

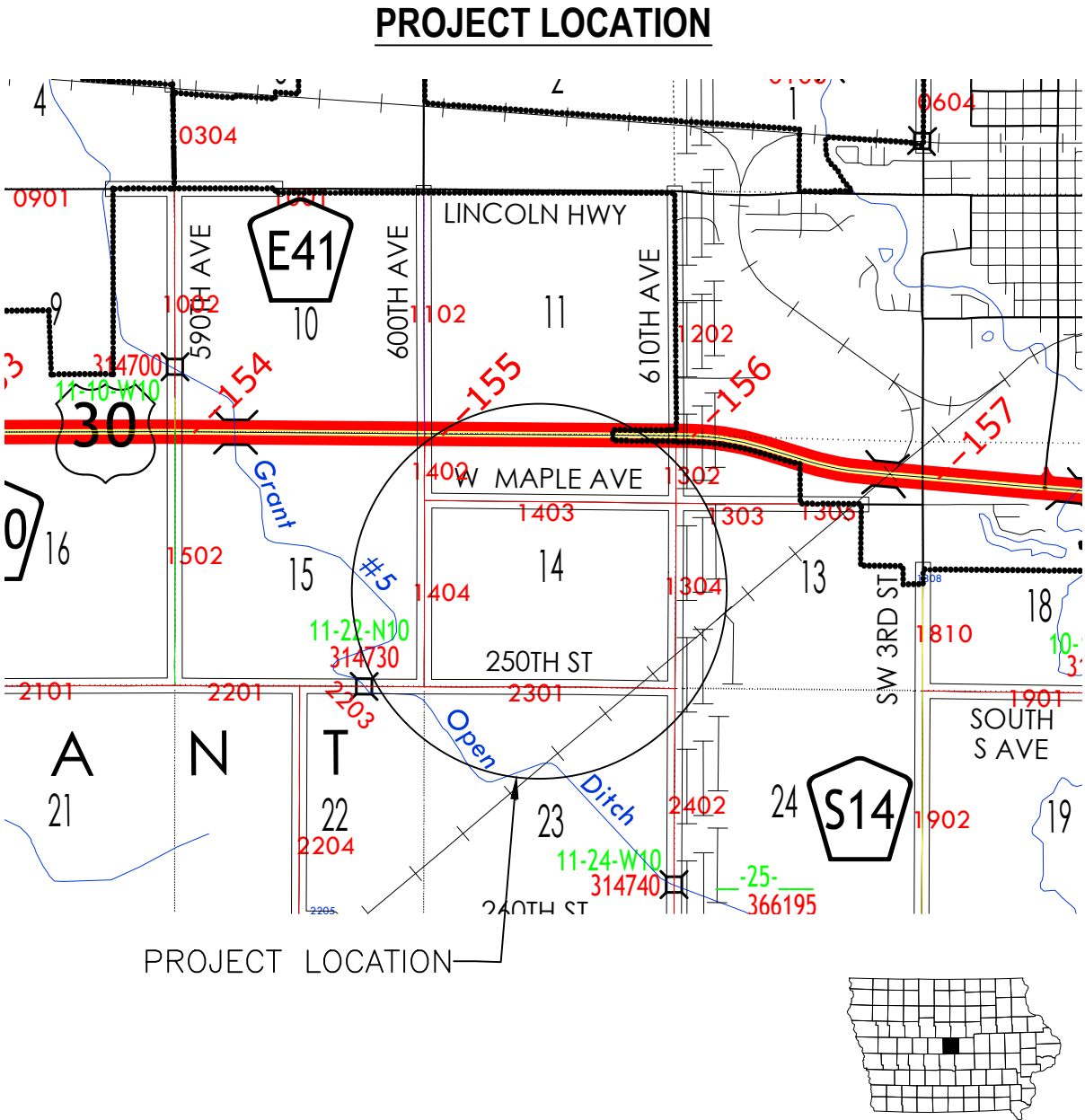
IOWA COMMUNICATIONS NETWORK

CONSTRUCTION DRAWINGS FOR:
NEW CONSTRUCTION BETWEEN AMES & NEVADA
HWY 30, 600TH, 250TH, & 610TH
(STORY COUNTY)

PROJECT OVERVIEW:

DESCRIPTION OF PROJECT

- 1. PROVIDE AND PLACE APPROXIMATELY 12,382-FT± OF 2-IN HDPE VIA PLOW AND DIRECTIONAL BORE
 - ALL DRIVEWAYS, ROAD CROSSINGS, AND (1) RAILROAD TO BE BORED
- 2. ALL 2-IN HDPE SHALL BE COUPLED TO ALLOW CONTINUOUS PULLING OF FIBER FROM EACH HANDHOLE
 - ALL DUCT SPLICES SHALL BE AIR AND WATER TIGHT AND BE SPECIFICALLY MADE FOR JOINING HDPE CONDUIT
- 3. PROVIDE AND PLACE (5) 24X36X30 TIER 15 HANDHOLES WITH LID SET TO GRADE
 - HANDHOLES TO BE INSTALLED PER ICN TYPICAL DRAWING ON PAGE 14
 - PREP FOR TRIVIEW LOCATE PEDESTAL ON EACH END OF THE NEW CONSTRUCTION, SEE TYPICAL DRAWING ON PAGE 14
- 4. PROVIDE AND PULL APPROXIMATELY 13,308-FT± OF ARMORED OSP RATED 12CT FIBER OPTIC CABLE (12F)
 - (2) ICN SPLICE POINTS ON EACH END OF THE NEW CONSTRUCTION
 - (1) LUMEN SPLICE POINT FOR ICN TIE-IN ON THE SOUTH END OF THE NEW CONSTRUCTION (SEE CONSTRUCTION PLANS FOR DETAILS)
 - REMAINING HANDHOLES ARE FOR SLACK COILS (CONTINUOUS FIBER | NOT SPLICE POINTS)



CONTACTS*				
COMPANY	TYPE	NAME	PHONE	EMAIL
Iowa Communications Network (ICN)	OSP Engineer	Mike Dalen	515-499-1642	mike.dalen@iowa.gov
Iowa Communications Network (ICN)	ICN Materials	Paul Damge	515-725-4749	paul.damge@iowa.gov
Fiber Network Services (FNS)	Splicing Coordination	NOC OSP	515-725-7423	icnnocosp@iowa.gov

*THIS CONTACT LIST IS NOT ALL-INCLUSIVE. CONTRACTOR IS RESPONSIBLE FOR REQUESTING LOCATES OF ALL UTILITIES.

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1	TITLE PAGE (THIS SHEET)	8	CONSTRUCTION DRAWING (5)
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NEW CONSTRUCTION BETWEEN AMES & NEVADA
STORY CO – HWY 30, 600TH, 250TH, & 610TH

