



City of Chicago



O2013-5621

Office of the City Clerk

Document Tracking Sheet

Meeting Date: 7/24/2013

Sponsor(s): Emanuel, Rahm (Mayor)

Type: Ordinance

Title: Use agreement with ExteNet Systems, Inc. for construction and installation of conduit, fiber and node facilities in public ways

Committee(s) Assignment: Committee on Economic, Capital and Technology Development

1. 2.

AUTHORIZATION FOR EXECUTION OF USE AGREEMENT WITH EXTENET SYSTEMS, INC. FOR CONSTRUCTION AND INSTALLATION OF CONDUIT, FIBER AND NODE FACILITIES IN THE PUBLIC WAYS AND FOR THE EXECUTION OF AN INDEFEASIBLE RIGHT OF USE AGREEMENT WITH EXTENET SYSTEMS, INC. GRANTING THE CITY THE PERPETUAL USE OF ONE HUNDRED AND FORTY-FOUR DEDICATED SINGLE MODE STRANDS OF FIBER OPTIC CABLE

WHEREAS, The City of Chicago (the "City") as a home rule unit under Article VII, Section 6 of the Constitution of the State of Illinois "may exercise any power and perform any function pertaining to its government and affairs; and

WHEREAS, The City wishes to encourage the development of high speed communications facilities throughout the City; and

WHEREAS, ExteNet Systems, Inc. is a Delaware corporation holding a Certificate of Public Convenience and Necessity issued by the Illinois Commerce Commission to provide telecommunications ("Grantee"); and

WHEREAS, Grantee is in the business of providing point-to-point signal transport services and telecommunications facilities for use by telecommunications retail carriers who in turn primarily provide wireless telecommunications services to consumers and businesses at the retail level (the "Wireless Carriers"); and

WHEREAS, Grantee desires to construct and install by open/cut trench or other City of Chicago Department of Transportation ("CDOT) approved methods in, under and over the public way six (6) distinct telecommunications networks each of which consist of an aerial cable path (collectively the "Aerial Path") and five (5) of which also consist of an underground conduit path (collectively the "Underground Path" and together with the Aerial Path, the "Conduit and Cable Paths") in certain portions of the City, as further set forth in the Plans (as hereinafter defined); and

WHEREAS, the Underground Path will consist of three (3) one and one-quarter (1 ¼) inch innerducts and the Aerial Path will consist of one (1) cable of the standard size to accommodate at least one hundred forty four (144) optical fiber strands and up to two hundred eighty eight (288) optical fiber strands to be attached on utility poles owned by ComEd, all to be operated by ExteNet as a telecommunications network for use by one or more Wireless Carriers to serve such Wireless Carriers' retail customers, other than the IRU Fiber granted to the City which will be used on an exclusive basis by the City. The Underground Path being identified and set forth in Grantee's thirteen (13) Under Ground Fiber Optic Facility plans prepared by the civil engineer at Gabe's Construction Company, Inc. ("Contractor") originally dated December 7, 2012, each as conditionally approved by CDOT on: June 10, 2013 (OUC EFP File #57586), June 11, 2013 (OUC EFP File #57623, #57629 and #57630), June 13, 2013 (OUC EFP File #57651, ExteNet- Ordinance_(7-23-13)_FINAL).doc

#57652, and #57653), June 21, 2013 (OUC EFP File #57829 and #57830), July 1, 2013 (OUC EFP File #57909 and #57910), July 5, 2013 (OUC EFP File #57911), and July 10, 2013 (OUC EFP File #58017) (the "Authorized Underground Routes"), and attached hereto as Exhibit A. The Aerial Path being identified and set forth in Grantee's six (6) aerial cable and equipment plans, as delivered to the City on July 16, 2013 (the "Authorized Aerial Routes" and together with the Authorized Underground Routes, the "Authorized Routes"), and attached hereto as Exhibit B; and

WHEREAS, Grantee also desires to install, operate and maintain twenty-four (24) nodes, which will consist of (i) an antenna of approximately twenty-three (23) inches in height and a diameter of ten (10) inches (tube-like), (ii) a remote radio head unit approximately twenty-four (24) inches, fourteen (14) inches in width and nine (9) inches in depth, (iii) a battery of approximately thirty-two (32) inches in height, twenty-three (23) inches in width and fifteen (15) inches in depth on utility poles owned by ComEd, and (iv) a total of six (6) manholes each approximately three (3) feet in height, three (3) feet in width and three (3) feet in length (collectively, the "Conduit and Cable Facilities," and together with the Conduit and Cable Paths, the "Conduit and Cable Improvements") in connection with the Conduit and Cable Paths in a portion of the City's public way as depicted in the Plans (except for those portions owned by parties other than the City, the "Authorized Facility Locations," and together with the Authorized Routes, the "Authorized Locations"); and

WHEREAS, Grantee will also be using numerous hub facilities located on certain private property that will be connected and used in conjunction with the Conduit and Cable Improvements; and

WHEREAS, Grantee has proposed that Grantee be permitted to construct, install, repair, replace, use, operate and maintain the Conduit and Cable Improvements in the Authorized Locations, and to provide the Conduit and Cable Improvements for use by Wireless Carriers; and

WHEREAS, in lieu of certain right of way fees applicable to the installation of the Conduit and Cable Improvements in the Authorized Locations, as further set forth in Exhibit C hereto, Grantee shall furnish the City with one (1) one and one-quarter (1 ¼) inch innerduct (the "City Innerduct") containing one hundred and forty-four (144) dedicated strands of single mode fiber in the Underground Path, as and to the extent the Underground Path and Conduit and Cable Facilities are constructed and ready for use, and an equal amount of single mode fiber in the Aerial Path, as and to the extent the Aerial Path and Conduit and Cable Facilities are constructed and ready for use, for the City's exclusive use in perpetuity (the "IRU Fiber"); provided however, that in addition to providing the City Innerduct and IRU Fiber, Grantee shall pay compensation and fees, as set forth in Exhibit C, related to the construction, installation, repair, replacement, use, operation, and maintenance of the Conduit and Cable Improvements by Grantee in the Authorized Locations (collectively, the "Compensation"); and

WHEREAS, the City desires to accept the Compensation and the right to use and access the City Innerducts and the IRU Fiber within the Conduit and Cable Paths; and

WHEREAS, the City and the Grantee have reached an agreement as to the basic terms under which Grantee will be permitted to construct, install, repair, replace, use, operate and maintain the Conduit and Cable Improvements, including the City Innerduct and IRU Fiber, in the Authorized Locations; and

WHEREAS, Grantee and the City are willing to negotiate and enter into a Conduit and Cable Path and Facility Use Agreement ("Use Agreement") containing the basic terms ("Basic Terms") in substantially the form attached hereto as Exhibit C, upon approval of the Basic Terms by ordinance of this City Council;

WHEREAS, Grantee and the City are also willing to negotiate and enter into an Indefeasible Right of Use (IRU) agreement ("IRU Agreement") containing basic terms (the "IRU Basic Terms") in substantially the form attached hereto as Exhibit D, upon approval of the IRU Basic Terms by ordinance of this City Council; now, therefore,

Be It Ordained by the City Council of the City of Chicago:

SECTION 1. Subject to approval of the Corporation Counsel as to form and legality, the Executive Director of the City's Office of Emergency Management and Communications ("OEMC"), the Commissioners of CDOT, the Department of Business Affairs and Consumer Protection ("BACP"), the Department of Innovation and Technology ("DoIT") (or any successor departments thereto) or any of their respective designees (collectively, the "Commissioners"), are authorized to execute, on behalf of the City, and the City Clerk is authorized to attest to, a Use Agreement between the City and the Grantee, incorporating the Basic Terms attached hereto as Exhibit C, subject to such changes as may be approved by the Commissioners, including the relocation of the Authorized Locations, subject to approval of the Corporation Counsel, their execution of the Use Agreement constituting conclusive evidence of their approval and this City Council's approval of any such changes or revisions therein from the Basic Terms, provided, however, that no such change or revision may permit installation of the Conduit and Cable Improvements anywhere but within the public ways accommodating the Authorized Locations, extend the term of the Use Agreement beyond that which is provided in the Basic Terms, reduce the consideration contrary to the provisions of the Basic Terms, or reduce the security provided the City below the level set forth in the Basic Terms without further action of this City Council.

SECTION 2. Subject to approval of the Corporation Counsel as to form and legality, the Commissioners are authorized to execute, on behalf of the City, and the City Clerk is authorized to attest to, the IRU Agreement between the City and the Grantee, incorporating the IRU Basic Terms attached hereto as Exhibit D, subject to such changes as may be approved by the Commissioners, including the relocation of the Authorized Locations, subject to approval of the Corporation Counsel, their execution of the IRU Agreement constituting conclusive evidence of their approval and this City Council's approval of any such changes or revisions therein from the IRU Basic Terms, provided, however, that no such change or revision may permit installation of the Conduit and Cable Improvements anywhere but within the public ways accommodating the

Exhibit A

Underground Routes

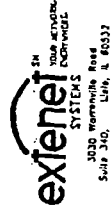
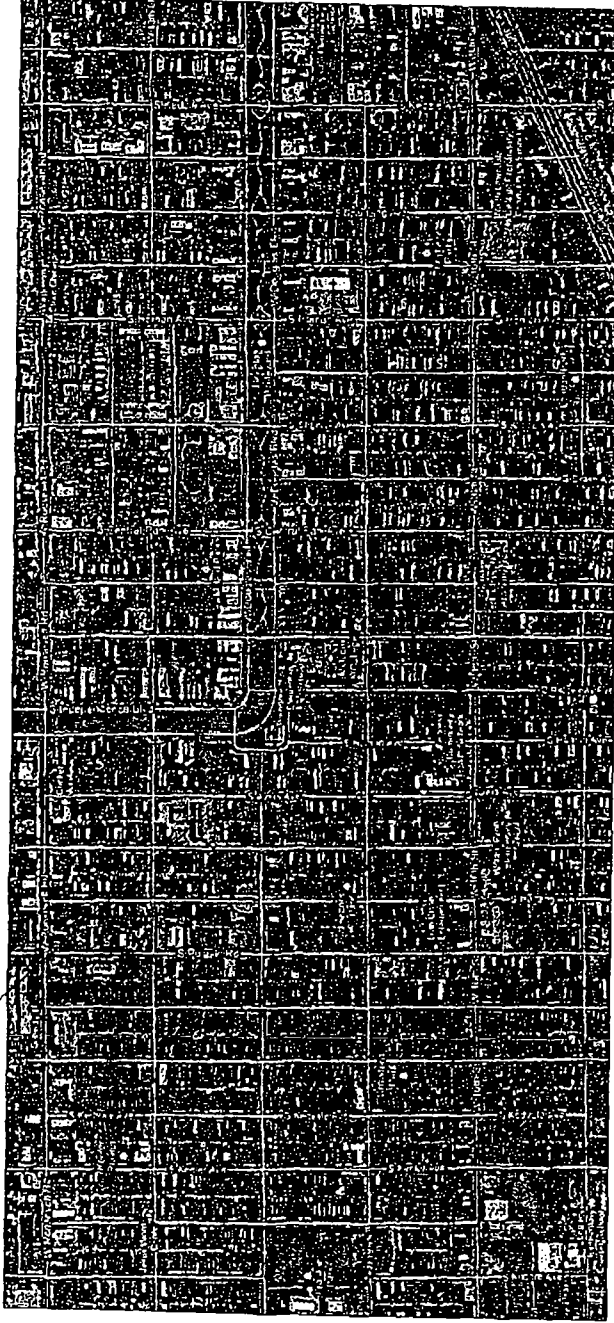
PROPOSED EXTENET SYSTEMS

UNDER GROUND FIBER OPTIC FACILITY

EXTIL-12005-1
15TH STREET
CHICAGO, IL

O.U.C. IR #54519
ERP #57586

PROJECT LOCATION



DIGGER HOTLINE
<CHICAGO UTILITY ALERT NETWORK>
1-312-744-7000

CONTACT INFORMATION:

EXTENET SYSTEMS:

DAVE FASSHAUER (708) 975-5786

GABE'S CONSTRUCTION:

ENGINEERING - JEFF RINARTZ (920) 889-4510
CONSTRUCTION - BRIAN VANSCHYNDEL (920) 889-9809

PROJECT NO:

EXTIL12005-1

PROJECT LOCATION:

W. 15TH ST FROM ALLEY WEST OF S. RIDGEWAY AVE TO
ALLEY EAST OF S. LAWDALE AVE.

ADDITIONAL LOCATION DESCRIPTION:

INSTALL APPROX. 725' LF OF 2" HDPE CONDUIT E/W FIBER
OPTIC CABLE WITHIN THE R/W OF W. 15TH STREET,
BETWEEN S. HAMLIN AVE AND S. MILLARD AVE. NO
HANDHOLES/MANHOLES REQUIRED - THIS IS RISER POLE
TO RISER POLE PROPOSED BUILD.

PROJECT COORDINATOR:

JEFF RINARTZ (920) 889-4510

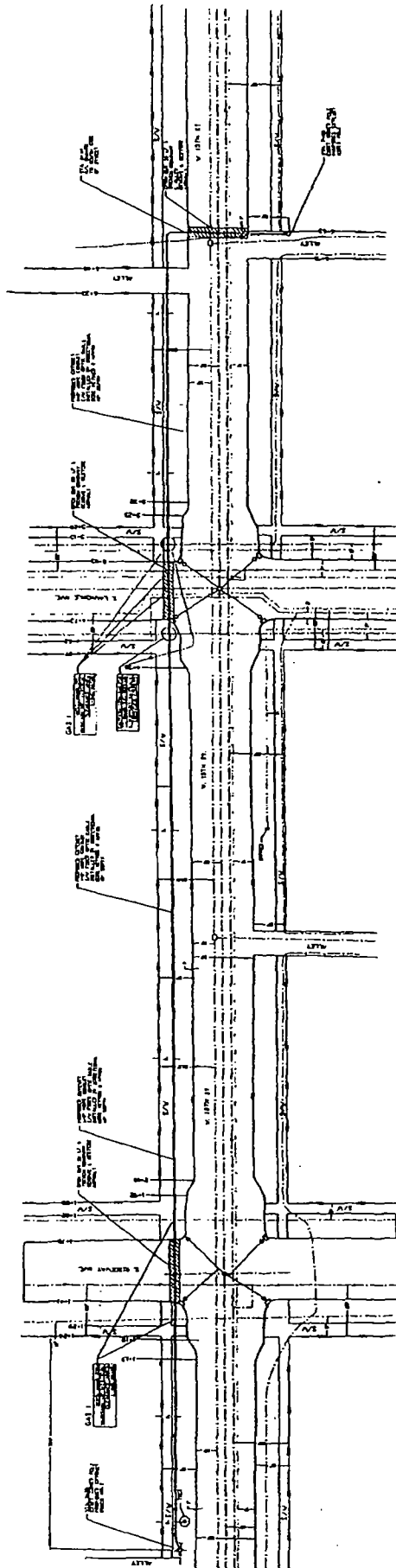
Utility Notes:

AT&T facilities present in the work area. Contractor is directed to exercise caution during excavation, contractor assumes all liability for damages to AT&T facilities, contact DIGGER a minimum of 48 hours prior to excavation, hand dig around AT&T facilities. If it is determined that AT&T facilities need to be adjusted, it is contractor's responsibility to contact Esteban Peralta (312-977-7537) immediately.

City Contractors are requested to take extra precautions when working near ComEd overhead wires. These wires are not insulated. Hand dig is required when crossing ComEd underground cables/conduits. Maintain 18" clearance from any ComEd conduit.

When field conditions require ComEd assistance (such as manhole frame & cover adjustments), please contact ComEd, Project Engineer, Don Ries, 773-838-2905, 6-weeks prior to start of work for areas south of Cermak Av, and for areas north of Cermak Av, contact ComEd Project Engineer, Joe Leung, 773-509-3288.

JCDecaux has bus shelter(s) within the project area. Please contact JCDecaux for bus shelter removal:312-456-2977



STATUS

extenel
your network
powered
by intel

3030 Warrville Road
Suite 210, Uptn, IL 60532

Project #: WEST-DDUGLAS-IL

Engineer: GAE'S

Original Issue Date: 7/23/12

Published Date:

Bill of Materials:

Description	Qty.
Fiber - 432	XXX
Fiber - 288	XXX
Fiber - 144	XXX
Fiber - 96	XXX
Fiber - 72	XXX
Fiber - 48	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - 6-inp	XXX
Total Fiber: 310	XXX

Routes - Actual: XXX
Routes - UC-Released: XXX
Routes - UC-New Conduct: 288
Routes - Base Station: XXX
Total Route Footage: 280

Poles - Power: XXX
Poles - Tele: XXX
Poles - Other: XXX
Total Poles: XXX

Nodes: XXX
2" HDPC: 288
Sprockets: XXX
Sump Loops: XXX
Manholes: XXX
Manholes: XXX

- 400' x 400'
- 300' x 300'
- 200' x 200'
- 150' x 150'
- 100' x 100'
- 75' x 75'
- 50' x 50'
- 25' x 25'
- 12.5' x 12.5'
- 6.25' x 6.25'
- 3.125' x 3.125'

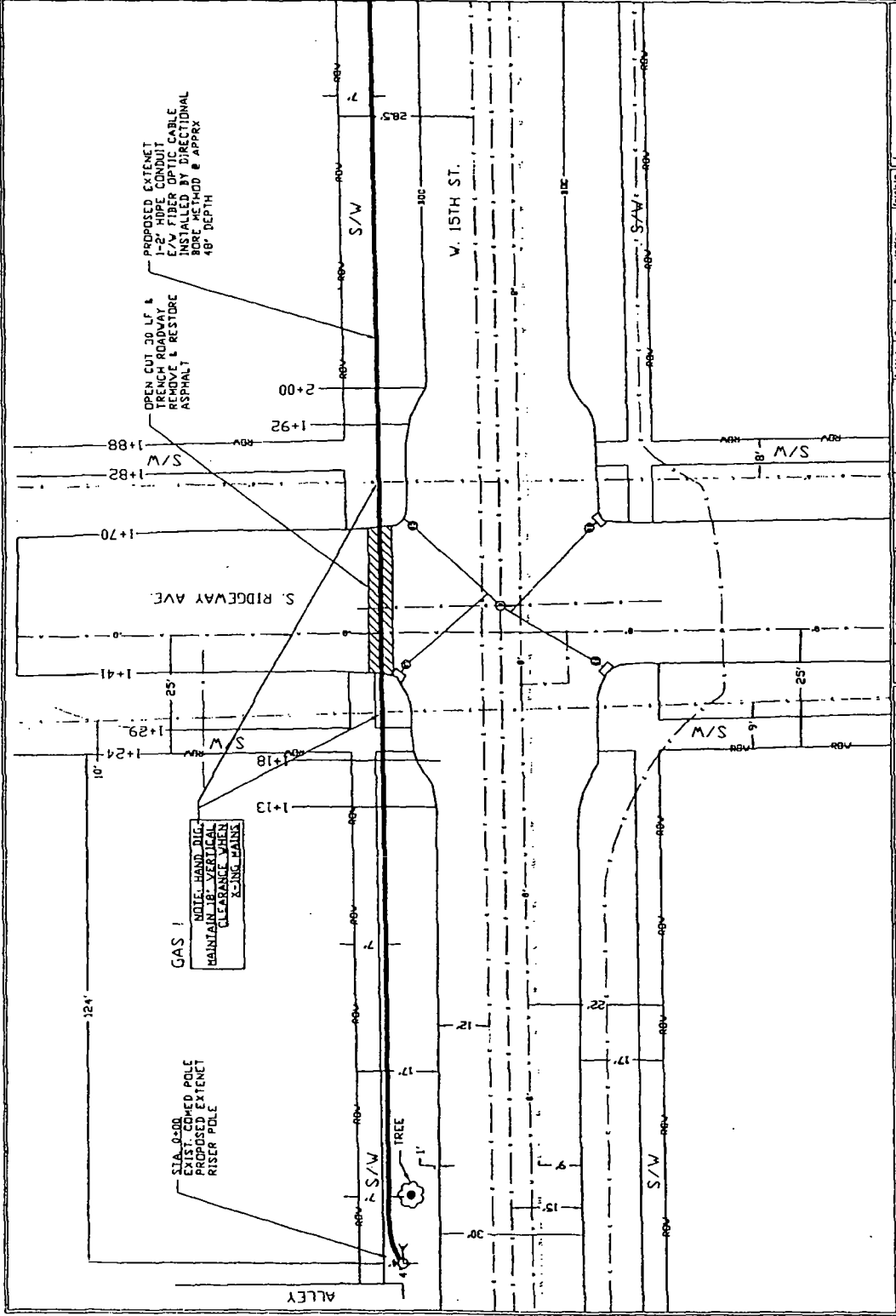


4604 North 49th Street
Sheboygan, WI 53083
Phone: (920) 454-7800

Page 1

Page 2

Map Number:



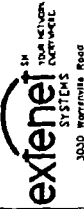
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Scale: 1" = 20'

Municipality: CITY OF CHICAGO
NORTH LAWNDALE AREA

State: ILLINOIS
County: COOK

STATUS



3000 Warrick Road
Suite 300, Oak Brook, IL 60453

Project #:
Job Title: WEST-DOUGLAS-IL

Engineer: GACS

Original Issue Date: 7/23/12

Published Date:

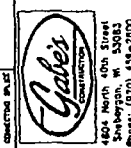
Description	Qty
Fiber - 28	XX
Fiber - 24	XX
Fiber - 144	XX
Fiber - 96	XX
Fiber - 72	XX
Fiber - 48	XX
Fiber - 24	XX
Fiber - 12	XX
Fiber - Drop	XX
Total Fiber	270

Routes - Aerial
 Route - UC-leased
 Route - UC-New Conduit
 Route - Base Station
 Total Route Footage

Poles - Power
 Poles - Telco
 Poles - Other
 Total Poles

Nodes
 2" HDPE
 Anchors
 Splice Cops
 Manholes
 Manholes

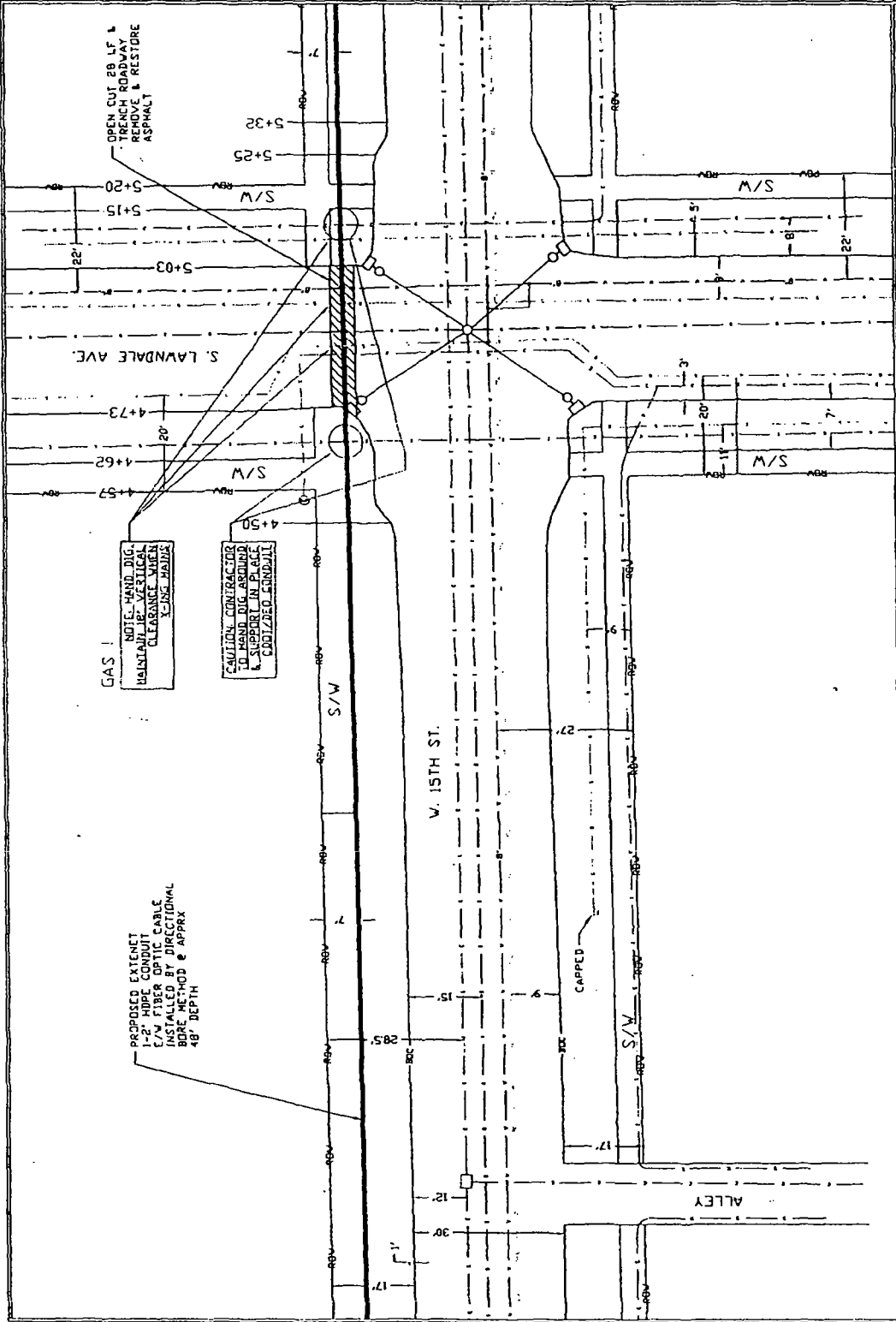
- 1. 2" HDPE
- 2. 2" HDPE
- 3. 2" HDPE
- 4. 2" HDPE
- 5. 2" HDPE
- 6. 2" HDPE
- 7. 2" HDPE
- 8. 2" HDPE
- 9. 2" HDPE
- 10. 2" HDPE
- 11. 2" HDPE
- 12. 2" HDPE
- 13. 2" HDPE
- 14. 2" HDPE
- 15. 2" HDPE
- 16. 2" HDPE
- 17. 2" HDPE
- 18. 2" HDPE
- 19. 2" HDPE
- 20. 2" HDPE



4604 North 40th Street
 Sheboygan, WI 53083
 Phone: (212) 458-7000

PAGE 1 PAGE 2 PAGE 3

Map Number:



Scale: 1" = 20'

Date	Description	Drawn By	Checked By	Scale
7/23/12	REVISED	BI	BI	1" = 20'
	REVISED	BI	BI	
	REVISED	BI	BI	
	REVISED	BI	BI	

State: ILLINOIS
 County: COOK
 Municipality: CITY OF CHICAGO
 NORTH LAWNDALE AREA

STATUS

exenel^{INC.}
IN YOUR NETWORK
SYSTEMS

3030 Lawrence Road
Suite 260, Glenview, IL 60033

Project #:
Job Title: WEST-DOUGLAS-IL

Engineer: GALE'S

Original Issue Date 7/23/12

Revised Date:

Bill of Materials:

Description	Qty.
Fiber - 432	1XX
Fiber - 288	1XX
Fiber - 144	1XX
Fiber - 96	1XX
Fiber - 72	1XX
Fiber - 48	1XX
Fiber - 24	1XX
Fiber - 12	1XX
Fiber - Drop	1XX
Total Fiber	205

Route - 4x4x1: 1XX
Route - 10-Used: 1XX
Route - 30x Station: 1XX
Total Route Footage: 175'

Poles - Power: 1XX
Poles - Telco: 1XX
Poles - Other: 1XX
Total Poles: 3XX

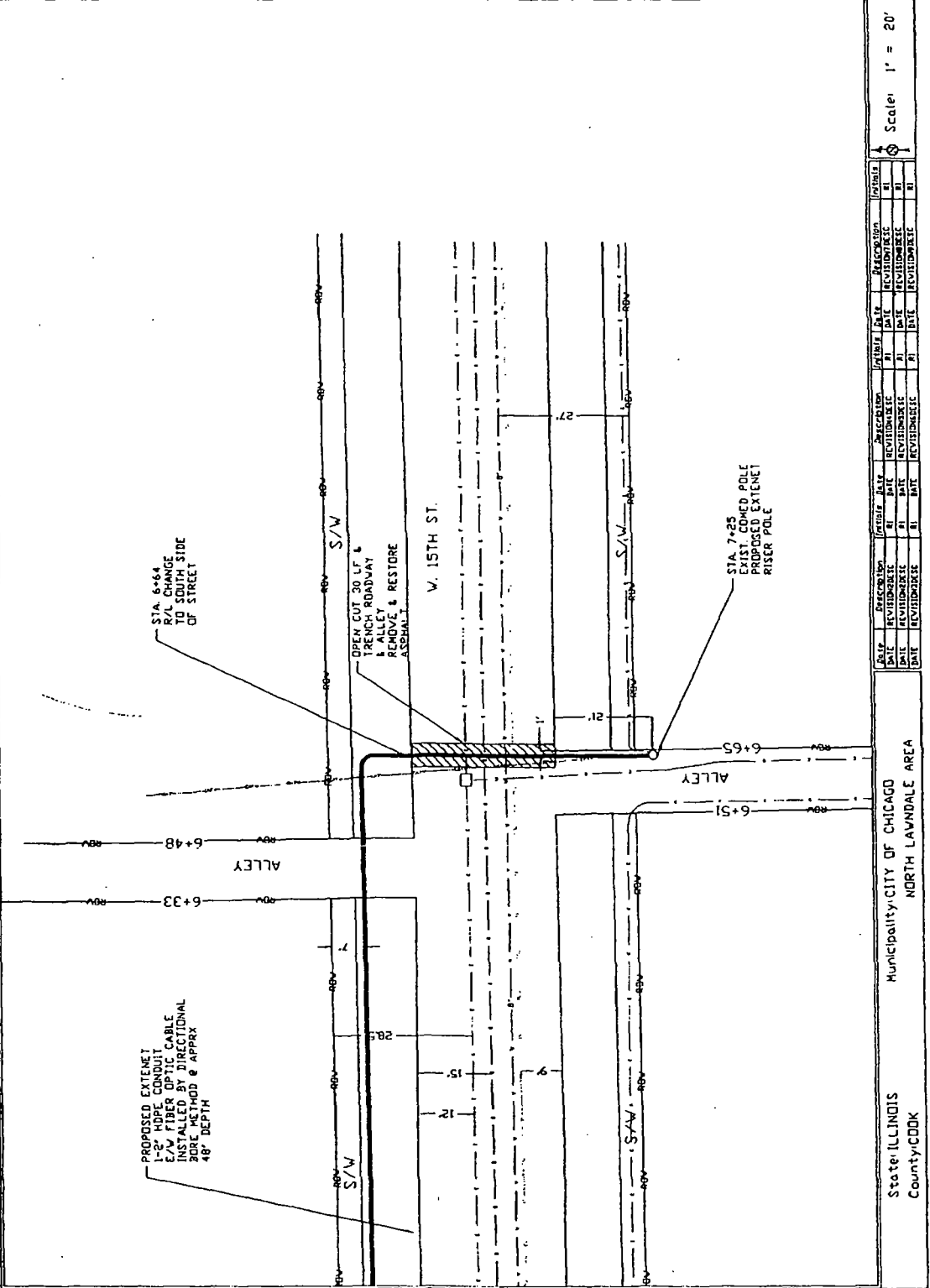
Splices: 1XX
2" HDPE: 12V
Anchors: 1XX
Stack Loops: 1XX
Handholes: 1XX
Manholes: 1XX

- 48" POLE
- 36" POLE
- 30" POLE
- 24" POLE
- 2" HDPE
- ANCHOR
- SPACER
- STACK LOOP
- HANDHOLE
- MANHOLE
- CONNECTION POINT



4801 North 46th Street
Sheboygan, WI 53083
Phone: (920) 454-7800


PAGE 2 PAGE 3
Map Number:

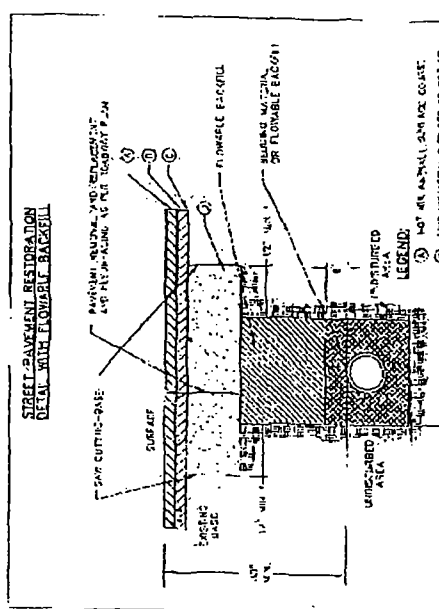


Scale: 1" = 20'

DATE	DESCRIPTION	INITIALS	DATE	DESCRIPTION	INITIALS

State: ILLINOIS
County: COOK
Municipality: CITY OF CHICAGO
NORTH LAWNDALE AREA

STATUS	
	
3030 Normande Road Suite 340, Des Plaines, IL 60032	
Project #	WEST-INDUCLAS-IL
Job Title	Engineer
Original Issue Date	7/23/12
Published Date	CABC'S
Bill of Materials:	
Description	Qty
Fiber - 432	XXX
Fiber - 288	XXX
Fiber - 144	XXX
Fiber - 96	XXX
Fiber - 48	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - Drop	XXX
Total Fiber	
Routes - Aerial	XXX
Routes - UC-Leased	XXX
Routes - UC-New Conduct	XXX
Routes - Base Station	XXX
Total Route Footage	XXX
Poles - Power	XXX
Poles - Telco	XXX
Poles - Other	XXX
Total Poles	
Notes	XXX
Stack Loops	XXX
Handholes	XXX
Manholes	XXX
Other	XXX
Legend	XXX
Scale	XXX
Map Number	XXX



NOTES:

- ALL REVISIONS SHOULD BE MADE TO THE ORIGINAL DRAWING. FOR CONCRETE CURB, ALL REVISIONS SHOULD BE MADE TO THE ORIGINAL DRAWING.
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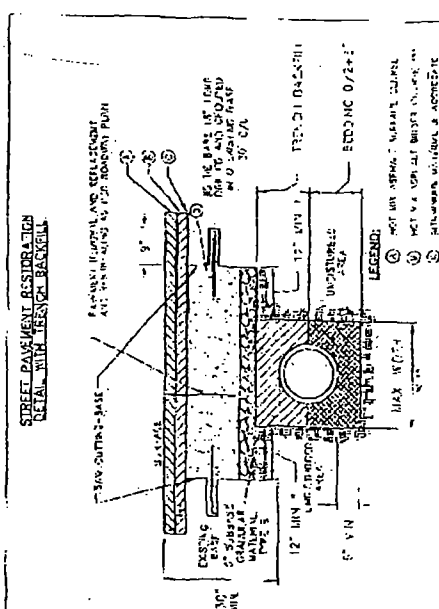
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- ② NOT AN APPROVED MATERIAL
- ③ NOT AN APPROVED MATERIAL
- ④ NOT AN APPROVED MATERIAL
- ⑤ NOT AN APPROVED MATERIAL

CDOT
 CITY OF CHICAGO
 STREET PAVEMENT RESTORATION
 DETAIL WITH TRENCH BACKFILL

DATE: 01/13/12
 SHEET: A-223
 DRAWN BY: [Name]
 CHECKED BY: [Name]

Scale: 1" = 12"



NOTES:

- ALL REVISIONS SHOULD BE MADE TO THE ORIGINAL DRAWING. FOR CONCRETE CURB, ALL REVISIONS SHOULD BE MADE TO THE ORIGINAL DRAWING.
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LEGEND:

- ① NOT AN APPROVED MATERIAL
- ② NOT AN APPROVED MATERIAL
- ③ NOT AN APPROVED MATERIAL
- ④ NOT AN APPROVED MATERIAL
- ⑤ NOT AN APPROVED MATERIAL

CDOT
 CITY OF CHICAGO
 STREET PAVEMENT RESTORATION
 DETAIL WITH TRENCH BACKFILL

DATE: 01/13/12
 SHEET: A-224
 DRAWN BY: [Name]
 CHECKED BY: [Name]

Scale: 1" = 12"

DATE	DESCRIPTION	BY	DATE	DESCRIPTION	BY

State: ILLINOIS
 County: COOK

Municipality: CITY OF CHICAGO
 NORTH LAVADALE AREA

Scale: 1" = N.T.S.

STATUS

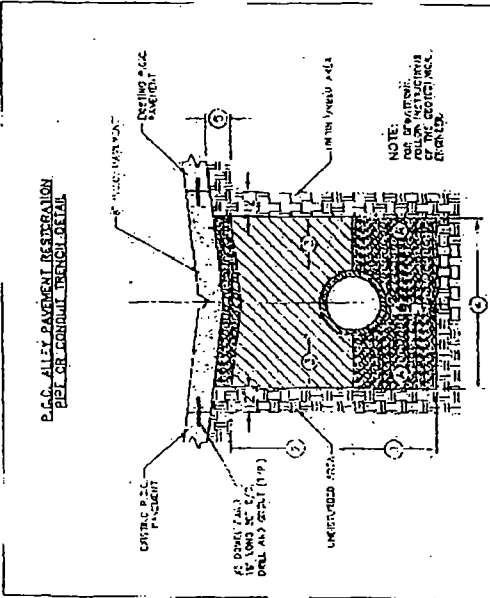
exfenet™
 THE NETWORK
 SYSTEMS
 3030 Waverly Road
 Suite 340, Lincoln, IL 60532

Project No. WEST-DUGLAS-IL
 Job Title: WEST-DUGLAS-IL
 Engineer: GAB'S
 Original Issue Date: 7/23/12

Description	Qty.
Fiber - 432	XXX
Fiber - 288	XXX
Fiber - 144	XXX
Fiber - 96	XXX
Fiber - 72	XXX
Fiber - 56	XXX
Fiber - 48	XXX
Fiber - 40	XXX
Fiber - 32	XXX
Fiber - 24	XXX
Fiber - 16	XXX
Fiber - 8	XXX
Total Fiber	XXX

Notes:
 3/16" Strand
 Anchors
 Slick Loops
 Manholes
 Total Poles: XXX

Gaber
 484 North 42nd Street
 Skokie, IL 60076
 Phone: (847) 431-1100



- 1. BEDDING: 6\"/>

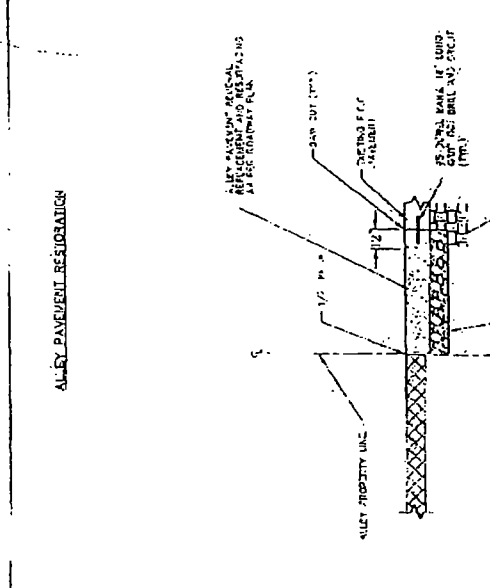
CDOT
 CHICAGO DEPARTMENT
 OF TRANSPORTATION

DATE: 12/24/12
 SHEET: A-23

CITY OF CHICAGO
 P.C.C. ALLEY PAVEMENT
 RESTORATION PIPE OR CONDUIT
 TRENCH DETAIL CONCEPTUAL PLAN
 DATE: 7/23/12
 SHEET: 3/11/12

Scale: 1" = N.T.S.

DATE	DESCRIPTION	BY	DATE	DESCRIPTION	BY



- 1. ALLEY PROPERTY LINE
- 2. 1/2\"/>

CDOT
 CHICAGO DEPARTMENT
 OF TRANSPORTATION

DATE: 12/24/12
 SHEET: A-23

CITY OF CHICAGO
 ALLEY PAVEMENT RESTORATION
 DATE: 7/23/12
 SHEET: 3/11/12

State: ILLINOIS
 County: COOK
 Municipality: CITY OF CHICAGO
 NORTH LAWNDALE AREA

STATUS

exfenet IN
SYSTEMS
CONTRACT

3030 Warrick Road
Suite 310, URM, IL 60537

Project # WEST-RODOLAS-11
Job Title WEST-RODOLAS-11
Engineer GARCIA

Original Issue Date 7/23/12
Published Date

DESCRIPTION	QTY
Fiber - 200	XXX
Fiber - 100	XXX
Fiber - 144	XXX
Fiber - 96	XXX
Fiber - 72	XXX
Fiber - 48	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - Drop	XXX
Total Fiber	XXX

Route - Aerial XXX
Route - UC-Mes Conduit XXX
Route - Base Station XXX
Total Route Footage XXX

Poles - Power XXX
Poles - Telco XXX
Poles - Other XXX
Total Poles XXX

Nodes XXX
5/16" Strand XXX
Anchors XXX
Splices XXX
Handholes XXX
Manholes XXX

- 1. 1/2" DIA. RIGID
- 2. 1/2" DIA. FLEX
- 3. 1/2" DIA. FLEX
- 4. 1/2" DIA. FLEX
- 5. 1/2" DIA. FLEX
- 6. 1/2" DIA. FLEX
- 7. 1/2" DIA. FLEX
- 8. 1/2" DIA. FLEX
- 9. 1/2" DIA. FLEX
- 10. 1/2" DIA. FLEX
- 11. 1/2" DIA. FLEX
- 12. 1/2" DIA. FLEX
- 13. 1/2" DIA. FLEX
- 14. 1/2" DIA. FLEX
- 15. 1/2" DIA. FLEX
- 16. 1/2" DIA. FLEX
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- 19. 1/2" DIA. FLEX
- 20. 1/2" DIA. FLEX

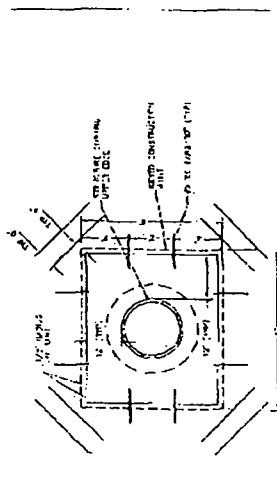


DATE	REVISION	DESCRIPTION

Map Number:

DETAIL OF STRUCTURE CASTING ISOLATION BOX FOR P.C.C. PAVEMENT AND P.C.C. BASE COURSE

1/2" DIA. REINFORCING BARS
1/2" DIA. REINFORCING BARS



DETAIL OF REINFORCING

GENERAL CONDITIONS

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE SPECIFICATIONS AND DRAWINGS.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS.

3. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES.

4. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE ENGINEER.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES AND STRUCTURES.

6. ALL WORK SHALL BE COMPLETED WITHIN THE SPECIFIED TIME FRAME.

7. THE CONTRACTOR SHALL MAINTAIN A NEAT AND ORDERLY WORK AREA AT ALL TIMES.

8. ALL MATERIALS SHALL BE STORED PROPERLY AND PROTECTED FROM WEATHER.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS.

10. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES.

11. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE ENGINEER.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES AND STRUCTURES.

13. ALL WORK SHALL BE COMPLETED WITHIN THE SPECIFIED TIME FRAME.

14. THE CONTRACTOR SHALL MAINTAIN A NEAT AND ORDERLY WORK AREA AT ALL TIMES.

15. ALL MATERIALS SHALL BE STORED PROPERLY AND PROTECTED FROM WEATHER.

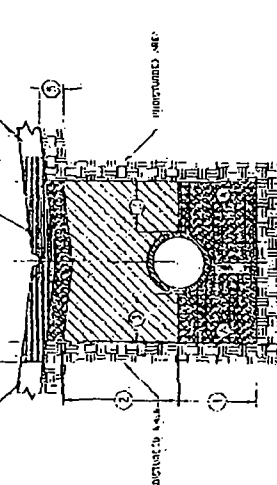
DATE	REVISION	DESCRIPTION

DATE	REVISION	DESCRIPTION

Scale: 1" = N.T.S.

ASPHALT ALLEY PAVEMENT RESTORATION - SIDE OF GROUND TRENCH DETAIL

1/2" DIA. REINFORCING BARS
1/2" DIA. REINFORCING BARS



DETAIL OF REINFORCING

GENERAL CONDITIONS

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE SPECIFICATIONS AND DRAWINGS.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS.

3. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES.

4. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE ENGINEER.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES AND STRUCTURES.

6. ALL WORK SHALL BE COMPLETED WITHIN THE SPECIFIED TIME FRAME.

7. THE CONTRACTOR SHALL MAINTAIN A NEAT AND ORDERLY WORK AREA AT ALL TIMES.

8. ALL MATERIALS SHALL BE STORED PROPERLY AND PROTECTED FROM WEATHER.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS.

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11. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE ENGINEER.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES AND STRUCTURES.

13. ALL WORK SHALL BE COMPLETED WITHIN THE SPECIFIED TIME FRAME.

14. THE CONTRACTOR SHALL MAINTAIN A NEAT AND ORDERLY WORK AREA AT ALL TIMES.

15. ALL MATERIALS SHALL BE STORED PROPERLY AND PROTECTED FROM WEATHER.

DATE	REVISION	DESCRIPTION

DATE	REVISION	DESCRIPTION

Scale: 1" = N.T.S.

State: ILLINOIS Municipality: CITY OF CHICAGO North LAUNDALE AREA

County: COOK

CDOT CHICAGO DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO

ALLEY PAVEMENT RESTORATION

TRENCH DETAIL - ASPHALT ALLEY

DATE: 7/23/12

REVISION: 1

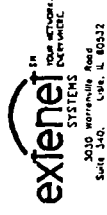
DESCRIPTION: 1/2" DIA. REINFORCING BARS

SCALE: 1" = N.T.S.

PROPOSED EXTENET SYSTEMS

UNDER GROUND FIBER OPTIC FACILITY

W ROOSEVELT RD
CHICAGO, IL



OUC IR FILE # 54518
OUC EFP FILE # 57623

PROJECT LOCATION



DIGGER HOTLINE
<CHICAGO UTILITY ALERT NETWORK>
1-312-744-7000

CONTACT INFORMATION:

EXTENET SYSTEMS:
DAVE FASSHAUER (708) 975-5786

GABE'S CONSTRUCTION:
ENGINEERING - JEFF RINARTZ (920) 889-4510
CONSTRUCTION - BRIAN VANSCHYNDEL (920) 889-9809

PROJECT NO:

EXTIL12005-2

PROJECT LOCATION:

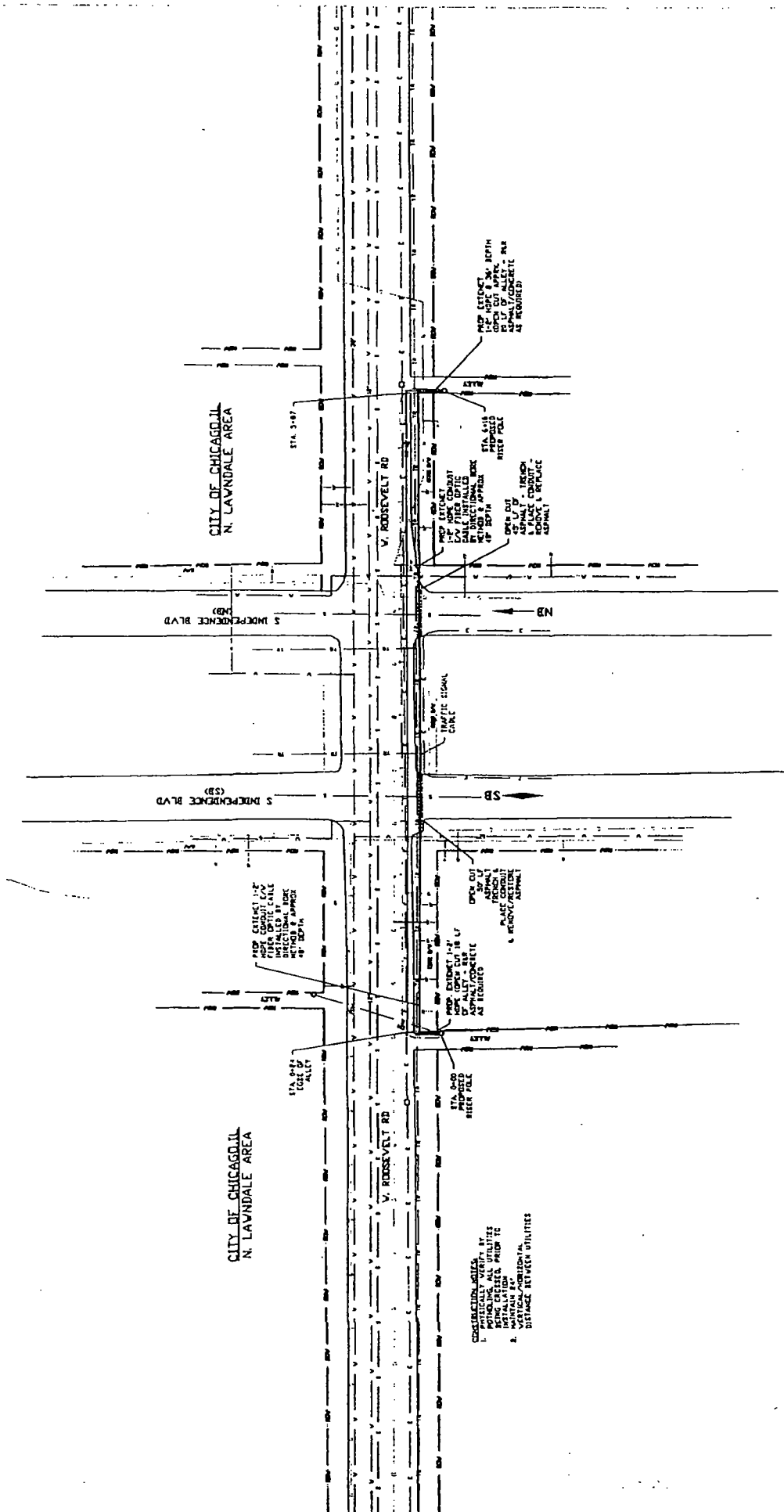
ROOSEVELT AVE - FROM ALLEY 200' WEST OF E OF SB
INDEPENDENCE AVE TO ALLEY 200' EAST OF NB
INDEPENDENCE AVE.

ADDITIONAL LOCATION DESCRIPTION:

INSTALL APROX. 616' LF OF 2" HDPE CONDUIT E/W FIBER
OPTIC CABLE WITHIN THE R/W OF ROOSEVELT AVE
BETWEEN S. AVERS & S. LAWDALE AVE NO
HANDHOLES/MANHOLES REQUIRED - THIS IS RISER POLE
TO RISER POLE PROPOSED BUILD.

PROJECT COORDINATOR:

JEFF RINARTZ (920) 889-4510



CONSTRUCTION NOTES:
 1. PHYSICALLY VERIFY BY MEASUREMENT THAT ALL UTILITIES ARE BEING EXPOSED PRIOR TO INSTALLATION.
 2. VERTICAL ALIGNMENT IN DISTANCE BETWEEN UTILITIES

CITY OF CHICAGO, N. LAVONDALE AREA

CITY OF CHICAGO, N. LAVONDALE AREA

V. ROOSEVELT RD

V. ROOSEVELT RD

S INDEPENDENCE BLVD

S INDEPENDENCE BLVD (SB)

STA 3+47

STA 6+18

CONCRETE CURB & GUTTER AT REQUIRED

CONCRETE CURB & GUTTER AT REQUIRED

CONCRETE CURB & GUTTER AT REQUIRED

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SYSTEMS
PERFORMANCE

1030 Warranda Road
Suite 340, Urb. IL 60432

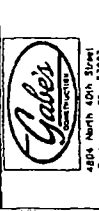
Project # _____
Job Title: WEST DOUGLAS, IL
Engineer: GALT'S
Original Issue Date: 10/3/12

Published Date:	Qty.
Fiber - 432	XXX
Fiber - 488	XXX
Fiber - 544	XXX
Fiber - 600	XXX
Fiber - 656	XXX
Fiber - 712	XXX
Fiber - 768	XXX
Fiber - 824	XXX
Fiber - 880	XXX
Fiber - 936	XXX
Fiber - 992	XXX
Total Fiber:	XXX

Route - Aerial	XXX
Route - UG - Fiber	XXX
Route - UG - Conduit	XXX
Route - Base Station	XXX
Total Route Footage	XXX

Poles - Power	XXX
Poles - Telco	XXX
Poles - Other	XXX
Total Poles	XXX

Nodes	XXX
5/16" Strand	XXX
ANCHORS	XXX
SPICERS	XXX
Stack Loops	XXX
MANHOLES	XXX



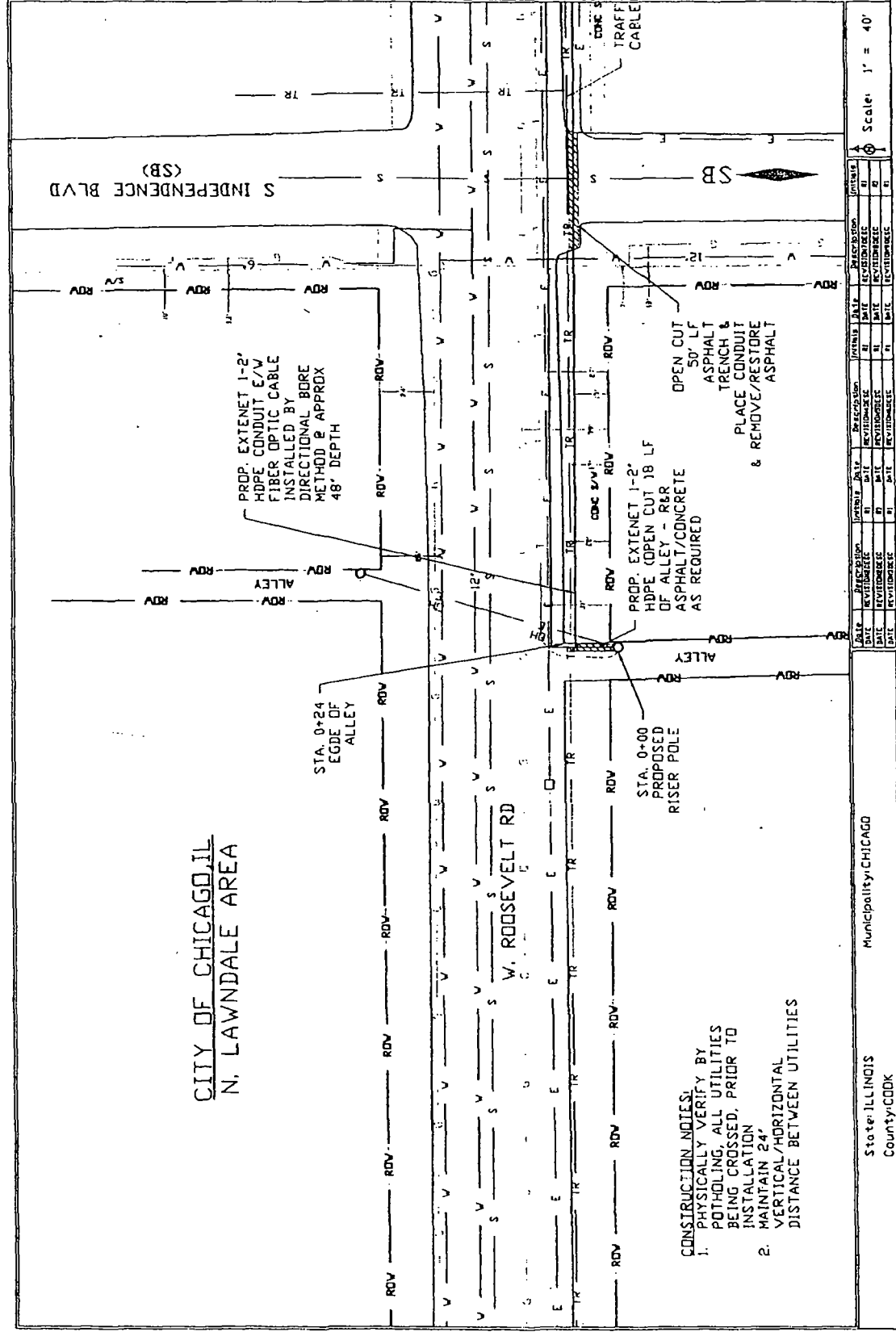
484 North 40th Street
Sheboygan, WI 53083
Phone: (920) 458-2050

DATE	DESCRIPTION	BY

Scale: 1" = 40'

Page 1 of 1

Job Number: _____



CONSTRUCTION NOTES:

- PHYSICALLY VERIFY BY POT-HOLING, ALL UTILITIES BEING CROSSED. PRIOR TO INSTALLATION.
- MAINTAIN 24" VERTICAL/HORIZONTAL DISTANCE BETWEEN UTILITIES

State: ILLINOIS
County: COOK

Municipality: CHICAGO

PERMIT - ONLY



3033 Norwalk Road
Suite 310, Oak, IL 60452

Project #:

Job Title: WEST DOUGLAS IL

Engineer: GAB'S

Original Issue Date 10/3/12

Bill of Materials:

Description	Qty
Fiber - 432	XXX
Fiber - 864	XXX
Fiber - 1728	XXX
Fiber - 3456	XXX
Fiber - 6912	XXX
Fiber - 13824	XXX
Fiber - 27648	XXX
Fiber - 55296	XXX
Fiber - 110592	XXX
Fiber - 221184	XXX
Fiber - 442368	XXX
Fiber - 884736	XXX
Fiber - Drop	XXX
Total Fiber	XXX

Route - Aerial

Route - UC-Leased

Route - Base Station

Route - Base Station

Total Route Footage

Poles - Power

Poles - Telco

Poles - Other

Total Poles

Nodes

5/16" Strand

Anchor

Splices

Stack Loops

Handsplices

Handsplices

Handsplices

Handsplices

Handsplices

Handsplices

Handsplices

Handsplices

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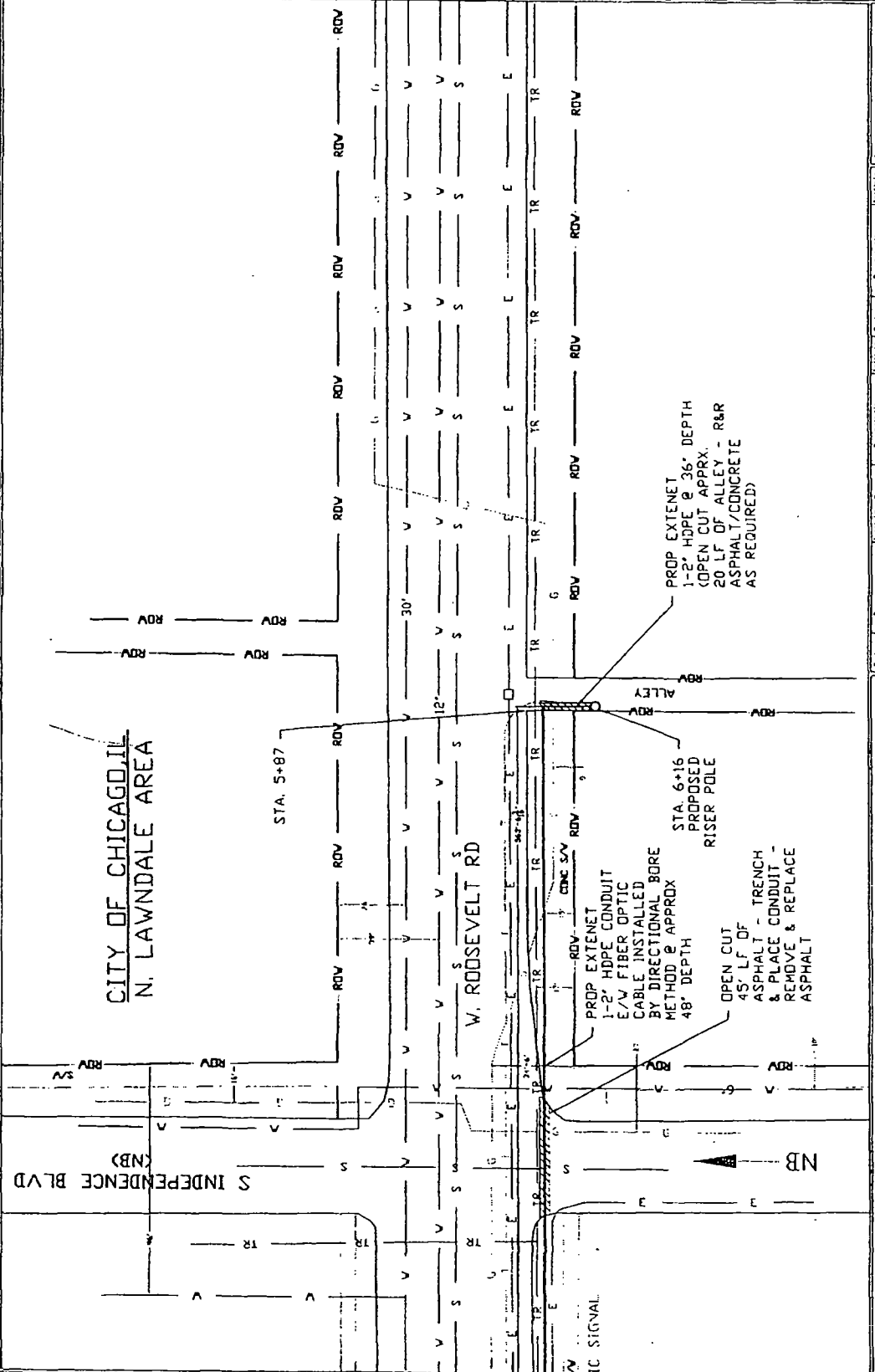


4804 North 40th Street
Sheboygan, WI 53083
Phone: (920) 452-1000

PAGE 1

PAGE 2

Map Number:



DATE	DESCRIPTION	INITIALS	DATE	DESCRIPTION	INITIALS

Scale: 1" = 40'

State: ILLINOIS
County: COOK
Municipality: CHICAGO

PERMIT ONLY

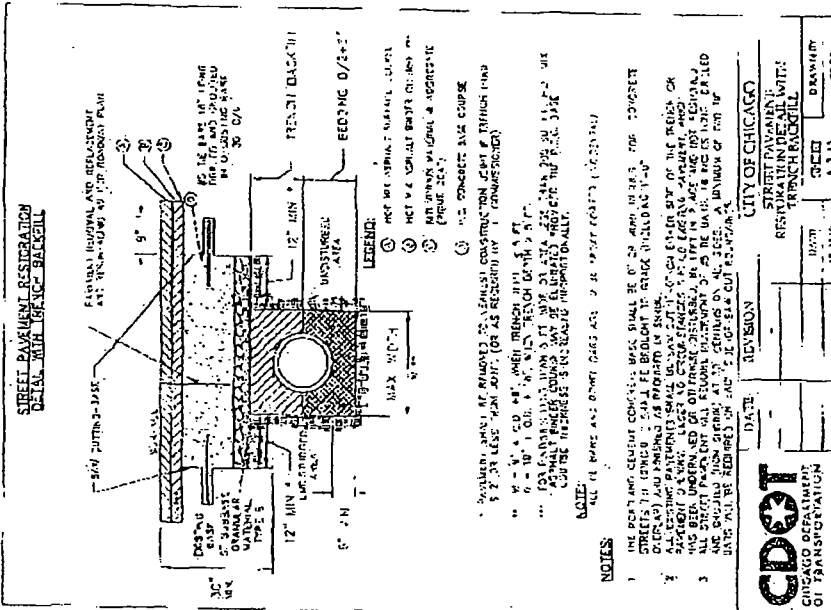
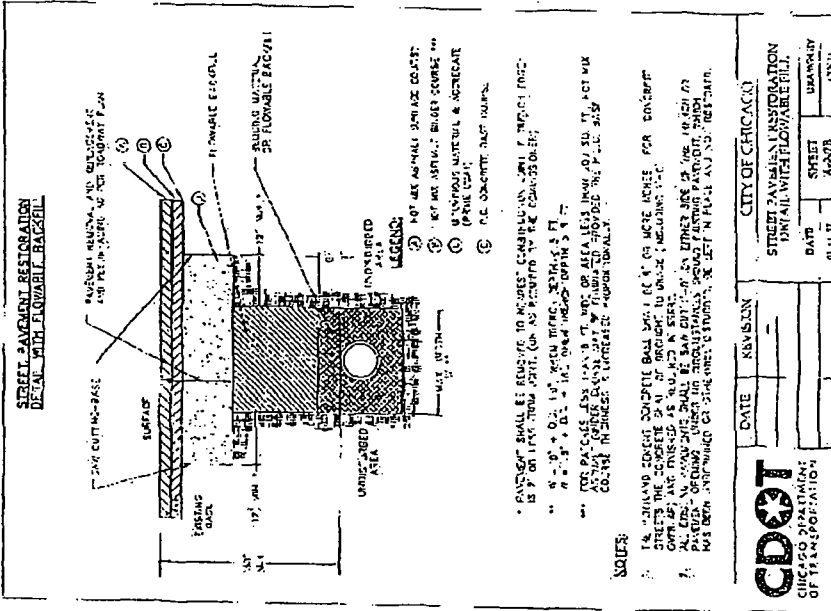
extenet SYSTEMS
 3030 Westmoreland Road
 Suite 310, Ure, IL 60533

Project No. WEST DOUGLAS 1L
 Job Title: GAB'S
 Engineer: GAB'S
 Original Issue Date: 10/3/12

Material	Description	Qty.
Fiber	- 432	XXX
Fiber	- 288	XXX
Fiber	- 144	XXX
Fiber	- 72	XXX
Fiber	- 48	XXX
Fiber	- 24	XXX
Fiber	- 12	XXX
Fiber	- 6	XXX
Fiber	- 3	XXX
Fiber	- 1.5	XXX
Total Fiber		XXX
Routes	- April	XXX
Routes	- US-44	XXX
Routes	- US-44/CHICAGO	XXX
Routes	- 18th Street	XXX
Total	Route Footage	XXX
Poles	- Power	XXX
Poles	- Other	XXX
Total	Poles	XXX
Notes	- Street	XXX
Notes	- Splices	XXX
Notes	- Stack Loads	XXX
Notes	- Manholes	XXX
Notes	- Other	XXX

Gabe's
 CONSULTANTS
 1818 North La Salle
 Suite 300, Chicago, IL 60612
 Phone: (312) 442-2400

1. ASBESTOS
 2. LEAD
 3. POLYBIPHENYLENE
 4. POLYBROMINATED POLYFLUORENE
 5. POLYCHLORINATED BIPHENYLENE
 6. POLYCHLORINATED DIBENZO-P-DIOXIN
 7. POLYCYCLOPOLYBIPHENYLENE
 8. POLYCYCLOPOLYBIPHENYLENE
 9. POLYCYCLOPOLYBIPHENYLENE
 10. POLYCYCLOPOLYBIPHENYLENE



NOTES:

1. ALL DIMENSIONS SHOWN ARE UNLESS OTHERWISE NOTED.
2. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.
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NOTES:

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DATE	REVISION	DESCRIPTION	INITIALS	DATE	REVISION	DESCRIPTION	INITIALS

DATE	REVISION	DESCRIPTION	INITIALS	DATE	REVISION	DESCRIPTION	INITIALS

Scale: 1" = 40'

State: ILLINOIS
 County: COOK
 Municipality: CHICAGO

CDOT
 CHICAGO DEPARTMENT OF TRANSPORTATION

CDOT
 CHICAGO DEPARTMENT OF TRANSPORTATION

CDOT
 CHICAGO DEPARTMENT OF TRANSPORTATION

PERMIT ONLY

exteneel in
SYSTEMS
PERFORMANCE

3030 North Lincoln Road
Suite 210, Waukegan, IL 60087

Project #
Job Title: WEST DOUGLAS IL
Engineer: GARE'S

Original Issue Date 10/3/12

Published Date:

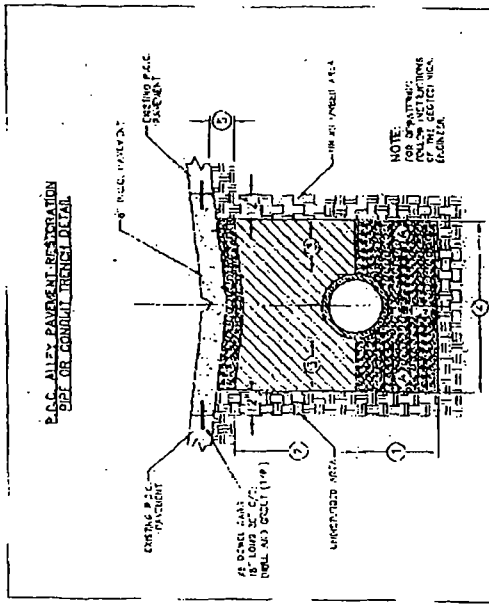
Description	Qty.
Fiber - 888	XXX
Fiber - 144	XXX
Fiber - 16	XXX
Fiber - 72	XXX
Fiber - 36	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - Drop	XXX
Total Fiber	XXX

Route - Aerial
Route - UC-Loaded
Route - UC-New Conduit
Route - Base Station
Total Route Footage

Poles - Power
Poles - Other
Total Poles

Nodes
5/16" Strand
Anchors
Stack Loops
Hardware

- 1. 1" DIA. RIGID
- 2. 1" DIA. RIGID
- 3. 1" DIA. RIGID
- 4. 1" DIA. RIGID
- 5. 1" DIA. RIGID
- 6. 1" DIA. RIGID
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- 8. 1" DIA. RIGID
- 9. 1" DIA. RIGID
- 10. 1" DIA. RIGID
- 11. 1" DIA. RIGID
- 12. 1" DIA. RIGID
- 13. 1" DIA. RIGID
- 14. 1" DIA. RIGID
- 15. 1" DIA. RIGID
- 16. 1" DIA. RIGID
- 17. 1" DIA. RIGID
- 18. 1" DIA. RIGID
- 19. 1" DIA. RIGID
- 20. 1" DIA. RIGID



- | NO. | DESCRIPTION | DATE | REVISION |
|-----|--------------|------|----------|
| 1 | REDDING | | |
| 2 | BACKFILL | | |
| 3 | CLEARANCE | | |
| 4 | TRENCH WIDTH | | |
| 5 | SUB-BASE | | |

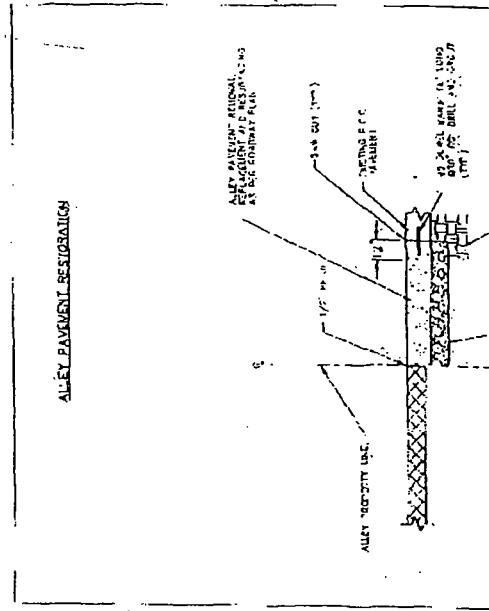
CDOT CHICAGO DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO
Municipality: CHICAGO

DATE: 12/20/12
SHEET: 2 OF 2
JOB: 122001

Scale: 1" = 40'

DATE	DESCRIPTION	INITIALS	DATE	DESCRIPTION	INITIALS
	REVISION #1			REVISION #1	
	REVISION #2			REVISION #2	
	REVISION #3			REVISION #3	



- | DATE | DESCRIPTION | INITIALS | DATE | DESCRIPTION | INITIALS |
|------|-------------|----------|------|-------------|----------|
| | REVISION #1 | | | REVISION #1 | |
| | REVISION #2 | | | REVISION #2 | |
| | REVISION #3 | | | REVISION #3 | |

CDOT CHICAGO DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO
Municipality: CHICAGO

DATE: 12/20/12
SHEET: 2 OF 2
JOB: 122001

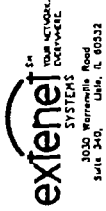
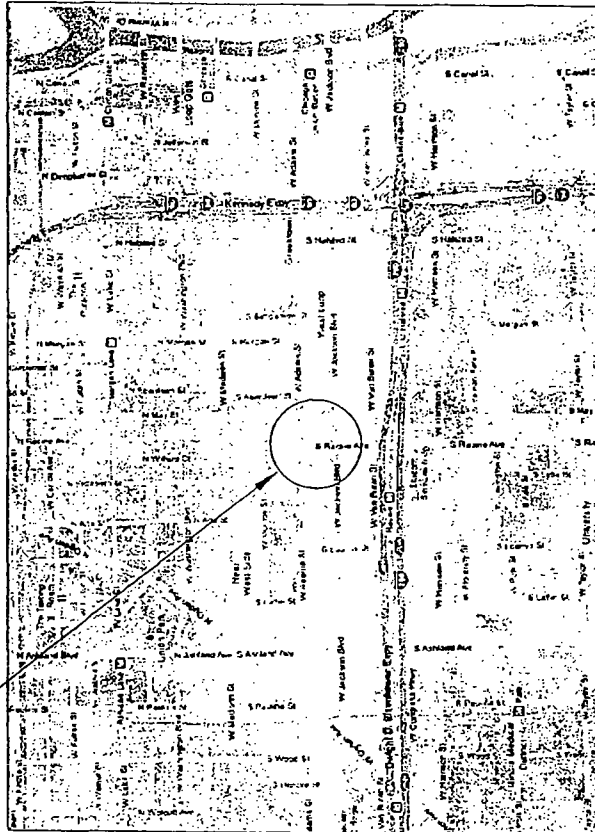
State: ILLINOIS
County: COOK

PROPOSED EXTENET SYSTEMS

UNDERGROUND FIBER OPTIC FACILITY

S. RACINE AVE. FROM 2ND ALLEY NORTH
OF W. ADAMS ST TO W. GLADYS AVE.
W. GLADYS AVE FROM S. RACINE AVE TO
125 FT WEST OF S. RACINE AVE.
CHICAGO, IL

PROJECT LOCATION — OUC IR FILE # 55713
OUC EFP FILE # 57629



DIGGER HOTLINE
<CHICAGO UTILITY ALERT NETWORK>
1-312-744-7000

CONTACT INFORMATION:

EXTENET SYSTEMS:

DAVE FASSHAUER (708) 975-5786

GABE'S CONSTRUCTION:

ENGINEERING - JEFF RINARTZ (920) 889-4510
CONSTRUCTION - BRIAN VANSCHYNDEL (920) 889-9809

PROJECT NO:

EXTIL12006

PROJECT LOCATION:

S. RACINE AVE FROM ALLEY (W. GLADYS AVE) GOING
NORTH ALONG RACINE AVE CROSSING W. JACKSON, W.
ADAMS TO ALLEY APPROX. 200' NORTH OF W ADAMS ST.

