

ADDRESS: 6655 WEDGEWOOD RD, MAPLE GROVE
 PROJECT NAME: MEDIVATORS



SITE LOCATION

CONTACTS

CONTACT INFO:

PHONE:

SITE INDEX

- 1 - COVER SHEET/SITE LOCATION
- 2 - LEGEND
- 3 - GENERAL NOTES
- 4 - PROJECT SHEETS
- 5 - TYPICALS
- 6 - DETAILS

SCOPE OF WORK:

CONTRACTOR WILL MEET WITH THE OSPE TO GO OVER THE DETAILS OF THE PROJECT PRIOR TO STARTING THE PROJECT. THE CONTRACTOR WILL MAKE A SET OF DRAWINGS TO ENSURE BOTH THE OSPE AND THE CONTRACTOR HAS A CLEAR UNDERSTANDING AS TO WHAT IS EXPECTED OF THE CONTRACTOR TO COMPLETE. CONTRACTOR WILL NOTIFY OSPE PRIOR TO ANY CHANGES, REQUESTS FROM PROPERTY MANAGEMENT AND ALL UNINTENTIONAL INCIDENTALS.

SCOPE OF WORK:

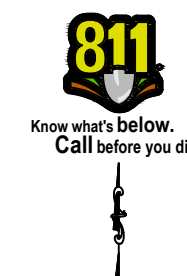
THIS PROJECT WILL PROVIDE A 24CT NON-ARMORED FIBER TO CONNECT TO THE 6655 WEDGEWOOD RD BUILDING.

START FROM THE EXISTING LEVEL3 HANDHOLE IN THE BOULEVARD ALONG WEDGEWOOD RD. BORE 3 -1.25" CONDUITS ALONG WITH 24 CT NON-ARMORED FIBER WITH TRACER WIRE GOING WEST AROUND THE SOUTHERLY PART OF THE BUILDING. ALSO PLACE A NEW HANDHOLE BEHIND BUILDING. STAY NEAR THE BUILDING AND ENTER THE BUILDING BELOW GRADE FROM THE PARKING LOT SIDE. (OSP VENDER TO COMPLETE THE BUILDING ENTRY, SEE ISP SCOPE OF WORK DESCRIPTION FOR DETAIL.)

THE TOTAL BUILD FOR THE OSP PROJECT IS: 787'.

SYMBOL CORRESPONDS TO PHOTO LOCATIONS AND ORIENTATION. SEE SHEET # FOR SITE PHOTOGRAPHS.

3				AS-BUILT
2				REVISION # 1
1	8/26/16	ML	KM	ORIGINAL
NO.	DATE	ENG DESIGN	DRAFTING	COMMENT



LEVEL 3 ENGINEER: BOB STRONG 952-351-2353
 ENGINEERING FIRM: TLR Consulting MIKE LAUGHLIN 320-963-2836
 PROJECT NUMBER:
 LOCATION: 6655 WEDGEWOOD RD, MAPLE GROVE MN
 DRAWING NAME: 6655 WEDGEWOOD RD MAPLE GROVE.dwg

LEGEND

LINETYPES

	UG FIBER - EXISTING
	UG FIBER - PROPOSED
	AERIAL FIBER - EXISTING
	AERIAL FIBER - PROPOSED
	STRAND - EXISTING
	STRAND - PROPOSED
	CONDUIT - EXISTING
	CONDUIT - PROPOSED
	INNERDUCT - EXISTING
	INNERDUCT - PROPOSED
	GAS
	WATER
	TELEPHONE
	ELECTRIC
	SANITARY SEWER (SEW)
	STORM DRAIN
	FENCE
	CABLE TV
	STEAM
	OIL
	UNKNOWN UTILITY
	RIGHT OF WAY
	EDGE OF PAVEMENT
	OVER HEAD ELECTRIC RAILROAD

SYMBOL	DESCRIPTION
ASW	ASPHALT SIDEWALK
BIP	BLACK IRON PIPE
BSP	BLACK STEEL PIPE
CSW	CONCRETE SIDEWALK
EOP	EDGE OF PAVEMENT
EOTW	EDGE OF TRAVEL WAY
FOC	FACE OF CURB
HDPE	HIGH DENSITY POLYETHYLENE
HH	HANDHOLE
JB	JUNCTION BOX
MH	MANHOLE
MP	MILE POST
O/S	OFFSET
PVC	POLY VINYL CHLORIDE
RGS	RIGID GALVANIZED STEEL CONDUIT
ROW	RIGHT OF WAY
STA.	STATION

	RISER
	TELEPHONE
	POWER VAULT
	CATCH BASIN/INLET
	FIRE HYDRANT
	GROUND/BOND
	STREET LIGHT
	TREE
	CULVERT
	WING WALL
	BRIDGE
	MISC. UTILITY
	UTILITY POLE - EXISTING
	UTILITY POLE - PROPOSED
	HANDHOLE - EXISTING
	HANDHOLE - PROPOSED
	MANHOLE - EXISTING
	MANHOLE - PROPOSED
	PULLBOX - EXISTING
	PULLBOX - PROPOSED

	VAULT - EXISTING				
	VAULT - PROPOSED				
	AERIAL STORAGE - EXISTING				
	AERIAL STORAGE - PROPOSED				
	VAULT/BUILDING STORAGE - EXISTING				
	VAULT/BUILDING STORAGE - PROPOSED				
	POLE ANCHOR/DOWN GUY - EXISTING				
	POLE ANCHOR/DOWN GUY - PROPOSED				
	PROPOSED DOWN GUY ON EXISTING ANCHOR				
	TERMINATION - EXISTING				
	TERMINATION - PROPOSED				
	BUILDING CALLOUT - PROPOSED				
	MANUFACTURER NAME				
	MANUFACTURER NAME				
<table border="1"><tr><td>#F</td><td>IN: 0</td></tr><tr><td></td><td>OUT: 0</td></tr></table>	#F	IN: 0		OUT: 0	SEQUENTIAL CALLOUT
#F	IN: 0				
	OUT: 0				
<table border="1"><tr><td>#F</td><td>IN: 0</td></tr><tr><td></td><td>TAIL: 0</td></tr></table>	#F	IN: 0		TAIL: 0	SEQUENTIAL IN TAIL CALLOUT
#F	IN: 0				
	TAIL: 0				
<table border="1"><tr><td>#F</td><td>TAIL: 0</td></tr><tr><td></td><td>OUT: 0</td></tr></table>	#F	TAIL: 0		OUT: 0	SEQUENTIAL TAIL OUT CALLOUT
#F	TAIL: 0				
	OUT: 0				

<table border="1"><tr><td>POLE NO</td><td>N/A</td></tr><tr><td>UTILITY1</td><td>0'-0"</td></tr></table>	POLE NO	N/A	UTILITY1	0'-0"	POLE ATTACHMENT CALLOUT - EXISTING USE DYNAMIC PULL DOWN TO SELECT FROM 1 TO 6 ATTACHMENTS
POLE NO	N/A				
UTILITY1	0'-0"				
<table border="1"><tr><td>POLE NO</td><td>N/A</td></tr><tr><td>UTILITY1</td><td>0'-0"</td></tr></table>	POLE NO	N/A	UTILITY1	0'-0"	POLE ATTACHMENT CALLOUT - PROPOSED USE DYNAMIC PULL DOWN TO SELECT FROM 1 TO 6 ATTACHMENTS
POLE NO	N/A				
UTILITY1	0'-0"				
	CABLE FIBERS: FIBERS CABLE OWNER: LEVEL3 CABLE LENGTH: LENGTH NOTES:				
	CABLE FIBERS: FIBERS CABLE OWNER: LEVEL3 CABLE LENGTH: LENGTH NOTES:				
	CONDUIT OWNER: LEVEL3 CONDUIT LENGTH: LENGTH CONDUIT QTY: CONDUITS CONDUIT SIZE: SIZE CONDUIT TYPE: TYPE INNER DUCT QTY: INNERDUCTS INNER DUCT SIZE: SIZE INNER DUCT TYPE: TYPE NOTES:				
	CONDUIT OWNER: LEVEL3 CONDUIT LENGTH: LENGTH CONDUIT QTY: CONDUITS CONDUIT SIZE: SIZE CONDUIT TYPE: TYPE INNER DUCT QTY: INNERDUCTS INNER DUCT SIZE: SIZE INNER DUCT TYPE: TYPE NOTES:				
	STRAND TYPE: TYPE STRAND LENGTH: LENGTH NOTES:				
	STRAND TYPE: TYPE STRAND LENGTH: LENGTH NOTES:				
	NOTES				
	NOTES				

SYMBOL CORRESPONDS TO PHOTO LOCATIONS AND ORIENTATION. SEE SHEET # FOR SITE PHOTOGRAPHS.