1	NEW CONSTRUCTION	7-22-25
2		
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DES MOINES, IOWA 50319
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STANDARD INSTALLATION REQUIREMENTS:		
GENERAL REQUIREMENTS:		
<div>1. THE CONTRACTOR SHALL POTHOLE ALL EXISTING UTILITIES.</div> <div>2. PROVIDE THE OWNERS OF ANY NATURAL GAS UTILITY 48 HOURS ADVANCE NOTICE THAT WORK IS SCHEDULED IN THE VICINITY OF THEIR LINES/MAINS SO THAT THEY CAN PROVIDE STANDBY AND PROTECT SERVICES.</div> <div>3. MAINTAIN PROOF OF NOTIFICATION TO AND RECEIPT OF NOTIFICATION BY THE GAS UTILITY.</div> <div>4. PERMITS AND COORDINATION<div>4.1. SECURE ALL NECESSARY STATE AND LOCAL (CITY, COUNTY, ETC.) PERMITS, PUBLIC OR PRIVATE EASEMENTS, FACILITY PERMITS, USAGE PERMITS, AND ANY OTHER PERMIT REQUIRED BY AN AUTHORITY HAVING JURISDICTION (AHJ).</div><div>4.2. ICN WILL OBTAIN AND PROVIDE COPIES OF IDOT PERMITS.</div><div>4.3. IF PERMITS ARE REQUIRED TO BE IN THE NAME OF THE OWNER RATHER THAN THE CONTRACTOR, THE CONTRACTOR SHALL PREPARE THE PERMIT FOR THE OWNER'S SIGNATURE.</div><div>4.4. COORDINATE INSTALLATION WITH ALL OWNERS AND AHJ OVER THE ROUTE, THE FIBER, RIGHT-OF-WAY AND BUILDINGS IN WHICH END POINTS WILL BE LOCATED.</div><div>4.5. FAILURE TO COORDINATE WITH THE AHJ AND TO OBTAIN ALL NECESSARY PERMITS IS AT THE PERIL OF THE CONTRACTOR.</div><div>4.6. RIGHT-OF-WAY PERMIT FEES ARE AN AUTHORIZED EXTRA ABOVE THE QUOTED BID PRICE. EXCAVATION PERMITS SHALL BE BY THE CONTRACTOR.</div><div>4.7. ENSURE ALL FACILITIES ARE PLACED WITHIN THE PUBLIC RIGHT-OF-WAY.</div></div>		

5. ENSURE THAT PERSONNEL WORKING IN THE ROW ARE EQUIPPED WITH AND USE PROPER SAFETY EQUIPMENT AND ATTIRE.

6. ALL TOOLS AND TEST EQUIPMENT REQUIRED TO DO A PROJECT SHALL BE PROVIDED BY THE CONTRACTOR OR ITS SUBCONTRACTOR(S). SECURITY OF TOOLS AND TEST EQUIPMENT SHALL BE THE RESPONSIBILITY OF EACH WORKER. THE ICN SHALL NOT BE RESPONSIBLE FOR THE SECURITY OF ANY PROPERTY LEFT ON ICN'S PROPERTY OR ON PROPERTY CONTROLLED BY THE ICN OR THE STATE OF IOWA.

7. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTRUCTING ITS EMPLOYEES IN SAFETY MEASURES CONSIDERED APPROPRIATE FOR THE JOB. IN ADDITION, THE CONTRACTOR SHALL NOT PERMIT PLACING OR USE OF TOOLS OR MATERIALS IN TRAFFIC LANES OR OTHER LOCATIONS. THE TOOLS OR MATERIALS SHALL NOT BE PLACED IN SUCH A MANNER SO AS TO CREATE SAFETY HAZARDS TO STATE EMPLOYEES, CONTRACTING AGENCY EMPLOYEES, THE PUBLIC OR THEMSELVES.

8. EXCAVATIONS AND TRENCHES: THE ICN REQUIRES ALL OPEN EXCAVATIONS OR TRENCHES TO BE MONITORED AND ATTENDED TO DURING CONSTRUCTION PER. THE ICN REQUIRES ALL OPEN EXCAVATIONS AND TRENCHES BACKFILLED THE SAME DAY. IF THE CONTRACTOR IS REQUIRED TO LEAVE AN EXCAVATION OR TRENCH OPEN, THEN THE CONTRACTOR SHALL PROPERLY FENCE AND/OR COVER THE EXCAVATION FOR SAFETY. CONTRACTOR SHALL FOLLOW ALL OSHA REQUIREMENTS FOR EXCAVATION AND TRENCH SAFETY.

9. CONTRACTOR AND ITS EMPLOYEES SHALL COMPLY WITH ALL OSHA REGULATIONS. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE STATE AND FEDERAL LAWS.

10. CONTRACTOR SHALL COMPLY WITH ALL IOWA ONE CALL REQUIREMENTS AS PROVIDED BY IOWA CODE, CHAPTER 480.

11. PROVIDE ALL LABOR AND SUPERVISION FOR THE PROJECT.

12. PROVIDE AND INSTALL MATERIALS NEEDED TO RESULT IN A FULLY FUNCTIONAL SYSTEM MEETING ICN STANDARDS, WHETHER OR NOT THE MATERIALS OR METHODS ARE SPECIFICALLY MENTIONED IN THIS DOCUMENT. SEE THE LIST OF ICN-FURNISHED MATERIALS.

13. INSTALL CABLE ROUTE MARKERS FURNISHED BY ICN. WHERE POSSIBLE, INSTALL MARKERS ADJACENT TO POLES, BUILDINGS OR IN OTHER PROTECTED AREAS.

14. A COPY OF THIS SCOPE OF WORK AND THE ENGINEERING PLAN FOR THIS PROJECT SHALL BE ON SITE AND AVAILABLE ANY TIME WORK IS BEING PERFORMED. FAILURE TO HAVE THE REQUIRED DOCUMENTS ON SITE MAY RESULT IN ICN REQUIRING THE CONTRACTOR TO STOP WORKING UNTIL THE REQUIRED DOCUMENTS ARE ON-SITE.

15. SUBCONTRACTORS SHALL MEET THE SAME QUALIFICATIONS STATED FOR CONTRACTORS. CONTRACTOR SHALL OBTAIN APPROVAL OF THE CONTRACTING AGENCY'S PROJECT MANAGER PRIOR TO USING A SUBCONTRACTOR ON ANY PROJECT.

16. RESTORE ALL DAMAGE TO PRIVATE PROPERTY, RIGHT-OF-WAY, ICN PROPERTY, AND ANY OTHER PROPERTY DAMAGED IN THE COURSE OF THE WORK.

16.1.ANY DISRUPTION OF GRASS IN AN INDIVIDUAL'S YARD OR IN A PRIVATE MAINTAINED AREA OF THE PUBLIC RIGHT OF WAY (THE AREA BETWEEN THE SIDEWALK AND THE STREET CURB) MUST BE RESTORED THROUGH RE-SODDING. ANY DISRUPTION OF THE GRASS IN THE MEDIAN WAY OR AN UNIMPROVED SHOULDER MUST BE RESTORED EITHER THROUGH RE-SODDING OR RE-SEEDING AS REQUIRED BY THE ROW OWNER.

16.2.AREAS SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION.

16.3. DIRT SHALL BE MECHANICALLY COMPACTED AROUND HANDHOLES AND PITS.

16.4. LAWNS SHALL BE SODDED WITH LIKE GRASS.

16.5. CONTRACTOR IS RESPONSIBLE FOR WATERING THE SOD UNTIL IT HAS KNITTED TO THE GROUND BENEATH.

16.6.ALL DEBRIS SHALL BE REMOVED FROM THE CONSTRUCTION AREAS INCLUDING BUT NOT LIMITED TO: CONSTRUCTION MATERIALS, TRASH, LARGE OBJECTS OR STONES WITHIN BACKFILLED AREAS, ETC.