ADDITIONAL LOCATION DESCRIPTION:

INSTALL APPROX. 1110' LF OF 2' HDPE CONDUIT E/W
FIBER OPTIC CABLE WITHIN THE R/W OF S. RACINE AVE
FROM W. GLADYS AVE TO ALLEY WAY LOCATED APPRX.
200' NORTH OF W. ADAMS ST. UTILIZING EXISTING SPRINT
MANHOLE LOCATED AT INTERSECTION OF W. ADAMS & S.
RACINE AVE.

PROJECT COORDINATOR:

JEFF RINARTZ (920) 889-4510

PAGE 1

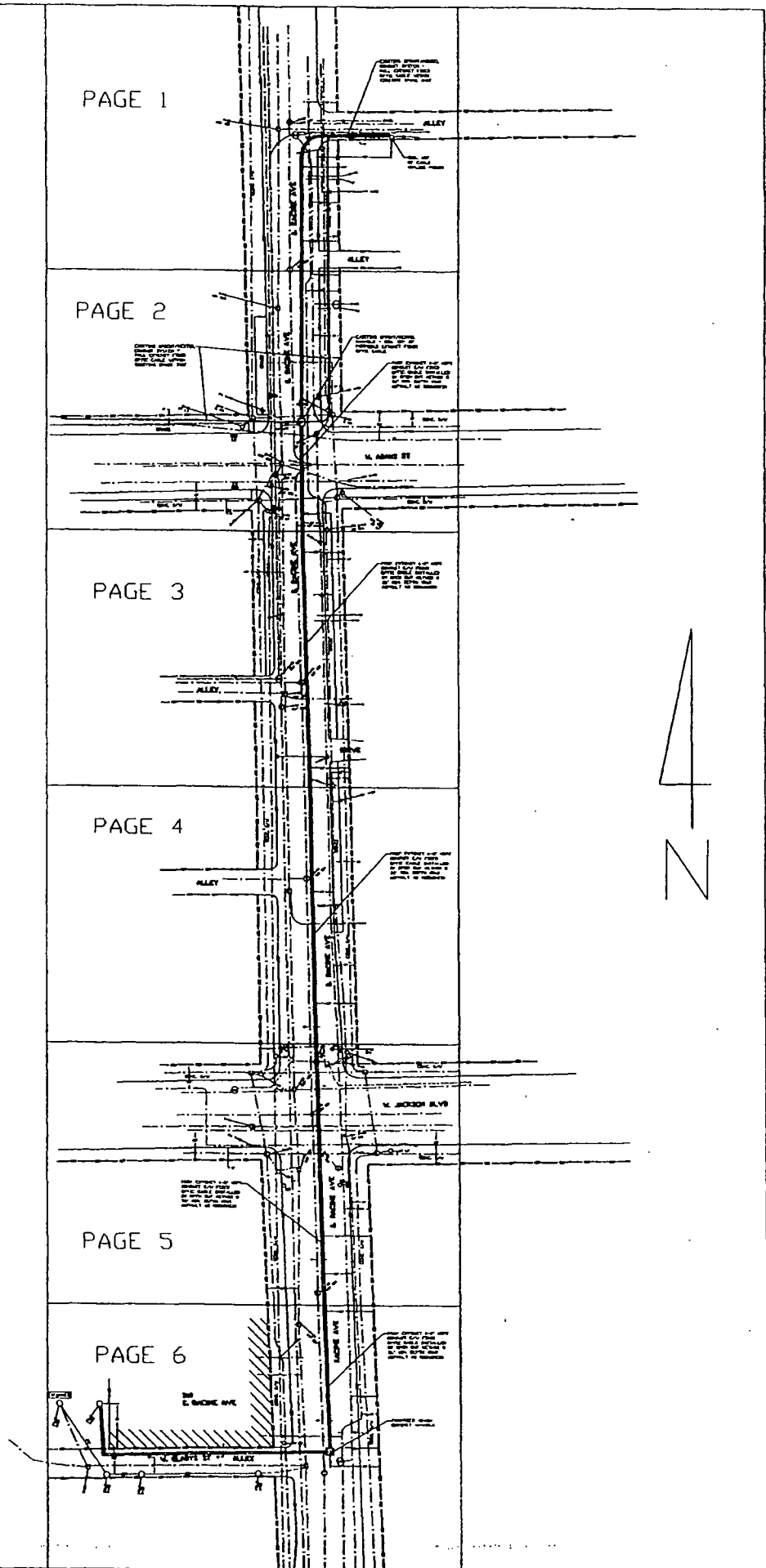
PAGE 2

PAGE 3

PAGE 4

PAGE 5

PAGE 6



PERMIT ONLY



3030 Wernersville Road
Suite 340, Umm, IL 60522

Project #: EXT112006
Job Title: RUSH-DISTRICT-IL

Engineer: GABE'S

Original Issue Date 10/16/12

Submittal Data:

Description	Qty
Fiber - 432	33X
Fiber - 288	33X
Fiber - 54	33X
Fiber - 72	33X
Fiber - 48	33X
Fiber - 36	33X
Fiber - 24	33X
Fiber - 12	33X
Fiber - Drop	33X
Total Fiber	33X

Route - Aerial
Route - UC-leased
Route - Under Conduit
Route - Under Structure
Total Route Footage 33X

Poles - Power 33X
Poles - Telco 33X
Poles - Other 33X
Total Poles 33X

Nuts - Steelrod 33X
Washers 33X
Anchors 33X
Splices 33X
Stack Loops 33X
Manholes 33X

- ⊙ - 1/2" RFI
- ⊗ - 1/2" RFI
- ⊛ - 1/2" RFI
- ⊠ - 1/2" RFI
- ⊡ - 1/2" RFI
- ⊞ - 1/2" RFI
- ⊚ - 1/2" RFI
- ⊜ - 1/2" RFI
- ⊝ - 1/2" RFI
- ⊟ - 1/2" RFI
- ⊠ - 1/2" RFI
- ⊡ - 1/2" RFI
- ⊞ - 1/2" RFI
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- ⊜ - 1/2" RFI
- ⊝ - 1/2" RFI
- ⊟ - 1/2" RFI

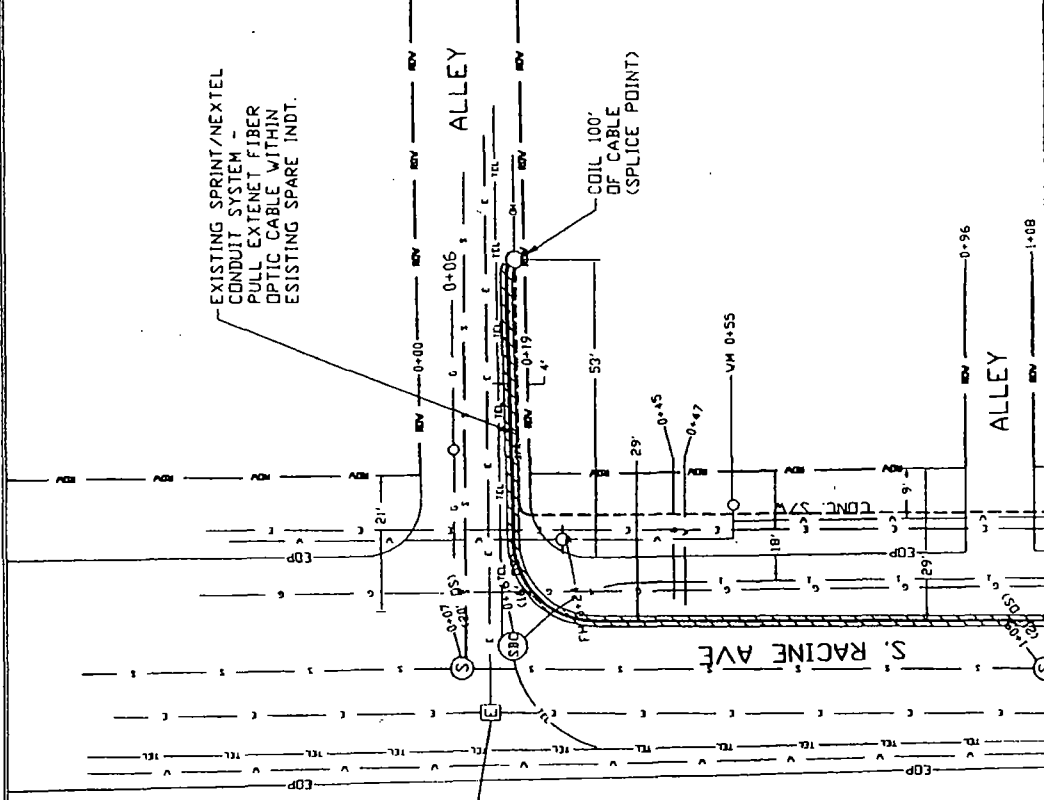


3125 North 10th Street
Chicago, IL 60641
Phone: (312) 452-2000

PAGE 1

PAGE 2

Map Number: A



EXISTING SPRINT/NEXTEL
CONDUIT SYSTEM -
PULL EXTENET FIBER
OPTIC CABLE WITHIN
EXISTING SPARE INDT.

ALLEY
COIL 100'
OF CABLE
(SPLICE POINT)

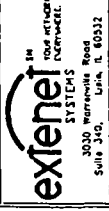
S. RACINE AVE
CONC SV

Scale: 1" = 20'

DATE	DESCRIPTION	INITIALS	DATE	DESCRIPTION	INITIALS

State: ILLINOIS
County: COOK
Municipality: RIVERSIDE/BERWYN

PERMIT_ONLY



3030 Warrenville Road
Suite 310, Lisle, IL 60532

Project No. EXT1112006

Job Title: RUSH-DISTRICT-11

Engineer: GABC'S

Original Issue Date 10/16/12

Published Date:

Bill of Materials	Description	Qty.
Fiber - 432	XXX	XXX
Fiber - 888	XXX	XXX
Fiber - 144	XXX	XXX
Fiber - 22	XXX	XXX
Fiber - 48	XXX	XXX
Fiber - 36	XXX	XXX
Fiber - 24	XXX	XXX
Fiber - 12	XXX	XXX
Fiber - Drop	XXX	XXX
Total Fiber		XXX

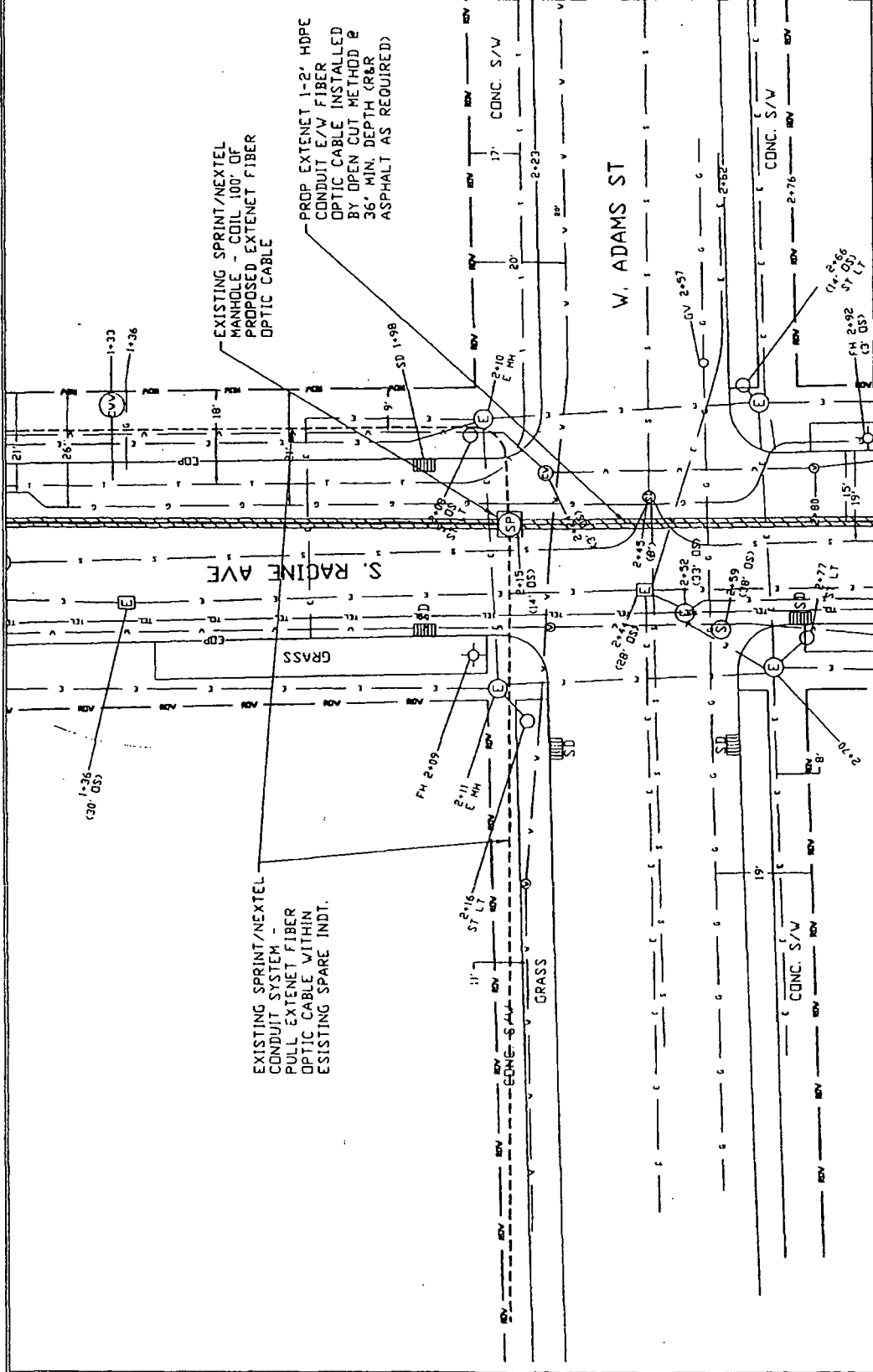
Route	Material	Qty.
Route - Aerial	XXX	XXX
Route - UC-Leased	XXX	XXX
Route - UC-New Conduit	XXX	XXX
Route - Keep Station	XXX	XXX
Total Route Postage	XXX	XXX

Nodes	Material	Qty.
Nodes - Strand	XXX	XXX
Nodes - Splice	XXX	XXX
Nodes - Patch	XXX	XXX
Nodes - Handholes	XXX	XXX

Gabe's
CONSTRUCTION

1624 North W. 31st St
Chicago, IL 60640
Phone: (832) 428-2009

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Map Number: A



DATE	DESCRIPTION	INITIALS	DATE	DESCRIPTION	INITIALS

Scale: 1" = 20'

Municipality: RIVERSIDE/BERWYN

State: ILLINOIS
County: COOK

PERMIT ONLY



3034 Warrenville Road
Suite 340 Dan, IL 60533

Project # EXTIL2006

Job Title: RUSH-DISTRICT-IL

Engineer: GAB'S

Original Issue Date 10/16/12

Published Date:

Description	Qty.
Fiber - 43E	XXX
Fiber - 186	XXX
Fiber - 186	XXX
Fiber - 96	XXX
Fiber - 72	XXX
Fiber - 48	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - Drop	XXX
Total Fiber	XXX

Route - 43E
Route - 186
Route - 186
Route - 96
Route - 72
Route - 48
Route - 24
Route - 12
Route - Drop

Route - 43E
Route - 186
Route - 186
Route - 96
Route - 72
Route - 48
Route - 24
Route - 12
Route - Drop

Route - 43E
Route - 186
Route - 186
Route - 96
Route - 72
Route - 48
Route - 24
Route - 12
Route - Drop

Route - 43E
Route - 186
Route - 186
Route - 96
Route - 72
Route - 48
Route - 24
Route - 12
Route - Drop

Route - 43E
Route - 186
Route - 186
Route - 96
Route - 72
Route - 48
Route - 24
Route - 12
Route - Drop

Route - 43E
Route - 186
Route - 186
Route - 96
Route - 72
Route - 48
Route - 24
Route - 12
Route - Drop

Route - 43E
Route - 186
Route - 186
Route - 96
Route - 72
Route - 48
Route - 24
Route - 12
Route - Drop

Route - 43E
Route - 186
Route - 186
Route - 96
Route - 72
Route - 48
Route - 24
Route - 12
Route - Drop

Route - 43E
Route - 186
Route - 186
Route - 96
Route - 72
Route - 48
Route - 24
Route - 12
Route - Drop



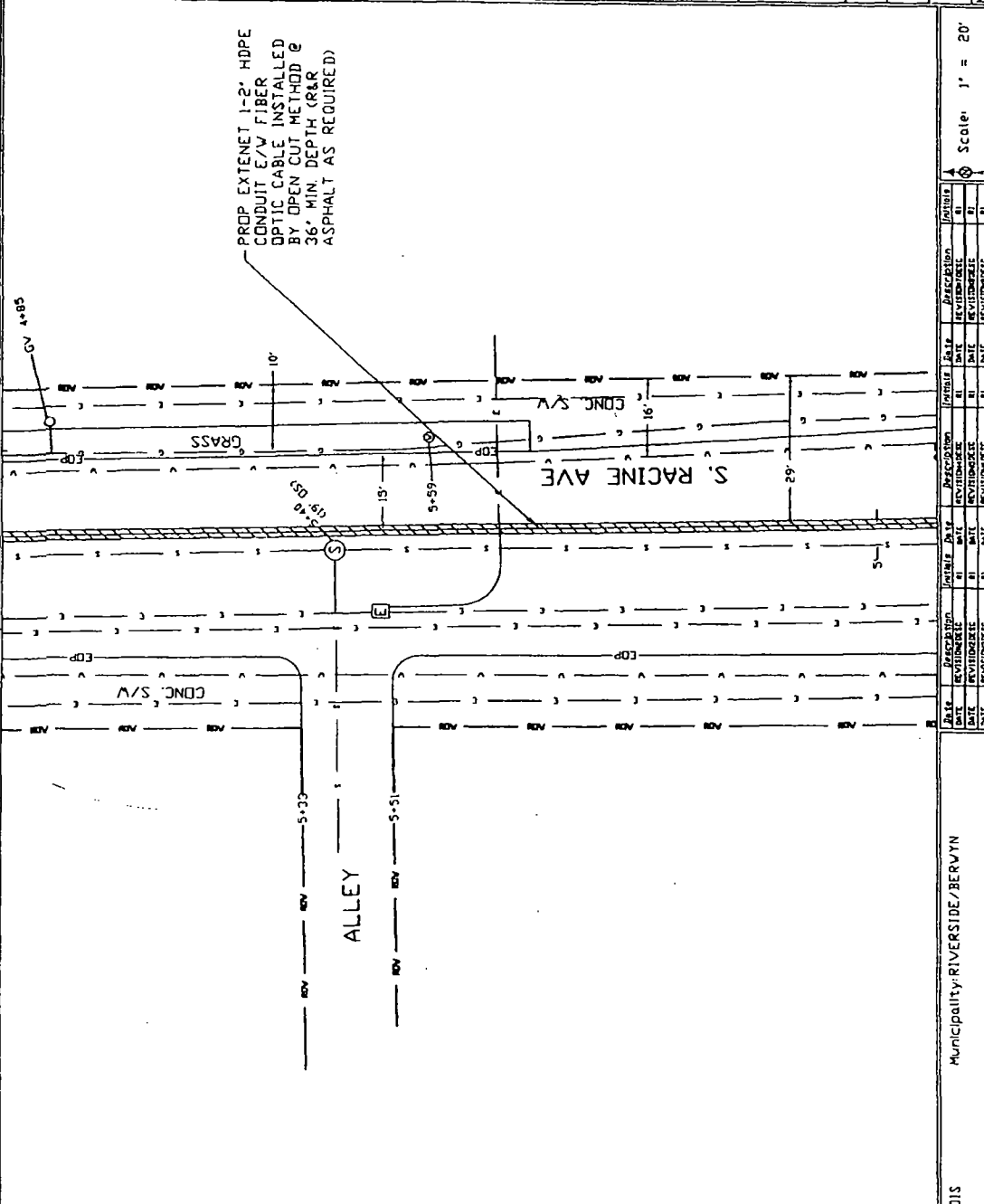
4804 March 400 Street
Shibboleth, WI 53083
Phone: (262) 581-2800

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Map Number: A



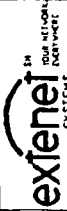
PROP. EXTENET 1-2" HDPE
CONDUIT E/W FIBER
OPTIC CABLE INSTALLED
BY OPEN CUT METHOD @
36" MIN. DEPTH (R&R
ASPHALT AS REQUIRED)

Municipality: RIVERSIDE/BERWYN
State: ILLINOIS
County: COOK

Scale: 1" = 20'

DATE	DESCRIPTION	BY	DATE	DESCRIPTION	BY

PERMIT ONLY



3005 W. North Ave.
Suite 340, Chicago, IL 60642

Project # EXT112005

Job Title: RUSH-DISTRICT-11

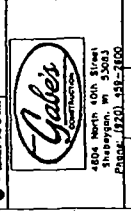
Engineer: GABE'S

Original Issue Date 10/16/12

Published Base	Description	Qty.
	Fiber - 432	XXX
	Fiber - 148	XXX
	Fiber - 144	XXX
	Fiber - 94	XXX
	Fiber - 72	XXX
	Fiber - 48	XXX
	Fiber - 36	XXX
	Fiber - 18	XXX
	Fiber - Drop	XXX
	Total Fiber	XXX

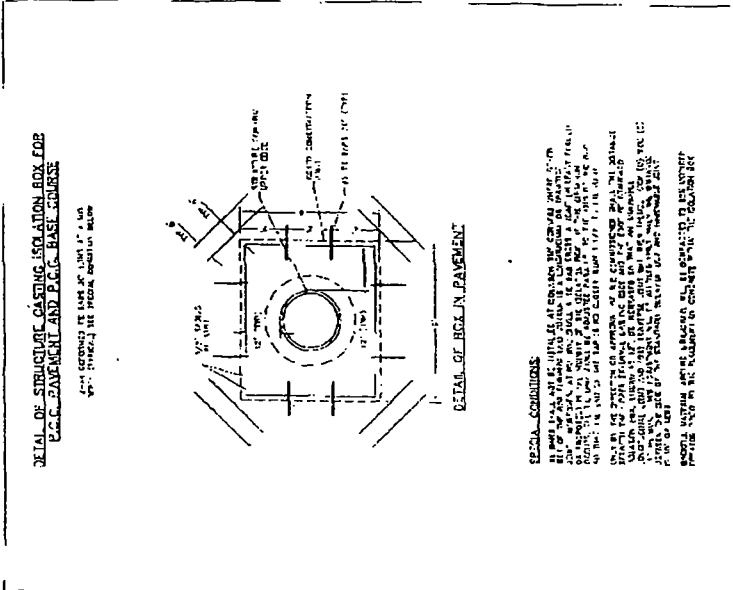
Route - Aerial
Route - UG-Use Conduit
Route - Base Station
Total Route Footage
Poles - Power
Poles - Telco
Poles - Other
Total Poles

Notes	Material
1. 3/16" Strand	XXX
2. Splices	XXX
3. Steel Loops	XXX
4. Hardware	XXX
5. Manholes	XXX

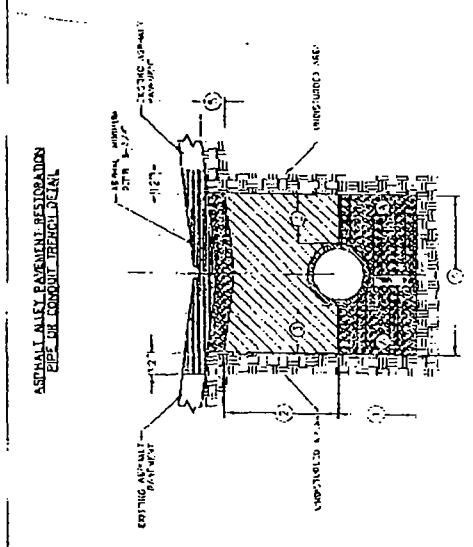


4804 North 10th Street
Chicago, IL 60630
Phone: (773) 592-7400

Map Number: A



DATE	REVISION	CITY OF CHICAGO
		USI/MS OF STRUCTURE CASTING ISOLATION BOX
		DRAWN BY: DEWITT
		CHECKED: A-232A
		DATE: 11/20/12



①	BEDDING
② <td>RAILROAD</td>	RAILROAD
③ <td>CLEARANCE</td>	CLEARANCE
④ <td>TRENCH WIDTH</td>	TRENCH WIDTH
⑤ <td>SUB-BASE</td>	SUB-BASE

DATE	REVISION	CITY OF CHICAGO
		ALLEY PAVEMENT DETAILATION TRENCH DETAIL ASPHALT ALLEY
		DRAWN BY: DEWITT
		CHECKED: A-232A
		DATE: 11/20/12



CHICAGO DEPARTMENT OF TRANSPORTATION

DATE	REVISION	DESCRIPTION	INITIALS
		REVISIONS	
		REVISIONS	
		REVISIONS	
		REVISIONS	

Scale: 1" = 20'

State: ILLINOIS
County: COOK
Municipality: RIVERSIDE/BERWYN

PROPOSED EXTENET SYSTEMS

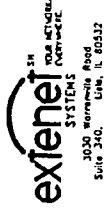
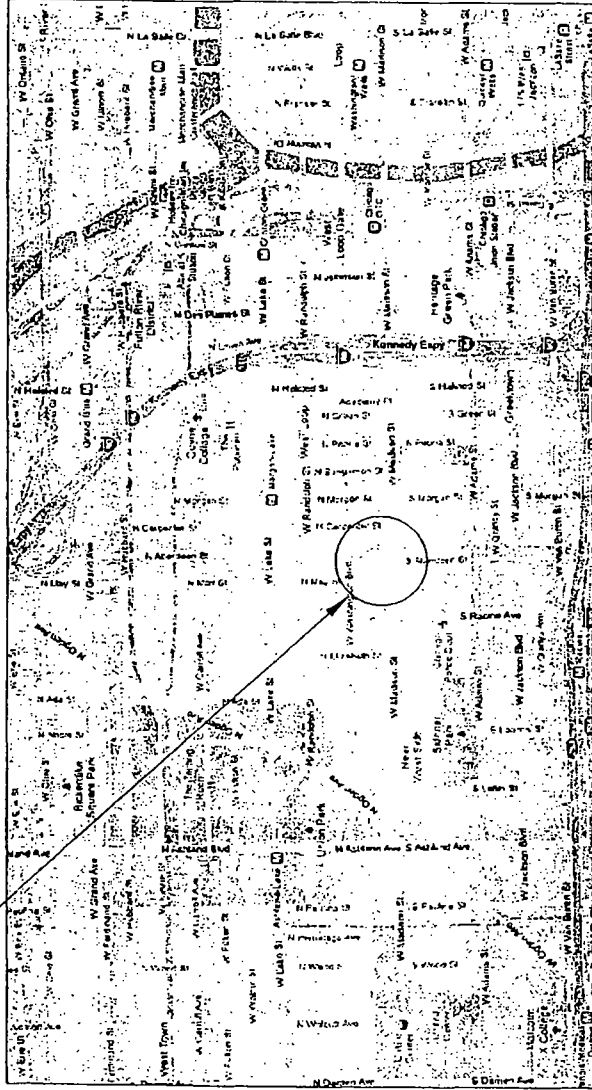
UNDERGROUND FIBER OPTIC FACILITY

N. ABERDEEN ST FROM ALLEY APPROX 135' SOUTH OF W. MADISON ST
WEST MADISON BETWEEN N. ABERDEEN & S. ABERDEEN N. ABERDEEN
N. ABERDEEN FROM W. MADISON TO ALLEY APPROX 175' NORTH OF WEST
WASHINGTON BLVD.
CHICAGO, IL

PROJECT LOCATION

OUC IR FILE # 55713

OUC EFP FILE # 57630



DIGGER HOTLINE
(CHICAGO UTILITY ALERT NETWORK)
1-312-744-7000

CONTACT INFORMATION:

EXTENET SYSTEMS:

DAVE FASSHAUER (708) 975-5786

GABE'S CONSTRUCTION:

ENGINEERING - JEFF RINARTZ (920) 889-4510
CONSTRUCTION - BRIAN VANSCHYNDEL (920) 889-9809

PROJECT NO:

EXTIL12006

PROJECT LOCATION:

S. ABERDEEN ST FROM ALLEY LOCATED APPROX. 135'
SOUTH OF W. MADISON ST, CONTINUE NORTH TO W.
MADISON ST, EAST ALONG W. MADISON ST TO N. ABERDEEN
ST, THEN CONTINUE NORTH ALONG N. ABERDEEN ST. FROM
W. MADISON PAST W. WASHINGTON BLVD TO ALLEY ON
WEST SIDE. APPROX. 175' N OF W. WASHINGTON BLVD,
CONTINUE WEST IN ALLEY FOR APPROX 85' TO RISER
POLE.

ADDITIONAL LOCATION DESCRIPTION:

INSTALL BY OPEN CUT AND TRENCHING APPROX. 994' LF OF
2" HDPE CONDUIT E/W FIBER OPTIC CABLE WITHIN THE
R/W OF N. ABERDEEN & S. ABERDEEN ST. MANHOLE
REQUIRED APPROX 50' NORTH OF W. MADISON ST ALONG N.
ABERDEEN ST.

PROJECT COORDINATOR:

JEFF RINARTZ (920) 889-4510

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REVISIONS
NO. 1
DATE 10/10/50
BY [unclear]
DESCRIPTION [unclear]

PAGE 5

REVISIONS
NO. 1
DATE 10/10/50
BY [unclear]
DESCRIPTION [unclear]

PAGE 4

REVISIONS
NO. 1
DATE 10/10/50
BY [unclear]
DESCRIPTION [unclear]

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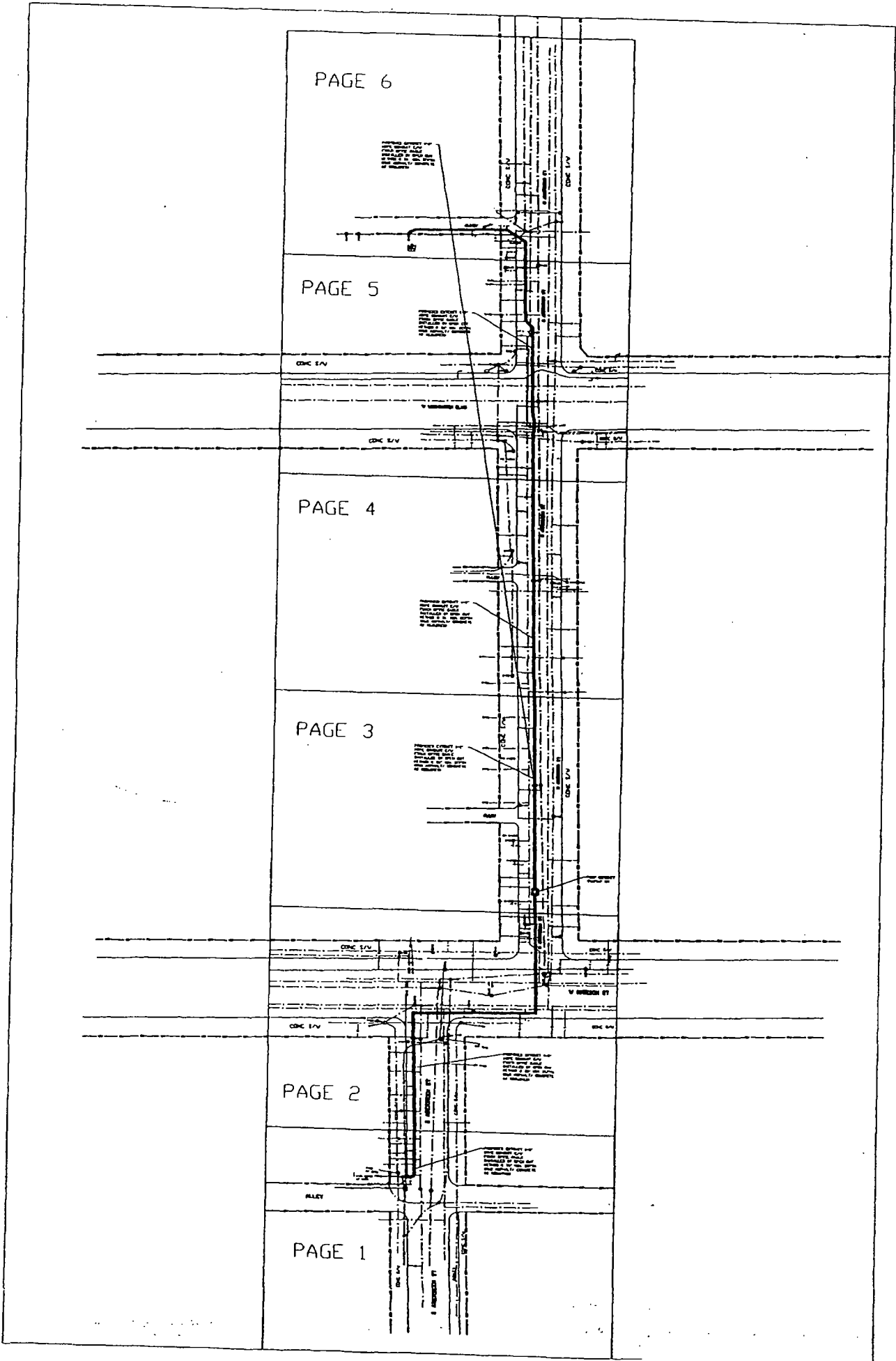
REVISIONS
NO. 1
DATE 10/10/50
BY [unclear]
DESCRIPTION [unclear]

PAGE 2

REVISIONS
NO. 1
DATE 10/10/50
BY [unclear]
DESCRIPTION [unclear]

REVISIONS
NO. 1
DATE 10/10/50
BY [unclear]
DESCRIPTION [unclear]

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PERMIT ONLY



3030 Waverly Road
Suite 310, Lisle, IL 60532
Project #: CXTL12005
Job Title: RUSH-DISTRICT-IL
Engineer: GABE'S

Original Issue Date: 10/19/12
Published Date:

Description	Qty.
Fiber - 432	XXX
Fiber - 288	XXX
Fiber - 144	XXX
Fiber - 96	XXX
Fiber - 72	XXX
Fiber - 36	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - Drop	XXX
Total Fiber	XXX

Routes - AF-111	XXX
Routes - UG-111	XXX
Routes - UG-New Conduit	XXX
Routes - Base Station	XXX
Total Route Footage	XXX

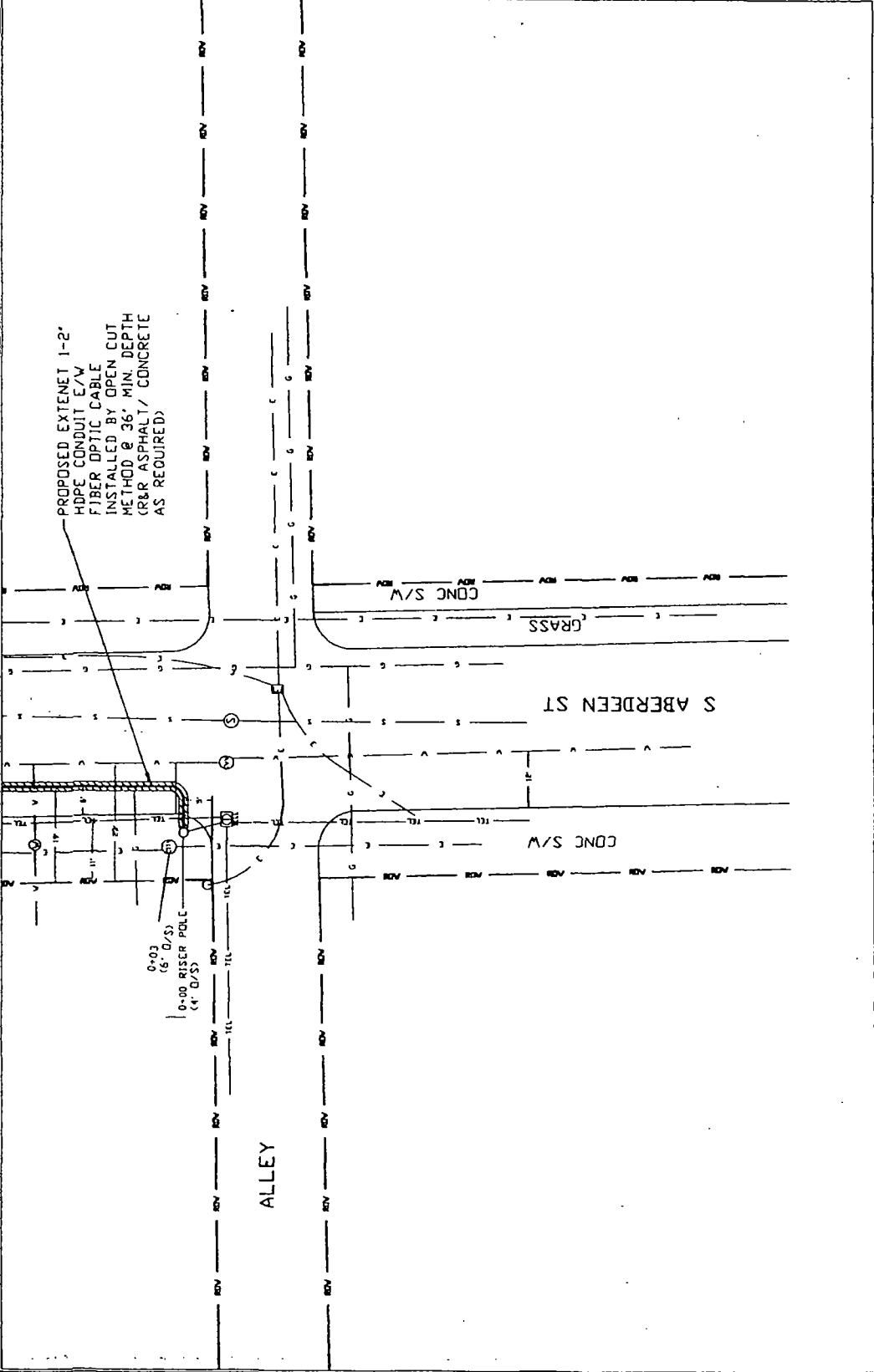
Poles - Fiber	XXX
Poles - Trico	XXX
Poles - Other	XXX
Total Poles	XXX

Nodes	XXX
5/16" Strand	XXX
Anchors	XXX
Straps	XXX
Straps - Loops	XXX
Manholes	XXX
Manholes	XXX



4804 North 40th Street
Sheboygan, WI 53083
Phone: (920) 454-2800

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DATE	REVISION/DESCRIPTION	DATE	REVISION/DESCRIPTION	DATE	REVISION/DESCRIPTION	DATE	REVISION/DESCRIPTION	DATE	REVISION/DESCRIPTION	DATE	REVISION/DESCRIPTION	DATE	REVISION/DESCRIPTION

Scale: 1" = 20'

State: ILLINOIS
County: COOK
Municipality: CHICAGO

PERMIT ONLY



3010 Warramille Road
Suite 310, Urb. IL 60532

Project #: ESTLLE0005

Job Title: RUSH-DISTRICT-IL

Engineer: GABLS

Original Issue Date 10/18/12

Published Date:

Bill of Materials:

Description	Qty.
Fiber - 132	XXX
Fiber - 288	XXX
Fiber - 144	XXX
Fiber - 36	XXX
Fiber - 72	XXX
Fiber - 48	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - Drop	XXX
Total Fiber	XXX

- Route - Aerial
- Route - UC-leased
- Route - UC-Net Conduit
- Route - Base Station
- Total Route Postage

Poles - Power	XXX
Poles - Fiber	XXX
Poles - Other	XXX
Total Poles	XXX

- Nodes
- 5/16" Strand
- 3/8" Anchors
- 3/4" Anchors
- Slack Loops
- Manholes
- Manholes

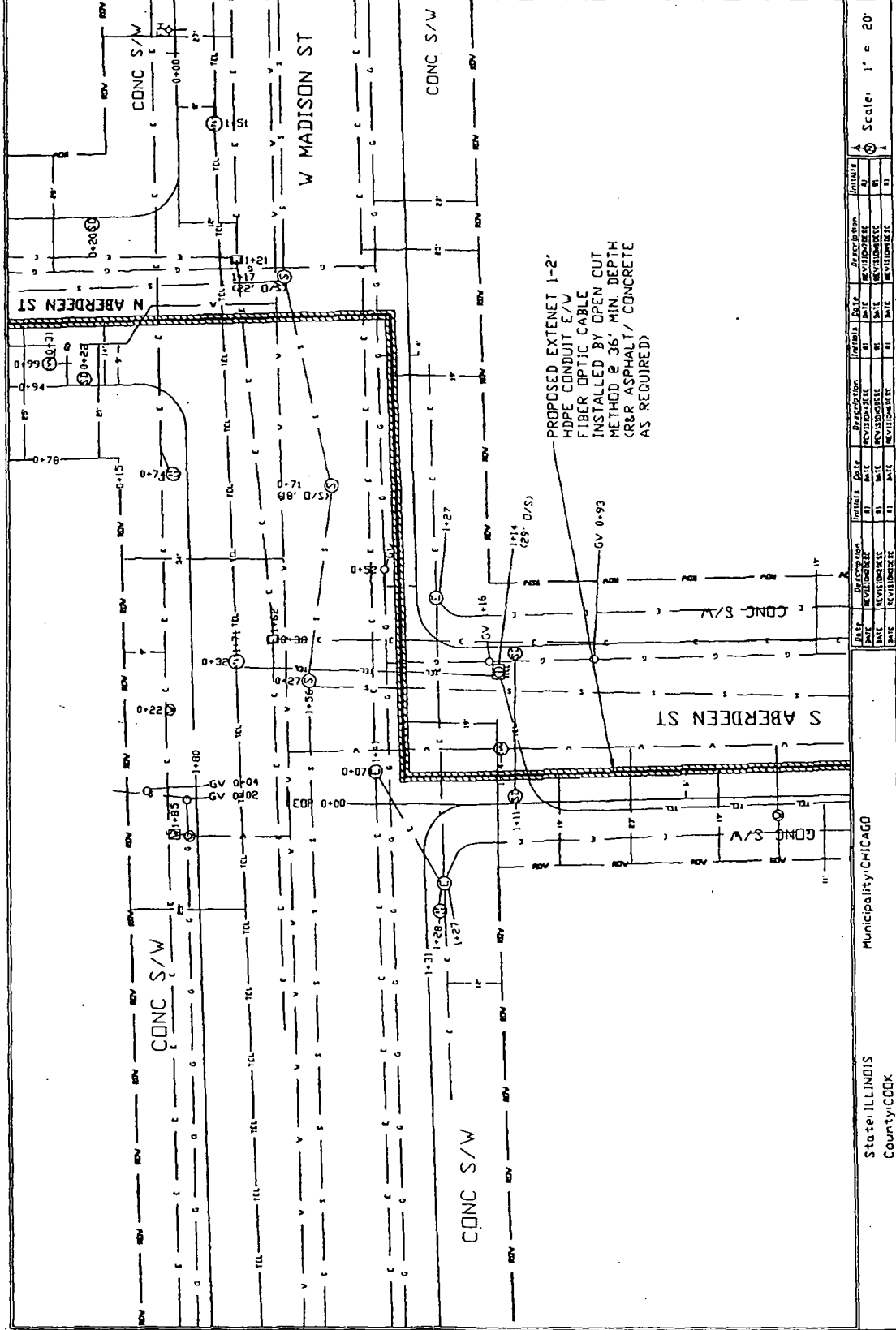
<input type="checkbox"/>	PLAN LOG
<input type="checkbox"/>	ASSET TAG
<input type="checkbox"/>	CONDUIT
<input type="checkbox"/>	MANHOLE
<input type="checkbox"/>	POLE
<input type="checkbox"/>	POSTAGE
<input type="checkbox"/>	SMALLER POLES
<input type="checkbox"/>	SPLITTING BOXES
<input type="checkbox"/>	COMPETING OBJECT



4804 North 43rd Street
Shonopago, WI 53080
Phone: (262) 442-1100

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PROPOSED EXTENET 1-2" HDPE CONDUIT E/W FIBER OPTIC CABLE INSTALLED BY OPEN CUT METHOD @ 36" MIN. DEPTH GR&R ASPHALT/ CONCRETE AS REQUIRED)

Scale: 1" = 20'



DATE	REVISION	DESCRIPTION

Municipality: CHICAGO

State: ILLINOIS
County: COOK

PERMIT ONLY



3030 Stevenson Road
Suite 310, Uin, IL 60332

Project #: EXT112006

Job Title: RUSH-DISTRICT-IL

Engineer: GABER'S

Original Issue Date 10/18/12

Published Date:

Bill of Materials	Qty.
Pole - 422	XIX
Pole - 488	XIX
Pole - 566	XIX
Pole - 72	XIX
Pole - 48	XIX
Pole - 36	XIX
Pole - 18	XIX
Pole - Drop	XIX
Total Fiber	XIX

Route - Aerial

Route - 10C-New Conduit

Route - Base Station

Total Route Footage

Poles - Power

Poles - Telco

Poles - Other

Total Poles

Nodes

3/16" Strand

Anchor's

Splices

Handholes

Handholes

Handholes

Handholes

Handholes

Handholes

Handholes

Handholes

Handholes



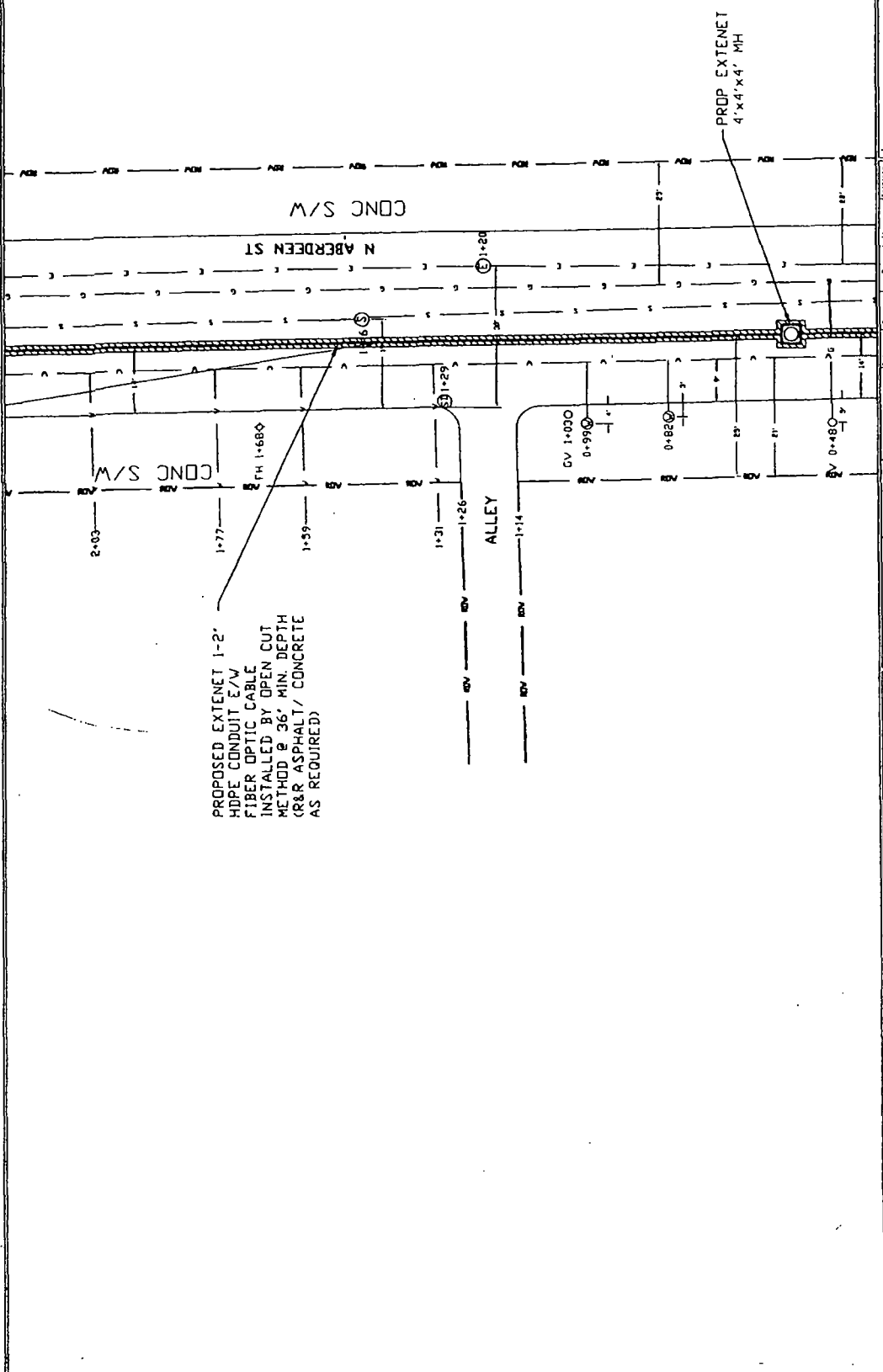
4804 March 4th Street
Shibboleth, WI 53083
Phone: (414) 488-2800

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Map Number: A



DATE	DESCRIPTION	INITIALS	DATE	DESCRIPTION	INITIALS

Scale: 1" = 20'

State: ILLINOIS
County: COOK
Municipality: CHICAGO

PERMIT ONLY



3030 Warrenville Road
Suite 310, Unit 1, 60512

Project No. EXT1120006

Job Title: RUSH-DISTRICT-1-L
Engineer: GABC'S

Original Issue Date 10/18/12

Published Date:

Description	QTY.
Fiber - 428	XXX
Fiber - 288	XXX
Fiber - 144	XXX
Fiber - 72	XXX
Fiber - 48	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - Drop	XXX
Total Fiber	428

Route - Aerial XXX
Route - UC-Lease XXX
Route - UC-Res Conduit XXX
Route - Other Conduit XXX
Total Route Footage XXX

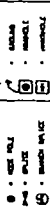
Poles - Power XXX
Poles - Telco XXX
Poles - Other XXX
Total Poles XXX

Nodes XXX
2 1/2" Stand XXX
Arches XXX
Splices XXX
Stack Loops XXX
Handholes XXX
Manholes XXX

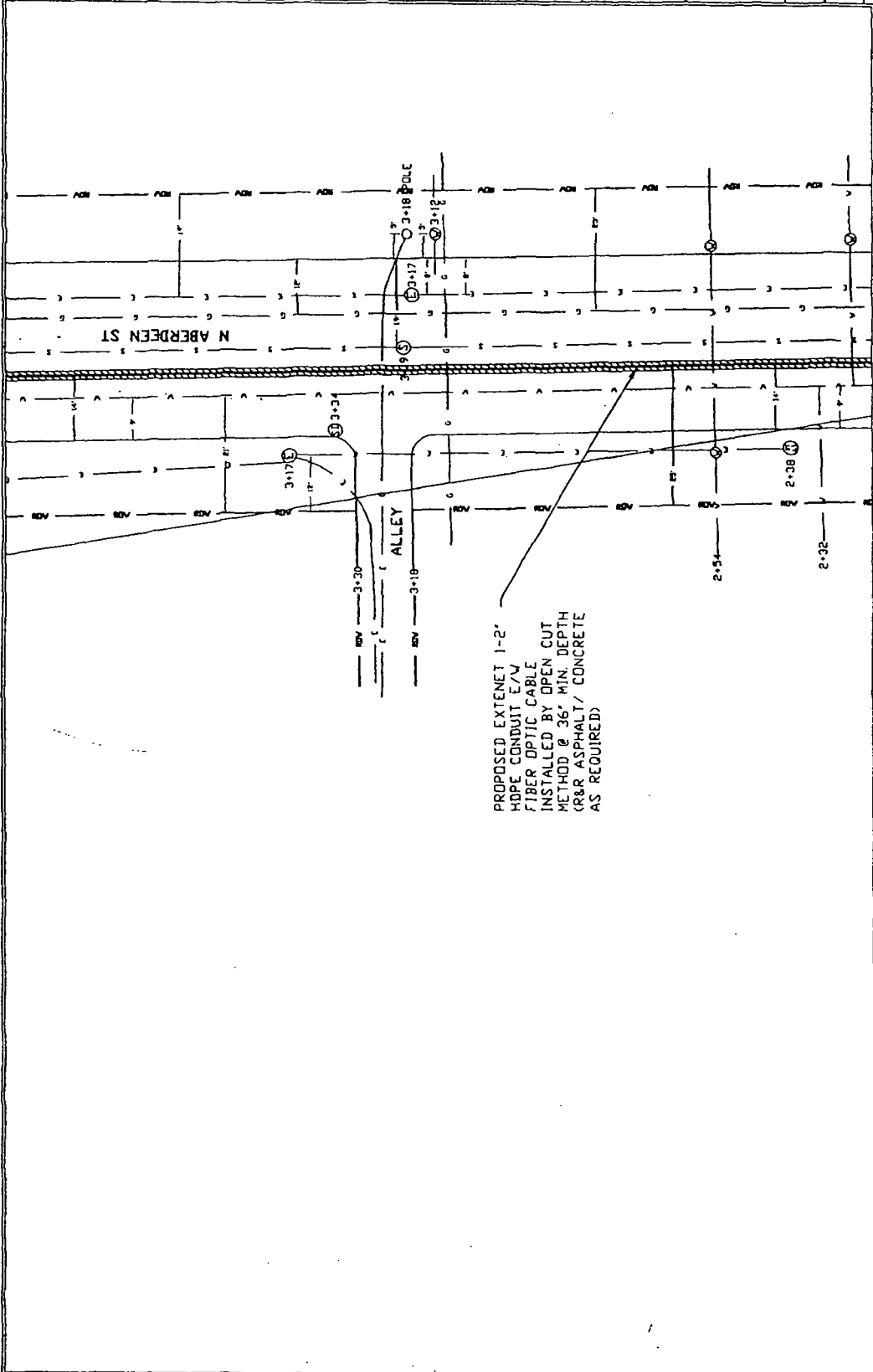
Legend:
X - POWER POLE
O - TELCO POLE
P - POLE
C - STACK POLE
S - STANCHION POLE
H - HOLLOW POLE
M - MANHOLE
D - DIRECTION POLE

Scale: 1" = 20'

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Page 4
Page 3
Map Number: A



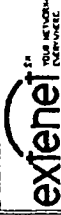
4824 North 48th Street
Chicago, IL 60630
Phone: (773) 482-2800



DATE	BY	DESCRIPTION	ISSUE		REVISION	
			DATE	BY	DATE	BY

State: ILLINOIS
County: COOK
Municipality: CHICAGO

PERMIT_ONLY



3030 Warrenville Road
Suite 310, Uta, IL 60532

Project # EXTIL12006

Job Title: RUSH-DISTRICT-IL

Engineer: GABC'S

Original Issue Date 10/19/12

Published Date:

Description	Qty.
Fiber - 432	XXX
Fiber - 288	XXX
Fiber - 144	XXX
Fiber - 96	XXX
Fiber - 48	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - Drop	XXX
Total Fiber	XXX

Routes - Armal

Routes - LC-Loosed

Routes - LC-Loose Conduit

Routes - Base Station

Total Route Footage

Poles - Power

Poles - Tele

Poles - Other

Total Poles

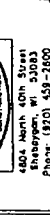
Notes

3/16" Strand

Stack Loops

Manholes

Legend



4801 North 40th Street
Chicago, IL 60630
Phone: (832) 451-2800

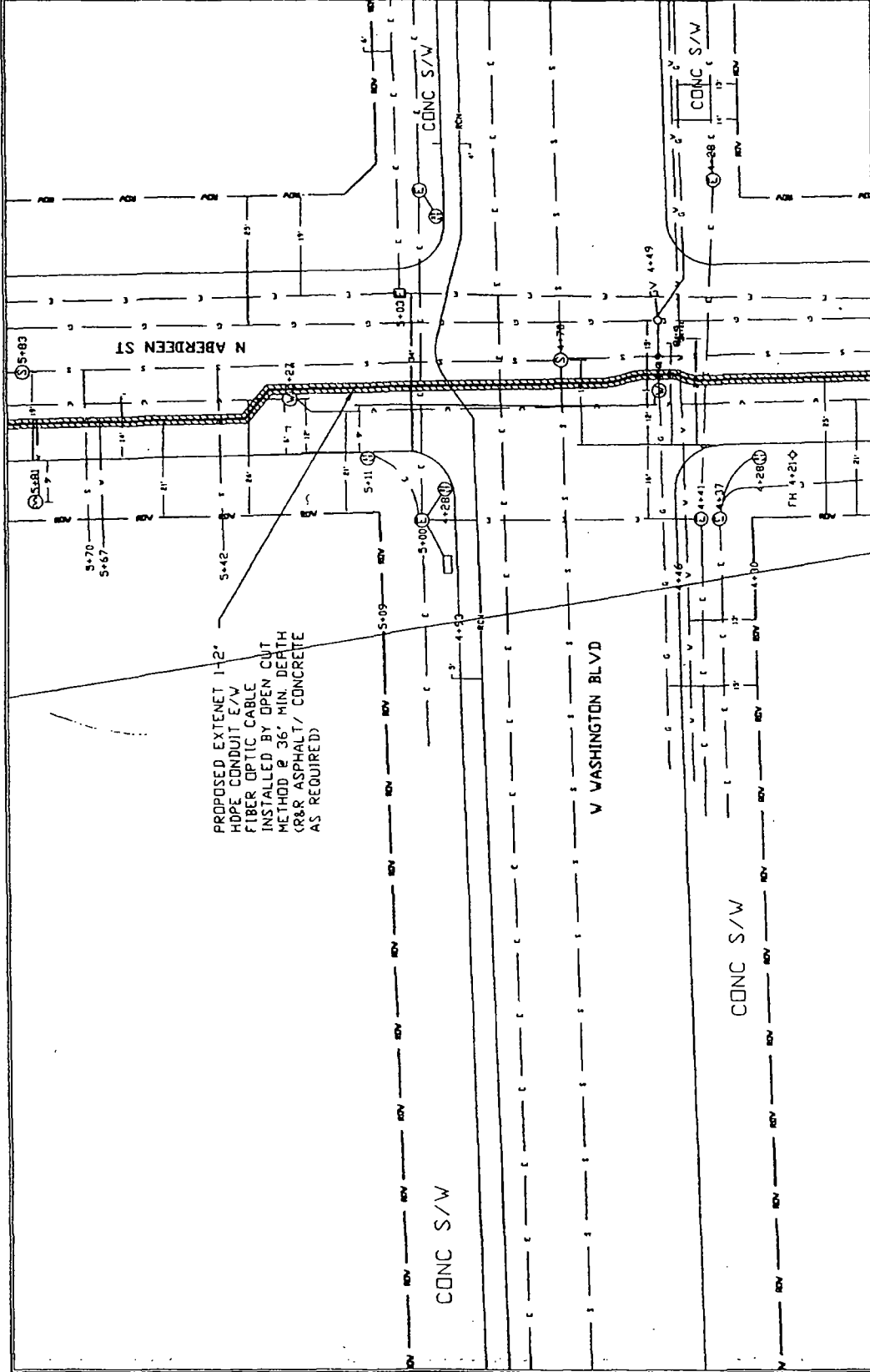
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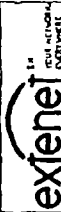


DATE	DESCRIPTION	DATE	DESCRIPTION	DATE	DESCRIPTION

Scale: 1" = 20'

State: ILLINOIS
County: COOK
Municipality: CHICAGO

PERMIT ONLY



3030 Wrennville Road
Suite 340, Lisle, IL 60532

Project #: EX1112005

Job Title: RUSH-DISTRICT-IL
Engineer: GARCIA

Original Issue Date: 10/18/12

Published Date:

Description	Qty
Fiber - 432	XIX
Fiber - 288	XIX
Fiber - 144	XIX
Fiber - 96	XIX
Fiber - 48	XIX
Fiber - 24	XIX
Fiber - 12	XIX
Fiber - Drop	XIX
Total Fiber: XIX	

Route - Aerial
Route - UC-Leased
Route - UC-New Conduit
Route - Base Station
Total Router Footage

Poles - Power
Poles - Telco
Poles - Other

Total Poles

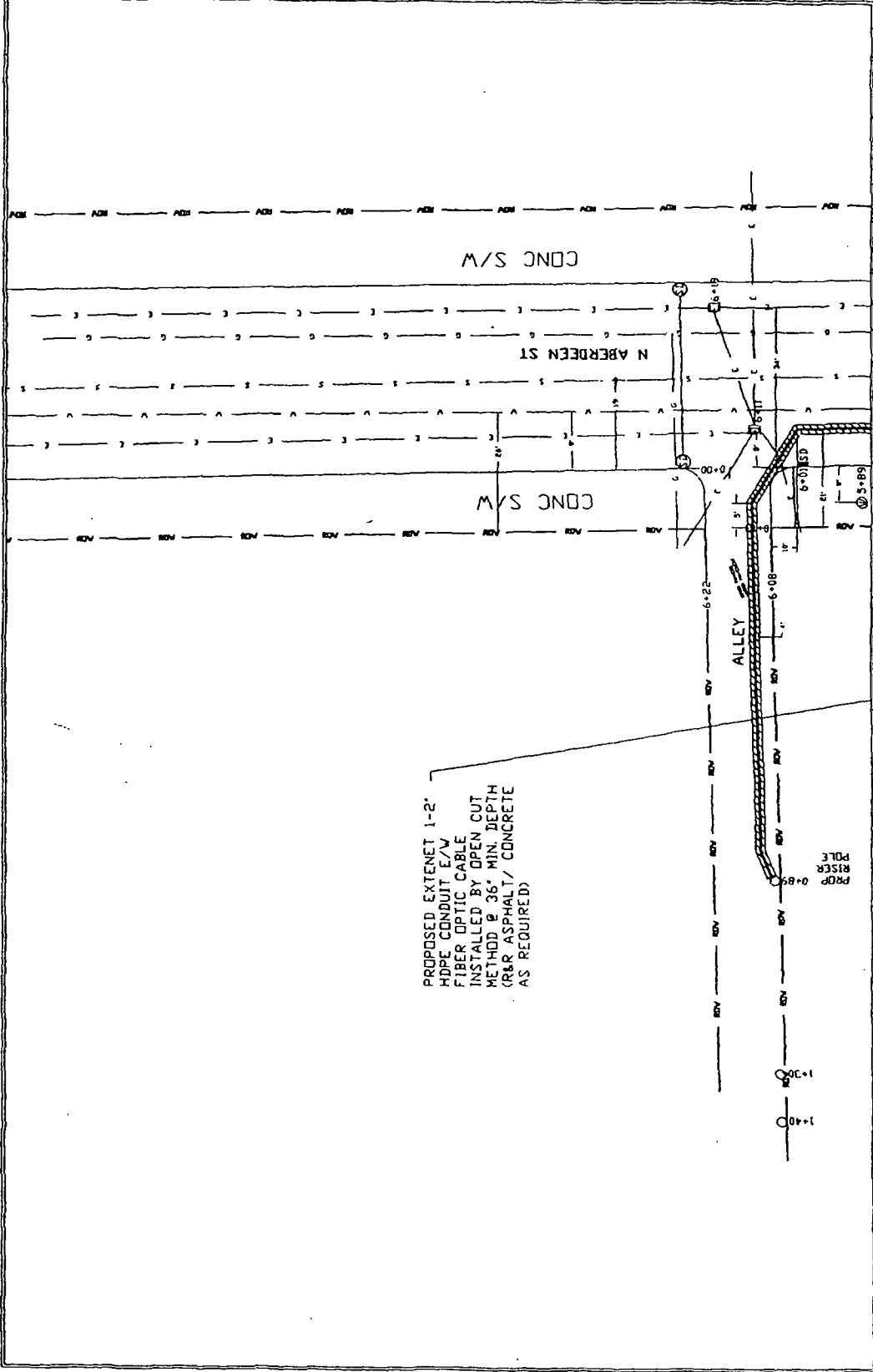
Mode: Strand
XXX
XXX
XXX
XXX
Splices
XXX
XXX
Stack Loops
XXX
Manholes
XXX
XXX

XX - 24" HDPE RIGID POLY
X - 18" RIGID POLY
● - 12" RIGID POLY
○ - 6" RIGID POLY
○ - 4" RIGID POLY
○ - 2" RIGID POLY
○ - 1.5" RIGID POLY
○ - 1.25" RIGID POLY
○ - 1" RIGID POLY
○ - .75" RIGID POLY
○ - .5" RIGID POLY
○ - .375" RIGID POLY
○ - .25" RIGID POLY
○ - .1875" RIGID POLY
○ - .125" RIGID POLY
○ - .0625" RIGID POLY



1878 North 30th Street
Chicago, IL 60641
Phone: (773) 851-2800

Scale: 1" = 20'



PROPOSED EXTENET 1-2'
HDPE CONDUIT E/W
FIBER OPTIC CABLE
INSTALLED BY OPEN CUT
METHOD @ 36" MIN. DEPTH
(R&R ASPHALT/ CONCRETE
AS REQUIRED)

REVISION	DATE	BY	CHKD	DESCRIPTION
1				
2				
3				
4				
5				

DATE REVISION	DATE REVISION	DATE REVISION	DATE REVISION	DATE REVISION

State of ILLINOIS
County: COOK

Municipality: CHICAGO

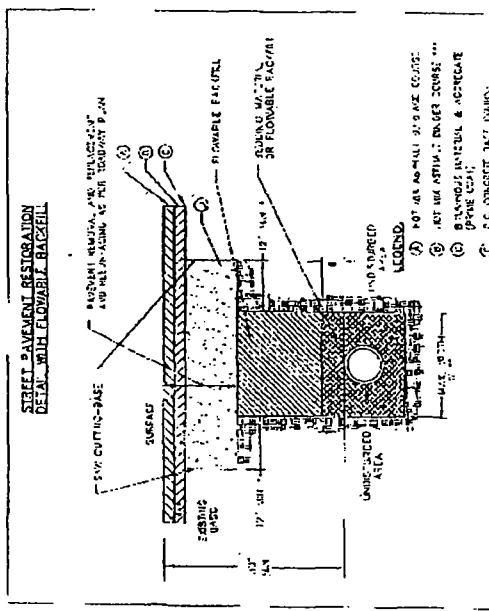
Map Number: A

PERMIT_ONLY

extenei INCORPORATED
 SYSTEMS
 3030 Warramite Road
 Suite 340, Ute, IL 60532
 Project # EXT118206
 Job Title: RUSH-DISTRIC-I-II
 Engineer: GARC'S
 Original Issue Date: 10/18/12

Bill of Materials	Description	Qty
Fiber - 432	XXX	XXX
Fiber - 288	XXX	XXX
Fiber - 144	XXX	XXX
Fiber - 72	XXX	XXX
Fiber - 48	XXX	XXX
Fiber - 36	XXX	XXX
Fiber - 24	XXX	XXX
Fiber - 12	XXX	XXX
Fiber - Drop	XXX	XXX
Total Fiber: XXX		
Route - Aerial	XXX	XXX
Route - Up-Leads	XXX	XXX
Route - Base Station	XXX	XXX
Total Route Footage	XXX	XXX
Poles - Power	XXX	XXX
Poles - Telco	XXX	XXX
Poles - Other	XXX	XXX
Total Poles	XXX	XXX

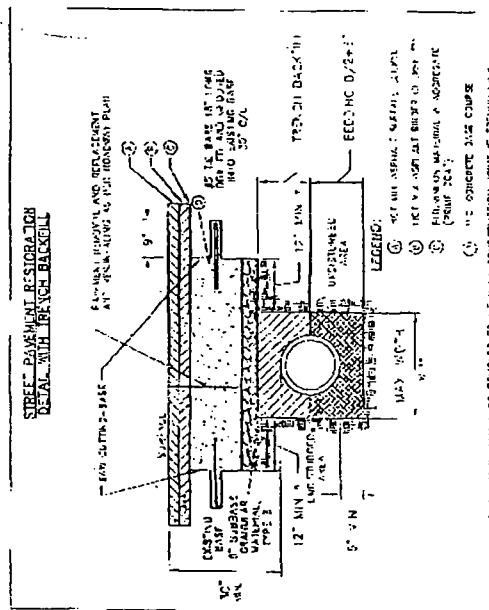
Gabel
 CONSULTANTS
 1881 North York Street
 Schaumburg, IL 60196
 Phone: (815) 458-7100



NOTES:

- PAVEMENT SHALL BE REPAVED TO MATCH EXISTING SURFACE FINISH TO A MINIMUM OF 1/8\"/>
- 5\"/>
- FOR DETAILS AND NOTES SEE SHEET 10/18/12, ACT VIX

CDOT
 CITY OF CHICAGO
 STREET PAVEMENT RESTORATION
 DETAIL WITH FLOWABLE BACKFILL
 DATE: 10/18/12
 SHEET: 4-243



NOTES:

- THE TRENCH TIGHT CONTACT SHALL BE 0.05\"/>
- OVERLAP AND JOINTS SHALL BE REPAVED TO MATCH EXISTING SURFACE FINISH TO A MINIMUM OF 1/8\"/>
- ALL EXISTING PAVEMENT SHALL BE REPAVED TO MATCH EXISTING SURFACE FINISH TO A MINIMUM OF 1/8\"/>

CDOT
 CITY OF CHICAGO
 STREET PAVEMENT RESTORATION
 DETAIL WITH TRENCH BACKFILL
 DATE: 10/18/12
 SHEET: 4-244

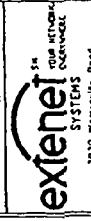
Scale: 1" = 20'

DATE	DESCRIPTION	INITIALS	DATE	DESCRIPTION	INITIALS

State: ILLINOIS
 County: COOK
 Municipality: CHICAGO

Map Number: A

PERMIT ONLY



3030 Weyburne Road
Suite 300, Upt. IL 60532

Project # EX11L12005

Job Title: RUSH-DISTRICT-IL

Engineer: GARCÉS

Original Issue Date: 10/18/12

Published Date:

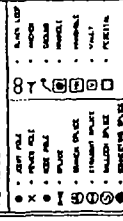
Description	Qty.
Fiber - 432	XXX
Fiber - 288	XXX
Fiber - 144	XXX
Fiber - 75	XXX
Fiber - 48	XXX
Fiber - 36	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - Drop	XXX
Total Fiber	XXX

Route - Aerial XXX
Route - LC-Leased XXX
Route - LC-Non Consult XXX
Route - Bare Station XXX
Total Route Footage 207

Poles - Beer XXX
Poles - Telco XXX
Poles - Other XXX

Notes XXX
3/8" Strand XXX
Slices XXX
Stack Loops XXX
Manholes XXX

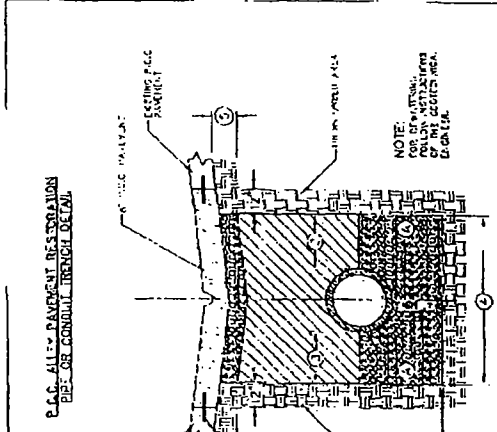
- JURY HOLE
- 1" RISE HOLE
- 2" RISE HOLE
- 3" RISE HOLE
- 4" RISE HOLE
- 6" RISE HOLE
- 8" RISE HOLE
- 12" RISE HOLE
- 18" RISE HOLE
- 24" RISE HOLE
- 30" RISE HOLE
- 36" RISE HOLE
- 42" RISE HOLE
- 48" RISE HOLE
- 54" RISE HOLE
- 60" RISE HOLE
- 66" RISE HOLE
- 72" RISE HOLE
- 78" RISE HOLE
- 84" RISE HOLE
- 90" RISE HOLE
- 96" RISE HOLE
- 102" RISE HOLE
- 108" RISE HOLE
- 114" RISE HOLE
- 120" RISE HOLE



1501 North 40th Street
Chicago, IL 60632
Phone: (773) 492-7400

DATE	REVISION	DESCRIPTION	INITIALS

Map Number: A



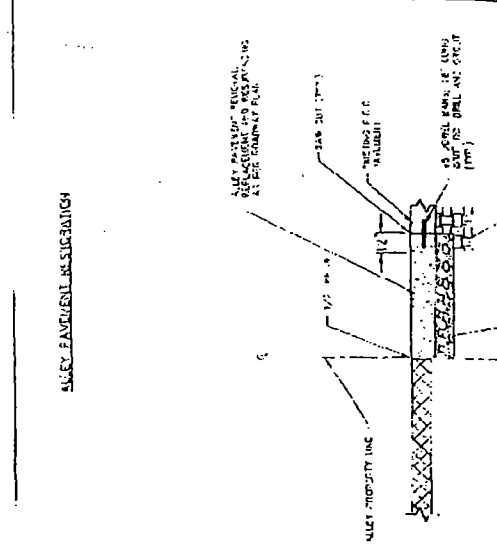
- 1 BEDDING
- 2 BACKFILL
- 3 CLEARANCE
- 4 TRENCH WIDTH
- 5 SUB-BASE

CDOT
CHICAGO DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO
REVISION

DATE: 10/17/10
BY: GUSZ
DATE: 10/17/10
BY: GUSZ

DATE: 10/17/10
BY: GUSZ
DATE: 10/17/10
BY: GUSZ



CDOT
CHICAGO DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO
REVISION

DATE: 10/17/10
BY: GUSZ
DATE: 10/17/10
BY: GUSZ

DATE: 10/17/10
BY: GUSZ
DATE: 10/17/10
BY: GUSZ

Scale: 1" = 20'

DATE	REVISION	DESCRIPTION	INITIALS

State: ILLINOIS
County: COOK
Municipality: CHICAGO

PERMIT_ONLY



3835 Veranda Road
Naperville, IL 60563
Project # EXTIL12006

Job Title: RUSH-DISTRICT-11
Engineer: GABE'S

Original Issue Date 10/18/12

Bill of Materials:

Description	Qty
Fiber - 432	XXX
Fiber - 48	XXX
Fiber - 144	XXX
Fiber - 96	XXX
Fiber - 72	XXX
Fiber - 48	XXX
Fiber - 36	XXX
Fiber - 12	XXX
Fiber - Drop	XXX
Total Fiber	XXX

Routes - Aerial XXX
Routes - Underground XXX
Routes - UG-Non Conduit XXX
Routes - Base Station XXX
Total Route Footage XXX

Poles - Power XXX
Poles - Telco XXX
Poles - Other XXX
Total Poles XXX

Notes
5/16" Strand XXX
Anchors XXX
Splices XXX
Stack Loops XXX
Monitors XXX

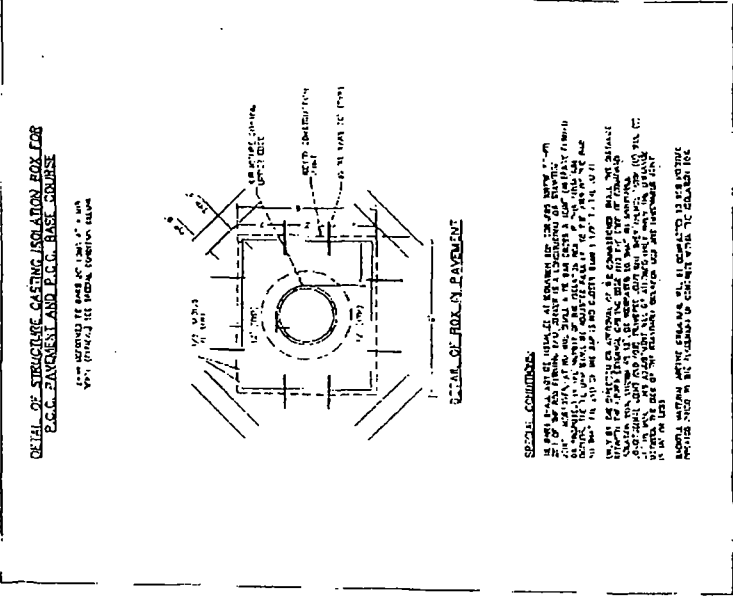
- 1. 1/2" DIA. PIPES
- 2. 1/2" DIA. PIPES
- 3. 1/2" DIA. PIPES
- 4. 1/2" DIA. PIPES
- 5. 1/2" DIA. PIPES
- 6. 1/2" DIA. PIPES
- 7. 1/2" DIA. PIPES
- 8. 1/2" DIA. PIPES
- 9. 1/2" DIA. PIPES
- 10. 1/2" DIA. PIPES



DATE	REVISION	DESCRIPTION

Scale: 1" = 20'

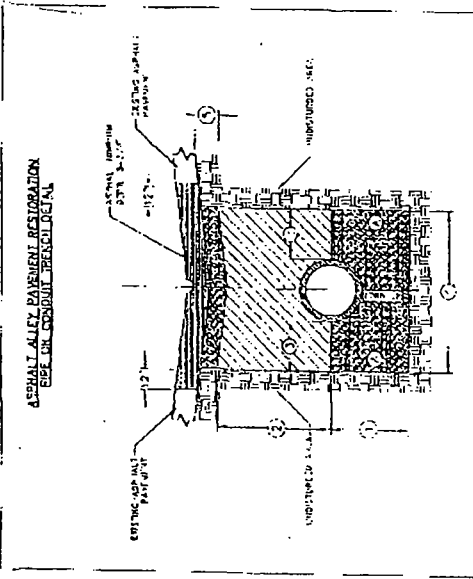
DATE	REVISION	DESCRIPTION	INITIALS



CITY OF CHICAGO
URBAN ENGINEERING ARCHITECTURE
ISOLATION BOX

DATE	REVISION	DESCRIPTION

CDOT
CITY OF CHICAGO



CITY OF CHICAGO
URBAN ENGINEERING ARCHITECTURE
RESTORATION TYPE OR CORNER
BREAK DETAIL - ASPHALT ALLEY

DATE	REVISION	DESCRIPTION

CDOT
CITY OF CHICAGO

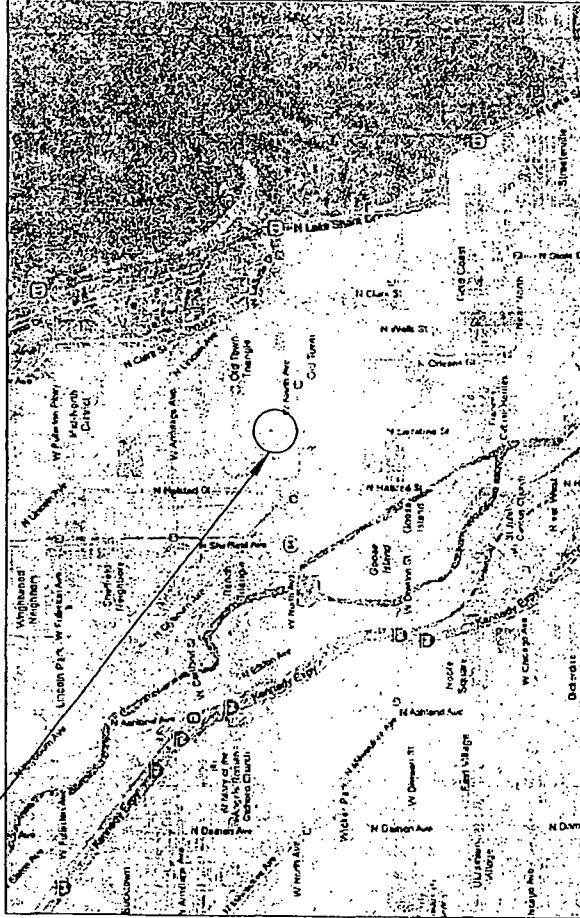
State: ILLINOIS
County: COOK
Municipality: CHICAGO

PROPOSED EXTENET SYSTEMS

UNDERGROUND FIBER OPTIC FACILITY

N. LARRABEE ST. FROM ALLEY SOUTH OF W. NORTH AVE.
W. EUGENIE ST FROM N. LARRABEE ST TO ALLEY EAST
OF N. LARRABEE ON W. EUGENIE, CONTINUING NORTH IN
ALLEY APPROX 125' NORTH IN ALLEY

PROJECT LOCATION
OCU IR FILE # 55984
OCU EFP # 57651



DIGGER HOTLINE
<CHICAGO UTILITY ALERT NETWORK>
1-312-744-7000

CONTACT INFORMATION:

EXTENET SYSTEMS:

DAVE FASSHAUER (708) 975-5786

GABE'S CONSTRUCTION:

ENGINEERING -- JEFF RINARTZ (920) 889-4510

CONSTRUCTION -- BRIAN VANSCHYNDEL (920) 889-9809

PROJECT NO:

EXTIL12008

PROJECT LOCATION:

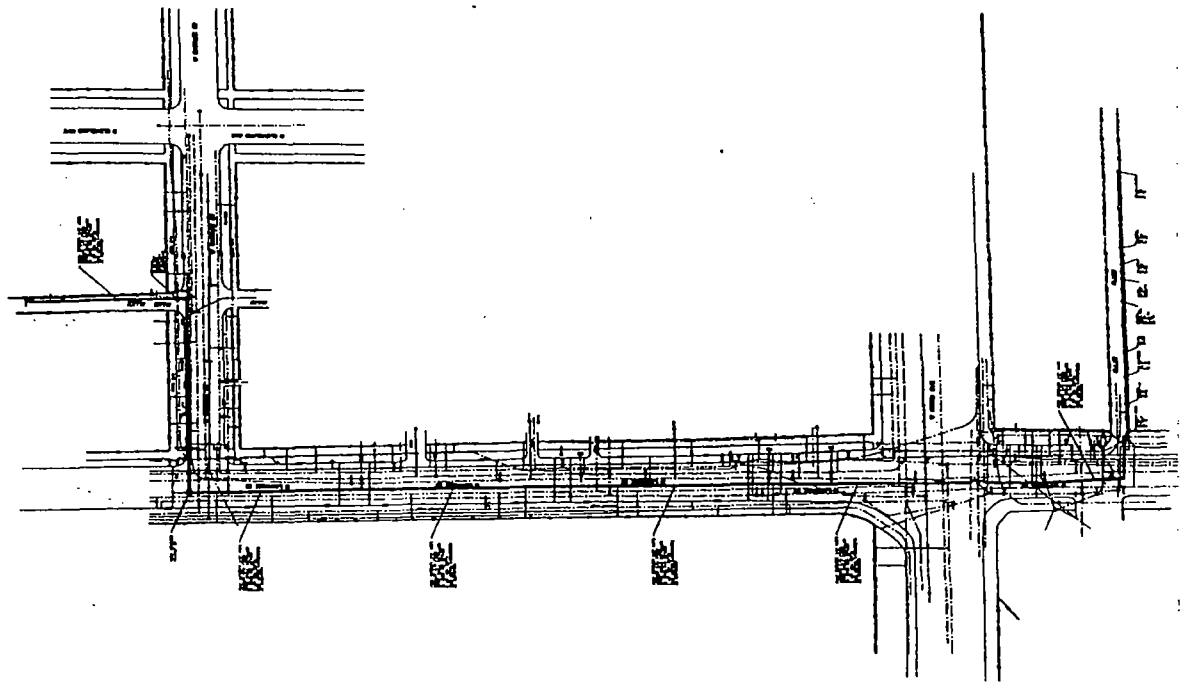
N. LARRABEE ST FROM ALLEY LOCATED SOUTH OF W.
NORTH AVE TO W. EUGENIE ST, CONTINUE EAST ON W.
W. EUGENIE TO ALLEY APPROX 150' EAST OF N. LARRABEE,
CONTINUE NORTH IN ALLEY APPROX 125' TO SECOND POLE.

