

PROJECT INFORMATION

SCOPE OF WORK:

THE ICN IS RELOCATING FROM IOWA WESLEYAN AT 600 JACKSON ST TO A NEW ICN SHELTER AT 1300 W COURTLAND ST., MOUNT PLEASANT, IA. IT WILL INVOLVE APPROXIMATELY 4661' ROUTE LENGTH AND 5300' OF NEW CABLE INSTALLATION IN NEW CONDUITS, CONTRACTOR IS REQUIRED TO COORDINATE WITH ICN ON THE CUT OVER OF EXISTING CABLES FOR LINKS 1607-4fA AND 1606-12fA, LINK 7045 IRTHP 36f. UPN 12f. AND WINDSTREAM 36f WITH ICN. CREWS WILL BE REQUIRED FOR CABLE PULLING DURING CUTOVER: AFTER HOURS 22:00 TO 6:00.

CONTACT PERSON TIM FLICKINGER IOWA COMMUNICATIONS NETWORK (ICN) PHONE: (515) 725-4699 timothy.flickinger@icn.state.ia.us

NICK FREERKS HBK ENGINEERING 509 S. GILBERT STREET IOWA CITY, IA 52240 PHONE: (319) 338-7557 nfreerks@hbkengineering.com

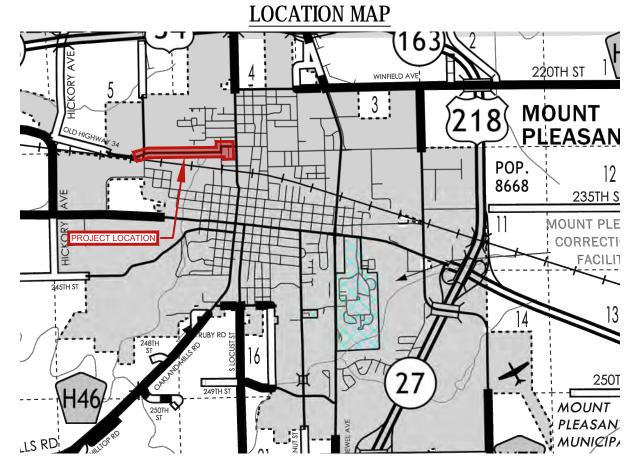
NOTE:

TELECOM MINIMUM DEPTH IS 36" UNDER SOIL AND 48 UNDER PAVED SURFACES. ICN IS REQUIRING 48" MINIMUM

MAINTAIN 2' OF SEPARATION WHEN CROSSING WATER MAINS

IOWA COMMUNICATIONS NETWORK

MOUNT PLEASANT WESLEYAN RELOCATION TO W COURTLAND ST FIBER INSTALLATION HENRY COUNTY, MOUNT PLEASANT, IOWA 1300 W COURTLAND ST TO 600 JACKSON ST





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CALL 811 FOR LOCATION OF UNDERGROUND TELEPHONE, ELECTRIC, GAS MAINS, CABLE TELEVISION AND OTHER UTILITIES.

EXISTING UNDERGROUND AND OVERHEAD UTILITIES AND DRAINAGE STRUCTURES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THEREFORE. THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS THE RESPONSIBILITY OF THE INDIVIDUAL CONTRACTORS TO EXACTLY LOCATE AND PROTECT EACH EXISTING UTILITY BEFORE AND DURING ACTUAL CONSTRUCTION.



OSP PROJECT LOG #: 44240107 LINK NAME: 1629-1631

UTILITY CONTACTS						
COMPANY	CONTACT NAME	PHONE	PHONE			
ANR PIPELINE COMPANY (AR2)	GREG LEDGER	(319) 498-4200	GREGLEDGER@TCENERGY.COM			
ALLIANT ENERGY (ASE)	FIELD ENGINEER	(800) 572-3940	LOCATEIPL@ALLIANTENERGY.COM			
IOWA COMMUNICATIONS NETWORK (ICN) SHANNON MARLOW (800) 572-3940 ICNOUTSIDEPLANTIOWAONECALL@IOWA.GOV						
IOWA HOSPITAL ASSOCIATION (IHA) SHANNON MARLOW (800) 572-3940 ICNOUTSIDEPLANTIOWAONECALL@IOWA.GOV						
MNA/BLUEBIRD (MNB01)	JAMIE SCOTT	(314) 427-8738	JAMES.SCOTT@BLUEBIRDNETWORK.COM			
MOUNT PLEASANT MUNICIPAL UTILITIES	JACK HEDGECOCK	(319) 385-2121	MPUGROUP@MTPUTILITIES.COM			
CITY OF MOUNT PLEASANT (MTP)	RICK MULLIN	(319) 385-1480	RMULLIN@IOWATELECOM.NET			
ACCESS ENERGY COOPERATIVE (SEI)	DAN PHILIPS	(319) 385-1577	DPHILIPS@ACCESSENERGYCOOP.COM			
MEDIACOM (TC9)	DARRIN WALKER	(319) 759-3786	DWALKER@MEDIACOMCC.COM			
UNITE PRIVATE NETWORKS, LLC (UPN)	JOE KILZER	(816) 425-3556	UPNGIS@UPNFIBER.COM			
WINDSTREAM COMMUNICATIONS LOCATE DESK (800) 289-1901 LOCATE DESK@WINDSTREAM.COM						

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509 SOUTH GILBERT STREET IOWA CITY, IA 52240 PHONE: (319) 338-7557 STATE OF IOWA, DEPARTMENT OF LABOR **REGULATION NO. 00527328**

INDEX OF SHEETS

HEET	TITLE
1	TITLE SHEET
2	ENGINEER GENERAL NOTES AND LEGEND
3	ICN GENERAL NOTES
4	MATERIALS
	CIVIL
5-12	PLAN SHEETS
13-20	DETAIL SHEETS

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ENGINEER GENERAL NOTES AND LEGENED

ALL CONDUIT AND HANDHOLE INSTALLATIONS, REMOVALS, MODIFICATIONS, AND TEMPORARY WORK SHALL BE DONE ACCORDING TO THE FOLLOWING NON-INCLUSIVE CONDITIONS: SECTION 1.0 SCOPE OF WORK

1.01 INSTALLATION DESCRIPTION

INSTALL CONDUIT AND ALL RELATED APPURTENANCES FOR FIBER OPTIC CABLE INSTALLATION. SEE PLANS FOR EXACT LOCATION, LENGTHS, QUANTITIES, AND DIMENSIONS OF PROPOSE IMPROVEMENTS

- 1.02 SEE SHEET 4 FOR LOCATION OF ENGINEER'S ESTIMATE OF MATERIALS.
- 1.03 THE CONTRACTOR SHALL PROVIDE ALL MATERIAL EQUIPMENT, LABOR, INSTALLATION, RESTORATION, UTILITY RELOCATION CHARGES, JOB SITE DELIVERY COSTS AND INCIDENTALS TO COMPLETE THE DESCRIBED OR ILLUSTRATED WORK, UNDER THIS CONTRACT.
- 1.04 ANY CHANGE-ORDER REQUEST MUST BE PRESENTED IN WRITING TO THE OWNER'S REPRESENTATIVE AND APPROVED PRIOR TO PROCEEDING WITH THE REQUESTED CHANGE. DOCUMENTATION CONCERNING ANY AND ALL CHANGE ORDERS WILL BE REDUCED TO FORMAL RECORD. FILED WITH THE OWNER'S REPRESENTATIVE AND BE MADE AVAILABLE FOR FUTURE REFERENCE
- 1.05 THE CONTRACTOR SHALL PROVIDE A MINIMUM 48 HOUR ADVANCED NOTICE TO HBK ENGINEERING (319-338-7557) TO SCHEDULE A PRE-CONSTRUCTION WALK THROUGH WITH A HBK ENGINEERING REPRESENTATIVE. THIS WALK THROUGH MUST BE COMPLETED PRIOR TO THE COMMENCEMENT OF ANY WORK WITHIN THE LIMITS OF THIS PROJECT.
- 1.06 THE ENGINEER WILL NOT BE RESPONSIBLE NOR ASSUME ANY LIABILITY FOR NEGLIGENT ACTS OR ERRORS OF OMISSIONS OF ANY CONTRACTOR, ANY SUBCONTRACTOR, OR ANY OF THE CONTRACTOR'S OR SUBCONTRACTORS' AGENTS OR EMPLOYEES OR ANY OTHER PERSONS (EXCEPT ENGINEER'S OWN EMPLOYEES) AT THE PROJECT SITE OR OTHERWISE PERFORMING ANY OF THE WORK OF THE PROJECT, ANY CONTRACTOR OR SUBCONTRACTOR, AS WELL AS THE ENGINEER, WILL BE RESPONSIBLE FOR HIS OWN SAFETY PROGRAM. NEITHER THE PROFESSIONAL ACTIVITIES OF THEENGINEER, NOR THE PRESENCE OF THE ENGINEER OR HIS OR HER EMPLOYEES AND SUB-CONSULTANTS AT THE CONSTRUCTION SITE. SHALL RELIEVE ANY CONTRACTOR OF HIS OR HER OBLIGATIONS, DUTIES AND RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES. NECESSARY FOR PERFORMING, SUPERINTENDING OR COORDINATING ALL PORTIONS OF THE WORK OF CONSTRUCTION IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ANY HEALTH OR SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES. THE ENGINEER AND HIS OR HER PERSONNEL HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION CONTRACTOR OR OTHER ENTITY OR THEIR EMPLOYEES IN CONNECTION WITH ANY HEALTH OR SAFETY PRECAUTIONS.

SECTION 2.0 MATERIALS

- 2.01 ALL MATERIALS INSTALLED WITHIN THE LIMITS OF THIS PROJECT SHALL BE IN CONFORMANCE WITH STANDARD RECOMMENDATIONS OF THE NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION (NEMA) AND AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
- 2.02 ALL TRENCHED CONDUIT, ELBOWS, AND COUPLINGS SHALL BE HDPE UNLESS OTHERWISE NOTED. ALL BORED CONDUIT AND COUPLINGS SHALL BE HDPE SDR-13 UNLESS OTHERWISE NOTED.
- 2.03 JOB SITE MATERIAL WILL BE DELIVERED TO AND MAINTAINED AT THE STREET WORK AREAS IN A WELL MANAGED MANNER. TO MINIMIZE CONGESTION OR INCONVENIENCE TO OTHER WORKERS, OR CONTRACTORS WORKING UNDER ALTERNATE PERMITS.

SECTION 3.0 GENERAL NOTES

- 3.01 CONTRACTOR IS ADVISED TO READ ALL NOTES ON DRAWINGS, CAREFULLY.
- 3.02 THE CONTRACTOR SHALL VERIFY EXISTING STREET RIGHTS OF WAY TO THE EXTENT NECESSARY TO VERIFY PROPOSED WORK REMAINS WITHIN THESE RIGHTS OF WAY AND DOES NOT INFRINGE ONTO PRIVATE PROPERTY NOT OWNED BY THE OWNER.
- 3.03 SCALE FOR DRAWINGS IS FOR GENERAL INFORMATION ONLY, LOCATIONS AND DIMENSIONS SHALL BE TAKEN AS SHOWN AND THE DRAWINGS SHALL NOT BE SCALED.
- 3.04 CONTRACTOR SHALL COORDINATE ALL WORK WITH ALL PUBLIC AND PRIVATE UTILITIES AS WELL AS CITY AND STATE AGENCIES.
- 3.05 INSTALL CONDUIT MINIMUM OF 10'-0" BELOW ALL WATERWAYS AND CULVERT CROSSINGS. CONTRACTOR TO VERIFY CULVERT DEPTH PRIOR TO CONDUIT INSTALLATION.
- 3.06 NUMEROUS ELEVATION CHANGES, TOPOGRAPHY LINES SHOWN ON DRAWING FOR REFERENCE ONLY
- 3.07 DUE TO EXISTING FORESTED AREAS, SOME TREE REMOVAL AND TRIMMING REQUIRED FOR CONDUIT OR HANDHOLE INSTALLATION WITHIN THE RIGHT-OF-WAY
- 3.08 RIGHT OF WAY LOCATIONS ARE APPROXIMATE. FIBER INSTALLATION 6'-0" MINIMUM OFF RIGHT-OF-WAY.