3				AS-BUILT
2				REVISION # 1
1	8/26/16	ML	KM	ORIGINAL
NO.	DATE	ENG DESIGN	DRAFTING	COMMENT

Level(3)
COMMUNICATIONS

LEVEL 3 ENGINEER: BOB STRONG 952-351-2353
ENGINEERING FIRM: TLR Consulting MIKE LAUGHLIN 320-963-2836
PROJECT NUMBER:
LOCATION: 6655 WEDGEWOOD RD, MAPLE GROVE MN
DRAWING NAME: 6655 WEDGEWOOD RD MAPLE GROVE.dwg
CONFIDENTIAL/PROPRIETARY SHEET: 2 OF 15

GENERAL NOTES

1. Contractor must obtain locates prior to disturbing the ground.
2. Contractor must have a copy of the approved permit from the appropriate agency on the jobsite at all times.
3. All cable will be placed at standard minimum depth. (Level 3 standard is 36" deep unless otherwise directed by a Level 3 representative.)
4. Any landscaping will be replaced to equal or better than that which existed prior to work.
5. Project site will be properly secured prior to the end of each day.
6. All work is to be in accordance with all authorities having jurisdiction in the work zone.
7. Contractors are advised to contact Level 3 for any additional information or clarification concerning scope of work or the requirements necessary for project completion.
8. Contractor is responsible to field verify all dimensions, quantities and existing conditions prior to construction. If a significant change to the running line is needed, please contact your Level 3 representative before proceeding.
9. Before construction begins, contractor shall take appropriate precautions to avoid any potential obstructions prior to proceeding with work.
10. No construction on private property will commence until approval is given by the appropriate Level 3 employee.
11. Contractor shall not proceed with work until they have received a Purchase Order and have been directed to do so by an authorized Level 3 representative.
12. Contractor shall not exceed the Purchase Order value without authorization in writing from the appropriate Level 3 representative.
13. As-Builts will be required for each project including cable footage sequentials at every access point, slack loop, splice location, pole and termination point. Contractor should also provide notes of all changes in depths, running lines, mh/hh locations, and any other applicable notes to depict the work that took place. NOTE: All major changes need to be pre-approved by an authorized Level 3 employee prior to starting the work.
14. ISP SPLICING DONE BY ISP VENDOR

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS UTILITY QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-02, ENTITLED STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO UTILIZE THE GOPHER STATE ONE CALL EXCAVATION NOTICE SYSTEM REQUIRED MN STATUTE, CHAPTER 216D FOR ALL UNDERGROUND UTILITY LOCATIONS.

 SYMBOL CORRESPONDS TO PHOTO LOCATIONS AND ORIENTATION. SEE SHEET # FOR SITE PHOTOGRAPHS.



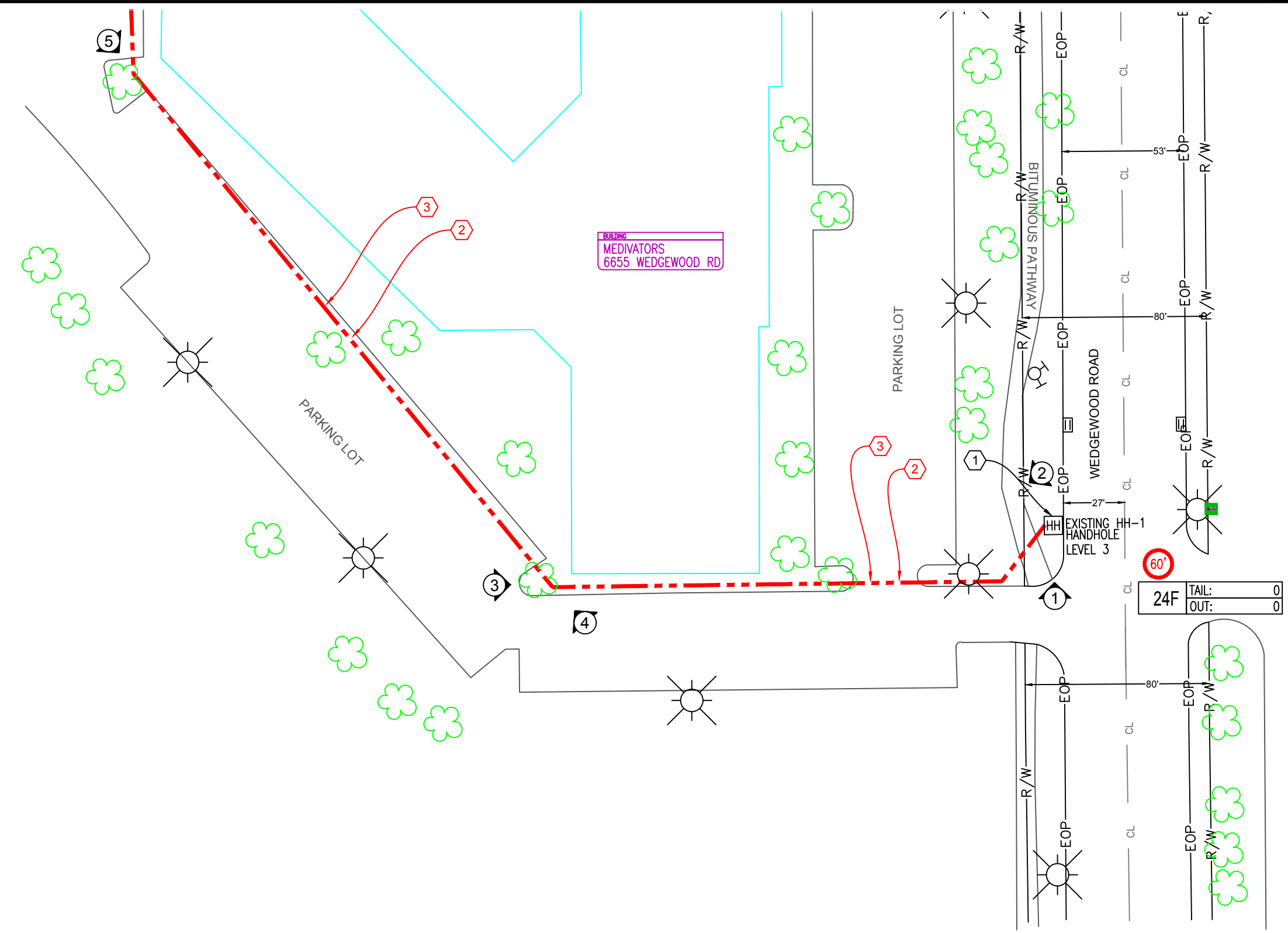
3				AS-BUILT
2				REVISION # 1
1	8/26/16	ML	KM	ORIGINAL
NO.	DATE	ENG DESIGN	DRAFTING	COMMENT



LEVEL 3 ENGINEER: BOB STRONG 952-351-2353
 ENGINEERING FIRM: TLR Consulting MIKE LAUGHLIN 320-963-2836
 PROJECT NUMBER:
 LOCATION: 6655 WEDGEWOOD RD, MAPLE GROVE MN
 DRAWING NAME: 6655 WEDGEWOOD RD MAPLE GROVE.dwg
 CONFIDENTIAL/PROPRIETARY SHEET: 3 OF 15

CONSTRUCTION NOTES

- 1 EXISTING LEVEL 3 HANDHOLE
PLACE TEST STATION
- 2 CONDUIT OWNER: LEVEL3
CONDUIT LENGTH: 542'
CONDUIT QTY: 3
CONDUIT SIZE: 1.25"
CONDUIT TYPE: HDPE
NOTES: DIRECTIONAL BORE
- 3 CABLE FIBERS: 24 CT NON ARMORED
CABLE OWNER: LEVEL3
CABLE LENGTH: 602'
NOTES:



Page Rate Card

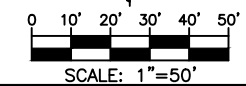
Unit Code & Description	Units	Estimated Quantity	Actual Quantity
UGB-30550 - Directional Bore up to 1500': 3 HDPE conduits up to 2" (on one reel)	FT	542'	
UGB-30830 - Place Locate Wire in Existing Conduit	FT	542'	
UGB-30960 - Place up to 288 count FOC in conduit, up to 1500'	FT	602'	
UGB-31610 - Core Bore MH/HH: 4" Outside Diameter	EACH	1	
UGB-31640 - Excavate Small Pit: 6'x4'x5'	EACH	1	
UGB-32000 - Place Locate Test Station	EACH	1	

Page Rate Card

Unit Code & Description	Units	Estimated Quantity	Actual Quantity
MAT-90070 - CONDUIT: 1 1/4 HDPE SDR-11	FT	1626'	
MAT-91320 - Miscellaneous fiber optic cable PROVIDED BY Level3	EACH	602'	
MAT-91980 - Locate wire #12 AWG - solid copper with insulated jacket	FT	602'	
MAT-90760 - Conduit Plug: 1-1/4" Blank Jackmoon equivalent	EACH	2	
MAT-90770 - Conduit Plug: 1-1/4" with Cable Simplex Plug Jackmoon equivalent	EACH	1	
MAT-92080 - Test Stations- Marker post 3 terminal PROVIDED BY Level3	EACH	1	
MAT-92000 - Locate wire # 6 AWG - solid copper with insulated jacket	FT	120'	



Know what's below.
Call before you dig.



