



FARRAGUT MUNICIPAL PLANNING COMMISSION AGENDA

July 16, 2020

5:30 p.m. Workshop Review

Wireless Communication Science and Issues by Christopher Davis, PhD from the University of Maryland Department of Electrical and Computer Engineering

7:00 p.m. Regular Meeting

This meeting can be viewed live on Charter channel 193 and TDS channel 3." The meeting will be held virtually, authorized by Governor Lee's executive orders regarding the COVID19 pandemic.

Meeting comments may be emailed to comments@townoffarragut.org and must be received by 12:00 p.m. on July 16 to be included in the record of the meeting. Anyone that wishes to provide comments must include their name and address. For questions please e-mail Mark Shipley at mshipley@townoffarragut.org or Bart Hose at bhose@townoffarragut.org

- 1. Approval of agenda**
- 2. Election of Officers**
- 3. Approval of minutes – June 18, 2020**
- 4. Discussion and public hearing on a new application and schedule for MCImetro 2020 Fiber Build, along portions of N. Campbell Station Road, Herron Road, West End Avenue, and portions of the Cove at Turkey Creek, Stonecrest, and Sweet Briar Subdivisions (Mastec, Applicant)**
- 5. Discussion and public hearing on a conceptual master plan for the redevelopment of the old Kroger property – Farragut Town Center at Biddle Farms, Parcels 3.02, 3.03, a portion of 3.18, and a portion of 3.19, Tax Map 143, 45 Acres (SITE Incorporated, Applicant)**
- 6. Discussion and public hearing on a request for a variance from the number of access points permitted on a local street as provided for in the Driveways and Other Accessways Ordinance in relation to the property at 11740 Weathervane Drive (Jon-David and Allison Deeson, Applicant)**

11408 MUNICIPAL CENTER DRIVE | FARRAGUT, TN 37934 | 865.966.7057

WWW.TOWNOFFARRAGUT.ORG

It is the policy of the Town of Farragut not to discriminate on the basis of race, color, national origin, age, sex, or disability pursuant to Title VI of the Civil Rights Act of 1964, Public Law 93-112 and 101-336 in its hiring, employment practices and programs. To request accommodations due to disabilities, please call 865-966-7057 in advance of the meeting.

7. **Discussion on a request to amend Appendix A – Zoning, Chapter 3., Specific District Regulations, Section XII., General Commercial District (C-1), B., 3., as it relates to the outdoor display and or storage of general farm implements and lawn care equipment, riding lawn mowers, and related accessories (Farragut Lawn and Tractor, Applicant)**
8. **Discussion on a request to rezone the property at 11824 Kingston Pike, Parcel 025, Tax Map 152C, Group J., 1.81 Acres from Office (O-1) to General Single-Family Residential (R-2) (Troy and Evangella Stavros, Applicant)**
9. **Discussion on a request to rezone Parcel 021.03, Tax Map 153 (end of Spring Branch Lane), from Rural Residential (R-1) to General Single-Family Residential (R-2), 6.84 Acres (Rackley Engineering, Applicant)**
10. **Discussion on a request to amend the Farragut Zoning Ordinance to permit a microbrewery and brewpub (Carlos Cortez, Applicant)**
11. **Approval of utilities**
12. **Citizen Forum**

Planning Commission Meeting Public Comment Protocol

The Planning Commission welcomes and invites citizens to participate in public meetings.

At the end of each meeting, there will be time reserved for public comment on matters not on the regular agenda under the Citizen Forum agenda item. If you are interested in providing a comment, please do so through the Town's web site at comments@townoffarragut.org by no later than 12:00 p.m. on the date of the meeting. Please provide your name and address with the comment.

During the regular agenda portion of the meeting there may be an allowance for public comment for each agenda item. The Chairman may recognize public comment based on the following guidelines:

1. The Chairman shall maintain and control the meeting to provide a professional and objective environment conducive to presentation and discussion of the agenda items;
2. Comments shall address issues, not individuals or personalities;
3. Comments may support or oppose particular issues or measures, but the motives of those with differing views shall not be questioned or attacked;
4. Personal attacks and malicious comments shall not be tolerated;
5. An applicant, and/or their representative(s), for an item on the regular agenda shall be afforded the time necessary to present their request and respond to questions.



I am Christopher C. Davis, a physicist, biophysicist, engineer, and professor specializing in electromagnetic theory and related areas. I was a tenured full professor of Electrical and Computer Engineering at the University of Maryland in College Park, Maryland for over 44 years. I am now Research Professor. I also hold an endowed chaired professorship as Minta Martin Professor of Engineering.

I have taught electromagnetic theory and related subjects since 1975. Electromagnetic theory is the study of electromagnetic waves, like radiofrequency (RF) waves, their propagation characteristics and how they interact with various structures and organisms. I am a member of several professional societies that have recognized my experiences and expertise in bioelectromagnetics and related fields. I am an elected Fellow of the Institute of Electrical and Electronics Engineers (IEEE) and the Institute of Physics. I am a past member of the IEEE Committee on Man and Radiation, and a past Chair of that committee's Sub Committee on RF and Microwaves.