SECTION 4.0 SAFETY

- 4.01 CONTRACTOR SHALL TAKE ALL NECESSARY SAFETY PRECAUTIONS TO PROTECT UTILITIES, PEDESTRIANS, WORKERS AND VEHICULAR TRAFFIC. THE CONTRACTOR SHALL PROVIDE TEMPORARY FENCES, BARRICADES. ETC. AS REQUIRED TO PROTECT ADJACENT PROPERTY AND THE PUBLIC DURING ALL PHASES OF CONSTRUCTION
- 4.02 THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY BARRICADES, SIGNAGE, WARNING LIGHTS AND OTHER DEVICES AND KEEP ALL TRAFFIC CONTROL OPERATIONAL 24 HOURS A DAY AT ALL OPEN TRENCH LOCATIONS AND AT LOCATIONS WHICH DO NOT HAVE A FINISHED SURFACE OR ROAD PLATES.
- 4.03 THE CONTRACTOR SHALL COORDINATE INGRESS AND EGRESS TO ADJACENT PROPERTIES AND/OR CONSTRUCTION AFFECTED BY THE PROPOSED WORK.

- 5.01 EXISTING CONDITIONS, STRUCTURES, UTILITIES AND SURFACE FEATURES SHOWN WERE OBTAINED FROM UTILITY ATLASES AND FROM DRAWINGS FURNISHED BY THE VARIOUS UTILITIES AND ARE ASSUMED TO BE ACCURATE AND CORRECT. THE CONTRACTOR SHALL PERFORM HIS OWN SURVEY AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS OF EXISTING STRUCTURES PRIOR TO STARTING ANY WORK
- 5.02 FOR BORED INSTALLATIONS. THE CONTRACTOR SHALL PERFORM TEST HOLES AT ALL UTILITY CROSSINGS TO VERIEV THE LOCATION AND ELEVATION OF ALL UTILITIES PRIOR TO ANY EXCAVATION AND TO LOCATE ANY POSSIBLE OBSTRUCTIONS. ALL TEST HOLES SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT
- 5.03 FOR TRENCHED INSTALLATIONS, THE CONTRACTOR SHALL PERFORM TEST HOLES PER PLAN OR AS DEEMED NECESSARY TO VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES PRIOR TO ANY EXCAVATION, AND TO LOCATE ANY POSSIBLE OBSTRUCTIONS, ALL TEST HOLES SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT
- 5.04 THE CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF ALL OVERHEAD OBSTRUCTIONS PRIOR TO THE COMMENCEMENT OF WORK
- 5.05 EXISTING UTILITIES ARE SHOWN AT THEIR APPROXIMATE LOCATION. THE CONTRACTOR SHALL CONTACT IOWA ONE CALL AT 1(800)-292-8989 A MINIMUM OF 48 HOURS (EXCLUDING WEEKENDS AND GOVERNMENT HOLIDAYS) PRIOR TO COMMENCEMENT OF ANY PAVEMENT CUTS OR EXCAVATION TO REQUEST LOCATING AND MARKING OF EXISTING UTILITIES PRIOR TO PERFORMING ANY EXCAVATION WORK IN OR AROUND ANY UTILITY
- 5.06 ALL EXCAVATION WORK NEAR AND AROUND EXISTING STRUCTURES AND UTILITIES SHALL BE BY HAND METHOD
- ALL DISCREPANCIES SHOULD BE REPORTED TO ENGINEER OF RECORD AT HBK ENGINEERING (319-338-7557). 5.07 ANY QUESTIONS OR COMMENTS THE CONTRACTOR MAY HAVE ARE TO BE DISCUSSED WITH THE OWNER AND ENGINEER PRIOR TO CONSTRUCTION.
- 5.08 FURTHER, THE CONTRACTOR SHALL RECORD THE LOCATION AND ELEVATION OF ALL UTILITIES ENCOUNTERED, AND INSTALLATION OF NEW WORK, AS THE WORK PROGRESSES AND SHALL PREPARE RECORD DRAWINGS (RED-LINES) BASED ON HIS RECORDS. AS PART OF THE RECORD DRAWINGS, CONTRACTOR SHALL ALSO PROVIDE HORIZONTAL AND VERTICAL CONFIGURATION OF CONDUITS WHERE MULTIPLE CONDUITS ARE INSTALLED. THESE RECORDS TO BE SUPPLIED TO HBK ENGINEERING, LLC AT COMPLETION OF WORK
- 5.09 AT SEWER DRAINS FROM HOMES OR OTHER BUILDINGS, IF THERE IS INTERFERENCE, REPLACE INKIND. IN ALL CASES WHERE SEWER WORK IS DONE, A PERMIT SHOULD BE OBTAINED AND A SEWER INSPECTOR SHOULD BE PRESENT DURING THE WORK
- 5.10 CONTRACTOR SHALL SUPPORT ALL WATER MAINS IN EXCESS OF 12" IN DIAMETER WITH A PERMANENT TYPE OF STRUCTURE UNLESS OTHERWISE NOTIFIED BY THE WATER DEPARTMENT, AND IS INCLUDED IN COST FOR DOING THE WORK, AT NO TIME DURING CONSTRUCTION SHALL WATER MAINS GO UNSUPPORTED FOR A SPAN GREATER THAN 8'-0".
- 5.11 CONTRACTOR RESPONSIBLE FOR OBTAINING AND PROVIDING REVIEW AND DESIGN OF ANY AND ALL TEMPORARY UTILITY SUPPORT SYSTEMS PRIOR TO CONSTRUCTION.
- 5.12 CONTRACTOR SHALL NOTICY ALLIANT IN SITUATIONS WHERE STEEL PIPE CONDUCTOR IS NICKED DURING. EXCAVATION, ALLIANT WILL EVALUATE THE EXTENT OF THE DAMAGE SO AS TO DETERMINE WHETHER REPAIR IS REQUIRED PRIOR TO BACKFILL AND GRADE SURFACE RESTORATION.

SECTION 6.0 WORK

SECTION 5.0 EXISTING UTILITIES

- 6.01 NO STORAGE OF EQUIPMENT OR MATERIALS IN THE ROADWAY IS PERMITTED UNLESS THE CONTRACTOR OBTAINS WRITTEN PERMISSION FROM THE CITY, STATE, AND/OR GOVERNING BODY
- 6.02 THE CONTRACTOR SHALL MARK ALL OPENINGS ON THE SURFACE PRIOR TO THE COMMENCEMENT OF EXCAVATION, ALL OPENINGS ON PAVED SURFACES SHALL BE SAW CUT PRIOR TO REMOVAL OF PAVEMENT.
- 6.03 CONTRACTOR RESPONSIBLE FOR OBTAINING AND PROVIDING REVIEW AND DESIGN OF ANY AND ALL SHORING SYSTEMS PRIOR TO CONSTRUCTION.
- 6.04 CONTRACTOR SHALL ASSUME ALL ELECTRICAL CABLES ARE ENERGIZED AND SHALL BE SUPPORTED SO AS NOT TO STRESS ANY PORTION OF THE CABLE.
- 6.05 CONTRACTOR SHALL PROVIDE APPROPRIATE ENGINEERED DE-WATERING MEASURES, IF NECESSARY, TO ENSURE GROUNDWATER TABLE REMAINS AT A DEPTH BELOW THE BASE OF THE EXCAVATION AT ALL TIMES DURING EXCAVATION, INSTALLATION AND BACKFILLING OPERATIONS.
- 6.06 THE ENGINEER SHALL BE NOTIFIED FOR RESOLUTION OF SITUATIONS WHERE CONDUIT DEPTH BELOW GRADE DEVIATES BY MORE THAN 3" AS CURRENTLY SHOWN ON PLAN/PROFILE DRAWINGS.
- 6.07 THE ENGINEER SHALL ALSO BE NOTIFIED FOR DISPOSITION OF SITUATIONS WHERE THE CONDUIT CANNOT MAINTAIN SEPARATIONS PER PLAN.

SECTION 7.0 RESTORATION

- THE CONTRACTOR SHALL OBTAIN A PERMIT TO PERFORM ALL RESTORATION WORK IN THE CONTRACTOR'S NAME. ALL PAVING SHALL BE COMPLETED WITHIN 15 WORKING DAYS AFTER EXCAVATION IS BACKFILLED UNLESS OTHERWISE ARRANGED IN ADVANCE WITH GOVERNING AGENCY.
- 7.02 CONTRACTOR SHALL BREAK OUT SIDEWALK DRIVEWAY CURB AND GUTTER PAVEMENT AND RESTORE TO PERMANENT CONDITION. CONTRACTOR TO CONFORM CONCRETE TO COLOR. FINISH, AND TEXTURE OF EXISTING SIDEWALKS CURB AND GUTTER
- 7.03 THE CONTRACTOR IS RESPONSIBLE FOR THE RESTORATION OF THE AREAS DISTURBED BY CONSTRUCTION ACTIVITIES. CONTRACTOR TO PAY ALL FEES AND OBTAIN ALL PERMITS FOR RESTORATION.
- THE CONTRACTOR IS TO RESTORE ALL DAMAGED STRUCTURES AND UTILITIES TO THE SATISFACTION OF 7 04 THE FACILITY OWNER. IN THE EVENT THAT DAMAGE OCCURS.

1-800-292-8989

LEGEND

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EXISTING ROW LINE FO FO EXISTING FIBER OPTIC LINE OH FO EXISTING OVERHEAD LINE OH OH EXISTING STORM DRAIN SD SD EXISTING ELECTRIC (BURIED) E E EXISTING GAS LINE G G EXISTING STORM SEWER > > EXISTING SANITARY SEWER)) E EXISTING ICN FIBER W W W	
EXISTING OVERHEAD LINE OH OH EXISTING STORM DRAIN SD SD EXISTING ELECTRIC (BURIED) E E EXISTING GAS LINE G G EXISTING STORM SEWER -> > EXISTING SANITARY SEWER -> > EXISTING WATER LINE	
EXISTING STORM DRAIN	
EXISTING ELECTRIC (BURIED) EE EXISTING GAS LINE GG EXISTING STORM SEWER S EXISTING SANITARY SEWER EXISTING WATER LINE	
EXISTING GAS LINE GG EXISTING STORM SEWER S EXISTING SANITARY SEWER) EXISTING WATER LINE	
EXISTING STORM SEWER >> EXISTING SANITARY SEWER >> EXISTING WATER LINE EXISTING ICN FIBER EXISTING ICN (AERIAL)	
EXISTING SANITARY SEWER	
EXISTING WATER LINEW EXISTING ICN FIBERW EXISTING ICN (AERIAL)A	
EXISTING ICN FIBER A A A A A A A A A A A A A A A A A A A	
EXISTING ICN (AERIAL)	
TO BE ABANDONED	
PROPOSED ICN FIBER	
PROPOSED AERIAL A A	
PROPOSED ICN CONDUIT	
CENTERLINE OF ROAD	
PROPOSED ICN HANDHOLE	
EXISTING ICN HANDHOLE	
PROPOSED HANDHOLE (BY OTHERS)	
EXISTING STORM CULVERT LOCATION	
EXISTING STORM MANHOLE	
EXISTING STORM INLET	
EXISTING SANITARY MANHOLE (SS)	
EXISTING SANITARY CLEAN OUT	
EXISTING FIBER OPTIC MANHOLE	
EXISTING FIBER OPTIC HANDHOLE FO	
EXISTING COMMUNICATIONS MANHOLE	
EXISTING COMMUNICATIONS HANDHOLE	
EXISTING ELECTRIC MANHOLE	
EXISTING ELECTRIC TRANSFORMER	
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EXISTING WATER MANHOLE (W)	
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ICN GENERAL NOTES

STANDARD INSTALLATION REQUIREMENTS:

GENERAL REOUIREMENTS:

- 1. THE CONTRACTOR SHALL POTHOLE ALL EXISTING UTILITIES
- 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.
- 3. MAINTAIN PROOF OF NOTIFICATION TO AND RECEIPT OF NOTIFICATION BY THE GAS UTILITY.
- 4. PERMITS AND COORDINATION
- 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). ALL CONTRACTORS AND SUBCONTRACTORS MUST BE LICENSED AND BONDED WITH THE CITY OF CLEAR LAKE.
- 4.2. ICN WILL OBTAIN AND PROVIDE COPIES OF IDOT PERMITS
- 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.
- 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.
- 4.5. FAILURE TO COORDINATE WITH THE AHLAND TO OBTAIN ALL NECESSARY PERMITS IS AT THE PERIL OF THE CONTRACTOR
- 4.6. RIGHT-OF-WAY PERMIT FEES ARE AN AUTHORIZED EXTRA ABOVE THE QUOTED BID PRICE. EXCAVATION PERMITS SHALL BE BY THE CONTRACTOR.
- 4.7. ENSURE ALL FACILITIES ARE PLACED WITHIN THE PUBLIC RIGHT-OF-WAY.
- 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.

