EASTERN TREASURE VALLEY ELECTRICAL PLAN

IDAHO POWER®

2023-24 UPDATE

In Cooperation With The:
2023-24 Eastern Treasure Valley Electrical Plan Community Advisory Committee

Report Prepared By:
Transmission & Distribution Planning Department

MAPPING RESULTS

High Voltage Transmission Lines and Source Substations – North Ada Area

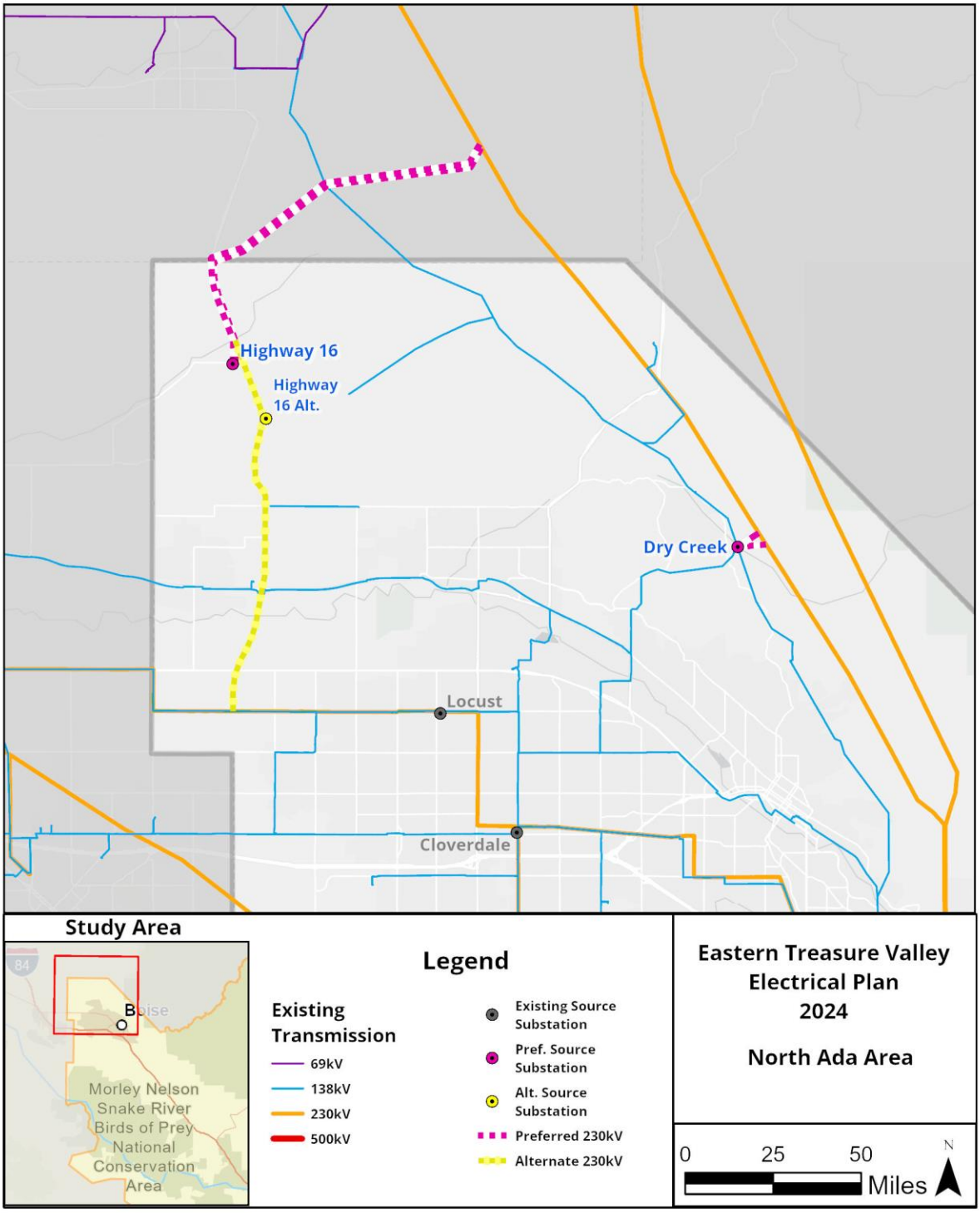

Figure 1
Preferred High Voltage Transmission Lines and Source Substations – North Ada Area

Preferred Options

The Committee chose preferred locations for two new source substations and the connecting transmission line routes in the North Ada area.

Preferred Source Substation Locations

Highway 16 Source

The Committee opted to locate the Highway 16 Source Substation north of the City of Star, west of the Firebird Speedway and south of the bend in Chaparral Rd.

Dry Creek Source

The Committee opted to locate the Dry Creek Source Substation on a parcel of land owned by Idaho Power near the existing Dry Creek development.

Preferred High-Voltage Transmission Line Routes

Highway 16 Source north connecting 230-kV Transmission Lines

Utilizing double circuit transmission lines when possible, construct two 230-kV transmission lines north from the proposed Highway 16 Source Substation following Chapparal Rd and heading north along Hwy 16 to the border of Ada and Gem Counties. At the county line, construct two new route-diverse 230-kV transmission lines north and east to the existing 230-kV transmission line running from Boise Bench Substation to the future Shell Rock Substation. Where possible, construct transmission lines in valleys outside of viewsheds, avoiding existing residences, irrigated farmland, and floodplains.

- *Avoids farmland and viewsheds and follows Hwy 16.*

Dry Creek Source 230-kV Transmission Line

Build two route-diverse 230-kV transmission lines heading north and east from the proposed Dry Creek source substation, to the existing transmission line running from Boise Bench Substation to the future Shell Rock Substation. Construct around the geography of the nearby hills to accommodate the most economic route.

Alternative Source Substation Locations

Highway 16 Source

The Committee identified an alternative site for the Highway 16 Source Substation. This location is north of the City of Star, roughly half a mile northeast of the Lanktree Gulch Trailhead, east of a curve in Hwy 16 intersection.

Alternative High-Voltage Transmission Line Routes

Highway 16 Source South Connecting 230-kV Transmission Line Alternative

Follow preferred route north along Chapparal Rd to Hwy 16. Construct single circuit 230-kV transmission line south along Hwy 16, following the highway to the existing 230-kV transmission line along McMillan Rd.