SCALE: 1"=50'

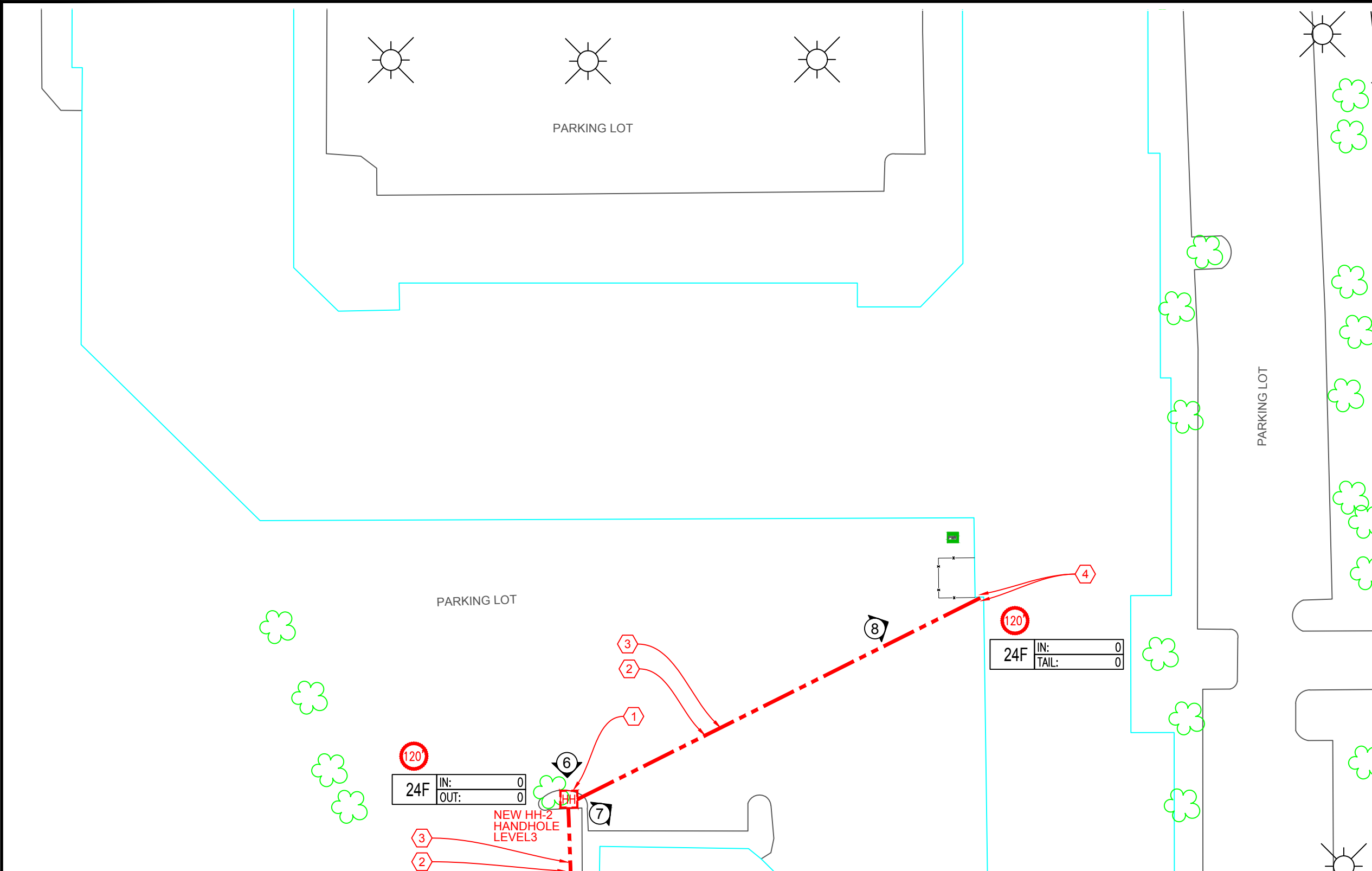
3				AS-BUILT
2				REVISION # 1
1	8/26/16	ML	KM	ORIGINAL
NO.	DATE	ENG DESIGN	DRAFTING	COMMENT



LEVEL 3 ENGINEER: BOB STRONG 952-351-2353
 ENGINEERING FIRM: TLR Consulting MIKE LAUGHLIN 320-963-2836
 PROJECT NUMBER:
 LOCATION: 6655 WEDGEWOOD RD, MAPLE GROVE MN
 DRAWING NAME: 6655 WEDGEWOOD RD MAPLE GROVE.dwg
 CONFIDENTIAL/PROPRIETARY SHEET: 4 OF 15

CONSTRUCTION NOTES

- 1 NEW LEVEL 3 HANDHOLE 120' 24F SLACK
- 2 CONDUIT OWNER: LEVEL3
CONDUIT LENGTH: 245'
CONDUIT QTY: 3
CONDUIT SIZE: 1.25"
CONDUIT TYPE: HDPE
NOTES: DIRECTIONAL BORE
- 3 CABLE FIBERS: 24 CT NON ARMORED
CABLE OWNER: LEVEL3
CABLE LENGTH: 485'
NOTES:
- 4 REMOVE CONCRETE PANEL AND UNDERMINE FOUNDATION THEN CUT/CORE FLOOR IN DEMARC ROOM DOWN TO THE BASE OF THE FOUNDATION, INSTALL 4" RIGID CONDUIT & SWEEP OUT BEYOND THE FOUNDATION BELOW GRADE. INSTALL 3 - 1 1/2" DUCT INTO THE 4" RIGID CONDUIT UP INTO THE DEMARC. ROOM. REPAIR FLOOR AND CONCRETE PANEL



120	IN:	0
	OUT:	0

120	IN:	0
	TAIL:	0

Page Rate Card			
Unit Code & Description	Units	Estimated Quantity	Actual Quantity
UGB-30550 - Directional Bore up to 1500': 3 HDPE conduits up to 2" (on one reel)	FT	245'	
UGB-30830 - Place Locate Wire in Existing Conduit	FT	245'	
UGB-30960 - Place up to 288 count FOC in conduit, up to 1500'	FT	485'	
UGB-31270 - Place New - 30"x48"x36" - Non-concrete Manhole / Handhole	EACH	1	
UGB-31640 - Excavate Small Pit: 6'x4'x5'	EACH	1	
ISP-40040 - Core Foundation greater than 12"	EACH	1	
ISP-40060 - Core Floor greater than 12"	EACH	1	
UGB-30900 - Place Three - Up to 2" HDPE in existing conduit	FT	20	
UGB-31110 - Remove & Restore Paved Surface, Concrete: 6" Depth	SQFT	60	
UGB-31170 - Remove & Restore Paved Surface, Asphalt: 6" Depth	SQFT	60	

Page Rate Card			
Unit Code & Description	Units	Estimated Quantity	Actual Quantity
MAT-90070 - CONDUIT: 1 1/4 HDPE SDR-11	FT	735'	
MAT-91320 - Miscellaneous fiber optic cable PROVIDED BY Level3	EACH	485	
MAT-91980 - Locate wire #12 AWG - solid copper with insulated jacket	FT	245'	
MAT-90760 - Conduit Plug: 1-1/4" Blank Jackmoon equivalent	EACH	6	
MAT-90770 - Conduit Plug: 1-1/4" with Cable Simplex Plug Jackmoon equivalent	EACH	3	
MAT-90970 - Tier 15 30"x48"x36" - With knock-outs and racking - Including Cover	EACH	1	
MAT-90490 - Casing Steel 4" .288 thickness ASTM A139 Grade B	FT	10	
MAT-90310 - Conduit Steel Sweep: 4" any angle	EACH	1	
MAT-92030 - Flow fill	SQ	30	

