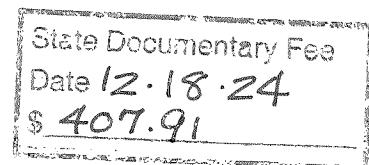


Following recordation, return to:

Evergreen-CR 5 & Erie Parkway, L.L.C.
2390 East Camelback Road, Suite 410
Phoenix, Arizona 85016
Attention: Laura Ortiz



SPECIAL WARRANTY DEED

THIS SPECIAL WARRANTY DEED (this **Deed**), is made and entered into effective as of the 18 day of December, 2024 (the **Effective Date**), by and between CLAYTON PROPERTIES GROUP, INC., a Tennessee corporation (**Grantor**), having an address of 4908 Tower Road, Denver, Colorado 80249, and EVERGREEN-CR 5 & ERIE PARKWAY, L.L.C., an Arizona limited liability company (**Grantee**), having an address of 2390 East Camelback Road, Suite 410, Phoenix, Arizona 85016.

WITNESS, that Grantor, for and in consideration of the sum of Ten and 00/100 Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged and agreed, has granted, bargained, sold and conveyed, and by these presents does hereby grant, bargain, sell, convey and confirm, unto Grantee, its successors and assigns forever, the real property situate, lying and being in the County of Weld, State of Colorado, legally described on Exhibit A attached hereto and incorporated herein by this reference (the **Property**).

TOGETHER with all and singular the hereditaments and appurtenances thereto belonging, or in anywise appertaining, and the reversions, remainders, rents, issues and profits thereof; and all the estate, right, title, interest, claim and demand whatsoever of Grantor, either in law or equity, of, in and to the above bargained premises, with the hereditaments and appurtenances, **excepting and reserving unto Seller the following:**

(a) all interest, right, and title in and to minerals and mineral rights, oil, gas and other minerals, oil and gas rights (including lease rights), and coal and coal rights underlying the Property (collectively, **Minerals**); provided, however that the Grantor does hereby covenant and agree that, in respect of any Minerals that Grantor actually owns, Grantor and its successors and assigns as to such Minerals that Grantor actually owns, shall not have any rights to enter upon or use the surface of the Property for purposes of drilling, removal, extraction, or production of Minerals, or setting of any equipment, and that the Grantor does hereby forever relinquish the same on its behalf and on behalf of its successors and assigns; provided, further, however that such restrictions against access or use of the surface of the Property shall not prohibit the pooling or unitization of the mineral estate owned by Grantor with land other than the Property, or the exploration or production of Minerals by subterranean (below five hundred feet (500') from the surface) directional or horizontal drilling or by subterranean (below five hundred feet (500') from the surface) entries or operations conducted on the surface of other lands, but without entering upon or using the surface of the Property and so long as these operations in no manner interfere with the surface or subsurface support of any improvements constructed or to be constructed on the Property; and



25207759

(b) all water and water rights appurtenant to the Property, as applicable, including tributary, non-tributary, not non-tributary, and underground water and water rights, storage rights, ditch and ditch rights, well rights, reservoir and reservoir rights, and water and ditch company stock (collectively, **Water Resources**); provided, however that the Grantor does hereby covenant and agree that, as to any Water Resources that Grantor actually owns, Grantor and its successors and assigns shall not have any rights to enter upon or use the surface of the Property for purposes of drilling, removal, extraction, or production of Water Resources, or setting of any equipment, and that the Grantor does hereby forever relinquish the same on its behalf and on behalf of its successors and assigns; provided, further, however that such restrictions against access or use of the surface of the Property shall not prohibit the exploration or production of Water Resources by subterranean (below five hundred feet (500') from the surface) directional or horizontal drilling or by subterranean (below five hundred feet (500') from the surface) entries or operations conducted on the surface of other lands, but without entering upon or using the surface of the Property and so long as these operations in no manner interfere with the surface or subsurface support of any improvements constructed or to be constructed on the Property.

TO HAVE AND TO HOLD the said Property with the appurtenances above bargained and described, unto Grantee, its successors and assigns forever. Grantor, for itself, and its successors and assigns, does covenant and agree that it shall and will WARRANT AND FOREVER DEFEND the above-bargained Property in the quiet and peaceable possession of Grantee, its successors and assigns, against all and every person or persons claiming the whole or any part thereof, by, through or under Grantor (but none other), except for the matters set forth on Exhibit B hereto and incorporated herein by this reference (collectively, the **Permitted Exceptions**) and real estate taxes for the year 2024 and subsequent years and assessments becoming a lien after the date hereof.

[Remainder of Page Left Intentionally Blank; Signature Page Follows]

SIGNATURE PAGE TO SPECIAL WARRANTY DEED

IN WITNESS WHEREOF, Grantor has executed and delivered this Special Warranty Deed as of the 18 day of December, 2024.

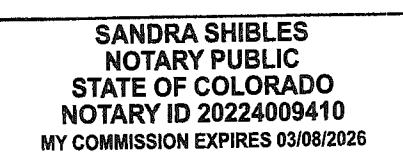
GRANTOR:

CLAYTON PROPERTIES GROUP, INC., a Tennessee corporation

By: Heidi A. Moore
Name: Heidi A. Moore
Title: Asst. Secretary

STATE OF COLORADO)
) ss.
COUNTY OF Denver)

The foregoing instrument was acknowledged before me this 17 day of December, 2024, by Heidi Moore, the Assistant Secretary of Clayton Properties Group, Inc., a Tennessee corporation, on behalf of said corporation.



Sandra Shibles
Notary Public
My commission expires: 03/08/2026

EXHIBIT A
Attached to Special Warranty Deed
(Legal Description)

TRACT H-1, ERIE HIGHLANDS FILING NO. 14, AMENDMENT NO. 1, COUNTY OF WELD, STATE OF COLORADO.

EXHIBIT B

Attached to Special Warranty Deed
(Permitted Exceptions)

1. Taxes for the year 2024, and subsequent years a lien not yet due or payable.
2. Water rights, claims or title to water.
3. RIGHTS OF WAY FOR COUNTY ROADS 30 FEET ON EITHER SIDE OF SECTION AND TOWNSHIP LINES, AS ESTABLISHED BY THE BOARD OF COUNTY COMMISSIONERS FOR WELD COUNTY, COLORADO, RECORDED OCTOBER 14, 1889 IN BOOK 86 AT PAGE 273.
4. RESERVATION OF ALL COAL AND OTHER MINERALS UNDERLYING THE LAND, AS SET FORTH IN DEED RECORDED MAY 31, 1945 IN BOOK 1155 AT PAGE 407, AND RE-RECORDED SEPTEMBER 27, 1945 IN BOOK 1162 AT PAGE 31, AND ANY AND ALL ASSIGNMENTS THEREOF OR INTERESTS THEREIN.
5. OIL AND GAS LEASE BETWEEN WILLIAM H. PELTIER AND T.S. PACE, RECORDED JUNE 17, 1970 UNDER RECEPTION NO. 1549405, AND RE-RECORDED MARCH 23, 1976 UNDER RECEPTION NO. 1684120, AND ANY AND ALL ASSIGNMENTS THEREOF, OR INTEREST THEREIN.
AMENDMENT OF OIL AND GAS LEASE RECORDED JUNE 25, 2012 UNDER RECEPTION NO. 3854517.
6. NOTICE OF GENERAL DESCRIPTION OF AREA SERVED BY PANHANDLE EASTERN PIPE LINE COMPANY RECORDED JUNE 26, 1986 UNDER RECEPTION NO. 2058722.
7. NOTICE CONCERNING UNDERGROUND FACILITIES OF UNITED POWER, INC. RECORDED JANUARY 24, 1991 UNDER RECEPTION NO. 2239296.
8. TERMS, CONDITIONS, PROVISIONS, BURDENS, OBLIGATIONS AND EASEMENTS AS SET FORTH AND GRANTED IN RIGHT-OF-WAY GRANT RECORDED MAY 03, 1993 UNDER RECEPTION NO. 2331355.
9. REQUEST FOR NOTIFICATION OF SURFACE DEVELOPMENT RECORDED MAY 28, 2002 UNDER RECEPTION NO. 2954714.
10. REQUEST FOR NOTIFICATION OF SURFACE DEVELOPMENT RECORDED APRIL 21, 2006 UNDER RECEPTION NO. 3381087.
11. REQUEST FOR NOTIFICATION RECORDED DECEMBER 21, 2007 UNDER RECEPTION NO. 3525268.

12. TERMS, CONDITIONS, PROVISIONS, BURDENS AND OBLIGATIONS AS SET FORTH IN SURFACE USE AGREEMENT RECORDED AUGUST 01, 2013 UNDER RECEPTION NO. 3952706.
13. TERMS, CONDITIONS, PROVISIONS, BURDENS AND OBLIGATIONS AS SET FORTH IN ORDINANCE NO. 35-2013 RECORDED NOVEMBER 25, 2013 UNDER RECEPTION NO. 3980216.
14. TERMS, CONDITIONS, PROVISIONS, BURDENS AND OBLIGATIONS AS SET FORTH IN ORDINANCE NO. 36-2013 RECORDED NOVEMBER 25, 2013 UNDER RECEPTION NO. 3980217.
15. ANY TAX, LIEN, FEE, OR ASSESSMENT BY REASON OF INCLUSION OF SUBJECT PROPERTY IN THE ERIE HIGHLANDS METROPOLITAN DISTRICT NO. 2, AS EVIDENCED BY INSTRUMENT RECORDED DECEMBER 02, 2013, UNDER RECEPTION NO. 3981398.
16. ANY TAX, LIEN, FEE, OR ASSESSMENT BY REASON OF INCLUSION OF SUBJECT PROPERTY IN THE ERIE HIGHLANDS METROPOLITAN DISTRICT NO. 3, AS EVIDENCED BY INSTRUMENT RECORDED DECEMBER 02, 2013, UNDER RECEPTION NO. 3981399.
17. TERMS, CONDITIONS, PROVISIONS, BURDENS AND OBLIGATIONS AS SET FORTH IN MEMORANDUM OF COMPATIBLE DEVELOPMENT AND SURFACE USE AGREEMENT RECORDED DECEMBER 09, 2013 UNDER RECEPTION NO. 3982954.
18. TERMS, CONDITIONS, PROVISIONS, BURDENS, OBLIGATIONS AND EASEMENTS AS SET FORTH AND GRANTED IN GRANT OF PERMANENT AVIGATION EASEMENT AGREEMENT RECORDED DECEMBER 16, 2013 UNDER RECEPTION NO. 3984166.
19. EASEMENTS, CONDITIONS, COVENANTS, RESTRICTIONS, RESERVATIONS AND NOTES ON THE PLAT OF ERIE HIGHLANDS FILING NO. 1 RECORDED SEPTEMBER 10, 2014 UNDER RECEPTION NO. 4044915.
20. TERMS, CONDITIONS, PROVISIONS, BURDENS AND OBLIGATIONS AS SET FORTH IN ERIE HIGHLANDS PROPERTY VESTED RIGHTS DEVELOPMENT AGREEMENT RECORDED SEPTEMBER 10, 2014 UNDER RECEPTION NO. 4044916.
21. TERMS, CONDITIONS, PROVISIONS, BURDENS AND OBLIGATIONS AS SET FORTH IN ERIE HIGHLANDS PROPERTY MASTER PRE-DEVELOPMENT AGREEMENT RECORDED SEPTEMBER 10, 2014 UNDER RECEPTION NO. 4044917.

22. REQUEST FOR NOTIFICATION OF APPLICATION FOR DEVELOPMENT RECORDED JULY 12, 2016 UNDER RECEPTION NO. 4218393.
23. EASEMENTS, CONDITIONS, COVENANTS, RESTRICTIONS, RESERVATIONS AND NOTES ON THE PLAT OF ERIE HIGHLANDS FILING NO. 11 RECORDED APRIL 6, 2017 UNDER RECEPTION NO. 4291875.
24. TERMS, CONDITIONS, PROVISIONS, BURDENS AND OBLIGATIONS AS SET FORTH IN ERIE HIGHLANDS FILING NO. 11 DEVELOPMENT AGREEMENT RECORDED APRIL 06, 2017 UNDER RECEPTION NO. 4291876.
25. TERMS, CONDITIONS, PROVISIONS, BURDENS AND OBLIGATIONS AS SET FORTH IN MEMORANDUM OF SURFACE DAMAGE AND RELEASE EASEMENT RECORDED AUGUST 13, 2018 UNDER RECEPTION NO. 4422664.

AFFIDAVIT OF SCRIVENER'S ERROR IN CONNECTION THEREWITH RECORDED OCTOBER 11, 2018 UNDER RECEPTION NO. 4438127.
26. REQUEST FOR NOTIFICATION OF SURFACE DEVELOPMENT RECORDED JUNE 19, 2019 UNDER RECEPTION NO. 4498653, AND AMENDED REQUEST FOR NOTIFICATION OF SURFACE DEVELOPMENT RECORDED JULY 17, 2019 UNDER RECEPTION NO. 4506256.
27. REQUEST FOR NOTIFICATION OF SURFACE DEVELOPMENT RECORDED JUNE 19, 2019 UNDER RECEPTION NO. 4498654, AND AMENDED REQUEST FOR NOTIFICATION OF SURFACE DEVELOPMENT RECORDED JULY 17, 2019 UNDER RECEPTION NO. 4506257.
28. EASEMENTS, CONDITIONS, COVENANTS, RESTRICTIONS, RESERVATIONS AND NOTES ON THE PLAT OF ERIE HIGHLANDS FILING NO. 14 RECORDED MAY 1, 2020 UNDER RECEPTION NO. 4587151.

AFFIDAVIT OF CORRECTION OF PLAT RECORDED MAY 28, 2020 UNDER RECEPTION NO. 4593929 AND RE-RECORDED JUNE 3, 2020 UNDER RECEPTION NO. 4595704.
29. EASEMENTS, CONDITIONS, COVENANTS, RESTRICTIONS, RESERVATIONS AND NOTES ON THE PLAT OF ERIE HIGHLANDS FILING NO. 14, AMENDMENT NO. 1 RECORDED MAY 28, 2021 UNDER RECEPTION NO. 4720052.
30. TERMS, CONDITIONS, PROVISIONS, BURDENS AND OBLIGATIONS AS SET FORTH IN MEMORANDUM OF AGREEMENT RECORDED MARCH 28, 2023 UNDER RECEPTION NO. 4888778.
31. TERMS, CONDITIONS, PROVISIONS, BURDENS AND OBLIGATIONS AS SET FORTH IN DECLARATION OF DRAINAGE EASEMENTS RECORDED DECEMBER 19, 2024, UNDER RECEPTION NO. 5001164.

ALTA/NSPS LAND TITLE SURVEY

TRACT H-1, ERIE HIGHLANDS FILING NO. 14, AMENDMENT NO. 1
LOCATED IN THE NORTHEAST QUARTER OF SECTION 20, TOWNSHIP 1 NORTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN,
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO

LEGAL DESCRIPTION

TRACT H-1, ERIE HIGHLANDS FILING NO. 14, AMENDMENT NO. 1,
COUNTY OF WELD, STATE OF COLORADO

TITLE COMMITMENT NOTES

LAND TITLE GUARANTEE COMPANY COMMITMENT ORDER NO. ABZ25207759-2, WITH A COMMITMENT DATE OF 09/26/2023 AT 5:00 P.M. WAS RELIED UPON FOR RECORD INFORMATION REGARDING RIGHTS-OF-WAY, EASEMENTS AND ENCUMBRANCES. THIS SURVEY DOES NOT REPRESENT A TITLE SEARCH BY AZTEC CONSULTANTS, INC. TO DETERMINE OWNERSHIP, RIGHTS-OF-WAY, EASEMENTS OR OTHER MATTERS OF PUBLIC RECORD.

NOTE: THE WORD "AFFECTS" AS USED BELOW, IS HEREBY DEFINED AS: "A DETERMINATION THAT THE PROPERTY OR INTERESTS DESCRIBED, WITHIN THE ITEMS LISTED AMONG THE SCHEDULE B, PART II PROVIDED, FALLS WITHIN OR TOUCHES THE SURVEYED PROPERTY".

ITEM NUMBERS BELOW REFER TO THOSE ITEMS AS LISTED IN SCHEDULE B, PART II OF SAID TITLE COMMITMENT.

ITEM NUMBERS 1-8 ARE STANDARD EXCEPTIONS AND ARE NOT ADDRESSED AS A PART OF THIS SURVEY.

9. RIGHTS OF WAY FOR COUNTY ROADS 30 FEET ON EITHER SIDE OF SECTION AND TOWNSHIP LINES, AS ESTABLISHED BY THE BOARD OF COUNTY COMMISSIONERS FOR WELD COUNTY, COLORADO, RECORDED OCTOBER 14, 1889 IN BOOK 86 AT PAGE 273. **AFFECTS THE SURVEYED PROPERTY AND IS SHOWN HEREON.**

10. RESERVATION OF ALL COAL AND OTHER MINERALS UNDERLYING THE LAND, AS SET FORTH IN DEED RECORDED MAY 31, 1954 IN BOOK 1155 AT PAGE 407, AND RE-RECORDED SEPTEMBER 27, 1945 IN BOOK 1162 AT PAGE 31, AND ANY AND ALL ASSIGNMENTS THEREOF OR INTERESTS THEREIN. **AFFECTS THE SURVEYED PROPERTY, BUT IS BLANKET IN NATURE AND THEREFORE IS NOT SHOWN HEREON.**

11. OIL AND GAS LEASE BETWEEN WILLIAM H. PELTIER AND T.S. PACE, RECORDED JUNE 17, 1970 UNDER RECEPTION NO. 1549405, AND RE-RECORDED MARCH 23, 1976 UNDER RECEPTION NO. 1684120, AND ANY AND ALL ASSIGNMENTS THEREOF, OR INTEREST THEREIN.

AMENDMENT OF OIL AND GAS LEASE RECORDED JUNE 25, 2012 UNDER RECEPTION NO. 3854517.

NOTE: THE PRESENT OWNERSHIP OF THE LEASEHOLD CREATED BY SAID LEASE AND OTHER MATTERS AFFECTING THE INTEREST OF THE LESSEE ARE NOT SHOWN HEREIN. **AFFECTS THE SURVEYED PROPERTY, BUT IS BLANKET IN NATURE AND THEREFORE IS NOT SHOWN HEREON.**

12. NOTICE OF GENERAL DESCRIPTION OF AREA SERVED BY PANHANDLE EASTERN PIPE LINE COMPANY RECORDED JUNE 26, 1986 UNDER RECEPTION NO. 2058722. **AFFECTS THE SURVEYED PROPERTY, BUT IS BLANKET IN NATURE AND THEREFORE IS NOT SHOWN HEREON.**

13. NOTICE CONCERNING UNDERGROUND FACILITIES OF UNITED POWER, INC. RECORDED JANUARY 24, 1991 UNDER RECEPTION NO. 2239296. **AFFECTS THE SURVEYED PROPERTY, BUT IS BLANKET IN NATURE AND THEREFORE IS NOT SHOWN HEREON.**

14. TERMS, CONDITIONS, PROVISIONS, BURDENS, OBLIGATIONS AND EASEMENTS AS SET FORTH AND GRANTED IN RIGHT-OF-WAY GRANT RECORDED MAY 03, 1993 UNDER RECEPTION NO. 2331355. **AFFECTS THE SURVEYED PROPERTY AND IS SHOWN HEREON.**

15. REQUEST FOR NOTIFICATION OF SURFACE DEVELOPMENT RECORDED MAY 28, 2002 UNDER RECEPTION NO. 2954714. **AFFECTS THE SURVEYED PROPERTY, BUT IS BLANKET IN NATURE AND THEREFORE IS NOT SHOWN HEREON.**

16. REQUEST FOR NOTIFICATION OF SURFACE DEVELOPMENT RECORDED APRIL 21, 2006 UNDER RECEPTION NO. 3381087. **AFFECTS THE SURVEYED PROPERTY, BUT IS BLANKET IN NATURE AND THEREFORE IS NOT SHOWN HEREON.**

17. REQUEST FOR NOTIFICATION RECORDED DECEMBER 21, 2007 UNDER RECEPTION NO. 3525268. **AFFECTS THE SURVEYED PROPERTY, BUT IS BLANKET IN NATURE AND THEREFORE IS NOT SHOWN HEREON.**

18. TERMS, CONDITIONS, PROVISIONS, BURDENS AND OBLIGATIONS AS SET FORTH IN SURFACE USE AGREEMENT RECORDED AUGUST 01, 2013 UNDER RECEPTION NO. 3952706. **AFFECTS THE SURVEYED PROPERTY AND IS SHOWN HEREON.**

19. TERMS, CONDITIONS, PROVISIONS, BURDENS AND OBLIGATIONS AS SET FORTH IN ORDINANCE NO. 35-2013 RECORDED NOVEMBER 25, 2013 UNDER RECEPTION NO. 3980216. **AFFECTS THE SURVEYED PROPERTY, BUT IS BLANKET IN NATURE AND THEREFORE IS NOT SHOWN HEREON.**

20. TERMS, CONDITIONS, PROVISIONS, BURDENS AND OBLIGATIONS AS SET FORTH IN ORDINANCE NO. 36-2013 RECORDED NOVEMBER 25, 2013 UNDER RECEPTION NO. 3980217. **AFFECTS THE SURVEYED PROPERTY, BUT IS BLANKET IN NATURE AND THEREFORE IS NOT SHOWN HEREON.**

21. ANY TAX, LIEN, FEE, OR ASSESSMENT BY REASON OF INCLUSION OF SUBJECT PROPERTY IN THE ERIE HIGHLANDS METROPOLITAN DISTRICT NO. 2, AS EVIDENCED BY INSTRUMENT RECORDED DECEMBER 02, 2013, UNDER RECEPTION NO. 3981398. **AFFECTS THE SURVEYED PROPERTY, BUT IS BLANKET IN NATURE AND THEREFORE IS NOT SHOWN HEREON.**

22. ANY TAX, LIEN, FEE, OR ASSESSMENT BY REASON OF INCLUSION OF SUBJECT PROPERTY IN THE ERIE HIGHLANDS METROPOLITAN DISTRICT NO. 3, AS EVIDENCED BY INSTRUMENT RECORDED DECEMBER 02, 2013, UNDER RECEPTION NO. 3981399. **AFFECTS THE SURVEYED PROPERTY, BUT IS BLANKET IN NATURE AND THEREFORE IS NOT SHOWN HEREON.**

23. TERMS, CONDITIONS, PROVISIONS, BURDENS AND OBLIGATIONS AS SET FORTH IN MEMORANDUM OF COMPATIBLE DEVELOPMENT AND SURFACE USE AGREEMENT RECORDED DECEMBER 09, 2013 UNDER RECEPTION NO. 3982954. **AFFECTS THE SURVEYED PROPERTY AND IS SHOWN HEREON.**

24. TERMS, CONDITIONS, PROVISIONS, BURDENS, OBLIGATIONS AND EASEMENTS AS SET FORTH AND GRANTED IN GRANT OF PERMANENT AVIATION EASEMENT AGREEMENT RECORDED DECEMBER 16, 2013 UNDER RECEPTION NO. 3984166. **AFFECTS THE SURVEYED PROPERTY, BUT IS BLANKET IN NATURE AND THEREFORE IS NOT SHOWN HEREON.**

BENCHMARK

NGS POINT 48VA 1999 (NAVD 88) = 5074.66.

