IRWIN THOMAS PRELIMINARY/FINAL PUD DEVELOPMENT PLAN

PART OF THE NORTHWEST QUARTER, NORTHEAST QUARTER, SOUTHEAST QUARTER AND EAST ONE-HALF OF THE SOUTHWEST QUARTER OF SECTION 11, TOWNSHIP 2 NORTH, RANGE 69 WEST OF THE 6TH PRINCIPAL MERIDIAN. COUNTY OF BOULDER, STATE OF COLORADO

LEGAL DESCRIPTION IT No. 1 (NORTH PORTION): A PARCEL OF LAND LOCATED IN THE EAST HALF OF THE NORTHWEST QUARTER AND IN THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 2 NORTH, RANGE 69 WEST OF THE 6TH PRINCIPAL MERIDIAN.

COUNTY OF BOULDER. STATE OF COLORADO AND BEING

MORE PARTICULARLY **DESCRIBED** AS FOLLOWS:

BEARINGS CONTAINED HEREIN ARE BASED ON THE ASSUMPTION THAT THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 11, TOWNSHIP 2 NORTH, RANGE 69 WEST OF THE 6TH PRINCIPAL MERIDIAN BEARS N 90°00'00" E BETWEEN A FOUND 3.25 INCH ALUMINUM CAP MONUMENT STAMPED LS 20685 IN RANGE BOX AT THE SOUTH QUARTER CORNER OF SAID SECTION 11 AND A FOUND 2 INCH **ALUMINUM CAP MONUMENT STAMPED LS 18892 IN RANGE** BOX AT THE SOUTHEAST CORNER OF SAID SECTION 11.

COMMENCING AT THE NORTHWEST CORNER OF THE EAST HALF OF THE SOUTHWEST QUARTER OF SECTION 11. TOWNSHIP 2 NORTH, RANGE 69 WEST OF THE 6TH PRINCIPAL MERIDIAN, A FOUND 3.25 INCH ALUMINUM CAP MONUMENT IN RANGE BOX WITH CAP STAMPED LS 34993:

THENCE N 00°09'49" E ALONG THE WEST LINE OF THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 11 A DISTANCE OF 113.32 FEET TO THE POINT OF BEGINNING AT THE NORTHERLY RIGHT-OF-WAY LINE OF COLORADO STATE HIGHWAY 119;

THENCE S 88°35'07" E ALONG SAID NORTHERLY RIGHT-OF-WAY LINE OF HIGHWAY 119 A DISTANCE OF 420:12

THENCE S 89°46'53" E A DISTANCE OF 1458.66 FEET TO THE BEGINNING OF A CURVE TO THE LEFT. SAID CURVE HAVING A RADIUS OF 1499,43 FEET, A CHORD BEARING OF N 84°05'29" E AND A CHORD DISTANCE OF 316.16 FEET;

THENCE ALONG THE ARC OF SAID CURVE A DISTANCE OF 318.75 FEET:

THENCE DEPARTING SAID NORTHERLY RIGHT-OF-WAY LINE N 00°23'09" E A DISTANCE OF 540.74 FEET: THENCE S 89°13'25" W A DISTANCE OF 16.39 FEET: THENCE N 88°58'35" W A DISTANCE OF 59.92 FEET: THENCE N 87°25'56" W A DISTANCE OF 59.36 FEET THENCE N 84°49'38" W A DISTANCE OF 30.47 FEET: THENCE N 80°18'03" W A DISTANCE OF 29.84 FEET: THENCE N 85°39'40" W A DISTANCE OF 318.58 FEET; THENCE S 77°48'07" W A DISTANCE OF 30.42 FEET; THENCE S 84°58'59" W A DISTANCE OF 29.01 FEET; THENCE S 89°55'28" W A DISTANCE OF 119.83 FEET: THENCE N 89°29'26" W A **DISTANCE** OF 179.76 FEET; THENCE N 88°16'29" W A DISTANCE OF 46.67 FEET; THENCE N 86°57'50" W A DISTANCE OF 122.90 FEET; THENCE N 81°58'55" W A DISTANCE OF 119.60 FEET TO THE

BEGINNING OF A CURVE TO THE LEFT. SAID CURVE HAVING

A RADIUS OF 1176.88 FEET, A CHORD BEARING OF N 80°21'54"

THENCE ALONG THE ARC OF SAID CURVE A DISTANCE OF 329.24 FEET:

W AND A CHORD DISTANCE OF 328.17 FEET;

THENCE S 89°24'25" W A DISTANCE OF 179.24 FEET; THENCE S 88°58'45" W A DISTANCE OF 179,71 FEET: THENCE S 85°15'33" W A DISTANCE OF 90.62 FEET; THENCE S 75°00'56" W A DISTANCE OF 29.57 FEET: THENCE S 59°42'34" W A DISTANCE OF 29.89 FEET: THENCE S 56"24'01" W A DISTANCE OF 120.42 FEET: THENCE S 54°31'47" W A DISTANCE OF 29.53 FEET; THENCE S 52°02'52" W A DISTANCE OF 29.85 FEET; THENCE S 48°31'12" W A DISTANCE OF 30.08 FEET: THENCE S 38°16'59" W A DISTANCE OF 29.75 FEET: THENCE S 21°37'46" W A DISTANCE OF 16.75 FEET: THENCE S 04°53'41" W A DISTANCE OF 73.69 FEET;

THENCE S 10°27'59" W A DISTANCE OF 41.57 FEET TO A POINT ON THE WEST LINE OF THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 11:

THENCE S 00°09'49" W ALONG SAID LINE A DISTANCE OF 354.17 FEET TO THE POINT OF BEGINNING:

PARCEL CONTAINS: 1,352,597.44 SQUARE FEET OR 31.05

LEGAL DESCRIPTION IT No. 1 (SOUTH PORTION): THAT PART OF THE EAST HALF OF THE SOUTHEAST QUARTER, PART OF THE NORTHEAST QUARTER AND PART OF THE EAST HALF OF THE SOUTHWEST QUARTER OF SECTION 11, TOWNSHIP 2 NORTH, RANGE 69 WEST OF THE 8TH PRINCIPAL MERIDIAN, COUNTY OF BOULDER, STATE OF COLORADO AND BEING MORE PARTICULARLY DESCRIBED AS

BEARINGS CONTAINED HEREIN ARE BASED ON THE ASSUMPTION THAT THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 11 BEARS N 90°00'00" E BETWEEN A FOUND 3.25 INCH ALUMINUM CAP MONUMENT STAMPED LS 20885 IN RANGE BOX AT THE SOUTH QUARTER CORNER OF SAID SECTION 11 AND A FOUND 3.25 INCH ALUMINUM CAP MONUMENT STAMPED LS 18982 IN RANGE BOX AT THE SOUTHEAST **QUARTER OF SAID SECTION 11.**

COMMENCING AT A FOUND 3.25 INCH ALUMINUM CAP MONUMENT STAMPED LS 34983 AT THE NORTHWEST CORNER OF THE EAST HALF OF THE SOUTHWEST QUARTER OF SECTION 11. TOWNSHIP 2 NORTH, RANGE

THENCE S 00°23'31" W ALONG THE WEST LINE OF THE EAST HALF OF THE SOUTHWEST QUARTER OF SAID SECTION 11 A DISTANCE OF 81.16 FEET TO THE POINT OF BEGINNING ON THE SOUTHERLY RIGHT-OF-WAY LINE **OF COLORADO STATE HIGHWAY 119:**

THENCE ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE THE FOLLOWING (8) COURSES AND DISTANCES:

1) N 87°01'49" E A DISTANCE OF 366.96 FEET; 2) 8 89°49'17" E A DISTANCE OF 1090.50 FEET: 3) S 86°10'33" E A DISTANCE OF 453.38 FEET: 4) ALONG A CURVE TO THE LEFT WITH AN ARC LENGTH OF 1157.79, WITH A RADIUS OF 1781.52 FEET, WITH A CHORD BEARING OF N 73°57'35" E, WITH A CHORD LENGTH OF 1137.06 FEET; 5) N 85°23'01" E A DISTANCE OF 262.28 FEET 6) S 80°30'18" E A DISTANCE OF 90.60 FEET: 7) S 67°36'37" E A DISTANCE OF 167.64 FEET: 8) S 60°10'07" E A DISTANCE OF 457.20 FEET TO A POINT ON THE

THENCE N 89°53'04" E A DISTANCE OF 40.00 FEET TO A POINT ON THE **EASTERLY RIGHT-OF-WAY LINE OF NORTH 119TH STREET:**

WESTERLY RIGHT-OF-WAY LINE OF NORTH 119TH STREET;

THENCE S 00°02'50" W CONTINUING ALONG SAID EASTERLY

THENCE S 00"06"57" E ALONG SAID EASTERLY RIGHT-OF-WAY LINE 20 FEET EASTERLY AND PARALLEL WITH THE EAST LINE OF THE NORTHEAST QUARTER OF THE SOUTHFAST QUARTER OF SECTION 11 A DISTANCE OF 1231.26 FEET;

RIGHT-OF-WAY LINE 20 FEET EASTERLY AND PARALLEL WITH THE EAST LINE OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 11 A DISTANCE OF 1141.37 FEET: THENCE N 89°58'52" W A DISTANCE OF 50.09 FEET: THENCE N 00°02'50" E A DISTANCE OF 80.70 FEET: THENCE N 70°49'00" W A DISTANCE OF70.96 FEET: THENCE N 79°37'39" W A DISTANCE OF 133.21 FEET; THENCE N 00°00'00" E A DISTANCE OF 14.08 FEET; THENCE N 90°00'00" W A DISTANCE OF 1120.00 FEET: THENCE N 58°27'33" W A DISTANCE OF 98.96 FEET; THENCE 8 00°00'00" E A DISTANCE OF 393,86 FEET TO A POINT ON THE SOUTHERLY RIGHT-OF-WAY LINE OF QUAIL ROAD;

THENCE N 90°00'00" W ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE 30 FEET SOUTHERLY AND PARALLEL WITH THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 11 A DISTANCE OF 55.00 FEET;

THENCE DEPARTING SAID SOUTHERLY RIGHT-OF-WAY LINE N 00°00'00" W A DISTANCE OF 427.62 FEET:

THENCE N 58°27'33" W A DISTANCE OF 31.07 FEET: THENCE N 66°50'00" WA DISTANCE OF 157.10 FEET: THENCE N 00°22'00" E A DISTANCE OF 145.94 FEET: THENCE N 90°00'00" W A DISTANCE OF839.55 FEET; THENCE S 00°22'00" W A DISTANCE OF 651.62 FEET TO A POINT ON THE SOUTHERLY RIGHT-OF-WAY LINE OF QUAIL ROAD:

THENCE N 90°00'00" W 30 FEET SOUTHERLY AND PARALLEL WITH THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 11 A DISTANCE OF 134.21 FEET:

THENCE 8.89'35'39" W ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE A DISTANCE OF 1308.36 FEET:

THENCE N 00°23'31" E A DISTANCE OF 30.00 FEET TO A FOUND 3.25 INCH ALUMINUM CAP MONUMENT STAMPED LS 20885 IN RANGE BOX AT THE SOUTHWEST CORNER OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 11:

THENCE'N 00°23'31" E ALONG THE WEST LINE OF THE EAST HALF OF THE SOUTHWEST QUARTER OF SECTION 11 A DISTANCE OF 2537.37 FEET: TO THE POINT OF BEGINNING.

PARCEL CONTAINS: 9,319,116.6 SQUARE FEET OR 213.938 ACRES MORE

NOTICE: According to Colorado Law you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event, may any action based upon any defact in this survey be commenced more than 10 years from the date of the certification hereon.

LEGAL DESCRIPTION - IRWIN THOMAS ANNEXATION NO.2 (NORTH PORTION)

A PARCEL OF LAND LOCATED IN THE NORTH ONE-HALF OF SECTION 11, TOWNSHIP 2 NORTH, RANGE 69 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF BOULDER, STATE OF COLORADO MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEARINGS CONTAINED HEREIN ARE BASED ON THE ASSUMPTION THAT THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 11. TOWNSHIP 2 NORTH, RANGE 69 WEST OF THE 6TH PRINCIPAL MERIDIAN BEARS N 90°00'00" E BETWEEN A FOUND 3,25 INCH ALUMINUM CAP MONUMENT STAMPED LS 20685 IN RANGE BOX AT THE SOUTH QUARTER CORNER OF SAID SECTION 11 AND A FOUND 2 INCH ALUMINUM CAP MONUMENT STAMPED LS 18892 IN RANGE BOX AT THE SOUTHEAST CORNER OF SAID SECTION 11.

