

SEE SHEET 2 FOR
INDEX OF SHEETS,
GENERAL NOTES,
AND
COMMITMENTS

Project Description:

Proposed residential network buildout

Geographic Information:

State: Illinois
County: McHenry
City: Lake in the Hills

List of Permitting Authorities:

1. City of Lake in the Hills
2. None
3. None
4. None
5. None
6. None

i3Broadband - Engineering Department
PHONE: (309) 670-0400 ext. 400
EMAIL: engineering@i3broadband.com

Project Designer: **Joe Carrington**
Const. Manager: **Nemanja Stanojevic**
Market Manager: **Coty Keosprasa**



FOR LOCATING SERVICES
CALL: (800) 892-0123 (IL)
(800) 344-7483 (MO)
or 811 (US)

Printed: 2/7/2025
Time: 1:10 PM



PLANS FOR PROPOSED FIBER INSTALLATION

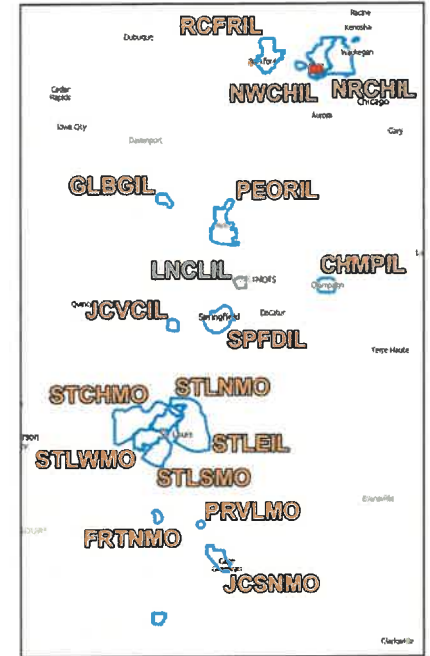
Market: NWCHIL

Chassis: NWCHILMXKC03

Sector: NWCHIL2051

Bore Footage: 8987

Passings: 184



**SUBMITTED
FOR PERMITTING**

INDEX OF SHEETS

C1	Cover Sheet
N1	Index, General Notes, and Commitments Sheet
DT1	Typical Vault Details Sheet
DT2	Typical Vault Installation Details Sheet
L1	Symbol Reference Legend Sheet
PO1	Project Overview Map
D1 - D4	Duct and Vault Installation Maps
F1 - F4	Fiber Installation Maps

SPECIAL PERMITTING COMMITMENTS

GENERAL PLAN NOTES

- These notes shall be applicable to all operations performed under this contract, except when they conflict with any SPECIAL PERMIT COMMITMENTS (SEE THIS SHEET). In such cases, the notes in that section shall supercede these notes.
- All care should be taken to mitigate damage to existing utilities. OneCall shall be contacted before any boring or excavation.
- Note that handholes drawn on the shared lot line can be adjusted to either side of the lot line as necessary, which is standard on i3Broadband prints. Handholes that are shifted to one side of a lot line need to be placed on that side of the lot line, generally to comply with an easement, or to avoid a driveway or large tree.
- Construction change order requests shall be coordinated with the appropriate i3 Construction Department Representative and CLEARLY DOCUMENTED ON THESE PLANS AS RED-LINED AS-BUILT DRAWINGS.
- Any damage to adjacent properties caused by construction operations within the work area shall be fully restored to their ORIGINAL CONDITION.
- Dimensions (approximate, in feet) shown generally indicate total Right-of-Way width, or Utility Easement width relative to nearest lot line. Rights-of-Way and Utility Easements are not necessarily uniform (i.e. not split evenly a cross street centerline or property line). Contact i3 as needed for clarity.
- SLACK NOTES:
 -All taps are to have 4' of slack at the head, 55' at the splice case, and no slack storage anywhere else.
 -Mainline cable to have 55' at all ends/cut points and 110' at all #3 or larger handholes where cable is uncut.
 -Any other abnormalities will be noted on prints.
- The CONTRACTOR shall be required to comply with all Federal, State, and Local laws/ordinances, in addition to all i3broadband contract documents.

