



Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE INTERSTATE ROAD SYSTEM STORY COUNTY

ITS INFRASTRUCTURE RELOCATION

I-35 - 280th Street to US-30
US-30 - Dayton Avenue to Iowa DOT Ames Maintenance Garage

SCALES: As Noted

TOTAL	36
PROJECT IDENTIFICATION NUMBER	
PROJECT NUMBER	ITS-035-4(228)108-25-85

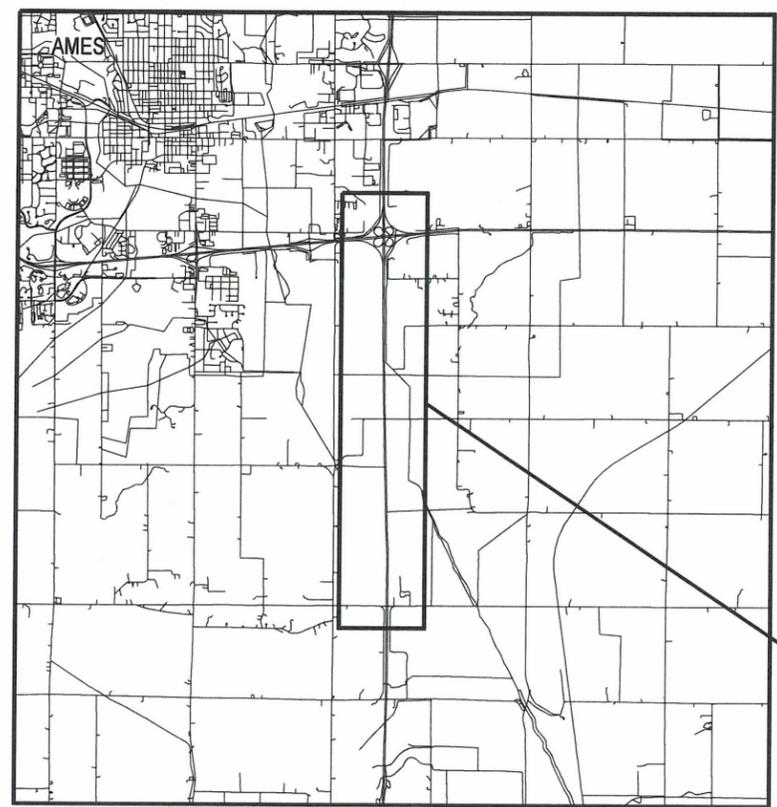
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Refer to the Proposal Form for list of applicable specifications.

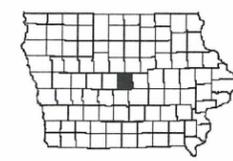
Value Engineering Saves. Refer to Article 1105.15 of the Specifications.



NO MILEAGE SUMMARY



PROJECT LOCATION



I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

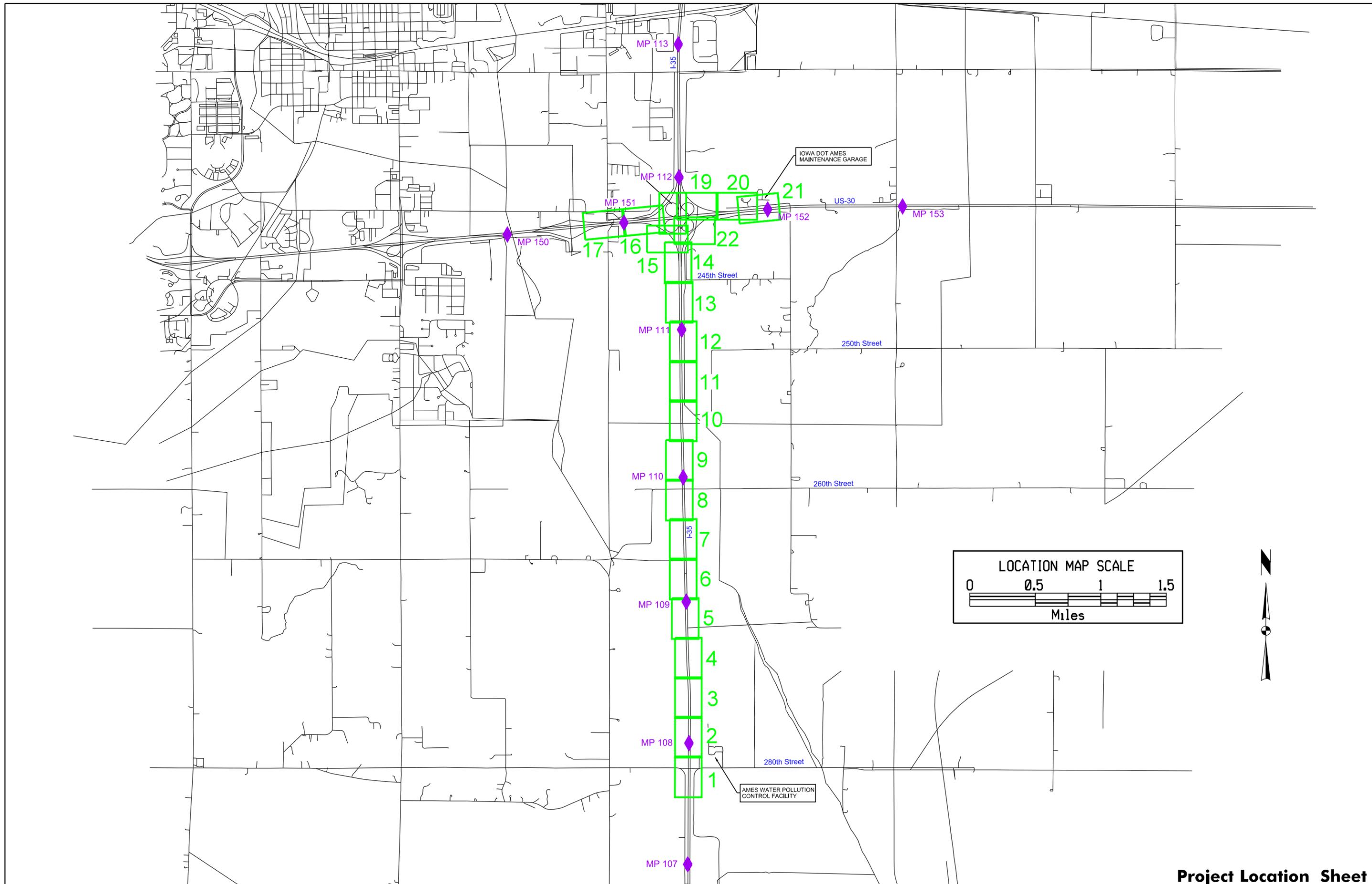
Justin P. Petersen 1-15-2016
Signature Date

Justin P. Petersen
Printed or Typed Name

20842
License Number

My license renewal date is December 31, 20 17

Pages or sheets covered by this seal: A.01-A.03, C.01-C.08, J.01, N.01-N.22, U.01-U.02



Project Location Sheet

10:51:51 AM 1/15/2016 gsetb F:\Projects\014-1253\40-Design\Microstation\W0 13 - I-35 & US-30 Fiber Relocation\DGN\Sheets\01.A Sheets\cover02.dgn

STANDARD SYMBOLS

- Interstate Highway Symbol
- U.S. Highway Symbol
- Iowa Highway Symbol
- County Road Highway Symbol
- Evergreen Tree
- Deciduous Tree
- Fruit Tree
- Shrub (Bushes)
- Timber
- Hedge
- Stump
- Swamp
- Rock Outcrop
- Broken Concrete
- Revetment (Rip Rap)
- Cemetery
- Grave
- Cave
- Sink Hole
- Board Fence
- Chain Link or Security Fence
- Wire Fence
- Terrace
- Earth Dam or Dike (Existing)
- Earth Dam or Dike (Proposed)
- Tile Outlet
- Edge of Water
- Existing Drainage
- Proposed Drainage
- Right of Way Rail or Lot Corner
- Concrete Monument
- Well
- Windmill
- Beehive Intake
- Existing Intake
- Proposed Intake
- Existing Utility Access (Manhole)
- Proposed Utility Access (Manhole)
- Fire Hydrant
- Water Hydrant (Rural)
- Septic Tank
- Cistern Symbol
- L.P. Gas Tank (No Footing)
- Underground Storage Tank
- Latrine
- Luminaire

- Traffic Signal
- Traffic Signal with Luminaire
- Telephone Pedestal
- Television Pedestal
- Telephone Pole
- Telephone Pole (Second Company)
- Telephone Pole (Third Company)
- Telephone Pole (Fourth Company)
- Telephone Pole (Fifth Company)
- Power Pole
- Power Pole (Second Company)
- Power Pole (Third Company)
- Power Pole (Fourth Company)
- Power Pole (Fifth Company)
- Electrical HighLine Tower (Metal or Concrete)
- Power Riser Pole
- Telegraph Pole
- Satellite TV Dish
- Existing Water Line
- Existing Water Line (Second Company)
- Existing Sanitary Sewer Line
- Existing Telephone Line
- Existing Telephone Line (Second Company)
- Existing Fiber Optics Telephone Line
- Existing Storm Sewer Line

- Existing Gas Line
- Existing High Pressure Gas Line
- Existing Gas Line (Second Company)
- Existing High Pressure Gas Line (Second Company)
- Existing Power Line
- Existing Power Line (Second Company)
- Cable Television Line
- Guardrail (Beam or Cable)
- Guard Post (one or two)
- Guard Post (over two)
- Filler Pipe
- Gas Valve
- Water Valve
- Speed Limit Sign
- Mile Marker Post
- SIGN
- WHU
- RT
- EB
- TCB
- RRB
- TSB



NOTE: THE PLAN LOCATIONS OF UNDERGROUND AND AERIAL UTILITIES, WHEN SHOWN, ARE APPROXIMATE ONLY. IN ADDITION, A PORTION OF UTILITY INFORMATION MAY NOT HAVE BEEN PROVIDED. ALL UTILITIES SHALL BE LOCATED AND MARKED PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTRACTING UTILITIES AND LOCATOR SERVICES AND SCHEDULING THE LOCATION OF UNDERGROUND UTILITIES. THE CONTRACTOR SHALL ALSO CONTACT ANY AND ALL UTILITIES AND LOCAL GOVERNMENT AGENCIES NOT PARTICIPATING IN LOCATION SERVICES.

RIGHT OF WAY LEGEND

- Proposed Right of Way
- Existing Right of Way
- Existing and Proposed Right of Way
- Easement and Existing Right of Way
- Borrow
- Easement (Temporary)
- Easement
- Excess
- Property Line
- A/C Access Control

CONVENTIONAL SIGNS

- Station Reference Point Survey Line
- Section Corner
- Proposed Profile Grade
- Railroad
- Existing Proposed Field Tile
- Existing Proposed Culverts
- Stream

UNIQUE SYMBOLS FOR THIS PROJECT

EXISTING	PROPOSED	DESCRIPTIONS
		Iowa DOT Plowed Conduit
		Iowa DOT Bored Conduit
		ICN Fiber
		Existing Iowa DOT Conduit
		Iowa DOT Handhole, Type I
		Iowa DOT Handhole, Type FOR27
		Iowa DOT Handhole, Type Fiber Vault
		Iowa DOT Handhole, Misc.
		ICN Handhole
		Iowa DOT Traffic Camera
		Iowa DOT Traffic Sensor
		Meter Pedestal
		Iowa DOT ITS Device Cabinet, Pole Mount
		Iowa DOT ITS Device Cabinet, Ground Mount
		Iowa DOT Device Pole
		Iowa DOT Lighting Control/DMS Cabinet

ABBREVIATIONS

DOT	Department of Transportation
ITS	Intelligent Transportation Systems
NEC	National Electric Code
OTDR	Optical Time Domain Reflectometer
TCP	Traffic Control Plan
ROW	Right of Way
HH	Handhole
ICN	Iowa Communications Network
NTS	Not to Scale

LEGEND AND SYMBOL INFORMATION SHEET

ESTIMATE OF QUANTITIES					100-1A
					07-15-97
Item No.	Item Code	Item	Unit	Quantities	
				Estimated Total	As-Built Total
1	2528-8445110	TRAFFIC CONTROL	LS	1	
2	2533-4980005	MOBILIZATION	LS	1	
3	2599-9999005	REMOVE EXISTING HANDHOLE	EACH	1	
4	2599-9999005	HANDHOLE, TYPE FOR27	EACH	20	
5	2599-9999005	HANDHOLE, TYPE FIBER VAULT	EACH	3	
6	2599-9999009	2" CONDUIT, PLOWED	LINEAR FT	22,233	
7	2599-9999009	2" CONDUIT, BORED	LINEAR FT	4,964	
8	2599-9999009	2" SDR11 CONDUIT, BORED	LINEAR FT	982	
9	2599-9999009	TRACER WIRE	LINEAR FT	28,179	
10	2599-9999009	96 SM FIBER	LINEAR FT	25,134	
11	2599-9999009	288 SM FIBER	LINEAR FT	7,191	
12	2599-9999010	POST INSTALLATION FIBER OPTIC ACCEPTANCE TESTING	LS	1	

PROJECT DESCRIPTION		100-1D
		10-18-05
<p>ITS-035-4(228)108--25-85 PROJECT SUMMARY</p> <p>FIBER OPTIC RELOCATION PROJECT IN STORY COUNTY.</p> <p>INTERCHANGE CONSTRUCTION AT I-35 & US-30 (IOWA DOT PROJECT IM-035-4(160)87--13-77) WILL IMPACT THE EXISTING IOWA DOT FIBER OPTIC BACKBONE IN THE AREA OF THE INTERCHANGE AND ALONG I-35 TO THE SOUTH.</p> <p>THIS PROJECT INVOLVES INSTALLING CONDUIT, HANDHOLES, AND FIBER OPTIC CABLE. NEW CONDUIT AND FIBER WILL BE INSTALLED ALONG US-30, CROSSING I-35 ON THE NORTH SIDE OF THE I-35 & US-30 INTERCHANGE. SOUTH OF THE I-35 & US-30 INTERCHANGE, CONDUIT AND FIBER WILL BE INSTALLED ALONG THE WEST SIDE OF I-35. FIBER SPLICING AND DATA TRAFFIC CUTOVERS WILL BE COMPLETED UNDER A SEPARATE CONTRACT.</p>		

STANDARD ROAD PLANS			105-4
			10-18-11
The following Standard Road Plans apply to construction work on this project.			
Number	Date	Title	
LI-130	10-21-14	Temporary Floodlighting Luminaires	
LI-141	10-21-14	Electrical Installation (Roadway Ducts)	
TC-1	04-16-13	Work Not Affecting Traffic (Two-Lane or Multi-Lane)	
TC-202	04-21-15	Work Within 15 ft of Traveled Way (Two-Lane)	
TC-211	04-17-12	Lane Closure on Low Volume Roadway	
TC-212	04-16-13	Spot Location Lane Closure with Flaggers	
TC-213	04-17-12	Lane Closure with Flaggers	
TC-251	04-17-12	Temporary Road Closure	
TC-402	04-21-15	Work Within 15 ft of Traveled Way (Multi-Lane)	
TC-416	04-17-12	Partial Lane Closure on Ramps	
TC-418	10-15-13	Lane Closure on Divided Highway	