ITEM	ICN PART NUMBER	QTY	NOTES
ICN PROVIDED MATERIALS			
TRIVIEW Test Station w/ Isolever 72" ORANGE (with 3 ICN decals applied) (Walker)	TVT172OB-EM9125	2	
12 AWG Pro-Line CU HDPE 30 MIL Orange Solid Copper Tracer Wire (2500' reel) (Graybar)	PE3012BC-07	200ft	
450A (with lug) FOSC450-A4-4-NT-0-A1V CLOSURE W/ GROUNDING & STD BSKFOR LT FI	FOSC450-A4-4-NT-0-A1V	2	
A TRAY 12 FOSC-ACC-A-TRAY-12 TRAY WITH 12 FUSION SPLICE HOLDER	497817-000	2	
FOSC Closure Sealing Kit FAK-MULDRP-45-4P/CBL-ATT	1F6818-000	2	
3M Scotchlok Shield Bond Connector 4460-D	4460-D	4	
CONTRACTOR PROVIDED MATERIALS*		X	
HDPE Conduit (13.5 SDR)	2 INCH	12,382ft±	
Duct Splices	2 INCH	10	
24" X 36" X 30" TD handhole w/ 20T lid TIER 15 (Martin or New Basis)		5	
6 AWG Bare Solid Copper Ground Wire (Graybar) - 315' reel		50	
12 AWG Pro-Line CU HDPE 30 MIL Orange Solid Copper Tracer Wire (2500' reel) (Graybar)		200	
Erico 1/2" x 6' Ground Rod (Graybar)	611360	2	
Burndy 1/2" Ground Rod Clamp (Anixter)	GRC12	2	
12 strand Armored OSP Rated SM fiber		13,308ft±	

NOTE ON HDPE CONDUIT AND SPLICES:

1. HDPE SHALL BE ORANGE SMOOTH WALL SDR 13.5

2. DUCT SPLICES SHALL BE MADE OF THE FOLLOWING (IN ORDER OF PREFERENCE.)

- ELECTROFUSION
- CRIMP ON
- CLAMP ON / BOLT ON (SPLIT COUPLINGS)
- PUSH ON

3. **ALL SPLICES SHALL BE AIR AND WATER TIGHT**

4. DUCT SPLICES SHALL BE OF A TYPE MADE SPECIFICALLY FOR JOINING HDPE CONDUIT

5. ALL DUCT SPLICES SHALL BE MADE IN SUCH MANNER AS TO ALLOW CONTINUOUS PULLING OF CABLE THROUGH DUCT.

NOTE ON OSP FIBER CABLE

Single Mode, Single Armor, Gel Free, Loose Tube OSP cable (12-strand minimum, refer to Materials)

Tensile Strength: 600 lb short term

Attenuation: 0.35/0.25 dB at 1310/1550 nm

NOTE ON HANDHOLE(S):

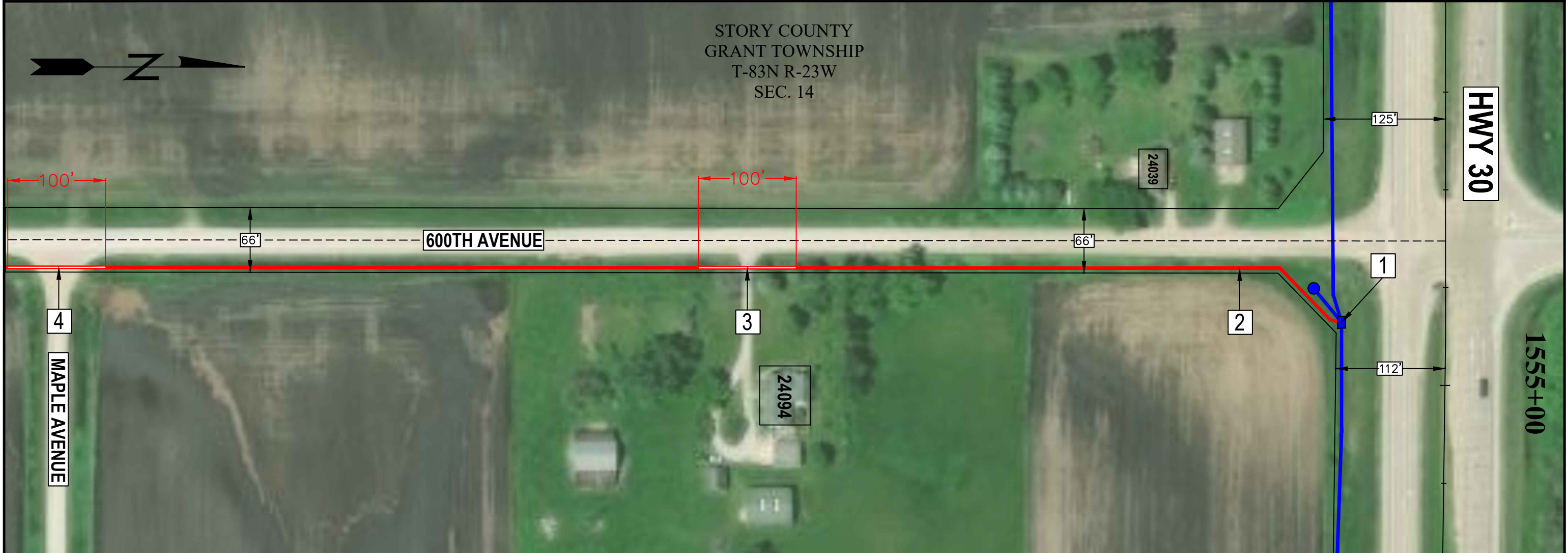
Polymer Concrete (Quazite, New Basis, Martin, e.g.) 24"x36"x30" Tier 15

Hybrid Polymer Concrete - Fiberglass (Oldcastle FRP, e.g.) 24"x36"x30" Tier 15

*NOTE ON CONTRACTOR PROVIDED MATERIAL(S):

Contractor shall supply all other materials required for proper installation, including but not limited to: HDPE, Duct Splices, Grounding and Tracer Wires, Rock, Wire Mesh, etc.

ANY EXCEPTIONS MUST BE AGREED UPON IN WRITING PRIOR TO CONSTRUCTION.




- NOTES:
- STA. 1554+35: EXISTING HANDHOLE WITH SPLICE ENCLOSURE
 - BEGIN 2-IN HDPE
 - BRING HDPE UNDERNEATH AND INTO HANDHOLE PER ICN TYPICAL ATTACHED
 - LEAVE 75± OF NEW ARMORED OSP RATED 12F COILED IN BOTTOM OF HANDHOLE FOR A SPLICE TAIL
 - 2-WAY LOCATE POINT, PREP FOR TRIVIEW LOCATE PEDESTAL, AND SEE TYPICAL DRAWING ATTACHED
 - STA. 1554+35 TO CALLOUT (21) SOUTH OF 250TH AND 610TH: PROVIDE & PLACE 12,382-FT± OF 2-IN HDPE
 - PLACE HDPE 4-FT FROM ROW AND A MINIMUM OF 3-FT BELOW GRADE
 - ALL DRIVEWAYS, ROAD CROSSINGS, AND RAILROAD TO BE DIRECTIONALLY BORED PER CONSTRUCTION PLANS
 - HDPE SHALL BE SMOOTH WALL SDR 13.5
 - ALL DUCT SPLICES SHALL BE AIR AND WATER TIGHT VIA CRIMP ON, CLAMP/BOLT ON, OR PUSH ON.
 - ALL DUCT SPLICES SHALL BE SPECIFICALLY MADE FOR JOINING HDPE CONDUIT AND ALLOW CONTINUOUS PULLING OF FIBER THROUGHOUT DUCT.
 - HOUSE ADDRESS 24094: DIRECTIONALLY BORE DRIVEWAY FOR APPROXIMATELY 100-FT±
 - BEG/END PLOW AND SPLICE DUCT TOGETHER ON EACH SIDE PER REQUIREMENTS
 - DO NOT PARK OR DISTURB PROPERTY
 - MAPLE AVE ROAD CROSSING: DIRECTIONALLY BORE GRAVEL ROAD FOR APPROXIMATELY 100-FT±
 - BEG/END PLOW AND SPLICE DUCT TOGETHER ON EACH SIDE PER REQUIREMENTS