High Voltage Transmission Lines and Source Substations – South Ada/Elmore Area

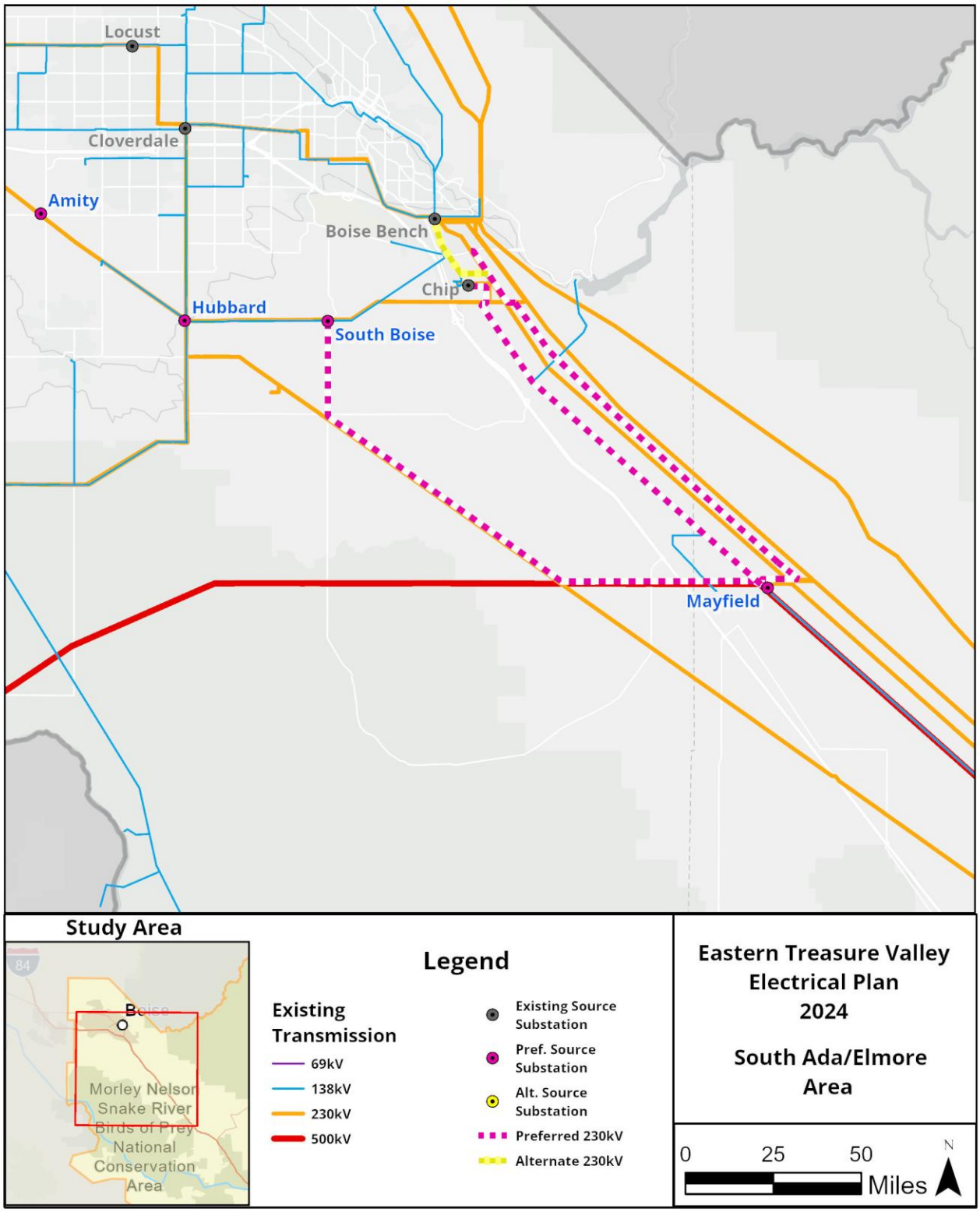

Figure 2: Preferred High Voltage Transmission Lines and Source Substations - South Ada/Elmore Area

Preferred Options

The Committee chose preferred locations for four new source substations and the connecting 230-kV transmission line routes in the South Ada/Elmore area.

Preferred Source Substation Locations

Amity Source

The Committee opted to co-locate the Amity source substation with the future Amity distribution substation (Sub 2) southwest of the City of Meridian, northwest of the intersection of Amity Rd and Ten Mile Rd, expanding a parcel of land owned by Idaho Power to accommodate a source substation.

- *Utilizes land owned by Idaho Power combines facilities.*

Hubbard Source

The Committee opted to co-locate the Hubbard source substation with the existing Hubbard 230-kV transmission switching substation, south of the intersection of Hubbard Rd and Cloverdale Rd, northwest of the Falcon Creek golf course.

- *Utilizes land owned by Idaho Power combines facilities.*

South Boise Source

The Committee opted to locate the South Boise source substation South of the City of Boise, northwest of the intersection of Amyx Ln and Pleasant Valley Rd near an existing 230-kV transmission line.

Mayfield Source

The Committee opted to locate the Mayfield source substation southeast of the future Mayfield Township, southeast of the intersection of Prairie Grass Dr and Baseline Rd on parcel owned by Idaho Power. The Mayfield source substation will be co-located with a planned 500-kV to 230-kV source substation.

- *Utilizes land owned by Idaho Power combines facilities.*

Preferred High-Voltage Transmission Line Routes

Mayfield Source to South Boise Source 230-kV Transmission Line

Build 230-kV transmission line heading west out of Mayfield substation, following the route of the existing 500-kV transmission line running to Hemmingway substation. At the intersection of the 230-kV transmission line running from Hubbard substation to Danskin Power Plant, head northwest using separate 230-kV transmission structures constructed as close to existing route as feasible. At the intersection of the existing transmission line with Pleasant Valley Rd, head north to the proposed South Boise source substation.

- *Follows planned relocation of 230-kV line corridor on Micron land.*

Mayfield Source to Chip Source 230-kV Transmission Line

Build new 230-kV transmission line north and west out of Mayfield Source Substation to Chip Source Substation, following the route of the existing 138-kV transmission line running from Mountain Home Junction #1 to DRAM Substation. Replace the 138-kV transmission structures with 230-kV structures, double circuiting the existing 138-kV transmission line on the same structures as the new 230-kV transmission line.

- *Co-locates with existing lines to reduce the impact to wildlife.*

Mayfield Source to Boise Bench Source 230-kV Transmission Line

Build new 230-kV transmission east out of Mayfield Substation to the intersection of Base Line Rd and Bowns Creek Rd. Head north and west between the existing 230-kV transmission lines, until intersecting with the existing 230-kV transmission line running from Boise Bench Source Substation to Chip Source Substation, roughly one mile south of Columbia Rd. Run west, then run north and west constructing new 230-kV transmission structures as close to the existing 230-kV transmission line running from Chip Source Substation to Mayfield Source Substation as possible. When intersecting Hwy 21, begin double circuiting with existing 230-kV transmission line to Boise Bench substation.

Alternative High-Voltage Transmission Line Routes

Mayfield Source to Boise Bench Source 230-kV Transmission Line Alternative

Follow the preferred route between the existing 230-kV transmission line corridor north from Mayfield Source Substation to where it intersects with Columbia Rd. Head west along Columbia Rd to Technology Way. Construct 230-kV transmission line following the existing 138-kV transmission line route to Boise Bench Source Substation, double circuiting the existing 138-kV transmission line on the same structures.

