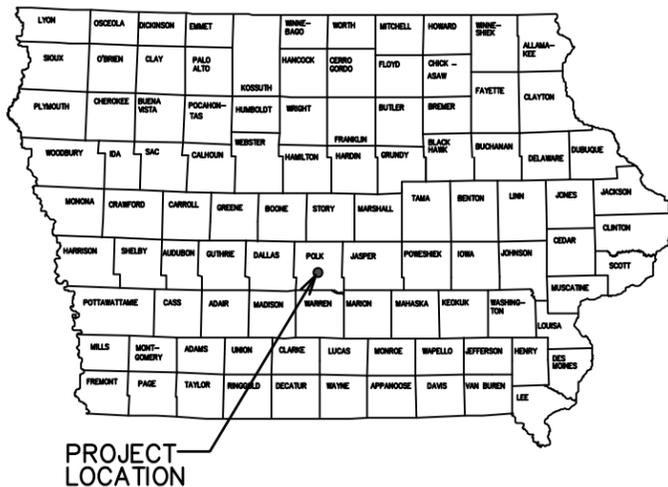
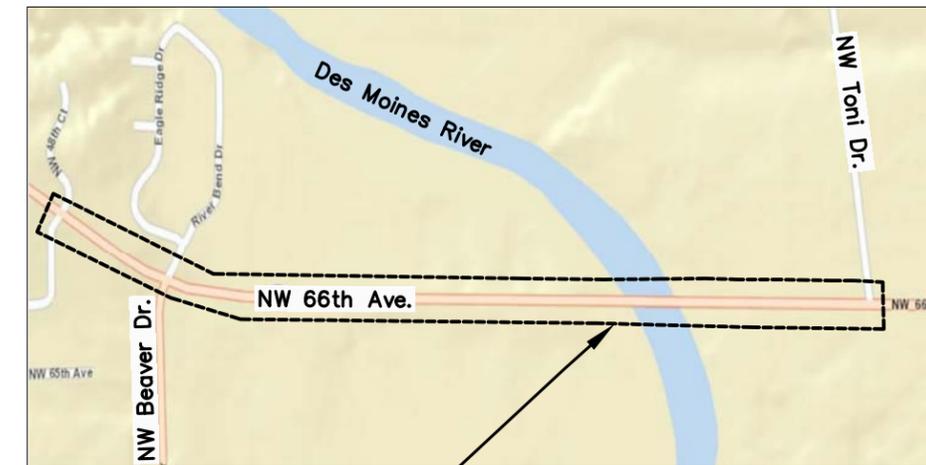


LOCATION MAP



CONSTRUCTION DRAWINGS FOR NW 66th AVE. BRIDGE FIBER RELOCATION JOHNSTON, IOWA

VICINITY MAP



PROJECT LOCATION



Project Overview:

Polk County Engineering Dept. is making road and bridge improvements on NW 66th Avenue between NW 48th Court and Toni Drive. ICN will need to relocate approximately 7000 feet of fiber.

ICN provided Materials:

- 7000' of 96f Armored Cable
- 10 Hand Holes
- 2 Tyco 450D Splice Enclosures
- 6 Tyco 450D 36 Count Splice Trays
- 2 3M Shield Bonding Kits

Materials Pickup:

Wallace State Office Bldg.
502 E. 9th St.
Des Moines, Ia 50319
(Loading at NW Corner of Bldg.)
Warehouse contact: Paul Damge Tel. 515-725-4749
Cell 515-491-1429

SHEET INDEX

1	COVER SHEET
2	STA. 101+10 to STA. 102+65
3	STA. 102+00 to STA. 108+00
4	STA. 108+00 to STA. 114+00
5	STA. 114+00 to STA. 120+00
6	STA. 120+00 to STA. 126+00
7	STA. 126+00 to STA. 132+00
8	STA. 128+00 to STA. 134+00 (PARTIAL REPEAT)
9	STA. 134+00 to STA. 140+00
10	STA. 140+00 to STA. 146+00
11	STA. 146+00 to STA. 152+00
12	STA. 152+00 to STA. 158+00
13	HAND HOLE DETAIL

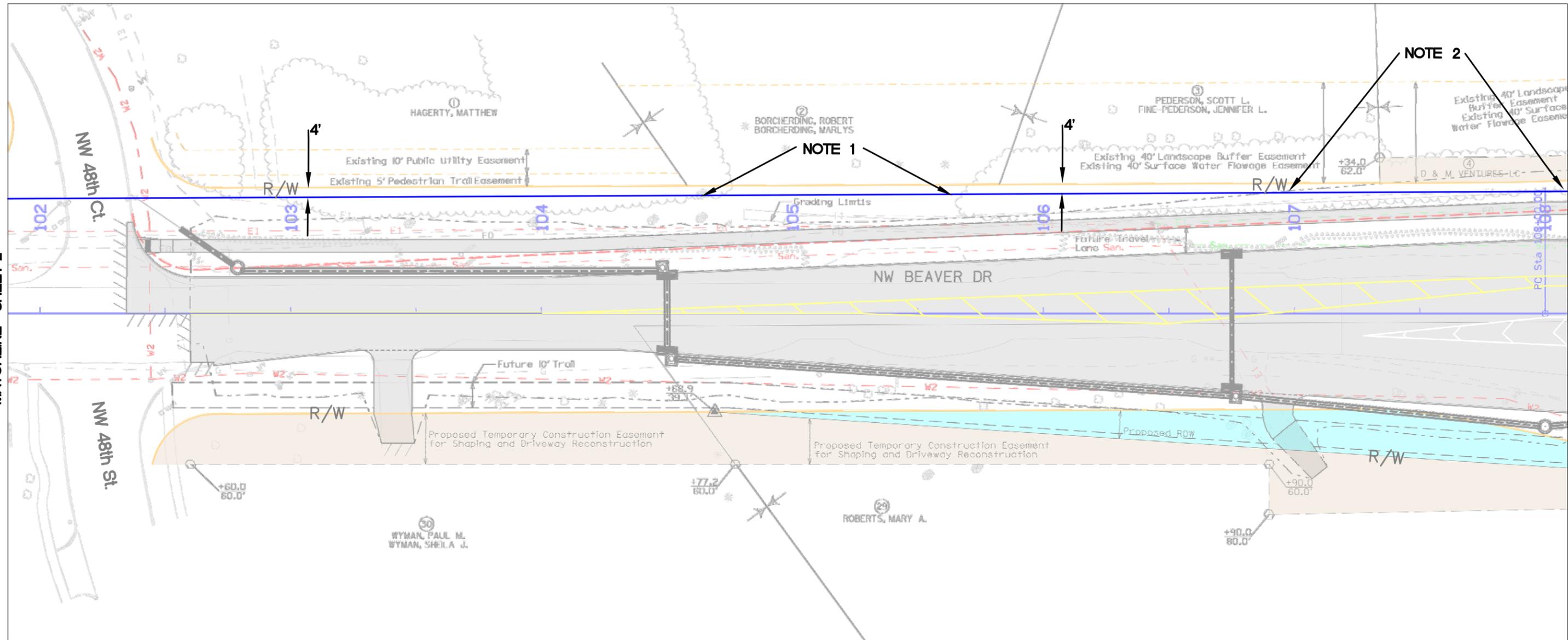
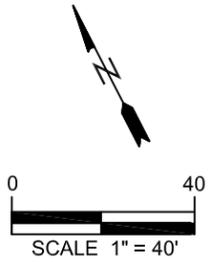
PROJECT NOTES:

1. THE CONTRACTOR WILL NEED TO ACQUIRE A "RIGHT OF WAY USE GRANT PERMIT" FROM POLK COUNTY ENGINEERING DEPARTMENT. (515-286-3705) PER POLK COUNTY THE FEE ON THIS PROJECT WILL BE WAIVED.
2. THE CONTRACTOR MAY NEED TO MOBILIZE MULTIPLE TIMES DUE TO COORDINATION WITH PROGRESS ON THE BRIDGE PROJECT.