COMMENCING AT THE EAST QUARTER CORNER OF SECTION 11. FROM WHENCE THE NORTHEAST CORNER OF SECTION 11 BEARS NORTH 00°01'24" WEST 2629.85 FEET:

THENCE ALONG THE EAST LINE OF THE NORTHEAST QUARTER OF SECTION 11 NORTH 00°01'24" WEST 697.30 FEET: THENCE LEAVING SAID EAST LINE NORTH 89°58'36" WEST 20.00 FEET TO A POINT ON THE

THENCE LEAVING SAID WESTERLY RIGHT-OF-WAY LINE NORTH 65°16'54" WEST 504.96 FEET TO A POINT ON THE WEST LINE OF A TRACT OF LAND DESCRIBED BY DEED RECORDED AT RECEPTION

THENCE ALONG SAID WEST LINE SOUTH 58°21'32' WEST 71.75 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE FOR THE BURLINGTON NORTHERN RAILROAD RECORDED AT BOOK 130 PAGE 243 OF BOULDER COUNTY RECORDS:

THENCE ALONG SAID NORTHERLY RIGHT-OF-WAY LINE THE FOLLOWING 2 COURSES:

NO. 2294476 OF BOULDER COUNTY RECORDS AND BEING THE POINT OF BEGINNING:

1) ALONG THE ARC OF A CURVE TO THE RIGHT, SAID CURVE HAVING A RADIUS OF 5950.00 FEET A CENTRAL ANGLE OF 00°00'32", CHORD OF SAID ARC BEARS NORTH 63°34'35" WEST 0.94 FEET). A DISTANCE OF 0.94 FEET:

2) NORTH 63"34"35" WEST 2860.49 FEET:

THENCE NORTH 31°25'52" EAST 11.30 FEET;

WESTERLYRIGHT-OF-WAYLINE OF NORTH 119TH STREET:

THENCE NORTH 34°42'22' EAST 568.16 FEET TO A POINT ON THE NORTH LINE OF THE NORTHWEST QUARTER OF SECTION 11;

THENCE ALONG SAID NORTH LINE NORTH 89°49'52" EAST 164.58 FEET TO THE NORTH ONEQUARTER CORNER OF SECTION 11;

THENCE SOUTH 00°16'40" WEST 504.45 FEET;

THENCE NORTH 89°49'19' EAST 484.71 FEET:

THENCE SOUTH 55°08'38" EAST 140.51 FEET;

THENCE SOUTH 43°57'24" EAST 429.71 FEET:

THENCE SOUTH 49°04'29" EAST 119.74 FEET;

THENCE SOUTH 59°47'40" EAST 596.86 FEET;

THENCE SOUTH 50°54'20" EAST 225.05 FEET;

THENCE NORTH 21°01'10' EAST 184.68 FEET:

THENCE SOUTH 73°46'50" EAST 236.00 FEET:

THENCE SOUTH 15°28'33" WEST 306.12 FEET;

THENCE SOUTH 65°16'54" EAST 265.95 FEET TO A POINT ON THE WEST LINE OF A TRACT OF LAND DESCRIBED BY DEED RECORDED AT RECEPTION NO. 2294476 OF BOULDER COUNTY RECORDS TO THE POINT OF BEGINNING.

PARCEL CONTAINS: 799,981.8 SQUARE FEET OR 18.365 ACRES MORE OR LESS.

FLOOD PLAIN NOTES:

THIS PROPERTY LIES IN AREAS DETERMINED TO BE WITHIN • OTHER AREAS - AREAS OUTSIDE THE 2% ANNUAL CHANCE FLOOD • ZONE X - AREAS OF 25 ANNUAL CHANCE OF FLOOD OR AREAS WITH 1% ANNUAL CHANCE OF FLOOD WITH AVERAGE DEPTHS OF LESS THAN ONE FOOT OR WITHIN DRAINAGE AREAS LESS THAN ONE SQUARE MILE AND AREAS PROTECTED BY LEVEES FROM THE 100 YEAR FLOOD AND • ZONE AE - SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1%

ANNUAL FLOOD CHANCE, BASE FLOOD ELEVATIONS DETERMINED. • ZONE AH - SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL FLOOD CHANCE, FLOOD DEPTHS OF 1 TO 3 FEET, (USUALLY AREAS OF PONDING) BASE FLOOD ELEVATIONS DETERMINED. FLOODPLAIN INFORMATION PER FIRM FLOOD INSURANCE RATE MAP NO 08013C0287J

DATED DECEMBER 18, 2012 AND FIRM FLOOD INSURANCE RATE MAP NO 08013C0289J DATED DECEMBER 18, 2012

THE ADDITIONAL FLOODPLAIN SHOWN HERE ON IS BASED ON CITY OF LONGMONT, CH2MHILL DRAFT FLOOD PLAIN MAPPING DATED 5/21/15. A DRAFT REVISED CLOMR FOR THE EXISTING FLOODPLAIN CONDITION BASED ON THE CH2MHILL DRAFT FLOOD PLAIN. MAPPING DATED 5/21/15 IS PREPARED AND IS IN THE PROCESS OF FEMA APPROVAL. ROCK CREEK SURVEYING LLC ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE CH2MHILL INFORMATION. FLOOD PLAIN INFORMATION IS SUBJECT TO REVISION IF CHANGES OR IMPROVEMENTS OCCUR IN THE FLOODPLAIN.

LEGAL DESCRIPTION - IRWIN THOMAS ANNEXATION NO. 2 (SOUTH PORTION)

A PARCEL OF LAND SITUATED IN THE NORTHEAST QUARTER AND THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 11, TOWNSHIP 2 NORTH, RANGE 69 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF BOULDER, STATE OF COLORADO AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEARINGS CONTAINED HEREIN ARE BASED ON THE ASSUMPTION THAT THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 11, TOWNSHIP 2 NORTH, RANGE 69 WEST OF THE 6TH PRINCIPAL MERIDIAN BEARS N 90°00'00" E BETWEEN A FOUND 3.25 INCH ALUMINUM CAP MONUMENT STAMPED LS 20685 IN RANGE BOX AT THE SOUTH QUARTER CORNER OF SAID SECTION 11 AND A FOUND 2 INCH ALUMINUM CAP MONUMENT STAMPED LS 18892 IN RANGE BOX AT THE SOUTHEAST CORNER OF SAID SECTION 11.

COMMENCING AT A POINT ON THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 11, FROM WHENCE THE EAST QUARTER CORNER OF SECTION 11 BEARS S 0° 01'24" E A DISTANCE OF 156.00 FEET;

THENCE N 70°19'39' W A DISTANCE OF 21.24 FEET TO A POINT ON THE WEST RIGHT OF WAY LINE OF NORTH 119TH STREET:

THENCE N 70°19'39" W A DISTANCE OF 1369.15 FEET TO A POINT ON THE WEST LINE OF THE EAST HALF OF THE NORTHEAST QUARTER OF SECTION 11; THENCE ALONG SAID WEST LINE N 00°07'45" E A DISTANCE OF 27.17 FEET;

THENCE S 89°43'29" W A DISTANCE OF 1308.99 FEET TO A POINT ON THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 11: THENCE ALONG SAID WEST LINES 00°16'40" W A DISTANCE OF 22.25 FEET TO A POINT FROM WHENCE THE CENTER QUARTER CORNER OF SECTION 11 BEARS S 00°16'40" W A

DISTANCE OF 636.60 FEET: THENCE N 77°55'08' W A DISTANCE OF 198.10 FEET,

THENCE N 63°40'08" W A DISTANCE OF 217,90 FEET: THENCE S 89°55'52" W A DISTANCE OF 914.35 FEET TO A POINT ON THE WEST LINE OF THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 11 FROM WHENCE THE WEST CENTER SIXTEENTH CORNER OF SECTION 11 BEARS S 00°09'49" W A DISTANCE OF 780.43

THENCE ALONG SAID WEST LINE N 00°09`49" E A DISTANCE OF 290.02 FEET TO THE SOUTHWEST CORNER OF A PARCEL OF LAND DESCRIBED BY A SPECIAL WARRANTY DEED RECORDED AS RECEPTION NO. 1059214, FILM 1639 OF BOULDER COUNTY RECORDS; THENCE S 89°03'48" E ALONG SAID SOUTHERLY LINE A DISTANCE OF 304.16 FEET;

RIGHT OF WAY LINE OF THE BURLINGTON NORTHERN RAILROAD AND BEING THE POINT OF

THENCE N 87°51'12" E A DISTANCE OF 223.07 FEET: THENCE S 70°42'17" E A DISTANCE OF 78.66 FEET THENCE N 00°09'49" E A DISTANCE OF 972.28 FEET TO A POINT ON THE SOUTHWESTERLY

BEGINNING; THENCE S 00°09°49" W A DISTANCE OF 206 66 FEET:

THENCE S 59°54'42" E A DISTANCE OF 31.44 FEET; THENCE S 89°45'11" E A DISTANCE OF 297.71 FEET: THENCE S 63°40'50" E A DISTANCE OF 236.62 FEET:

THENCE S 00°09'49" W A DISTANCE OF 370.48 FEET TO THE BEGINNING OF A NON-TANGENT CURVE TO THE RIGHT, SAID CURVE HAVING A RADIUS OF 750.00 FEET, A CHORD BEARING OF S 69°43'06" E, A CHORD DISTANCE OF 237.77 FEET:

THENCE ALONG THE ARC OF SAID CURVE A DISTANCE OF 238.78 FEET:

THENCE S 60°35'52' E A DISTANCE OF 171.40 FEET: THENCE S 89°52'49' E A DISTANCE OF 122.83 FEET. THENCE S 85°52'23' E A DISTANCE OF 177.36 FEET:

THENCE S 35°26'22" E A DISTANCE OF 106.41 FEET; THENCE S 00°56'32" W A DISTANCE OF 98.38 FEET TO THE BEGINNING OF A CURVE TO THE LEFT. SAID CURVE HAVING A RADIUS OF 1400.00 FEET. A CHORD BEARING OF S 84°47'32" E AND A CHORD DISTANCE OF 480.21 FEET;

THENCE ALONG THE ARC OF SAID CURVE A DISTANCE OF 482.60 FEET; THENCE N 85°19'57" E A DISTANCE OF 104.25 FEET TO THE BEGINNING OF A CURVE TO THE

RIGHT, SAID CURVE HAVIING A RADIUS OF 300:00 FEET, A CHORD BEARING OF S 84°01'28" E AND A CHORD DISTANCE OF 110.81 FEET: THENCE ALONG THE ARC OF SAID CURVE A DISTANCE OF 111.45 FEET. THENCE S 73°22'53" E A DISTANCE OF 205.55 FEET TO THE BEGINNING OF A CURVE TO THE

RIGHT, SAID CURVE HAVING A RADIUS OF 520.00 FEET, A CHORD BEARING OF S 60°29'53" E AND A CHORD DISTANCE OF 231.88 FEET; THENCE ALONG THE ARC OF SAID CURVE A DISTANCE OF 233.85 FEET;

THENCE S 47°36'54" E A DISTANCE OF 48.06 FEET TO THE BEGINNING OF A CURVE TO THE LEFT, HAVING A RADIUS OF 200.00, A CHORD BEARING OF S 54°47'07" E AND A CHORD DISTANCE OF 49.93 FEET: THENCE ALONG THE ARC OF SAID CURVE A DISTANCE OF 50.06 FEET.

THENCE S.61°57'30" E A DISTANCE OF 36.39 FEET TO A POINT ON THE NORTHWESTERLY RIGHT-OF-WAY LINE OF COLORADO STATE HIGHWAY 119; THENCE N 46°31'45" E ALONG SAID NORTHWESTERLY RIGHT-OF-WAY LINE A DISTANCE OF

47.02 FEET: THENCE N 51°28'42" E A DISTANCE OF 223.42 FEET TO A POINT ON THE SOUTHEASTERLY RIGHT OF WAY LINE OF THE BURLINGTON NORTHERN SANTA FE (BNSF) RAILROAD: THENCE DEPARTING SAID NORTHWESTERLY RIGHT-OF-WAY LINE N 63°34'35" W A DISTANCE OF 2201.79 FEET TO A POINT ON THE WEST LINE OF THE NORTHWEST QUARTER

OF THE NORTHEAST QUARTER OF SECTION 11 THENCE S.00°16'40" W ALONG SAID WEST LINE AND ALONG THE EASTERLY RIGHT-OF-WAY LINE OF SAID BNSF RAILROAD RIGHT-OF-WAY A DISTANCE OF 139.25 FEET: THENCE N 63°34'35' W ALONG THE SOUTHERLY RIGHT-OF-WAY LINE OF SAID BNSF

RAILROAD A DISTANCE OF 677.89 FEET: THENCE N 63°34'35" W CONTINUING ALONG SAID SOUTHERLY RAILROAD RIGHT-OF-WAY LINE A DISTANCE OF 107.67 FEET TO THE POINT OF BEGINNING.