811
Know what's below.
Call before you dig.

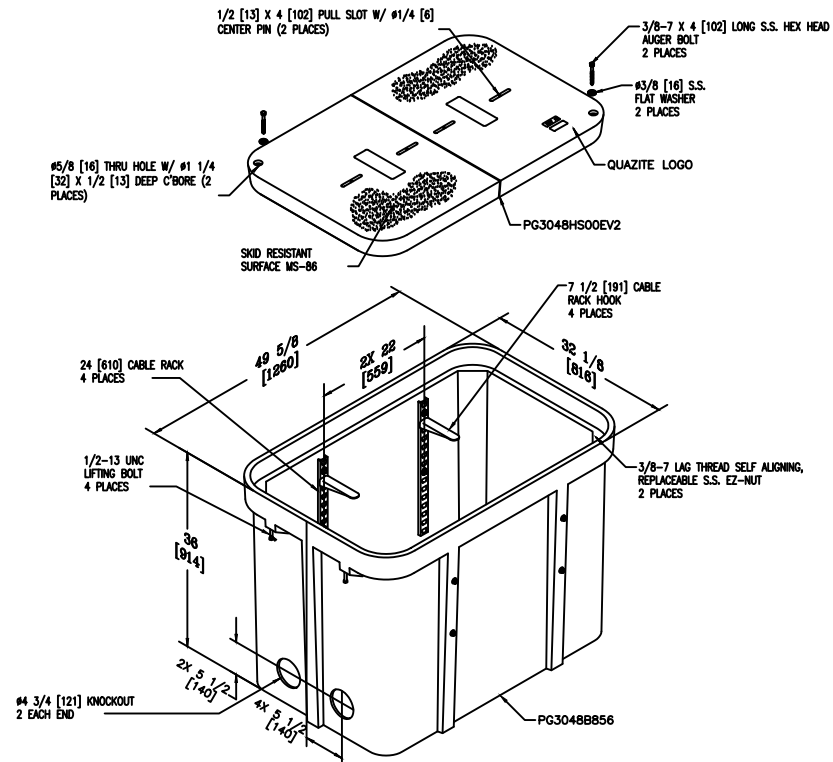
SCALE: 1"=50'

3				AS-BUILT
2				REVISION # 1
1	8/26/16	ML	KM	ORIGINAL
NO.	DATE	ENG DESIGN	DRAFTING	COMMENT



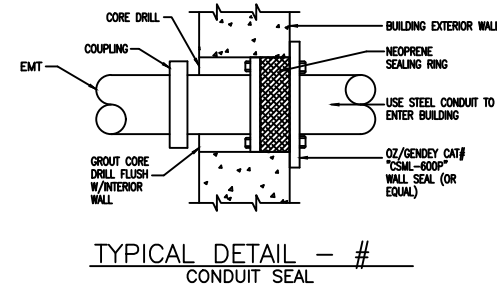
LEVEL 3 ENGINEER: BOB STRONG 952-351-2353
 ENGINEERING FIRM: TLR Consulting MIKE LAUGHLIN 320-963-2836
 PROJECT NUMBER:
 LOCATION: 6655 WEDGEWOOD RD, MAPLE GROVE MN
 DRAWING NAME: 6655 WEDGEWOOD RD MAPLE GROVE.dwg
 CONFIDENTIAL/PROPRIETARY SHEET: 5 OF 15

TYPICALS



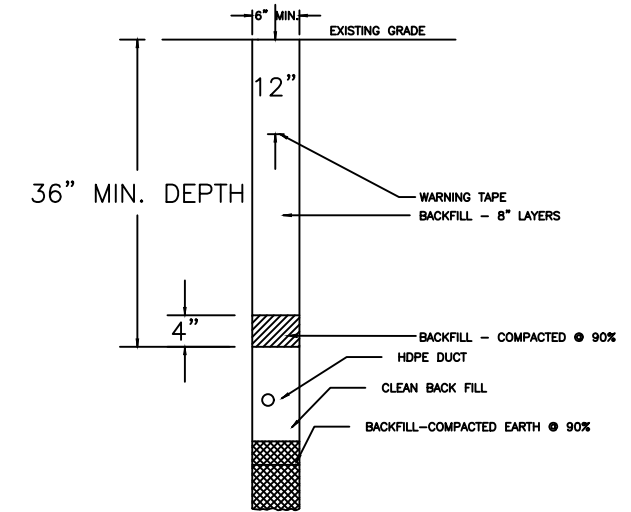
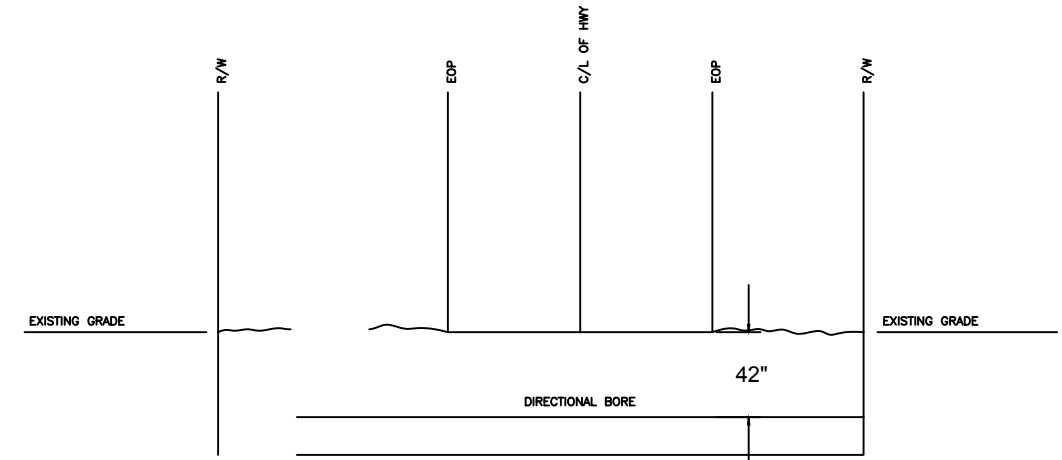
TYPICAL DETAIL - #

QUAZITE 30X48X36 ASSEMBLY
 W/(4) 24" CABLE RACKS
 & (4) 7 1/2" HOOKS
 PG3048Z987EV2

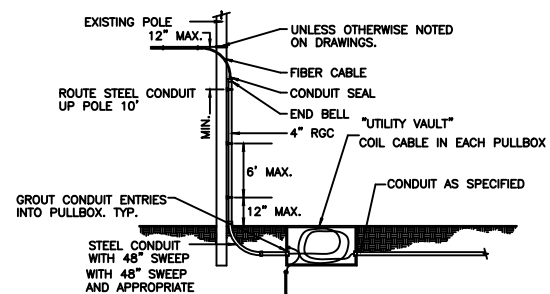


TYPICAL DETAIL - #
 DIRECTIONAL BORE
 UNDER ROAD / HIGHWAY / INTERSTATE

WEDGEWOOD ROAD



TYPICAL DETAIL - #
 TRENCH IN SOIL (NON TRAFFIC AREAS)



TYPICAL DETAIL - #
 AERIAL/UNDERGROUND TRANSITION

1 SYMBOL CORRESPONDS TO PHOTO LOCATIONS AND ORIENTATION. SEE SHEET # FOR SITE PHOTOGRAPHS.



Know what's below.
 Call before you dig.

3				AS-BUILT
2				REVISION # 1
1	8/26/16	ML	KM	ORIGINAL
NO.	DATE	ENG DESIGN	DRAFTING	COMMENT



LEVEL 3 ENGINEER: BOB STRONG 952-351-2353
 ENGINEERING FIRM: TLR Consulting MIKE LAUGHLIN 320-963-2836
 PROJECT NUMBER:
 LOCATION: 6655 WEDGEWOOD RD, MAPLE GROVE MN
 DRAWING NAME: 6655 WEDGEWOOD RD MAPLE GROVE.dwg

DETAILS



START AT EXISTING HANDHOLE ALONG BOULEVARD IN FRONT OF BUILDING ON WEDGEWOOD RD 1
4



FROM HANDHOLE BORE UNDER PATHWAY, GRASSY AREA AND PARKING LOT, CONTINUE AROUND TO BACK OF BUILDING. 2
4



CONTINUE TO BORE IN GRASSY AREA AROUND BUILDING 3
4



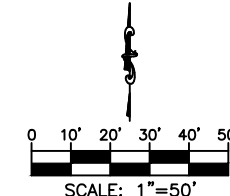
COMING FROM FRONT OF BUILDING, AROUND TO THE BACK. 4
4

SYMBOL CORRESPONDS TO PHOTO LOCATIONS AND ORIENTATION. SEE SHEET # FOR SITE PHOTOGRAPHS.

3				AS-BUILT
2				REVISION # 1
1	8/26/16	ML	KM	ORIGINAL
NO.	DATE	ENG DESIGN	DRAFTING	COMMENT



Know what's below.
Call before you dig.