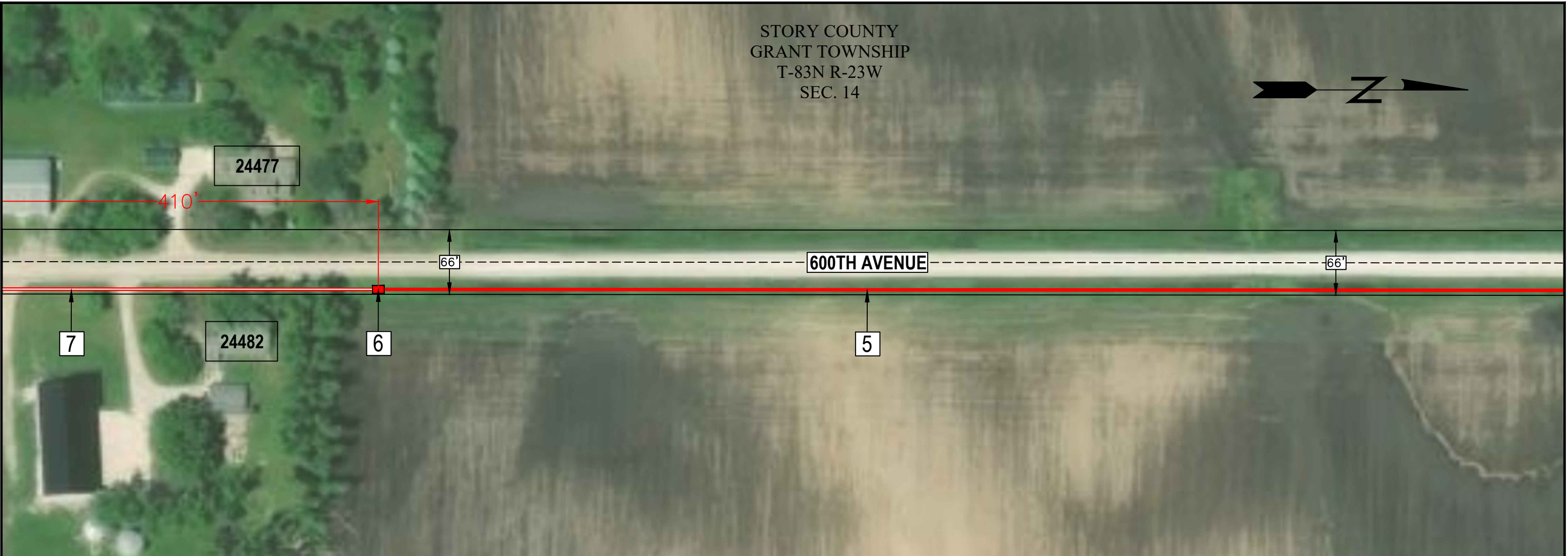
LEGEND	
EXISTING ICN DUCT	—
PROPOSED TY-DUCT	—
PROPOSED ICN DUCT	—
PROPOSED ICN BORE	—
EXISTING ICN HANDHOLE	■
PROPOSED ICN HANDHOLE	■
LUMEN HANDHOLE	■
RIGHT-OF-WAY	—

CONSTRUCTION DOCUMENT



NEW CONSTRUCTION BETWEEN AMES & NEVADA			 Iowa Communications Network
STORY CO – HWY 30, 600TH, 250TH, AND 610TH			
1	NEW CONSTRUCTION	7-21-25	
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STORY COUNTY
GRANT TOWNSHIP
T-83N R-23W
SEC. 14



NOTES:

5. PLOW 2-IN HDPE
- PLACE HDPE 4-FT FROM ROW AND A MINIMUM OF 3-FT BELOW GRADE
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6. PROVIDE AND PLACE 24X36X30 TIER 15 HANDHOLE WITH LID SET TO GRADE
- PLACE HANDHOLE 4-FT OR LESS FROM ROW
 - BRING HDPE UNDERNEATH AND INTO HANDHOLE PER ICN TYPICAL ATTACHED
 - END PLOW AND BEGIN DIRECTIONAL BORE FOR DRIVEWAYS
 - LEAVE 100-FT OR MORE OF CONTINUOUS ARMORED OSP RATED 12F COILED IN BOTTOM HANDHOLE (NOT A SPLICE OR LOCATE POINT)
7. HOUSE ADDRESS 24482: DIRECTIONALLY BORE APPROXIMATELY 410-FT± FOR DRIVEWAYS
- BEG/END PLOW AND SPLICE DUCT TOGETHER ON SOUTH SIDE OF DRIVEWAYS ONLY, AS OTHER END WILL ENTER HANDHOLE ON CALLOUT (6)



LEGEND	
EXISTING ICN DUCT	—
PROPOSED TY-DUCT	—
PROPOSED ICN DUCT	—
PROPOSED ICN BORE	—
EXISTING ICN HANDHOLE	■
PROPOSED ICN HANDHOLE	■
LUMEN HANDHOLE	■
RIGHT-OF-WAY	—

CONSTRUCTION DOCUMENT



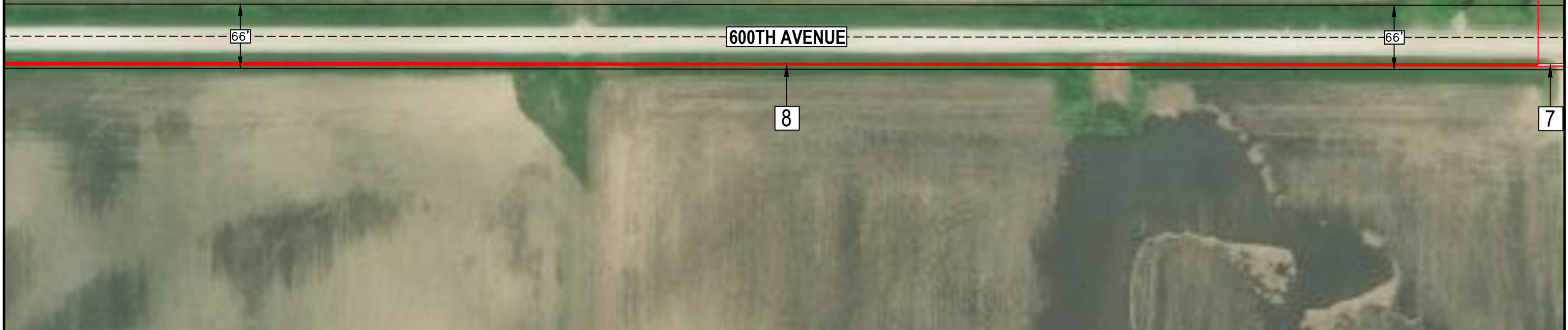
NEW CONSTRUCTION BETWEEN AMES & NEVADA
STORY CO - HWY 30, 600TH, 250TH, & 610TH



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NOTES:

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LEGEND

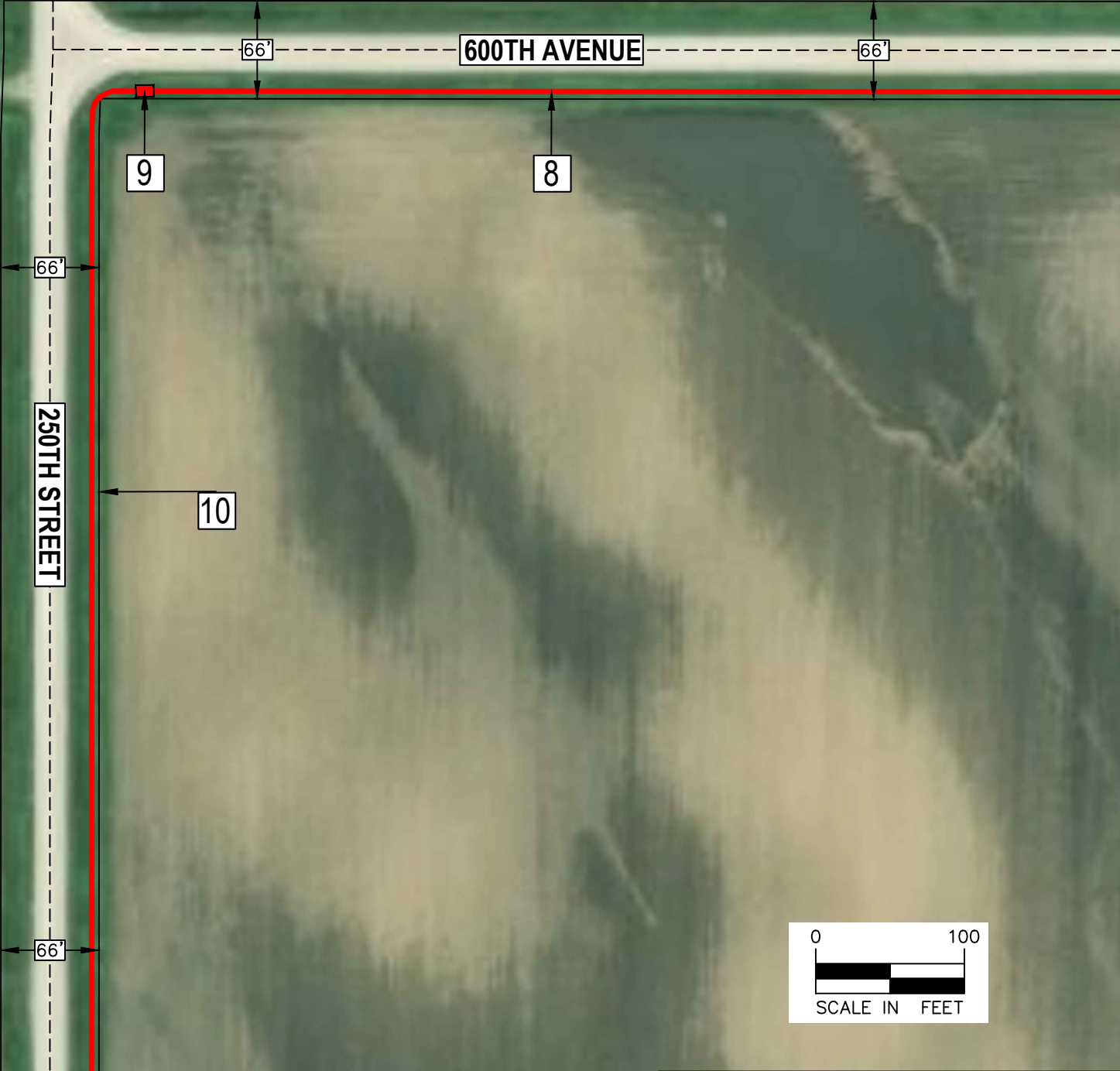
EXISTING ICN DUCT	
PROPOSED TY-DUCT	
PROPOSED ICN DUCT	
PROPOSED ICN BORE	
EXISTING ICN HANDHOLE	
PROPOSED ICN HANDHOLE	
LUMEN HANDHOLE	
RIGHT-OF-WAY	

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LEGEND

- EXISTING ICN DUCT (Blue line)
- PROPOSED TY-DUCT (Magenta line)
- PROPOSED ICN DUCT (Red line)
- PROPOSED ICN BORE (Red line)
- EXISTING ICN HANDHOLE (Blue square)
- PROPOSED ICN HANDHOLE (Red square)
- LUMEN HANDHOLE (Cyan square)
- RIGHT-OF-WAY (Dashed line)

- NOTES:
- 8. PLOW 2-IN HDPE
 - PLACE HDPE 4-FT FROM ROW AND A MINIMUM OF 3-FT BELOW GRADE
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 - 9. PROVIDE AND PLACE 24X36X30 TIER 15 HANDHOLE WITH LID SET TO GRADE
 - PLACE HANDHOLE 4-FT OR LESS FROM ROW
 - BRING HDPE UNDERNEATH AND INTO HANDHOLE PER ICN TYPICAL ATTACHED
 - LEAVE 100-FT OR MORE OF CONTINUOUS ARMORED OSP RATED 12F COILED IN BOTTOM HANDHOLE (NOT A SPLICE OR LOCATE POINT)
 - 10. PLOW 2-IN HDPE
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STORY COUNTY
GRANT TOWNSHIP
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SEC. 14



60222

66'

250TH STREET

10

66'



LEGEND


- EXISTING ICN DUCT
- PROPOSED TY-DUCT
- PROPOSED ICN DUCT
- PROPOSED ICN BORE
- EXISTING ICN HANDHOLE
- PROPOSED ICN HANDHOLE
- LUMEN HANDHOLE
- RIGHT-OF-WAY

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NEW CONSTRUCTION BETWEEN AMES & NEVADA STORY CO – HWY 30, 600TH, 250TH, & 610TH			
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GRANT TOWNSHIP
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 - ALL DUCT SPLICES SHALL BE SPECIFICALLY MADE FOR JOINING HDPE CONDUIT AND ALLOW CONTINUOUS PULLING OF FIBER THROUGHOUT DUCT
 11. ADDRESS 60485: DIRECTIONALLY BORE APPROXIMATELY 200-FT± FOR DRIVEWAYS
 - BEG/END PLOW AND SPLICE DUCT TOGETHER ON WEST SIDE OF DRIVEWAY ONLY, AS OTHER END WILL ENTER HANDHOLE ON CALLOUT (12)
 - DO NOT PARK OR DISTURB PROPERTY
 12. PROVIDE AND PLACE 24X36X30 TIER 15 HANDHOLE WITH LID SET TO GRADE
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13