Area 1: Northwest Ada Area

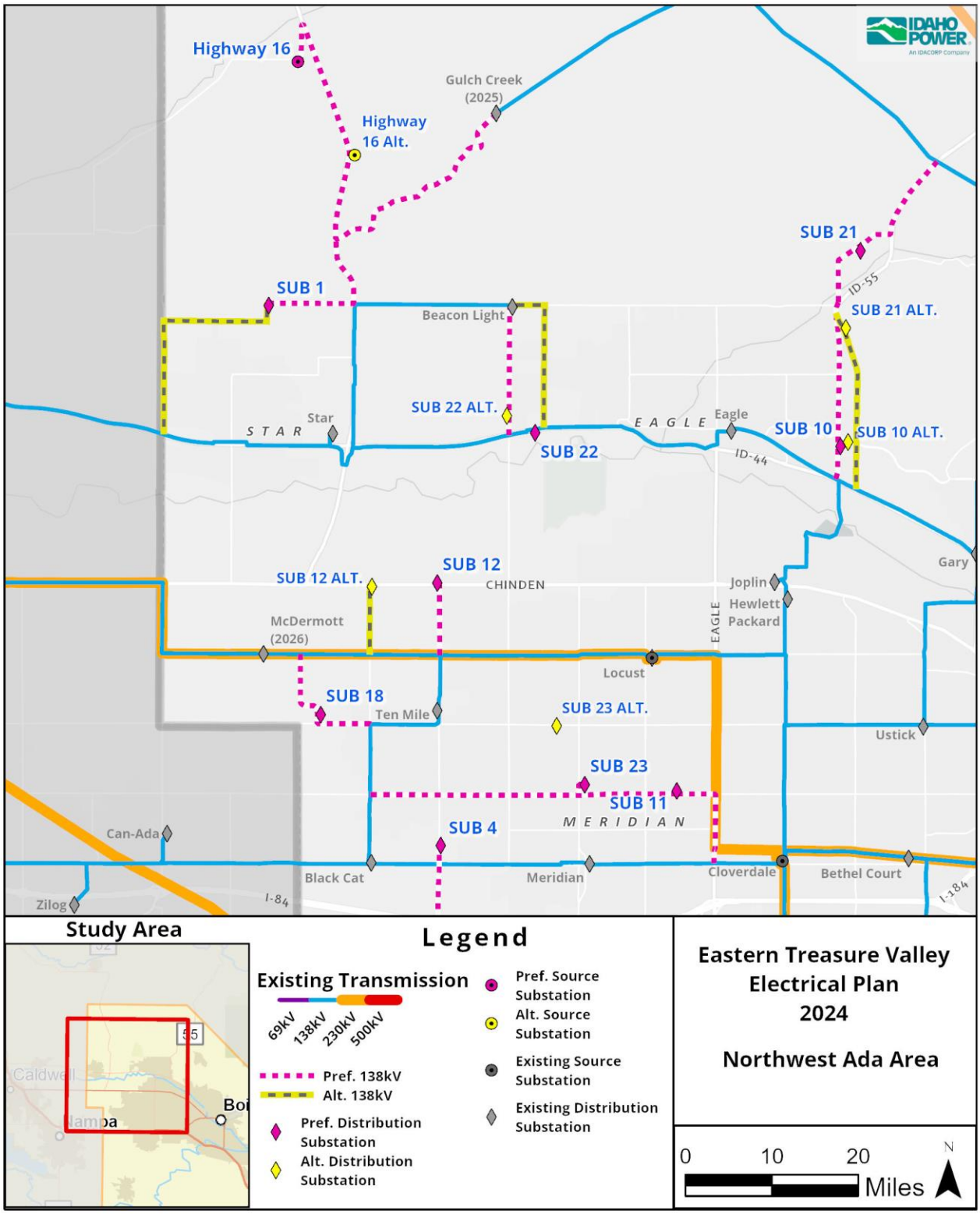

Figure 3
Northwest Ada Area

Preferred Options

In the Northwest Ada Area, the Committee selected preferred locations for seven new substations and the connecting 138-kV line routes.

Preferred Substation Locations

Distribution Substation 1 (Sub 1):

To be located southeast of the intersection of Beacon Light Rd and Wing Rd.

Distribution Substation 4 (Sub 4):

To be located southeast of the intersection of the Boise Valley Railroad and Ten Mile Rd.

Distribution Substation 11 (Sub 11):

To be located northeast of the intersection of Fairview Ave and Webb Rd.

Distribution Substation 12 (Sub 12):

To be located northwest of the intersection of Chinden Blvd and Ten Mile Rd.

- *Utilizes land annexed by the city.*

Distribution Substation 18 (Sub 18):

To be located northeast of the intersection of Ustick Rd and McDermott Rd.

Distribution Substation 22 (Sub 22):

To be located southwest of the intersection of State St and Old Valley Rd.

- *Mixed use and commercial area.*

Distribution Substation 23 (Sub 23):

To be located southeast of the intersection of Carmel Dr and Meridian Rd.

Preferred 138-kV Transmission Line Routes

Highway 16 Source to Gulch Creek Substation

Construct double circuit 138-kV transmission north along Chaparral Rd. Head south following Hwy 16, to an unnamed road for a future planned community just north of Equest Ln. Construct single circuit 138-kV transmission east along this road to Gulch Creek Substation.

Highway 16 Source to Sub 1

Use the double circuit transmission described in the Highway 16 Source to Gulch Creek Substation connection. At the intersection north of Equest Ln, build single circuit 138-kV transmission south to Beacon Light Rd. Head West along Beacon Light Rd to Sub 1.

Beacon Light Substation to Sub 22

Construct a new 138-kV transmission south along Linder Rd from Beacon Light Substation to the existing 138-kV transmission line along State St. Upgrade single circuit transmission to double circuit transmission from Linder Rd to Sub 22.

Ten Mile Substation to Sub 12

Construct a new double circuit 138-kV transmission line north along Ten Mile Rd from existing 138-kV transmission line along McMillan Rd to Sub 12.

McDermott Substation to Sub 18

Construct a new double circuit 138-kV transmission line south along McDermott Rd from existing 138-kV transmission line along McMillan Rd to Sub 18.

Sub 18 to Ten Mile Substation

Construct a new double circuit 138-kV transmission line east along Ustick Rd from Sub 18 to existing 138-kV transmission line at Black Cat Rd.

Sub 18 to Sub 23 to Black Cat Substation

Tap the existing 138-kV transmission line at the intersection of Black Cat Rd and Cherry Ln. Construct a new 138-kV transmission line east along Cherry Ln to Meridian Rd. Construct double circuit 138-kV transmission north along Meridian Rd to Sub 23.

- *Uses an existing transmission line route for a portion of path.*

Sub 23 to Sub 11

Use double circuit 138-kV transmission line along Meridian Rd described in Sub 18 to Sub 23 to Black Cat Substation connection. Construct new 138-kV transmission east along Fairview Ave to Sub 11.

Sub 11 to Cloverdale Substation to Meridian Substation

Construct new 138-kV transmission line east along Fairview Ave from Sub 11 to the existing 230-kV transmission line along Eagle Rd. Double circuit with this existing 230-kV transmission line south, continuing past the railroad to Franklin Rd.

- *Uses an existing transmission line route for a portion of path.*

Sub 4 to Amity Source (Continues onto Figure 4)

Construct a new 138-kV transmission line south along Ten Mile Rd from Sub 4, past Sub 17 to the Amity Source Substation. Between Sub 17 and the Amity Source Substation, construct the new line as double circuit 138-kV transmission line.

Alternative Options

The Committee selected alternative options for three future substations.

Sub 12 Alternative:

To be located southeast of the intersection of Chinden Blvd and Black Cat Rd.

Sub 22 Alternative:

To be located southwest of the intersection of Rosslare Dr and Linder Rd.

Sub 23 Alternative:

To be located south of Ustick Rd and the southwest corner of Settlers Park.

The Committee also selected alternative line routes for the following transmission line sections.

Sub 1 Alternative Connection

Construct a new 138-kV transmission line south along Wing Rd to New Hope Rd. Continue west to Can Ada Rd, constructing south to existing 138-kV transmission line along Hwy 44.

Beacon Light Substation to Sub 22 Alternative

Construct a new 138-kV transmission line from Beacon Light Substation east to Park Ln. Continue south until the intersection with 138-kV transmission line along State St, double circuiting to Sub 22.

Ten Mile Substation to Sub 12 Alternative

Construct a new double circuit 138-kV transmission line north along Black Cat Rd. from existing 138-kV transmission line along McMillan Rd to Sub 12 Alternative.