- DUCT INSTALLATION REQUIREMENTS
- HDPE DUCT SHALL BE NO LESS THAN 36-42 INCHES DEEP.
- 2. DUCT SHALL BE INSTALLED IN THE PUBLIC RIGHT-OF-WAY.
- 3. WHEN CROSSING A HIGHWAY IN DOT RIGHT-OF-WAY, DUCT SHALL BE NO LESS THAN 48 INCHES BELOW GRADE UNDER THE ROADWAY AND SHOULDERS. HDPE MAY BE USED UNDER THE ROADWAY AND SHOULDERS IF INSTALLED AT A MINIMUM DEPTH OF 48".
- 4. SHOULD IT BE NECESSARY TO CROSS PRIVATE PROPERTY, THE CONTRACTOR MAY APPLY TO THE ICN FOR AN EXCEPTION, AND REQUEST PERMISSION TO SECURE AN EASEMENT. THE EASEMENT IS REQUIRED TO BE IN THE NAME OF ICN AND THE CONTRACTOR SHALL HAVE THE EASEMENT PREPARED BY A LAND SURVEYOR LICENSED IN THE STATE OF IOWA. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FEES UNLESS PREVIOUSLY AUTHORIZED BY THE ICN.
- 5. AT THE CONCLUSION OF THE PROJECT, PROVIDE AND LEAVE A PULL ROPE IN ALL DUCTS, CONDUITS AND PATHWAYS, INCLUDING INDOOR, OUTDOOR, NEW AND EXISTING.
- 6. DIRT SHALL BE MECHANICALLY COMPACTED AT ALL DUCT SPLICES, BORE PITS AND AROUND HANDHOLES.
- 7. GROUND SHALL BE RESTORED TO THE CONDITION FOUND PRIOR TO CONSTRUCTION AND DEBRIS REMOVED PRIOR TO SODDING OR SEEDING
- 8. ALL CONDUITS SHALL BE PLUGGED VIA DUCT SEAL OR OTHER METHOD UPON COMPLETION OF CABLE INSTALLATION
- 9. IF SCHEDULE 40 PVC CONDUIT IS UTILIZED, ALL ANGLES (45, 90 DEGREE OR OTHER) REQUIRE FITTINGS TO LONG SWEEP TO ACCOMMODATE MINIMUM CABLE BEND RADIUSES.
- 10. THE ICN REQUIRES PICTURES BY THE CONTRACTOR AND/OR ON- SITE INSPECTION BY ICN STAFF PRIOR TO COMPLETION OF THE PROJECT WHERE PIPE AND FITTINGS ARE NOT EXPOSED; I.E. UNDERGROUND, BEHIND A WALL. ETC.

HANDHOLE REQUIREMENTS

- 1. INSTALL HANDHOLES SO THAT THE LID IS LEVEL AND FLUSH WITH THE SURROUNDING NATURAL GRADE. THE LID SHALL NOT EXTEND ABOVE THE SURROUNDING NATURAL GRADE.
- 2. PROVIDE ¼" OPENING HARDWARE CLOTH TYPE SCREEN WIRE BELOW THE HANDHOLE.
- 3. PROVIDE 5-6 INCHES OF 3/2" CRUSHED ROCK BELOW THE HANDHOLE. ROCK SHALL BE COMPACTED. GRAVEL SHALL EXTEND A MINIMUM OF 6 INCHES BEYOND THE OUTSIDE WALLS OF THE HANDHOLE. DO NOT USE PEA GRAVEL OR OTHER ROUND STONE.
- 4. DO NOT PLACE GRAVEL INSIDE HANDHOLE ABOVE THE HARDWARE CLOTH.
- 5. CONDUIT SHALL EXTEND A MINIMUM OF 6" ABOVE THE HARDWARE CLOTH/GRAVEL.
- 6. FAILURE OF THE CONTRACTOR TO INSTALL HANDHOLES AS SPECIFIED WILL CAUSE THE CONTRACTOR TO RETURN AND RE-INSTALL THE HANDHOLE ACCORDING TO THIS SPECIFICATION BEFORE PAYMENT FOR THE PROJECT IS
- 7. HANDHOLE INSTALLATIONS SHALL FOLLOW ICN STANDARD TYPICAL INSTALLATION; SEE TYPICAL DRAWING.

FIBER INSTALLATION REQUIREMENTS

- 1. INSTALL FIBER ACCORDING TO INDUSTRY "BEST PRACTICES".
- 2. THE CONTRACTOR SHALL NOT VIOLATE THE MANUFACTURER'S MINIMUM INSTALLATION BEND RADIUS WHEN THE CABLE IS UNDER TENSION, OR THE MINIMUM INSTALLED BEND RADIUS.
- 3. TO PREVENT EXCEEDING THE MANUFACTURER'S MAXIMUM PULLING TENSION DURING INSTALLATION OF THE FIBER OPTIC CABLE, THE CONTRACTOR SHALL USE A "BREAK-AWAY" PULLING SWIVEL WHEN INSTALLING CABLE.
- 4. THE "BREAK-AWAY" FUNCTION SHALL ACTIVATE AT OR BELOW THE MAXIMUM PULLING TENSION SPECIFIED BY THE CABLE MANUFACTURER.
- 5. THE CONTRACTOR SHALL TEST ALL STRANDS OF THE FIBER, ON THE REEL, PRIOR TO BEGINNING FIBER INSTALLATION. CONFIRM THAT ALL STRANDS MEET MANUFACTURER'S LOSS SPECIFICATIONS.
- 6. THE CONTRACTOR SHALL FIELD VERIFY ALL LENGTHS AND EXISTING CONDITIONS PRIOR TO STARTING CONSTRUCTION
- 7. SLACK LOOPS IN HANDHOLES SHALL BE COILED, INSTALLED, AND SECURED TO AVOID DAMAGE TO THE COIL AND NOT INTERFERE WITH LIDS.
- 8. SLACK LOOPS AT SPLICES SHALL BE COILED TO MATCH THE EXISTING FIBER CABLE TAILS AND ALLOWANCE FOR SPLICE PREPARATION.
- 9. ICN FIBER IN ALL HANDHOLES SHALL BE LABELED WITH ICN WRAP AROUND CABLE TAGS OR OTHER LABELED CABLE TAGS.

BUILDING ENTRY REQUIREMENTS

- 1. WEATHER-SEAL ALL PENETRATIONS
- 2. USE MORTAR OR SIMILAR CEMENT TO SEAL PENETRATION OF BRICK OR CEMENT BLOCK.
- 3. FIRESTOP PENETRATIONS OF ANY FIRE-RATED FLOOR, WALL OR CEILING.
- 4. REPLACE THE FIRESTOP MATERIAL IN ANY EXISTING FIRESTOPPED PENETRATION USED BY THE CONTRACTOR.
- 5. ALL OUTDOOR CONDUITS, OF ANY LENGTH, SHALL BE GALVANIZED IRON PIPE (GIP). EMT, PVC AND PLASTIC ARE PROHIBITED
- 6. IMMEDIATELY UPON INSTALLATION, SEAL THE ENDS OF ALL DUCTS WITH DUCT SEAL OR EXPANSION FOAM TO PREVENT SILTATION OR FILLING WITH MOISTURE. THIS APPLIES TO BOTH NEW AND EXISTING DUCTS.
- 7. AT THE CONCLUSION OF THE PROJECT, ENSURE THAT A PULL ROPE IS LEFT IN ALL PATHWAYS, BOTH INSIDE AND OUTSIDE, NEW AND EXISTING.



- LOCATE FACILITY REQUIREMENTS
- PERMISSION FROM ICN TO SPLICE.
- 3. SPLICE ONLY IN HANDHOLES.
- 5. LEAVE THE WIRE SPLICE VISIBLE IN THE HANDHOLE.
- τερμινίδι

 - 9. DO NOT LEAVE ANY EXPOSED TRACER WIRE OR GROUND WIRE.

 - TERMINAL

- NORTH" ETC.
- WIRES BEFORE PAYMENT FOR THE PROJECT IS MADE.
- SEALING KIT
- SPLICE ENCLOSURE.
- PEDESTAL DETAIL.

DELIVERABLES/ACCEPTANCE:

ETC.

- 1.3. DEPTHS OF CABLE AND/OR CONDUIT INSTALLATION.
- SPLICE PLAN WAS FOLLOWED.

CONTRACTOR

1. TRACER WIRE SHALL BE CONTINUOUS.

2. SPLICES IN THE TRACER WIRE ARE NOT ALLOWED. IF TRACER WIRE IS ACCIDENTALLY SEVERED, REQUEST

4. USE EITHER AN EPOXY SPLICE KIT, SCOTCH 3M 3832 OR A MOLEX PERMASEAL BUTT SPLICE. 10-12 GA. SPLICE MATERIALS SHALL BE DESIGNED FOR UNDERGROUND APPLICATIONS.