ADDITIONAL LOCATION DESCRIPTION:

INSTALL BY OPEN CUT TRENCH APPROX. 1105' LF OF 2"
HDPE CONDUIT E/W FIBER OPTIC CABLE WITHIN THE R/W
OF N. LARRABEE BETWEEN W. EUGENIE ST & ALLEY S. OF
W. NORTH AVE, PLACE MANHOLE AT W. EUGENIE ST,
CONTINUE EAST ALONG W. EUGENIE ST TO FIRST ALLEY,
CONTINUE NORTH TO SECOND POLE IN ALLEY WAY

PROJECT COORDINATOR:

JEFF RINARTZ (920) 889-4510



PERMIT_ONLY



3030 Warrenville Road
Suite 310, Lisle, IL 60532
Project # EXT112008
Job Title: NORTH DISTRICT-IL
Engineer: GABE'S

Published Date: 10/22/12

Original Issue Date: 10/22/12

Bill of Materials	
Description	Qty.
Fiber - 432	XXX
Fiber - 288	XXX
Fiber - 144	XXX
Fiber - 72	XXX
Fiber - 48	XXX
Fiber - 36	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - Drop	XXX
Total Fiber	XXX

Routes - Aerial: XXX
Routes - US-Leased: XXX
Routes - US-New Conduit: XXX
Routes - New Station: XXX
Total Route Footage: XXX

Poles - Power: XXX
Poles - Telco: XXX
Poles - Other: XXX

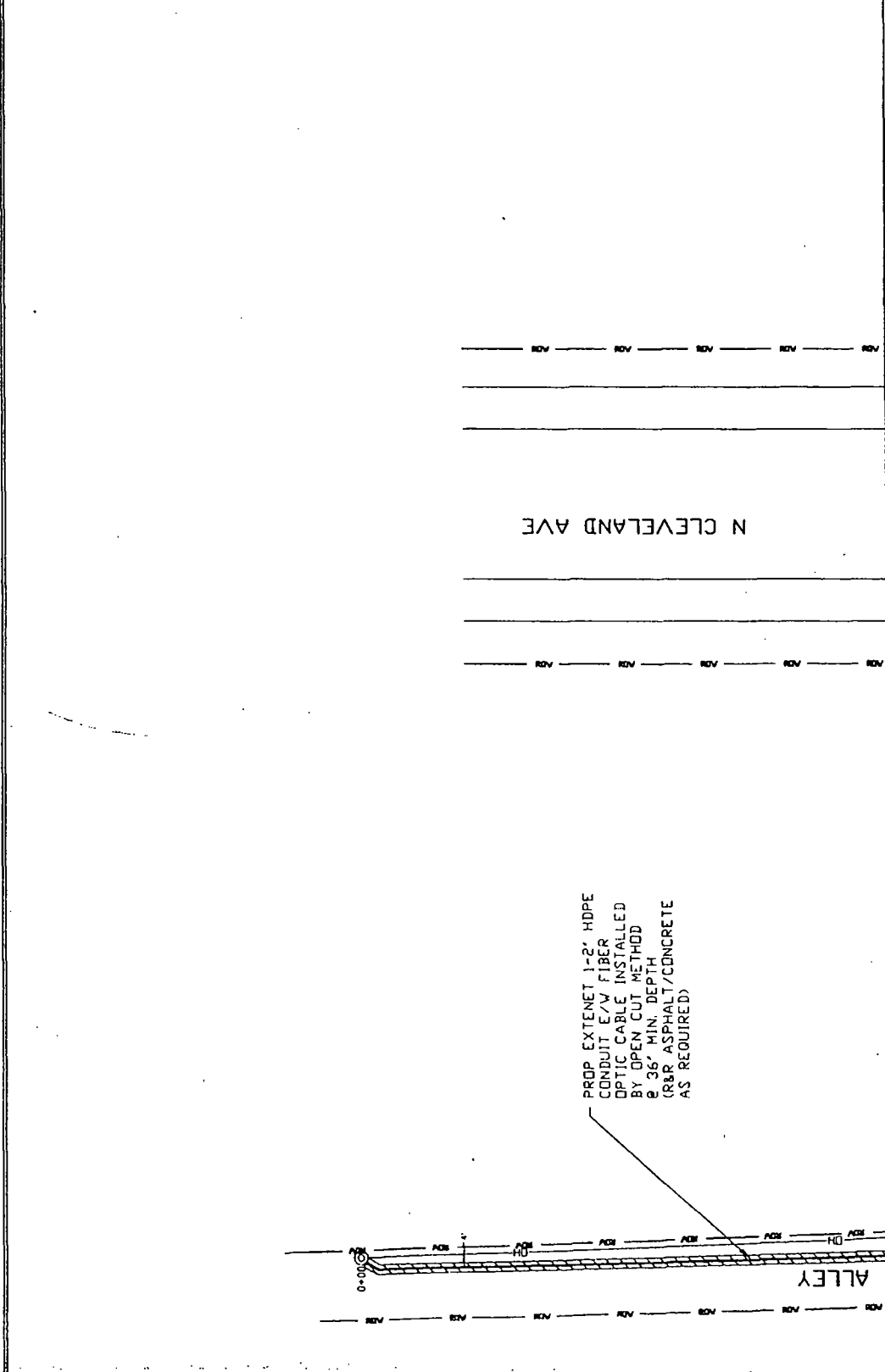
Total Poles: XXX

Hardware

Wires/Strand: XXX
Jackets: XXX
Archives: XXX
Splices: XXX
Slack Loops: XXX
Manholes: XXX

• 10FT PULL • 50FT PULL • 100FT PULL
• 150FT PULL • 200FT PULL • 300FT PULL
• 400FT PULL • 500FT PULL • 600FT PULL
• 700FT PULL • 800FT PULL • 900FT PULL
• 1000FT PULL • 1100FT PULL • 1200FT PULL
• 1300FT PULL • 1400FT PULL • 1500FT PULL

1024 North 49th Street
Lisle, IL 60532
Phone: (708) 433-2100



N CLEVELAND AVE

PROP EXTENET 1-2' HDPE
CONDUIT E/V FIBER
OPTIC CABLE INSTALLED
BY OPEN CUT METHOD
@ 36' MIN. DEPTH
(R&R ASPHALT/CONCRETE
AS REQUIRED)

State: ILLINOIS Municipality: CHICAGO

County: COOK

DATE	DESCRIPTION	ISSUED DATE	REVISION	BY	CHK

Scale: 1" = 20'

Map Number: A

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Map Number: A

PERMIT ONLY



3030 Warrick Road
Suite 340, Lisle, IL 60532

Project #: EX1112008

Job Title: NORTH DISTRICT-IL

Engineer: CMC'S

Original Issue Date 10/22/12

Published Date:

Description	Qty.
Fiber - 432	XXX
Fiber - 288	XXX
Fiber - 144	XXX
Fiber - 96	XXX
Fiber - 72	XXX
Fiber - 36	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - Drop	XXX
Total Fiber	XXX

Route - Aerial

Route - UC-Lessd

Route - UC-New Conduit

Route - Base Station

Total Route Footage

Poles - Power

Poles - Fiber

Poles - Other

Total Poles

Needs

3/16" Strand

Wrenches

Stack Loops

Manholes

Manholes

Manholes

Manholes

Manholes

Manholes

Manholes

Manholes

Manholes

Manholes

Manholes

Manholes

Manholes

Manholes

Manholes

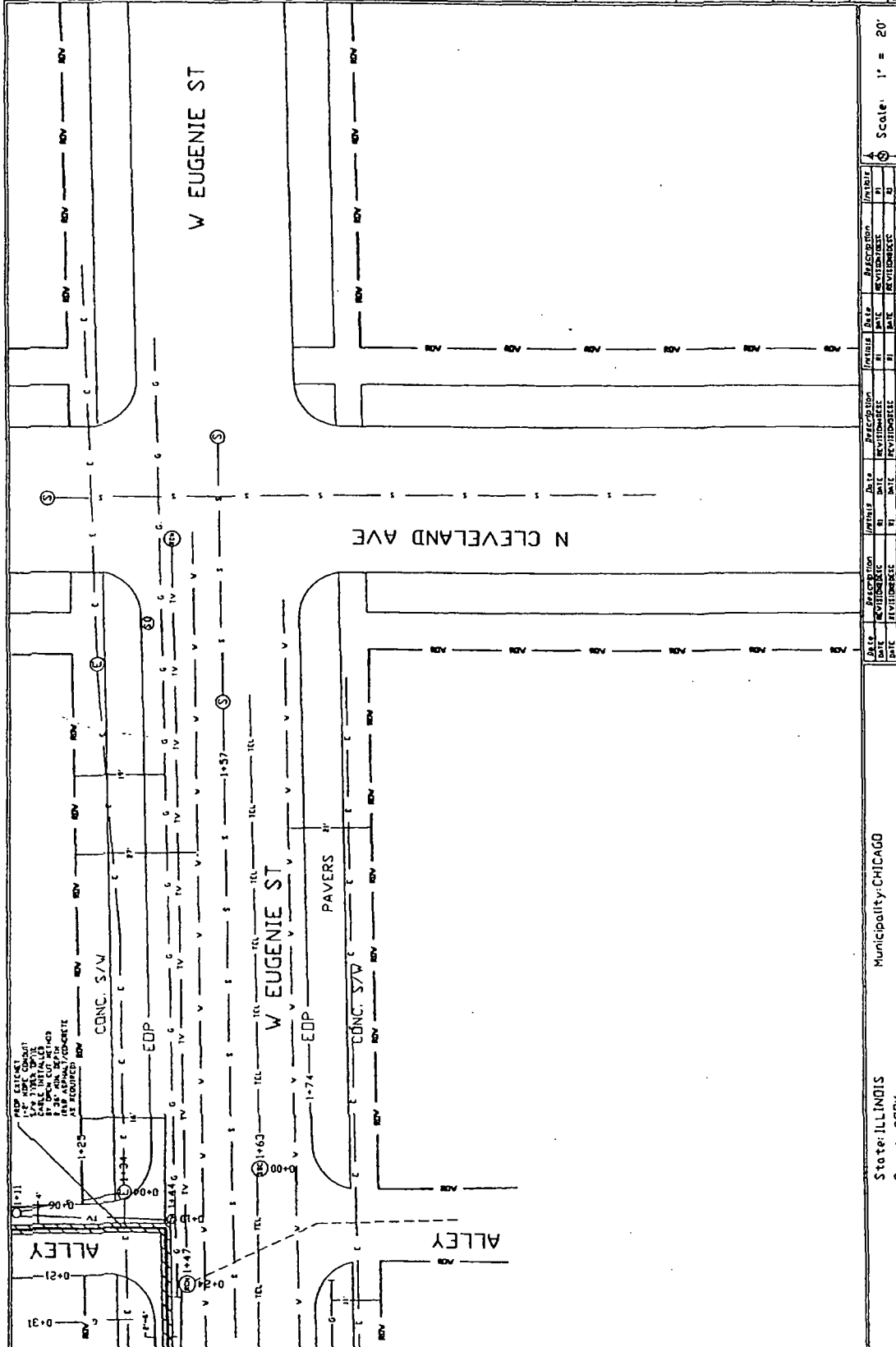
Manholes

Manholes



4804 North 40th Street
Chicago, IL 60641
Phone: (800) 438-2800

Page #	Map Number
PAGE 1	A
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PAGE 3	
PAGE 4	



Scale: 1" = 20'

DATE	DESCRIPTION	BY	DATE	DESCRIPTION	BY

State: ILLINOIS
County: COOK
Municipality: CHICAGO

PERMIT ONLY



3030 Warranda Road
Suite 310, Oak, IL 60532

Project #: EX111E2008
Job Title: NORTH DISTRICT-IL
Engineer: GAB'S

Original Issue Date 10/22/12
Published Date:

Bill of Materials:

Description	Qty.
Fiber - 432	XXX
Fiber - 288	XXX
Fiber - 144	XXX
Fiber - 96	XXX
Fiber - 72	XXX
Fiber - 24	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - Drop	XXX
Total Fiber	XXX

Route - Aerial
Route - UC-Leased
Route - UC-New Conduit
Route - Base Station
Total Route Postage

Poles - Power
Poles - Enco
Poles - Other
Total Poles

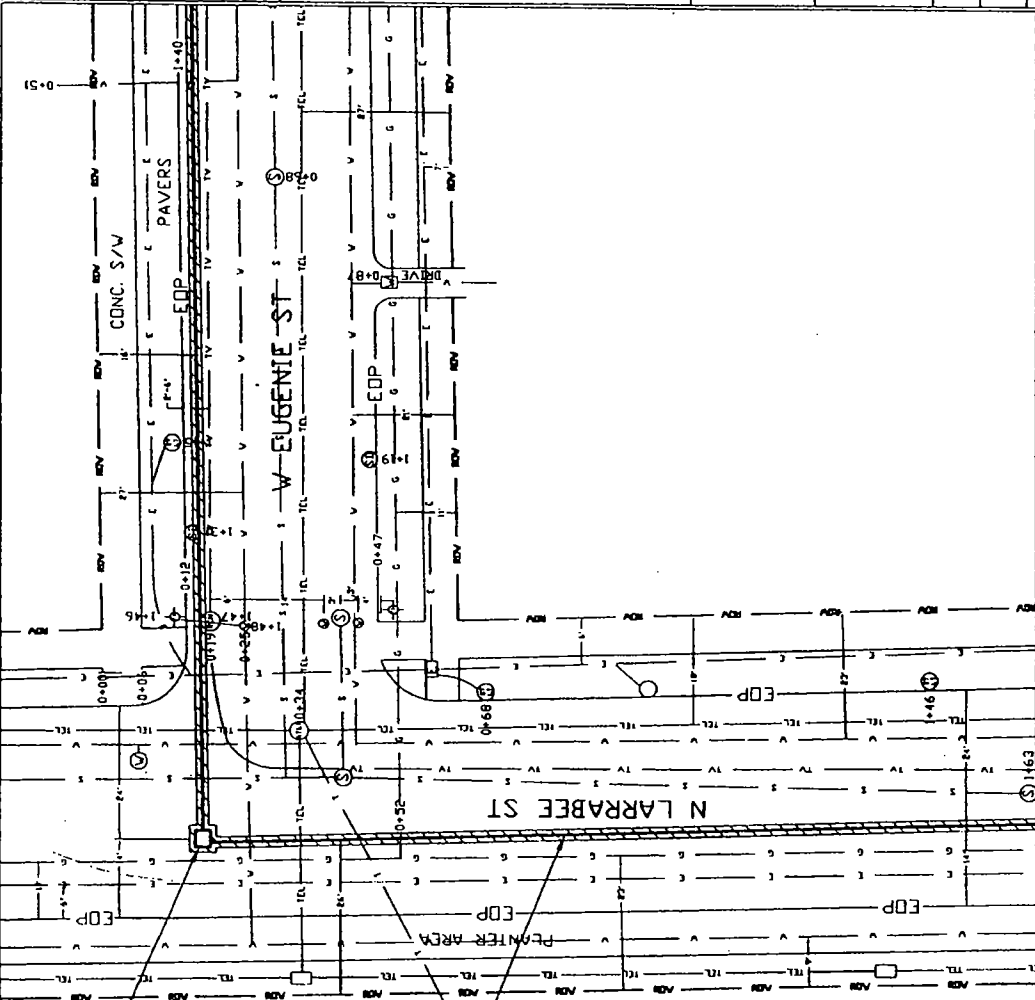
- Nodes - Strand
- Nodes - 4-Way
- Splices
- Stack Loops
- Manholes
- 200' PILE
- 100' PILE
- 50' PILE
- STANDARD PILE
- MASON PILE
- CONCRETE PILE



4804 North 40th Street
Shelburne, VT 05080
PHONE: (802) 485-2800

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Map Number: A



PROP. EXTENET
4' x 4' x 4' MH

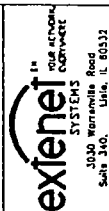
PROP EXTENET 1-2' HDPE
CONDUIT E/W FIBER
OPTIC CABLE INSTALLED
BY OPEN CUT METHOD
@ 36" MIN. DEPTH
(R/R ASPHALT/CONCRETE
AS REQUIRED)

Scale: 1" = 20'

DATE	DESCRIPTION	INITIALS	DATE	DESCRIPTION	INITIALS
	REVISED			REVISED	

State: ILLINOIS
County: COOK
Municipality: CHICAGO

PERMIT ONLY



1010 Warramille Road
Suite 310, Uia, IL 60532

Project #: EXTIL12008

Job Title: NORTH DISTRICT-IL

Engineer: GARCIS

Original Issue Date 10/22/12

Published Date:

Bill of Materials:

Description Qty

Fiber - 28 XXX

Fiber - 28 XXX

Fiber - 144 XXX

Fiber - 96 XXX

Fiber - 28 XXX

Fiber - 48 XXX

Fiber - 24 XXX

Fiber - 12 XXX

Fiber - Drop XXX

Total Fiber XXX

Routes - As-built XXX

Routes - UC-Loaded XXX

Routes - UC-New Conduit XXX

Routes - Base Station XXX

Total Route Footage XXX

Poles - Power XXX

Poles - Telco XXX

Poles - Other XXX

Total Poles XXX

Nodes XXX

5/16" Strand XXX

Splices XXX

Splices Loops XXX

Manholes XXX

Manholes XXX

Technical drawing showing utility routes, fiber paths, and street layouts including N LARABEE ST and DRIVE 3-86. The drawing includes various symbols for poles, conduits, and fiber paths, along with annotations for 'PROP EXTENET 1-2' HDPE CONDUIT E/W FIBER OPTIC CABLE INSTALLED BY OPEN CUT METHOD @ 36" MIN. DEPTH (R&R ASPHALT/CONCRETE AS REQUIRED)'.

DATE	DESCRIPTION	INITIALS	DATE	DESCRIPTION	INITIALS
10/22/12	ISSUE				
	REVISED				
	REVISED				
	REVISED				

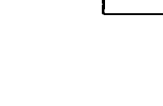
Scale: 1" = 20'

State of ILLINOIS
County: COOK

Municipality: CHICAGO

Page 4
Page 5
Page 6

Map Number: A



extenel
 SYSTEMS
 3030 W. North Road
 Suite 310, Deerfield, IL 60015
 Project # EXT112008
 Job Title NORTH DISTRICT-IL
 Engineer GABE'S
 Original Issue Date 10/22/12

Bill of Materials:

Description	Qty.
Fiber - 432	XXX
Fiber - 888	XXX
Fiber - 56	XXX
Fiber - 72	XXX
Fiber - 48	XXX
Fiber - 26	XXX
Fiber - 52	XXX
Fiber - Drop	XXX
Total Fiber	XXX

Route - Aerial
 Route - UC-Loaded
 Route - Bare Fiber
 Route - Bare Station
 Total Route Footage
 Poles - Power
 Poles - Telco
 Poles - Other

Total Poles
 Nodes
 S/W's Strands
 Anchors
 Splices
 Slack Loops
 Handovers
 Manholes

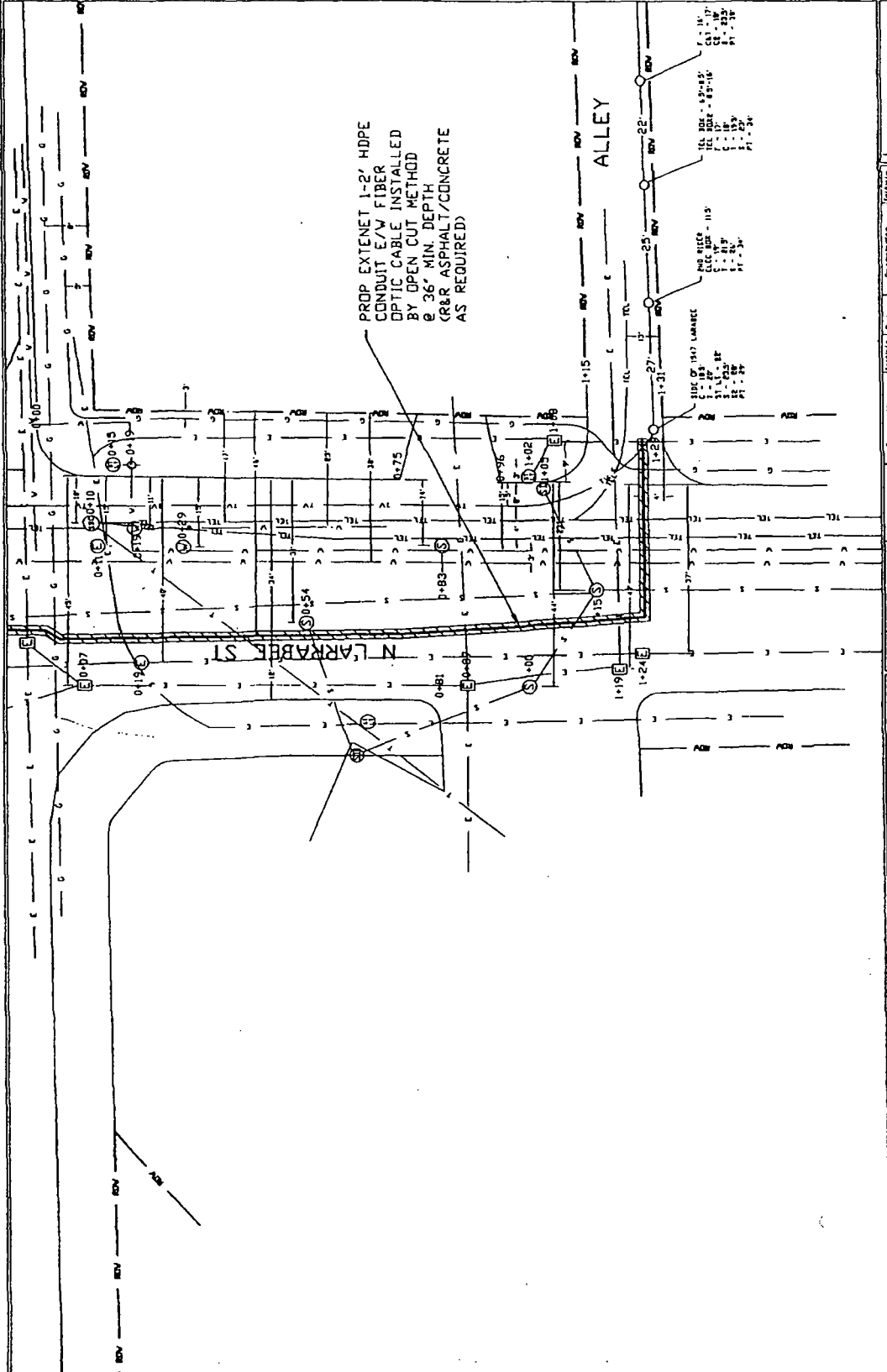
- 12" RIB
- 18" RIB
- 24" RIB
- 36" RIB
- 48" RIB
- 60" RIB
- 72" RIB
- 84" RIB
- 96" RIB
- 108" RIB
- 120" RIB
- 144" RIB
- 168" RIB
- 192" RIB
- 216" RIB
- 240" RIB
- 264" RIB
- 288" RIB
- 312" RIB
- 336" RIB
- 360" RIB
- 384" RIB
- 408" RIB
- 432" RIB
- 456" RIB
- 480" RIB
- 504" RIB
- 528" RIB
- 552" RIB
- 576" RIB
- 600" RIB



Scale: 1" = 20'

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Page 8

Map Number: A



Rev. No.	Date	Description	Initial	Date
1				
2				
3				
4				
5				
6				
7				
8				

State: ILLINOIS
 County: COOK
 Municipality: CHICAGO

PERMIT_ONLY

extenei IN
SYSTEMS OPERATIONS
1616 Veterans Road
Suite 310, Oak Brook, IL 60132

Project #: EXT112000
Job Title: NORTH DISTRICT-IL
Engineer: GAF/S

Original Issue Date: 10/22/12
Published Date:

Description	Qty.
Fiber - 42	XXX
Fiber - 84	XXX
Fiber - 144	XXX
Fiber - 96	XXX
Fiber - 72	XXX
Fiber - 48	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - Drop	XXX
Total Fiber	XXX

Route - Aerial
Route - US-Leased
Route - US-New Conduit
Route - Base Station
Total Route Footage: XXX

Poles - Power
Poles - Dingo
Total Poles: XXX

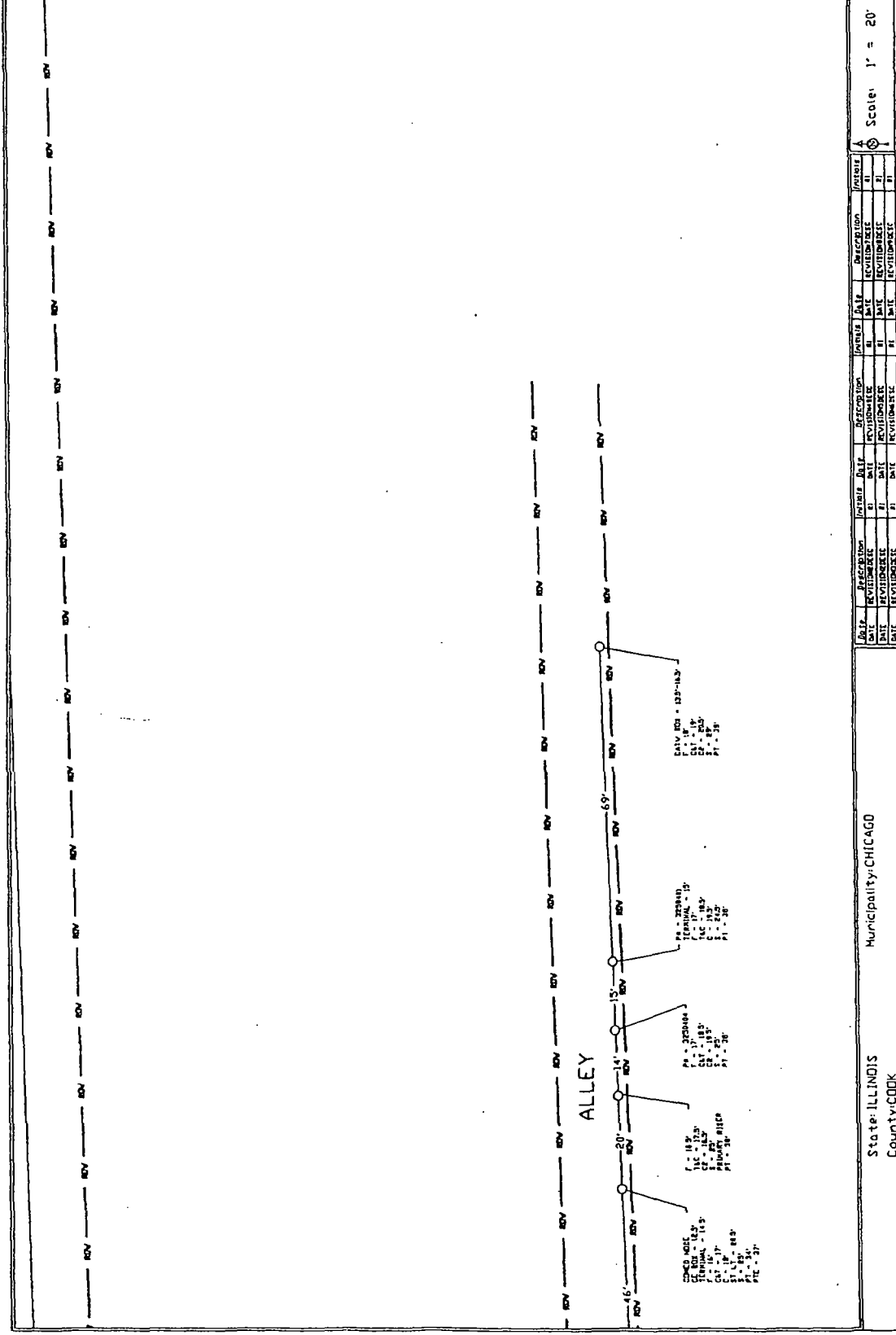
Nodes
3/16" Strand
ANCHORS
SPICES
Cable loops
HANDHOLES
MANHOLES

- ☐ - 120V PULL
- ☐ - 240V PULL
- ☐ - 480V PULL
- ☐ - 600V PULL
- ☐ - 120V PLATE
- ☐ - 240V PLATE
- ☐ - 480V PLATE
- ☐ - 600V PLATE
- ☐ - CONCRETE PLATE



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PAGE 6	
PAGE 7	
PAGE 8	

Map Number: A



Scale: 1" = 20'

REVISION	DATE	DESCRIPTION	BY	DATE	DESCRIPTION	BY	DATE	DESCRIPTION	BY
1									
2									
3									
4									
5									
6									
7									
8									

State: ILLINOIS
County: COOK
Municipality: CHICAGO

PERMIT ONLY

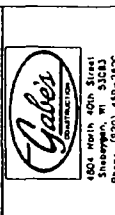


3330 Warrville Road
Suite 340, Ume, IL 60431
Project # EXTIL12008

Job: STRENGTH DISTRICT-IL
Engineer: GAIS
Original Issue Date: 10/22/12

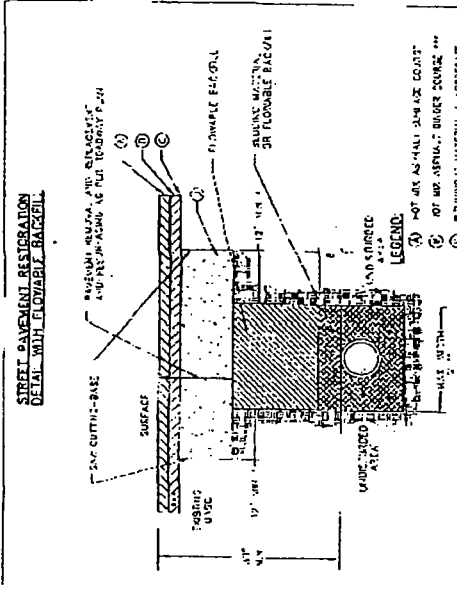
Published Date:	Description:	Qty.
	Fiber - 432	XXX
	Fiber - 288	XXX
	Fiber - 144	XXX
	Fiber - 72	XXX
	Fiber - 48	XXX
	Fiber - 36	XXX
	Fiber - 24	XXX
	Fiber - 12	XXX
	Fiber - Drop	XXX
	Total Fiber	XXX
	Route - Aerial	XXX
	Route - UG-Leased	XXX
	Route - UG-Own	XXX
	Route - Drop	XXX
	Route - Backhaul	XXX
	Route - Station	XXX
	Total Route Footage	XXX
	Poles - Power	XXX
	Poles - Tele	XXX
	Poles - Other	XXX
	Total Poles	XXX

Notes:	XXX
Splices:	XXX
Stack Loops:	XXX
Manholes:	XXX
Other:	XXX



4801 North 40th Street
Sheboygan, WI 53081
Phone: (430) 438-2525

Map Number: A



**STREET PAVEMENT RESTORATION
DETAIL WITH FLOWABLE BACKFILL**

1. FLOWABLE CONCRETE SHALL BE 4" THICK LAYER FOR CONCRETE
CURB AT THE POINT OF THE CURB TO THE CURB FACE.

2. FLOWABLE CONCRETE SHALL BE 2" THICK LAYER FOR THE 2" CURB
FACE. FLOWABLE CONCRETE SHALL BE 2" THICK LAYER FOR THE 2" CURB
FACE. FLOWABLE CONCRETE SHALL BE 2" THICK LAYER FOR THE 2" CURB
FACE.

3. ALL CURB AND DECK PARTS ARE TO BE CONCRETE UNLESS OTHERWISE
NOTED.

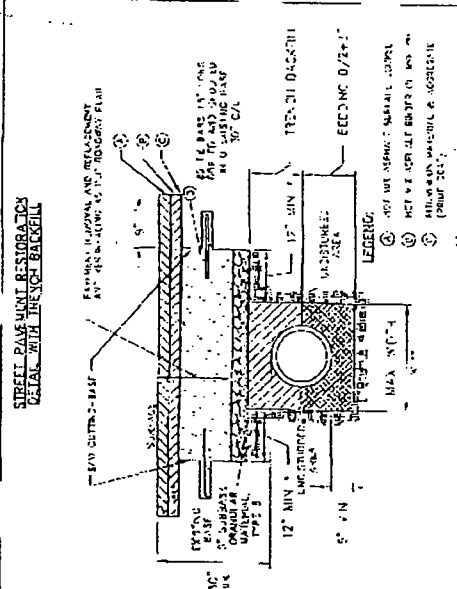
DATE	REVISION

CDOT CHICAGO DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO

STREET PAVEMENT RESTORATION
DETAIL WITH FLOWABLE BACKFILL

SHEET A-22B



**STREET PAVEMENT RESTORATION
DETAIL WITH TRENCH BACKFILL**

1. THE CURB AND DECK PARTS ARE TO BE CONCRETE UNLESS OTHERWISE
NOTED.

2. THE CURB AND DECK PARTS ARE TO BE CONCRETE UNLESS OTHERWISE
NOTED.

3. ALL CURB AND DECK PARTS ARE TO BE CONCRETE UNLESS OTHERWISE
NOTED.

DATE	REVISION

CDOT CHICAGO DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO

STREET PAVEMENT RESTORATION
DETAIL WITH TRENCH BACKFILL

SHEET A-22A

Scale: 1" = 20'

DATE	REVISION	DESCRIPTION	BY	DATE

State: ILLINOIS
County: COOK

PERMIT ONLY



3010 Warren Road
Suite 310, Lake, IL 60532

Project # EX1112008

Job TYPERTH DISTRICT-IL

Engineer: GARC'S

Original Issue Date 10/22/12

Published Date:

Description	Qty.
Fiber - 432	XXX
Fiber - 888	XXX
Fiber - 144	XXX
Fiber - 96	XXX
Fiber - 48	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - Drop	XXX
Total Fiber	XXX

Route - Aerial XXX

Route - UC-Lease XXX

Route - UC-New Conduit XXX

Route - Base Station XXX

Total Route Footage XXX

Poles - Poleer XXX

Poles - Telco XXX

Poles - Other XXX

Total Poles XXX

Nodes - Strand XXX

Nodes - Archless XXX

Splices XXX

Stack Lamps XXX

Handholes XXX

Handholes XXX

Handholes XXX

Handholes XXX

Handholes XXX

Handholes XXX

Handholes XXX

Handholes XXX

Handholes XXX

Handholes XXX

Handholes XXX

Handholes XXX

Handholes XXX

Handholes XXX

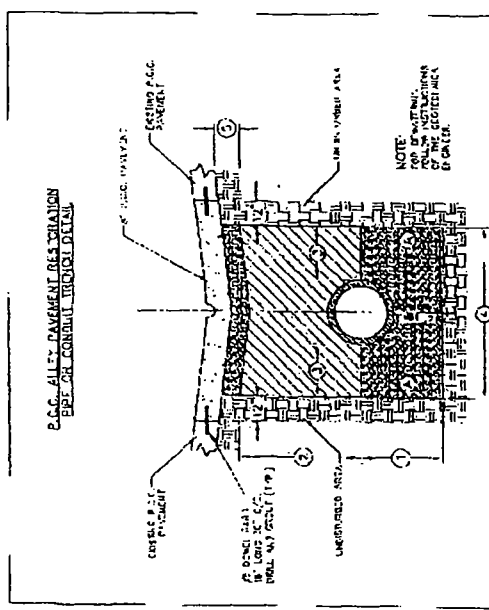
Handholes XXX

Handholes XXX



1401 North
State Street
Chicago, IL 60643
Phone: (773) 492-2100

Map Number: A

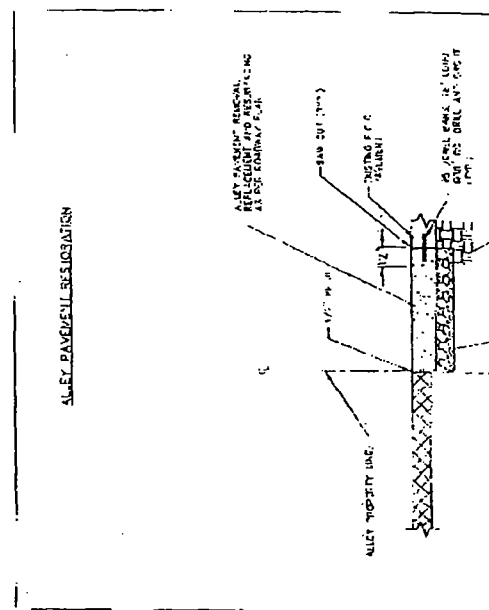


- ① BEDDING 24" 100% GRADED STONE
- ② BACKFILL 18" 95% RELATIVE DENSITY
- ③ CLEARANCE 18" 95% RELATIVE DENSITY
- ④ TRENCH WIDTH 18" 95% RELATIVE DENSITY
- ⑤ SUB-BASE 4" 100% GRADED STONE, IN MATERIAL TYPE 3

DATE	REVISION	CITY OF CHICAGO
		ALLEY PAVEMENT RECONSTRUCTION
		TRENCH DETAIL CONSTRUCTION
		DATE: 10/22/12
		SHEET: A-2-3
		CHANGING AT: UAK1



CHICAGO DEPARTMENT OF TRANSPORTATION



- ① BEDDING 24" 100% GRADED STONE
- ② BACKFILL 18" 95% RELATIVE DENSITY
- ③ CLEARANCE 18" 95% RELATIVE DENSITY
- ④ TRENCH WIDTH 18" 95% RELATIVE DENSITY
- ⑤ SUB-BASE 4" 100% GRADED STONE, IN MATERIAL TYPE 3

DATE	REVISION	CITY OF CHICAGO
		ALLEY PAVEMENT RECONSTRUCTION
		TRENCH DETAIL CONSTRUCTION
		DATE: 10/22/12
		SHEET: A-2-3
		CHANGING AT: UAK1



CHICAGO DEPARTMENT OF TRANSPORTATION

Scale: 1" = 20'

DATE	DESCRIPTION	INITIALS	DATE	DESCRIPTION	INITIALS
	REVISION			REVISION	
	REVISION			REVISION	
	REVISION			REVISION	
	REVISION			REVISION	

State: ILLINOIS
County: COOK
Municipality: CHICAGO

PERMIT ONLY



3030 Wrentham Road
Suite 340, Suite 1, Bldg 32
Project # EX1112008
JOB NUMBER DISTRICT-IL
CITY OF CHICAGO

Original Issue Date 10/22/12

Approved Date:

Qty.	Description	Disy.
432	Fiber - 432	XXX
288	Fiber - 288	XXX
96	Fiber - 96	XXX
72	Fiber - 72	XXX
48	Fiber - 48	XXX
24	Fiber - 24	XXX
6	Fiber - 6	XXX
3	Fiber - 3	XXX
1	Fiber - Drop	XXX
Total Fiber: 336		

XXX	Route - April
XXX	Route - UC-leased
XXX	Route - UC-Metro
XXX	Route - UC-Spectrum
XXX	Route - UC-Verizon
XXX	Route - UC-AT&T
XXX	Route - UC-Cable
XXX	Route - UC-Other
XXX	Total Route Footage

XXX	Poles - Power
XXX	Poles - Telco
XXX	Poles - Other
XXX	Total Poles

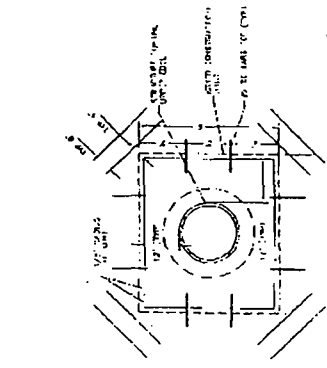
XXX	Nodes
XXX	5/16" Strand
XXX	Splices
XXX	Stack Loops
XXX	Manholes



4800 North 48th Street
Shawnee, WI 53083
Phone: (978) 438-2899

DETAIL OF STRUCTURE CASTING ISOLATION BOX FOR
ELECTRICAL AND FIBER BENCH COURSE

SEE NOTES ON SHEET 10/22/12



DETAIL OF FOL-JOIN PAYMENT

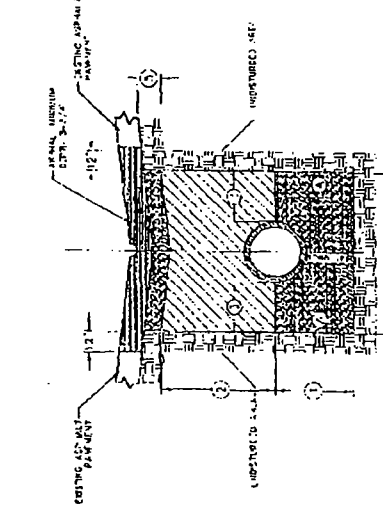
SPECIAL CONDITIONS

1. FOL-JOIN SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
2. THE FOL-JOIN SHALL BE INSTALLED IN A MANNER THAT PROVIDES A WEATHER-TIGHT SEAL.
3. THE FOL-JOIN SHALL BE INSTALLED IN A MANNER THAT PROVIDES A SOUND BARRIER.
4. THE FOL-JOIN SHALL BE INSTALLED IN A MANNER THAT PROVIDES A SOUND BARRIER.
5. THE FOL-JOIN SHALL BE INSTALLED IN A MANNER THAT PROVIDES A SOUND BARRIER.

CDOT CHICAGO DEPARTMENT OF TRANSPORTATION

DATE: / / REVISION: CITY OF CHICAGO
 SHEET: 127/103 DRAWN BY: A-2-12A
 PROJECT: ISOLATION BOX

ASPHALT ALLEY BENCHMARK RESTORATION
SEE DR. CONCRETE BENCHMARK DETAIL



1. BEDDING
2. BACKFILL
3. CLEARANCE
4. TRENCH WIDTH
5. SUB-BASE

CDOT CHICAGO DEPARTMENT OF TRANSPORTATION

DATE: / / DIVISION: CITY OF CHICAGO
 SHEET: 127/103 DRAWN BY: A-2-12A
 PROJECT: ALLEY PAYMENT
 SUBPROJECT: BENCH DETAIL, ASPHALT ALLEY

Scale: 1" = 20'

DATE	DESCRIPTION	BY	DATE	DESCRIPTION	BY

State: ILLINOIS
County: COOK

Municipality: CHICAGO

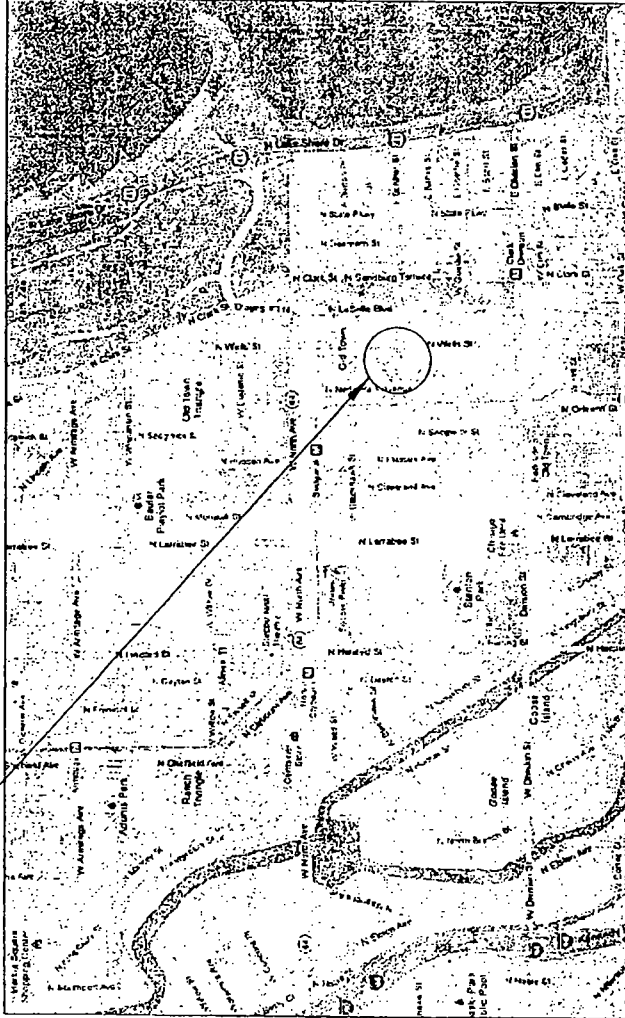
Map Number: A

PROPOSED EXTENET SYSTEMS

UNDERGROUND FIBER OPTIC FACILITY

N. NORTH PARK AVE. 12' SOUTH OF W.
SCHILLER ST TO W. SCHILLER ST
W. SCHILLER ST. BETWEEN N. NORTH PARK AVE.
& ALLEY 160' EAST OF N. WELLS AVE & 60'
SOUTH INTO ALLEY
CHICAGO, IL

PROJECT LOCATION — **OUC IR FILE # 55979**
OUC EFP FILE # 57652



DIGGER HOTLINE
<CHICAGO UTILITY ALERT NETWORK>
1-312-744-7000

CONTACT INFORMATION:

EXTENET SYSTEMS:

DAVE FASSHAUER (708) 975-5786

GABE'S CONSTRUCTION:

ENGINEERING - JEFF RINARTZ (920) 889-4510

CONSTRUCTION - BRIAN VANSCHYNDEL (920) 889-9809

PROJECT NO:

EXTIL12008

PROJECT LOCATION:

N. NORTH PARK AVE-12' SOUTH OF W. SCHILLER ST TO W. SCHILLER ST. W. SCHILLER AVE BETWEEN N. NORTH PARK AVE TO ALLEY APPROX 160' EAST FO N. WELLS ST. & SOUTH INTO ALLEY APPROX 60'

ADDITIONAL LOCATION DESCRIPTION:

INSTALL APPROX. 809' LF OF 2" HDPE CONDUIT E/W FIBER OPTIC CABLE WITHIN THE R/W OF W. SCHILLER AVE FROM N. NORTH PARK AVE TO ALLEY EAST OF N WELLS ST - THIS IS RISER POLE TO RISER POLE PROPOSED BUILD.

PROJECT COORDINATOR:

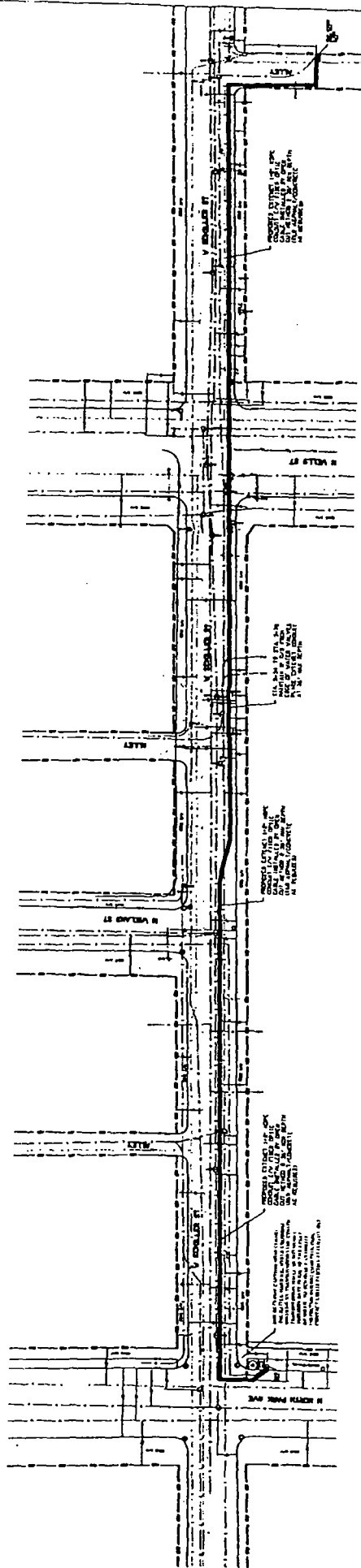
JEFF RINARTZ (920) 889-4510

Utility Notes

AT&T facilities present in the work area. Contractor is directed to exercise caution during excavation, contractor assumes all liability for damages to AT&T facilities, contact DIGGER a minimum of 48 hours prior to excavation, hand dig around AT&T facilities. If it is determined that AT&T facilities need to be adjusted, it is contractor's responsibility to contact Esteban Peralta (312-977-7537) immediately.

City Contractors are requested to take extra precautions when working near ComEd overhead wires. These wires are not insulated. Hand dig is required when crossing ComEd underground cables/conduits. Maintain 18" clearance from any ComEd conduit.

When field conditions require ComEd assistance (such as manhole frame & cover adjustments), please contact ComEd, Project Engineer, Don Ries, 773-838-2905, 6-weeks prior to start of work for areas south of Cermak Av, and for areas north of Cermak Av, contact ComEd Project Engineer, Joe Leung, 773-509-3288.



PERMIT ONLY



3030 Waukena Road
Suite 310, Oak, IL 60532

Project #: EXT112008

Job Title: NORTH DISTRICT-IL

Engineer: GABE'S

Original Issue Date: 10/23/12

Published Date:

Bill of Materials:

Description	Qty.
Fiber - 432	XXX
Fiber - 288	XXX
Fiber - 144	XXX
Fiber - 96	XXX
Fiber - 48	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - 6	XXX
Fiber - 3	XXX
Fiber - 1.5	XXX
Total Fiber	XXX

Routes - Aerial

Routes - UG-Leased

Routes - UG-Res Conduit

Routes - Base Station

Total Route Footage

Poles - Precast

Poles - Galco

Poles - Other

Total Poles

Manholes

Manholes

Manholes

Manholes

Manholes

Manholes

Manholes

Manholes

Manholes

Manholes

Manholes

Manholes

Manholes

Manholes

Manholes

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Manholes

Manholes

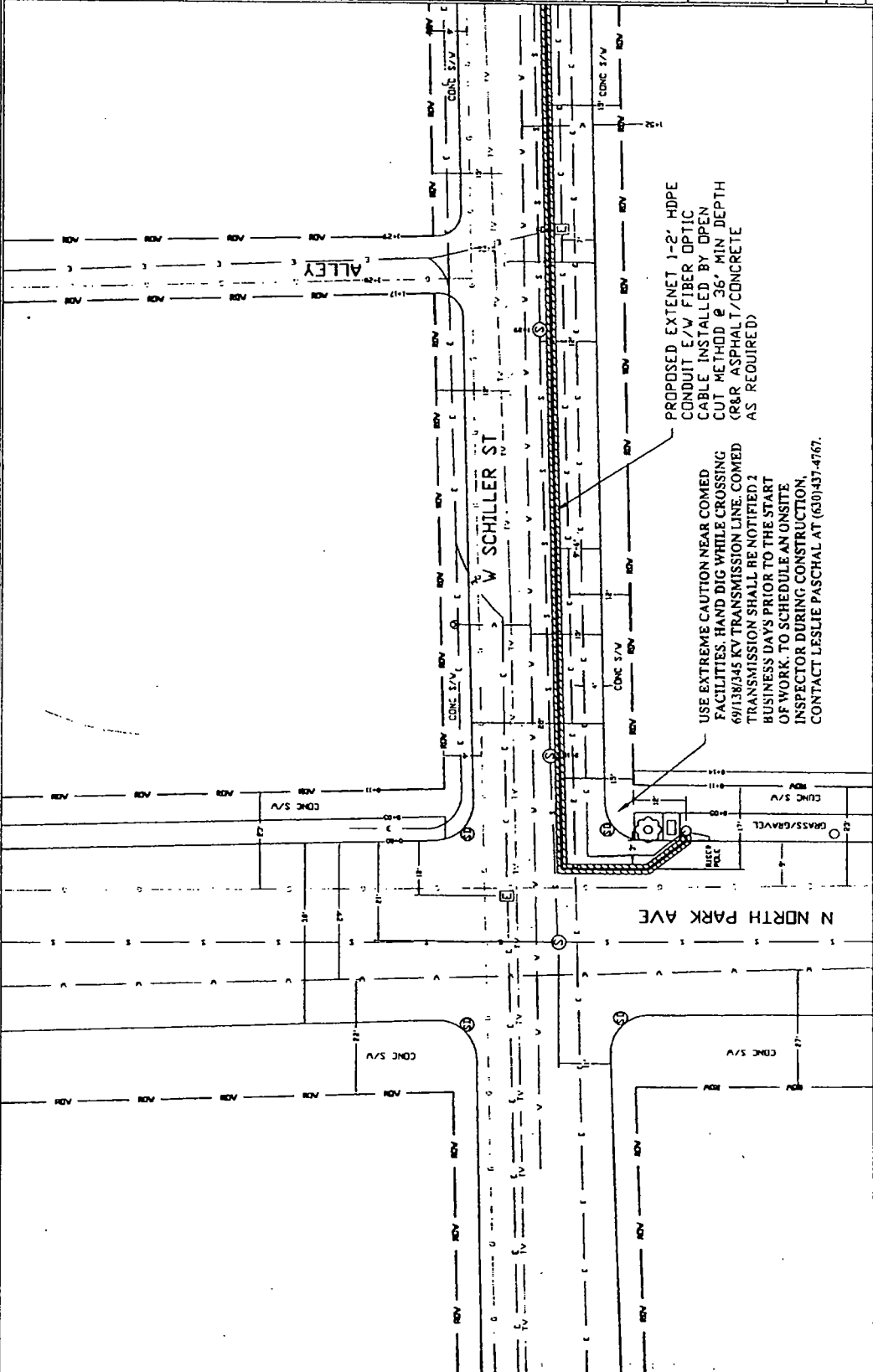
Manholes

Manholes

Manholes

Manholes

Manholes



4800 North 40th Street
Mundelein, IL 60060
Phone: (815) 412-3100

Page 1 Page 8

Map Number: A

Scale: 1" = 20'

Date	Description	Initials	Date	Description	Initials

Municipality: CHICAGO

State: ILLINOIS
County: COOK

PERMIT_ONLY

extenet INC.
FIBER OPTIC NETWORK
3015 Terminal Road
Suite 240, Northbrook, IL 60062

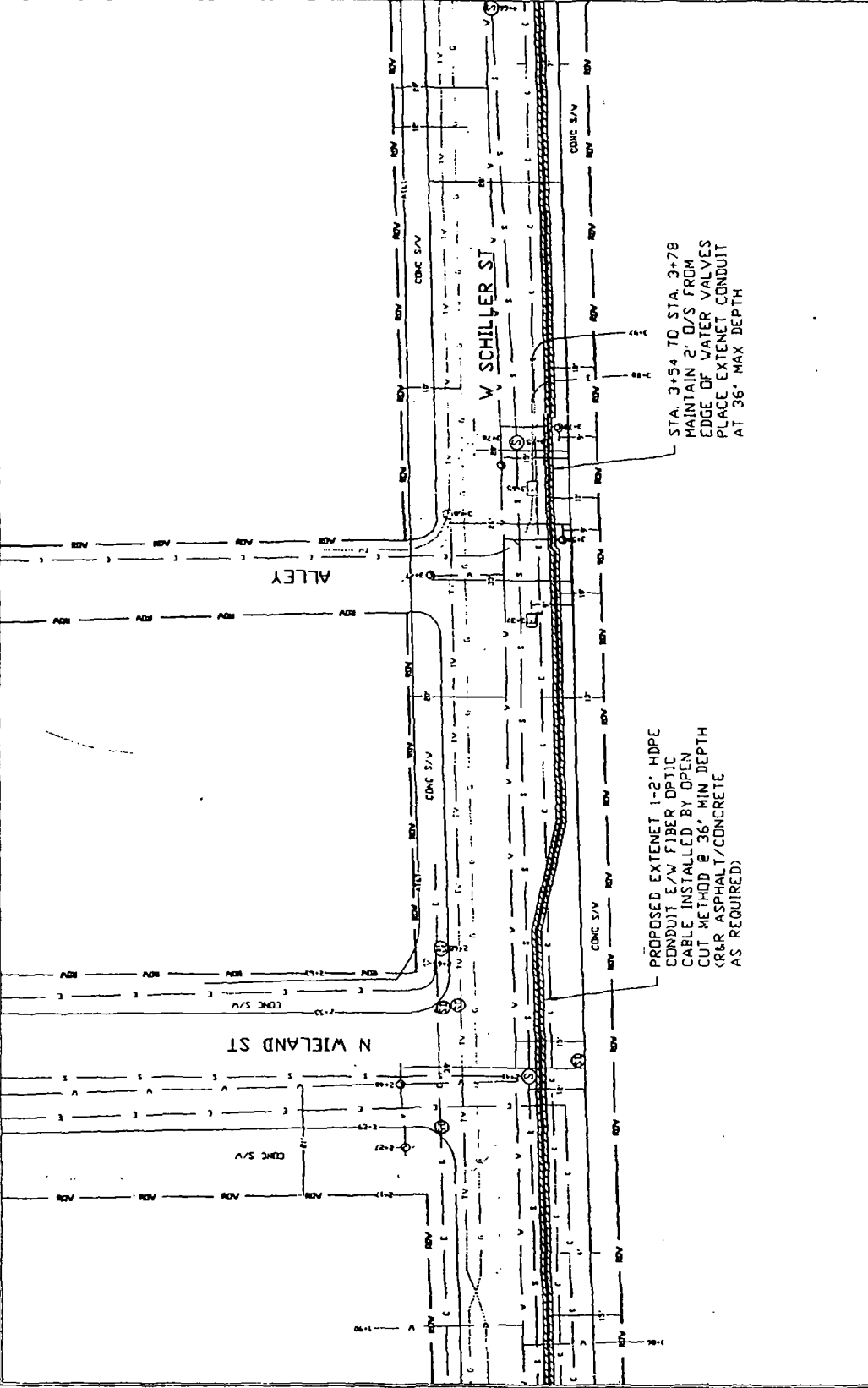
Project #: EXT112008
Job Title: NORTH DISTRICT-IL
Engineer: GALE'S
Original Issue Date: 10/23/12
Published Date:

Bill of Materials

DESCRIPTION	Qty
Fiber - 432	XIX
Fiber - 864	XIX
Fiber - 144	XIX
Fiber - 96	XIX
Fiber - 72	XIX
Fiber - 48	XIX
Fiber - 24	XIX
Fiber - 12	XIX
Fiber - Drop	XIX
Total Fiber	XIX
Route - Aerial	XIX
Route - UG-Wire Conduit	XIX
Route - Base Station	XIX
Total Route Footage	XIX
Poles - Power	XIX
Poles - Telco	XIX
Poles - Other	XIX
Total Poles	XIX

Nodes
3/16" Strand
Anchors
Splices
Loops
Manholes
Manholes

- ⊙ 4" DIA. M.P.
- ⊙ 6" DIA. M.P.
- ⊙ 8" DIA. M.P.
- ⊙ 12" DIA. M.P.
- ⊙ 18" DIA. M.P.
- ⊙ 24" DIA. M.P.
- ⊙ 30" DIA. M.P.
- ⊙ 36" DIA. M.P.
- ⊙ 42" DIA. M.P.
- ⊙ 48" DIA. M.P.
- ⊙ 54" DIA. M.P.
- ⊙ 60" DIA. M.P.
- ⊙ 66" DIA. M.P.
- ⊙ 72" DIA. M.P.
- ⊙ 78" DIA. M.P.
- ⊙ 84" DIA. M.P.
- ⊙ 90" DIA. M.P.
- ⊙ 96" DIA. M.P.
- ⊙ 102" DIA. M.P.
- ⊙ 108" DIA. M.P.
- ⊙ 114" DIA. M.P.



Scale: 1" = 20'

DATE	DESCRIPTION	BY	DATE	DESCRIPTION	BY	DATE	DESCRIPTION	BY

State: ILLINOIS
County: COOK
Municipality: CHICAGO

Map Number: A
PAGE 1 PAGE 2 PAGE 3

STA. 3+54 TO STA. 3+78
MAINTAIN 2' O/S FROM
EDGE OF WATER VALVES
PLACE EXTENET CONDUIT
AT 36" MAX DEPTH

PROPOSED EXTENET 1-2' HDPE
CONDUIT E/W FIBER OPTIC
CABLE INSTALLED BY OPEN
CUT METHOD @ 36" MIN DEPTH
(R&R ASPHALT/CONCRETE
AS REQUIRED)

PERMIT_ONLY
extenel
Fiber Networks
Systems

3030 Westmire Road
Suite 340, La Grange, IL 60525
Project # : EX1112008
Job #MRTH DISTRICT-IL
Engineer: GABES
Original Issue Date 10/23/12

Published Date: _____

Bill of Materials:

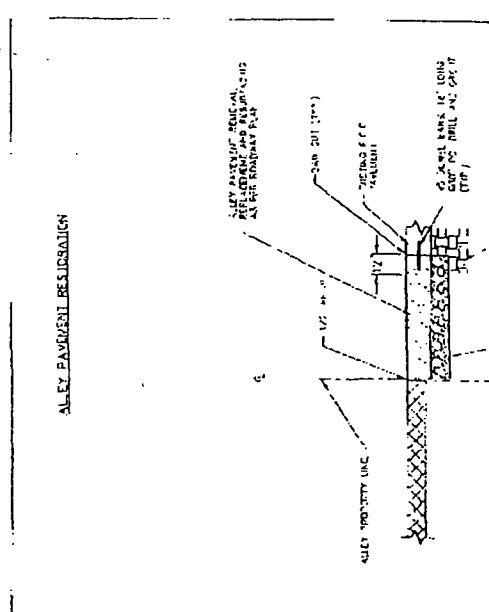
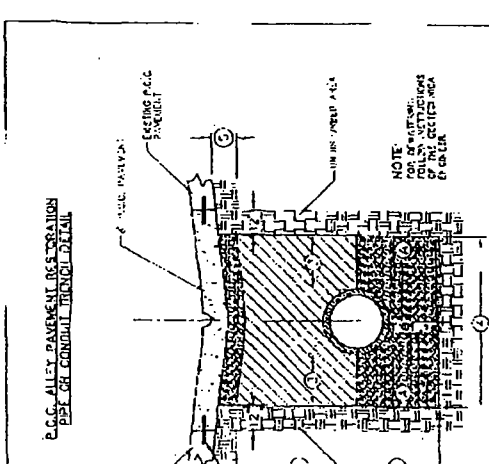
Description	Qty
Fiber - 432	XXX
Fiber - 888	XXX
Fiber - 144	XXX
Fiber - 288	XXX
Fiber - 72	XXX
Fiber - 48	XXX
Fiber - 36	XXX
Fiber - 24	XXX
Fiber - Drop	XXX
Total Fiber	XXX

Route - Aerial
Route - UG-Leased
Route - UG-Proprietor
Route - Buried Station
Route - Buried
Total Route Footage
Poles - Power
Poles - Tele
Poles - Other

Nodes - Street
Nodes - Wire
Nodes - Ancho
Nodes - Splice
Nodes - Slack Loops
Nodes - Manholes
Nodes - Vertices

- 20' HLL
- 20' HLL
- 20' HLL
- 20' HLL
- 20' HLL
- 20' HLL
- 20' HLL
- 20' HLL
- 20' HLL

Gaber
COMMUNICATIONS
4801 North 44th Street
Shrooagan, WI 53083
Phone: (262) 531-2100



Legend:

- ① REDDING
- ② BACKFILL
- ③ CLEARANCE
- ④ TRENCH WIDTH
- ⑤ SUB-BASE
- ⑥ 6\"

CDOT
CHICAGO DEPARTMENT
OF TRANSPORTATION

CITY OF CHICAGO
REGULATORY DEPARTMENT
INTEGRATION AND COMPLIANCE

DATE	REVISION

DATE: 12/12/12
SHEET: A-29
DRAWN BY: GABES

CITY OF CHICAGO
ALLEY PAVEMENT RESTORATION

DATE	REVISION

DATE: 12/12/12
SHEET: A-29
DRAWN BY: GABES

DATE	REVISION	DESCRIPTION	DATE	REVISION	DESCRIPTION

Scale: 1" = 20'

State: ILLINOIS
County: COOK
Municipality: CHICAGO

Map Number: A

PERMIT_ONLY

extenei IN YOUR NETWORK SYSTEMS

3330 Northwest Row
Suite 340, Utah, IL 60632
Project #: EXTIL12008
JOB NORTH DISTRICT-IL
Engineer: GABCS'S

Original Issue Date 10/23/12

Published Data:	Description	Qty.
	Fiber - 432	XXX
	Fiber - 288	XXX
	Fiber - 240	XXX
	Fiber - 96	XXX
	Fiber - 72	XXX
	Fiber - 48	XXX
	Fiber - 36	XXX
	Fiber - 24	XXX
	Fiber - 12	XXX
	Fiber - Drop	XXX
	Total Fiber	XXX
	Route - Aerial	XXX
	Route - U-Gleaves	XXX
	Route - U-G Channels	XXX
	Route - Base Station	XXX
	Total Route Footage	XXX
	Poles - Power	XXX
	Poles - Tele	XXX
	Poles - Other	XXX
	Total Poles	XXX

Nodes: XXX
9/16" Strand: XXX
Anchors: XXX
Splices: XXX
Patch Cords: XXX
Bridging: XXX
Handoffs: XXX

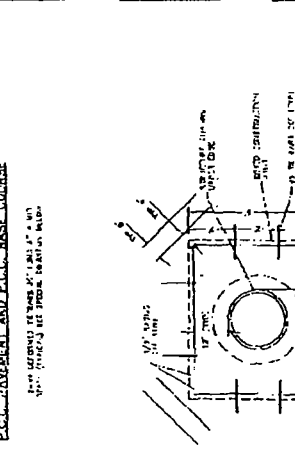
CDOT CHICAGO DEPARTMENT OF TRANSPORTATION

4801 North 40th Street
Shelton, WI 53083
Phone: (800) 542-7000

<input type="checkbox"/>	1" DIA. RIGID POLY
<input type="checkbox"/>	2" DIA. RIGID POLY
<input type="checkbox"/>	3" DIA. RIGID POLY
<input type="checkbox"/>	4" DIA. RIGID POLY
<input type="checkbox"/>	5" DIA. RIGID POLY
<input type="checkbox"/>	6" DIA. RIGID POLY
<input type="checkbox"/>	8" DIA. RIGID POLY
<input type="checkbox"/>	10" DIA. RIGID POLY
<input type="checkbox"/>	12" DIA. RIGID POLY
<input type="checkbox"/>	15" DIA. RIGID POLY
<input type="checkbox"/>	18" DIA. RIGID POLY
<input type="checkbox"/>	21" DIA. RIGID POLY
<input type="checkbox"/>	24" DIA. RIGID POLY
<input type="checkbox"/>	27" DIA. RIGID POLY
<input type="checkbox"/>	30" DIA. RIGID POLY
<input type="checkbox"/>	36" DIA. RIGID POLY
<input type="checkbox"/>	42" DIA. RIGID POLY
<input type="checkbox"/>	48" DIA. RIGID POLY
<input type="checkbox"/>	54" DIA. RIGID POLY
<input type="checkbox"/>	60" DIA. RIGID POLY
<input type="checkbox"/>	72" DIA. RIGID POLY
<input type="checkbox"/>	84" DIA. RIGID POLY
<input type="checkbox"/>	96" DIA. RIGID POLY
<input type="checkbox"/>	108" DIA. RIGID POLY
<input type="checkbox"/>	120" DIA. RIGID POLY

INITIALS	DATE	DESCRIPTION
		REVISIONS
		REVISIONS
		REVISIONS
		REVISIONS
		REVISIONS
		REVISIONS
		REVISIONS
		REVISIONS
		REVISIONS
		REVISIONS
		REVISIONS

DETAIL OF STRUCTURE CASTING ISOLATION BOX FOR ELEC. EQUIP. AND FACE BASE COURSE



DETAIL OF BOX-IN-FACED

SPECIAL CONDITIONS:

1. THE BOX SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING:

- A. ALL WORK SHALL BE IN ACCORDANCE WITH THE CHICAGO DEPARTMENT OF TRANSPORTATION (CDOT) SPECIFICATIONS FOR CAST-IN-PLACE CONCRETE.
- B. THE BOX SHALL BE CAST AND FINISHED TO MATCH THE ADJACENT CONCRETE SURFACES.
- C. THE BOX SHALL BE CAST WITH A 1/2" FINISH TO MATCH THE ADJACENT CONCRETE SURFACES.
- D. THE BOX SHALL BE CAST WITH A 1/2" FINISH TO MATCH THE ADJACENT CONCRETE SURFACES.
- E. THE BOX SHALL BE CAST WITH A 1/2" FINISH TO MATCH THE ADJACENT CONCRETE SURFACES.

