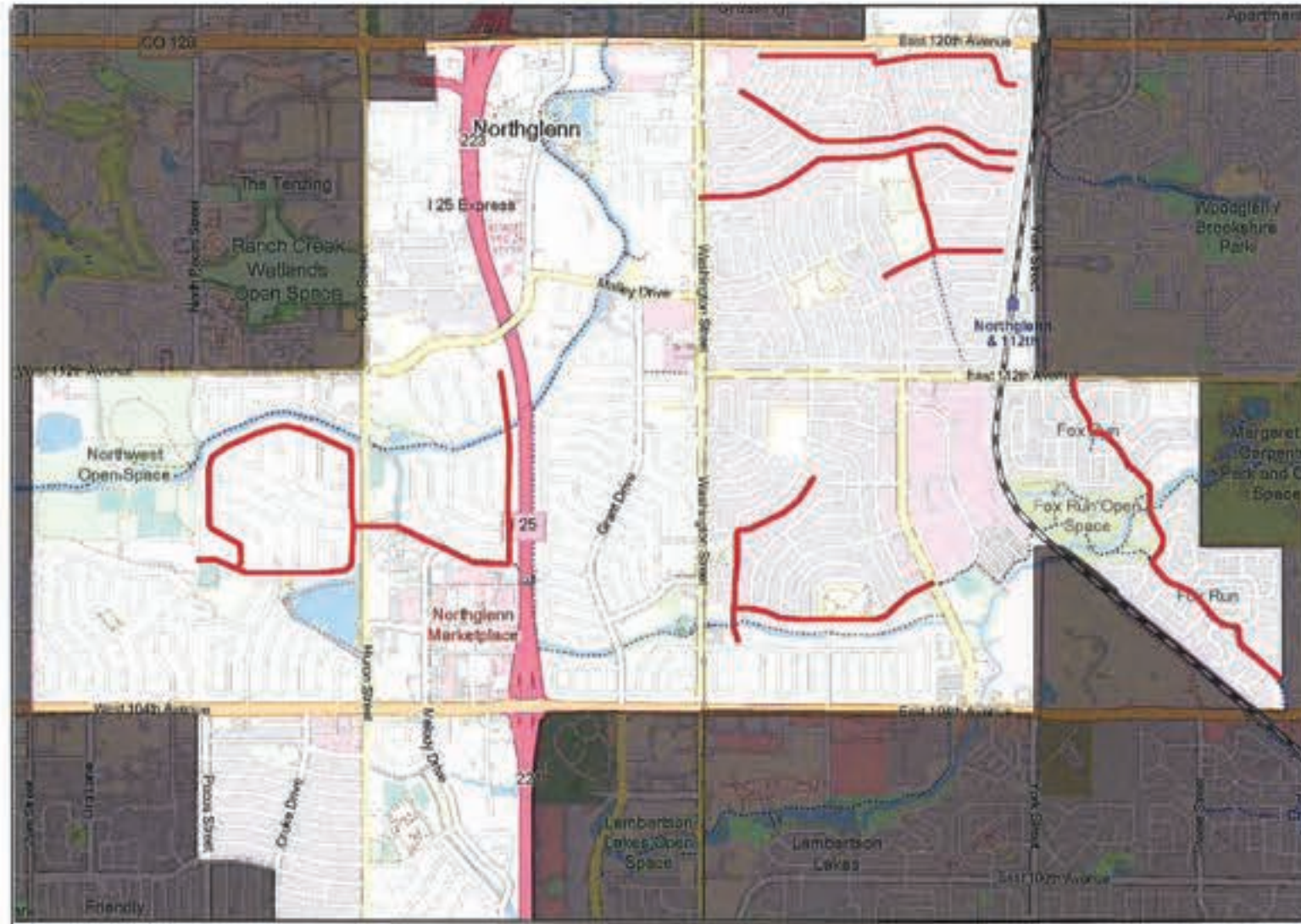


Oversight / NHS

FHWA PROJECTS OF DIVISION INTEREST (PoDI) OVERSIGHT?  NO  YES  
 NATIONAL HIGHWAY SYSTEM?  NO  YES

# DEPARTMENT OF TRANSPORTATION STATE OF COLORADO

HIGHWAY CONSTRUCTION BID PLANS OF PROPOSED  
CONNECT NORTHGLENN MULTIMODAL IMP-SMS  
CITY OF NORTHGLENN, COLORADO  
CDOT PROJECT NUMBER: STU M945-007, 24362



PROJECT MAP

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Print Date: 7/20/2022  
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12301 Claude Ct  
Northglenn, CO 80241

Sheet Revisions		
Date:	Comments	Init.



As Constructed	CONNECT NORTHGLENN TITLE SHEET		Project No. STU M945-007, 24362
No Revisions:	Designer: KH	Structure	Drawing Number 1
Revised:	Detailer: KH	Numbers	Sheet Number 1
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**COLORADO  
DEPARTMENT OF TRANSPORTATION  
M&S STANDARDS PLANS LIST**

July 31, 2019

Revised on February 17, 2023

ALL OF THE M&S STANDARD PLANS, AS SUPPLEMENTED  
AND REVISED, APPLY TO THIS PROJECT WHEN USED  
BY DESIGNATED PAY ITEM OR SUBSIDIARY ITEM.

THE M&S STANDARD PLANS USED TO DESIGN THIS PROJECT ARE  
INDICATED BY A MARKED BOX ■, AND WILL BE ATTACHED TO THE  
PLANS. ALL OTHER M&S STANDARD PLANS ARE STILL ELIGIBLE FOR USE  
IN CONSTRUCTION IF APPROVED BY AN APPROPRIATE CDOT ENGINEER.

Computer File Information		Sheet Revisions		Colorado Department of Transportation  2829 West Howard Place CDOT HQ, 3rd Floor Denver, CO 80204 Phone: 303-757-9021 FAX: 303-757-9868 Construction Engineering Services JBK	<h1 align="center">STANDARD PLANS LIST</h1>	STANDARD PLAN NO.
Creation Date: 07/31/19		Date:	Comments			STANDARDS PLANS LIST
Designer Initials: JBK	<input type="checkbox"/> (R-X)					Standard Sheet No. 1 of 1
Last Modification Date: 02/17/23	<input type="checkbox"/> (R-X)					Project Sheet Number:
Detailer Initials: LTA	<input type="checkbox"/> (R-X)					
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English		<input type="checkbox"/> (R-X)				

GENERAL NOTES

DIVISION 100 GENERAL PROVISIONS

- 1) All construction shall be in accordance with the Colorado Department of Transportation Standard Specifications for Road and Bridge Construction (Current Edition at Project Award), the M&S Standard Plans (as indicated on the Standard Plans List), and the Field Materials Manual (Current Edition at Project Award).
- 2) No Right-Of-Way acquisition will be needed for this project. All work will be completed entirely within the existing Right-of-Way.
- 3) The Contractor shall limit construction activities to construction limits as shown in the plans unless otherwise directed by the Engineer. Any disturbance beyond these limits shall be restored to the original condition by the Contractor at their own expense. Construction activities, in addition to normal construction procedures, shall include the parking of vehicles or equipment, disposal of litter and any other action which would alter existing conditions.
- 4) The Contractor shall keep existing drainage structures functional and maintain drainage to those structures. Maintaining drainage will not be paid for separately, but shall be included in the work.
- 5) The Contractor shall protect all existing survey monumentation from damage during construction operations. Any monuments disturbed by the contractor that are not designated for relocation, shall be reset at the Contractor's expense. The Contractor and Engineer shall note those monuments in the field prior to construction.
- 6) It is estimated that 2 Sanitary Facilities will be required on this project. Sanitary Facilities shall be fully operational before construction can begin. Sanitary Facility pay item shall include cleaning a minimum of twice a week.
- 7) The Contractor shall implement a containment system preventing all construction/removal debris from falling into waterbodies or the ground below.
- 8) During construction over roadways, the Contractor shall provide a means of protection to the traveling public from falling debris by approved traffic control measures of screening, etc. Such protection shall be approved by the Engineer prior to any demolition or construction. Any debris that falls into the travelway shall be removed immediately and all work shall stop until the issue is addressed and approved by the Engineer. All protection measures shall be included in the cost of the work and not paid for separately.
- 9) Contractor may work on multiple structures and/or multiple locations concurrently to meet the project time count schedule.
- 10) The Contractor shall comply with all Local Agency(s) noise ordinances and/or other restrictions applicable to nighttime construction activities for projects within the local municipal coverage areas. Projects falling within unincorporated areas of a County will be governed by County Code. The Contractor shall coordinate with the Local Agency(s) and/or CDOT for all necessary noise exemptions or notices, noise permit variances, and approvals to do night work as required. If Local Agency nighttime noise restrictions do not exist and there are

noise sensitive receptors in the project area, the approvals to do nighttime work shall be approved through the CDOT Engineer. Standard noise controls and best management practices for reducing equipment and construction activity noise levels shall be utilized in all cases and will be the responsibility of the contractor to consistently employ when working in noise sensitive areas after 7:00 p.m.

- 11) For this project, the Contractor is required to review and understand all local agency ordinances with project applicable night restrictions. When conditions apply, the contractor shall submit a nighttime noise ordinance memorandum(s) to all jurisdictional local authorities. This memorandum shall request construction noise exemptions for night work operations (at least two weeks prior to the proposed night work start date) where construction work is scheduled between the hours of 7:00 p.m. and 7:00 a.m. The following information should be included in the exemption request submittals and sent to the City/County Engineer: (1) Requesting entity, (2) Contact person and phone number, (3) Location of the work, (4) Reasons night work is being requested, (5) Type of activities proposed to occur at night, (6) Equipment proposed to be used at night, (7) Start and end date proposed, (8) Total number of nights work is proposed to occur.
- 12) All nighttime construction activities subject to noise level restrictions cannot begin until the necessary documentation and notifications have been approved by the local agency authority, the CDOT Engineer and /or the Region's Noise Specialist. All exemption requests and permitting requirements will not be paid for separately, but will be included in the work.
- 13) No parking or staging shall occur within open space areas or trails adjacent to the project.
- 14) If paleontological resources are uncovered during project construction, work in the immediate area of the find should cease, and Dr. Nicole Peavey (nicole.peavey@state.co.us) should be notified as soon as possible per Section 107.23 of the Standard Specifications.

UTILITIES

- 15) Utilities as shown on the plan sheets are plotted from the best available information. The contractor's attention is directed to subsection 105.11 of the standard specifications concerning utilities. The contractor shall comply with article 1.5 of title 9, CRS ("excavation requirement") when excavating or grading is planned in the area of underground utilities.
- 16) Utilities are depicted on these plans in accordance with their achieved quality level as defined in the American society of civil engineer's document ASCE 38 "standard guideline for the collection and depiction of existing subsurface utility data." reliance upon this data for risk management purposes during bidding does not relieve the excavator or utility owner from following all applicable utility damage prevention statutes, policies, and/or procedures during construction.

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**GENERAL NOTES**

- 17) The Contractor shall contact the Utility Notification Center of Colorado (UNCC) at 811 to have locations of UNCC registered lines marked by member companies. All other underground facilities shall be located by contacting the respective owner. Utility service laterals shall also be located prior to beginning excavation or grading.
- 18) The Contractor shall be responsible for verifying the location and depth of all existing utilities as necessary to ensure that the utilities will not be impacted by construction activities. If existing utilities are within close proximity horizontally or vertically to proposed installations, the contractor shall contact the Engineer. Any existing utility, which is to remain but is damaged as a result of the contractor's operation, shall be replaced at the contractor's expense.

**DIVISION 200 EARTHWORK**

- 19) Erosion/Sediment Control measures must be implemented before construction. All Erosion/Sediment Control BMPs shall be placed as needed according to the construction phasing and as approved by the Engineer. All Erosion/Sediment Control and Stormwater responsibilities are as stated in the Stormwater Management Plan.
- 20) The Contractor shall protect all storm sewer facilities and waterways adjacent to any work location including, but not limited to where pavement cutting operations involving sawcutting, grinding, sandblasting, asphalt planing, paving or other activity that may result in pollution per the Stormwater Management Plan or as directed by the Engineer. The Contractor shall remove and properly dispose of all water products generated by operations, including, but not limited to cutting operations on a daily basis. The discharge of any water contaminated by waste products from cutting operations to the storm sewer is prohibited. The cost of the containment and removal of water products shall not be measured and paid for separately, but shall be included in the work.
- 21) The Contractor shall remove on a daily basis all sediment, mud, debris, or other potential pollutants which may be discharged to, or accumulate in the flow lines and public right-of-ways as a result of construction activities associated with this project. The cost of tile containment and removal of debris shall not be measured and paid for separately, but shall be included in the work.
- 22) All inlets shall be protected during milling and paving operations. The protection shall be removed at the end of each day. The cost of protection shall be included in the work.
- 23) All removals shall become the property of the Contractor unless otherwise indicated in the plans and project specifications. The Contractor shall properly dispose of all materials, Disposal of material, regardless of property ownership shall be in accordance with all State, Federal, and Local Environmental Regulations.
- 24) Dust control shall be the responsibility of the Contractor. The cost of this work will not be paid for separately, but shall be included in the work. Water shall be used as a dust palliative where required. Locations shall be as directed by the Engineer.


**DIVISION 400 PAVEMENT**

- 25) In areas where cutting or patching is necessary, the pavement shall be cut to a neat line as directed by the Engineer. Sawcutting will not be paid for separately, but shall be included in the cost of work.

- 26) Roadways shall be free of any loose debris before being opened to traffic. Sweeping shall be done with a pick-up broom. The cost of the removal, disposal, and cleaning shall not be paid for separately but shall be included in the cost of work.
- 27) Public Information Services (Tier III) will be required on this project. See Special Provisions for details.
- 28) No traffic shall be detoured onto roadway shoulders unless shown in the plans or previously approved by Engineer, if the Contractor detours traffic onto shoulders, the Contractor shall sweep at the direction of the Engineer. If the sweeping is not construction related it will be paid for as **Sweeping (Sediment Removal)** per hour.
- 29) No equipment or material stockpiles shall be left in the work zone or clear zone other than during established and approved time, and during work being performed.
- 30) It is estimated that the following items and quantities will be required for this project as approved and/or directed by the CDOT Project Engineer:

Pay Item	Description	Pay Unit	Initial Const.	Interim Const.	Permanent Stabilization	*Total Quantity
209-00002	Erosion Log Type 1 (12 inch)	LF	100	50		150
209-00035	Aggregate Bag	LF	30	30		60
209-00046	Pre-fabricated Concrete Washout Structure (Type 1)	EA	1			1
209-00106	Sweeping (Sediment Removal)	HR		10		10
212-00700	Organic Fertilizer	LBS			5	5
212-00708	Seeding (Native) Broadcast	ACRE			0.01	0.01
213-00012	Spray-on Mulch Blanket	ACRE			0.01	0.01
607-11525	Fence (Plastic)	LF	50			50

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Detailer:	KH	Numbers	
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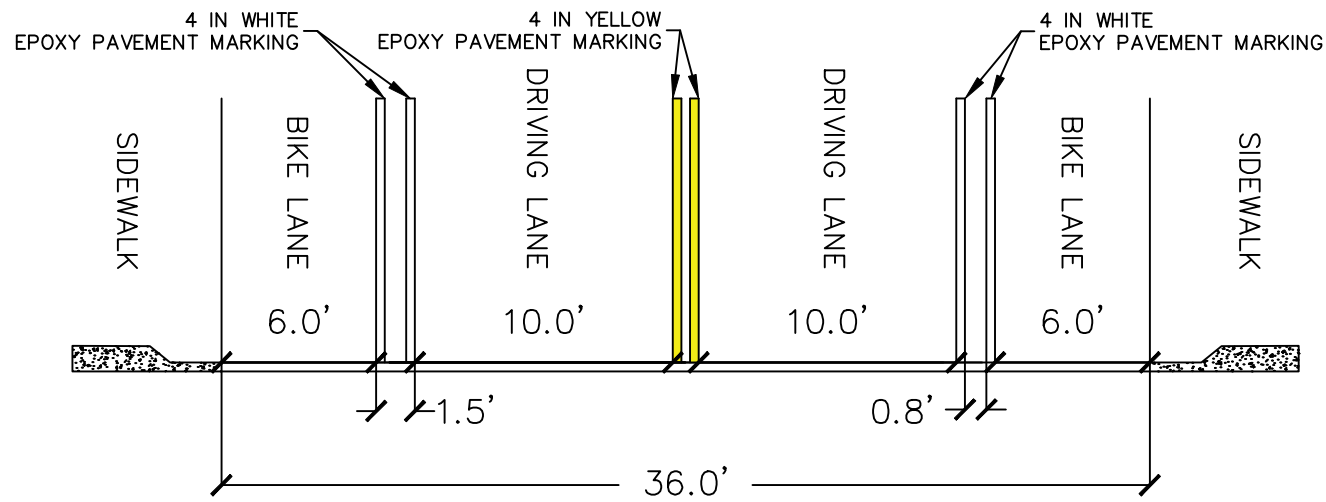
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- 31) In the unlikely event that suspected asbestos-containing material (ACM) is encountered, including with buried utilities, workers will follow CDOT Specification 250.07 – Asbestos-Containing Material Management and CDOT Regulated Asbestos-Contaminated Soil Management Standard Operating Procedure. Additionally, depending on the type of ACM, this material must also be abated in accordance with either Section 5.5 of the Solid Waste Regulations, or Regulation No. 8 of the Air Quality Control Commission Regulations.
- 32) Although encountering impacted soil or groundwater is not expected, if impacted soil and/or groundwater is encountered, work will stop immediately, and the procedures outlined in the CDOT Specification 250 shall be followed. All costs associated with sampling, handling or disposal, if necessary, will be paid for by Force Account.
- 33) There shall be no disturbance to recreational properties nor accesses to them. The Contractor shall maintain continuous access throughout the project for pedestrians and bicyclists via existing sidewalks and trails, or via temporary all-weather alternate routes as needed.