ICN Contact:

Mike Broderick (515) 725-4610

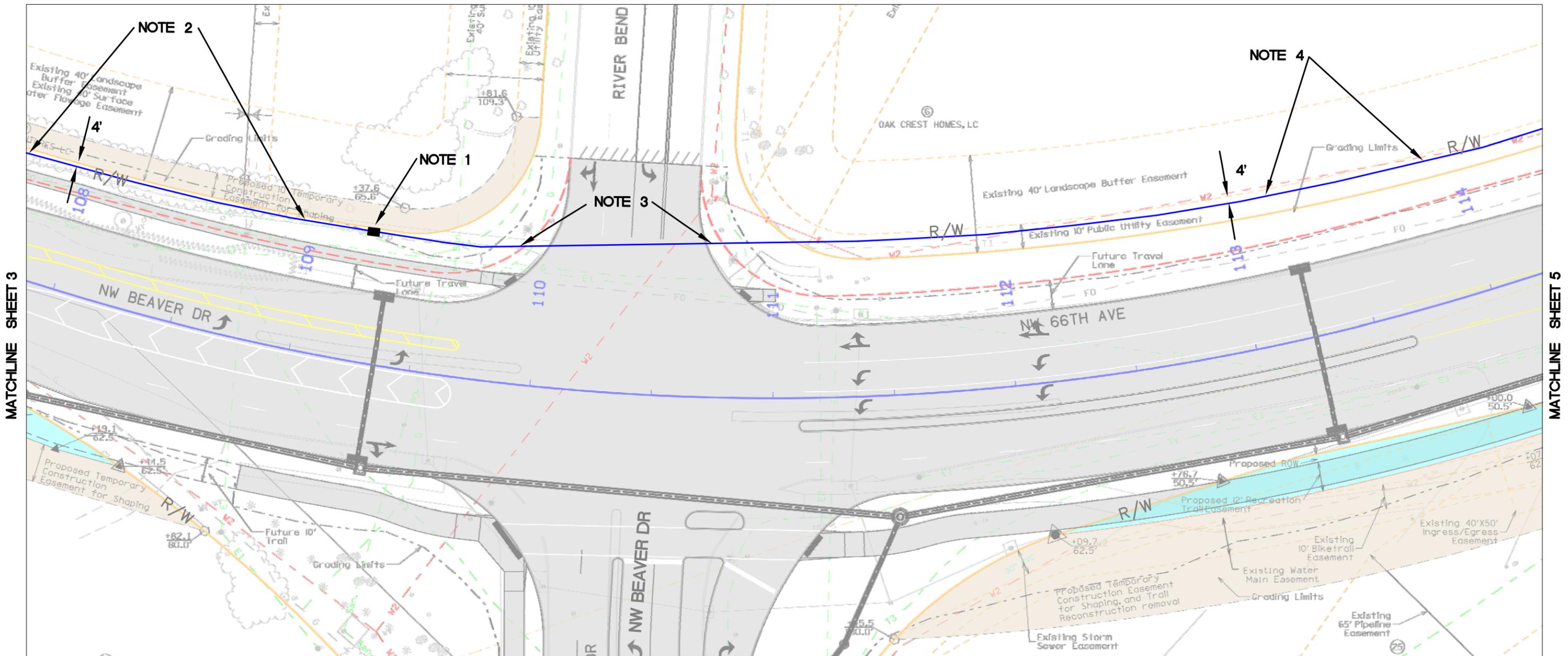
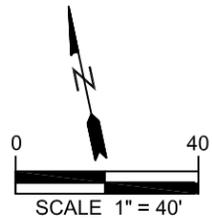
IOWA COMMUNICATIONS NETWORK		THIS DRAWING IS PROVIDED FOR GENERAL INFORMATION ONLY AND IS NOT TO BE USED TO DETERMINE PRECISE ION PLACEMENT. CALL ONE CALL BEFORE EXCAVATION (1-800-292-8989)		
400 EAST 14TH STREET, GRIMES STATE OFFICE BUILDING, DES MOINES, IOWA 50319 ICN © 2015, COPY WITH PERMISSION				
1	CONSTRUCTION DRAWINGS	MARCH 2016	SCALE: NONE	SIZE: 11 x 17
			NW 66th AVENUE BRIDGE FIBER RELOCATION JOHNSTON, IOWA	
			SHEET 1 of 13	



PROJECT NOTES:

1. BORE A 2" DIA. HDPE DUCT 4' INSIDE THE ROW LINE BETWEEN HH# 1 AND HH# 2. LEAVE A PULL ROPE IN THE DUCT CONNECTING HH# 1 & HH# 2. (APPROXIMATELY 815', SEE SHEET 4)
2. BORE 6' MINIMUM DEPTH FROM STA. 107+00 TO STA. 109+00 DUE TO FUTURE EARTHWORK.
3. FIBER UNDER PAVED STREETS AND DRIVES TO BE A MINIMUM OF 48" BELOW TOP OF SLAB. FIBER SHALL ALWAYS HAVE A MINIMUM COVER OF 30".