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Area 2: Northeast Ada Area

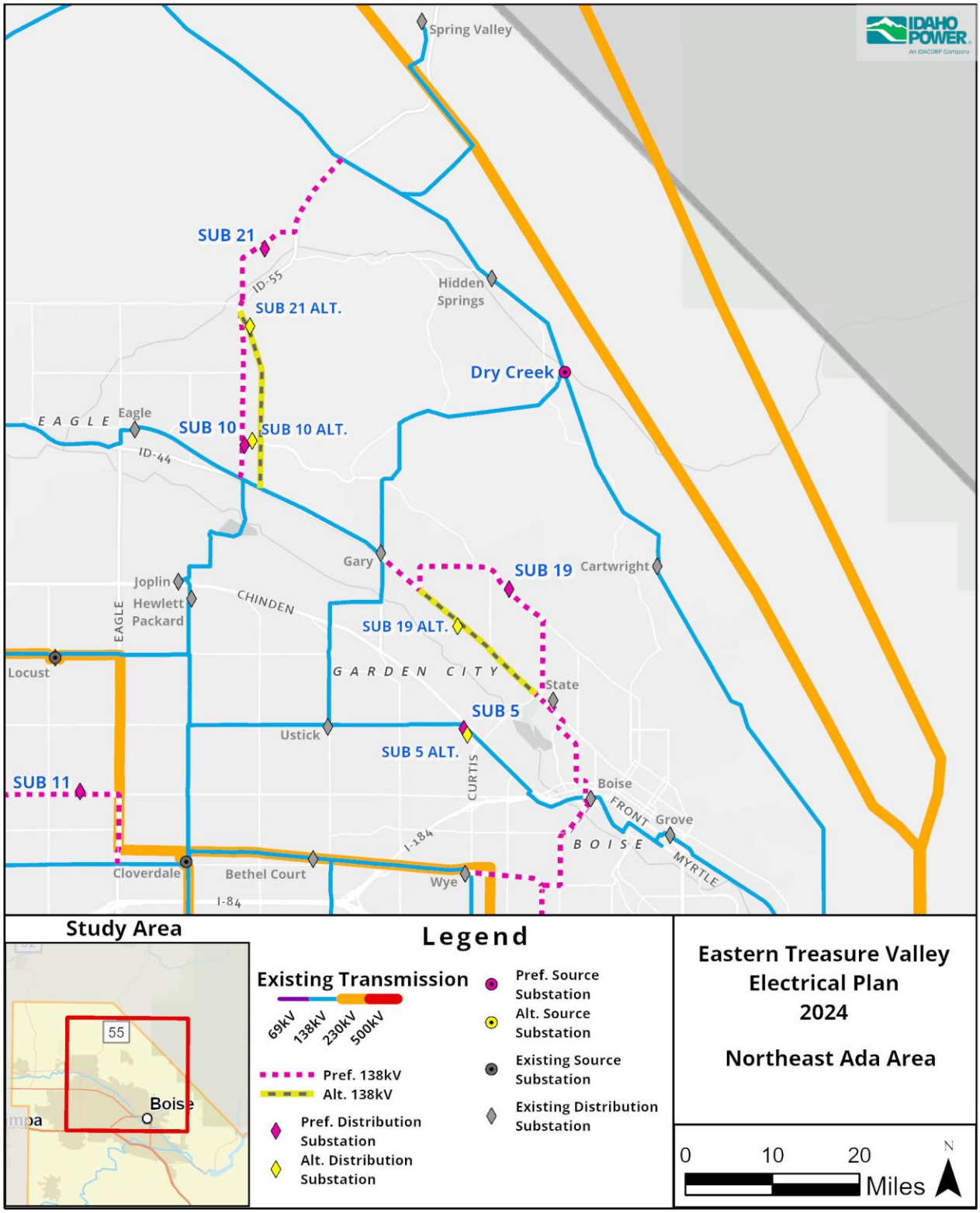

Figure 4
Northeast Ada Area

Preferred Options

In the Northeast Ada Area, the Committee selected preferred locations for four new distribution substations and the connecting 138-kV transmission line routes.

Preferred Substation Locations

Distribution Substation 5 (Sub 5):

To be located southwest of the intersection of Stockton St and 44th St.

Distribution Substation 10 (Sub 10):

To be located southeast of the intersection of Hill Rd and Hwy 55.

Distribution Substation 19 (Sub 19):

To be located east of the intersection of Hill Rd and Greer St.

Distribution Substation 21 (Sub 21):

To be located south of Brookside Ln and north of Hwy 55.

Preferred 138-kV Transmission Line Routes

Eagle Substation to Joplin Substation to Sub 10

Construct a new double circuit 138-kV transmission line north along Hwy 55 from the existing 138-kV transmission line on State St to Sub 10.

Sub 10 to Sub 21

Construct a new 138-kV transmission line north along Hwy 55 from Sub 10 to Brookside Ln. Continue north along Brookside Ln to Sub 21.

Sub 21 to Dry Creek Source

Construct a new 138-kV transmission line northeast along Brookside Ln to Hwy 55. Continue north along Hwy 55 to the existing 138-kV transmission line near Spring Creek Way. Upgrade existing 138-kV transmission from this connection point north and west to Gulch Creek Substation to double circuit 138-kV transmission.

- *Uses an existing transmission line route for a portion of path.*

Gary Substation to Sub 19

Following the route of the existing de-energized 69-kV transmission line along State St, upgrade structures to 138-kV transmission southwest from Gary Substation to Pierce Park Ln. Head north to Castle Dr, then east along Castle Dr to Hill Rd. Follow Hill Rd southeast to Sub 19.

- *Uses an existing transmission line route for a portion of path.*

Sub 19 to State Substation

Construct a new 138-kV transmission line southeast along Hill Rd from Sub 19 to 36th St. Continue south along 36th St to State St. Head southeast along State St to Grace St, upgrading existing de-energized 69-kV transmission to 138-kV transmission line. Continue following route

of existing 69-kV transmission line to State Substation, upgrading structures to double circuit 138-kV transmission line.

- *Uses an existing transmission line route for a portion of the path.*

State Substation to Wye Substation

Upgrade the existing 69-kV transmission line to 138-kV from State Substation to near Boise Substation. Follow existing route to Whitewater Park Blvd, then head south along Whitewater Park Blvd to Jordan St. Follow Jordan St east to existing 69-kV transmission line, following the existing 69-kV line route to near Boise Substation. Upgrading existing 69-kV route from near Boise Substation southwest along Americana Blvd, then south along Latah St. with double circuit 138-kV construction to Rose Hill St. Turn west at Rose Hill St and continue double circuit 138-kV transmission to Roosevelt St. At Roosevelt St, continue double circuit 138-kV transmission line west along Rose Hill St and Franklin Rd to Wye Substation.

- *Uses an existing transmission line route for the majority of path.*

Alternative Options

The Committee selected alternative options for four future substations.

Sub 5 Alternative:

To be located north of the intersection of Ustick Rd and 43rd St.

Sub 10 Alternative:

To be located southwest of the intersection of Hill Rd and Horseshoe Bend Rd.

Sub 19 Alternative:

To be located southeast of the intersection of State St and Plantation River Dr.

Sub 21 Alternative:

To be located northeast of the intersection of Goose Creek Rd and Horseshoe Bend Rd.

The Committee also selected alternative line routes for the following transmission line sections.

Eagle Substation to Joplin Substation to Sub 10 Alternative

Construct a new double circuit 138-kV transmission line north along Horseshoe Bend Rd from existing 138-kV transmission line along State St to Sub 10.

Sub 10 Alternative to Sub 21 Alternative

Continuing from the alternative transmission line connection of Eagle Substation to Joplin Substation to Sub 10. Construct new 138-kV transmission line north along Horseshoe Bend Rd to Hwy 55. Past this point, follow the remainder of the preferred transmission line route from Sub 10 to Sub 21.

Gary Substation to State Substation Alternative

Upgrade existing de-energized 69-kV transmission line along State St from Gary Substation to State Substation following a de-energized 69-kV transmission line route.