**ESTIMATE OF QUANTITIES, PROJECT DESCRIPTION,
AND STANDARD ROAD PLANS**

ENGLISH	IOWA DOT	DESIGN TEAM Olsson Associates	STORY	COUNTY	PROJECT NUMBER ITS-035-4(228)108--25-85	SHEET NUMBER C.01
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ESTIMATE REFERENCE INFORMATION			100-4A
			10-29-02
Item No.	Item Code	Item	
1	2528-8445110	TRAFFIC CONTROL	
		MATERIALS, METHOD OF MEASUREMENT, AND BASIS OF PAYMENT refer to the Special Provisions	
		for ITS INFRASTRUCTURE RELOCATION	
-	-	-	
2	2533-4980005	MOBILIZATION	
		METHOD OF MEASUREMENT AND BASIS OF PAYMENT refer to the Special Provisions for ITS	
		INFRASTRUCTURE RELOCATION	
-	-	-	
3	2599-9999005	REMOVE EXISTING HANDHOLE	
		METHOD OF MEASUREMENT AND BASIS OF PAYMENT refer to the Special Provisions for ITS	
		INFRASTRUCTURE RELOCATION	
-	-	-	
4	2599-9999005	HANDHOLE, TYPE FOR27	
		MATERIALS, METHOD OF MEASUREMENT, AND BASIS OF PAYMENT refer to the Special Provisions	
		for ITS INFRASTRUCTURE RELOCATION	
-	-	-	
5	2599-9999005	HANDHOLE, TYPE FIBER VAULT	
		MATERIALS, METHOD OF MEASUREMENT, AND BASIS OF PAYMENT refer to the Special Provisions	
		for ITS INFRASTRUCTURE RELOCATION	
-	-	-	
6	2599-9999009	2" CONDUIT, PLOWED	
		MATERIALS, METHOD OF MEASUREMENT, AND BASIS OF PAYMENT refer to the Special Provisions	
		for ITS INFRASTRUCTURE RELOCATION	
-	-	-	
7	2599-9999009	2" CONDUIT, BORED	
		MATERIALS, METHOD OF MEASUREMENT, AND BASIS OF PAYMENT refer to the Special Provisions	
		for ITS INFRASTRUCTURE RELOCATION	
-	-	-	
8	2599-9999009	2" SDR11 CONDUIT, BORED	
		MATERIALS, METHOD OF MEASUREMENT, AND BASIS OF PAYMENT refer to the Special Provisions	
		for ITS INFRASTRUCTURE RELOCATION	
-	-	-	
9	2599-9999009	TRACER WIRE	
		MATERIALS, METHOD OF MEASUREMENT, AND BASIS OF PAYMENT refer to the Special Provisions	
		for ITS INFRASTRUCTURE RELOCATION	
-	-	-	
10	2599-9999009	96 SM FIBER	
		MATERIALS, METHOD OF MEASUREMENT, AND BASIS OF PAYMENT refer to the Special Provisions	
		for ITS INFRASTRUCTURE RELOCATION	
-	-	-	
11	2599-9999009	288 SM FIBER	
		MATERIALS, METHOD OF MEASUREMENT, AND BASIS OF PAYMENT refer to the Special Provisions	
		for ITS INFRASTRUCTURE RELOCATION	
-	-	-	
12	2599-9999010	POST INSTALLATION FIBER OPTIC ACCEPTANCE TESTING	
		METHOD OF MEASUREMENT AND BASIS OF PAYMENT refer to the Special Provisions for ITS	
		INFRASTRUCTURE RELOCATION	

ESTIMATE REFERENCE INFORMATION

ENGLISH	IOWA DOT	DESIGN TEAM Olsson Associates	STORY	COUNTY	PROJECT NUMBER ITS-035-4(228)108--25-85	SHEET NUMBER C.02
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GENERAL NOTES

MISC.

1. AERIAL PHOTOGRAPHY SHOWN ON PLANS IS FOR REFERENCE ONLY AND MAY NOT MATCH EXISTING CONDITIONS.
2. ALL EXISTING IOWA DOT ITS DEVICES AND IOWA DOT AND ICN FIBER SHALL BE KEPT IN OPERATION. CONTRACTOR SHALL MAINTAIN AND PROTECT ALL EXISTING POWER AND COMMUNICATION CABLES AND DEVICES DURING CONSTRUCTION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

UTILITIES

3. THE PLAN LOCATIONS OF UNDERGROUND AND AERIAL UTILITIES, WHEN SHOWN, ARE APPROXIMATE ONLY. IN ADDITION, A PORTION OF UTILITY INFORMATION MAY NOT HAVE BEEN PROVIDED. ALL UTILITIES SHALL BE LOCATED AND MARKED PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING UTILITIES AND LOCATOR SERVICES AND SCHEDULING THE LOCATION OF UNDERGROUND UTILITIES. THE CONTRACTOR SHALL ALSO CONTACT ANY AND ALL UTILITIES AND LOCAL GOVERNMENT AGENCIES NOT PARTICIPATING IN LOCATION SERVICES.
4. THE CONTRACTOR SHALL NOT DISTURB ANY EXISTING UTILITIES EXCEPT AS SPECIFICALLY DEFINED WITHIN THE SCOPE OF WORK FOR THIS CONTRACT. WHERE WORK AFFECTS OR IS AFFECTED BY THE EXISTING UTILITIES, THE WORK SHALL BE COORDINATED WITH THE UTILITY COMPANY AND/OR OWNER. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE IOWA DOT.
5. UTILITY COMPANIES WHOSE FACILITIES ARE SHOWN ON THE PLANS OR KNOWN TO BE WITHIN THE CONSTRUCTION LIMITS SHALL BE NOTIFIED BY THE CONTRACTOR OF THE STARTING CONSTRUCTION DATE.

CONDUIT

6. THE CONTRACTOR SHALL BORE ALL CROSSINGS BENEATH ROADWAYS, STREETS, OTHER PAVED SURFACES, RAILROAD, OR OTHER STRUCTURE. DEPTH OF ALL BORES SHALL BE A MINIMUM OF 48 INCHES UNLESS OTHERWISE SPECIFIED IN PLANS.
7. ALL CONDUIT SHALL BE HDPE CONDUIT. RIGID P.V.C CONDUIT (SCHEDULE 40 OR AS APPROVED) MAY BE SUBSTITUTED FOR UNDERGROUND CONDUIT RUNS UNDER 25 FEET OR AS OTHERWISE DIRECTED BY THE ENGINEER.
8. THE MINIMUM BENDING RADIUS OF HDPE CONDUIT SHALL BE THE CONDUIT MANUFACTURER'S RECOMMENDATIONS FOR MINIMUM BENDING RADIUS.
9. THE CONTRACTOR SHALL PLOW ALL CONDUIT WHERE EXISTING CONDITIONS ALLOW UNLESS OTHERWISE SPECIFIED ON THE PLANS. THE CONTRACTOR MAY BORE IN LIEU OF PLOWING AT THE CONTRACTOR'S EXPENSE.
10. CONTRACTOR SHALL ATTEMPT TO INSTALL ALL CONDUIT ADJACENT TO DOT FENCE/ROW AT THE OFFSETS NOTED ON PLAN SHEETS. REMOVAL/DISTURBANCE OF EXISTING TREE GROWTH IS ALLOWED; HOWEVER, REMOVAL OF OBVIOUS DOT PLANTINGS SHALL BE AVOIDED. WHERE THICK TREE GROWTH RESULTS IN A NEED TO CHANGE INSTALLATION METHODS OR ROUTING, THE ENGINEER SHOULD FIRST BE NOTIFIED AND APPROVE THE REQUESTED CHANGE.
11. BORE LENGTHS AS SHOWN ON DESIGN PLANS ARE TO BE CONSIDERED MINIMUM FOR CONSTRUCTION UNLESS OTHERWISE APPROVED BY THE ENGINEER.
12. TRANSVERSE BORE PITS AND RECEIVING PITS SHALL BE WITHIN 15 FEET OF ROW LINE.

CONSTRUCTION

13. ANY AND ALL IMPROVEMENTS SUCH AS ASPHALT OR CONCRETE PAVEMENTS, CURBS, GUTTERS, WALKS, DRAINAGE DITCHES, CULVERTS, DRAIN TILES, EMBANKMENTS, SHRUBS, TREES, GRASS, SOD, ETC., IF DAMAGED, SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITIONS (OR BETTER) AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO THE IOWA DOT.

GENERAL NOTES

CONSTRUCTION (CONTINUED)

14. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR ANY EXISTING CONDUIT, CONDUCTORS, OR OTHER FACILITIES DAMAGED DURING CONSTRUCTION. ALL EXISTING INFRASTRUCTURE REMOVED OR DAMAGED BY THE CONTRACTOR SHALL BE REPLACED IN KIND BY THE CONTRACTOR, WITH NO ADDITIONAL COMPENSATION.
15. MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF ALL APPLICABLE SECTIONS INCLUDING BUT NOT LIMITED TO ARTICLES 2523 AND 2525, OF THE "IOWA DEPARTMENT OF TRANSPORTATION ENGLISH STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, SERIES 2015" PLUS CURRENT SUPPLEMENT SPECIFICATIONS AND SPECIAL PROVISIONS.
16. THE CONTRACTOR SHALL NOT DISTURB DESIRABLE GRASS AREAS AND DESIRABLE TREES OUTSIDE THE CONSTRUCTION LIMITS. THE CONTRACTOR WILL NOT BE PERMITTED TO PARK OR SERVICE VEHICLES AND EQUIPMENT OR USE THESE AREAS FOR STORAGE OF MATERIALS. STORAGE, PARKING AND SERVICE AREA(S) WILL BE SUBJECT TO THE APPROVAL OF THE RESIDENT CONSTRUCTION ENGINEER.
17. THE TOP SIX (6) INCHES OF THE DISTURBED AREAS SHALL BE FREE OF ROCK AND DEBRIS AND SHALL BE FOR THE ESTABLISHMENT OF VEGETATION, SUBJECT TO THE APPROVAL OF THE ENGINEER.
18. THE CONTRACTOR IS EXPECTED TO HAVE MATERIALS, EQUIPMENT, AND LABOR AVAILABLE ON A DAILY BASIS TO INSTALL AND MAINTAIN EROSION CONTROL FEATURES ON THE PROJECT. THIS MAY INVOLVE SEEDING, SILT FENCE, ROCK DITCH CHECKS, SILT BASINS, OR SILT DIKES.
19. NO OPEN HOLES OR MOUNDS OF DIRT SHALL BE LEFT UNPROTECTED DURING NON-WORKING HOURS.

FIBER

20. COILS OF 60 FEET OF FIBER CABLE SHALL BE PLACED IN EACH TYPE FOR27 HANDHOLE UNLESS OTHERWISE SPECIFIED ON THE PLANS OR THE TABULATION (LISTING OF HANDHOLE WORK) ON SHEET C.07. COILS OF 150 FEET OF FIBER CABLE SHALL BE PLACED IN EACH TYPE FIBER VAULT HANDHOLE UNLESS OTHERWISE SPECIFIED ON THE PLANS OR TABULATION (LISTING OF HANDHOLE WORK) ON SHEET C.07.
21. CONTRACTOR SHALL PLACE TAGS ON ALL FIBER OPTIC CABLE IDENTIFYING THE OWNER AND DIRECTION OF THE CABLE AT EACH TERMINATION POINT AND IN EVERY HANDHOLE AND SPLICE VAULT. TAGS SHALL CLEARLY IDENTIFY WHERE EACH INDIVIDUAL CABLE RUN ORIGINATED AND WHERE IT ENDS (HANDHOLE TO HANDHOLE, HANDHOLE TO CABINET, HANDHOLE TO BUILDING, ETC.) FOR FIBER INSTALLATIONS WITH JOINT DEPARTMENT OF TRANSPORTATION/OTHER AGENCY (OR ENTITY) USE WHERE THE FIBER WILL BE OWNED BY THE OTHER AGENCY (OR ENTITY), INSTALL TYPICAL IDENTIFIERS AND/OR MARKINGS FOR THAT FIBER.
22. ANY EXISTING PULL TAPE OR TRACER WIRE THAT IS USED AS A PULL ROPE FOR FIBER OPTIC CABLE INSTALLATION SHALL BE REPLACED IN KIND. THE COST OF ANY TRACER WIRE OR PULL TAPE REPLACEMENT SHALL BE SUBSIDIARY TO THE FIBER OPTIC CABLE INSTALLATION.
23. IN THE EVENT IT IS SUSPECTED THAT CABLE DAMAGE HAS OCCURRED PRIOR TO FINAL ACCEPTANCE, CONTRACTOR SHALL PERFORM OTDR TESTING OF ALL FIBER STRANDS WITHIN SEVENTY TWO (72) HOURS AFTER NOTIFICATION AND SUBMIT A COPY OF THE OTDR TEST TO THE ENGINEER UPON COMPLETION.
24. CONTRACTOR SHALL REPLACE OR REPAIR, AS DIRECTED BY THE ENGINEER, ANY DAMAGE OCCURRING BEFORE FINAL ACCEPTANCE AT NO ADDITIONAL COST TO THE IOWA DOT. THE CONTRACTOR WILL NOT BE GRANTED AN EXTENSION OF TIME FOR DELAYS CAUSED BY REPLACING OR REPAIRING THE INSTALLED CABLE.
25. CONTRACTOR SHALL REPAIR OR REPLACE ANY DEFECT IN THE INSTALLED CABLE AT NO ADDITIONAL COST TO THE IOWA DOT. CONSIDER A DEFECT TO BE ANY CONDITION RESULTING IN A NEGATIVE OR ADVERSE EFFECT ON CURRENT OR FUTURE OPERATIONS OF THE COMPLETED FIBER OPTIC COMMUNICATION SYSTEM AS DETERMINED BY THE ENGINEER.
26. ANY EXISTING WIRING THAT IS DAMAGED DURING FIBER OPTIC CABLE INSTALLTION SHALL BE REPLACED OR REPAIRED, AS DIRECTED BY THE ENGINEER, AT NO ADDITIONAL COST TO THE IOWA DOT.

GENERAL NOTES

**EROSION CONTROL
(RURAL SEEDING)**

232-3A
04-15-14

FOLLOWING THE COMPLETION OF WORK IN A DISTURBED AREA, PLACE SEED, FERTILIZER, AND MULCH ON THE DISTURBED AREA LYING 8 FEET ADJACENT TO SHOULDER AND MEDIAN AS FOLLOWS:

USE SEED MIX AND FERTILIZER MEETING THE REQUIREMENTS OF SECTION 261.03,C,3 OF THE STANDARD SPECIFICATIONS.

USE MULCH MEETING THE REQUIREMENTS OF SECTIONS 2601.03,E,2,a AND 4169.07,A OF THE STANDARD SPECIFICATIONS.