DATE	REVISION	DESCRIPTION

CITY OF CHICAGO
DETAILS OF CAST-IN-PLACE CONCRETE
ISOLATION BOX

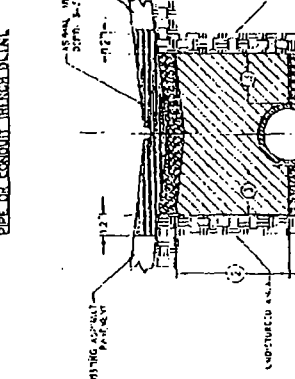
DATE	7/1/13
DESIGNER	A-2-21A
CHECKER	
APPROVER	

CDOT CHICAGO DEPARTMENT OF TRANSPORTATION

Scale: 1" = 20'

Map Number: A

ASPHALT ALLEY PAVEMENT RESTORATION - DEPTH OF CONCRETE THROUGHOUT



DETAIL OF CONCRETE DEPTH

1. BEDDING
2. SANDFILL
3. CURB
4. TRENCH WIDTH
5. SUB-BASE

CONCRETE SHALL BE CAST AND FINISHED TO MATCH THE ADJACENT CONCRETE SURFACES.

DATE	7/1/13
DESIGNER	A-2-10
CHECKER	
APPROVER	

CITY OF CHICAGO
ALLEY PAVEMENT RESTORATION
TRENCH DETAILS - ASPHALT ALLEY

CDOT CHICAGO DEPARTMENT OF TRANSPORTATION

State: ILLINOIS
County: COOK

Municipality: CHICAGO

PROPOSED EXTENET SYSTEMS

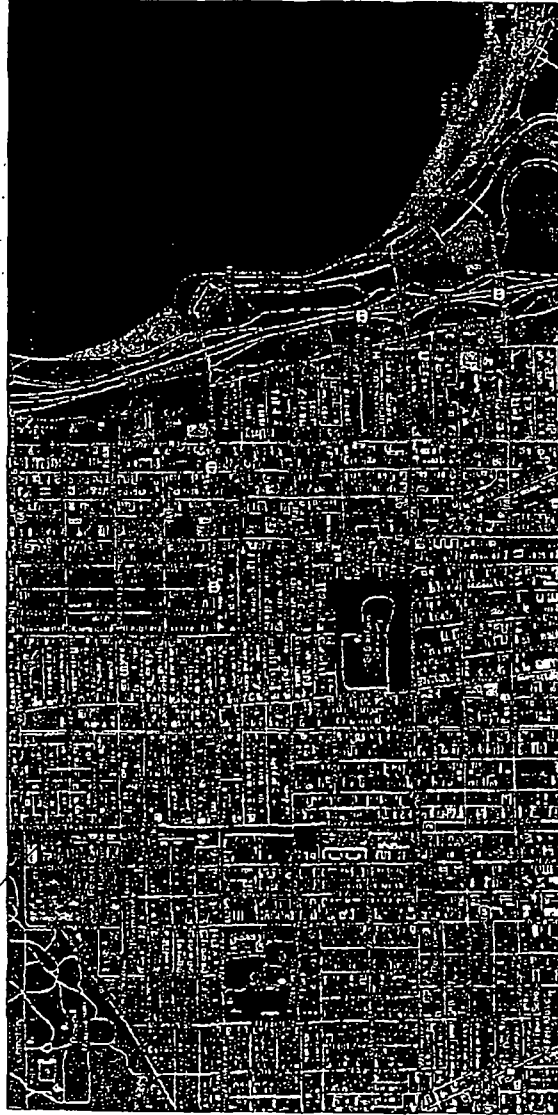
UNDERGROUND FIBER OPTIC FACILITY

W AINSLIE ST FROM ALLEY WEST OF
N. BROADWAY TO ALLEY EAST OF
CTA TRACKS
CHICAGO, IL

PROJECT LOCATION

OUC IR FILE # 55981

OUC EFP FILE # 57653



DIGGER HOTLINE
(CHICAGO UTILITY ALERT NETWORK)
1-312-744-7000

CONTACT INFORMATION:

EXTENET SYSTEMS:

DAVE FASSHAUER (708) 975-5786

GABE'S CONSTRUCTION:

ENGINEERING - JEFF RINARTZ (920) 889-4510

CONSTRUCTION - BRIAN VANSCHYNDEL (920) 889-9809

PROJECT NO:

EXTIL12012

PROJECT LOCATION:

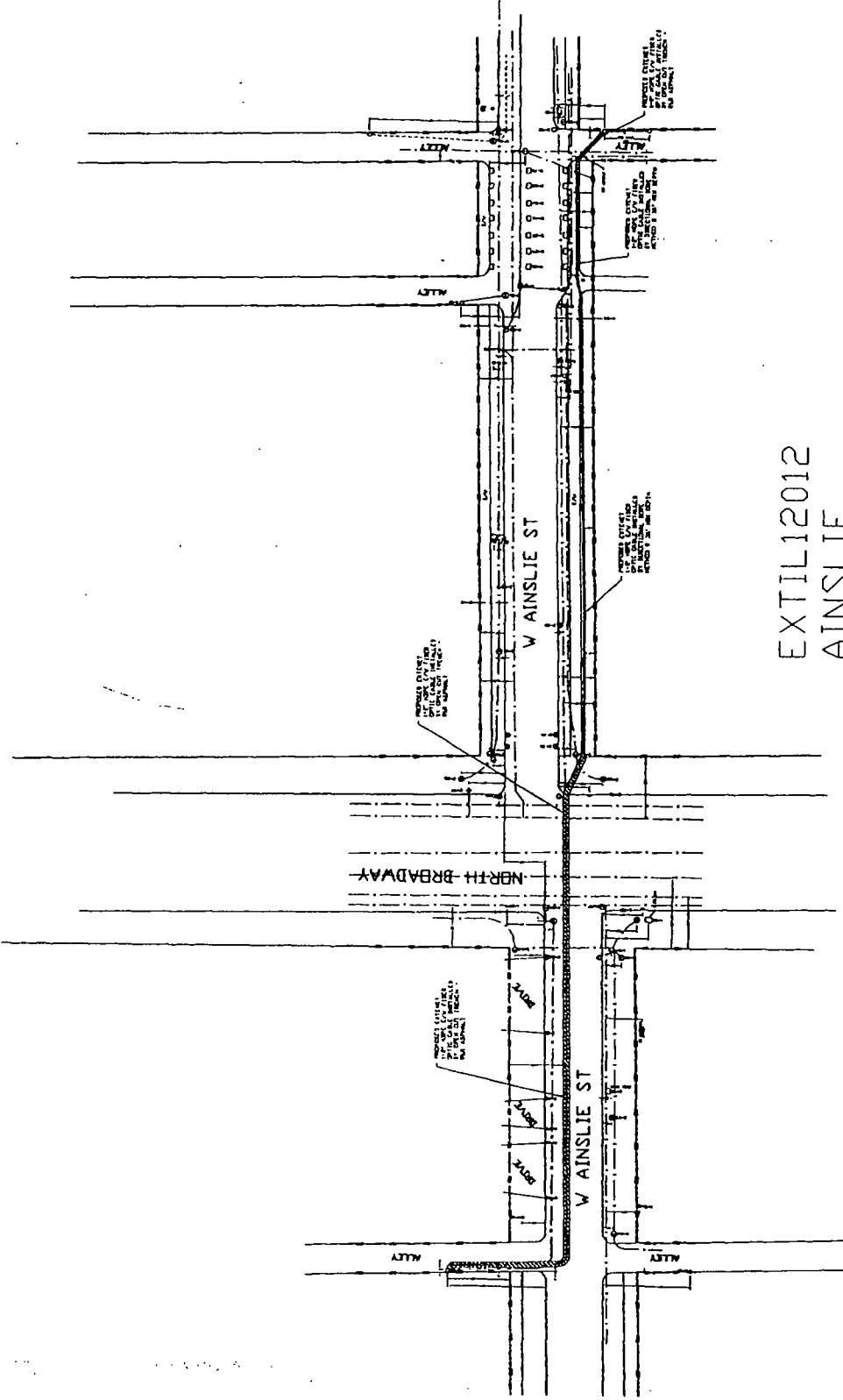
W. AINSLIE ST FROM ALLEY WEST OF N. BROADWAY AVE
TO ALLEY EAST OF CTA TRACKS

ADDITIONAL LOCATION DESCRIPTION:

INSTALL BY OPEN CUT TRENCHING & BORING APPROX. 658'
LF OF 2" HDPE CONDUIT E/W FIBER OPTIC CABLE
WITHIN THE R/W OF W. AINSLIE ST. PLACE HANDHOLE IN
SE CORNER OF INTERSECTION OF W. AINSLIE & N.
BROADWAY.

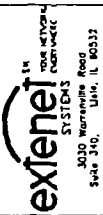
PROJECT COORDINATOR:

JEFF RINARTZ (920) 889-4510



EXTIL12012
 AINSLIE

PERMIT ONLY



3030 Warren Road, Suite 310, Uia, IL 60532

Project #: LINCOLN-PARK-IL

Job Title: GABE'S

Engineer: GABE'S

Published Date: 12/14/12

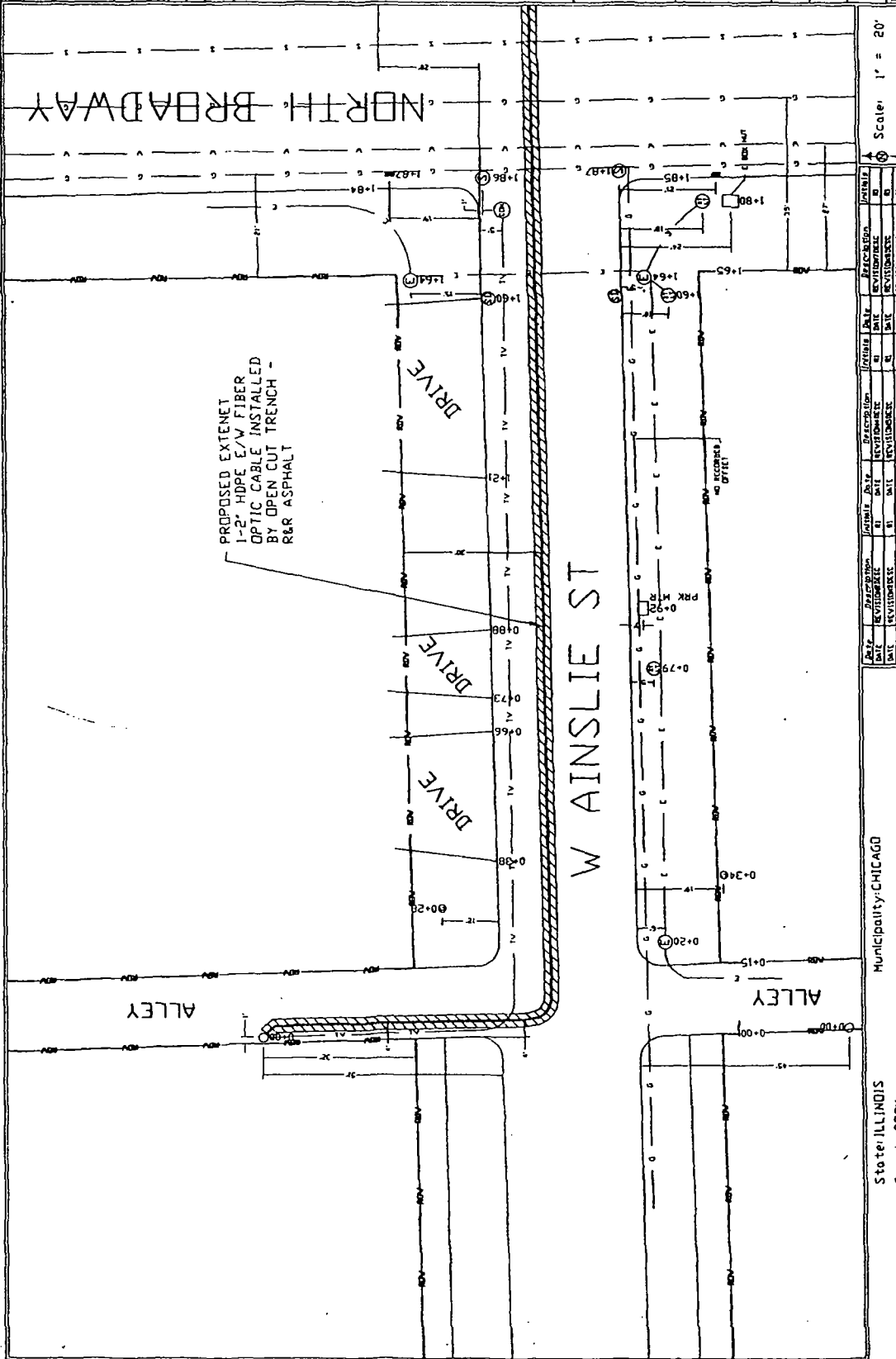
Table with 2 columns: Material, Qty. Includes rows for Fiber - 432, Fiber - 288, Fiber - 144, Fiber - 96, Fiber - 72, Fiber - 26, Fiber - 24, Fiber - 12, Fiber - Drop, Total Fiber.

Table with 2 columns: Material, Qty. Includes rows for Route - Aerial, Route - UC-Leased, Route - UC-Nes Conduit, Route - Base Station, Total Route Footage, Poles - Power, Poles - Fiber, Poles - Other, Total Poles.

Table with 2 columns: Material, Qty. Includes rows for 3716 - Strand, 3716 - Jacket, Splices, Stack Loops, Manholes, Manholes.

Gabe's Construction logo and contact information: 4800 North 40th Street, Chicago, IL 60631, Phone: (800) 451-2800.

Scale: 1" = 20'



Map Number:

Page 1

Page 2

Page 3

Page 4

Page 5

Page 6

Page 7

Page 8

Page 9

Page 10

State: ILLINOIS
County: COOK

Municipality: CHICAGO

Scale: 1" = 20'

Revision table with columns: Date, Description, Drawn, Checked, etc.

PERMIT ONLY

extenel fiber optic network
SYSTEMS Corporation
3030 Watercourse Road
Suite 340, Lin. IL 60532

Project #: LINCOLN-PARK-IL
Job Title: GABC'S
Engineer: GABC'S
Original Issue Date: 12/14/12
Published Date:

Description	Qty.
Fiber - 322	XXX
Fiber - 288	XXX
Fiber - 144	XXX
Fiber - 96	XXX
Fiber - 72	XXX
Fiber - 48	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - Drop	XXX
Total Fiber	XXX

Routes - As-built XXX
 Route - UC-Leased XXX
 Route - UC-New Conduit XXX
 Route - Base Station XXX
 Total Route Footage XXX

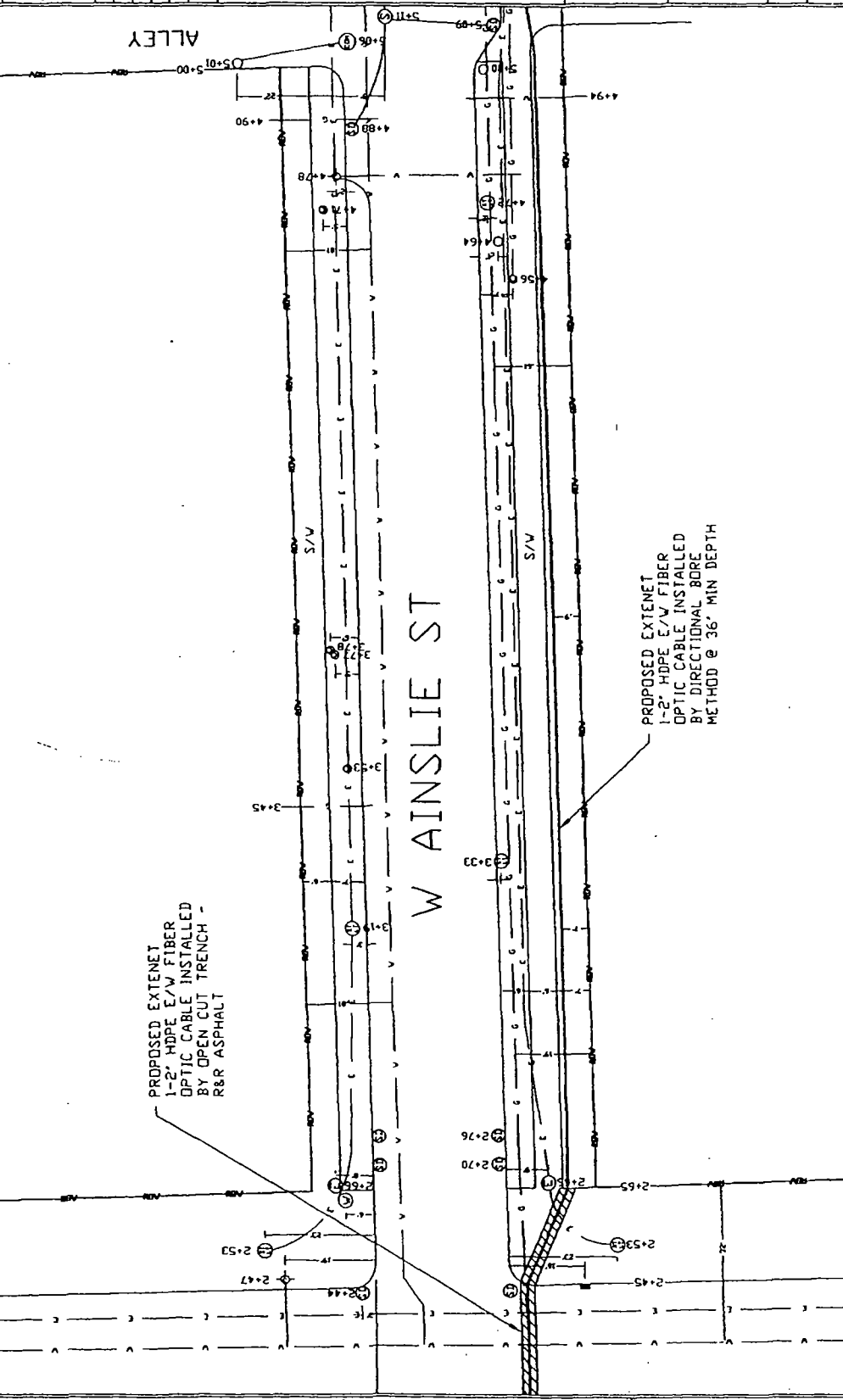
Poles - Poles XXX
 Poles - Cuts XXX
 Poles - Other XXX
 Total Poles XXX

Nodes - S/W Stream XXX
 Slices XXX
 Slices XXX
 Stack Loops XXX
 Manholes XXX
 Manholes XXX



104 North 45th Street
Chicago, IL 60631
Phone: (800) 432-7400

SCALE: 1" = 20'		
PAGE 1	PAGE 2	PAGE 3
Map Number:		

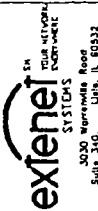


Scale: 1" = 20'

Date	Description	By	Check	By	Date	Description	By	Check	By	Date

State: ILLINOIS Municipality: CHICAGO
 County: COOK

PERMIT ONLY



5020 Westmoreland Road
Suite 310, Upt. IL 60532

Project #: LINCOLN-PARK-IL
Job Title:
Engineer: GARCIA

Original Issue Date 12/14/12
Published Date:

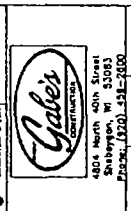
Description	Qty.
Fiber - 32	XXX
Fiber - 64	XXX
Fiber - 128	XXX
Fiber - 144	XXX
Fiber - 96	XXX
Fiber - 72	XXX
Fiber - 48	XXX
Fiber - 36	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - Drop	XXX
Total Fiber	XXX

Route - Mark
Route - Un-leased
Route - IG-New Conduit
Route - Base Station
Total Route Footage

Poles - Power
Poles - Telco
Poles - Other

Nodes
3/16" Strand
Anchors
Splices
Handholes
Manholes

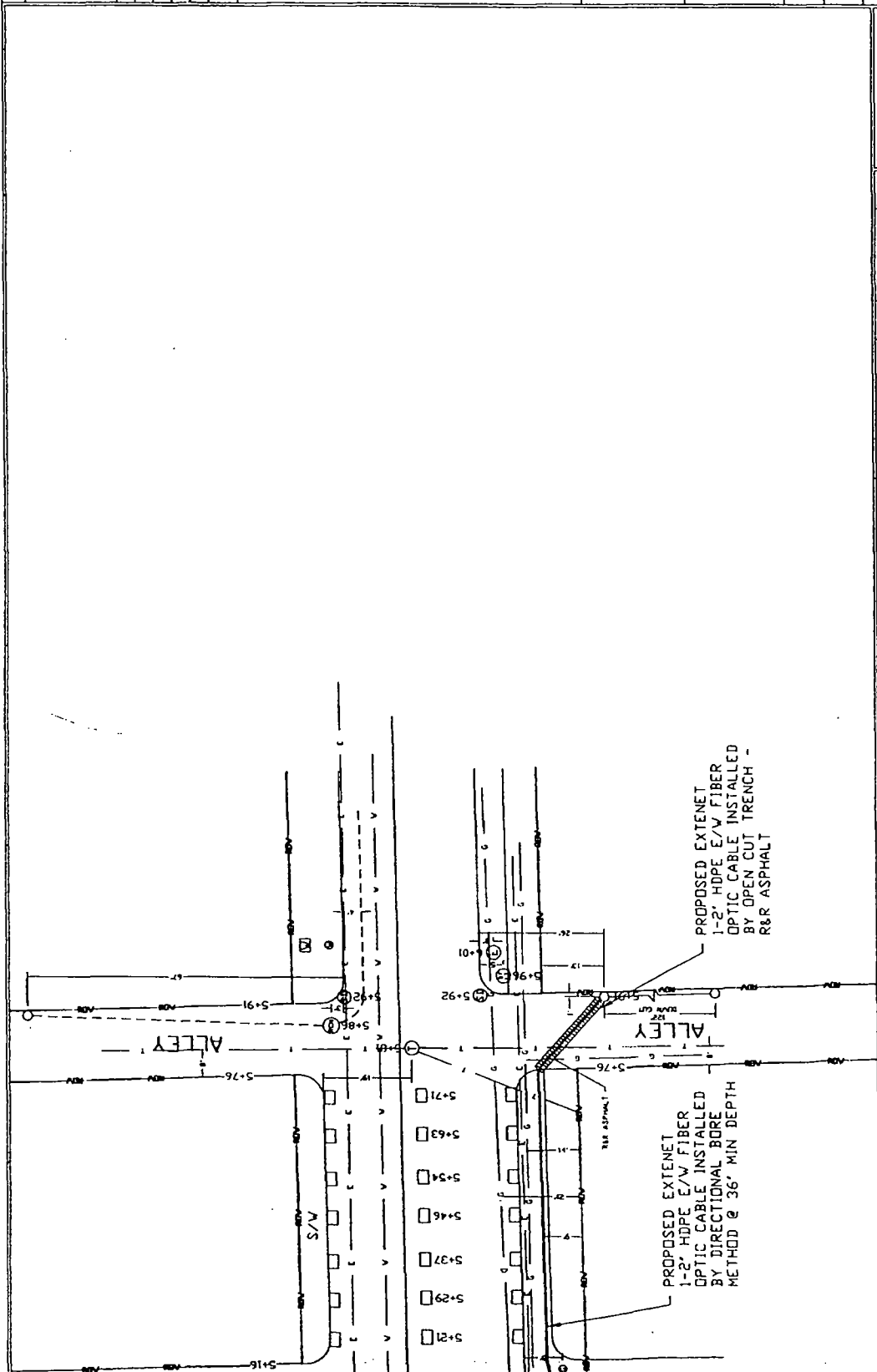
- 20' RAIL
- 40' RAIL
- 60' RAIL
- 80' RAIL
- 100' RAIL
- 120' RAIL
- 140' RAIL
- 160' RAIL
- 180' RAIL
- 200' RAIL
- 220' RAIL
- 240' RAIL
- 260' RAIL
- 280' RAIL
- 300' RAIL
- 320' RAIL
- 340' RAIL
- 360' RAIL
- 380' RAIL
- 400' RAIL
- 420' RAIL
- 440' RAIL
- 460' RAIL
- 480' RAIL
- 500' RAIL
- 520' RAIL
- 540' RAIL
- 560' RAIL
- 580' RAIL
- 600' RAIL
- 620' RAIL
- 640' RAIL
- 660' RAIL
- 680' RAIL
- 700' RAIL
- 720' RAIL
- 740' RAIL
- 760' RAIL
- 780' RAIL
- 800' RAIL
- 820' RAIL
- 840' RAIL
- 860' RAIL
- 880' RAIL
- 900' RAIL
- 920' RAIL
- 940' RAIL
- 960' RAIL
- 980' RAIL
- 1000' RAIL



4804 North 40th Street
Shibboleth, WI 53083
Phone: (920) 591-2400

PAGE 2
PAGE 3

Map Number



Scale: 1" = 20'

DATE	DESCRIPTION	BY	DATE	DESCRIPTION	BY

State: ILLINOIS
County: COOK
Municipality: CHICAGO

PERMIT ONLY



3030 Westmore Road
Suite 310, Uka, IL 60132

Project #: LINDOLH-PARK-11

Job Title: GARB'S

Original Issue Date: 12/14/12

Published Date:

Description	Qty.
Fiber - 432	XXX
Fiber - 288	XXX
Fiber - 144	XXX
Fiber - 96	XXX
Fiber - 48	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - Drop	XXX
Total Fiber	XXX

Route - Aerial XXX

Route - DG-Lesses XXX

Route - DG-New Conduit XXX

Route - Drop Location XXX

Total Route Footage XXX

Poles - Power XXX

Poles - Telco XXX

Poles - Other XXX

Total Poles XXX

Nodes XXX

276 Strand XXX

108 Strand XXX

Splices XXX

Stack Loops XXX

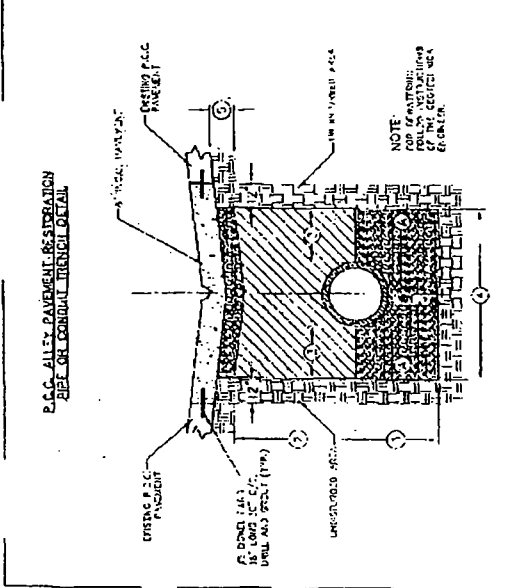
Manholes XXX

Memories XXX



4824 North 40th Street
Chicago, IL 60641
Phone: (773) 298-2800

Map Number:



- 1 BEDDING 24\"/>
- 2 BACKFILL 24\"/>
- 3 CLEARANCE 6\"/>
- 4 TRENCH WIDTH 18\"/>
- 5 SUB-BASE 6\"/>

CDOT
CHICAGO DEPARTMENT OF TRANSPORTATION

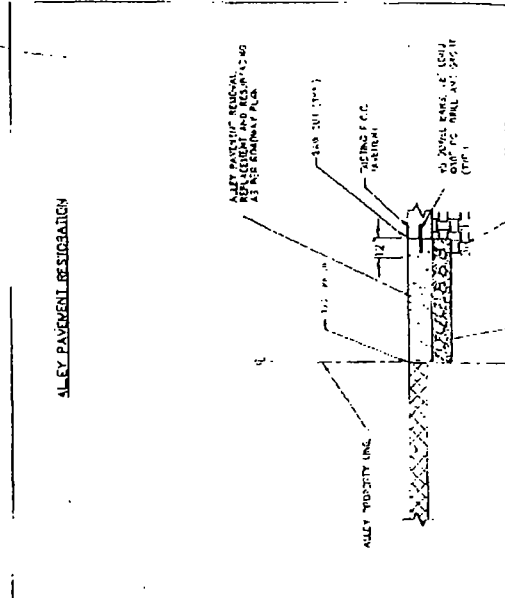
DATE: 12/14/12
REVISION: 1

CITY OF CHICAGO
ILLINOIS DEPARTMENT OF TRANSPORTATION
TRENCH DETAIL CONCRETE ALIAY

DATE: 12/14/12
SHEET: 7A-27
JOB: 11201

Scale: 1" = 20'

DATE	DESCRIPTION	INITIALS	DATE	DESCRIPTION	INITIALS



- 1 ALLEY PAVEMENT RESTORATION 12\"/>
- 2 ASPHALT SAND 12\"/>
- 3 ASPHALT 12\"/>
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- 99 ASPHALT 12\"/>
- 100 ASPHALT SAND 12\"/>

CDOT
CHICAGO DEPARTMENT OF TRANSPORTATION

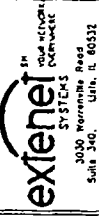
DATE: 12/14/12
REVISION: 1

CITY OF CHICAGO
ALLEY PAVEMENT RESTORATION

DATE: 12/14/12
SHEET: 7A-28
JOB: 11201

State: ILLINOIS
County: COOK
Municipality: CHICAGO

PERMIT ONLY



3030 North Branch
Suite 300, Chicago, IL 60632

Project # LINCOLN-PARK-IL
Engineer GABES

Original Issue Date 12/14/12
Published Date

DESCRIPTION	QTY
Fiber - 32	XXX
Fiber - 44	XXX
Fiber - 96	XXX
Fiber - 72	XXX
Fiber - 30	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - Drop	XXX
Total fiber	XXX

Route - 40-100
Route - 40-150
Route - 40-200
Route - Base Station
Total Route Footage

Poles - Power
Poles - Dico
Poles - Other
Total Poles

Nodes
5/16" Strand
Anchors
Straps
Shocks
Handholes
Punchholes

- 60# FIBER
- 40# FIBER
- 30# FIBER
- 24# FIBER
- 12# FIBER
- 1/2" DROP
- 1/4" DROP
- 1/8" DROP
- 1/16" DROP
- 1/32" DROP
- 1/64" DROP
- 1/128" DROP
- 1/256" DROP
- 1/512" DROP
- 1/1024" DROP

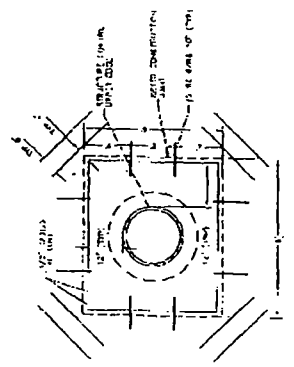


400 North 4th Street
Chicago, IL 60607
Phone: (312) 438-2800

Map Number

DETAIL OF STRUCTURE CASTING ISOLATION BOX FOR E.C.C. PAVEMENT AND E.C.C. BASE COURSE

4" MINIMUM THICKNESS OF CONCRETE
4" MINIMUM THICKNESS OF E.C.C.



DETAIL OF REIN. PAVEMENT

SPECIAL CONDITIONS

1. ALL MATERIALS TO BE USED IN THE CONSTRUCTION OF THIS STRUCTURE SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.
2. THE STRUCTURE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS DRAWING.
3. THE STRUCTURE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE CITY OF CHICAGO.
4. THE STRUCTURE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE CITY OF CHICAGO.

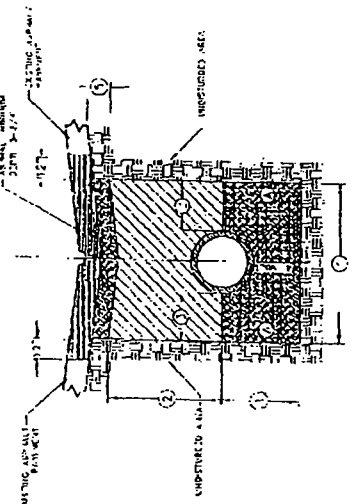
DATE	REVISION	CITY OF CHICAGO
12/14/12	1	12/14/12

12/14/12

12/14/12



ASPHALT ALIQUOT PAVEMENT RESTORATION FOR EXISTING SUBGRADE



1. BEDDING
2. BACKFILL
3. CLEARANCE
4. TRENCH WIDTH
5. SLOPE RAMP

DATE	REVISION	CITY OF CHICAGO
12/14/12	1	12/14/12

12/14/12

12/14/12



Scale: 1' = 20'

DATE	REVISION	CITY OF CHICAGO
12/14/12	1	12/14/12

State: ILLINOIS
County: COOK

Municipality: CHICAGO

PROPOSED EXTENET SYSTEMS

UNDERGROUND FIBER OPTIC FACILITY

W ADDISON ST FROM ALLEY W. OF N. HALSTED
ST TO ALLEY EAST OF N. PINE GROVE AVE
CHICAGO, IL

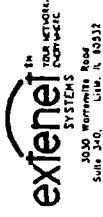
OUC IR FILE # 55712

OUC EFP FILE # 57829

PROJECT LOCATION



DIGGER HOTLINE
(CHICAGO UTILITY ALERT NETWORK)
1-312-744-7000



CONTACT INFORMATION:

EXTENET SYSTEMS:

DAVE FASSHAUER (708) 975-5786

GABE'S CONSTRUCTION:

ENGINEERING - JEFF RINARTZ (920) 889-4510
CONSTRUCTION - BRIAN VANSCHYNDEL (920) 889-9809

PROJECT NO:

EXTIL12010

PROJECT LOCATION:

W. ADDISON ST BETWEEN ALLEY W. OF N. HALSTED TO
ALLEY EAST OF N. PINE GROVE AVE.

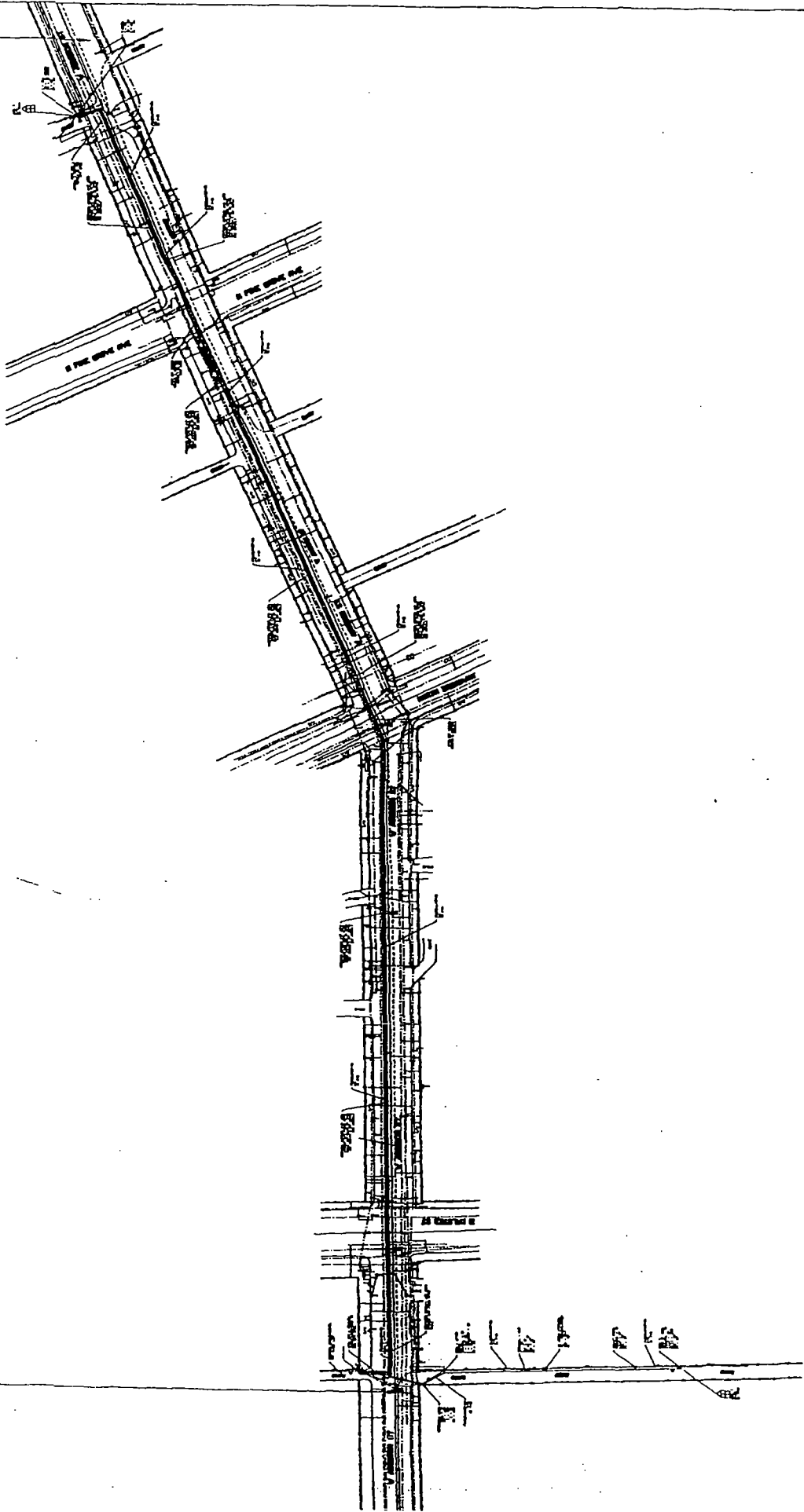
ADDITIONAL LOCATION DESCRIPTION:

INSTALL BY OPEN CUT TRENCH APPROX. 1650' LF OF 2"
HDPE CONDUIT E/W FIBER OPTIC CABLE WITHIN THE R/W
OF W. ADDISON STREET, FROM ALLEY WEST OF N. HALSTED
AND ALLEY EAST OF N. PINE GROVE AVE NO
HANDHOLES/MANHOLES REQUIRED - THIS IS RISER POLE
TO RISER POLE PROPOSED BUILT.

PROJECT COORDINATOR:

JEFF RINARTZ (920) 889-4510

PROJECT LIMITS



PERMIT ONLY

extene!™
 YOUR ACTION.
 THEIR SYSTEMS.
 YOUR NETWORK.

100 Westmoreland Road
 Suite 340, Upt. IL 60332

Project # _____
 Job Title: CORNELIA-IL
 Engineer: GARET
 Original Issue Date 11/5/12
 Published Date _____

Bill of Materials:

Description	Qty.
Fiber - 432	XXX
Fiber - 144	XXX
Fiber - 96	XXX
Fiber - 72	XXX
Fiber - 48	XXX
Fiber - 36	XXX
Fiber - 12	XXX
Fiber - Drop	XXX
Total Fiber	XXX

Route - Aerial
 Route - UG-Conduit
 Route - Base Station
 Total Route Footage

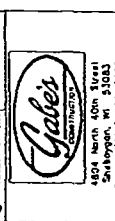
Poles - Power
 Poles - Telco
 Poles - Other

Total Poles

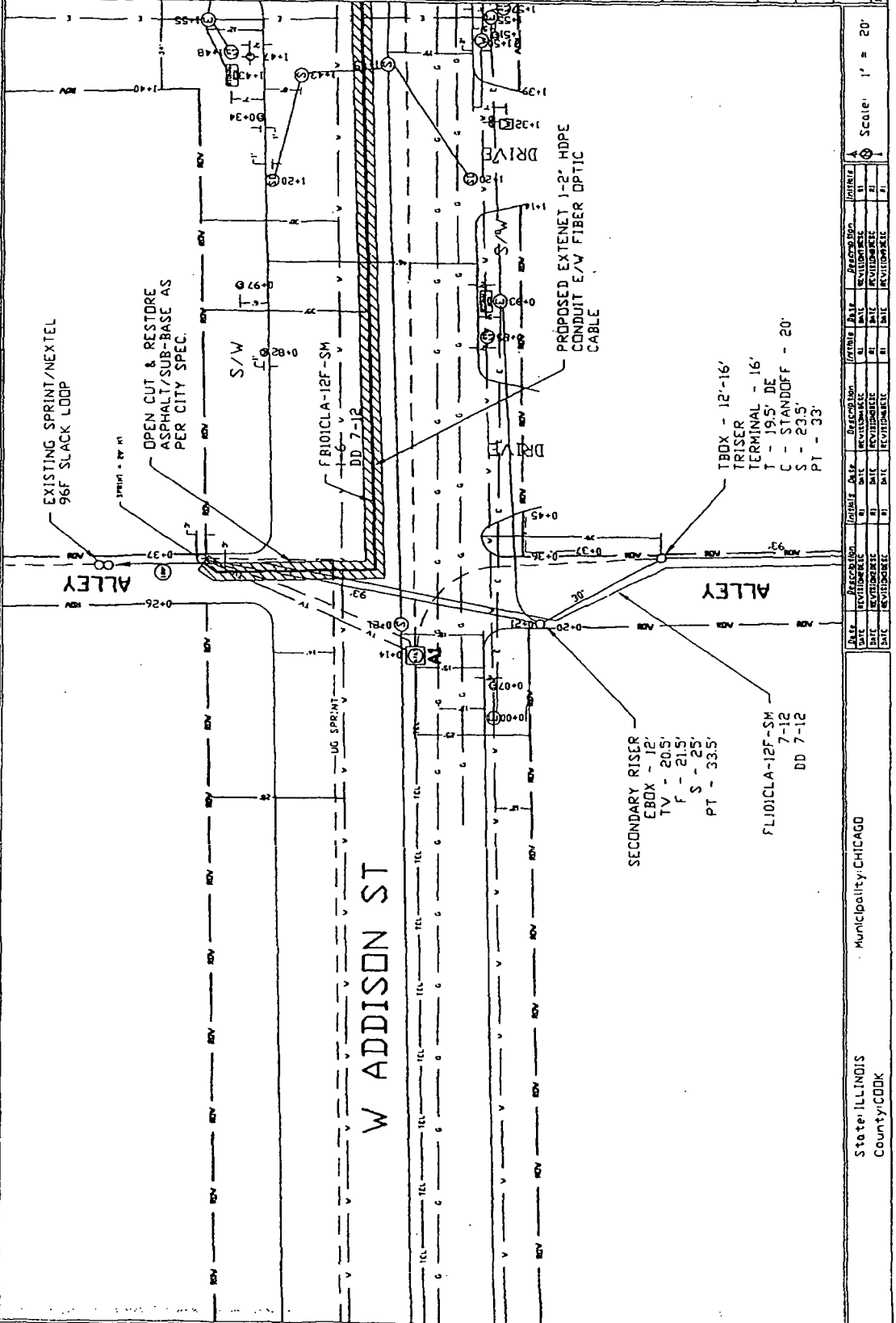
Notes
 5/16" Strand
 Anchors
 Splices
 Manholes

Legend:

- 1" DIA. HOLE
- 2" DIA. HOLE
- 3" DIA. HOLE
- 4" DIA. HOLE
- 6" DIA. HOLE
- 8" DIA. HOLE
- 12" DIA. HOLE
- 18" DIA. HOLE
- 24" DIA. HOLE
- 30" DIA. HOLE
- 36" DIA. HOLE
- 42" DIA. HOLE
- 48" DIA. HOLE
- 54" DIA. HOLE
- 60" DIA. HOLE
- 66" DIA. HOLE
- 72" DIA. HOLE
- 78" DIA. HOLE
- 84" DIA. HOLE
- 90" DIA. HOLE
- 96" DIA. HOLE
- 102" DIA. HOLE
- 108" DIA. HOLE
- 114" DIA. HOLE
- 120" DIA. HOLE



Page 1	Page 1
Page 2	Page 2
Page 3	Page 3
Page 4	Page 4
Page 5	Page 5



DATE	DESCRIPTION	INITIALS	DATE	DESCRIPTION	INITIALS
	REVISION			REVISION	
	REVISION			REVISION	
	REVISION			REVISION	
	REVISION			REVISION	

State: ILLINOIS
 County: COOK
 Municipality: CHICAGO

Map Number: _____

PERMIT ONLY

extenet IN YOUR NETWORK PARTNER

3030 Warrick Road
Suite 310, Oak, IL 60453

Project # -
Job Title - CORNELIA-IL
Engineer - GARCIA
Original Issue Date 11/5/12

Bill of Materials

Description	Qty.
Fiber - 432	XXX
Fiber - 888	XXX
Fiber - 56	XXX
Fiber - 72	XXX
Fiber - 48	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - Drop	XXX
Total Fiber	XXX

Route - Aerial
Route - US-96 Conduit
Route - Base Station
Route - Base Station
Total Route Footage

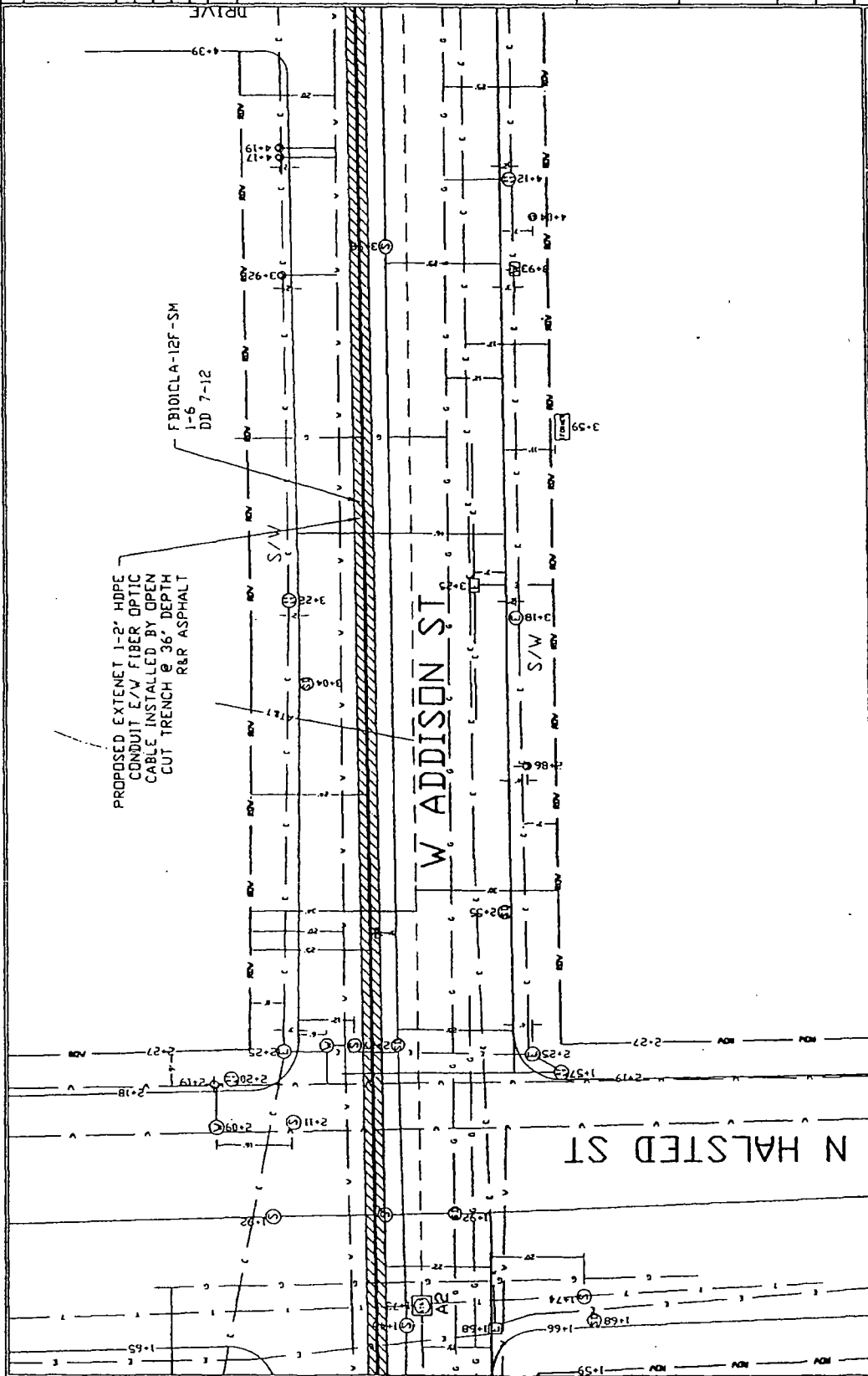
Poles - Power	XXX
Poles - Telco	XXX
Poles - Other	XXX
Total Poles	XXX

Nodes

3/16" Strand	XXX
Anchor	XXX
Stack Loops	XXX
Manholes	XXX
Manholes	XXX

4804 North 40th Street
Sheboygan, WI 53083
Phone: (262) 461-3400

PAGE 1	PAGE 2	PAGE 3
PAGE 4	PAGE 5	PAGE 6



Scale: 1" = 20'

DATE	DESCRIPTION	BY	DATE	DESCRIPTION	BY

Municipality: CHICAGO

State: ILLINOIS
County: COOK

Map Number:

PERMIT ONLY



3030 Westmerville Road
Suite 310, Upt. 1, 60337

Project # - CORNELIA-IL

Job Title - GARE'S

Original Issue Date 11/5/12

Published Date:

Description	Qty.
Fiber - 12E	XXX
Fiber - 888	XXX
Fiber - 144	XXX
Fiber - 36	XXX
Fiber - 48	XXX
Fiber - 36	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - 6000	XXX
Total Fiber	XXX

Route - Aerial

Route - UG-Leased

Route - UG-Not Leased

Route - Bury

Total Route Footage

Poles - Power

Poles - Telco

Poles - Other

Total Poles

Masts

5/16" Strand

ANCHORS

Splices

Stack Loops

Manholes

Manholes

Manholes

Manholes

Manholes

Manholes

Manholes

Manholes

Manholes

Manholes

Manholes

Manholes

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Manholes

Manholes

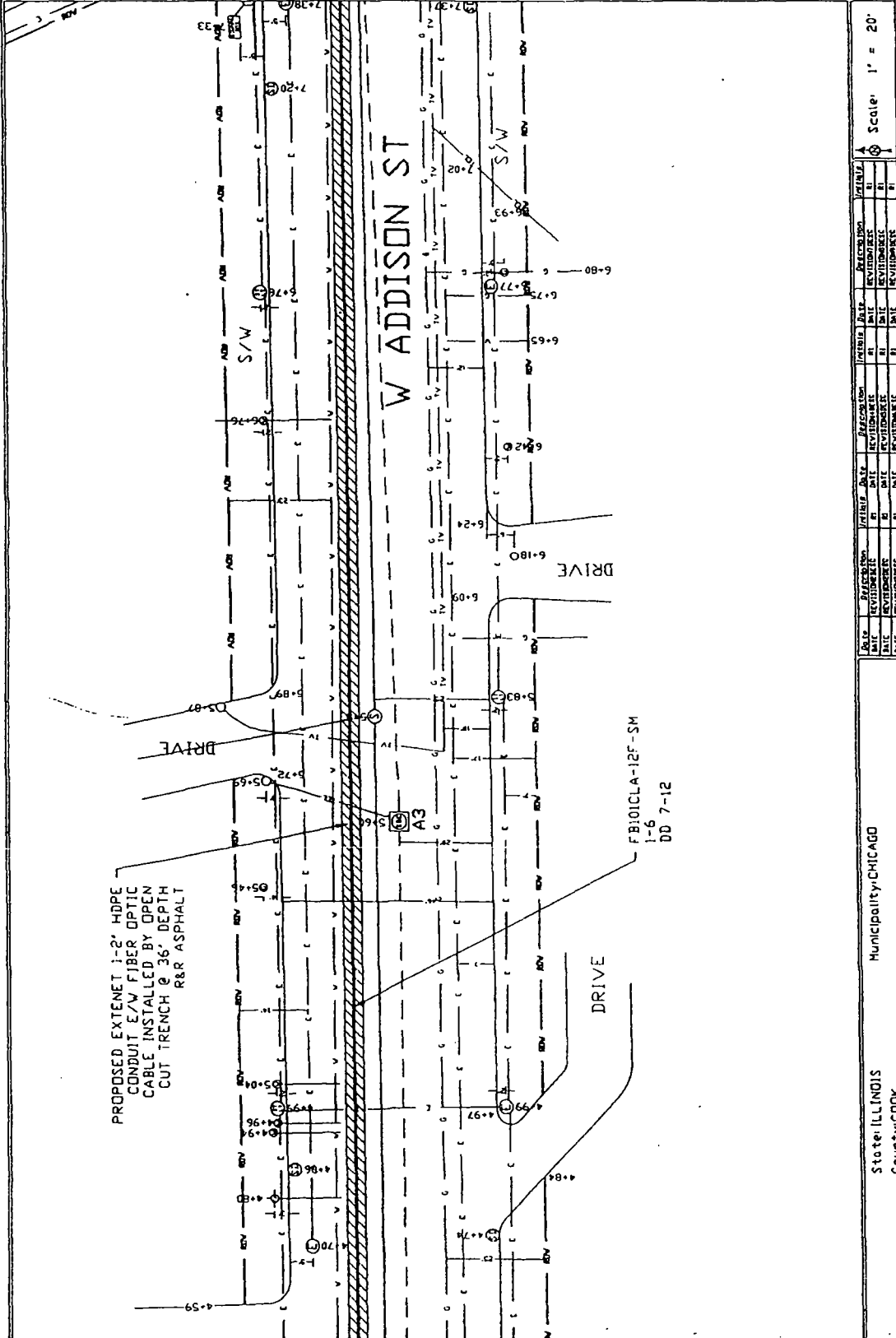
Manholes



4804 North 49th Street
Sheboygan, WI 53083
PHONE: (920) 431-2800

PAGE 1	PAGE 2	PAGE 3	PAGE 4
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Pop. Number



Scale: 1" = 20'

DATE	DESCRIPTION	BY	DATE	DESCRIPTION	BY

State: ILLINOIS Municipality: CHICAGO
County: COOK

PERMIT ONLY

extenet is your network systems consultant

3030 Warrington Road
Suite 310, Lisle, IL 60532

PROJECT # - CORNELIA-IL

Job Title: _____
Engineer: _____
Original Issue Date: 11/5/12
Publishing Date: _____

Bill of Materials


Qty	Description	Dly.
XXX	Fiber - 432	XXX
XXX	Fiber - 880	XXX
XXX	Fiber - 144	XXX
XXX	Fiber - 288	XXX
XXX	Fiber - 72	XXX
XXX	Fiber - 18	XXX
XXX	Fiber - 36	XXX
XXX	Fiber - 24	XXX
XXX	Fiber - 36-ep	XXX
XXX	Total Fiber	XXX

Routes - Aerial: XXX
 Routes - GC-Lease: XXX
 Routes - UC-MS Leasing: XXX
 Routes - OC-MS Leasing: XXX
 Total Route Footage: XXX

Poles - Power: XXX
 Poles - Telco: XXX
 Poles - Other: XXX
 Total Poles: XXX

Nodes: XXX
 5/16" Strand: XXX
 Anchors: XXX
 Splices: XXX
 Slack Loops: XXX
 Spare Fibers: XXX
 Markings: XXX

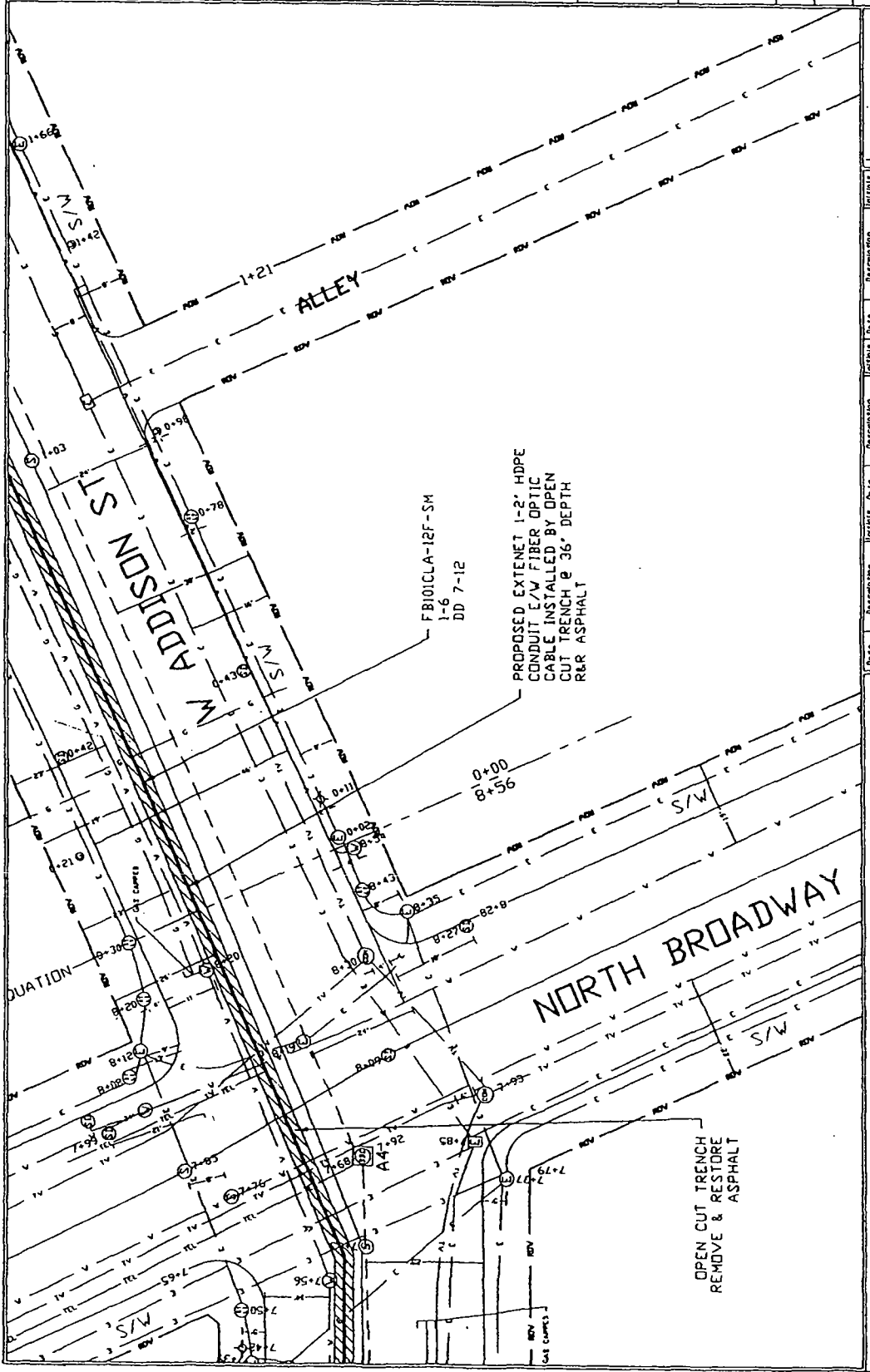
- ① - 210' PILE
- ② - 180' PILE
- ③ - 150' PILE
- ④ - 120' PILE
- ⑤ - 90' PILE
- ⑥ - 60' PILE
- ⑦ - 30' PILE
- ⑧ - 15' PILE
- ⑨ - 7.5' PILE
- ⑩ - 3.75' PILE
- ⑪ - 1.875' PILE
- ⑫ - 0.9375' PILE
- ⑬ - 0.46875' PILE
- ⑭ - 0.234375' PILE
- ⑮ - 0.1171875' PILE
- ⑯ - 0.05859375' PILE
- ⑰ - 0.029296875' PILE
- ⑱ - 0.0146484375' PILE



4804 North 40th Street
Shabazz, WI 53083
Phone: (262) 431-7000

PAGE 1	PAGE 4
PAGE 5	PAGE 6

Map Number: _____

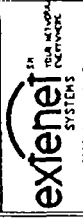


REVISION	DATE	DESCRIPTION
1	11/5/12	ISSUED FOR PERMIT
2		
3		
4		
5		
6		
7		

Municipality: CHICAGO

State: ILLINOIS
County: COOK

PERMIT ONLY



3030 Harrison Road
Suite 340, Naperville, IL 60563

Project # -
Job Title: GERMELIA-IL

Engineer: GABC

Original Issue Date 11/5/12

Submittal Date:

Bill of Materials	Qty.
Fiber - 432	XXX
Fiber - 480	XXX
Fiber - 144	XXX
Fiber - 96	XXX
Fiber - 72	XXX
Fiber - 48	XXX
Fiber - 36	XXX
Fiber - 12	XXX
Fiber - Drop	XXX
Total Fiber	XXX

Route - Aerial XXX

Route - Un-aerial XXX

Route - UG-Hrs Conduit XXX

Route - Base Station XXX

Total Route Footage XXX

Poles - Power XXX

Poles - Telco XXX

Poles - Other XXX

Total Poles XXX

Nodes XXX

5/16" Strand XXX

Anchor's XXX

Splices XXX

Stick Loads XXX

Manholes XXX

Manholes XXX

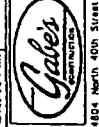
Manholes XXX

Manholes XXX

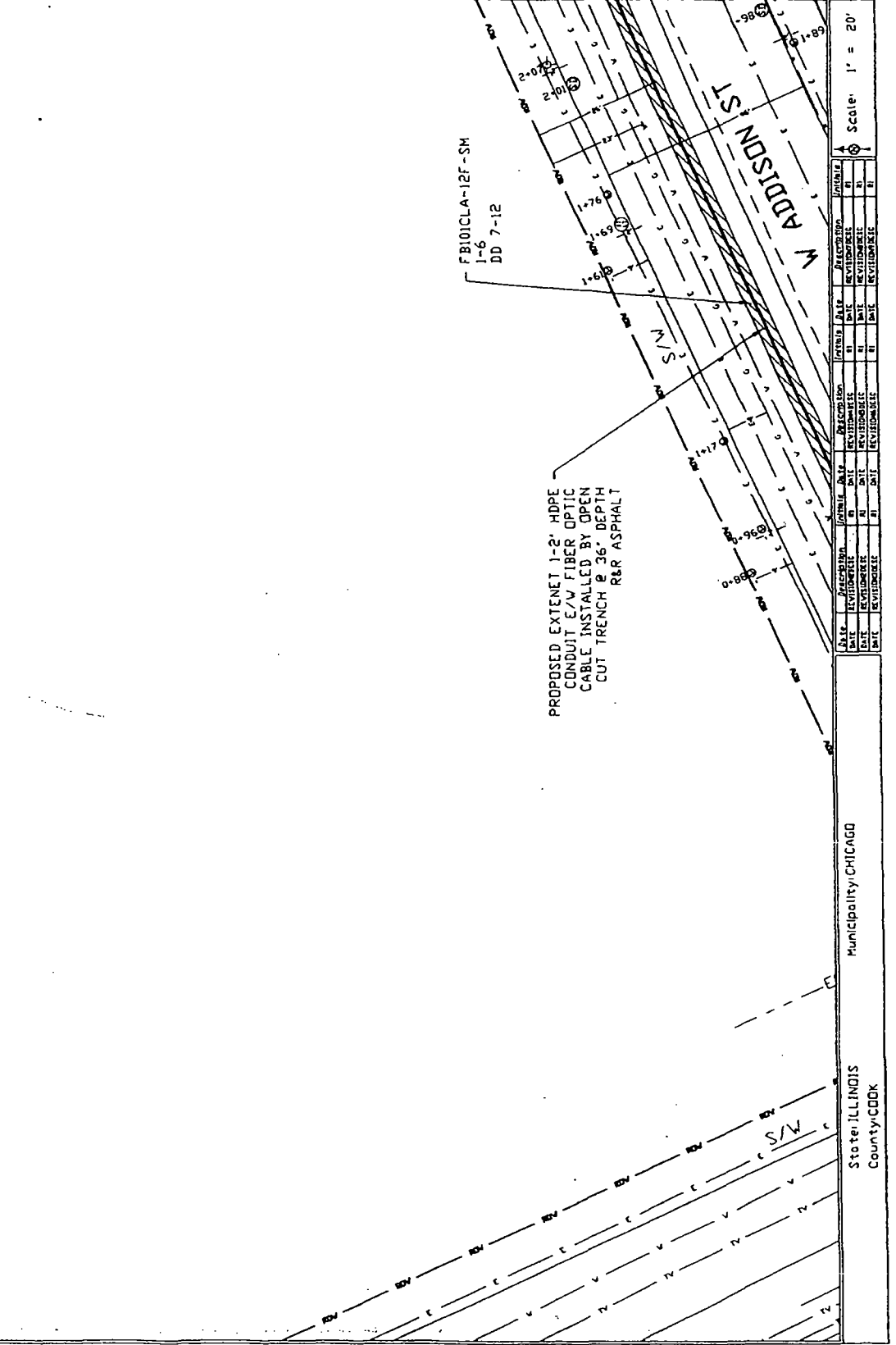
Manholes XXX

Manholes XXX

Manholes XXX



4804 North 40th Street
Sheboygan, WI 53083
Phone: (920) 439-2800



PROPOSED EXTENET 1-2' HDPE
CONDUIT E/W FIBER OPTIC
CABLE INSTALLED BY OPEN
CUT TRENCH @ 36" DEPTH
R/R ASPHALT

FBI0ICLA-12F-SM
1-6
DD 7-12

DATE	REVISION	BY	DATE	REVISION	BY

Scale: 1" = 20'

State: ILLINOIS
County: COOK

Municipality: CHICAGO

Map Number:

PAGE 3

PAGE 4

PAGE 5

PAGE 6

PERMIT ONLY

extenel IN THE NETWORK
 SYSTEMS FOR THE NETWORK
 3030 Warrville Road
 Suite 300, Oak, IL 60452

Project # -
 Job Title: CORNELIA-IL
 Engineer: GABE'S

Original Issue Date 11/5/12

Published Date:

Bill of Materials:	Description	Qty.
Fiber - 432	XXX	XXX
Fiber - 480	XXX	XXX
Fiber - 54	XXX	XXX
Fiber - 56	XXX	XXX
Fiber - 72	XXX	XXX
Fiber - 48	XXX	XXX
Fiber - 36	XXX	XXX
Fiber - 12	XXX	XXX
Fiber - Drop	XXX	XXX
	Total Fiber	XXX

Route - Aerial	XXX
Route - UC-Leaf	XXX
Route - Core	XXX
Route - Base Station	XXX
Total Route Footage	XXX
Poles - Power	XXX
Poles - Telco	XXX
Poles - Other	XXX
Total Poles	XXX
Nodes	XXX
2 1/2" Strand	XXX
Anchor's	XXX
Splices	XXX
Stack Loops	XXX
Manholes	XXX
Handholes	XXX

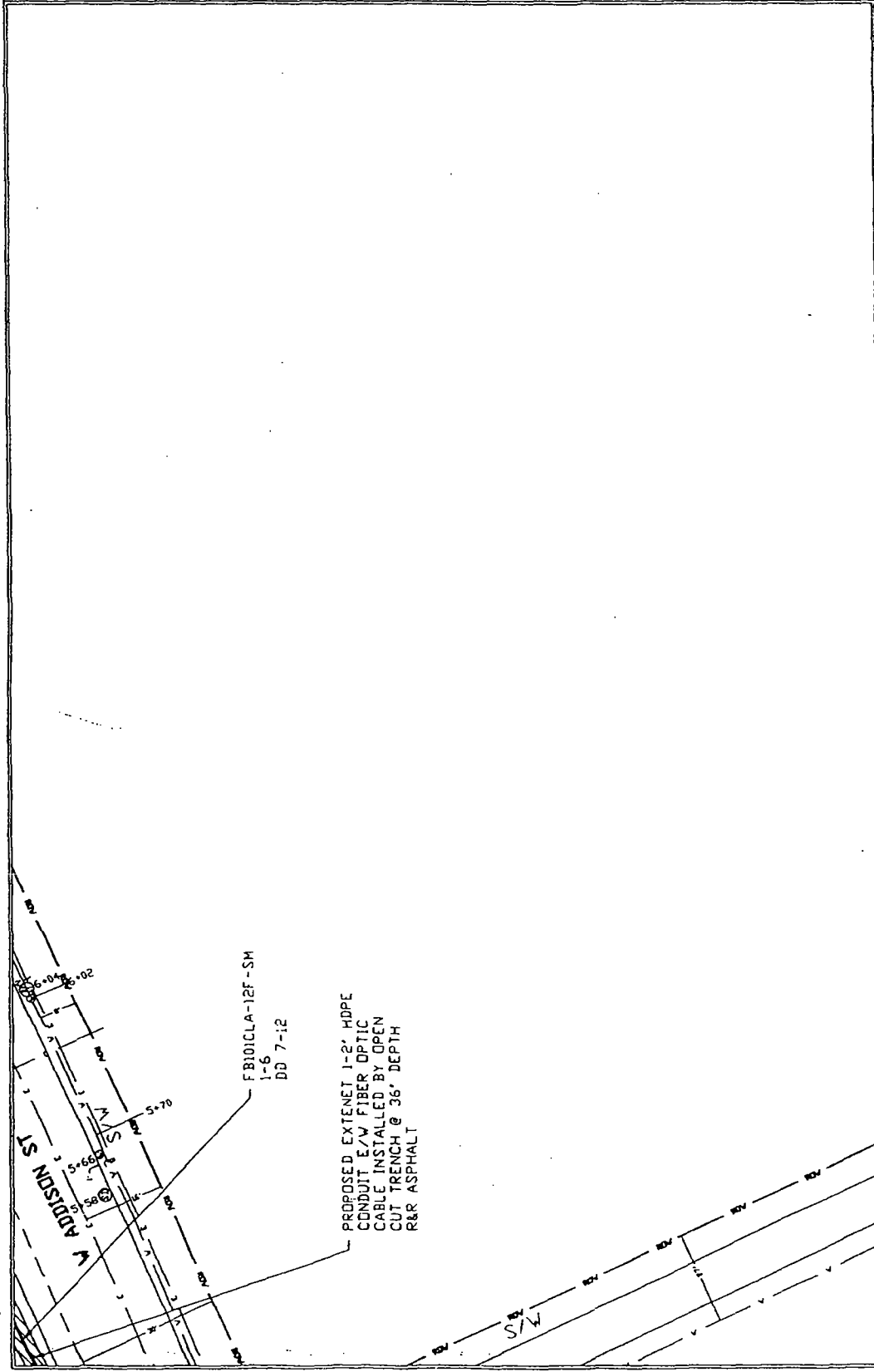
- 1 - 20' PILE
- 2 - 20' PILE
- 3 - 20' PILE
- 4 - 20' PILE
- 5 - 20' PILE
- 6 - 20' PILE
- 7 - 20' PILE
- 8 - 20' PILE
- 9 - 20' PILE
- 10 - 20' PILE
- 11 - 20' PILE
- 12 - 20' PILE
- 13 - 20' PILE
- 14 - 20' PILE
- 15 - 20' PILE
- 16 - 20' PILE
- 17 - 20' PILE
- 18 - 20' PILE
- 19 - 20' PILE
- 20 - 20' PILE



1025 W. 20th St., Suite 210
 Sheboygan, WI 53080
 Phone: (920) 438-2100

Page 6	Page 7
Page 8	Page 9
Page 10	Page 11

Scale: 1" = 20'



