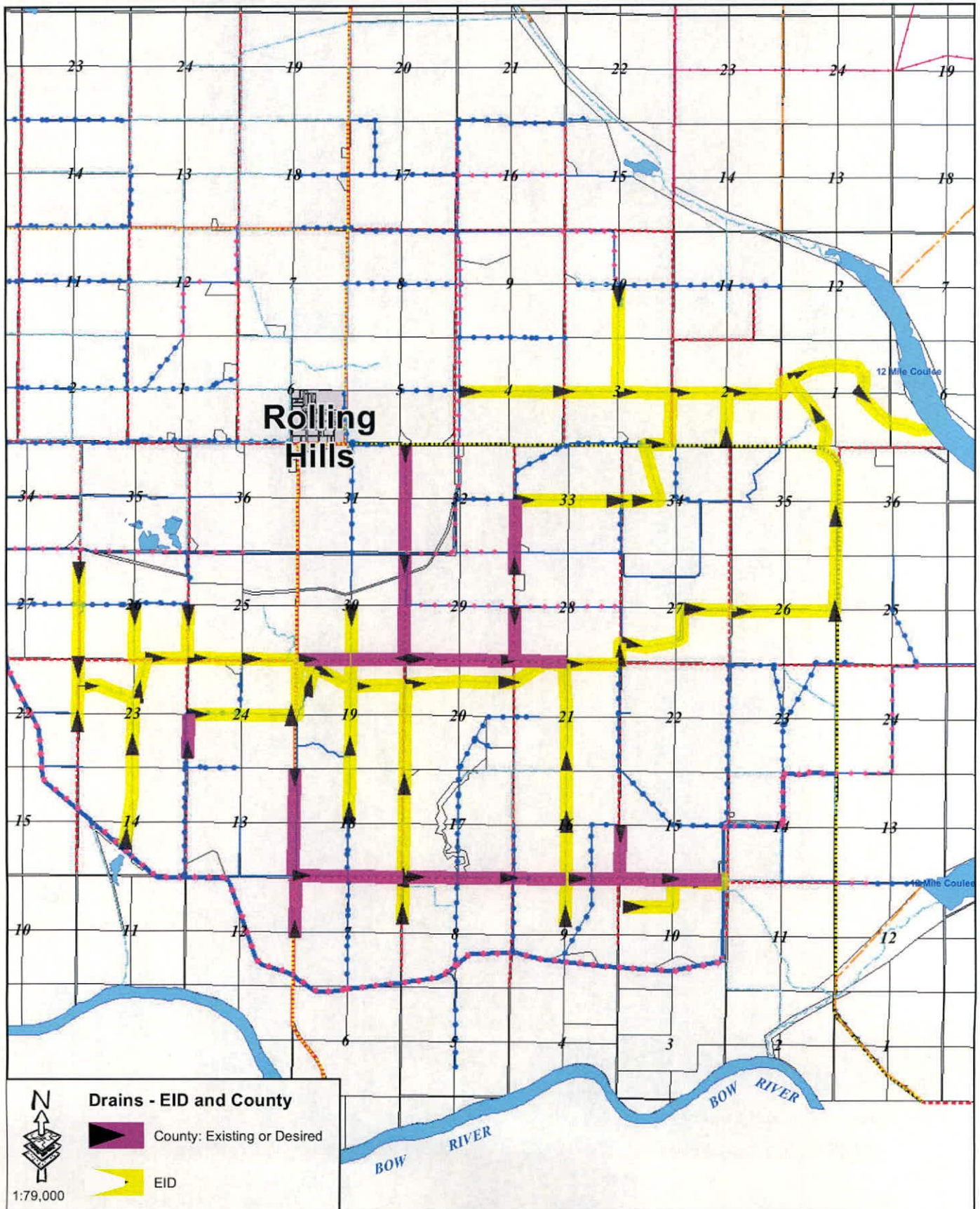
Propose surveys in year 1, construction in years 2 and 3.