PREPARING THE SEEDBED AND FURNISHING AND APPLYING SEED, FERTILIZER, AND MULCH IS INCIDENTAL TO MOBILIZATION AND WILL NOT BE PAID FOR SEPARATELY.

**EROSION CONTROL
(URBAN SEEDING)**

232-3B
04-15-14

FOLLOWING THE COMPLETION OF WORK IN A DISTURBED AREA, PLACE SEED, FERTILIZER, AND MULCH ON THE DISTURBED AREAS AS FOLLOWS:

USE SEED MIX AND FERTILIZER MEETING THE REQUIREMENTS OF SECTION 2601.03,C,4 OF THE STANDARD SPECIFICATIONS.

USE MULCH MEETING THE REQUIREMENTS OF SECTIONS 2601.03,E,2,a AND 4169.07,A OF THE STANDARD SPECIFICATIONS.

PREPARING THE SEEDBED AND FURNISHING AND APPLYING SEED, FERTILIZER, AND MULCH IS INCIDENTAL TO MOBILIZATION AND WILL NOT BE PAID FOR SEPARATELY.

**EROSION CONTROL
(NATIVE GRASS SEEDING)**

232-3C
04-15-14

FOLLOWING THE COMPLETION OF WORK IN A DISTURBED AREA, PLACE SEED AND MULCH ON THE DISTURBED AREA LYING 8 FEET OR MORE BEYOND THE SHOULDER AS FOLLOWS:

SEED MIX:

BIG BLUESTEM (ANDROPOGON GERADII)	6 LBS. PLS/ACRE (7.0 KG/HA)
INDIANGRASS (SORGHASTRUM NUTANS)	6 LBS. PLS/ACRE (7.0 KG/HA)
LITTLE BLUESTEM (SCHIZACHYRIUM SCOPARIUM)	6 LBS. PLS/ACRE (7.0 KG/HA)
PARTRIDGE PEA (CHAMAECRISTA FASCILATA)	4 LBS. PLS/ACRE (4.5 KG/HA)
SIDEOATS GRAMA (BOUPELLOUA CURTIPENDULA)	4 LBS. PLS/ACRE (4.5 KG/HA)
CANADA WILDRYE (ELYMUS CANADENSIS)	2 LBS. PLS/ACRE (2.2 KG/HA)
SWITCHGRASS (PANICUM VIRGATUM)	1 LBS. PLS/ACRE (1.1 KG/HA)
OATS (AVENA SATIVA)	32 LBS./ACRE (36.0 KG/HA)

FURNISH BIG BLUESTEM, INDIANGRASS, CANADA WILDRYE AND LITTLE BLUESTEM THAT IS DEBEARDED OR EQUAL TO FACILITATE THE APPLICATION OF SEED.

USE MULCH MEETING THE REQUIREMENTS OF SECTIONS 2601.03,E,2,a AND 4169.07,A OF THE STANDARD SPECIFICATIONS.

PREPARING THE SEEDBED AND FURNISHING AND APPLYING SEED AND MULCH IS INCIDENTAL TO MOBILIZATION AND WILL NOT BE PAID FOR SEPARATELY.

**EROSION CONTROL
(SELECTIVE CLEARING)**

232-6
10-18-11

SELECTIVE CLEARING WILL BE REQUIRED ON THIS PROJECT. DO NOT REMOVE ANY TREES OUTSIDE OF THE CONSTRUCTION LIMITS WITHOUT THE ENGINEER'S APPROVAL.

EMERALD ASH BORER

232-10
10-21-14

DISPOSE OF ALL WOOD MATERIAL GENERATED AS A RESULT OF CLEARING AND/OR GRUBBING ACCORDING TO THE IOWA DEPARTMENT OF AGRICULTURE AND LAND STEWARDSHIP'S EMERALD ASH BORER (EAB) QUARANTINE ORDER. FOR MORE INFORMATION REFER TO [HTTP://WWW.IOWATREEPESTS.COM/EAB_REGULATIONS.HTML](http://www.iowatreepests.com/EAB_REGULATIONS.HTML).

GENERAL NOTES

UTILITY CONTACTS

Company	Name	Street	City, State, Zip	Phone
IOWA COMMUNICATIONS NETWORK (ICN)	TIM FLICKINGER	400 EAST 14TH STREET	DES MOINES, IA 50319	515-725-4699
IOWA DOT ITS	TONY TAYLOR	800 LINCOLN WAY	AMES, IA 50010	515-239-1902
IOWA DOT DISTRICT 1	SCOTT SMYTH	2130 SE 17TH STREET	GRIMES, IA 50111	515-986-5457
CONSUMERS ENERGY	JIM KIDD	2074 242ND STREET	MARSHALLTOWN, IA 50158	641-752-1593
IOWA DOT, NETWORK SERVICES	JEFF SUNDHOLM			515-239-1583
IOWA DOT MAINTENANCE GARAGE	JIM VAN SICKLE	57073 U.S. 30	AMES, IA 50010	515-663-6367
CENTURYLINK	STEVEN PARKER	2103 E. UNIVERSITY AVE. 1ST FLOOR	DES MOINES, IA 50317	515-265-0968
IOWA NETWORK SERVICES (INS)	JEFF KLOCKO	4201 CORPORATE DRIVE	WEST DES MOINES, IA 50266	515-830-0445
ALLIANT ENERGY	JASON A. HOGAN	4902 NORTH BILTMORE	MADISON, WI 53707	608-458-4871
CITY OF AMES ELECTRIC SERVICES	TIM MCCOLLOUGH	502 CARROLL AVENUE	AMES, IA 50010	515-239-5501
CITY OF AMES MUNICIPAL UTILITIES	JOHN JOINER	515 CLARK STREET	AMES, IA 50010	515-239-5160
WINDSTREAM	DALE GRAFF	614 WEST STREET SOUTH	GRINNELL, IA 50112	641-990-3297
CENTRAL IOWA WATER ASSOCIATION	JIM LAPLANT	1351 IOWA SPEEDWAY DRIVE	NEWTON, IA 50208	641-792-7011

THIS LIST IS NOT ALL-INCLUSIVE. CONTRACTOR IS RESPONSIBLE TO REQUEST LOCATES OF ALL UTILITIES, AND COORDINATE IF NEEDED, PRIOR TO COMMENCING WORK. 72 HOUR ADVANCE NOTICE IS REQUIRED TO NOTIFY ALL UTILITY COMPANIES.

UTILITY CONTACTS

LISTING OF CONDUIT AND FIBER WORK

Conduit Run	Location		Conduit Length	Existing Conduit	2" Conduit, Plowed	2" Conduit, Bored	2" SDR11 Conduit, Bored	Tracer Wire	96 SM Fiber	288 SM Fiber
	From	To								
1F	HH 1-1E	HH 1-3	323			1		1	1	
1G	HH 1-3	END BORE	195			1		1	1	
1H	END BORE	HH 2-3	1299		1			1	1	
2C	HH 2-3	HH 3-2	1112			1		1	1	
3B	HH 3-2	HH 4-2	1492		1			1	1	
4B	HH 4-2	HH 5-2	1418		1			1	1	
5B	HH 5-2	HH 6-3	1500		1			1	1	
6C	HH 6-3	BEGIN BORE	303		1			1	1	
6D	BEGIN BORE	HH 7-2	982				1	1	1	
7B	HH 7-2	HH 7-3	1272		1			1	1	
7C	HH 7-3	HH 8-6	1205		1			1	1	
8H	HH 8-6	HH 8-7	244			1		1	1	
8I	HH 8-7	END BORE	250			1		1	1	
9B	END BORE	HH 9-2	1250		1			1	1	
9C	HH 9-2	BEGIN BORE	678		1			1	1	
10B	BEGIN BORE	END BORE	369			1		1	1	
10C	END BORE	HH 10-2	453		1			1	1	
10D	HH 10-2	HH 11-2	1500		1			1	1	
11B	HH 11-2	HH 12-2	1029		1			1	1	
12B	HH 12-2	HH 13-2	1499		1			1	1	
13C	HH 13-2	HH 14-3	1491		1			1	1	
14F	HH 14-3	HH 15-1	1164		1			1	1	
15A	HH 15-1	HH 16-1E	865		1			1	1	
16A	HH 16-1E	HH 17-1	1356	X					1	
16B	BEGIN BORE	HH 17-2	902			1		1		1
16C	HH 16-2	BEGIN BORE	329		1			1		1
16D	HH 16-2	HH 18-5E	1370		1			1		1
17A	HH 17-1	HH 17-2	244			1		1		1
18H	HH 18-5E	HH 19-1	774			1		1		1
19A	HH 19-1	END BORE	551			1		1		1
19B	END BORE	HH 20-1	629		1			1		1
20A	HH 20-1	HH 21-5	1487		1			1		1
21C	HH 21-2E	HH 21-3E	15	X						1
21E	HH 21-3E	HH 21-5	195	X						1

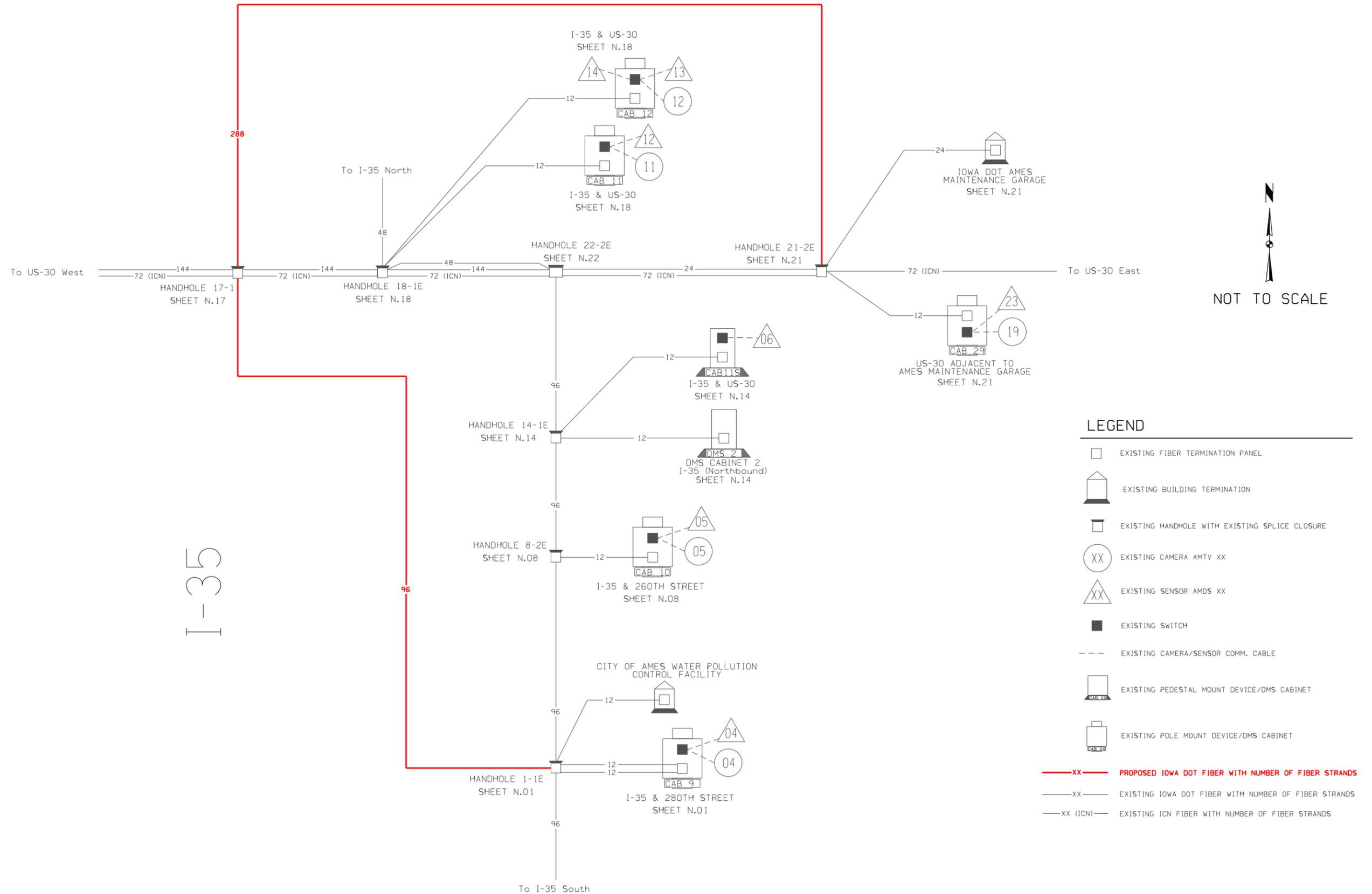
LISTING OF WORK

LISTING OF HANDHOLE WORK

Handhole Label	Handhole Type	Route	Mile Post	Northing (As Constructed)	Easting (As Constructed)	96 SM Fiber Coll	288 SM Fiber Coll
HH 1-1E	Existing	I-35	107.75			75	
HH 1-3	FOR27	I-35	107.75			60	
HH 2-3	FOR27	I-35	108.05			60	
HH 3-2	FOR27	I-35	108.25			60	
HH 4-2	FOR27	I-35	108.55			60	
HH 5-2	FOR27	I-35	108.80			60	
HH 6-3	FOR27	I-35	109.10			60	
HH 7-2	FOR27	I-35	109.30			60	
HH 7-3	FOR27	I-35	109.65			60	
HH 8-6	FOR27	I-35	109.80			60	
HH 8-7	Fiber Vault	I-35	109.85			150	
HH 9-2	FOR27	I-35	110.10			60	
HH 10-2	FOR27	I-35	110.40			60	
HH 11-2	FOR27	I-35	110.70			60	
HH 12-2	FOR27	I-35	110.90			60	
HH 13-2	FOR27	I-35	111.15			60	
HH 14-3	Fiber Vault	I-35	111.45			500	
HH 15-1	FOR27	I-35	111.65			60	
HH 16-1E	Existing	US-30	151.10			60	
HH 16-2	FOR27	US-30	151.10				60
HH 17-1	Fiber Vault	US-30	150.85			200	200
HH 17-2	FOR27	US-30	150.85				60
HH 18-5E	Existing	I-35	111.95				60
HH 19-1	FOR27	I-35	111.90				60
HH 20-1	FOR27	US-30	151.65				60
HH 21-2E	Existing	US-30	151.95				75
HH 21-3E	Existing	US-30	151.95				60
HH 21-5	FOR27	US-30	151.95				60

LISTING OF WORK

US-30



LEGEND

- EXISTING FIBER TERMINATION PANEL
- EXISTING BUILDING TERMINATION
- EXISTING HANDHOLE WITH EXISTING SPLICE CLOSURE
- EXISTING CAMERA AMTV XX
- EXISTING SENSOR AMDS XX
- EXISTING SWITCH
- EXISTING CAMERA/SENSOR COMM. CABLE
- EXISTING PEDESTAL MOUNT DEVICE/DMS CABINET
- EXISTING POLE MOUNT DEVICE/DMS CABINET
- PROPOSED IOWA DOT FIBER WITH NUMBER OF FIBER STRANDS
- EXISTING IOWA DOT FIBER WITH NUMBER OF FIBER STRANDS
- EXISTING ICN FIBER WITH NUMBER OF FIBER STRANDS

I-35

FIBER ARCHITECTURE

TRAFFIC CONTROL PLAN

108-23A
08-01-08

1. ALL TRAFFIC CONTROL SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 2528-TRAFFIC CONTROL OF THE IOWA DOT'S STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, THE TRAFFIC CONTROL SERIES OF STANDARD ROAD PLANS FOUND ON TAB 105-4 ON SHEET C.01, AND THE IOWA SUPPLEMENTAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. FOR ADDITIONAL COMPLEMENTARY INFORMATION, REFER TO PART 6 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
2. TRAFFIC SHALL BE MAINTAINED AT ALL TIMES. TEMPORARY LANE CLOSURES WILL NOT BE ALLOWED, EXCEPT AS PROVIDED IN NOTE 3. INTERCHANGE RAMP SHALL REMAIN OPEN AT ALL TIMES.
3. A. INTERSTATE 35, HIGHWAY 30:
SINGLE LANE CLOSURES WILL BE ALLOWED ONLY DURING THE FOLLOWING HOURS;
10:00 PM (SUNDAY - THURSDAY) TO 6:00 AM (MONDAY - FRIDAY), 10:00 PM FRIDAY TO 8:00 AM SATURDAY AND 10:00 PM SATURDAY TO 7:00 AM SUNDAY.