Level(3)
COMMUNICATIONS

LEVEL 3 ENGINEER: BOB STRONG 952-351-2353
ENGINEERING FIRM: TLR Consulting MIKE LAUGHLIN 320-963-2836
PROJECT NUMBER:

LOCATION: 6655 WEDGEWOOD RD, MAPLE GROVE MN

DRAWING NAME: 6655 WEDGEWOOD RD MAPLE GROVE.dwg

CONFIDENTIAL/PROPRIETARY

SHEET: 7 OF 15

DETAILS



BORE BEHIND BUILDING. 5
4



PLACE NEW HANDHOLE BEFORE BORING TOWARDS THE BUILDING. SEE SHEET 5. 6
5



BORE UNDER PARKING LOT AT REAR OF BUILDING. 7
5

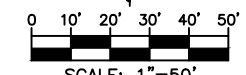


END AT BACK OF BUILDING. ENTRY WILL BE BELOW GRADE. 8
5

SYMBOL CORRESPONDS TO PHOTO LOCATIONS AND ORIENTATION. SEE SHEET # FOR SITE PHOTOGRAPHS.



Know what's below.
Call before you dig.



SCALE: 1"=50'

3				AS-BUILT
2				REVISION # 1
1	8/26/16	ML	KM	ORIGINAL
NO.	DATE	ENG DESIGN	DRAFTING	COMMENT



LEVEL 3 ENGINEER: BOB STRONG 952-351-2353

ENGINEERING FIRM: TLR Consulting MIKE LAUGHLIN 320-963-2836

PROJECT NUMBER:

LOCATION: 6655 WEDGEWOOD RD, MAPLE GROVE MN

DRAWING NAME: 6655 WEDGEWOOD RD MAPLE GROVE.dwg

CONFIDENTIAL/PROPRIETARY SHEET: 8 OF 15

ADDRESS: 6655 WEDGEWOOD RD, MAPLE GROVE
 PROJECT NAME: MEDIVATORS



SITE LOCATION

CONTACTS

CONTACT INFO:

PHONE:

SITE INDEX

- 1 - ISP SPLICE
- 2 - ISP SHEET
- 3 - PHOTOS
- 4 - OSP/ISP RAKE CARD TABLE

SCOPE OF WORK:

DESCRIPTION: OSP VENDER WILL COMPLETE A BELOW GRADE UNDER SLAB AND CORE FROM LOADING DOCK HEIGHT TO THE OUTSIDE BELOW GRADE INTERCEPT. A 4" CONDUIT WILL BE EXTENDED THROUGH THE FLOOR AND SWEEPED OUT TO THE OUTSIDE OF THE FOUNDATION. THE THREE 1.25" CONDUITS WILL THEN BE BROUGHT THROUGH THE 4" UP INTO THE DEMARCATION ROOM. THE ISP VENDER WILL THEN RUN 2" EMT UP THE WALL OVER THE DOOR AND CONTINUE ALONG THE WALL, TURNING AND CONTINUING AT THE NEXT WALL OVER TO THE DEMARC, WHERE A 4'X4'X3/4" FIRERATED PLYWOOD BACK BOARD WILL BE INSTALLED & A WALL MOUNTED CABINET. A 20AMP DEDICATED OUTLET WILL BE INSTALLED AND SERVED FROM THE EXISTING ELECTRICAL CIRCUIT PANEL. A GROUND BAR AND GROUNDING TO THE BUILDING GROUND WILL BE REQUIRED. TOTAL ISP WILL BE 55'

SYMBOL CORRESPONDS TO PHOTO LOCATIONS AND ORIENTATION. SEE SHEET # FOR SITE PHOTOGRAPHS.

3				AS-BUILT
2				REVISION # 1
1	8/26/16	ML	KM	ORIGINAL
NO.	DATE	ENG DESIGN	DRAFTING	COMMENT



LEVEL 3 ENGINEER: BOB STRONG 952-351-2353
 ENGINEERING FIRM: TLR Consulting MIKE LAUGHLIN 320-963-2836
 PROJECT NUMBER:
 LOCATION: 6655 WEDGEWOOD RD, MAPLE GROVE MN
 DRAWING NAME: 6655 WEDGEWOOD RD MAPLE GROVE.dwg

CONSTRUCTION NOTES

- ① CONDUIT OWNER: TWTC LEVEL3
 CONDUIT LENGTH: 55'
 CONDUIT QTY: CONDUITS
 CONDUIT SIZE: 2"
 CONDUIT TYPE: EMT
 NOTES: FROM BLDG. ENTRY TO BACKBOARD

- ② CABLE FIBERS: 24CT NON ARMORED
 CABLE OWNER: TWTC LEVEL3
 CABLE LENGTH: 55'
 NOTES: BLDG. ENTRY TO FDP CABINET

ELECTRICAL ROOM

DEMARCATION ROOM

FDP

LEVEL3
 24 FIBER
 DEMARC

24F	IN:	0
	TAIL:	0

Page Rate Card			
Unit Code & Description	Units	Estimated Quantity	Actual Quantity
ISP-40080 - Risers and Runs: Place 1" EMT (Building)	FT	40'	
ISP-40100 - Risers and Runs: Place 2" EMT (Building)	FT	55'	
ISP-40310 - MPOE/CPE Civil: Standard Colo Cabinet 28" x 36"	EACH	1	
ISP-40440 - Install ground bar and ground per applicable electrical codes	EACH	1	
ISP-40450 - Install Power Receptacle	EACH	1	
ISP-40470 - Power Cable: Install 1-phase 120V <= 30A ea addtl through empty duct	FT	40'	
ISP-40470 - Power Cable: Install 1-phase 120V <= 30A ea addtl through empty duct	FT	40'	
ISP-40460 - Power Cable : Install 1-phase 120V <= 30A through empty duct	FT	1	
ISP-40660 - Place Fiber Cable in innerduct	FT	55'	
ISP-40430 - Place FTP Back Board up to 4'x4'x3/4". Fire Retardant Paint	EACH	1	

Page Rate Card			
Unit Code & Description	Units	Estimated Quantity	Actual Quantity
MISC-80050-1-CABINET DELIVERY	EACH	1	
MAT-90630 - EMT 1"	FT	40'	
MAT-90650 - EMT 2"	FT	55'	
MAT-91530 - Miscellaneous Colo Cabinet - Standard 28" x 36"	EACH	1	
MAT-91620 - 20A, 120V Single Phase Power Cable	FT	120'	
MAT-91760 - L5-20 Receptacle	EACH	1	
MAT-92120 - Ground Bar	EACH	1	
MAT-91320 - Miscellaneous fiber optic cable PROVIDED BY Level3	FT	55'	
MAT-92140 - Miscellaneous Ground Wire	FT	50'	
MAT-91580 - Miscellaneous Back Board up to 4'x4'x3/4". Fire Retardant Paint	EACH	1	
MAT-90210 - Conduit Sweep: 1" any angle	EACH	3	
MAT-90240 - Conduit Sweep: 2" any angle	EACH	4	

Ⓝ SYMBOL CORRESPONDS TO PHOTO LOCATIONS AND ORIENTATION. SEE SHEET # FOR SITE PHOTOGRAPHS.