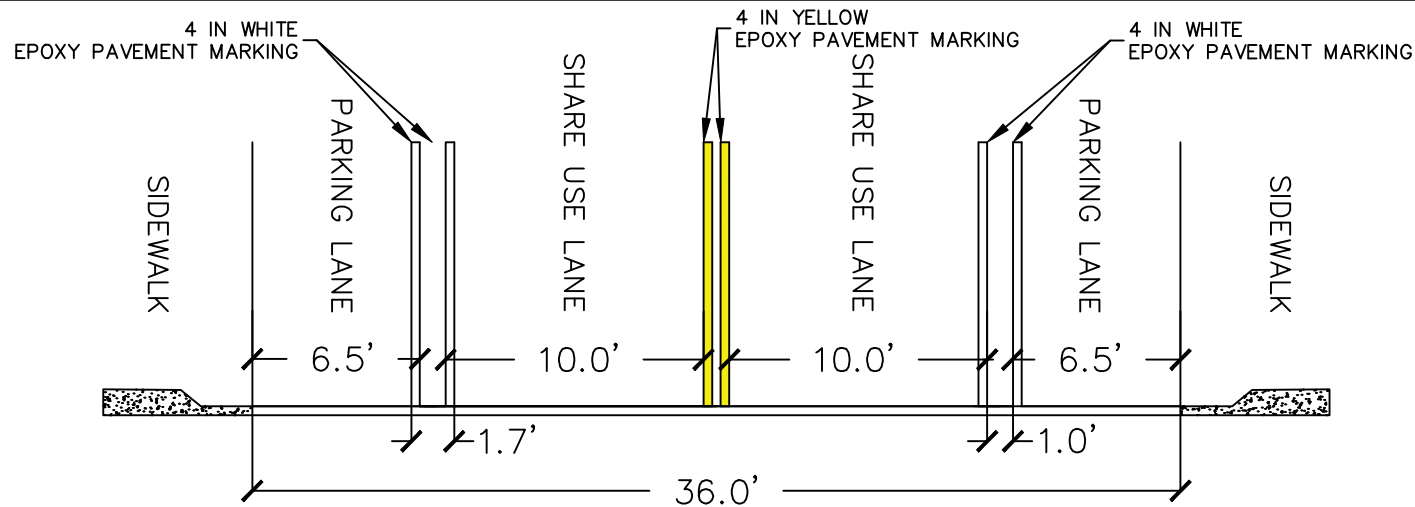
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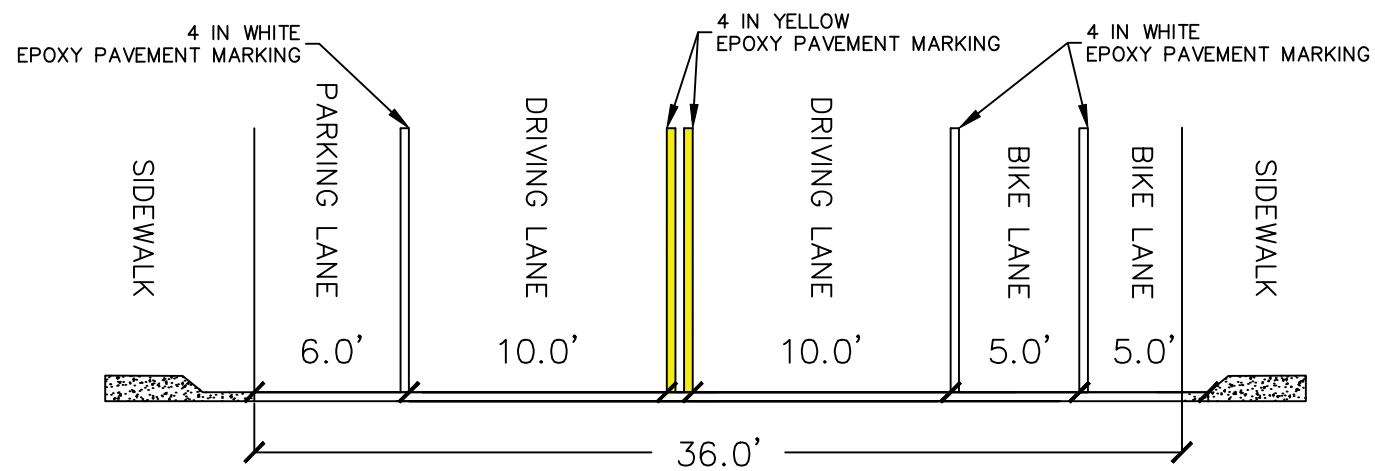




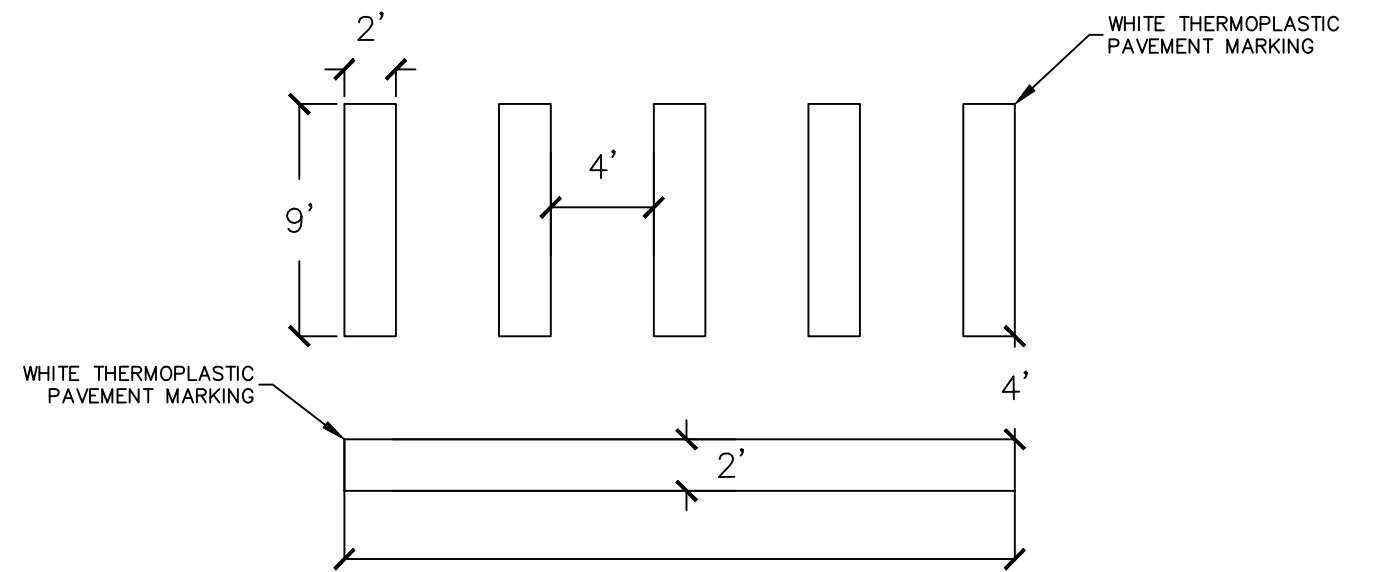
BIKE LANE CONFIGURATION



SHARE USE LANE CONFIGURATION



LEROY DRIVE TYPICAL STRIPING



HALF OF ROADWAY WIDTH CROSSWALK CONFIGURATION

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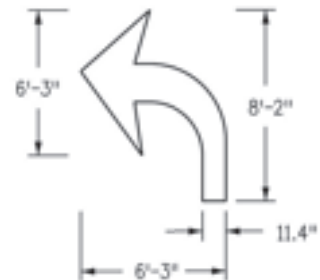
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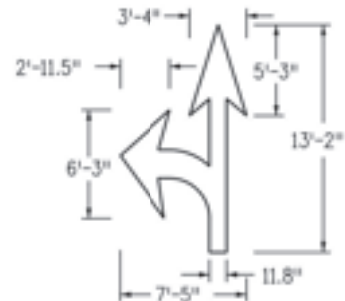
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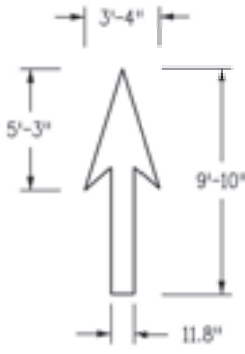
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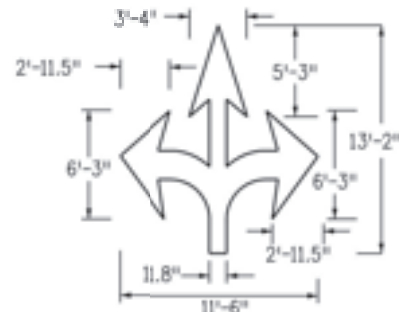
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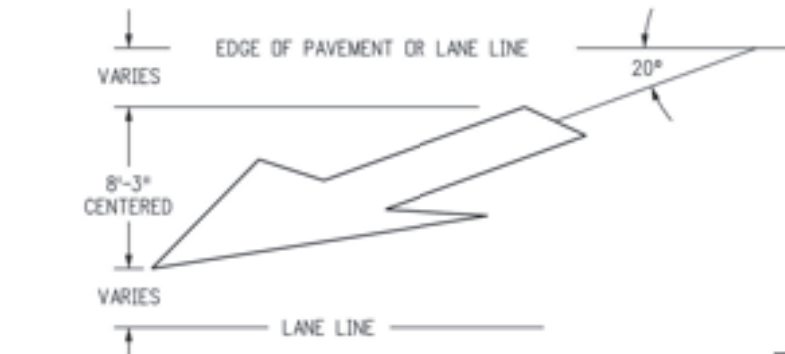
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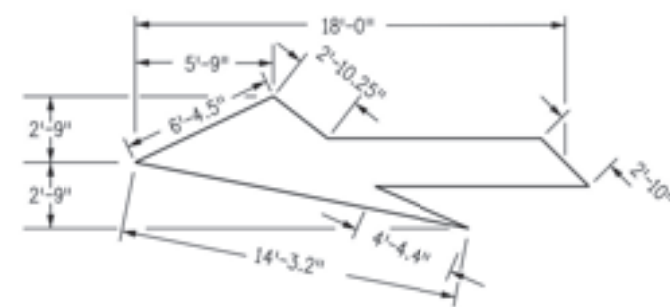
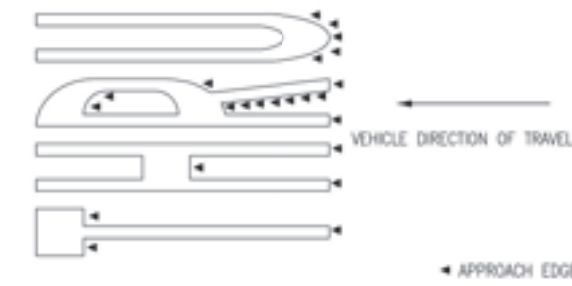
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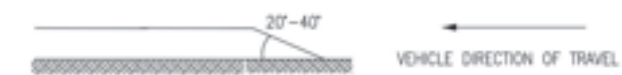


TYPICAL APPROACH EDGE TAPERING VIEW



AREA = 58 SQ.FT.

TYPICAL APPROACH EDGE TAPERING PROFILE VIEW



**WORD AND SYMBOL NOTES**

- IF HEIGHT IS INCREASED OR DECREASED THEN ALL MEASUREMENTS CHANGE PROPORTIONATELY. EXAMPLE: "H" MEASUREMENT FOR STOP IS REDUCED TO 4 FT. FROM 8 FT. THEN SQUARE FEET = 5.75 (1/4 OF 23.0 SQ. FT.).
- PAVEMENT WORD AND SYMBOL MARKINGS, TRANSVERSE AND LONGITUDINAL (CONTINENTAL) CROSSWALK LINES, AND STOP LINES WILL BE PAID FOR IN SQUARE FEET USING THEIR SPECIFIC BID ITEMS.
- LETTER SPACING SHALL BE 8 IN. EXCEPT FOR THE LETTER "A" WHICH IS 6 IN.
- USE THE MARKING WORD "BIKE" IF 6 FT. TO 8 FT. BIKE LANES ARE INSTALLED.

**TAPERING NOTES**

- ALL PAVEMENT MARKING APPROACH EDGES FROM THE VEHICLE DIRECTION OF TRAVEL SHALL BE TAPERED USING A PUTTY KNIFE OR SIMILAR TOOL.

**DESIGNATED PAYMENT AREAS**

FOR THE FOLLOWING H, W, AND S DIMENSIONS PAY:

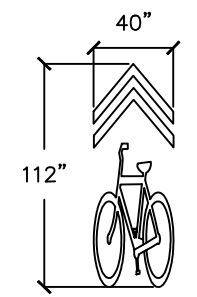
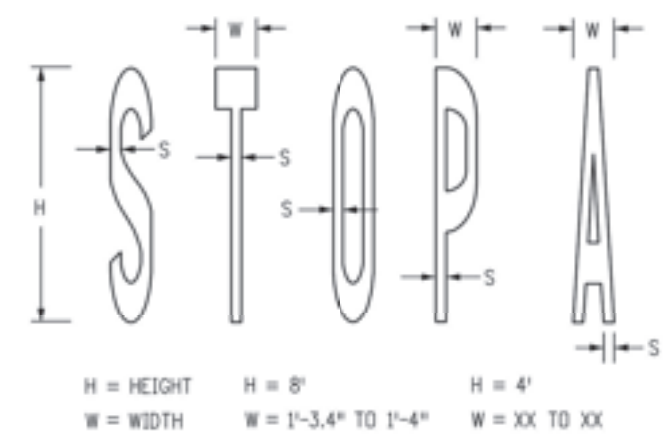
**H = 4' WORDS**

- BIKE - 5.5 SQ.FT.
- LANE - 6.0 SQ.FT.
- ONLY - 6.0 SQ.FT.
- XING - 5.0 SQ.FT.

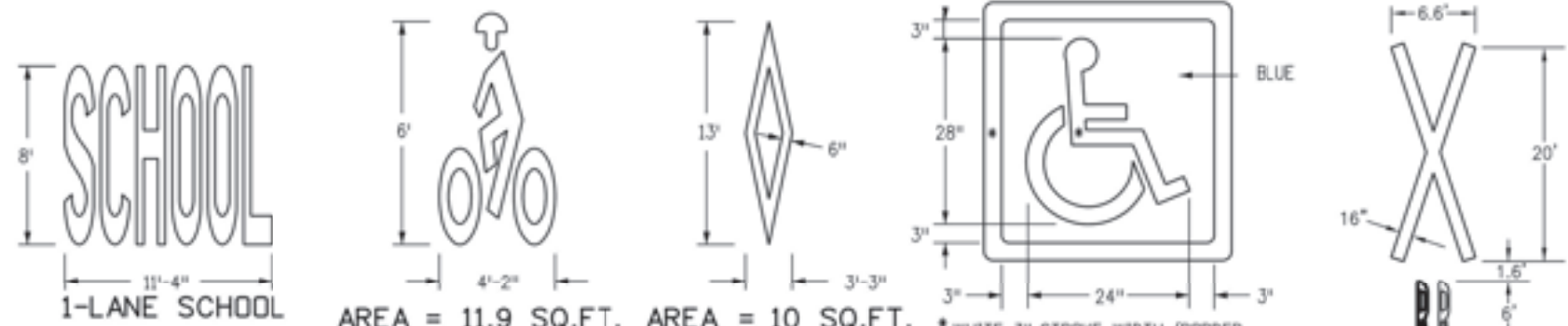
**H = 8' WORDS**

- STOP - 23.0 SQ.FT.
- ONLY - 22.5 SQ.FT.
- AHEAD - 29.0 SQ.FT.
- BUS - 18.5 SQ.FT.
- SCHOOL(1L) - 33.0 SQ.FT.
- SCHOOL(2L) - 85.0 SQ.FT.
- NORTH - 30.6 SQ.FT.
- EAST - 22.1 SQ.FT.
- X with RR - 69 SQ.FT.
- YIELD - 23 SQ.FT.
- XING - 20.0 SQ.FT.
- LANE - 22.5 SQ.FT.
- BIKE - 21.0 SQ.FT.
- HWY - 16.5 SQ.FT.
- THRU - 22.0 SQ.FT.
- PED - 17.5 SQ.FT.
- SOUTH - 28.5 SQ.FT.
- WEST - 23.7 SQ.FT.
- EXPRESS - 41 SQ.FT.

**TYPICAL LETTER MEASUREMENTS**



SHARE LANE MARKING



PAVEMENT MARKING WORDS AND SYMBOLS

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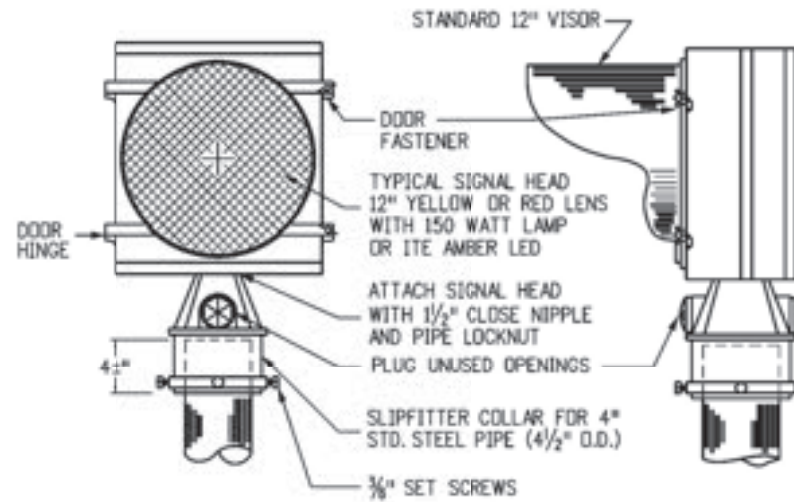
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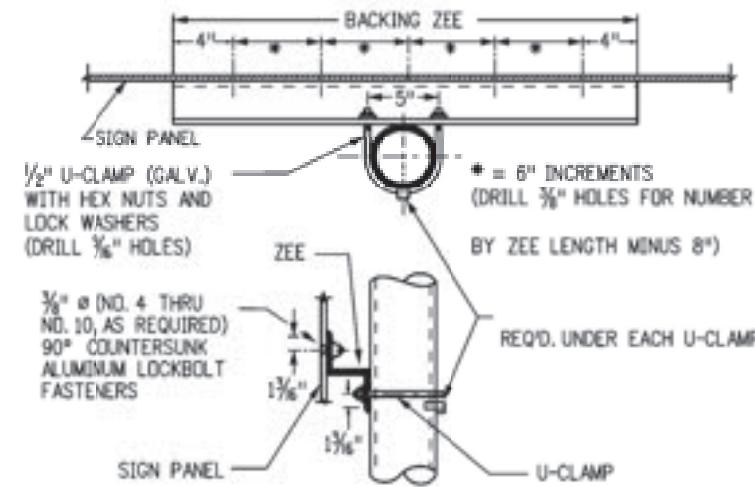
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STU M945-007, 24362
Drawing Number 5
Sheet Number 7