B. INTERSTATE RAMP MAY BE RESTRICTED ACCORDING TO TC-420 IF MORE THAN SHOULDER WIDTH IS REQUIRED FOR CONSTRUCTION ACTIVITIES.

C. ALL LOCAL CITY STREETS: SINGLE LANE CLOSURES WILL BE ALLOWED AT ALL TIMES EXCEPT 6:00 AM TO 9:00 AM AND 3:00 PM TO 6:00 PM WEEKDAYS MONDAY THROUGH FRIDAY.

D. THE TIME, LENGTH, AND DURATION OF LANE CLOSURES SHALL BE AS APPROVED BY THE ENGINEER. THE DOT AND LOCAL MUNICIPALITIES RESERVE THE RIGHT TO MODIFY THESE RESTRICTIONS TO ACCOMMODATE SPECIFIC CONTRACTOR ACTIVITIES AND UNFORSEEN TRAFFIC CONDITIONS, AS WELL AS SPECIAL EVENTS.
4. A. SHOULDER CLOSURES WILL BE ALLOWED AT ALL TIMES EXCEPT 6:00 AM TO 9:00 AM AND 3:00 PM TO 6:00 PM WEEKDAYS MONDAY THROUGH FRIDAY.

B. THE TIME, LENGTH AND DURATION OF LANE CLOSURES SHALL BE AS APPROVED BY THE ENGINEER. THE DOT AND LOCAL MUNICIPALITIES RESERVE THE RIGHT TO MODIFY THESE RESTRICTIONS TO ACCOMMODATE SPECIFIC CONTRACTOR ACTIVITIES AND UNFORSEEN TRAFFIC CONDITIONS, AS WELL AS SPECIAL EVENTS.
5. THE CONTRACTOR SHALL COORDINATE TRAFFIC CONTROL WITH OTHER PROJECTS AS DESCRIBED ON STANDARD NOTATION 111-01 ON PLAN SHEET J.01.
6. CONSTRUCTION TRAFFIC SHALL NOT USE MEDIAN CROSSOVERS.
7. THE CONTRACTOR SHALL MAINTAIN A CLEAN PAVEMENT LEADING INTO AND OUT OF THE WORK AREA AT ALL TIMES.
8. ANY DISTURBED AREAS MUST BE RESTORED AND LEVEL WITH THE SURROUNDING PAVEMENT EACH NIGHT. DAYTIME DROP-OFFS SHALL NOT BE ALLOWED.

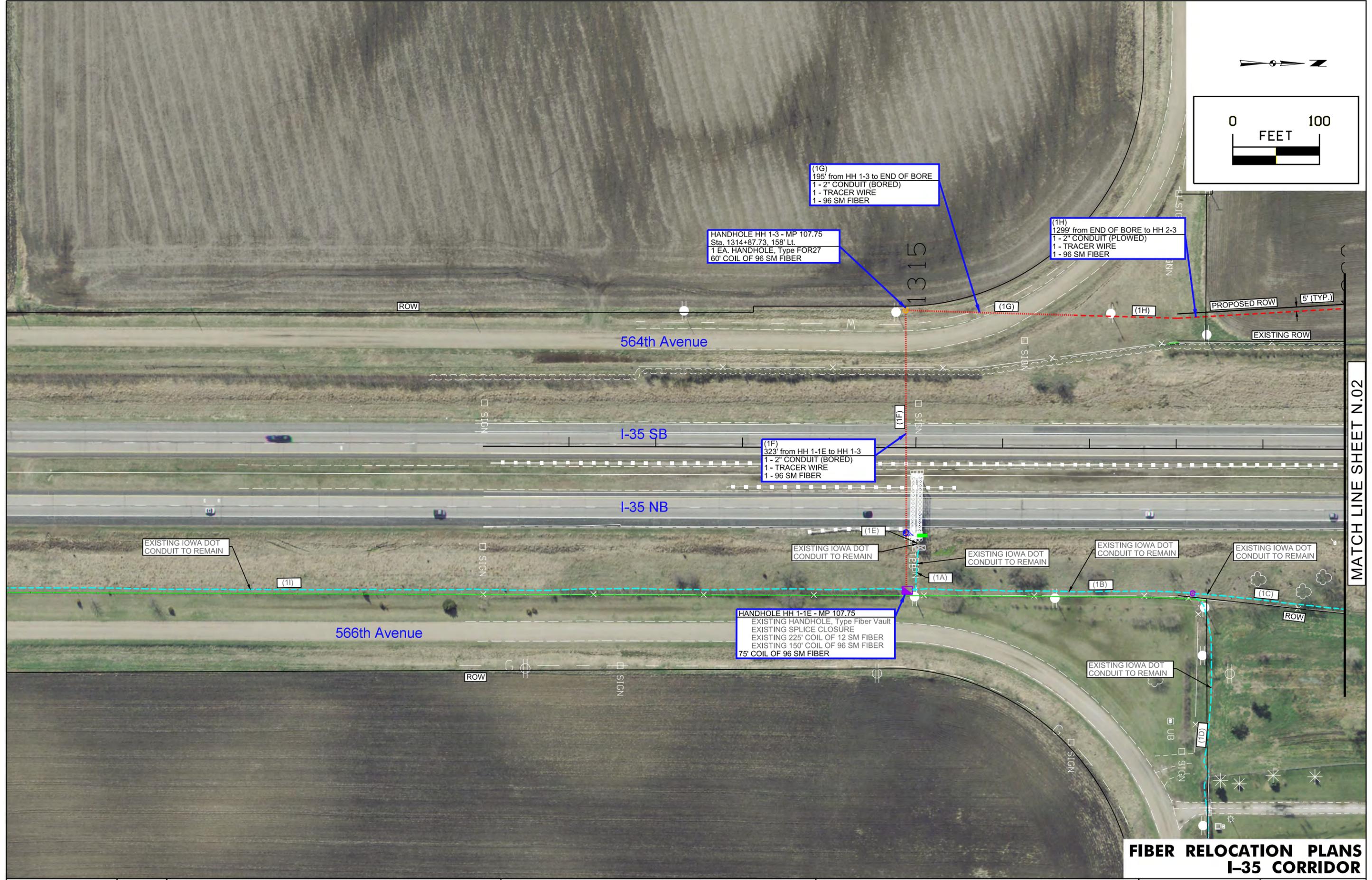
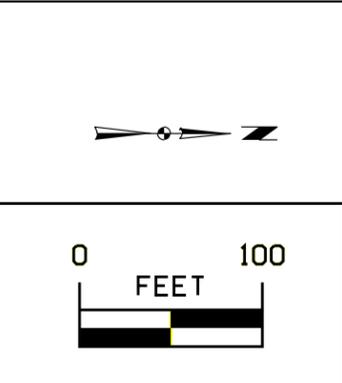
COORDINATED OPERATIONS

111-01
04-17-12

OTHER WORK IN PROGRESS DURING THE SAME PERIOD OF TIME WILL INCLUDE THE CONSTRUCTION OF THE PROJECTS LISTED. COORDINATE OPERATIONS WITH THOSE OF OTHER CONTRACTORS WORKING WITHIN THE SAME AREA.

PROJECT	TYPE OF WORK
IM-NHS-35-4(173)109--03-85	Grading
IM-NHS-35-4(174)109--03-85	Bridge Replacement - PPCB
IM-NHS-35-4(203)209--03-85	Structures-Miscellaneous
IMN-35-4(176)87--0E-77	PCC Patching

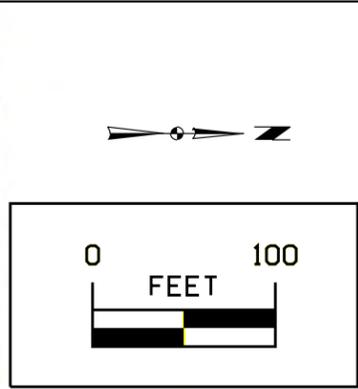
TRAFFIC CONTROL AND COORDINATED OPERATIONS



MATCH LINE SHEET N.02

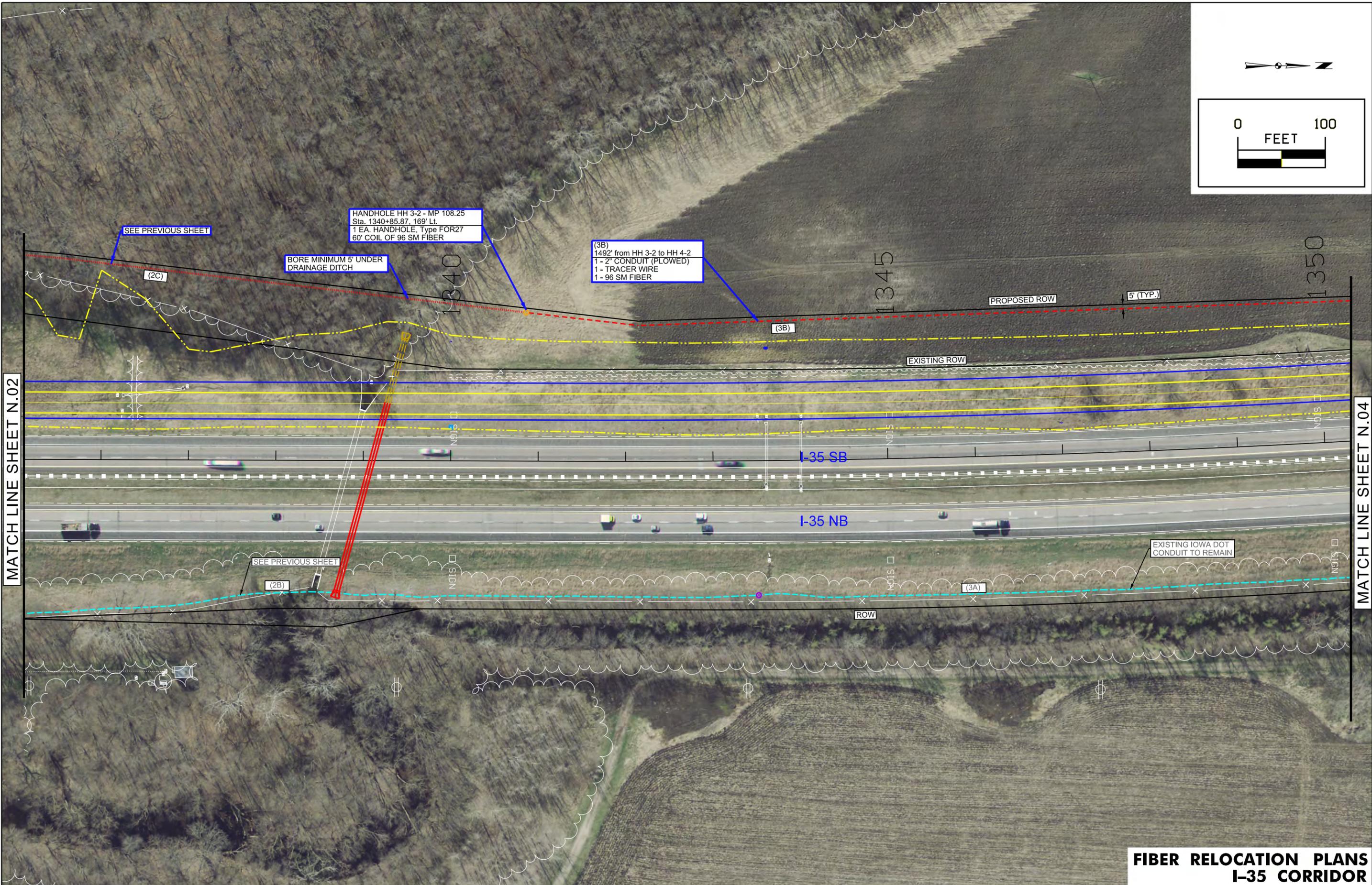
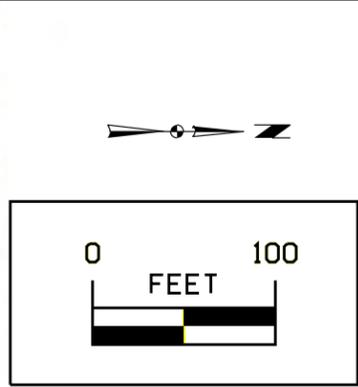
**FIBER RELOCATION PLANS
I-35 CORRIDOR**

ENGLISH	IOWA DOT	DESIGN TEAM	Olsson Associates	STORY	COUNTY	PROJECT NUMBER	ITS-035-4(228)108--25-85	SHEET NUMBER	N.01
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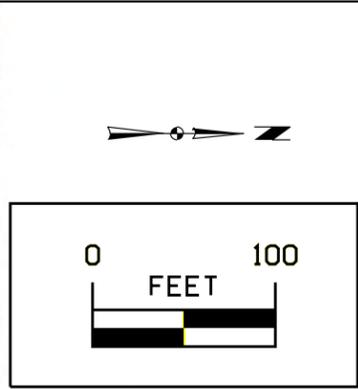
**FIBER RELOCATION PLANS
I-35 CORRIDOR**

ENGLISH	IOWA DOT	DESIGN TEAM	Olsson Associates	STORY	COUNTY	PROJECT NUMBER	ITS-035-4(228)108--25-85	SHEET NUMBER	N.02
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**FIBER RELOCATION PLANS
I-35 CORRIDOR**