3				AS-BUILT
2				REVISION # 1
1	8/26/16	ML	KM	ORIGINAL
NO.	DATE	ENG DESIGN	DRAFTING	COMMENT

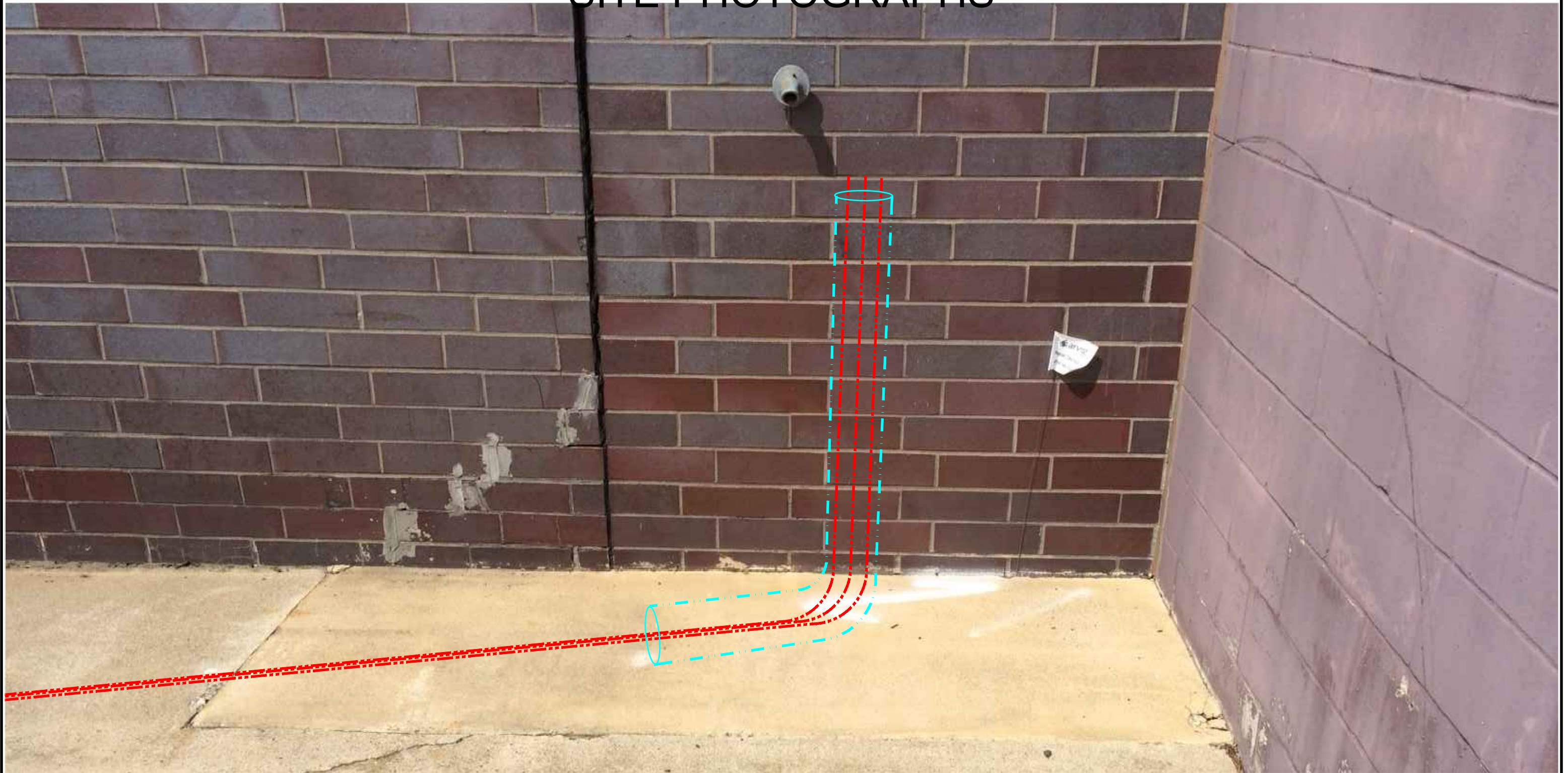


LEVEL 3 ENGINEER: BOB STRONG 952-351-2353
 ENGINEERING FIRM: TLR Consulting MIKE LAUGHLIN 320-963-2836
 PROJECT NUMBER:
 LOCATION: 6655 WEDGEWOOD RD, MAPLE GROVE MN
 DRAWING NAME: 6655 WEDGEWOOD RD MAPLE GROVE.dwg

811
 Know what's below.
 Call before you dig.

SCALE: 1"=50'

SITE PHOTOGRAPHS



**UNDERGROUND BLDG. ENTRY - 4" CONDUIT
BROUGHT UNDER FOUNDATION AND EXTENDED
UP THROUGH FLOOR - 3-1.25" DUCT FED THROUGH**



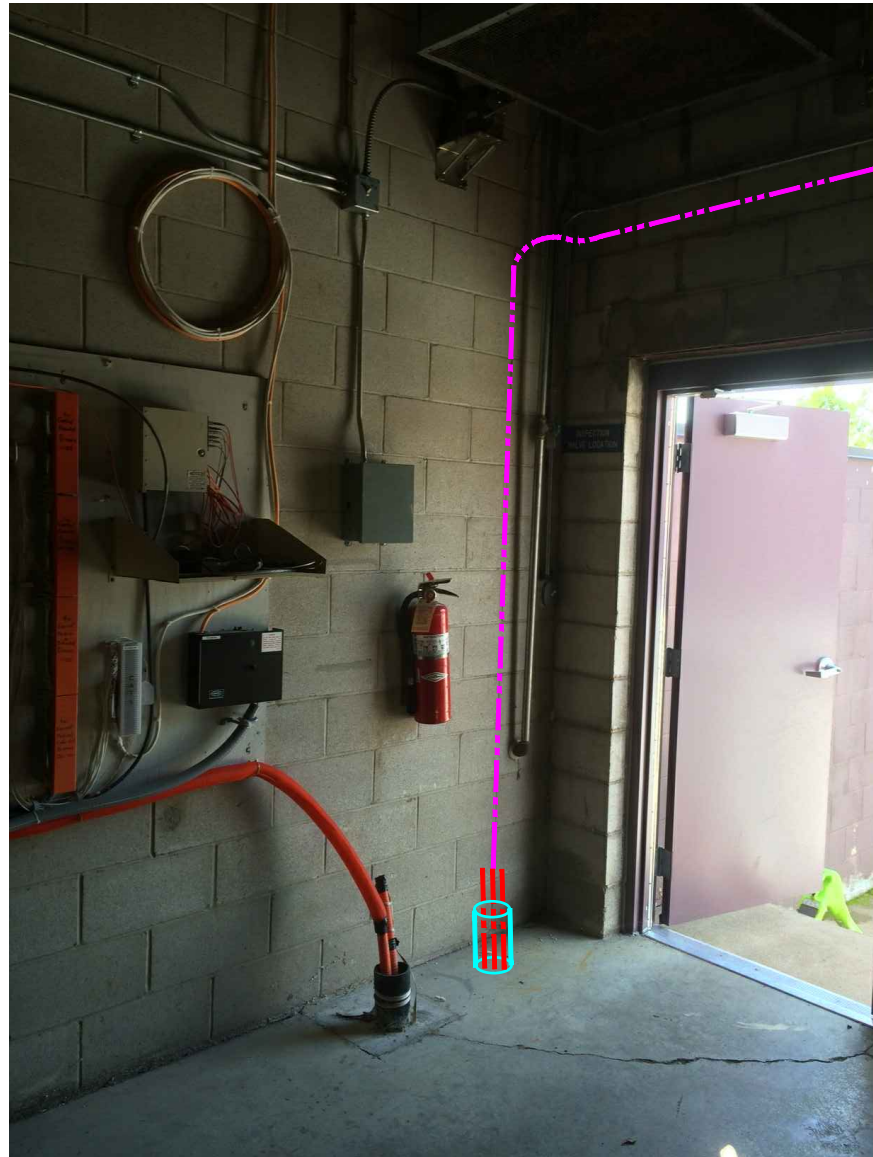
Know what's below.
Call before you dig.