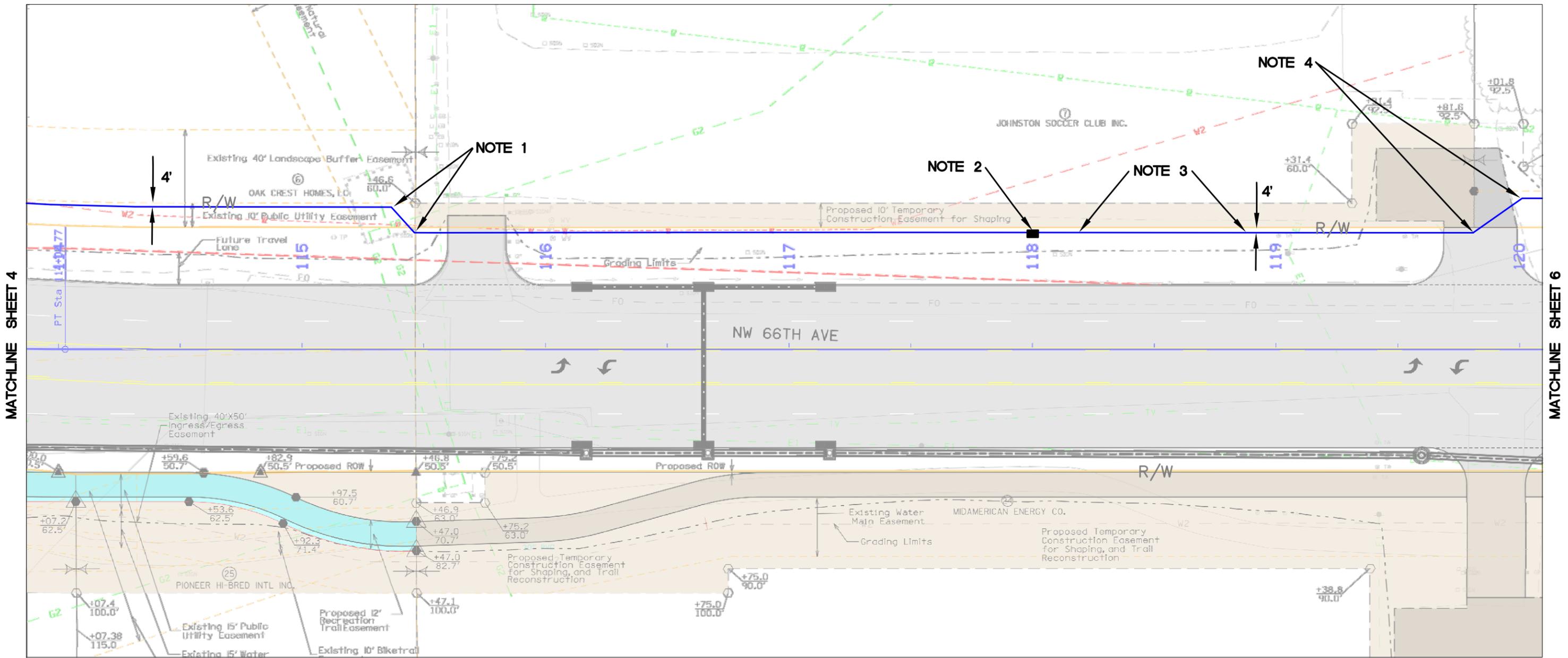
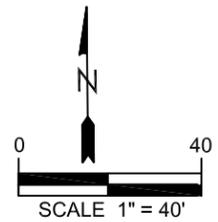
IOWA COMMUNICATIONS NETWORK		<small>THIS DRAWING IS PROVIDED FOR GENERAL INFORMATION ONLY AND IS NOT TO BE USED TO DETERMINE PRECISE ION PLACEMENT. CALL ONE CALL BEFORE EXCAVATION (1-800-292-8989)</small>	
<small>400 EAST 14TH STREET, GRIMES STATE OFFICE BUILDING, DES MOINES, IOWA 50319 ICN © 2015, COPY WITH PERMISSION</small>		<small>ICN</small>	
1	CONSTRUCTION DRAWINGS	MARCH 2016	SCALE: NONE SIZE: 11 x 17
			NW 66th AVENUE BRIDGE FIBER RELOCATION DES MOINES, IOWA
			SHEET 3 of 13



PROJECT NOTES:

1. PLACE PROPOSED HH# 2, 4' OFF ROW LINE (STA. 109+25, 46' LT.) A PULL ROPE SHALL BE LEFT IN THE DUCT CONNECTING HH# 1 & HH# 2.
2. BORE 6' MINIMUM DEPTH FROM STA. 107+00 TO STA. 109+00 DUE TO FUTURE EARTHWORK.
3. TRANSITION PLACEMENT FROM 46' LEFT ON THE WEST SIDE OF RIVER BEND DRIVE TO 56' LEFT ON THE EAST SIDE OF RIVER BEND DRIVE.
4. BORE A 2" DIA. HDPE DUCT, 4' INSIDE THE ROW LINE BETWEEN HH# 2 AND HH# 3. (APPROXIMATELY 875' SEE SHEET 5)
5. FIBER UNDER PAVED STREETS AND DRIVES TO BE A MINIMUM OF 48" BELOW TOP OF SLAB. FIBER SHALL ALWAYS HAVE A MINIMUM COVER OF 30".

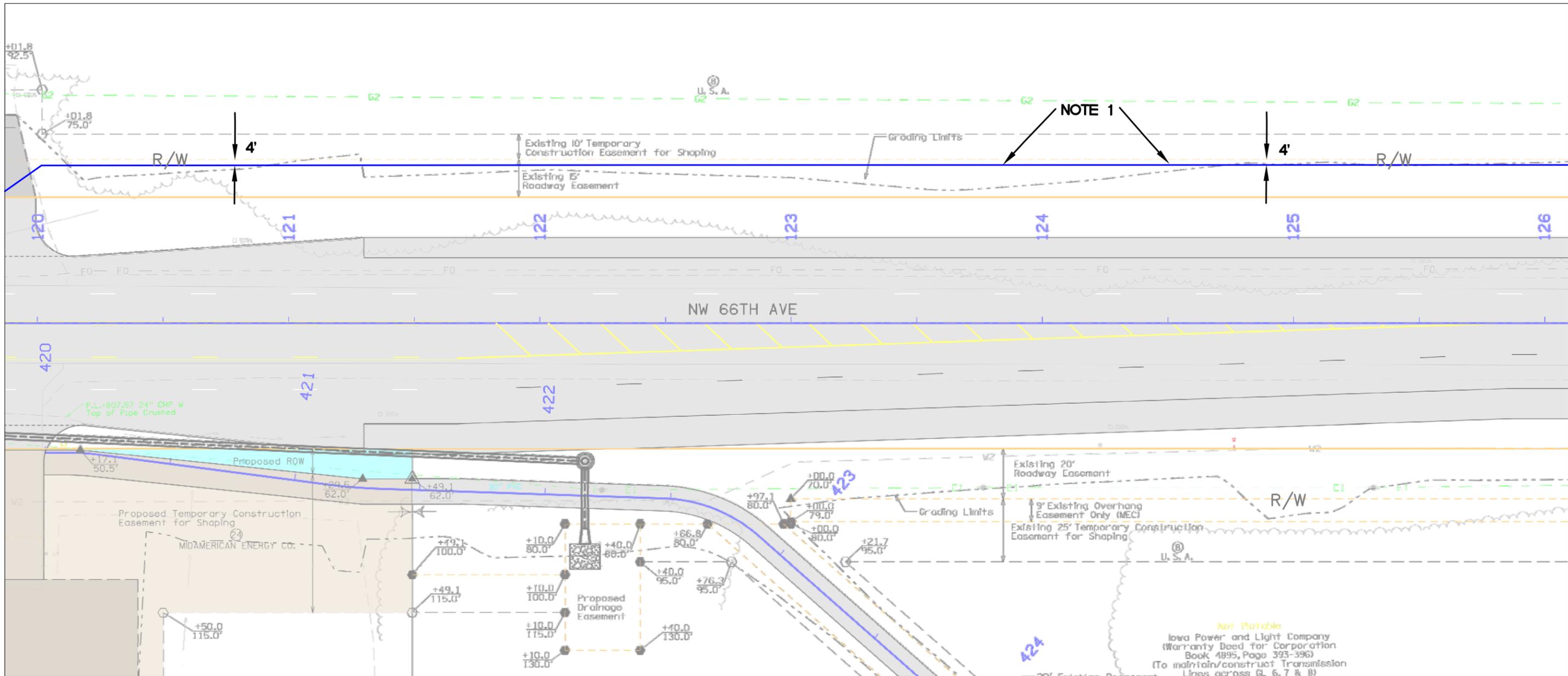
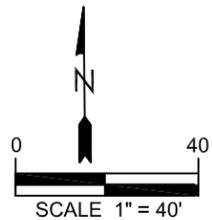
IOWA COMMUNICATIONS NETWORK		<small>THIS DRAWING IS PROVIDED FOR GENERAL INFORMATION ONLY AND IS NOT TO BE USED TO DETERMINE PRECISE ION PLACEMENT. CALL ONE CALL BEFORE EXCAVATION (1-800-292-8989)</small>	
<small>400 EAST 14TH STREET, GRIMES STATE OFFICE BUILDING, DES MOINES, IOWA 50319 ICN © 2015, COPY WITH PERMISSION</small>		<small>ICN</small>	
1	CONSTRUCTION DRAWINGS	MARCH 2016	SCALE: NONE
			SIZE: 11 x 17
			NW 66th AVENUE BRIDGE FIBER RELOCATION DES MOINES, IOWA
			SHEET 4 of 13