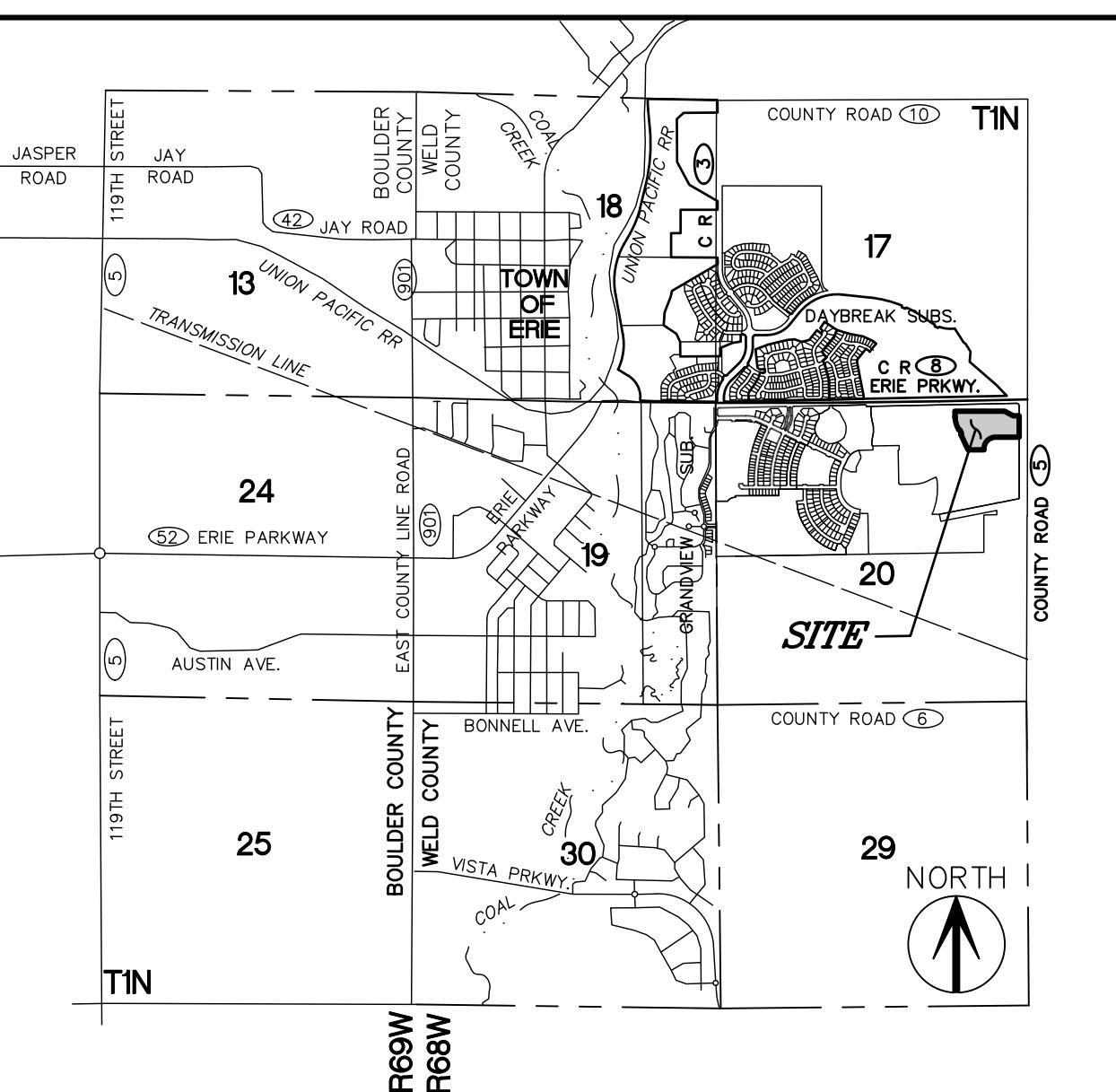
THE MARK IS A PUNCH HOLE, TOP CENTER ON A LONG STAINLESS STEEL ROD DRIVEN TO REFUSAL, A DEPTH OF 48.00' ENCASED IN A 3.0' LONG GREASED PVC PIPE, ENCLOSED IN A 6-INCH PVC PIPE WITH LOGO LID, SURROUNDED BY A CONCRETE CUPULA FLUSH WITH THE GROUND, IT IS 104.0' SOUTHEAST FROM THE STOP BAR FOR A4, 82.7' EAST-NORTH-EAST FROM THE EDGE OF TAXIWAY A, 72.8' WEST-SOUTHWEST FROM THE EDGE OF RUNWAY 15-33, 64.3' SOUTHWEST FROM THE TOP CENTER OF SIGN—A4—, 62.3' SOUTHEAST FROM THE TOP CENTER OF ORANGE IDENTIFIER UNIT REIL NUMBER 1 AND 2.0' SOUTH FROM A WITNESS POST. THIS STATION IS DESIGNATED AS A PRIMARY AIRPORT CONTROL STATION FOR THE ANA PROJECT

BASIS OF BEARINGS

THE BEARINGS SHOWN HEREON ARE BASED UPON THE NORTH LINE OF TRACT H-1, ERIE HIGHLANDS FILING NO. 14, AMENDMENT NO. 1 AND WAS ASSUMED TO BEAR NORTH 90°0'0" EAST, A DISTANCE OF 868.13 FEET; MONUMENTED AT EACH END BY A NO. 6 REBAR WITH A PINK PLASTIC CAP STAMPED "AZTEC PLS 38636".

FLOOD ZONE

BASED ON A GRAPHICAL REPRESENTATION OF FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) MAP NO. 08013C0442U, PANEL 442 of 615 (PER INDEX MAP NO. 08013C1ND2B DATED DECEMBER 18, 2012 PANEL 442 WAS NOT PRINTED) THE SUBJECT PROPERTY LIES WITHIN "ZONE X", BEING DEFINED AS "OTHER AREAS ... DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN".



VICINITY MAP

SCALE: 1"=3000'

GENERAL NOTES

1. THE FIELD WORK FOR THIS SURVEY WAS PERFORMED BY AN AZTEC CONSULTANTS, INC. SURVEY CREW AND COMPLETED ON FEBRUARY 22, 2024.
2. PER C.R.S. 38-51-106, "ALL LINEAL UNITS DEPICTED ON THIS LAND SURVEY PLAT ARE U.S. SURVEY FEET. ONE METER EQUALS 39.37/12 U.S. SURVEY FEET, EXACTLY ACCORDING TO THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY."
3. AS TO TABLE A ITEM NO. 2: SUBJECT PROPERTY IS NOT ADDRESSED.
4. AS TO TABLE A ITEM NO. 4: THE SURVEYED PARCEL CONTAINS A TOTAL OF 12.710 ACRES OR 553,632 SQUARE FEET, MORE OR LESS.
5. AS TO TABLE A ITEM NO. 11(b): THIS SURVEY DOES NOT CERTIFY TO SUBSURFACE FEATURES, IMPROVEMENTS, UTILITIES OR BURIED LINES OF ANY TYPE. LOCATION DEPICTED HEREON ARE DERIVED FROM FIELD SURVEY OF UTILITY FLAGGING / PAINT MARKING, PERFORMED BY AZTEC SURVEY AND LOCATING ON FEBRUARY 22, 2024.
6. THE PROPERTY DESCRIBED HEREON IS THE SAME AS THE PROPERTY DESCRIBED IN LAND TITLE GUARANTEE COMPANY COMMITMENT ORDER NO. ABZ25207759-2, WITH A COMMITMENT DATE OF 09/26/2023 AT 5:00 P.M. AND THAT ALL EASEMENTS, COVENANTS AND RESTRICTIONS REFERENCED IN SAID TITLE COMMITMENT OR APPARENT FROM A PHYSICAL INSPECTION OF THE SITE OR OTHERWISE KNOWN TO ME HAVE BEEN PLOTTED HEREON OR OTHERWISE NOTED AS TO THEIR EFFECT ON THE SUBJECT PROPERTY.
7. THE ACCOMPANYING SURVEY WAS MADE ON THE GROUND AND CORRECTLY SHOWS THE LOCATION OF ALL BUILDINGS, STRUCTURES AND OTHER IMPROVEMENTS SITUATED ON THE ABOVE PREMISES; THERE ARE NO VISIBLE ENCROACHMENTS ON THE SUBJECT PROPERTY OR UPON ADJACENT LAND ABUTTING SAID PROPERTY EXCEPT AS SHOWN HEREON AND WAS MADE IN ACCORDANCE WITH LAWS AND/OR MINIMUM STANDARDS OF THE STATE OF COLORADO.
8. PLEASE REFER TO THE ENCANA SURFACE USE AGREEMENT RECORDED UNDER RECEPTION NO. 3982954 FOR ALL SETBACK AND USE RESTRICTIONS.
9. PLEASE REFER TO THE KERR-MCGEE SURFACE USE AGREEMENT RECORDED UNDER RECEPTION NO. 3952706 FOR ALL SETBACK AND USE RESTRICTIONS.
10. PROPOSED TEMPORARY CONSTRUCTION AND PIPE LINE EASEMENTS ARE SHOWN HEREON BASED ON GRAPHICAL REPRESENTATION OF EXHIBIT D WITHIN THE SURFACE USE AGREEMENT RECORDED UNDER RECEPTION NO. 3952706.
11. AS OF THE DATE OF THIS SURVEY, THERE WERE NO BUILDINGS ON SUBJECT PROPERTY.

SURVEYOR'S STATEMENT

TO CLAYTON PROPERTIES GROUP, INC., A TENNESSEE CORPORATION
OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY
LAND TITLE GUARANTEE COMPANY
EVERGREEN DECO, INC., A CALIFORNIA CORPORATION

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1-5, 8, 11(b) AND 13 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON FEBRUARY 22, 2024.
DATE OF PLAT OR MAP: 03/06/2024



ANTHONY K. PEALL, P.L.S. NO. 38636
COLORADO LICENSED PROFESSIONAL LAND SURVEYOR
FOR AND ON BEHALF OF AZTEC CONSULTANTS, INC.

NOTICE: PER THE STATE OF COLORADO BOARD OF LICENSURE FOR ARCHITECTS, PROFESSIONAL ENGINEERS, AND PROFESSIONAL LAND SURVEYORS RULE 1.B.2 THE WORD "CERTIFIED" AS USED HEREON MEANS AN EXPRESSION OF PROFESSIONAL OPINION AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EXPRESSED OR IMPLIED. THE SURVEY REPRESENTED HEREON HAS BEEN PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION IN ACCORDANCE WITH APPLICABLE STANDARDS OF PRACTICE AND IS BASED UPON MY KNOWLEDGE, INFORMATION AND BELIEF.

STATUTE OF LIMITATIONS

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 TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON.

ALTA/NSPS LAND TITLE SURVEY
TRACT H-1, ERIE HIGHLANDS F14, AM 1
TOWN OF ERIE, COLORADO
PREPARED FOR
EVERGREEN DECO, INC.
EVERBACK ROAD, SUITE 410, PHOENIX, AZ 85016

ONE
OF 2 SHEETS
SHEET
70923-01
JOB NO.

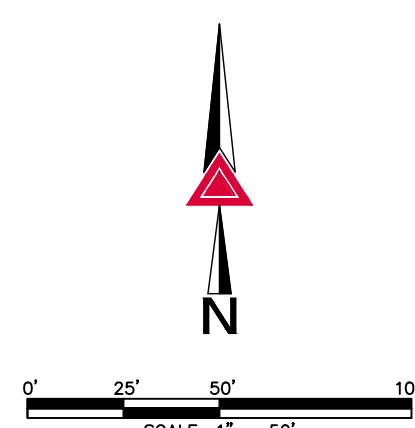
AZTEC
CONSULTANTS, INC.
300 East Mineral Ave., Suite 1
Littleton, Colorado 80122
Phone: (303) 713-1898
Fax: (303) 713-1897
www.azteconsultants.com

SCALE N.T.S.	DATE 03/06/2024
AKP DWA NIN	BY BY
DATE 2024/03/04	REVISION DESCRIPTION

ALTA/NSPS LAND TITLE SURVEY

TRACT H-1, ERIE HIGHLANDS FILING NO. 14, AMENDMENT NO. 1
LOCATED IN THE NORTHEAST QUARTER OF SECTION 20, TOWNSHIP 1 NORTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN,
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO

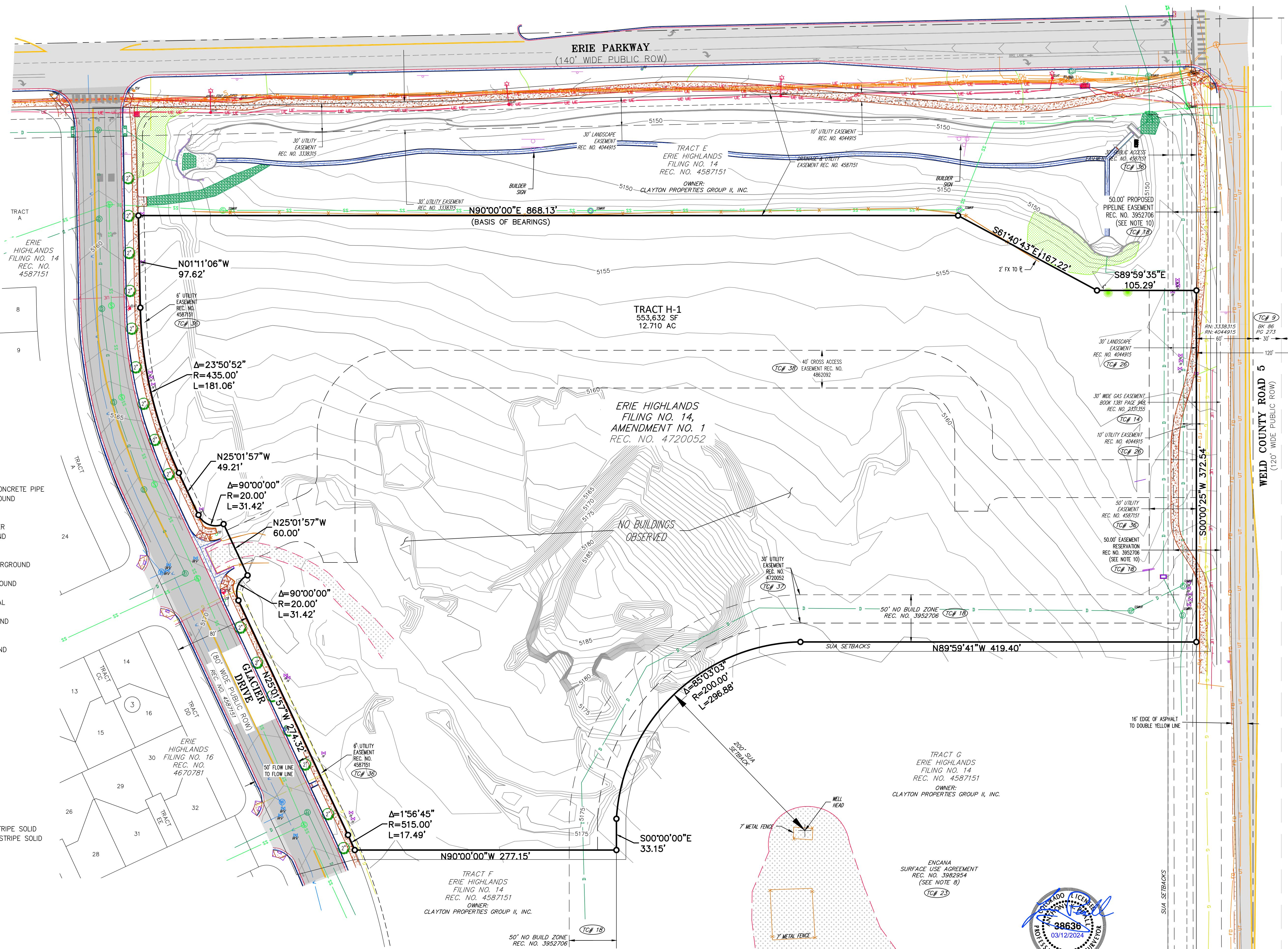
LEGEND	
○	FOUND NO. 5 REBAR WITH PINK PLASTIC CAP STAMPED "AZTEC PLS 38636"
○	R.O.W. RIGHT-OF-WAY
TC# XX	TITLE COMMITMENT SCHEDULE B PART II EXCEPTION ITEM
SUA	SURFACE USE AGREEMENT



SCALE: 1" = 50'

TOPOGRAPHIC LEGEND

○	SANITARY CLEANOUT
○	SANITARY MANHOLE
○	SANITARY MKR POST
○	RIPRAP
○	STORM INLET
○	STORM FES
○	STORM MANHOLE
○	STORM REINFORCED CONCRETE PIPE
○	WATER LINE UNDERGROUND
○	WATER MANHOLE
○	WATER VALVE
○	ELECTRIC TRANSFORMER
○	ELECTRIC UNDERGROUND
○	LIGHT POLE
○	ELECTRIC VAULT
○	TELEPHONE LINE UNDERGROUND
○	TELEPHONE PEDESTAL
○	FIBER OPTIC UNDERGROUND
○	FIBER OPTIC MKR
○	FIBER OPTICS PEDESTAL
○	FIBER OPTIC VAULT
○	CABLE TV UNDERGROUND
○	CABLE TV VAULT
○	TRAFFIC SIGNAL
○	GAS LINE UNDERGROUND
○	GAS MKR POST
○	IRRIGATION VALVE
○	CONDUIT
○	VENT PIPE
○	LANDSCAPE EDGE
○	TREE CONIFER
○	TREE DECIDUOUS
○	FENCE
○	HANDICAP RAMP
○	SIDEWALK
○	EDGE CONCRETE
○	EDGE ROAD
○	CURB LIP OF GUTTER
○	CURB TOP BACK
○	FLOWLINE
○	CURB TOP FACE
○	PAN
○	PAN FLOWLINE
○	LINEMARKING WHITE STRIPE SOLID
○	LINEMARKING YELLOW STRIPE SOLID
○	SIGN
○	STRUCTURE
○	HANDRAIL
○	WALL
○	SIDEWALK
○	CONCRETE
○	ASPHALT PAVEMENT
○	EDGE ROAD
○	LANDSCAPE EDGE



ALTA/NSPS LAND TITLE SURVEY
TRACT H-1, ERIE HIGHLANDS F14, AM 1
TOWN OF ERIE, COLORADO

300 East Mineral Ave., Suite 1
Littleton, Colorado 80122
Phone: (303) 713-1898
Fax: (303) 713-1897
www.azteconsultants.com

AZTEC
CONSULTANTS, INC.

DATE	BY	REVISION DESCRIPTION
2024/03/04	AKP	DRAWN

70923-01
JOB NO.

ERIE HIGHLANDS FILING NO. 17

A REPLAT OF TRACT H-1, ERIE HIGHLANDS FILING NO. 14, AMENDMENT NO. 1

LOCATED IN THE NORTHEAST QUARTER OF SECTION 20, TOWNSHIP 1 NORTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN,
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO.

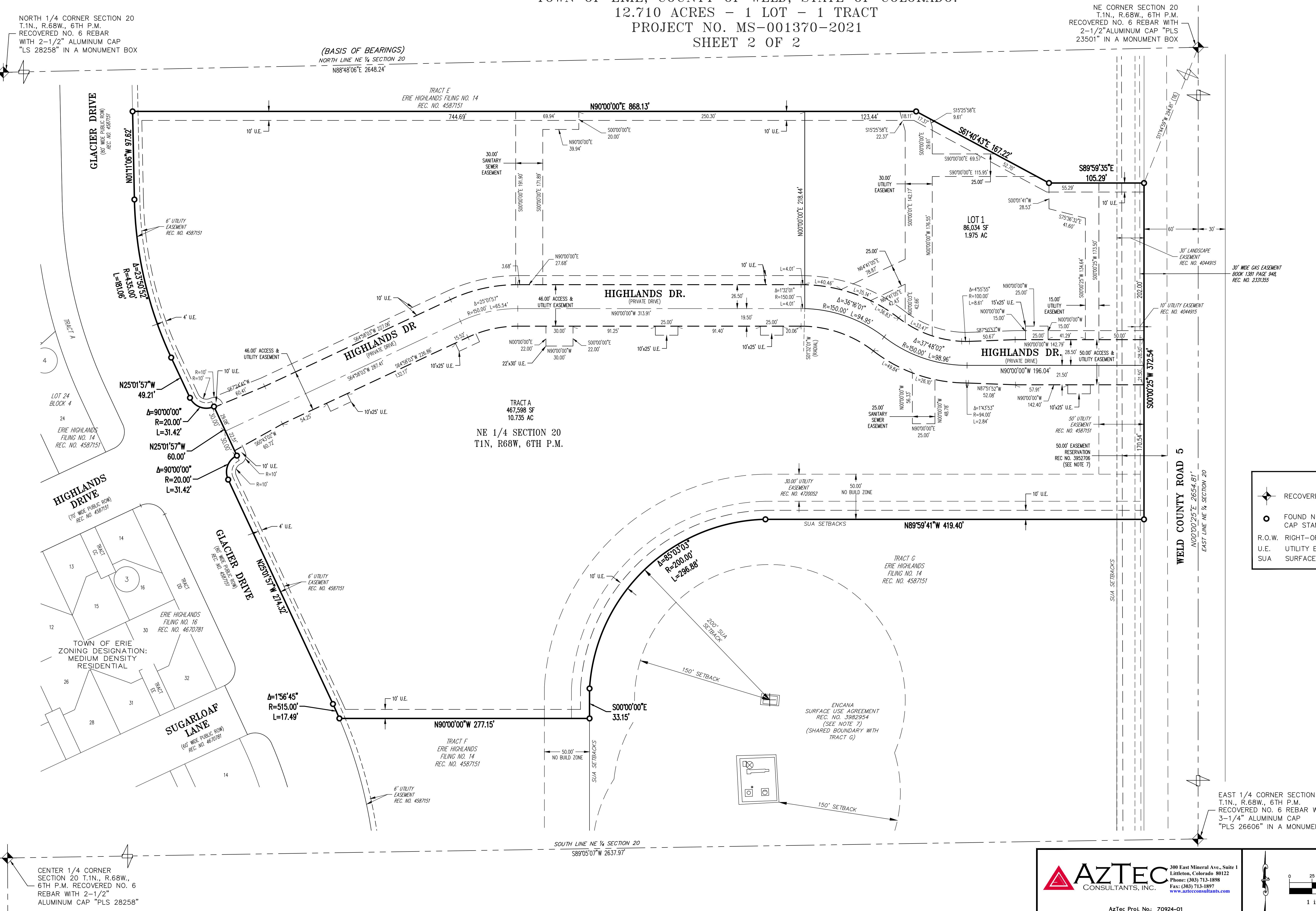
12.710 ACRES - 1 LOT - 1 TRACT
PROJECT NO. MS-001370-2021

SHEET 2 OF 2

NORTH 1/4 CORNER SECTION 20
T.1N., R.68W., 6TH P.M.
- RECOVERED NO. 6 REBAR
WITH 2-1/2" ALUMINUM CAP
"LS 28258" IN A MONUMENT BOX

(BASIS OF BEARING)
NORTH LINE NE $\frac{1}{4}$ SECTION
N88°18'06" E 2648 24'

NE CORNER SECTION 20
T.1N., R.68W., 6TH P.M.
RECOVERED NO. 6 REBAR WITH
2-1/2" ALUMINUM CAP "PLS
23501" IN A MONUMENT BOX



**TOWN OF ERIE
ZONING DESIGNATION:
LOW DENSITY
RESIDENTIAL**

LEGEND

◆ RECOVERED P.L.S.S. CORNER STAMPED AS NOTED

● FOUND NO. 5 REBAR WITH 1-1/4" PINK PLASTIC CAP STAMPED "AZTEC PLS 38636"

R.O.W. RIGHT-OF-WAY

U.E. UTILITY EASEMENT DEDICATED BY THIS PLAT

SUA SURFACE USE AGREEMENT



EAST 1/4 CORNER SECTION 20
T.1N., R.68W., 6TH P.M.
RECOVERED NO. 6 REBAR WITH
3-1/4" ALUMINUM CAP
"PLS 26606" IN A MONUMENT BOX

3 1/4" ALUMINUM CAR
"PLS 26606" IN A MONUMENT BOX
FOR AND ON BEHALF OF
AZTEC CONSULTANTS, INC

The logo for AZTEC CONSULTANTS, INC. It features a red triangle on the left containing a stylized 'A' and 'Z' that together form a larger 'E' shape. To the right of the triangle, the word 'AZTEC' is written in a large, bold, black, serif font. Below 'AZTEC', the words 'CONSULTANTS, INC.' are written in a smaller, black, sans-serif font.

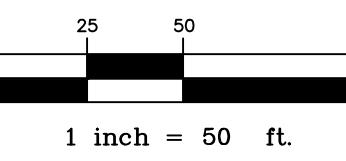
**300 East Mineral Ave., Suite 1
Littleton, Colorado 80122
Phone: (303) 713-1898
Fax: (303) 713-1897
www.azteconsultants.com**

DATE OF
PREPARATION: 2024-06-12

SCALE 1"-50'

SHEET 2 OF 2

CENTER 1/4 CORNER
SECTION 20 T.1N., R.68W.,
- 6TH P.M. RECOVERED NO. 6
REBAR WITH 2-1/2"
ALUMINUM CAP "PLS 28258"



zTec Proj. No.: 70924-01

May 06, 2025

**RE: Erie Highlands Filing 17 – CDs
WCR 5 & Erie Parkway (WCR 8)
Updated Landscape Plans**

Dear Harry Brennan,

This letter is to provide an explanation of the updates made to our landscape plans as a part of our CD submittal. The scope of the plans attached herein have been modified to include offsite improvement areas adjacent to the required improvements at the intersection of Glacier and Erie as reflected in our May 13th CD submittal package. You will also notice that the sidewalk alignment along WCR5 has been updated to match the required alignment reflected in the same May 13th CD submittal.