6. ROUTE A GROUND WIRE FROM THE GROUND INSIDE THE BUILDING, THROUGH THE ENTRY TO THE TII 163

7. SECURE ALL RISER CONDUITS WITH 3 EACH TWO-HOLE CONDUIT STRAPS. 8. WIRE THE PEDESTAL/TERMINAL SO THAT LOCATES MAY BE PERFORMED IN ANY DIRECTION AND FROM THE FAR

10. PERMANENTLY GROUND THE TRACER WIRE AT THE HANDHOLE ON THE FURNISHED GROUND ROD 11. AT THE CONCLUSION OF THE PROJECT LEAVE THE TRACER WIRE SHIELD SHORTED TO GROUND IN THE LOCATE

12. 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. 13. LABEL ALL WIRES IN THE LOCATE TERMINAL/PEDESTAL/TRIVIEW. (I.E. "GROUND", "FACING DMACC", "FACING

14. FAILURE TO LABEL THE LOCATE WIRES WILL CAUSE THE CONTRACTOR TO RETURN AND PROPERLY LABEL THE

15. BOND TRACER WIRE(S) WITHIN SPLICE ENCLOSURES UTILIZING A 3M 4460-D/FO SHIELD BONDING KIT. 16. ROUTE TRACER WIRE(S) OUT OF SPLICE ENCLOSURE THROUGH A SINGLE PORT UTILIZING A FOSC CLOSURE

17. AT SPLICE LOCATIONS WITH NO LOCATE PEDESTAL, TRACER WIRES SHALL BE BONDED TOGETHER, WITHIN THE

18. AT EACH END OF ANY TRACER WIRE, USE APPROPRIATE-SIZED RING TERMINAL (CRIMP) CONNECTORS USING APPROPRIATE CRIMP TOOL; OR CREATE A WIRE EYELET AS PER TYPICAL INSTALLATION OF TRI-VIEW LOCATE

1. CONTRACTOR SHALL PROVIDE CONSTRUCTION REDLINE AS-BUILTS WITH:

1.1. OFFSETS TO FIXED OBJECTS TO THE CABLE/CONDUIT RUNNING LINE, HANDHOLES AND NEW FACILITIES 1.2. METER MARKS OF CABLE INSTALLATIONS AT HANDHOLE ENTRY/EXIT, SPLICE LOCATIONS, BUILDING ENTRIES,

1.4. ONE ORIGINAL SET OF AS-BUILT DRAWINGS MUST BE PROVIDED WITHIN TWO (2) WEEKS AFTER COMPLETION OF CONSTRUCTION FOR THE ICN MANAGEMENT RECORDS. REDLINE AS-BUILT DRAWINGS MUST BE COMPLETE. 2. CONTRACTOR SHALL PROVIDE SPLICING REDLINE OF ALL SPLICING COMPLETED AND VALIDATION THAT THE

3. CONTRACTOR IS RESPONSIBLE TO LOCATE FIBER UNTIL ACCEPTANCE BY THE ICN. ACCEPTANCE INCLUDES: 3.1. SUBMISSION OF CONSTRUCTION AND SPLICING RED LINE DRAWINGS BY CONTRACTOR

3.2. ASSIGNMENT OF LINK NUMBER BY THE ICN (IF APPLICABLE)

3.3. SUBMISSION OF FINAL AS BUILT DRAWING BY THE ICN TO THE ICN NETWORK MAINTENANCE PROVIDER.

3.4. SUBMISSION TO IOWA ONE CALL AND THE ICN NETWORK MAINTENANCE PROVIDER'S CONTRACT LOCATER. 3.5. THE MEASUREMENTS IN THE STATEMENT OF WORK ARE ESTIMATES AND NEED TO BE VERIFIED BY THE

4. ONLY WRITTEN MODIFICATIONS TO THIS SCOPE OF WORK ARE BINDING - VERBAL CHANGES TO THIS SCOPE OF WORK BY ANY PERSON OR PERSONS ARE NOT BINDING, UNLESS CONFIRMED IN WRITING 5. FINAL PAYMENT WILL NOT BE PROCESSED UNTIL ALL DELIVERABLES ARE RECEIVED AND ACCEPTED.

	UNT PLEA ER INSTAL			WESLEYAN	FIBER	RELOCATION hbk	ICN
	FOR 60% REVIEW 08/17/2023 FOR 90% REVIEW 08/31/2023 FOR PERMIT PLANS 09/11/2023]	COMMUNICATIONS NI 400 EAST 14TH STREET GRIMES STATE OFFICE BUILDIN DES MOINES, IOWA 50319 2N © 2021, COPY WITH PERMISS	G
ALE	E: NONE	SIZE: 1	1"X 17'	ICN GENERAL NO	DTES	PAGE 3	OF 20

	ICN PROVIDED MATERIALS		
CATEGORY	ITEM DESCRIPTION	UNIT	QTY
FIBER CABLE	FIBER CABLE 48F ARMORED SM CABLE		5500
LOCATE FACILITIES TRIVIEW WARNING MARKER		EA	1
LOCATE FACILTIES	TRIVIEW LOCATE PEDESTALS	EA	2
LOCATE FACILTIIES	ICN SNAP AROUND	EA	10
FDP, BULKHEADS, TRAYS	CORNING CCH-02U RACK MOUNT FDP	EA	1
FDP, BULKHEADS, TRAYS	CORNING CCH 12f SM D-SC CASSETTE LOADED	EA	4
SPLICE CLOSURE	*450B SPLICE CLOSURE	EA	3
SPLICE TRAY	*B TRAY 24-POS	EA	5
SHIELD BOND CONNECTOR	*SHIELD BOND CONNECTOR	EA	8
SEALING KIT	*FOSC CLOSURE SEALING KIT	EA	3

CONTRACTOR SUPPLIED MATERIALS						
CATEGORY	ITEM DESCRIPTION	UNIT	QTY			
DUCT 2" ORANGE HDPE DUCT		LFT	5300			
HANDHOLES	24X36X36 TIER 15 HH W/LID	EA	5			
LOCATE FACILITIES	6 AWG BARE SOLID COPPER GROUND WIRE	LFT	20			
LOCATE FACILITIES	12 AWG HDPE ORANGE SOLID COPPER WIRE	LFT	350			
LOCATE FACILITIES	1/2" X 6' GROUND ROD	EA	4			
LOCATE FACILTIIES	1/2" GROUND ROD CLAMP	EA	4			

	ESTIMATE OF QUANTITIES								
ITEM NO.	ITEM	UNIT	PLANNED TOTAL	AS-BUILT TOTAL					
1	MOBILIZATION	LS	1						
2	INSTALL 24" X 36" X 36" HANDHOLE	EA	5						
3	1-2" CONDUIT	LF	4227						
4	2-2" CONDUIT	LF	434						
5	48 SM ARMORED FIBER (TOTAL)	LF	5300						
6	48 SM ARMORED FIBER (RUNNING LINE)	LF	4650						
7	48 SM ARMORED FIBER (COIL)	LF	650						
8	TYCO 450B SPLICE ENCLOSURE	EA	3						

NOTE: CONDUIT INSTALLATION METHOD SHALL BE BORED UNDER ANY ROADWAYS, DRIVEWAYS, AND PAVED SURFACES. THE METHOD BETWEEN PLOW VERSUS BORE FOR CONDUIT INSTALLATION IS AT THE CONTRACTORS DISCRETION.

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 1310/1440 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

<u>*NOTE ON CONTRACTOR PROVIDED MATERIAL(S):</u> 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.

LISTING OF CONDUIT & FIBER WORK							
CONDUIT RUN	FROM	то	LENGTH	2" CONDUIT	48 SM ARMORED FIBER, UNDERGROUND		
1	PROP. ICN SHELTER	HH1	434	868	434		
2	HH1	HH2	1743	1743	1743		
3	HH2	HH3	1511	1511	1511		
4	HH3	HH4	589	589	589		
5	HH4	HH5	365	365	365		
6	HH4	EX. WINDSTREAM HH	8	8	8		
7	HH5	IRHTP RISER	11	11	0		
	TOTAL			5095	4650		

INCLUDING COILS.

	LISTING OF HANDH	OLE WORK		
HANDHOLE LABEL	HANDHOLE LABEL HANDHOLE TYPE		STATION	48 SM ARMORED FIBER COIL
PROP ICN SHELTER	ICN SHELTER	W COURTLAND ST	0+00	50
HH1 24" X 36" X 36"		W COURTLAND ST 4+34		150
HH2	HH2 24" X 36" X 36"		21+77	100
HH3	24" X 36" X 36"	W COURTLAND ST	36+88	100
HH4	HH4 24" X 36" X 36"		42+77	225
HH5	24" X 36" X 36"	JACKSON ST	46+42	75
	TOTAL			650



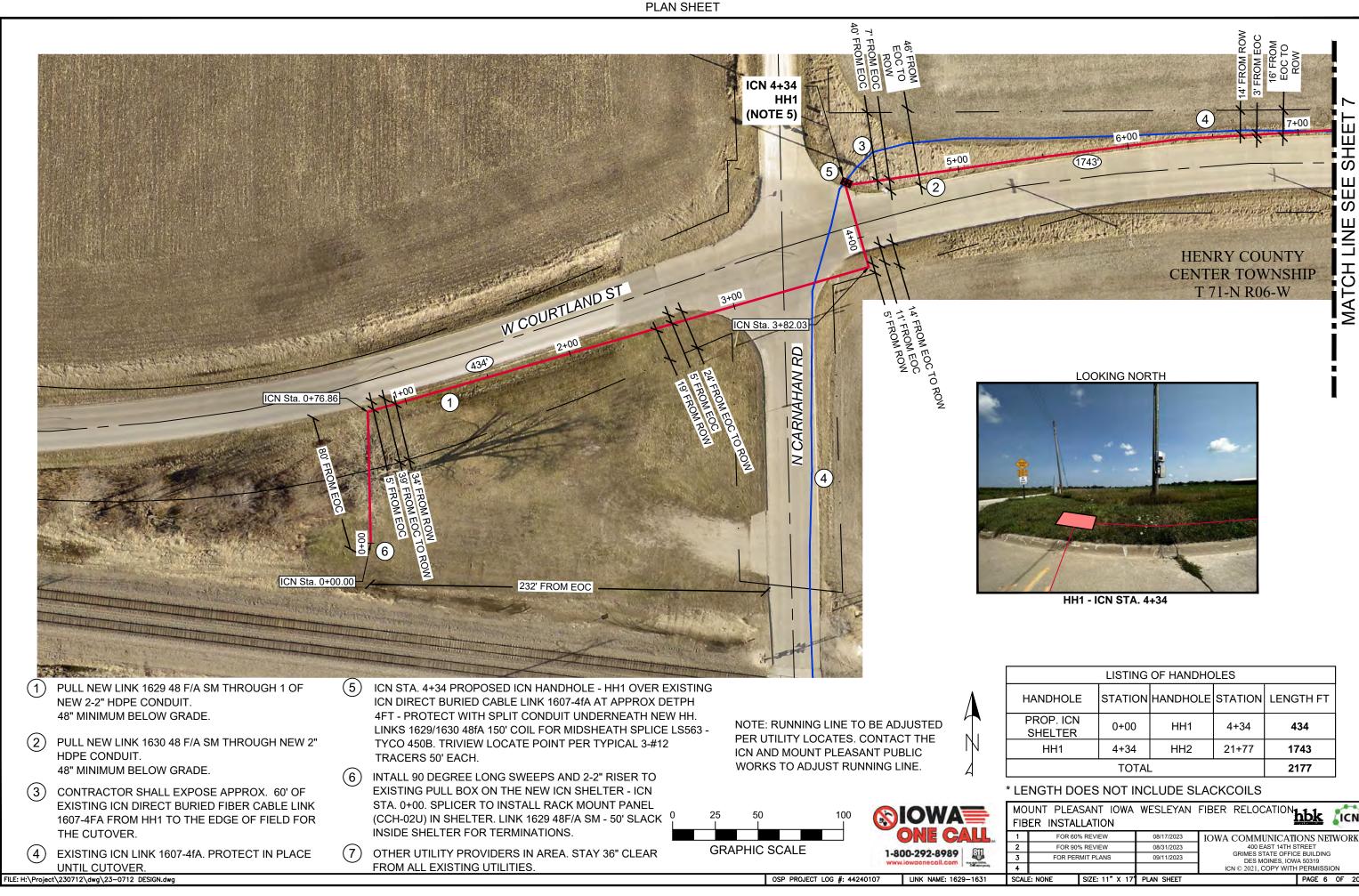
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NOTE: THIS TABLE SHOWS APPROXIMATE LENGTHS IN CONDUIT ONLY AND DOES NOT INCLUDE ANY COILS OR SLACK FOR FINER CABLES, TRACER WIRE, PULL ROPE, ETC. CONTRACTOR SHALL VERIFY NECESSARY QUANTITIES

	UNT PLEA ER INSTAL		WESLEYAN	FIBER	RELOCATION	<u>ok</u>	ICN
1	FOR 609	% REVIEW	08/17/2023	IOWA	COMMUNICATION	IS NETV	VORK
2	FOR 90% REVIEW FOR PERMIT PLANS		08/31/2023		400 EAST 14TH STREET		
3			09/11/2023	GRIMES STATE OFFICE BUILDIN DES MOINES, IOWA 50319			
4				IC	N © 2021, COPY WITH PER		N
SCAL	E: NONE	SIZE: 11" X 17"	MATERIALS		PA	AGE 4	OF 20