ENGLISH	IOWA DOT	DESIGN TEAM	Olsson Associates	STORY	COUNTY	PROJECT NUMBER	ITS-035-4(228)108--25-85	SHEET NUMBER	N.03
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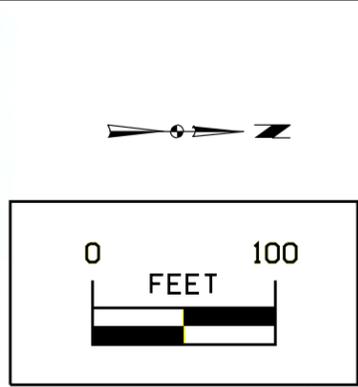


MATCH LINE SHEET N.03

MATCH LINE SHEET N.05

**FIBER RELOCATION PLANS
I-35 CORRIDOR**

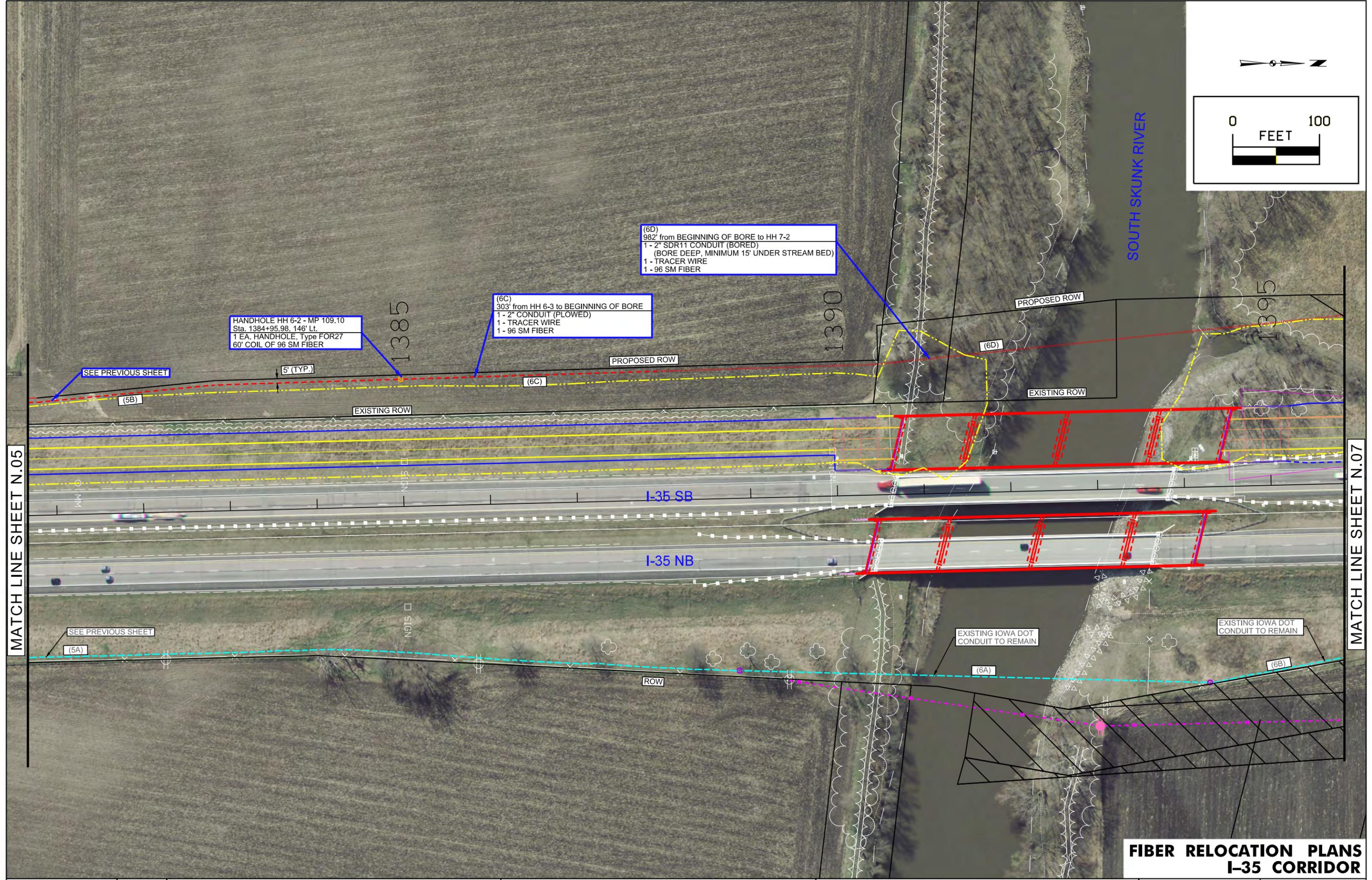
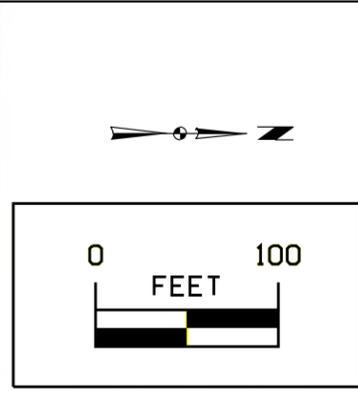
ENGLISH	IOWA DOT	DESIGN TEAM Olsson Associates	STORY	COUNTY	PROJECT NUMBER ITS-035-4(228)108--25-85	SHEET NUMBER N.04
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MATCH LINE SHEET N.04

MATCH LINE SHEET N.06

**FIBER RELOCATION PLANS
I-35 CORRIDOR**

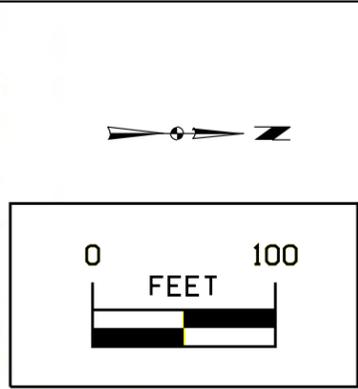


HANDHOLE HH 6-2 - MP 109.10
Sta. 1384+95.98, 146' Lt.
1 EA. HANDHOLE, Type FOR27
60' COIL OF 96 SM FIBER

(6C)
303' from HH 6-3 to BEGINNING OF BORE
1 - 2" CONDUIT (PLOWED)
1 - TRACER WIRE
1 - 96 SM FIBER

(6D)
982' from BEGINNING OF BORE to HH 7-2
1 - 2" SDR11 CONDUIT (BORED)
(BORE DEEP, MINIMUM 15' UNDER STREAM BED)
1 - TRACER WIRE
1 - 96 SM FIBER

**FIBER RELOCATION PLANS
I-35 CORRIDOR**



(7B)
 1272' from HH 7-2 to HH 7-3
 1 - 2" CONDUIT (PLOWED)
 1 - TRACER WIRE
 1 - 96 SM FIBER

(7C)
 1205' from HH 7-3 to HH 8-6
 1 - 2" CONDUIT (PLOWED)
 1 - TRACER WIRE
 1 - 96 SM FIBER

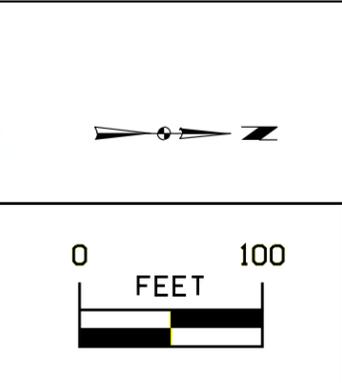
HANDHOLE HH 7-2 - MP 109.30
 Sta. 1397+77.28, 209' Lt.
 1 EA. HANDHOLE, Type FOR27
 60' COIL OF 96 SM FIBER

HANDHOLE HH 7-3 - MP 109.65
 Sta. 1410+49.6, 186' Lt.
 1 EA. HANDHOLE, Type FOR27
 60' COIL OF 96 SM FIBER

MATCH LINE SHEET N.06

MATCH LINE SHEET N.08

**FIBER RELOCATION PLANS
 I-35 CORRIDOR**



(8I)
250' from HH 8-7 to END OF BORE
1 - 2" CONDUIT (BORED)
(BORE MINIMUM 10' DEPTH)
1 - TRACER WIRE
1 - 96 SM FIBER

HANDHOLE HH 8-7 - MP 109.85
Sta. 1424+85.5, 257' Lt.
1 EA. HANDHOLE, Type Fiber Vault
150' COIL OF 96 SM FIBER

(8H)
244' from HH 8-6 to HH 8-7
1 - 2" CONDUIT (BORED)
1 - TRACER WIRE
1 - 96 SM FIBER

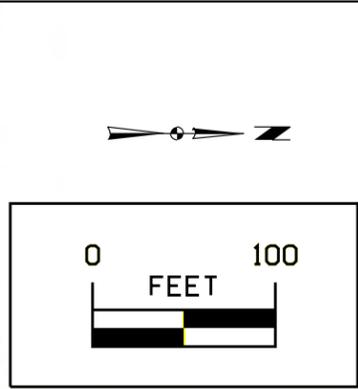
HANDHOLE HH 8-6 - MP 109.80
Sta. 1422+55.28, 165' Lt.
1 EA. HANDHOLE, Type FOR27
60' COIL OF 96 SM FIBER

SEE PREVIOUS SHEET

SEE PREVIOUS SHEET

**FIBER RELOCATION PLANS
I-35 CORRIDOR**

ENGLISH	IOWA DOT	DESIGN TEAM	Olsson Associates	STORY	COUNTY	PROJECT NUMBER	ITS-035-4(228)108--25-85	SHEET NUMBER	N.08
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(9B)
1250' from END OF BORE to HH 9-2
1 - 2" CONDUIT (PLOWED)
1 - TRACER WIRE
1 - 96 SM FIBER

HANDHOLE HH 9-2 - MP 110.10
Sta. 1439+76.5, 184' Lt.
1 EA. HANDHOLE, Type FOR27
60' COIL OF 96 SM FIBER

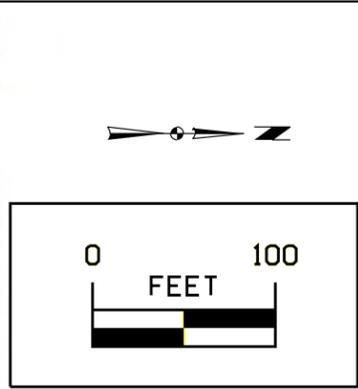
(9C)
678' from HH 9-2 to BEGINNING OF BORE
1 - 2" CONDUIT (PLOWED)
1 - TRACER WIRE
1 - 96 SM FIBER

EXISTING IOWA DOT
CONDUIT TO REMAIN

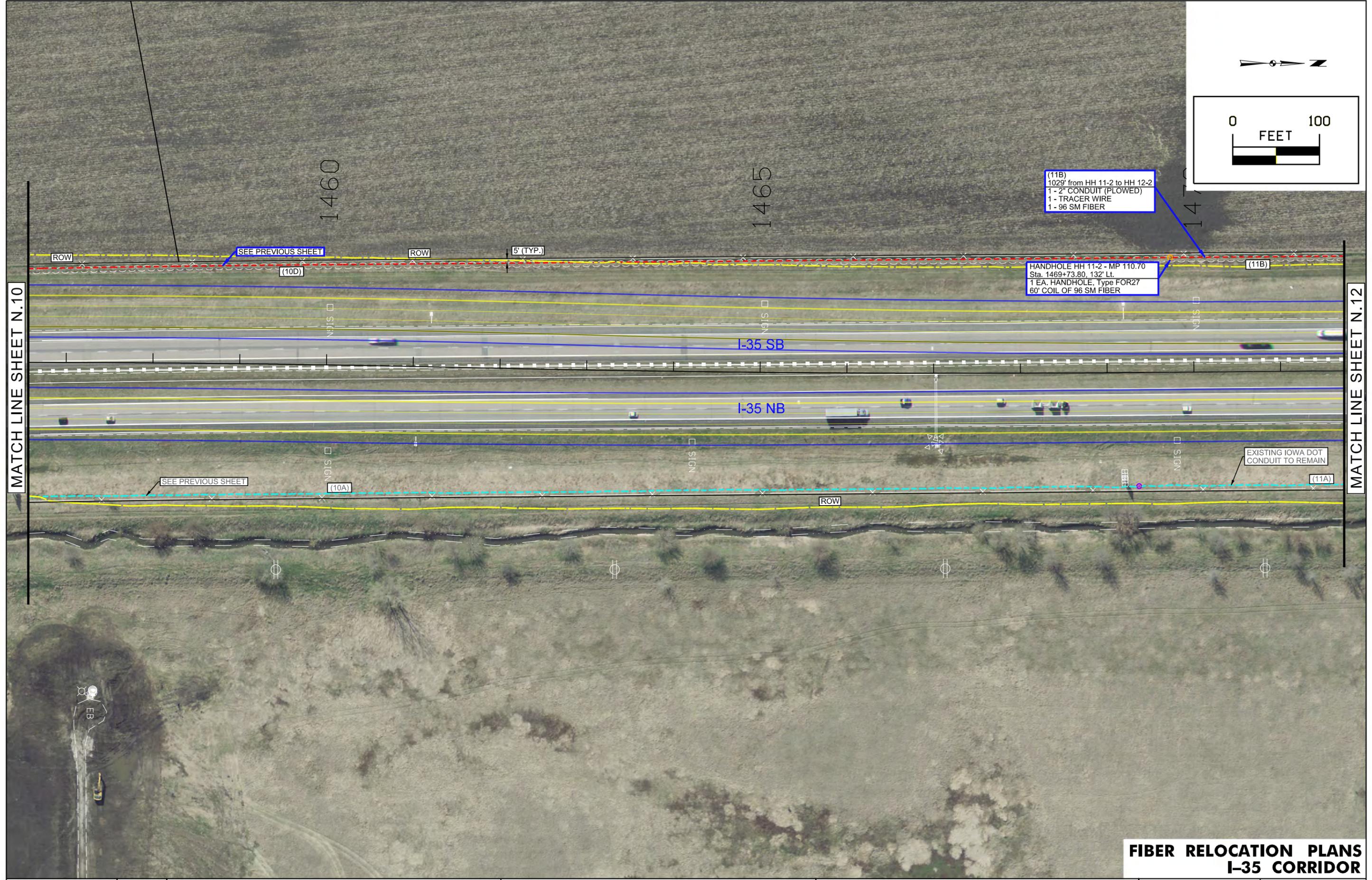
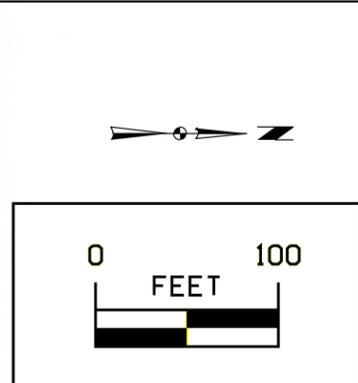
MATCH LINE SHEET N.08