Drain Area Location Plan

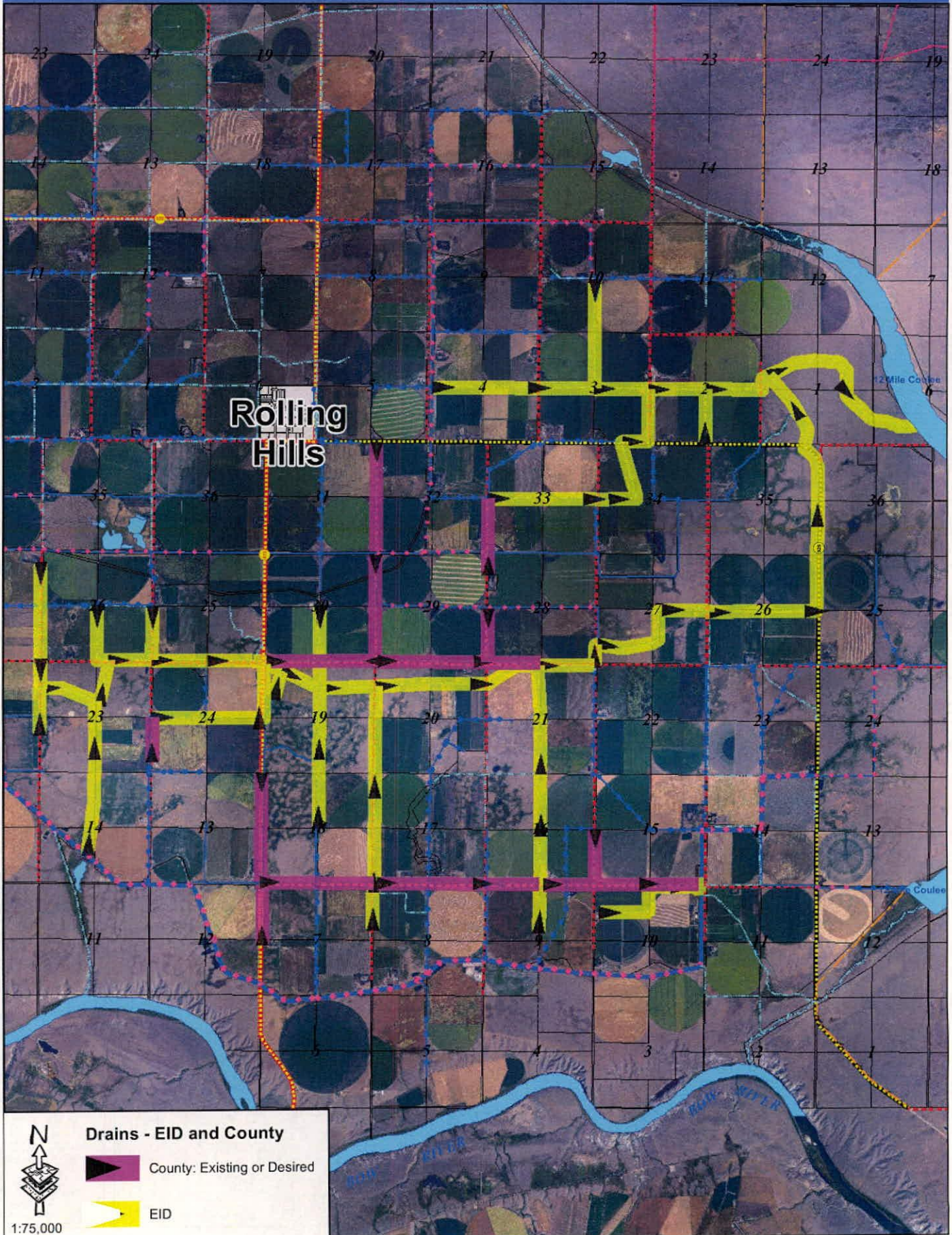
Area of Drainage

09 (South Rolling Hills)

Year 2 and 3



Drainage Area Site Plan



Proposed Implementation

- 2011 projects approved by both boards
- EID staff survey and design projects; if there are different alternatives with significant cost differences they will be brought back to both boards for approval
- Most projects will just proceed
- EID engineering staff will identify where additional right-of-way is required and where utilities need to be moved
- County staff will obtain additional right-of-way where adjacent to road, and arrange for utilities to be moved; EID staff will do the same where not adjacent to road
- County staff and EID staff will prepare a list of projects for design and construction in 2012 and 2013 over the summer