**GENERAL NOTES**

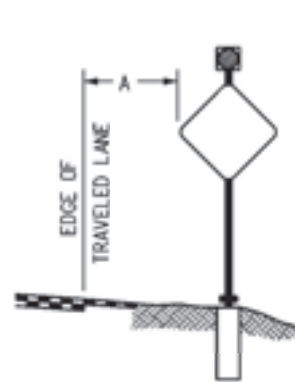
- ALL SIGN PANELS USED ON FLASHING BEACONS ARE CLASS II AND SHALL BE FABRICATED IN ACCORDANCE WITH:
  - PANELS SHALL BE SINGLE SHEET ALUMINUM 0.100 MINIMUM THICKNESS.
  - BACKING ZEES ARE 3 IN. X 21#16 IN. 2.33 LBS. PER FT. ALUMINUM.
  - ALL SIGNS SHALL BE FABRICATED USING RETROREFLECTIVE SHEETING CONFORMING TO ASTM D4956, THE TYPE SHALL BE DESCRIBED IN THE STANDARD SPECIFICATIONS AND/OR AS SHOWN ON THE PLANS.
  - BOLTS, U-CLAMPS, NUTS AND METAL WASHERS SHALL BE GALVANIZED OR CADMIUM PLATED.
- INSTALLATION DESIGN CONFORMS WITH AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS" AND SHALL BE FABRICATED IN ACCORDANCE WITH:
  - STEEL PIPE, POST ANCHOR PLATES AND BREAK-AWAY PLATES SHALL CONFORM TO AASHTO M270 (ASTM A709) GRADE 36.
  - HIGH STRENGTH BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM-A325 AND SHALL BE GALVANIZED OR CADMIUM PLATED.
  - HOLES SHALL BE DRILLED AND CUTS SHALL PREFERABLY BE SAW CUTS; HOWEVER, FLAME CUTTING WILL BE PERMITTED PROVIDED ALL EDGES ARE GROUND. METAL SHALL NOT PROJECT BEYOND THE PLANE OF THE PLATE FACE ON BREAK-AWAY PLATES.
  - ALL WELDING IS TO BE CONTINUOUS AND IN ACCORDANCE WITH CURRENT AWS SPECIFICATIONS.
  - A "KEEPER PLATE" OF THIN (28 GAGE) GALVANIZED SHEET METAL, FABRICATED TO MATCH BREAK-AWAY PLATE DIMENSIONS BUT WITH HOLES RATHER THAN SLOTS, SHALL BE USED TO RESTRAIN BOLT LOOSENING DUE TO WIND VIBRATION.
  - PIPE LENGTH VARIES WITH VERTICAL PLACEMENT, MINIMUM GROUND CLEARANCE (7 FT. ) AND THE SIGN PANEL REQUIRED. IT WILL BE AS SHOWN ON THE PLANS, OR AS DETERMINED BY CROSS-SECTION, OR AS DIRECTED BY THE ENGINEER FOR EACH LOCATION (MAXIMUM LENGTH IS APPROXIMATELY 20 FT.-10 IN. AND MINIMUM LENGTH IS APPROXIMATELY 15 FT.-4 IN. IF LENGTH IS NOT SPECIFIED SUPPLY MAXIMUM - MAY REQUIRE FIELD CUT TO CONFORM TO TYPICAL SIGN PLACEMENT DETAILS).
- CONCRETE FOOTINGS FOR FLASHING BEACON INSTALLATIONS SHALL CONFORM TO "DRILLED CAISSONS" AND "STRUCTURAL CONCRETE" (CLASS "B2").
- ALL ELECTRICAL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NEC, NEMA, UL OR EIA WHEREVER APPLICABLE; THE COLORADO PUC AND ANY LOCAL CODES OR ORDINANCES WHICH MAY APPLY; AND THE FOLLOWING:
  - THE CONTRACTOR IS TO PROVIDE ALL NECESSARY WIRING WITHIN THE BEACON AND FROM THERE TO THE POWER SOURCE PROVIDED BY THE UTILITY COMPANY. THE UTILITY COMPANY WILL MAKE THE CONNECTION WITH THE CONTRACTOR'S WIRING.
  - THE ELECTRICAL SERVICE BETWEEN THE POWER SOURCE AND THE FLASHING BEACON SHALL BE UNDERGROUND UNLESS AN AERIAL DROP IS AUTHORIZED BY THE ENGINEER. ALL WIRING EXCLUDING THE AERIAL DROP WIRE SHALL BE IN CONDUIT.
  - THE "FLASHER" SHALL BE HOUSED IN A SUITABLE ENCLOSURE ON THE UTILITY POLE AT THE POWER SOURCE UNLESS THE ENGINEER DIRECTS THAT THE ENCLOSURE BE MOUNTED ON THE BEACON PIPE OR THAT THE DEVICE MAY BE CONTAINED WITHIN THE SIGNAL HEAD ITSELF.
  - A SUITABLE ENCLOSURE FOR THE FLASHER SHALL BE IN ACCORDANCE WITH "A RAIN TIGHT JUNCTION BOX OR CAN, APPROXIMATELY 8 IN. X 8 IN. X 4 IN., SURFACE MOUNT, WITH A FLANGED SCREW ATTACHED COVER, AND FABRICATED FROM NOT LESS THAN 16 GAGE GALVANIZED STEEL".
  - A BUILT-IN RADIO INTERFERENCE SUPPRESSION DEVICE AND A PHOTOCELL SENSOR TYPE SIGNAL LAMP DIMMER SHALL BE PROVIDED FOR EACH FLASHING BEACON.
  - BEACONS SHALL FLASH AT A RATE OF NOT LESS THAN 50 AND NOT MORE THAN 60 TIMES PER MINUTE.
- BREAKAWAY BASE INSTALLATION SHALL BE USED FOR UNI-DIRECTIONAL CONFIGURATION ONLY. PEDESTAL FOUNDATION (AS SHOWN ON SHEET 3). MAY BE USED FOR BOTH UNI-DIRECTIONAL AND BI-DIRECTIONAL CONFIGURATIONS.
- WHEN SPECIFIED IN THE PLANS, SOLAR POWERED SYSTEM MAY BE USED IN PLACE OF AC POWER SYSTEM SHOWN ON THIS SHEET.
- FOR ADVANCE PLACEMENT OF WARNING SIGNS SEE MUTCD SECTION 2C.05 AND TABLE 2C-4.



**TYPICAL SIGNAL HEAD - 12 INCH LENS**



**TYPICAL PANEL ATTACHMENT DETAILS**



**LATERAL PLACEMENT ("A")**

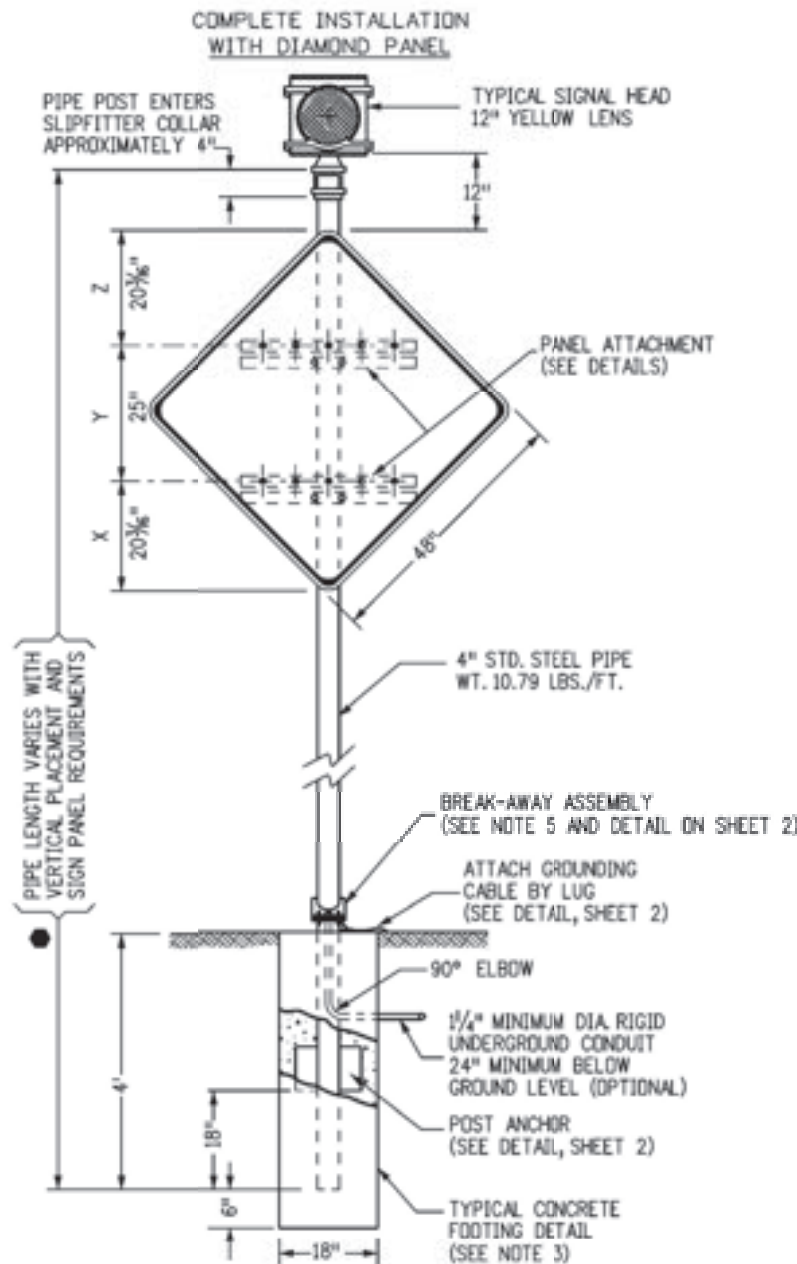
NORMAL LATERAL PLACEMENT "A" FOR WARNING SIGNS IS 12' PLUS CURB OR SHOULDER WIDTH.

NORMAL LATERAL PLACEMENT "A" FOR REGULATORY SIGNS IS 6' PLUS CURB OR SHOULDER WIDTH, OR IF NONE 12' FROM EDGE OF PAVEMENT.

2' SHALL BE CONSIDERED MINIMUM EXCEPT THAT IN URBAN AREAS 1' FROM THE CURB FACE IS PERMISSIBLE WHERE SIDEWALK WIDTH IS LIMITED OR WHERE EXISTING POLES ARE CLOSE TO THE CURB.

REFER TO COLORADO STANDARD PLAN S-614-1 FOR VERTICAL PLACEMENT REQUIREMENTS.

**TYPICAL SIGN PLACEMENT**



DESCRIPTION	DIMENSIONS (IN.)			LENS TYPE	BACKING ZEES
	X	Y	Z		
36" DIAMETER CIRCLE PANEL ( ● )	8	20	8	12" YELLOW	20"
48" DIAMETER CIRCLE PANEL ( ● )	10 1/2	27	10 1/2	12" YELLOW	20"
36" PENTAGON PANEL ( ● )	9	20	9	12" YELLOW	20"
48" PENTAGON PANEL ( ● )	12	25 3/4	9	12" YELLOW	20"
48" OCTAGON PANEL ( ● )	12	24	12	12" RED	20"
24" X 48" RECTANGLE PANEL ( ■ )	12	24	12	12" YELLOW	20"

**TYPICAL ELEVATION FACING TRAFFIC**

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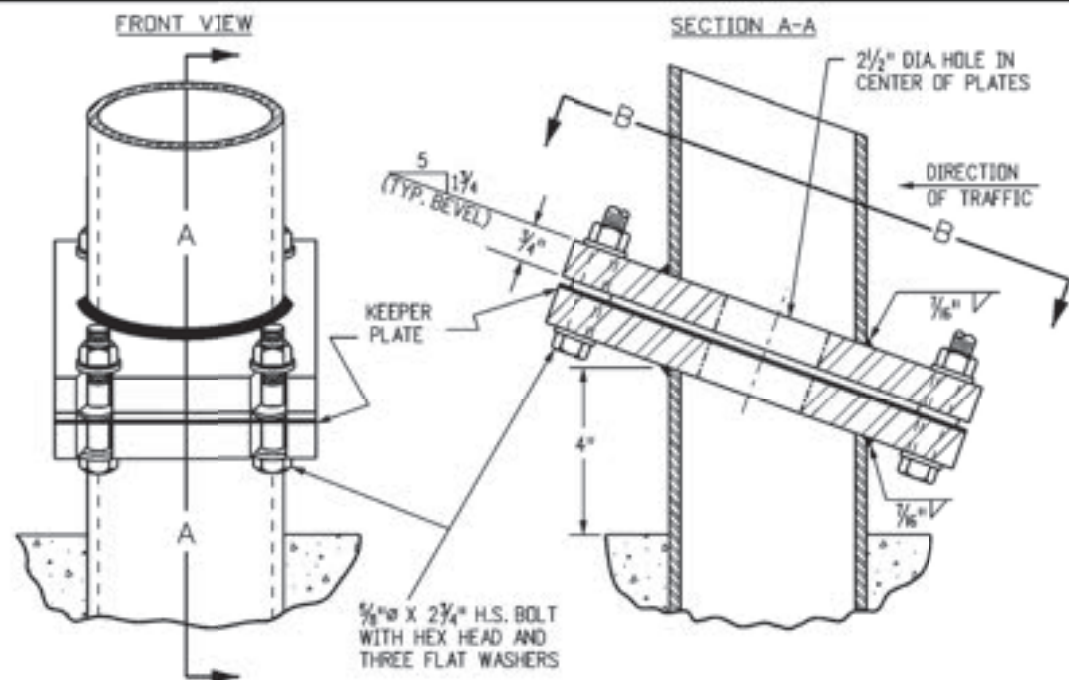
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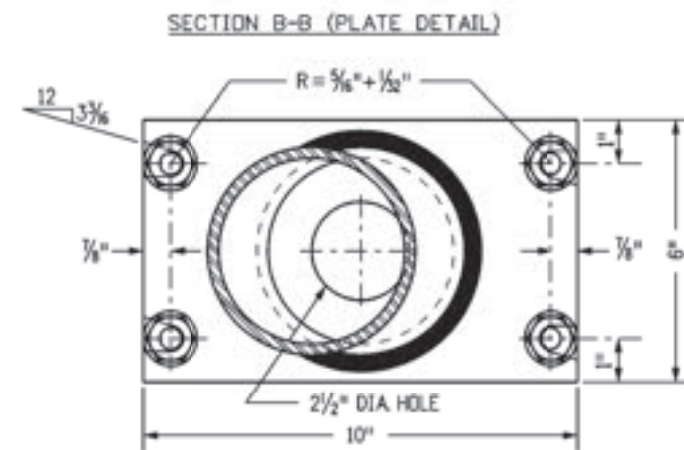
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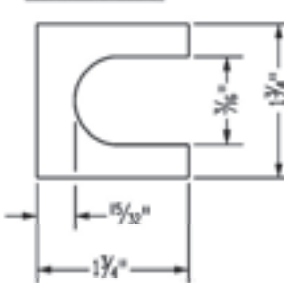


**BREAK-AWAY ASSEMBLY BOLTING PROCEDURE**

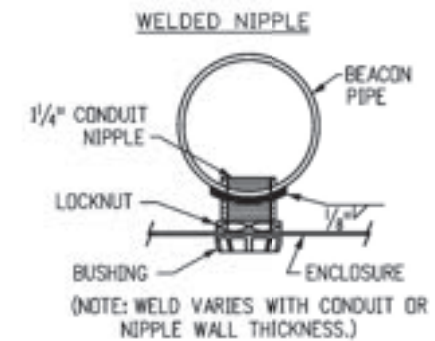
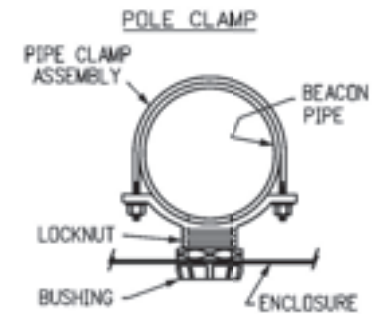
1. ASSEMBLE POST TO FOOTING WITH BOLTS- ONE FLAT WASHER ON EACH BOLT TOP AND BOTTOM, AND ONE FLAT WASHER AND THE KEEPER PLATE BETWEEN THE BREAK-AWAY PLATES. USE BRASS SHIMS TO PLUMB THE POST.
2. TIGHTEN ALL BOLTS TO MAXIMUM POSSIBLE WITH A 12 TO 15 INCH PIPE WRENCH TO BED WASHERS AND SHIMS TO CLEAN BOLT THREADS, THEN LOOSEN EACH BOLT IN TURN AND RETIGHTEN IN A SYSTEMATIC ORDER TO 450 INCH-POUNDS TORQUE.
3. BURR THREADS AT JUNCTION WITH NUT USING A CENTER PUNCH TO PREVENT NUT LOOSENING.



**SHIM DETAIL**

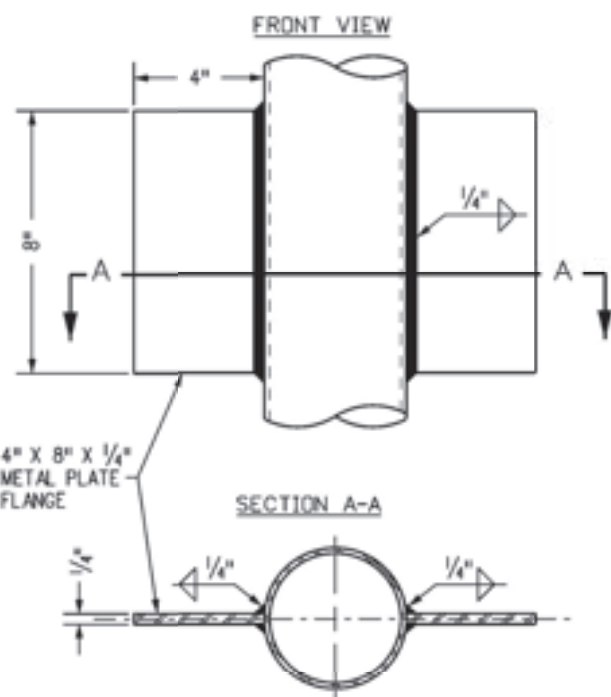


FURNISH TWO (2) .012 IN.± THICK AND TWO (2) .032 IN.± THICK SHIMS. SHIMS SHALL BE FABRICATED FROM BRASS SHIMS STOCK OR STRIP CONFORMING TO ASTM-B 36.

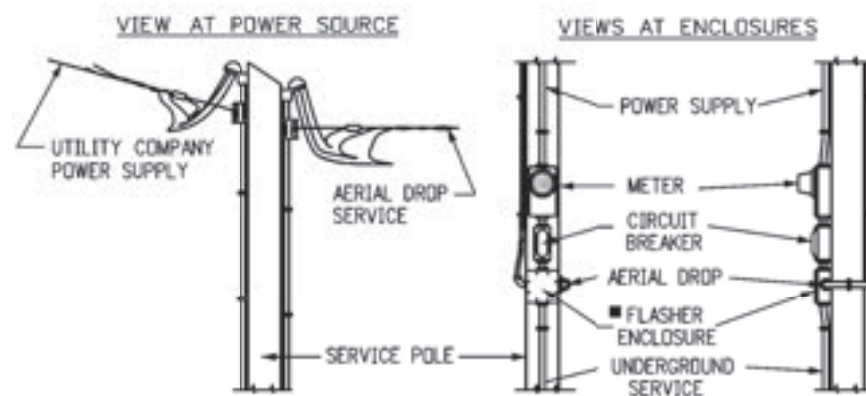


**TYPICAL PIPE ATTACHMENTS**

**TYPICAL BREAK-AWAY ASSEMBLY DETAILS**

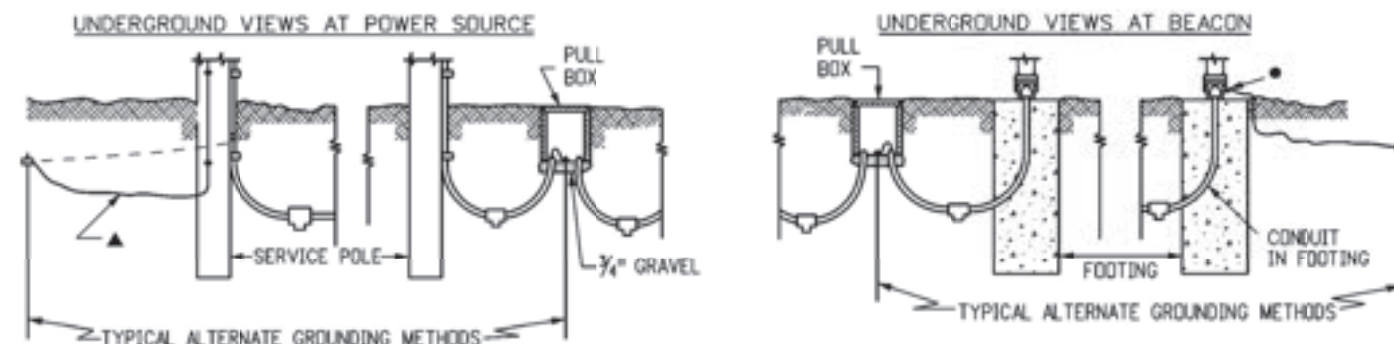
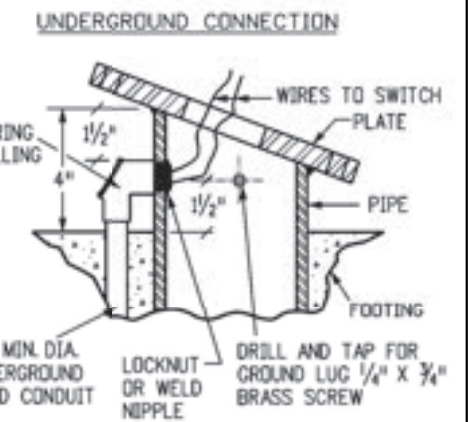
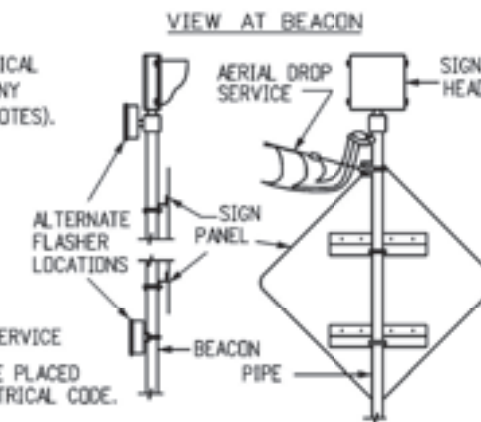


**POST ANCHOR DETAILS**

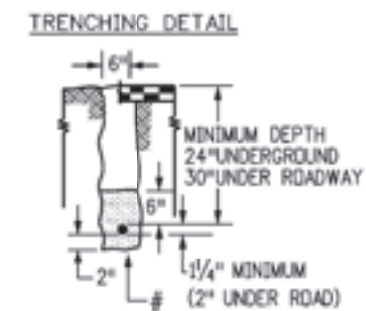


**NOTES**

- LOCATION AND CONFIGURATION OF ELECTRICAL EQUIPMENT IS DIAGRAMATIC ONLY (USE ANY METHOD COMPLYING WITH THE GENERAL NOTES).
- ▲ EXISTING GROUND AT SERVICE POLE; OTHERWISE PULL THRU CONDUIT OR ATTACH TO CONDUIT AND TAP OFF UNDERGROUND.
  - DRILL AND TAP PIPE FOR 1/4" ROUND ROUND HEAD BRASS SCREW, 3/4" LONG, FOR GROUND LUG.
  - PROVIDE WEEP HOLE WITH AERIAL DROP SERVICE
  - # BEDDING MATERIAL FOR CONDUIT SHALL BE PLACED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.