PROJECT NOTES:

1. TRANSITION PLACEMENT 56' LEFT TO 46' LEFT AT STATION 115+46
2. PLACE PROPOSED HH# 3, 4' OFF ROW LINE (STA. 118+00, 46' LT.)
3. BORE A 2" DIA. HDPE DUCT, 4' INSIDE THE ROW LINE BETWEEN HH# 3 AND HH# 4.
(APPROXIMATELY 825' SEE SHEET 6)
4. TRANSITION PLACEMENT FROM 46' LEFT AT STA. 119+82 TO 56' LEFT AT STA.120+02.
5. FIBER UNDER PAVED STREETS AND DRIVES TO BE A MINIMUM OF 48" BELOW TOP OF SLAB.
FIBER SHALL ALWAYS HAVE A MINIMUM COVER OF 30".

IOWA COMMUNICATIONS NETWORK		THIS DRAWING IS PROVIDED FOR GENERAL INFORMATION ONLY AND IS NOT TO BE USED TO DETERMINE PRECISE ION PLACEMENT. CALL ONE CALL BEFORE EXCAVATION (1-800-292-8989)	
400 EAST 14TH STREET, GRIMES STATE OFFICE BUILDING, DES MOINES, IOWA 50319 ICN © 2015, COPY WITH PERMISSION		ICN	
1	CONSTRUCTION DRAWINGS	MARCH 2016	SCALE: NONE SIZE: 11 x 17
		NW 66th AVENUE BRIDGE FIBER RELOCATION DES MOINES, IOWA	
		SHEET 5 of 13	



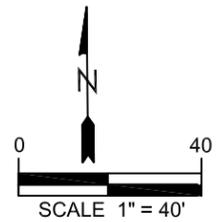
MATCHLINE SHEET 5

MATCHLINE SHEET 7

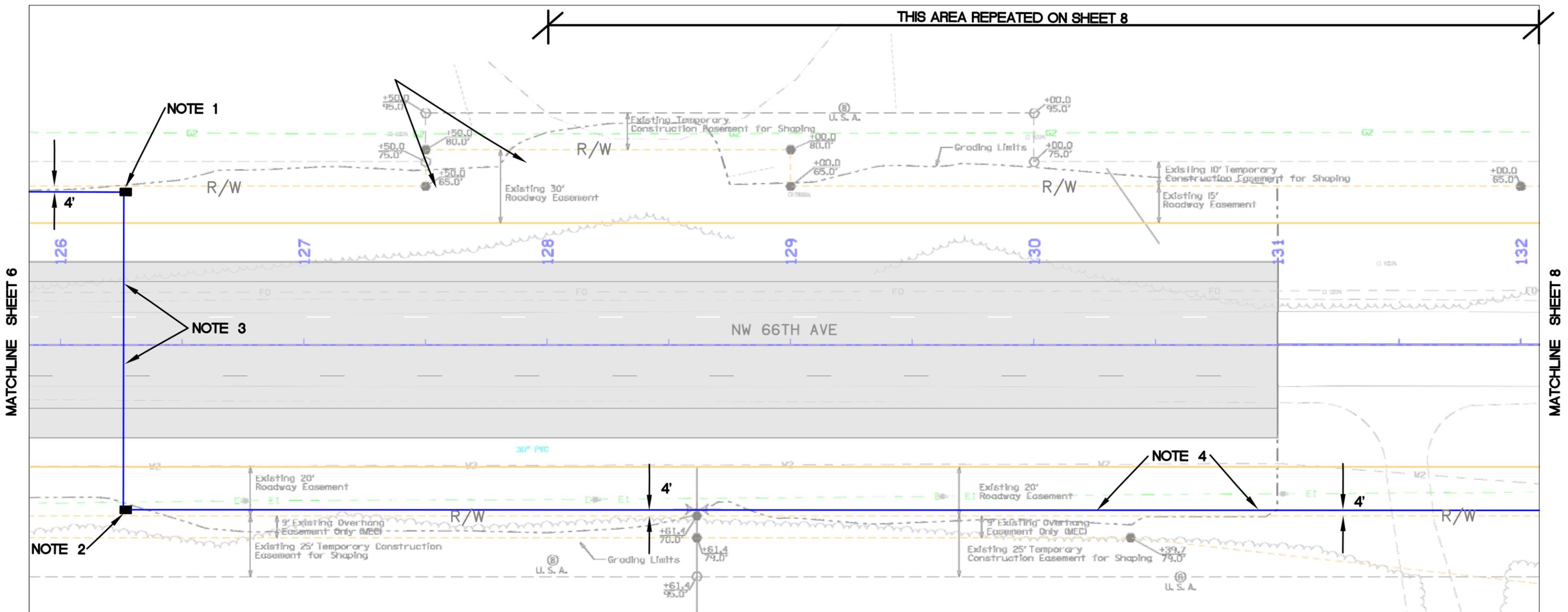
PROJECT NOTES:

1. BORE A 2" DIA. HDPE DUCT, 4' INSIDE THE ROW LINE BETWEEN HH# 3 AND HH# 4. (APPROXIMATELY 825', SEE SHEET 7)
2. FIBER UNDER PAVED STREETS AND DRIVES TO BE A MINIMUM OF 48" BELOW TOP OF SLAB. FIBER SHALL ALWAYS HAVE A MINIMUM COVER OF 30".