DATE	DESCRIPTION	DATE	DESCRIPTION	DATE	DESCRIPTION

State: ILLINOIS
 County: COOK
 Municipality: CHICAGO

Map Number:

PERMIT ONLY

exfenet IN THE BUSINESS OF SYSTEMS INTEGRATION
 2030 Warrance Road
 Suite 340, Uia, IL 60312

Project # -
 Job Title - CORNELIA-IL
 Engineer - GAC'S
 Original Issue Date 11/5/12

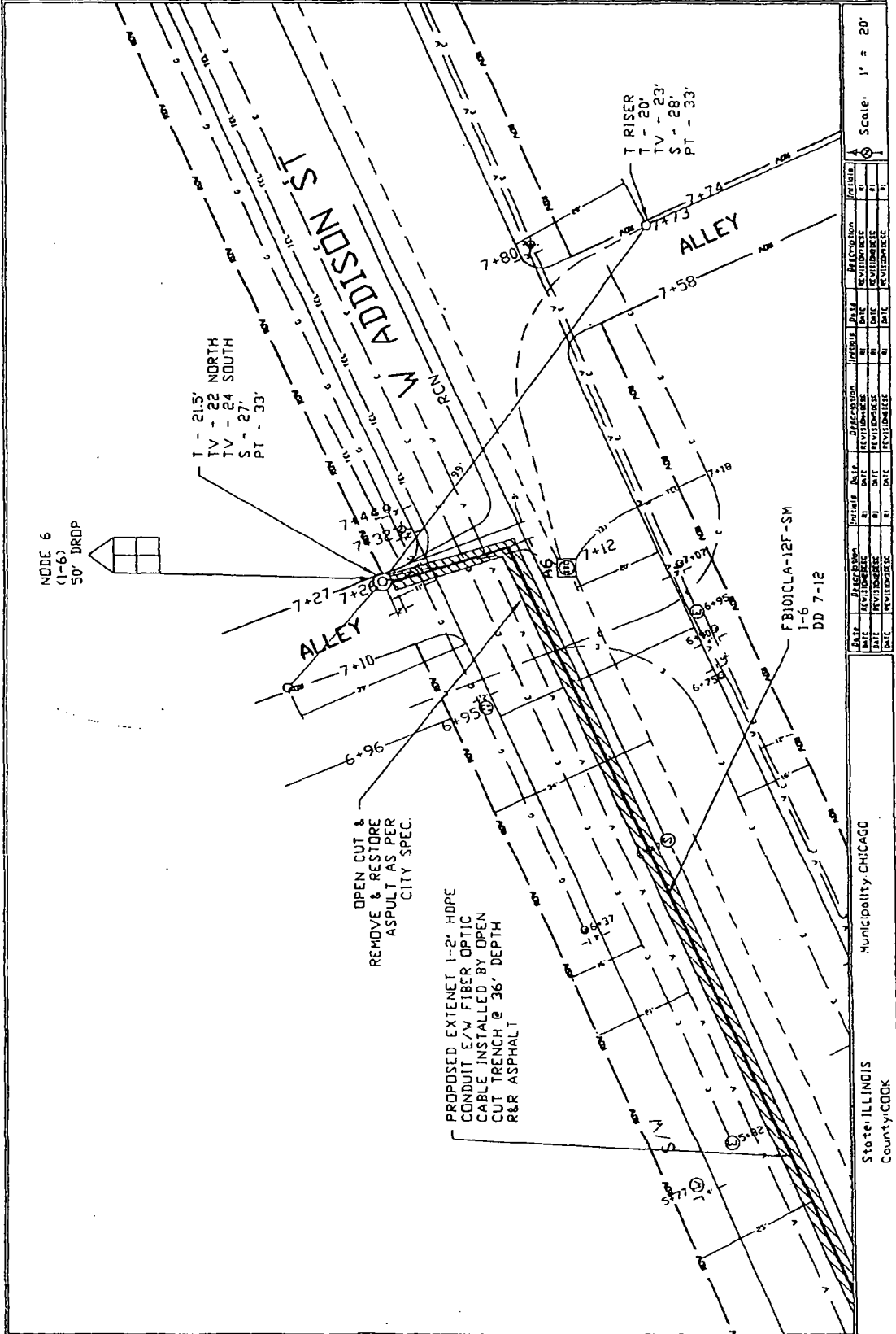
Pub. No.	Description	Qty.
XXX	Fiber - 432	XXX
XXX	Fiber - 288	XXX
XXX	Fiber - 144	XXX
XXX	Fiber - 72	XXX
XXX	Fiber - 48	XXX
XXX	Fiber - 36	XXX
XXX	Fiber - 24	XXX
XXX	Fiber - 18	XXX
XXX	Fiber - 12	XXX
XXX	Fiber - 6	XXX
XXX	Total Fiber	25

- Route - Aerial
- Route - US-Leased
- Route - US-Res Conduit
- Route - US-Res Conduit
- Route - US-Res Conduit
- Total Fiber Footage

- Poles - Power
- Poles - Fiber
- Poles - Other
- Total Poles

Gabel Construction
 484 North 40th Street
 Sheboygan, WI 53083
 Phone: (920) 432-3000

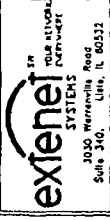
DATE	DESCRIPTION	INITIALS



Scale: 1" = 20'

State: ILLINOIS
 County: COOK
 Municipality: CHICAGO

PERMIT ONLY



Project # -
Job Title - CORNELIA-IL
Engineer - GABE'S
Original Issue Date 11/5/12

Publ. Issue Date:	
Bill of Materials	
Fiber	Qty
Fiber - 432	xxx
Fiber - 432	xxx
Fiber - 144	xxx
Fiber - 144	xxx
Fiber - 26	xxx
Fiber - 26	xxx
Fiber - 26	xxx
Fiber - 24	xxx
Fiber - 24	xxx
Fiber - 24	xxx
Fiber - 26	xxx
Fiber - 24	xxx
Fiber - 24	xxx
Total Fiber	124'

Route - Asmtl	124'
Route - UC-lessee	xxx
Route - Under Construction	xxx
Route - Other	xxx
Total Route Footage	124'
Poles - Power	
Pole - Telec	3
Pole - Other	xxx
Total Poles	3

Nodes	xxx
1/4" Strand	124'
Anchor's	xxx
Splices	xxx
Stack Loops	xxx
Handoffs	xxx
Manholes	xxx

-
- JEN PULL
- JEN PULL
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- JEN PULL
- JEN PULL



4504 North 40th Street, Indianapolis, IN 46203, Phone: (317) 458-7803

Page 1	Page 2
Page 1	Page 2

Map Number:

FL101CLA-12F-SM
7-12
DD 7-12

TERMINAL - 16.5'
T - 18'
C&F > 19'
ST L T - 21'
2ND - 24'
PT - 38'

NO COMMS ATTACHED
PH - 02310910-120208
2ND - 24.5'
PT - 36'

2NDARY RISER
TERMINAL - 16'
I.C.B.F > 19'
2ND - 24'
PT - 33'

ALLEY

DATE	REVISION	DATE	REVISION

Scale: 1" = 20'

State: ILLINOIS
County: COOK
Municipality: CHICAGO

PERMIT_ONLY

extenet in
 SYSTEMS NETWORK CORP.
 3805 Lawrence Road
 Suite 340, Joliet, IL 60432

Project # -
 Job Title - CORNELIA-IL
 Engineer - GABES

Original Issue Date 11/5/12
 Published Date:

Bill of Materials	Description	Qty.
Fiber - 320	XXX	320
Fiber - 288	XXX	288
Fiber - 144	XXX	144
Fiber - 96	XXX	96
Fiber - 72	XXX	72
Fiber - 48	XXX	48
Fiber - 24	XXX	24
Fiber - 12	150'	150'
Fiber - Drop	50'	50'
Total Fiber		207

Route - Agrin 50'
 Route - UG-leased XXX
 Route - UG-New Conduit XXX
 Route - Base Station XXX
 Total Route Footage 30'

Poles - Poleer 1
 Poles - Telco 1
 Poles - Other 1
 Total Poles 3

Nodes
 1/4" Strand 1
 Anchors 32
 Splices 2
 Splice Loops 1
 Manholes XXX
 Handholes XXX

- 20' RLL
- 30' RLL
- 40' RLL
- 50' RLL
- 60' RLL
- 70' RLL
- 80' RLL
- 90' RLL
- 100' RLL
- 110' RLL
- 120' RLL
- 130' RLL
- 140' RLL
- 150' RLL
- 160' RLL
- 170' RLL
- 180' RLL
- 190' RLL
- 200' RLL

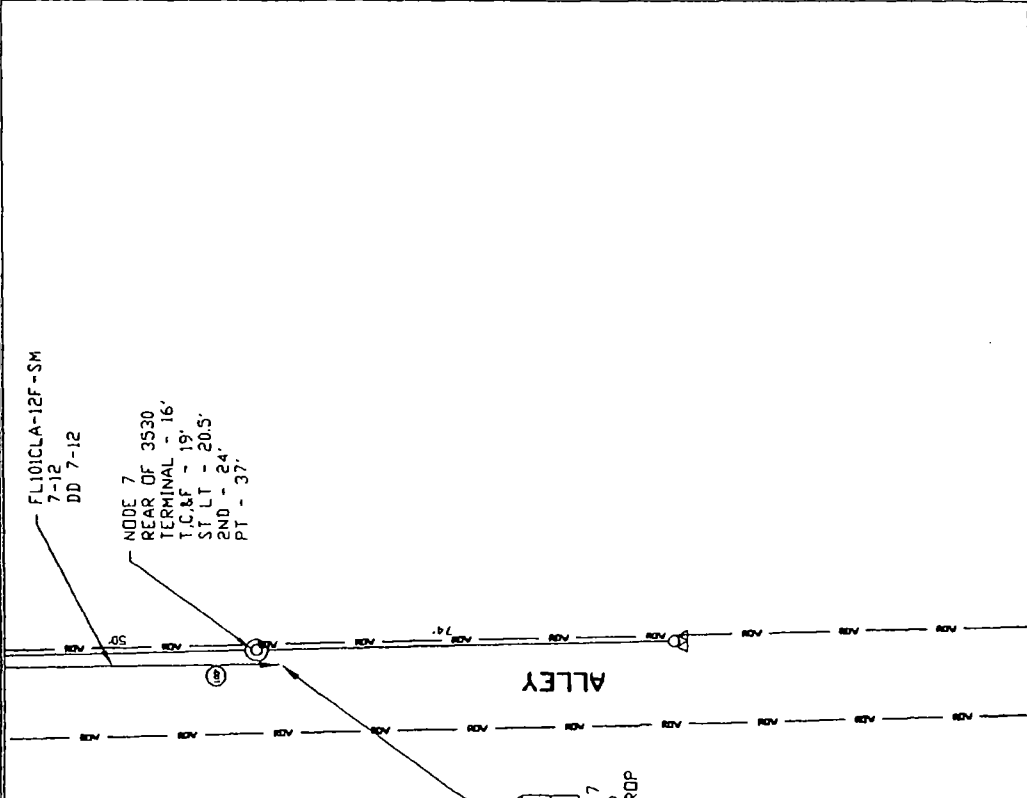


400 North 4th Street
 Joliet, IL 60432
 Phone: (815) 431-7100

PAGE 9

PAGE 18

Map Number:



Scale: 1" = 20'

DATE	DESCRIPTION	BY	DATE	DESCRIPTION	BY

State: ILLINOIS
 County: COOK
 Municipality: CHICAGO

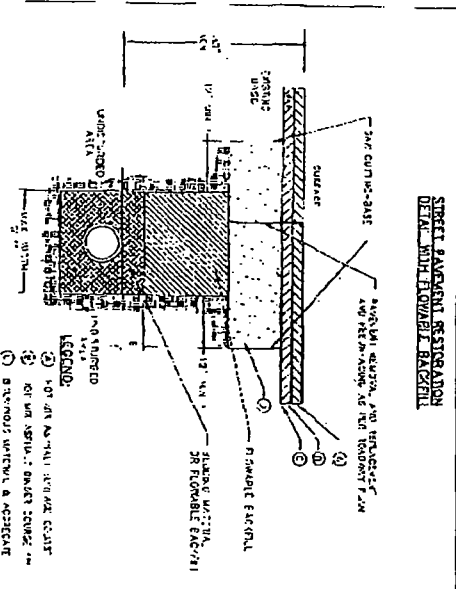
PERMIT ONLY

extenet
 SYSTEMS CORPORATION
 3030 Wernholm Road
 Suite 310, Unit 11, 60532

Project: B -
 Job Title: CORNICIA-L
 Engineer: CACTS
 Original Issue Date: 11/5/12

Bill of Materials:

Description	Qty.
Bar - #32	xxx
Bar - #88	xxx
Bar - #14	xxx
Bar - #5	xxx
Bar - #6	xxx
Bar - #8	xxx
Bar - #10	xxx
Bar - #12	xxx
Bar - #16	xxx
Bar - #20	xxx
Bar - #24	xxx
Bar - #28	xxx
Bar - #32	xxx
Bar - #36	xxx
Bar - #40	xxx
Bar - #44	xxx
Bar - #48	xxx
Bar - #52	xxx
Bar - #56	xxx
Bar - #60	xxx
Bar - #64	xxx
Bar - #68	xxx
Bar - #72	xxx
Bar - #76	xxx
Bar - #80	xxx
Bar - #84	xxx
Bar - #88	xxx
Bar - #92	xxx
Bar - #96	xxx
Bar - #100	xxx
Bar - #104	xxx
Bar - #108	xxx
Bar - #112	xxx
Bar - #116	xxx
Bar - #120	xxx
Bar - #124	xxx
Bar - #128	xxx
Bar - #132	xxx
Bar - #136	xxx
Bar - #140	xxx
Bar - #144	xxx
Bar - #148	xxx
Bar - #152	xxx
Bar - #156	xxx
Bar - #160	xxx
Bar - #164	xxx
Bar - #168	xxx
Bar - #172	xxx
Bar - #176	xxx
Bar - #180	xxx
Bar - #184	xxx
Bar - #188	xxx
Bar - #192	xxx
Bar - #196	xxx
Bar - #200	xxx
Bar - #204	xxx
Bar - #208	xxx
Bar - #212	xxx
Bar - #216	xxx
Bar - #220	xxx
Bar - #224	xxx
Bar - #228	xxx
Bar - #232	xxx
Bar - #236	xxx
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Bar - #988	xxx
Bar - #992	xxx
Bar - #996	xxx
Bar - #1000	xxx

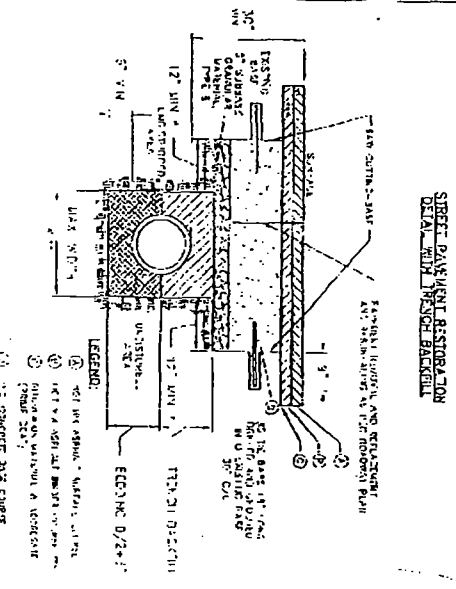


NOTES:
 1. THE FINISH AND SLOPE OF THE SURFACE SHALL BE AS SHOWN ON THE DRAWING.
 2. THE FINISH AND SLOPE OF THE SURFACE SHALL BE AS SHOWN ON THE DRAWING.
 3. THE FINISH AND SLOPE OF THE SURFACE SHALL BE AS SHOWN ON THE DRAWING.
 4. THE FINISH AND SLOPE OF THE SURFACE SHALL BE AS SHOWN ON THE DRAWING.
 5. THE FINISH AND SLOPE OF THE SURFACE SHALL BE AS SHOWN ON THE DRAWING.

CDOT
 CHICAGO DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO
 STREET PAVEMENT RESTORATION
 SHEET 11/5/12

DATE: 11/5/12
 REVISION: A-2-12



NOTES:
 1. THE FINISH AND SLOPE OF THE SURFACE SHALL BE AS SHOWN ON THE DRAWING.
 2. THE FINISH AND SLOPE OF THE SURFACE SHALL BE AS SHOWN ON THE DRAWING.
 3. THE FINISH AND SLOPE OF THE SURFACE SHALL BE AS SHOWN ON THE DRAWING.
 4. THE FINISH AND SLOPE OF THE SURFACE SHALL BE AS SHOWN ON THE DRAWING.
 5. THE FINISH AND SLOPE OF THE SURFACE SHALL BE AS SHOWN ON THE DRAWING.

CDOT
 CHICAGO DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO
 STREET PAVEMENT RESTORATION
 SHEET 11/5/12

DATE: 11/5/12
 REVISION: A-2-12

DATE	DESCRIPTION	BY	DATE	DESCRIPTION	BY
11/5/12	REVISION: A-2-12	CDOT	11/5/12	REVISION: A-2-12	CDOT
11/5/12	REVISION: A-2-12	CDOT	11/5/12	REVISION: A-2-12	CDOT
11/5/12	REVISION: A-2-12	CDOT	11/5/12	REVISION: A-2-12	CDOT

Scale: 1" = 20'

State: ILLINOIS
 County: COOK
 Municipality: CHICAGO

Yale's
 CONSTRUCTION

4800 Wacker Drive, Suite 3300
 Chicago, IL 60601
 Phone: (312) 458-2000

PERMIT ONLY

exenet
INFORMATION SYSTEMS
 3010 Wernicke Road
 Suite 310, York, IL 60552

Project # -
 Job Title - CORNELIA-IL
 Engineer - GAECS

Original Issue Date - 11/5/12
 Published Date -
 Bill of Materials -

Description	Qty.
Fiber - 432	XXX
Fiber - 488	XXX
Fiber - 144	XXX
Fiber - 96	XXX
Fiber - 48	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Total Fiber	550

Route - Aerial	30
Route - Un-Classed	XXX
Route - Un-Use Conduct	XXX
Route - Base Station	XXX
Total Route Footage	30

Poles - Pole	1
Poles - Tripo	XXX
Poles - Other	XXX
Total Poles	XXX

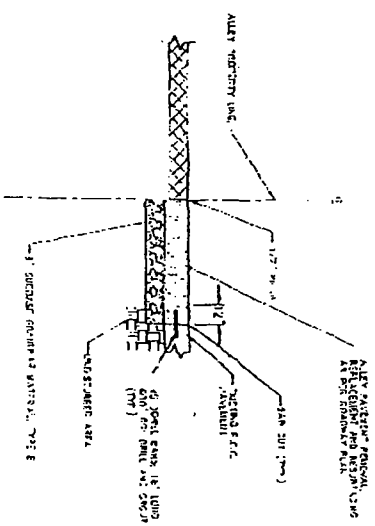
Nodes	1
1/4" Strand	30
Nodes	2
Steel Loops	1
Hardware	XXX
Hardware	XXX

• 200' AUL	• 100'
• 150' AUL	• 75'
• 100' AUL	• 50'
• 75' AUL	• 25'
• 50' AUL	• 12.5'
• 25' AUL	• 6.25'
• 12.5' AUL	• 3.125'
• 6.25' AUL	• 1.5625'
• 3.125' AUL	• 0.78125'
• 1.5625' AUL	• 0.390625'
• 0.78125' AUL	• 0.1953125'
• 0.390625' AUL	• 0.09765625'
• 0.1953125' AUL	• 0.048828125'
• 0.09765625' AUL	• 0.0244140625'
• 0.048828125' AUL	• 0.01220703125'
• 0.0244140625' AUL	• 0.006103515625'
• 0.01220703125' AUL	• 0.0030517578125'
• 0.006103515625' AUL	• 0.00152587890625'
• 0.0030517578125' AUL	• 0.000762939453125'
• 0.00152587890625' AUL	• 0.0003814697265625'
• 0.000762939453125' AUL	• 0.00019073486328125'
• 0.0003814697265625' AUL	• 0.000095367431640625'
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• 0.000095367431640625' AUL	• 0.00002384185791015625'
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• 0.000000000000000043368086899414062500001352015173055736953125' AUL	• 0.000000000000000010842021724853515625000003380037934696928095703125'
• 0.0000000000000000216840434497070312500000676007586928095703125' AUL	• 0.000000000000000010842021724853515625000003380037934696928095703125' AUL

CDOT
 ILLINOIS DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO
 ALL PAVEMENT REPAIRS

DATE: _____ REVISION: _____
 DATE: _____ REVISION: _____

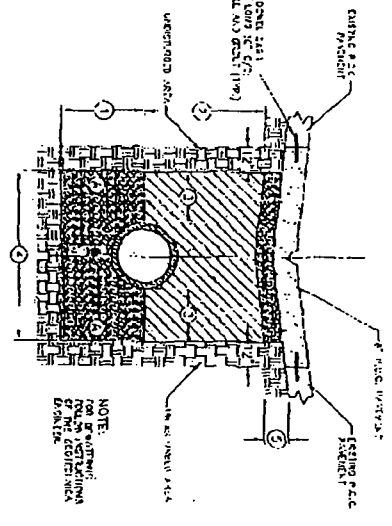


ALLEY PAVEMENT RESTORATION

CDOT
 ILLINOIS DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO
 P.C.C. ALLEY PAVEMENT RESTORATION

DATE: _____ REVISION: _____
 DATE: _____ REVISION: _____



P.C.C. ALLEY PAVEMENT RESTORATION

① BEDDING	EX. CONCRETE TYPE
② SACKFILL	4\"/>
③ CLEARANCE	4\"/>
④ TRENCH WIDTH	4\"/>
⑤ SUB-BASE	4\"/>

State: ILLINOIS
 County: COOK

Municipality: CHICAGO

Scale: 1" = 20'

DATE	DESCRIPTION	INITIALS	DATE	DESCRIPTION	INITIALS

Labels
ILLINOIS DEPARTMENT OF TRANSPORTATION

4824 North 40th Street
 Springfield, IL 62709
 Phone: (217) 524-3300

PERMIT ONLY

extenet in
3030 Riverfront Road
Chicago, IL 60631
Unit: 11-00313

Project No. CORNELIA-IL
Job Title: GABCT

Original Issue Date: 11/5/12

Bill of Materials:

Description	Qty.
Fiber - 288	111
Fiber - 144	111
Fiber - 96	111
Fiber - 72	111
Fiber - 48	111
Fiber - 24	111
Fiber - 12	111
Fiber - D-90	200
Total Fiber	200

Route - 4800
Route - 10-14-148
Route - 10-14-148
Route - Base Station
Total Route Footage

Item	Qty.
Poles - Power	1
Poles - T148	111
Poles - T148	111
Total Poles	223

Hoods

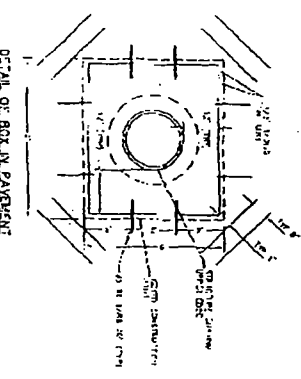
Item	Qty.
1/4" Strand	1
Anchor	2
Splice	2
Splice Loops	2
Markers	111

- 1 - 1/4" Strand
- 2 - Anchor
- 2 - Splice
- 2 - Splice Loops
- 111 - Markers
- 1 - 1/4" Strand
- 2 - Anchor
- 2 - Splice
- 2 - Splice Loops
- 111 - Markers



4800 North 40th Street
Schaumburg, IL 60196
Phone: (815) 399-7500

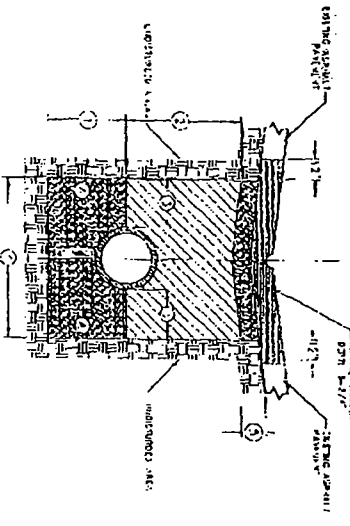
DETAIL OF STRUCTURE CASTING ISOLATION BOX FOR
ELEC. PAVEMENT AND CONC. BASE COURSE



GENERAL CONDITIONS:
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF CHICAGO AND THE ILLINOIS DEPARTMENT OF TRANSPORTATION AND SAFETY.

CITY OF CHICAGO
UTILITY PAYMENT ORDER
REVISION HISTORY

DATE	REVISION
11/5/12	ISSUE FOR PERMIT



- 1. BEDDING: 6" MIN. SAND BEDDING
- 2. BACKFILL: 6" MIN. SAND BEDDING
- 3. CLEARANCE: 6" MIN. CLEARANCE
- 4. TRENCH WIDTH: 6" MIN. TRENCH WIDTH
- 5. SUB-BASE: 6" MIN. SUB-BASE

CITY OF CHICAGO
UTILITY PAYMENT ORDER
REVISION HISTORY

DATE	REVISION
11/5/12	ISSUE FOR PERMIT

State of ILLINOIS
County: COOK

Municipality: CHICAGO

Scale: 1" = 20'

DATE	REVISION
11/5/12	ISSUE FOR PERMIT

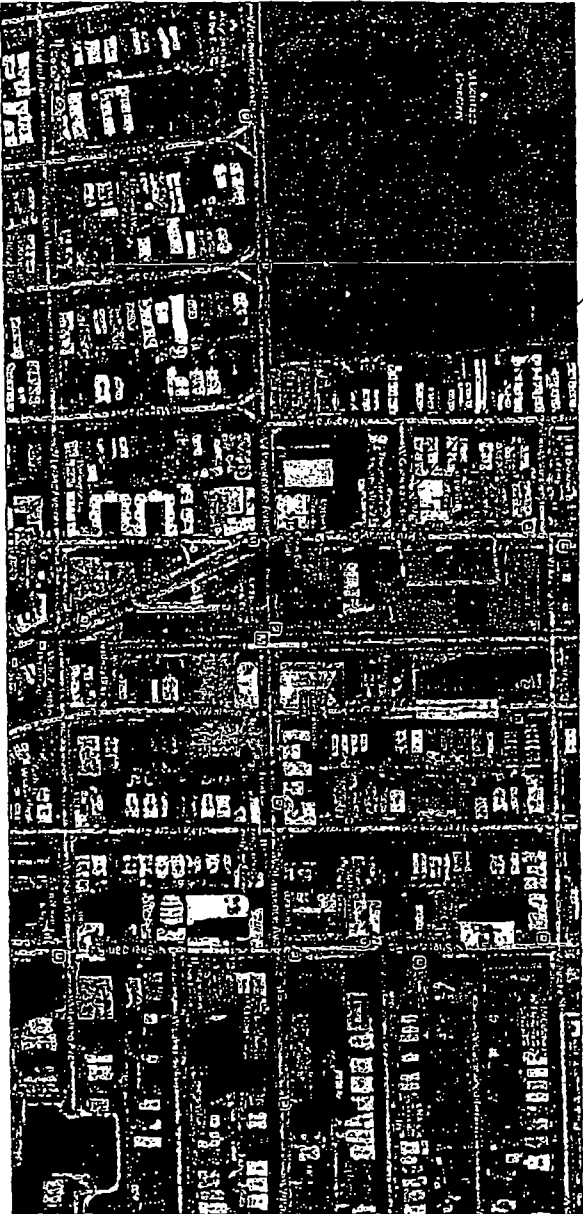
PROPOSED EXTENET SYSTEMS

UNDERGROUND FIBER OPTIC FACILITY

ALLEY WAY EAST ALONG CTA RAIL &
W LAWRENCE AVE.
CHICAGO, IL

PROJECT LOCATION

OUC IR FILE # 55981
OUC EFP FILE # 57830



DIGGER HOTLINE
<CHICAGO UTILITY ALERT NETWORK>
1-312-744-7000

extenetSM
SYSTEMS
1000 Westmore Road
Suite 300
Oak Brook, IL 60521

CONTACT INFORMATION:

EXTENET SYSTEMS:

DAVE FASSHAUER (708) 975-5786

GABE'S CONSTRUCTION:

ENGINEERING - JEFF RINARTZ (920) 889-4510
CONSTRUCTION - BRIAN VANSCHYNDEL (920) 889-9809

PROJECT NO.:

EXTIL12012

PROJECT LOCATION:

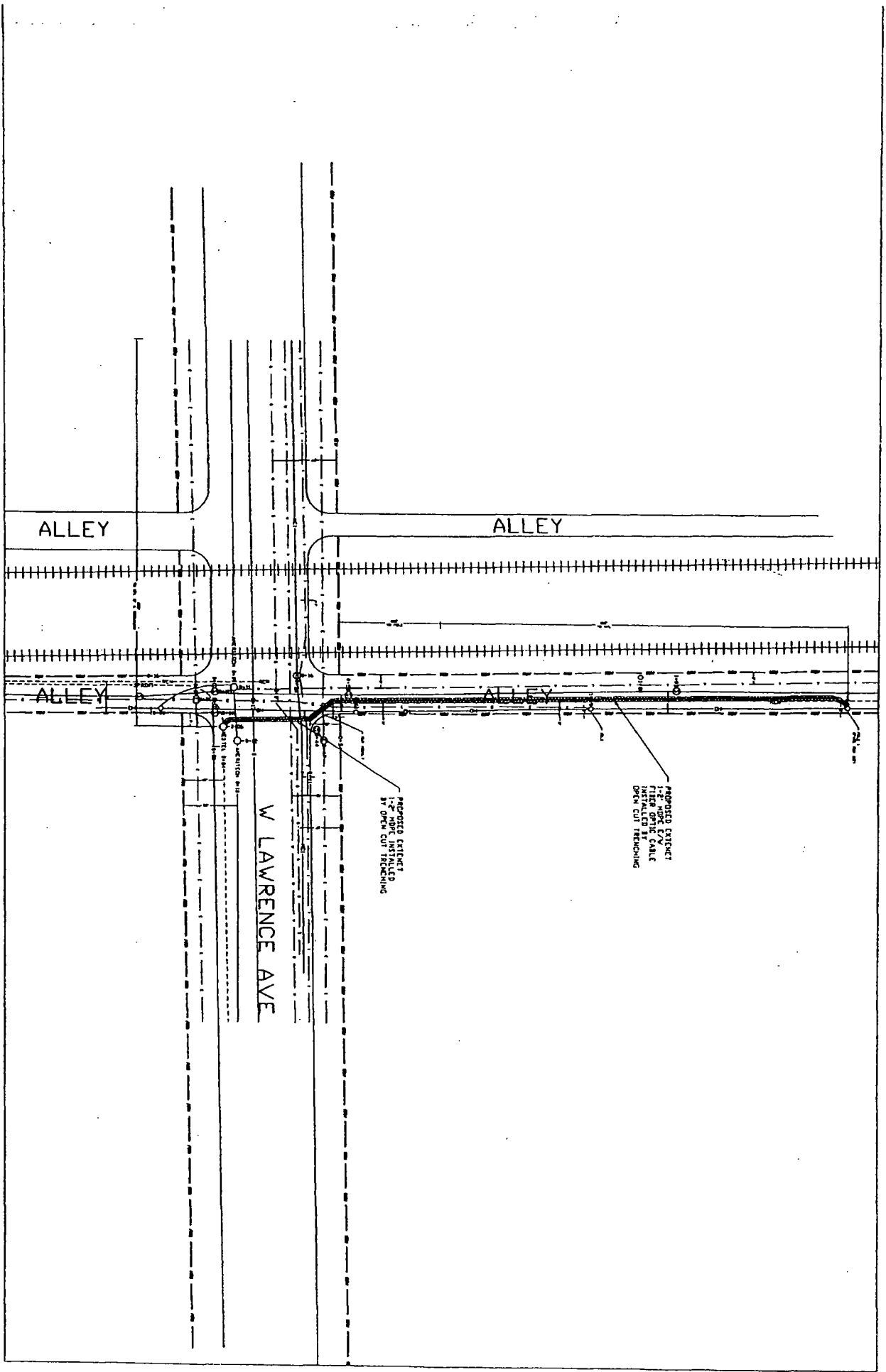
ALLEY WAY EAST OF CTA TRACKS & W. LAWRENCE AVE.
(W. LAWRENCE AVE BETWEEN N. BROADWAY N. WINTHRDP
AVE.)

ADDITIONAL LOCATION DESCRIPTION:

INSTALL BY OPEN CUT TRENCH & BORING APPROX. 260' LF
OF 2" HDPE CONDUIT E/W FIBER OPTIC CABLE WITHIN
THE ALLEY WAY NORTH OF W. LAWRENCE AVE. TO EXIST.
SPRINT MANHOLE LOCATED IN W. LAWRENCE AVE. - WORK
TO BE PERFORMED BETWEEN N. BROADWAY & N. WINTHRDP
AVE.

PROJECT COORDINATOR:

JEFF RINARTZ (920) 889-4510



ALLEY

ALLEY

ALLEY

ALLEY

W LAWRENCE AVE

PROPOSED EXTEND
1/2" PIPE INSTALLED
BY OPEN CUT TRENCHING

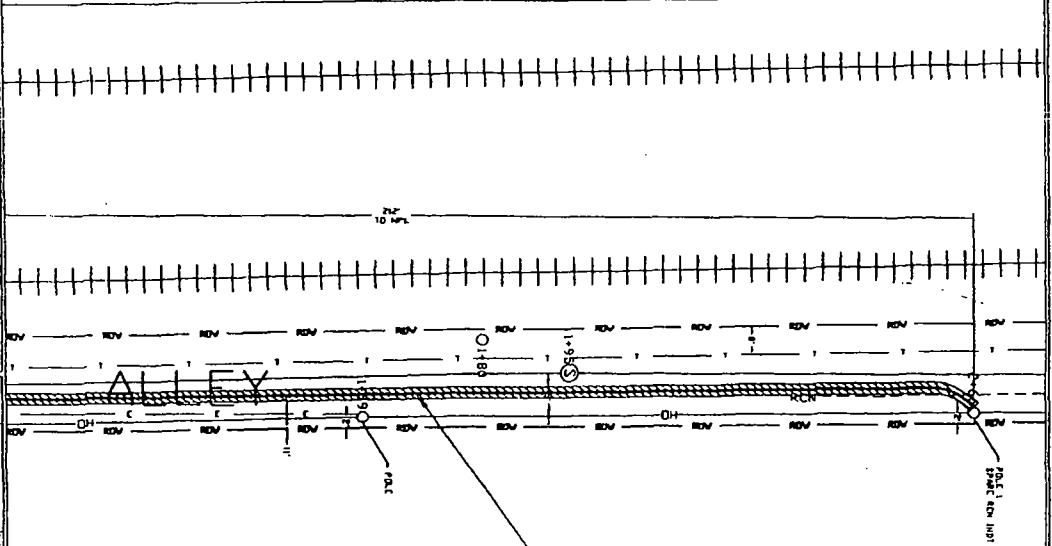
PROPOSED EXTEND
1/2" PIPE E/V
FIELD OPTIC CABLE
OPEN CUT TRENCHING

State: ILLINOIS
County: COOK

Municipality: CHICAGO

ALLEY

Date	Description	Initial	Date	Description	Initial	Date	Description	Initial
DATE	REVISION	BY	DATE	REVISION	BY	DATE	REVISION	BY



PROPOSED EXTENT
1-2" HDPE E/W
FIBER OPTIC CABLE
INSTALLED BY
OPEN CUT TRENCHING

Scale: 1" = 20'

4421 North 40th Street
Sheboygan, WI 53083
Phone: (920) 582-2800

PERMIT ONLY

extenetSM
YOUR NETWORK SYSTEMS CONCEPT

3030 Wrentham Road
Suite 310
Waukegan, IL 60053

Project #
Job Title: LINCOLN-PARK-1L
Engineers: CARL S.

Original Issue Date: 12/11/12

Published Date:

Bill of Materials

Description	Qty
Fiber - 432	XXX
Fiber - 808	XXX
Fiber - 144	XXX
Fiber - 96	XXX
Fiber - 72	XXX
Fiber - 36	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - Drop	XXX
Total Fiber	XXX
Route - Armi	XXX
Route - UG-Loose	XXX
Route - UG-New Conduit	XXX
Route - Base Station	XXX
Total Route Footage	XXX
Poles - Power	XXX
Poles - Trench	XXX
Poles - Other	XXX
Total Poles	XXX
Nodes	XXX
3/16" Strand	XXX
Anchor	XXX
Splicer	XXX
Manholes	XXX
Manholes	XXX

- 400' RFL
- 600' RFL
- 800' RFL
- 1000' RFL
- 1200' RFL
- 1500' RFL
- 1800' RFL
- 2100' RFL
- 2400' RFL
- 2700' RFL
- 3000' RFL
- 3300' RFL
- 3600' RFL
- 3900' RFL
- 4200' RFL

- 12" MD
- 18" MD
- 24" MD
- 30" MD
- 36" MD
- 42" MD
- 48" MD
- 54" MD
- 60" MD
- 66" MD
- 72" MD
- 78" MD
- 84" MD
- 90" MD

PERMIT ONLY

extene
 2010 Station Road
 Suite 210, Waukegan, IL 60052

Project #: LINCOLN-PARK-11
 Engineer: GARCS
 Original Issue Date: 12/11/12
 Revisions:

Bill of Materials

DESCRIPTION	QTY
Fiber - 432	XXX
Fiber - 528	XXX
Fiber - 576	XXX
Fiber - 672	XXX
Fiber - 72	XXX
Fiber - 48	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Total Fiber	XXX

Notes

Notes	XXX
3/16" Strand	XXX
Anchor	XXX
Spacers	XXX
Steel Loops	XXX
Rebar	XXX

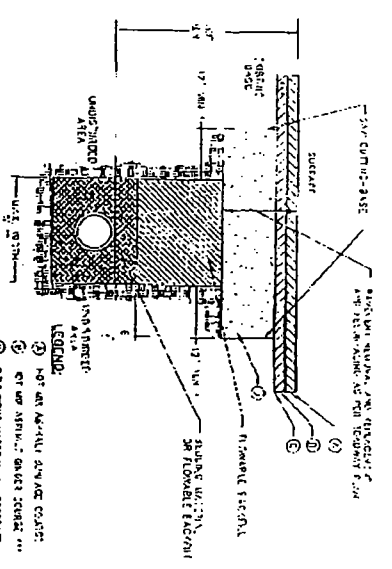
Legend

○	As per
●	As per
□	As per
△	As per
▽	As per
◇	As per
◇	As per
◇	As per
◇	As per
◇	As per
◇	As per

4801 North 48th Street
 Skokie, IL 60076
 Phone: (847) 593-2800

CDOT
 DIVISION OF TRANSPORTATION
 CITY OF CHICAGO
 STREET PAVEMENT RESTORATION
 DEMIL AND FLOWABLE BACKFILL

**STREET PAVEMENT RESTORATION
 DEMIL WITH FLOWABLE BACKFILL**



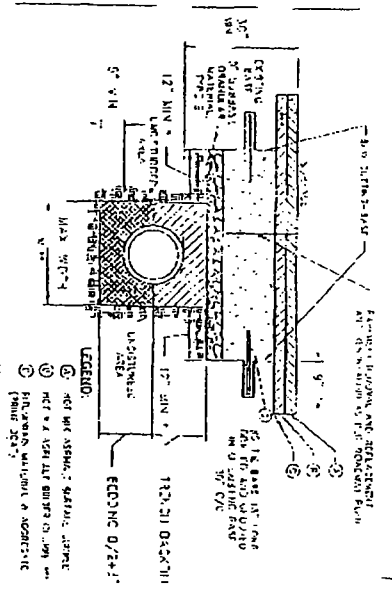
NOTES

1. THE CONTRACTOR SHALL COMPLY WITH ALL CITY OF CHICAGO SPECIFICATIONS FOR CONCRETE AND ASPHALT CONCRETE.
2. THE CONTRACTOR SHALL FURNISH TO THE CITY OF CHICAGO ALL MATERIALS AND LABOR NECESSARY TO COMPLETE THE WORK.
3. THE CONTRACTOR SHALL MAINTAIN THE EXISTING DRIVEWAY AND SIDEWALKS.
4. THE CONTRACTOR SHALL MAINTAIN THE EXISTING CURBS AND GUTTERS.
5. THE CONTRACTOR SHALL MAINTAIN THE EXISTING UTILITIES.
6. THE CONTRACTOR SHALL MAINTAIN THE EXISTING SIGNAGE.
7. THE CONTRACTOR SHALL MAINTAIN THE EXISTING LIGHTING.
8. THE CONTRACTOR SHALL MAINTAIN THE EXISTING TREES AND LANDSCAPE.
9. THE CONTRACTOR SHALL MAINTAIN THE EXISTING FENCES AND BARRIERS.
10. THE CONTRACTOR SHALL MAINTAIN THE EXISTING DRIVEWAY AND SIDEWALKS.
11. THE CONTRACTOR SHALL MAINTAIN THE EXISTING CURBS AND GUTTERS.
12. THE CONTRACTOR SHALL MAINTAIN THE EXISTING UTILITIES.
13. THE CONTRACTOR SHALL MAINTAIN THE EXISTING SIGNAGE.
14. THE CONTRACTOR SHALL MAINTAIN THE EXISTING LIGHTING.
15. THE CONTRACTOR SHALL MAINTAIN THE EXISTING TREES AND LANDSCAPE.
16. THE CONTRACTOR SHALL MAINTAIN THE EXISTING FENCES AND BARRIERS.

CDOT
 DIVISION OF TRANSPORTATION
 CITY OF CHICAGO
 STREET PAVEMENT RESTORATION
 DEMIL WITH FLOWABLE BACKFILL

DATE: 11/17
 SHEET: A-2-23
 DRAWING: 2011

**STREET PAVEMENT RESTORATION
 DEMIL WITH FLOWABLE BACKFILL**



NOTES

1. THE CONTRACTOR SHALL COMPLY WITH ALL CITY OF CHICAGO SPECIFICATIONS FOR CONCRETE AND ASPHALT CONCRETE.
2. THE CONTRACTOR SHALL FURNISH TO THE CITY OF CHICAGO ALL MATERIALS AND LABOR NECESSARY TO COMPLETE THE WORK.
3. THE CONTRACTOR SHALL MAINTAIN THE EXISTING DRIVEWAY AND SIDEWALKS.
4. THE CONTRACTOR SHALL MAINTAIN THE EXISTING CURBS AND GUTTERS.
5. THE CONTRACTOR SHALL MAINTAIN THE EXISTING UTILITIES.
6. THE CONTRACTOR SHALL MAINTAIN THE EXISTING SIGNAGE.
7. THE CONTRACTOR SHALL MAINTAIN THE EXISTING LIGHTING.
8. THE CONTRACTOR SHALL MAINTAIN THE EXISTING TREES AND LANDSCAPE.
9. THE CONTRACTOR SHALL MAINTAIN THE EXISTING FENCES AND BARRIERS.
10. THE CONTRACTOR SHALL MAINTAIN THE EXISTING DRIVEWAY AND SIDEWALKS.
11. THE CONTRACTOR SHALL MAINTAIN THE EXISTING CURBS AND GUTTERS.
12. THE CONTRACTOR SHALL MAINTAIN THE EXISTING UTILITIES.
13. THE CONTRACTOR SHALL MAINTAIN THE EXISTING SIGNAGE.
14. THE CONTRACTOR SHALL MAINTAIN THE EXISTING LIGHTING.
15. THE CONTRACTOR SHALL MAINTAIN THE EXISTING TREES AND LANDSCAPE.
16. THE CONTRACTOR SHALL MAINTAIN THE EXISTING FENCES AND BARRIERS.

CDOT
 DIVISION OF TRANSPORTATION
 CITY OF CHICAGO
 STREET PAVEMENT RESTORATION
 DEMIL WITH FLOWABLE BACKFILL

DATE: 11/17
 SHEET: A-2-23
 DRAWING: 2011

State: ILLINOIS
 County: COOK

Municipality: CHICAGO

DATE	DESCRIPTION	INITIALS	DATE	DESCRIPTION	INITIALS	DATE	DESCRIPTION	INITIALS

Scale: 1" = 20'

HSP Number:

PERMIT ONLY

extenet INC.
 SYSTEMS
 3030 Weymouth Road
 Suite 310, Uva, IL 60532

Project #:
 Engineer: LINCOLN-PARK-IL
 Date: 12/11/12

Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

PERMIT ONLY

extenet INC.
 SYSTEMS
 3030 Weymouth Road
 Suite 310, Uva, IL 60532

Project #:
 Engineer: LINCOLN-PARK-IL
 Date: 12/11/12

Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

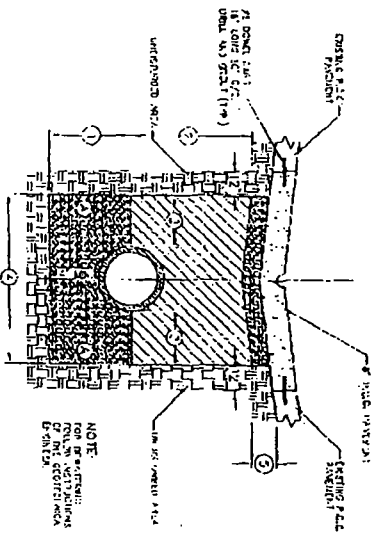
Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

Material:
 Description: OLY
 Qty:

PAGE ALLY PAYMENT RESERVATION
FOR CONDUIT TRENCH DETAIL



- 1 REDDING: 2" ENHANCED 3/4" CONC. 18" WIDE, 18" DEEP TO CURB AND 2" MINIMUM TO BACKFILL. 18" MIN. TO 18" MAX. WITH TRENCH 3" WIDE.
- 2 BACKFILL: 18" WIDE, 18" DEEP TO CURB AND 2" MINIMUM TO BACKFILL. 18" MIN. TO 18" MAX. WITH TRENCH 3" WIDE.
- 3 CLEARANCE: 18" WIDE, 18" DEEP TO CURB AND 2" MINIMUM TO BACKFILL. 18" MIN. TO 18" MAX. WITH TRENCH 3" WIDE.
- 4 TRENCH WIDTH: 18" WIDE, 18" DEEP TO CURB AND 2" MINIMUM TO BACKFILL. 18" MIN. TO 18" MAX. WITH TRENCH 3" WIDE.
- 5 SUB-BASE: 18" WIDE, 18" DEEP TO CURB AND 2" MINIMUM TO BACKFILL. 18" MIN. TO 18" MAX. WITH TRENCH 3" WIDE.

CDOT CHICAGO DEPARTMENT OF TRANSPORTATION

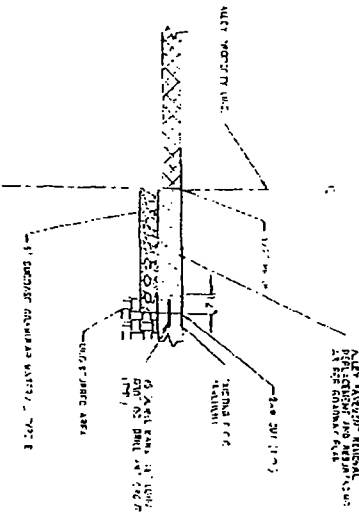
DATE: _____ REVISION: _____

CITY OF CHICAGO

REG. ALL PAYMENT RESERVATION FOR CONDUIT TRENCH DETAIL

DATE: _____ SHEET: _____

ALLY PAYMENT RESERVATION



CDOT CHICAGO DEPARTMENT OF TRANSPORTATION

DATE: _____ REVISION: _____

CITY OF CHICAGO

REG. ALL PAYMENT RESERVATION

DATE: _____ SHEET: _____

State: ILLINOIS
 County: COOK

Municipality: CHICAGO

DATE	DESCRIPTION	INITIAL	DATE	DESCRIPTION	INITIAL	DATE	DESCRIPTION	INITIAL
	REVISION			REVISION			REVISION	
	REVISION			REVISION			REVISION	

Scale: 1" = 20'

Labels CONNECTIONS

4801 North 40th Street
 Skokie, IL 60077
 Phone: (847) 582-2800

Material:
 Description: OLY
 Qty:

PERMIT - ONLY

exteneT FOR UTILITY
 3330 Westmoreland Road
 Suite 310, Oak Brook, IL 60521
 5151515

Project # LINCOLN-PARK-10
 Engineer: GABES

Original Issue Date: 12/11/12

Positive Date

Bill of Materials

Description	QTY.
Fiber - 432	xxx
Fiber - 288	xxx
Fiber - 144	xxx
Fiber - 96	xxx
Fiber - 48	xxx
Fiber - 24	xxx
Fiber - 12	xxx
Fiber - Drop	xxx
Total Fiber	xxx

Route - Aerial
 Route - Un-leased
 Route - Un-New Conduit
 Route - Base Station
 Total Route Footage

Point - Power
 Point - Fiber
 Point - Other
 Total Poles

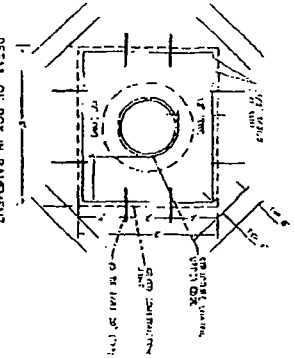
Notes
 1. Splice Stranded
 2. Splices
 3. Slack Loops
 4. Handholes

Symbol	Description
○	Point - Power
●	Point - Fiber
□	Point - Other
○	Handhole
○	Splice
○	Slack Loop
○	Stranded
○	Un-leased
○	Un-New Conduit
○	Base Station
○	Total Route Footage
○	Point - Power
○	Point - Fiber
○	Point - Other
○	Total Poles



4824 North 40th Street
 Milwaukee, WI 53242
 Phone: (414) 432-3500

DETAIL OF STRUCTURE CASTING ISOLATION BOX FOR U.G. DUCTS AND P.O.C. BASE COURSE

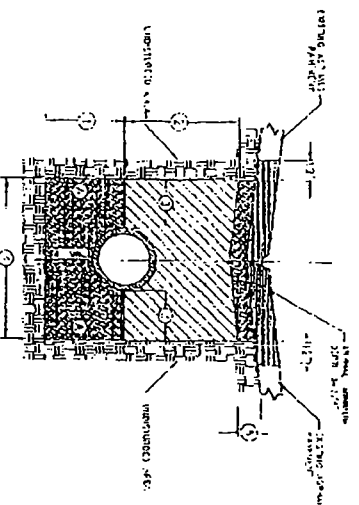


DETAIL OF BOX IN PAVEMENT

SECTION CONDITIONS:
 1. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF CHICAGO SPECIFICATIONS FOR CONSTRUCTION OF STREETS AND HIGHWAYS.
 2. ALL MATERIALS SHALL BE OF THE BEST QUALITY AND SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE CITY ENGINEER.
 3. ALL WORK SHALL BE COMPLETED WITHIN THE SPECIFIED TIME FRAME.
 4. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CITY OF CHICAGO SPECIFICATIONS FOR CONSTRUCTION OF STREETS AND HIGHWAYS.
 5. ALL WORK SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE CITY ENGINEER.



DATE	REVISION	CITY OF CHICAGO
		UTAH INSURANCE COMPANY
		ISOLATION BOX
		OR INVENTOR
		CDOT



NO.	DESCRIPTION	REVISIONS
1	BEDDING	CALL OUT DRAWING FROM
2	RAKESHILL	STANDARD WIDTH 36\"/>
3	1.75\"/>	
4	TRENCH WIDTH	CALL OUT DRAWING FROM
5	SLURRY	CALL OUT DRAWING FROM

DATE	REVISION	CITY OF CHICAGO
		UTAH INSURANCE COMPANY
		STREET
		UTAH
		CDOT

State: ILLINOIS
 County: COOK
 Municipality: CHICAGO

DATE	REVISION	DESCRIPTION	DATE	REVISION	DESCRIPTION

Scale: 1" = 20'
 MAP NUMBER:

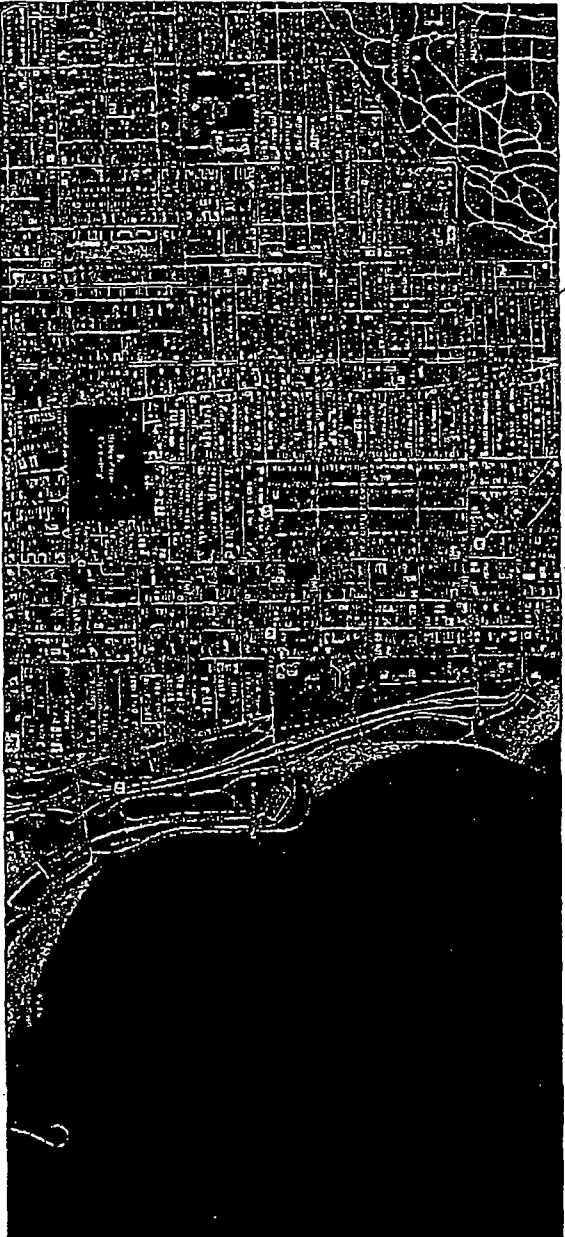
PROPOSED EXTENET SYSTEMS

UNDERGROUND FIBER OPTIC FACILITY

1. W. CARMEN AVE FROM ALLEY W. OF N. BROADWAY TO N. BROADWAY
2. N. BROADWAY-FROM W. CARMEN AVE TO W. WINDONA ST.
3. W. WINDONA ST.-FROM N. BROADWAY TO ALLEY EAST OF CTA TRACKS
CHICAGO, IL

PROJECT LOCATION

OUC IR FILE # 55982
OUC EFP FILE # 57909



DIGGER HOTLINE
(CHICAGO UTILITY ALERT NETWORK)
1-312-744-7000

extenetSM
THE NETWORK
SYSTEMS
CORPORATION
3030 Northbrook Road
Suite 210
Lib. N. 60532

CONTACT INFORMATION:

EXTENET SYSTEMS:

DAVE FASSHAUER (708) 975-5786

GABE'S CONSTRUCTION:

ENGINEERING - JEFF RINARTZ (920) 889-4510

CONSTRUCTION - BRIAN VANSCHYNDEL (920) 889-9809

PROJECT NO:

EXT1L12012

PROJECT LOCATION:

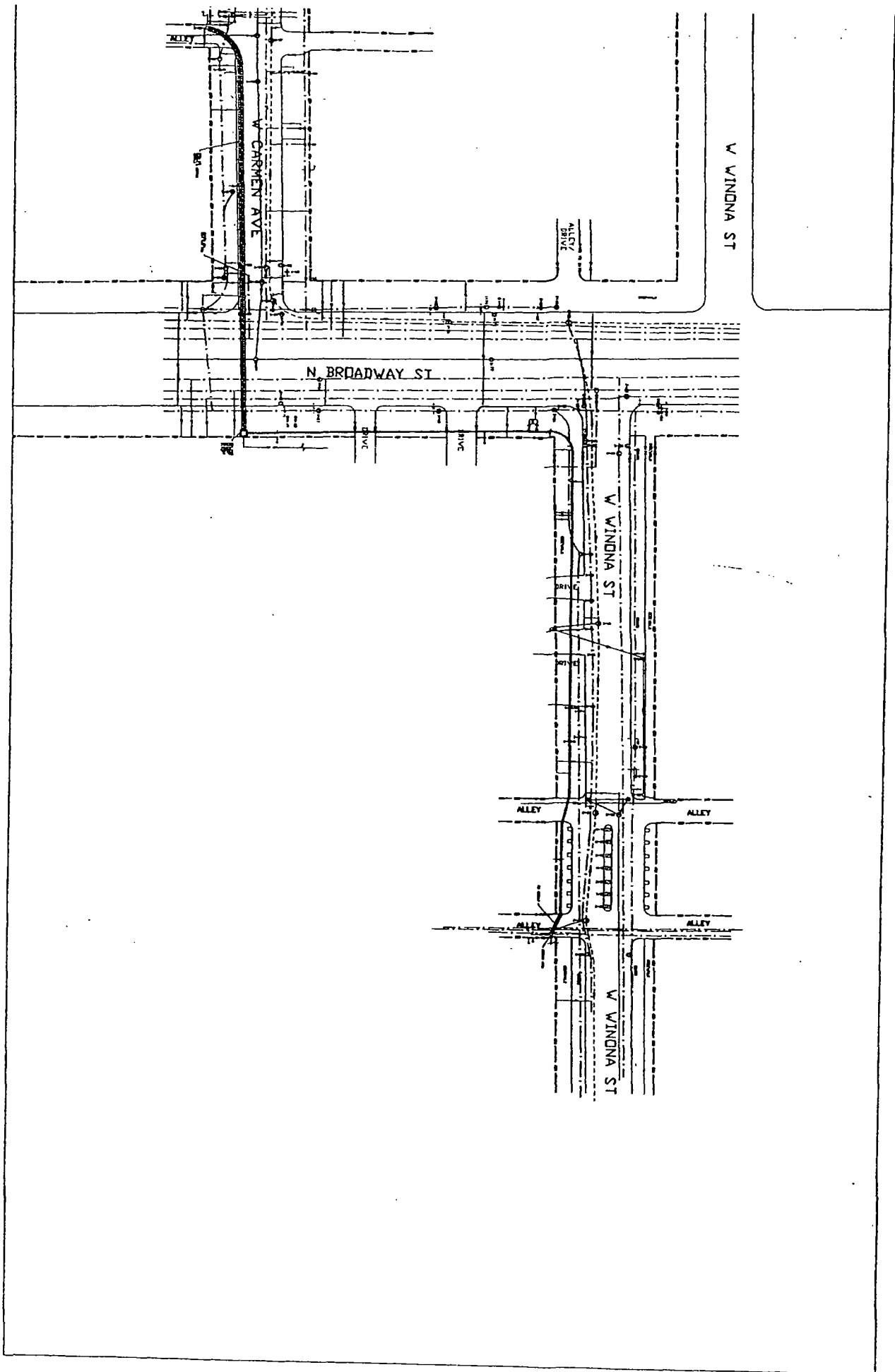
W. CARMEN AVE. FROM ALLEY WEST OF N. BROADWAY
ALONG W. CARMEN TO N. BROADWAY, CONTINUE NORTH ON
N. BROADWAY TO W. WINDONA, CONTINUE EAST ALONG W.
WINDONA TO ALLEY EAST OF CTA TRACKS

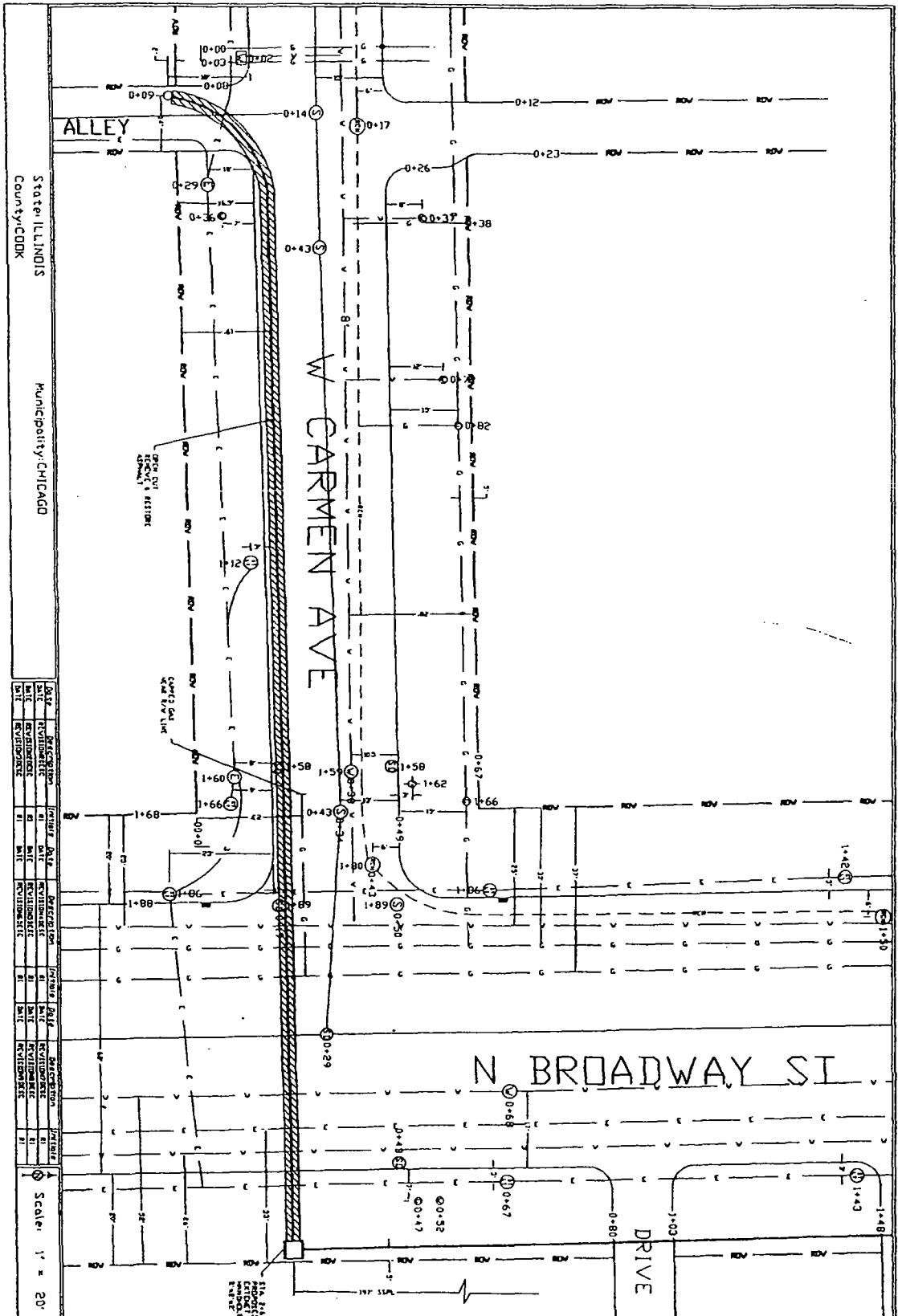
ADDITIONAL LOCATION DESCRIPTION:

BEGINNING IN ALLEY WEST OF N. BROADWAY ON W. CARMEN
AVE, CONTINUE EAST TO N. BROADWAY, CONTINUE NORTH
ALONG N. BROADWAY TO W. WINDONA AVE, CONTINUE
EAST ALONG W. WINDONA TO ALLEY LOCATED ON EAST SIDE
OF CTA TRACKS, INSTALL APPROX. 732' LF OF 2" HDPE
CONDUIT E/W FIBER OPTIC CABLE BY OPEN CUT
TRENCHING & BORING. PLACE HANDHOLE AT SE CORNER OF
INTERSECTION OF N. BROADWAY & WEST CARMEN & SE
CORNER OF N. BROADWAY & W. WINDONA.

PROJECT COORDINATOR:

JEFF RINARTZ (920) 889-4510





State ILLINOIS
County: COOK
Municipality: CHICAGO

DATE	REVISION	DESCRIPTION	DATE	REVISION	DESCRIPTION
11/29/11	1	ISSUED FOR PERMIT			
11/29/11	2	REVISED FOR COMMENTS			
11/29/11	3	REVISED FOR COMMENTS			
11/29/11	4	REVISED FOR COMMENTS			
11/29/11	5	REVISED FOR COMMENTS			
11/29/11	6	REVISED FOR COMMENTS			

Scale: 1" = 20'

Permit ONLY

3030 North LaSalle
Chicago, IL 60641
Phone: (773) 458-2800

9/16" Strand
FIBER
Stock Length
Handholes
Handholes
Handholes

DESCRIPTION	QTY
Fiber - 432	111
Fiber - 288	111
Fiber - 144	111
Fiber - 96	111
Fiber - 72	111
Fiber - 48	111
Fiber - 24	111
Fiber - Drop	111
Total Fiber	111

DESCRIPTION	QTY
Route - Annual	111
Route - 1/2 Year	111
Route - Base Station	111
Total Route Footage	111

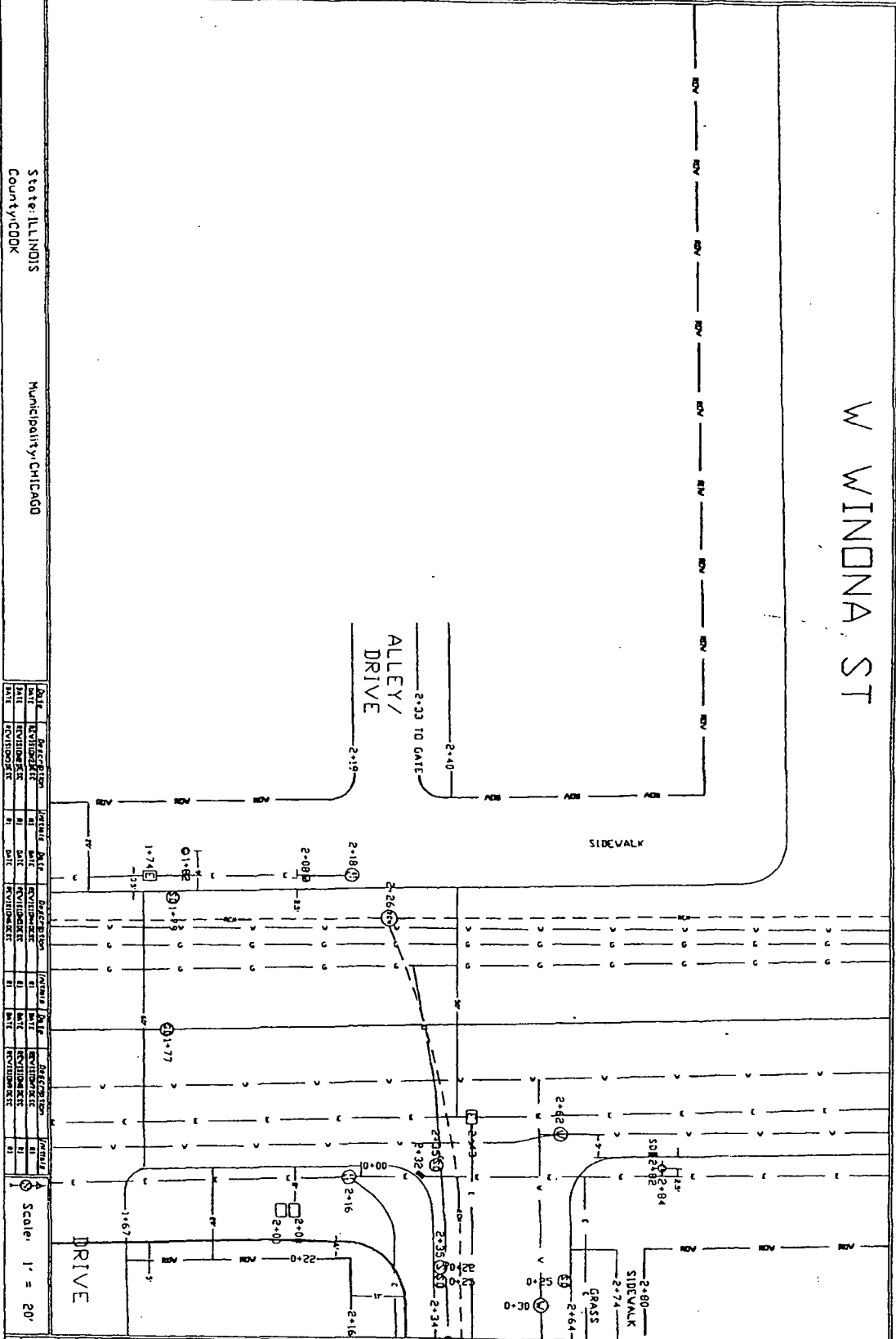
DESCRIPTION	QTY
Poles - Power	111
Poles - Fiber	111
Poles - Other	111
Total Poles	111

DESCRIPTION	QTY
Handholes	111
Handholes	111
Handholes	111


Project #: UNCLN-PARK-11
Engineer: CAE'S
Original Issue Date: 12/12/12
Published Date:

Bill of Materials:
Description: QTY
Fiber - 432: 111
Fiber - 288: 111
Fiber - 144: 111
Fiber - 96: 111
Fiber - 72: 111
Fiber - 48: 111
Fiber - 24: 111
Fiber - Drop: 111
Total Fiber: 111

W WINDONA ST



PERMIT ONLY



 3000 Westfield Road
 Schaumburg, IL 60195
 Phone: (815) 399-8800

Project #:
 Job Title: LIMCDUN-PARK-II
 Engineer: GAECS
 Original Issue Date 12/12/12

Revised Date:	Bill of Materials:
	Description
	Fiber - 432 XXX
	Fiber - 888 XXX
	Fiber - 56 XXX
	Fiber - 72 XXX
	Fiber - 48 XXX
	Fiber - 36 XXX
	Fiber - 24 XXX
	Fiber - 12 XXX
	Total Fiber: XXX
	Route - Aerial: XXX
	Route - UC-188: XXX
	Route - Base Station: XXX
	Total Route Footage: XXX

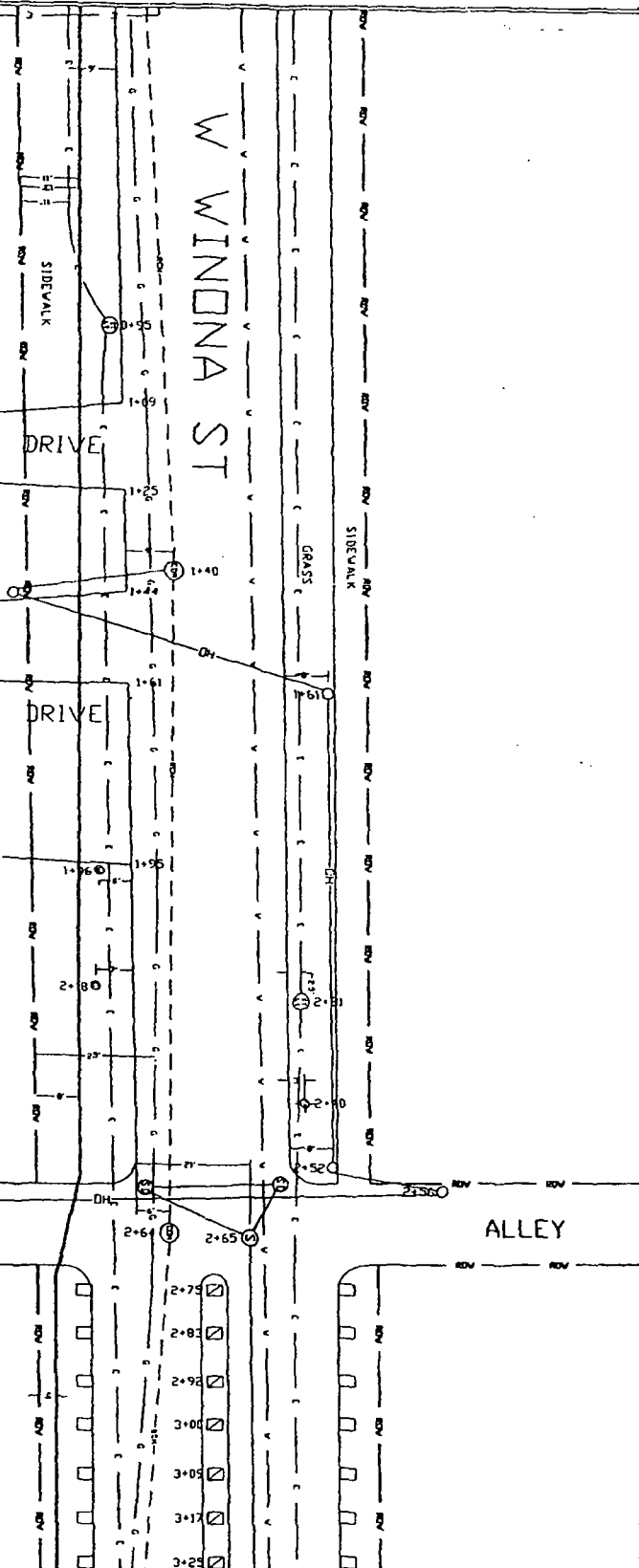
Notes	Symbol
Start Pole	○
End Pole	●
Anchor	⊕
Splices	⊞
Stack Loops	⊞
Manholes	⊞
Power	○
Water	○
Gas	○
Other	○
Utility	○
Construction	○
Other	○

4804 North 40th Street
 Schaumburg, IL 60195
 Phone: (815) 399-8800

Scale: 1" = 20'
 Sheet 1 of 3
 Project #:
 Job Title:
 Engineer:

State: ILLINOIS
 County: COOK
 Municipality: CHICAGO

Date	Description	Initial	Date	Description	Initial
12/12/12	REVISED	SI	12/12/12	REVISED	SI
12/12/12	REVISED	SI	12/12/12	REVISED	SI



State: ILLINOIS Municipality: CHICAGO
 County: COOK

DATE	DESCRIPTION	ISSUED	BY	DATE	DESCRIPTION	ISSUED	BY
01/15/12	PERMIT	SI	DATE	01/15/12	PERMIT	SI	DATE
01/15/12	REVISION	SI	DATE	01/15/12	REVISION	SI	DATE

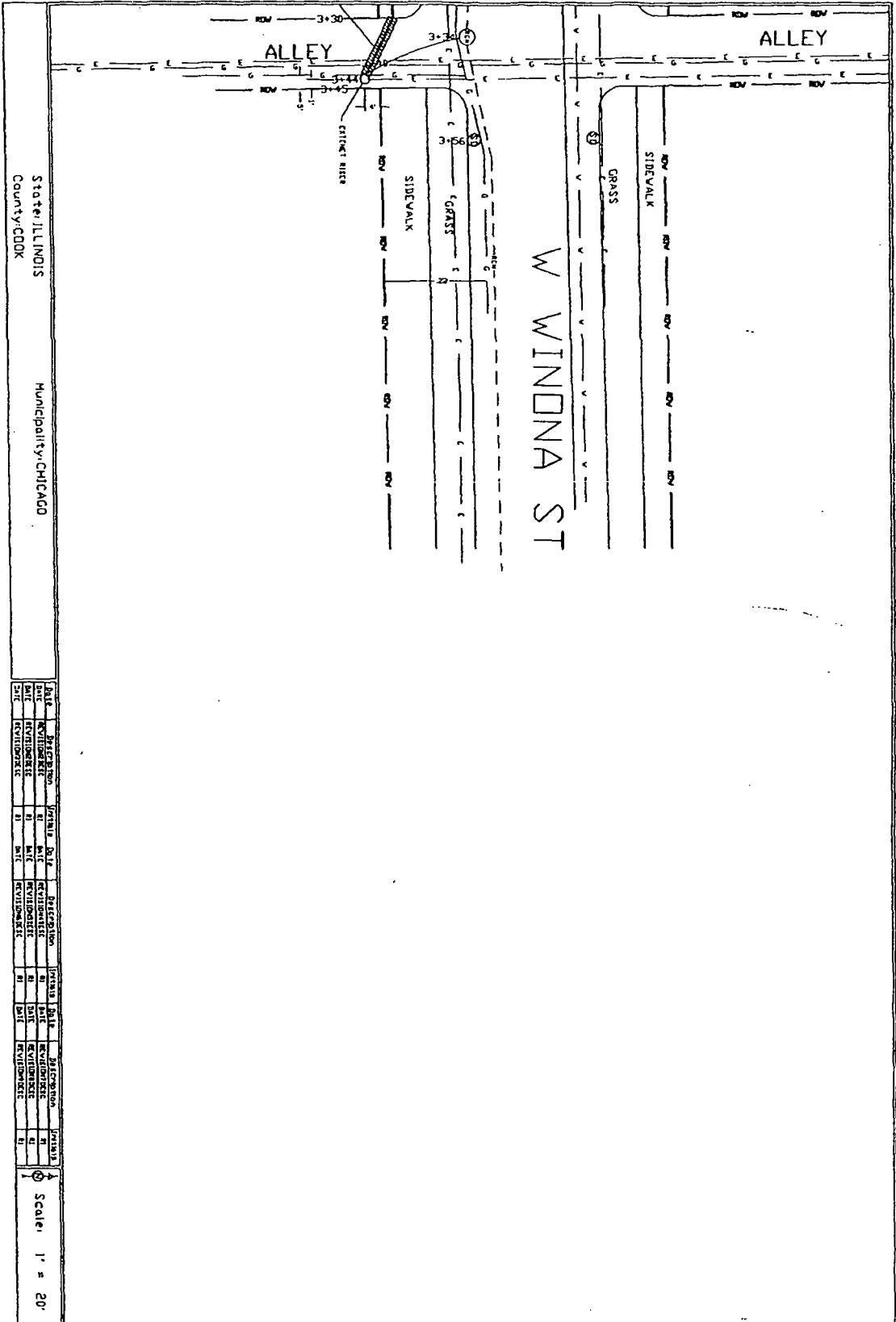
Scale: 1" = 20'

PERMIT ONLY	
exteneer MULTI-MEDIA SYSTEMS NETWORK	
300 Westmore Road Suite 510, Urb., IL 60433	
Job Title:	LINCOLN-PARK-11
Engineer:	GAFFES
Original Issue Date:	12/12/12
Revised Date:	
Bill of Materials:	
DESCRIPTION	QTY.
Fiber - 432	XXX
Fiber - 608	XXX
Fiber - 96	XXX
Fiber - 36	XXX
Fiber - 72	XXX
Fiber - 48	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - 6	XXX
Fiber - 3	XXX
Fiber - Pop	XXX
Total Fiber	XXX
Route - Aerial	XXX
Route - Pole	XXX
Route - Under-Grade	XXX
Route - Base Station	XXX
Total Route Footage	XXX
Poles - Power	XXX
Poles - Tele	XXX
Poles - Other	XXX
Total Poles	XXX
Nodes	XXX
5/8" Standard Anchors	XXX
3/8" x 6" Rods	XXX
3/8" x 6" Rods	XXX
Hardware	XXX
Monitors	XXX



4824 North 40th Street
 Springville, WI 53091
 Phone: (414) 382-2800

PAGE 1
 PAGE 2
 PAGE 3
 PAGE 4
 MOD NUMBER:



State: ILLINOIS
 County: COOK
 Municipality: CHICAGO

DATE	REVISION	BY	DESCRIPTION	DATE	REVISION	BY	DESCRIPTION
12/12/12	1	XXX	ISSUE FOR PERMIT				
12/12/12	2	XXX	REVISED PER PLAN CHANGES				
12/12/12	3	XXX	REVISED PER PLAN CHANGES				
12/12/12	4	XXX	REVISED PER PLAN CHANGES				
12/12/12	5	XXX	REVISED PER PLAN CHANGES				

Scale: 1" = 20'

exteneer IS THE NETWORK SYSTEMS PARTNER

3030 Weyburn Road
 Suite 300, Oak Brook, IL 60451

Project #: LINDOLN-PARK-IL
 Engineer: CAJCS

Original Issue Date: 12/12/12

Multiple Dates:

Bill of Materials:

Description	Qty.
Fiber - 432	XXX
Fiber - 288	XXX
Fiber - 144	XXX
Fiber - 96	XXX
Fiber - 72	XXX
Fiber - 48	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - Drop	XXX
Total Fiber	XXX

Route - Aerial: XXX
 Route - Underground: XXX
 Route - UC-New Conduit: XXX
 Route - Base Station: XXX
 Total Route Footage: XXX

Poles - Power: XXX
 Poles - 15'10": XXX
 Poles - Other: XXX
 Total Poles: XXX

Manholes: XXX

5/16" Steels: XXX
 3/8" Steels: XXX
 1/2" Steels: XXX
 3/4" Steels: XXX
 1" Steels: XXX
 Manholes: XXX

CO - 4000: XXX
 CO - 2000: XXX
 CO - 1000: XXX
 CO - 500: XXX
 CO - 250: XXX
 CO - 125: XXX
 CO - 62.5: XXX
 CO - 31.25: XXX
 CO - 15.625: XXX

PERMIT ONLY

4404 NORTH 40TH STREET
 SHARON, IL 60489
 PHONE: (708) 583-7000

Labels

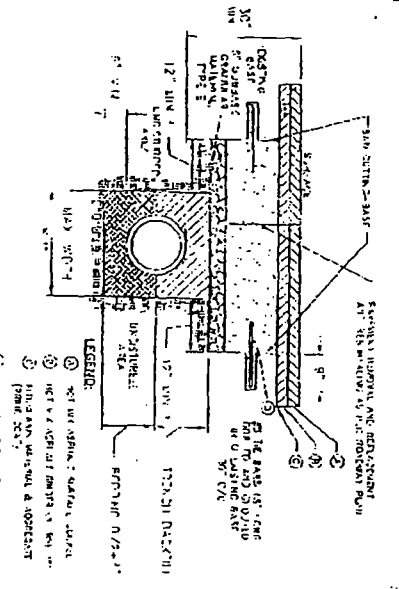
4000 NORTH 40TH STREET
 SHARON, IL 60489
 PHONE: (708) 583-7000

PAGE 3

PAGE 4

Map Number:

**STREET PAVEMENT RESTORATION
DETAIL WITH REINCH BACKFILL**



- NOTES:**
1. THE ROAD SHALL BE RESTORED TO ORIGINAL CONDITION WITH 3/4" CURB OR 2" HIGH CURB, FROM CONCRETE.
 2. ALL EXISTING PAVEMENT SHALL BE REPAIRED TO ORIGINAL CONDITION.
 3. ALL EXISTING PAVEMENT SHALL BE REPAIRED TO ORIGINAL CONDITION.
 4. ALL EXISTING PAVEMENT SHALL BE REPAIRED TO ORIGINAL CONDITION.
 5. ALL EXISTING PAVEMENT SHALL BE REPAIRED TO ORIGINAL CONDITION.
 6. ALL EXISTING PAVEMENT SHALL BE REPAIRED TO ORIGINAL CONDITION.
 7. ALL EXISTING PAVEMENT SHALL BE REPAIRED TO ORIGINAL CONDITION.
 8. ALL EXISTING PAVEMENT SHALL BE REPAIRED TO ORIGINAL CONDITION.
 9. ALL EXISTING PAVEMENT SHALL BE REPAIRED TO ORIGINAL CONDITION.
 10. ALL EXISTING PAVEMENT SHALL BE REPAIRED TO ORIGINAL CONDITION.