If you have any questions, please do not hesitate to call me at 602.384.2241

Sincerely

Jenn Roldan

Evergreen - Sr. Development Manager

Phoenix | Los Angeles | Denver | Salt Lake City

evgre.com

Development | Services | Investments



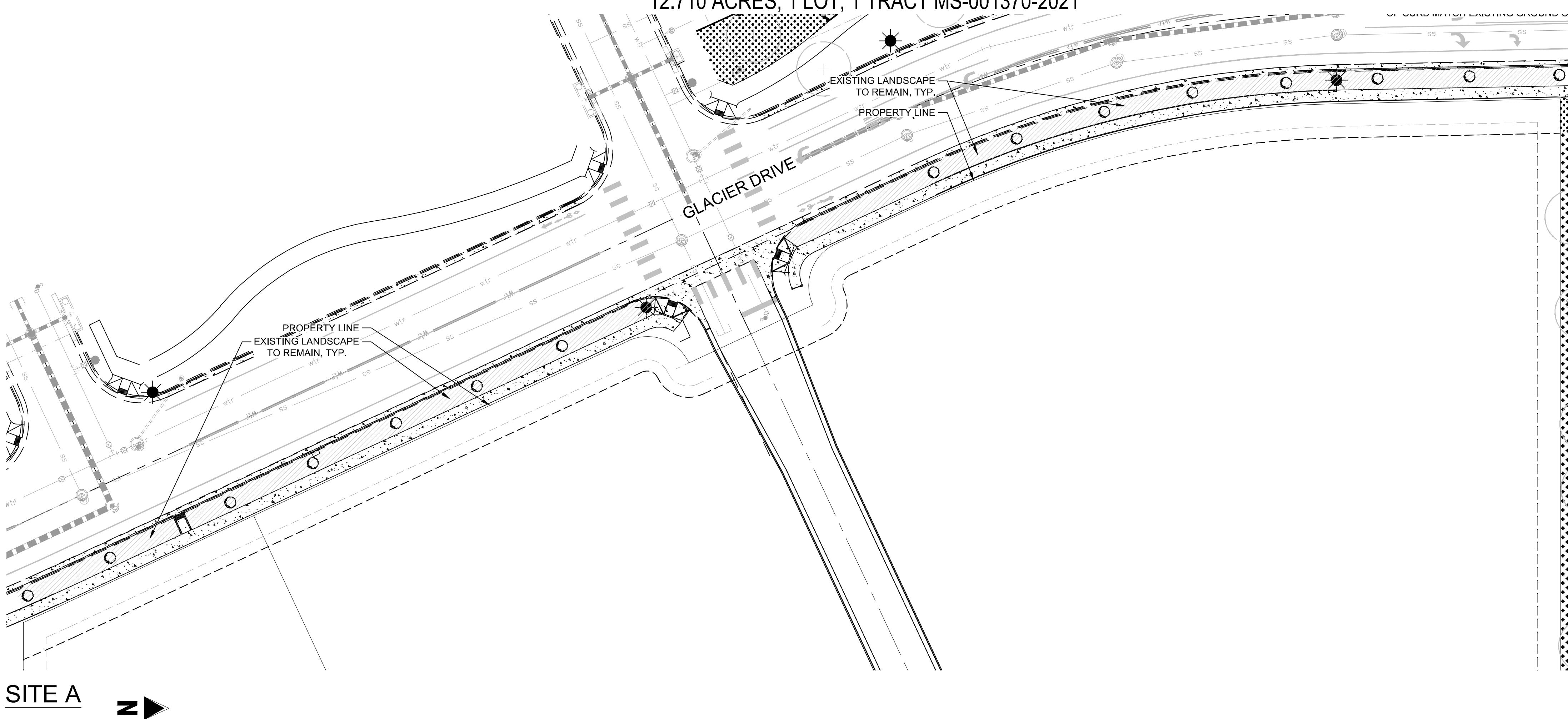
Evergreen

ERIE HIGHLANDS FILING NO.17

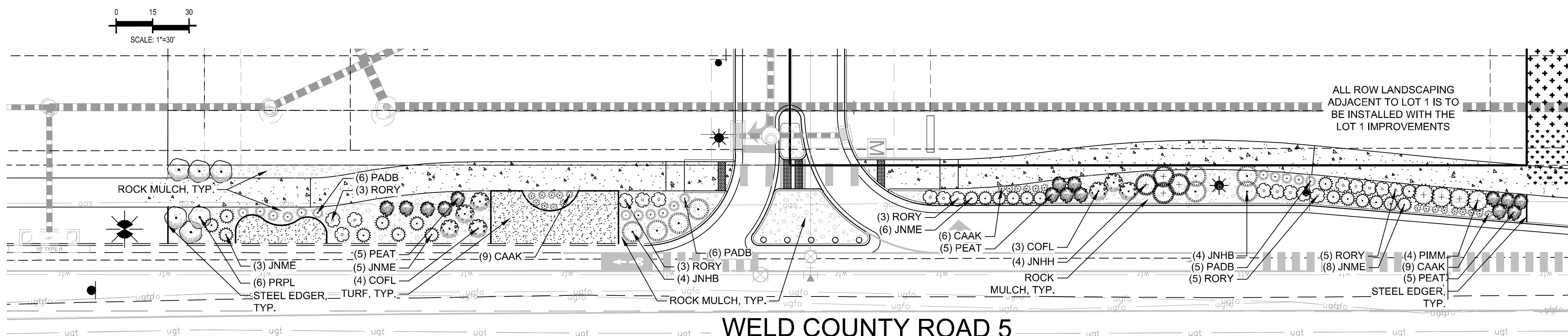
LOCATED IN THE NORTHEAST QUARTER OF SECTION 20, TOWNSHIP 1 NORTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN

TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO

12.710 ACRES, 1 LOT, 1 TRACT MS-001370-2021



SITE A



WELD COUNTY ROAD 5

SITE B



LANDSCAPE REQUIREMENTS

CATEGORY	FORMULA	CALCULATION	REQUIRED	PROVIDED
GLACIER DRIVE	1 TREE/1000 S.F. 1 SHRUB/150 S.F.	1,000/10,811 = 11 TREES 150/10,811 = 67 SRHUBS	11 TREES 67 SRHUBS	*15 TREES EXISTING *EXISTING GROUND COVER
COUNTY ROAD 5	1 TREE/1000 S.F. 1 SHRUB/150 S.F.	1,000/3,591 = 4 TREES 150/3,591 = 24 SHRUBS	4 TREES 24 SHRUBS	0 TREES 85 SHRUBS 41 GRASSES/PERENNIALS
TOTAL		14,402 S.F.	20 TREES 135 SHRUBS	0 TREES 85 SHRUBS 41 GRASSES/PERENNIALS

NOTE: (1) 2.5" CAL. TREE = (10) 5 GAL SHRUBS, (1) 5 GAL. SHRUB = (3) 1 GAL. PERENNIALS/GRASSES

NOTE: WHERE THE NUMBER FOR TREES PROVIDED IS LOWER THAN WHAT IS REQUIRED, THE REQUIREMENT IS MET THROUGH SHRUB EQUIVALENCY NOTED ABOVE.

TOTAL STREET FRONTAGE = 1,050 L.F.

*EXISTING LANDSCAPE

Galloway

5500 Greenwood Plaza Blvd., Suite 200
Greenwood Village, CO 80111
303.770.8884
GallowayUS.com

NOT FOR
CONSTRUCTION

EVERGREEN DEVELOPMENT
ERIE HIGHLANDS
FILING 17
SITE PLAN
TOWN OF ERIE, COLORADO

#	Date	Issue / Description	Init.
1	05/22/2025	2ND SUBMITTAL	EDN
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			
41			
42			
43			
44			
45			
46			
47			
48			
49			
50			
51			
52			
53			
54			
55			
56			
57			
58			
59			
60			
61			
62			
63			
64			
65			
66			
67			
68			
69			
70			
71			
72			
73			
74			
75			
76			
77			
78			
79			
80			
81			
82			
83			
84			
85			
86			
87			
88			
89			
90			
91			
92			
93			
94			
95			
96			
97			
98			
99			
100			
101			
102			
103			
104			
105			
106			
107			
108			
109			
110			
111			
112			
113			
114			
115			
116			
117			
118			
119			
120			
121			
122			
123			
124			
125			
126			
127			
128			
129			
130			
131			
132			
133			
134			
135			
136			
137			
138			
139			
140			
141			
142			
143			
144			
145			
146			
147			
148			
149			
150			
151			
152			
153			
154			
155			
156			
157			
158			
159			
160			
161			
162			
163			
164			
165			
166			
167			
168			
169			
170			
171			
172			
173			
174			
175			
176			
177			
178			
179			
180			
181			
182			
183			
184			
185			
186			
187			
188			
189			
190			
191			
192			
193			
194			
195			
196			
197			
198			
199			
200			
201			
202			
203			
204			
205			
206			
207			
208			
209			
210			
211			
212			
213			
214			
215			
216			
217			
218			
219			
220			
221			
222			
223			
224			
225			
226			
227			
228			
229			
230			
231			
232			
233			
234			
235			
236			
237			
238			
239			
240			
241			
242			
243			
244			
245			

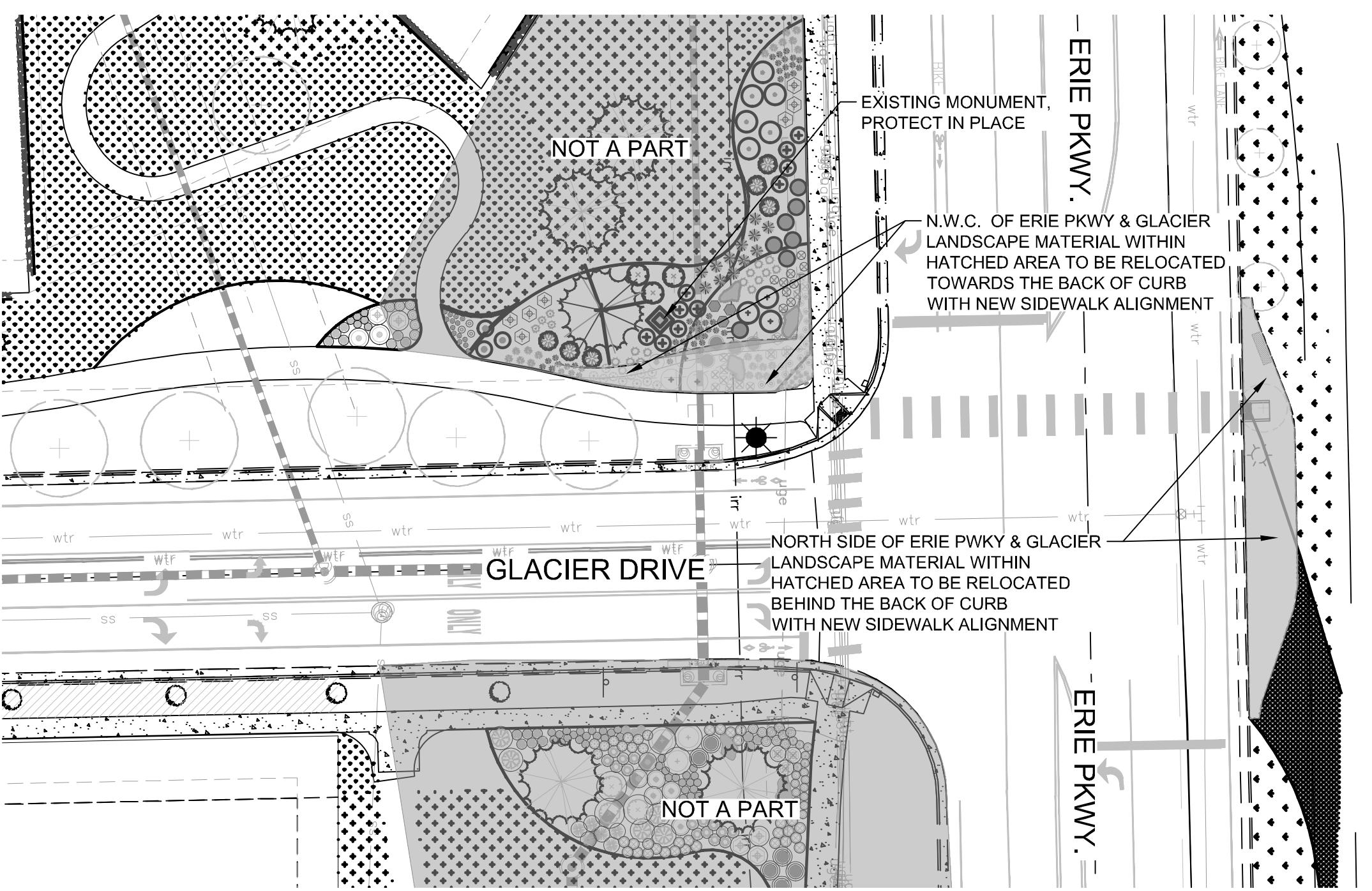
ERIE HIGHLANDS FILING NO.17

LOCATED IN THE NORTHEAST QUARTER OF SECTION 20, TOWNSHIP 1 NORTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
12.710 ACRES, 1 LOT, 1 TRACT MS-001370-2021

Galloway

5500 Greenwood Plaza Blvd., Suite 200
Greenwood Village, CO 80111
303.770.8884
GallowayUS.com

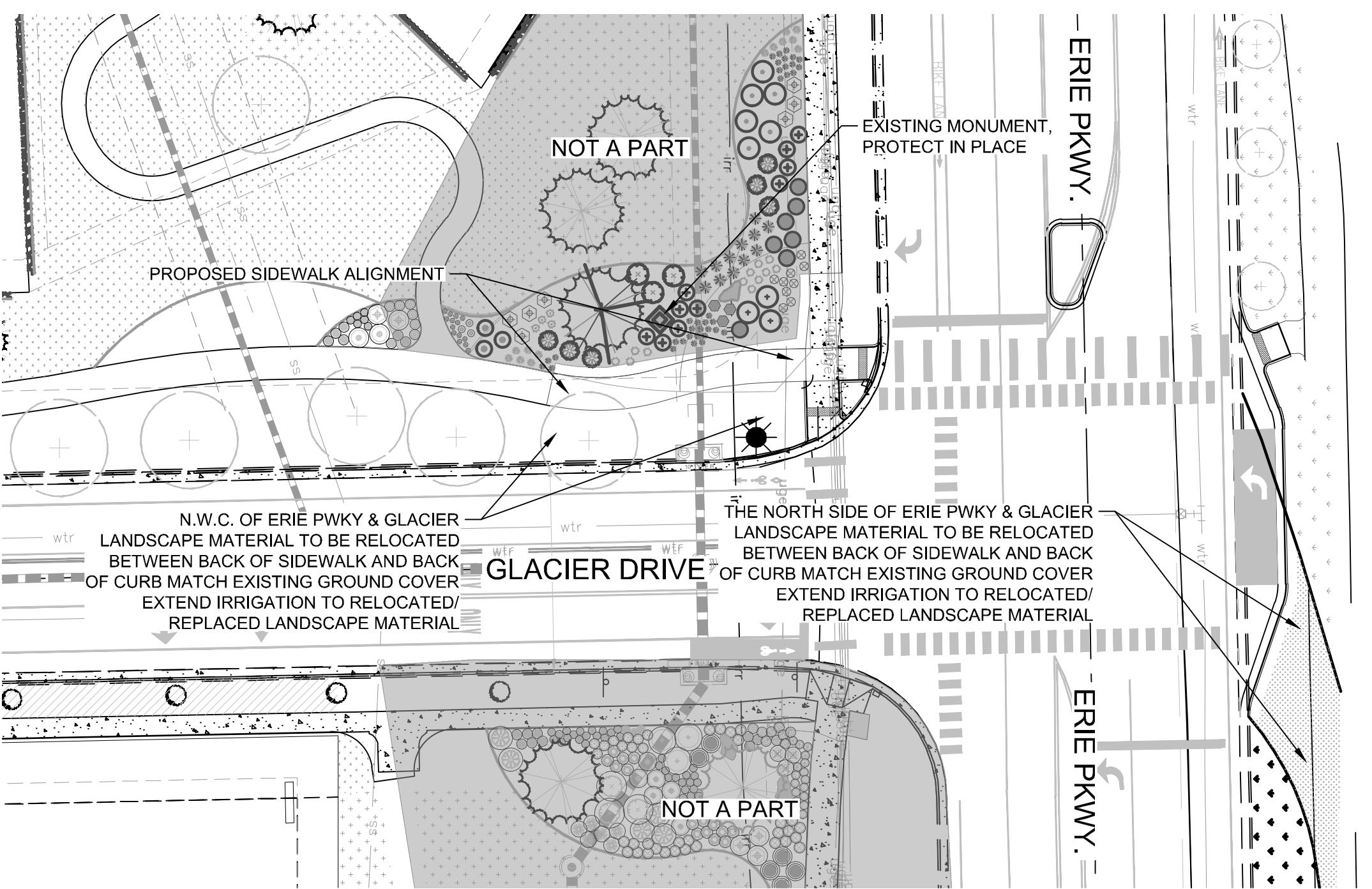
NOT FOR
CONSTRUCTION



SITE C - EXISTING CONDITION



0 15 30
SCALE: 1'=30'



SITE C - PROPOSED CONDITION



0 15 30
SCALE: 1'=30'

N.W.C. OF GLACIER & ERIE PKWY. LANDSCAPE MATERIAL RELOCATED/REMOVED

- MOONSHINE YARROW: -12
- SHASTA DAISY: -6
- MAY NIGHT SALVIA: -7
- WHITE BUD MUGO PINE: -3
- STELLA DE ORO DAYLILY: -14
- BLACK EYED SUSAN: -6
- BLONDE AMBITION GRAMA GRASS: -8
- ALBA MEIDLAND ROSE: -4
- SEA FOAM ROSE-WHITE: -3
- RED SWITCH GRASS: -10
- RUSSIAN SAGE: -1
- FEATHER REED GRASS: -2
- BLUE MIST SPIREA: -11
- BOULDER: -2

NORTH SIDE OF GLACIER & ERIE PKWY. ESTIMATED LANDSCAPE MATERIAL RELOCATED/REMOVED

- STELLA DE ORO DAYLILY: -10
- GRO-LOW FRAGRANT SUMAC: -7
- BUFFALO JUNIPER: -4
- HONEYLOCUST: -1

COPYRIGHT
THESE PLANS ARE AN INSTRUMENT OF SERVICE
AND ARE THE PROPERTY OF GALLOWAY AND MAY
NOT BE DUPLICATED, DISCLOSED, OR REPRODUCED
WITHOUT THE WRITTEN CONSENT OF GALLOWAY.
COPYRIGHTS AND INFRINGEMENTS WILL BE
ENFORCED AND PROSECUTED.



EVERGREEN DEVELOPMENT
ERIE HIGHLANDS
FILING 17
SITE PLAN
TOWN OF ERIE, COLORADO

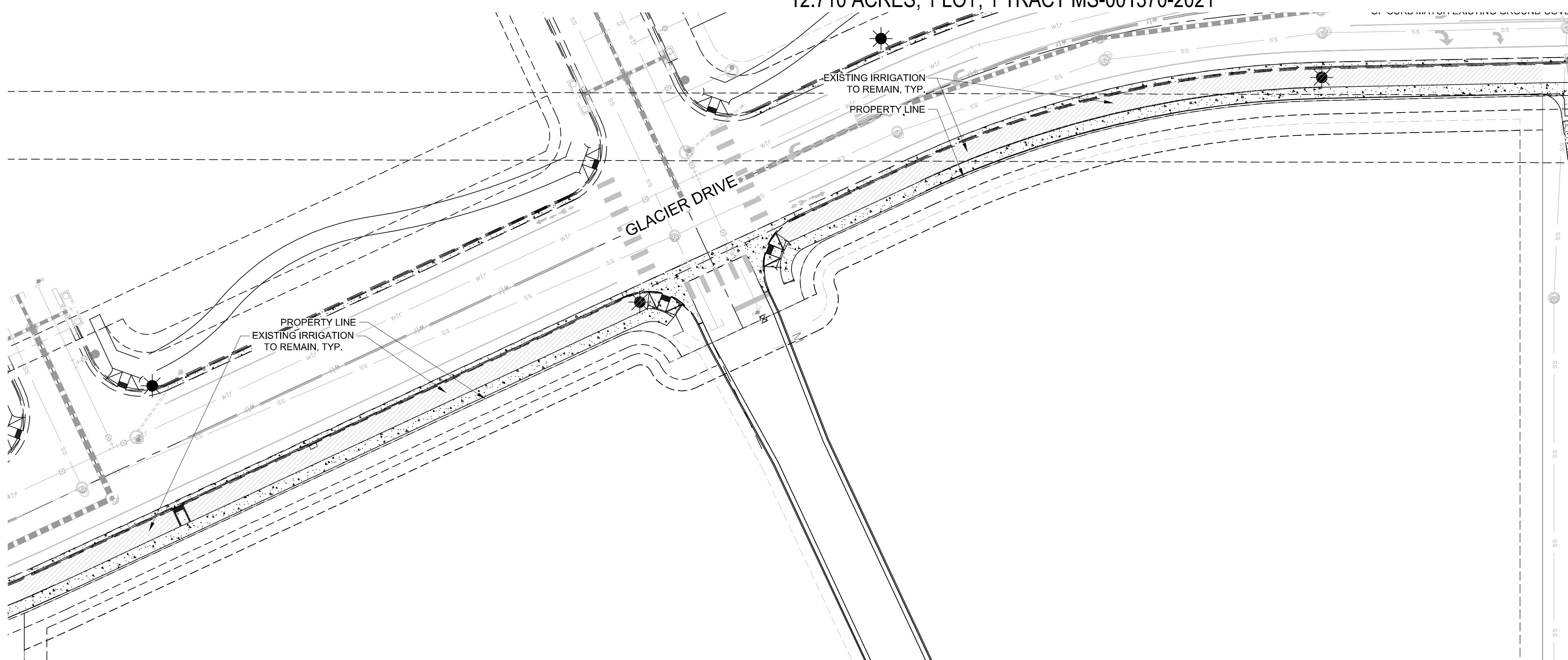
#	Date	Issue / Description	Init.
1	05/22/2025	2ND SUBMITTAL	EDN
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			
41			
42			
43			
44			
45			
46			
47			
48			
49			
50			
51			
52			
53			
54			
55			
56			
57			
58			
59			
60			
61			
62			
63			
64			
65			
66			
67			
68			
69			
70			
71			
72			
73			
74			
75			
76			
77			
78			
79			
80			
81			
82			
83			
84			
85			
86			
87			
88			
89			
90			
91			
92			
93			
94			
95			
96			
97			
98			
99			
100			
101			
102			
103			
104			
105			
106			
107			
108			
109			
110			
111			
112			
113			
114			
115			
116			
117			
118			
119			
120			
121			
122			
123			
124			
125			
126			
127			
128			
129			
130			
131			
132			
133			
134			
135			
136			
137			
138			
139			
140			
141			
142			
143			
144			
145			
146			
147			
148			
149			
150			
151			
152			
153			
154			
155			
156			
157			
158			
159			
160			
161			
162			
163			
164			
165			
166			
167			
168			
169			
170			
171			
172			
173			
174			
175			
176			
177			
178			
179			
180			
181			
182			
183			
184			
185			
186			
187			
188			
189			
190			
191			
192			
193			
194			
195			
196			
197			
198			
199			
200			
201			
202			
203			
204			
205			
206			
207			
208			
209			
210			
211			
212			
213			
214			
215			
216			
217			
218			
219			
220			
221			
222			
223			
224			
225			
226			
227			
228			
229			
230			
231			
232			
233			
234			
235			
236			
237			
238			
239			
240			
241			
242			
243			
244			
245			
246			
247			
248			
249			
250			
251			
252			
253			
254			</td

ERIE HIGHLANDS FILING NO.17

LOCATED IN THE NORTHEAST QUARTER OF SECTION 20, TOWNSHIP 1 NORTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN

TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO

12.710 ACRES, 1 LOT, 1 TRACT MS-001370-2021



SITE A



0 15 30
SCALE: 1"=30'

POINT OF CONNECTION 'B'

STATIC PRESSURE: +/- 80 DESIGNED SIZE OF TAP: 3/4"
• USE 3/4" TAP AND INTO THE DOMESTIC WATER LINE
AFTER THE METER.
• 3/4" TYPE K COPPER SERVICE FROM THE TAP THROUGH
THE IRRIGATION BACKFLOW, TO THE MASTER VALVE.
• CONTRACTOR SHALL VERIFY LOCATION OF THE
EQUIPMENT IN FIELD WITH OWNER OR OWNER'S
AUTHORIZED REPRESENTATIVE AND/OR LANDSCAPE
ARCHITECT.
• SEE POINT OF CONNECTION DIAGRAM, THIS SHEET, FOR
THE IRRIGATION SYSTEM EQUIPMENT CONFIGURATION.
• THE IRRIGATION CONTRACTOR SHALL FIELD VERIFY THE
STATIC WATER PRESSURE IF PRESSURE IS UNKNOWN,
THE CONTRACTOR MUST TEST WATER PRESSURE AND
CONTACT THE LANDSCAPE ARCHITECT WITH THE
RESULTS TO ENSURE SYSTEM WILL BE OPERATIONAL.
SEE GENERAL IRRIGATION NOTES.
• WHEN WATER PRESSURE IS TO THE IRRIGATION SYSTEM
EXCEEDS 100 PSI, THE IRRIGATION CONTRACTOR SHALL
INSTALL A PRESSURE REDUCING / REGULATING VALVE
(PRV) TO LIMIT THE WATER TO 80 PSI MAXIMUM. WHEN
PRESSURE DROPS BELOW 65 PSI, THE IRRIGATION
CONTRACTOR SHALL INSTALL A BOOSTER PUMP TO A
MINIMUM PRESSURE OF 80 PSI.

B4 1" 2.17
B3 1" 1.65
B2 1" 2.97
PROPERTY LINE
PROPERTY LINE
B1 1" 2.15
IRRIGATION EQUIPMENT, MAINLINE,
PIPES, ETC. SHOWN OUTSIDE OF
LANDSCAPE AREAS FOR GRAPHIC
PURPOSES ONLY, TYP.
IRRIGATION EQUIPMENT, MAINLINE,
PIPES, ETC. SHOWN OUTSIDE OF
LANDSCAPE AREAS FOR GRAPHIC
PURPOSES ONLY, TYP.
EXTEND TWO SPARE CONTROL WIRES
WITH COMMON FROM CONTROLLER 'A'
TO INDICATED LOCATION. STUB WIRES
IN VALVE BOX CONTAINING QUICK
COUPLING VALVE.
IRRIGATION EQUIPMENT, MAINLINE,
PIPES, ETC. SHOWN OUTSIDE OF
LANDSCAPE AREAS FOR GRAPHIC
PURPOSES ONLY, TYP.
IRRIGATION EQUIPMENT, MAINLINE,
PIPES, ETC. SHOWN OUTSIDE OF
LANDSCAPE AREAS FOR GRAPHIC
PURPOSES ONLY, TYP.
EXTEND TWO SPARE CONTROL WIRES
WITH COMMON FROM CONTROLLER 'A'
TO INDICATED LOCATION. STUB WIRES
IN VALVE BOX CONTAINING QUICK
COUPLING VALVE.