IOWA COMMUNICATIONS NETWORK		THIS DRAWING IS PROVIDED FOR GENERAL INFORMATION ONLY AND IS NOT TO BE USED TO DETERMINE PRECISE ION PLACEMENT. CALL ONE CALL BEFORE EXCAVATION (1-800-292-8989)	
400 EAST 14TH STREET, GRIMES STATE OFFICE BUILDING, DES MOINES, IOWA 50319 ICN © 2015, COPY WITH PERMISSION			
1	CONSTRUCTION DRAWINGS	MARCH 2016	SCALE: NONE SIZE: 11 x 17
			NW 66th AVENUE BRIDGE FIBER RELOCATION DES MOINES, IOWA
			SHEET 6 of 13



THIS AREA REPEATED ON SHEET 8



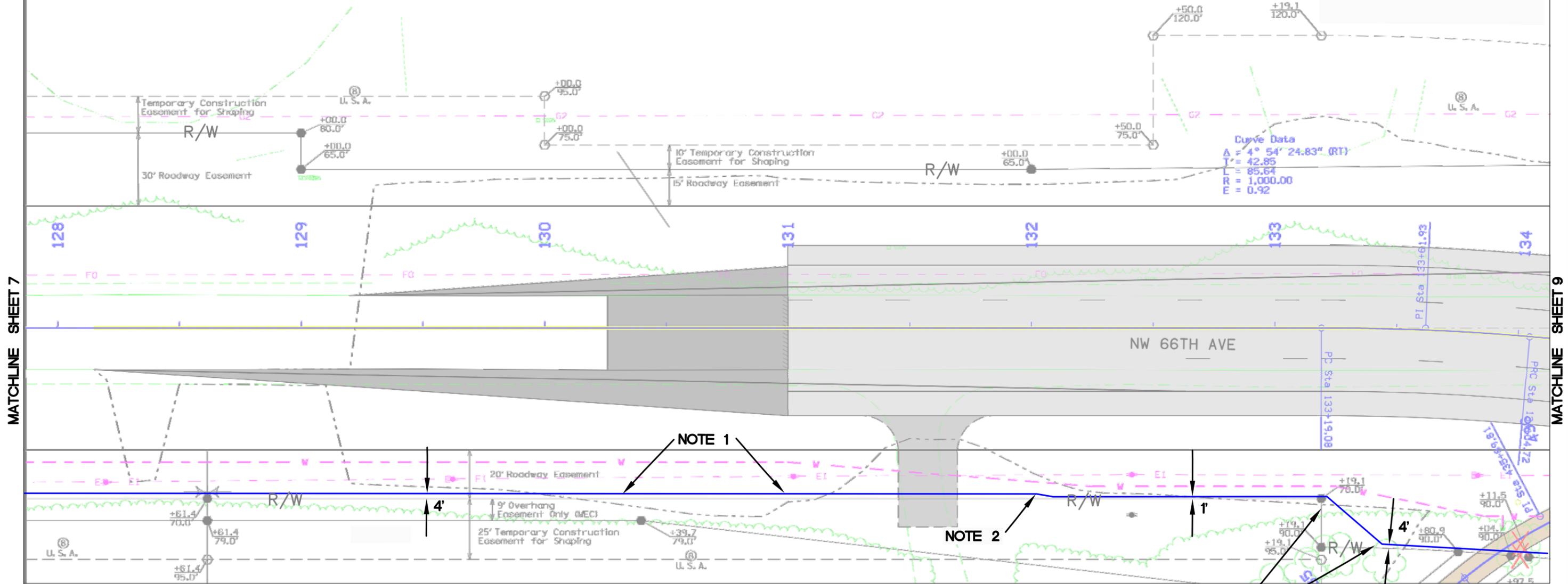
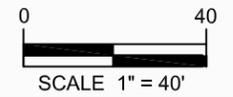
PROJECT NOTES:

1. PLACE PROPOSED HH# 4, 4' OFF ROW LINE. (STA. 126+25, 61' LT.)
2. PLACE PROPOSED HH# 5, 4' OFF ROW LINE. (STA. 126+25, 66' RT.)
3. BORE A 2" DIA. HDPE DUCT UNDER NW 66TH AVE. BETWEEN HH# 4 & HH# 5. (APPROXIMATELY 127') EXERCISE CARE IN PROXIMITY OF 30" DIA. WATER MAIN.
4. BORE A 2" DIA. HDPE DUCT FROM HH# 5 TO HH# 6 (APPROXIMATELY 875', SEE SHEET 8)
5. FIBER UNDER PAVED STREETS AND DRIVES TO BE A MINIMUM OF 48" BELOW TOP OF SLAB. FIBER SHALL ALWAYS HAVE A MINIMUM COVER OF 30".

IOWA COMMUNICATIONS NETWORK		THIS DRAWING IS PROVIDED FOR GENERAL INFORMATION ONLY AND IS NOT TO BE USED TO DETERMINE PRECISE ION PLACEMENT. CALL ONE CALL BEFORE EXCAVATION (1-800-292-8989)	
400 EAST 14TH STREET, GRIMES STATE OFFICE BUILDING, DES MOINES, IOWA 50319 ICN © 2015, COPY WITH PERMISSION			
1	CONSTRUCTION DRAWINGS	MARCH 2016	SCALE: NONE SIZE: 11 x 17
			NW 66th AVENUE BRIDGE FIBER RELOCATION DES MOINES, IOWA
			SHEET 7 of 13

SAYLOR TWP.
T-79N R-24W
SEC 5

THIS AREA REPEATED ON SHEET 7

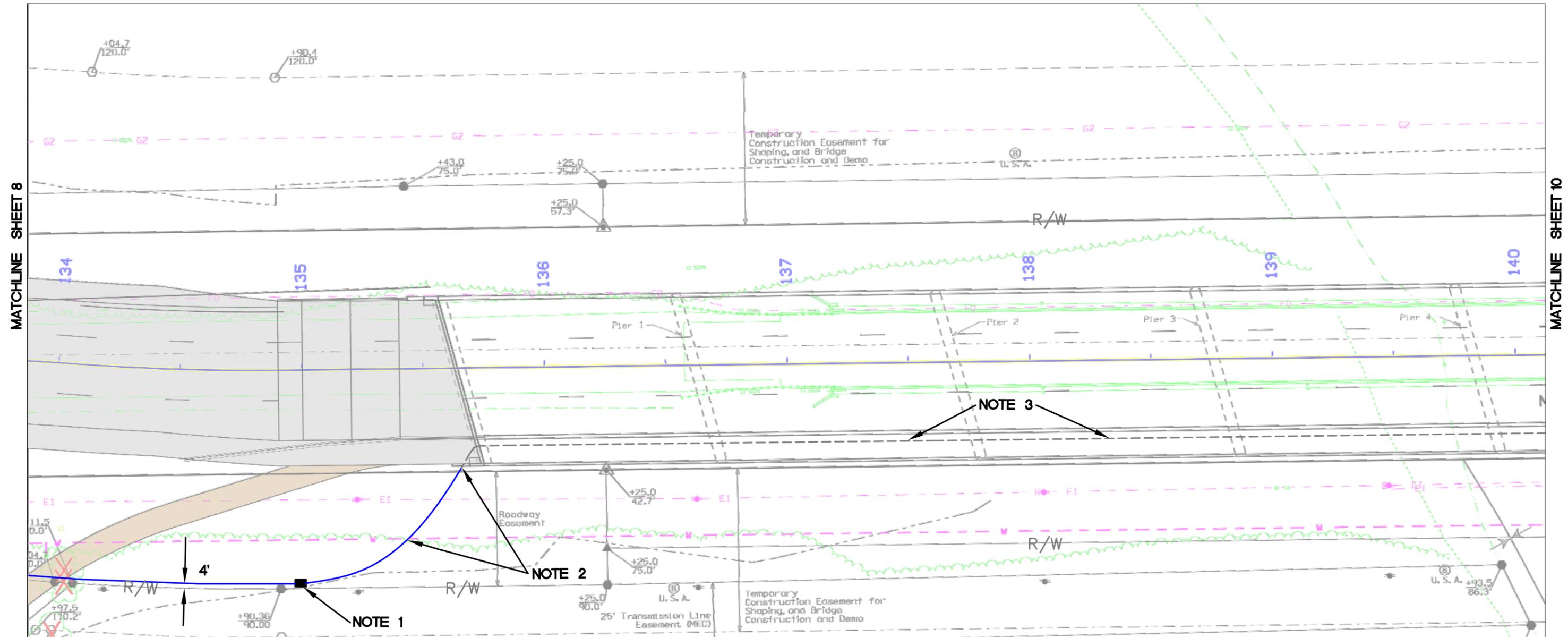
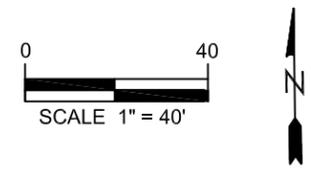