PARCEL CONTAINS: 870,515.7 SQUARE FEET OR 19.98 AGRES.

Surveyor's Certificate I certify this PUD Plan accurately represents the results of a survey made by me or under my direct supervision completed according to applicable State of Colorado requirements.

ROBERT A. RICHARD L.S. Colorado Reg. No.; <u>て合て</u>器

STANDARD NOTES:

A. THE PROPERTY IS SUBJECT TO AN ANNEXATION AGREEMENT WITH THE CITY OF LONGMONT. B. ALL FUTURE DEVELOPMENT OF THE PROPERTY WILL CONFORM TO THE APPROVED

CONCEPT PLAN UNLESS AMENDED BY THE CITY COUNCIL. C. THE PROPERTY WILL COMPLY WITH ALL APPLICABLE DEVELOPMENT CODE REQUIREMENTS.

D. THE PROPERTY WILL COMPLY WITH THE CITY OF LONGMONT'S REQUIREMENTS FOR DRAINAGE

E. FUTURE DEVELOPMENT ON THE PROPERTY SHALL COMPLY WITH THE CITY'S FLOOD PLAIN REGULATIONS BASED ON THE BEST FLOODPLAIN DATA AVAILABLE AT THE TIME OF DEVELOPMENT.

1.) THE PURPOSE OF THIS MAP IS FOR USE AS THE IRWIN THOMAS NO. 1 AND NO. 2 ANNEXATION CONCEPT PLAN BASE SHEET AS PREPARED BY RESOURCE

2) THIS CONCEPT PLAN IS NOT A LAND SURVEY PLAT OR AN IMPROVEMENT SURVEY PLAT IN ACCORDANCE WITH CRS.

3) PROPOSED ZONING - PLANNED UNIT DEVELOPMENT MIXED USE - PUD-MU

4.) 5-FOOT ELEVATION CONTOURS SHOWN HEREON WERE PROVIDED BY THE CLIENT AND ARE FOR GENERAL INFORMATION PURPOSES ONLY. NO VERTICAL DATUM WAS PROVIDED FOR THIS MAPPING. ROCK CREEK SURVEYING, LLC ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE TOPOGRAPHIC INFORMATION SHOWN HEREON

Property Owner Acknowledgement

Golden Farm, LLLP, RLSJ Properties, LLC and the City of Longmont, being the owners of the property described herein have planned this property under the name of Irwin Thomas Planned Unit Development for Gravel Mining and Reclamation. All conditions, terms, and specifications designated or described on this document shall be binding on the owner(s), their heirs, successors and assigns.

November 2018 1 Golden Land, LLLP

Reggie Golden

Notary Certificate STATE OF COLORADO)

COUNTY OF BOULDERY The foregoing instrument was acknowledged before me this November 2018 by Reggie Golden

My Commission expires: 8/20/20

Address of Notary: Rahin a. Engen, 3249 Huy 52, Euc., CO 80546

Fire Approval The BUD Plan has been approved.

Public Works and Natural Resources Approval The PUD Plan has been approved.

Public Works and Natural Resources

my Warsh

Mayor's Certificate This is to certify that a site/development plan at the above described property was approved the City of Longmont.

Chairperson, Planning and Zoning Commissio

Raw Water Policy, Utility Plan, and Easement Approval This PUD Plan is in compliance with the City of Longmont raw water policy. Utility easements for water sanitary sewer, electric, and communication facilities are adequate as shown.

Water/Utilities ongmont Power and

Date Prepared: September 14, 2016

Prepared by: Resource Conservation Partners, LLC P.O. Box 1522 **Longmont Colorado**

For Recording 11/26/2018 Sheet 1 of 4

IRWIN THOMAS PRELIMINARY/FINAL PUD DEVELOPMENT PLAN

PART OF THE NORTHWEST QUARTER, NORTHEAST QUARTER, SOUTHEAST QUARTER AND EAST ONE-HALF OF THE SOUTHWEST QUARTER OF SECTION 11, TOWNSHIP 2 NORTH, RANGE 69 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF BOULDER, STATE OF COLORADO

LEGAL DESCRIPTION IT No. 1 (NORTH PORTION):

A PARCEL OF LAND LOCATED IN THE EAST HALF OF THE NORTHWEST QUARTER AND IN THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 2 NORTH, RANGE 69 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF BOULDER, STATE OF COLORADO AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEARINGS CONTAINED HEREIN ARE BASED ON THE ASSUMPTION THAT THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 11, TOWNSHIP 2 NORTH, RANGE 69 WEST OF THE 6TH PRINCIPAL MERIDIAN BEARS N 90°00'00" E BETWEEN A FOUND 3.25 INCH ALUMINUM CAP MONUMENT STAMPED LS 20685 IN RANGE BOX AT THE SOUTH QUARTER CORNER OF SAID SECTION 11 AND A FOUND 2 INCH ALUMINUM CAP MONUMENT STAMPED LS 18892 IN RANGE BOX AT THE SOUTHEAST CORNER OF SAID SECTION 11.

COMMENCING AT THE NORTHWEST CORNER OF THE EAST HALF OF THE SOUTHWEST QUARTER OF SECTION 11. TOWNSHIP 2 NORTH, RANGE 69 WEST OF THE 6TH PRINCIPAL MERIDIAN, A FOUND 3.25 INCH ALUMINUM CAP MONUMENT IN RANGE BOX WITH CAP STAMPED LS 34993;

THENCE N 00°09'49" E ALONG THE WEST LINE OF THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 11 A DISTANCE OF 113.32 FEET TO THE POINT OF BEGINNING AT THE NORTHERLY RIGHT-OF-WAY LINE OF COLORADO STATE HIGHWAY 119:

THENCE S 88°35'07" E ALONG SAID NORTHERLY RIGHT-OF-WAY LINE OF HIGHWAY 119 A DISTANCE OF 420.12

THENCE S 89°46'53" E A DISTANCE OF 1458.66 FEET TO THE BEGINNING OF A CURVE TO THE LEFT, SAID CURVE HAVING A RADIUS OF 1499.43 FEET, A CHORD BEARING OF N 84°05'29" E AND A CHORD DISTANCE OF 316.16 FEET;

THENCE ALONG THE ARC OF SAID CURVE A DISTANCE OF 316.75 FEET:

THENCE DEPARTING SAID NORTHERLY RIGHT-OF-WAY LINE N

00°23'09" E A DISTANCE OF 540.74 FEET; THENCE S 89°13'25" W A DISTANCE OF 16.39 FEET;

THENCE N 88°58'35" W A DISTANCE OF 59.92 FEET; THENCE N 87°25'56" W A DISTANCE OF 59.36 FEET

THENCE N 84°49'36" W A DISTANCE OF 30.47 FEET;

THENCE N 80°18'03" W A DISTANCE OF 29.84 FEET; THENCE N 85°39'40" W A DISTANCE OF 318.58 FEET;

THENCE S 77°48'07" W A DISTANCE OF 30.42 FEET;

THENCE S 84°58'59" W A DISTANCE OF 29.01 FEET;

THENCE S 89°55'28" W A DISTANCE OF 119.83 FEET; THENCE N 89°29'26" W A DISTANCE OF 179.76 FEET:

THENCE N 88°16'29" W A DISTANCE OF 46.67 FEET;

THENCE N 86°57'50" W A DISTANCE OF 122.90 FEET;

THENCE N 81°58'55" W A DISTANCE OF 119.60 FEET TO THE BEGINNING OF A CURVE TO THE LEFT, SAID CURVE HAVING

A RADIUS OF 1176.88 FEET, A CHORD BEARING OF N 80°21'54"

THENCE ALONG THE ARC OF SAID CURVE A DISTANCE OF

THENCE S 89°24'25" W A DISTANCE OF 179.94 FEET:

W AND A CHORD DISTANCE OF 328.17 FEET;

THENCE S 88°58'45" W A DISTANCE OF 179.71 FEET:

THENCE S 85°15'33" W A DISTANCE OF 90.62 FEET;

THENCE S 75°00'56" W A DISTANCE OF 29.57 FEET: THENCE S 59°42'34" W A DISTANCE OF 29.89 FEET:

THENCE S 56°24'01" W A DISTANCE OF 120.42 FEET;

THENCE S 54°31'47" W A DISTANCE OF 29.53 FEET;

THENCE S 52°02'52" W A DISTANCE OF 29.85 FEET;

THENCE S 48°31'12" W A DISTANCE OF 30.08 FEET; THENCE S 38°16'59" W A DISTANCE OF 29.75 FEET;

THENCE S 21°37'46" W A DISTANCE OF 16.75 FEET;

THENCE S 04°53'41" W A DISTANCE OF 73.69 FEET;

THENCE S 10°27'59" W A DISTANCE OF 41.57 FEET TO A POINT ON THE WEST LINE OF THE EAST HALF OF THE NORTHWEST **QUARTER OF SECTION 11;**

THENCE S 00°09'49" W ALONG SAID LINE A DISTANCE OF 354.17 FEET TO THE POINT OF BEGINNING;

PARCEL CONTAINS: 1,352,597.44 SQUARE FEET OR 31.05

LEGAL DESCRIPTION IT No. 1 (SOUTH PORTION): THAT PART OF THE EAST HALF OF THE SOUTHEAST QUARTER, PART OF

THE NORTHEAST QUARTER AND PART OF THE EAST HALF OF THE SOUTHWEST QUARTER OF SECTION 11, TOWNSHIP 2 NORTH, RANGE 69 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF BOULDER, STATE OF COLORADO AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEARINGS CONTAINED HEREIN ARE BASED ON THE ASSUMPTION THAT THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 11 BEARS N 90°00'00" E BETWEEN A FOUND 3.25 INCH ALUMINUM CAP MONUMENT STAMPED LS 20685 IN RANGE BOX AT THE SOUTH QUARTER CORNER OF SAID SECTION 11 AND A FOUND 3.25 INCH ALUMINUM CAP MONUMENT STAMPED LS 18982 IN RANGE BOX AT THE SOUTHEAST QUARTER OF SAID SECTION 11.

COMMENCING AT A FOUND 3.25 INCH ALUMINUM CAP MONUMENT STAMPED LS 34993 AT THE NORTHWEST CORNER OF THE EAST HALF OF THE SOUTHWEST QUARTER OF SECTION 11, TOWNSHIP 2 NORTH, RANGE **69 WEST**;

THENCE S 00°23'31" W ALONG THE WEST LINE OF THE EAST HALF OF THE SOUTHWEST QUARTER OF SAID SECTION 11 A DISTANCE OF 81.16 FEET TO THE POINT OF BEGINNING ON THE SOUTHERLY RIGHT-OF-WAY LINE OF COLORADO STATE HIGHWAY 119;

THENCE ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE THE FOLLOWING (8) COURSES AND DISTANCES:

1) N 87°01'49" E A DISTANCE OF 366.96 FEET;

 S 89°49'17" E A DISTANCE OF 1090.50 FEET; 3) S 86°10'33" E A DISTANCE OF 453.38 FEET; 4) ALONG A CURVE TO THE LEFT WITH AN ARC LENGTH OF 1157.79', WITH

A RADIUS OF 1761.52 FEET, WITH A CHORD BEARING OF N 73°57'35" E, WITH A CHORD LENGTH OF 1137.06 FEET;

5) N 85°23'01" E A DISTANCE OF 262.28 FEET; 6) S 80°30'18" E A DISTANCE OF 90.60 FEET:

7) S 67°36'37" E A DISTANCE OF 167.64 FEET: 8) S 60°10'07" E A DISTANCE OF 457.20 FEET TO A POINT ON THE WESTERLY RIGHT-OF-WAY LINE OF NORTH 119TH STREET;

THENCE N 89°53'04" E A DISTANCE OF 40.00 FEET TO A POINT ON THE **EASTERLY RIGHT-OF-WAY LINE OF NORTH 119TH STREET:**

THENCE S 00°06'57" E ALONG SAID EASTERLY RIGHT-OF-WAY LINE 20 FEET EASTERLY AND PARALLEL WITH THE EAST LINE OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 11 A DISTANCE OF 1231.26 FEET;

THENCE S 00°02'50" W CONTINUING ALONG SAID EASTERLY RIGHT-OF-WAY LINE 20 FEET EASTERLY AND PARALLEL WITH THE EAST LINE OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF

SECTION 11 A DISTANCE OF 1141.37 FEET; THENCE N 89°58'52" W A DISTANCE OF 50.09 FEET;

THENCE N 00°02'50" E A DISTANCE OF 80.70 FEET;