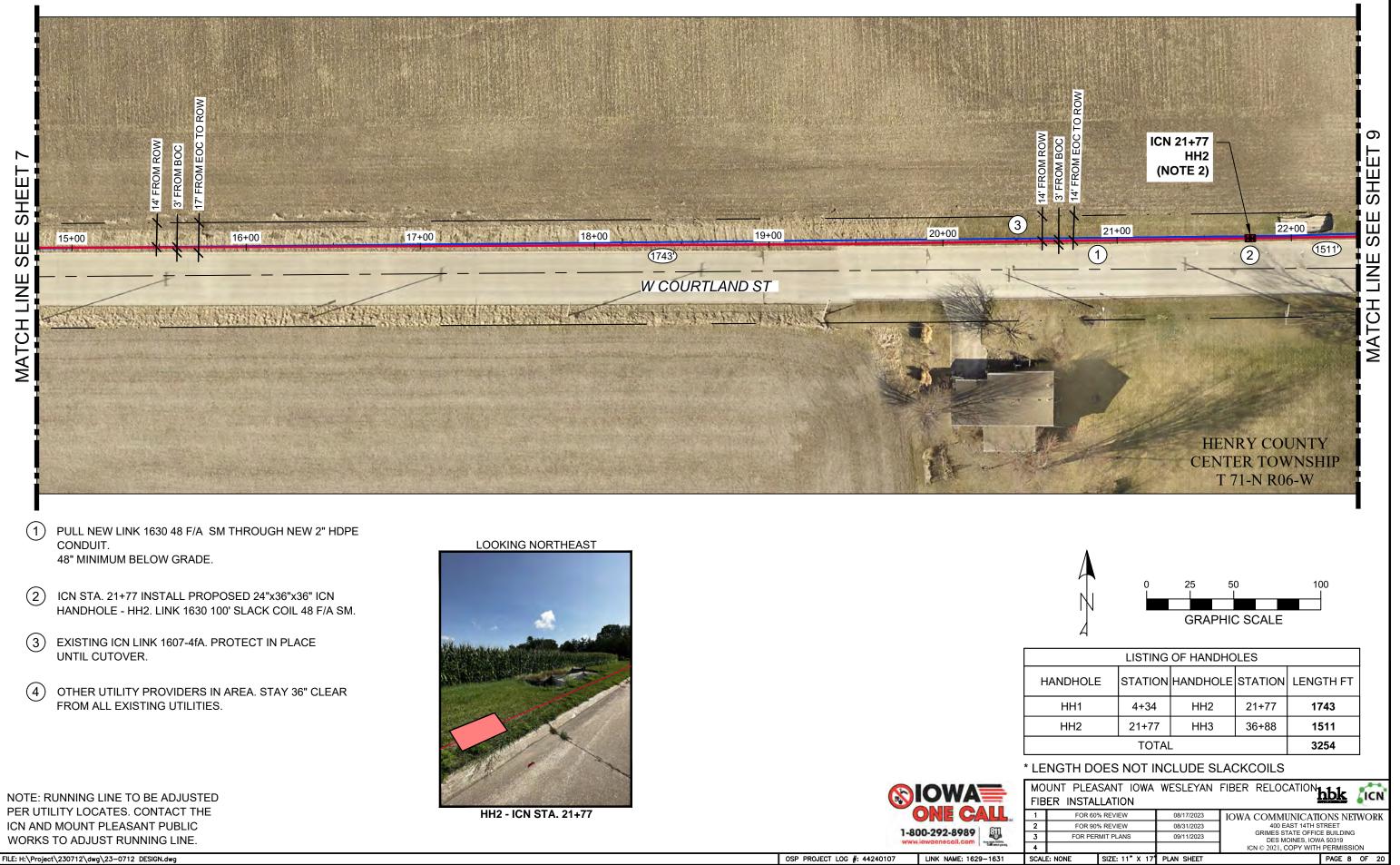


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	FOR 60 ⁴	% REVIEW	08/17/2023	IOWA COMMUNICATI	ONS NET	RK			
	FOR 90	% REVIEW	08/31/2023	400 EAST 14TH STREET GRIMES STATE OFFICE BUILDING DES MOINES, IOWA 50319					
	FOR PER	RMIT PLANS	09/11/2023						
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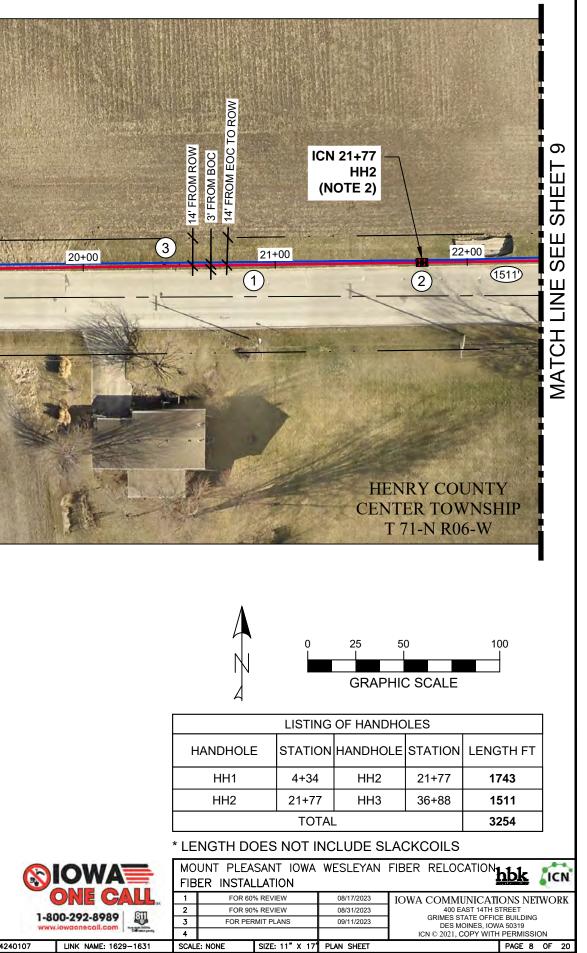
										_	
		LISTIN	G	OF HANDHO	DLES	3					
HANDHOLE		STATIO	N	HANDHOLE	ST	ATION	LENG	TH F	T		
PROP. ICN SHELTER		0+00		HH1	4	+34	4	34			
HH1		4+34		HH2	2	1+77	17	'43			
TOTAL								77			
ENGTH DO	DES		١C	LUDE SLA	СКС	OILS					
OUNT PLEA BER INSTAL			WE	ESLEYAN FIE	BER	RELOC	ATION	nbk		ic	N
FOR 60 ⁴	% REVI	EW		^{08/17/2023} IC	OWA		JNICATI		VET	WO	RK
FOR 909				08/31/2023			AST 14TH S				
FOR PERMIT PLANS 09/11/2				09/11/2023		DES M	DINES, IOW	A 50319			
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PER UTILITY LOCATES. CONTACT THE ICN AND MOUNT PLEASANT PUBLIC WORKS TO ADJUST RUNNING LINE.







- AND BELOW EXISTING ICN LINK 1607-f4A WHICH IS APPROXIMATELY AT 13-14' DEPTH. (ICN STA. 29+75).
- (3) BORE MIN. DEPTH OF 3' BELOW BOTTOM OF INLET WHICH IS APPROXIMATELY AT 4.5' DEPTH. (ICN STA. 23+00).
- (4)EXISTING ICN LINK 1607-4fA. PROTECT IN PLACE UNTIL CUTOVER.
- (5) OTHER UTILITY PROVIDERS IN AREA. STAY 36" CLEAR FROM ALL EXISTING UTILITIES.

NOTE: RUNNING LINE TO BE ADJUSTED PER UTILITY LOCATES. CONTACT THE ICN AND MOUNT PLEASANT PUBLIC WORKS TO ADJUST RUNNING LINE.







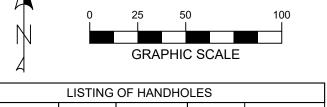
ICN STA. 23+00



ICN STA. 29+75

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OSP PROJECT LOG #: 44240107 LINK NAME: 1629-1631

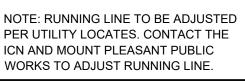


LISTING OF HANDHOLES								
HANDHOLE	STATION	HANDHOLE	STATION	LENGTH FT				
HH2	21+77	HH3	36+88	1511				
	1511							
ENGTH DOES NOT INCLUDE SLACKCOILS								
OUNT PLEASANT IOWA WESLEYAN FIBER RELOCATION								

AL	E: NONE	SIZE: 11" X 17	PLAN SHEET	PAGE 9 OF 20				
				ICN © 2021, COPY WITH PERMISSION				
	FOR PER	MIT PLANS	09/11/2023	GRIMES STATE OFFICE BUILDING DES MOINES, IOWA 50319				
	FOR 90	% REVIEW	08/31/2023	400 EAST 14TH STREET				
	FOR 60 ⁴	% REVIEW	08/17/2023	IOWA COMMUNICATIONS NETWORK				
IB	ER INSTAL	LATION						



- 1 PULL NEW LINK 1630 48 F/A SM THROUGH NEW 2" HDPE CONDUIT. 48" MINIMUM BELOW GRADE.
- (2) ICN STA. 36+88 INSTALL PROPOSED 24"x36"x36" ICN HANDHOLE - HH3. LINK 1630 100' SLACK COIL 48 F/A SM.
- (3) EXISTING ICN LINK 1607-4fA. PROTECT IN PLACE UNTIL CUTOVER.
- (4) OTHER UTILITY PROVIDERS IN AREA. STAY 36" CLEAR FROM ALL EXISTING UTILITIES.









HH3 - ICN STA. 36+88

LOOKING SOUTH



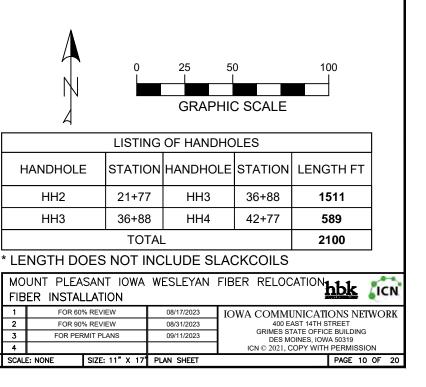
HH3 - ICN STA. 36+88



ICN STA. 37+00

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OSP PROJECT LOG #: 44240107 LINK NAME: 1629-1631



- (1)PULL NEW LINK 1630 48 F/A SM THROUGH NEW 2" HDPE CONDUIT. 48" MINIMUM BELOW GRADE.
- (2) PULL NEW 48 F/A SM THROUGH NEW 2" HDPE CONDUIT BETWEEN ICN HH STA 42+77 / 0+00A TO WINDSTREAM HH 0+08A. LEAVE 75' OF SLACK IN EACH HH FOR SPLICING (TOTAL CABLE LENGTH 160') 48" MINIMUM BELOW GRADE.
- (3) PULL NEW LINK 1631 48 F/A SM THROUGH NEW 2" HDPE CONDUIT. 48" MINIMUM BELOW GRADE.
- (4)ICN STA. 42+77 PROPOSED 24"X36"X36" ICN HANDHOLE - HH4 OVER EXISTING ICN DIRECT BURIED CABLE LINK 1607-4fA AND LINK 1606-12FA - PROTECT WITH SPLIT CONDUIT UNDERNEATH NEW HH. EXISTING ICN HH COULD NOT BE LOCATED - IF FOUND REMOVE. EXPOSE EXISTING SOUTHBOUND CONDUITS. ENTER EXISTING ICN SOUTH, EAST AND WEST BOUND CONDUITS INTO HH. ICN LINK 1606-12fA TO BE CUT AT **BUILDING ENTRANCE TO 600 JACKSON** ST AND PULLED BACK AT HH DURING HOT CUT. LEAVE ICN LINK 1607-4fA IN PLACE. LINKS 1630/1631 48fA 150' COIL FOR MIDSHEATH SPLICE LS564 - TYCO 450B. LOCATE POINT: TRIVIEW WITH GROUND ROD AND 3-#12 TRACER WIRES - LEAVE 50' COILS FOR EACH DIRECTION.
- (5)EXISTING ICN LINK 1607-4fA. PROTECT IN PLACE UNTIL CUTOVER.
- (6)EXISTING ICN LINK 1606-12fA. PROTECT IN PLACE.
- (7)2' FROM SW. STAY ON SOUTH SIDE OF UTILITY POLE.
- (8)SEE PAGE 13 FOR MORE DETAIL ON EXISTING ICN ALONG JACKSON ST.
- (9)OTHER UTILITY PROVIDERS IN AREA. STAY 36" CLEAR FROM ALL EXISTING UTILITIES.