WELD COUNTY ROAD 5

SITE B



0 10 20
SCALE: 1"=20'

IRRIGATION DISCLAIMER

1. DRAWINGS ARE DIAGRAMMATIC. IRRIGATION COMPONENTS MAY BE SHOWN OUTSIDE OF PLANTING AREAS FOR CLARITY ONLY. CONTRACTOR SHALL AVOID CONFLICTS WITH PLANT MATERIALS AND ARCHITECTURAL FEATURES. ALL PIPING AND WIRING SHALL BE INSTALLED IN PLANTING AREA OR IN SLEEVES. NO PIPING UNDER TREES OR SHRUBS WILL BE ACCEPTED.
2. CONTRACTOR SHALL INSTALL MAINLINES +/-12" FROM PAVEMENT EDGE IN PLANTING AREAS. ALL PIPING, VALVES, AND OTHER EQUIPMENT SHOWN WITHIN PAVED AREAS OR OUT OF PROPERTY BOUNDARIES ARE FOR DESIGN CLARIFICATION ONLY, AND SHALL BE INSTALLED IN PLANTING AREAS WITHIN THE PROPERTY LINES OR LIMITS AS INDICATED ON THESE PLANS.
3. THE IRRIGATION CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL ABOVE-GRADE AND VISIBLE IRRIGATION EQUIPMENT (CONTROLLERS, BACKFLOW PREVENTERS, METER PIT, ETC.) WITH THE OWNER'S AUTHORIZED REPRESENTATIVE AND / OR LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. THE INSTALLATION OF THESE ITEMS SHALL BE INTEGRATED WITHIN DESIGNATED LANDSCAPE AREAS. FAILURE TO LOCATE THIS EQUIPMENT IN AN APPROVED LOCATION MAY RESULT IN THE IRRIGATION CONTRACTOR BEING REQUIRED TO MOVE SUCH ITEMS AT HIS OWN COST.
4. THE IRRIGATION SYSTEM DESIGN IS BASED ON THE MINIMUM OPERATING PRESSURE AND THE MAXIMUM FLOW DEMAND SHOWN ON THE DRAWINGS. THE IRRIGATION CONTRACTOR SHALL FIELD VERIFY THE STATIC & OPERATING WATER PRESSURE PRIOR TO CONSTRUCTION OF ANY COMPONENT OF THE IRRIGATION SYSTEM. AFTER FIELD VERIFICATION, THE IRRIGATION CONTRACTOR SHALL NOTIFY THE OWNER, OWNER'S REPRESENTATIVE, LANDSCAPE ARCHITECT, & IRRIGATION DESIGNER OF THE PRESSURE READING FOR THE TAP.
5. ALL PRESSURIZED MAINLINES, VALVES, Drip, and Rotor and Spray Heads shall be installed a minimum of 5' away from any building foundation. Additional requirements may be listed in the geotechnical report regarding irrigation near building foundations. Contractor is responsible to abide by the 5' minimum distance and/or the geotechnical report requirements. If this equipment is shown within the 5' offset on these plans, it is for the purpose of graphic clarity only.
6. REFER TO SHEET IR2.0 & IR2.1 FOR IRRIGATION NOTES AND IRRIGATION DETAILS.

UTILITY NOTES

1. THE LANDSCAPE CONTRACTOR IS REQUIRED TO CONTACT THE COUNTY PUBLIC WORKS DEPARTMENT, AND ANY OTHER PUBLIC OR PRIVATE AGENCY NECESSARY FOR UTILITY LOCATION PRIOR TO ANY CONSTRUCTION.
2. THIS DRAWING IS A PART OF A COMPLETE SET OF BID DOCUMENTS, SPECIFICATIONS, ADDITIONAL DRAWINGS, AND EXHIBITS. UNDER NO CIRCUMSTANCES SHOULD THESE PLANS BE USED FOR CONSTRUCTION PURPOSES WITHOUT EXAMINING ACTUAL LOCATIONS OF UTILITIES ON SITE, AND REVIEWING ALL RELATED DOCUMENTS.
3. THE LOCATION OF THE ALL UNDERGROUND UTILITIES ARE LOCATED ON THE ENGINEERING DRAWINGS FOR THIS PROJECT. THE MOST CURRENT REVISION IS HERE IN MADE PART OF THIS DOCUMENT. UNDERGROUND UTILITIES EXIST THROUGHOUT THIS SITE AND MUST BE LOCATED PRIOR TO ANY CONSTRUCTION ACTIVITY. WHEN LOCATING AND UTILITIES EXIST, FIELD ADJUSTMENTS MAY BE NECESSARY AND MUST BE APPROVED BY A REPRESENTATIVE OF THE OWNER. NEITHER THE OWNER NOR THE LANDSCAPE ARCHITECT ASSUMES ANY RESPONSIBILITY WHATSOEVER, IN RESPECT TO THE CONTRACTOR'S ACCURACY IN LOCATING THE INDICATED PLANT MATERIAL, AND UNDER NO CIRCUMSTANCES SHOULD THESE PLANS BE USED WITHOUT REFERENCING THE ABOVE MENTIONED DOCUMENTS.

WIRING/SLEEVING NOTES

IN ADDITION TO PROVIDING SLEEVES FOR ALL PIPING UNDER ROADWAYS AND
WALKWAYS, PROVIDE AND INSTALL SCH. 40 PVC SLEEVES FOR ALL
CONTROLLER WIRES OCCURRING UNDER ALL ROADWAYS AND WALKWAYS.
SLEEVES FOR CONTROLLER WIRES SHALL BE 1-1/2" DIA.

CAUTION
UTILITIES EXIST WITHIN CONSTRUCTION
LIMITS. CONTRACTOR IS RESPONSIBLE FOR
IDENTIFYING THEIR LOCATION PRIOR TO
CONSTRUCTION.
Call before you dig.

1. ALL UTILITY LOCATIONS SHOWN ARE BASED ON MAPS PROVIDED BY THE APPROPRIATE UTILITY COMPANY AND FIELD SURFACE EVIDENCE AT THE TIME OF SURVEY AND IS TO BE CONSIDERED AN APPROXIMATE LOCATION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES, PUBLIC AND PRIVATE, AS SHOWN ON THE PLANS OR NOT, PRIOR TO CONSTRUCTION. REPORT ANY DISCRENCES TO THE ENGINEER PRIOR TO CONSTRUCTION.

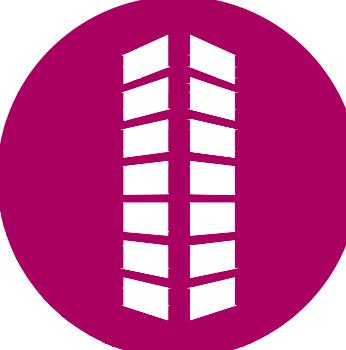
2. WHERE A PROPOSED UTILITY CROSSES AN EXISTING UTILITY, IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF SUCH EXISTING UTILITY, EITHER THROUGH POTHoling OR ALTERNATIVE METHOD. REPORT INFORMATION TO THE ENGINEER PRIOR TO CONSTRUCTION.

Galloway

5500 Greenwood Plaza Blvd., Suite 200
Greenwood Village, CO 80111
303.770.8884
GallowayUS.com

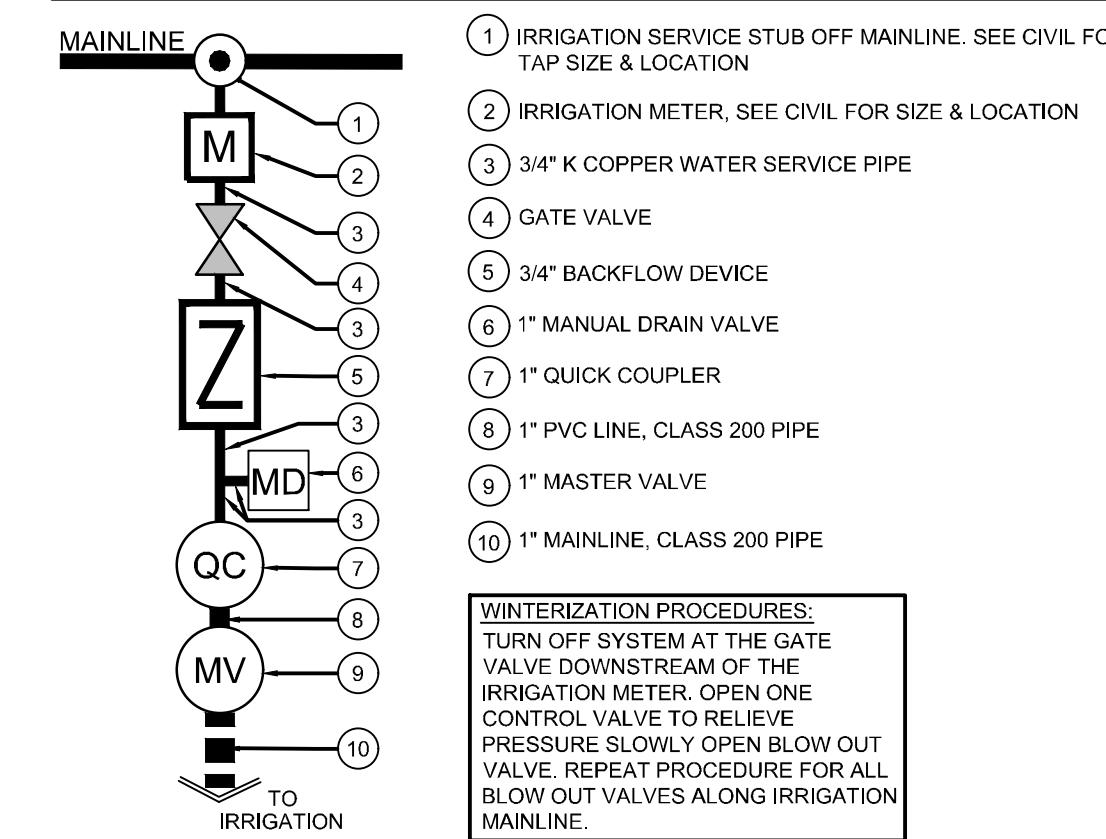
NOT FOR
CONSTRUCTION

COPYRIGHT
THESE PLANS ARE AN INSTRUMENT OF SERVICE
AND ARE THE PROPERTY OF GALLOWAY AND MAY
NOT BE DUPLICATED, DISCLOSED, OR REPRODUCED
WITHOUT THE WRITTEN CONSENT OF GALLOWAY.
COPYRIGHTS AND INFRINGEMENTS WILL BE
ENFORCED AND PROSECUTED.



EVERGREEN DEVELOPMENT
ERIE HIGHLANDS
FILING 17
SITE PLAN
TOWN OF ERIE, COLORADO

TYPICAL POINT OF CONNECTION B SCHEMATIC DIAGRAM



VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM
B1	HUNTER ICZ-101-25-LF	1"	AREA FOR Drip EMMITTERS	2.15
B2	HUNTER ICV-G	1"	TURF ROTARY	2.97
B3	HUNTER ICZ-101-25-LF	1"	AREA FOR Drip EMMITTERS	1.65
B4	HUNTER ICV-G	1"	TURF ROTARY	2.17

Date Issue / Description Init. EDN
1 05/22/2025 2ND SUBMITTAL

Project No: ED105
Drawn By: EDN
Checked By: JAR
Date: 03/03/2025

IRRIGATION PLAN



IR1.0

Sheet 5 of 7

ERIE HIGHLANDS FILING NO.17

LOCATED IN THE NORTHEAST QUARTER OF SECTION 20, TOWNSHIP 1 NORTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN
TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO
12.710 ACRES, 1 LOT, 1 TRACT MS-001370-2021

IRRIGATION_SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	DETAIL
Φ Φ 80F	HUNTER MP800SR PROS-06-PRS40-CV TURF ROTATOR, 6IN. POP-UP WITH CHECK VALVE, PRESSURE REGULATED TO 40 PSI, MP ROTATOR NOZZLE ON PRS40 BODY, ADJ=ORANGE AND GRAY (ARC 90-210), 360=LIME GREEN AND GRAY (ARC 360)	DETAIL 1 SHEET IR2.0
◇ ◇ ◇	HUNTER MP815 PROS-06-PRS40-CV TURF ROTATOR, 6IN. POP-UP WITH CHECK VALVE, PRESSURE REGULATED TO 40 PSI, MP ROTATOR NOZZLE ON PRS40 BODY, M=MAROON AND GRAY ADJ=ARC 90 TO 210, L=LIGHT BLUE AND GRAY 210 TO 270 ARC, O=OLIVE AND GRAY 360 ARC.	DETAIL 1 SHEET IR2.0
⊕	HUNTER ICZ-101-25-LF 1" Drip Control Zone Kit, 1in. ICV Globe Valve with 1in. HY100 Filter System, Pressure Regulation: 25 PSI, Flow Range: .5 GPM - 15 GPM, 150 Mesh Stainless Steel Screen.	DETAIL 2 SHEET IR2.0
◎	NIBCO 4660 T 3/4" SCHEDULE 40 MANUAL FLUSH VALVE, CONNECT TO DRIP POLYTUBING FOR WINTERIZATION/BLOWOUT.	DETAIL 3 SHEET IR2.0
	AREA TO RECEIVE DRIP EMMITTERS HUNTER HE-B POINT SOURCE DRIP EMMITTER WITH SELF PIERCING BARB, COLOR CODED EMMITTERS FOR FLOW RATES OF 0.5 GPH, 1.0 GPH, 2.0 GPH, 4.0 GPH, AND 6.0 GPH. CAN BE INSERTED INTO 1/2IN. AND 3/4IN. TUBING AND HAVE PRESSURE COMPENSATING FROM 15 PSI-50 PSI. OPTIONAL DIFFUSER CAP (HE) AVAILABLE.	
	EMITTER SCHEDULE: -1 GALLON AND SMALLER: 2, HEB-5-B EMMITTER PER PLANT (1 GPH TOTAL) 5 GALLON: 2, HEB-10-B EMMITTERS PER PLANT (2 GPH TOTAL) -10-15 GALLONS & UPRIGHT JUNIPERS: 3, HEB-10-B EMMITTERS PER PLANT (3 GPH TOTAL) -1" TO 2-1/2" CALIPER TREES: 4, HEB-10-B EMMITTERS PER PLANT (4 GPH TOTAL) -3" TO 4" CALIPER TREES: 6, HEB-10-B EMMITTERS PER PLANT (6 GPH TOTAL)	DETAIL 4 SHEET IR2.0
●	HUNTER ICV-G 1" 1IN., 1-1/2IN., 2IN., AND 3IN. PLASTIC ELECTRIC REMOTE CONTROL VALVE, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE.	DETAIL 5 SHEET IR2.0
○○	HUNTER HQ-44LRC 1" QUICK COUPLER VALVE, YELLOW RUBBER LOCKING COVER, RED BRASS AND STAINLESS STEEL, WITH 1IN. NPT INLET, 2-PIECE BODY.	DETAIL 6 SHEET IR2.0
◆	NIBCO 4660-S SCHEDULE 40 MANUAL BALL VALVE, SAME SIZE AS MAINLINE PIPE DIAMETER AT VALVE LOCATION, SIZE RANGE - 3/4" - 3"	DETAIL 1 SHEET IR2.1
◀	NIBCO T-113-K CLASS 125 BRONZE GATE SHUT OFF VALVE WITH CROSS HANDLE, SAME SIZE AS MAINLINE PIPE DIAMETER AT VALVE LOCATION, SIZE RANGE - 1/4IN. - 3IN.	DETAIL 2 SHEET IR2.1
●●	HUNTER IBV-FS 1" 1IN., 1-1/2IN., 2IN., AND 3IN. BRASS ELECTRIC MASTER VALVE, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE. WITH FILTER SENTRY FACTORY INSTALLED OPTION.	DETAIL 3 SHEET IR2.1
○○	1" NIBCO T-113-K 1" CLASS 125 BRONZE MANUAL DRAIN VALVE WITH CROSS HANDLE	DETAIL 4 SHEET IR2.1
■	FEBCO B25Y 3/4" REDUCED PRESSURE BACKFLOW PREVENTER	DETAIL 5 SHEET IR2.1
■	HUNTER XCH-1200-SS ELECTROMECHANICAL CONTROLLER, 12 STATIONS, OUTDOOR MODEL, BATTERY-POWERED. STAINLESS STEEL CABINET, FOR RESIDENTIAL/COMMERCIAL USE.	DETAIL 6 SHEET IR2.1
●	HUNTER XCHSPB STAINLESS STEEL MOUNTING BRACKET, COMES WITH OUTDOOR STAINLESS STEEL CABINET FOR XCH-SS CONTROLLERS. REQUIRED XCHSPOLE TO ATTACH TO.	
	HUNTER XCHSPOLE STEEL MOUNTING POLE, 4FT., COMES WITH OUTDOOR STAINLESS STEEL CABINET FOR XCH-SS CONTROLLERS. REQUIRED SCHSPB MOUNTING BRACKET.	
●○	HUNTER SPXCH SOLAR PANEL KIT FOR XC HYBRID CONTROLLER. ELIMINATES THE NEED FOR BATTERIES AND PROVIDES MAINTENANCE FREE OPERATION BY HARNESSING THE SUNFT'S ENERGY.	
●○	HUNTER WRF-CLIK RAINFREEZE SENSOR, INSTALL WITHIN 1000 FT OF CONTROLLER, IN LINE OF SIGHT, 22-28 VAC/DC 100 MA POWER FROM TIMER TRANSFORMER. MOUNT AS NOTED. INCLUDES GUTTER MOUNT.	DETAIL 7 SHEET IR2.1
M	WATER METER 3/4" USE DEDICATED IRRIGATION TAP AND METER. SEE CIVIL FOR TAP AND METER SIZE AND LOCATION.	DETAIL 8 SHEET IR2.1

IRRIGATION_SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	DETAIL
Φ Φ 80F	HUNTER MP800SR PROS-06-PRS40-CV TURF ROTATOR, 6IN. POP-UP WITH CHECK VALVE, PRESSURE REGULATED TO 40 PSI, MP ROTATOR NOZZLE ON PRS40 BODY, ADJ=ORANGE AND GRAY (ARC 90-210), 360=LIME GREEN AND GRAY (ARC 360)	DETAIL 1 SHEET IR2.0
◇ ◇ ◇	HUNTER MP815 PROS-06-PRS40-CV TURF ROTATOR, 6IN. POP-UP WITH CHECK VALVE, PRESSURE REGULATED TO 40 PSI, MP ROTATOR NOZZLE ON PRS40 BODY, M=MAROON AND GRAY ADJ=ARC 90 TO 210, L=LIGHT BLUE AND GRAY 210 TO 270 ARC, O=OLIVE AND GRAY 360 ARC.	DETAIL 1 SHEET IR2.0
⊕	HUNTER ICZ-101-25-LF 1" Drip Control Zone Kit, 1in. ICV Globe Valve with 1in. HY100 Filter System, Pressure Regulation: 25 PSI, Flow Range: .5 GPM - 15 GPM, 150 Mesh Stainless Steel Screen.	DETAIL 2 SHEET IR2.0
◎	NIBCO 4660 T 3/4" SCHEDULE 40 MANUAL FLUSH VALVE, CONNECT TO DRIP POLYTUBING FOR WINTERIZATION/BLOWOUT.	DETAIL 3 SHEET IR2.0
	AREA TO RECEIVE DRIP EMMITTERS HUNTER HE-B POINT SOURCE DRIP EMMITTER WITH SELF PIERCING BARB, COLOR CODED EMMITTERS FOR FLOW RATES OF 0.5 GPH, 1.0 GPH, 2.0 GPH, 4.0 GPH, AND 6.0 GPH. CAN BE INSERTED INTO 1/2IN. AND 3/4IN. TUBING AND HAVE PRESSURE COMPENSATING FROM 15 PSI-50 PSI. OPTIONAL DIFFUSER CAP (HE) AVAILABLE.	
	EMITTER SCHEDULE: -1 GALLON AND SMALLER: 2, HEB-5-B EMMITTER PER PLANT (1 GPH TOTAL) 5 GALLON: 2, HEB-10-B EMMITTERS PER PLANT (2 GPH TOTAL) -10-15 GALLONS & UPRIGHT JUNIPERS: 3, HEB-10-B EMMITTERS PER PLANT (3 GPH TOTAL) -1" TO 2-1/2" CALIPER TREES: 4, HEB-10-B EMMITTERS PER PLANT (4 GPH TOTAL) -3" TO 4" CALIPER TREES: 6, HEB-10-B EMMITTERS PER PLANT (6 GPH TOTAL)	DETAIL 4 SHEET IR2.0
●	HUNTER ICV-G 1" 1IN., 1-1/2IN., 2IN., AND 3IN. PLASTIC ELECTRIC REMOTE CONTROL VALVE, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE.	DETAIL 5 SHEET IR2.0
○○	HUNTER HQ-44LRC 1" QUICK COUPLER VALVE, YELLOW RUBBER LOCKING COVER, RED BRASS AND STAINLESS STEEL, WITH 1IN. NPT INLET, 2-PIECE BODY.	DETAIL 6 SHEET IR2.0
◆	NIBCO 4660-S SCHEDULE 40 MANUAL BALL VALVE, SAME SIZE AS MAINLINE PIPE DIAMETER AT VALVE LOCATION, SIZE RANGE - 3/4" - 3"	DETAIL 1 SHEET IR2.1
◀	NIBCO T-113-K CLASS 125 BRONZE GATE SHUT OFF VALVE WITH CROSS HANDLE, SAME SIZE AS MAINLINE PIPE DIAMETER AT VALVE LOCATION, SIZE RANGE - 1/4IN. - 3IN.	DETAIL 2 SHEET IR2.1
●●	HUNTER IBV-FS 1" 1IN., 1-1/2IN., 2IN., AND 3IN. BRASS ELECTRIC MASTER VALVE, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE. WITH FILTER SENTRY FACTORY INSTALLED OPTION.	DETAIL 3 SHEET IR2.1
○○	1" NIBCO T-113-K 1" CLASS 125 BRONZE MANUAL DRAIN VALVE WITH CROSS HANDLE	DETAIL 4 SHEET IR2.1
■	FEBCO B25Y 3/4" REDUCED PRESSURE BACKFLOW PREVENTER	DETAIL 5 SHEET IR2.1
■	HUNTER XCH-1200-SS ELECTROMECHANICAL CONTROLLER, 12 STATIONS, OUTDOOR MODEL, BATTERY-POWERED. STAINLESS STEEL CABINET, FOR RESIDENTIAL/COMMERCIAL USE.	DETAIL 6 SHEET IR2.1
●	HUNTER XCHSPB STAINLESS STEEL MOUNTING BRACKET, COMES WITH OUTDOOR STAINLESS STEEL CABINET FOR XCH-SS CONTROLLERS. REQUIRED XCHSPOLE TO ATTACH TO.	
	HUNTER XCHSPOLE STEEL MOUNTING POLE, 4FT., COMES WITH OUTDOOR STAINLESS STEEL CABINET FOR XCH-SS CONTROLLERS. REQUIRED SCHSPB MOUNTING BRACKET.	
●○	HUNTER SPXCH SOLAR PANEL KIT FOR XC HYBRID CONTROLLER. ELIMINATES THE NEED FOR BATTERIES AND PROVIDES MAINTENANCE FREE OPERATION BY HARNESSING THE SUNFT'S ENERGY.	
●○	HUNTER WRF-CLIK RAINFREEZE SENSOR, INSTALL WITHIN 1000 FT OF CONTROLLER, IN LINE OF SIGHT, 22-28 VAC/DC 100 MA POWER FROM TIMER TRANSFORMER. MOUNT AS NOTED. INCLUDES GUTTER MOUNT.	DETAIL 7 SHEET IR2.1
M	WATER METER 3/4" USE DEDICATED IRRIGATION TAP AND METER. SEE CIVIL FOR TAP AND METER SIZE AND LOCATION.	DETAIL 8 SHEET IR2.1

ERIE HIGHLANDS FILING NO.17

LOCATED IN THE NORTHEAST QUARTER OF SECTION 20, TOWNSHIP 1 NORTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN

TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO

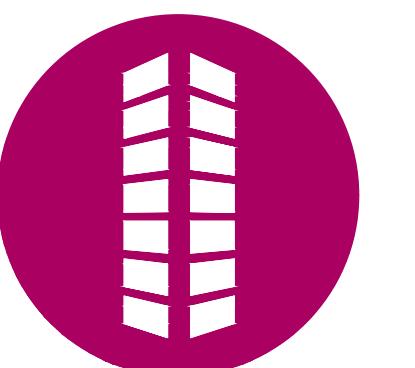
12.710 ACRES, 1 LOT, 1 TRACT MS-001370-2021

Galloway

5500 Greenwood Plaza Blvd., Suite 200
Greenwood Village, CO 80111
303.770.8884
GallowayUS.com

NOT FOR
CONSTRUCTION

COPYRIGHT
THESE PLANS ARE AN INSTRUMENT OF SERVICE
AND ARE THE PROPERTY OF GALLOWAY AND MAY
NOT BE DUPLICATED, DISCLOSED, OR REPRODUCED
WITHOUT THE WRITTEN CONSENT OF GALLOWAY.
COPYRIGHTS AND INFRINGEMENTS WILL BE
ENFORCED AND PROSECUTED.