LEGEND

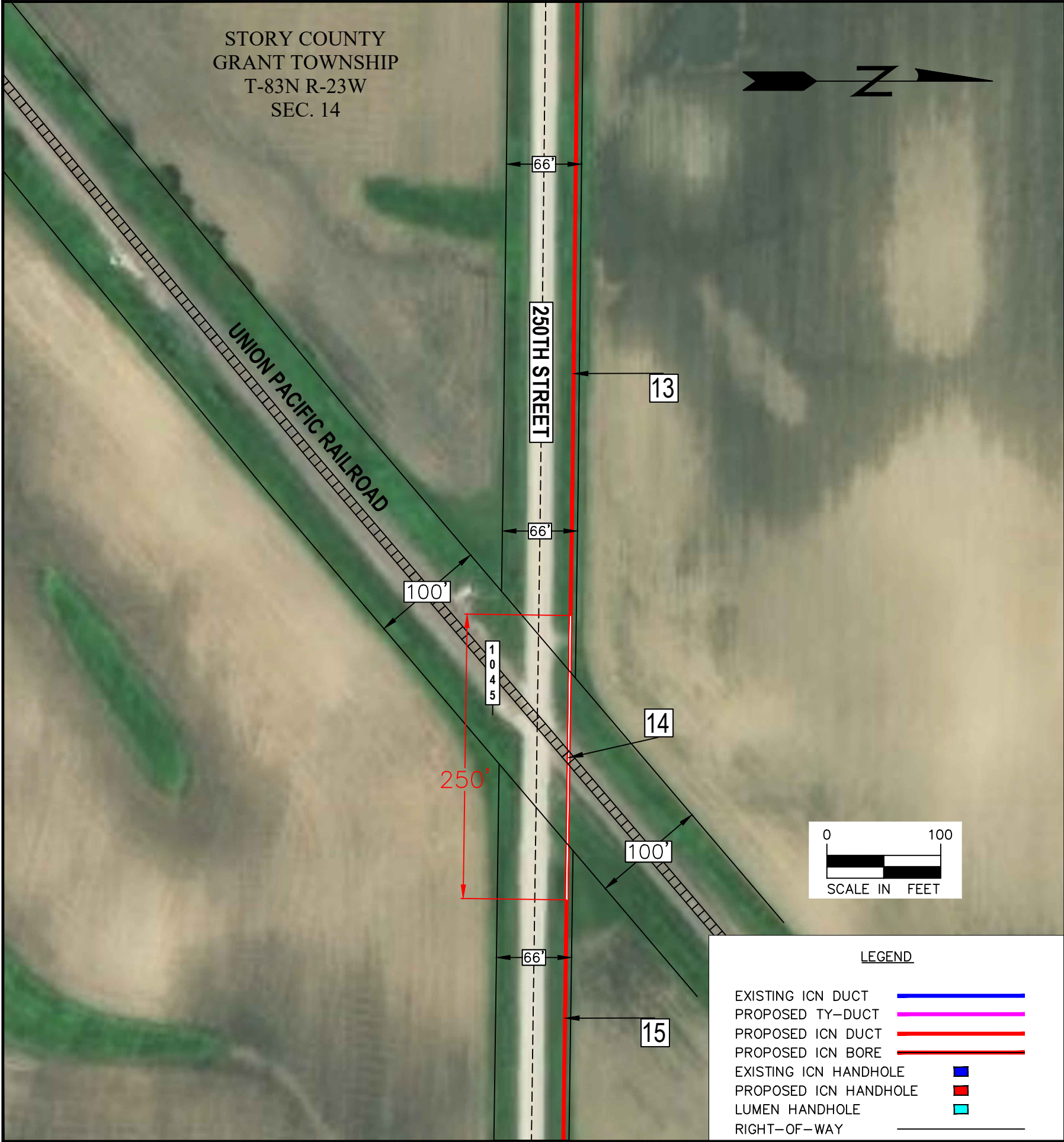
- EXISTING ICN DUCT —————
- PROPOSED TY-DUCT —————
- PROPOSED ICN DUCT —————
- PROPOSED ICN BORE —————
- EXISTING ICN HANDHOLE ■
- PROPOSED ICN HANDHOLE ■
- LUMEN HANDHOLE ■
- RIGHT-OF-WAY —————

- NOTES:
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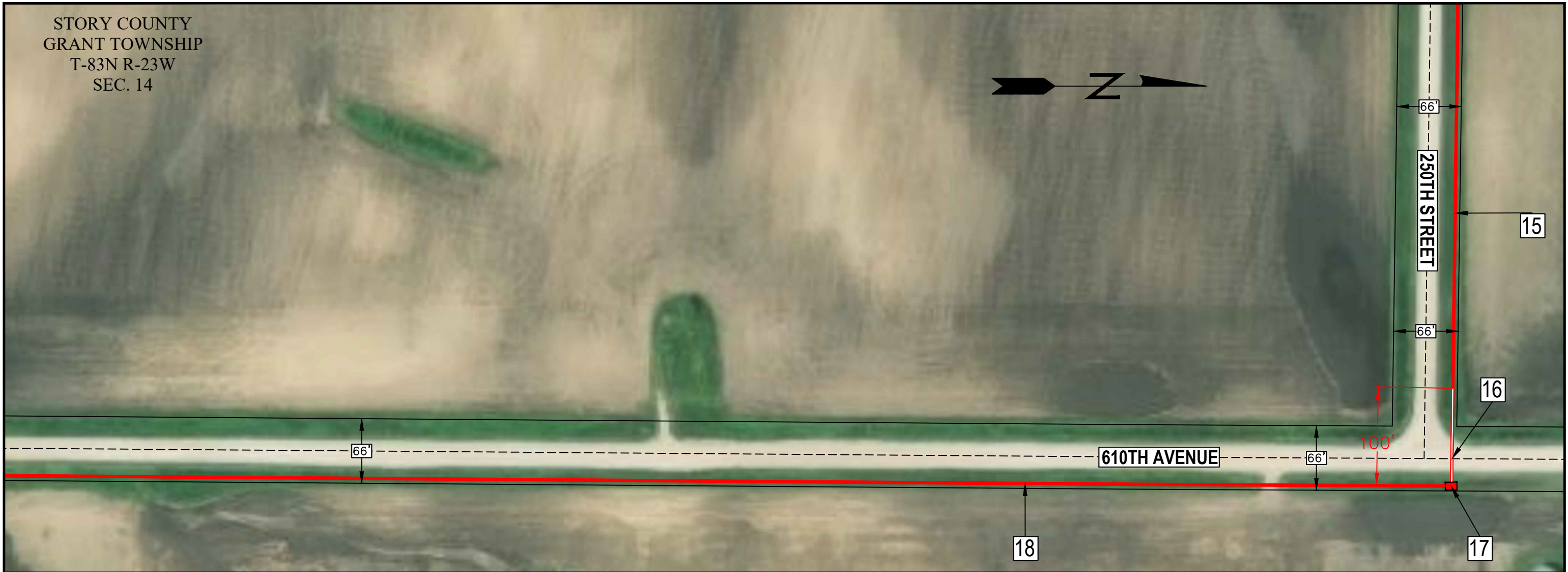
13. PLOW 2-IN HDPE
- PLACE HDPE 4-FT FROM ROW AND A MINIMUM OF 3-FT BELOW GRADE
 - ALL DRIVEWAYS, ROAD CROSSINGS, AND RAILROAD TO BE DIRECTIONALLY BORED PER CONSTRUCTION PLANS
 - HDPE SHALL BE SMOOTH WALL SDR 13.5
 - ALL DUCT SPLICES SHALL BE AIR AND WATER TIGHT VIA CRIMP ON, CLAMP/BOLT ON, OR PUSH ON.
 - ALL DUCT SPLICES SHALL BE SPECIFICALLY MADE FOR JOINING HDPE CONDUIT AND ALLOW CONTINUOUS PULLING OF FIBER THROUGHOUT DUCT
14. UNION PACIFIC RAILROAD CROSSING AT MILE MARKER 1045
- DIRECTIONALLY BORE 100-FT± OF 2-IN HDPE UNDER RAILROAD PER UNION PACIFIC'S SPECIFICATIONS, THE AMERICAN NATIONAL STANDARDS INSTITUTE'S (ANSI), AND NATIONAL ELECTRICAL SAFETY CODE (NESC)
 - MAINTAIN SUFFICIENT DEPTH OF COVER BENEATH THE TRACKS AT A MINIMUM OF 15-FT FROM THE BASE OF THE RAIL TO THE TOP OF PIPE
 - CROSS TRACKS AS PERPENDICULAR AS POSSIBLE AND NO LESS THAN AT A 60 DEGREE ANGLE
 - A RAILROAD SIGNAL REPRESENTATIVE MUST BE PRESENT DURING INSTALLATION IF RAILROAD SIGNALS ARE IN THE VICINITY, UNLESS SIGNAL REPRESENTATIVE AUTHORIZES OTHERWISE
 - DO NOT DISTURB, STORE, OR PARK EQUIPMENT ON OR NEAR RAILROAD ROW
15. PLOW 2-IN HDPE
- PLACE HDPE 4-FT FROM ROW AND A MINIMUM OF 3-FT BELOW GRADE
 - ALL DRIVEWAYS, ROAD CROSSINGS, AND RAILROAD TO BE DIRECTIONALLY BORED PER CONSTRUCTION PLANS
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CONSTRUCTION DOCUMENT



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1	NEW CONSTRUCTION	7-21-25		
2				
3				
4				

STORY COUNTY
GRANT TOWNSHIP
T-83N R-23W
SEC. 14



NOTES:

15. PLOW 2-IN HDPE
- PLACE HDPE 4-FT FROM ROW AND A MINIMUM OF 3-FT BELOW GRADE
 - ALL DRIVEWAYS, ROAD CROSSINGS, AND RAILROAD TO BE DIRECTIONALLY BORED PER CONSTRUCTION PLANS
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16. 610TH AVE ROAD CROSSING: DIRECTIONALLY BORE GRAVEL ROAD FOR APPROXIMATELY 100-FT±
- BEG/END PLOW AND SPLICE DUCT TOGETHER ON WEST SIDE OF ROAD ONLY, AS OTHER END WILL ENTER HANDHOLE ON CALLOUT (17)
17. PROVIDE AND PLACE 24X36X30 TIER 15 HANDHOLE WITH LID SET TO GRADE
- PLACE HANDHOLE 4-FT OR LESS FROM ROW
 - BRING HDPE UNDERNEATH AND INTO HANDHOLE PER ICN TYPICAL ATTACHED
 - LEAVE 100-FT OR MORE OF CONTINUOUS ARMORED OSP RATE 12F COILED IN BOTTOM HANDHOLE (NOT A SPLICE OR LOCATE POINT)
18. PLOW 2-IN HDPE
- PLACE HDPE 4-FT FROM ROW AND A MINIMUM OF 3-FT BELOW GRADE
 - ALL DRIVEWAYS, ROAD CROSSINGS, AND RAILROAD TO BE DIRECTIONALLY BORED PER CONSTRUCTION PLANS
 - HDPE SHALL BE SMOOTH WALL SDR 13.5
 - ALL DUCT SPLICES SHALL BE AIR AND WATER TIGHT VIA CRIMP ON, CLAMP/BOLT ON, OR PUSH ON.
 - ALL DUCT SPLICES SHALL BE SPECIFICALLY MADE FOR JOINING HDPE CONDUIT AND ALLOW CONTINUOUS PULLING OF FIBER THROUGHOUT DUCT



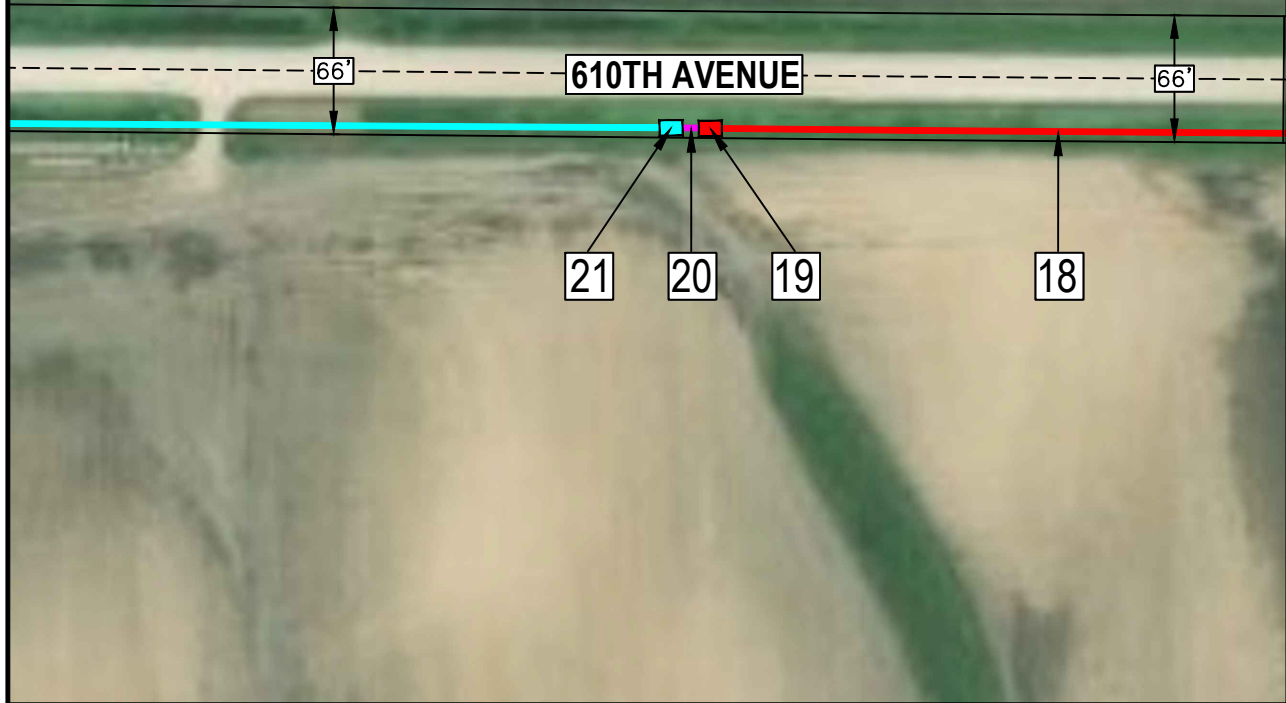
LEGEND	
EXISTING ICN DUCT	—
PROPOSED TY-DUCT	—
PROPOSED ICN DUCT	—
PROPOSED ICN BORE	—
EXISTING ICN HANDHOLE	■
PROPOSED ICN HANDHOLE	■
LUMEN HANDHOLE	■
RIGHT-OF-WAY	—

CONSTRUCTION DOCUMENT



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4			

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NOTES:

18. PLOW 2-IN HDPE
- PLACE HDPE 4-FT FROM ROW AND A MINIMUM OF 3-FT BELOW GRADE
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 - ALL DUCT SPLICES SHALL BE SPECIFICALLY MADE FOR JOINING HDPE CONDUIT AND ALLOW CONTINUOUS PULLING OF FIBER THROUGHOUT DUCT
19. PROVIDE AND PLACE 24X36X30 TIER 15 HANDHOLE WITH LID SET TO GRADE
- PLACE HANDHOLE 4-FT OR LESS FROM ROW
 - BRING HDPE UNDERNEATH AND INTO HANDHOLE PER ICN TYPICAL ATTACHED
 - LEAVE 75± OF NEW ARMORED OSP RATED 12F COILED IN BOTTOM OF HANDHOLE FOR A SPLICE TAIL
 - THIS WILL BE A ICN SPLICE POINT AND A TIE CABLE WILL BE PULLED OVER TO THE LUMEN HANDHOLE
 - 2-WAY LOCATE POINT, PREP FOR TRIVIEW LOCATE PEDESTAL, AND SEE TYPICAL DRAWING ATTACHED
20. PROVIDE AND PLACE 2-IN HDPE FROM ICN HANDHOLE TO LUMEN HANDHOLE
- PROVIDE AND PULL ARMORED OSP RATED 12F FROM THE ICN HANDHOLE TO THE LUMEN HANDHOLE LEAVING 75-FT OR MORE IN EACH HANDHOLE FOR SPLICE TAILS
21. LUMEN HANDHOLE FOR ICN TO TIE INTO THEIR NETWORK
- WORK WITH ICN OSP/MIKE DALEN ON EXACT LOCATION OF HANDHOLE
 - BRING HDPE UNDERNEATH AND INTO HANDHOLE PER ICN TYPICAL ATTACHED
 - LEAVE 75± OF NEW ARMORED OSP RATED 12F COILED IN BOTTOM OF HANDHOLE FOR A SPLICE TAIL