MATCH LINE SHEET N.10

**FIBER RELOCATION PLANS
I-35 CORRIDOR**

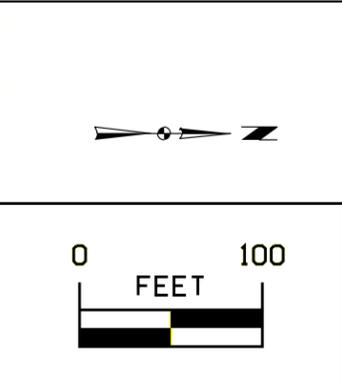


**FIBER RELOCATION PLANS
I-35 CORRIDOR**



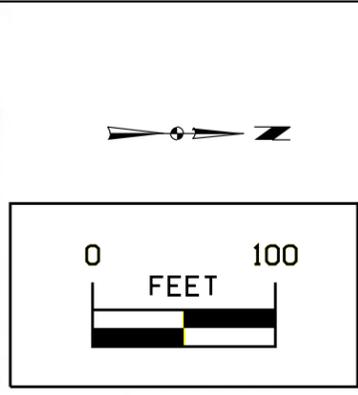
**FIBER RELOCATION PLANS
I-35 CORRIDOR**

ENGLISH	IOWA DOT	DESIGN TEAM	Olsson Associates	STORY	COUNTY	PROJECT NUMBER	ITS-035-4(228)108--25-85	SHEET NUMBER	N.11
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**FIBER RELOCATION PLANS
I-35 CORRIDOR**

ENGLISH	IOWA DOT	DESIGN TEAM	Olsson Associates	STORY	COUNTY	PROJECT NUMBER	ITS-035-4(228)108--25-85	SHEET NUMBER	N.12
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HANDHOLE HH 13-2 - MP 111.15
 Sta. 1495+00.49, 132' LT.
 1 EA. HANDHOLE, Type FOR27
 60' COIL OF 96 SM FIBER

(13C)
 1491' from HH 13-2 to HH 14-3
 1- 2" CONDUIT (PLOWED)
 1- TRACER WIRE
 1- 96 SM FIBER

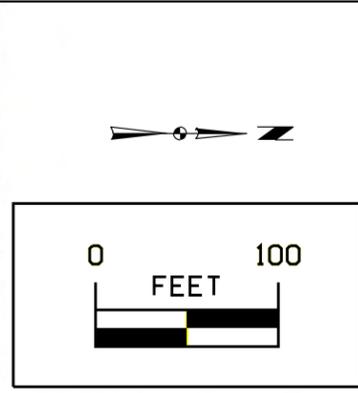
EXISTING IOWA DOT
 CONDUIT TO REMAIN

EXISTING IOWA DOT
 CONDUIT TO REMAIN

MATCH LINE SHEET N.12

MATCH LINE SHEET N.14

**FIBER RELOCATION PLANS
 I-35 CORRIDOR**



HANDHOLE HH 14-3 - MP 111.45
 Sta. 1509+91.30, 131' Lt.
 1 EA. HANDHOLE, Type Fiber Vault
 500' COIL OF 96 SM FIBER

(14F)
 1164' from HH 14-3 to HH 15-1
 1- 2" CONDUIT (PLOWED)
 1- TRACER WIRE
 1- 96 SM FIBER

SEE PREVIOUS SHEET

(13C)

5' (TYP.)

ROW

1510

(14F)

1515

From Highway 30 EB Ramp C

MATCH LINE SHEET N.13

MATCH LINE SHEET N.15

EXISTING IOWA DOT CONDUIT TO REMAIN

(14E)

SEE PREVIOUS SHEET

(13B)

SEE PREVIOUS SHEET

(13A)

I-35 SB

I-35 NB

EXISTING IOWA DOT CONDUIT TO REMAIN

(14B)

EXISTING IOWA DOT CONDUIT TO REMAIN

(14C)

EXISTING IOWA DOT CONDUIT TO REMAIN

(14A)

EXISTING IOWA DOT CONDUIT TO REMAIN

(14D)

To Highway 30 EB

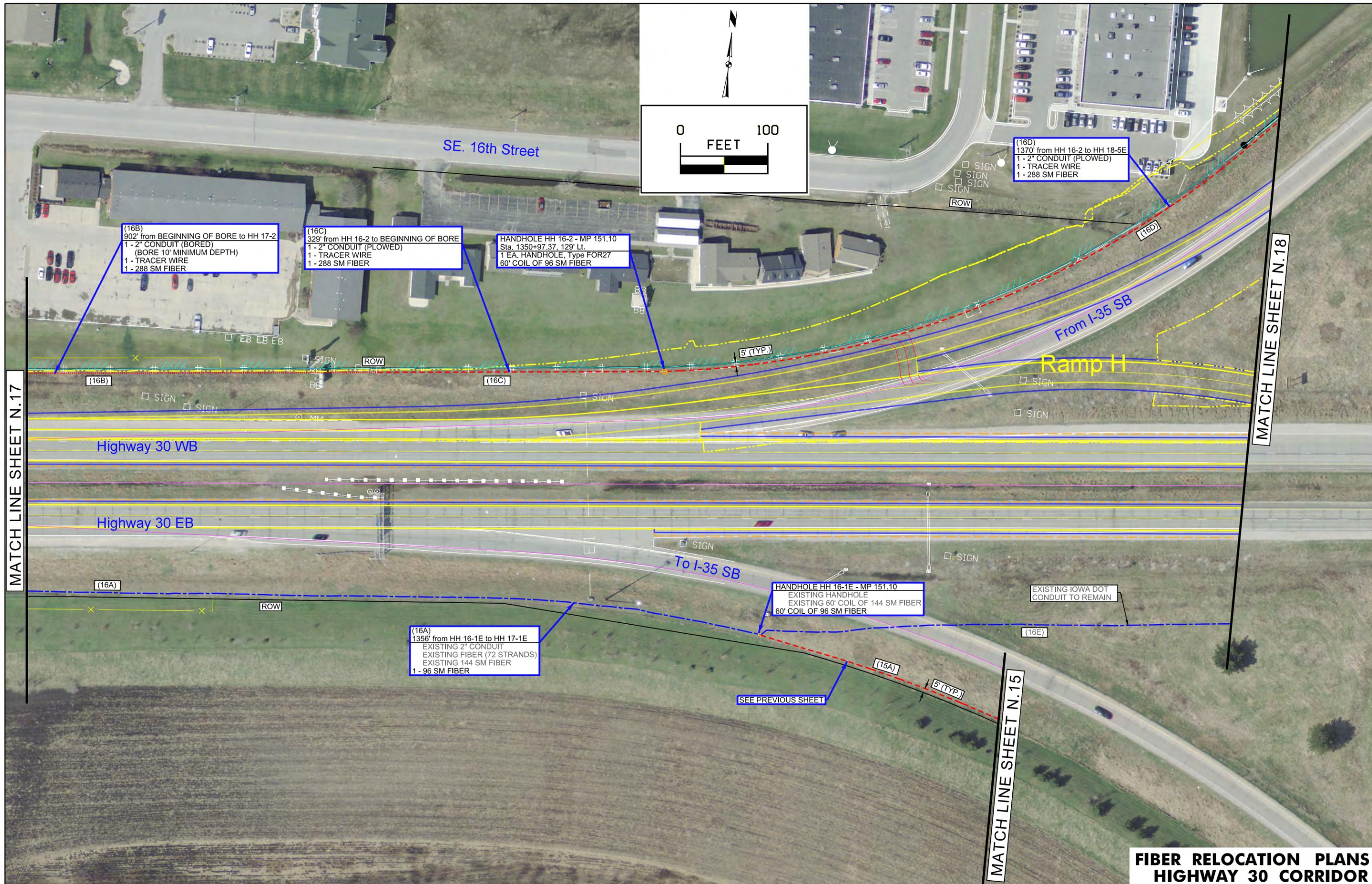
ROW

245th Street

Ramp B

MATCH LINE SHEET N.22

**FIBER RELOCATION PLANS
 I-35 CORRIDOR**



(16B)
902' from BEGINNING OF BORE to HH 17-2
1 - 2" CONDUIT (BORED)
(BORE 10' MINIMUM DEPTH)
1 - TRACER WIRE
1 - 288 SM FIBER

(16C)
329' from HH 16-2 to BEGINNING OF BORE
1 - 2" CONDUIT (PLOWED)
1 - TRACER WIRE
1 - 288 SM FIBER

HANDHOLE HH 16-2 - MP 151.10
Sta. 1350+97.37, 129° Lt.
1 EA. HANDHOLE, Type FOR27
60' COIL OF 96 SM FIBER

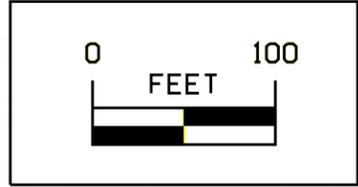
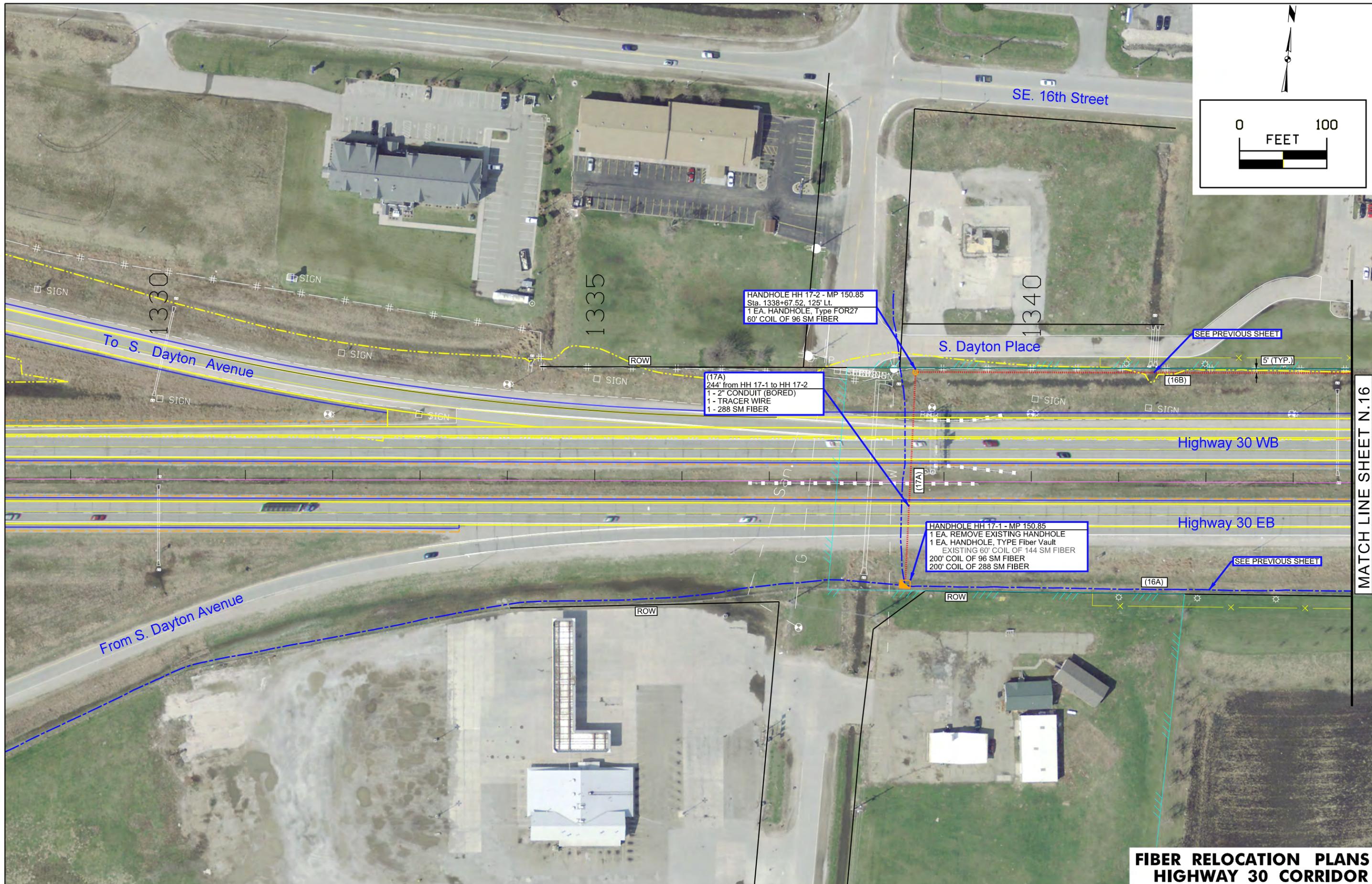
(16D)
1370' from HH 16-2 to HH 18-5E
1 - 2" CONDUIT (PLOWED)
1 - TRACER WIRE
1 - 288 SM FIBER

(16A)
1356' from HH 16-1E to HH 17-1E
EXISTING 2" CONDUIT
EXISTING FIBER (72 STRANDS)
EXISTING 144 SM FIBER
1 - 96 SM FIBER