THENCE N 70°49'00" W A DISTANCE OF70.96 FEET; THENCE N 79°37'39" W A DISTANCE OF 133.21 FEET;

THENCE N 00°00'00" E A DISTANCE OF 14.08 FEET;

THENCE N 90°00'00" W A DISTANCE OF 1120.00 FEET; THENCE N 58°27'33" W A DISTANCE OF 98.96 FEET;

THENCE S 00°00'00" E A DISTANCE OF 393.86 FEET TO A POINT ON THE

SOUTHERLY RIGHT-OF-WAY LINE OF QUAIL ROAD;

THENCE N 90°00'00" W ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE 30 FEET SOUTHERLY AND PARALLEL WITH THE SOUTH LINE OF THE

SOUTHEAST QUARTER OF SECTION 11 A DISTANCE OF 55.00 FEET:

THENCE DEPARTING SAID SOUTHERLY RIGHT-OF-WAY LINE N 00°00'00" W

A DISTANCE OF 427.62 FEET;

THENCE N 58°27'33" W A DISTANCE OF 31.07 FEET; THENCE N 66°50'00" WA DISTANCE OF 157.10 FEET;

THENCE N 00°22'00" E A DISTANCE OF 145.94 FEET;

SOUTHWEST QUARTER OF SECTION 11;

THENCE N 90°00'00" W A DISTANCE OF839.55 FEET; THENCE S 00°22'00" W A DISTANCE OF 651.62 FEET TO A POINT ON THE

SOUTHERLY RIGHT-OF-WAY LINE OF QUAIL ROAD; THENCE N 90°00'00" W 30 FEET SOUTHERLY AND PARALLEL WITH THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 11 A DISTANCE

THENCE S 89°35'39" W ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE A DISTANCE OF 1308.36 FEET;

THENCE N 00°23'31" E A DISTANCE OF 30.00 FEET TO A FOUND 3.25 INCH ALUMINUM CAP MONUMENT STAMPED LS 20685 IN RANGE BOX AT THE SOUTHWEST CORNER OF THE SOUTHEAST QUARTER OF THE

THENCE N 00°23'31" E ALONG THE WEST LINE OF THE EAST HALF OF THE SOUTHWEST QUARTER OF SECTION 11 A DISTANCE OF 2537.37 FEET; TO THE POINT OF BEGINNING.

PARCEL CONTAINS: 9,319,116.6 SQUARE FEET OR 213.938 ACRES MORE

OF 134.21 FEET:

NOTICE: According to Colorado Law you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event, may any action based upon any defect in this survey be commenced more than 10 years from the date of the certification hereon.

LEGAL DESCRIPTION - IRWIN THOMAS ANNEXATION NO.2 (NORTH PORTION)

A PARCEL OF LAND LOCATED IN THE NORTH ONE-HALF OF SECTION 11, TOWNSHIP 2 NORTH, RANGE 69 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF BOULDER, STATE OF COLORADO MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEARINGS CONTAINED HEREIN ARE BASED ON THE ASSUMPTION THAT THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 11, TOWNSHIP 2 NORTH, RANGE 69 WEST OF THE 6TH PRINCIPAL MERIDIAN BEARS N 90°00'00" E BETWEEN A FOUND 3.25 INCH ALUMINUM CAP MONUMENT STAMPED LS 20685 IN RANGE BOX AT THE SOUTH QUARTER CORNER OF SAID SECTION 11 AND A FOUND 2 INCH ALUMINUM CAP MONUMENT STAMPED LS 18892 IN RANGE BOX AT THE SOUTHEAST CORNER OF SAID SECTION 11.

COMMENCING AT THE EAST QUARTER CORNER OF SECTION 11, FROM WHENCE THE NORTHEAST CORNER OF SECTION 11 BEARS NORTH 00°01'24" WEST 2629.85 FEET:

THENCE ALONG THE EAST LINE OF THE NORTHEAST QUARTER OF SECTION 11 NORTH 00°01'24" WEST 697.30 FEET: THENCE LEAVING SAID EAST LINE NORTH 89°58'36" WEST 20.00 FEET TO A POINT ON THE

THENCE LEAVING SAID WESTERLY RIGHT-OF-WAY LINE NORTH 65°16'54" WEST 504.96 FEET TO A POINT ON THE WEST LINE OF A TRACT OF LAND DESCRIBED BY DEED RECORDED AT RECEPTION NO. 2294476 OF BOULDER COUNTY RECORDS AND BEING THE POINT OF BEGINNING;

THENCE ALONG SAID WEST LINE SOUTH 58°21'32" WEST 71.75 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE FOR THE BURLINGTON NORTHERN RAILROAD RECORDED AT BOOK 130 PAGE 243 OF BOULDER COUNTY RECORDS;

THENCE ALONG SAID NORTHERLY RIGHT-OF-WAY LINE THE FOLLOWING 2 COURSES:

1) ALONG THE ARC OF A CURVE TO THE RIGHT, SAID CURVE HAVING A RADIUS OF 5950.00 FEET A CENTRAL ANGLE OF 00°00'32", CHORD OF SAID ARC BEARS NORTH 63°34'35" WEST 0.94 FEET), A DISTANCE OF 0.94 FEET;

2) NORTH 63°34'35" WEST 2860.49 FEET;

THENCE NORTH 31°25'52" EAST 11.30 FEET;

WESTERLYRIGHT-OF-WAYLINE OF NORTH 119TH STREET:

THENCE NORTH 34°42'22" EAST 568.16 FEET TO A POINT ON THE NORTH LINE OF THE NORTHWEST QUARTER OF SECTION 11;

THENCE ALONG SAID NORTH LINE NORTH 89°49'52" EAST 164.58 FEET TO THE NORTH ONEQUARTER CORNER OF SECTION 11

THENCE SOUTH 00°16'40" WEST 504.45 FEET;

THENCE NORTH 89°49'19" EAST 484.71 FEET;

THENCE SOUTH 55°08'38" EAST 140.51 FEET;

THENCE SOUTH 43°57'24" EAST 429.71 FEET THENCE SOUTH 49°04'29" EAST 119.74 FEET;

THENCE SOUTH 59°47'40" EAST 596.86 FEET;

THENCE SOUTH 50°54'20" EAST 225.05 FEET;

THENCE NORTH 21°01'10" EAST 184.68 FEET:

THENCE SOUTH 73°46'50" EAST 236.00 FEET:

THENCE SOUTH 15°28'33" WEST 306.12 FEET;

THENCE SOUTH 65°16'54" EAST 265.95 FEET TO A POINT ON THE WEST LINE OF A TRACT OF LAND DESCRIBED BY DEED RECORDED AT RECEPTION NO. 2294476 OF BOULDER COUNTY RECORDS TO THE POINT OF BEGINNING.

PARCEL CONTAINS: 799,981.8 SQUARE FEET OR 18.365 ACRES MORE OR LESS.

FLOOD PLAIN NOTES:

THIS PROPERTY LIES IN AREAS DETERMINED TO BE WITHIN • OTHER AREAS - AREAS OUTSIDE THE 2% ANNUAL CHANCE FLOOD • ZONE X - AREAS OF 25 ANNUAL CHANCE OF FLOOD OR AREAS WITH 1% ANNUAL CHANCE OF FLOOD WITH AVERAGE DEPTHS OF LESS THAN ONE FOOT OR WITHIN DRAINAGE AREAS LESS THAN ONE SQUARE MILE AND AREAS PROTECTED BY LEVEES FROM THE 100 YEAR FLOOD AND

• ZONE AE - SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL FLOOD CHANCE, BASE FLOOD ELEVATIONS DETERMINED. ZONE AH - SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL FLOOD CHANCE, FLOOD DEPTHS OF 1 TO 3 FEET, (USUALLY AREAS OF PONDING) BASE FLOOD ELEVATIONS DETERMINED. FLOODPLAIN INFORMATION PER FIRM FLOOD INSURANCE RATE MAP NO 08013C0287J

DATED DECEMBER 18, 2012 AND FIRM FLOOD INSURANCE RATE MAP NO 08013C0289J DATED DECEMBER 18, 2012

THE ADDITIONAL FLOODPLAIN SHOWN HERE ON IS BASED ON CITY OF LONGMONT, CH2MHILL DRAFT FLOOD PLAIN MAPPING DATED 5/21/15. A DRAFT REVISED CLOMR FOR THE EXISTING FLOODPLAIN CONDITION BASED ON THE CH2MHILL DRAFT FLOOD PLAIN MAPPING DATED 5/21/15 IS PREPARED AND IS IN THE PROCESS OF FEMA APPROVAL ROCK CREEK SURVEYING LLC ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE CH2MHILL INFORMATION. FLOOD PLAIN INFORMATION IS SUBJECT TO REVISION IF CHANGES OR IMPROVEMENTS OCCUR IN THE FLOODPLAIN.

LEGAL DESCRIPTION - IRWIN THOMAS ANNEXATION NO. 2 (SOUTH PORTION)

A PARCEL OF LAND SITUATED IN THE NORTHEAST QUARTER AND THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 11, TOWNSHIP 2 NORTH, RANGE 69 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF BOULDER, STATE OF COLORADO AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEARINGS CONTAINED HEREIN ARE BASED ON THE ASSUMPTION THAT THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 11, TOWNSHIP 2 NORTH, RANGE 69 WEST OF THE 6TH PRINCIPAL MERIDIAN BEARS N 90°00'00" E BETWEEN A FOUND 3.25 INCH ALUMINUM CAP MONUMENT STAMPED LS 20685 IN RANGE BOX AT THE SOUTH QUARTER CORNER OF SAID SECTION 11 AND A FOUND 2 INCH ALUMINUM CAP MONUMENT STAMPED LS 18892 IN RANGE BOX AT THE SOUTHEAST CORNER OF SAID SECTION 11.

COMMENCING AT A POINT ON THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 11, FROM WHENCE THE EAST QUARTER CORNER OF SECTION 11 BEARS S 0° 01'24" E A DISTANCE OF 156.00 FEET;

THENCE N 70°19'39" W A DISTANCE OF 21.24 FEET TO A POINT ON THE WEST RIGHT OF WAY LINE OF NORTH 119TH STREET

THENCE N 70°19'39" W A DISTANCE OF 1369.15 FEET TO A POINT ON THE WEST LINE OF THE EAST HALF OF THE NORTHEAST QUARTER OF SECTION 11:

THENCE ALONG SAID WEST LINE N 00°07'45" E A DISTANCE OF 27.17 FEET; THENCE S 89°43'29" W A DISTANCE OF 1308.99 FEET TO A POINT ON THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 11;

THENCE ALONG SAID WEST LINE S 00°16'40" W A DISTANCE OF 22.25 FEET TO A POINT FROM WHENCE THE CENTER QUARTER CORNER OF SECTION 11 BEARS S 00°16'40" W A DISTANCE OF 636.60 FEET

THENCE N 77°55'08" W A DISTANCE OF 198.10 FEET;

THENCE N 63°40'08" W A DISTANCE OF 217.90 FEET; THENCE S 89°55`52" W A DISTANCE OF 914.35 FEET TO A POINT ON THE WEST LINE OF THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 11 FROM WHENCE THE WEST CENTER SIXTEENTH CORNER OF SECTION 11 BEARS S 00°09'49" W A DISTANCE OF 780.43

THENCE ALONG SAID WEST LINE N 00°09'49" E A DISTANCE OF 290.02 FEET TO THE SOUTHWEST CORNER OF A PARCEL OF LAND DESCRIBED BY A SPECIAL WARRANTY DEED RECORDED AS RECEPTION NO. 1059214, FILM 1639 OF BOULDER COUNTY RECORDS;

THENCE S 89°03'48" E ALONG SAID SOUTHERLY LINE A DISTANCE OF 304.16 FEET; THENCE N 87°51`12" E A DISTANCE OF 223.07 FEET;

THENCE S 70°42`17" E A DISTANCE OF 78.66 FEET; THENCE N 00°09'49" E A DISTANCE OF 972.28 FEET TO A POINT ON THE SOUTHWESTERLY RIGHT OF WAY LINE OF THE BURLINGTON NORTHERN RAILROAD AND BEING THE POINT OF

THENCE S 00°09°49" W A DISTANCE OF 206.66 FEET THENCE S 59°54'42" E A DISTANCE OF 31.44 FEET; THENCE S 89°45'11" E A DISTANCE OF 297.71 FEET:

THENCE S 63°40'50" E A DISTANCE OF 236.62 FEET:

BEGINNING:

THENCE S 00°09'49" W A DISTANCE OF 370.48 FEET TO THE BEGINNING OF A NON-TANGENT CURVE TO THE RIGHT, SAID CURVE HAVING A RADIUS OF 750.00 FEET, A CHORD BEARING