- *Uses an existing, de-energized 69-kV transmission line route for majority of the path. Some of the transmission structures are already built to 138-kV specifications.*

Area 3: Southwest Ada Area

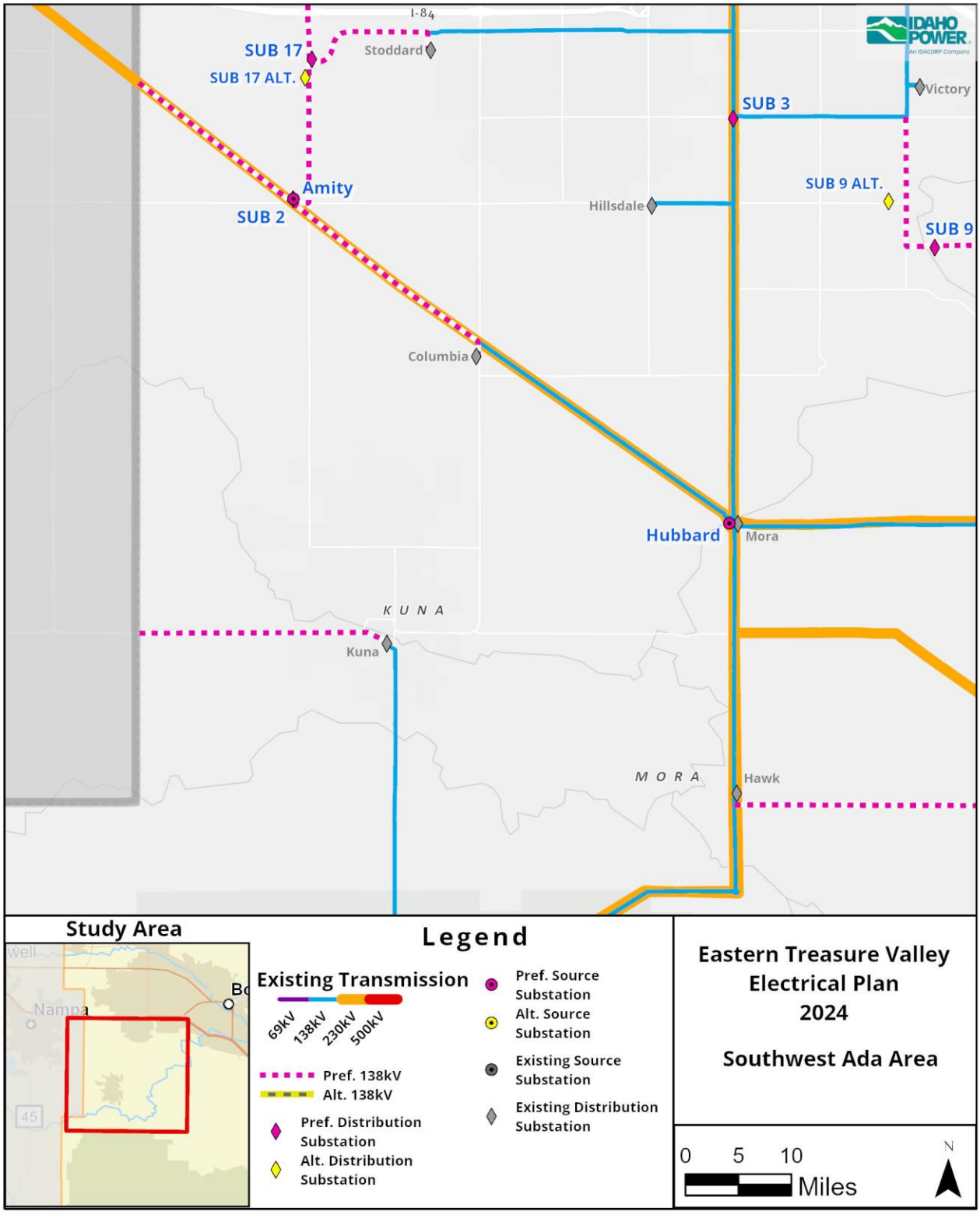

Figure 5
Southwest Ada Area

Preferred Options

In the Southwest Ada Area, the Committee proposed preferred locations for three new distribution substations and the connecting 138-kV transmission line routes.

Preferred Substation Locations

Distribution Substation 2 (Sub 2):

To be located northwest of the intersection of Amity Rd and Ten Mile Rd on a parcel of land owned by Idaho Power and co-located with the proposed Amity source substation.

- *Utilizes land owned by Idaho Power and combines facilities.*

Distribution Substation 3 (Sub 3):

To be located southwest of the intersection of Victory Rd and Cloverdale Rd.

Distribution Substation 17 (Sub 17):

To be located northeast of the intersection of Overland Rd and Ten Mile Rd.

Preferred 138-kV Transmission Line Routes

Sub 17 to Stoddard Substation

Construct a new 138-kV transmission line east along Overland Rd from Sub 17 to existing transmission line at Tech Ln. Upgrade 138-kV transmission line south of Tech Ln to Stoddard Substation to double circuit.

Sub 17 to Amity Source

Construct a new double circuit 138-kV transmission line south along Ten Mile Rd from Sub 17 to Amity Source Substation.

Amity Source to WTVEP area

Double circuiting with existing 230-kV transmission structures running from Caldwell Substation to Hubbard Substation, construct a new 138-kV transmission line northwest to WTVEP study area.

- *Uses an existing transmission line route for entirety of path.*

Amity Source to Columbia Substation

Double circuiting with existing 230-kV transmission structures running from Caldwell Substation to Hubbard Substation, construct a new 138-kV transmission line southeast to Columbia Substation.

- *Uses an existing transmission line route for entirety of path.*

Kuna Substation to WTVEP area

Construct a new 138-kV transmission line leaving Kuna Substation and heading northwest along Shortline St and turning west on Avalon St to Kuna Rd to the WTVEP study area.

Hawk Substation to Sub 28 (continues to Figure 6)

Construct a new 138-kV line south out of Hawk Substation along Cloverdale Rd to Kuna Mora Rd. Turn east on Kuna Mora Rd and construct a single circuit 138-kV transmission line to Cole Rd. Turning south on Cole Rd, construct a double circuit 138-kV line to Sub 28.

Alternative Option

The Committee selected an alternative for one future substation location.

Sub 17 Alternative:

To be located southwest of the intersection of Lamont Rd and Ten Mile Rd.