PROJECT NOTES:

1. BORE A 2" DIA. HDPE DUCT FROM HH# 5 TO HH# 6 (APPROXIMATELY 875', SEE SHEET 9)
2. TRANSITION TO 1' OFF ROW AT STA. 132+00 (69' RT) AND 10' MIN. DEPTH TO AVOID 30" DIA. WATER MAIN. MAINTAIN THIS CLEARANCE FROM STA. 132+00 THRU STA. 133+19.
3. FOLLOW CHANGE IN ROW FOR DUCT PLACEMENT STA. 133+19, (69' RT) TO STA. 133+80, (86' RT)
4. FIBER UNDER PAVED STREETS AND DRIVES TO BE A MINIMUM OF 48" BELOW TOP OF SLAB. FIBER SHALL ALWAYS HAVE A MINIMUM COVER OF 30".

NOTE 3

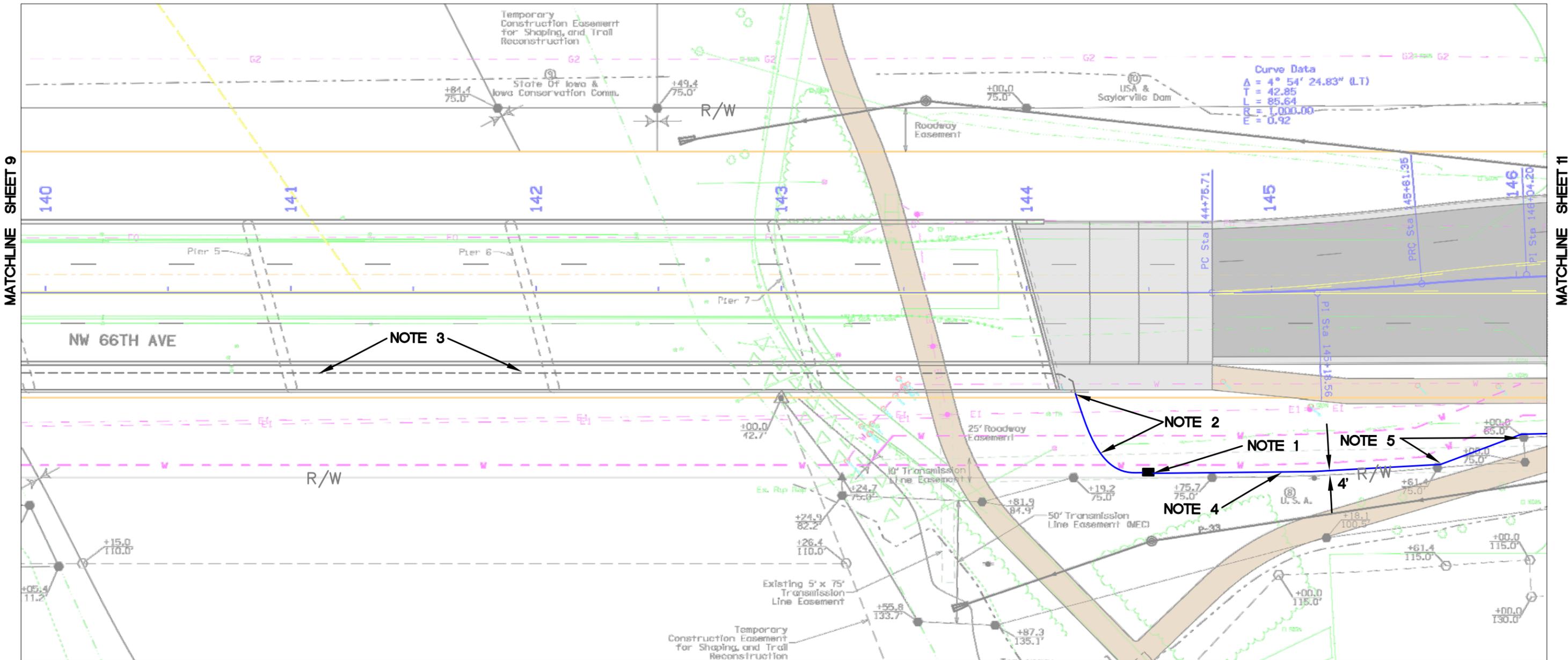
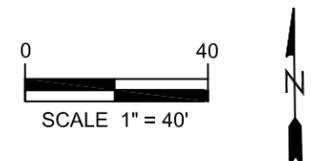
IOWA COMMUNICATIONS NETWORK <small>400 EAST 14TH STREET, GRIMES STATE OFFICE BUILDING, DES MOINES, IOWA 50319 ION © 2015, COPY WITH PERMISSION</small>		<small>THIS DRAWING IS PROVIDED FOR GENERAL INFORMATION ONLY AND IS NOT TO BE USED TO DETERMINE PRECISE ION PLACEMENT. CALL ONE CALL BEFORE EXCAVATION (1-800-292-8989)</small>		
1	CONSTRUCTION DRAWINGS	MARCH 2016	SCALE: NONE	SIZE: 11 x 17
			NW 66th AVENUE BRIDGE FIBER RELOCATION DES MOINES, IOWA	
			SHEET 8 of 13	



PROJECT NOTES:

1. PLACE PROPOSED HH# 6, 4' OFF ROW LINE (STA. 135+00, 86' RT.)
2. BORE A 2" DIA. HDPE DUCT APPROXIMATELY 80' FROM HH# 6 TO THE STEEL CONDUIT STUB ON THE BRIDGE WING WALL. USE A TRANSITION COUPLING TO CONNECT THE 2" DIA. HDPE DUCT TO THE 1 1/2" STEEL CONDUIT. CONFIRM THE LOCATION OF CONDUIT STUB WITH BRIDGE CONTRACTOR.
3. 1 1/2" DIA. STEEL CONDUIT IN BRIDGE DECK FOR ICN FIBER.
4. EXERCISE CARE IN THE PROXIMITY OF THE 30" DIA. WATER MAIN.