I have been involved with research on the possible biological effect of RF, including microwave and millimeter wave fields, and how such waves are absorbed by various materials for over 40 years. I have submitted my curriculum vitae, which summarizes my education, experience, and publications.

I am here today at the request of CTIA to explain that: (1) the Federal Communications Commission (FCC) has established exposure limits that apply to small cell facilities and are based on recommendations from international expert standard setting bodies that continually evaluate the science; (2) the FCC standards are conservative, with a fifty-fold safety factor below the threshold at which there is any known potential health effect from exposure to RF fields; and (3) my calculations demonstrate that the public's exposure to RF emissions from small cell facilities operating at maximum power will be hundreds of times below the FCC's conservative limits.

The FCC has established exposure limits for all RF-regulated transmitters, which includes small cell wireless facilities. Specifically, the FCC has adopted "Maximum Permissible Exposure (MPE) limits for electric and magnetic field strength and power density for transmitters operating at frequencies from 300 kHz to 100 GHz," which apply to the frequencies utilized in small cell wireless facilities. All RF emitting transmitters and facilities must either comply with the FCC guidelines (or be categorically excluded under those guidelines) or file an Environmental Assessment with the FCC. In addition to federal enforcement of the limits, it is common for authorities to "require a certificate of compliance with FCC rules related to radio frequency emission from a small cell wireless facility."

The FCC exposure limits (together with those of most other countries around the world) are based on limits developed by independent expert organizations. The FCC limits are based on recommendations from the IEEE (certified by the American National Standards Institute (ANSI)) and the National Council on Radiation Protection and Measurements (NCRP), which

the FCC accurately characterizes as “internationally recognized for their expertise in this area.”¹ Other countries base their standards on the recommendations from the International Commission on Nonionizing Radiation Protection (ICNIRP), which the FCC describes as “an international non-profit-making body of independent scientific experts addressing the possibility of adverse effects on human health of exposure to non-ionizing radiation.”²

The ANSI/IEEE, NCRP and ICNIRP limits are generally similar. They are designed to exclude all known hazards of RF energy with, in the words of the FCC, “a very large margin of safety” such that the limits are “many times below levels that are generally accepted as having the potential to cause adverse health effects.”³ Many organizations continue to review the scientific literature in this field as it develops, including the FCC, World Health Organization, and the IEEE and ICNIRP standards setting organizations. The FCC states that it “closely monitors all [health studies related to human exposure to RF fields]. However, at this time, there is no basis on which to establish a different safety threshold than our current requirements.”⁴

In my experience, RF exposure levels from wireless base stations are invariably far below the FCC limits. The FCC notes that “most facilities create maximum exposures that are only a small fraction of the limits.”⁵ Indeed, the FCC states that: “Measurements made near typical cellular and PCS installations, especially those with tower-mounted antennas, have shown that ground-level power densities are hundreds to thousands of times less than the FCC's limits for safe exposure. This makes it extremely unlikely that a member of the general public could be exposed to RF levels in excess of FCC guidelines due solely to cellular or PCS base station antennas located on towers or monopoles.”⁶ My calculations confirm that it is also extremely unlikely that a member of the general public could be exposed to emissions from small cell facilities that exceed the FCC guidelines.

The FCC regulations allow 0.533 milliwatts per square centimeter MPE at 800 MHz and 1.0 milliwatts per square centimeter MPE above 1.5 GHz. My understanding is that the typical maximum power output for a single antenna on a small cell installation is 30 watts (W) Effective Radiated Power (ERP), and a typical small cell installation would include four 30 W antennas at 120 W ERP total. Assuming maximum power from small cell installations 30 feet above the ground at various frequencies, typical small cell deployment would yield exposure levels hundreds of times below the FCC regulations.⁷ At a lower power level, such as 5 watts, the exposures are even lower. The chart below illustrates the point.

¹ FCC, Second Memorandum Opinion and Order and Notice of Proposed Rulemaking, 12 FCC RCD 13494 at ¶32 (August 25, 1997).

² FCC, First Report and Order Further Notice of Proposed Rule Making and Notice of Inquiry. FCC 13-39, at 7 n.20 (2013).

³ FCC, “A Local Government Official’s Guide to Transmitting Antenna RF Emission Safety; Rules, Procedures, and Practical Guidance” at 1 (June 2, 2000) (FCC Local Government Guide).

⁴ <https://www.fcc.gov/consumers/guides/wireless-devices-and-health-concerns>

⁵ FCC Local Government Guide at 1.

⁶ <https://www.fcc.gov/engineering-technology/electromagnetic-compatibility-division/radio-frequency-safety/faq/rf-safety#Q15>.