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Area 4: Southeast Ada Area

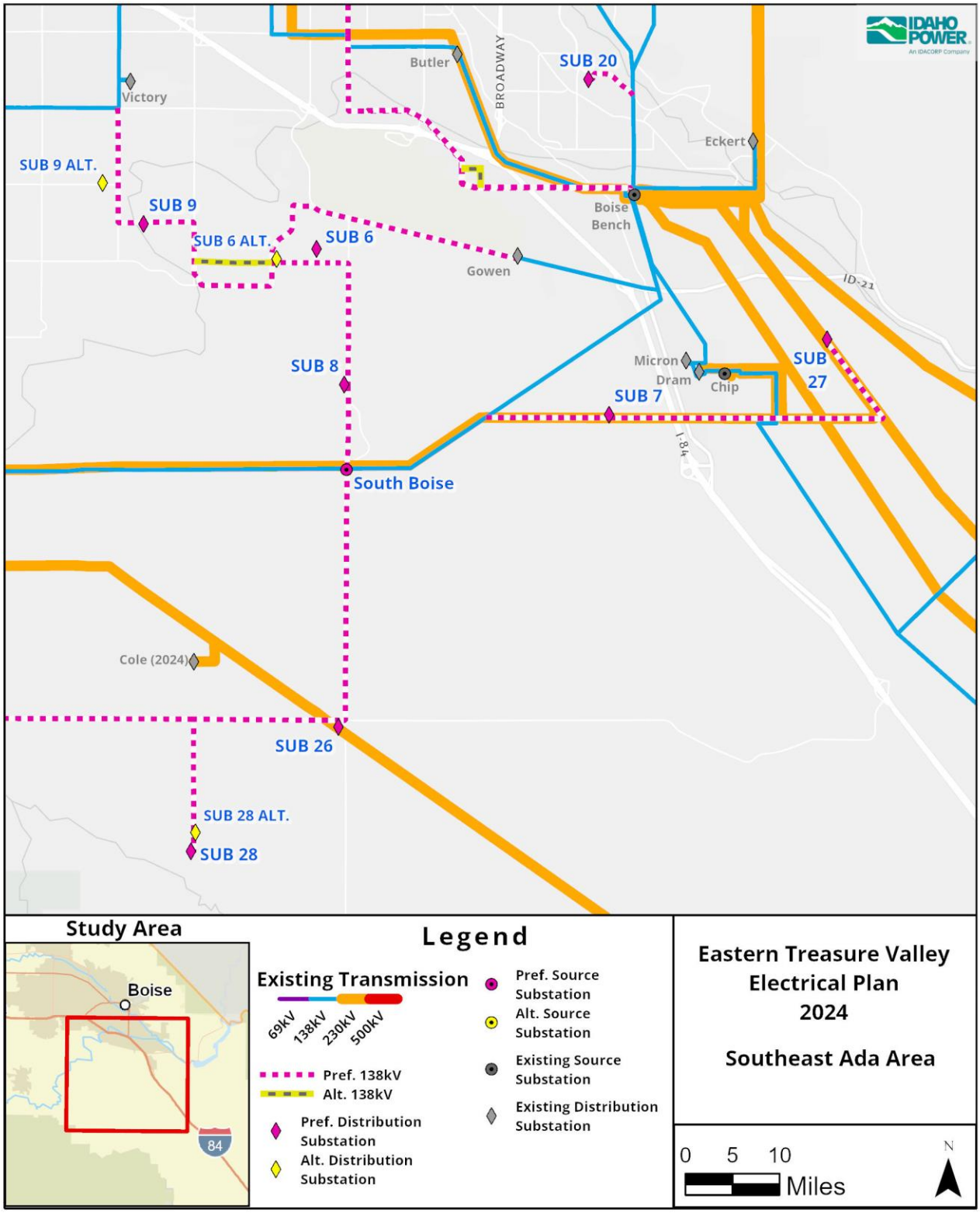

Figure 6:
Southeast Ada Area

Preferred Options

In the Southeast Ada Area, the Committee proposed preferred locations for eight new distribution substations and the connecting 138-kV transmission line routes.

Preferred Substation Locations

Distribution Substation 6 (Sub 6)

To be located north of a planned extension of Lake Hazel Rd, south of Gowen Rd and east of Orchard St.

Distribution Substation 7 (Sub 7)

To be located northwest of the intersection of Freight St and Warehouse Way.

Distribution Substation 8 (Sub 8)

To be located northwest of the intersection of Hollilynn Dr and Pleasant Valley Rd.

Distribution Substation 9 (Sub 9)

To be located southeast of the intersection of Desert Ave and Latigo Dr.

- *Located in low density area.*

Distribution Substation 20 (Sub 20)

To be located southwest of the intersection of Parkcenter Blvd and Lexington Dr.

Distribution Substation 26 (Sub 26)

To be located southwest of the intersection of Kuna Mora Rd and Pleasant Valley Rd.

Distribution Substation 27 (Sub 27)

To be located northwest of the intersection of Columbia Rd and Oregon Ridge Rd.

Distribution Substation 28 (Sub 28)

To be located southwest of the intersection of Barker Rd and Cole Rd.

Preferred 138-kV Transmission Line Routes

Boise Substation to Boise Bench Source Substation (continues on Figure 4)

Upgrading existing 69-kV route from Boise Substation southwest along Americana Blvd, then south along Latah St. with double circuit 138-kV construction to Rose Hill St. Turn west at Rose Hill St and continue double circuit 138-kV transmission to Roosevelt St. Turn south at Roosevelt St and continue double circuit 138-kV transmission line following the existing 69-kV transmission line south and east to Boise Bench Source Substation.

- *Uses an existing transmission line route for entirety of path.*

Wye Substation to Boise Bench Substation (continues on Figure 4)

Construct double circuit 138-kV from Wye Substation east on Franklin Rd to Rose Hill St. Turn south on Roosevelt St, continuing double circuit 138-kV transmission line. Continue double

circuit 138-kV transmission line following the existing 69-kV transmission line south and east to Boise Bench Source Substation.

- *Uses an existing transmission line route for majority of path.*

Victory Substation to Sub 9

Upgrade existing 138-kV transmission line south from Victory Substation to Victory Rd to double circuit 138-kV transmission. Construct a new 138-kV transmission line south along Maple Grove Rd from Victory Rd to Desert Ave. Heading east along Desert Ave to Sub 9.

- *Uses an existing transmission line route for portion of path.*

Sub 9 to Sub 6

Construct a new 138-kV transmission line leaving Sub 9 east along Desert Ave. At the intersection with Cole Rd, head south to intersection with Lake Hazel Rd, staying east of the New York Canal. Head east along the Lake Hazel Rd extension, following the bend north onto Orchard St and continuing roughly a quarter of a mile north to the dirt road. Constructing double circuit 138-kV transmission, follow this dirt road east roughly half a mile then north to Sub 6.

Sub 6 to Gowen Substation

Construct double circuit 138-kV transmission line west from Sub 6 to Orchard St. Turn north along Orchard Rd and construct single circuit 138-kV transmission line to Gowen Rd. Turn east on Gowen Rd and continue to Gowen Substation.

Sub 6 to Sub 8

Construct 138-kV transmission line east along the dirt road described in the Sub 9 to Sub 6 connection. At the intersection with Pleasant Valley Rd, turn south and continue to Sub 8.

Sub 8 to South Boise Source

Construct 138-kV transmission south along Pleasant Valley Rd from Sub 8 to the South Boise Source Substation.

South Boise Source to Sub 7

Construct a new double circuit 138-kV transmission line with the existing 138-kV transmission line heading east from the South Boise Source Substation. Follow the existing transmission line route northeast to where the existing 230-kV transmission line turns east. Construct a new single circuit 138-kV transmission line heading east in the same corridor as the existing 230-kV transmission line to Freight St to Sub 7.

- *Uses an existing transmission line route for portion of path.*

Sub 7 to Sub 27

Construct a new 138-kV transmission line east along Freight St and crossing I-84 following the existing 230-kV transmission line route. Continue the new 138-kV transmission line east to where the existing 230-kV transmission line turns northwest. Start with double circuit 138-kV transmission line from the point an existing 230-kV transmission line turns north towards Chip Source Substation. The double circuit 138-kV transmission line east to where an existing 230-

kV transmission line turns northwest towards Boise Bench Source Substation. Follow the existing 230-kV transmission line route northwest with double circuit 138-kV transmission line to Sub 27.

- *Uses an existing transmission line route for portion of path.*

Sub 27 to DRAM Substation

Use the route described in Sub 7 to Sub 27 from Sub 27 to the point at which the 230-kV transmission lines turn north to Chip Source Substation. Tap the existing 138-kV line that connects to DRAM Substation.

- *Uses an existing transmission line route for portion of path.*

South Boise Source to Sub 26

Double circuiting with the proposed 230-kV transmission line running from South Boise Source Substation to the Mayfield Source Substation, install 138-kV transmission line south along Pleasant Valley Rd to the intersection with Kuna Mora Rd. Turn west on Kuna Mora Rd, installing 138-kV transmission to Sub 26.

- *Uses a proposed 230-kV transmission line route for entirety of path.*

Sub 26 to Sub 28

Construct new 138-kV transmission line west along Kuna Mora Rd from Sub 26 to Cole Rd. Construct double circuit 138-kV transmission south on Cole Rd to Sub 28.

Sub 20 Connection

Tap the existing 138-kV transmission line near the intersection of Parkcenter Blvd and Portside Ave and construct new double circuit 138-kV transmission line northwest along Parkcenter Blvd to Sub 20.

Alternative Options

The Committee selected alternate locations for three future substation locations.

Sub 6 Alternative

To be located northeast of the intersection of the future Lake Hazel Rd extension and Orchard St.

Sub 9 Alternative

To be located north of the intersection of Amity Rd and Shawnee Way.