HANDHOLE HH 16-1E - MP 151.10
EXISTING HANDHOLE
EXISTING 60' COIL OF 144 SM FIBER
60' COIL OF 96 SM FIBER

EXISTING IOWA DOT
CONDUIT TO REMAIN

**FIBER RELOCATION PLANS
HIGHWAY 30 CORRIDOR**



HANDHOLE HH 17-2 - MP 150.85
Sta. 1338+67.52, 125' Lt.
1 EA. HANDHOLE, Type FOR27
60' COIL OF 96 SM FIBER

(17A)
244' from HH 17-1 to HH 17-2
1 - 2" CONDUIT (BORED)
1 - TRACER WIRE
1 - 288 SM FIBER

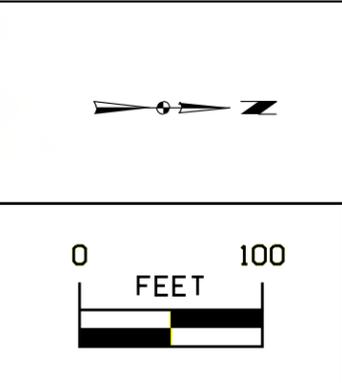
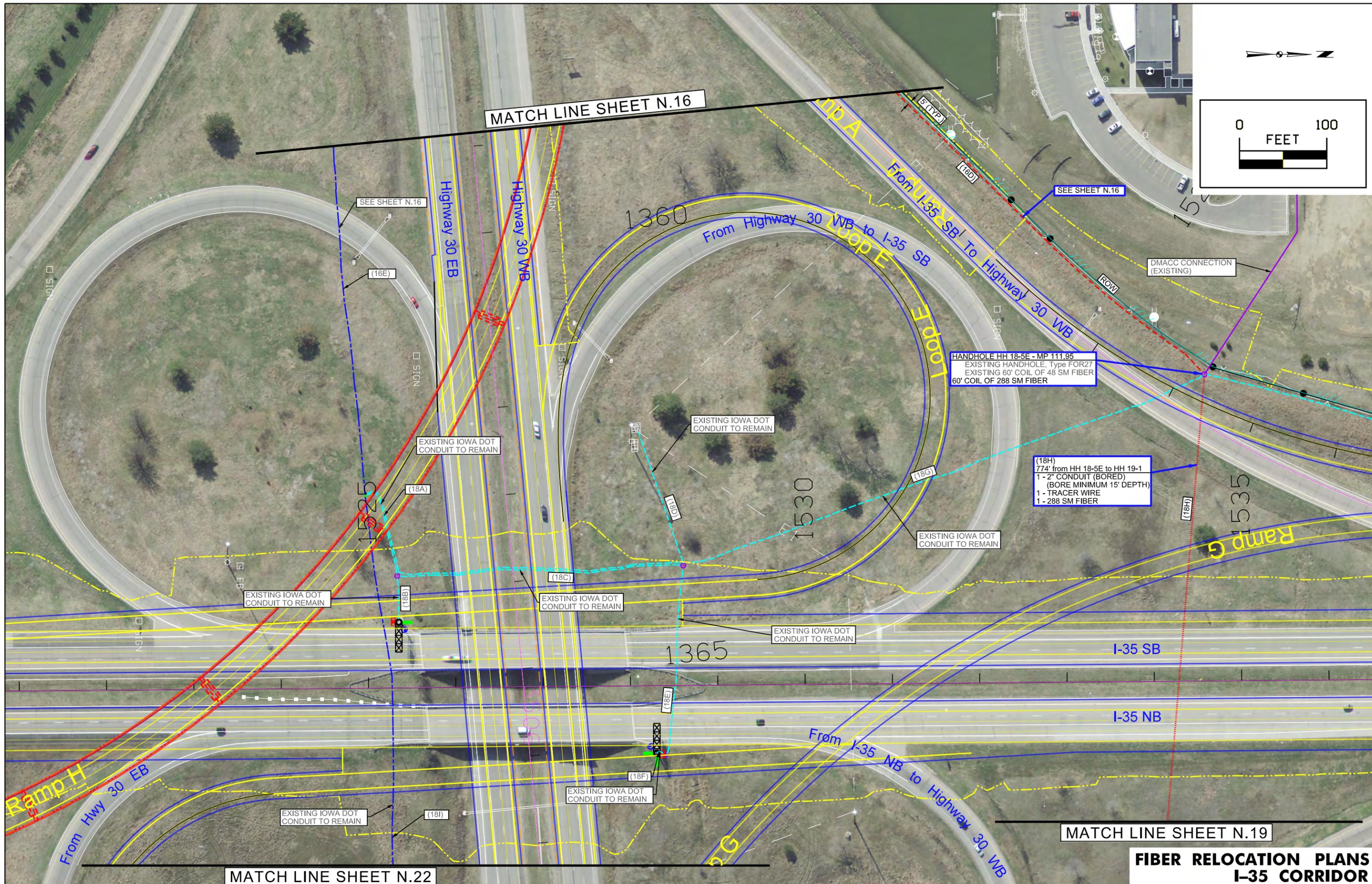
HANDHOLE HH 17-1 - MP 150.85
1 EA. REMOVE EXISTING HANDHOLE
1 EA. HANDHOLE, TYPE Fiber Vault
EXISTING 60' COIL OF 144 SM FIBER
200' COIL OF 96 SM FIBER
200' COIL OF 288 SM FIBER

SEE PREVIOUS SHEET

SEE PREVIOUS SHEET

MATCH LINE SHEET N.16

**FIBER RELOCATION PLANS
HIGHWAY 30 CORRIDOR**



MATCH LINE SHEET N.16

SEE SHEET N.16

(18H)
774' from HH 18-5E to HH 19-1
1 - 2" CONDUIT (BORED)
(BORE MINIMUM 15' DEPTH)
1 - TRACER WIRE
1 - 288 SM FIBER

HANDHOLE HH 18-5E - MP 111.95
EXISTING HANDHOLE, Type FOR27
EXISTING 60' COIL OF 48 SM FIBER
60' COIL OF 288 SM FIBER

DMACC CONNECTION
(EXISTING)

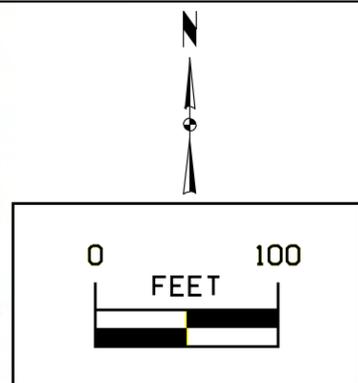
EXISTING IOWA DOT
CONDUIT TO REMAIN

MATCH LINE SHEET N.19

MATCH LINE SHEET N.22

**FIBER RELOCATION PLANS
I-35 CORRIDOR**

ENGLISH	IOWA DOT	DESIGN TEAM	Olsson Associates	STORY	COUNTY	PROJECT NUMBER	ITS-035-4(228)108--25-85	SHEET NUMBER	N.18
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MATCH LINE SHEET N.18

MATCH LINE SHEET N.20

HANDHOLE HH 19-1 - MP 111.90
Sta. 1369+98.96, 674' Lt.
1 EA. HANDHOLE, Type FOR27
60' COIL OF 96 SM FIBER

(19A)
551' from HH 19-1 to END OF BORE
1 - 2" CONDUIT (BORED)
1 - TRACER WIRE
1 - 288 SM FIBER

(19B)
629' from END OF BORE to HH 20-1
1 - 2" CONDUIT (PLOWED)
1 - TRACER WIRE
1 - 288 SM FIBER

(18H)
SEE PREVIOUS SHEET

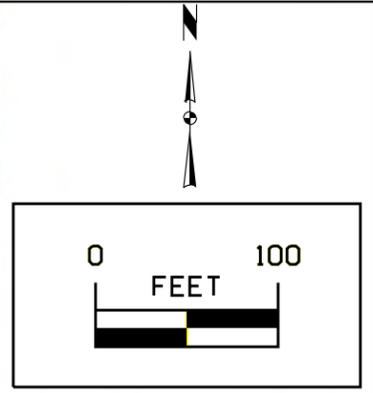
BORE DEEP 5' MINIMUM UNDER STREAM BED

ROW

(19B)

5' (TYP.)

**FIBER RELOCATION PLANS
HIGHWAY 30 CORRIDOR**

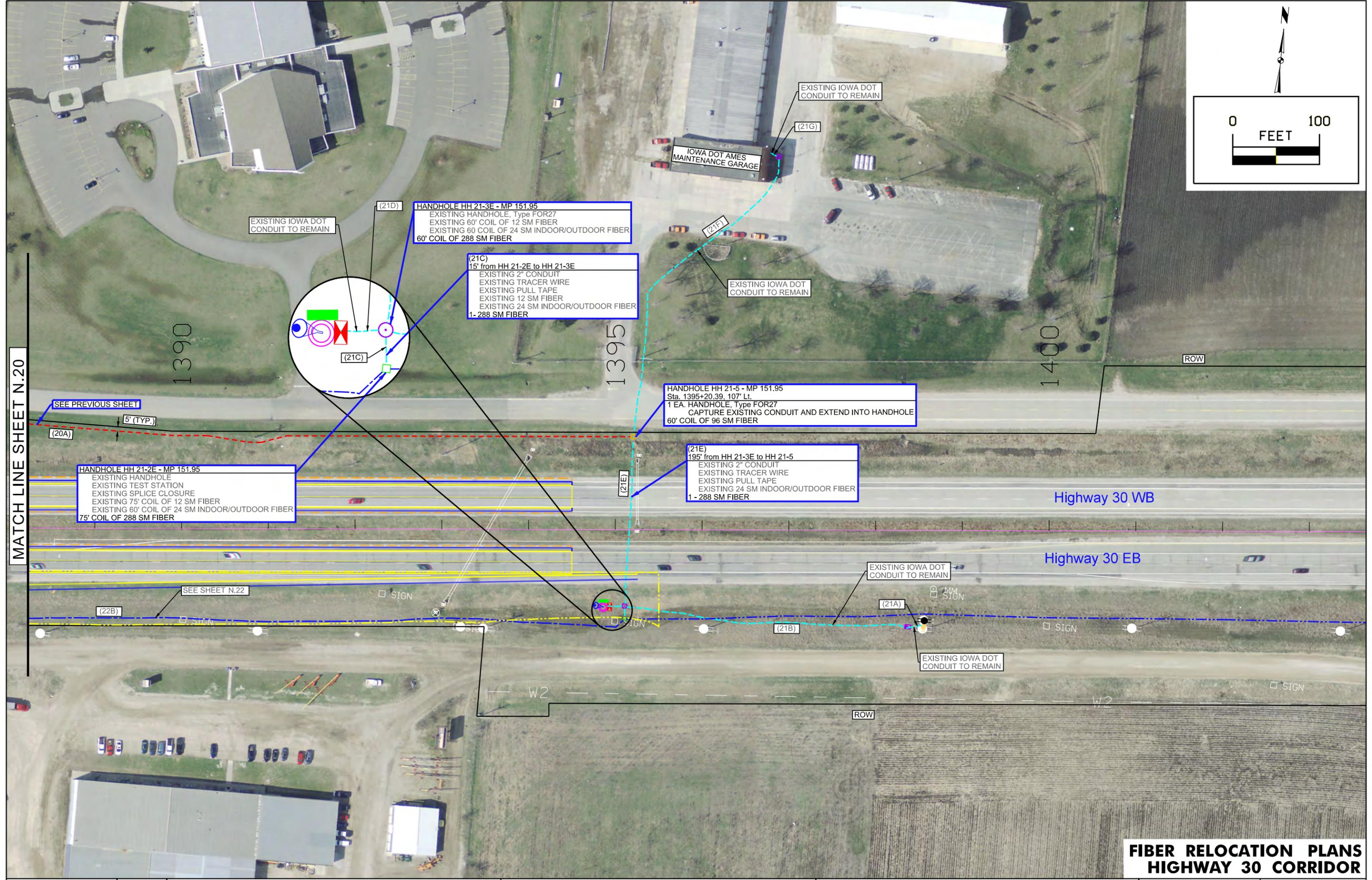
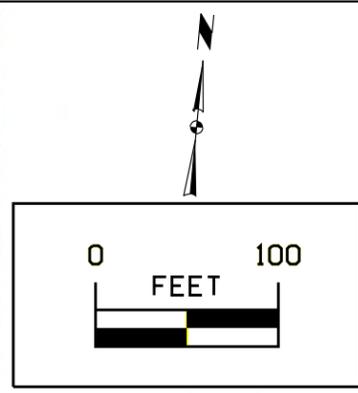


MATCH LINE SHEET N.19

MATCH LINE SHEET N.21

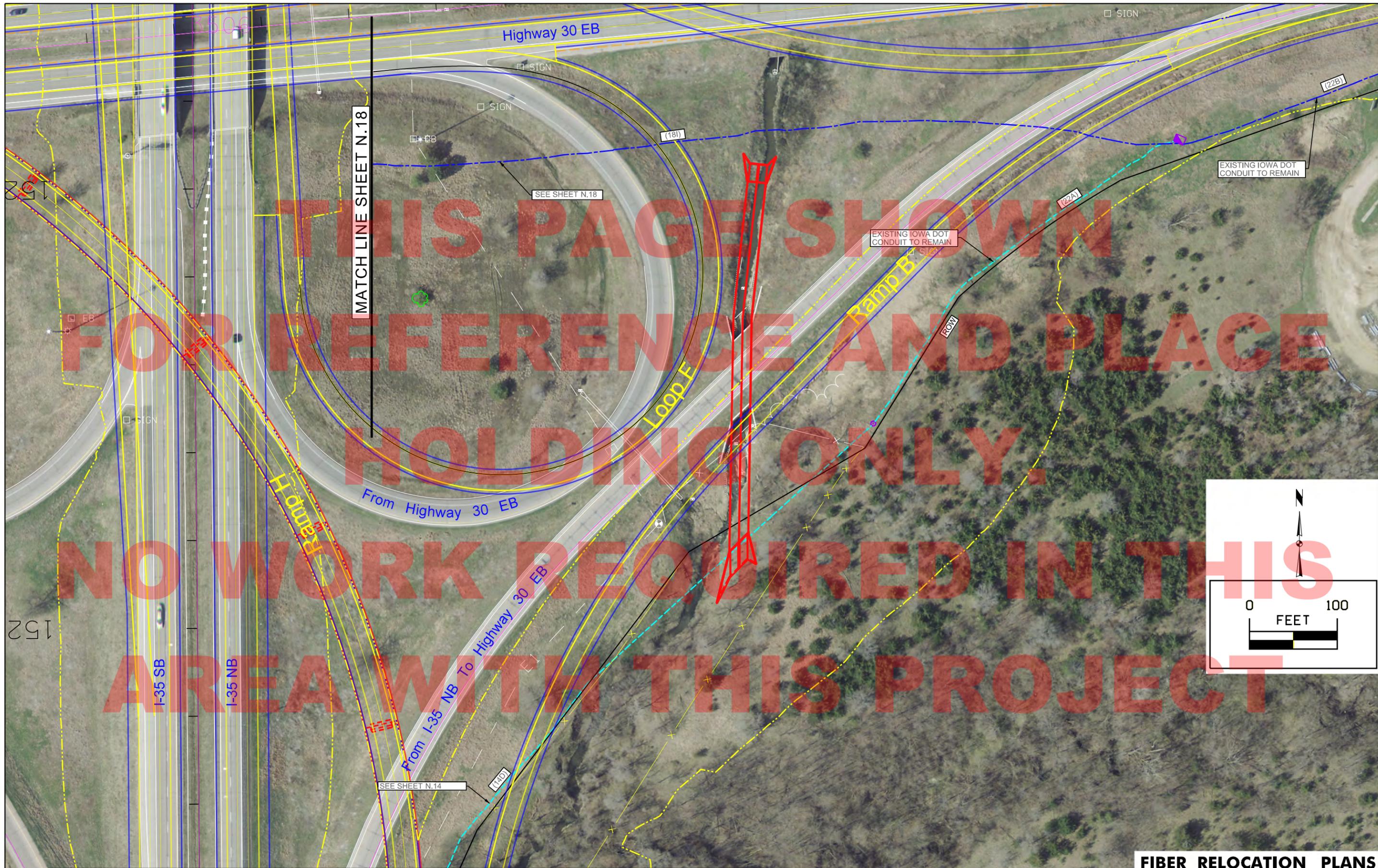
**FIBER RELOCATION PLANS
HIGHWAY 30 CORRIDOR**

ENGLISH	IOWA DOT	DESIGN TEAM	Olsson Associates	STORY	COUNTY	PROJECT NUMBER	ITS-035-4(228)108--25-85	SHEET NUMBER	N.20
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**FIBER RELOCATION PLANS
HIGHWAY 30 CORRIDOR**