OF S 69°43'06" E, A CHORD DISTANCE OF 237.77 FEET; THENCE ALONG THE ARC OF SAID CURVE A DISTANCE OF 238.78 FEET;

THENCE S 60°35'52" E A DISTANCE OF 171.40 FEET; THENCE S 89°52'49" E A DISTANCE OF 122.83 FEET; THENCE S 85°52'23" E A DISTANCE OF 177.36 FEET:

THENCE S 35°26'22" E A DISTANCE OF 106.41 FEET: THENCE S 00°56'32" W A DISTANCE OF 98.38 FEET TO THE BEGINNING OF A CURVE TO THE LEFT, SAID CURVE HAVING A RADIUS OF 1400.00 FEET. A CHORD BEARING OF S 84°47'32" E AND A CHORD DISTANCE OF 480.21 FEET;

THENCE ALONG THE ARC OF SAID CURVE A DISTANCE OF 482.60 FEET: THENCE N 85°19'57" E A DISTANCE OF 104.25 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT, SAID CURVE HAVIING A RADIUS OF 300.00 FEET, A CHORD BEARING OF S 84°01'28" E

AND A CHORD DISTANCE OF 110.81 FEET; THENCE ALONG THE ARC OF SAID CURVE A DISTANCE OF 111.45 FEET; THENCE S 73°22'53" E A DISTANCE OF 205.55 FEET TO THE BEGINNING OF A CURVE TO THE RIGHT. SAID CURVE HAVING A RADIUS OF 520.00 FEET, A CHORD BEARING OF S 60°29'53" E

AND A CHORD DISTANCE OF 231.88 FEET; THENCE ALONG THE ARC OF SAID CURVE A DISTANCE OF 233.85 FEET; THENCE S 47°36'54" E A DISTANCE OF 48.06 FEET TO THE BEGINNING OF A CURVE TO THE LEFT, HAVING A RADIUS OF 200.00, A CHORD BEARING OF S 54°47'07" E AND A CHORD

THENCE ALONG THE ARC OF SAID CURVE A DISTANCE OF 50.06 FEET; THENCE S 61°57'30" E A DISTANCE OF 36.39 FEET TO A POINT ON THE NORTHWESTERLY RIGHT-OF-WAY LINE OF COLORADO STATE HIGHWAY 119; THENCE N 46°31'45" E ALONG SAID NORTHWESTERLY RIGHT-OF-WAY LINE A DISTANCE OF

47.02 FEET: THENCE N 51°28'42" E A DISTANCE OF 223.42 FEET TO A POINT ON THE SOUTHEASTERLY RIGHT OF WAY LINE OF THE BURLINGTON NORTHERN SANTA FE (BNSF) RAILROAD; THENCE DEPARTING SAID NORTHWESTERLY RIGHT-OF-WAY LINE N 63°34'35" W A

DISTANCE OF 2201.79 FEET TO A POINT ON THE WEST LINE OF THE NORTHWEST QUARTER

OF THE NORTHEAST QUARTER OF SECTION 11; THENCE S 00°16'40" W ALONG SAID WEST LINE AND ALONG THE EASTERLY RIGHT-OF-WAY LINE OF SAID BNSF RAILROAD RIGHT-OF-WAY A DISTANCE OF 139.25 FEET; THENCE N 63°34'35" W ALONG THE SOUTHERLY RIGHT-OF-WAY LINE OF SAID BNSF RAILROAD A DISTANCE OF 677.89 FEET;

THENCE N 63°34'35" W CONTINUING ALONG SAID SOUTHERLY RAILROAD RIGHT-OF-WAY

LINE A DISTANCE OF 107.67 FEET TO THE POINT OF BEGINNING.

PARCEL CONTAINS: 870,515.7 SQUARE FEET OR 19.98 ACRES.

Surveyor's Certificate

DISTANCE OF 49.93 FEET;

I certify this PUD Plan accurately represents the results of a survey made by me or under my direct supervision completed according to applicable State of Colorado requirements.

	27
L.S. Colorado Reg. No.;	

STANDARD NOTES:

REQUIREMENTS.

A. THE PROPERTY IS SUBJECT TO AN ANNEXATION AGREEMENT WITH THE CITY OF LONGMONT

B. ALL FUTURE DEVELOPMENT OF THE PROPERTY WILL CONFORM TO THE APPROVED

CONCEPT PLAN UNLESS AMENDED BY THE CITY COUNCIL. C. THE PROPERTY WILL COMPLY WITH ALL APPLICABLE DEVELOPMENT CODE

D. THE PROPERTY WILL COMPLY WITH THE CITY OF LONGMONT'S REQUIREMENTS FOR DRAINAGE

E. FUTURE DEVELOPMENT ON THE PROPERTY SHALL COMPLY WITH THE CITY'S FLOOD PLAIN REGULATIONS BASED ON THE BEST FLOODPLAIN DATA AVAILABLE AT THE TIME OF DEVELOPMENT.

1.) THE PURPOSE OF THIS MAP IS FOR USE AS THE IRWIN THOMAS NO. 1 AND NO. 2 ANNEXATION CONCEPT PLAN BASE SHEET AS PREPARED BY RESOURCE CONSERVATON PARTNERS, LLC.

3) PROPOSED ZONING - PLANNED UNIT DEVELOPMENT MIXED USE - PUD-MU

CLIENT AND ARE FOR GENERAL INFORMATION PURPOSES ONLY. NO VERTICAL

DATUM WAS PROVIDED FOR THIS MAPPING. ROCK CREEK SURVEYING, LLC

ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE TOPOGRAPHIC

2) THIS CONCEPT PLAN IS NOT A LAND SURVEY PLAT OR AN IMPROVEMENT SURVEY PLAT IN ACCORDANCE WITH CRS.

4.) 5-FOOT ELEVATION CONTOURS SHOWN HEREON WERE PROVIDED BY THE

INFORMATION SHOWN HEREON

Property Owner Acknowledgement Golden Farm, LLLP, RLSJ Properties, LLC and the City of Longmont, being the owners of the property described herein have planned this property under the name of Irwin Thomas Planned Unit Development for Gravel Mining and Reclamation. All conditions, terms, and specifications designated or described on this document shall be binding on the owner(s), their heirs, successors and assigns.

In witness whereof, we have hereunto set our hands and seals this	day of
Reggie Golden Golden Land, LLLP	
Reggie Golden RLSJ Properties, LLC	

Notary Certificate STATE OF COLORADO) COUNTY OF

The foregoing instrument was acknowledged before me this My Commission expires:

Notary Public Address of Notary: Fire Approval

Public Works and Natural Resources Approval

The PUD Plan has been approved

The PUD Plan has been approved

Public Works and Natural Resources

Planning Director Approval Approved this _____ _ day of Planning Director

Planning and Zoning Commission Approval Approved this _____ day of _

Mayor's Certificate This is to certify that a site/development plan of the above described property was approved

Chairperson, Planning and Zoning Commission

the City of Longmont.

Longmont Power and

Communications

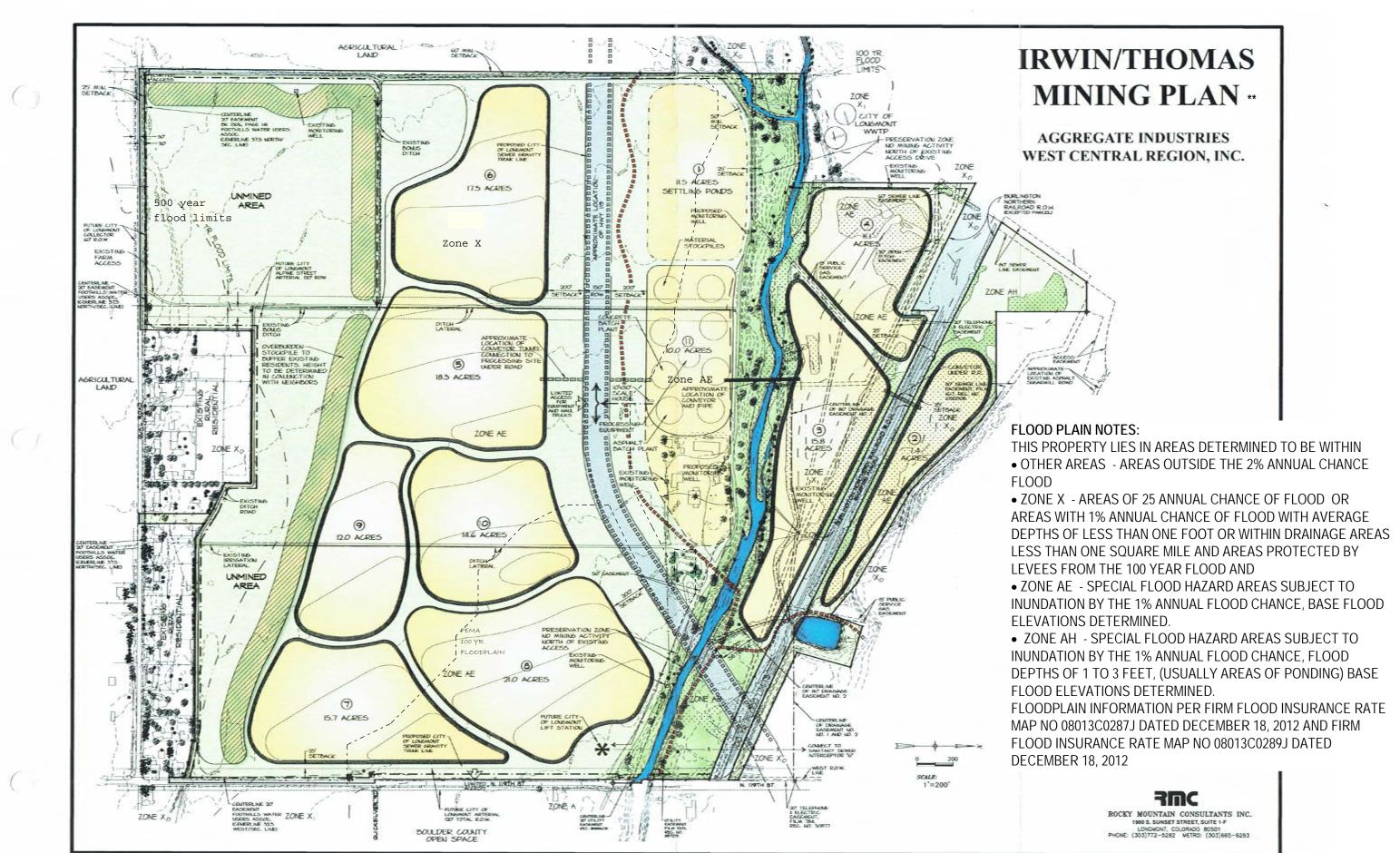
Raw Water Policy, Utility Plan, and Easement Approval This PUD Plan is in compliance with the City of Longmont raw water policy. Utility easements for water, sanitary sewer, electric, and communication facilities are adequate as shown.