**TYPICAL ELECTRICAL SERVICE DETAIL**



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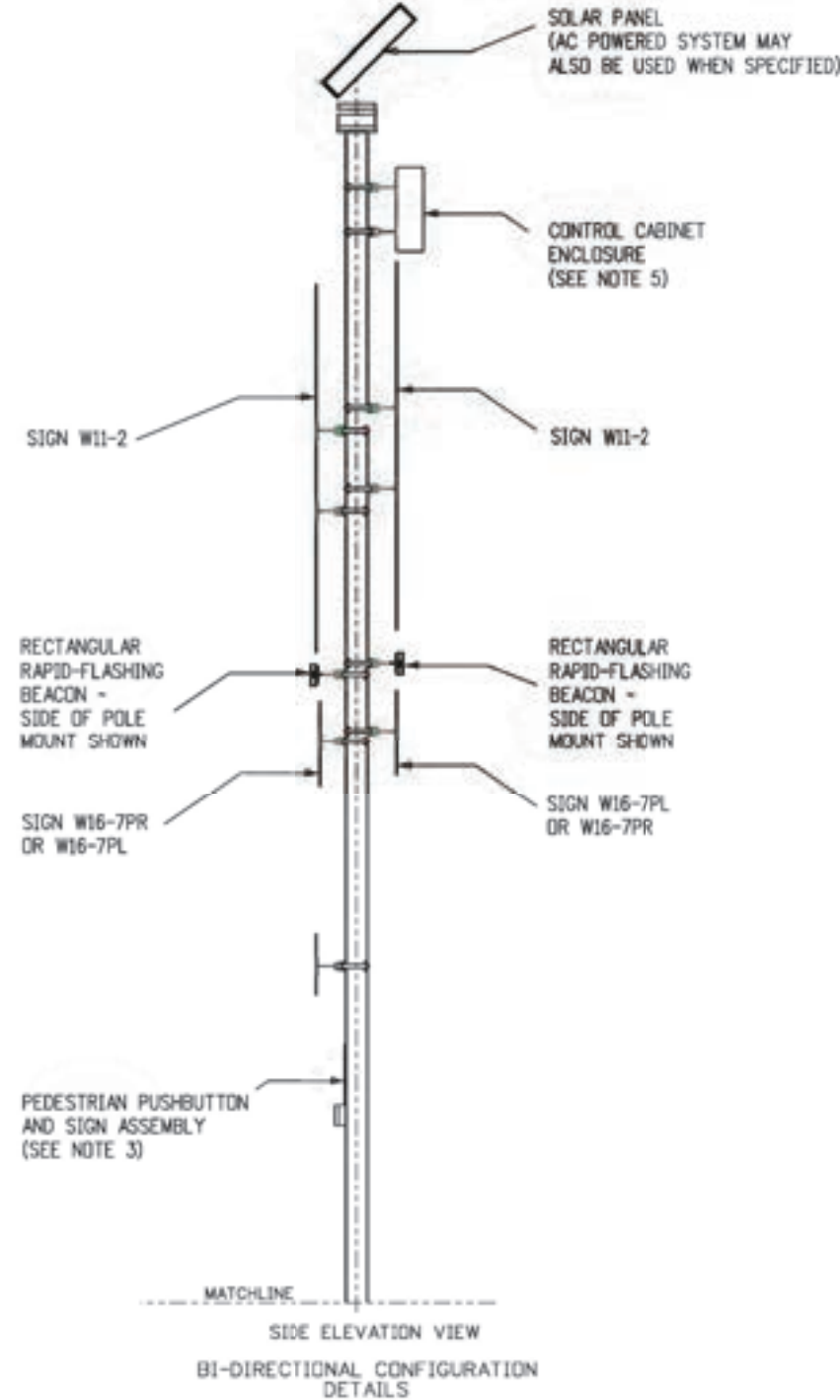
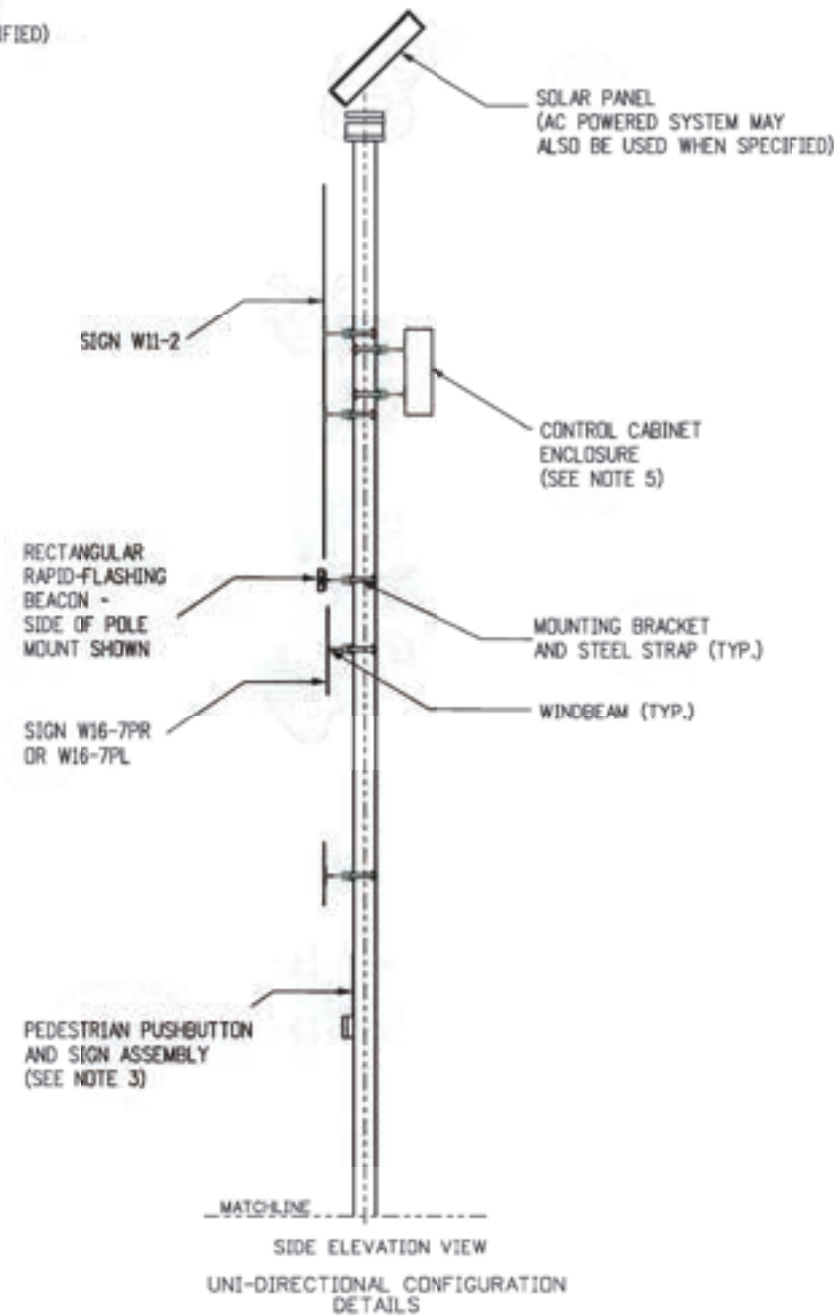
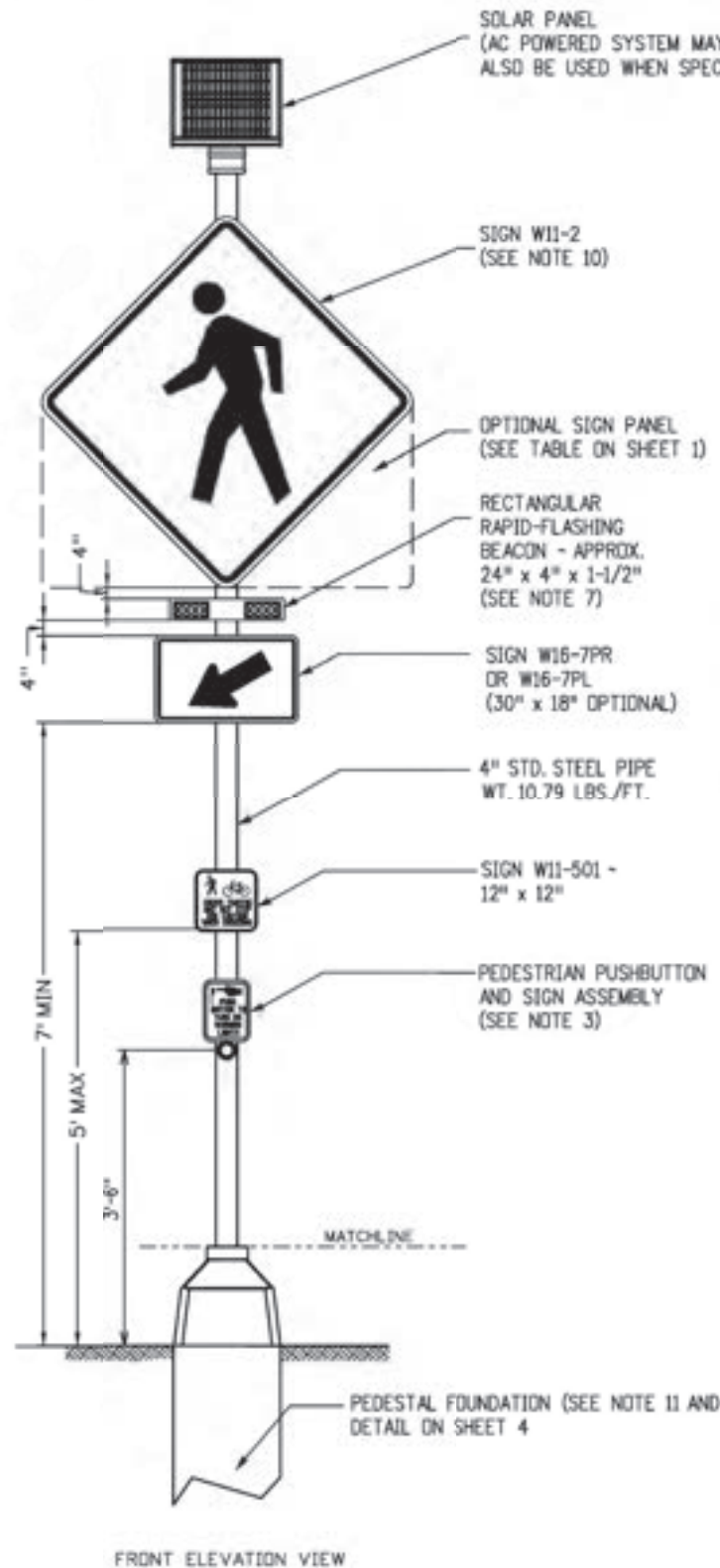
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Revised:	Designer: KH	Structure	Drawing Number 6
Void:	Detailer: KH	Numbers	Sheet Number 9
	Sheet Subset: GEN PLANS	Subset Sheets: 4 of 7	

**GENERAL NOTES**

1. THE RRFB SYSTEM SHALL ADHERE TO ALL ASPECTS OF THE FEDERAL HIGHWAY ADMINISTRATION, INTERIM APPROVAL 21-RECTANGULAR RAPID-FLASHING BEACONS AT UNCONTROLLED MARKED CROSSWALKS (FHWA 1A-21).
2. AN RRFB SHALL ONLY BE USED TO SUPPLEMENT A POST-MOUNTED W11-2, S1-1, OR W11-15 SIGN WITH 16-7P PLAQUE, LOCATED IMMEDIATELY ADJACENT TO AN UNCONTROLLED MARKED CROSSWALK.
3. PEDESTRIAN PUSHBUTTON AND SIGN ASSEMBLY MAY BE SEPARATE PARTS. USE R10-25 (9" X 12") SIGN IN ACCORDANCE WITH 2009 MUTCD. SIGN MAY INCLUDE INTEGRATED WARNING LIGHTS.
4. TERMINATE RRFB CONNECTIONS PER MANUFACTURER'S RECOMMENDATION.
5. CONTROL CABINET ENCLOSURE SHALL BE SIZED BY THE RRFB MANUFACTURER.
6. BEACON ASSEMBLY MAY BE MOUNTED ON THE SIDE OF THE POLE AS SHOWN OR ON THE TOP OF THE POLE IF SPECIFIED.
7. RRFB DISPLAYS SHALL BE LED TYPE MEETING THE INTENSITY REQUIREMENTS OF SAE J595 FOR CLASS 1 YELLOW, BUT SHALL NOT EXCEED 1000 CANDELAS DURING DAYLIGHT AND 500 CANDELAS AFTER DARK.
8. SEE SHEET 1, 2 AND 4 FOR STANDARD BASE AND FOUNDATIONS DETAILS.
9. WHEN SPECIFIED IN THE PLANS, AC POWER SYSTEM (AS SHOWN ON SHEET 1) MAY BE USED IN PLACE OF SOLAR POWERED SYSTEM SHOWN ON THIS SHEET.
10. FOR POSTED SPEEDS OF 35 MPH OR LOWER, THE W11-2 SIGNS SHALL BE 36" x 36". FOR POSTED SPEEDS OF 40 MPH OR HIGHER, THE W11-2 SIGNS SHALL BE 48" x 48".
11. PEDESTAL FOUNDATION MAY BE USED FOR BOTH UNI-DIRECTIONAL AND BI-DIRECTIONAL CONFIGURATIONS. BREAKAWAY BASE INSTALLATION (AS SHOWN ON SHEET 1) SHALL BE USED FOR UNI-DIRECTIONAL CONFIGURATION ONLY.



**RECTAGULAR RAPID-FLASHING BEACON (RRFB)**

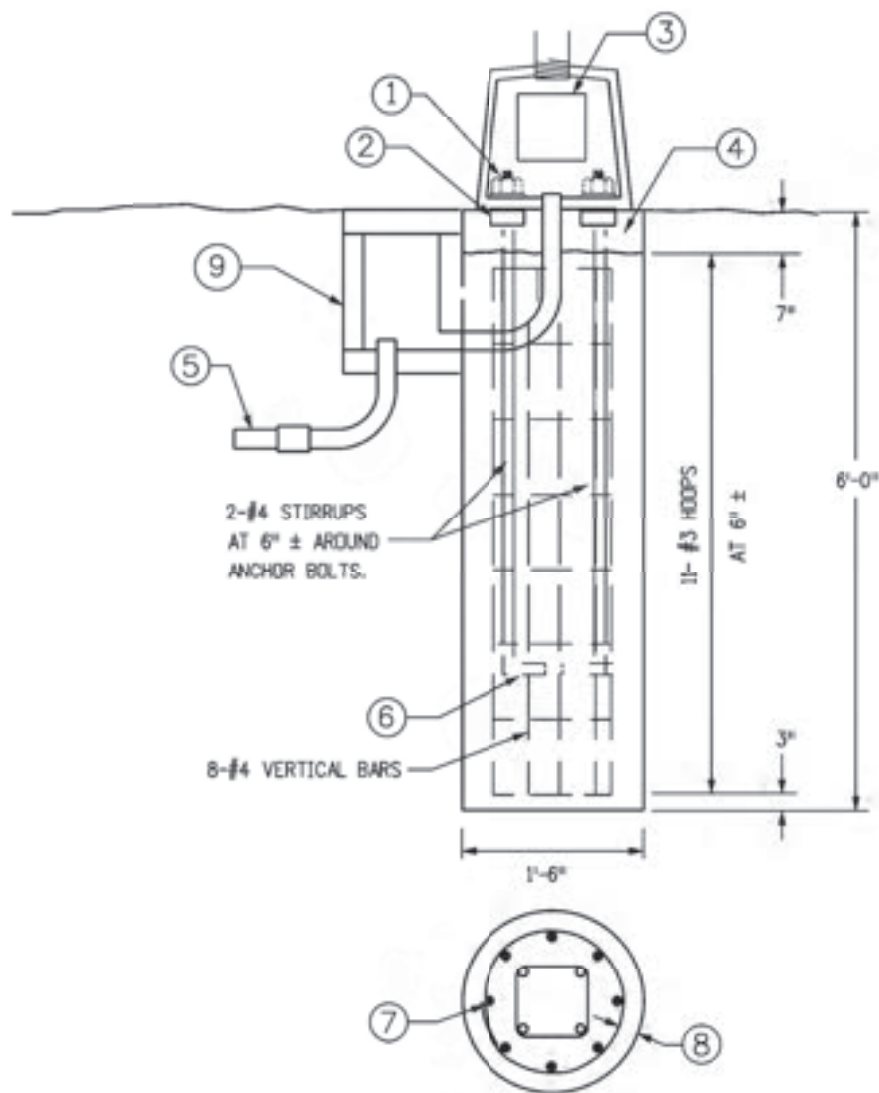
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**ALTERNATE PEDESTAL BASE INSTALLATION**

**GENERAL NOTES**

- POLE AND PEDESTAL MUST BE DESIGNED TO MEET THE REQUIREMENTS OUTLINED IN THE "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS LUMINAIRES AND TRAFFIC SIGNALS", PUBLISHED BY AASHTO, FOR A WIND VELOCITY OF 100 MPH. THE CONTRACTOR SHALL SUBMIT TWO SETS OF WORKING DRAWINGS, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF COLORADO, IN ACCORDANCE WITH SECTION 105.02 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

**DESIGN DATA**

THE DESIGNS HEREIN ASSUME THAT FLASHING BEACONS ARE INSTALLED WITHIN THE ROADWAY PRISM WITH THE FOLLOWING SOIL PARAMETERS:  
 SOIL DENSITY  $\gamma = 110$  LB./CU.FT.  
 SOIL COHESION = 750 LB./SQ.FT. FOR MEDIUM STIFF COHESIVE SOIL  
 SOIL  $\phi$  ANGLE = 30 DEG. FOR MEDIUM DENSE COHESIONLESS SOIL  
 SF = 3.0 FOR FLEXURAL RESISTANCE

- CONTACT THE ENGINEER IF THE FLASHING BEACON WILL NOT BE INSTALLED WITHIN THE ROADWAY PRISM OR IF ANY OF THE FOLLOWING SOIL CONDITIONS ARE ENCOUNTERED DURING DRILLING:
- THE SOIL HAS A HIGH ORGANIC CONTENT OR CONSISTS OF SATURATED SILT AND CLAY.
  - THE SITE WON'T SUPPORT THE WEIGHT OF THE DRILLING RIG.
  - THE FOUNDATION SOILS ARE NOT HOMOGENOUS.
  - FIRM BEDROCK IS ENCOUNTERED.
  - A HIGH GROUNDWATER TABLE IS ENCOUNTERED.
  - LARGE BOULDERS ARE ENCOUNTERED.