EVERGREEN DEVELOPMENT
ERIE HIGHLANDS
FILING 17
SITE PLAN
TOWN OF ERIE, COLORADO

#	Date	Issue / Description	Init.
1	05/22/2025	2ND SUBMITTAL	EDN
2			
3			
4			
5			
6			

Project No: ED105
Drawn By: EDN
Checked By: JAR
Date: 03/03/2025

IRRIGATION NOTES & DETAILS

IR2.0

Sheet 6 of 7

ERIE HIGHLANDS FILING NO.17

LOCATED IN THE NORTHEAST QUARTER OF SECTION 20, TOWNSHIP 1 NORTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN

TOWN OF ERIE, COUNTY OF WELD, STATE OF COLORADO

12.710 ACRES, 1 LOT, 1 TRACT MS-001370-2021

Galloway

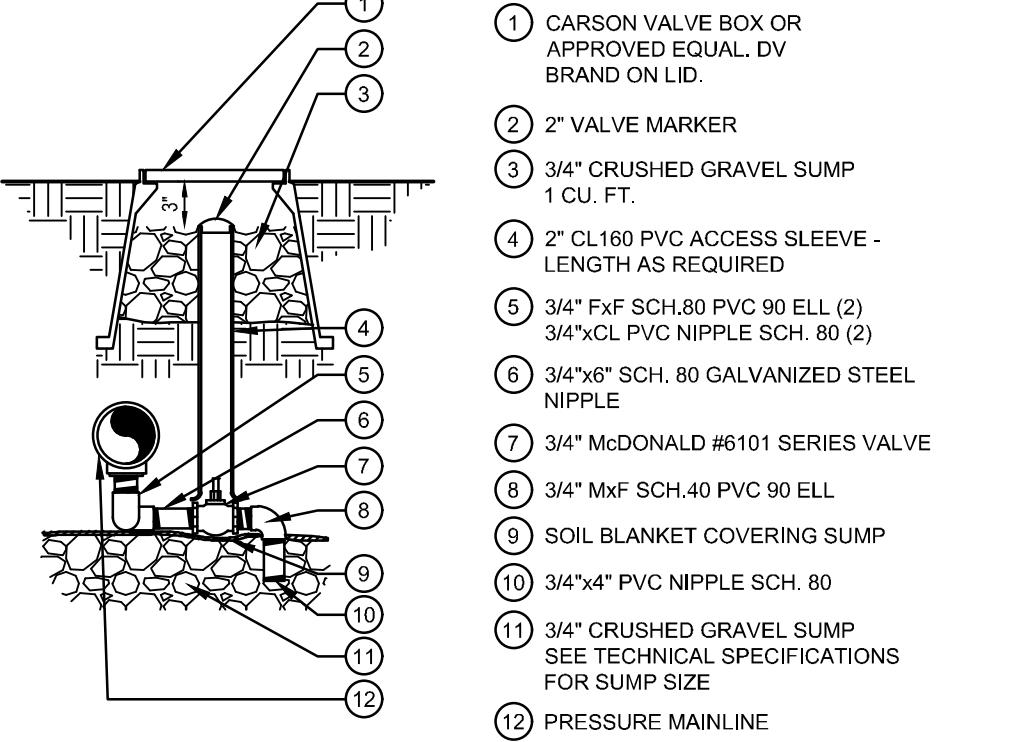
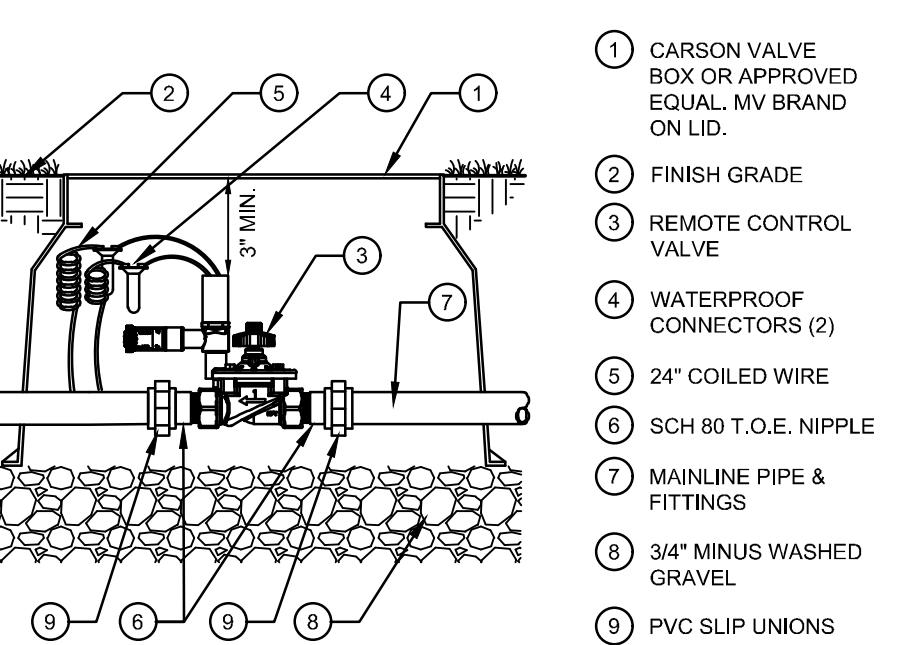
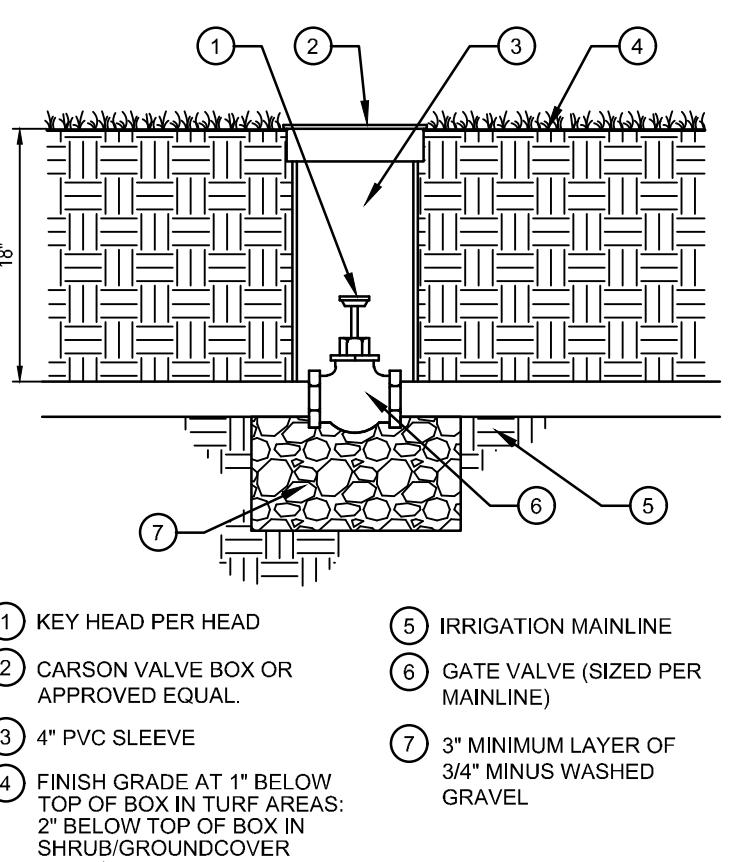
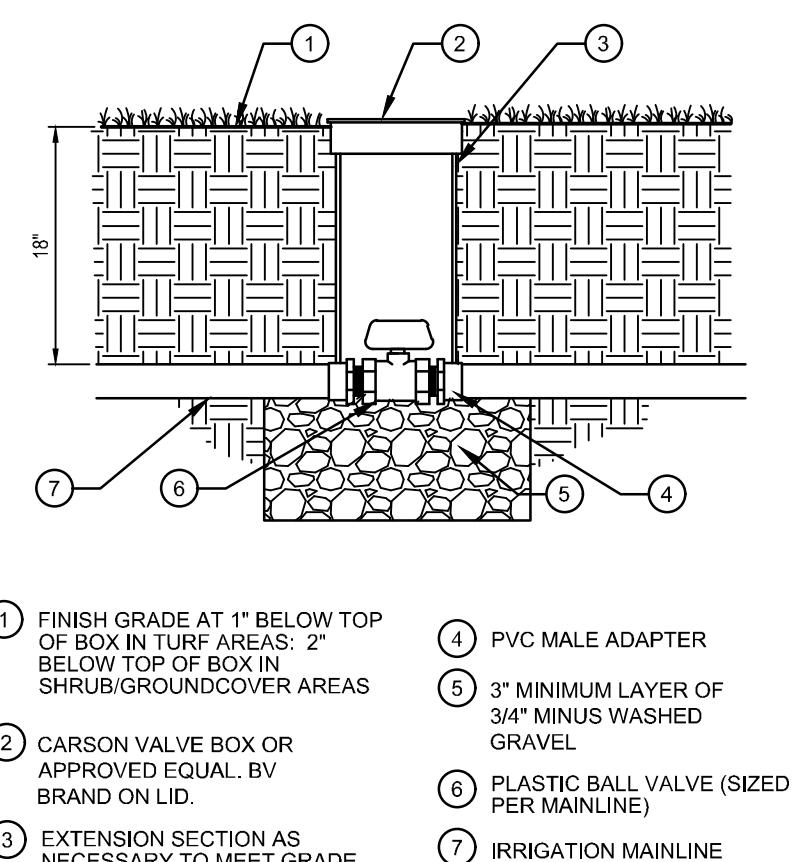
5500 Greenwood Plaza Blvd., Suite 200
Greenwood Village, CO 80111
303.770.8884
GallowayUS.com

NOT FOR CONSTRUCTION

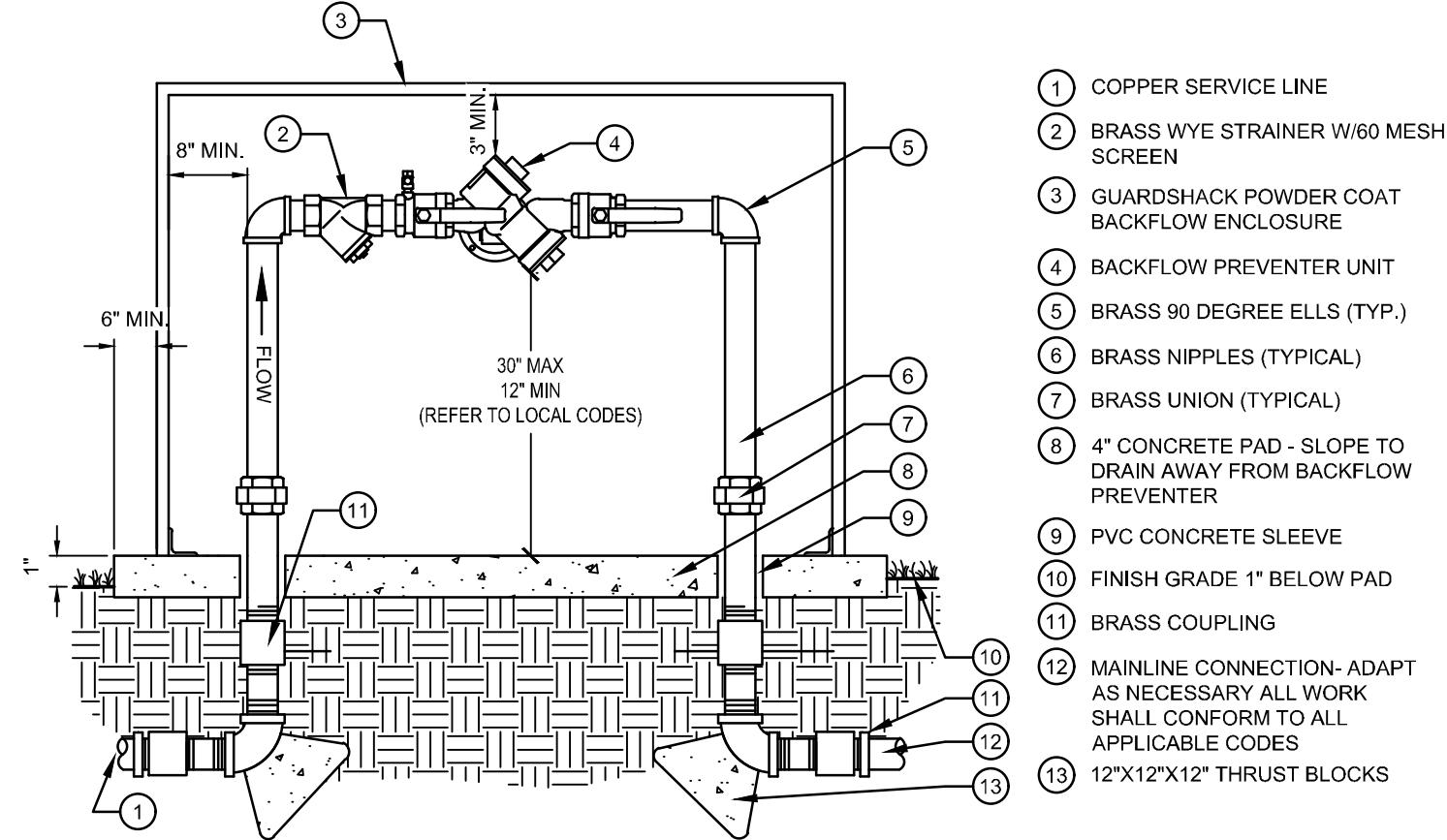
COPYRIGHT
THESE PLANS ARE AN INSTRUMENT OF SERVICE
AND ARE THE PROPERTY OF GALLOWAY AND MAY
NOT BE DUPLICATED, DISCLOSED, OR REPRODUCED
WITHOUT THE WRITTEN CONSENT OF GALLOWAY.
COPYRIGHTS AND INFRINGEMENTS WILL BE
ENFORCED AND PROSECUTED.



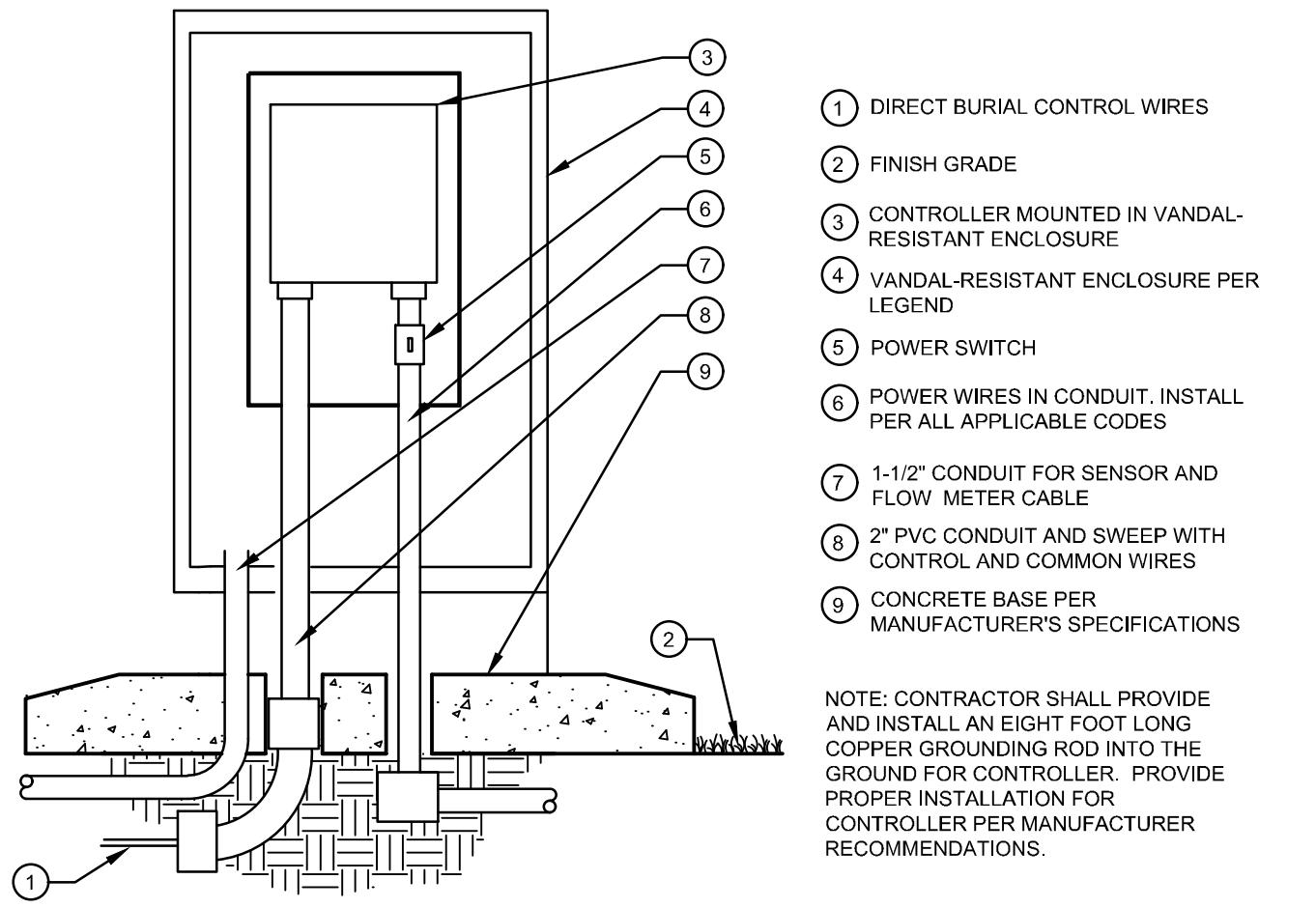
**EVERGREEN DEVELOPMENT
ERIE HIGHLANDS
FILING 17
SITE PLAN
TOWN OF ERIE, COLORADO**



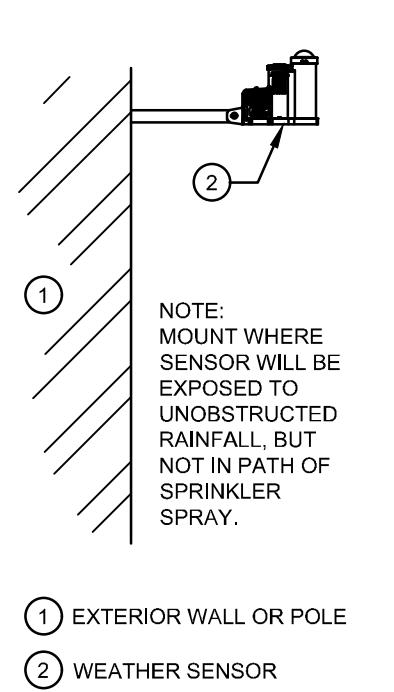
1 BALL VALVE
N.T.S.



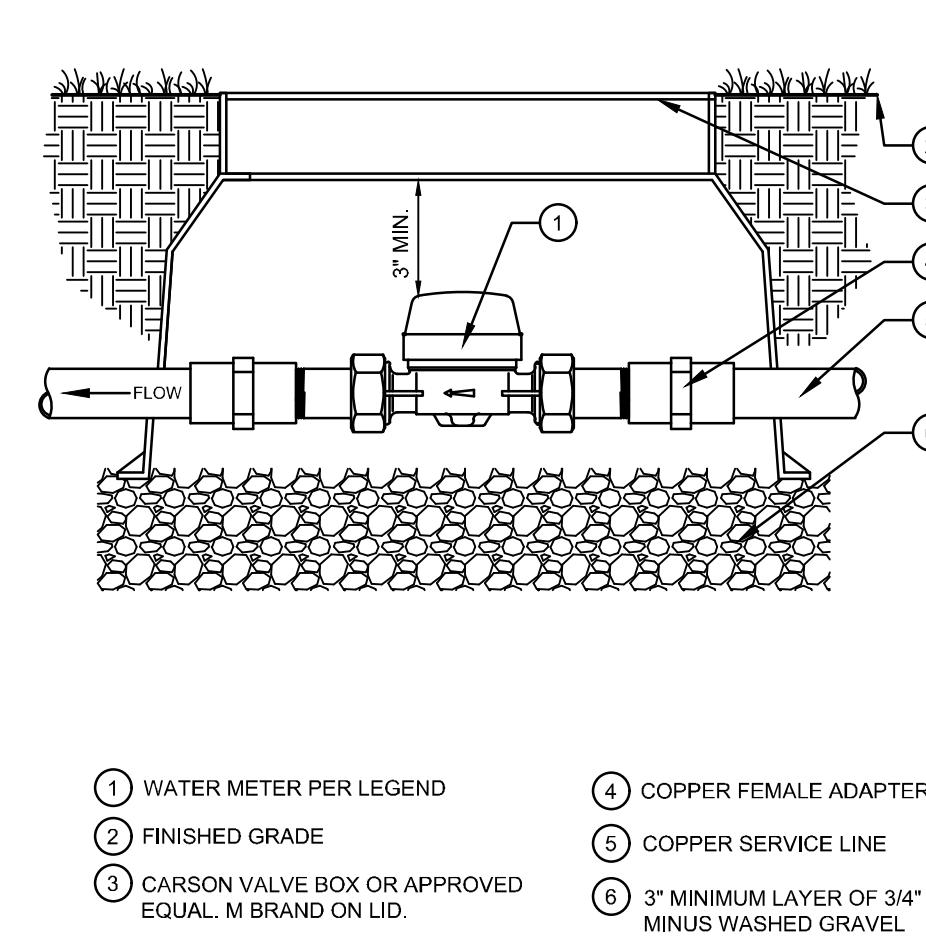
2 GATE VALVE
N.T.S.



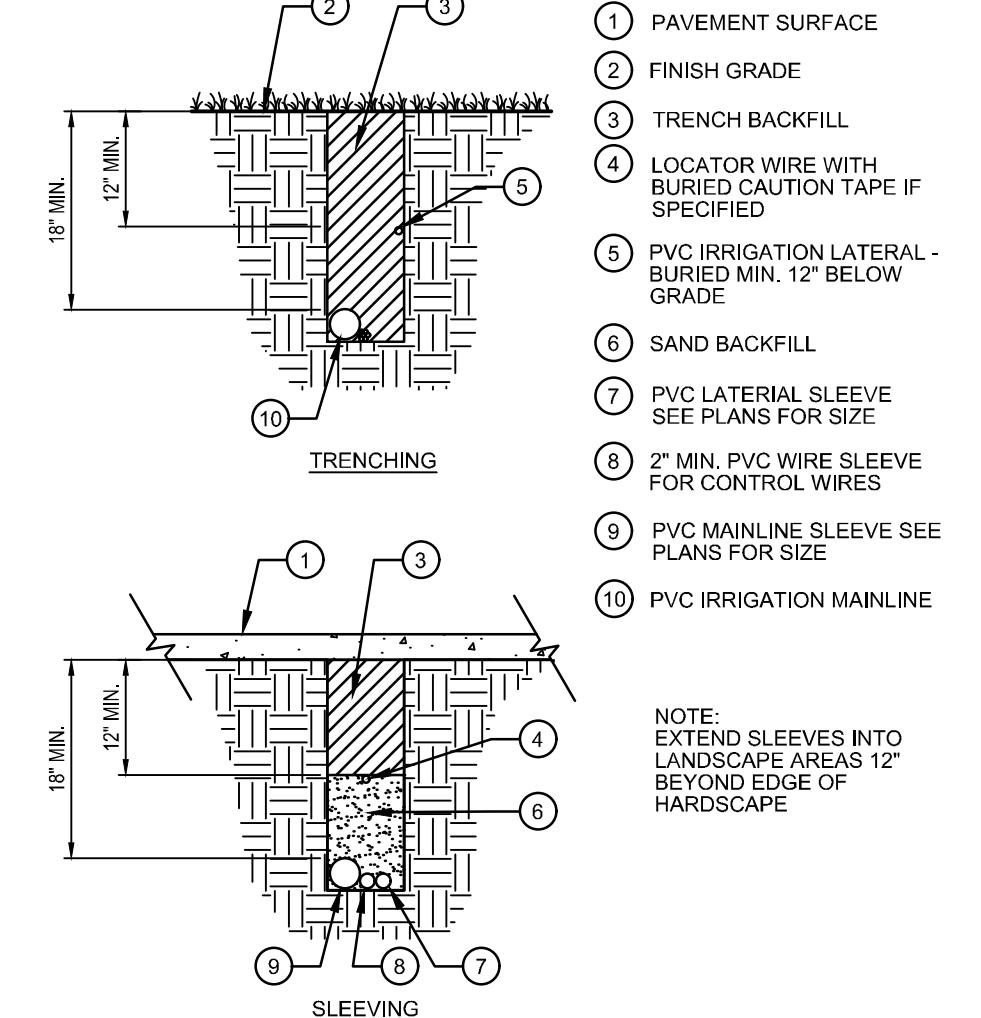
3 MASTER VALVE
N.T.S.



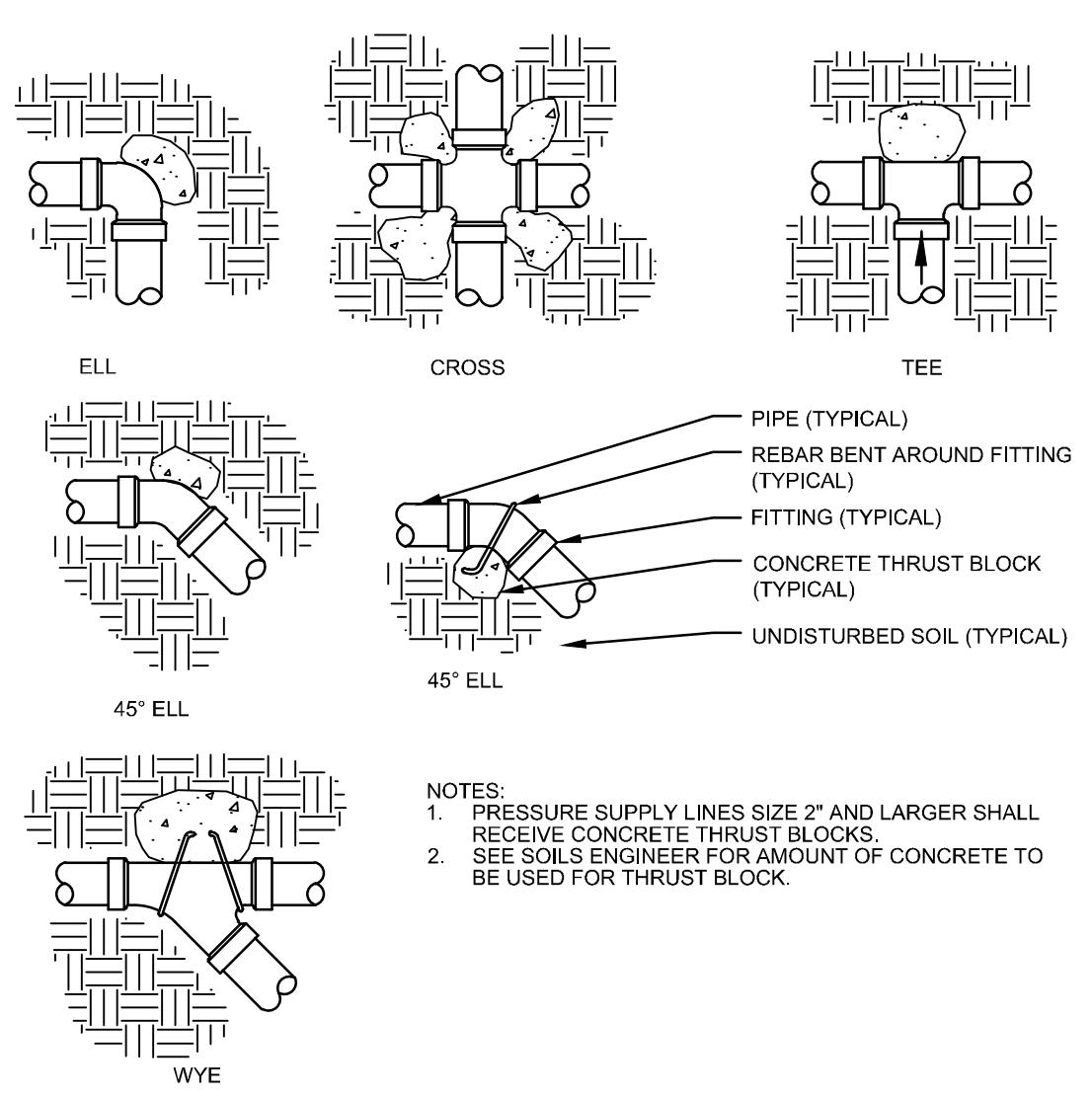
4 MANUAL DRAIN VALVE
N.T.S.