Date Prepared: Water/Utilities September 14, 2016

Prepared by: Resource Conservation Partners, LLC P.O. Box 1522 Longmont Colorado

For Recording 11/26/2018 Sheet 1 of 4

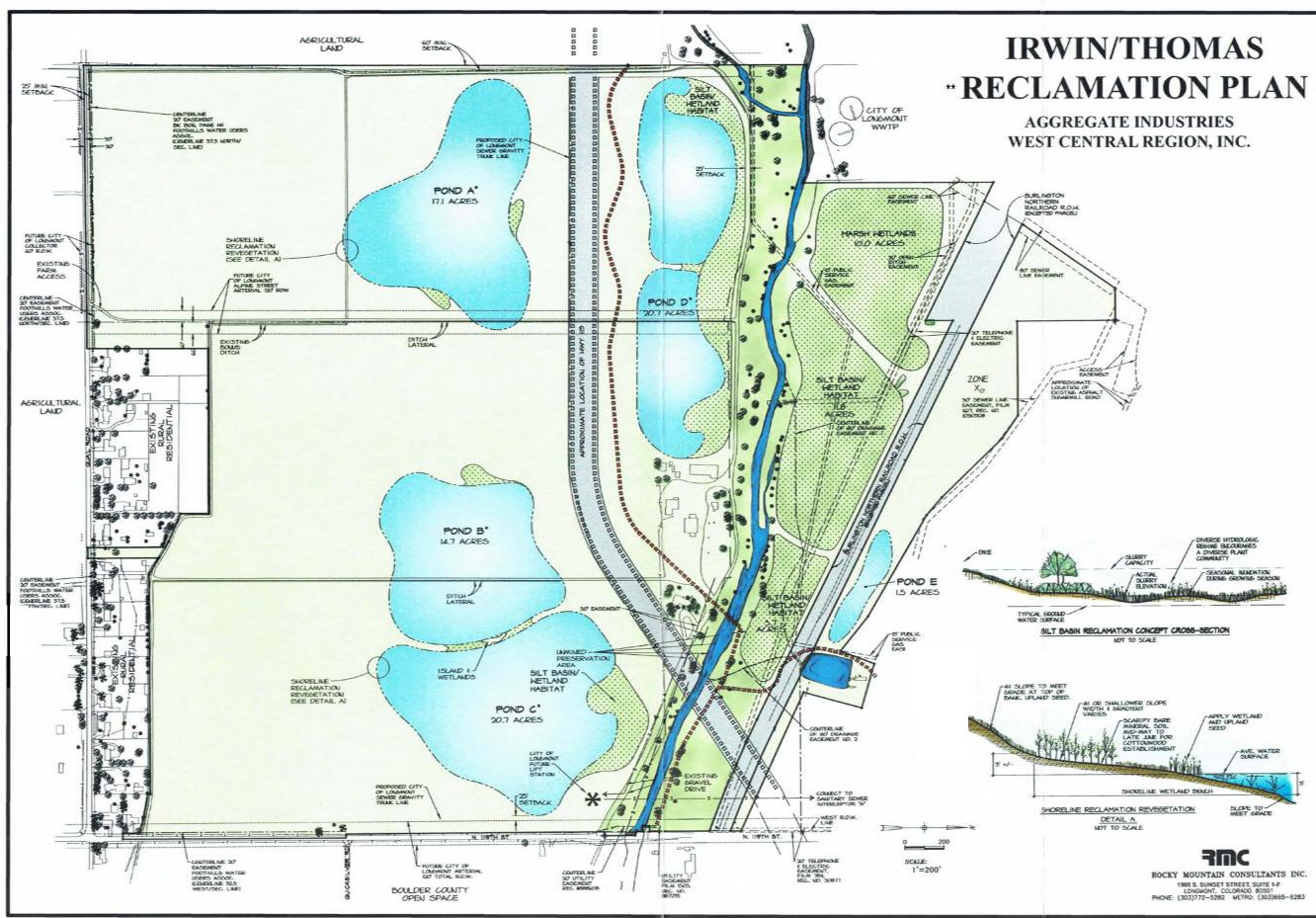
IRWIN THOMAS PRELIMINARY/FINAL PUD DEVELOPMENT PLAN FOR GRAVEL MINING AND RECLAMATION



Description of Development

1. The Development consists of open mining and reclamation on approximately 151 acres of a 346 acre area on the Irwin/Thomas property located at the northwest intersection of Quail Road and North 119th Street.

- 2. Roads/Parking The following roads shall serve the Development subject to the conditions and limitations as further set forth: N. 1191h Street; and Highway 119 Bypass. Access to the site from State Highway 119 is shown on Sheet 269 of the Colorado Department of Transportation's construction drawings for State Highway 119, prepared by Carter and Burgess, and revised on March 13, 2002. This access may be revised only upon the approval of the Colorado Department of Transportation and the City of Longmont. The Developer shall obtain an access permit from the City of Longmont before utilizing North 119th Street for truck hauling. The Developer shall provide written consent from the Colorado Department of Transportation before conducting any construction work within any portion of the State Highway 119 right-of-way. Employee parking will be located in a designated gravel parking area adjacent to the scale house.
- 3. Landscaping/Reclamation The Developer shall provide revegetation for the Development in accordance with the City approved Mining Plan and Reclamation Plans. This revegetation shall include the installation of a seeded temporary screening berm, on the western edge of the project between any mined areas and any residentially zoned adjacent land and along the southern limits of the mining to screen the activity from the existing homes along Quail Road. The berm and seeding shall be completed before any mining is commenced south of State Highway 119 as shown on the Mining Plan. The berm shall be removed at the completion of mining activities on the south side of HWY 119.
- 4. Signage All signs for the Development shall comply with the applicable provisions of the Longmont Land Development Code. The Developer shall post one sign along N. 119th Street and one sign along Quail Road stating that mining will take place on the site in the future. The content, size, and location of the signs must be approved by the City of Longmont prior to installation.
- 5. The Developer shall pay City of Longmont Transportation Investment Fees at the time of Building Permit.
- 6. Enforcement The City may conduct a periodic review of the Development as necessary to assure compliance with the Final Development Plan for Gravel Mining and Reclamation. This right includes the right to enter upon the property included within the Development at any time, without prior notice, to inspect for compliance with the terms of the PUD. All site visitors to the active mining site will be required to go through appropriate Mine Safety and Health Administration (MSHA) training, wear required safety equipment and check in at the scale house prior to entering the site.
- 7. The proposed mining pods range in size from 11 to 21 acres and will be mined in the numbered sequence indicated on the PUD plan.
- 8. The mining pods will be mined one at a time so that only one pod or portions of two pods and the processing site are disturbed during any phase of mining.
- 9. The final reclamation plan includes five irregularly shaped ponds totaling about 73 acres with the area between the St. Vrain Creek and Burlington Northern Railroad consisting of about 25.5 acres of wetlands. The exact number and configuration of the ponds may vary based on the gravel resource and available fill material.
- 10. The main access to site will be located on N. 119th Street, just south of St. Vrain Creek. No traffic will leave the site travelling south on N. 119th Street and trucks entering the site must not travel between Quail Road and the site access. There is a prohibition on truck hauling on Quail Street and south of the proposed access on North 119th Street;
- 11. If sustained winds exceed 30 MPH at mining sites, loading and hauling operations will cease until the wind speed drops below 30 MPH. Conveying, and drilling operations may continue. Wind speed shall be measured at the mine site.
- 12. Any ditch crossings or relocations shall be done only upon the consent of the ditch companies and in accordance with all applicable regulations.
- 13. The Applicants shall obtain all applicable permits as required and necessary. This includes, but is not limited to: Floodplain Development permits, National Pollution Discharge Elimination System permits, Air Pollution Control Emission permits, Construction Materials Regular Operation (112) Reclamation permits, Water Discharge permits, City of Longmont Stormwater Construction Activity Permit and any well permits or temporary substitute supply plans required by the State Engineer.
- 14. This use -must comply with all applicable state noise standards and state fugitive dust standards.
- 15. The perimeter of the preservation zone depicted on the mining plan prepared by Rocky Mountain Consultants Inc., revised on 11/7/01, shall be marked with permanent monuments on the ground for the duration of the mining period. No mining activities shall occur within this defined area. The Applicants must reclaim all adjacent areas in accordance with the plans approved by the County before removing any monument.
- 16. Outside storage, and the storage of fuel, oil, and grease, as well as the repair of equipment and machinery, are accessory uses to this approval, provided the Applicants meet all-applicable regulations.
- 17. The property will comply with the City of Longmont's requirements for drainage.
- 18. Development on the property shall comply with the City's Flood Plain Regulations based on the best floodplain data available at the time of development



** for Reference - see sheet 3 and 4 for Mining and Reclamation Maps

19. This approval recognizes the following:

Mining of approximately 3.5 million tons of material;

A total of 150 average daily trips to the site, not to exceed 200 trips per day;
Accessory processing of sand and gravel including screening and stockpiling. The mining operator may install a portable screening plant in the bottom of an active mining cell to sort material prior to removal from the site.

20. The Applicants shall mitigate adverse impacts on neighboring wells caused by de-watering or other mining operations that result in lower ground water levels outside of mining boundaries. To meet this requirement, the Applicants shall install piezometers adjacent to residential areas sufficient to determine the effect on adjoining properties. If mining operations cause a reduction by more than 10% in water quality or quantity, the Applicants shall provide replacement water equal to or better in quantity and quality to the original conditions. In fulfilling this condition, the Applicants shall be responsible for conducting industry recognized water quality/quantity analyses at least four times a year. The Applicants commit to monitor groundwater wells quarterly throughout the life of the mine.

21. The mined portion of any mining pod in any phase shall be limited to that shown on the approved plan. If mining is underway in more than one pod at a time, the combined mining area shall not exceed 35 acres. For purposes of interpreting this condition, "combined mining area" shall mean any area that has been disturbed in preparation of mining, or in which mining is underway, or in which grading for reclamation for is underway. Once grading of a reclaimed mining pod is completed it will not longer be considered as part of the combined mining area. Revegetation and weed management within reclaimed pods will be ongoing through out the life of the mine.

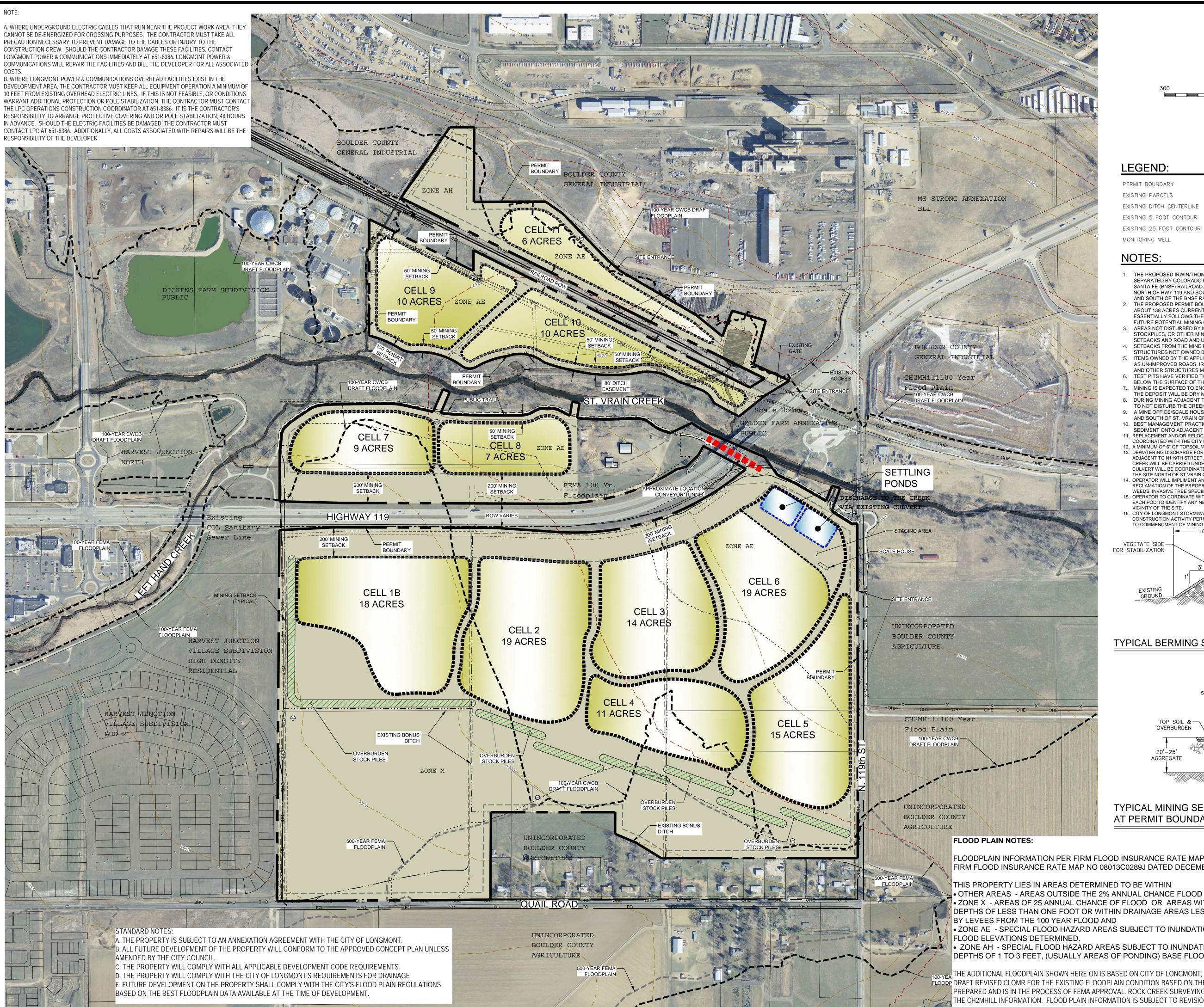
22. The Applicants shall obtain an access permit from the City of Longmont before using North 119th Street for any truck hauling. Before issuing the access permit, the City may determine what, if any, mitigation measures are necessary. Mitigation measures may include, but are not limited to, payment by the Applicants of a pro-rata share of the costs of any acceleration or deceleration lanes, pavement rehabilitation, traffic control devices, or other measures necessary to correct adverse impacts to the street. Any costs associated with determining the proper mitigation measures are the responsibility of the Applicants.