FOOTING DESIGN IS BASED ON 100 MPH WIND LOAD ON A 48 IN. X 48 IN. DIAMOND SIGN PANEL MOUNTED 9 FT. ABOVE THE GROUND, WITH A 24 IN. X 24 IN. RECTANGULAR PLAQUE UNDERNEATH AND A FLASHING BEACON 12 IN. ABOVE. IF A SIGN CONFIGURATION IS PROPOSED THAT EXCEEDS THESE DIMENSIONS, THE FOOTING DESIGN MUST BE ENGINEERED AND SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF COLORADO.

**FOOTING NOTES**

- |  |   |
|--|---|
| ① HEX NUTS   | ⑥ INSTALL ANCHOR BOLTS (FURNISHED WITH POLE) PER MANUFACTURER'S TEMPLATE PRINT (FURNISHED WITH ORDER)   |
| ② SQUARE NUTS  | ⑦ MINIMUM OVERLAP OF 12 IN.   |
| ③ HAND HOLE SHALL BE PROVIDED.   | ⑧ 1-1/2 IN. CLEARANCE FOR HOOPS   |
| ④ 4 IN. MIN. NON-SHRINKABLE GROUT OVER ROUGH FOUNDATION  | ⑨ STANDARD PULL BOX... TYPE ???   |
| ⑤ SCHEDULE 80 PVC (24 IN. MIN. DEPTH, 30 IN. MIN. DEPTH UNDER ROADWAY) CONDUIT STUB FROM PULL BOX TO POLE SHALL BE 2" MIN. DIAMETER. | CAISSON DESIGNS REQUIRE THAT THE CAISSON BE FOUNDED IN COMPACT SAND, CLAY OR SANDY CLAY. IF, BY VISUAL INSPECTION OF THE HOLE, OTHER MATERIAL IS PRESENT, THE CAISSON DESIGN SHALL BE MODIFIED AS DETERMINED BY THE ENGINEER. |

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Revised:	Designer: KH	Structure	Drawing Number 9
Void:	Detailer: KH	Numbers	Sheet Number 11
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INDEX			CONTRACT ITEM NO.	CONTRACT ITEM	UNIT	ROADWAY								PROJECT TOTALS	
XXXX	XXXX	XXXX				PLAN	AS CONST.								PLAN
			208-00002	Erosion Log Type 1 (12 inch)	LF	150								150	
			208-00035	Aggregate Bag	LF	60								60	
			208-00046	Pre-fabricated Concrete Washout Structure (Type 1)	EA	1								1	
			208-00106	Sweeping (Sediment Removal)	HR	10								10	
			212-00700	Organic Fertilizer	LBS	5								5	
			212-00708	Seeding (Native) Broadcast	ACRE	0.01								0.01	
			213-00012	Spray-on Mulch Blanket	ACRE	0.01								0.01	
			607-11525	Fence (Plastic)	LF	50								50	
			614-80003	Solar Rapid Rectangular Flashing Beacon	EA	12								12	
			626-00000	Mobilization & Demobilization	LS	7								7	
			627-00002	Preformed Thermoplastic Pavement Marking (Bike Lane)	SF	4,896								4,896	
			627-00004	Epoxy Pavement Marking (4")	LF	133,950								133,950	
			630-80341	Construction Traffic Sign	EA	48								48	
			630-80380	Traffic Cone	EA	450								450	

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**CONNECT NORTHGLENN**  
**SUMMARY OF APPROX. QUANTITIES**

Designer:	KH	Structure	
Detailer:	KH	Numbers	
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**9. TABULATION OF STORMWATER QUANTITIES**

- 1. Control Measure sediment removal and disposal shall be paid for as: 208 Removal and Disposal of Sediment (Equipment) and 208 Removal and Disposal of Sediment (Labor). All other control measure maintenance shall be included in the cost of the control measure.

The following pay items can be used for interim stabilization as defined in section 208.04(e)(2): 213-00002, 213-00003, 213-00004, 213-00007, 213-00012, 213-00013, 213-00061, 213-00150, 213-00151

website [https://www.codot.gov/business/designsupport/cdot-construction-specifications/2019-construction-specifications/project-special-provision-work-sheets?b\\_start:int=20](https://www.codot.gov/business/designsupport/cdot-construction-specifications/2019-construction-specifications/project-special-provision-work-sheets?b_start:int=20)

PSP Spec.	Pay Item	Description	Pay Unit	Initial Const.	Interim Const.	Permanent Stabilization	*Total Quantity
	208-00002	Erosion Log Type 1 (12 inch)	LF	100	50		150
	208-00035	Aggregate Bag	LF	30	30		60
	208-00046	Pre-fabricated Concrete Washout Structure (Type 1)	Each	1			1
	208-00106	Sweeping (Sediment Removal)	Hour		10		10
	212-00700	Organic Fertilizer	Pounds			5	5
	212-00708	Seeding (Native) Broadcast	Acre			0.01	0.01
	213-00012	Spray-on Mulch Blanket	Acre			0.01	0.01
	607-11525	Fence (Plastic)	LF	50			50

\*It is anticipated that additional control measures and control measure quantities not shown on the SWMP Site Maps shall be required on the project for unforeseen conditions and replacement of items that are beyond their useful service life, see subsections 208.03 and 208.04. **Quantities for all control measures shown above are estimated, and have been increased for unforeseen conditions and normal control measure life expectancy.** Quantities shall be adjusted according to the conditions encountered in the field as directed and approved by the Engineer. Payment shall be for the actual work completed and material used.

\*\* F/A refers to CDOT's Force Account Pay Items.

**10. BIOLOGICAL IMPACTS and DEWATERING**

**A. ENVIRONMENTAL IMPACTS:**

Wetland Impacts: NO  
 Stream Impacts: NO  
 Threatened and Endangered Species: No species are anticipated to be impacted by the project.

**B. DEWATERING:**

(Not covered under the CDPHE guidance document Low Risk Discharge Guidance Discharges of Uncontaminated Groundwater to Land):  
<https://www.colorado.gov/pacific/sites/default/files/WQ%20LOW%20RISK%20GW.pdf>  
 Dewatering: Refer to other environmental permits in accordance with subsection 107.02 and the permits contained in Tab 16 of the SWMP.  
 If groundwater does not meet water quality standards for receiving water a separate CDP5 Dewatering Permit shall be obtained by the Contractor from CDPHE in accordance with subsections 107.02 and 107.25.

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**NON-STRUCTURAL Control Measures** that may be potentially used on the project for erosion and sediment control; practices may include, but are not limited to:  
 Erosion control devices are used to limit the amount of soil loss on site. Sediment control devices are designed to capture sediment on the project site.

APPLICATION, CONTROL MEASURE	NARRATIVE	M-STANDARD or "For NON-STANDARD	IN USE ON SITE	CONTROL MEASURE IMPLEMENTATION PHASE		
				INITIAL ACTIVITY	INTERIM ACTIVITIES	PERMANENT STABILIZATION
VEGETATIVE BUFFER STRIP	Finishing component for filtering sediment-laden runoff from disturbance area. Area within CDOT ROW or temporary easement to be identified on SWMP prior to construction starting.			X	X	X
GRADING APPLICATIONS (LANDFORM)	Existing or created landforms may be used as a control measure if they prevent sediment from entering or leaving the disturbance area. If a landform directs flow of water to a concentrated outfall point, the outfall point shall be protected to prevent erosion. Area to be identified on SWMP prior to construction starting.	M-208		X	X	
TOPSOIL MANAGEMENT STOCKPILE/SALVAGE Stockpile	Prior to any site disturbance work commencing, existing topsoil shall be scraped to a depth four inches or as specified, and placed in stockpiles or windrows. Upon completion of final grading, topsoil shall be evenly distributed over embankment to a depth of four inches or as specified.	M-208		X	X	X
SURFACE ROUGHENING / GRADING TECHNIQUES	Temporary stabilization of disturbance and to minimize wind and erosion.				X	
SEEDING (TEMPORARY)	Temporary stabilization used for over wintering of disturbance or used to control erosion for areas scheduled for future construction.				X	
BONDED FIBER MATRIX or MULCHING (HYDRAULIC)	Not to be used in areas of concentrated flows, i.e. ditch lines. To be for either Interim or Permanent Stabilization placed as a surface cover for erosion control. May be used as surface cover when work is temporarily halted and as approved by the Engineer for stockpiles.				X	
Straw or Hay MULCH/MULCH TACKIFIER	Interim or Permanent Stabilization placed as a surface cover for erosion control and or seeding establishment. To be installed as Interim Stabilization as a surface cover when work is temporarily halted and as approved by the Engineer				X	X
SPRAY-ON MULCH BLANKET (Not to be used in areas of concentrated flows, i.e. ditch lines.)	Interim or Permanent Stabilization placed as a surface cover for erosion control and or seeding establishment. To be installed as temporary surface cover when work is temporarily halted and as approved by the Engineer				X	X
SEEDING PERMANENT (NATIVE)	Permanent Stabilization of disturbance and to reduce runoff and control erosion on disturbed areas.					X
Sweeping	Source control, used to remove sediment tracked onto paved surfaces and to prevent sediment from entering drainage system. Sweep daily and at the end of the construction shift as needed. Kick brooms shall not be permitted.			X	X	X
OTHER						

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**8. NARRATIVES:**

Below are the CDOT narratives covered in CDOT's Standard Specifications and M Standard Plans. Proposed non-standard control measures during design should be added to the matrix. Place an X in the column for M-208 Standard or "X" for Non-Standard and provide a narrative. The narrative shall include what, when, where and why the control measure is being used. Also place an X in the appropriate implementation column(s) [During design place a "B" in the Initial Activities Column for any control measures that should be installed before construction activity starts.

**Control Measure Matrixes During Construction:**

- Control measure narratives have been included for the CDOT Standard Specifications and Standard Plan M-208 and M-216 along with any non-standard control measures approved during the design process. If a Non-Standard Control Measure not included in the SWMP is proposed and approved by the Engineer the SWMP Administrator for Construction shall do the following: Place an "X" in the column for non-standard and complete a Non-Standard Control Measure Specification and Narrative covering the what, when, where and why the control measure is being used shall be add to the SWMP. The appropriate "X" shall also be added to the implementation phase(s).
- The SWMP Administrator for Construction shall place an "X" in the column In Use On Site when the control measure has been installed.
- A "B" in the Initial Activities Column indicates that the control measure shall be installed **before** construction activity starts. Locations and quantities will be discussed during the Environmental Pre-Construction Conference with the Regional Water Pollution Control Manager.


**STRUCTURAL Control Measures** that may be potentially used on the project for erosion and sediment control; practices may include, but are not limited to:

APPLICATION, CONTROL MEASURE	NARRATIVE	M- 208 STANDARD or "X" for NON-STANDARD	IN USE ON SITE	CONTROL MEASURE IMPLEMENTATION PHASE		
				INITIAL ACTIVITIES	INTERIM ACTIVITIES	PERMANENT STABILIZATION
PROTECTION OF EXISTING WETLANDS Fence (plastic) and erosion logs	Fence (plastic) shall be placed in combination with erosion logs to prevent encroachment of construction traffic and sediment into state waters prior to start of construction disturbances. Fence (plastic) shall be placed adjacent to the wetlands; erosion logs shall be placed between the plastic fence and disturbance area. Logs shall be placed to direct flows away from or filter water running into wetlands from disturbance areas.			B or X	X	
PROTECTION OF EXISTING TREES/LANDSCAPING Fence (plastic)	Fence (plastic) shall be used in areas indicated in the plans to prevent encroachment of construction traffic and sediment for the protection of mature trees and/or existing landscaping prior to start of construction disturbances.			B or X	X	
STOCKPILE PROTECTION Temporary berm, erosion logs, aggregate bags*	Placed within specified distance, in accordance with subsection 208.06, from toe to contain sediment around stockpile. *Aggregate bags are easily moved and replaced for access during the workday. Place prior to start of stockpile, increase control as stockpile increases size.	M-208			X	
TOE OF FILL PROTECTION Erosion logs, temporary berm, silt fence, topsoil windrow*	Place prior to slope/embankment work to capture sediment and protect and delineate undisturbed areas. *Can be used to stockpile topsoil for salvage.	M-208		X	X	
PERIMETER CONTROL Erosion logs, silt fence, temporary berm, topsoil windrow*	Placed prior to construction commencing to address potential run-on water from off site, and to divert around disturbed area. *Can be used to stockpile topsoil for salvage.	M-208		B or X	X	
SLOPE CONTROL Silt fence, erosion logs	Placed on the contour of a slope to contain and slow down construction runoff. Place prior to start of construction disturbances.	M-208		X	X	
CONCRETE WASHOUT In-ground or fabricated	Construction control, used for waste management of concrete and concrete equipment cleaning. Place prior to start of concrete activities.	M-208		X	X	
VEHICLE TRACKING PAD	Source control, placed to prevent tracking of sediment from disturbed area to offsite surface. Place prior to start of construction disturbances.	M-208		B or X	X	
DEWATERING (Contractor is responsible for obtaining a permit from Colorado Department of Health and Environment.)	Shall be done in such a manner to prevent potential pollutants from entering state waters.			X	X	
OTHER						

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**F. RESEEDING OPERATIONS/CORRECTIVE STABILIZATION:**

Prior to partial acceptance.

1. All seeded areas shall be reviewed by the SWMP Administrator for Construction and or Engineer for bare soils caused by surface or wind erosion. Bare areas caused by surface or gully erosion, blown away mulch, etc. shall be re-graded, seeded, and have the designated mulching applied as necessary, at no additional cost to the project.
2. The Contractor shall maintain seeding/mulch/tackifier, mow to control weeds or apply herbicide to control weeds in the seeded areas until Partial Acceptance of the stormwater construction work.

**7. PRIOR TO PROJECT FINAL ACCEPTANCE**

1. When directed by the Engineer, removal and disposal of temporary control measures shall be included in the cost of work.
2. Refer to Specification 208.10 for Items to be completed prior to requesting partial acceptance of water quality work.

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		<input type="checkbox"/>					Sheet Subset: SWMP	Subset Sheets: 1 of 2			



Name/Title	Contact Information (phone & email)	TECS Certification #	Start Date	Engineer Approval

C. **PERMANENT STABILIZATION SUBJECT MATTER EXPERT:** This qualified individual will be either a Regional Environmental Staff member, or an Independent Contractor Controller (Independent Assurance Program). This expert is a project team leader responsible for ensuring project adherence to requirements of the 207 and 212 Specifications as follows and will be available for questions regarding permanent stabilization requirements.

1. Review the Topsoil Management Plan and the Permanent Stabilization Site Maps.
2. Attend the Environmental Pre-construction Conference.
3. Coordinate the Site Pre-vegetation Conference.
4. Review and recommend approval of products.
5. Review and recommend approval of the Quantities Verification Prerequisite.
6. Attend the Partial Landscape Completion Walkthrough.
7. Attend the Final Landscape Completion Walkthrough.

Name/Title	Contact Information (phone & email)

**4. DURING CONSTRUCTION**

The SWMP should be considered a "living document" that is continuously reviewed and modified. During construction, the following items shall be added, updated, or amended as needed by the Contractor in accordance with Section 208

A. **MATERIALS HANDLING AND SPILL PREVENTION:**

Prior to construction commencing the Contractor shall submit a Spill Prevention, Control and Countermeasure Plan, see subsection 208.06. Materials handling shall be in accordance with subsection 208.06.

B. **OTHER CDPS PERMITS:**

None.

C. **STOCKPILE MANAGEMENT:**

Shall be done in accordance with subsections 107.25 and 208.07.

D. **CONCRETE WASHOUT:**

Concrete washout water or waste from field laboratories and paving equipment shall be contained in accordance with subsection 208.05.

E. **SAW CUTTING:**

Shall be done in accordance with subsections 107.25, 208.04, and 208.05.

F. **STREET SWEEPING:**

shall be done in accordance with subsection 208.04.

**5. CONTROL MEASURE MAINTENANCE**

Maintenance shall be in accordance with subsection 208.04 (f).

**6. INTERIM AND PERMANENT STABILIZATION**

The Contractor shall comply with all interim stabilization and permanent stabilization requirements in accordance with subsection 208.04(e).

A. **SEEDING PLAN**

The following seed mix(es) and rates are for drill seeding method as shown on the Permanent Stabilization Site Maps shall be used:

COMMON NAME	BOTANICAL NAME	LBS. PLS PER ACRE
blue grama grass	Bouteloua gracilis	3.0
sideoats grama	Bouteloua curtipendula	3.0
little bluestem (Pastura, Blaze)	Schizachyrium scoparium	2.8
sand dropseed	Sporobolus cryptandrus	1.1
sand lovegrass (Nebraska 27)	Eragostis trichoides	1.1
<b>TOTAL</b>		<b>11.0</b>

B. **SEEDING APPLICATION:**

The following seeding methods shall be used for all areas which are not surfaced and as shown on the Permanent Stabilization Site Maps. Soil compaction shall be minimized for areas where permanent stabilization will be achieved through vegetative cover. In small areas not accessible to a drill, hand broadcast at double the PLS rate per acre and rake 0.25 inch to 0.5 inch into the soil per Section 212 of CDOT Standards and Specifications.

Pay Item	Seeding Method (subsection 212.05)	Acre
212-00708	Seeding (Native) Broadcast	0.01
	<b>Total</b>	<b>0.01</b>

The Contractor shall provide the location of where seed is stored and access to stored seed locations to the Engineer. Seed stored by the Contractor for longer than 30 days will be rejected.

C. **MULCHING APPLICATION:**

Apply a minimum of 2 tons/ac. of certified weed free hay or 2 1/2 tons/ac. of certified weed free straw per acre and in accordance with Section 213, and mechanically crimp it into the soil in combination with an organic mulch tackifier.

Prior to winter shutdown or the summer seeding window closure: Uncompleted slopes shall be mulched with 2 tons of mulching (weed free) per acre, mechanically crimped into the topsoil in combination with an organic mulch tackifier in accordance with Sections 208 and 213.