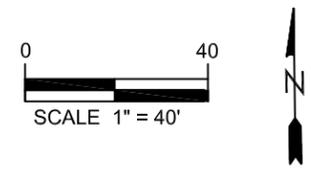
IOWA COMMUNICATIONS NETWORK		THIS DRAWING IS PROVIDED FOR GENERAL INFORMATION ONLY AND IS NOT TO BE USED TO DETERMINE PRECISE ION PLACEMENT. CALL ONE CALL BEFORE EXCAVATION (1-800-292-8989)	
400 EAST 14TH STREET, GRIMES STATE OFFICE BUILDING, DES MOINES, IOWA 50319 ICN © 2015, COPY WITH PERMISSION			
1	CONSTRUCTION DRAWINGS	MARCH 2016	SCALE: NONE SIZE: 11 x 17
			NW 66th AVENUE BRIDGE FIBER RELOCATION DES MOINES, IOWA
			SHEET 9 of 13



PROJECT NOTES:

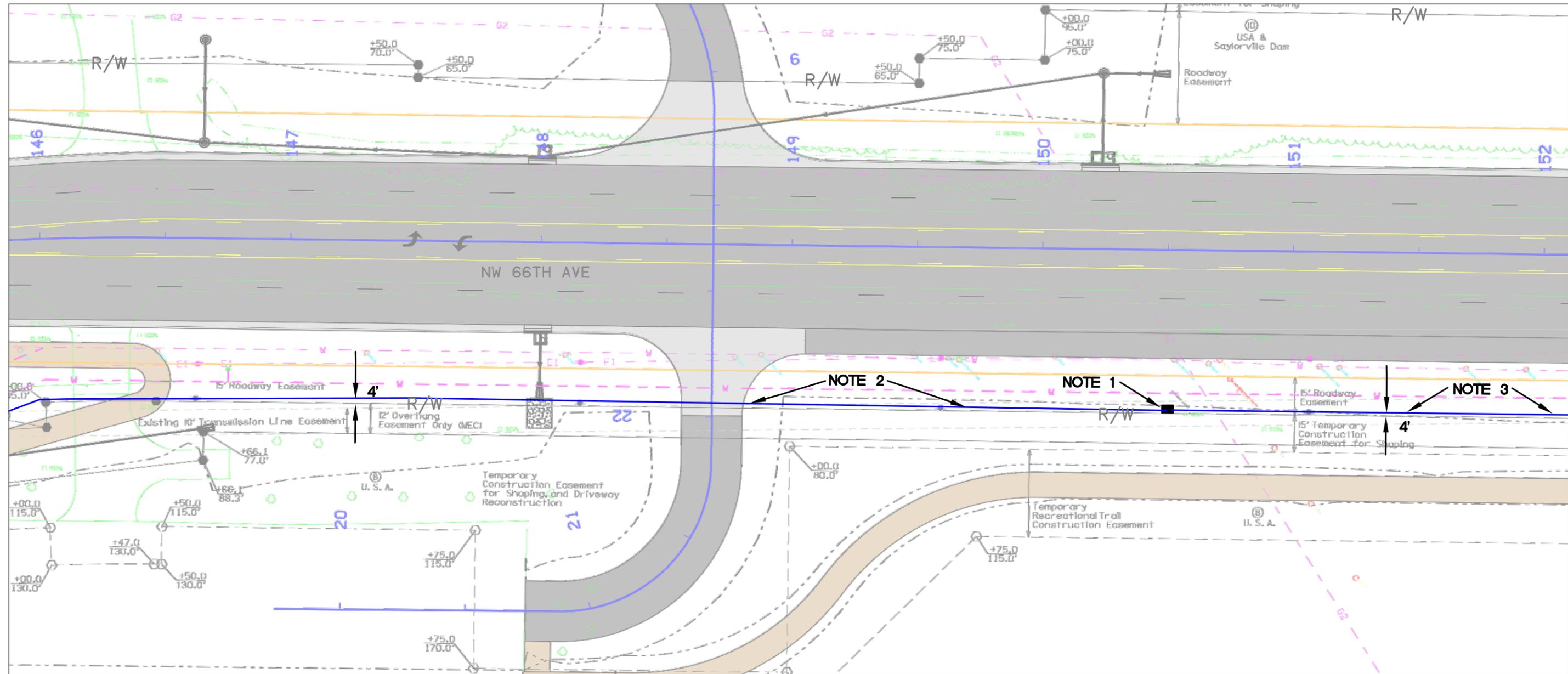
1. PLACE PROPOSED HH# 7, 4' OFF ROW LINE (STA. 144+50, 71' RT.)
2. BORE A 2" DIA. HDPE DUCT APPROXIMATELY 50' FROM HH# 7 TO THE STEEL CONDUIT STUB ON THE BRIDGE WING WALL. USE A TRANSITION COUPLING TO CONNECT THE 2" DIA. HDPE DUCT TO THE 1 1/2" DIA. STEEL CONDUIT. CONFIRM THE LOCATION OF CONDUIT STUB WITH BRIDGE CONTRACTOR.
3. 1 1/2" DIA. STEEL CONDUIT IN BRIDGE DECK FOR ICN FIBER.
4. BORE A 2" DIA. HDPE DUCT FROM HH# 7 TO HH# 8 (APPROXIMATELY 600') MAINTAIN 4' OFFSET FROM ROW AND 10' MIN. DEPTH, EXCEPT WHERE NOTED.
5. FOLLOW CHANGE IN ROW FOR DUCT PLACEMENT STA. 145+61, 71' RT. TO STA. 146+00, 61' RT (10' MIN. DEPTH).
6. EXERCISE CARE IN THE PROXIMITY OF THE 30" DIA. WATER MAIN.

IOWA COMMUNICATIONS NETWORK		THIS DRAWING IS PROVIDED FOR GENERAL INFORMATION ONLY AND IS NOT TO BE USED TO DETERMINE PRECISE ION PLACEMENT. CALL ONE CALL BEFORE EXCAVATION (1-800-292-8989)	
400 EAST 14TH STREET, GRIMES STATE OFFICE BUILDING, DES MOINES, IOWA 50319 ICN © 2015, COPY WITH PERMISSION		ICN	
1	CONSTRUCTION DRAWINGS	MARCH 2016	SCALE: NONE SIZE: 11 x 17
			NW 66th AVENUE BRIDGE FIBER RELOCATION DES MOINES, IOWA
			SHEET 10 of 13