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602 High Point Lane
East Peoria, Illinois
(309) 670-0400 ext. 400
i3broadband.com

RESERVED
FOR SHEET
NORTH ARROW
AND SCALE

PROJECT ENGINEER:

Joe Carrington

REVISIONS

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/ /24 | No. _____

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/ /24 | No. _____

/ /24 | No. _____

PROPOSED FIBER INSTALLATION PLANS

INDEX, GENERAL NOTES, AND COMMITMENTS

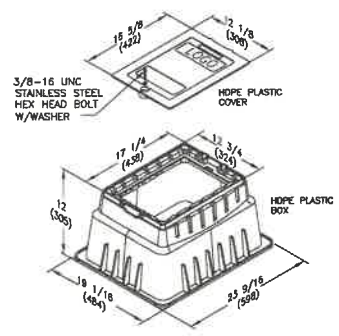
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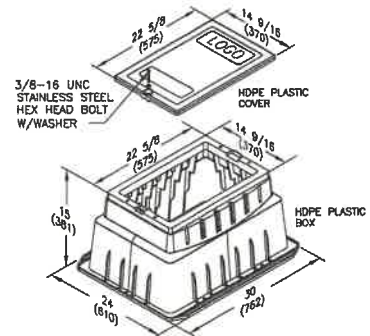
SHEET:

N1

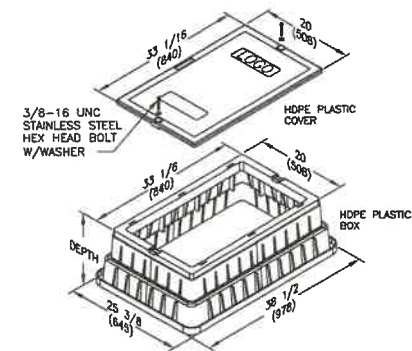
TYPICAL VAULT (HANDHOLE) DETAILS



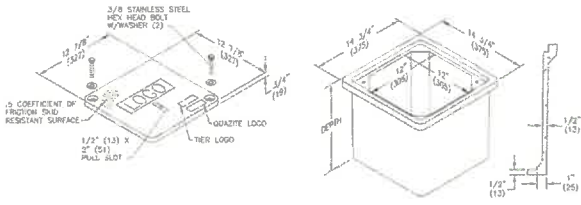
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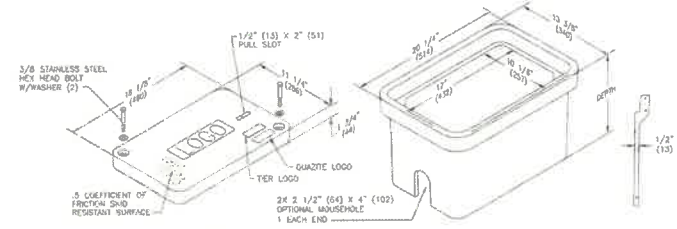
HH2 (PED RATED) (PE-20 or Eq.)



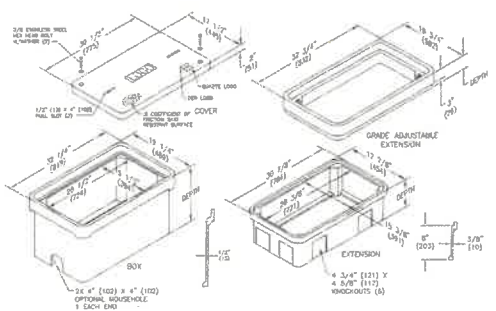
HH3 (PED RATED) (PE-30 or Eq.)



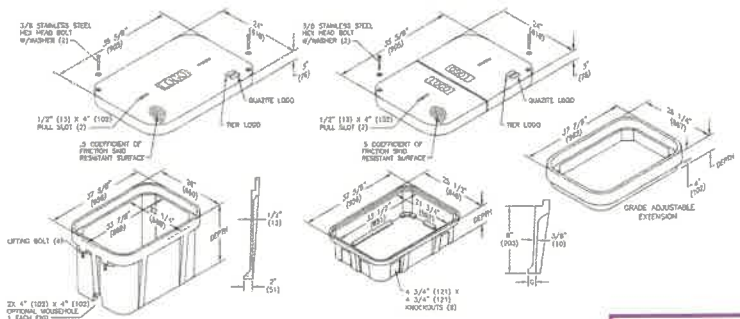
HH0 (TIER15 RATED)



HH1 (TIER15 RATED) (QUAZITE 11x18 or Eq.)



HH3 (TIER15 RATED) (QUAZITE 17x30 or Eq.)



HH6 (TIER15 RATED) (QUAZITE 24x36 or Eq.)