D. **SPECIAL REQUIREMENTS:**

Soil amendments, seedbed preparation, and permanent stabilization mulching shall be accomplished within four working days of placing the topsoil on the de-compacted civil subgrades. If placed topsoil is not mulched with permanent stabilization mulch within four working days, the Contractor shall complete interim stabilization methods in accordance with subsection 208.04(e) at no additional cost to the Department. Permanent stabilization mulching shall be accomplished within 24 hours of hydraulic application of native seed.

The Contractor shall submit a proposed Permanent Stabilization Phasing Plan to the Engineer for approval showing how the SWMP Permanent Stabilization Plans will be implemented to minimize damage to seeded areas.


E. **SOIL AMENDMENT REQUIREMENTS:**

Minimum amendment material requirements for all disturbances to receive seeding (native).

Total Acres of Seeding (Native) Broadcast with Topsoil Generated from Topsoil (Onsite)

Seeding (Native) Broadcast Pay Item 212-00708	Pay Item	Description	Amount/Acre	Units	Total For This Method
	212-00700	Organic Fertilizer High N	435	Pounds	5
212-00701	Compost (Mechanically Applied)	0	CY	0	
212-00703	Humate	0	Pounds	0	
212-00704	Mycorrhizae	0	Pounds	0	
212-00705	Elemental Sulfur	0	Pounds	0	

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# STORMWATER MANAGEMENT PLAN: NORTHGLENN SAFER STREETS

## 1. SITE DESCRIPTION

The Contractor shall comply with all City of Northglenn MS4 requirements. The SWMP Administrator for Construction shall update to reflect current project site conditions.

### A. PROJECT SITE LOCATION:

Location or address of construction office:

This project is located throughout the City of Northglenn, Colorado. Pavement markings will be placed throughout the city's roadways. RRFBs (Rectangular Rapid-Flashing Beacon) will be placed at the following intersections: 140 feet West of Williams Way & Truda Dr., Phillips Dr. & Wyco Dr., E 115<sup>th</sup> Ave. and Wyco Dr., 200 feet East of Graves Ct. & High St., 950 feet East of Irma Dr. & E 112<sup>th</sup> Pl., Larsen Dr. and Leroy Dr., 250 feet North of Larsen Dr. & E 105<sup>th</sup> Pl., Leroy & Irma Dr., 250 feet North of Fox Run Pkwy & 108<sup>th</sup> Dr., 500 feet East of Bonita Pl. & Acoma St., Huron St. & Niver Canal, 150 feet South of Melody Dr. & Monterey Cir., Melody Dr. & W 100<sup>th</sup> Pl.

Location or address of construction office: \_\_\_\_\_

### B. PROJECT SITE DESCRIPTION:

This project includes increased safety designs to roadways and intersections throughout Northglenn. Roadway safety designs will consist of the implementation of pavement markings throughout roadways within the city. In addition, RRFBs will be placed on intersections to facilitate pedestrian safety.

### C. PROPOSED SEQUENCING FOR MAJOR CONSTRUCTION ACTIVITIES:

Construction activities include, installation of initial control measures, clearing, installation of RRFBs, and seeding. Stabilize all areas that are not paved or landscaped through establishment of vegetation cover.

### D. ACRES OF DISTURBANCE:

1. Total area of construction site (LOC): 0.01 acres
2. Total area of proposed disturbance (LDA): 0.01 acres
3. Total area of seeding: 0.01 acres

### E. EXISTING SOIL DATA:

The majority of the soils on this site consist of hydrologic soil group C, which is composed primarily of clay loam. This hydrologic soil group consists of soils with a slow infiltration rate when moderately wet. This group can be described as consisting of moderately fine to fine texture. This group can also be described as having a slow rate of water transmission and having a high potential for runoff. The other soils on site consist of hydrologic soil group D. This hydrologic soil group is chiefly composed of clays; therefore, it has a high shrink-swell potential. It is also classified as having a very slow infiltration rate and a very slow rate of water transmission.

Data Source(s): <https://websoilsurvey.sc.egov.usda.gov/App/HomePage>

### F. EXISTING VEGETATION, INCLUDING PERCENT OF VEGETATIVE COVER:

During design, the SWMP Administrator for Design in consultation with the Engineer will determine if the SWMP Administrator for Design or the SWMP Administrator for Construction will conduct the Vegetation Transects. If the site is disturbed, an Adequate Reference Site(s) may be utilized, refer to the permit. SWMP Administrator for Design or SWMP Administrator for Construction is to conduct a survey including general description of existing vegetation prior to any ground disturbance on the project. The SWMP Administrator shall photo-document existing vegetation where all work will be occurring. The SWMP Administrator shall perform the vegetation survey transect(s) and include photo documentation.

Pre-Construction Date of survey: \_\_\_\_\_ Percent Existing Vegetative Cover: \_\_\_\_\_

Description of existing vegetation: \_\_\_\_\_

Method for determining percent vegetative cover:

Include a map or table showing transect locations, photos documenting pre-Construction vegetative cover, and methodology used to determine existing vegetative cover to SWMP tab 17:

Post-Construction Date of survey: \_\_\_\_\_ Percent Vegetative Cover: \_\_\_\_\_

Description of vegetation: \_\_\_\_\_

The method used to determine pre-construction percent cover shall be used to determine post construction percent cover. Include map or table showing transect locations, photos documenting post-Construction vegetative cover, and methodology used to determine existing vegetative cover to SWMP tab 17:

## 2. STORMWATER MANAGEMENT CONTROLS FOR FIRST CONSTRUCTION ACTIVITIES

THE CONTRACTOR SHALL PERFORM THE FOLLOWING:

### A. POTENTIAL POLLUTANT SOURCES

Refer to Potential Pollutant Sources in SWMP Section 4A. Evaluate, identify and describe all potential sources of pollutants at the site in accordance with subsection 107.25 and place any Control Measures required to contain potential pollutants.

### B. OFFSITE DRAINAGE (RUN ON WATER):

Place Control Measures to address run-on water in accordance with subsection 208.03.

### C. CONSTRUCTION DEWATERING:

Obtain a CDPS Dewatering Permit from CDPHE if conditions of their Low-Risk Guidance for Discharges of Uncontaminated Groundwater to Land are not met; see subsections 107.02 and 107.25.

Refer to CDPHE Low Risk Discharge Guidance Document of Uncontaminated Groundwater to Land. <https://www.colorado.gov/pacific/sites/default/files/WQ%20LOW%20RISK%20GW.pdf>

### D. VEHICLE TRACKING CONTROL:

Control Measures shall be implemented in accordance with subsection 208.04.

### E. PERIMETER CONTROL:

Perimeter control shall be established as the first item on the SWMP to prevent the potential for pollutants leaving the construction site boundaries, entering the stormwater drainage system, or discharging to state waters. Perimeter control may consist of berms, silt fence, erosion logs, existing landforms, or other Control Measures as approved.

## 3. QUALIFIED STORMWATER MANAGERS:

### A. SWMP ADMINISTRATOR FOR DESIGN:

CDOT Certified Individual responsible for developing SWMP Plan Sheets during the design phase.


Name/Title	Contact Information [phone & email]	Certification #
Lauren Gentile/Environmental Manager	720-273-1672 <a href="mailto:gentile@rocksol.com">gentile@rocksol.com</a>	33D95D1A

### B. SWMP ADMINISTRATOR FOR CONSTRUCTION:

(As defined in Section 208) The Contractor shall designate a SWMP Administrator for Construction. The SWMP Administrator for Construction shall become the operator for the SWMP and assume responsibility for all design changes to the SWMP implementation and maintenance in accordance to 208.03, the SWMP shall remain the property of City of Northglenn. The SWMP Administrator for Construction shall be responsible for implementing, maintaining, and revising SWMP, including the title and contact information. The activities and responsibilities of the SWMP Administrator for Construction shall address all aspects of the project's SWMP. (Update the information below for each new SWMP Administrator for Construction) (Copy of TECS Certification must also be included in the SWMP.

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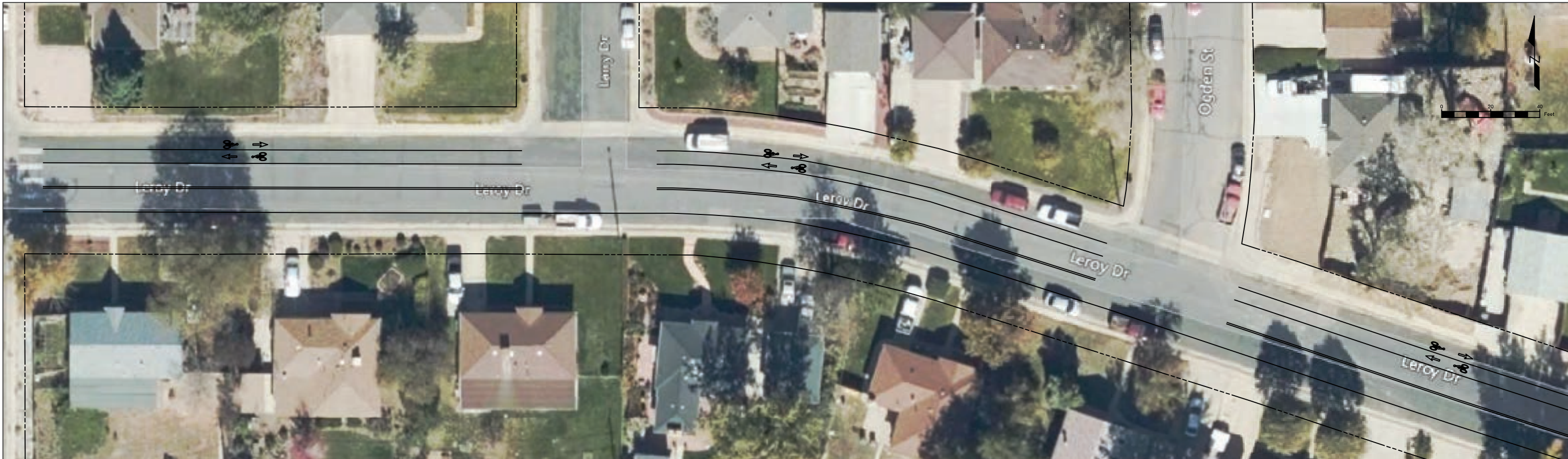
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Sheet Revisions		
Date:	Comments	Init.




As Constructed	CONNECT NORTHGLENN SWMP		Project No.
No Revisions:			STU M945-007, 24362
Revised:	Designer: KH	Structure Numbers	Drawing Number 1
Void:	Detailer: KH	Sheet Subset: SWMP	Subset Sheets: 1 of 2

Sheet Number 18
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Plot Date: 7/20/2022 1:43 PM Plotted By: Kyle Haworth  
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Print Date: 7/20/2022
File Name: LEROY DR.DWG
Horiz. Scale: As Noted    Vert. Scale: As Noted
 12301 Claude Ct Northglenn, CO 80241 Ph: (303) 450-8835

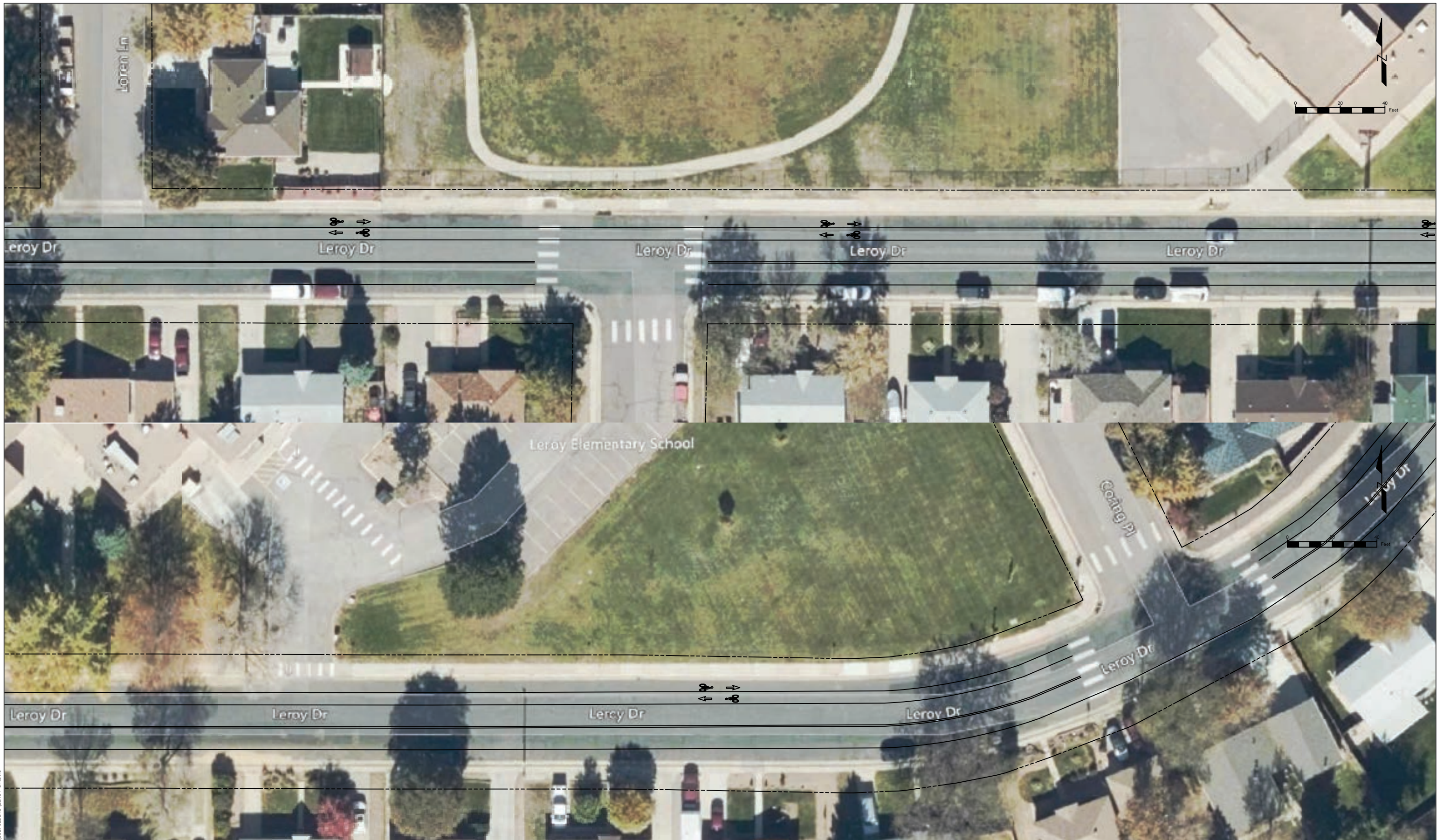
Sheet Revisions		
Date:	Comments	Init.




As Constructed
No Revisions:
Revised:
Void:

CONNECT NORTHGLENN LERROY DR		
Designer: KH	Structure	Numbers
Detailer: KH		
Sheet Subset: LEROY DR	Subset Sheets: 1 of 3	

Project No.
STU M945-007, 24362
Drawing Number 1
Sheet Number 19



Plot Date: 7/20/2022 1:43 PM Plotted By: Kyle Howarth  
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Print Date: 7/20/2022
File Name: LEROY DR.DWG
Horiz. Scale: As Noted    Vert. Scale: As Noted
 12301 Claude Ct Northglenn, CO 80241 Ph: (303) 450-8835

Sheet Revisions		
Date:	Comments	Init.



As Constructed
No Revisions:
Revised:
Void:

CONNECT NORTHGLENN LEROY DR		
Designer:	KH	Structure
Detailer:	KH	Numbers
Sheet Subset:	LEROY DR	Subset Sheets: 2 of 3

Project No.
STU M945-007, 24362
Drawing Number 2
Sheet Number 20



Plot Date: 7/20/2022 1:43 PM Plotted By: Kyle Howarth  
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Print Date: 7/20/2022
File Name: LEROY DR.DWG
Horiz. Scale: As Noted      Vert. Scale: As Noted
12301 Claude Ct Northglenn, CO 80241 Ph: (303) 450-8835

Sheet Revisions		
Date:	Comments	Init.




As Constructed
No Revisions:
Revised:
Void:

CONNECT NORTHGLENN LERROY DR		
Designer:	KH	Structure
Detailer:	KH	Numbers
Sheet Subset:	LERROY DR	Subset Sheets: 3 of 3

Project No.
STU M945-007, 24362
Drawing Number 3
Sheet Number 21



Plot Date: 7/20/2022 1:43 PM Plotted By: Kyle Haworth  
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Print Date: 7/20/2022
File Name: 115TH AVE.DWG
Horiz. Scale: As Noted    Vert. Scale: As Noted
 12301 Claude Ct Northglenn, CO 80241 Ph: (303) 450-8835

Sheet Revisions		
Date:	Comments	Init.




As Constructed
No Revisions:
Revised:
Void:

CONNECT NORTHGLENN 115TH AVE		
Designer: KH	Structure	
Detailer: KH	Numbers	
Sheet Subset: 115TH AVE	Subset Sheets: 1 of 2	

Project No.
STU M945-007, 24362
Drawing Number 1
Sheet Number 22



Plot Date: 7/20/2022 1:43 PM Plotted By: Kyle Howarth  
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Print Date: 7/20/2022	
File Name: 115TH AVE.DWG	
Horiz. Scale: As Noted	Vert. Scale: As Noted
 12301 Claude Ct Northglenn, CO 80241 Ph: (303) 450-8835	

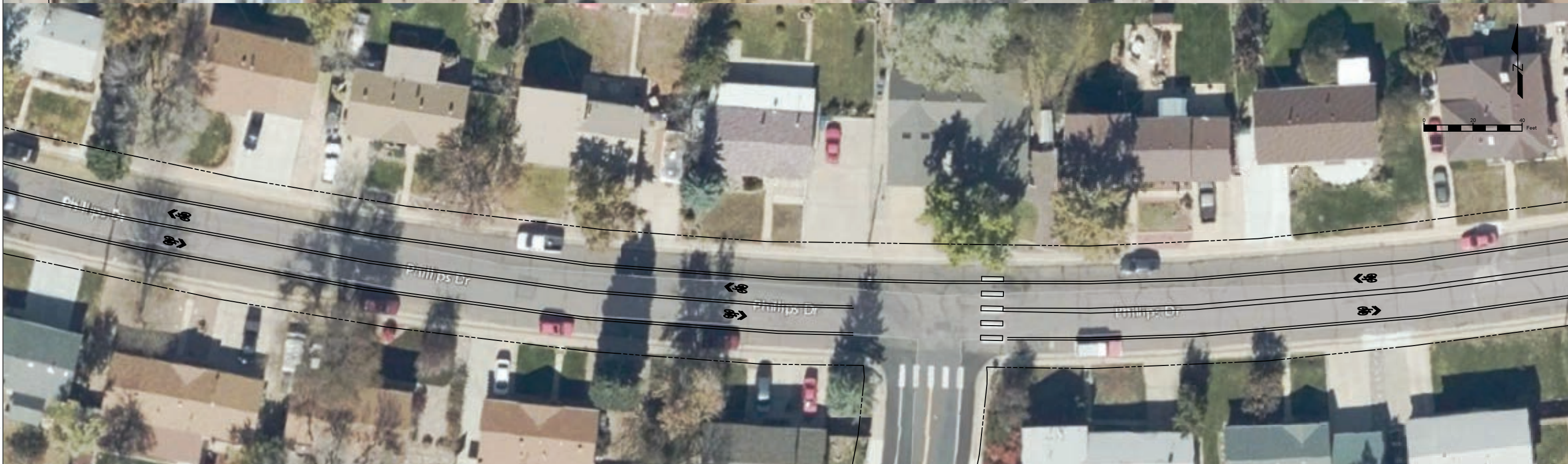
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Date:	Comments	Init.