3				AS-BUILT
2				REVISION # 1
1	8/26/16	ML	KM	ORIGINAL
NO.	DATE	ENG DESIGN	DRAFTING	COMMENT

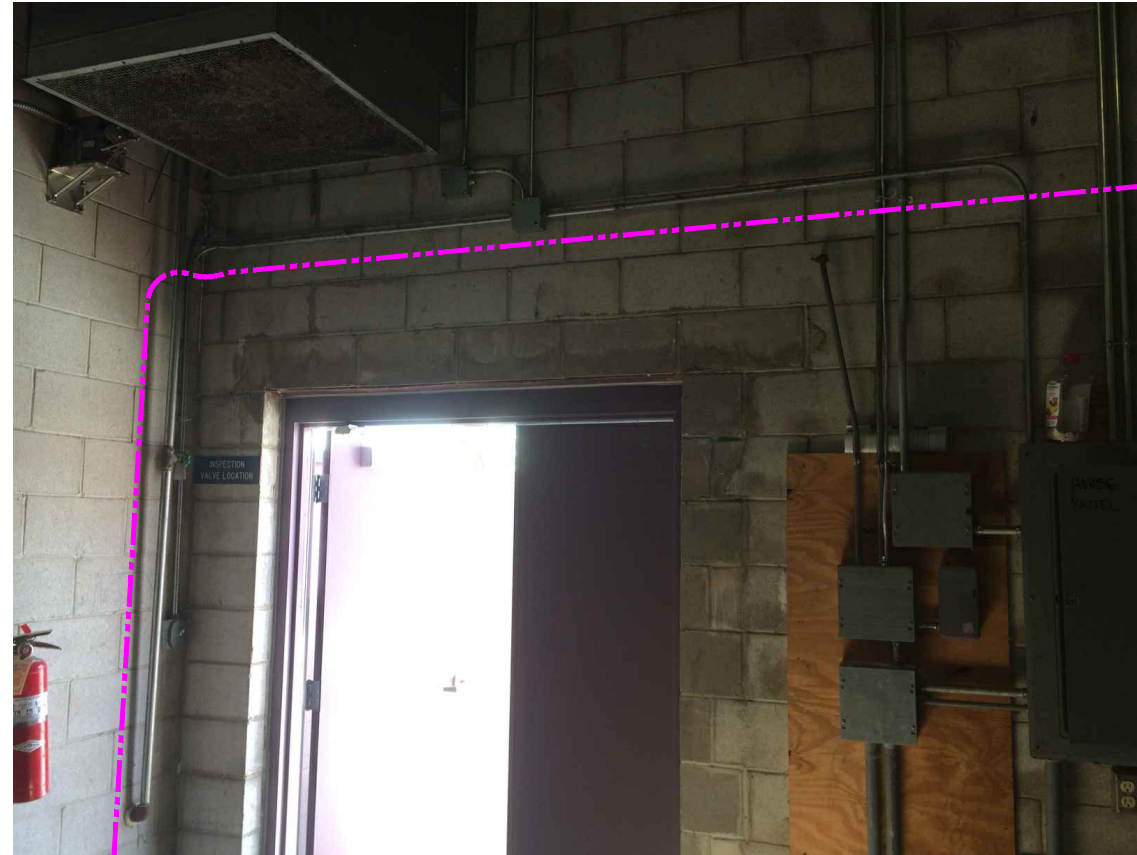


LEVEL 3 ENGINEER: BOB STRONG 952-351-2353
ENGINEERING FIRM: TLR Consulting MIKE LAUGHLIN 320-963-2836
PROJECT NUMBER:
LOCATION: 6655 WEDGEWOOD RD, MAPLE GROVE MN
DRAWING NAME: 6655 WEDGEWOOD RD MAPLE GROVE.dwg
CONFIDENTIAL/PROPRIETARY SHEET: 11 OF 15

SITE PHOTOGRAPHS



4" BLDG. ENTRY THROUGH FLOOR AND 2" EMT FROM ENTRY UP WALL AND OVER DOOR



2" EMT ROUTE ALONG WEST WALL



2" EMT ROUTE CONTINUING ALONG WEST WALL. CIRCUIT BREAKER PANEL LOCATION FOR OUTLET FEED.



Know what's below.
Call before you dig.

3				AS-BUILT
2				REVISION # 1
1	8/26/16	ML	KM	ORIGINAL
NO.	DATE	ENG DESIGN	DRAFTING	COMMENT



LEVEL 3 ENGINEER: BOB STRONG 952-351-2353
 ENGINEERING FIRM: TLR Consulting MIKE LAUGHLIN 320-963-2836
 PROJECT NUMBER:
 LOCATION: 6655 WEDGEWOOD RD, MAPLE GROVE MN
 DRAWING NAME: 6655 WEDGEWOOD RD MAPLE GROVE.dwg
 CONFIDENTIAL/PROPRIETARY SHEET: 12 OF 15

SITE PHOTOGRAPHS



2" EMT ROUTE CONTINUING ALONG WEST WALL AND TURNING ALONG THE NORTH WALL, PAST THE STAIR CASE. CIRCUIT BREAKER PANEL LOCATION FOR OUTLET FEED.



2" EMT ROUTE CONTINUING ALONG THE NORTH WALL PAST THE STAIR CASE TO THE BACKBOARD LOCATION.



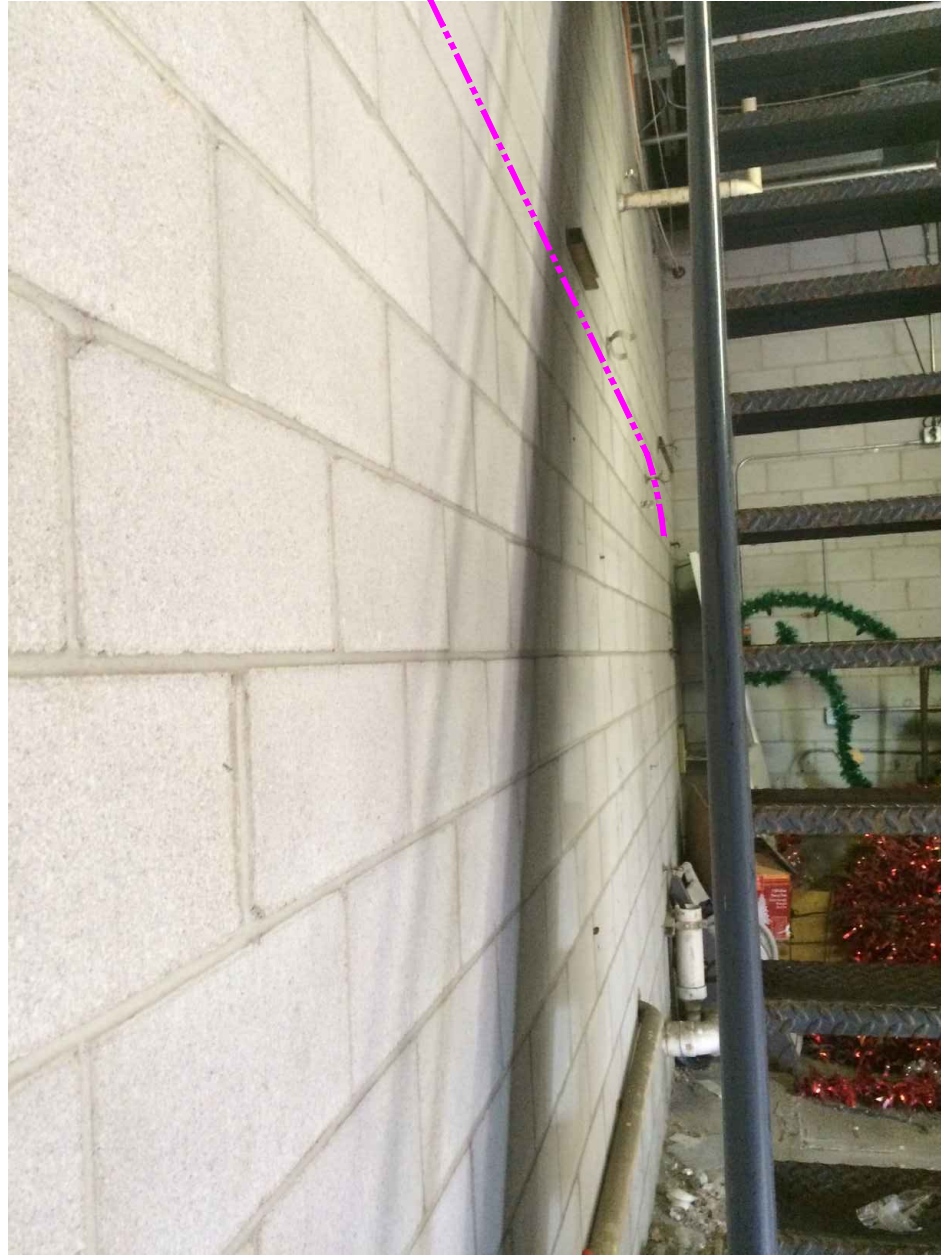
Know what's below.
Call before you dig.