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Note: Dimensions shown on this sheet represent typical vault/handhole configurations based on Broadband's preferred manufacturer specifications. Minor variations in dimensions may exist between various vault/handhole manufacturers.

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PROJECT ENGINEER:
Joe Carrington

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/	/ 24 No. _____
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/	/ 24 No. _____
/	/ 24 No. _____

PROPOSED FIBER INSTALLATION PLANS

TYPICAL VAULT (HANDHOLE) DETAILS

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SECTOR: NWCIL2051

SHEET:
DT1

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PROJECT ENGINEER:

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PROPOSED FIBER INSTALLATION PLANS

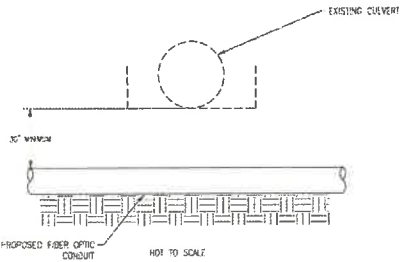
TYPICAL VAULT INSTALLATION DETAILS

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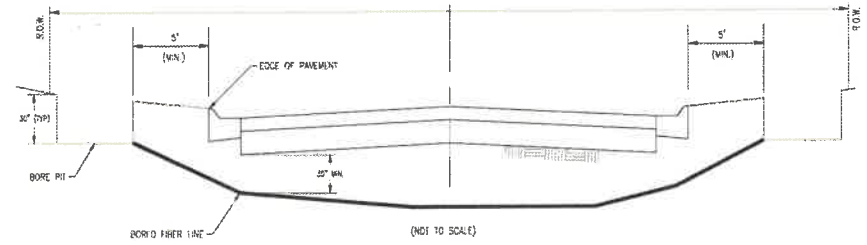
SECTOR: NWCHIL2051

SHEET:

DT2



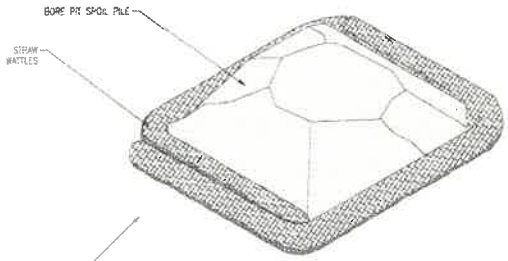
FIBER OPTIC CONDUIT AND CULVERT SEPARATION TYPICAL VERTICAL SEPARATION



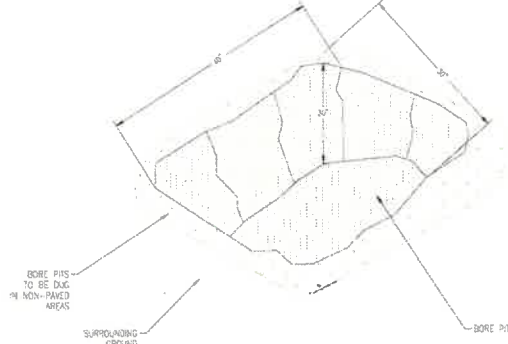
BORED ROAD CROSSING TYPICAL DETAIL

NOTES
 1. DETAIL TO BE CONSULTED WHEN PLANS INDICATE A HANDHOLE ON EITHER SIDE OF A ROAD CROSSING. IF A HANDHOLE IS INDICATED ON ONLY ONE SIDE OF THE ROADWAY, THE BORE MAY CONTINUE BEYOND THE CROSSING. DISTANCES AND DEFINES AS SHOWN ON THE DETAIL ARE STILL APPLICABLE.