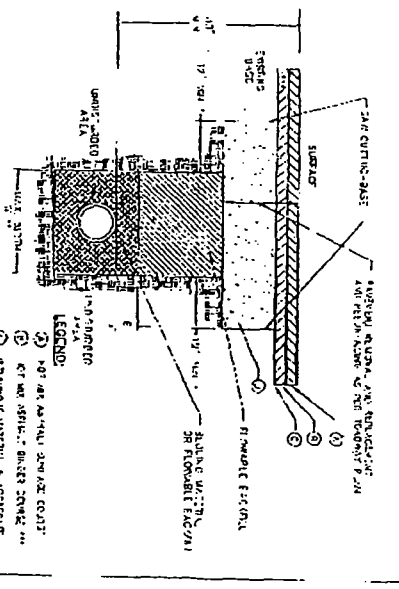
CDOT
CHICAGO DIVISION
OF TRANSPORTATION

DATE: _____
REVISION: _____
REVISION: _____
REVISION: _____
REVISION: _____

CITY OF CHICAGO
STREET PAVEMENT RESTORATION
DETAIL WITH REINCH BACKFILL

DATE: _____
REVISION: _____
REVISION: _____
REVISION: _____
REVISION: _____

**STREET PAVEMENT RESTORATION
DETAIL WITH DOWEL BARRIS**



- NOTES:**
1. THE ROAD SHALL BE RESTORED TO ORIGINAL CONDITION WITH 3/4" CURB OR 2" HIGH CURB, FROM CONCRETE.
 2. ALL EXISTING PAVEMENT SHALL BE REPAIRED TO ORIGINAL CONDITION.
 3. ALL EXISTING PAVEMENT SHALL BE REPAIRED TO ORIGINAL CONDITION.
 4. ALL EXISTING PAVEMENT SHALL BE REPAIRED TO ORIGINAL CONDITION.
 5. ALL EXISTING PAVEMENT SHALL BE REPAIRED TO ORIGINAL CONDITION.
 6. ALL EXISTING PAVEMENT SHALL BE REPAIRED TO ORIGINAL CONDITION.
 7. ALL EXISTING PAVEMENT SHALL BE REPAIRED TO ORIGINAL CONDITION.
 8. ALL EXISTING PAVEMENT SHALL BE REPAIRED TO ORIGINAL CONDITION.
 9. ALL EXISTING PAVEMENT SHALL BE REPAIRED TO ORIGINAL CONDITION.
 10. ALL EXISTING PAVEMENT SHALL BE REPAIRED TO ORIGINAL CONDITION.

CDOT
CHICAGO DIVISION
OF TRANSPORTATION

DATE: _____
REVISION: _____
REVISION: _____
REVISION: _____
REVISION: _____

CITY OF CHICAGO
STREET PAVEMENT RESTORATION
DETAIL WITH DOWEL BARRIS

DATE: _____
REVISION: _____
REVISION: _____
REVISION: _____
REVISION: _____

State of ILLINOIS
County: COOK

DATE	DESCRIPTION	INITIALS	DATE	DESCRIPTION	INITIALS

Scale: 1" = 20'

PERMIT ONLY

extenet
CONSTRUCTION SYSTEMS
3000 Westmoreland Road
Suite 300, Uva, IL 60532

Job Title: LINCOLN-PARK-11
Engineer: CARLS
Original Issue Date: 12/12/12

Description	Qty.
Bar - 432	XXX
Bar - 288	XXX
Bar - 144	XXX
Bar - 72	XXX
Bar - 36	XXX
Bar - 18	XXX
Bar - 9	XXX
Bar - 4.5	XXX
Bar - 2.25	XXX
Bar - 1.125	XXX
Total Bar	XXX

Notes	Quantity
Rebar - Asphalt	XXX
Rebar - Un-leasred	XXX
Rebar - UG-Case Condot	XXX
Rebar - UG-Case Condot	XXX
Total Rebar	XXX

Notes	Quantity
Rebar - Asphalt	XXX
Rebar - Un-leasred	XXX
Rebar - UG-Case Condot	XXX
Rebar - UG-Case Condot	XXX
Total Rebar	XXX

Notes	Quantity
Rebar - Asphalt	XXX
Rebar - Un-leasred	XXX
Rebar - UG-Case Condot	XXX
Rebar - UG-Case Condot	XXX
Total Rebar	XXX

Yates
4401 North 40th Street
Springfield, IL 62782
Phone: (332) 458-2500

PERMIT ONLY

extenei
SYSTEMS
1840 WASHINGTON ROAD
SUNNYVALE, CALIF. 94089

Job Title: LINCOLN-PARK-IL

Contract: CATCIS

Original Issue Date: 12/12/12

Revised Date:

Bill of Materials:

Description Qty.

Fiber - 432 216

Fiber - 288 144

Fiber - 96 48

Fiber - 72 36

Fiber - 48 24

Fiber - 24 12

Fiber - 12 6

Total Fiber: 312

Route - AP44H 216

Route - UNL4888 144

Route - Base Station 36

Total Route Footage 312

Poles - Power 216

Poles - Telco 144

Poles - Other 36

Total Poles 312

Nodes 216

3/16" Strand 144

Anchor 36

Splices 216

Stick Loops 144

Hardware 36

Hardware 36

Hardware 36

Hardware 36

Hardware 36

Hardware 36

Hardware 36

Hardware 36

Hardware 36

Hardware 36

Hardware 36

PERMIT ONLY

extenei
SYSTEMS
1840 WASHINGTON ROAD
SUNNYVALE, CALIF. 94089

Job Title: LINCOLN-PARK-IL

Contract: CATCIS

Original Issue Date: 12/12/12

Revised Date:

Bill of Materials:

Description Qty.

Fiber - 432 216

Fiber - 288 144

Fiber - 96 48

Fiber - 72 36

Fiber - 48 24

Fiber - 24 12

Fiber - 12 6

Total Fiber: 312

Route - AP44H 216

Route - UNL4888 144

Route - Base Station 36

Total Route Footage 312

Poles - Power 216

Poles - Telco 144

Poles - Other 36

Total Poles 312

Nodes 216

3/16" Strand 144

Anchor 36

Splices 216

Stick Loops 144

Hardware 36

Hardware 36

Hardware 36

Hardware 36

Hardware 36

Hardware 36

Hardware 36

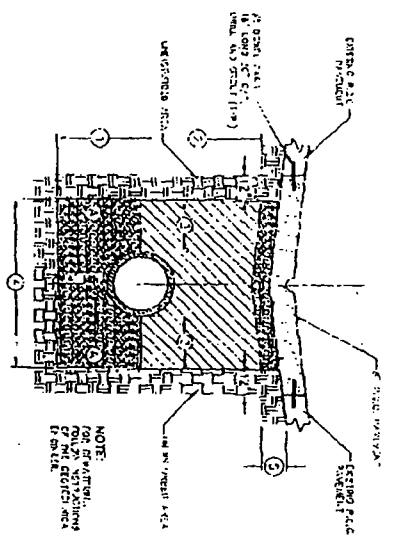
Hardware 36

Hardware 36

Hardware 36

Hardware 36

PLATE 41 - PAVEMENT RESTORATION
DETAIL OF CONDUIT TRENCH DETAIL



- 1 BEDDING 1/2" DASHED FRONT
- 2 BACKFILL 1/2" DASHED FRONT
- 3 CLEARANCE 1/2" DASHED FRONT
- 4 TRENCH WIDTH 1/2" DASHED FRONT
- 5 SUB-BASIS 1/2" DASHED FRONT

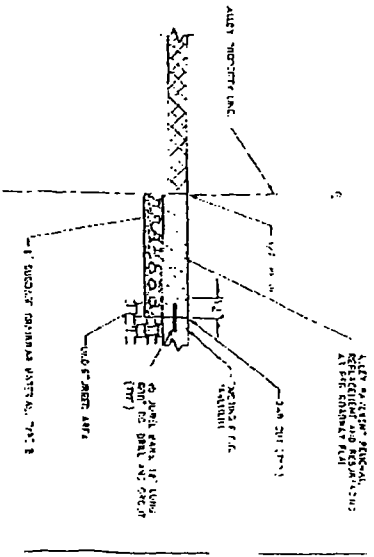
CDOT
CITY OF CHICAGO
DIVISION OF TRANSPORTATION
DIVISION OF CONSTRUCTION

DATE: _____ REVISION: _____

CITY OF CHICAGO
1840 WASHINGTON ROAD
SUNNYVALE, CALIF. 94089

DATE: 02/12/12 SHEET: A-13 DRAWN BY: [Signature]

PLATE 40 - PAVEMENT RESTORATION
DETAIL OF CONDUIT TRENCH DETAIL



CDOT
CITY OF CHICAGO
DIVISION OF TRANSPORTATION
DIVISION OF CONSTRUCTION

DATE: _____ REVISION: _____

CITY OF CHICAGO
1840 WASHINGTON ROAD
SUNNYVALE, CALIF. 94089

DATE	REVISION	BY	CHKD	DATE	REVISION	BY	CHKD

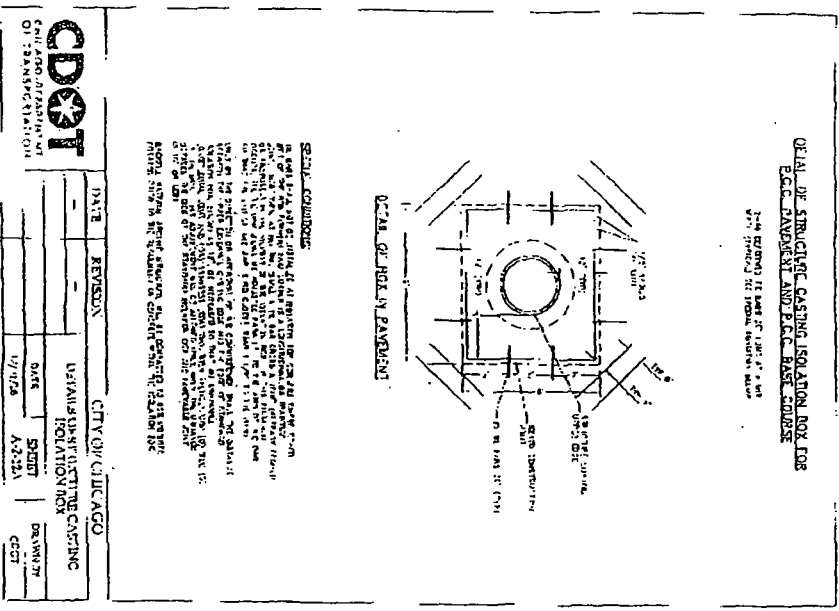
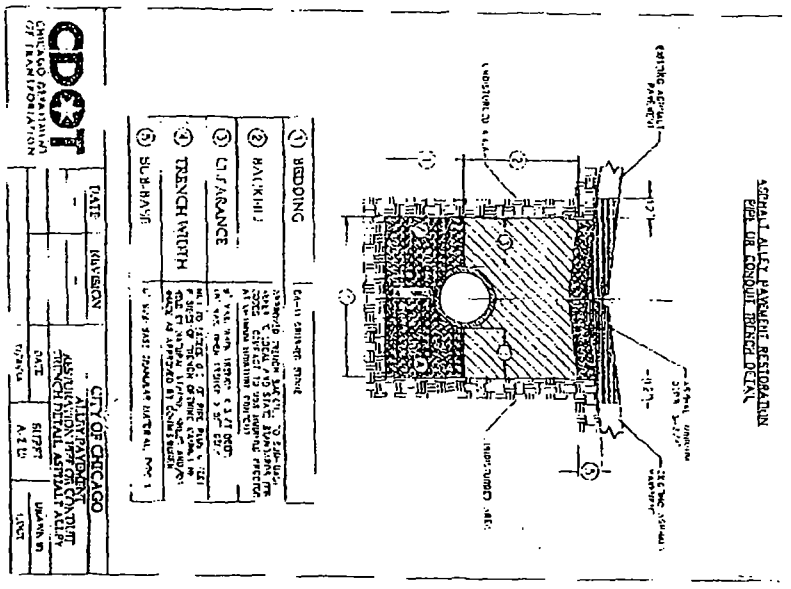
State: ILLINOIS
County: COOK

Municipality: CHICAGO

Scale: 1" = 20'

Map Number:

State: ILLINOIS
 County: COOK
 Municipality: CHICAGO



CDOT
 CITY OF CHICAGO
 DIVISION OF TRANSPORTATION

DATE	REVISION

DESIGN: SUBMITTING THE CASTING ISOLATION BOX
 DATE: 11/17/20
 DRAWN BY: AJS/20
 CHECKED BY: CCOT

DATE	REVISION	DATE	REVISION

Scale: 1" = 20'

extenet SYSTEMS
 300 Wernicke Road
 East Troy, WI, U.S.A. 53122

Project #: LINCOLN-PARK-11
 Engineer: CASE'S
 Original Issue Date: 12/12/12

Description	Qty.
Fiber - 432	333
Fiber - 888	333
Fiber - 144	333
Fiber - 96	333
Fiber - 12	333
Fiber - 24	333
Fiber - 84	333
Fiber - 12	333
Total Fiber	333

Notes:
 1. 3/16" Splayed
 2. 1/4" Splices
 3. 1/4" Splices
 4. 1/4" Splices
 5. 1/4" Splices

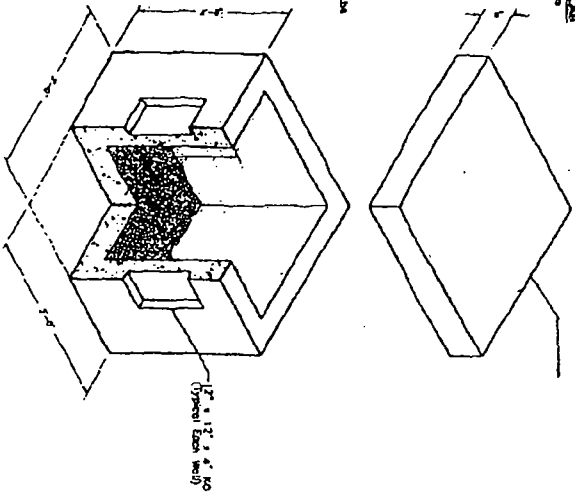
Legend:
 X - 100%
 O - 50%
 ● - 25%
 ○ - 10%
 □ - 5%

Oldcastle Precast

2223H BLASE

2'-0" x 2'-0" x 2'-0" / D.
 Handhole Box
 Model 222 H

2223H BLASE
 Model 222 H



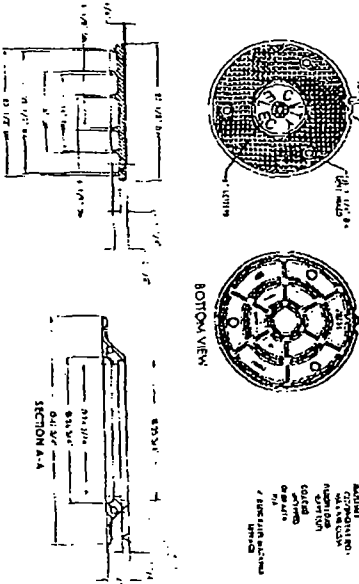
GENERAL NOTES:
 1. Concrete for this application strength 4000 psi
 2. All reinforcement shall be #4 bars
 3. All dimensions are given unless otherwise noted
 4. Dimensions for installation shall be given of C/P unless otherwise noted
 5. Reinforcement to be provided by ADMET

Oldcastle Precast
 4000 North 40th Street
 Milwaukee, WI 53208
 (414) 332-2000

State: ILLINOIS
 County: COOK

Municipality: CHICAGO

1530C COVER



1/2" MIN. CURB
 1/2" MIN. CURB
 1/2" MIN. CURB
 1/2" MIN. CURB
 1/2" MIN. CURB
 1/2" MIN. CURB



STANDARD DETAILS
 REVISIONS TO THIS
 DRAWING

DATE	REVISION	BY	DATE	DESCRIPTION
DATE	REVISION	BY	DATE	DESCRIPTION
DATE	REVISION	BY	DATE	DESCRIPTION

Scale: 1" = 20"

PERMIT ONLY

extener
 SYSTEMS
 1050 Western Road
 Suite 310 Urb. & 60532

Project # LINCOLN-PARK-11

Engineer: CAITS

Original Issue Date: 12/12/12

Published Date: OLY

Description	Qty.
Fiber - 432	XXX
Fiber - 248	XXX
Fiber - 164	XXX
Fiber - 72	XXX
Fiber - 48	XXX
Fiber - 36	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Total Fiber	XXX

Route - Aerial	XXX
Route - UC-Installed	XXX
Route - UC-Ready to Install	XXX
Route - UC-Ready to Install	XXX
Total Ready to Install	XXX
Poles - Power	XXX
Poles - Telco	XXX
Poles - Other	XXX
Total Poles	XXX
Manholes	XXX
5/16" Strand	XXX
3/8" Strand	XXX
3/4" Strand	XXX
1" Strand	XXX
1 1/2" Strand	XXX
2" Strand	XXX
2 1/2" Strand	XXX
3" Strand	XXX
3 1/2" Strand	XXX
4" Strand	XXX
4 1/2" Strand	XXX
5" Strand	XXX
5 1/2" Strand	XXX
6" Strand	XXX
6 1/2" Strand	XXX
7" Strand	XXX
7 1/2" Strand	XXX
8" Strand	XXX
8 1/2" Strand	XXX
9" Strand	XXX
9 1/2" Strand	XXX
10" Strand	XXX
10 1/2" Strand	XXX
11" Strand	XXX
11 1/2" Strand	XXX
12" Strand	XXX

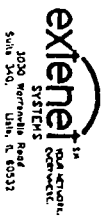
Label
 4401 North 40th Street
 Milwaukee, WI 53208
 Phone: (414) 332-2000

Map Number	Sheet Number

PROPOSED EXTENET SYSTEMS

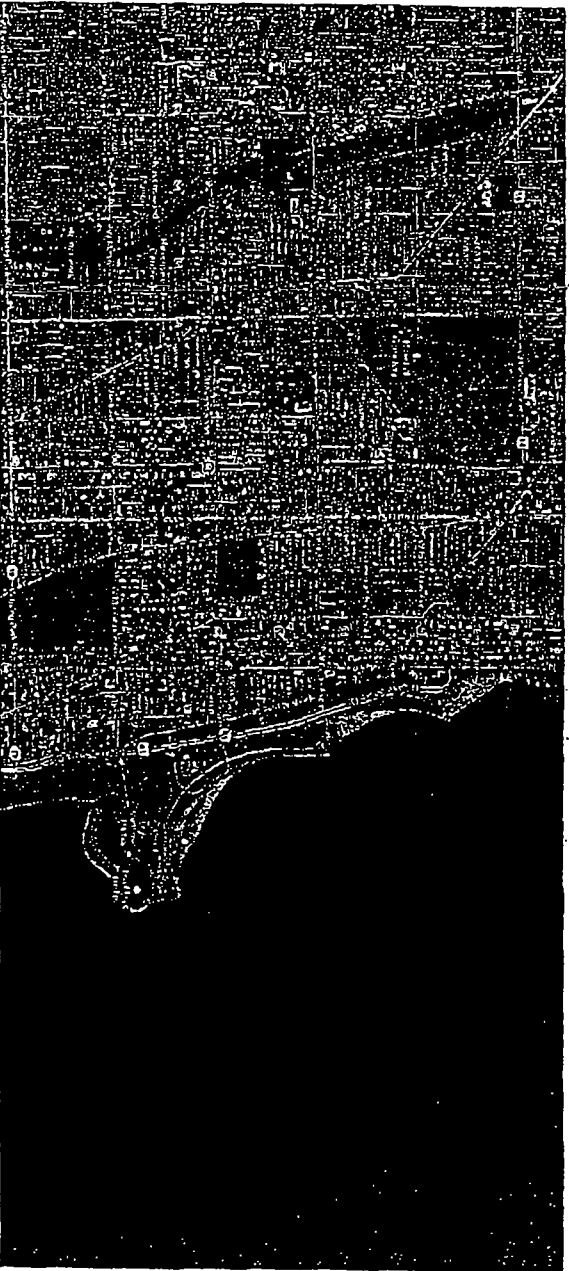
UNDERGROUND FIBER OPTIC FACILITY

ALLEY NORTH OF W. LAWRENCE AVE & WEST OF N. CLARENDON AVE.
W. LAWRENCE AVE. FROM ALLEY WEST OF N. CLARENDON AVE TO N.
CLARENDON AVE
N. CLARENDON AVE. FROM W. LAWRENCE AVE TO W. EASTWOOD AVE.
W. EASTWOOD AVE. FROM N. CLARENDON TO ALLEY W OF N. CLARENDON
CHICAGO, IL



PROJECT LOCATION

OUC IR FILE # 55983
OUC EFP FILE # 57910



DIGGER HOTLINE
<CHICAGO UTILITY ALERT NETWORK>
1-312-744-7000

CONTACT INFORMATION:

EXTENET SYSTEMS:

DAVE FASSHAUER (708) 975-5786

GABE'S CONSTRUCTION:

ENGINEERING - JEFF RINARTZ (920) 889-4510
CONSTRUCTION - BRIAN VANSCHYNDEL (920) 889-9809

PROJECT NO:

EXTIL12012

PROJECT LOCATION:

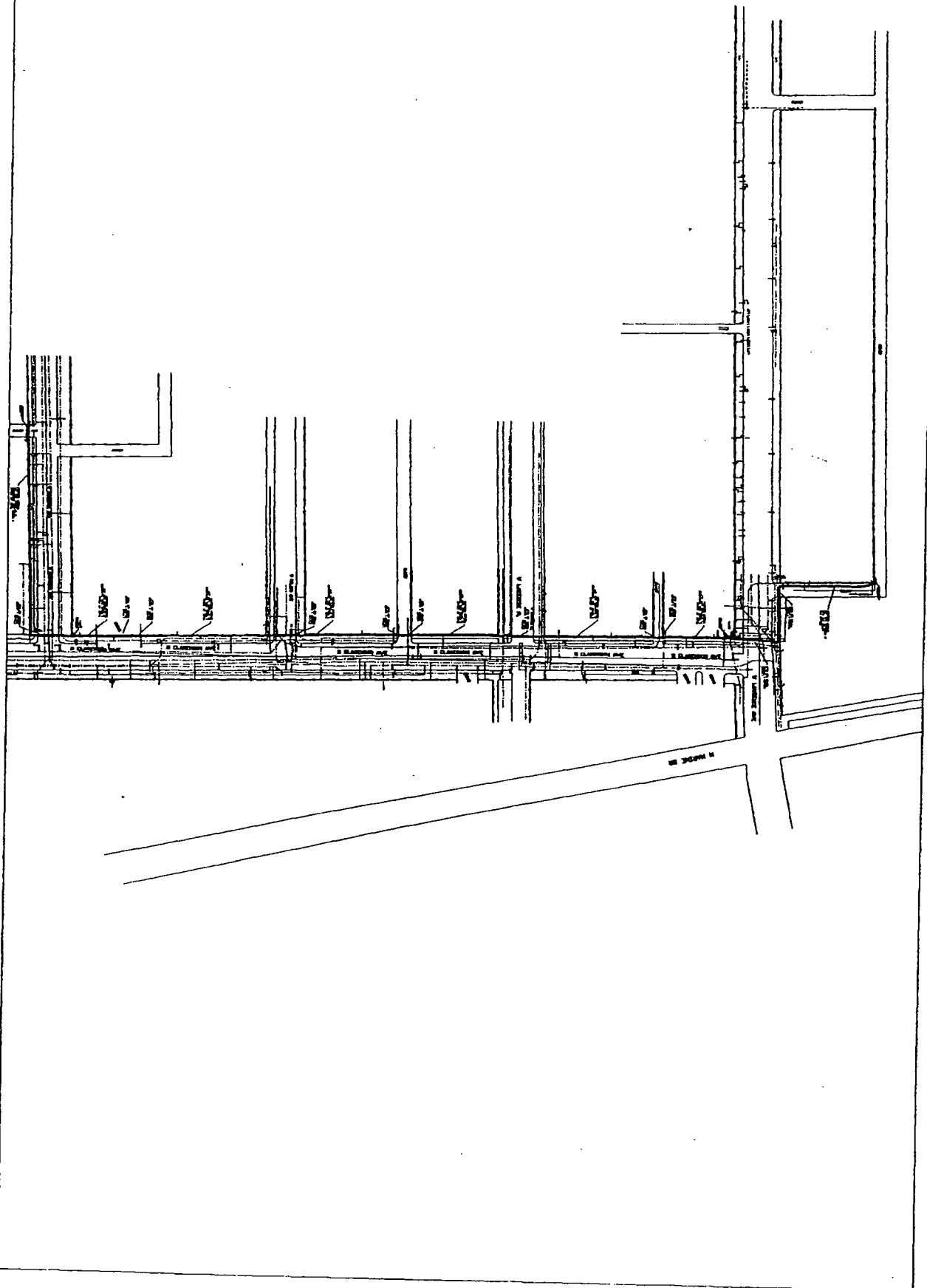
ALLEY WEST OF N. CLARENDON AVE AND NORTH OF W.
LAWRENCE AVE, W. LAWRENCE AVE FROM ALLEY W. OF N.
CLARENDON TO N. CLARENDON, N. CLARENDON FROM W.
LAWRENCE TO W. EASTWOOD AVE, W. EASTWOOD AVE
FROM N. CLARENDON AVE TO ALLEY WEST OF N.
CLARENDON.

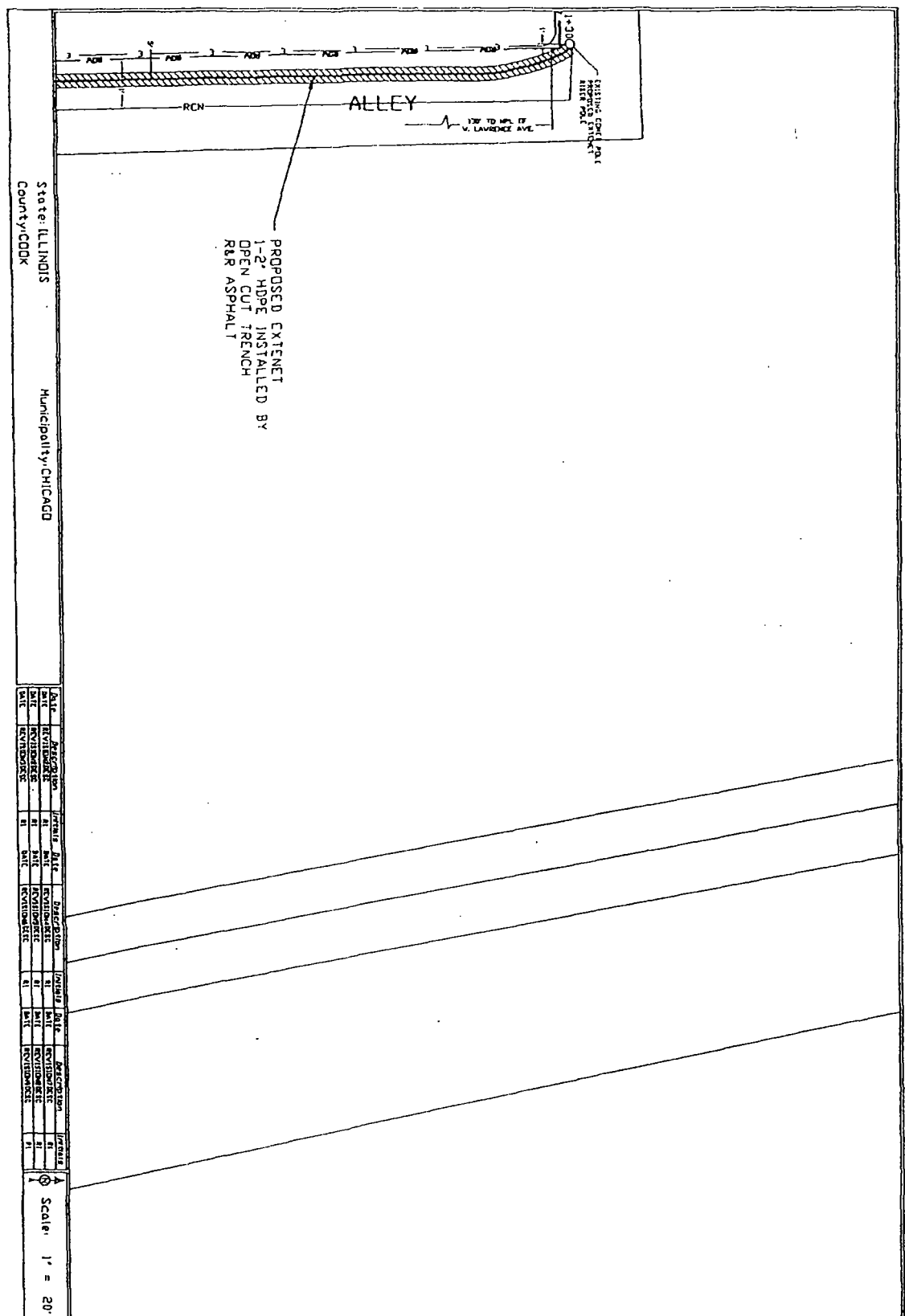
ADDITIONAL LOCATION DESCRIPTION:

BEGINNING AT POLE LOCATED IN ALLEY N. OF W.
LAWRENCE AVE & WEST OF N. CLARENDON AVE CONTINUE
SOUTH TO W. LAWRENCE AVE THEN EAST ALONG W.
LAWRENCE AVE TO N. CLARENDON AVE, CONTINUE SOUTH
ALONG N. CLARENDON AVE. TO W. EASTWOOD AVE,
CONTINUE WEST ALONG W. EASTWOOD AVE TO RISER POLE
IN ALLEY OF SOUTHSIDE OF W. EASTWOOD AVE. INSTALL
BY OPEN CUT TRENCHING & BORING APPRX. 1568' LF OF 2"
HDPE CONDUIT/HANDHOLES & FIBER OPTIC CABLE.

PROJECT COORDINATOR:

JEFF RINARTZ (920) 889-4510





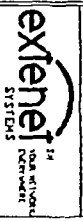
State: ILLINOIS
 County: COOK
 Municipality: CHICAGO

PROPOSED EXTENET
 1-2" HDPE INSTALLED BY
 OPEN CUT TRENCH
 R/R ASPHALT

DATE	DESCRIPTION	INITIALS	DATE	DESCRIPTION	INITIALS	DATE	DESCRIPTION	INITIALS
12/14/12	REVISED	SI	12/14/12	REVISED	SI	12/14/12	REVISED	SI
12/14/12	REVISED	SI	12/14/12	REVISED	SI	12/14/12	REVISED	SI

Scale: 1" = 20'

PERMIT - ONLY



3030 Wermine Road
 Suite 310 Urb. N. 60532

Project #: LINCOLN-PARK-IL

Engineer: GABES

Original Issue Date: 12/14/12

Published Date:

Bill of Materials:

Description	Qty.
Fiber - 432	xxx
Fiber - 888	xxx
Fiber - 144	xxx
Fiber - 36	xxx
Fiber - 48	xxx
Fiber - 36	xxx
Fiber - 24	xxx
Fiber - 12	xxx
Fiber - Drop	xxx
Total Fiber	xxx

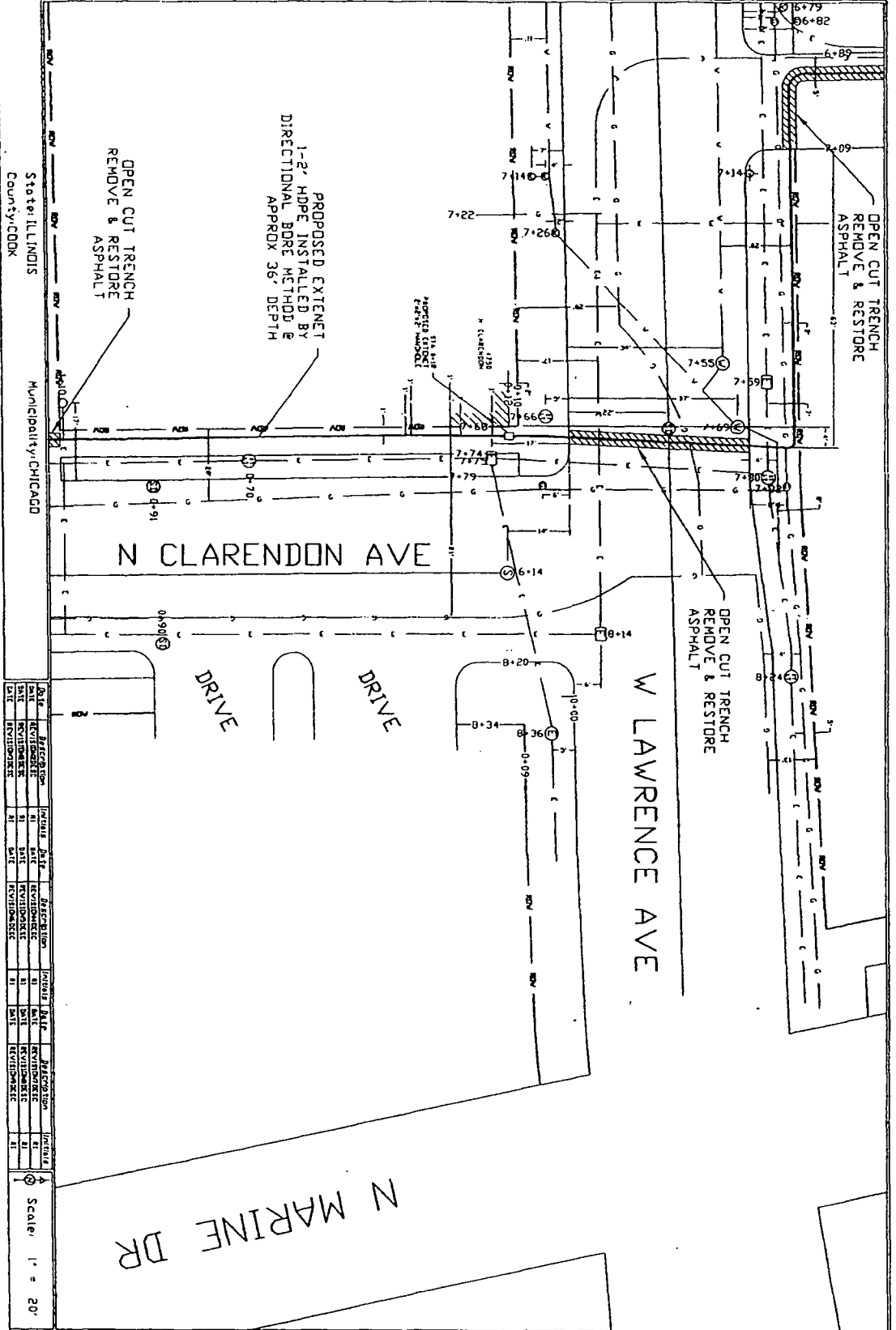
Route - Aerial
 Route - UC-Treeed
 Route - UC-New Conduit
 Route - Base Station
 Total Route Footage
 Poles - Power
 Poles - Tero
 Poles - Other
 Total Poles

Notes:
 1. See all
 2. See all
 3. See all
 4. See all
 5. See all
 6. See all
 7. See all
 8. See all
 9. See all
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 94. See all
 95. See all
 96. See all
 97. See all
 98. See all
 99. See all
 100. See all



1801 North Dear Street
 Evanston, IL 60202
 Phone: (773) 458-2100

Page 1	Page 2	Page 3	Page 4
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PERMIT ONLY

<p>extenei <small>an harsco</small></p> <p>SYSTEMS</p> <p>3050 Warrville Road Suite 500, UH, IL 60532</p> <p>Project #: LINCEN-PARK-IL</p> <p>Engineer: GARC</p> <p>Original Issue Date 12/14/12</p>	<p>Polished Base</p> <p>Bit of Materials</p> <p>Description Qty.</p> <p>Fiber - 432 XXX</p> <p>Fiber - 880 XXX</p> <p>Fiber - 54 XXX</p> <p>Fiber - 72 XXX</p> <p>Fiber - 48 XXX</p> <p>Fiber - 24 XXX</p> <p>Fiber - 24 XXX</p> <p>Total Fiber XXX</p>	<p>Route - Aerial XXX</p> <p>Route - Underpass XXX</p> <p>Route - Base Station XXX</p> <p>Total Route Footage XXX</p> <p>Poles - Power XXX</p> <p>Poles - Telco XXX</p> <p>Poles - Other XXX</p> <p>Total Poles XXX</p> <p>Horizontal</p> <p>5/8" Strand XXX</p> <p>Anchor XXX</p> <p>Spacers XXX</p> <p>Stack Loops XXX</p> <p>Manholes XXX</p>
---	---	--

Date	Description	Initials	Date	Description	Initials
DATE	REVISION	SI	DATE	REVISION	SI
DATE	REVISION	SI	DATE	REVISION	SI
DATE	REVISION	SI	DATE	REVISION	SI

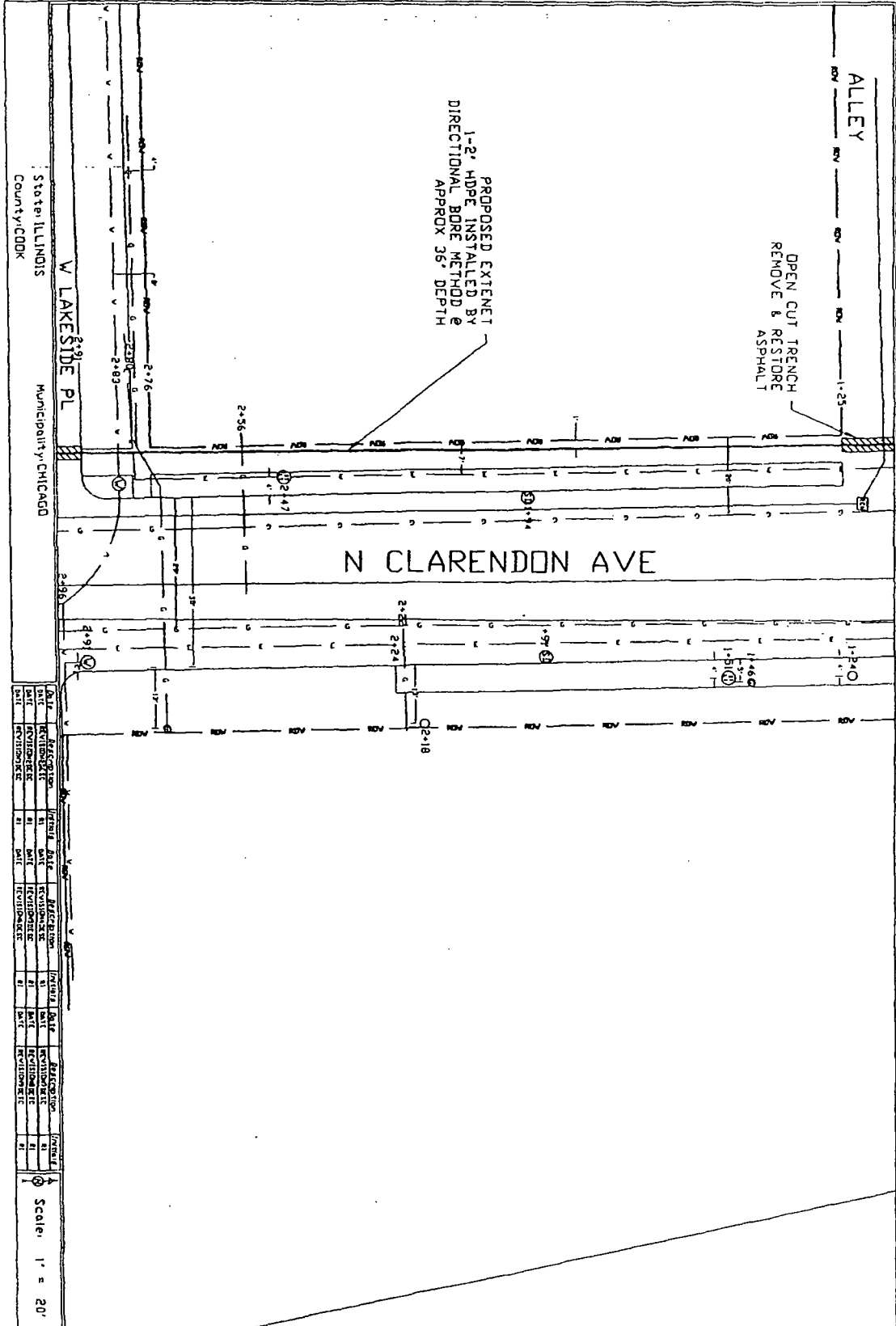
Scale: 1" = 20'



480 North 40th Street
Shawnee, WI 53083
Phone: (262) 484-2800

MOB Numbers:

PAGE 1	PAGE 2	PAGE 3
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State of ILLINOIS
County: COOK

W LAKESIDE PL
Municipality: CHICAGO

PROPOSED EXTENET
1-2" HDPE INSTALLED BY
DIRECTIONAL BORE METHOD @
APPROX 36" DEPTH

OPEN CUT TRENCH
REMOVE & RESTORE
ASPHALT

N CLARENDON AVE

DATE	REVISION	BY	DATE	REVISION	BY	DATE	REVISION	BY	DATE	REVISION	BY
	1			1			1			1	
	2			2			2			2	
	3			3			3			3	
	4			4			4			4	

Scale: 1" = 20'

PERMIT ONLY

extenet™
NON METRIC
SYSTEMS
INCORPORATED

3030 Monrovia Road
Suite 340, Villa, IL 60552

Project #: LINCOLN-PARK-IL
Job Title: GATE'S
Engineer: GALE'S

Original Issue Date: 12/14/12
Published Date: []

Description	Qty.
Fiber - 432	XXX
Fiber - 288	XXX
Fiber - 144	XXX
Fiber - 96	XXX
Fiber - 48	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - Drop	XXX
Total Fiber	XXX

Route: Aerial
Route: UG/Lashed
Route: Manholes
Route: Manholes
Route: Manholes

Post - Power
Post - Teico
Post - Other

Total Poles
XXX

Notes:
1. All work to be done in accordance with the City of Chicago specifications.
2. All work to be done in accordance with the City of Chicago specifications.
3. All work to be done in accordance with the City of Chicago specifications.
4. All work to be done in accordance with the City of Chicago specifications.

Gallex
ADMINISTRATIVE

1624 North Lincoln Street
Chicago, IL 60642
Phone: (773) 342-2800

Page	Number
Page 1	1
Page 2	2
Page 3	3
Page 4	4

PERMIT ONLY

extener SYSTEMS
100 West
Sibley, MN 55110
500 Merriman Road
Suite 500, Unity, MN 55052

Project #:
Job Title: LINCOLN-PARK-11
Engineer: G.A.C.'S
Original Issue Date: 12/14/12

Billed Materials:

Description	Qty.
Fiber - 432	xxx
Fiber - 888	xxx
Fiber - 144	xxx
Fiber - 222	xxx
Fiber - 333	xxx
Fiber - 468	xxx
Fiber - 936	xxx
Fiber - 24	xxx
Fiber - 24	xxx
Fiber - 24	xxx
Total Fiber	xxx

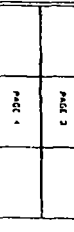
Route - Asphalt
Route - Unimproved
Route - Other
Route - Other
Total Route Footage: 231

Poles - Power: 204
Poles - Pole: 204
Poles - Dener: 204
Total Poles: 204

Labels: 113
2/1/2" Strand: 113
Anchor: 113
Spiker: 113
Stack Loops: 113
Hardware: 113

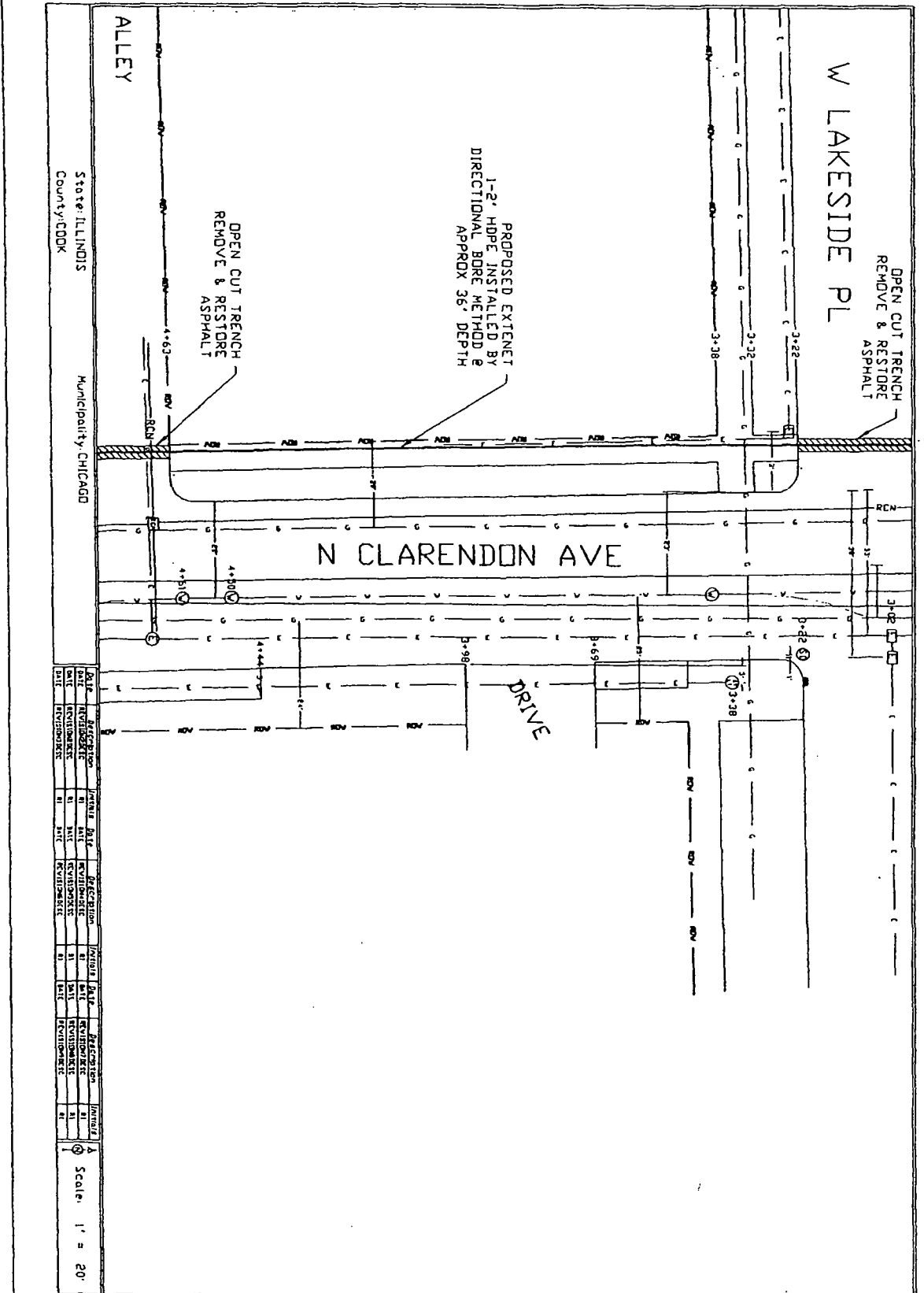
Legend:
 ○ - 200T rail
 ● - 200T rail
 ⊙ - 200T rail
 ⊗ - 200T rail
 ⊕ - 200T rail
 ⊖ - 200T rail
 ⊛ - 200T rail
 ⊜ - 200T rail
 ⊝ - 200T rail
 ⊞ - 200T rail
 ⊟ - 200T rail
 ⊠ - 200T rail
 ⊡ - 200T rail
 ⊢ - 200T rail
 ⊣ - 200T rail
 ⊤ - 200T rail
 ⊥ - 200T rail
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 ⊿ - 200T rail
 ⊿ - 200T rail

4401 North 44th Street
Shelbyville, MN 55065
Phone: (763) 553-2100



Scale: 1" = 20'

PAGE 1	
PAGE 2	
PAGE 3	
PAGE 4	
PAGE 5	
PAGE 6	



OPEN CUT TRENCH REMOVE & RESTORE ASPHALT

3+22

3+32

3+38

OPEN CUT TRENCH REMOVE & RESTORE ASPHALT

4+63

Proposed extent 1-2" HDPE installed by directional bore method @ approx 36" depth

N CLARENDON AVE

DRIVE

State: ILLINOIS
County: COOK

Municipality: CHICAGO

DATE	BY	REVISION	DATE	DESCRIPTION	DATE	BY	REVISION	DATE	DESCRIPTION
12/14/12	G.A.C.'S	1		ISSUE FOR PERMIT					

PERMIT ONLY



3010 Western Road
Suite 300, Lincoln, IL 60312

Project #: LINCOLN-PARK-IL

Engineer: GAB'S

Original Issue Date 12/14/12

Published Date:

Bill of Materials:

DESCRIPTION	QTY
Fiber - 800	XXX
Fiber - 100	XXX
Fiber - 144	XXX
Fiber - 96	XXX
Fiber - 72	XXX
Fiber - 48	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - Drop	XXX
Total Fiber	XXX

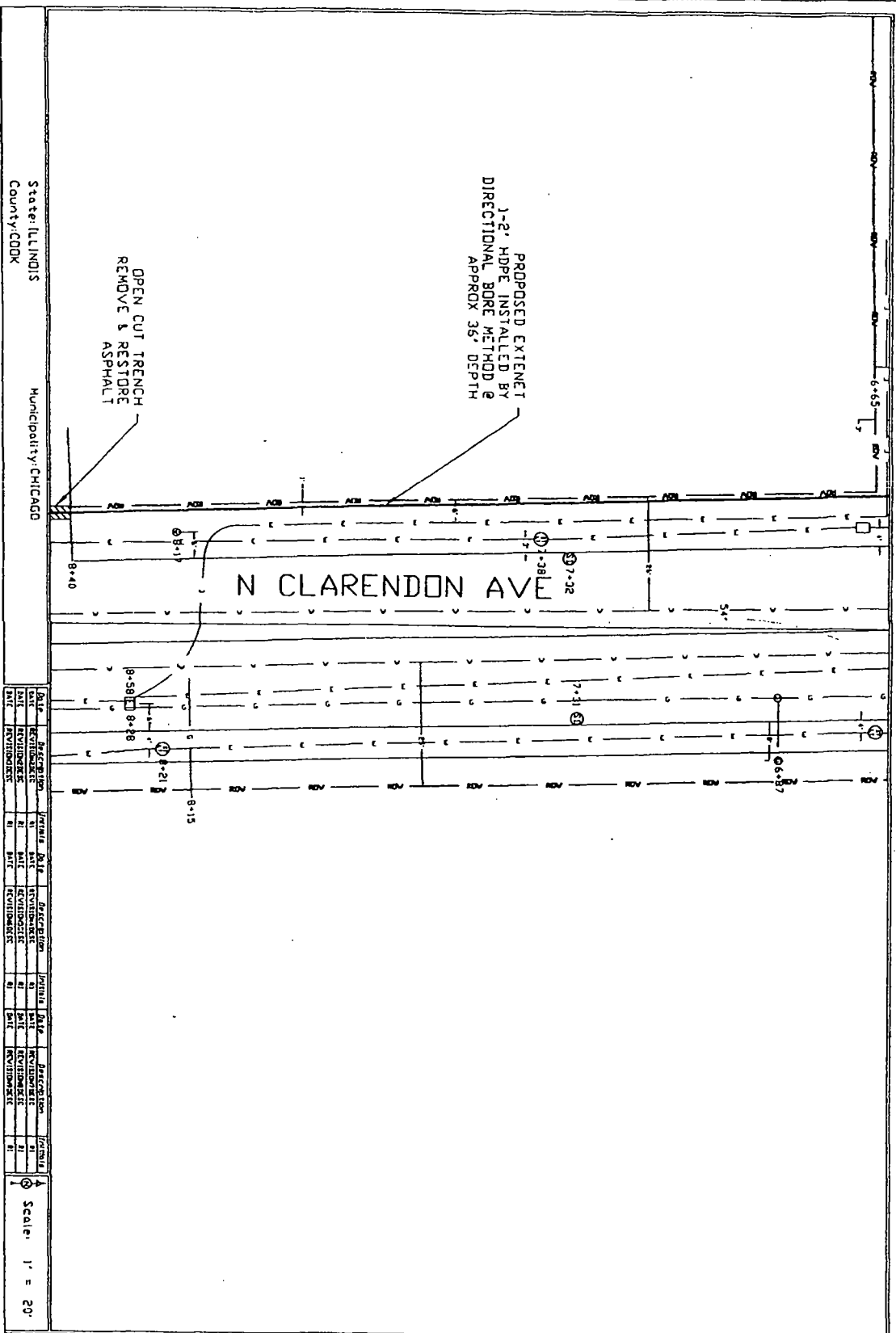
Route - Termini
Route - Un-Neer Conduit
Route - Base Station
Total Route Footage: XXX

Poles - Power
Poles - Telco
Poles - Other
Total Poles: XXX

Notes
5/16" Strand
ANCHORS
SPICES
Hardware
Hardware

4824 North 49th Street
Shawnee, WI 53091
Dial: (202) 432-7000

Legend:
 X - 100' LSP
 X - 200' LSP
 X - 300' LSP
 X - 400' LSP
 X - 500' LSP
 X - 600' LSP
 X - 700' LSP
 X - 800' LSP
 X - 900' LSP
 X - 1000' LSP
 X - 1100' LSP
 X - 1200' LSP
 X - 1300' LSP
 X - 1400' LSP
 X - 1500' LSP
 X - 1600' LSP
 X - 1700' LSP
 X - 1800' LSP
 X - 1900' LSP
 X - 2000' LSP
 X - 2100' LSP
 X - 2200' LSP
 X - 2300' LSP
 X - 2400' LSP
 X - 2500' LSP
 X - 2600' LSP
 X - 2700' LSP
 X - 2800' LSP
 X - 2900' LSP
 X - 3000' LSP
 X - 3100' LSP
 X - 3200' LSP
 X - 3300' LSP
 X - 3400' LSP
 X - 3500' LSP
 X - 3600' LSP
 X - 3700' LSP
 X - 3800' LSP
 X - 3900' LSP
 X - 4000' LSP
 X - 4100' LSP
 X - 4200' LSP
 X - 4300' LSP
 X - 4400' LSP
 X - 4500' LSP
 X - 4600' LSP
 X - 4700' LSP
 X - 4800' LSP
 X - 4900' LSP
 X - 5000' LSP
 X - 5100' LSP
 X - 5200' LSP
 X - 5300' LSP
 X - 5400' LSP
 X - 5500' LSP
 X - 5600' LSP
 X - 5700' LSP
 X - 5800' LSP
 X - 5900' LSP
 X - 6000' LSP
 X - 6100' LSP
 X - 6200' LSP
 X - 6300' LSP
 X - 6400' LSP
 X - 6500' LSP
 X - 6600' LSP
 X - 6700' LSP
 X - 6800' LSP
 X - 6900' LSP
 X - 7000' LSP
 X - 7100' LSP
 X - 7200' LSP
 X - 7300' LSP
 X - 7400' LSP
 X - 7500' LSP
 X - 7600' LSP
 X - 7700' LSP
 X - 7800' LSP
 X - 7900' LSP
 X - 8000' LSP
 X - 8100' LSP
 X - 8200' LSP
 X - 8300' LSP
 X - 8400' LSP
 X - 8500' LSP
 X - 8600' LSP
 X - 8700' LSP
 X - 8800' LSP
 X - 8900' LSP
 X - 9000' LSP
 X - 9100' LSP
 X - 9200' LSP
 X - 9300' LSP
 X - 9400' LSP
 X - 9500' LSP
 X - 9600' LSP
 X - 9700' LSP
 X - 9800' LSP
 X - 9900' LSP
 X - 10000' LSP



PROPOSED EXTENET
 1-2' HDPE INSTALLED BY
 DIRECTIONAL BORE METHOD @
 APPROX 35' DEPTH

OPEN CUT TRENCH
 REMOVE & RESTORE
 ASPHALT

State: ILLINOIS
 County: COOK
 Municipality: CHICAGO

DATE	DESCRIPTION	INITIALS	DATE	DESCRIPTION	INITIALS

Scale: 1" = 20'

Sheet 1	Sheet 2	Sheet 3	Sheet 4

PERMIT ONLY

extenetSM
FOR AERIAL
SYSTEMS CENTER

300 Westmoreland Road
Suite 310, Urbana, IL 60553

Project #: LINCOLN-PARK-IL

Job Title: Cable

Company: G&S

Original Issue Date 12/14/12

Published Date:

Bill of Materials:

Description: City

Riser - 432

Riser - 288

Riser - 144

Riser - 96

Riser - 72

Riser - 56

Riser - 48

Riser - 36

Riser - 24

Riser - 12

Riser - Drop

Total Riser: XXX

Route - Aerial: XXX

Route - UC-Cleaved: XXX

Route - UC-New Conduct: XXX

Route - Base Station: XXX

Total Route Footage: XXX

Poles - Pole: XXX

Poles - Tripod: XXX

Poles - Other: XXX

Total Pole: XXX

Nodes: XXX

2/16" Strand: XXX

Anchor: XXX

Slack Loops: XXX

Hardware: XXX

Memories: XXX

• 200 ft. Rod

• 200 ft. Rod

• 200 ft. Rod

• 200 ft. Rod

• 200 ft. Rod

• 200 ft. Rod

• 200 ft. Rod

• 200 ft. Rod

• 200 ft. Rod

• 200 ft. Rod

• 200 ft. Rod

• 200 ft. Rod

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• 200 ft. Rod

• 200 ft. Rod

• 200 ft. Rod

• 200 ft. Rod

• 200 ft. Rod

• 200 ft. Rod

• 200 ft. Rod

• 200 ft. Rod

• 200 ft. Rod

• 200 ft. Rod



301 North 40th Street
Chicago, IL 60612
Phone: (312) 438-2800

Sheet 4 of 4
Part 4
Part 3

Scale: 1" = 20'

Sheet Number:

Sheet 4

Sheet 3

Sheet 2

Sheet 1

Sheet 0

Sheet -1

Sheet -2

Sheet -3

Sheet -4

Sheet -5

Sheet -6

Sheet -7

Sheet -8

Sheet -9

Sheet -10

Sheet -11

OPEN CUT TRENCH
REMOVE & RESTORE
ASPHALT

DRIVE

PROPOSED EXTENCT
1-2" HDPE INSTALLED BY
DIRECTIONAL BORE METHOD @
APPROX 36" DEPTH

OPEN CUT TRENCH
REMOVE & RESTORE
ASPHALT

State: ILLINOIS
County: COOK

Municipality: CHICAGO

Date: 12/14/12
Author: G&S
Checker: G&S
Title: PERMIT

Revision: 1
Description: REVISED PERMIT

Revision: 2
Description: REVISED PERMIT

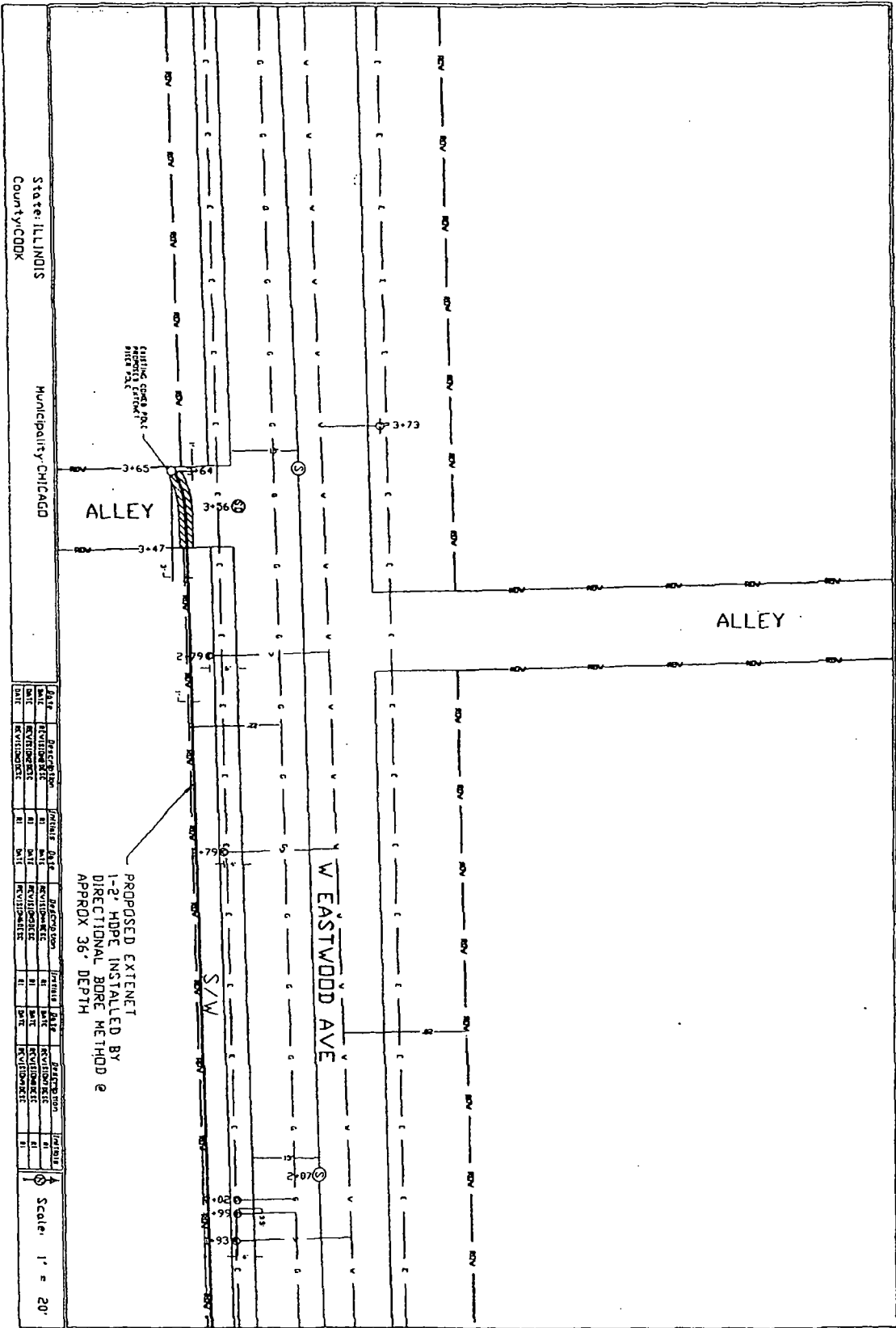
Revision: 3
Description: REVISED PERMIT

Revision: 4
Description: REVISED PERMIT

Revision: 5
Description: REVISED PERMIT

Revision: 6
Description: REVISED PERMIT

Revision: 7
Description: REVISED PERMIT



State: ILLINOIS
County: COOK

Municipality: CHICAGO

DATE	REVISION	DESCRIPTION	INITIALS	DATE	REVISION	DESCRIPTION	INITIALS

PROPOSED EXTENET
1-2" HDPE INSTALLED BY
DIRECTIONAL BORE METHOD @
APPROX 36" DEPTH

Scale: 1" = 20'

Map Number:

PERMIT - ONLY

exteneT
FIBER OPTIC NETWORK
300 Westmore Road
Suite 200, Oak Park, IL 60452

Project #: LINCOLN-PARK-IL
Engineer: GARCIS
Original Issue Date: 12/14/12
Published Date:

Bill of Materials:

DESCRIPTION	QTY.
Fiber - 432	XXX
Fiber - 600	XXX
Fiber - 600	XXX
Fiber - 96	XXX
Fiber - 72	XXX
Fiber - 48	XXX
Fiber - 36	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - Drop	XXX
Total Fiber	XXX

Route - Aerial	XXX
Route - Underground	XXX
Route - Base Station	XXX
Total Route Footage	XXX
Poles - Power	XXX
Poles - Telco	XXX
Poles - Drive	XXX
Total Poles	XXX

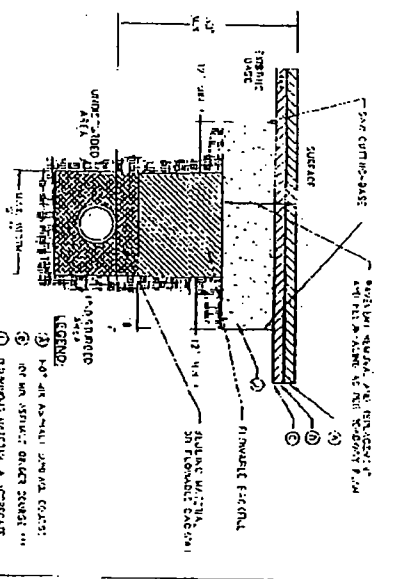
Nodes - 5/16" Strand	XXX
Nodes - Splices	XXX
Nodes - Handholes	XXX
Nodes - Manholes	XXX



4801 NORTH MON ST
DORIS, ILLINOIS 60422
Phone: (708) 458-3100

Page 1
Page 2
Page 3

**SHEET PAVEMENT RESTORATION
DETAIL WITH FIBERBILT BACKFILL**

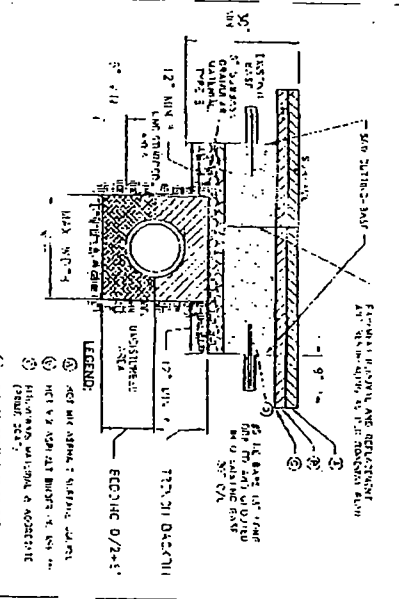


- LEGEND:
 1. 1 1/2\"/>

NOTES:
 1. PAVEMENT SHALL BE FINISHED TO MATCH EXISTING SURFACE WITH 1/8\"/>

CDOT
 CHICAGO DEPARTMENT OF TRANSPORTATION
 STREET PAVEMENT RESTORATION
 SHEET NO. 432
 DATE: 01/13/12
 DRAWN BY: [Blank]
 CHECKED BY: [Blank]

**SHEET PAVEMENT RESTORATION
DETAIL WITH FIBERBILT BACKFILL**



- LEGEND:
 1. 1 1/2\"/>

NOTES:
 1. PAVEMENT SHALL BE FINISHED TO MATCH EXISTING SURFACE WITH 1/8\"/>

CDOT
 CHICAGO DEPARTMENT OF TRANSPORTATION
 STREET PAVEMENT RESTORATION
 SHEET NO. 433
 DATE: [Blank]
 DRAWN BY: [Blank]
 CHECKED BY: [Blank]

Scale: 1" = 20'

DATE	REVISION	INITIALS	DATE	REVISION	INITIALS

State: ILLINOIS
 County: CHICAGO
 Municipality: CHICAGO

PERMIT ONLY

exteneer INC.
SYSTEMS
3030 North Lincoln Road
Suite 300 Oak Brook, IL 60513

Job Title: LINCOLN-PARK-1L

Engineer: GARET

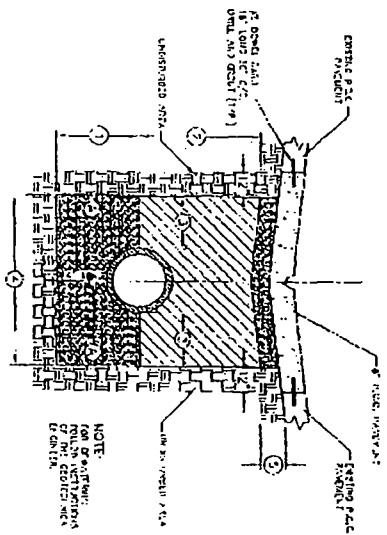
Original Issue Date: 12/14/12

Revised Date:

Bill of Materials

Description	Qty.
Fiber - 432	XXX
Fiber - 288	XXX
Fiber - 144	XXX
Fiber - 72	XXX
Fiber - 48	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - 6	XXX
Total Fiber	XXX
Route - Aerial	XXX
Route - DE-aerated	XXX
Route - Base Station	XXX
Total Route Footage	XXX
Poles - Power	XXX
Poles - Telco	XXX
Poles - Other	XXX
Total Poles	XXX
Nodes	XXX
5/16" Strand	XXX
Anchor	XXX
Sockets	XXX
Sleece 1000s	XXX
Hardware	XXX
• 20ft pole	XXX
• 30ft pole	XXX
• 40ft pole	XXX
• 50ft pole	XXX
• 60ft pole	XXX
• 80ft pole	XXX
• 100ft pole	XXX
• 120ft pole	XXX
• 150ft pole	XXX
• 200ft pole	XXX
• 250ft pole	XXX
• 300ft pole	XXX
• 350ft pole	XXX
• 400ft pole	XXX
• 450ft pole	XXX
• 500ft pole	XXX
• 550ft pole	XXX
• 600ft pole	XXX
• 650ft pole	XXX
• 700ft pole	XXX
• 750ft pole	XXX
• 800ft pole	XXX
• 850ft pole	XXX
• 900ft pole	XXX
• 950ft pole	XXX
• 1000ft pole	XXX

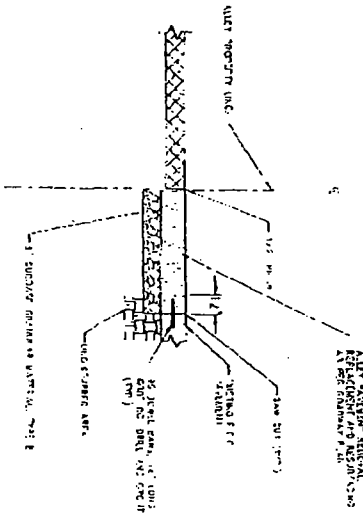
P&I ALLY PAYMENT REGISTRATION P&I OF CONDUIT INSTALL DETAIL



- 1. READING: SEE EXHIBIT F FOR
- 2. BACKTILL: APPROXIMATE 10% OF EACH SIDE OF CONDUIT TO BE COVERED WITH BACKTILL
- 3. CLEANUP: PER THE EXISTING SITE PLAN, ALL EXISTING MATERIAL SHALL BE REMOVED AND THE AREA SHALL BE RESTORED TO ORIGINAL CONDITION
- 4. TRENCH WIDTH: 8" WIDE OPEN, STANDARD MATERIAL, PER 3
- 5. SUB-BAS: 8" WIDE OPEN, STANDARD MATERIAL, PER 3

CDOT CHICAGO DEPARTMENT OF TRANSPORTATION
DATE: _____ DEVISION: CITY OF CHICAGO
PROJECT: REGISTRATION THEUR CONDUIT
TRENCH DETAIL, CONDUIT ALLY

ALLY PAYMENT REGISTRATION



CDOT CHICAGO DEPARTMENT OF TRANSPORTATION
DATE: _____ REVISION: CITY OF CHICAGO
PROJECT: ALLY PAYMENT REGISTRATION

State: ILLINOIS
County: COOK

Municipality: CHICAGO

Date	Description	Project	Date	Revision

Scale: 1" = 20'

HP Number: _____



4445 North Ash St
Shroton, IL 60439
Phone: (630) 585-2500

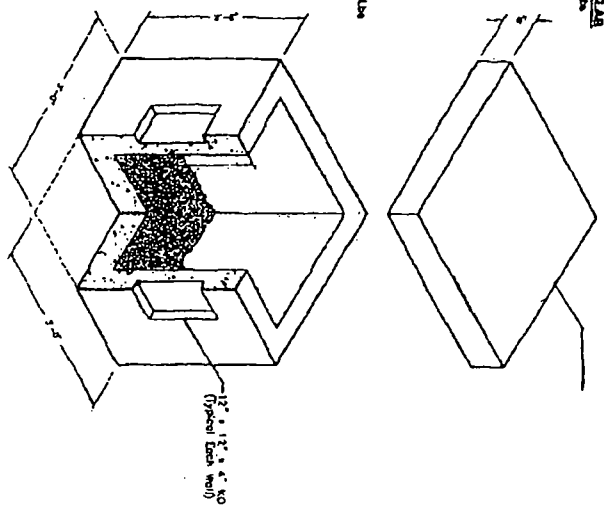


The SALES/REPRESENTATION

2'-0" x 2'-0" x 2'-0" I.O.
Handhole Box
Model: ZZMH

ZZMH TOP SLAB
Weight: 288 Lbs

ZZMH BASE
Weight: 2350 Lbs

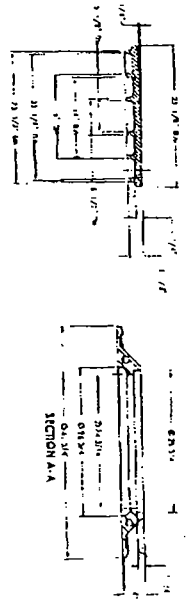
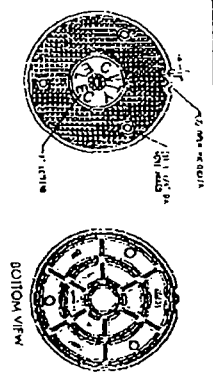


GENERAL NOTES:
1. See drawing for dimensions.
2. All dimensions are in feet and inches.
3. All dimensions are to the center of the hole.
4. All dimensions are to the center of the hole.
5. All dimensions are to the center of the hole.
6. All dimensions are to the center of the hole.