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No Revisions:
Revised:
Void:

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Designer:	KH	Structure
Detailer:	KH	Numbers
Sheet Subset:	115TH AVE	Subset Sheets: 2 of 2

Project No.
STU M945-007, 24362
Drawing Number 2
Sheet Number 23



Print Date: 7/20/2022  
 File Name: PHILLIPS DR.DWG  
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Sheet Revisions		
Date:	Comments	Init.



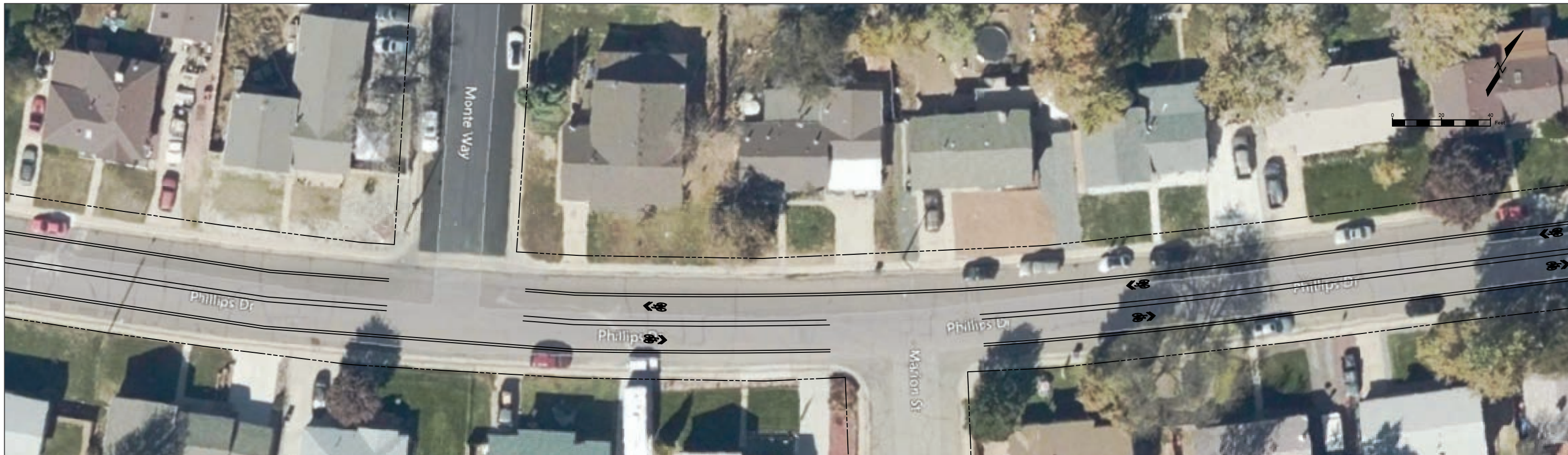
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Revised:
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Designer: KH	Structure	
Detailer: KH	Numbers	
Sheet Subset: PHILLIPS DR		Subset Sheets: 1 of 5


Project No.
STU M945-007, 24362
Drawing Number 1
Sheet Number 24

Plot Date: 7/20/2022 1:43 PM Plotted By: Kyle Howarth  
 C:\USERS\KHOWARTH\DESKTOP\CAD\SUBFOLDERS\PHILLIPS DR.DWG





Plot Date: 7/20/2022 1:43 PM Plotted By: Kyle Howarth  
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Print Date: 7/20/2022
File Name: PHILLIPS DR.DWG
Horiz. Scale: As Noted      Vert. Scale: As Noted
 12301 Claude Ct Northglenn, CO 80241 Ph: (303) 450-8835

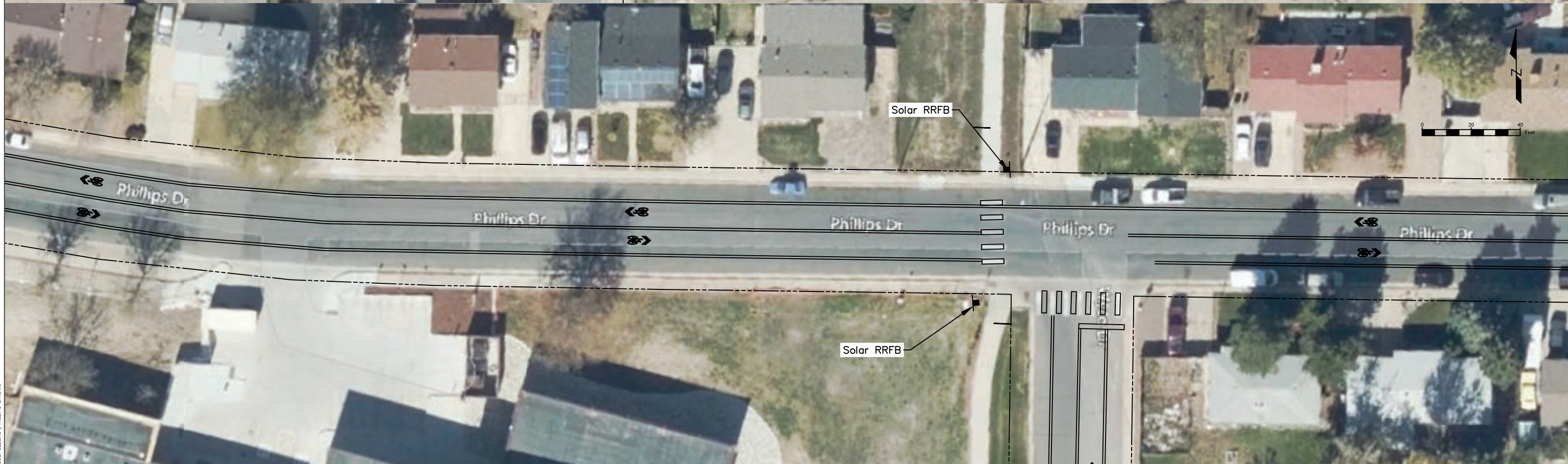
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Revised:
Void:

CONNECT NORTHGLENN PHILLIPS DR		
Designer: KH	Structure	
Detailer: KH	Numbers	
Sheet Subset: PHILLIPS DR		Subset Sheets: 2 of 5

Project No.
STU M945-007, 24362
Drawing Number 2
Sheet Number 25



Plot Date: 7/20/2022 1:43 PM Plotted By: Kyle Howarth  
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Print Date: 7/20/2022
File Name: PHILLIPS DR.DWG
Horiz. Scale: As Noted    Vert. Scale: As Noted
 12301 Claude Ct Northglenn, CO 80241 Ph: (303) 450-8835

Sheet Revisions		
Date:	Comments	Init.



As Constructed
No Revisions:
Revised:
Void:

CONNECT NORTHGLENN PHILLIPS DR		
Designer: KH	Structure	
Detailer: KH	Numbers	
Sheet Subset: PHILLIPS DR		Subset Sheets: 3 of 5

Project No.
STU M945-007, 24362
Drawing Number 3
Sheet Number 26



Plot Date: 7/20/2022 1:44 PM Plotted By: Kyle Howarth  
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Print Date: 7/20/2022  
 File Name: PHILLIPS DR.DWG  
 Horiz. Scale: As Noted    Vert. Scale: As Noted

Sheet Revisions		
Date:	Comments	Init.



As Constructed  
 No Revisions:  
 Revised:  
 Void:

**CONNECT NORTHGLENN  
PHILLIPS DR**  
 Designer: KH  
 Detailer: KH  
 Sheet Subset: PHILLIPS DR

Project No.  
 STU M945-007, 24362  
 Drawing Number 4  
 Sheet Number 27

Structure Numbers  
 Subset Sheets: 4 of 5



Plot Date: 7/20/2022 1:44 PM Plotted By: Kyle Howarth  
 C:\USERS\KHOWARTH\DESKTOP\CAD\SUBFOLDERS\PHILLIPS DR.DWG

Print Date: 7/20/2022  
 File Name: PHILLIPS DR.DWG  
 Horiz. Scale: As Noted    Vert. Scale: As Noted

Sheet Revisions		
Date:	Comments	Init.



As Constructed  
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 Revised:  
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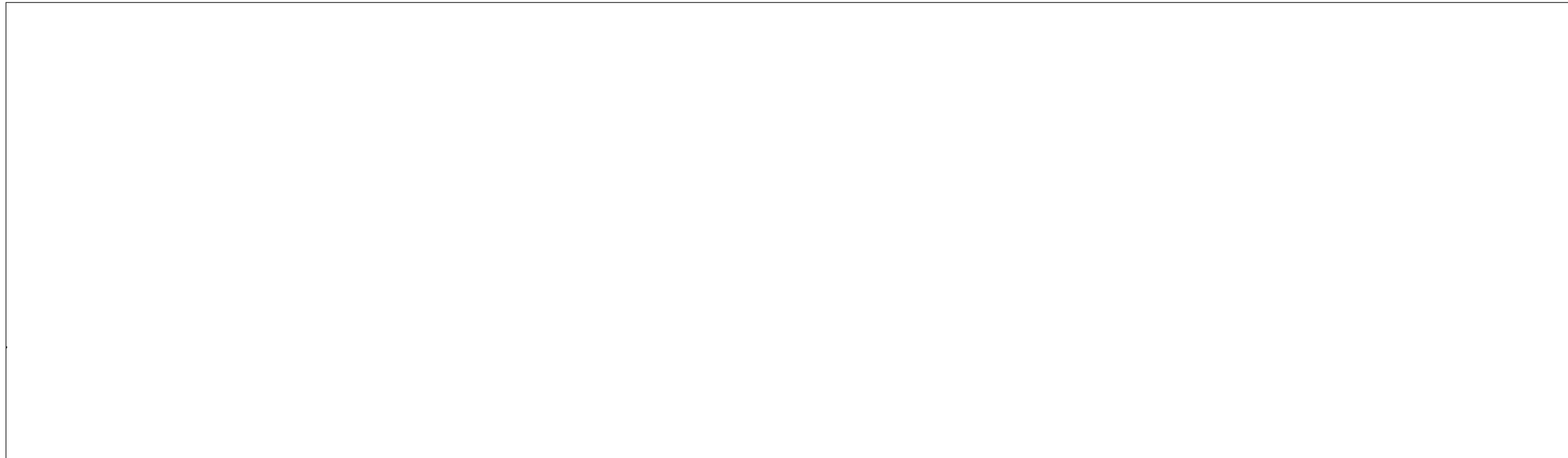
**CONNECT NORTHGLENN  
 PHILLIPS DR**

Designer:	KH	Structure	
Detailer:	KH	Numbers	
Sheet Subset: PHILLIPS DR		Subset Sheets: 5 of 5	

Project No.  
 STU M945-007, 24362  
 Drawing Number 5  
 Sheet Number 28



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Plot Date: 7/20/2022 1:44 PM Plotted By: Kyle Howarth  
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Print Date: 7/20/2022
File Name: TRUDA DR.DWG
Horiz. Scale: As Noted    Vert. Scale: As Noted

Sheet Revisions		
Date:	Comments	Init.




As Constructed
No Revisions:
Revised:
Void:

CONNECT NORTHGLENN TRUDA DR		
Designer: KH	Structure	
Detailer: KH	Numbers	
Sheet Subset: TRUDA DR	Subset Sheets: 3 of 5	

Project No.
STU M945-007, 24362
Drawing Number 3
Sheet Number 29



Plot Date: 7/20/2022 1:45 PM Plotted By: Kyle Howarth  
 C:\USERS\KHOWARTH\DESKTOP\CAD\SUBFOLDERS\KENNEDY DR.DWG

Print Date: 7/20/2022
File Name: KENNEDY DR.DWG
Horiz. Scale: As Noted    Vert. Scale: As Noted
 12301 Claude Ct Northglenn, CO 80241 Ph: (303) 450-8835

Sheet Revisions		
Date:	Comments	Init.




As Constructed
No Revisions:
Revised:
Void:

CONNECT NORTHGLENN KENNEDY DR		
Designer:	KH	Structure
Detailer:	KH	Numbers
Sheet Subset:KENNEDY DR	Subset Sheets: 5 of 5	

Project No.
STU M945-007, 24362
Drawing Number 1
Sheet Number 30



Plot Date: 7/20/2022 1:45 PM Plotted By: Kyle Howarth  
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Print Date: 7/20/2022
File Name: KENNEDY DR.DWG
Horiz. Scale: As Noted    Vert. Scale: As Noted
 12301 Claude Ct Northglenn, CO 80241 Ph: (303) 450-8835

Sheet Revisions		
Date:	Comments	Init.




As Constructed
No Revisions:
Revised:
Void:

CONNECT NORTHGLENN KENNEDY DR		
Designer:	KH	Structure
Detailer:	KH	Numbers
Sheet Subset: KENNEDY DR	Subset Sheets: 5 of 5	

Project No.
STU M945-007, 24362
Drawing Number 2
Sheet Number 31



Plot Date: 7/20/2022 1:45 PM Plotted By: Kyle Howarth  
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Print Date: 7/20/2022
File Name: KENNEDY DR.DWG
Horiz. Scale: As Noted    Vert. Scale: As Noted
 12301 Claude Ct Northglenn, CO 80241 Ph: (303) 450-8835

Sheet Revisions		
Date:	Comments	Init.



As Constructed
No Revisions:
Revised:
Void:


CONNECT NORTHGLENN KENNEDY DR		
Designer:	KH	Structure
Detailer:	KH	Numbers
Sheet Subset: KENNEDY DR	Subset Sheets: 5 of 5	

Project No.
STU M945-007, 24362
Drawing Number 3
Sheet Number 32





Plot Date: 7/20/2022 1:45 PM Plotted By: Kyle Howarth  
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Print Date: 7/20/2022
File Name: KENNEDY DR.DWG
Horiz. Scale: As Noted    Vert. Scale: As Noted
 12301 Claude Ct Northglenn, CO 80241 Ph: (303) 450-8835

Sheet Revisions		
Date:	Comments	Init.




As Constructed
No Revisions:
Revised:
Void:

CONNECT NORTHGLENN KENNEDY DR		
Designer:	KH	Structure
Detailer:	KH	Numbers
Sheet Subset: KENNEDY DR	Subset Sheets: 5 of 5	

Project No.
STU M945-007, 24362
Drawing Number 4
Sheet Number 33



Plot Date: 7/20/2022 1:45 PM Plotted By: Kyle Howarth  
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Print Date: 7/20/2022
File Name: KENNEDY DR.DWG
Horiz. Scale: As Noted    Vert. Scale: As Noted
 12301 Claude Ct Northglenn, CO 80241 Ph: (303) 450-8835

Sheet Revisions		
Date:	Comments	Init.



As Constructed
No Revisions:
Revised:
Void:

CONNECT NORTHGLENN KENNEDY DR		
Designer:	KH	Structure
Detailer:	KH	Numbers
Sheet Subset:KENNEDY DR	Subset Sheets: 5 of 5	


Project No.
STU M945-007, 24362
Drawing Number 5
Sheet Number 34

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Print Date: 7/20/2022
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 12301 Claude Ct Northglenn, CO 80241 Ph: (303) 450-8835

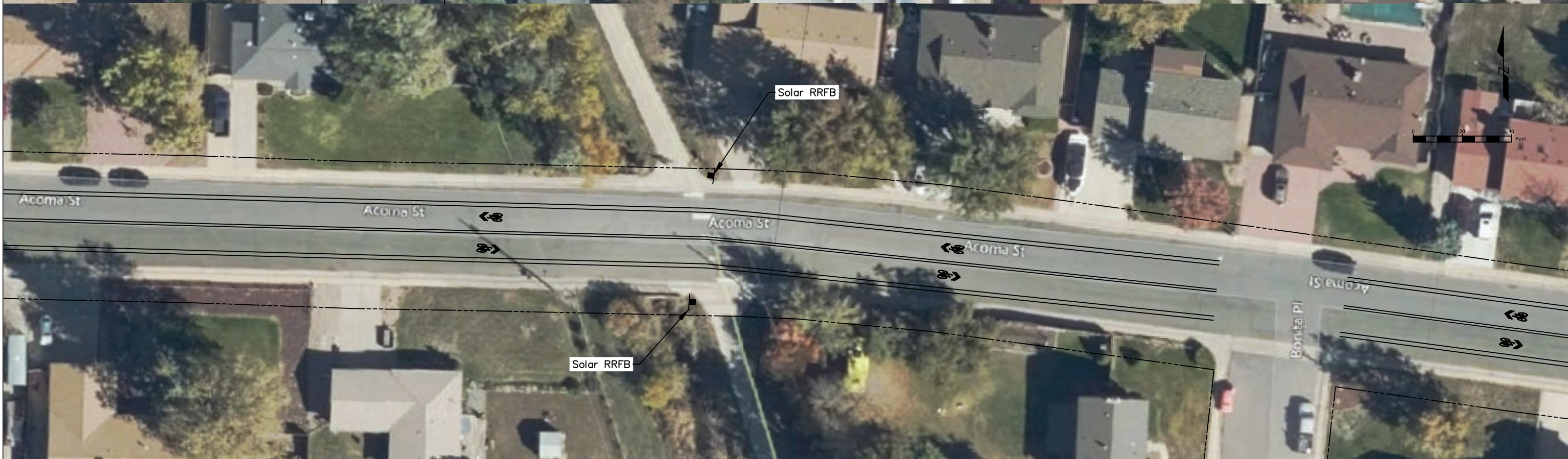
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CONNECT NORTHGLENN KENNEDY DR		
Designer:	KH	Structure
Detailer:	KH	Numbers
Sheet Subset:KENNEDY DR	Subset Sheets: 5 of 5	

Project No.
STU M945-007, 24362
Drawing Number 6
Sheet Number 35



Plot Date: 7/20/2022 1:45 PM Plotted By: Kyle Howarth  
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Print Date: 7/20/2022
File Name: ACOMA DR.DWG
Horiz. Scale: As Noted    Vert. Scale: As Noted
12301 Claude Ct Northglenn, CO 80241 Ph: (303) 450-8835

Sheet Revisions		
Date:	Comments	Init.




As Constructed
No Revisions:
Revised:
Void:

CONNECT NORTHGLENN ACOMA ST		
Designer: KH	Structure	
Detailer: KH	Numbers	
Sheet Subset: ACOMA ST	Subset Sheets: 1 of 5	

Project No.
STU M945-007, 24362
Drawing Number 1
Sheet Number 36



Plot Date: 7/20/2022 1:45 PM Plotted By: Kyle Howarth  
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Print Date: 7/20/2022
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 12301 Claude Ct Northglenn, CO 80241 Ph: (303) 450-8835

Sheet Revisions		
Date:	Comments	Init.




As Constructed
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Revised:
Void:

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Designer: KH	Structure	
Detailer: KH	Numbers	
Sheet Subset: ACOMA ST	Subset Sheets: 2 of 5	

Project No.
STU M945-007, 24362
Drawing Number 2
Sheet Number 37



Plot Date: 7/20/2022 1:45 PM Plotted By: Kyle Howarth  
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Print Date: 7/20/2022	
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Horiz. Scale: As Noted	Vert. Scale: As Noted
	12301 Claude Ct Northglenn, CO 80241 Ph: (303) 450-8835

Sheet Revisions		
Date:	Comments	Init.