ADDITIONAL NOTES
 1. CONTRACTOR TO APPLY FOR EROSION CONTROL PERMITS TO CITY PRIOR TO CONSTRUCTION.
 2. ALL AREAS OCCURRED BY CONSTRUCTION TO BE REPAIRED IN KIND WITH LIKE MATERIALS.
 3. RESTORATION OF UNPAVED/FOREST AREAS SHALL BE AS FOLLOWS:
 1. TOPSOIL REMOVED DURING DISTURBANCE SHALL BE SALVAGED.
 2. UPON BACKFILLING OF EXCAVATION, PROVIDE 4" TOPSOIL AT SURFACE.
 3. PROVIDE CLASS A SEED AND FERTILIZER PER CITY ROAD AND BRIDGE CONSTRUCTION SPECIFICATIONS.
 4. COVER AREAS WITH 140 LB 15' EROSION CONTROL BLANKET, OR APPROVAL EQUIV.
 A. BLANKET TO EXTEND MINIMUM OF 6' BEYOND AREA TO BE RESTORED.
 B. BLANKET TO BE ANCHORED PER MANUFACTURER'S REQUIREMENTS.
 C. ANY BLANKET OVERLAPS SHALL BE A MINIMUM OF 12".
 D. WHEN BLANKET IS PLACED ON A SLOPE, THE DOWNSTREAM BLANKET SHALL BE BENEATH THE UPSTREAM.
 4. DISTURBANCE OF PAVEMENT/HARD SURFACES IS TO BE AVOIDED. IF THIS IS UNAVOIDABLE, CONTRACTOR TO COORDINATE WITH UTILITY ENGINEER, AND CITY ON THE PROPER PLACEMENT OF THE UTILITY AND NEIGHBORING UTILITIES FOR RESTORATION. SITE-SPECIFIC ADDITIONAL DETAILS WILL BE PROVIDED TO CITY BY UTILITY AND ENGINEER IN THESE INSTANCES.



NOT TO SCALE



NOT TO SCALE

NOTES:
 1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
 2. FIBER ROLLS SHOULD BE INSPECTED AFTER EVERY SIGNIFICANT STORM EVENT TO CLEAR AND DISPOSE OF SEDIMENT AND DEBRIS.

SPECIFICATIONS:
 WATTLES SHALL BE A STRAW-FILLED TUBE OF FLEXIBLE NETTING MATERIAL. IT SHALL BE A MACHINE PRODUCED TUBE OF COMPACTED ROE STRAW THAT IS CERTIFIED WEED FREE FORMER, BY A MANUFACTURER WHOSE PRINCIPAL BUSINESS IS WATTLE MANUFACTURING. THE NETTING SHALL CONSIST OF SEAMLESS, HIGH DENSITY POLYESTER, AND SHALL HAVE A WEIGHT AND COVER ULTRAVIOLET LIGHT INHIBITORS. THE WATTLE SHALL HAVE A MINIMUM MASS PER UNIT WEIGHT OF 1.6 LBS./YD², A MINIMUM DIAMETER OF 8.0 - 9.0 INCHES, A MINIMUM NET STITCH THICKNESS OF 0.03 INCHES, A MINIMUM NET KNOT THICKNESS OF 0.055 INCHES AND A MINIMUM NETTING UNIT WEIGHT OF 0.35 GUNZES/FOOT. THE SEDIMENT RETENTION CAPACITY OF THE WATTLE SHALL BE 30 LBS./FOOT. FIBRE CONTENT SHALL BE 100 PERCENT CERTIFIED ROE STRAW WITH A MINIMUM LENGTH OF 3.0.

NOTES:
 1. BORE PITS TO BE REQUIRED ON 18" (PE-30 OR EO) AND LARGER HANDHOLES.
 2. EROSION AND SEDIMENT CONTROL FOR BORE PITS PER STANDARD DETAIL.
 3. BORE PITS TO BE DUG IN NON-PAVED AREAS ONLY. DISTANCE FROM PAVEMENT PER CITY ORDINANCE, NOT TO BE LESS THAN 5 FEET. NO CURB RAMPS MAY BE DISRUPTED.
 4. IF BORE PITS IN PAVED AREAS ARE UNAVOIDABLE, CONTRACTOR TO COORDINATE WITH ENGINEER AND CITY ON LOCATION AND RESTORATION REQUIREMENTS.
 5. BORE PIT TO BE EXCAVATED NO MORE THAN 48 HOURS IN ADVANCE OF BORING OPERATIONS. BORE PIT SHALL BE BACKFILLED WITHIN 48 HOURS OF COMPLETION OF BORING OPERATION AND INSTALLATION OF HANDHOLE.

EROSION & SEDIMENT CONTROL BORE PIT SPOIL PILE

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SYMBOL REFERENCE LEGEND

RESERVED
 FOR SHEET
 NORTH ARROW
 AND SCALE

PROJECT ENGINEER:
 Joe Carrington

REVISIONS
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PROPOSED FIBER INSTALLATION PLANS
SYMBOL REFERENCE LEGEND
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 SECTOR: NWCHIL2051