NOTE: RUNNING LINE TO BE ADJUSTED PER UTILITY LOCATES. CONTACT THE ICN AND MOUNT PLEASANT PUBLIC WORKS TO ADJUST RUNNING LINE.



MATCH LINE SEE SHEET 10

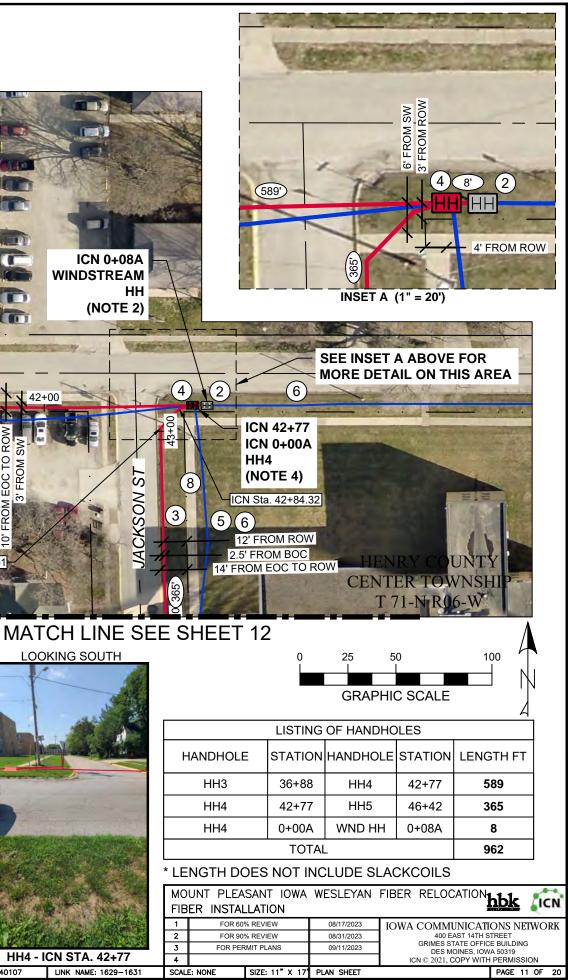
LOOKING SOUTH

ICN STA. 39+11



ICN STA. 41+25





MATCH LINE SEE SHEET 11



- (4)EXISTING ICN LINKS 1607-4fA AND 1606-12fA. PROTECT IN PLACE UNTIL CUTOVER.
- (5) 30" FROM CURB. STAY WEST OF TRANSFORMER PAD.
- (6)EXISTING HH WITH IRHTP AND UPN CABLES; LOCATION TO CUT CABLES FOR CUTOVER.
- (7)EXPOSE EXISTING HH TO VERIFY CONDUITS AND DETERMINE IF LINK 1606-12fA CAN BE PULLED BACK TO HH 4. LOCATION TO CUT LINK 1606-12FA DURING CUTOVER
- (8) SEE PAGE 13 FOR MORE DETAIL ON EXISTING ICN ALONG JACKSON ST.
- (9)OTHER UTILITY PROVIDERS IN AREA. STAY 36" CLEAR FROM ALL EXISTING UTILITIES.

FI 1 2 3 1-800-292-8989

LOOKING NORTH



HH5 - ICN STA. 46+42



LOOKING NORTH

- (1)PULL NEW LINK 1631 48 F/A THROUGH NEW 2" HDPE CONDUIT. 48" MINIMUM BELOW GRADE.
- (2)ICN STA. 46+42 INSTALL PROPOSED 24"x36"x36" ICN HANDHOLE - HH5 OVER EXISTING UPN CONDUIT. ACCESS EXISTING UPN CONDUIT APPROX DEPTH 4±. LINK 1631 48f A 75' COIL FOR BUTT SPLICE LS565 -TYCO 450B. GROUND #12 TRACER WIRE 50' FOR NEW LINK 1631. GROUND #12 TRACER WIRE TO RISER POLE. UPN AND IRTHP CABLE TO BE CUT AT HH TO EAST AND PULLED BACK FOR SPLICING DURING HOT CUT.

NEW 2" HDPE CONDUIT TO INTERCEPT EXISTING IRHTP AT RISER. IRHTP CABLE TO BE CUT AT HH TO EAST AND PULLED BACK TO ICN HH5 FOR SPLICING DURING HOT CUT. CONTRACTOR TO REMOVE/REPLACE RISER FOR RE-ROUTING IN NEW CONDUIT. NEW #12 TRACER WIRE FROM RISER TO LOCATE PUCK TO HH5 AND GROUND TO NEW GROUND ROD. 48" MINIMUM BELOW GRADE.

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NOTE: RUNNING LINE TO BE ADJUSTED

PER UTILITY LOCATES. CONTACT THE

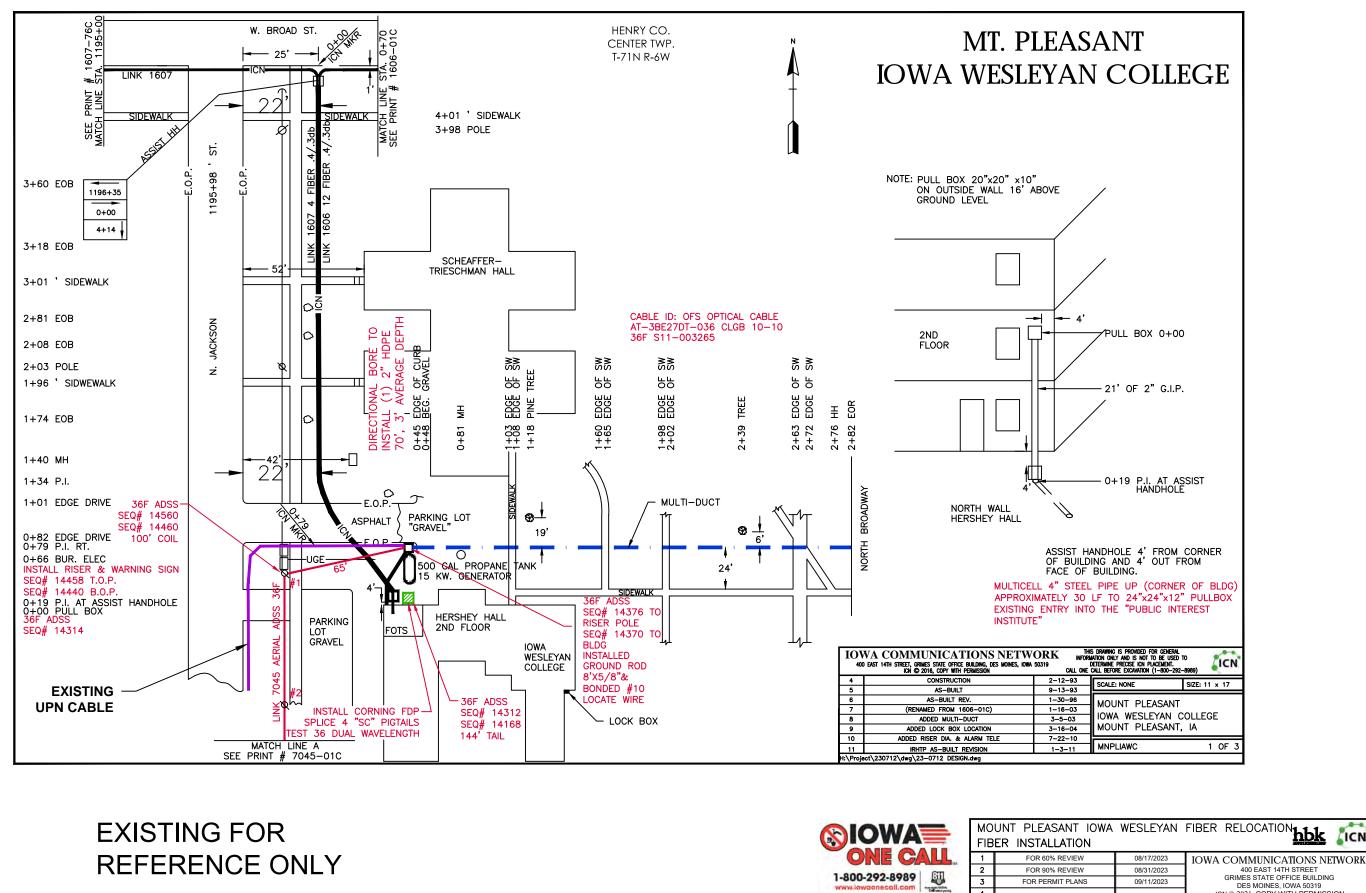
ICN AND MOUNT PLEASANT PUBLIC

WORKS TO ADJUST RUNNING LINE.

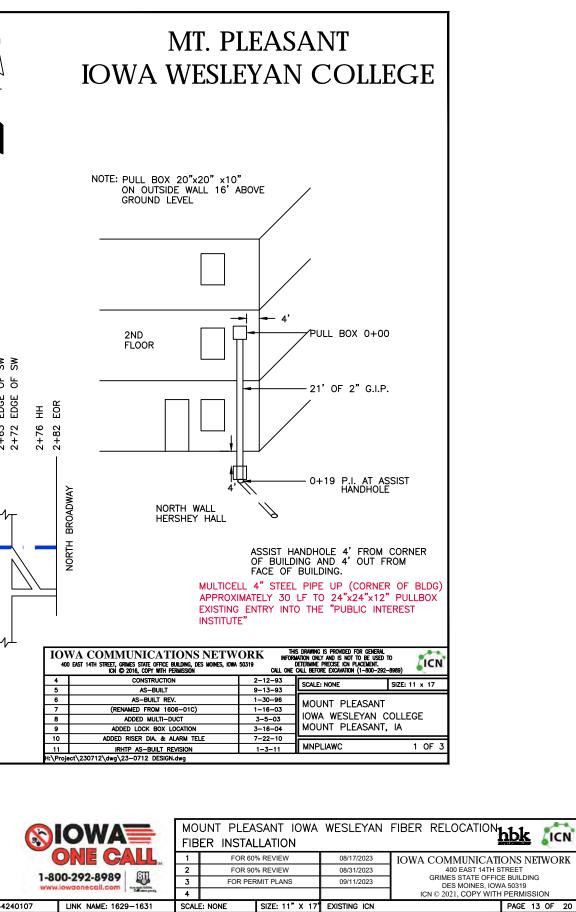
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OSP PROJECT LOG #: 44240107 LINK NAME: 1629-1631

HENRY C					
		OF HANDHC			
HANDHOLE				LENGTH FT	
HH 4	42+77	HH5 IRHTP	46+42	365	
HH 5	46+42 TOTAL	RISER	46+53	11 376	
L * LENGTH DOES				570	
MOUNT PLEASAN FIBER INSTALLAT 1 FOR 60% REVI 2 FOR 90% REVI 3 FOR PERMIT PL	T IOWA WI ION EW EW ANS	08/17/2023 IC 08/31/2023 09/11/2023	BER RELOC	INICATIONS NET ST 14TH STREET ATE OFFICE BUILDING DINES, IOWA 50319 OPY WITH PERMISSIO	N
SCALE: NONE SIZE:	11" X 17" PL	AN SHEET		PAGE 12	OF 20