MATCHLINE SHEET 10

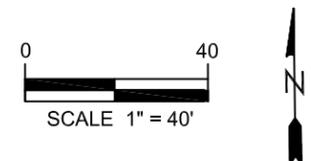
MATCHLINE SHEET 12



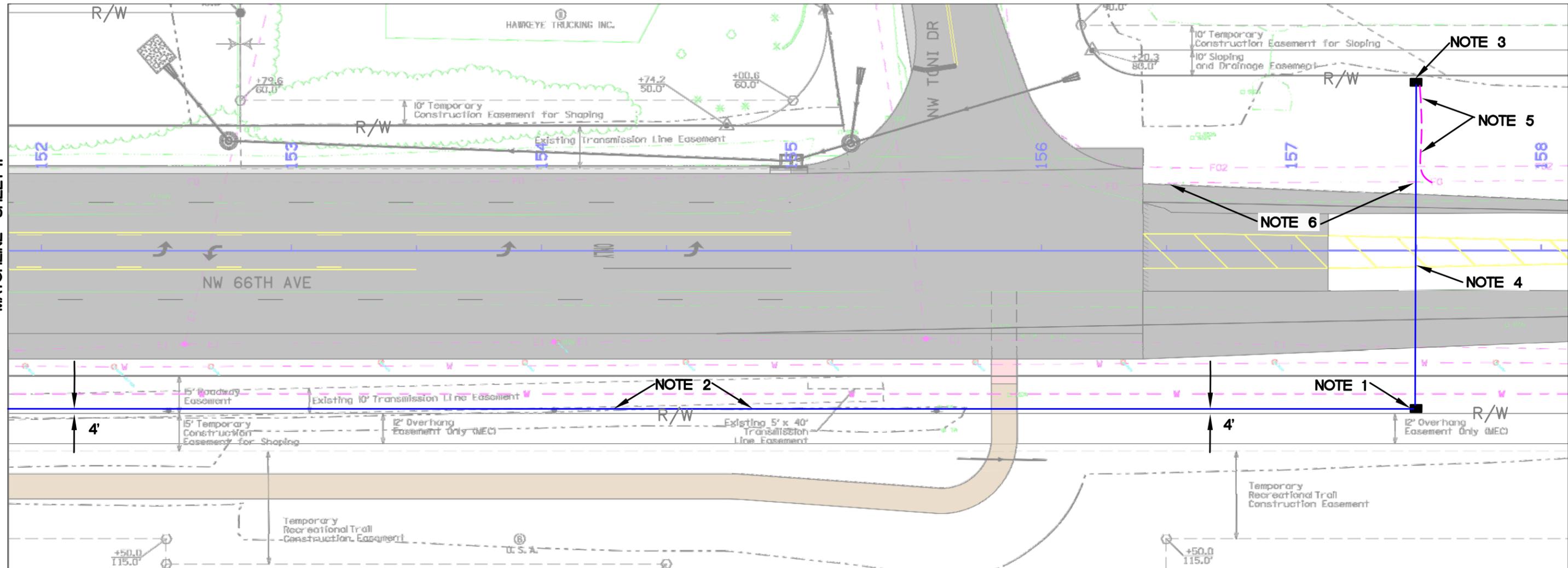
PROJECT NOTES:

1. PLACE PROPOSED HH# 8, 4' OFF ROW LINE (STA. 150+50, 61' RT.)
2. BORE A 2" DIA. HDPE DUCT FROM HH# 7 TO HH# 8 (APPROXIMATELY 600') MAINTAIN 4' OFFSET FROM ROW (10' MIN. DEPTH) EXCEPT WHERE NOTED. (SEE SHEET #10)
3. BORE A 2" DIA. HDPE DUCT FROM HH# 8 TO HH# 9 (APPROXIMATELY 700') MAINTAIN 4' OFFSET FROM ROW (10' MIN. DEPTH) EXCEPT WHERE NOTED. (SEE SHEET #12)
4. EXERCISE CARE IN THE PROXIMITY OF THE 30" DIA. WATER MAIN.

IOWA COMMUNICATIONS NETWORK <small>400 EAST 14TH STREET, GRIMES STATE OFFICE BUILDING, DES MOINES, IOWA 50319 ICN © 2015, COPY WITH PERMISSION</small>		<small>THIS DRAWING IS PROVIDED FOR GENERAL INFORMATION ONLY AND IS NOT TO BE USED TO DETERMINE PRECISE ION PLACEMENT. CALL ONE CALL BEFORE EXCAVATION (1-800-292-8989)</small>		
		1 CONSTRUCTION DRAWINGS	MARCH 2016	
NW 66th AVENUE BRIDGE FIBER RELOCATION DES MOINES, IOWA				
SHEET 11 of 13				



MATCHLINE SHEET 11



PROJECT NOTES:

1. PLACE PROPOSED HH# 9, 4' OFF ROW LINE (STA. 157+50, 61' RT.)
2. BORE A 2" DIA. HDPE DUCT FROM HH# 8 TO HH# 9 (APPROXIMATELY 700') MAINTAIN 4' OFFSET FROM ROW (10' MIN. DEPTH) EXCEPT WHERE NOTED. (SEE SHEET #11)
3. PLACE PROPOSED HH# 10, 4' OFF ROW LINE (STA. 157+50, 66' LT.)
4. BORE A 2" DIA. HDPE DUCT UNDER NW 66TH AVE. BETWEEN HH# 9 AND HH# 10. (APPROXIMATELY 127') EXERCISE CARE IN THE PROXIMITY OF THE 30" DIA. WATER MAIN.
5. TRENCH APPROXIMATELY 43' BETWEEN THE EXISTING ICN CABLE AND PROPOSED HH# 10.
6. EXPOSE 100' OF EXISTING 84F CABLE. AT CUT-OVER CUT THE CABLE AT THE WEST END (STA. 156+50) AND RELOCATE TO PROPOSED HH# 10.
7. PULL 7000' OF ICN SUPPLIED 96F ARMORED CABLE BETWEEN HH# 1 AND HH# 10. LEAVE A 50' SPLICE TAIL AT HH# 1 AND HH# 10. LEAVE A 50' SLACK COIL IN HH'S # 2-9
8. ALL FIBER TO HAVE A MINIMUM OF 30" OF COVER. FIBER UNDER PAVED DRIVES AND STREETS TO BE A MINIMUM OF 48" BELOW TOP OF SLAB.

SPlicing NOTES:

1. WINDSTREAM WILL PULL A 12F CABLE INTO HH # 1 IN ADDITION ICN'S CONTRACTOR INSTALLING A 96F CABLE. SPLICE THE FIRST 84F OF THE EXISTING 96F CABLE TO THE FIRST 84F OF THE NEW 96F CABLE. SPLICE THE LAST 12F OF THE EXISTING 96F CABLE TO THE 12F WINDSTREAM CABLE. COIL THE LAST 12F OF THE NEW 96F CABLE AND STOW IN THE TRAY.(DO NOT CUT OFF) BOND THE TWO ARMOR SHEATHS OF THE TWO 96F CABLES THROUGH THE CASE WITH THE ICN SUPPLIED SHIELD BONDING KIT.
2. AT HH # 10 SPLICE THE FIRST 84F OF THE NEW 96F CABLE TO THE EXISTING 84F CABLE. COIL THE REMAINING 12F OF THE NEW 96F CABLE AND STOW IN THE TRAY.(DO NOT CUT OFF) BOND THE ARMORED SHEATHS OF THE 2 CABLES THROUGH THE CASE WITH THE ICN SUPPLIED SHIELD BONDING KIT.
3. THE CONTRACTOR SHALL HAVE A SPLICER MOBILIZED AT EACH END OF THE PROJECT FOR CUT OVER.

IOWA COMMUNICATIONS NETWORK		THIS DRAWING IS PROVIDED FOR GENERAL INFORMATION ONLY AND IS NOT TO BE USED TO DETERMINE PRECISE ION PLACEMENT. CALL ONE CALL BEFORE EXCAVATION (1-800-292-8989)	
400 EAST 14TH STREET, GRIMES STATE OFFICE BUILDING, DES MOINES, IOWA 50319 ICN © 2015, COPY WITH PERMISSION			
1	CONSTRUCTION DRAWINGS	MARCH 2016	SCALE: NONE SIZE: 11 x 17
			NW 66th AVENUE BRIDGE FIBER RELOCATION DES MOINES, IOWA
			SHEET 12 of 13
W:\OSP\OSP PROJECTS\BRODERICK\Polk County\77160603 - Johnston - NW 66th Ave Bridge Relocate\NW 66th Bridge2.dwg			

HANDHOLE PLACEMENT TYPICAL

24" X 36" X 30" HAND HOLE