SHEET:
11

CONSTRUCTION

- Duct/Conduit**
 - - - Primary
 - - - Secondary
 - - - Third Order
 - - - Fourth Order
 - - - In Building
- Shelters**
 Shelters
- Cabinets**
 Cabinets
- Vaults/Handholes**
Pedestrian Rated
 Unknown Size (Pedestrian)
 HH 0 (12x12 or eq.)
 HH 1 (PE-14 or eq.)
 HH 2 (PE-20 or eq.)
 HH 3 (PE-30 or eq.)
 HH 6 (2x3 or eq.)
Tier 15 Rated
 Unknown Size (Tier Rated)
 HH 0 (12x12 or eq.)
 HH 1 (PE-14 or eq.)
 HH 2 (PE-20 or eq.)
 HH 3 (PE-30 or eq.)
 HH 6 (2x3 or eq.)
 HH 12 (3x4 or eq.)
 HH 15 (3x5 or eq.)
 HH 16 (4x4 or eq.)
Unknown/Other
 Unknown Type/Size (3 Owned, See Notes)
- Building Terminations (OFDCs)**
 Building Terminations (OFDCs)
- Cable Terminations**
 Cable Terminations
- Duct Terminations**
 Buried Endcap
 Stubbed Above Ground (Bldg. Termination)
 Well Box
 Other/Unknown
- Splice Cases**
 Type A Starfighter 3000
 3M
 Type B
 Type B (No Grounding)
 Type C Coyote
 Type D
 Type D (No Grounding)
- Internal Taps**
 2 Ports
 4 Ports
 6 Ports
 8 Ports
 12 Ports
- Splitters**
 Calk
 Zone
 Unknown
- Additional Cable Slack**
 Additional Cable Slack
- Taps**
 2 Ports
 4 Ports
 6 Ports
 8 Ports
 12 Ports
- Mainline Cables**
 1F
 4F
 6F
 8F
 12F
 24F
 48F
 72F
 96F
 144F
 216F
 288F
 432

INSTALLED

- Duct/Conduit**
 - - - Primary
 - - - Secondary
 - - - Third Order
 - - - Fourth Order
 - - - In Building
 - - - <all other values>
- Shelters**
 Shelters
- Cabinets**
 Cabinets
- Vaults/Handholes**
Pedestrian Rated
 Unknown Size (Pedestrian)
 HH 0 (12x12 or eq.)
 HH 1 (PE-14 or eq.)
 HH 2 (PE-20 or eq.)
 HH 3 (PE-30 or eq.)
 HH 6 (2x3 or eq.)
Tier 15 Rated
 Unknown Size (Tier Rated)
 HH 0 (12x12 or eq.)
 HH 1 (PE-14 or eq.)
 HH 2 (PE-20 or eq.)
 HH 3 (PE-30 or eq.)
 HH 6 (2x3 or eq.)
 HH 12 (3x4 or eq.)
 HH 15 (3x5 or eq.)
 HH 16 (4x4 or eq.)
Unknown/Other
 Unknown Type/Size (3 Owned, See Notes)
- Third Party Vaults/Handholes**
 BBN (Formerly REG) Handhole
 Stratus Handhole
 3rd Party (All Other)
- Fiber Manholes**
 AT&T Manhole
 Fiber Optic Manhole
- Building Terminations (OFDCs)**
 Building Terminations (OFDCs)
- Cable Terminations**
 Cable Terminations
- Duct Terminations**
 Buried Endcap
 Stubbed Above Ground (Bldg. Termination)
 Well Box
 Other/Unknown
- Duct Field Repairs**
 Duct Field Repairs
- Splice Cases**
 Type A Starfighter 3000
 3M
 Type B
 Type B (No Grounding)
 Type C Coyote
 Type D
 Type D (No Grounding)
 Gator (Field Repair)
- Internal Taps**
 2 Ports
 4 Ports
 6 Ports
 8 Ports
 12 Ports
- Splitters**
 Calk
 Zone
 Unknown
- Additional Cable Slack**
 Additional Cable Slack
- Taps**
 2 Ports
 4 Ports
 6 Ports
 8 Ports
 12 Ports
- Mainline Cables**
 1F
 4F
 6F
 8F
 12F
 24F
 48F
 72F
 96F
 144F
 216F
 288F
 432


MISC.

- Utility Easement**
 Utility Easement
- Parcels**
 Duct and Vault Installation Maps
 Fiber Installation Maps
- Sector Boundaries**
 Cover & Index Map (Project)
 Index Map (All)
 Project Sector
 Non Project Sectors
- Drop Arrows**
 Drop Arrow (Visible)
- Index Sheet Borders**
 Project Sheet Boundaries


**SUBMITTED
 FOR PERMITTING**

Facilities leaving project boundaries shown only for reference. Only facilities entirely inside of project boundaries to be considered part of the project scope unless otherwise specified.