Chicago Precast
1200 North Dearborn
Chicago, IL 60610
Tel: (773) 327-1100
Fax: (773) 327-1101
www.chicagoprecast.com

State: ILLINOIS
County: COOK
Municipality: CHICAGO

1530C COVER



GENERAL NOTES:
1. See drawing for dimensions.
2. All dimensions are in feet and inches.
3. All dimensions are to the center of the hole.
4. All dimensions are to the center of the hole.
5. All dimensions are to the center of the hole.
6. All dimensions are to the center of the hole.

DATE	DESCRIPTION	BY	DATE	DESCRIPTION	BY	DATE	DESCRIPTION	BY
12/14/12	REVISED	SI	12/14/12	REVISED	SI	12/14/12	REVISED	SI
12/14/12	REVISED	SI	12/14/12	REVISED	SI	12/14/12	REVISED	SI
12/14/12	REVISED	SI	12/14/12	REVISED	SI	12/14/12	REVISED	SI

Scale: 1" = 20'

PERMIT ONLY



3000 Westmore Road
Suite 300, Uva, N. 20512

Project #: LINCOLN-PARK-11

Job Title: GATE'S

Engineer: GATE'S

Original Issue Date: 12/14/12

Revised Date:

Bill of Materials:

Description	Qty.
Fiber - 432	XXX
Fiber - 288	XXX
Fiber - 144	XXX
Fiber - 96	XXX
Fiber - 72	XXX
Fiber - 48	XXX
Fiber - 36	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Total Fiber	XXX

Route - Aerial

Route - DC-Leased

Route - DC-Non-Conduct

Route - Deep Station

Total Route / Order

Poles - Power

Poles - T-Post

Poles - D-Post

Total Poles

Arms

Arms - Standard

Arms - Special

Arms - Other

Stack Loops

Handholes

Handholes - 24\"/>

Handholes - 36\"/>

Handholes - 48\"/>

Handholes - 60\"/>

Handholes - 72\"/>

Handholes - 84\"/>

Handholes - 96\"/>

Handholes - 108\"/>

Handholes - 120\"/>

Handholes - 132\"/>

Handholes - 144\"/>

Handholes - 156\"/>

Handholes - 168\"/>

Handholes - 180\"/>



4800 North 40th Street
Shawnee, MO 64083
Phone: (816) 452-2100

Map Number:

PROPOSED EXTENET SYSTEMS

UNDERGROUND FIBER OPTIC FACILITY

1. N. SEDWICK ST. FROM ALLEY S. OF W. NORTH AVE TO W. NORTH AVE.
2. W. NORTH AVE FROM N. SEDWICK ST TO N. WIELAND ST.
3. N. WIELAND ST FROM W. NORTH AVE SOUTH ALONG N. WIELAND ST
200' SOUTH TO EXISTING POLE
4. N. NORTHPARK AVE. FROM W. NORTH AVE TO W. EUGENIE ST.
5. W. EUGENIE ST FROM N. NORTHPARK AVE. TO ALLEY EAST OF N.
NORTHPARK AVE TO RISER POLE
CHICAGO, IL

extenet
SYSTEMS
3000 Wernicke Road
Suite 310
Urbana, IL 62532

PROJECT LOCATION

OUC IR FILE # 55980
OUC ERP FILE # 57911



DIGGER HOTLINE
<CHICAGO UTILITY ALERT NETWORK>
1-312-744-7000

CONTACT INFORMATION:

EXTENET SYSTEMS:

DAVE FASSHAUER (708) 975-5786

GABE'S CONSTRUCTION:

JEFF RINARTZ (920) 889-4510
ENGINEERING
CONSTRUCTION - BRIAN VANSCHYNDEL (920) 889-9809

PROJECT NO:

EXTIL12008

PROJECT LOCATION:

W. NORTH AVE. FROM WIELAND ST. SEDWICK ST & N.
NORTH PARK AVE FROM W. NORTH AVE TO EUGENIE ST.

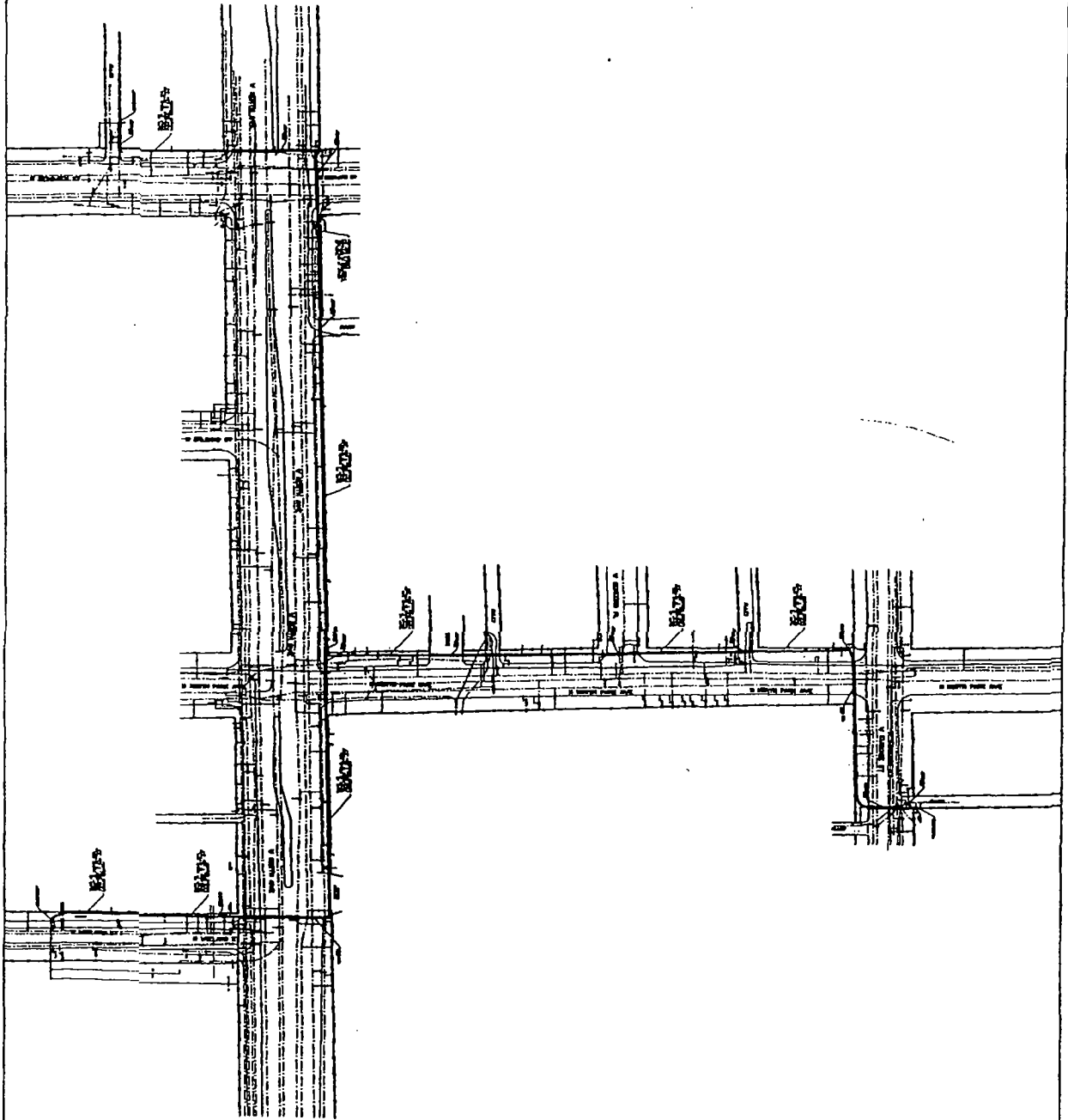
ADDITIONAL LOCATION DESCRIPTION:

ALIGN INSTALL BY OPEN CUT TRENCH & BORING APPROX. 1327' LF
OF 2" HDPE CONDUIT E/W FIBER OPTIC CABLE FROM
ALLEY ON N. SEDWICK AVE. SOUTH OF W. NORTH AVE.
CONTINUE NORTH TO W. NORTH AVE. CONTINUE EAST
ALONG W. NORTH AVE TO N. WIELAND ST. CONTINUE SOUTH
ALONG N. WIELAND ST. FROM W. NORTH AVE. TO POLE ON
N. WIELAND ST. ON WEST SIDE OF ROAD

ALIGN INSTALL BY OPEN CUT TRENCHING & BORING APPROX. 807'
LF OF 2" HDPE CONDUIT E/W FIBER OPTIC CABLE FROM
INTERSECTION OF W. NORTH AVE & N. NORTH PARK AVE.
CONTINUE NORTH TO EUGENIE ST. THEN EAST ALONG
EUGENIE TO ALLEY EAST OF EUGENIE TO RISER POLE
LOCATED ON NORTH SIDE OF W. EUGENIE ST & ALLEY.

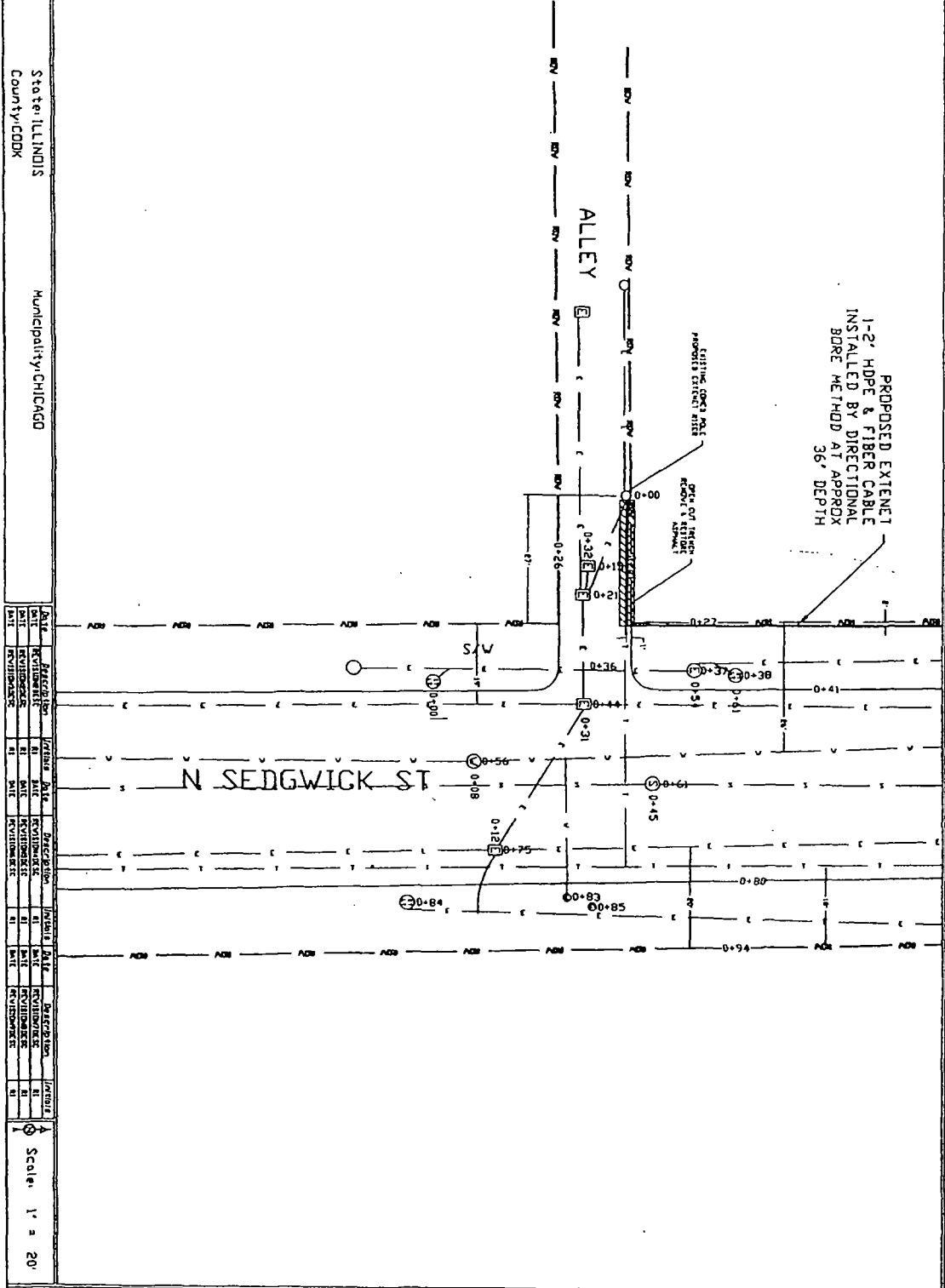
PROJECT COORDINATOR:

JEFF RINARTZ (920) 889-4510



PERMIT ONLY

PROPOSED EXTENT
 1-2" HDPE & FIBER CABLE
 INSTALLED BY DIRECTIONAL
 BORE METHOD AT APPROX
 36" DEPTH



State: ILLINOIS
 County: COOK

Municipality: CHICAGO

Date	Revision	Description	Initials	Date	Revision	Description	Initials
11/8/12	1	ISSUED FOR PERMIT					
11/8/12	2	REVISED FOR COMMENTS					
11/8/12	3	REVISED FOR COMMENTS					
11/8/12	4	REVISED FOR COMMENTS					

Scale: 1" = 20'

exteneal SYSTEMS
 1004 W. NORTH
 CHICAGO, IL 60642
 PHONE: (312) 453-2300

4805 North 40th Street
 Skokie, IL 60077
 PHONE: (847) 433-2300

Cables
 COMMUNICATIONS

Job Title: NORTH-DISTRICT-IL
 Original Issue Date: 11/8/12
 Published Date:
 Bill of Materials: DLY
 Description:
 Fiber - 432 XXX
 Fiber - 144 XXX
 Fiber - 96 XXX
 Fiber - 72 XXX
 Fiber - 48 XXX
 Fiber - 24 XXX
 Fiber - 12 XXX
 Total Fiber: 533

Route - APRN1 XXX
 Route - UPRN1 XXX
 Route - UPRN2 XXX
 Route - Base Station XXX
 Total Route Footage: XXX

Poles - Power XXX
 Poles - T-100 XXX
 Poles - Other XXX
 Total Poles: 333

Notes:
 7/16" Strand XXX
 Anchors XXX
 Splices XXX
 Saddles XXX
 Handholes XXX
 Manholes XXX

Legend:
 ○ - 1" hole
 ● - 2" hole
 ⊙ - 3" hole
 ⊚ - 4" hole
 ⊛ - 6" hole
 ⊜ - 8" hole
 ⊝ - 10" hole
 ⊞ - 12" hole
 ⊟ - 14" hole
 ⊠ - 16" hole
 ⊡ - 18" hole
 ⊢ - 20" hole
 ⊣ - 24" hole
 ⊤ - 30" hole
 ⊥ - 36" hole
 ⊦ - 42" hole
 ⊧ - 48" hole
 ⊨ - 54" hole
 ⊩ - 60" hole
 ⊪ - 72" hole
 ⊫ - 84" hole
 ⊬ - 96" hole
 ⊭ - 108" hole
 ⊮ - 120" hole
 ⊯ - 132" hole
 ⊰ - 144" hole
 ⊱ - 156" hole
 ⊲ - 168" hole
 ⊳ - 180" hole
 ⊴ - 192" hole
 ⊵ - 204" hole
 ⊶ - 216" hole
 ⊷ - 228" hole
 ⊸ - 240" hole
 ⊹ - 252" hole
 ⊺ - 264" hole
 ⊻ - 276" hole
 ⊼ - 288" hole
 ⊽ - 300" hole
 ⊾ - 312" hole
 ⊿ - 324" hole
 ⊿ - 336" hole
 ⊿ - 348" hole
 ⊿ - 360" hole
 ⊿ - 372" hole
 ⊿ - 384" hole
 ⊿ - 396" hole
 ⊿ - 408" hole
 ⊿ - 420" hole
 ⊿ - 432" hole
 ⊿ - 444" hole
 ⊿ - 456" hole
 ⊿ - 468" hole
 ⊿ - 480" hole
 ⊿ - 492" hole
 ⊿ - 504" hole
 ⊿ - 516" hole
 ⊿ - 528" hole
 ⊿ - 540" hole
 ⊿ - 552" hole
 ⊿ - 564" hole
 ⊿ - 576" hole
 ⊿ - 588" hole
 ⊿ - 600" hole

PERMIT ONLY

extenet
THE **DATA SYSTEMS**
INCORPORATED
 SYSTEMS
 3030 WASHINGTON ROAD
 SUITE 300 WILMINGTON, DE 19802

PROPOSED EXTENET
 1-2" HDPE & FIBER CABLE
 INSTALLED BY DIRECTIONAL
 BORE METHOD AT APPROX
 36" DEPTH

Project #:
 Job Title: NORTH-DISTRICT-1
 Contract: GABC'S
 Original Issue Date: 11/8/12

Revised Date:
 Bill of Materials:

DESCRIPTION	QTY
Fiber - 142	XXX
Fiber - 888	XXX
Fiber - 148	XXX
Fiber - 172	XXX
Fiber - 148	XXX
Fiber - 35	XXX
Fiber - 24	XXX
Fiber - 24	XXX
Total Fiber	XXX

Route - Aerial	XXX
Route - UC-10000	XXX
Route - UC-10000	XXX
Route - UC-10000	XXX
Total Route Footage	XXX

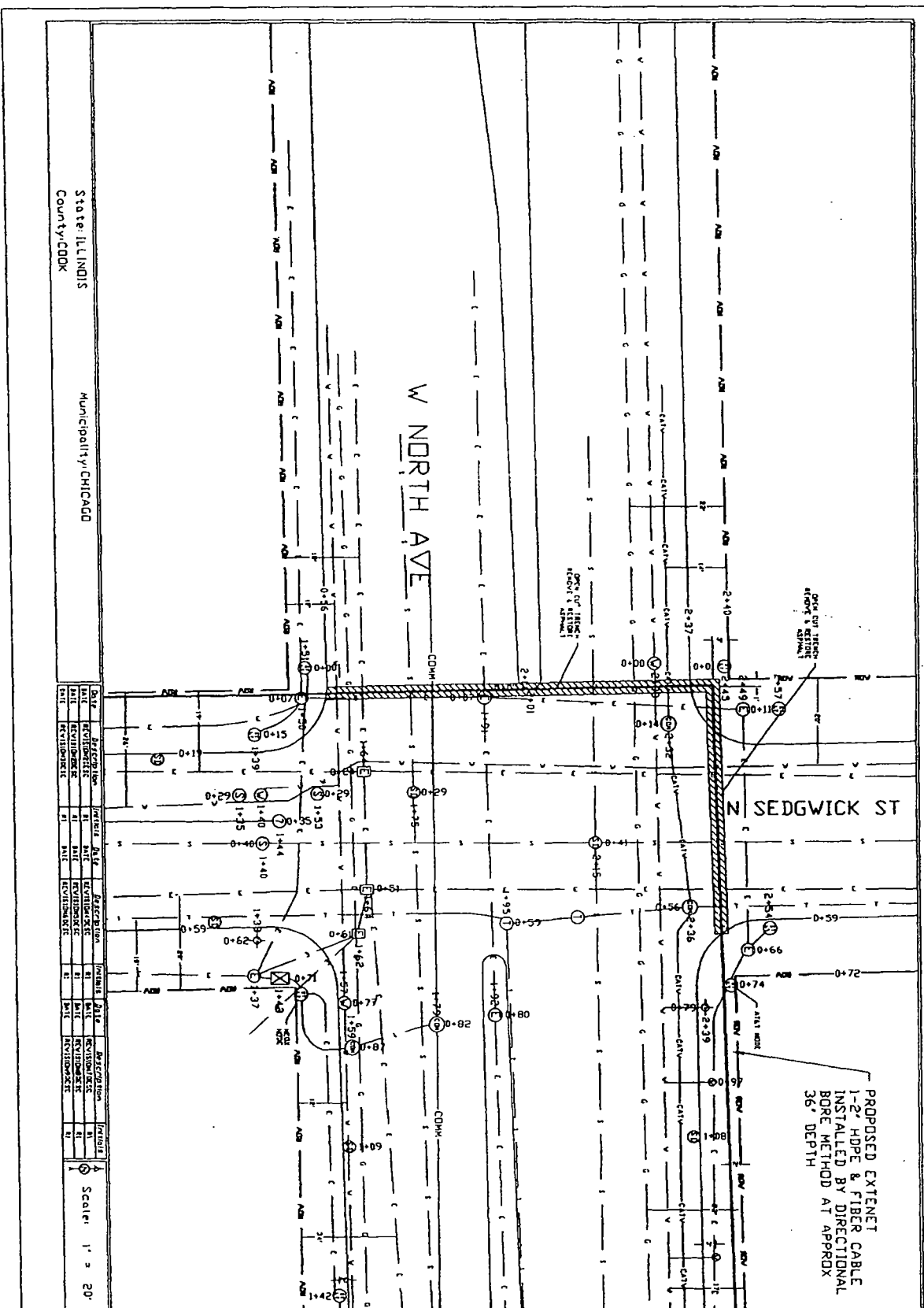
Poles - Power	XXX
Poles - Telco	XXX
Poles - Other	XXX
Total Poles	XXX

Notes	XXX
Anchor	XXX
Splices	XXX
Stack Loads	XXX
Hardware	XXX
Manholes	XXX
Other	XXX

404 North 40th Street Springport, WI 53085 Phone: (430) 348-2800
Page 1
Page 2
Page 3

Date	By	Description	Initials
DATE	BY	DESCRIPTION	INITIALS
DATE	BY	DESCRIPTION	INITIALS
DATE	BY	DESCRIPTION	INITIALS

State: ILLINOIS
 County: COOK
 Municipality: CHICAGO



Scale: 1" = 20'

PERMIT ONLY

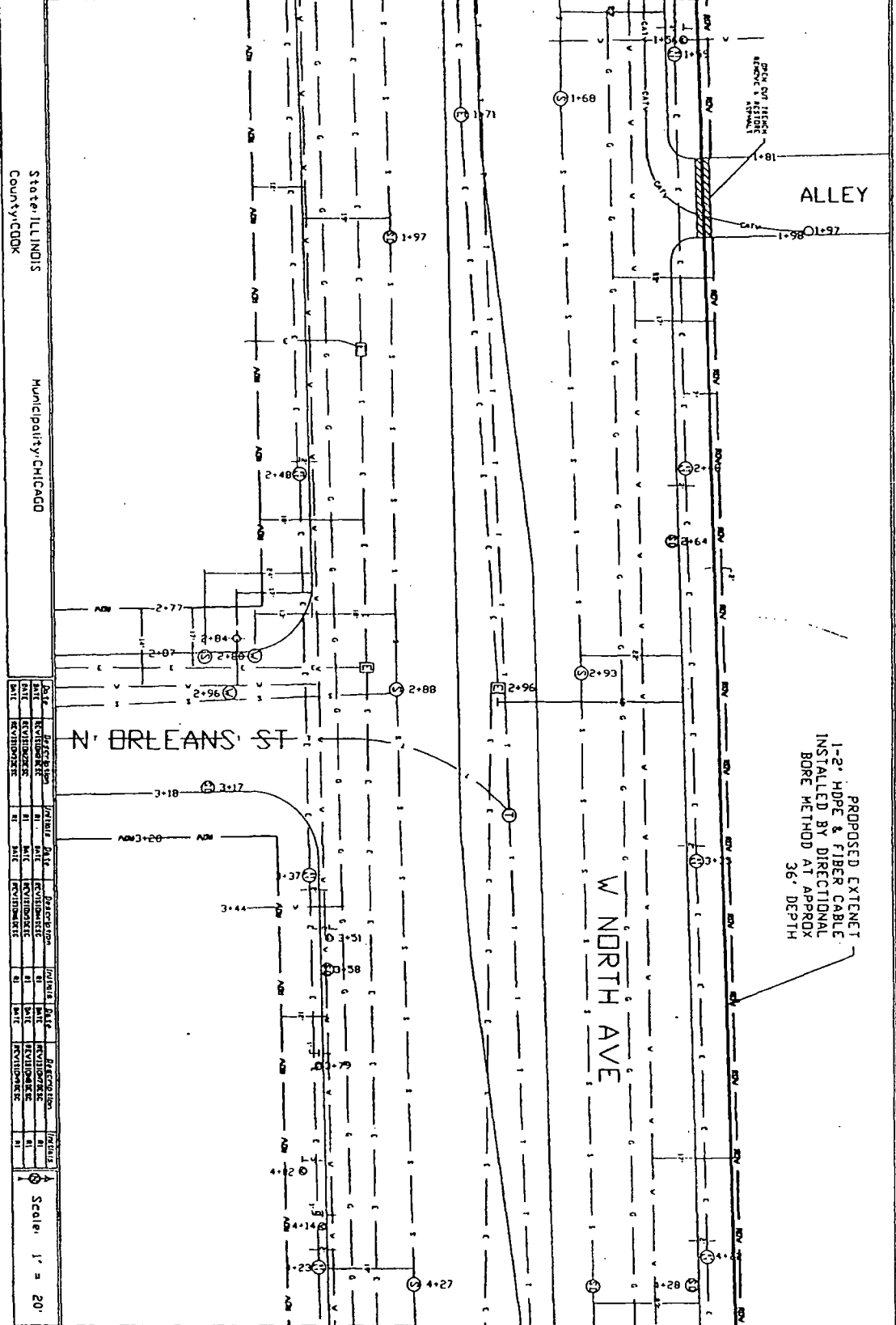


Project No. 1000
North District
Job Title: NORTH-DISTRICT-11
Engineer: GABES

Original Issue Date 11/8/12
Published Date:
Bill of Materials

Description	Qty
Fiber - 432	XXX
Fiber - 888	XXX
Fiber - 144	XXX
Fiber - 96	XXX
Fiber - 72	XXX
Fiber - 56	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - D-05	XXX
Total Fiber	XXX

Scale: 1" = 20'



State of ILLINOIS
County of COOK
Municipality of CHICAGO

Date	By	Description	Date	By	Description
REVISED	REVISIONS	REVISED	REVISIONS	REVISED	REVISIONS

4804 NORTH 90th STREET
MINNETONKA, MN 55345
Phone: (952) 458-3100

Labels
CONSTRUCTION

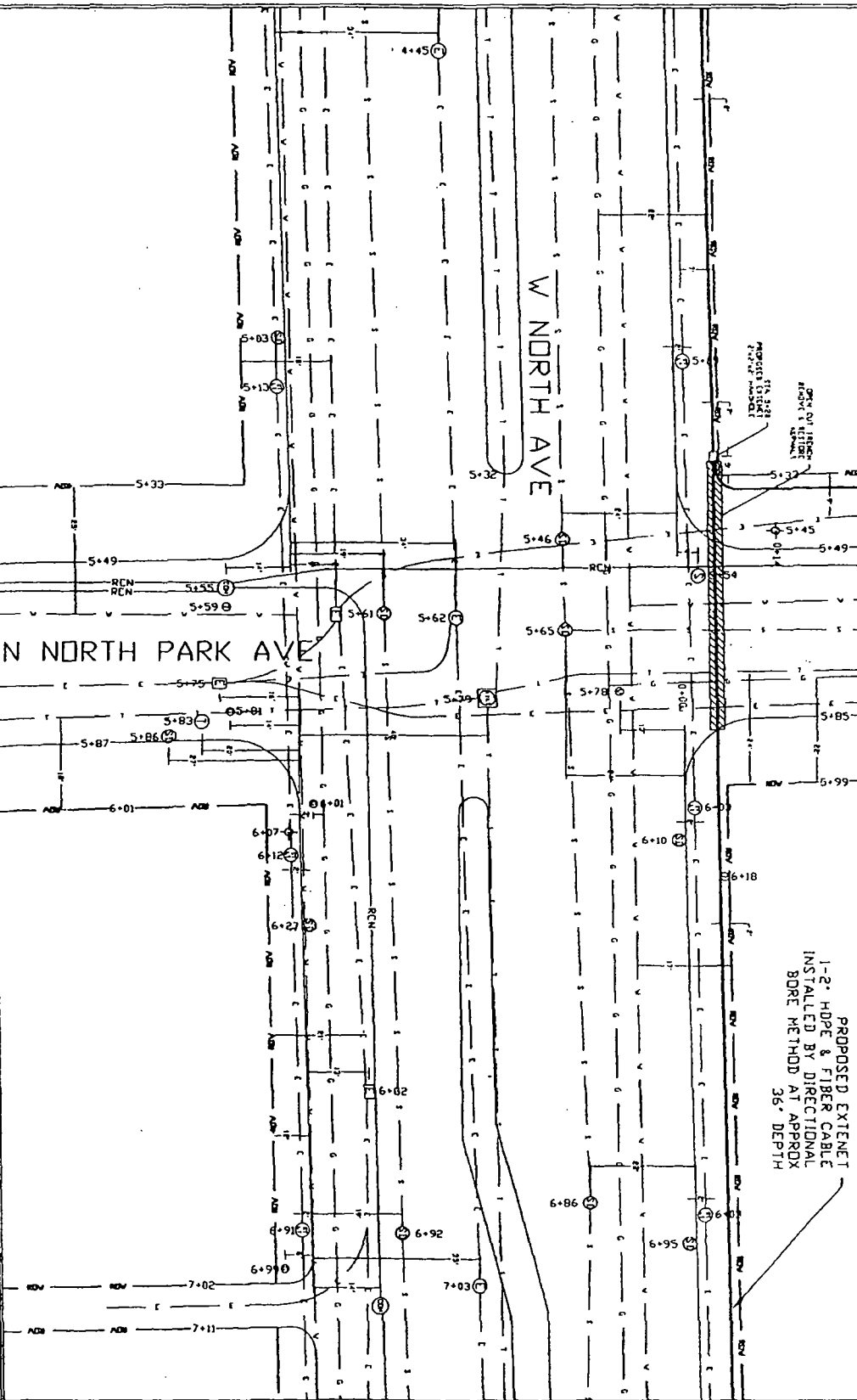
State of ILLINOIS
County COOK

Municipality CHICAGO

DATE	DESCRIPTION	INITIALS	DATE	DESCRIPTION	INITIALS	DATE	DESCRIPTION	INITIALS

Scale: 1" = 20'

Page Number	Page 1	Page 2	Page 3	Page 4	Page 5



PERMIT ONLY

extenei SYSTEMS
3030 Memorial Road
Suite 310, Oak Brook, IL 60452

Project #: ND171-DISTRICT-11

Job Title: ENGINEER
Engineer: [Signature]
Original Issue Date: 11/8/12

Revised Date: [Blank]

Bill of Materials:

Description	Qty.
Fiber - 432	XXX
Fiber - 288	XXX
Fiber - 96	XXX
Fiber - 72	XXX
Fiber - 48	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - Drop	XXX
Total Fiber	XXX

Route - April
Route - Upgrade
Route - Base Station
Total Route Footage: XXX

Poles - Power: XXX
Poles - Telco: XXX
Poles - Other: XXX

Notes:
1. 432 Strand
2. 2715 Strand
3. ANCHORS
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Chobex
4800 North 40th Street
Skokie, IL 60077
Phone: (847) 486-2500

DESCRIPTION	Qty.
Fiber - 432	XXX
Fiber - 888	XXX
Fiber - 56	XXX
Fiber - 72	XXX
Fiber - 18	XXX
Fiber - 36	XXX
Fiber - 24	XXX
Fiber - Drop	XXX
Total Fiber	XXX

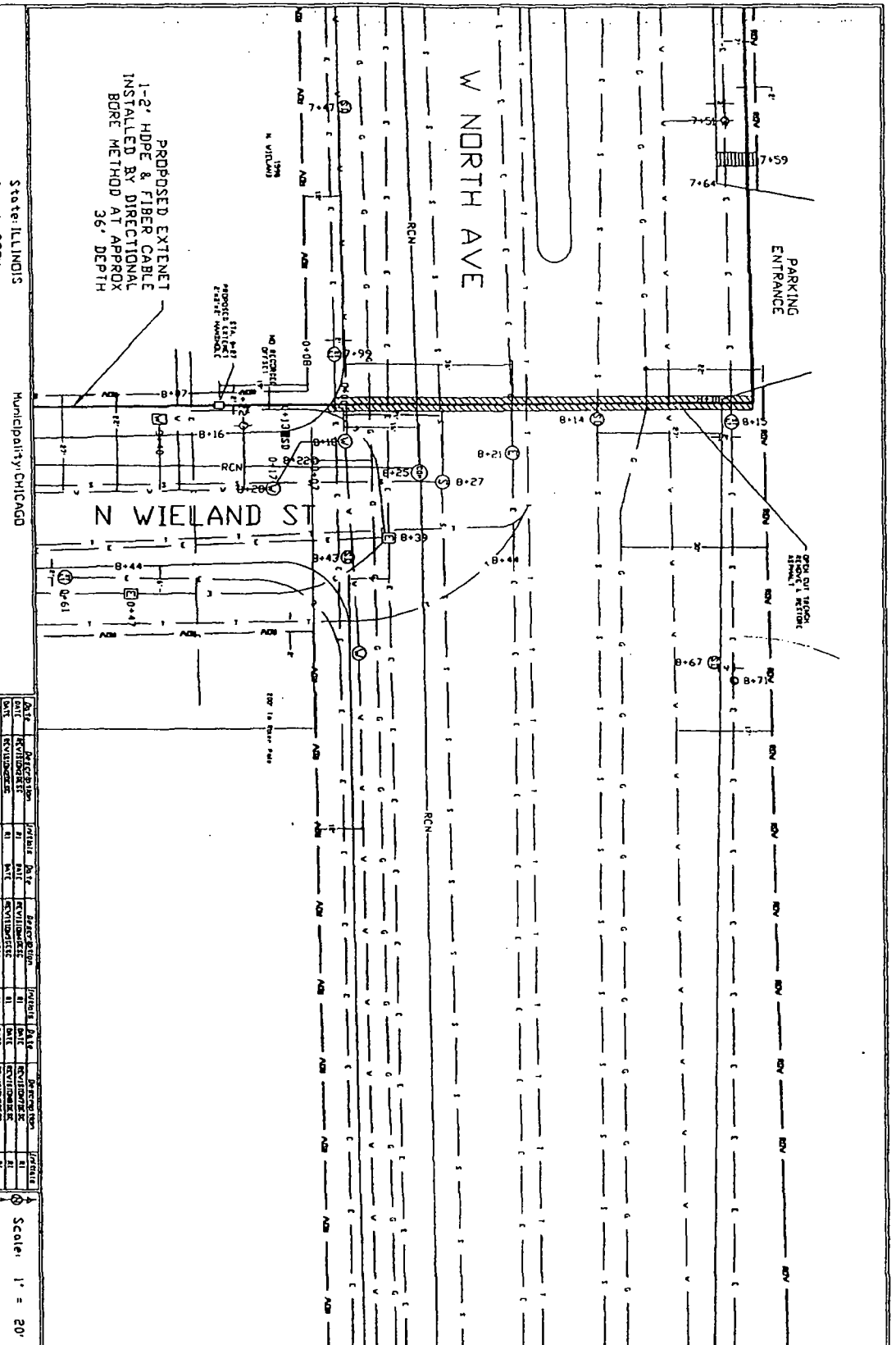
Route - Aerial	XXX
Route - UC-Cable	XXX
Route - UC-Cable	XXX
Route - Base Station	XXX
Total Route Footage	XXX

Poles - Power	XXX
Poles - Telco	XXX
Poles - Other	XXX
Total Poles	XXX

Huges	XXX
3/16" Strand	XXX
Anchor's	XXX
Splices	XXX
Match Loops	XXX
Manholes	XXX

CD	Asst. Con.
CB	Asst. Con.
CA	Asst. Con.
CC	Asst. Con.
CD	Asst. Con.
CE	Asst. Con.
CF	Asst. Con.
CG	Asst. Con.
CH	Asst. Con.
CI	Asst. Con.
CJ	Asst. Con.
CK	Asst. Con.
CL	Asst. Con.
CM	Asst. Con.
CN	Asst. Con.
CO	Asst. Con.
CP	Asst. Con.
CQ	Asst. Con.
CR	Asst. Con.
CS	Asst. Con.
CT	Asst. Con.
CU	Asst. Con.
CV	Asst. Con.
CW	Asst. Con.
CX	Asst. Con.
CY	Asst. Con.
CZ	Asst. Con.
CA	Asst. Con.
CB	Asst. Con.
CC	Asst. Con.
CD	Asst. Con.
CE	Asst. Con.
CF	Asst. Con.
CG	Asst. Con.
CH	Asst. Con.
CI	Asst. Con.
CJ	Asst. Con.
CK	Asst. Con.
CL	Asst. Con.
CM	Asst. Con.
CN	Asst. Con.
CO	Asst. Con.
CP	Asst. Con.
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CT	Asst. Con.
CU	Asst. Con.
CV	Asst. Con.
CW	Asst. Con.
CX	Asst. Con.
CY	Asst. Con.
CZ	Asst. Con.
CA	Asst. Con.
CB	Asst. Con.
CC	Asst. Con.
CD	Asst. Con.
CE	Asst. Con.
CF	Asst. Con.
CG	Asst. Con.
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CI	Asst. Con.
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CM	Asst. Con.
CN	Asst. Con.
CO	Asst. Con.
CP	Asst. Con.
CQ	Asst. Con.
CR	Asst. Con.
CS	Asst. Con.
CT	Asst. Con.
CU	Asst. Con.
CV	Asst. Con.
CW	Asst. Con.
CX	Asst. Con.
CY	Asst. Con.
CZ	Asst. Con.

Cable
 COMMUNICATIONS
 4804 North 40th Street
 Shoreview, WI 55083
 Phone: (763) 538-3000



State: ILLINOIS
 County: COOK
 Municipality: CHICAGO

NO.	DATE	DESCRIPTION	INITIALS	DATE	DESCRIPTION	INITIALS	DATE	DESCRIPTION	INITIALS
1		REVISED			REVISED			REVISED	
2		REVISED			REVISED			REVISED	
3		REVISED			REVISED			REVISED	
4		REVISED			REVISED			REVISED	
5		REVISED			REVISED			REVISED	

Scale: 1" = 20'

PERMIT ONLY

extenal
INCORPORATED
 SYSTEMS
 3020 Waverly Road
 Suite 310, Oak Brook, IL 60521

Job Title: NDRTH-DISTRICT

Engineer: GABES

Original Issue Date: 11/8/12

Published Date:

Bill of Materials

Description	Qty.
Fiber - 432	XXX
Fiber - 288	XXX
Fiber - 144	XXX
Fiber - 72	XXX
Fiber - 48	XXX
Fiber - 24	XXX
Fiber - 12	XXX
Fiber - 6	XXX
Fiber - 3	XXX
Total Fiber	XXX

Route - Annual

Route - Un-labeled	XXX
Route - Un-labeled	XXX
Route - Un-labeled	XXX
Total Route Footage	XXX

Route - Power

Power - Power	XXX
Power - Telco	XXX
Power - Other	XXX
Total Poles	XXX

Hardware

5/16" Strand	XXX
Anchor's	XXX
Shims	XXX
Stick Loose	XXX
Hardware	XXX

Labels

• 20ft Roll	XXX
• 10ft Roll	XXX
• 5ft Roll	XXX
• 2.5ft Roll	XXX
• 1.25ft Roll	XXX
• 0.625ft Roll	XXX
• 0.3125ft Roll	XXX
• 0.15625ft Roll	XXX
• 0.078125ft Roll	XXX

Labels
 CONTRACTOR'S LABELS
 1214 North 40th Street
 Sheboygan, WI 53081
 Phone: (920) 438-2000

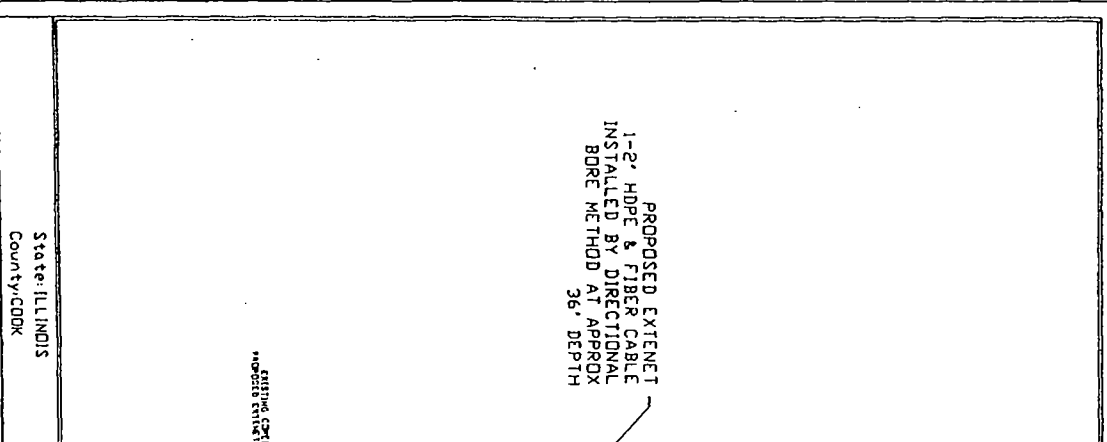
Field	Value
Field 1	
Field 2	
Field 3	
Field 4	

ADD NUMBERS

Scale: 1" = 20'

DATE	DESCRIPTION	BY	DATE	DESCRIPTION	BY	DATE	DESCRIPTION	BY
	INSTALL			INSTALL			INSTALL	
	REVISION			REVISION			REVISION	
	REVISION			REVISION			REVISION	
	REVISION			REVISION			REVISION	

Municipality: CHICAGO
 State: ILLINOIS
 County: COOK



PERMIT ONLY



3030 Westerville Road
Suite 300, Columbus, OH 43032

Project #: NORTH-DISTRICT-11

Engineer: GABERS

Original Issue Date 11/8/12

Authorised Date:

Bill of Materials:

Description	Qty.
Fiber - 432	XXX
Fiber - 438	XXX
Fiber - 444	XXX
Fiber - 46	XXX
Fiber - 72	XXX
Fiber - 40	XXX
Fiber - 26	XXX
Fiber - 12	XXX
Fiber - Drop	XXX
Total Fiber	XXX

Route - Aerial	XXX
Route - Underground	XXX
Route - Base Station	XXX
Total Route Footage	XXX

Poles - Power	XIX
Poles - Talco	XXV
Poles - Other	XXX
Total Poles	XXX

Hand - 2 1/2" Strand	XIX
Hand - 3" Strand	XIX
Sockets	XIX
Stick Loads	XIX
Hardware	XIX

• 20' Rod	• 20' Rod
• 24' Rod	• 24' Rod
• 30' Rod	• 30' Rod
• 36' Rod	• 36' Rod
• 42' Rod	• 42' Rod
• 48' Rod	• 48' Rod
• 54' Rod	• 54' Rod
• 60' Rod	• 60' Rod
• 66' Rod	• 66' Rod
• 72' Rod	• 72' Rod
• 78' Rod	• 78' Rod
• 84' Rod	• 84' Rod
• 90' Rod	• 90' Rod
• 96' Rod	• 96' Rod
• 102' Rod	• 102' Rod
• 108' Rod	• 108' Rod
• 114' Rod	• 114' Rod
• 120' Rod	• 120' Rod

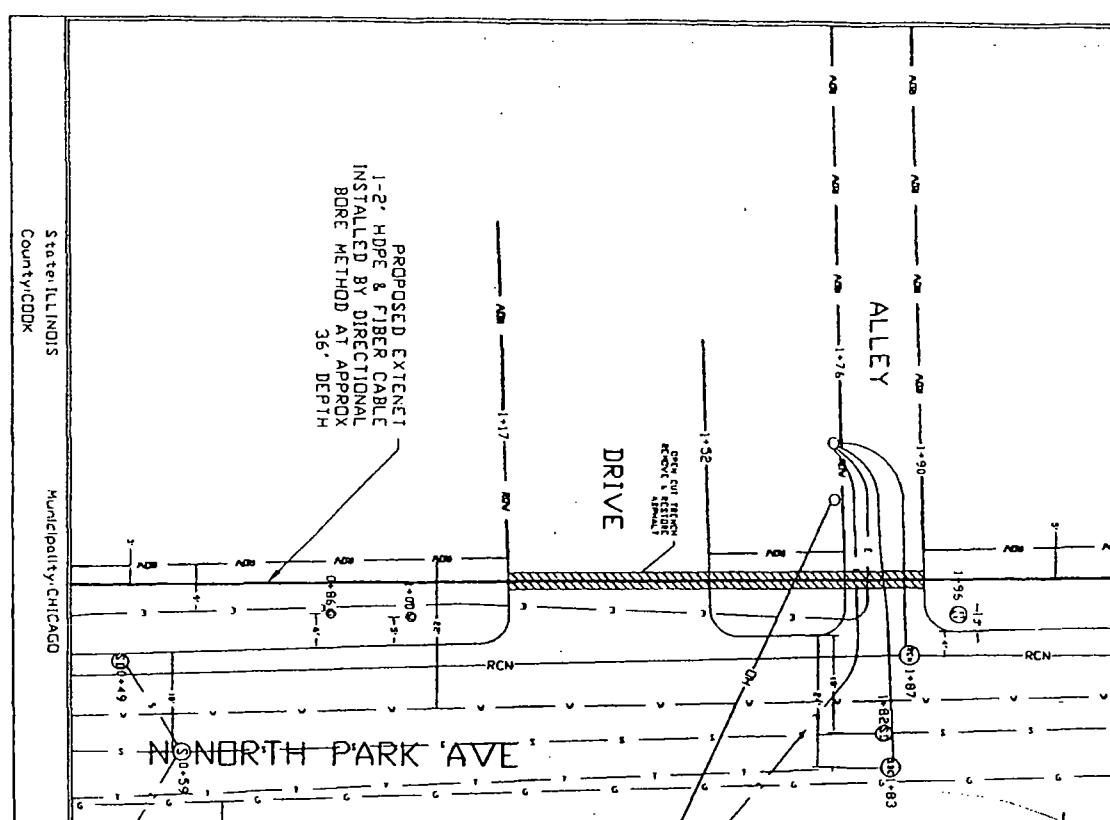


1601 South 10th Street
Shelton, WI 53083
Phone: (414) 531-2800

PAGE 3	PAGE 4	PAGE 5

Date	Description	Initial	Date	Description	Initial	Date	Description	Initial

State: ILLINOIS
County: COOK
Municipality: CHICAGO



PROPOSED EXTENSION
1-2' HDPE & FIBER CABLE
INSTALLED BY DIRECTIONAL
BORE METHOD AT APPROX
36' DEPTH

ALLEY

DRIVE

POLE 143

NORTH PARK AVE

Scale: 1" = 20'

PERMIT ONLY

extenet
 SYSTEMS
 3030 Weymouth Road
 Suite 310, Urb. & 80332

Project #1
 Job Title: NORTH-DISTRICT-11
 City/Area: GARCIS
 Original Issue Date: 11/8/12

Published Sheet
 Bill of Materials:

Description	Qty.
Fiber - 432	111
Fiber - 288	111
Fiber - 144	111
Fiber - 96	111
Fiber - 72	111
Fiber - 36	111
Fiber - 24	111
Fiber - 12	111
Total Fiber	111

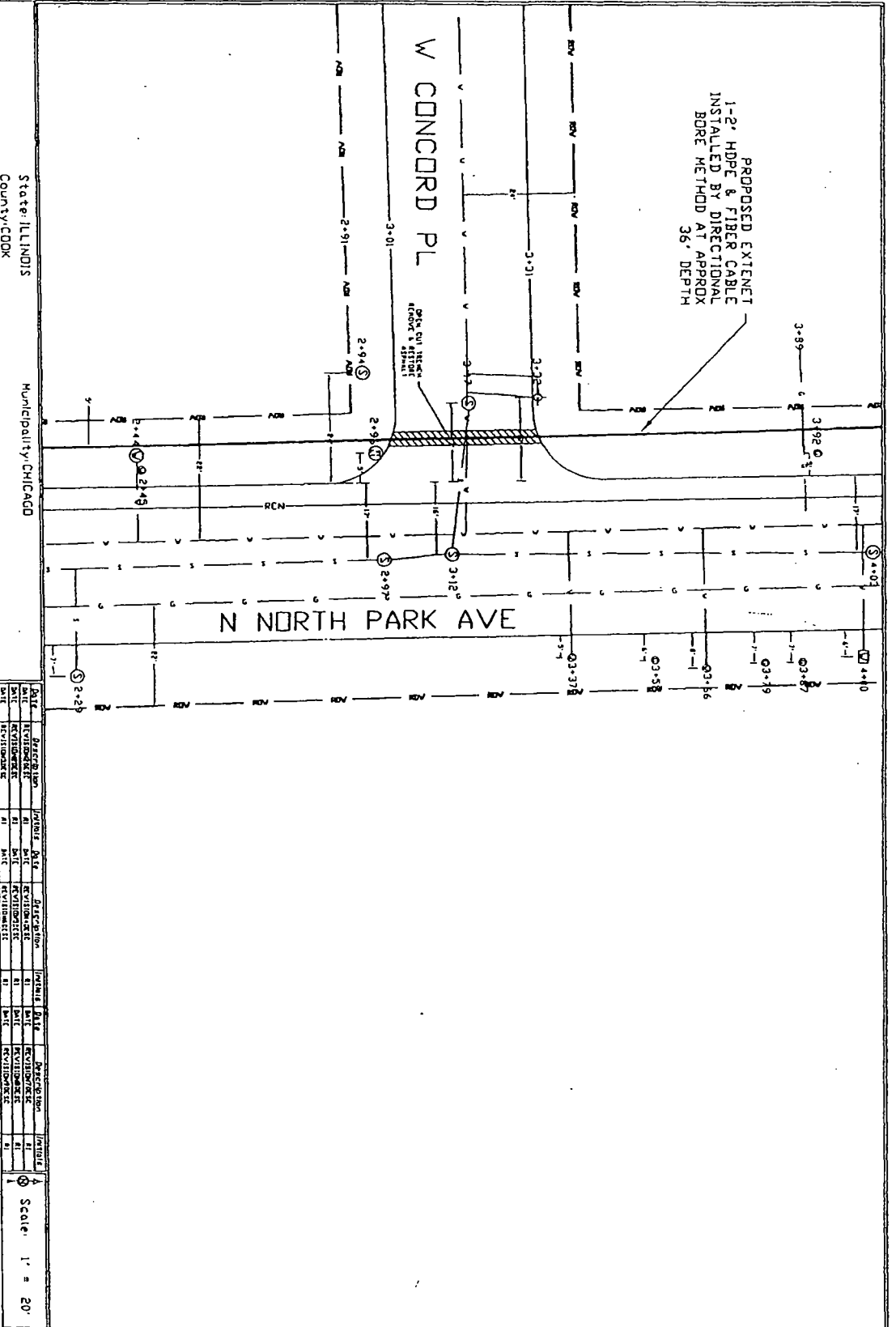
Route - Aerial
 Route - Un-leased
 Route - Un-New Conduit
 Route - Buss Station
 Total Route Footage

Poles - Pole
 Poles - Pole
 Poles - Pole
 Poles - Other
 Total Poles

Modes - 3/16 Stranded
 Modes - 1/8 Stranded
 Modes - 1/4 Stranded
 Modes - 1/2 Stranded
 Modes - 3/8 Stranded
 Modes - 1/2 Solid
 Modes - 3/8 Solid
 Modes - 1/4 Solid
 Modes - 1/8 Solid
 Modes - 1/4 Solid
 Modes - 3/8 Solid
 Modes - 1/2 Solid
 Modes - 3/4 Solid
 Modes - 1 Solid
 Modes - 1/2 Solid
 Modes - 3/4 Solid
 Modes - 1 Solid

Labels
 404 North 40th Street
 Suite 310, Urb. & 80332
 Phone: (820) 448-2600

Page	Page	Page	Page
Page 1	Page 2	Page 3	Page 4



Date	Description	Initials	Date	Description	Initials
11/8/12	REVISED	SI	11/8/12	REVISED	SI
11/8/12	REVISED	SI	11/8/12	REVISED	SI
11/8/12	REVISED	SI	11/8/12	REVISED	SI

State: ILLINOIS
 County: COOK

Municipality: CHICAGO

Scale: 1" = 20'

PERMIT ONLY

exteneer™
FOR VIDEO
SYSTEMS

3030 Municipal Road
Suite 240, Ulen, IL 60532

Project #:

Job Title: NORTH-DISTRICT-1

Engineer: GABC'S

Original Issue Date: 11/8/12

Published Date:

Bill of Materials:

Description	Qty.
Fiber - 432	533
Fiber - 288	533
Fiber - 144	533
Fiber - 96	533
Fiber - 72	533
Fiber - 36	533
Fiber - 24	533
Fiber - 12	533
Fiber - Drop	533
Total Fiber	533

Route - April

Route - UC-Labelled

Route - UC-New Conduit

Route - Base Station

Total Route Footage

Poles - Pole

Poles - Street

Poles - Other

Total Poles

Model	Qty.
3710 Strand	533
3710 Strand	533
Sockets	533
Stock Looops	533
Headmolds	533
Headmolds	533



3030 Municipal Road
Suite 240, Ulen, IL 60532
Phone: (815) 488-2800

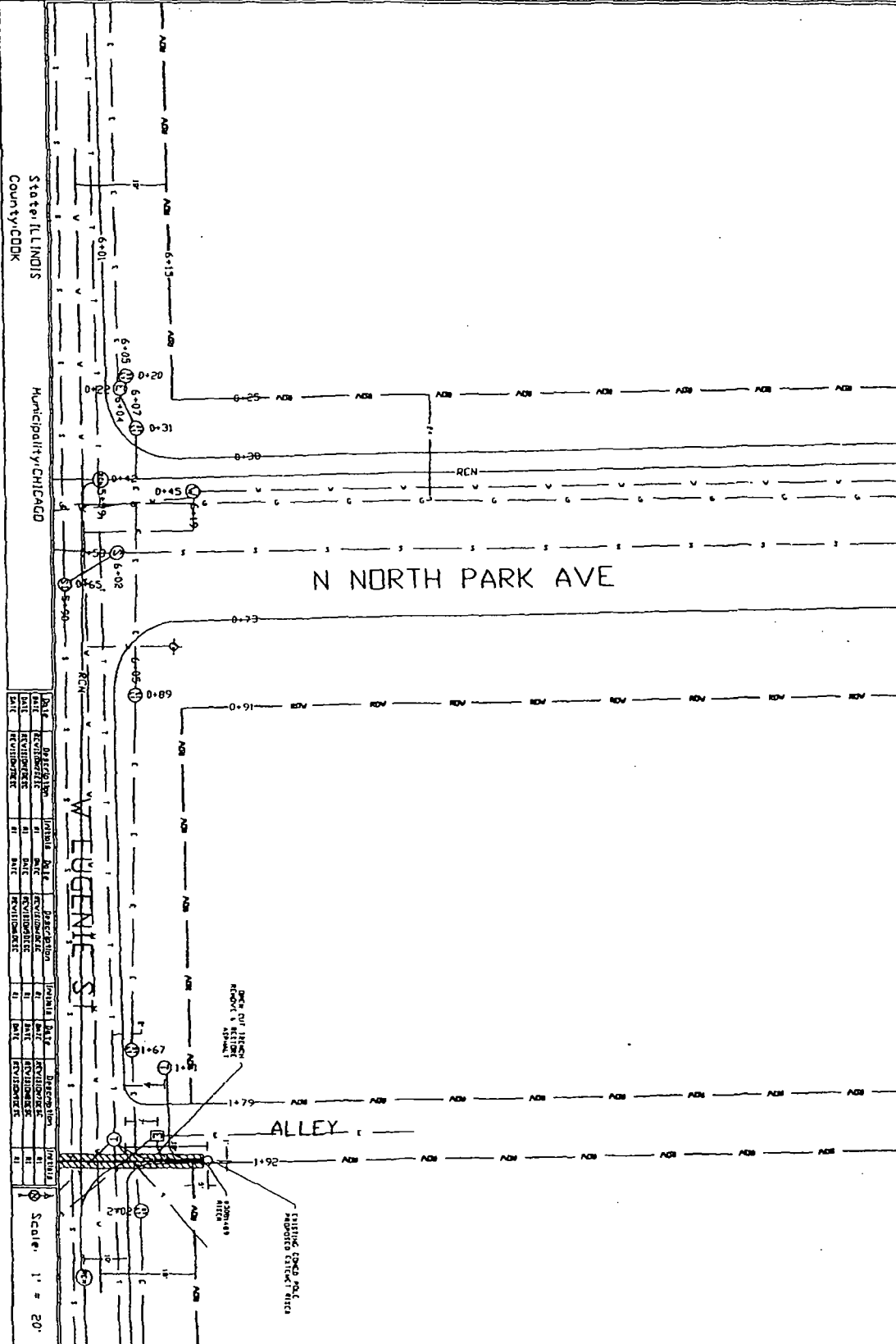
DATE	REVISION	BY	DATE	REVISION	BY

Scale: 1" = 20'

N NORTH PARK AVE

W EUGENE ST

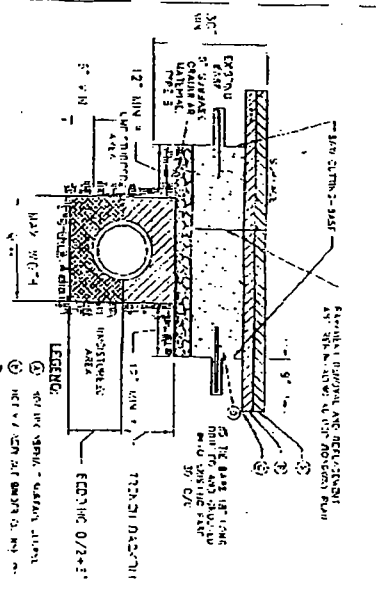
ALLEY



State of ILLINOIS
County: COOK

Municipality: CHICAGO

**STREET PAVEMENT RESTORATION
DETAIL - W/IN-TRENCH BACKCELL**



NOTES

1. THE PORT AND REINFORCED CONCRETE SHALL BE 2' DIA. WITH 1" DIA. CONCRETE GRANULES 1/4\"/>
- 2. PAVEMENT SHALL BE AS PER CITY OF CHICAGO SPECIFICATIONS FOR CONCRETE PAVEMENT WITH FIBER REINFORCEMENT.
- 3. THE TRENCH SHALL BE 12\"/>



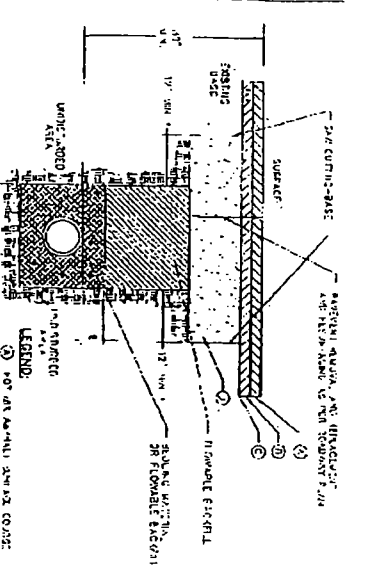
DATE: _____ REVISION: _____
 CITY OF CHICAGO
 STREET PAVEMENT RESTORATION
 W/IN-TRENCH BACKCELL

State: ILLINOIS
 County: COOK

Municipality: CHICAGO

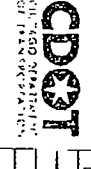
DATE	DESCRIPTION	INITIALS	DATE	DESCRIPTION	INITIALS

**STREET PAVEMENT RESTORATION
DETAIL - W/IN-TRENCH BACKCELL**



NOTES

1. THE PORT AND REINFORCED CONCRETE SHALL BE 2' DIA. WITH 1" DIA. CONCRETE GRANULES 1/4\"/>
- 2. PAVEMENT SHALL BE AS PER CITY OF CHICAGO SPECIFICATIONS FOR CONCRETE PAVEMENT WITH FIBER REINFORCEMENT.
- 3. THE TRENCH SHALL BE 12\"/>



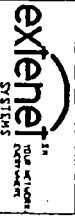
DATE: _____ REVISION: _____
 CITY OF CHICAGO
 STREET PAVEMENT RESTORATION
 W/IN-TRENCH BACKCELL

DATE	DESCRIPTION	INITIALS	DATE	DESCRIPTION	INITIALS

Scale: 1" = 20"

Job Number: _____

PERMIT ONLY



Job Title: NORTH-DISTRICT-1

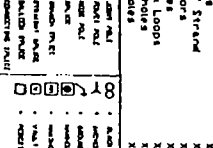
Project #: GABCS

Original Issue Date: 11/8/12

Published Date:

DESCRIPTION	QTY
Fiber - 432	xxx
Fiber - 488	xxx
Fiber - 52	xxx
Fiber - 92	xxx
Fiber - 12	xxx
Fiber - 48	xxx
Fiber - 36	xxx
Fiber - 12	xxx
Fiber - Drop	xxx
Total Fiber	xxx

DESCRIPTION	QTY
Route - APRN	xxx
Route - BASE	xxx
Route - UDS-NE CONDUIT	xxx
Route - Base Station	xxx
Total Route Footage	xxx
Poles - Power	xxx
Poles - Video	xxx
Poles - Other	xxx
Total Poles	xxx
Nodes - Standard	xxx
Nodes - S/C	xxx
Nodes - 4000	xxx
Nodes - 6000	xxx
Nodes - 8000	xxx
Nodes - 10000	xxx
Nodes - 12000	xxx
Nodes - 14000	xxx
Nodes - 16000	xxx
Nodes - 18000	xxx
Nodes - 20000	xxx
Nodes - 22000	xxx
Nodes - 24000	xxx
Nodes - 26000	xxx
Nodes - 28000	xxx
Nodes - 30000	xxx
Nodes - 32000	xxx
Nodes - 34000	xxx
Nodes - 36000	xxx
Nodes - 38000	xxx
Nodes - 40000	xxx
Nodes - 42000	xxx
Nodes - 44000	xxx
Nodes - 46000	xxx
Nodes - 48000	xxx
Nodes - 50000	xxx
Nodes - 52000	xxx
Nodes - 54000	xxx
Nodes - 56000	xxx
Nodes - 58000	xxx
Nodes - 60000	xxx



DESCRIPTION	INITIALS	DATE	DESCRIPTION	INITIALS	DATE

PERMIT ONLY

extenel
FOR HIGHWAY
SYSTEMS
CONSTRUCTION

300 W. North Ave.
Suite 310, Urb. & Essex

Project by: NORTH-DISTRICT-1
Job Title: GAB-3
Engineer: GAB-3
Original Issue Date: 11/8/12

Published Date:
Date of Revision: Q14

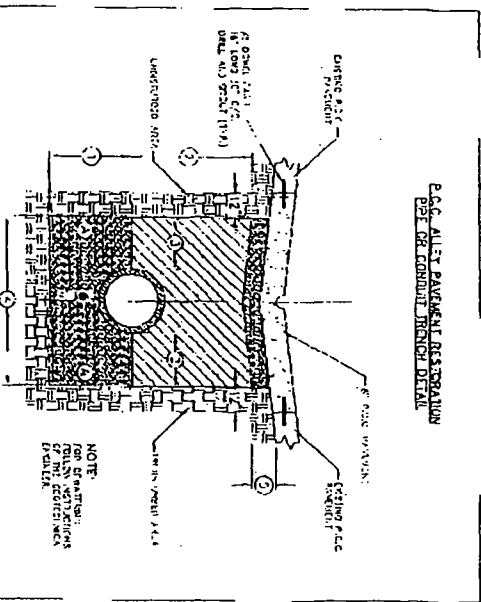
Description:
Fiber - 432 XXX
Fiber - 888 XXX
Fiber - 144 XXX
Fiber - 96 XXX
Fiber - 72 XXX
Fiber - 36 XXX
Fiber - 24 XXX
Fiber - 12 XXX
Total Fiber: 228 XXX

Route - April XXX
Route - UG-Installed XXX
Route - UG-New Consult XXX
Route - Base Station XXX
Total Route /cables XXX

Poles - Power XXX
Poles - Other XXX
Poles - Other XXX
Total Poles XXX

Manholes:
5/16" Street XXX
Street XXX
Street Loops XXX
Manholes XXX

Manholes:
X - 48" dia. XXX
X - 60" dia. XXX
X - 72" dia. XXX
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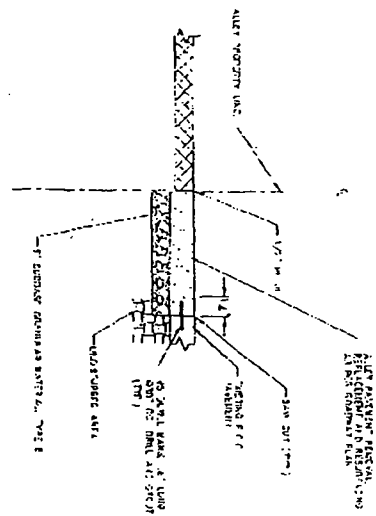
- 1 REDDING
CA. 1" ON/10\"/>
- 2 BACKFILL
APPROX. 7\"/>
- 3 CLEARANCE
APPROX. 1\"/>
- 4 TRENCH WIDTH
APPROX. 1\"/>
- 5 SUB-BASE
APPROX. 1\"/>

CDOT CHICAGO DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO
RESIDENTIAL CONDUIT

DATE: _____ REVISION: _____

DATE: _____ SHEET: _____



CDOT CHICAGO DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO
ALLEY PAVEMENT RESTORATION

DATE: _____ REVISION: _____

DATE: _____ SHEET: _____

DATE	DESCRIPTION	INITIALS	DATE	DESCRIPTION	INITIALS

State: ILLINOIS
County: COOK

Municipality: CHICAGO

Scale: 1" = 20'



480 North 69th Street
Shoemart, WI 53081
Phone: (414) 353-2800

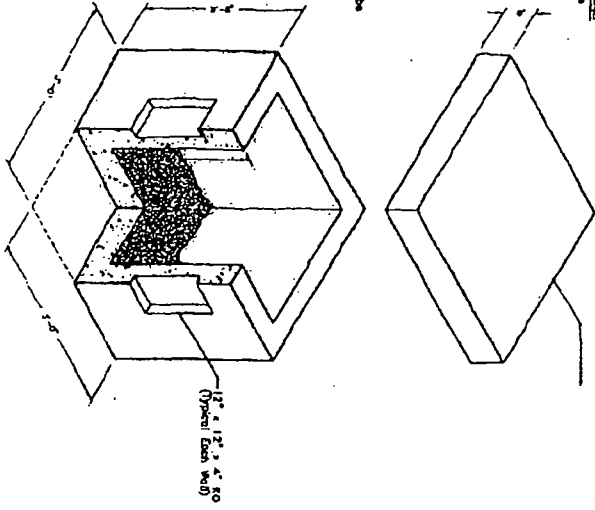


2'-0" x 3'-0" x 3'-0" I.D. Handhole Box

Model 222 H1

222H1 TOP SLAB
MADE IN USA

222H1 BASE
MADE IN USA



- SPECIAL NOTES
1. Confirm the site preparation is correct for a slab joint.
2. Reinforcing steel for all joints and anchors shall be installed before the concrete is poured.
3. All concrete shall be placed in one continuous lift.
4. Slabs shall be finished to a smooth texture.
5. Slabs shall be cured for a minimum of 7 days before any traffic is allowed.
6. Slabs shall be protected from damage during construction.