ENGLISH	IOWA DOT	DESIGN TEAM	Olsson Associates	STORY	COUNTY	PROJECT NUMBER	ITS-035-4(228)108--25-85	SHEET NUMBER	N.21
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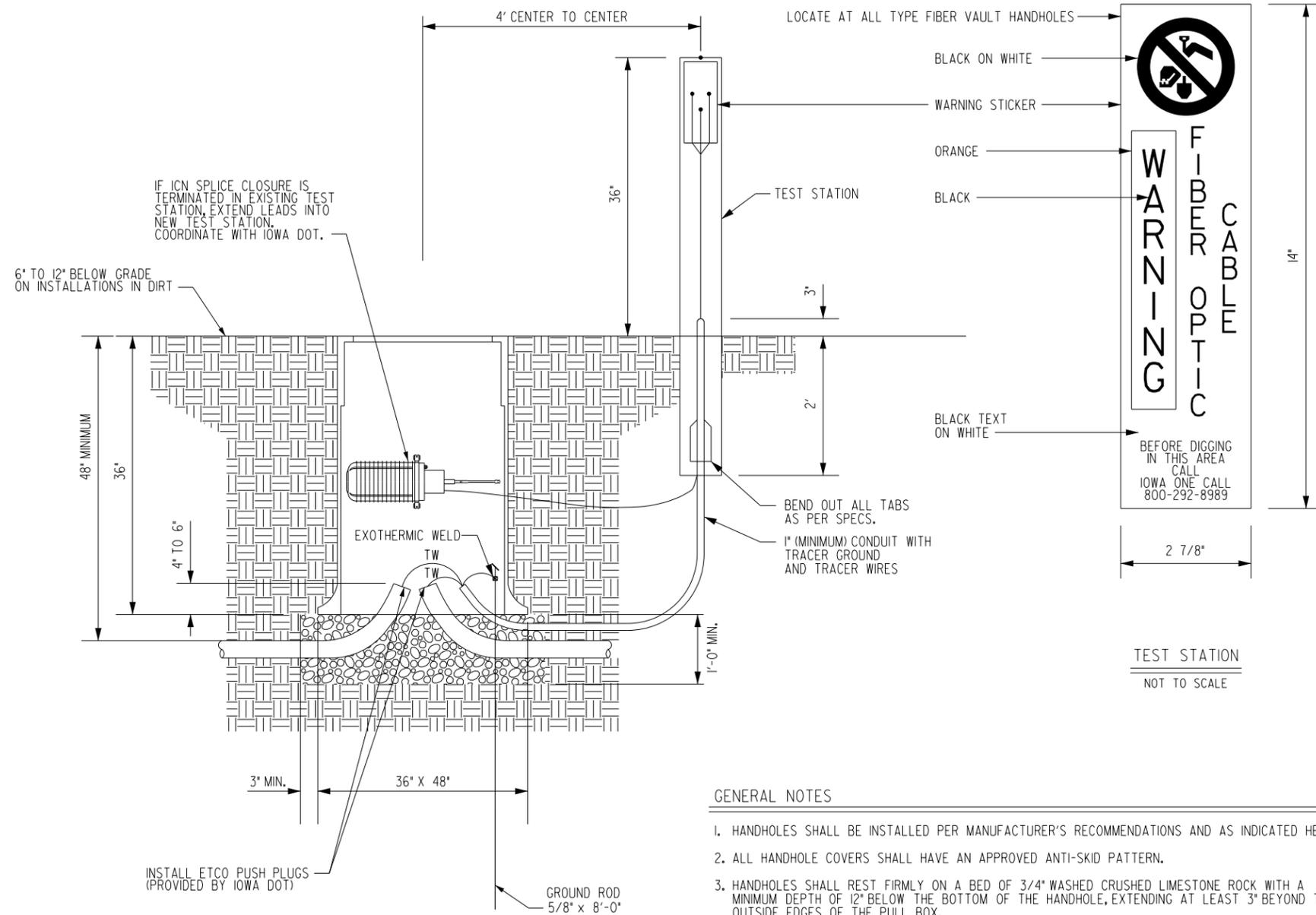
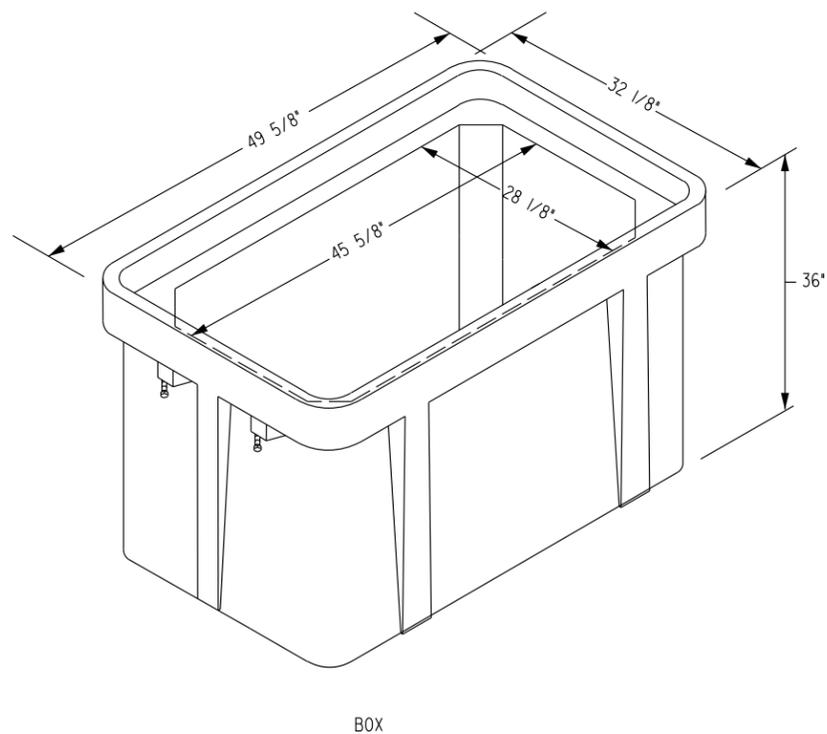
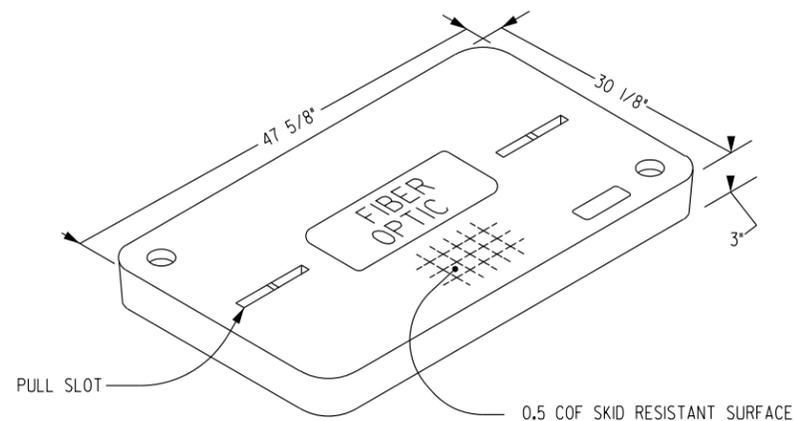


MATCH LINE SHEET N.18

MATCH LINE SHEET N.14

**FIBER RELOCATION PLANS
I-35 CORRIDOR**

ENGLISH	IOWA DOT	DESIGN TEAM	Olsson Associates	STORY	COUNTY	PROJECT NUMBER	ITS-035-4(228)108--25-85	SHEET NUMBER	N.22
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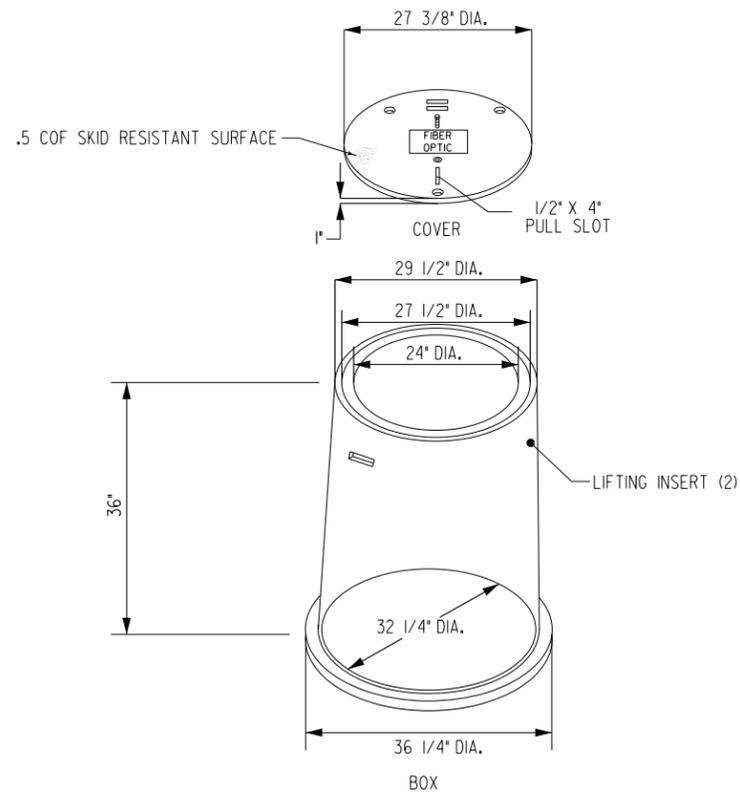
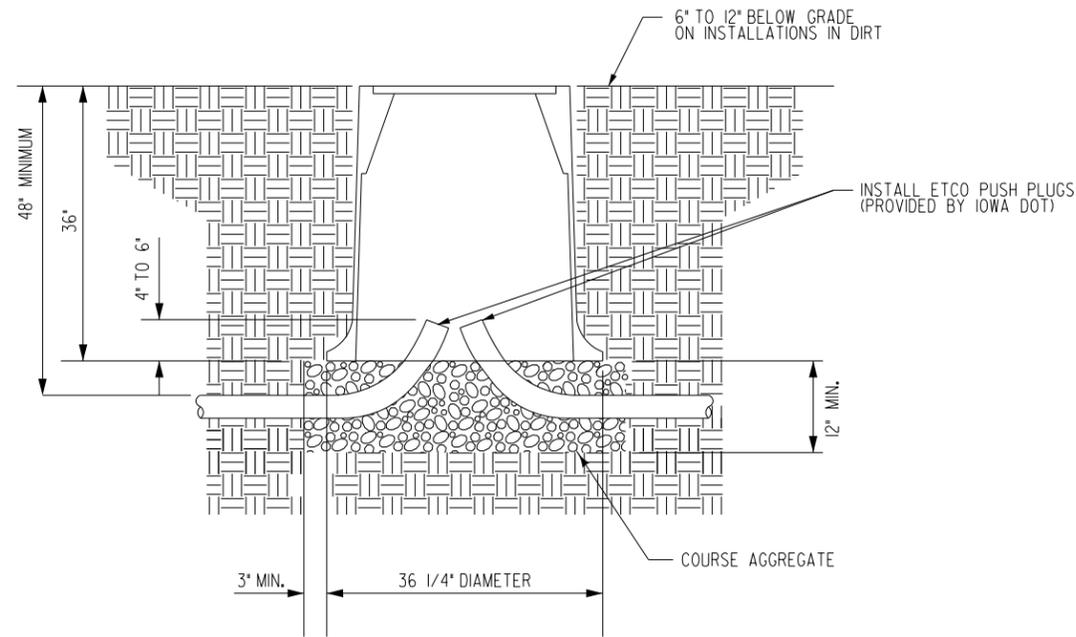


U.01-1 - FIBER VAULT
NOT TO SCALE

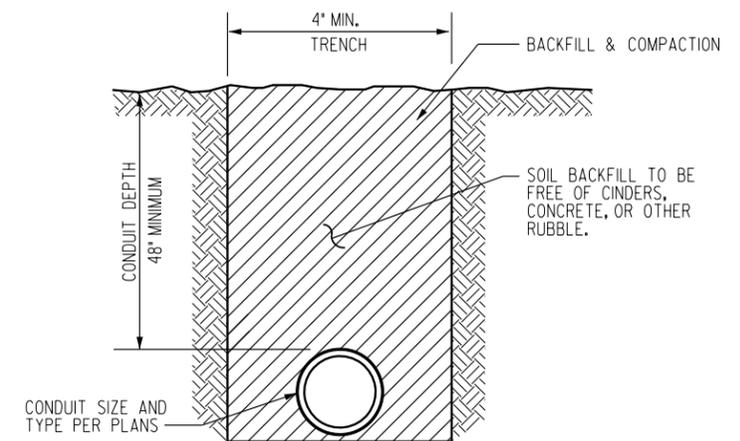
GENERAL NOTES

- HANDHOLES SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND AS INDICATED HEREIN.
- ALL HANDHOLE COVERS SHALL HAVE AN APPROVED ANTI-SKID PATTERN.
- HANDHOLES SHALL REST FIRMLY ON A BED OF 3/4" WASHED CRUSHED LIMESTONE ROCK WITH A MINIMUM DEPTH OF 12" BELOW THE BOTTOM OF THE HANDHOLE, EXTENDING AT LEAST 3" BEYOND THE OUTSIDE EDGES OF THE PULL BOX.
- DO NOT INSTALL LID BOLTS.
- AFTER TRACER WIRE IS INSTALLED, ALL DUCT TERMINAL ENDS IN HANDHOLES SHALL BE SEALED AGAINST ENTRY OF MOISTURE BY METHODS STATED IN SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.
- ALL LIDS SHALL BE LABELED. ALL TYPE FIBER VAULT LIDS SHALL BE LABELED 'FIBER OPTIC'.
- NO CONDUIT CAN ENTER THROUGH SIDE WALL OF HANDHOLES, THEY MUST ENTER FROM THE BOTTOM.

HANDHOLE DETAILS



U.02-1 - FOR27 HANDHOLE
NOT TO SCALE



U.02-2 - CONDUIT IN TRENCH
NOT TO SCALE

CONDUIT GENERAL NOTES

1. MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT STANDARDS AND SUPPLEMENTAL SPECIFICATIONS.
2. REFER TO APPROPRIATE STANDARD ROAD PLANS AND PROJECT PLANS FOR ADDITIONAL DETAILS.

HANDHOLE GENERAL NOTES

1. HANDHOLES SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND AS INDICATED HEREIN.
2. ALL HANDHOLE COVERS SHALL HAVE AN APPROVED ANTI-SKID PATTERN.
3. HANDHOLES SHALL REST FIRMLY ON A BED OF 3/4" WASHED CRUSHED LIMESTONE ROCK WITH A MINIMUM DEPTH OF 12" BELOW THE BOTTOM OF THE HANDHOLE, EXTENDING AT LEAST 3' BEYOND THE OUTSIDE EDGES OF THE PULL BOX.
4. DO NOT INSTALL LID BOLTS.
5. AFTER TRACER WIRE IS INSTALLED, ALL DUCT TERMINAL ENDS IN HANDHOLES SHALL BE SEALED AGAINST ENTRY OF MOISTURE BY METHODS STATED IN SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.
6. ALL LIDS SHALL BE LABELED. ALL TYPE FOR27 HANDHOLE LIDS SHALL BE LABELED 'FIBER OPTIC'.
7. NO CONDUIT CAN ENTER THROUGH SIDE WALL OF HANDHOLES, THEY MUST ENTER FROM THE BOTTOM.

HANDHOLE AND CONDUIT DETAILS