602 High Point Lane
East Peoria, Illinois
(309) 670-0400 ext. 400
l3broadband.com



0 25 50 75 100 Feet
SCALE: 1 INCH = 50 FEET
NCS, USA Continental Equidistant Conic

SHEET NOTES:

1. See Sheet D12 for typical road crossing and bore pit details.
2. Method of conduit installation shall be either Directional Bore or Missile Bore, UNLESS OTHERWISE NOTED ON THE PLANS OR SPECIAL PERMITTING COMMITMENTS (See Sheet N1).
3. Additional conduit locations (other than Primary) are shown offset for representation ONLY. Additional ducts shall follow the same general bore-path as the Primary Duct.

PROJECT ENGINEER:
Joe Carrington


REVISIONS	
/	/24 No. _____
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PROPOSED FIBER INSTALLATION PLANS	FIBER INSTALLATION PLAN MAPS	Printed: 2/7/2025 Time: 3:08 PM
SECTOR: NWCHIL2051		


SHEET:
D3

Facilities leaving project boundaries shown only for reference. Only facilities entirely inside of project boundaries to be considered part of the project scope unless otherwise specified.





602 High Point Lane
East Peoria, Illinois
(309) 670-0400 ext. 400
ibroadband.com



SCALE: 1 INCH = 50 FEET
PCS: USA Contiguous Equatorial Conic

SHEET NOTES:

- See Sheet 012 for typical road crossing and bore pit details.
- Method of conduit installation shall be either Directional Bore or Missile Bore, UNLESS OTHERWISE NOTED ON THE PLANS OR SPECIAL PERMITTING COMMENTS (See sheet N1).
- Additional conduit locations (other than Primary) are shown offset for representation ONLY. Additional ducts shall follow the same bore-path as the Primary Duct.

PROJECT ENGINEER:
Joe Carrington

REVISIONS	
/	/ 24 No. _____
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/	/ 24 No. _____