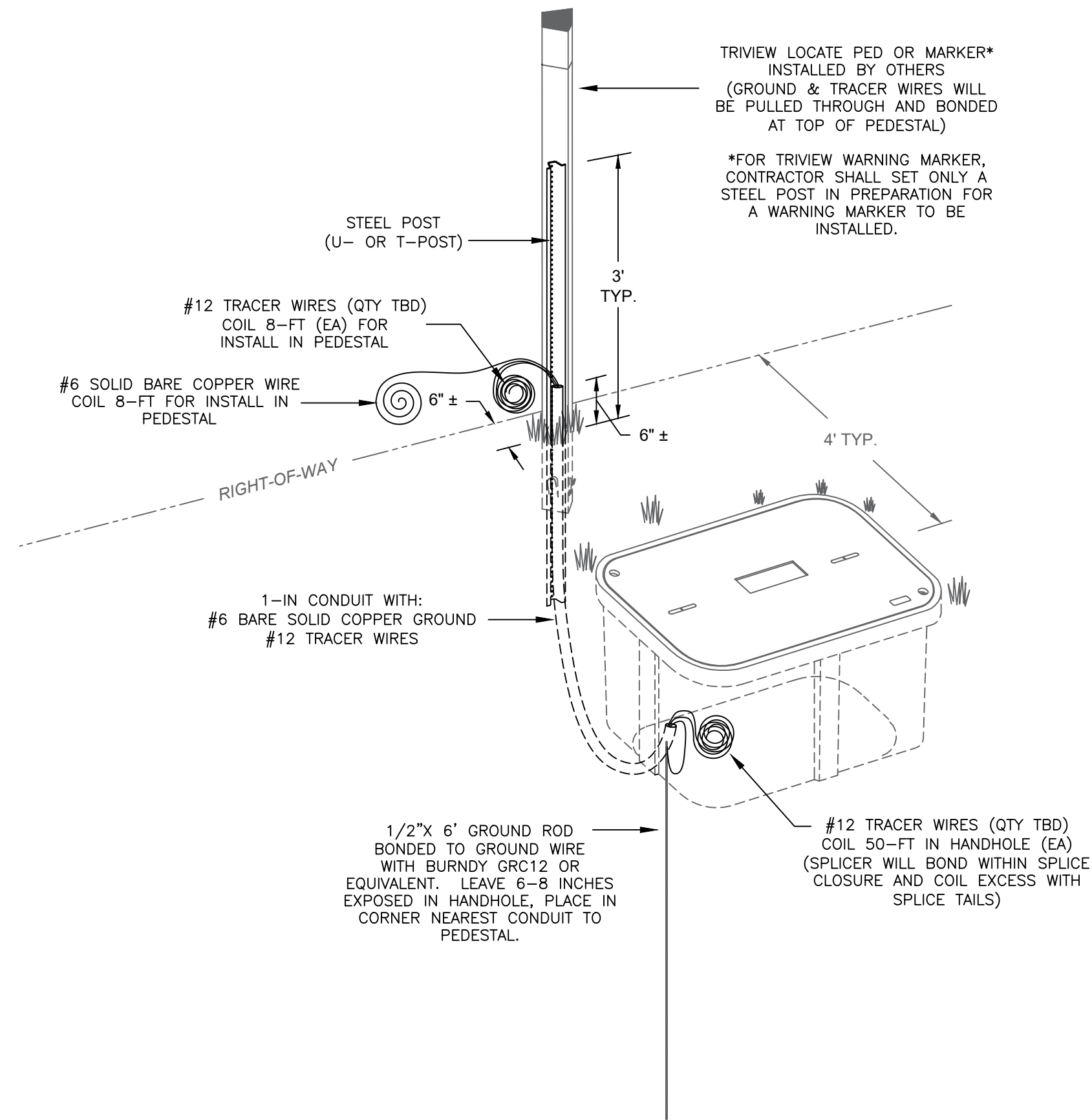


LEGEND	
EXISTING ICN DUCT	—
PROPOSED TY-DUCT	—
PROPOSED ICN DUCT	—
PROPOSED ICN BORE	—
EXISTING ICN HANDHOLE	■
PROPOSED ICN HANDHOLE	■
LUMEN HANDHOLE	■
RIGHT-OF-WAY	—

CONSTRUCTION DOCUMENT



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CONTRACTOR TO PROVIDE AND PLACE THE FOLLOWING MATERIAL IN PREPARATION FOR THE INSTALLATION OF A TRIVIEW LOCATE PEDESTAL (INSTALLED BY OTHERS):

STEEL POST

"U" OR "T" POST
LEAVE 3 FEET EXPOSED
BURY A MINIMUM OF 1 FEET
PLACE NEAR OR AT ROW UNLESS OTHERWISE DIRECTED

GROUND ROD

1/2-IN X 6-FT SOLID COPPER GROUND ROD
PLACE IN CORNER OF HANDHOLE NEAREST CONDUIT TO PEDESTAL
LEAVE 6-IN ± EXPOSED

GROUND WIRE

#6 BARE SOLID COPPER WIRE
BOND TO GROUND ROD WITH BURNDY GRC12 OR EQUIVALENT
ROUTE THROUGH CONDUIT TOWARDS PEDESTAL
COIL 8-FT AT CONDUIT EXIT TO BE BONDED TO PEDESTAL BY OTHERS

CONDUIT

1 INCH (MUST BE OF SUFFICIENTLY SMALL O.D. TO FIT INSIDE PEDESTAL)
CONDUIT MUST BE CONTINUOUS AND NON-CORROSIVE (HDPE OR PVC, E.G.)
ROUTE FROM BASE OF HANDHOLE TO BASE OF PEDESTAL
LEAVE 6-IN OF CONDUIT EXPOSED ABOVE GRADE (TO BE PLACED WITHIN PEDESTAL)

TRACER WIRE

#12 TRACER WIRES
TYPICALLY 2 OR 3 WIRES ARE REQUIRED*
COIL 50-FT (EA) IN BASE OF HANDHOLE TO BE BONDED IN SPLICE CLOSURE BY OTHERS
COIL 8-FT AT CONDUIT EXIT TO BE BONDED TO PEDESTAL BY OTHERS
*SEPARATE #12 TRACER WIRES ARE REQUIRED FOR EACH DIRECTION AND/OR CABLE.
QUANTITY OF TRACER WIRES SHALL BE PROJECT SPECIFIC AND DEFINED BY THE ICN
OSP ENGINEER WITHIN THE STATEMENT OF WORK, PLEASE VERIFY. AS A GENERAL
RULE, 150-FT OF #12 TRACER WIRE SHOULD BE SUFFICIENT FOR ANY PROJECT.

USE TRACER WIRE THAT IS RATED FOR DIRECT BURIAL WHERE REQUIRED. TRACER WIRE
SHALL BE #12 AWG, SOLID HF CCS 30 MIL HDPE HIGH FLEX TRACER WIRE: EITHER
SOLID COPPER OR COPPER CLAD STEEL.

CONTRACTOR TO PROVIDE AND PLACE THE FOLLOWING MATERIAL IN PREPARATION FOR THE INSTALLATION OF A TRIVIEW WARNING MARKER (INSTALLED BY OTHERS):

STEEL POST

"U" OR "T" POST
LEAVE 3 FEET EXPOSED
BURY A MINIMUM OF 1 FEET
PLACE NEAR OR AT ROW UNLESS OTHERWISE DIRECTED



IOWA COMMUNICATIONS NETWORK

GRIMES STATE OFFICE BUILDING
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DES MOINES, IOWA 50319
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CALL ONE CALL BEFORE EXCAVATION
(1-800-292-8989 OR 811)

CONSTRUCTION DETAIL
PREP FOR LOCATE PEDESTAL INSTALLATION
CONTRACTOR REQUIREMENTS

TYPICAL HANDHOLE

SCALE: NONE

SIZE: 11 x 17

1	FINAL	9-7-23	5
2	REVISION	2-27-24	6
3			7
4			8

O:\AutoCAD Standards\TYPICALS\TYPICAL-HH PLACEMENT - 2023.dwg