3				AS-BUILT
2				REVISION # 1
1	8/26/16	ML	KM	ORIGINAL
NO.	DATE	ENG DESIGN	DRAFTING	COMMENT

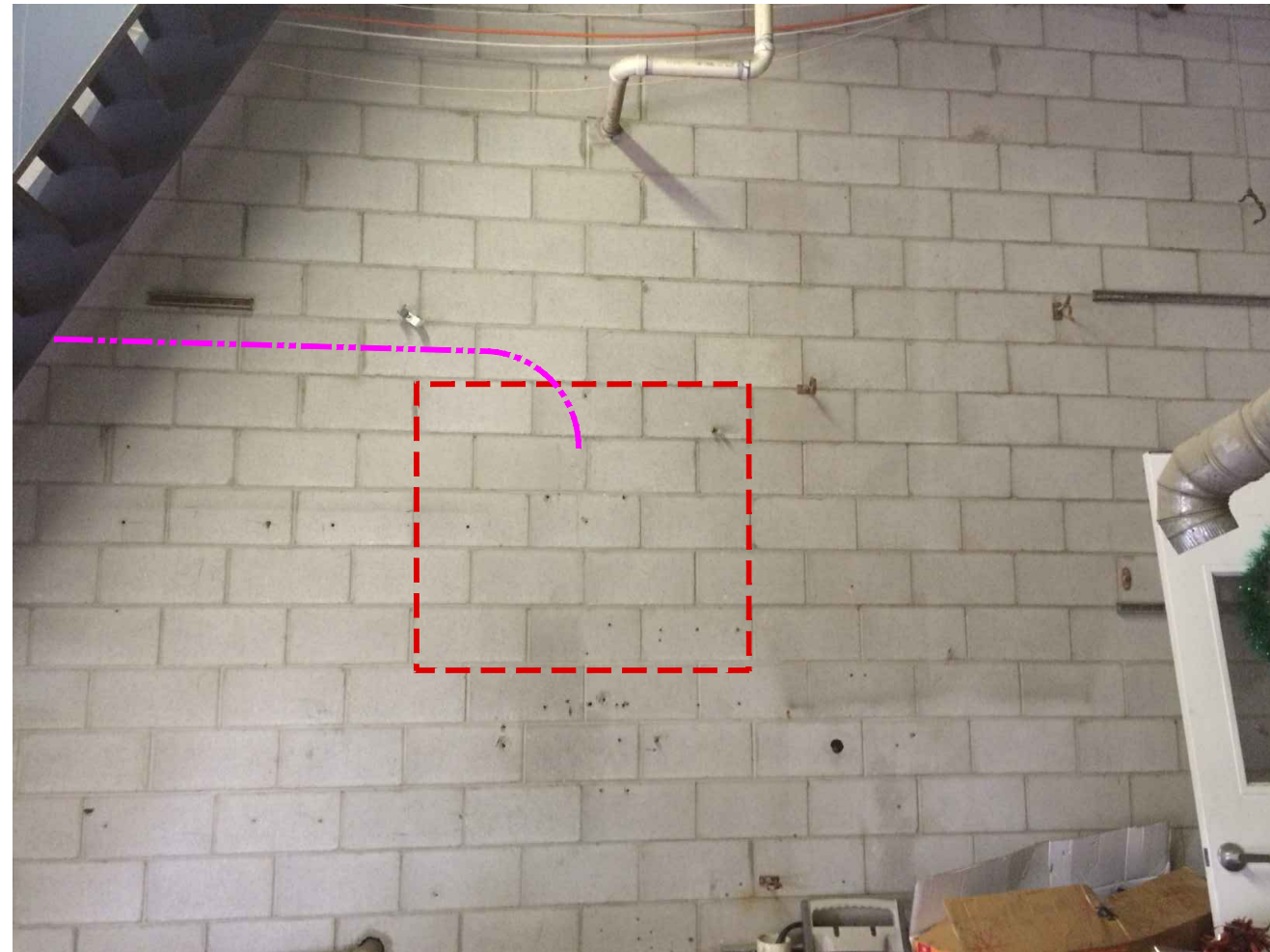


LEVEL 3 ENGINEER: BOB STRONG 952-351-2353
 ENGINEERING FIRM: TLR Consulting MIKE LAUGHLIN 320-963-2836
 PROJECT NUMBER:
 LOCATION: 6655 WEDGEWOOD RD, MAPLE GROVE MN
 DRAWING NAME: 6655 WEDGEWOOD RD MAPLE GROVE.dwg
 CONFIDENTIAL/PROPRIETARY SHEET: 13 OF 15

SITE PHOTOGRAPHS



VIEW SHOWING THE SPACE BETWEEN THE NORTH WALL AND THE STAIR CASE FOR 2" EMT AND 1" EMT POWER FEED.



2" EMT TO THE BACKBOARD LOCATION ON THE NORTH WALL OF DEMARC. ROOM.



Know what's below.
Call before you dig.

3				AS-BUILT
2				REVISION # 1
1	8/26/16	ML	KM	ORIGINAL
NO.	DATE	ENG DESIGN	DRAFTING	COMMENT



LEVEL 3 ENGINEER: BOB STRONG 952-351-2353
 ENGINEERING FIRM: TLR Consulting MIKE LAUGHLIN 320-963-2836
 PROJECT NUMBER:
 LOCATION: 6655 WEDGEWOOD RD, MAPLE GROVE MN
 DRAWING NAME: 6655 WEDGEWOOD RD MAPLE GROVE.dwg
 CONFIDENTIAL/PROPRIETARY SHEET: 14 OF 15

Total Underground Rate Card			
Unit Code & Description	Units	Estimated Quantity	Actual Quantity
UGB-30550 - Directional Bore up to 1500': 3 HDPE conduits up to 2" (on one reel)	FT	787'	
UGB-30830 - Place Locate Wire in Existing Conduit	FT	787'	
UGB-30960 - Place up to 288 count FOC in conduit, up to 1500'	FT	1087'	
UGB-31270 - Place New - 30"x48"x36" - Non-concrete Manhole / Handhole	EACH	1	
UGB-31610 - Core Bore MH/HH: 4" Outside Diameter	EACH	1	
UGB-31640 - Excavate Small Pit: 6'x4'x5'	EACH	2	
UGB-32000 - Place Locate Test Station	EACH	1	
ISP-40040 - Core Foundation greater than 12"	EACH	1	
ISP-40060 - Core Floor greater than 12"	EACH	1	
UGB-30900 - Place Three - Up to 2" HDPE in existing conduit	FT	20	
UGB-31110 - Remove & Restore Paved Surface, Concrete: 6" Depth	SQFT	60	
UGB-31170 - Remove & Restore Paved Surface, Asphalt: 6" Depth	SQFT	60	

Total Material Rate Card			
Unit Code & Description	Units	Estimated Quantity	Actual Quantity
MAT-90070 - CONDUIT: 1 1/4 HDPE SDR-11	FT	2361'	
MAT-91320 - Miscellaneous fiber optic cable PROVIDED BY Level3	EACH	1087'	
MAT-91980 - Locate wire #12 AWG - solid copper with insulated jacket	FT	1087'	
MAT-90760 - Conduit Plug: 1-1/4" Blank Jackmoon equivalent	EACH	8	
MAT-90770 - Conduit Plug: 1-1/4" with Cable Simplex Plug Jackmoon equivalent	EACH	4	
MAT-90970 - Tier 15 30"x48"x36" - With knock-outs and racking - Including Cover	EACH	1	
MAT-92080 - Test Stations- Marker post 3 terminal PROVIDED BY Level3	EACH	1	
MAT-92000 - Locate wire # 6 AWG - solid copper with insulated jacket	FT	120'	
MAT-90490 - Casing Steel 4" .288 thickness ASTM A139 Grade B	FT	10	
MAT-90310 - Conduit Steel Sweep: 4" any angle	EACH	1	
MAT-92030 - Flow fill	SQ	30	

Total Inside Plant (ISP) Rate Card			
Unit Code & Description	Units	Estimated Quantity	Actual Quantity
ISP-40080 - Risers and Runs: Place 1" EMT (Building)	FT	40'	
ISP-40100 - Risers and Runs: Place 2" EMT (Building)	FT	55'	
ISP-40310 - MPOE/CPE Civil: Standard Colo Cabinet 28" x 36"	EACH	1	
ISP-40440 - Install ground bar and ground per applicable electrical codes	EACH	1	
ISP-40450 - Install Power Receptacle	EACH	1	
ISP-40470 - Power Cable: Install 1-phase 120V <= 30A ea addtl through empty duct	FT	40'	
ISP-40470 - Power Cable: Install 1-phase 120V <= 30A ea addtl through empty duct	FT	40'	
ISP-40460 - Power Cable : Install 1-phase 120V <= 30A through empty duct	FT	1	
ISP-40660 - Place Fiber Cable in innerduct	FT	55'	
ISP-40430 - Place FTP Back Board up to 4'x4'x3/4". Fire Retardant Paint	EACH	1	

Total Material Rate Card			
Unit Code & Description	Units	Estimated Quantity	Actual Quantity
MISC-80050-1-CABINET DELIVERY	EACH	1	
MAT-90630 - EMT 1"	FT	40'	
MAT-90650 - EMT 2"	FT	55'	
MAT-91530 - Miscellaneous Colo Cabinet - Standard 28" x 36"	EACH	1	
MAT-91620 - 20A, 120V Single Phase Power Cable	FT	120'	
MAT-91760 - L5-20 Receptacle	EACH	1	
MAT-92120 - Ground Bar	EACH	1	
MAT-91320 - Miscellaneous fiber optic cable PROVIDED BY Level3	FT	55'	
MAT-92140 - Miscellaneous Ground Wire	FT	50'	
MAT-91580 - Miscellaneous Back Board up to 4'x4'x3/4". Fire Retardant Paint	EACH	1	
MAT-90210 - Conduit Sweep: 1" any angle	EACH	3	
MAT-90240 - Conduit Sweep: 2" any angle	EACH	4	

Total Aerial Rate Card			
Unit Code & Description	Units	Estimated Quantity	Actual Quantity

Total Material Rate Card			
Unit Code & Description	Units	Estimated Quantity	Actual Quantity



3				AS-BUILT
2				REVISION # 1
1	8/26/16	ML	KM	ORIGINAL
NO.	DATE	ENG DESIGN	DRAFTING	COMMENT



LEVEL 3 ENGINEER: BOB STRONG 952-351-2353
 ENGINEERING FIRM: TLR Consulting MIKE LAUGHLIN 320-963-2836
 PROJECT NUMBER:
 LOCATION: 6655 WEDGEWOOD RD, MAPLE GROVE MN
 DRAWING NAME: 6655 WEDGEWOOD RD MAPLE GROVE.dwg
 CONFIDENTIAL/PROPRIETARY SHEET: 15 OF 15