5 BACKFLOW PREVENTER, REDUCED PRESSURE
N.T.S.



6 PEDESTAL MOUNT CONTROLLER
N.T.S.



7 WEATHER SENSOR
N.T.S.

GENERAL IRRIGATION NOTES

- IRRIGATION DESIGN IS BASED ON THEORIES, ASSUMPTIONS, AND/OR INFORMATION PROVIDED BY CIVIL MODELS/UTILITIES/MUNICIPAL ENTITIES AND THIS IS DIAGRAMMATIC IN NATURE. ALL PIPING, VALVES, AND OTHER EQUIPMENT SHOWN WITHIN PAVED AREAS OR OUT OF PROPERTY LINES OR LIMITS INDICATED ON THE PLANS. THE IRRIGATION CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL ABOVE-GRADE IRRIGATION EQUIPMENT AND OTHER AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION, OR IRRIGATION CONTRACTOR MAY BE REQUIRED TO MOVE SUCH ITEMS AT HIS OWN COST.
- REFER TO SPECIFICATIONS (AS APPROPRIATE) FOR SUBMITTALS, INSPECTIONS AND OTHER APPLICABLE INFORMATION. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A COPY OF THE PROJECT SPECIFICATIONS PRIOR TO BIDDING. THE PROJECT SPECIFICATIONS ARE A PART OF THESE PLANS AND SHALL BE PROVIDED TO THE LANDSCAPE ARCHITECT AND OWNER'S REPRESENTATIVE. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING WORK AS SPECIFIED IN THE PROJECT SPECIFICATIONS AND ON THE PLANS.
- THE IRRIGATION CONTRACTOR SHALL MEET WITH THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF WORK, AND SHALL OBTAIN ALL ENGINEERING, LANDSCAPE, AND OTHER APPLICABLE PLANS & DOCUMENTS. CONTRACTOR SHALL THOROUGHLY REVIEW PLANS & REPORT ANY CONFLICTS OR DISCREPANCIES TO OWNER'S REPRESENTATIVE IMMEDIATELY.
- CONTRACTOR SHALL MEET WITH THE LANDSCAPE ARCHITECT AND OWNER'S REPRESENTATIVE AT THE UTILTY LOCATIONS PRIOR TO BEGINNING WORK. DO NOT INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS, GRADE DIFFERENCES, OR DIFFERENCES IN THE AREA DIMENSIONS EXIST THAT MIGHT NOT HAVE EXISTED AT THE TIME OF THE IRRIGATION DESIGN PREPARATION. SUCH OBSTRUCTIONS OR DIFFERENCES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE AND LANDSCAPE ARCHITECT. IN THE EVENT THAT NOTIFICATION IS NOT GIVEN, THE IRRIGATION CONTRACTOR SHALL ASSUME NO RESPONSIBILITY FOR ANY REVISIONS NECESSARY TO BRING THE SYSTEM TO A PROPER WORKING CONDITION, AND TO THE OWNER'S SATISFACTION.
- IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO FAMILIARIZE HIMSELF WITH ALL GRADE DIFFERENCES, LOCATIONS OF WALLS, RETAINING WALLS, ETC. THE IRRIGATION CONTRACTOR SHALL COORDINATE HIS WORK WITH THE GENERAL CONTRACTOR AND OTHER SUBCONTRACTORS FOR THE LOCATION AND INSTALLATION OF PIPE SLEEVES THROUGH WALL, UNDER ROADWAY, PAVING, ETC.
- THE CONTRACTOR SHALL MAKE NO SUBSTITUTIONS, DELETIONS, OR ADDITIONS TO THIS PLAN WITHOUT APPROVAL OF THE LANDSCAPE ARCHITECT.
- SEE CIVIL ENGINEER'S DRAWINGS FOR IRRIGATION POINT OF CONNECTION (TAP) AND DOMESTIC WATER SUPPLY.
- ALL CONSTRUCTION SHALL CONFORM TO CITY, COUNTY, AND FEDERAL REQUIREMENTS. IT SHALL BE THE RESPONSIBILITY OF THE OWNER TO OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE GOVERNMENT REGULATIONS. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS OR APPROVALS.
- THE IRRIGATION SYSTEM DESIGN IS BASED ON THE MINIMUM OPERATING PRESSURE AND THE MAXIMUM FLOW DEMAND SHOWN ON THE POINT OF CONNECTION (TAP) ON THE DRAWINGS. THE IRRIGATION CONTRACTOR SHALL FIELD VERIFY THE STATIC & OPERATING WATER PRESSURE PRIOR TO CONSTRUCTION, AND SHALL REPORT ANY DIFFERENCES BETWEEN THE WATER PRESSURE INDICATED ON THE DRAWINGS AND ACTUAL STATIC & OPERATING PRESSURE TO THE LANDSCAPE ARCHITECT AND OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT. IN THE EVENT PRESSURE DIFFERENCES ARE NOT REPORTED OR PRESSURES HAVE GREATLY CHANGED PRIOR TO THE START OF THE IRRIGATION SYSTEM CONSTRUCTION, THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR RECOMMENDING A SOLUTION OR PROVIDING AN ADD ALTERNATE BID FOR IRRIGATION COSTS.
- CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT IF AVAILABLE WATER PRESSURE EXCEEDS 5 PSI HIGHER OR LOWER THAN AVAILABLE WATER PRESSURE.
- NO MORE THAN 90% OF AVAILABLE MINIMUM STATIC WATER PRESSURE WAS USED IN PREPARATION OF THESE PLANS. FURTHERMORE, THE MAXIMUM FLOW THROUGH THE METER SHOULD NOT EXCEED 75% OF THE MAXIMUM SAFE FLOW.
- SUPPLY LINE AND METER TO BE PROVIDED BY GENERAL CONTRACTOR. BACKFLOW PREVENTER TO BE PROVIDED BY IRRIGATION CONTRACTOR. CONTRACTOR SHALL NOT BE REQUIRED TO PROVIDE A BACKFLOW PREVENTER.
- INSTALL ALL MATERIALS AND EQUIPMENT AS SHOWN ON THE PLANS AND DETAILS. NO SUBSTITUTIONS OF EQUIPMENT WILL BE ACCEPTABLE WITHOUT PRIOR WRITTEN APPROVAL BY THE LANDSCAPE ARCHITECT OR THE OWNER'S REPRESENTATIVE. THE IRRIGATION CONTRACTOR MAY BE REQUIRED TO REMOVE AND REPLACE ALL UNAPPROVED SUBSTITUTED EQUIPMENT AT HIS OWN COST IF SO DIRECTED BY THE OWNER.
- WHEN INSTALLING IRRIGATION PIPE AND EQUIPMENT NEXT TO HARDCAPE (SUCH AS WALLS, CURBS, OR WALKS), PLACE PIPE AS CLOSE AS POSSIBLE TO HARDCAPE TO AVOID CONFLICTS WITH PLANTING. REFER TO MAINLINE TRENCHING DETAILS FOR ADDITIONAL INFORMATION.
- THE IRRIGATION CONTRACTOR SHALL COORDINATE 120 V.A.C. ELECTRICAL POWER TO CONTROLLERS AND DEDICATE ONE (1) 20-AMP BREAKER FOR EACH CONTROLLER. IT SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO MAKE THE FINAL HOOK-UP FROM THE ELECTRICAL SOURCE TO THE CONTROLLER. ONE (1) 120 V.A.C. 20-AMP BREAKER SHALL BE PROVIDED FOR EACH BRANCH OF MAINLINE FOR FUTURE EXPANSION. STUB ADDITIONAL CONTROL WIRES INTO BACK OF IRRIGATION CONTROLLERS.
- ALL VALVE CONTROL WIRES SHALL BE AWG 14 TYPE UF, 600 VOLT TEST, DIRECT BURIAL. NO SPLICES SHALL BE ALLOWED EXCEPT AT VALVES AND CONTROLLER, WHERE SPLICES MAY BE NECESSARY DUE TO EXCESSIVELY LONG WIRE RUNS, THE CONTRACTOR SHALL MAKE ALL SPLICES IN ROUND VALVE BOXES WITH 3M'S DBV-DIRECT BURIAL SPLICE KIT. THE CONTRACTOR SHALL LABEL ALL WIRES WITH WATERPROOF TAGS AND MARKERS AT ALL SPLICES AND VALVE MANIFOLDS, AND SHALL LEAVE A 24" COIL OF EXCESS WIRE AT EACH CONNECTION.
- CONTRACTOR SHALL PROVIDE #10 COMMON WIRE, DIRECT BURIAL, TO ALL REMOTE CONTROL VALVES.
- CONNECT ALL DIRECT BURIAL WIRES TO VALVES USING 3M'S DBV-DIRECT BURIAL SPLICE KIT (UNLESS OTHERWISE SPECIFIED).
- ALL VALVE CONTROL WIRES SHALL BE AWG 14 TYPE UF, 600 VOLT TEST, DIRECT BURIAL. NO SPLICES SHALL BE ALLOWED EXCEPT AT VALVES AND CONTROLLER, WHERE SPLICES MAY BE NECESSARY DUE TO EXCESSIVELY LONG WIRE RUNS, THE CONTRACTOR SHALL MAKE ALL SPLICES IN ROUND VALVE BOXES WITH 3M'S DBV-DIRECT BURIAL SPLICE KIT. THE CONTRACTOR SHALL LABEL ALL WIRES WITH WATERPROOF TAGS AND MARKERS AT ALL SPLICES AND VALVE MANIFOLDS, AND SHALL LEAVE A 24" COIL OF EXCESS WIRE AT EACH CONNECTION.
- THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL CONTROL WIRE SLEEVES AND PIPE SLEEVES UNDER PAVED AREAS PRIOR TO PAVING. ELECTRICAL WIRES FOR IRRIGATION VALVES AND IRRIGATION LINES SHALL BE PLACED IN SEPARATE SLEEVES. ALL SLEEVING SHALL BE PVC SCHEDULE 40 PIPE. SLEEVES FOR MAINLINE AND LATERAL LINES SHALL BE A MINIMUM TWICE THE DIAMETER OF THE ENCLOSED PIPE. SLEEVES FOR CONTROL WIRES SHALL BE AS PER THE SLEEVING / WIRING NOTE AND THE WIRING SLEEVE LEGEND ITEM AS SHOWN ON THESE DRAWINGS.
- THE IRRIGATION SYSTEM SHALL BE INSTALLED BY A QUALIFIED IRRIGATION CONTRACTOR.

#	Date	Issue / Description	Init. EDN
1	05/22/2025	2ND SUBMITTAL	
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			

Project No:	ED105
Drawn By:	EDN
Checked By:	JAR
Date:	03/03/2025

IRRIGATION NOTES & DETAILS

IR2.1

Sheet 7 of 7



ALDRIDGE TRANSPORTATION CONSULTANTS, LLC
Advanced Transportation Planning and Traffic Engineering

John M.W. Aldridge, PE
 Colorado Licensed Professional Engineer

1082 Chimney Rock Road
Highlands Ranch, CO 80126
 Mobile: 303-594-4132

December 31, 2024

Erica Vester
 Evergreen
 2390 East Camelback Rd. Suite 410
 Phoenix, AZ 85016

RE: Traffic Impact Study - 5th Update Revised
 Erie Highlands, Erie, CO

Dear Ms. Vester:

This technical letter provides a revision to the fifth update of the Erie Highlands Traffic Impact Study prepared by this firm in August 2013. This revision addresses recent comments from the Town of Erie regarding the need for a westbound dual left turn lane at the Erie Pkwy/CR-5 intersection, the need for a right turn deceleration lane at the proposed right in/right out access on CR-5, and an estimation of when and what development in the commercial area will trigger a traffic signal warrant at Glacier Dr. and Erie Parkway.

This analysis is based on the recent 2024 AM and PM peak hour traffic movement counts at the Erie Pkwy/CR-5 intersection and a trip generation analysis of the recent site plan for the commercial area in Erie Highlands.

INTRODUCTION

Erie Highlands is essentially built out except for the commercial area. This includes close to 1,000 homes and an elementary school. The majority of the infrastructure is in place including the finished construction of Erie Parkway to a raised landscaped median divided four-lane Major Arterial. The internal street layout has been constructed according to the approved site plan and the roadway classification and access type plan we prepared in 2013 and subsequent updates. A traffic signal has been installed at Erie Parkway/Highlands Blvd. and signal design plans have been prepared and ready for construction at Erie Parkway/Glacier Dr. intersection. In addition, the intersection of Erie Parkway and CR-5 has been reconstructed with turn lanes on all approaches actuated traffic signal control, and flashing yellow left turn phasing.

Glacier Drive is constructed as a three-lane Commercial Collector (includes a two-way center left turn lane). The internal connections from residential collectors to Glacier Drive remain the same in particular Highlands Drive and Highview Drive. These provide excellent internal access to the commercial area.



This update focuses on the Town comments regarding the need for a westbound dual left turn lane at the Erie Pkwy/CR-5 intersection, if a right turn deceleration lane is required for the right/right out access on CR-5 and a signal warrant analysis for the proposed signal at Glacier Dr. and Erie Parkway. To address these comments, new traffic counts at the Erie Pkwy/CR-5 intersection were taken by All Traffic Data on Tuesday, September 24, 2024. In addition, the trip generation for the revised commercial area site plan area has been recalculated and added to the new traffic counts at the intersection to determine the operational characteristics of the three subject intersections in the 2026 AM and PM peak hour design scenario. Figure 1 shows the location, surrounding area, and the most recent site plan.



Figure 1 Location and Site Plan

TRIP GENERATION AND DISTRIBUTION

The commercial area in the 2013 study and subsequent updates examined the trip generation occasioned by the development of 100,000 square feet of retail and commercial space. The location and size of the commercial area has not appreciably changed. The primary external access remains at the Erie Pkwy/Glacier Drive intersection. A previously approved full-movement access on CR-5 has since changed to a right in/right out only.

In terms of Average Daily Traffic (ADT), the former 2013 plan shows approximately 6,791 trips for the commercial area. The new site plan shows a virtually equal amount at 6,684 ADT.

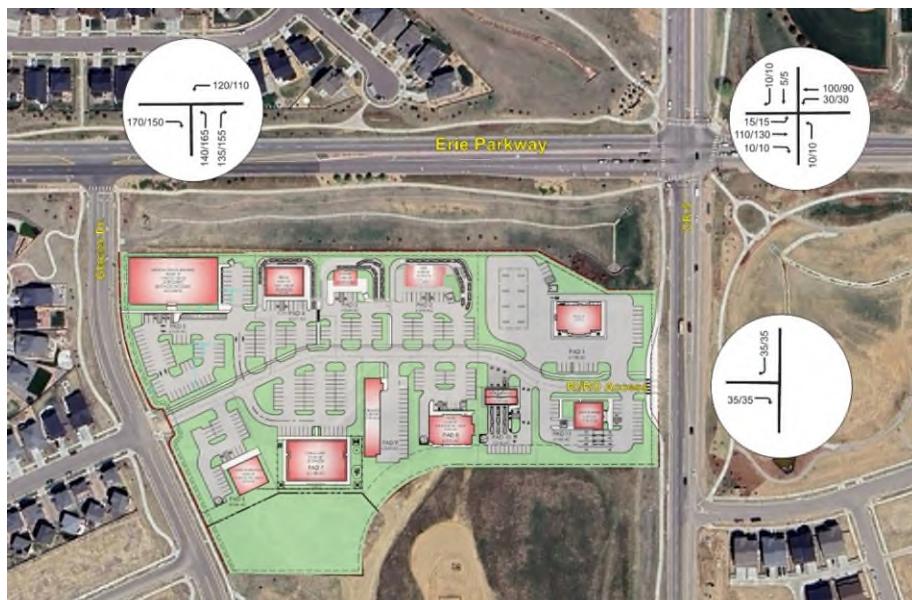
The trip generation rates and values for the revised commercial development are from the **ITE Trip Generation Manual, 11th Edition**. Note that the trips have been factored for an internal trip



reduction based on the NCHRP 684 Internal Trip Capture Estimation Tool. The trip generation worksheet below is for the revised commercial area site plan.

Trip Generation Worksheet									
Pad ITE CODE	LAND USE	UNIT	QUANTITY	ADT	AM		PM		
					IN	OUT	IN	OUT	
11 912	Bank	KSF	3.3	100.35 335	5.77 19	4.18 14	10.55 35	10.55 35	
2 934	Fast Food	KSF	4.0	467.48 1870	22.70 91	21.81 87	17.18 69	15.85 63	
3 937	Coffee Shop	KSF	1.5	533.57 800	43.80 66	42.08 63	19.50 29	19.50 29	
1 945	Gas Station w/Store	Veh. Sta.	16.0	265.12 4242	8.03 128	8.03 128	9.21 147	9.21 147	
9 942	Auto Care Center	KSF	5.5		1.49 8	0.77 4	1.49 8	1.62 9	
9 941	Quick Lubrication	Bays	3.0	40.00 120	2.01 6	0.99 3	2.72 8	2.13 6	
5,8 720	Medical Office	KSF	23.5	36.00 846	2.45 58	0.65 15	1.18 28	2.75 65	
6 712	Small Office	KSF	4.0	14.39 58	1.37 5	0.30 1	0.73 3	1.43 6	
4 822	Retail	KSF	4.8	54.45 261	1.42 7	0.94 5	3.30 16	3.30 16	
7 565	Day Care	KSF	10.5	47.62 500	5.83 61	5.17 54	5.23 55	5.89 62	
Internal Trip Reduction				26 percent	2348	117	98	104	114
Total Trips Assigned to Intersections					6684	333	278	295	325

The trip distribution remains the same as described in the August 2013 study. It is based on the locations of streets and highways (including the easy access to I-25) and employment and shopping in the surrounding area. The assumption is that 50 percent will originate to/from the west, and 40 percent to/from the east and I-25. The remaining 10 percent will travel to/from the east but orient north and south on CR-5, which provides access, albeit circuitous, south to SH-7 via Sheridan Parkway and to the north to SH-52. The network trip assignment assumes the shortest trip path logic. Figure 2 shows the distribution and assignment of the commercial site trip generation.



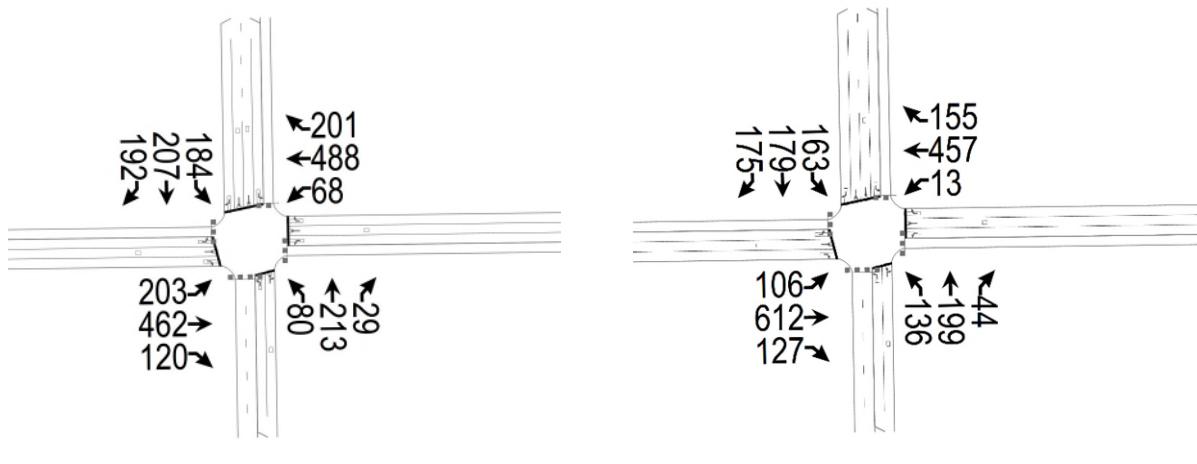


TRAFFIC IMPACT

The Synchro v.11 traffic operations model was used to analyze the level of service (LOS) characteristics at Erie Parkway/CR-5, Glacier Dr./Erie Parkway, and the right in/right out movement access on CR-5 with the new September 2024 AM and PM peak hour counts at Erie Pkwy/CR-5 and the site generated trips from the new site plan.

Synchro v.11 is based on procedures and methodologies referenced from the **Highway Capacity Manual 6th Edition (HCM)**. It rates intersection operations using a determination of level of service (LOS). LOS is letter rating from A to F. LOS A indicates free-flow traffic conditions and no delay at intersections. LOS F is heavy traffic congestion with significant delay. LOS is provided for the overall operations at signalized intersections. LOS D is generally the benchmark for acceptable signalized intersection operations during the weekday AM/PM peak hours. The LOS rating for unsignalized intersections is provided by the critical movement, not the overall, which is generally the left turn out from the minor street. Caution must be used when evaluating the LOS at unsignalized intersections particularly when LOS F is shown. In case of an LOS F, the HCM¹ suggests that other evaluation measures should be considered such as the control delay, volume over capacity ratio, and the 95th percentile queue length to make the most effective traffic control decision. LOS F at unsignalized intersections is considered normal for the weekday peak hour. The operations analysis data are presented on Synchro graphics in the appendix along with the Synchro worksheet reports.

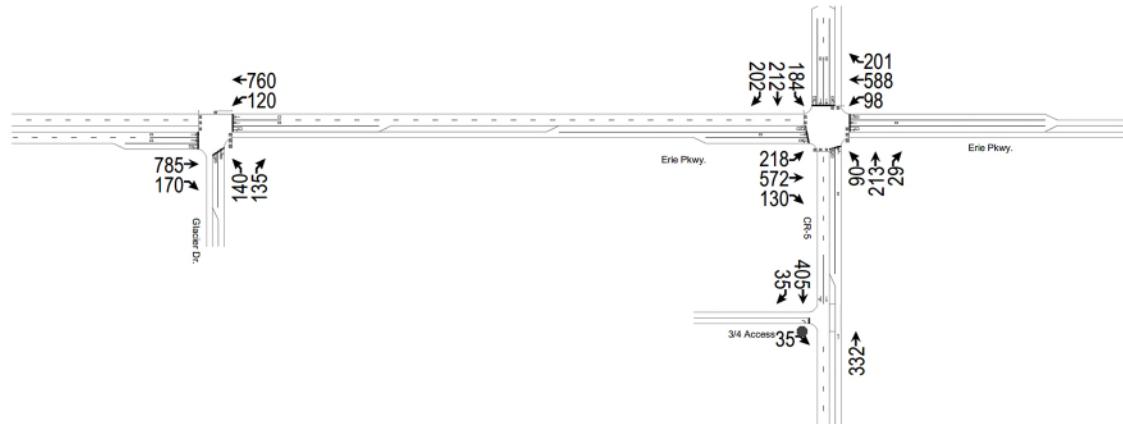
The existing 2024 AM and PM peak hour traffic counts at the intersection of Erie Parkway and CR-5 are shown below.



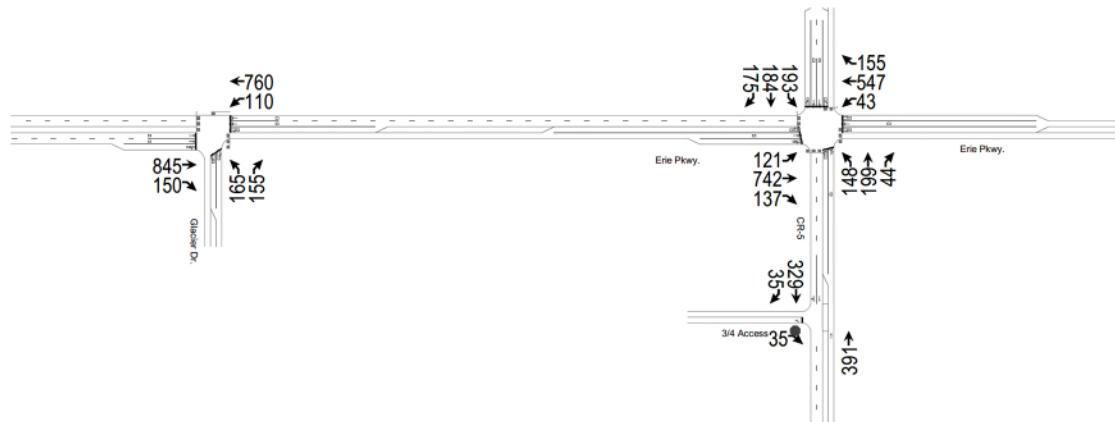
¹ Highway Capacity Manual 2010 page 19-40



The following graphics show the projected 2026 AM and PM peak hour total volumes with the site generated trips.