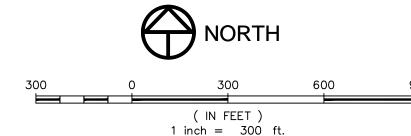
- 23. The Applicants shall obtain written consent from the Burlington Northern Railroad before conducting any construction work within any portion of railroad right-of-way.
- 24. The Applicants shall require all sand and gravel loads hauled from the site in any Applicant-owned or leased trucks, or by haulers under contract to the Applicants to be covered with tarps, to prevent fugitive dust and gravel from escaping during hauling.
- 25. Mining operations and truck hauling are limited to Mondays through Fridays: during the period of daylight savings time the hours of operation shall be 7:00 a.m. to 7:00 p.m., and during the period of standard time the hours of operation shall be 7:00 a.m. to 7:00 p.m. or daylight to dark (whichever is more restrictive). On Saturdays, work is restricted to equipment maintenance, maintenance necessary to ensure compliance with required permits, and hauling. Hauling on Saturdays is restricted to the hours listed above. No work at the site can occur on Sundays.
- 26. The applicant shall require all Applicant- owned or leased trucks and all trucks under contract to the Applicants to utilize "white noise" back up beepers as opposed to standard back up beepers. All mining and loading equipment assisted with the mining and reclamation shall also utilize "white noise" back up beepers.
- 27. Site access onto N. 119th Street and Mining operations shall not inhibit safe use of the St. Vrain Greenway unless approved by the City of Longmont. Per the existing MOU between the City and the gravel operator, the City will install a 6'tall chain link fence 10' to 15' south of the St. Vrain Greenway trail to limit access from the trail into the mining site. Timing of the installation of the fence shall be coordinated with the operator to assure that the fence is in place when the operator is ready to begin mining the are north of HWY 119.
- 28. All mining activities shall comply with the Memorandum of Understanding between the applicants, Aggregate Industries and the City of Longmont dated December 20, 2005.
- 29. This PDP/FDP is conceptual in nature. Exact configuration of Mining and Reclamation may change subject to site conditions and material available for fill. Any changes will be coordinated with the landowner and the City of Longmont. Revisions to the mining and reclamation plan that do not require and amendment to the DRMS permit may be approved through the administrative Staff review process at the City of Longmont. The operator will submit any required Technical Revision to the DRMS.

Prepared By:

Resource Conservation Partners LLC
PO Box 1522 Longmont CO 80502

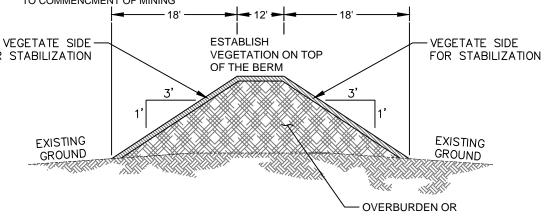
Date Prepared: September 14, 2016 rev. 11/29/2016 Sheet 2 of 4 For Recording 11/26/2018



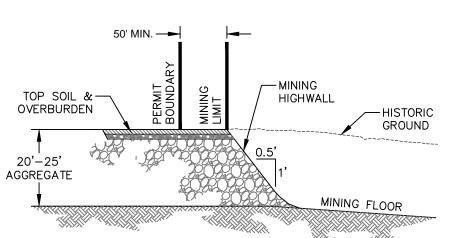


PERMIT BOUNDARY EXISTING PARCELS EXISTING DITCH CENTERLINE EXISTING 5 FOOT CONTOUR EXISTING 25 FOOT CONTOUR

- 1. THE PROPOSED IRWIN/THOMAS MINE PERMIT AREA IS COMPRISED OF 4 DISTINCT MINING AREAS SEPARATED BY COLORADO HIGHWAY 119, ST. VRAIN CREEK, AND THE BURLINGTON NORTHERN AND SANTA FE (BNSF) RAILROAD. MINING AREA 1 IS LOCATED SOUTH OF HWY 119, MINING AREA 2 IS NORTH OF HWY 119 AND SOUTH OF ST. VRAIN CREEK, MINING AREA 3 IS NORTH OF ST. VRAIN CREEK AND SOUTH OF THE BNSF RAILROAD, AND MINING AREA 4 IS NORTH OF THE RAILROAD.
- THE PROPOSED PERMIT BOUNDARY ENCOMPASSES APPROXIMATELY 295.6 ACRES WITH ONLY ABOUT 138 ACRES CURRENTLY PLANNED FOR MINING. HOWEVER, THE AFFECTED LAND BOUNDARY ESSENTIALLY FOLLOWS THE PERMIT BOUNDARY TO ALLOW FOR RECLAMATION ACTIVITIES AND FUTURE POTENTIAL MINING OPERATIONS.
- 3. AREAS NOT DISTURBED BY MINING MAY BE DISTURBED BY ACCESS ROADS, MATERIAL CONVEYING, STOCKPILES, OR OTHER MINING RELATED ACTIVITIES. THE REMAINING AREA WILL CONSIST OF SETBACKS AND ROAD AND UTILITY RIGHT-OF-WAYS.
- 4. SETBACKS FROM THE MINE PIT TOP OF SLOPE TO THE PROPOSED PERMIT BOUNDARY OR MAN-MADE STRUCTURES NOT OWNED BY THE APPLICANT WILL BE 50 FEET OR GREATER.
- 5. ITEMS OWNED BY THE APPLICANT OR PROPERTY OWNER LOCATED WITHIN THE PERMIT AREA SUCH AS UN-IMPROVED ROADS, IRRIGATION LATERALS, FENCES, WATER WELLS AND ASSOCIATED PUMPS AND OTHER STRUCTURES MAY BE REMOVED OR RELOCATED DURING MINING AND RECLAMATION.
- 6. TEST PITS HAVE VERIFIED THAT COMMERCIAL DEPOSITS OF SAND AND GRAVEL EXIST UP TO 25 FEET BELOW THE SURFACE OF THE GROUND. MINING IS EXPECTED TO ENCOUNTER GROUNDWATER WITHIN FIVE FEET OF THE GROUND SURFACE.
- THE DEPOSIT WILL BE DRY MINED USING DEWATERING TRENCHES AND PUMPS. 8. DURING MINING ADJACENT TO THE ST. VRAIN CREEK RIPARIAN AREA, PRECAUTIONS WILL BE TAKEN
- TO NOT DISTURB THE CREEK CHANNEL AND DESIRABLE VEGETATION. 9. A MINE OFFICE/SCALE HOUSE TRAILER WILL BE ESTABLISHED NEAR SITE ENTRANCES BOTH NORTH AND SOUTH OF ST. VRAIN CREEK.
- 10. BEST MANAGEMENT PRACTICES WILL BE USED TO LIMIT DISCHARGE OF STORMWATER AND SEDIMENT ONTO ADJACENT PROPERTIES AND WATERWAYS.
- 11. REPLACEMENT AND/OR RELOCATION OF ANY INFRASTRUCTURE LOCATED ON CITY PROPERTY WILL BE COORDINATED WITH THE CITY BEFORE ANY REMOVAL OR RELOCATION. 12. A MINIMUM OF 6" OF TOPSOIL WILL BE USED ON RECLAIMED AREAS.
- 13. DEWATERING DISCHARGE FOR THE AREA SOUTH OF HWY 119 WILL UTILIZE THE EXISTING CULVERT ADJACENT TO N119TH STREET. DEWATERING DISCHARGE FOR THE AREA BETWEEN HWY 119 AND ST.VRAIN CREEK WILL BE CARRIED UNDER THE GREENWAY TRAIL TO THE CREEK. INSTALLATION OF THE CULVERT WILL BE COORDINATED WITH THE CITY OF LONGMONT. DISCHARGE FROM THE PORTION OF
- THE SITE NORTH OF ST VRAIN CREEK WILL UTILIZE AN EXISTING DRAINAGE DITCH ON THE SITE. 14. OPERATOR WILL IMPLIMENT AN INTEGRATED WEED MANAGMENT PLAN DURING MINING AND RECLAMATION OF THE PRPOERTY. THE CITY MAY CONDUCT QUARTERLY INSPECTION OF NOXIOUS
- WEEDS. INVASIVE TREE SPECIIES WILL BE IDENTIFIED AND REMOVED TO THE EXTENT POSSIBLE. 5. OPERATOR TO CORDINATE WITH COLORADO PARKS & WILDLIFE PRIOR TO START OF OPERATIONS AT EACH POD TO IDENTIFY ANY NESTING RESTRICTIONS REGARDING RAPTOR NESTS LOCATED IN THE
- 16. CITY OF LONGMONT STORMWATER POLUTION CONTROL PLAN, EROSION CONTROL PLAN, STORMWATER CONSTRUCTION ACTIVITY PERMIT AND FLOOD PLAIN DEVELOPMENT PERMIT SHALL BE OBTAINED PRIOR TO COMMENCMENT OF MINING



TYPICAL BERMING SECTION



TYPICAL MINING SECTION AT PERMIT BOUNDARY

FLOODPLAIN INFORMATION PER FIRM FLOOD INSURANCE RATE MAP NO 08013C0287J DATED DECEMBER 18, 2012 AND FIRM FLOOD INSURANCE RATE MAP NO 08013C0289J DATED DECEMBER 18, 2012

• ZONE X - AREAS OF 25 ANNUAL CHANCE OF FLOOD OR AREAS WITH 1% ANNUAL CHANCE OF FLOOD WITH AVERAGE DEPTHS OF LESS THAN ONE FOOT OR WITHIN DRAINAGE AREAS LESS THAN ONE SQUARE MILE AND AREAS PROTECTED

• ZONE AE - SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL FLOOD CHANCE, BASE

● ZONE AH - SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL FLOOD CHANCE, FLOOD DEPTHS OF 1 TO 3 FEET, (USUALLY AREAS OF PONDING) BASE FLOOD ELEVATIONS DETERMINED.

THE ADDITIONAL FLOODPLAIN SHOWN HERE ON IS BASED ON CITY OF LONGMONT, CH2MHILL DRAFT FLOOD PLAIN MAPPING DATED 5/21/15. A LOODP DRAFT REVISED CLOMR FOR THE EXISTING FLOODPLAIN CONDITION BASED ON THE CH2MHILL DRAFT FLOOD PLAIN MAPPING DATED 5/21/15 IS PREPARED AND IS IN THE PROCESS OF FEMA APPROVAL. ROCK CREEK SURVEYING LLC ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF HE CH2MHILL INFORMATION. FLOOD PLAIN INFORMATION IS SUBJECT TO REVISION IF CHANGES OR IMPROVEMENTS OCCUR IN THE FLOODPLAIN.

P.O. Fort +-0 ___ O°

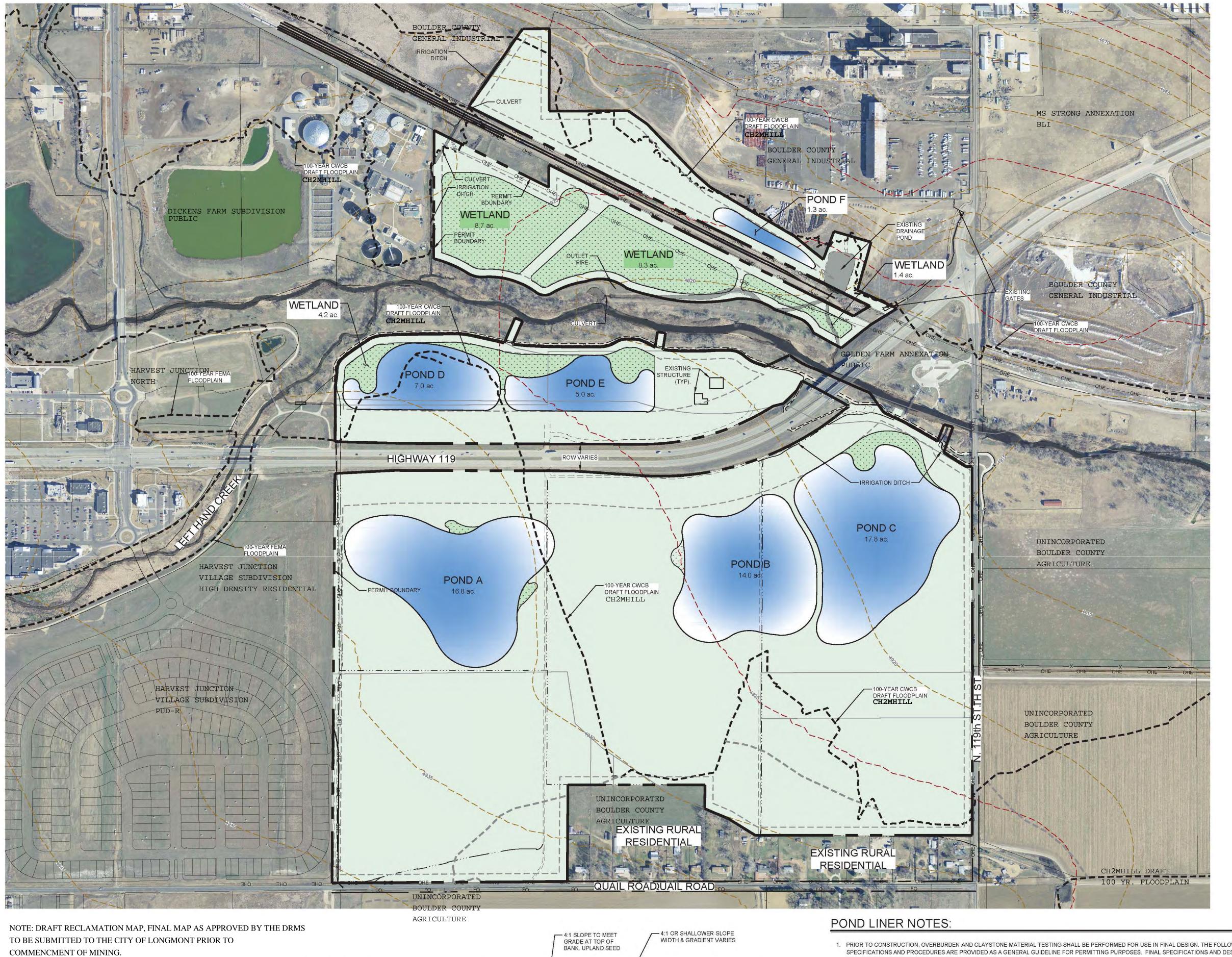
For Recording 11/26/2018

March, 20 Drawn: C. Snowdo **Design:** B. SCHENDERLE

Checked: B. SCHENDERLI

3 Of 4

Sheet:



MINING HEADWALL

SHORELINE RECLAMATION

— AVERAGE NORMAL

GROUNDWATER

SURFACE

GRADED TO DRAIN

MINING SECTION C (DIAGONAL HATCH)

APPLY WETLAND

SLOPE TO —

- AVERAGE NORMAL

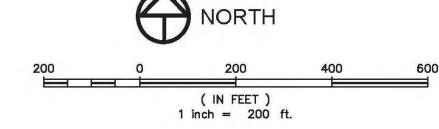
WATER SURFACE

AND UPLAND

SEED

— SHORELINE WETLAND BENCH —

- 1. PRIOR TO CONSTRUCTION, OVERBURDEN AND CLAYSTONE MATERIAL TESTING SHALL BE PERFORMED FOR USE IN FINAL DESIGN. THE FOLLOWING SPECIFICATIONS AND PROCEDURES ARE PROVIDED AS A GENERAL GUIDELINE FOR PERMITTING PURPOSES. FINAL SPECIFICATIONS AND DESIGN
- CRITERIA WILL BE DEVELOPED DURING THE FINAL DESIGN PROCESS. 2. EACH LAYER OF FILL SHALL BE SCARIFIED TO ALLOW PROPER BONDING BETWEEN LAYERS.
- 3. DENSITY AND MOISTURE CONTENT TESTING SHALL BE PERFORMED AT A RATE OF 1 TEST FOR EACH 2,000 YARDS PLACED.
- 4. ALL CLAY LINER MATERIAL SHALL BE COMPACTED TO A MINIMUM 95% ASTM-D698-78 STANDARD PROCTOR AT ±2% OF OPTIMUM MOISTURE CONTENT.
- 5. NO LINER MATERIAL SHALL BE PLACED IN THE LINER SLOPE WHILE EITHER THE MATERIAL, EMBANKMENT, OR FOUNDATION IS FROZEN.
- 6. NO ORGANIC MATERIAL SHALL BE PLACED IN THE LINER SLOPE. 7. EACH LAYER OR LIFT SHALL BE CONSTRUCTED CONTINUOUSLY AND APPROXIMATELY HORIZONTAL FOR THE WIDTH AND LENGTH OF EACH LIFT.
- 8. LINER MATERIAL SHALL BE COMPOSED OF CLAYEY OVERBURDEN AND WEATHERED CLAYSTONE THAT BREAKS DOWN DURING PROCESSING. BEDROCK CLAYSTONE MATERIAL MAY BE RIPPED, MOISTURE TREATED, AND ALLOWED TO AIR SLAKE FOR A MINIMUM OF ONE DAY PRIOR TO ITS PLACEMENT IN THE LINER. LINER MATERIAL IS DEFINED AS MATERIAL HAVING 4 INCH OR SMALLER COBBLE, A MINIMUM OF 50% FINES BY CLAY WEIGHT PASSING THE US STANDARD 200 SIEVE, AND A PLASTICITY INDEX OF 10% OR GREATER FOR THE PORTION OF MATERIAL FINER THAN THE US
- 9. SUFFICIENT MOISTURE SHALL BE ADDED AT THE BORROW AREA SO NO MORE THAN 3% ADDITIONAL MOISTURE IS REQUIRED TO BRING ANY LINER MATERIAL TO SPECIFICATIONS ONCE PLACED IN THE FILL.
- 10. LINER MATERIAL SHALL BE PLACED IN MAXIMUM OF 9-INCH LOOSE LIFTS PRIOR TO COMPACTION.
- $11. \ \ A\ CATERPILLAR\ 815\ OR\ 825\ SHEEPSFOOT\ COMPACTOR\ (OR\ EQUIVALENT)\ WILL\ BE\ USED\ FOR\ COMPACTING\ EFFORTS.$
- 12. THE COMPLETED LINER SHALL BE PROTECTED FROM DAMAGE CAUSED BY DESICCATION OR FREEZING TEMPERATURES BY PLACING A MINIMUM OF 12-INCHES PIT RUN MATERIAL ON THE ENTIRE SLOPE.



I EGEND

LLGLND.	
PERMIT BOUNDARY	
PROPOSED HAUL ROAD	
PROPOSED MINING LIMITS	-
EXISTING PARCELS	-
EXISTING DITCH	
EXISTING GAS LINE	—— GAS ——
EXISTING OVERHEAD ELECTRIC	OHE-
EXISTING EASEMENT	======
EXISTING 5 FOOT CONTOUR	————4880—
EXISTING 25 FOOT CONTOUR	
PROPOSED 5 FOOT CONTOUR	4880
PROPOSED 25 FOOT CONTOUR	4700
PROPOSED RE-VEGETATION	

NOTES:

- 1. THE PROPOSED FINAL LAND USE FOR THE IRWIN/THOMAS MINE IS GENERAL AGRICULTURE. 2. MINE CELLS WILL BE BACKFILLED TO CREATE UPLAND, OPEN WATER POND, AND WETLAND
- 3. ALL SLOPES SHALL BE GRADED TO 3H:1V OR FLATTER. ROUGH GRADING WILL ESTABLISH FINAL ELEVATIONS, SLOPES, AND TRANSITIONS. TRANSITIONS BETWEEN UPLANDS, WETLANDS, AND POND SLOPES SHALL BE GRADED WITH A SMOOTH, GRADUAL
- 4. FINAL GRADING WILL INCLUDE ADDITION OF TOPSOIL AND SURFACE PREPARATION FOR REVEGETATION. SPECIAL ATTENTION SHALL BE GIVEN TO TRANSITIONS FROM RECLAIMED AREAS TO UNDISTURBED LAND.
- 5. ALL AVAILABLE TOPSOIL AND OVERBURDEN MATERIAL WILL BE USED FOR BACKFILLING AND RECLAMATION.
- 6. THE GROWTH MEDIUM FOR REVEGETATION WILL BE A COMBINATION OF OVERBURDEN AND TOPSOILS.
- 7. TWO DIFFERENT MIXES OF UPLAND GRASSES WILL BE USED IN AREAS THAT WILL NOT EXPERIENCE PERIODIC FLOODING, SEASONAL GROUNDWATER, OR OTHER MOIST SOIL EROSION CONTROL. THIS MIX WILL MAINLY BE USED IN MA1 WHERE FURTHER AGRICULTURAL OR OTHER DEVELOPMENT IS EXPECTED TO OCCUR FOLLOWING PERMIT RELEASE. THE SECOND GRASS SEED MIX FOR AREAS LEFT AS OPEN SPACE IS COMPOSED OF A LONG LASTING AND REGENERATING NATIVE UPLAND SEED MIXTURE.

3
0.75
0.75
4.5

Upland Grass Seed – Native Open Space	Application Rate* (#PLS/acre)
Western Wheatgrass	4
Blue grama	1
Side-oats grama	1.5
Sand dropseed	0.5
Switchgrass	1
Indian Ricegrass	1
TOTAL	9
*Application rate is for drill seeding. If seed is application rate will be doubled.	to be broadcast, the

8. IN AREAS WHERE WETLANDS COULD POTENTIALLY BE DEVELOPED, THE SEED MIX WILL BE MODIFIED TO INCLUDE MORE TRANSITION AND WETLAND GRASSES AND GRASS-LIKE SPECIES. THESE SEED MIXES, ESPECIALLY IF STANDING WATER OR SATURATED SOILS EXIST DURING PLANTING, WILL LIKELY NEED TO BE BROADCAST.

2.5
2.5
1.5
1.5
1.5
1.5
11

- 9. UPLAND GRASS SEED WILL BE PLANTED WITH A DRILL EQUIPPED WITH DEPTH BANDS AND PRESS WHEELS. THE SEEDED AREA WILL THEN BE COVERED WITH CERTIFIED WEED-LESS STRAW MULCH AT A RATE OF 2,000 POUNDS PER ACRE. THE STRAW WILL BE CRIMPED INTO THE SOIL TO CONTROL EROSION UNTIL THE GRASS BECOMES ESTABLISHED.
- 10. DRILL SEEDING IS THE PREFERRED METHOD FOR REVEGETATION. IF BROADCAST SEEDING IS NECESSARY ON MOIST SOILS, STEEP SLOPES, OR IN EXCESSIVELY ROCKY AREAS, SUCCESS CAN BE ENCOURAGED BY BROADCASTING ONTO GROWTH MEDIUM THAT IS VERY LOOSE. IF THE SEED IS BROADCAST IN THOSE CIRCUMSTANCES, THEN THE SEEDED AREA WILL BE DRAGGED TO HELP BURY THE SEED.
- 11. PERIODIC INSPECTION FOR NOXIOUS WEEDS, WILL BE COMPLETED ON A QUARTERLY BASIS AND WILL BE DONE AS PART OF A WEED MANAGEMENT PLAN.
- 12. THE MINE OFFICE/SCALE HOUSE TRAILER AND ANY OTHER STRUCTURES ASSOCIATED WITH MINING WILL BE REMOVED FROM THE SITE DURING FINAL RECLAMATION ACTIVITIES.
- 13. BEST MANAGEMENT PRACTICES WILL BE USED TO CONTROL EROSION AND STORMWATER SUSPENDED SEDIMENT RUNOFF FROM THE SITE DURING RECLAMATION ACTIVITIES. 4. THE FINAL RECLAMATION PLAN INCLUDES FIVE IRREGULARLY SHAPED PONDS TOTALING
- ABOUT 73 ACRES WITH THE AREA BETWEEN THE ST. VRAIN CREEK AND BURLINGTON NORTHERN RAILROAD CONSISTING OF ABOUT 25.5 ACRES OF WETLANDS. THE EXACT NUMBER, AREA OF OPEN WATER, AND CONFIGURATION OF THE PONDS AND WETLANDS MAY VARY BASED ON THE GRAVEL RESOURCE AND AVAILABLE FILL MATERIAL. FINAL LAYOUT OF THE OPEN WATER WILL BE DETERMINED WHEN MINING HAS BEEN COMPLETED AND RECLAMATION TAKES PLACE, PER THE APPROVED RECLAMATION PLAN 5. BEFORE RECLAMATION ACTIVITIES COMMENCE ON LAND NORTH OF HWY 119, THE OPERATOR
- SHALL WALK THE SITE WITH THE CITY TO DETERMINE THE EXTENTS OF SEEDING WITH THE VARIED SEED MIXES SPECIFIED FOR THE PROJECT. 3. THE OPERATOR WILL WORK WITH THE CITY TO ADD DIVERSITY TO THE SEED MIXES PROPOSED FOR CITY-OWNED PROPERTY PRIOR TO RECLAMATION OF MINING ACTIVITIES IN THESE AREAS

IRWIN THOMAS PRELIMINARY/FINAL DEVELOPMENT PLAN FOR GRAVEL MINING AND RECLAMATION

DATE PREPARED: SEPTEMBER 14 2016 rev. 11/29/2016



For Recording 11/26/2018

March, 2016 590-008 Design: B. SCHENDERLEIN Checked: B. SCHENDERLEIN 1" = 200

SHEET 4 OF 4