As Constructed
No Revisions:
Revised:
Void:

CONNECT NORTHGLENN ACOMA ST		
Designer:	KH	Structure
Detailer:	KH	Numbers
Sheet Subset:	ACOMA ST	Subset Sheets: 3 of 5

Project No.
STU M945-007, 24362
Drawing Number 3
Sheet Number 38



Plot Date: 7/20/2022 1:45 PM Plotted By: Kyle Howarth  
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Print Date: 7/20/2022  
 File Name: ACOMA DR.DWG  
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Sheet Revisions		
Date:	Comments	Init.



As Constructed  
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**CONNECT NORTHGLENN**  
**ACOMA ST**  
 Designer: KH  
 Detailer: KH  
 Sheet Subset: ACOMA ST    Subset Sheets: 4 of 5


Project No.  
 STU M945-007, 24362  
 Drawing Number 4  
 Sheet Number 39

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Plot Date: 7/20/2022 1:45 PM Plotted By: Kyle Howarth  
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Print Date: 7/20/2022
File Name: ACOMA DR.DWG
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 12301 Claude Ct Northglenn, CO 80241 Ph: (303) 450-8835

Sheet Revisions		
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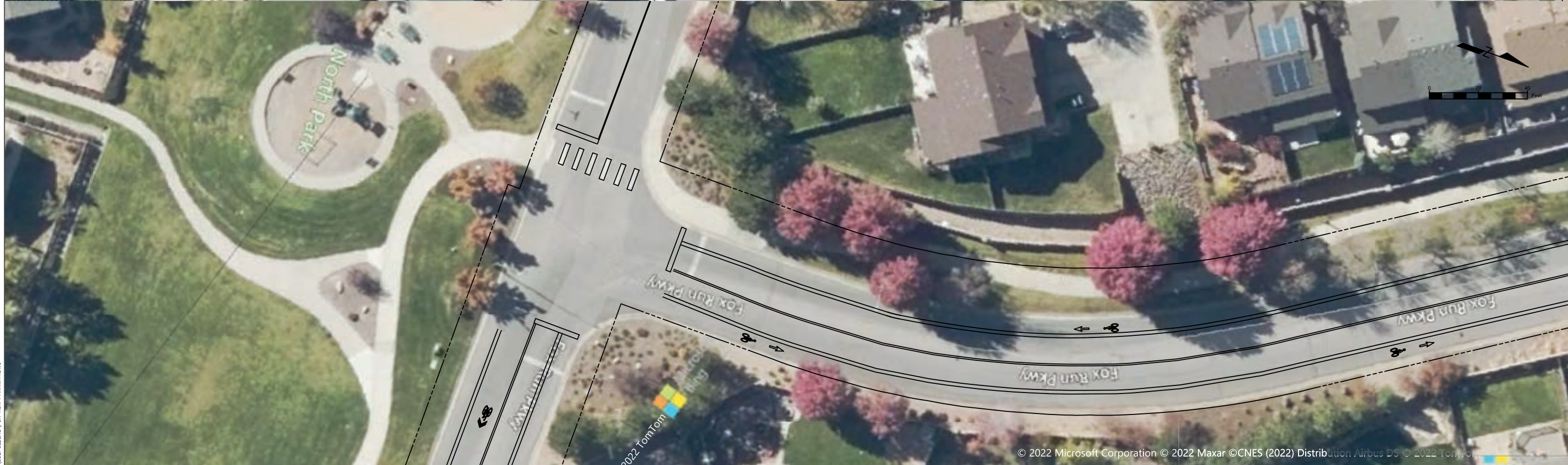


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Revised:
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CONNECT NORTHGLENN ACOMA ST		
Designer:	KH	Structure
Detailer:	KH	Numbers
Sheet Subset:	ACOMA ST	Subset Sheets: 5 of 5

Project No.
STU M945-007, 24362
Drawing Number 5
Sheet Number 40





Plot Date: 7/20/2022 1:45 PM Plotted By: Kyle Howarth  
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Print Date: 7/20/2022	
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 12301 Claude Ct Northglenn, CO 80241 Ph: (303) 450-8835	

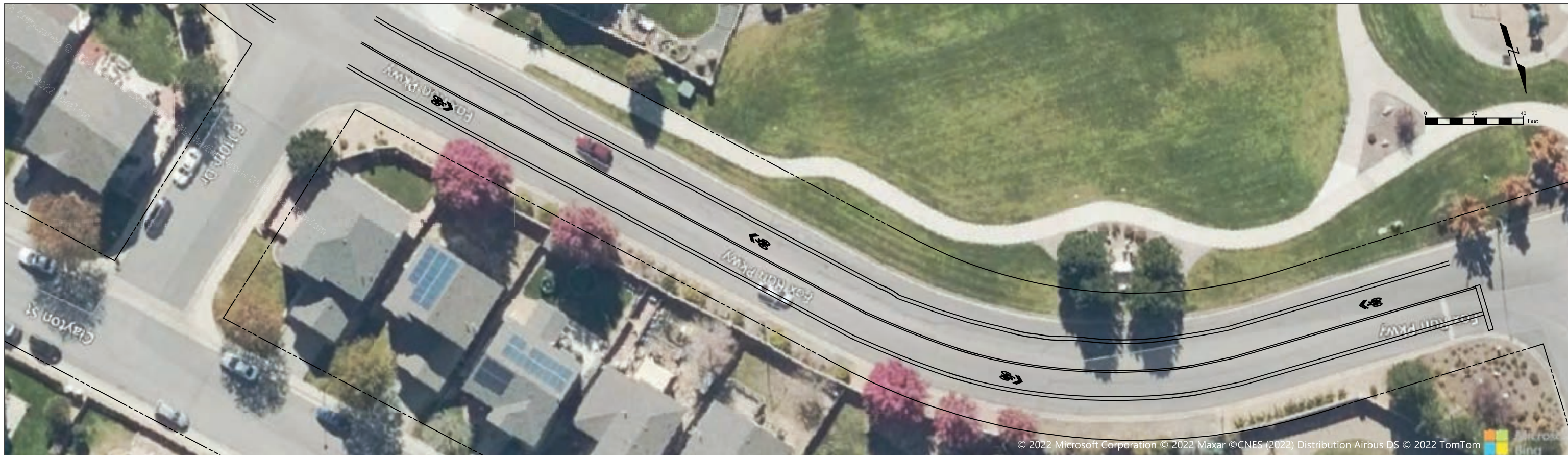
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Revised:
Void:

CONNECT NORTHGLENN FOX RUN PKWY		
Designer:	KH	Structure
Detailer:	KH	Numbers
Sheet Subsets:	FOX RUN PKWY	Subset Sheets: 1 of 7

Project No.
STU M945-007, 24362
Drawing Number 1
Sheet Number 41



Plot Date: 7/20/2022 1:45 PM Plotted By: Kyle Howarth  
 C:\USERS\KHOWARTH\DESKTOP\CAD\SUBFOLDERS\FOX RUN PARKWAY.DWG

Print Date: 7/20/2022  
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Sheet Revisions		
Date:	Comments	Init.

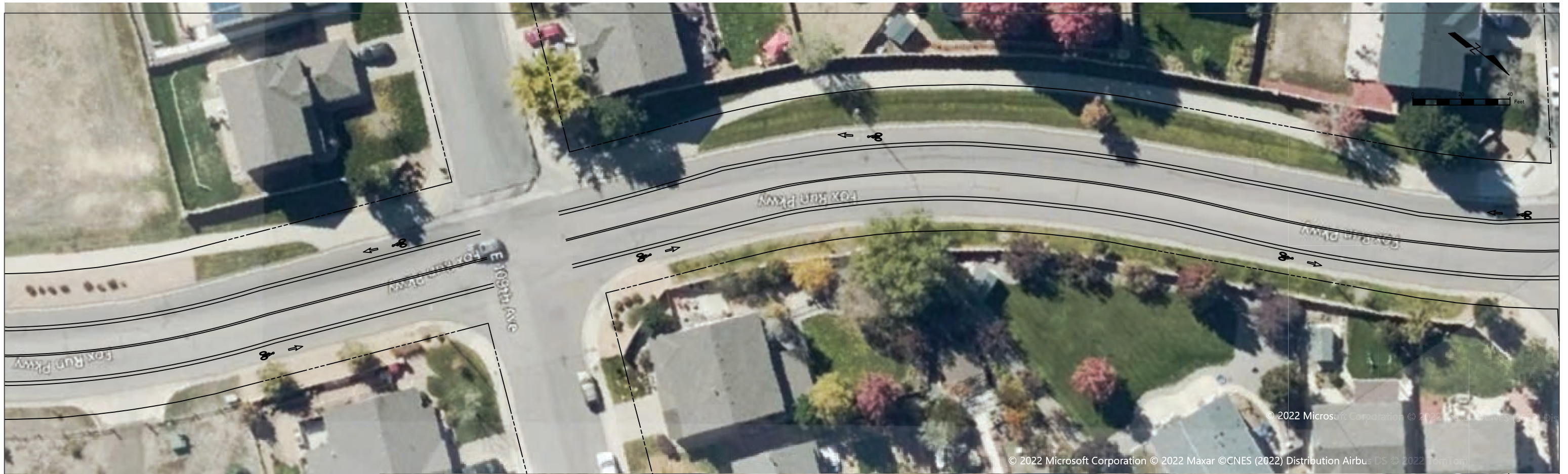


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 Detailer: KH  
 Sheet Sub: FOX RUN PKWY

Project No.  
 STU M945-007, 24362  
 Drawing Number 2  
 Sheet Number 42

Structure Numbers  
 Subset Sheets: 2 of 7



Plot Date: 7/20/2022 1:45 PM Plotted By: Kyle Howarth  
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Print Date: 7/20/2022  
 File Name: FOX RUN PARKWAY.DWG  
 Horiz. Scale: As Noted Vert. Scale: As Noted

Sheet Revisions		
Date:	Comments	Init.



As Constructed  
 No Revisions:  
 Revised:  
 Void:

**CONNECT NORTHGLENN  
FOX RUN PKWY**  
 Designer: KH  
 Detailer: KH  
 Sheet Sub: FOX RUN PKWY

Project No.  
 STU M945-007, 24362  
 Drawing Number 3  
 Sheet Number 43



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Structure Numbers  
 Subset Sheets: 3 of 7



Plot Date: 7/20/2022 1:45 PM Plotted By: Kyle Howarth  
 C:\USERS\KHOWARTH\DESKTOP\CAD\SUBFOLDERS\FOX RUN PARKWAY.DWG

Print Date: 7/20/2022	
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Horiz. Scale: As Noted	Vert. Scale: As Noted
12301 Claude Ct Northglenn, CO 80241 Ph: (303) 450-8835	

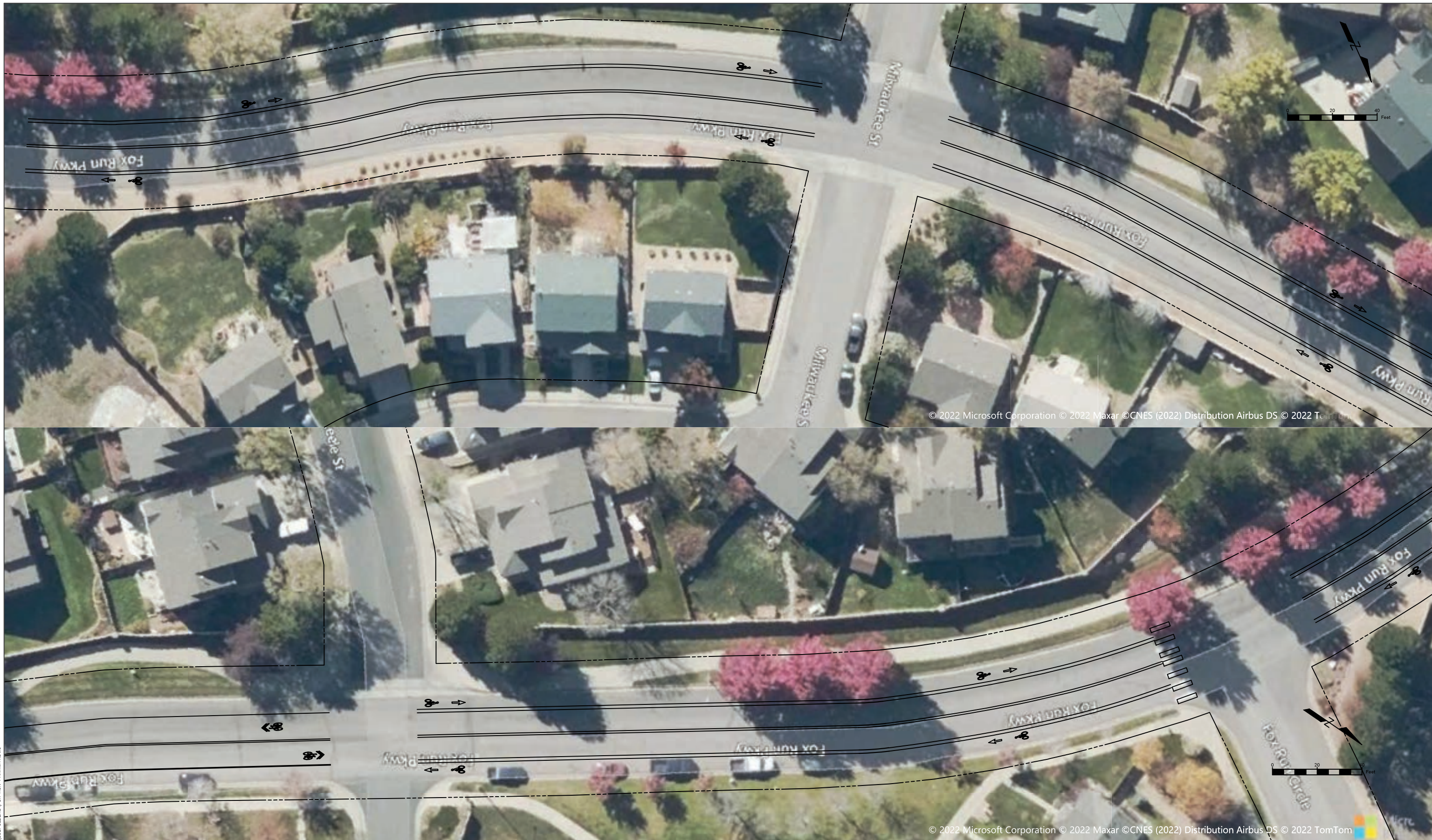
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As Constructed
No Revisions:
Revised:
Void:

CONNECT NORTHGLENN FOX RUN PKWY		
Designer:	KH	Structure
Detailer:	KH	Numbers
Sheet Subsets:	FOX RUN PKWY	Subset Sheets: 4 of 7

Project No.
STU M945-007, 24362
Drawing Number 4
Sheet Number 44



Plot Date: 7/20/2022 1:45 PM Plotted By: Kyle Howarth  
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Print Date: 7/20/2022	
File Name: FOX RUN PARKWAY.DWG	
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12301 Claude Ct Northglenn, CO 80241 Ph: (303) 450-8835	

Sheet Revisions		
Date:	Comments	Init.



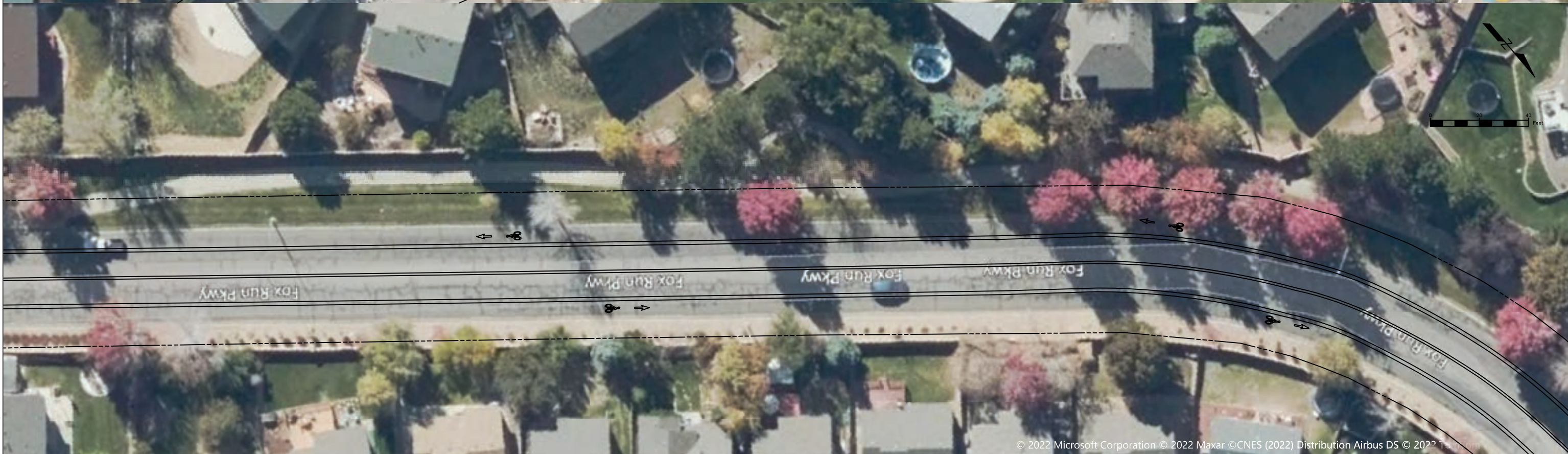
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Revised:
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CONNECT NORTHGLENN FOX RUN PKWY		
Designer:	KH	Structure
Detailer:	KH	Numbers
Sheet Subsets:	FOX RUN PKWY	Subset Sheets: 5 of 7

Project No.
STU M945-007, 24362
Drawing Number 5
Sheet Number 45



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Print Date: 7/20/2022	
File Name: FOX RUN PARKWAY.DWG	
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12301 Claude Ct Northglenn, CO 80241 Ph: (303) 450-8835	

Sheet Revisions		
Date:	Comments	Init.




As Constructed
No Revisions:
Revised:
Void:

CONNECT NORTHGLENN FOX RUN PKWY		
Designer:	KH	Structure
Detailer:	KH	Numbers
Sheet Subsets:	FOX RUN PKWY	Subset Sheets: 6 of 7

Project No.
STU M945-007, 24362
Drawing Number 6
Sheet Number 46



Plot Date: 7/20/2022 1:45 PM Plotted By: Kyle Howarth  
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Print Date: 7/20/2022
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 12301 Claude Ct Northglenn, CO 80241 Ph: (303) 450-8835

Sheet Revisions		
Date:	Comments	Init.



As Constructed
No Revisions:
Revised:
Void:


CONNECT NORTHGLENN FOX RUN PKWY		
Designer:	KH	Structure
Detailer:	KH	Numbers
Sheet Subsets:	FOX RUN PKWY	Subset Sheets: 7 of 7

Project No.
STU M945-007, 24362
Drawing Number 7
Sheet Number 47

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Plot Date: 7/20/2022 1:46 PM Plotted By: Kyle Howarth  
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Print Date: 7/20/2022	
File Name: RRFB.DWG	
Horiz. Scale: As Noted	Vert. Scale: As Noted
	
12301 Claude Ct Northglenn, CO 80241 Ph: (303) 450-8835	

Sheet Revisions		
Date:	Comments	Init.



As Constructed
No Revisions:
Revised:
Void:

CONNECT NORTHGLENN RRFB - 112 TH PL		
Designer:	KH	Structure
Detailer:	KH	Numbers
Sheet Subset:	RRFB	Subset Sheets: 1 of 3

Project No.
STU M945-007, 24362
Drawing Number 2
Sheet Number 48