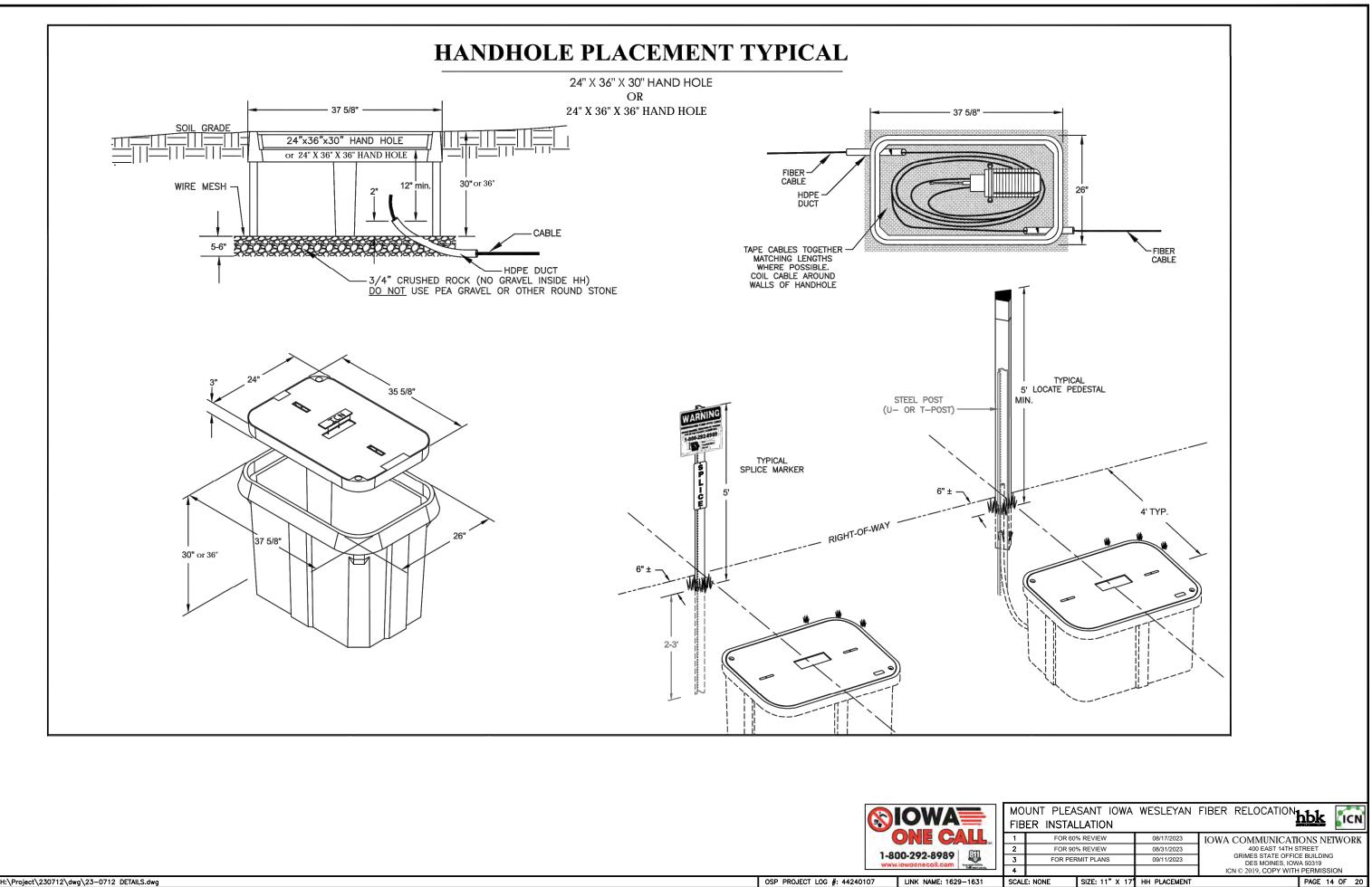


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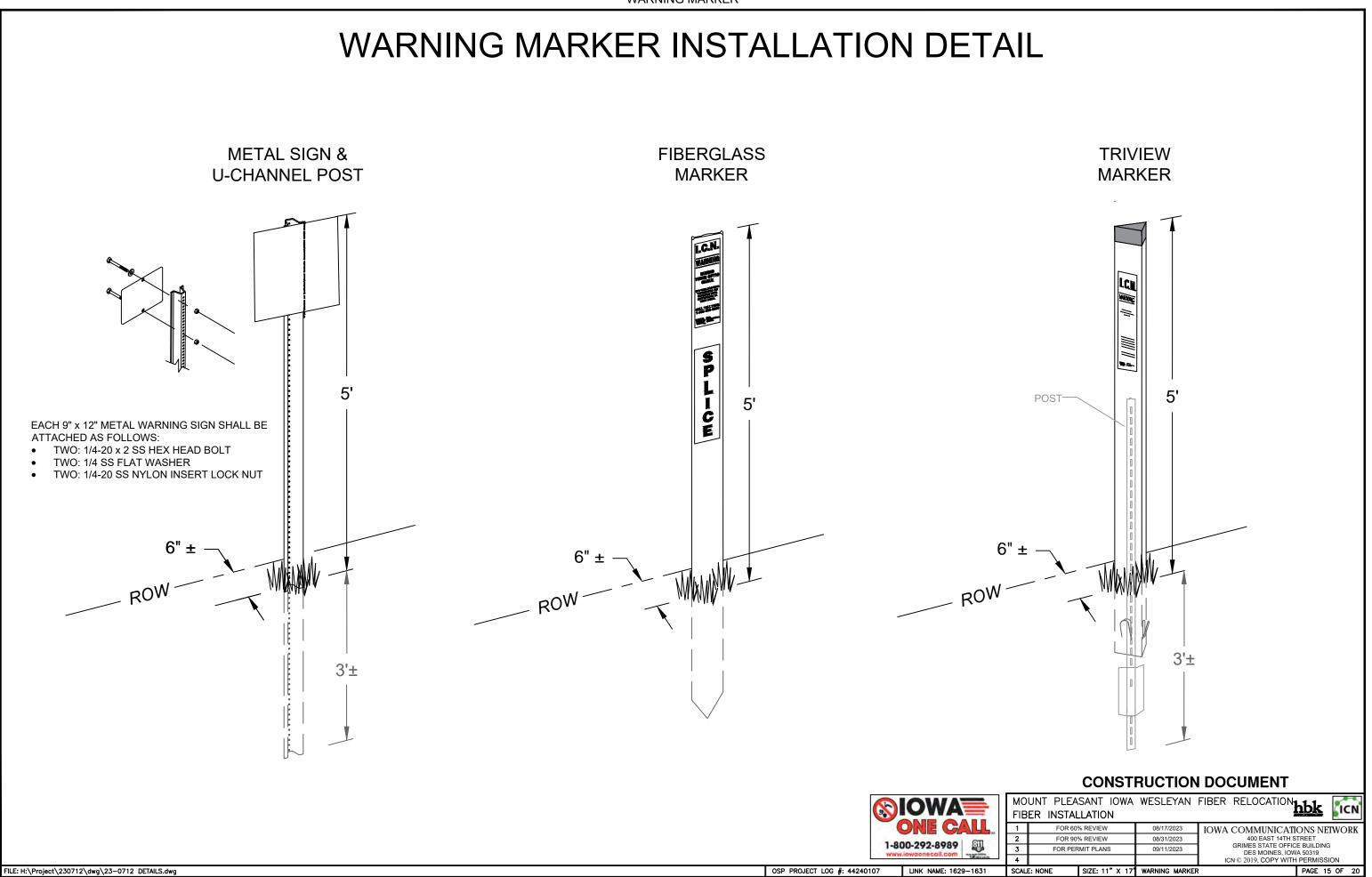
ICN

OSP PROJECT LOG #: 44240107

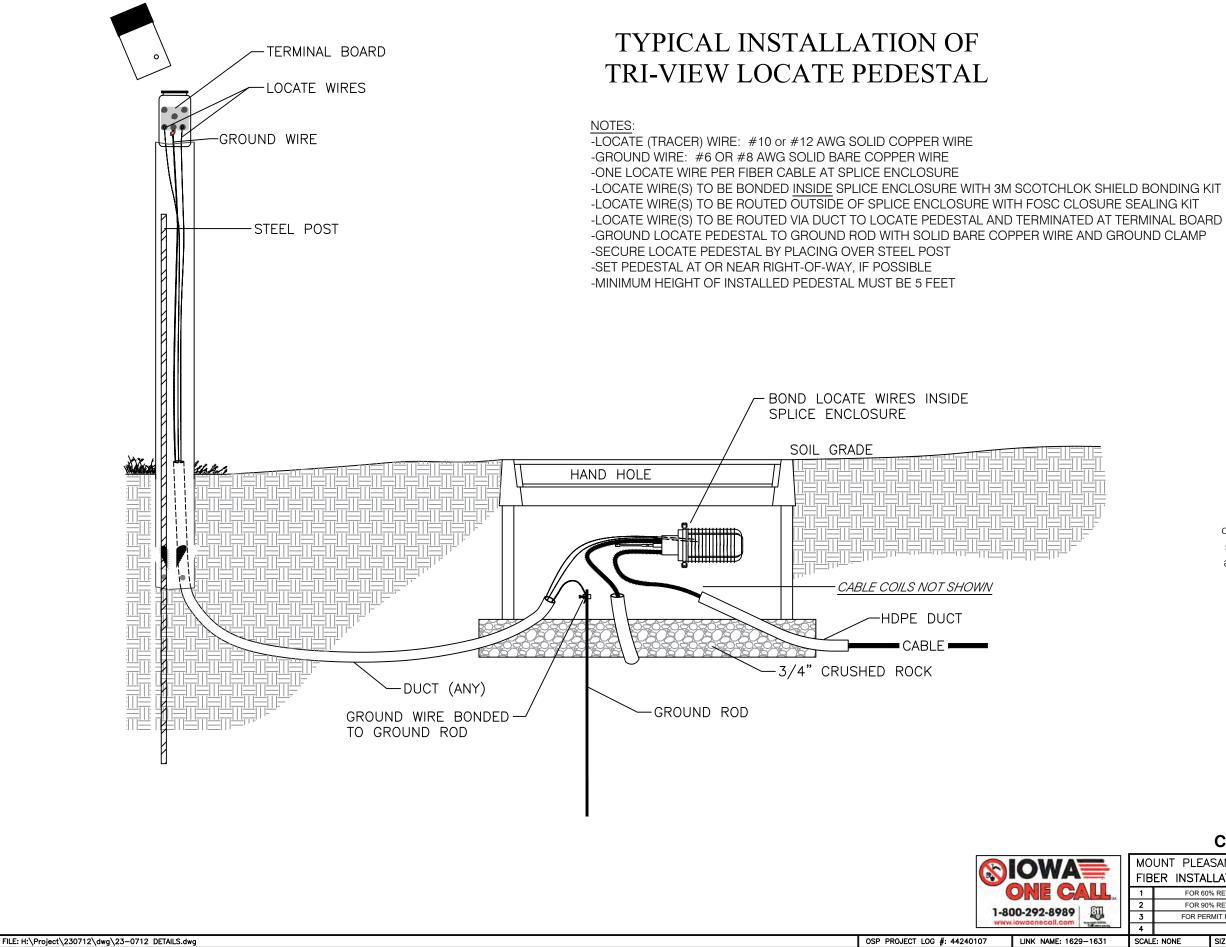


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WARNING MARKER



TRI-VIEW LOCATE

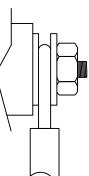


TRACER WIRE TERMINATION DETAIL

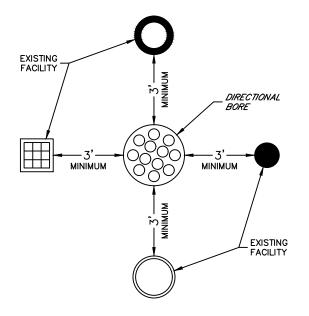
Termination of the locate wire at either a pedestal, puck, or in a splice case shall be made in the following fashion:

Strip off a minimum of 3/4" of insulation. Using a needle nose pliers bend a wire "eyelet" on the wire end in a clockwise manner. Use a flat washer on both sides of the wire eyelet when cinching it down on the stud. Flat washers shall be of appropriate size such that the hole matches the diameter of the stud and the outside diameter of the flat washer matches reasonably close to the eyelet diameter.