2026 AM Peak Hour Total



2026 PM Peak Hour Total



Table 1 - Intersection LOS/Delay (secs) Summary

Intersection	Existing		2026 Total	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Erie Pkwy/CR-5	C/27.5	C/27.2	C/27.8	C/29.9
Erie Pkwy/Glacier Dr.	n/a	n/a	B/10.2	B/11.4
RI/RO/CR-5	n/a	n/a	B/10.0	A/9.7

Table 1 describes the Level of Service (LOS) letter rating and the vehicle seconds of delay. As indicated the Erie Pkwy/CR-5 intersection is not significantly affected by the introduction of the site generated traffic. The Erie Pkwy/Glacier Dr. intersection will operate at a superior LOS B when signalized. The right in/right out access on CR-5 will similarly operate at a superior LOS B/A with stop-sign control.

Regarding the need for a dual left turn lane on the westbound approach at the Erie Pkwy/CR-5 intersection, the 2026 AM peak hour total volume of 98 vehicles per hour (vph) and a 2026 PM peak hour total volume of 43 vph are well below the typical dual left turn warrant of greater than 300 vph. In the 2026 AM peak hour total volume the LOS for the left turn movement only is rated B with 18.2 seconds of delay. Moreover, the back of the average queue length is just 1.2 vehicles. In the 2026 PM peak hour total volume the LOS for the left turn movement only is B with just 19.3 seconds of delay and a back of the average queue length of just 0.5 vehicles. Note that the 2013 TIS and subsequent updates found no instances of greater than 300 vph on the westbound left turn movement in the 2040 design horizon analyses.

Regarding the need for right turn deceleration lane at the right in/right out intersection on CR-5 we refer to the Town's 2023 Standards and Specifications Page 500-11 and the table copied below for the Minimum Right-Turns to Require Deceleration Lane (vph). Per the table the minimum vph on a Minor Arterial (CR-5) is 50 vph. It should be noted that there is no stop control on the right turn in movement and that CR-5 in this area was recently improved with two southbound through lanes that tend to make the right-in and right-out movements easier to navigate.

Right-turn Deceleration Lane

	Minimum Right-Turns to Require Deceleration Lane (vph)	Storage and Taper Length (ft)	Taper Rate
Principal Arterial	25	Storage (Min 150') + Taper	12:1
Minor Arterial	50	Storage (Min 100') + Taper	12:1

Based on discussions and review of comments from the Town staff and their consultant Fox-Tuttle, we have revised our calculations for the trip distribution and assignment to the right in/right out access from the commercial area. Previously, we assigned a flat 10 percent to the access. The flat rate assignment indicated a right turn in volume of 35 vph in the AM and PM peak hours. A revised site plan now shows a QT gas station with 16 fueling positions located in the northeast corner of the site and near the right in/right out



access on CR-5. The concern of the Town and consultant is that the proximity makes it attractive for pass-by trips. A pass-by trip is defined as an incoming trip that exits in the same direction. So, in this case it would only be for trips southbound on CR-5 which has limited destinations – secondary access to Westerly, primary access to Sunset, and beyond them, the Front Range Land Fill. Note that a right turn in trip that exits at the signal on Erie Pkwy. and Glacier Dr. is considered a diverted link trip, but these have also been accounted for in the calculations.

Instead of a flat rate we have assigned a distribution factor to each land use in the commercial area. Logically, the more westerly on the site the lesser the distribution. Conversely, the land uses on the east side and those that are prone to pass-by trips, the higher the distribution. The table on the next incorporates the trip generation data from for the AM and PM incoming movements.

Note that the data was taken before the internal trip reduction. The table takes the reduction on the trips assigned to the access.

Erie Highlands Commercial Area Peak Hour Trip Assignment to RI/RO Access						
Pad #	Use	Total		% Distribution to RI/RO	Assigned to RI/RO	
		AM IN	PM IN		AM IN	PM IN
10	Bank	19	35	10%	2	4
2	Fast Food	91	69	15%	14	10
4	Coffee	66	29	10%	7	3
1	QT	128	147	15%	19	22
9	Auto Care	8	8	10%	1	1
3	Quick Lube	6	8	10%	1	1
5&8	Medical	58	28	5%	3	1
6	Office	5	3	5%	0	0
7	Day Care	61	55	5%	3	3
Total		442	382		49	45
Internal Trip Reduction				26%	13	12
Total Assignment to Right-In Movement					36	33

The peak hour volumes of 36 vph in the AM peak hour and 33 vph in the PM peak hour assignment do not warrant a right turn deceleration lane in accordance with the Town standards that require a minimum of 50 vph to satisfy the warrant requirements.



Regarding the need to signalize the intersection of Erie Pkwy/Glacier Dr. Although the signal design plans are complete, the actual installation of the signal must be based on satisfaction of a MUTCD traffic signal volume warrant. Warrant 1 Eight Hour or Warrant 2 Four Hour. Possibly Warrant 3 Peak Hour but this is usually only applicable to short term, high discharge, industrial facilities. The signal warrant study should be based on actual not projected conditions.

However, the Town has requested a traffic signal warrant analysis based on projected conditions. To do this we have from the developer an estimated takedown of the lots by year and quarter. For this development they are anticipating that by the end of 2026, the gas station and convenience store, a fast-food restaurant and a coffee shop will be in place. These are the three highest traffic generating uses and represent about 80 percent of the total trip generation for the commercial area. The takedown schedules is shown in the following table.

Pad	Anticipated Use	Estimated Building Square Footage	Estimated Opening for business
1	Fuel Station & C-store	4,996	Q1 2026
2	Drive-thru restaurant	4,584	Q3 2026
3	Auto Service	1,800	Q3 2028
4	Drive-thru coffee	1,500	Q4 2026
5	Medical Office Building	18,500	Q4 2027
6	Office / medical office building	6,000	Q3 2028
7	Daycare	10,500	Q4 2027
8	Medical Office Building	5,500	Q4 2027
9	Auto Repair	5,500	Q3 2027
10	Bank / Office	3,340	Q3 2028

The total daily trip generation of the three uses is approximately 5,530 ADT inclusive of a 20 percent reduction for internal trip making which also accounts for the nearby residential visits. The 5,530 is split in half for the total incoming trips and the total outgoing trips. We then factor the 2,760 by a 90 percent for distribution and then by a 50/40 split for the westbound and eastbound movement, respectively. Then based on the recommendations from the MUTCD the right turn (eastbound) volume is reduced by 50 percent to account right turn on red factor and no eastbound acceleration lane. For the analysis, the northbound approach volume is 1,934 ADT (note that the traffic signal analysis worksheet includes a macro that converts the 2,760 ADT to the 1,934 ADT with the above factors). The 1,934 ADT is then converted to hourly volumes for each use with the Hourly Distribution of Vehicular Traffic by Land Use tables from the ITE Trip Generation Manual, 11th Edition. Note that the hourly volumes on Erie Parkway are also determined from the hourly distribution tables.

The hourly volumes for both Erie Parkway approaches and the Glacier Drive approach are input to the attached Traffic Signal Warrant Analysis Summary Worksheet. The analysis indicates that the three uses generate sufficient traffic to meet all three volume warrants – Warrant #1 – Eight Hour, Warrant #2 – Four Hour, and Warrant #3 Peak Hour - towards the end of 2026.

A question emerged recently regarding if all-way stop control is warranted at the intersection of Glacier Dr. and the private drive entrance to the commercial area. According to the MUTCD, there are five warrants and meeting any one of them could warrant all-way stop control.



- 1) Crash Experience (5 or more in 12-month period of the type correctable by all-way stop control)
- 2) Sight Distance (inadequate sight distance on the stop-controlled approach)
- 3) Transition to Signal Control or Yield Control at a Circular Intersection (not applicable)
- 4) 8-Hour Volume of units (Vehicles, Pedestrians, Bicycles) – (300 units on major street approaches for 8 hours of a typical day or 200 units for the same 8-hours on the minor street approaches)
- 5) Other Factors (conflicting left turn movements or intersection of two neighborhood through streets)

In this case, there are only two applicable warrants, crash experience and 8-hour volume. Both require actual experience and/or actual traffic counts. So, the intersection shall be two-way stop sign controlled until a warrant is met.

Crosswalk markings are advised on the Glacier Dr. approaches with appropriate unsignalized pedestrian crosswalk signs.

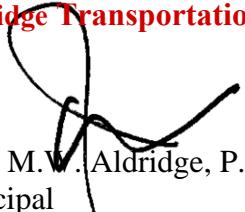
FINDINGS & RECOMMENDATIONS

Based on the analysis herein, and in my professional opinion, the trip generation from the revised site plan for the commercial area of Erie Highlands can be accommodated and managed by the adjacent streets and intersections at an acceptable level of service in the 2026 AM and PM peak hours inclusive of the full development of Erie Highlands. No geometric changes are necessitated to Erie Parkway as currently constructed with the increased trip generation.

- 1) A westbound dual left turn lane at Erie Pkwy/CR-5 is not warranted by the current and future left turn volume in the AM and PM peak hours. The peak hour volumes are well below the typical warrant threshold of 300 vph.
- 2) A right turn deceleration lane at in/right out movement access on CR-5 is not warranted by volume. The AM and PM peak hour right turn in volume is 36 and 33 vph, respectively. The warrant threshold is 50 vph.
- 3) The signal at Glacier Dr. and Erie Parkway should be installed when warranted by actual volumes in accord with MUTCD Warrant 1 Eight Hour or Warrant 2 Four Hour. A projected analysis indicates that the three highest generating uses – gas station with convenience store, fast food restaurant, and a coffee shop will generate enough traffic to warrant a traffic signal if constructed by the end of 2026.
- 4) At the intersection of Glacier Dr., and the private street entrance to the commercial area shall be two-way stop sign controlled initially and then converted to all-way stop sign control if warranted by crash experience or by the 8-hour volume warrant.
- 5) The intersection of Glacier Dr. should have crosswalk markings across the Glacier Dr. approaches and include appropriate unsignalized pedestrian/bicycle crosswalk signs.



Respectfully submitted,
Aldridge Transportation Consultants, LLC


John M.W. Aldridge, P.E.
Principal



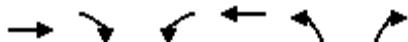
ATC is a professional service firm specializing in traffic engineering and transportation planning. ATC's principal, John M.W. Aldridge, is a Colorado licensed professional engineer. In the past 20 years, ATC has prepared over 1,000 traffic impact studies, designed over 100 traffic signals, and has provided expert witness testimony on engineering design and access issues on multi-million-dollar interchange and highway projects in Kansas and Colorado.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	203	462	120	68	488	201	80	213	29	184	207	192
Future Volume (veh/h)	203	462	120	68	488	201	80	213	29	184	207	192
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00			1.00	1.00		1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	221	502	130	74	530	218	87	232	32	200	225	209
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	283	651	552	276	582	493	440	460	64	412	1079	481
Arrive On Green	0.09	0.35	0.35	0.05	0.31	0.31	0.06	0.29	0.29	0.07	0.30	0.30
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1609	222	1781	3554	1585
Grp Volume(v), veh/h	221	502	130	74	530	218	87	0	264	200	225	209
Grp Sat Flow(s), veh/h/ln	1781	1870	1585	1781	1870	1585	1781	0	1830	1781	1777	1585
Q Serve(g_s), s	6.3	17.9	4.4	2.1	20.4	8.2	2.5	0.0	9.0	5.5	3.5	7.9
Cycle Q Clear(g_c), s	6.3	17.9	4.4	2.1	20.4	8.2	2.5	0.0	9.0	5.5	3.5	7.9
Prop In Lane	1.00			1.00			1.00	1.00		0.12	1.00	1.00
Lane Grp Cap(c), veh/h	283	651	552	276	582	493	440	0	524	412	1079	481
V/C Ratio(X)	0.78	0.77	0.24	0.27	0.91	0.44	0.20	0.00	0.50	0.49	0.21	0.43
Avail Cap(c_a), veh/h	283	653	554	301	611	518	467	0	524	412	1079	481
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.7	21.8	17.4	17.5	24.8	20.6	17.1	0.0	22.3	18.7	19.4	20.9
Incr Delay (d2), s/veh	13.2	5.6	0.2	0.5	17.4	0.6	0.2	0.0	3.4	0.9	0.4	2.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	3.4	8.4	1.5	0.8	11.3	3.0	1.0	0.0	4.2	2.4	1.5	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.9	27.4	17.6	18.1	42.3	21.3	17.3	0.0	25.8	19.6	19.8	23.8
LnGrp LOS	C	C	B	B	D	C	B	A	C	B	B	C
Approach Vol, veh/h		853			822			351		634		
Approach Delay, s/veh		27.1			34.5			23.7		21.0		
Approach LOS		C			C			C		C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R _c), s	10.0	26.0	8.4	30.6	8.7	27.3	11.2	27.8				
Change Period (Y+R _c), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.5	20.3	5.0	26.2	5.3	20.5	6.7	24.5				
Max Q Clear Time (g_c+l1), s	7.5	11.0	4.1	19.9	4.5	9.9	8.3	22.4				
Green Ext Time (p_c), s	0.0	1.0	0.0	2.0	0.0	1.6	0.0	0.9				
Intersection Summary												
HCM 6th Ctrl Delay			27.5									
HCM 6th LOS			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑↑	↑
Traffic Volume (veh/h)	106	612	127	13	457	155	136	199	44	163	179	175
Future Volume (veh/h)	106	612	127	13	457	155	136	199	44	163	179	175
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	115	665	138	14	497	168	148	216	48	177	195	190
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	276	719	609	150	637	540	473	452	101	421	1102	492
Arrive On Green	0.06	0.38	0.38	0.02	0.34	0.34	0.06	0.31	0.31	0.07	0.31	0.31
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1482	329	1781	3554	1585
Grp Volume(v), veh/h	115	665	138	14	497	168	148	0	264	177	195	190
Grp Sat Flow(s), veh/h/ln	1781	1870	1585	1781	1870	1585	1781	0	1811	1781	1777	1585
Q Serve(g_s), s	3.2	27.2	4.7	0.4	19.1	6.3	4.6	0.0	9.5	5.5	3.2	7.5
Cycle Q Clear(g_c), s	3.2	27.2	4.7	0.4	19.1	6.3	4.6	0.0	9.5	5.5	3.2	7.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	276	719	609	150	637	540	473	0	553	421	1102	492
V/C Ratio(X)	0.42	0.93	0.23	0.09	0.78	0.31	0.31	0.00	0.48	0.42	0.18	0.39
Avail Cap(c_a), veh/h	280	760	644	232	760	644	473	0	553	421	1102	492
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.7	23.5	16.6	20.2	23.7	19.5	17.4	0.0	22.6	18.1	20.1	21.6
Incr Delay (d2), s/veh	1.0	16.7	0.2	0.3	4.4	0.3	0.4	0.0	2.9	0.7	0.4	2.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	1.3	14.5	1.7	0.2	8.7	2.3	1.8	0.0	4.3	2.2	1.3	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.7	40.2	16.8	20.5	28.1	19.8	17.8	0.0	25.5	18.8	20.5	23.9
LnGrp LOS	B	D	B	C	C	B	B	A	C	B	C	C
Approach Vol, veh/h	918				679			412			562	
Approach Delay, s/veh	34.0				25.9			22.8			21.1	
Approach LOS	C				C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R _c), s	10.0	28.9	5.8	35.2	9.6	29.3	9.3	31.7				
Change Period (Y+R _c), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.5	19.0	5.0	32.5	5.1	19.4	5.0	32.5				
Max Q Clear Time (g_c+l1), s	7.5	11.5	2.4	29.2	6.6	9.5	5.2	21.1				
Green Ext Time (p_c), s	0.0	0.9	0.0	1.6	0.0	1.3	0.0	2.9				
Intersection Summary												
HCM 6th Ctrl Delay				27.2								
HCM 6th LOS				C								

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑	↑↗	
Traffic Vol, veh/h	0	35	0	332	405	35
Future Vol, veh/h	0	35	0	332	405	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	38	0	361	440	38
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	239	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.93	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.319	-	-	-	-
Pot Cap-1 Maneuver	0	763	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	763	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB	SB			
HCM Control Delay, s	10	0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR		
Capacity (veh/h)	-	763	-	-		
HCM Lane V/C Ratio	-	0.05	-	-		
HCM Control Delay (s)	-	10	-	-		
HCM Lane LOS	-	B	-	-		
HCM 95th %tile Q(veh)	-	0.2	-	-		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	218	572	130	98	588	201	90	213	29	184	212	202
Future Volume (veh/h)	218	572	130	98	588	201	90	213	29	184	212	202
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	237	622	141	107	639	218	98	232	32	200	230	220
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	308	815	690	288	730	619	371	338	47	340	881	393
Arrive On Green	0.10	0.44	0.44	0.06	0.39	0.39	0.06	0.21	0.21	0.10	0.25	0.25
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1609	222	1781	3554	1585
Grp Volume(v), veh/h	237	622	141	107	639	218	98	0	264	200	230	220
Grp Sat Flow(s), veh/h/ln	1781	1870	1585	1781	1870	1585	1781	0	1830	1781	1777	1585
Q Serve(g_s), s	6.7	25.1	4.9	3.2	28.3	8.7	3.8	0.0	11.9	7.7	4.7	10.8
Cycle Q Clear(g_c), s	6.7	25.1	4.9	3.2	28.3	8.7	3.8	0.0	11.9	7.7	4.7	10.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	308	815	690	288	730	619	371	0	385	340	881	393
V/C Ratio(X)	0.77	0.76	0.20	0.37	0.88	0.35	0.26	0.00	0.69	0.59	0.26	0.56
Avail Cap(c_a), veh/h	397	1011	856	512	1067	904	454	0	385	340	881	393
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.2	21.3	15.6	17.5	25.2	19.3	25.2	0.0	32.6	24.6	27.0	29.4
Incr Delay (d2), s/veh	6.8	2.8	0.1	0.8	5.8	0.3	0.4	0.0	9.6	2.6	0.7	5.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	2.9	10.4	1.7	1.2	12.4	3.2	1.6	0.0	6.2	3.4	2.0	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.0	24.1	15.8	18.3	31.0	19.6	25.6	0.0	42.1	27.2	27.8	35.0
LnGrp LOS	C	C	B	B	C	B	C	A	D	C	C	D
Approach Vol, veh/h	1000				964			362			650	
Approach Delay, s/veh	23.4				27.0			37.7			30.1	
Approach LOS	C				C			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R _c), s	9.5	43.4	9.8	26.7	13.5	39.4	13.2	23.3				
Change Period (Y+R _c), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	16.2	48.3	9.5	18.0	13.5	51.0	8.7	18.8				
Max Q Clear Time (g_c+l1), s	5.2	27.1	5.8	12.8	8.7	30.3	9.7	13.9				
Green Ext Time (p_c), s	0.2	4.2	0.1	1.0	0.3	4.6	0.0	0.6				
Intersection Summary												
HCM 6th Ctrl Delay				27.8								
HCM 6th LOS				C								



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑
Traffic Volume (veh/h)	785	170	120	760	140	135
Future Volume (veh/h)	785	170	120	760	140	135
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00			1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No	No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	853	185	130	826	152	147
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2442	1089	486	2791	213	190
Arrive On Green	0.69	0.69	0.05	0.79	0.12	0.12
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	853	185	130	826	152	147
Grp Sat Flow(s), veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	9.4	3.9	1.8	6.2	7.8	8.5
Cycle Q Clear(g_c), s	9.4	3.9	1.8	6.2	7.8	8.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	2442	1089	486	2791	213	190
V/C Ratio(X)	0.35	0.17	0.27	0.30	0.71	0.78
Avail Cap(c_a), veh/h	2442	1089	687	2791	498	443
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.1	5.3	3.9	2.8	40.2	40.5
Incr Delay (d2), s/veh	0.4	0.3	0.3	0.3	4.4	6.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	2.8	1.1	0.4	1.2	3.6	3.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	6.5	5.6	4.2	3.1	44.6	47.2
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	1038			956	299	
Approach Delay, s/veh	6.3			3.3	45.8	
Approach LOS	A			A	D	
Timer - Assigned Phs	1	2		6		8
Phs Duration (G+Y+R _c), s	9.3	69.7		79.0		15.8
Change Period (Y+R _c), s	4.5	4.5		4.5		4.5
Max Green Setting (G _{max})	5.5	54.5		74.5		26.5
Max Q Clear Time (g_c+l _{3.8})	11.4			8.2		10.5
Green Ext Time (p_c), s	0.2	7.2		6.2		0.8

Intersection Summary

HCM 6th Ctrl Delay	10.2
HCM 6th LOS	B

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑	↑↗	
Traffic Vol, veh/h	0	35	0	391	329	35
Future Vol, veh/h	0	35	0	391	329	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	38	0	425	358	38
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	-	198	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.93	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.319	-	-	-	-
Pot Cap-1 Maneuver	0	811	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	-	811	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB	SB			
HCM Control Delay, s	9.7	0	0			
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR		
Capacity (veh/h)	-	811	-	-		
HCM Lane V/C Ratio	-	0.047	-	-		
HCM Control Delay (s)	-	9.7	-	-		
HCM Lane LOS	-	A	-	-		
HCM 95th %tile Q(veh)	-	0.1	-	-		

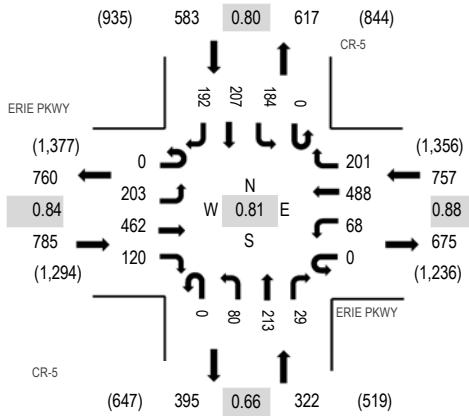
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	742	137	43	547	155	148	199	44	193	184	175
Future Volume (veh/h)	121	742	137	43	547	155	148	199	44	193	184	175
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	132	807	149	47	595	168	161	216	48	210	200	190
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	330	895	758	197	855	724	368	296	66	299	770	343
Arrive On Green	0.06	0.48	0.48	0.04	0.46	0.46	0.07	0.20	0.20	0.08	0.22	0.22
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1482	329	1781	3554	1585
Grp Volume(v), veh/h	132	807	149	47	595	168	161	0	264	210	200	190
Grp Sat Flow(s), veh/h/ln	1781	1870	1585	1781	1870	1585	1781	0	1811	1781	1777	1585
Q Serve(g_s), s	3.5	35.6	4.9	1.2	22.8	5.8	6.0	0.0	12.3	7.5	4.2	9.6
Cycle Q Clear(g_c), s	3.5	35.6	4.9	1.2	22.8	5.8	6.0	0.0	12.3	7.5	4.2	9.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	330	895	758	197	855	724	368	0	362	299	770	343
V/C Ratio(X)	0.40	0.90	0.20	0.24	0.70	0.23	0.44	0.00	0.73	0.70	0.26	0.55
Avail Cap(c_a), veh/h	411	895	758	227	855	724	368	0	362	299	770	343
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.92	0.92	0.92	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.9	21.5	13.5	18.6	19.5	14.8	26.9	0.0	33.7	28.7	29.3	31.4
Incr Delay (d2), s/veh	0.7	13.1	0.5	0.6	4.7	0.7	0.8	0.0	12.1	7.2	0.8	6.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	1.3	16.7	1.8	0.5	9.9	2.2	2.8	0.0	6.5	4.2	1.9	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.6	34.7	14.1	19.3	24.1	15.6	27.7	0.0	45.9	35.8	30.1	37.7
LnGrp LOS	B	C	B	B	C	B	C	A	D	D	C	D
Approach Vol, veh/h	1088				810			425			600	
Approach Delay, s/veh	29.6				22.1			39.0			34.5	
Approach LOS		C			C			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R _c), s	8.0	47.5	10.5	24.0	9.9	45.6	12.0	22.5				
Change Period (Y+R _c), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	41.5	6.0	19.5	9.5	37.0	7.5	18.0				
Max Q Clear Time (g_c+l1), s	3.2	37.6	8.0	11.6	5.5	24.8	9.5	14.3				
Green Ext Time (p_c), s	0.0	2.0	0.0	1.2	0.1	3.3	0.0	0.5				
Intersection Summary												
HCM 6th Ctrl Delay				29.9								
HCM 6th LOS				C								



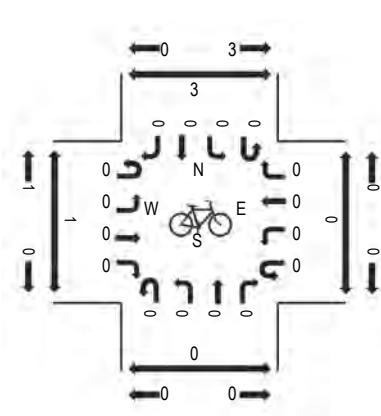
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑
Traffic Volume (veh/h)	845	150	110	760	165	155
Future Volume (veh/h)	845	150	110	760	165	155
Initial Q (Q _b), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No	No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	918	163	120	826	179	168
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2405	1073	458	2748	237	211
Arrive On Green	0.68	0.68	0.05	0.77	0.13	0.13
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	918	163	120	826	179	168
Grp Sat Flow(s), veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	10.8	3.6	1.8	6.6	9.3	9.9
Cycle Q Clear(g_c), s	10.8	3.6	1.8	6.6	9.3	9.9
Prop In Lane	1.00	1.00	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	2405	1073	458	2748	237	211
V/C Ratio(X)	0.38	0.15	0.26	0.30	0.75	0.80
Avail Cap(c_a), veh/h	2405	1073	656	2748	490	436
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.8	5.6	4.4	3.2	40.2	40.5
Incr Delay (d2), s/veh	0.5	0.3	0.3	0.3	4.8	6.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	3.3	1.0	0.4	1.4	4.4	4.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	7.2	5.9	4.7	3.5	45.0	47.1
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	1081			946	347	
Approach Delay, s/veh	7.0			3.7	46.1	
Approach LOS	A			A	D	
Timer - Assigned Phs	1	2		6		8
Phs Duration (G+Y+Rc), s	9.3	69.7		79.0		17.3
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5
Max Green Setting (Gmax)	5.5	54.5		74.5		26.5
Max Q Clear Time (g_c+l)	13.8	12.8		8.6		11.9
Green Ext Time (p_c), s	0.2	7.7		6.2		0.9
Intersection Summary						
HCM 6th Ctrl Delay			11.4			
HCM 6th LOS			B			