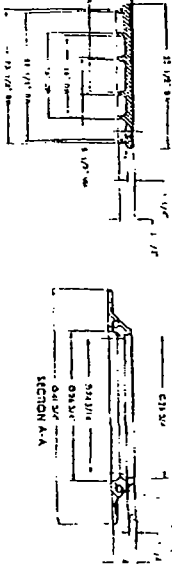
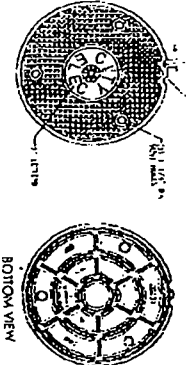
City of Chicago Public Works Department
311 North Dearborn Street, 3rd Floor
Chicago, IL 60641
Phone: (773) 554-1344

City of Chicago Public Works Department
311 North Dearborn Street, 3rd Floor
Chicago, IL 60641
Phone: (773) 554-1344

State: ILLINOIS
County: COOK

Municipality: CHICAGO

1530C COVER



Manufacturer Information
EJW FASTORNS
15151 West 11th Avenue
Suite 100
Wardensburg, IA 52455
Phone: (319) 338-3333
Fax: (319) 338-3333
www.ejwfastorns.com

NO. OF UNITS: 00153023
MATERIALS LIST
CONCRETE
1530C COVER

Table with columns: DATE, PROJECT, DRAWING NO., REVISIONS, etc.

Scale: 1" = 20'

PERMIT ONLY

exteneer SYSTEMS INC.
3020 Wrentham Road
Suite 340, Urbandale, IA 50333

Project # 108745-DISTRICT 14
Engineer GABE S.

Original Issue Date: 11/8/12
Published Date:

Description: QTY

Bill of Materials:

Notes - Detail

Notes - General

Notes - Fabrication

Notes - Installation

Notes - Material

Notes - Fabrication

Notes - Installation

Notes - Material

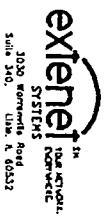


7401 North 40th Street
Shenandoah, WI 53089
Phone: (430) 438-2600

Map Number

PROPOSED EXTENET SYSTEMS

UNDERGROUND FIBER OPTIC FACILITY



OUC IR FILE # 55983
OUC EFP FILE # 58017



ALLEY N. OF W. WILSON AVE, W. OF
N. CLARENDON AVE. * W. WILSON
AVE. BETWEEN N. HAZEL AVE. &
ALLEY N. OF W. WILSON & W. OF N.
CLARENDON * N. HAZEL AVE. FROM
W. WILSON AVE. TO EASEMENT 190' S.
OF SPL OF W. WILSON * E. IN
EASEMENT FROM N. HAZEL AVE. TO
RISER POLE 113' E. OF EPL OF N.
HAZEL AVE.
CHICAGO, IL

DIGGER HOTLINE
<CHICAGO UTILITY ALERT NETWORK>
1-312-744-7000

CONTACT INFORMATION:

EXTENET SYSTEMS:

DAVE FASSHAUER (708) 975-5786

GABE'S CONSTRUCTION:

ENGINEERING - JEFF RINARTZ (920) 889-4510
CONSTRUCTION - BRIAN VANSCHYNDEL (920) 889-9809

PROJECT NO:

EXTIL12012

PROJECT LOCATION:

ALLEY N. OF W. WILSON AVE. & W. OF
N. CLARENDON AVE.
W. WILSON FROM ALLEY WEST OF N. CLARENDON AVE.
TO N. HAZEL AVE.
N. HAZEL AVE. FROM W. WILSON TO EASEMENT EAST OF
N. HAZEL AVE., 190' SOUTH OF SPL OF W. WILSON
EASEMENT FROM N. HAZEL AVE. TO RISER POLE
E. OF EPL OF N. HAZEL AVE.

ADDITIONAL LOCATION DESCRIPTION:

INSTALL BY OPEN CUT TRENCHING & BORING APPROX. 696'
LF OF 2" HDPE CONDUIT E/W FIBER OPTIC CABLE
WITHIN THE R/W & ALLEYS OF W. WILSON AVE. &
N. HAZEL AVE.

PROJECT COORDINATOR:

JEFF RINARTZ (920) 889-4510

PERMIT ONLY

extenet
 COMMUNICATION SYSTEMS
 3400 Northwestern Road
 Suite 110, Van, IL 60533

Project #:
 Engineer: GALEY

Original Issue Date: 07/09/13

Published Date:

Bill of Materials:

Description: Qty.

Fiber - 625 11X

Fiber - 888 11X

Fiber - 144 11X

Fiber - 25 11X

Fiber - 48 11X

Fiber - 24 11X

Fiber - 12 11X

Total Fiber 11X

Route - Aerial 11X

Route - UG-Leased 11X

Route - UG-New Conduit 11X

Route - Base Station 11X

Total Route (Footage) 11X

Poles - Power 11X

Poles - Tele 11X

Poles - Other 11X

Total Poles 11X

Nodes 11X

Nodes - Strand 11X

Nodes - Splices 11X

Nodes - Stack, Ledges 11X

Nodes - Handholes 11X

Nodes - Manholes 11X

Nodes - J-Box 11X

Nodes - Rod, Rail 11X

Nodes - Old, Rail 11X

Nodes - Old, Rail 11X

Nodes - Old, Rail 11X

Nodes - Old, Rail 11X

Nodes - Old, Rail 11X

Nodes - Old, Rail 11X

Nodes - Old, Rail 11X

Nodes - Old, Rail 11X

Nodes - Old, Rail 11X

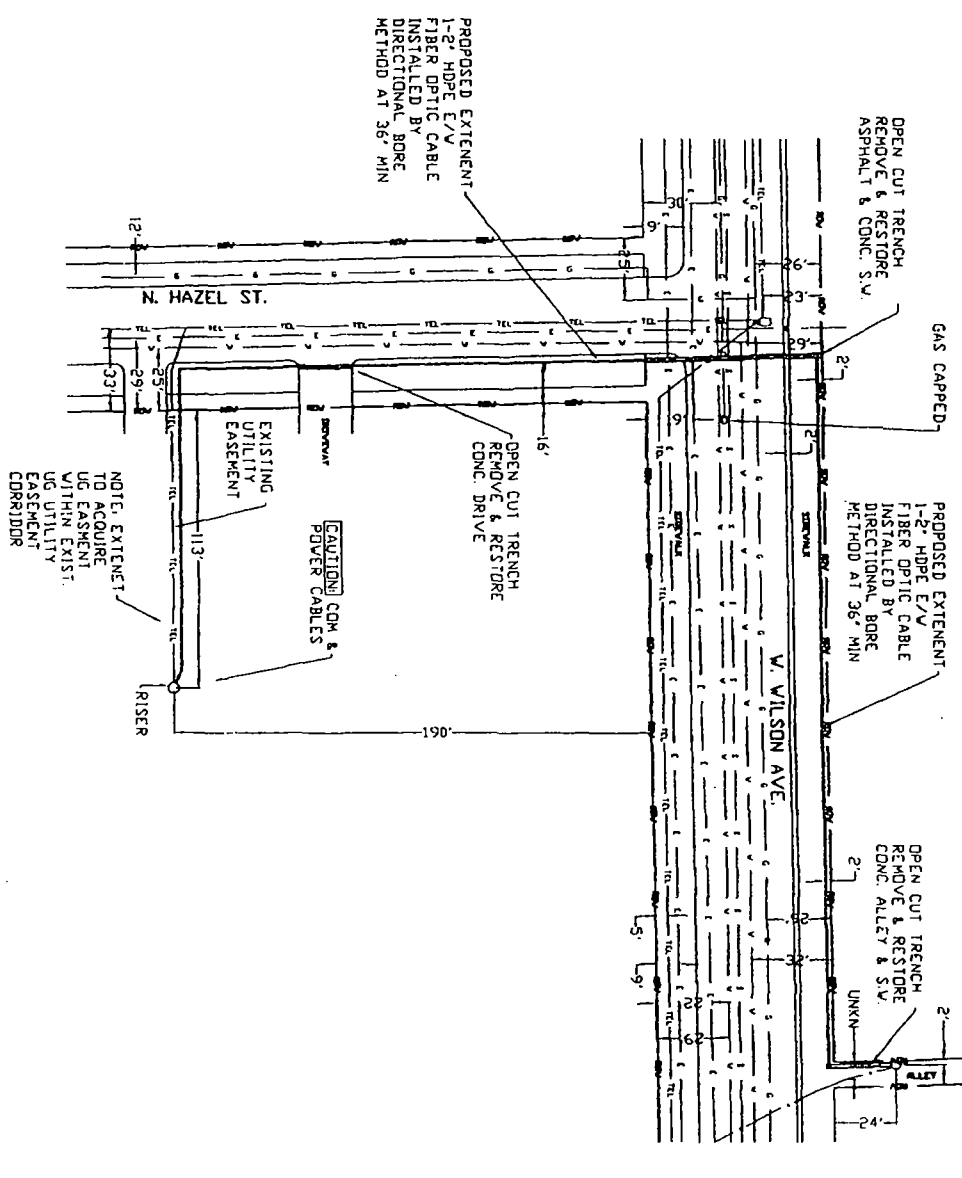


1410 North 45th Street
 Skokie, IL 60077
 Phone: (820) 358-2800

Sheet 1

NO.	DESCRIPTION	DATE	BY	CHKD.
1	ISSUED FOR PERMIT	07/09/13	GALEY	GALEY
2	REVISED			
3	REVISED			
4	REVISED			
5	REVISED			
6	REVISED			
7	REVISED			
8	REVISED			
9	REVISED			
10	REVISED			

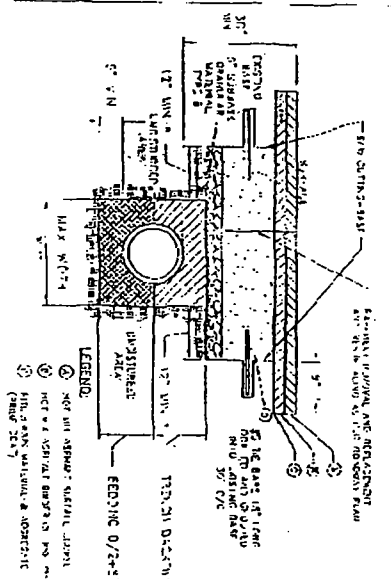
Scale: 1" = 20'



State: ILLINOIS
 County: COOK

Municipality: CHICAGO

**STREET PAVEMENT RESTORATION
DETAIL WITH FLEXIBLE BACKED**



NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES AND STRUCTURES UNDERGROUND AND ABOVEGROUND.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ADJACENT PROPERTY AND TRAFFIC.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ADJACENT PROPERTY AND TRAFFIC.

CDOT
CHICAGO DEPARTMENT OF TRANSPORTATION

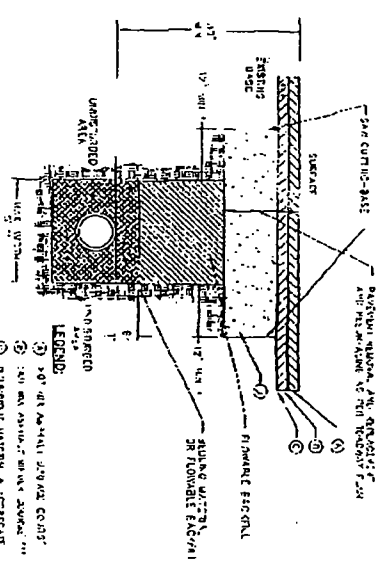
DATE: _____ REVISION: _____

CITY OF CHICAGO
STREET PAVEMENT RESTORATION
DETAIL WITH FLEXIBLE BACKED

DESIGNED BY: _____ SHEET: _____ DRAWN BY: _____

State of ILLINOIS
County: COOK Municipality: CHICAGO

**STREET PAVEMENT RESTORATION
DETAIL WITH FLOWABLE BACKED**



NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES AND STRUCTURES UNDERGROUND AND ABOVEGROUND.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ADJACENT PROPERTY AND TRAFFIC.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ADJACENT PROPERTY AND TRAFFIC.

CDOT
CHICAGO DEPARTMENT OF TRANSPORTATION

DATE: _____ REVISION: _____

CITY OF CHICAGO
STREET PAVEMENT RESTORATION
DETAIL WITH FLOWABLE BACKED

DESIGNED BY: _____ SHEET: _____ DRAWN BY: _____

DATE	DESCRIPTION	INITIALS	DATE	DESCRIPTION	INITIALS	DATE	DESCRIPTION	INITIALS

Scale: 1" = 20'

PERMIT ONLY

extenet
INTEGRATED
SYSTEMS
CONSTRUCTION

3000 Normandie Road
Suite 300, URB. IL 60531
Phone: (773) 432-2800

Job Title: CHICAGO-PARK-11
Engineer: GALEY
Design Issue Date: 12/14/12

Bill of Materials:
Description Qty.
Fiber - 432 212
Fiber - 888 212
Fiber - 144 212
Fiber - 75 212
Fiber - 48 212
Fiber - 26 212
Fiber - 12 212

Route - Aerial 212
Route - UG-Installed 212
Route - UG-New Conduit 212
Route - Base Station 212
Total Route 200000 212

Point - Power 212
Point - Other 212
Total Points 212

Notes:
1. 3/16 Strand 212
2. 3/16 Strand 212
3. 3/16 Strand 212
4. 3/16 Strand 212
5. 3/16 Strand 212
6. 3/16 Strand 212
7. 3/16 Strand 212
8. 3/16 Strand 212
9. 3/16 Strand 212
10. 3/16 Strand 212

Chaber
CONSTRUCTION

184 North 40th Street
Chicago, IL 60641
Phone: (773) 432-2800

Scale: 1" = 20'

Job Title: CHICAGO-PARK-11
Engineer: GALEY
Design Issue Date: 12/14/12

Bill of Materials:
Description Qty.
Fiber - 432 212
Fiber - 888 212
Fiber - 144 212
Fiber - 75 212
Fiber - 48 212
Fiber - 26 212
Fiber - 12 212

Route - Aerial 212
Route - UG-Installed 212
Route - UG-New Conduit 212
Route - Base Station 212
Total Route 200000 212

Point - Power 212
Point - Other 212
Total Points 212

Notes:
1. 3/16 Strand 212
2. 3/16 Strand 212
3. 3/16 Strand 212
4. 3/16 Strand 212
5. 3/16 Strand 212
6. 3/16 Strand 212
7. 3/16 Strand 212
8. 3/16 Strand 212
9. 3/16 Strand 212
10. 3/16 Strand 212

PERMIT ONLY

exteneer
 THE
 FIBER NETWORK
 SYSTEMS
 CORPORATION
 3030 Northwestern Road
 Suite 310, Upt. IL 60633

Project #: **12/14/12**
 Job Title: **LINCOLN-PARK-11**
 Engineer: **GABES**
 Original Issue Date: **12/14/12**

Quantity

Description	Qty.
Fiber - 432	XXX
Fiber - 808	XXX
Fiber - 816	XXX
Fiber - 824	XXX
Fiber - 832	XXX
Fiber - 840	XXX
Fiber - 848	XXX
Fiber - 856	XXX
Fiber - 864	XXX
Fiber - 872	XXX
Fiber - 880	XXX
Fiber - 888	XXX
Fiber - 896	XXX
Fiber - 904	XXX
Fiber - 912	XXX
Fiber - 920	XXX
Fiber - 928	XXX
Fiber - 936	XXX
Fiber - 944	XXX
Fiber - 952	XXX
Fiber - 960	XXX
Fiber - 968	XXX
Fiber - 976	XXX
Fiber - 984	XXX
Fiber - 992	XXX
Fiber - 1000	XXX
Total Fiber	XXX

Bill of Materials

Router - APTM1	XXX
Router - UCR-RESERVED	XXX
Router - UCR-CONDUIT	XXX
Router - UCR-STRIP	XXX
Total Router Footslop	XXX

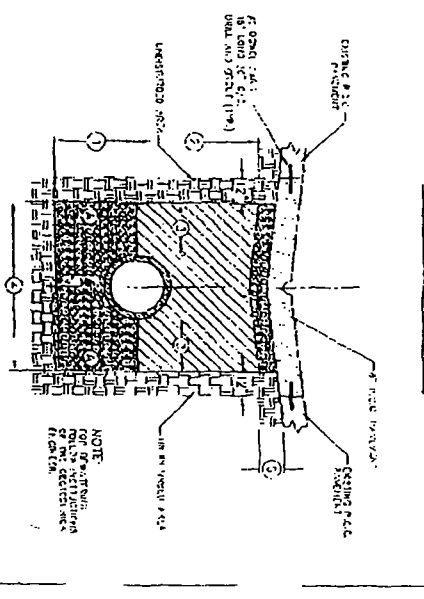
Notes:
 1. All work to be done in accordance with the City of Chicago specifications for fiber optic installations.
 2. All work to be done in accordance with the City of Chicago specifications for trenching and backfilling.
 3. All work to be done in accordance with the City of Chicago specifications for bedding and clearances.
 4. All work to be done in accordance with the City of Chicago specifications for trench width and sub-bases.
 5. All work to be done in accordance with the City of Chicago specifications for conduit and manholes.



City of Chicago
 Department of Public Works
 4401 North Lincoln Street
 Chicago, IL 60641
 Phone: (773) 438-3000

Job Number	Quantity

P.C.C. ALLEY PAVEMENT RECONSTRUCTION

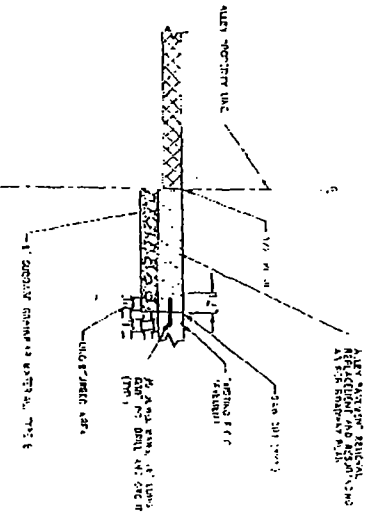


- 1. BEDDING: 2" - 1" GRAVEL BEDDING
- 2. BACKFILL: 4" - 1/2" MESH WIRE MESH BEDDING WITH 1" MIN. CLEARANCE ON ALL SIDES
- 3. CLEARANCE: 4" - 1/2" MESH WIRE MESH BEDDING WITH 1" MIN. CLEARANCE ON ALL SIDES
- 4. TRENCH WIDTH: 18" WIDE TRENCH WITH 1/4" MIN. CLEARANCE ON ALL SIDES
- 5. SUB-BASE: 4" - 1/2" MESH WIRE MESH BEDDING WITH 1" MIN. CLEARANCE ON ALL SIDES

CDOT
 CHICAGO DIVISION OF TRANSPORTATION

CITY OF CHICAGO
 U.S. DEPARTMENT OF TRANSPORTATION
 NATIONAL CENTER FOR CONSTRUCTION INFORMATION

DATE: _____ REVISION: _____
 DATE: _____ REVISION: _____
 DATE: _____ REVISION: _____



CDOT
 CHICAGO DIVISION OF TRANSPORTATION

CITY OF CHICAGO
 U.S. DEPARTMENT OF TRANSPORTATION

DATE: _____ REVISION: _____
 DATE: _____ REVISION: _____
 DATE: _____ REVISION: _____

State: ILLINOIS
 County: COOK

Municipality: CHICAGO

DATE	DESCRIPTION	BY	CHKD BY

Scale: 1" = 20'

PERMIT ONLY

extenet
THE
ROAD NETWORK
SYSTEMS

300 Wacker Drive
Suite 310
Lincoln, IL 60932

Project #
Job Title
Employer
Contract

Published Date: 12/14/12

Bill of Materials: City

Table with columns for Item, Description, and Qty. Items include Fiber - 400, Fiber - 288, Fiber - 144, Fiber - 96, Fiber - 72, Fiber - 48, Fiber - 36, Fiber - 24, Fiber - 12, Total Fiber, Poles - Power, Poles - Telecom, Poles - Other, Total Poles.

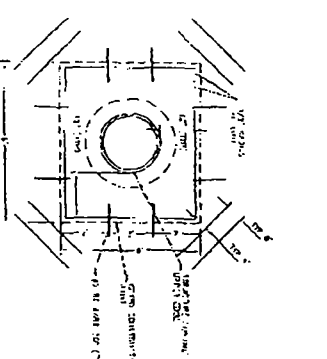
Table with columns for Item, Description, and Qty. Items include Route - Arrivals, Route - UC-Classroom, Route - UC-Nursery, Route - Base Station, Total Route Footage, Poles - Power, Poles - Telecom, Poles - Other, Total Poles.

- 3/16" Strand Anchors
Spiral Ledges
Hardhats
Method:



4000 North 40th Street
Skokie, IL 60076
Phone: (708) 582-8500

DETAIL OF STRUCTURE CALIBRATION BOX FOR
ECCO ZENERIED AND ECCO BASE COURSE



DETAIL OF NOCK-UP PARAPET

GENERAL CONDITIONS

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES AND STRUCTURES... (Detailed list of conditions follows)

Revision table with columns for DATE, REVISION, CITY OF CHICAGO, and SHEET/DESK/DRAWING/DATE.

CDOT logo and contact information for CHICAGO DIVISION

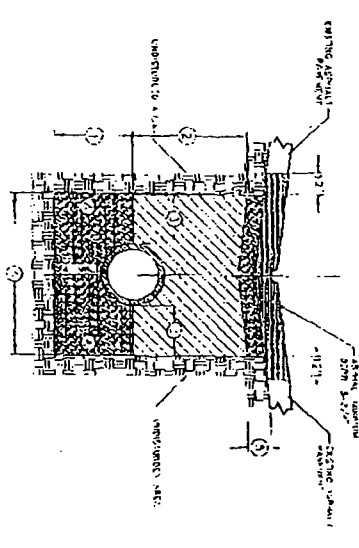


Table with columns 1-4: BEDDING, BACKFILL, CLEARANCE, TRENCH WIDTH, and SUBGRADE.

Table with columns DATE, DIVISION, CITY OF CHICAGO, and SHEET/DESK/DRAWING/DATE.

State of ILLINOIS
County: COOK

Municipality: CHICAGO

Table with columns DATE, TYPE OF EQUIPMENT, and REVISION.

Scale: 1" = 20'

Map Number:

Exhibit B

Aerial Routes

CHICAGO PERMIT

PROPOSED EXTENET SYSTEMS - CORNELIA NETWORK



3030 Northwestern Road
Suite 340, Upt. II, 60632

Project #

Job Title: CORNELIA-1/L

Engineer: GABEC'S

Original Issue Date 11/5/12

Published Date:

Bill of Materials:

Description	QTY.
Fiber - 432	XIX
Fiber - 288	XIX
Fiber - 144	XIX
Fiber - 72	XIX
Fiber - 36	XIX
Fiber - 18	XIX
Fiber - 9	XIX
Fiber - 4.5	XIX
Fiber - 2.25	XIX
Fiber - 1.125	XIX
Fiber - 0.5625	XIX
Total Fiber	XIX

Routes - Aerial XIX

Routes - UG-Tested XIX

Routes - UG-New Conduit XIX

Routes - In-Use Station XIX

Total Route Footage XIX

Poles - Power XIX

Poles - Tower XIX

Poles - Other XIX

Total Poles XIX

Nodes - Strand XIX

Nodes - Patch XIX

Nodes - Stack XIX

Nodes - Stack Loops XIX

Nodes - Handholes XIX

Nodes - Joints XIX

Nodes - Manholes XIX

Nodes - Vaults XIX

Nodes - Other XIX

Nodes - Total XIX

Nodes - Total XIX

Nodes - Total XIX

Nodes - Total XIX

Nodes - Total XIX

Nodes - Total XIX

Nodes - Total XIX

Nodes - Total XIX

Nodes - Total XIX

Nodes - Total XIX

Nodes - Total XIX

Nodes - Total XIX

Nodes - Total XIX

Nodes - Total XIX

Nodes - Total XIX

Nodes - Total XIX

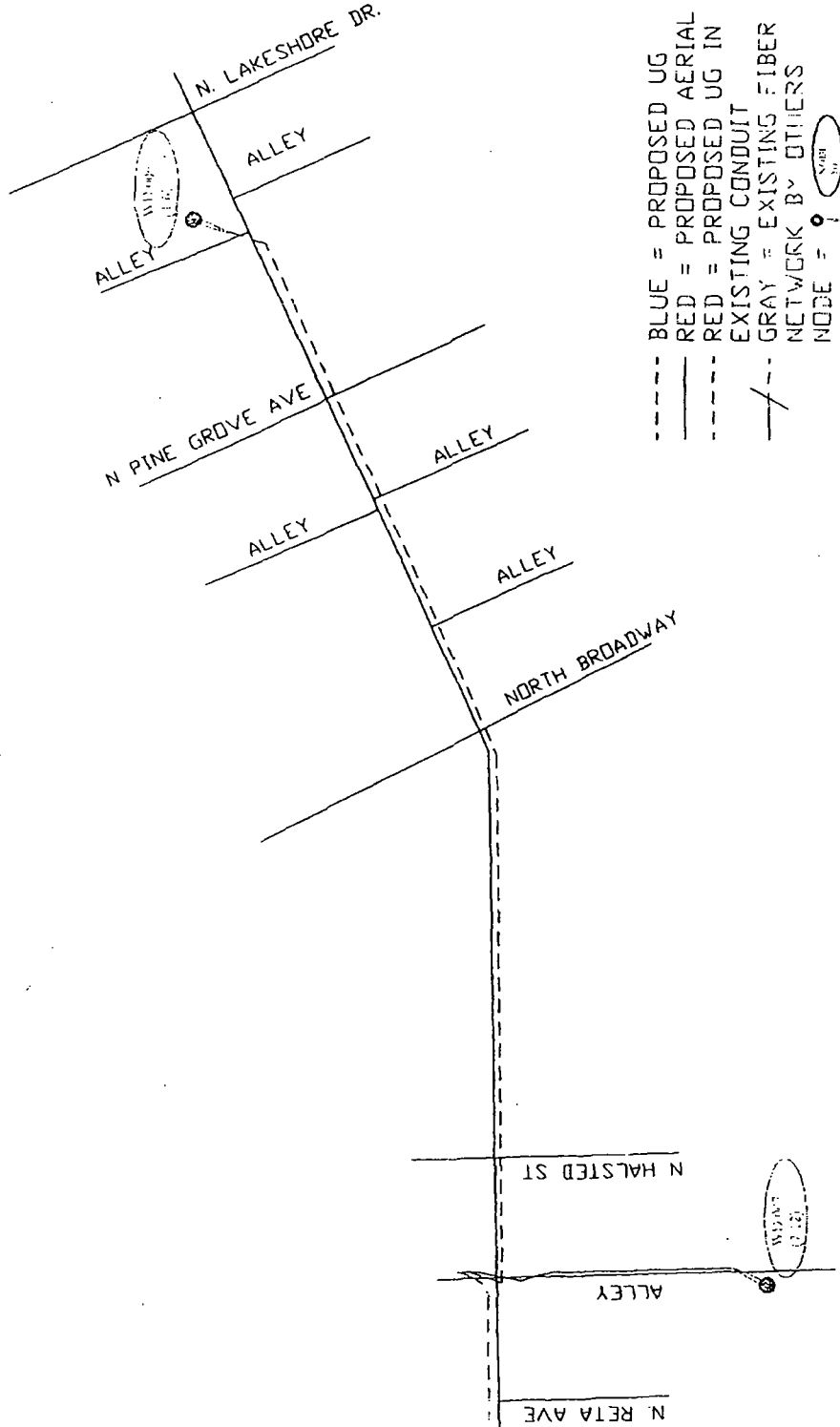
Nodes - Total XIX

Nodes - Total XIX

Nodes - Total XIX



404 North 4th Street
Chicago, IL 60607
Phone: (312) 432-2800



- BLUE = PROPOSED UG
- RED = PROPOSED AERIAL
- RED = PROPOSED UG IN EXISTING CONDUIT
- GRAY = EXISTING FIBER NETWORK BY OTHERS
- NODE = 9

Scale: 1" = 100'

DATE	DESCRIPTION	BY	DATE	DESCRIPTION	BY

DATE	DESCRIPTION	BY	DATE	DESCRIPTION	BY

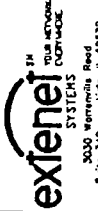
State: ILLINOIS
County: COOK

Municipality: CHICAGO

Map Number:

Page 1

CHICAGO PERMIT



3030 Wrentham Road
Suite 300, Uptown, IL 60632

Project #:
Job Title: NORTH-DISTRICT-11

Engineer: GAMES

Original Issue Date: 8/27/12
Published Date:

Bill of Materials:

Description	Qty
Fiber - 432	XXX
Fiber - 288	XXX
Fiber - 144	XXX
Fiber - 72	XXX
Fiber - 36	XXX
Fiber - 18	XXX
Fiber - 9	XXX
Fiber - 4.5	XXX
Fiber - 2.25	XXX
Total Fiber	XXX

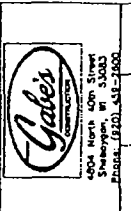
Route - Aerial: XXX
Route - UC-Leased: XXX
Route - UC-New Contract: XXX
Route - Resp Station: XXX
Total Route Footage: XXX

Poles - Pole: XXX
Poles - Telco: XXX
Poles - Other: XXX
Total Poles: XXX

Roads: XXX
1/4" Strand: XXX
Anchors: XXX
Sleeves: XXX
Stack Loops: XXX
Handholes: XXX
Headboxes: XXX

Other: XXX
Total: XXX

- 1" PVC RIGID
- 2" PVC RIGID
- 4" PVC RIGID
- 6" PVC RIGID
- 8" PVC RIGID
- 12" PVC RIGID
- 18" PVC RIGID
- 24" PVC RIGID
- 36" PVC RIGID
- 48" PVC RIGID
- 60" PVC RIGID
- 72" PVC RIGID
- 84" PVC RIGID
- 96" PVC RIGID
- 108" PVC RIGID
- 120" PVC RIGID
- 144" PVC RIGID
- 180" PVC RIGID
- 216" PVC RIGID
- 288" PVC RIGID
- 360" PVC RIGID
- 432" PVC RIGID



Page 1

Map Number:

PROPOSED EXTENET SYSTEMS - NORTH AVE NETWORK

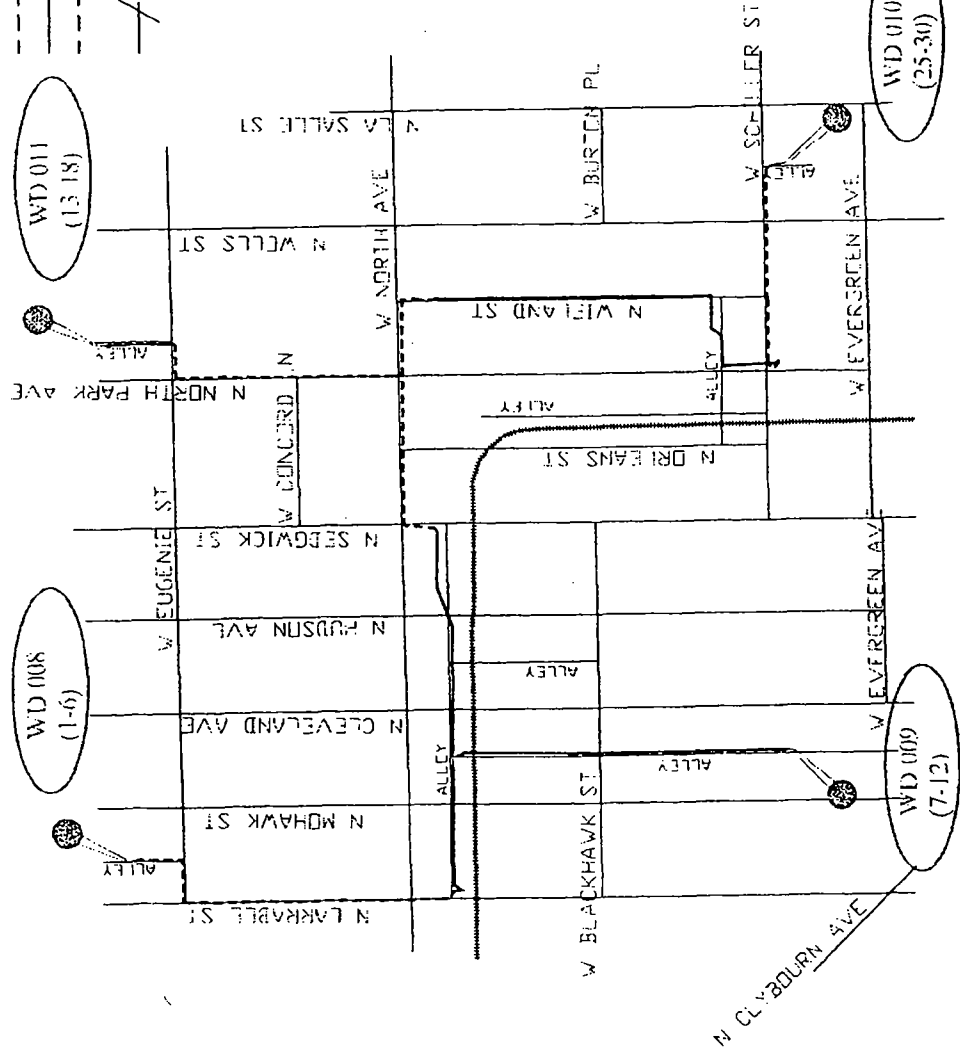
--- BLUE = PROPOSED UG
--- RED = PROPOSED AERIAL
--- RED = PROPOSED UG IN EXISTING CONDUIT
--- GRAY = EXISTING FIBER NETWORK BY OTHERS
NJDC = 1

WD 011 (13-18)

WD 008 (1-6)

WD 010 (25-30)

WD 009 (7-12)



DATE	DESCRIPTION	DATE	DESCRIPTION	DATE	DESCRIPTION

Scale: 1" = N.T.S.
Municipality: CHICAGO
State: ILLINOIS
County: COOK

CHICAGO PERMIT



3125 N. Halsted Street
Chicago, IL 60642
Phone: (773) 487-2100

Project #
Job Title: RUSH-DISTRICT-IL
Engineer: GABE'S
Original Issue Date: 2/15/13

Published Date:

Bill of Materials	Description	Qty
XXX	Fiber - 432	XXX
XXX	Fiber - 288	XXX
XXX	Fiber - 144	XXX
XXX	Fiber - 76	XXX
XXX	Fiber - 48	XXX
XXX	Fiber - 36	XXX
XXX	Fiber - 24	XXX
XXX	Fiber - 12	XXX
XXX	Fiber - Drop	XXX
XXX	Total Fiber	XXX

Route - Aerial
Route - UG-Looped
Route - UG-New Conduit
Route - Base Station
Total Route Footage: XXX

Poles - Power
Poles - Telco
Poles - Other
Total Poles: XXX

Nodes
1/4" Strand
Anchors
Splices
Stick Loops
Handholes
Handsets

• 200' Roll
• 500' Roll
• 1000' Roll
• 1500' Roll
• 2000' Roll
• 3000' Roll
• 4000' Roll
• 5000' Roll
• 6000' Roll
• 7000' Roll
• 8000' Roll
• 9000' Roll
• 10000' Roll



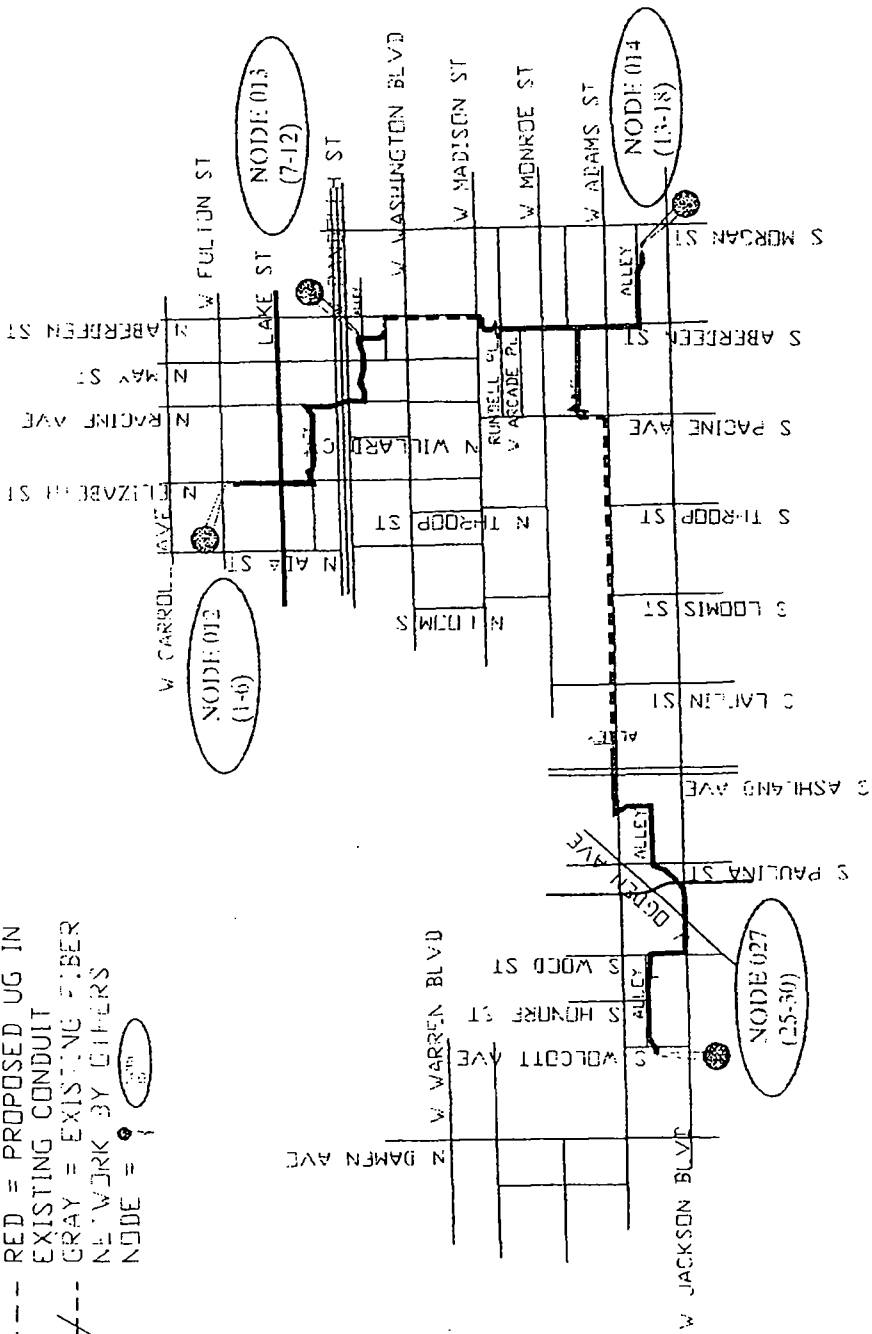
404 North 4th Street
Chicago, IL 60607
Phone: (773) 487-2100

Revised	Description	Initials	Date

Page 1
Scale: 1" = MTS.
RSP Number:

PROPOSED EXTENET SYSTEMS - RUSH DISTRICT NETWORK

- BLUE = PROPOSED UG
- RED = PROPOSED AERIAL
- RED = PROPOSED UG IN EXISTING CONDUIT
- GRAY = EXISTING FIBER NETWORK BY OTHERS
- NODE =

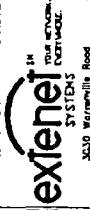


Revised	Description	Initials	Date

State: ILLINOIS
County: COOK
Municipality: RUSH_DISTRICT

PROPOSED EXTENET SYSTEMS - WEST DOUGLAS NETWORK

CHICAGO PERMIT



Project #

Job Title: WEST-DOUGLAS-IL
Engineer: GARCS

Original Issue Date: 2/15/13

Published Date:

Bill of Materials:

Description	Qty.
Fiber - 432	432
Fiber - 288	432
Fiber - 144	432
Fiber - 96	432
Fiber - 72	432
Fiber - 48	432
Fiber - 36	432
Fiber - 24	432
Fiber - 12	432
Fiber - Drop	432
Total Fiber	288

Route - Aerial
Route - UG-Leased
Route - UG-New Conduit
Route - Base Station
Total Route Footage

Poles - Power
Poles - Other
Total Poles

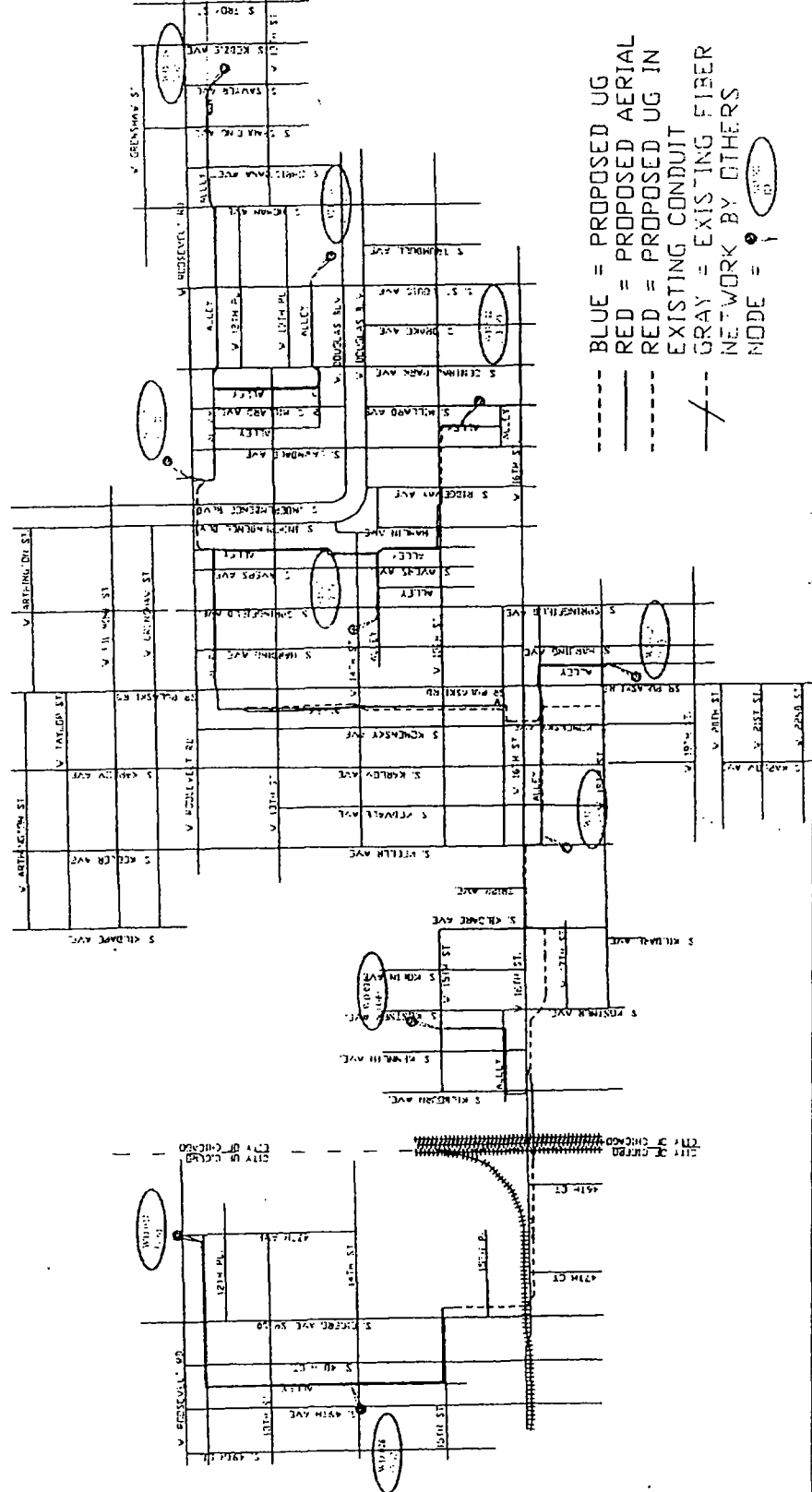
Nodes
1/4" Straps
Anchors
SIGMA Loops
Handholes
Manholes

- 1/4" Strap
- Anchor
- SIGMA Loop
- Handhole
- Manhole
- 1/4" Strap
- Anchor
- SIGMA Loop
- Handhole
- Manhole



4804 North 40th Street
Shippagan, WI 53083
Phone: (414) 592-2800

Page 1
Map Number:



BLUE = PROPOSED UG
RED = PROPOSED AERIAL
RED = PROPOSED UG IN EXISTING CONDUIT
GRAY = EXISTING FIBER NETWORK BY OTHERS
NODE = 13

DESCRIPTION	DATE	BY	REVISION

Scale: 1" = N.T.S.

State: ILLINOIS
County: COOK
Municipality: CHICAGO

CHICAGO PERMIT



Project #: Job Title: WEST-TOWN-IL
Contractor: GABES

Original Issue Date: 7/8/13
Published Date:

Description	Qty.
Fiber - 432	XXX
Fiber - 864	XXX
Fiber - 1728	XXX
Fiber - 3456	XXX
Fiber - 6912	XXX
Fiber - 13824	XXX
Fiber - 27648	XXX
Fiber - 55296	XXX
Fiber - 110592	XXX
Fiber - 221184	XXX
Fiber - 442368	XXX
Fiber - 884736	XXX
Fiber - 1769472	XXX
Total Fiber	XXX

Route - Aerial
Route - UC-Leased
Route - UC-New Conduit
Route - Back Station
Total Route Footage

Poles - Other
Poles - Pole
Poles - Other
Total Poles

Nodes
1/4" Strand
Punches
Straps
Slick Loops
Manholes
Manholes

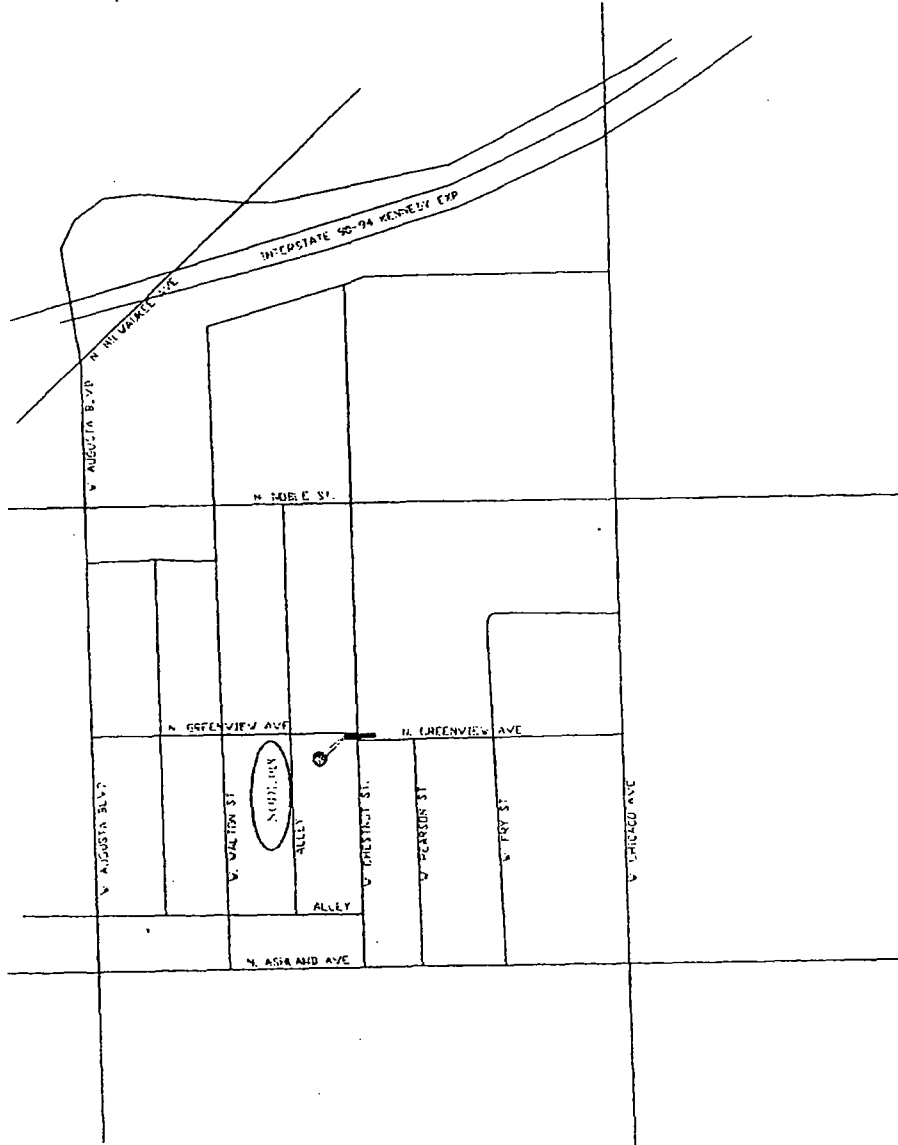
- 1/4" Strand
- Punches
- Straps
- Slick Loops
- Manholes
- Manholes



4004 North 40th Street
Sheboygan, WI 53083
Phone: (920) 453-2800

PROPOSED EXTENET SYSTEMS - WEST TOWN DISTRICT

- BLUE = PROPOSED UG
- RED = PROPOSED AERIAL
- RED = PROPOSED UG IN EXISTING CONDUIT
- /- GRAY = EXISTING FIBER NETWORK BY OTHERS
- NOUC = NOUC



DATE	DESCRIPTION	START DATE	END DATE	MATERIALS	
				QUANTITY	REMARKS

State: ILLINOIS
County: COOK
Municipality: CHICAGO

Scale: 1" = 100'

Map Number:

Exhibit C

Use Agreement Basic Terms

Conduit and Cable Path and Facility Use Agreement ("Use Agreement").

Re: Proposed License for a Conduit Facility and related Conduit and Cable Paths In, Over and Under the Public Way

Grantor: City of Chicago, an Illinois municipal corporation ("City")

Grantee: ExteNet Systems, Inc., a Delaware corporation that is registered as a telecommunications carrier under federal and Illinois law and is a telecommunications provider that does not operate as a telecommunications retailer ("Grantee").

Description
of Conduit
and Cable

Paths: The conduit and cable paths ("Conduit and Cable Paths") will be located in, over and under the public ways (i) as described in Grantee's thirteen (13) Under Ground Fiber Optic Facility plans ("Underground Plans") prepared by the civil engineer at Gabe's Construction Company, Inc. ("Contractor") originally dated December 7, 2012, each as conditionally approved by CDOT on: June 10, 2013 (OUC EFP File #57586), June 11, 2013 (OUC EFP File #57623, #57629 and #57630), June 13, 2013 (OUC EFP File #57651, #57652, and #57653), June 21, 2013 (OUC EFP File #57829 and #57830), July 1, 2013 (OUC EFP File #57909 and #57910), July 5, 2013 (OUC EFP File #57911), and July 10, 2013 (OUC EFP File #58017), and (ii) as set forth in Grantee's six (6) aerial cable and equipment plans ("Aerial Plans" and together with the Underground Plans, the "Plans"), originally dated: August 27, 2012, November 5, 2012, December 7, 2012, February 15, 2013, and July 8, 2013, and delivered to the City on July 16, 2013 (collectively, the "Authorized Routes"). The total linear footage of underground public way and airspace over the public way to be used is forty thousand eighty three (40,083) linear feet, with twenty-eight thousand one hundred eighty (28,180) linear feet above the public way and eleven thousand nine hundred three (11,903) linear feet under the public way. The Underground Path will contain approximately three (3) one and one-quarter (1 ¼) inch innerducts, including the City Innerduct. The Aerial Path will consist of one (1) cable of the standard size to accommodate at least one hundred forty four (144) optical fiber strands and a maximum of two hundred eighty eight (288) optical fiber strands to be attached on utility poles owned by ComEd. The

Conduit and Cable Paths will be installed within the public way after approval from the Office of Underground Coordination (“OUC”) and the City's Department of Transportation (“CDOT”). Any revisions to the Plans are subject to the approval of the Executive Director of OEMC, the Commissioner of CDOT, Commissioner of DoIT and Commissioner of BACP, or their respective designees (collectively, the “Commissioners”), which approval shall not be unreasonably withheld.

Description
of Conduit and
Cable

Facilities: The separately located conduit and cable facilities (the “Conduit and Cable Facilities” and together with the “Conduit and Cable Paths, the “Conduit and Cable Improvements”) will be located in the portion of the City’s public way identified and set forth in the Plans (the "Authorized Facility Location," and together with the Authorized Routes, the “Authorized Locations”). The total cubic feet of underground public way used by the manholes is approximately one hundred and sixty-two (162) cubic feet. The total volume of airspace above the public way used by the nodes is approximately two hundred and sixty-four (264) cubic feet. The Conduit and Cable Facilities will be installed after approval from the Office of Underground Coordination and/or other divisions of CDOT and after the execution of all necessary agreements including the Use Agreement and the IRU Agreement. Any revisions to the Plans are subject to the approval of the Commissioners which approval shall not be unreasonably withheld.

Relocation: The exact locations of the Conduit and Cable Improvements within the Authorized Locations may be changed by the Executive Director of OEMC and the Commissioner of CDOT and the Conduit and Cable Improvements may be relocated in whole or in part in the Public Way, either during or after the construction of the Conduit and Cable Improvements at Grantee's sole cost and expense upon at least 30 days advance written notice for a public purpose, including but not limited to utility or transportation purposes of the City or another governmental entity. The City will reasonably cooperate with Grantee in finding an alternate route for the affected Conduit and Cable Improvements. In the case of an emergency, as determined by the Executive Director of OEMC and the Commissioner of CDOT in their discretion, such relocation may occur in a shorter time frame as set forth in the Use Agreement.

Grant of
License:

The grant of license ("License") in the Use Agreement shall be for a maximum initial term of fifteen (15) years, and renewable for a maximum of three (3) additional terms (each, an “Extension”), with each Extension

not to exceed five (5) years, upon the mutual agreement of the parties as set forth in the Use Agreement. The License shall provide for the right of the Grantee to go in the Authorized Locations in connection with the construction, installation, repair, replacement, use, operation and maintenance of the Conduit and Cable Improvements, including the City Innerducts and IRU Fiber, for the purposes set forth in the Use Agreement and the IRU Agreement, as authorized by the City Council of the City of Chicago on _____, 2013.

Purpose of
Conduit and Cable
Improvements:

Grantee's primary purpose for the Conduit and Cable Improvements is to enhance the broadband communications infrastructure in the affected areas of the City in order to improve the coverage, capacity (numbers of simultaneous users and data throughput), operating efficiency and reliability of the wireless telecommunications carriers who use it. Nothing in the Use Agreement or the IRU Agreement shall affect the obligations and liabilities of telecommunications providers, cable television companies and other users of the public way under Illinois law and City ordinance. No entity may occupy or use any of the Conduit and Cable Improvements unless such entity has authority to be in the public ways under City ordinance and is complying with the terms thereof, including related agreements and/or applicable City regulations and provisions of the Municipal Code of Chicago (the "Code"). The proposed locations of the Conduit and Cable Improvements within the public ways are subject to final location approval by CDOT and the Office of Underground Coordination, which approval shall not be unreasonably withheld.

Payment
for License:

In lieu of paying the City's standard Telecommunications Provider Permit fees under Municipal Code Section 10-30-040 ("ROW Fees"), Grantee proposes to setoff such fees (the "Setoff") by including in the underground Conduit Path one (1) three-quarter ($\frac{3}{4}$) inch innerduct ("City Innerduct") and to install within the City Innerduct one hundred and forty-four (144) dedicated single mode fiber strands, and to install an equal amount of single mode fiber strands in the Aerial Path, all dedicated solely to the perpetual use of the City for governmental and commercial use per the IRU Agreement ("IRU Fiber").

The Setoff amount shall be equal to Grantee's cost of constructing the IRU Fiber to the City ("Total IRU Fiber Cost"). For purposes of the Setoff, the City and Grantee agree that the Total IRU Fiber Cost shall be \$1,387,000 for 40,083 linear feet of IRU Fiber ("Total IRU Fiber Amount"); provided

however, that the City reserves the right not to accept any portions of the IRU Fiber for purposes of the Setoff if the IRU Fiber is not built and ready for the City's use within two (2) years from the date of the IRU Agreement; provided further, however, that if Grantee provides less than the Total IRU Fiber Amount, then the Total IRU Fiber Cost shall be reduced in direct proportion to the reduced amount of IRU Fiber (E.g. If Grantee provides City with 50% of the Total IRU Fiber Amount, or 20,042 linear feet of IRU Fiber, then the Total IRU Fiber Cost shall be reduced by 50% to \$693,500). For the avoidance of doubt, Grantee shall still be permitted, subject to the Use Agreement, to construct any Conduit and Cable Improvements not ready for use by the City within a two (2) year period, even if the City chooses to reject the corresponding IRU Fiber pursuant to this paragraph.

Upon execution of the Agreement, the Setoff shall be applied to the applicable ROW Fees until such time as the IRU Fiber Cost has been paid by the City through the Setoff of such ROW Fees that would have otherwise been charged to ExteNet (the "Setoff Period"). During the Setoff Period, the annual ROW Fees applicable to Grantee shall be calculated using the following rates: \$6 per linear foot of Conduit Path, and \$1 per linear foot of Aerial Path.

In no event shall the City have any obligation to pay or reimburse Grantee for the IRU Fiber other than through the Setoff, or as otherwise set forth in the IRU Agreement and Use Agreement. For the period following the conclusion of the Setoff Period, including any Extensions, Grantee shall pay the Telecommunications Provider Permit fees applicable at such time for the balance of the Use Agreement.

Administrative
Fee:

Grantee shall also pay the City an administrative fee consisting of a one-time non-refundable fee of thirty thousand dollars (\$30,000) for certain administrative costs including attorney's fees. Subject to extension by the Corporation Counsel, this fee shall be due and payable five (5) days after the date this Ordinance is passed by the City Council unless Grantee elects not to pursue its Plans at such time.

Assignment
of License:

The Use Agreement and the IRU Agreement may be assigned or transferred by Grantee to an affiliated entity with the prior written consent of the Commissioners of CDOT, DoIT and BACP and with proper disclosure of ownership interests in the assignee in compliance with the

requirements of the Code, which consent shall not be unreasonably withheld. Such assignment shall be provided for in the Use Agreement and the IRU Agreement and shall include at a minimum full assumption by the assignee of Grantee's and Guarantor's (as hereinafter defined) obligations and liabilities with or without recourse as set forth in the Use Agreement and the IRU Agreement.

Construction of
Conduit and Cable
Improvements:

Grantee, or its contractor or subcontractors, shall at its sole cost and expense, construct the Conduit and Cable Improvements, including the City Innerduct and IRU Fiber, in accordance with the Code, the Use Agreement, the IRU Agreement, all applicable City regulations and City permits.

Maintenance of
Conduit and Cable
Improvements:

Throughout the term of the Use Agreement, Grantee, at its sole cost and expense, shall be responsible for the construction, installation, repair, replacement, use, operation and maintenance of the Conduit and Cable Improvements; provided that the City shall have reasonable access to the City Innerduct and IRU Fiber upon reasonable notice for installation and/or connection of facilities and for emergency repairs. Grantee shall perform such work in such manner and at such times as shall not interfere with the Authorized Locations or the Public Way without proper City permits. No maintenance to the Conduit and Cable Improvements requiring access to or creating potential interference with the Public Way shall be performed unless and until such access has been approved by permit issued by the Commissioner of CDOT. Grantee, at its sole cost and expense, shall be responsible for and make such repairs as are required to restore any portion of the Public Way which is damaged as a result of the construction, installation, repair, replacement, use, operation and maintenance of Grantee, or any of its contractors, subcontractors, or occupants of its Conduit and Cable Improvements as described in the Use Agreement, except that Grantee shall not be responsible for any damage resulting from the negligent use by the City or its contractors of the City Innerduct and IRU Fiber, as described in the IRU Agreement. All repairs to the Public Way shall meet CDOT construction standards applicable to the Public Way as set forth in the Code or applicable City regulations. Grantee, upon reasonable notice, at its expense and at no cost or liability to the City, shall support, protect and repair the Conduit and Cable Improvements during construction of public projects. Notwithstanding the foregoing and subject to the express provisions of the Use Agreement and

the IRU Agreement, ExteNet may terminate the Use Agreement and cease occupancy and use of all or any portion of the Authorized Locations at any time during the term of this Agreement.

Permits:

Grantee shall pay all applicable City taxes, right-of-way restoration fees and permit fees. Permits shall be obtained by Grantee using procedures consistent with the Code and applicable regulations which may be set forth in the Use Agreement to the extent deemed necessary by the Commissioners. Grantee is a telecommunications provider as provided by Chapter 10-30 of the Municipal Code of Chicago and is not a telecommunications retailer as provided by Chapter 3-73 of the Municipal Code of Chicago. Nothing herein restricts the Grantee from becoming a telecommunications retailer but if such designation shall occur it shall not affect in any way the rights and obligations contemplated by the Use Agreement and the IRU Agreement.

Indemnity:

Grantee shall indemnify, defend and hold harmless the City, its officials, employees, and agents for matters arising out of the use, occupation and control of the Conduit and Cable Improvements by Grantee or any of Grantee's authorized Wireless Carriers. Further, Grantee shall not be responsible to indemnify, defend and hold harmless the City, its officials, employees, and agents for matters arising out of the use, occupation or control by City of the City Innerduct and IRU Fiber where such use, occupation or control has been negligent or there has been wanton or willful misconduct in connection with such use, occupation or control. The indemnification of the City, its officials, employees, and agents shall survive any termination, expiration, or cancellation of the License, the Use Agreement, and/or the IRU Agreement.

Insurance
and Security:

Grantee shall, at its sole cost and expense, procure and maintain during the term of the Use Agreement, insurance and security as reasonably required by the Commissioner of CDOT as set forth in the Use Agreement and shall add the City as additional insured on a primary non-contributory basis to all applicable insurance policies which are specifically related to the Conduit and Cable Improvements.

The Grantee and the City agree that Grantee shall post, on an annual basis (with evergreen clause) for the entire term of the Use Agreement, or for such lesser term as the City Risk Manager and Commissioner of CDOT in their sole discretion may approve, a Letter of Credit ("LOC") in the amount of one hundred thousand (\$100,000) dollars; provided, however, the City reserves the right to request additional security in the form of

performance bonds up to a total of five hundred thousand (\$500,000) dollars.

Other Provisions: M.B.E./W.B.E., Chicago residency, and other construction practices shall be consistent with City of Chicago ordinances related to use of the Public Way. In addition, the Shakman decree boilerplate language shall be part of the Use Agreement pursuant to the City's Shakman Contractor Policy.

Exhibit D

IRU Agreement Basic Terms

Indefeasible Right of Use Agreement (“IRU Agreement”).

Re: Proposed grant of an Indefeasible Right of Use (“IRU”) with respect to certain dark fibers on Authorized Routes

ExteNet: ExteNet Systems, Inc., a Delaware corporation that is registered as a telecommunications carrier under federal and Illinois law and is a telecommunications provider that does not operate as a telecommunications retailer (“ExteNet”)

City: City of Chicago, an Illinois municipal corporation (“City”)

IRU Fiber: One hundred and forty-four (144) optical fiber strands of single mode fiber along the Authorized Routes as defined in the IRU Agreement.

The IRU Fiber will occupy on an exclusive basis: (i) for underground segments, one of the three (3) one and one-quarter (1 ¼) inch innerducts within the conduit installed by ExteNet; and (ii) for aerial segments, will be enclosed with ExteNet’s fiber in a common sheath as per the Plans depicted and described in Exhibit B of this Ordinance.

The IRU Fiber shall be “dark” fiber, which means that ExteNet shall have no obligation to assist the City or others in “lighting” and thus using the strands of fiber.

ExteNet and the City may mutually agree that the installation of some or all of the 144 strands comprising the IRU Fiber may not be desirable by the City or feasible for practical or technical reasons on certain portions of the Authorized Routes.

IRU Grant: ExteNet shall provide to the City an exclusive and irrevocable right to use the IRU Fibers, subject to the terms and conditions of the IRU Agreement.

Term: The IRU Fibers granted to the City pursuant to the IRU Agreement shall be in perpetuity and at no cost to the City, subject to the specific costs which are or may become the City’s responsibility as specifically provided herein, e.g. upon transfer of a network to the City.

IRU

Limitation: Grantee shall provide the IRU Fiber to the City for the City's, including its assignees', licensees', or contractors', exclusive use for any governmental purpose or purposes, including for the provision of telecommunication services to or by the City and other governmental entities. In addition, the City shall be entitled to use the IRU Fiber, or to assign, license, or otherwise grant use of the IRU Fiber to a third party or parties, for commercial telecommunications and broadband service purposes. The sole limitation on the City's commercial use of the IRU Fiber, including use by any assignees, licensees, contractors or third party or parties to whom the City has otherwise granted rights to use the IRU Fiber, shall be that the IRU Fiber cannot be used by the City or by any such entity or party to provide Distributed Network Services (as defined below) or as a component of a network that provides Distributed Network Services. For purposes of this limitation, the term "Distributed Network Services" means the provision of point-to-point signal transport and connectivity for outdoor or indoor distributed antenna system ("DAS") remote communications nodes, remote radio heads, small cells, or wireless access points deployed or used by wireless carriers, including but not limited to SMRS providers, that hold Federal Communications Commission licenses for radio frequency spectrum and provide voice and data services to end-user subscribers, whether directly or through other wireless carriers, provided that wireless access points employing only unlicensed radio frequency spectrum shall be included in this definition but only to the extent such wireless access points are deployed by or specifically for the use of such wireless carriers and their end-user subscribers. For the avoidance of doubt, the foregoing definition of Distributed Network Services does not mean or include the provision of infrastructure or "backhaul" signal transport and connectivity to traditional cellular antenna sites otherwise known in the industry as "macro cellular sites".

By way of example and not limitation, permitted uses of the IRU Fiber by the City, and/or any third party selected by the City, shall be: (i) the sale or provision of wired broadband voice and data services to business and residential customers; (ii) the sale or provision of wireless voice and data services to the general public in public spaces such as plazas and parks using unlicensed radio frequency spectrum, e.g., open Wi-Fi services, and that is not otherwise prohibited by the restrictions in the paragraph above; and (iii) the sale or provision of wireless voice and data services via macro cellular sites or other means, but without using any DAS nodes, remote radio heads, small cells or wireless access points on or connected with the IRU Fiber and without transporting DAS telecommunications traffic from any DAS nodes, remote radio heads, small cells or wireless access points

through the IRU Fiber.

For the avoidance of doubt, notwithstanding anything in the Use Agreement or the IRU Agreement, the City's (including its assignees', licensees', or contractors') ability to install DAS nodes, remote radio heads, small cells or wireless access points on fiber or other telecommunications facilities that is not IRU Fiber ("Non-IRU Fiber") and/or to transport DAS traffic on Non-IRU Fiber is not prohibited.

Grantee shall agree that it will not take any steps relating to the IRU Fiber that would prohibit or functionally prevent the City's permitted governmental or commercial uses of the IRU Fiber.

If Grantee shall, pursuant to the IRU Agreement, transfer ownership to the City of any of the fiber comprising part of any of its six distributed networks contemplated by the Use Agreement, or, subject to any applicable cure periods under the IRU Agreement or the Use Agreement, if Grantee is found to have materially breached its obligations under the IRU Agreement to provide or maintain the IRU Fiber, the aforementioned limitation on the use of the IRU Fiber shall immediately and fully terminate as to the corresponding portion or portions of the IRU Fiber.

Access to
IRU Fiber:

All of the IRU Fiber (aerial and underground) will be accessible via a separate splice box/case (or functionally similar way) at the Access/Splice Points (as hereinafter defined) so that the City's contractors and its assignees can access and splice the IRU Fiber without having access to ExteNet's optical fiber strands. "Access/Splice Point" means a specified location on the Authorized Routes, such as a handhole, where one fiber optic cable segment ends and another fiber optic cable segment begins and a splice box/case is installed.

The City will have access to the IRU Fiber at each Access/Splice Points planned and constructed by ExteNet, and ExteNet will add additional Access/Splice Points as requested by the City, provided that the City pays ExteNet's actual and reasonable costs of the additional construction required to provide such additional Access/Splice Points and provided further that the City submits such requests in a timely manner so that the work required to effect such additional Access/Splice Points can be coordinated and carried out by ExteNet as part of its Plans.

In exercising its rights of access to the IRU Fiber, the City, its contractors and permitted assigns will cooperate with ExteNet and comply with reasonable requirements for advance notice, qualification or certification

of technicians or contractors performing the work, scheduling and coordination of non-emergency work, etc., as well as undertaking to indemnify ExteNet with respect to any damage or service interruption affecting ExteNet's fiber network that results from the intentional wrongdoing or the negligent acts or omissions of the City, its contractors or permitted assigns, all as provided in appropriate detail in the IRU Agreement.

Subject to reasonable confidentiality agreement provisions (to the extent such confidentiality is permitted by law), ExteNet will provide detailed as built maps to the City or its assignees of the aerial fiber and underground fiber installations containing the IRU Fiber and the associated Access/Splice Points.

Operation and
Maintenance of
IRU Fiber:

Grantee agrees that Grantee, its successors or permitted assigns will operate and maintain each of the six (6) networks described in the Use Agreement for at least five (5) years after the acceptance date of the IRU Fiber granted by Grantee to the City.

Grantee will be responsible for maintaining and repairing the IRU Fiber at Grantee's sole cost and expense except for the costs and expense incurred for the repairing of any damage caused by the negligence of the City, its contractors or any third parties to whom the City has granted access and use with respect to the IRU Fiber. At any time after five (5) years after the acceptance date of the IRU Fiber by the City pursuant to the IRU, Grantee, its successors or permitted assigns may cease operating one (1) or more of the six (6) telecommunications networks described in the Use Agreement. In that event, upon six (6) months notice to the City, responsibility for maintaining and repairing the IRU Fiber in the particular network or networks abandoned may be transferred to the City. No maintenance and operating responsibilities may be transferred to the City under any circumstances for less than a complete network. Grantee shall cooperate with the City in ensuring that the transfer of this responsibility for repairing and maintaining the IRU Fiber be conducted in a reasonable and orderly manner. At no time, shall the City have the responsibility to maintain and repair Grantee's fiber, nodes, hubs, its fiber networks or any other Grantee facilities.

Grantee will be solely responsible for all DIGGER obligations at all times, unless operating and maintenance responsibilities for a particular network or networks is transferred to the City as provided for above, at which time

DIGGER obligations will also transfer to the City for that particular network or networks.

Third Party
Agreements
Relating to
IRU Fiber:

In the event that Grantee, its successors or permitted assigns cease operating one (1) or more of the six (6) telecommunications networks described in the Use Agreement after five (5) years after the acceptance date of the IRU Fiber by the City pursuant to the IRU, Grantee, its successors, or permitted assigns agree to undertake all commercially reasonable actions that are reasonably necessary to ensure that the City's rights under the IRU Agreement for the IRU Fiber associated with such network or networks shall not be negatively impacted in any way. By way of example, and without limiting the foregoing: Grantee, its successors or permitted assigns agree to the following: (i) Grantee, its successors and permitted assigns shall exert commercially reasonable efforts to prohibit and prevent the City's Innerduct and IRU Fiber from being physically disturbed; (ii) Grantee, its successors and permitted assigns shall not encumber the City's Innerducts and IRU fiber by or through any liens, judgments, creditor claims, or other encumbrances; (iii) Grantee, its successors and permitted assigns will maintain its third party agreements (E.g. pole attachments and private property agreements) to allow for continued use and access by the City of the City Innerduct and IRU Fiber until such time that the City has had a reasonable opportunity, which in no event shall be less than two (2) years, to negotiate its own agreements with such third parties on reasonable terms and conditions. During such time that the City is undertaking efforts to secure its own third party agreements, the City shall reimburse Grantee for the actual fees and costs that it pays such third parties and to operate and maintain the IRU Fiber. The City shall have the option to notify Grantee that it has no interest in securing any separate third party agreements for the IRU Fiber associated with any one (1) or more of the six (6) networks, in which event, Grantee's obligations under the IRU Agreement with respect thereto shall be terminated.

Grantee shall indemnify, defend and hold harmless the City, its officials, employees, and agents for matters arising out of the use, occupation and control of all Grantee facilities, including but not limited to any facilities located on private property, regardless of whether those facilities are related to the use and access of City Innerduct and IRU Fiber.

ECON



OFFICE OF THE MAYOR
CITY OF CHICAGO

RAHM EMANUEL
MAYOR

July 24, 2013

TO THE HONORABLE, THE CITY COUNCIL
OF THE CITY OF CHICAGO

Ladies and Gentlemen:

At the request of the Commissioner of Transportation and the Chief Information Officer,
I transmit herewith an ordinance authorizing the execution of an agreement with ExteNet.

Your favorable consideration of this ordinance will be appreciated.

Very truly yours,

Mayor

Handwritten signature or scribble.

Authorized Locations, extend the term of the IRU Agreement beyond that which is provided in the IRU Basic Terms or, reduce the consideration contrary to the provisions of the IRU Basic Terms.

SECTION 3. The Commissioners are also authorized, subject to approval of the Corporation Counsel, to enter into such other agreements as may be necessary to carry out the intent of the Use Agreement and the IRU Agreement. Only upon the execution of the Use Agreement and the IRU Agreement by the Commissioners and the Grantee and the fulfillment of any preconditions set forth in the Use Agreement and the IRU Agreement shall Grantee be authorized to construct, install, repair, replace, use, operate, maintain and provide the Conduit and Cable Improvements along the Authorized Locations pursuant to the terms of the Use Agreement and the IRU Agreement.

SECTION 4. This ordinance shall be in full force and effect upon its passage and approval.

SECTION 5. All ordinances and resolutions, or parts thereof, in conflict with this ordinance are, to the extent of such conflict, hereby amended.

APPROVED
[Signature]
CORPORATION COUNSEL

APPROVED
[Signature]
9/30/13
Mayor