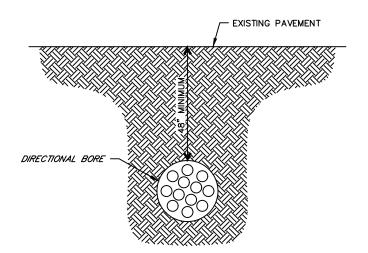


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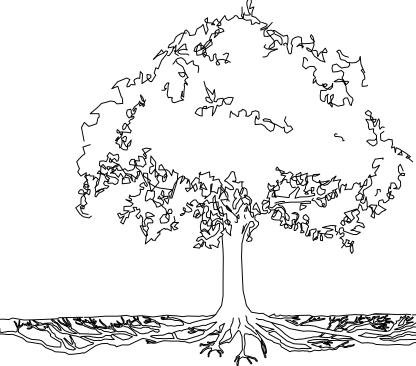


MAINTAIN A MINIMUM OF AT LEAST 3 FEET OF SEPARATION IN ANY DIRECTION BETWEEN DIRECTIONAL BORE AND ALL EXISTING FACILITIES.

UTILITY SEPARATION DETAIL



DIRECTIONAL BORING DETAIL

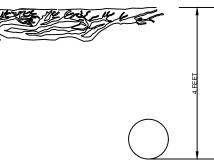


TREE PROTECTION - TUNNELING

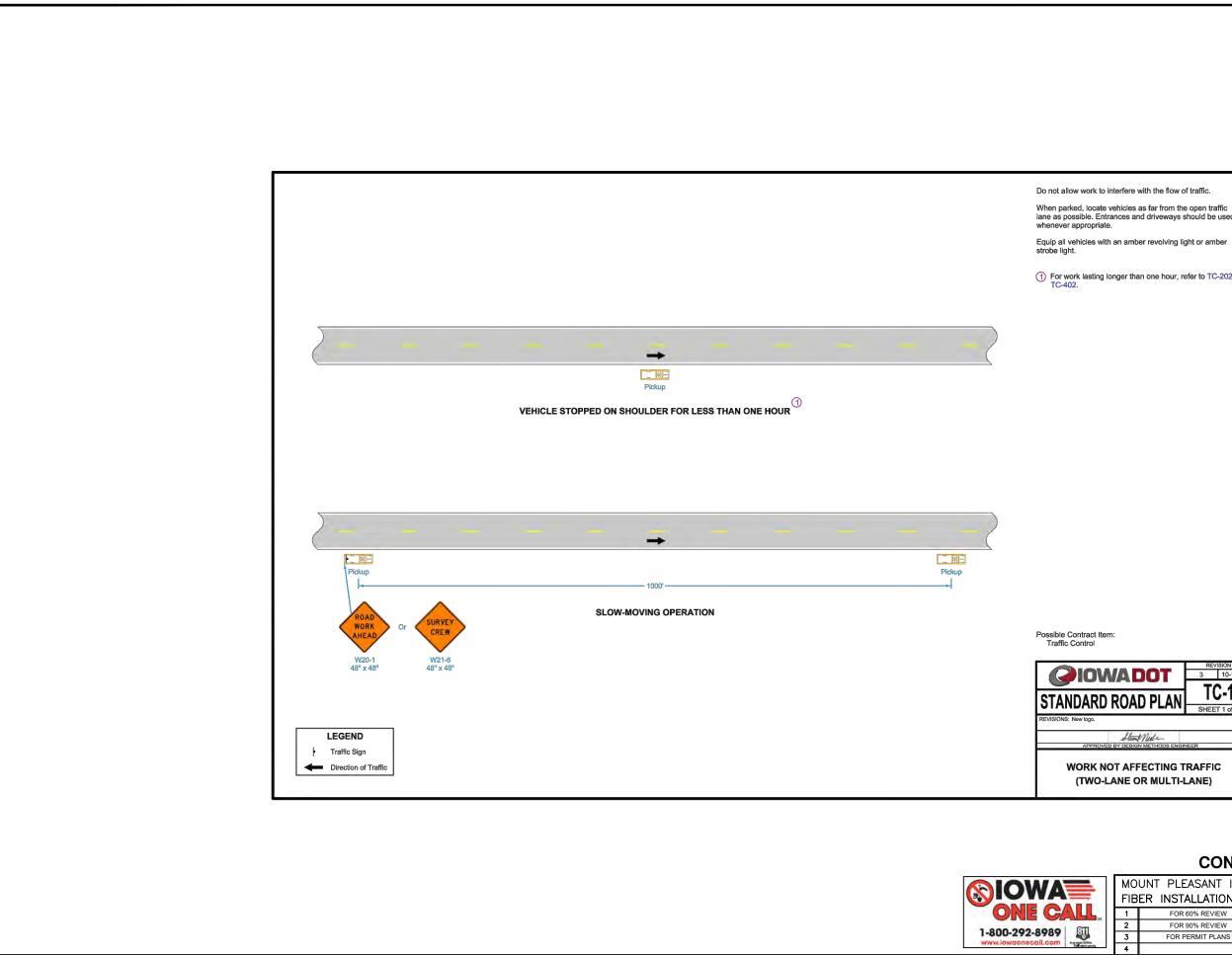


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12 INCH OR GREATER TRUNK DIAMETER

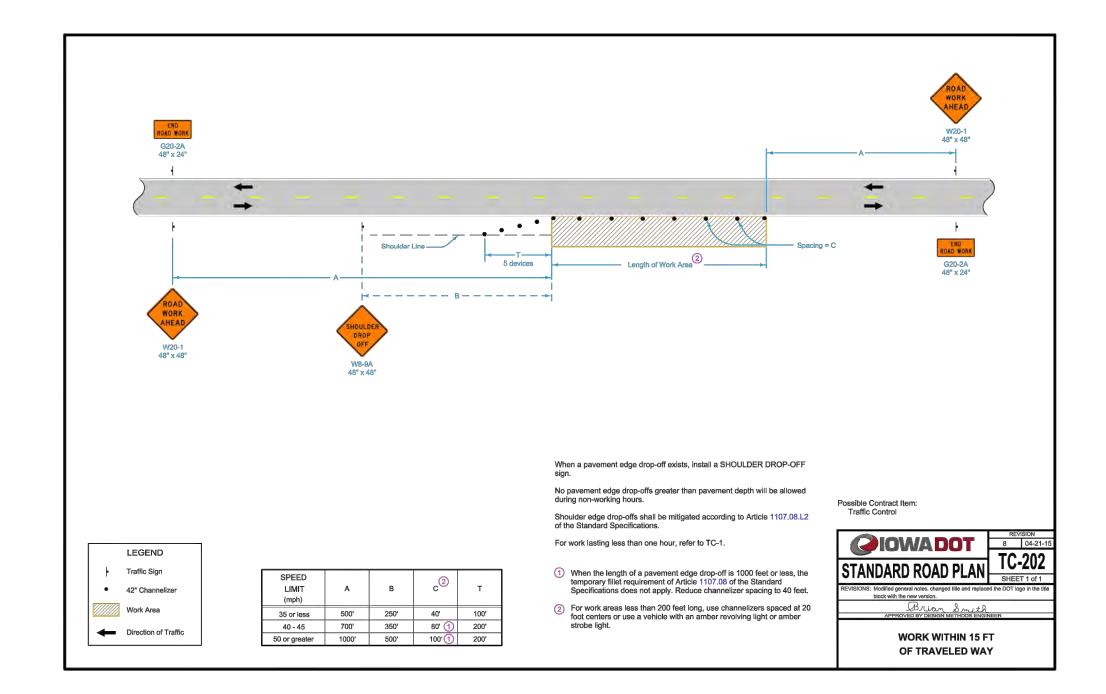


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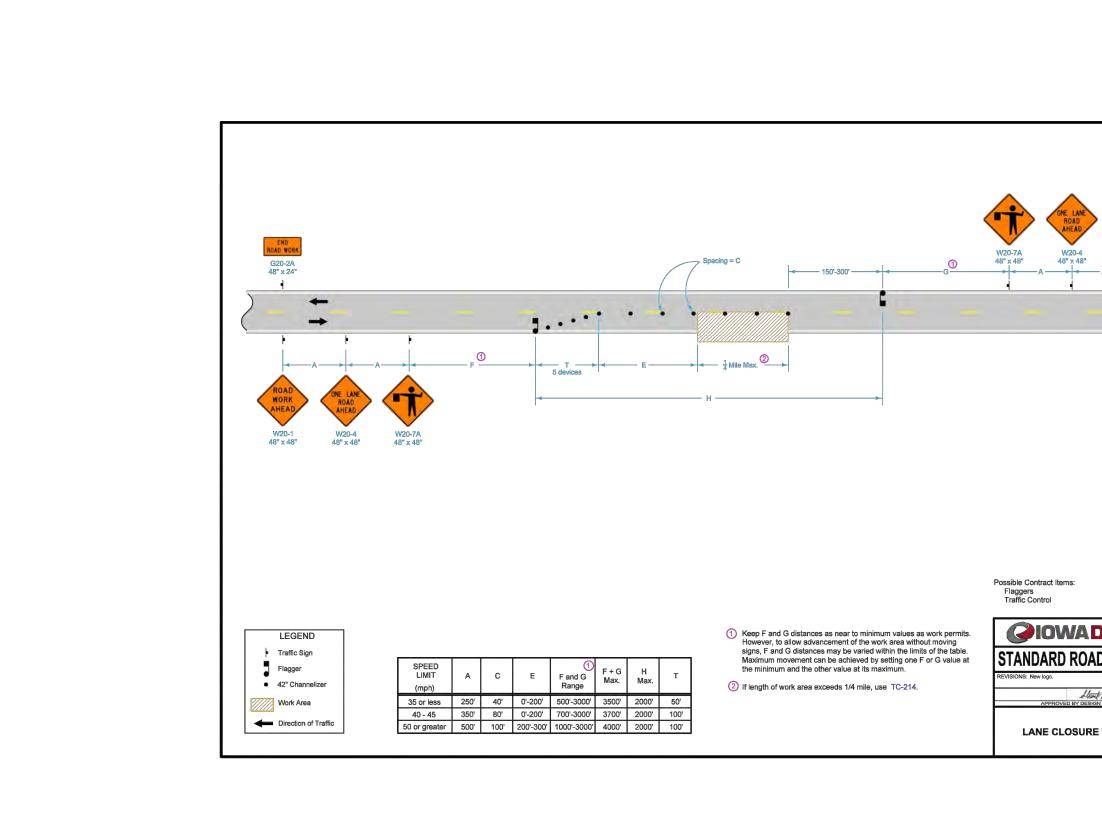
and driveways s	hould be used	
mber revolving lig	ght or amber	
than one hour, re	efer to TC-202 or	
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ROAD WORK AHEAD
W20-1 48" x 48" — A — — — —
→ (
EN0 ROAD WORK G20-2A 48" x 24"
REVISION 4 10-15-19
D PLAN TC-213
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GN METHODS ENGINEER

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