Sub 28 Alternative

To be located northeast of the intersection of Barker Rd and Cole Rd, north of a former meat processing plant.

The Committee also selected alternate line routes for the following transmission line sections:

Wye Substation to Boise Bench Substation Alternative

Follow route described in the preferred transmission line connection between Wye Substation and Boise Bench Substation. North of the Boise Airport near the intersection of Commerce Ave and Transport St, construct double circuit transmission line east along Commerce Ave to Enterprise St. Turn south on Enterprise St to the existing 69-kV transmission line and continue following the preferred route to Boise Bench Substation.

- *Uses an existing transmission line route for portion of path.*

Sub 9 to Sub 6 Alternative

Follow route described in preferred Sub 9 to Sub 6 connection. If constructing a 138-kV transmission line along the Lake Hazel Rd extension is infeasible, instead construct 138-kV transmission east from the intersection of Cole Rd and Latigo Dr east to Orchard Rd and continue following preferred route.

Area 6: Mayfield/Orchard Area

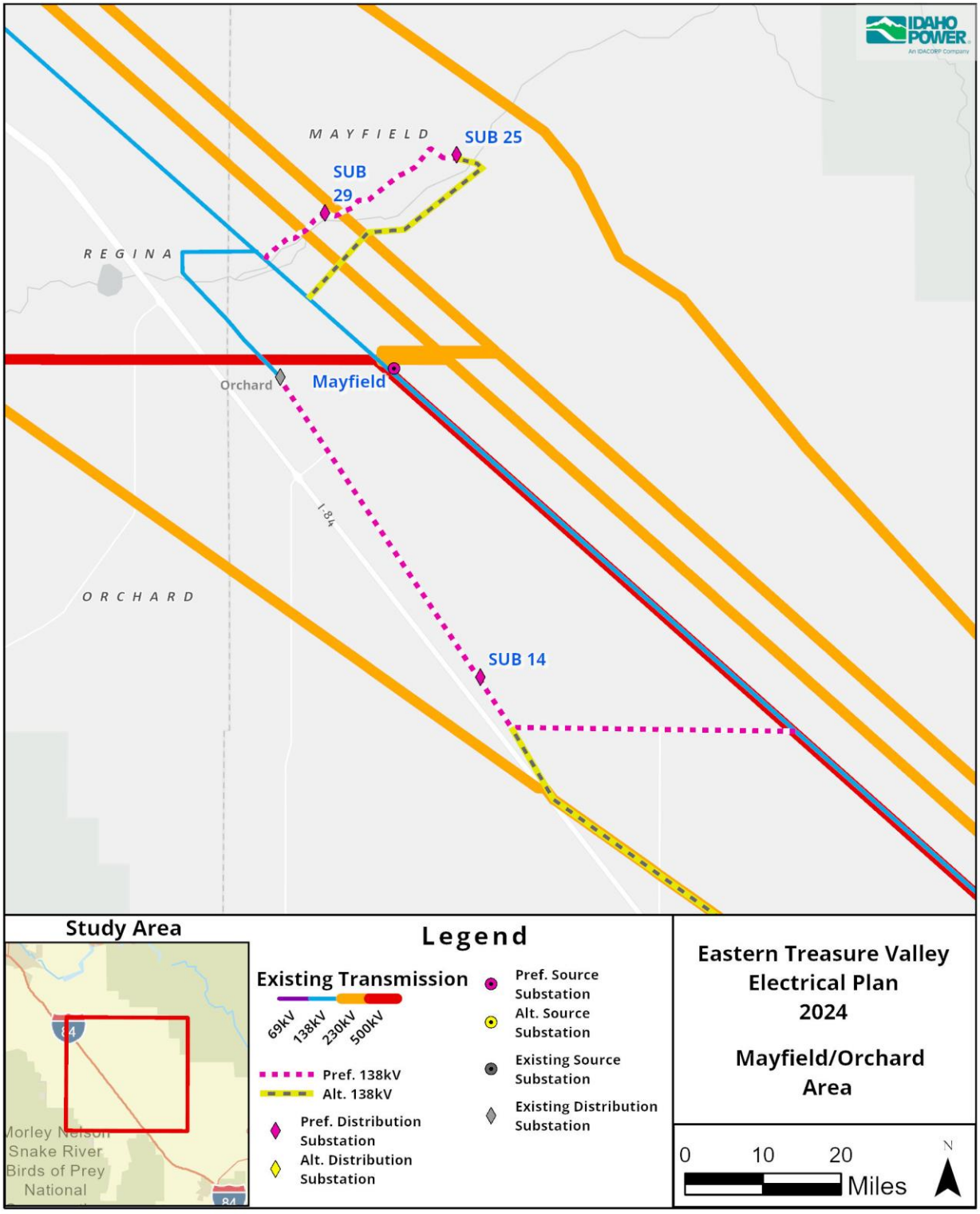

Figure 7: Mayfield/Orchard Area

Preferred Options

In the Mayfield/Orchard Area, the Committee proposed preferred locations for three new distribution substations and the connecting 138-kV transmission line routes.

Preferred Substation Locations

Distribution Substation 14 (Sub 14)

To be located north of the intersection of Soles Rest Creek Rd and Desert Wind Rd.

Distribution Substation 25 (Sub 25)

To be located east of the intersection of Mayfield Rd and Allen Ln.

Distribution Substation 29 (Sub 29)

To be located east of the intersection of Indian Creek Rd and Slater Creek Rd.

Preferred 138-kV Transmission Line Routes

Sub 29 to Existing 138-kV Transmission Line Northwest of Mayfield Source Substation

Tap the existing 138-kV transmission line that heads northwest out of Mayfield Source Substation at the intersection of Indian Creek Rd and the existing 138-kV transmission line. Construct double circuit 138-kV transmission line northeast along Indian Creek Rd to Sub 29.

- *Uses an existing transmission line route for portion of path.*

Sub 29 to Sub 25

Construct single circuit 138-kV transmission northeast along Indian Creek Rd from Sub 29 to intersection with Mayfield Rd. Turn east and follow Mayfield Rd to Sub 25.

Orchard Substation to Sub 14

Construct a new 138-kV transmission line southwest along Desert Wind Rd from Orchard Substation to Sub 14.

Sub 14 to Mt. Home Junction #1

Construct new 138-kV transmission line southeast along Desert Wind Rd from Sub 14 to the intersection with Tilli Rd. Turn east on Tilli Rd and continue east to intersection with the existing 138-kV and 500-kV transmission lines. Tap the existing 138-kV transmission line running from Mayfield Source Substation to Mountain Home Junction #1.

- *Uses an existing transmission line route for portion of path.*

Alternative Options

The Committee selected alternate line routes for the following transmission line sections:

Sub 25 to Mayfield Substation Alternative

Construct a new 138-kV transmission line east from Sub 25 along Mayfield Rd to Cemetery Rd. Continue south and west from this intersection, avoiding critical viewsheds in the nearby hills,

until tapping the existing 138-kV transmission line running from Mayfield Source Substation to DRAM Substation.

Sub 14 to Elmore Substation Alternative (continues on Figure 8)

Construct a new 138-kV transmission line southeast along Desert Wind Rd from Sub 14 to the existing 230-kV transmission line running from Danskin Source Substation to Hubbard Source Substation. Double circuit south and east along the 230-kV transmission line to Danskin Source Substation. Turn east and construct 138-kV transmission parallel to Mashburn Rd to Elmore Substation.