Location: 1 CR-5 & ERIE PKWY AM
Date: Tuesday, September 24, 2024
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

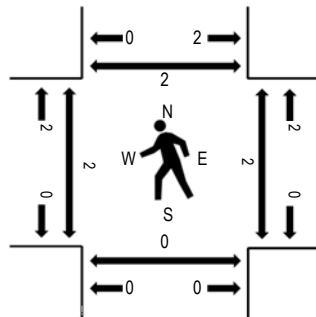
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



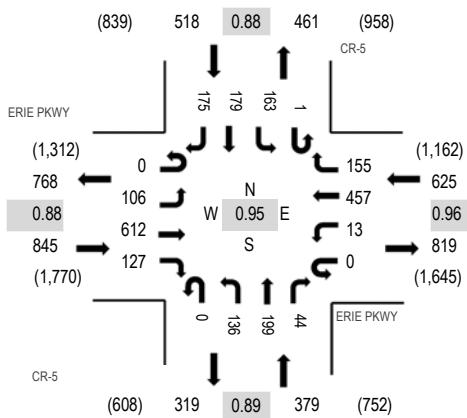
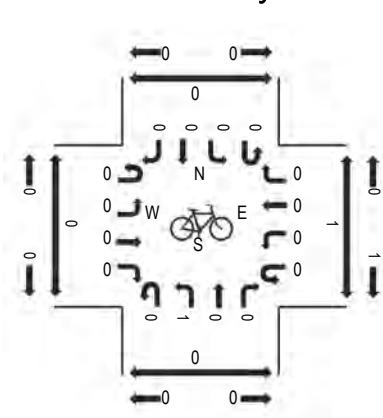
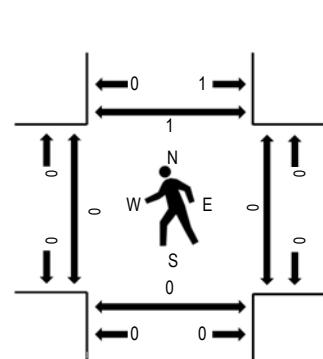
Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	ERIE PKWY Eastbound				ERIE PKWY Westbound				CR-5 Northbound				CR-5 Southbound				Rolling Hour		Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	West	East	South	North	
7:00 AM	0	23	101	12	0	17	89	30	0	15	18	7	0	45	16	16	389	2,268	0	0	0	0
7:15 AM	0	63	113	16	0	18	111	52	0	9	61	7	0	42	29	38	559	2,447	0	2	0	0
7:30 AM	0	78	125	30	0	17	123	75	0	20	96	6	0	55	71	62	758	2,372	2	0	0	2
7:45 AM	0	27	102	40	0	17	131	34	0	28	18	4	0	47	61	53	562	1,994	0	0	0	0
8:00 AM	0	35	122	34	0	16	123	40	0	23	38	12	0	40	46	39	568	1,836	0	0	0	0
8:15 AM	0	16	99	20	0	19	126	20	0	21	26	10	0	41	37	49	484		0	0	0	0
8:30 AM	0	8	75	19	0	14	123	18	0	14	19	12	0	23	32	23	380		0	0	0	0
8:45 AM	0	7	104	25	0	16	106	21	0	16	21	18	0	26	25	19	404		0	0	0	0
Count Total	0	257	841	196	0	134	932	290	0	146	297	76	0	319	317	299	4,104		2	2	0	2
Peak Hour	0	203	462	120	0	68	488	201	0	80	213	29	0	184	207	192	2,447		2	2	0	2

Peak Hour - Motorized Vehicles

Peak Hour - Bicycles

Peak Hour - Pedestrians


Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	ERIE PKWY Eastbound				ERIE PKWY Westbound				CR-5 Northbound				CR-5 Southbound				Rolling Hour	Pedestrian Crossings				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		West	East	South	North	
4:00 PM	0	50	183	35	0	7	81	33	0	28	54	21	0	24	25	23	564	2,158	0	0	0	0
4:15 PM	0	33	170	30	0	7	86	55	0	35	47	14	0	24	37	13	551	2,214	0	0	0	0
4:30 PM	0	27	164	42	0	4	83	30	0	24	43	19	0	26	27	17	506	2,258	0	0	0	0
4:45 PM	0	37	148	28	0	3	97	32	0	31	49	14	1	25	40	32	537	2,367	0	0	0	0
5:00 PM	0	23	159	35	0	3	121	44	0	19	55	12	0	49	41	59	620	2,365	0	0	0	1
5:15 PM	0	24	158	32	0	4	124	36	0	42	41	10	0	33	49	42	595	0	0	0	0	0
5:30 PM	0	22	147	32	0	3	115	43	0	44	54	8	0	56	49	42	615	0	0	0	0	0
5:45 PM	0	23	144	24	0	4	90	57	0	30	45	13	0	24	47	34	535	0	0	0	0	0
Count Total	0	239	1,273	258	0	35	797	330	0	253	388	111	1	261	315	262	4,523	0	0	0	0	1
Peak Hour	0	106	612	127	0	13	457	155	0	136	199	44	1	163	179	175	2,367	0	0	0	0	1

NCHRP 684 Internal Trip Capture Estimation Tool					
Project Name:	Erie Highlands		Organization:	ATC	
Project Location:	Erie, Colorado		Performed By:	jmwa	
Scenario Description:			Date:	12/18/2024	
Analysis Year:			Checked By:		
Analysis Period:	AM Peak Hour		Date:		

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips ³		
	ITE LUCs ¹	Quantity	Units	Total	Entering	Exiting
Office				216	131	85
Retail				277	142	135
Restaurant				317	157	160
Cinema/Entertainment				0	0	0
Residential				0		
Hotel				0		
All Other Land Uses ²				0	0	0
				810	430	380

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ. ⁴	% Transit	% Non-Motorized	Veh. Occ. ⁴	% Transit	% Non-Motorized
Office	1.00	0%	5%	1.00	0%	5%
Retail	1.00	0%	5%	1.00	0%	5%
Restaurant	1.50	0%	5%	1.50	0%	5%
Cinema/Entertainment	0.00	0%	0%	0.00	0%	0%
Residential						
Hotel						
All Other Land Uses ²	1.00			1.00		

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		24	54	0	0	0
Retail	5		18	0	0	0
Restaurant	18	11		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	969	509	460
Internal Capture Percentage	27%	26%	28%
External Vehicle-Trips ⁵	555	309	246
External Transit-Trips ⁶	0	0	0
External Non-Motorized Trips ⁶	35	18	17

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	18%	92%
Retail	25%	17%
Restaurant	31%	12%
Cinema/Entertainment	N/A	N/A
Residential	N/A	N/A
Hotel	N/A	N/A

¹Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

²Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

³Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

⁴Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

⁵Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

⁶Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 684 Internal Trip Capture Estimation Tool					
Project Name:	Erie Highlands	Organization:	ATC		
Project Location:		Performed By:	JMWA		
Scenario Description:	Commercial Area	Date:	2/19/2022		
Analysis Year:		Checked By:			
Analysis Period:	PM Street Peak Hour	Date:			

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips ³		
	ITE LUCs ¹	Quantity	Units	Total	Entering	Exiting
Office				33	10	23
Retail				621	315	306
Restaurant				361	187	174
Cinema/Entertainment				0	0	0
Residential				0		
Hotel				0		
All Other Land Uses ²				0	0	0
				1,015	512	503

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ. ⁴	% Transit	% Non-Motorized	Veh. Occ. ⁴	% Transit	% Non-Motorized
Office	1.00	0%	5%	1.00	0%	5%
Retail	1.50	0%	5%	1.50	0%	5%
Restaurant	1.50	0%	5%	1.50	0%	5%
Cinema/Entertainment	1.50	0%	0%	1.50	0%	0%
Residential						
Hotel						
All Other Land Uses ²	1.00	0%	0%	1.00	0%	0%

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		1320	1320		1320	
Retail					1320	
Restaurant					1320	
Cinema/Entertainment					1320	
Residential		1320	1320			
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		3	1	0	0	0
Retail	3		81	0	0	0
Restaurant	3	107		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	1,507	764	743
Internal Capture Percentage	26%	26%	27%
External Vehicle-Trips ⁵	710	360	350
External Transit-Trips ⁶	0	0	0
External Non-Motorized Trips ⁶	56	28	28

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	60%	17%
Retail	23%	18%
Restaurant	29%	42%
Cinema/Entertainment	N/A	N/A
Residential	N/A	N/A
Hotel	N/A	N/A

¹Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

²Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

³Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

⁴Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be

⁵Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

⁶Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Traffic Signal Warrant Analysis

Summary Worksheet

70%

The Worksheet(s) attached are provided as an attachment to the Engineering Investigation Study for:

Intersection: Glacier - Erie Parkway

County: Larimer

Town: ERIE

Major Street: Erie Parkway

Minor Street: Glacier Dr.

Critical Approach Speed: 45 mph

Critical Approach Speed: 25 mph

Lanes: 2 or more lanes

Lanes: 2 or more lanes

% Right Turns Included

In built-up area of isolated community of < 10,000 population? No

From North (SB) 0%

Total number of approaches at intersection? 3

From East (WB) 100%

If it is a "T" intersection, inflate minor threshold to 150%? No

From South (NB) 50%

Manually set volume level? 70%

From West (EB) 100%

Analysis based on PROJECTED volume data.

Forecast Year	Within 5 Years of Construction?	Time (HH:MM)			
		From	AM / PM	To	AM / PM
2027	Yes	6	AM	10	PM

Warrant Evaluation Summary		Warrant Met:
Warrant 1: Eight - Hour Vehicular Volume		Yes
Condition A: Minimum Vehicular Volume		No
Condition B: Interruption of Continuous Traffic		Yes
Condition C: Combination: 80% of A and B		Yes
Warrant 2: Four-Hour Volume		Yes
Warrant 3: Peak Hour Volume		Yes
Warrant 4: Pedestrian Volume		N/A
Criterion A: Four-Hour		
Criterion B: Peak-Hour		
Warrant 5: School Crossing		N/A
Warrant 6: Coordinated Signal System		N/A
Warrant 7: Crash Experience		N/A
Warrant 8: Roadway Network		Yes
Warrant 9: Intersection Near a Grade Crossing		N/A

Warrant Analysis Conducted By:

Name: John Aldridge

Agency: Aldridge Transportation Consultants

Date: 12/13/2024

Warrant 1: Eight - Hour Vehicular Volume

70%

Warrant Evaluated? Yes

Condition A :		
Min. Veh. Volume		
Volume Level	70%	56%
Major Rd. Req	420	336
Minor Rd. Req	140	112
Number of Hours	1	8

Satisfied? No

Condition B:		
Interruption of Continuous Traffic		
Volume Level	70%	56%
Major Rd. Req	630	504
Minor Rd. Req	70	56
Number of Hours	15	16

Satisfied? Yes

Condition C:		
Combination of A & B at 56%		
Satisfied? Yes		

Warrant Satisfied? Yes

Manually Set To: Yes

6:00 AM		Enter Start Time (Military Time) (HH:MM)			Total
Time Period	From	To	Major Road: Both App. (VPH)	Minor Road: High App. (VPH)	
1	6:00	7:00	740	65	805
2	7:00	8:00	1300	98	1398
3	8:00	9:00	1240	104	1344
4	9:00	10:00	920	94	1014
5	10:00	11:00	980	89	1069
6	11:00	12:00	1060	131	1191
7	12:00	13:00	1140	154	1294
8	13:00	14:00	1220	129	1349
9	14:00	15:00	1320	119	1439
10	15:00	16:00	1500	127	1627
11	16:00	17:00	1780	127	1907
12	17:00	18:00	1740	132	1872
13	18:00	19:00	1440	137	1577
14	19:00	20:00	1020	111	1131
15	20:00	21:00	920	99	1019
16	21:00	22:00	660	73	733

Warrant 2: Four-Hour Volume

70%

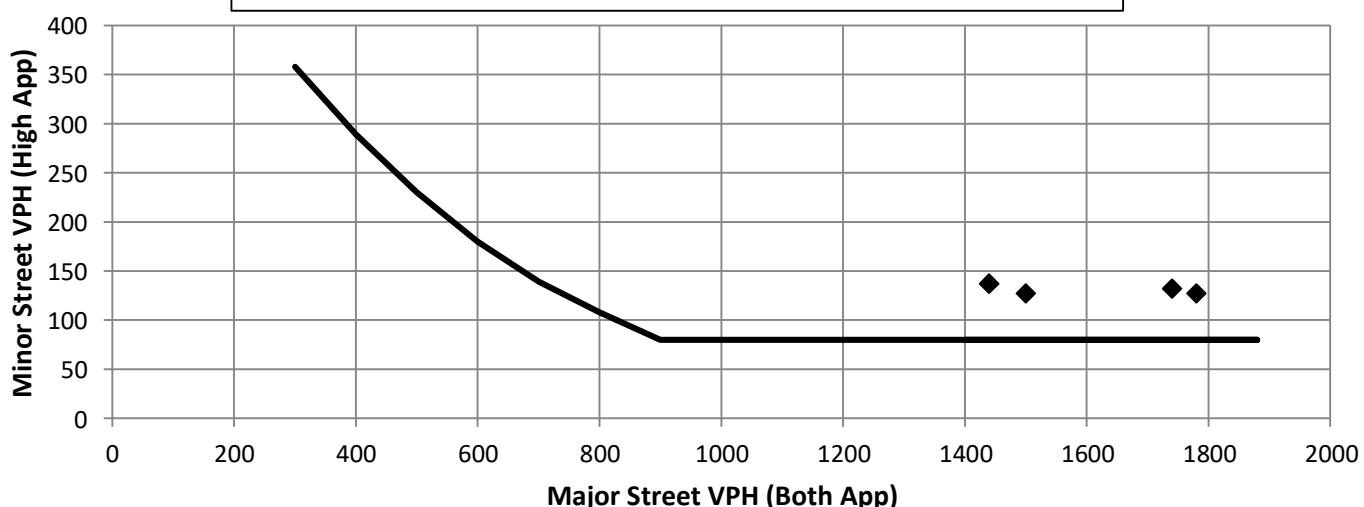
Warrant Evaluated? Yes

Warrant Satisfied? Yes

Manually Set To: Yes

Hour Start	16:00	17:00	15:00	18:00
Major Road Vol.	1780	1740	1500	1440
Minor Road Vol.	127	132	127	137

Figure 4C-2 Warrant 2, Four-Hour Vehicular Volume (70% Factor)



Warrant 3: Peak Hour Volume

70%

Warrant Evaluated? Yes

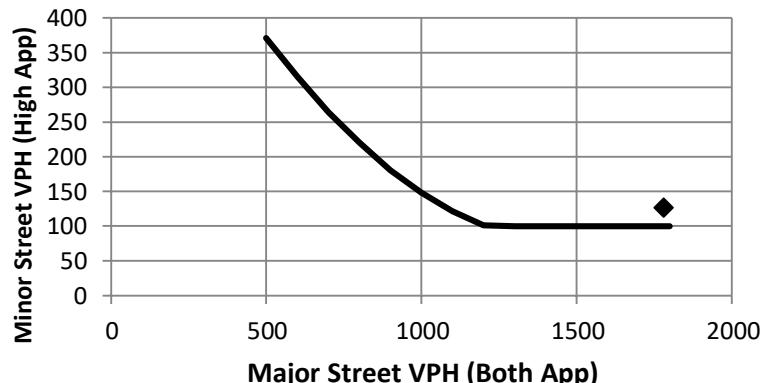
Condition justifying use of warrant:

Criteria	Met?
Delay on Minor Approach	5
Volume on Minor Approach	150
Total Entering Volume (veh/h)	650

Warrant Satisfied? Yes

Manually Set To: Yes

Figure 4C-4 Warrant 3, Peak Hour (70% Factor)



Manually Set Peak Hour? No

Peak Hour	Major Road Vol. (Both App.)	Minor Road Vol. (High App.)
16:00	1780	127

Warrant 4: Pedestrian Volume

70%

Warrant Evaluated?

Warrant Satisfied? N/A

Manually Set To:

Criterion A: Four Hour

Hour (Start)	Pedestrian Volume	Major Road Vol.
0:00	0	#N/A

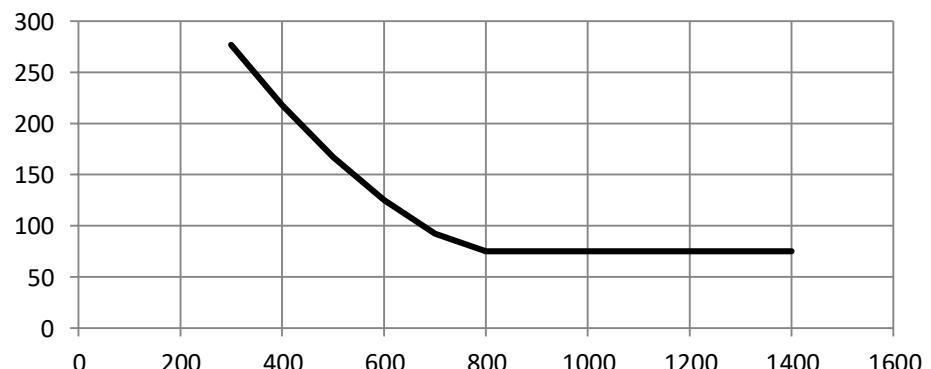
No

Avg. walk speed less than 3.5 ft/s?

No

Criterion A Satisfied?

Figure 4C-6 Warrant 4, Pedestrian Four-Hour Volume (70% Factor)

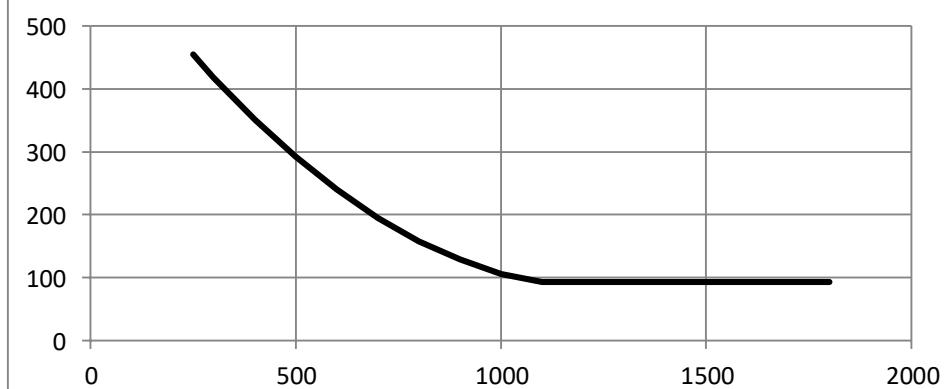


Criterion B: Peak Hour

Peak Hour	Pedestrian Vol.	Major Road Vol.
#N/A	#N/A	#N/A

Criterion B Satisfied?

Figure 4C-8 Warrant 4, Pedestrian Peak Hour (70% Factor)



Warrant 5: School Crossing

70%

Warrant Evaluated?

Warrant Satisfied? N/A

Manually Set To:

Fulfilled?

Criteria

1	There are a MINIMUM of 20 school children during the highest crossing hour.	
2	There are fewer adequate gaps in the major road traffic stream during the period when the school children are using the crossing than the number of minutes in the same period.	
3	The nearest traffic signal along the major road is located more than 300 ft away. Or, the nearest traffic signal is within 300 ft but the proposed traffic signal will not restrict the progressive movement of traffic.	

Warrant 6: Coordinated Signal System

70%

Warrant Evaluated?

Warrant Satisfied? N/A

Manually Set To:

Fulfilled?

Criteria

1	Signal spacing > 1000 ft	
2	On a one-way road or a road that has traffic predominantly in one direction, the adjacent signals are so far apart that they do not provide the necessary degree of vehicle platooning.	
3	On a two-way road, adjacent signals do not provide the necessary degree of platooning and the proposed and the adjacent signals will collectively provide a progressive operation.	

Warrant 7: Crash Experience

70%

Warrant Evaluated?

Warrant Satisfied? N/A

Manually Set To:

Met? Fulfilled?

Criteria

1	Adequate trial of other remedial measures has failed to reduce crash frequency.			
	Measures Tried:			
2	Five or more reported crashes, of types susceptible to correction by signal, have occurred within a 12 month period.		# of crashes per 12 months	
3	Warrant 1, Condition A (80%)		Yes	
	Warrant 1, Condition B (80%)		Yes	
	Warrant 4, Criterion A (80%)		#N/A	
	Warrant 4, Criterion B (80%)		#N/A	

Warrant 8: Roadway Network

70%

Warrant Evaluated? Yes

Warrant Satisfied? Yes

Manually Set To: Yes

Met? Fulfilled?

Criteria

1	Total entering volume of at least 1,000 veh/h during typical weekday peak hour		1907	Yes	
	Five-year projected volumes that satisfy one or more of Warrants 1, 2, or 3.		2	Yes	
2	Total entering vol. of at least 1,000 veh/h for each of any 5 hrs of non-normal business day (Sat. or Sun.)	Hour			

Hour				
Volume				

Characteristics of Major Routes - Select yes if all intersecting routes have characteristic

Fulfilled?

1	Part of the road or highway system that serves as the principal roadway network for through traffic flow		Yes
2	Rural or suburban highway outside of, entering, or traversing a city		Yes
3	Appears as a major route on an official plan		Yes

Warrant 9: Intersection Near a Grade Crossing

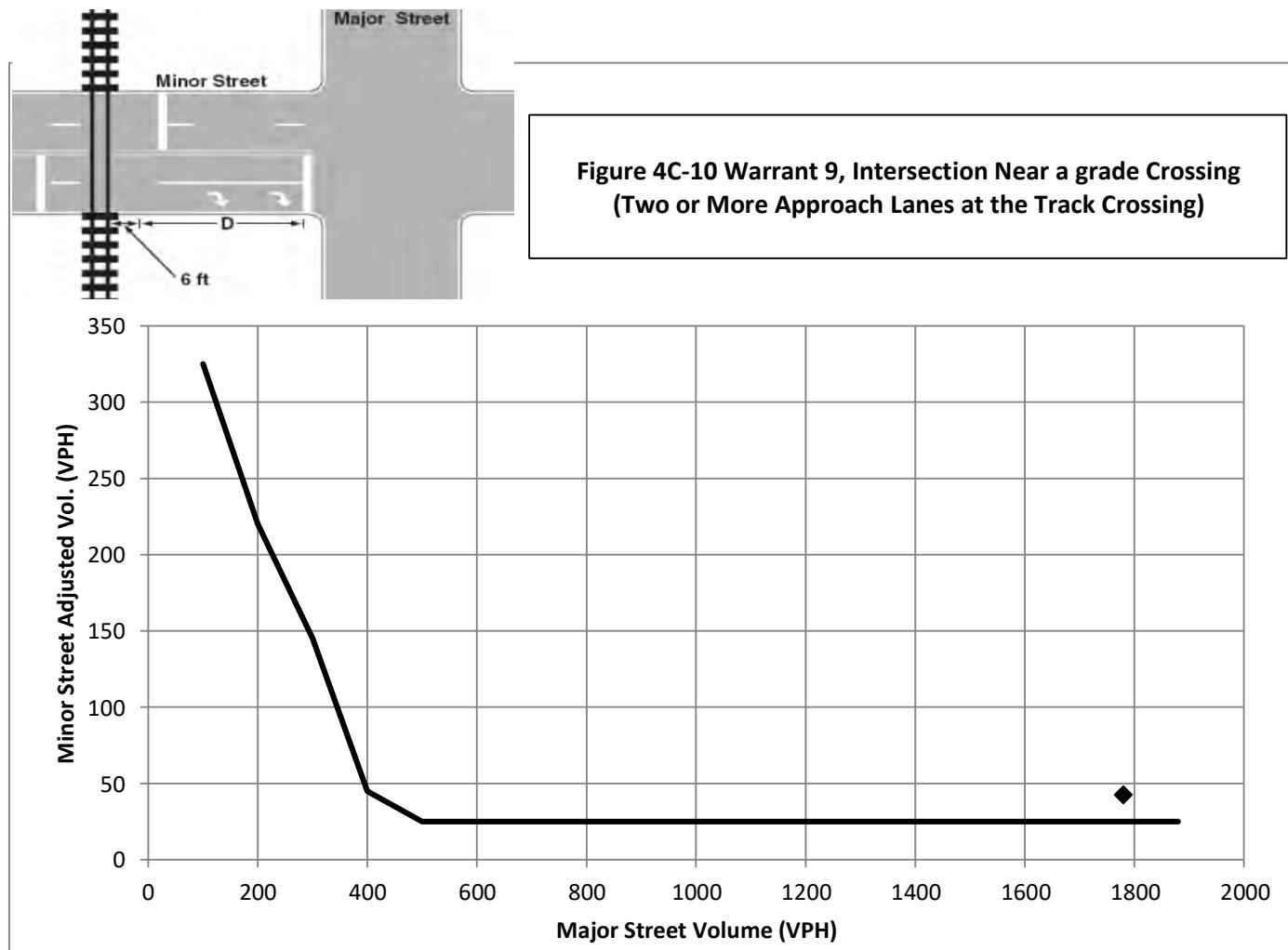
70%

Warrant Evaluated?

Warrant Satisfied? N/A

Manually Set To:

Adjustment Factors			Manually Set Peak Hour?				
Rail Traffic per Day	% High Occupancy Buses on Minor Road	% Tractor-Trailer Trucks on Minor Road	D	Peak Hour	Major Road Vol.	Minor Road Vol.	Adjusted Minor Vol.
1	0	0% to 2.5%	660	16:00	1780	127	42.545



Conclusions/Comments:

Updated: 12/6/2017