PROPOSED FIBER INSTALLATION PLANS

FIBER INSTALLATION PLAN MAPS

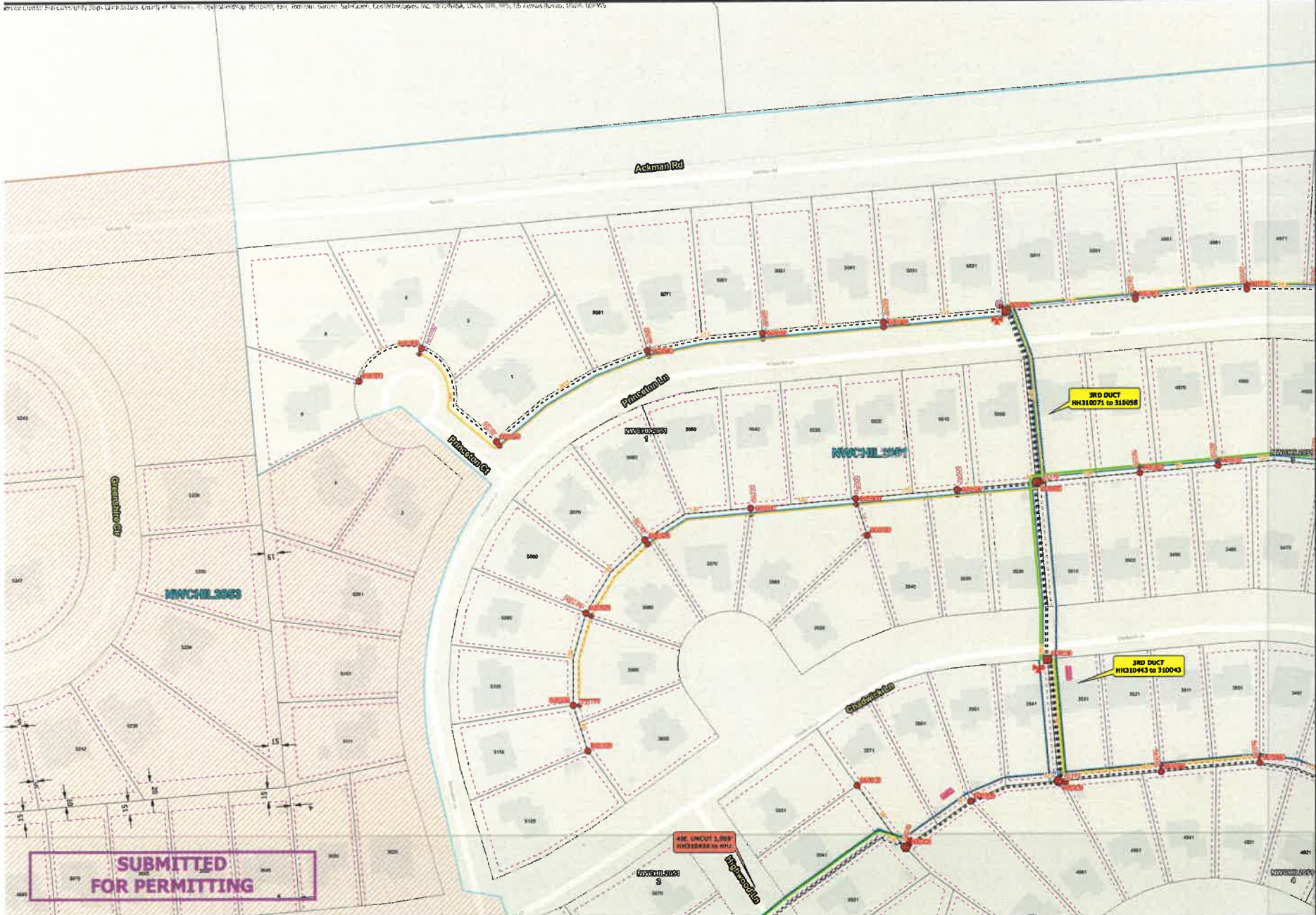
SECTOR: NWCHIL2051

Printed: 2/7/2025
Time: 3:08 PM

SHEET:
D4

Facilities leaving project boundaries shown only for reference. Only facilities entirely inside of project boundaries to be considered part of the project scope unless otherwise specified.

PROJECT LOCATION: East Peoria, IL 61626, Peoria County, IL. PROJECT NUMBER: 20250101. DATE: 2/7/2025. DRAWN BY: J. Carrington. CHECKED BY: J. Carrington. SCALE: 1" = 50'. SHEET: F1. PROJECT: Broadband.



Broadband
 602 High Point Lane
 East Peoria, Illinois
 (309) 670-0400 ext. 400
 broadband.com

0 25 50 75 100 Feet
 SCALE: 1" INCH = 50 FEET
 PCS, USA Commercial Equipment Co., Inc.

- SHEET NOTES:**
1. Fiber cables and taps are shown as offset from proposed conduit for cartographic representation ONLY. Fiber shall be installed within proposed conduit.
 2. Contractor shall field verify all dimensions prior to installing fiber cable.
 3. See Sheet N1 for installed fiber cable stack requirements.

PROJECT ENGINEER:
 Joe Carrington

REVISIONS

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/	/ 24	No. _____
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PROPOSED FIBER INSTALLATION PLANS
FIBER INSTALLATION PLAN MAPS
 SECTOR: NWCHEL2051

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SHEET:
F1

Facilities leaving project boundaries shown only for reference. Only facilities entirely inside of project boundaries to be considered part of the project scope unless otherwise specified.





602 High Point Lane
East Peoria, Illinois
(309) 670-0400 ext. 400
13broadband.com



0 25 50 75 100 Feet
SCALE: 1 INCH = 50 FEET
PCS USA Contour Lines Equal Start Contour

SHEET NOTES:

1. Fiber cables and taps are shown as offset from proposed conduit for cartographic representation ONLY. Fiber shall be installed within proposed conduit.
2. Contractor shall field verify all dimensions prior to installing fiber cable.
3. See Sheet W1 for installed fiber cable stack requirements.

PROJECT ENGINEER:
Joe Carrington

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PROPOSED FIBER INSTALLATION PLANS