- *Uses an existing transmission line route for majority of path.*

Area 6: Mt. Home Area

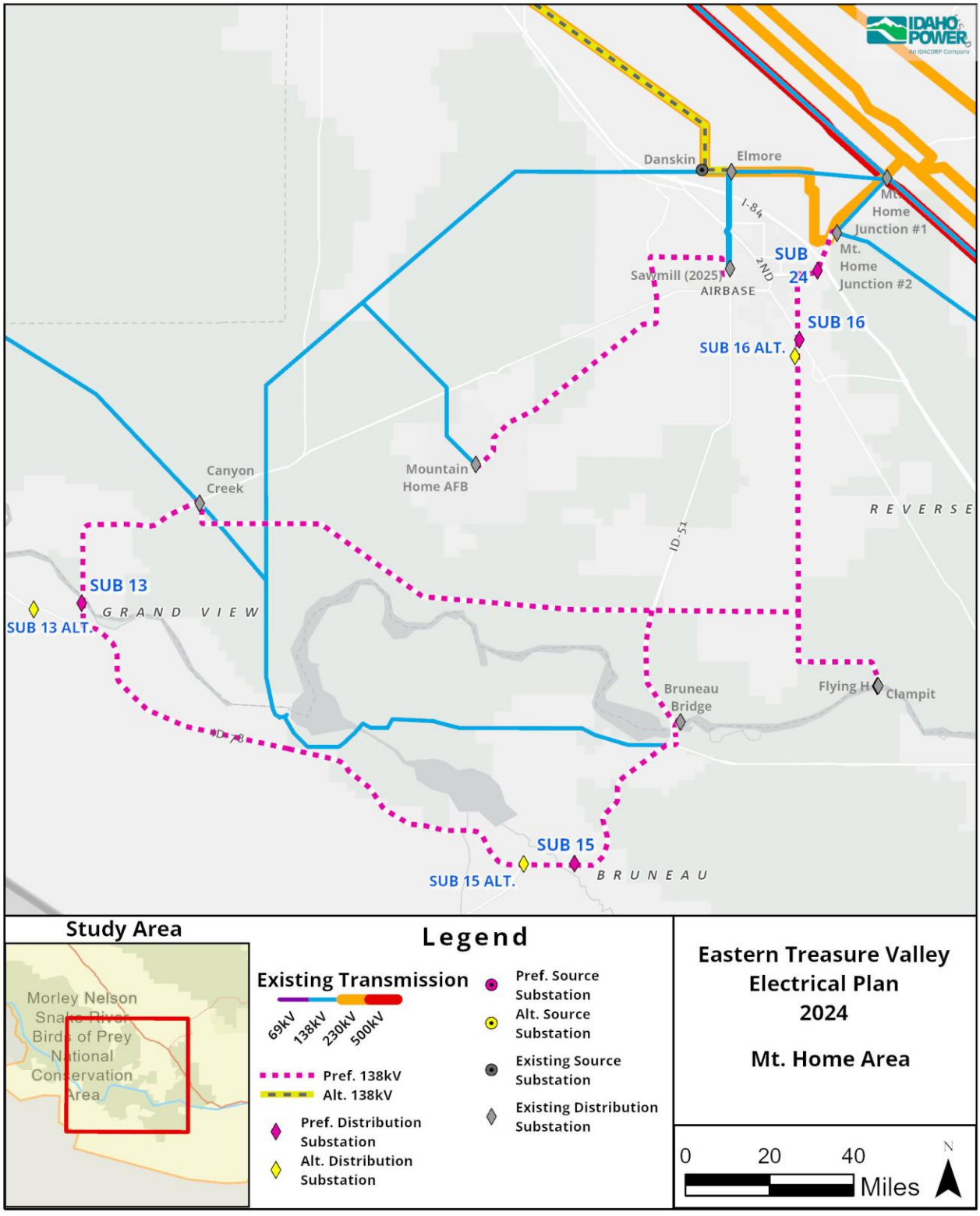

Figure 8: Mt. Home Area

Preferred Options

In the Mt. Home Area, the Committee proposed preferred locations for four new distribution substations and the connecting 138-kV transmission line routes.

Preferred Substation Locations

Distribution Substation 13 (Sub 13)

To be located north of Hwy 78, west of the town of Bruneau, ID, and east of a sewer lagoon.

Distribution Substation 15 (Sub 15)

To be located northwest of the intersection of West St and Grandview Rd.

Distribution Substation 16 (Sub 16)

To be located southeast of the intersection of Old Hwy 30 and 18th East St.

Distribution Substation 24 (Sub 24)

To be located near the intersection of NE City View Dr and American Legion Blvd, where future construction allows.

Preferred 138-kV Transmission Line Routes

Sawmill Substation to Mountain Home Air Force Base Substation

Construct new 138-kV transmission line south from Sawmill Substation to 5th St. Turn west, continuing to 23rd St and heading north. At the intersection with 10th St, turn west and continue to Bypass Rd (no connecting road), avoiding the Mountain Home Municipal Airport flight approach boundary. Head south on Bypass Rd, crossing Airbase Rd and the railroad, connecting to the existing 69-kV transmission line. Upgrade existing 69-kV transmission line route to 138-kV transmission running southwest to Mountain Home Air Force Base Substation.

- *Uses an existing transmission line route for portion of path.*

Mountain Home Junction Substation #2 to Sub 24

Construct 138-kV transmission line west from Mountain Home Junction Substation #1 to Hwy 20. Turn south on Hwy 20, double circuiting with the existing 230-kV transmission line along the highway where possible. Cross I-84 and continue south along American Legion Rd to the location of Sub 24.

- *Uses an existing transmission line route for portion of path.*

Sub 24 to Sub 16

Construct 138-kV transmission line from Sub 24 following American Legion Blvd south and west to the intersection with 18th St. Turn south on 18th St, crossing the railroad tracks to the location of Sub 16. Along 18th St between 6th St and Sub 16, the existing 69-kV transmission line will be rebuilt to 138-kV construction.

- *Uses an existing transmission line route for portion of path.*

Sub 16 to Bruneau Bridge Substation

Upgrade the existing 69-kV transmission line to 138-kV transmission line south along 18th St to the unnamed road where the 69-kV transmission line turns east. Continue upgrading the 69-kV transmission line west to the intersection with Hwy 51. Turn south and begin constructing new 138-kV double circuit transmission line along the highway to Bruneau Bridge Substation.

- *Uses an existing transmission line route for majority of path.*

Flying H and Clampit Substations Connections

Upgrade the existing 69-kV transmission line to 138-kV from Flying H and Clampit Substations to the upgraded 138-kV transmission line between Sub 16 and Bruneau Bridge Substation.

- *Uses an existing transmission line route for entirety of path.*

Bruneau Bridge Substation to Canyon Creek Substation

Use the new double circuit 138-kV transmission line described in the Sub 16 to Bruneau Bridge Substation along Hwy 51. Continue upgrading the existing 69-kV transmission line west to Canyon Creek Substation.

- *Uses an existing transmission line route for majority of path.*

Canyon Creek Substation to Sub 13

Construct a new 138-kV transmission line southwest out of Canyon Creek Substation along Hwy 167, crossing the Snake River to Sub 13.

Sub 13 to Sub 15

Construct a new 138-kV transmission line south along Hwy 167 from Sub 13 to Hwy 78. Head east and south following the curvature of Hwy 78 to the junction with Hwy 51. Continue east on Hwy 51 to the location of Sub 15.

Sub 15 to Bruneau Bridge Substation

Construct a new 138-kV transmission line east from Sub 15 following the curvature of Hwy 51 to the existing 138-kV transmission line near the junction with Hwy 78 near the Snake River. Double circuit the existing 138-kV transmission line north from the junction to Bruneau Bridge Substation.

- *Uses an existing transmission line route for portion of path.*

Alternative Options

The Committee selected alternate locations for three future substation locations.

Sub 13 Alternate

To be located south of Hwy 78, near a gravel pit roughly 1.5 miles west of the City of Grand View, Idaho.

Sub 15 Alternate

To be located north of the junction of Hwy 78 and Hwy 51.

Sub 16 Alternate

To be located northwest of the intersection of Yuba St and 18th East St.