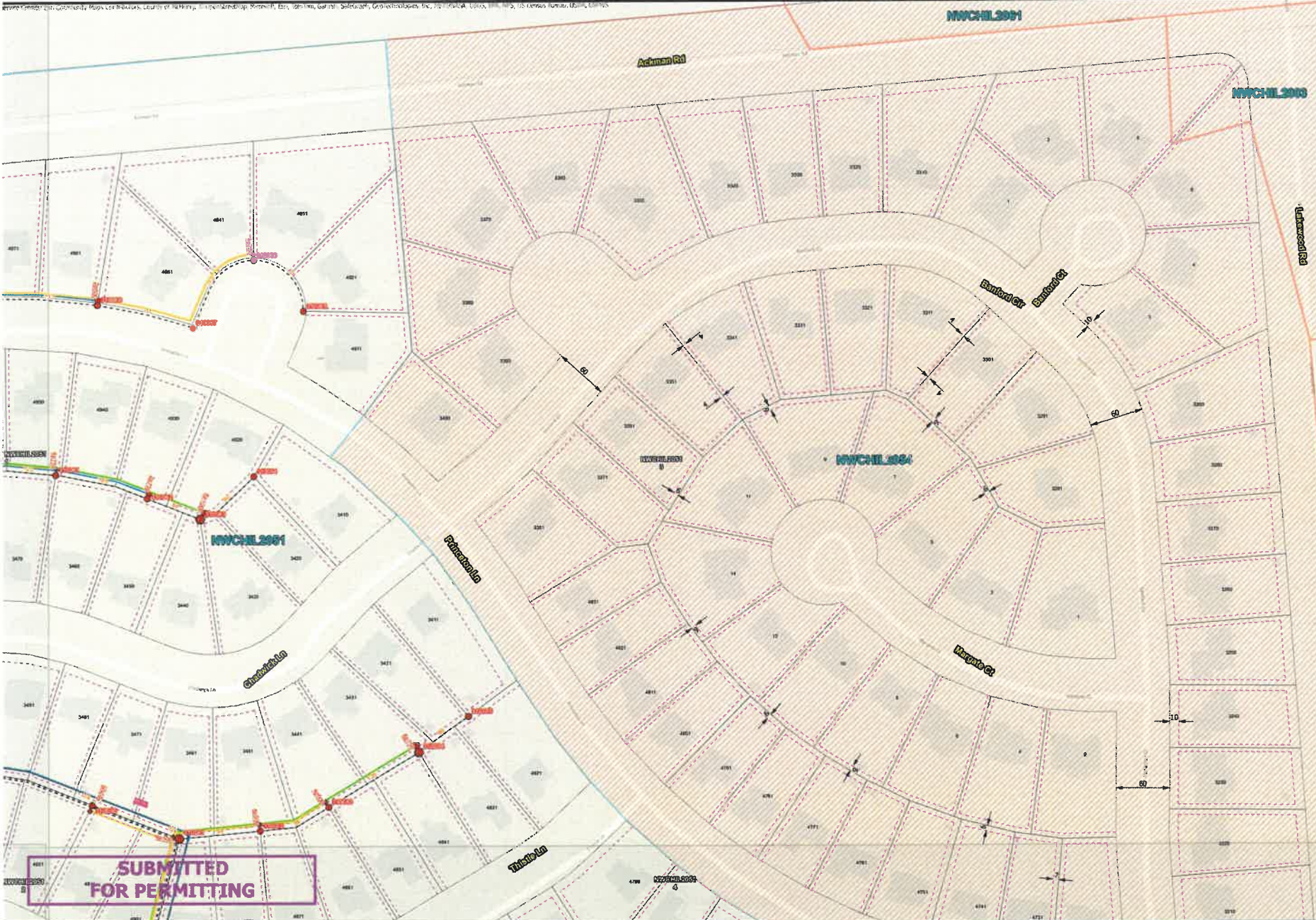
FIBER INSTALLATION PLAN MAPS

SECTOR: NWCHIL2051

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SHEET: **F2**

Facilities leaving project boundaries shown only for reference. Only facilities entirely inside project boundaries to be considered part of the project scope unless otherwise specified.



Broadband
 602 High Point Lane
 East Peoria, Illinois
 (309) 670-0400 ext. 400
 ibroadband.com

0 25 50 75 100 Feet
 SCALE: 1 INCH = 50 FEET
 PCS: USA Continuous Equidistant Conic

- SHEET NOTES:**
1. Fiber cables and taps are shown as offset from proposed conduit for cartographic representation ONLY. Fiber shall be installed within proposed conduit.
 2. Contractor shall field verify all dimensions prior to installing fiber cable.
 3. See Sheet N1 for installed fiber cable slack requirements.

PROJECT ENGINEER:
 Joe Carrington

REVISIONS	
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/	/ 24 No. _____

PROPOSED FIBER INSTALLATION PLANS
FIBER INSTALLATION PLAN MAPS
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SECTOR: NWCHEL2051

SHEET:
F3