⁷ Note, wireless carriers seldom operate facilities at full power. For illustrative purposes, however, I used full power outputs in my calculations. Further, it is likely that small cell facilities will be deployed above 30’. I used 30’ because any antenna deployed above 32.8’ is categorically excluded under the FCC’s regulations based on height. FCC Local Government Guide, Appendix A.

Frequency	Power Level	Height	Maximum Human Exposure	FCC Maximum Permissible Exposure (MPE)	Times Below FCC MPE
800 MHz	30 W ERP	30 feet	0.00052 mW/cm ²	0.533 mW/cm ²	1,024
800 MHz	120 W ERP	30 feet	0.0021 mW/cm ²	0.533 mW/cm ²	256
1.9 GHz	30 W ERP	30 feet	0.00052mW/cm ²	1 mW/cm ²	1,922
1.9 GHz	120 W ERP	30 feet	0.0021 mW/cm ²	1 mW/cm ²	480
28 to 39 GHz	30 W ERP	30 feet	0.00052mW/cm ²	1 mW/cm ²	1,922
28 to 39 GHz	120 W ERP	30 feet	0.0021 mW/cm ²	1 mW/cm ²	480

Example Exposures from Small Cell Installations. (mW/cm² is milliwatts per square centimeter)

What this chart illustrates is that small cell facilities will expose the general public to RF at levels far below the allowed limit under the FCC guidelines, which themselves are set far below the threshold level at which there are known potential health effects from RF. Again, the FCC standards are science-based recommendations from expert standard setting organizations that constantly monitor the science. The FCC and FDA work with these organizations “to assure that safety standards continue to adequately protect the public.”⁸

⁸ <https://www.fda.gov/Radiation-EmittingProducts/RadiationEmittingProductsandProcedures/HomeBusinessandEntertainment/CellPhones/ucm116335.htm>

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Faculty Directory



Davis, Christopher

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[301-405-3637](tel:301-405-3637)

Website(s):

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BACKGROUND

Christopher C. Davis is Minta Martin Professor of Engineering and Professor of Electrical and Computer Engineering at the University of Maryland, College Park. He received the B.A. degree (with Honors) in Natural Sciences from the University of Cambridge in 1965, the M.A. degree from the University of Cambridge in 1970, and the Ph.D. degree in Physics from the University of Manchester in 1970. From 1973-1975 he was an Instructor/Research Associate at Cornell University, and from 1982-83 was a Senior Visiting Fellow at the University of Cambridge. He has been a recipient of the following Honors and Awards: University of Maryland Distinguished Scholar-Teacher, 1989-90; Fellow of the Institute of Physics, 1989; AT&T/ASEE Award for Excellence in Engineering Education, 1990; Fellow of the IEEE, 1993; Invention of the Year Award in Information Technology, University of Maryland, 2000; Poole and Kent Teaching Award for Senior Faculty, 2012. Professor Davis is the author of the widely used text "Lasers and Electro-Optics," published by Cambridge University Press, and co-author with Jack Moore and Mike Coplan of the best selling text "Building Scientific Apparatus," recently published in its 4th edition by Cambridge University Press. He is also author or co-author of 14 chapters in books, 215 refereed journal articles and over 295 conference papers, and is the holder of twelve awarded and several pending patents. He is Conference co-Chair of the SPIE Free Space Laser Communications Conference, and is a frequent invited lecturer both nationally and internationally. He has

served as a scientific consultant to several US Government agencies and industry. He is a member of the IEEE Committee SCC-34 SC2, which deals with RF exposure from wireless devices.

HONORS AND AWARDS

Clark School of Engineering Senior Faculty Outstanding Research Award (2014)

Clark School of Engineering Poole and Kent Senior Faculty Teaching Award (2012)

University of Maryland Invention of the Year Award in Information Science (2000)

Technology Education Award of Distinction awarded by the Technology Education Association of Maryland (1999)

Fellow of IEEE (1993)

NASA Certificate of Recognition for Fiber Injection Locked Broad Area Laser (1992)

AT&T/ASEE Award for Excellence in Engineering Education (1990)

Distinguished Scholar-Teacher Award, University of Maryland (1989-1990)

Fellow of the Institute of Physics (1989)

NSF Creativity Award (1983)

S.E.R.C. Senior Visiting Fellow, University of Cambridge (1982)

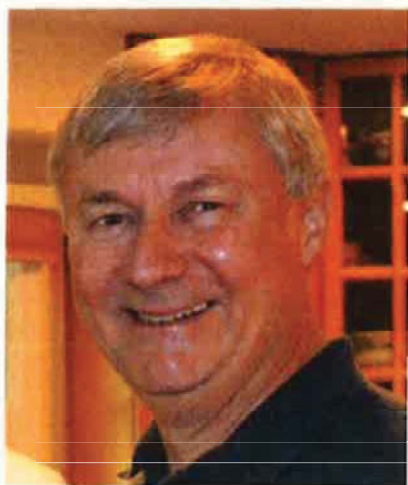
George Corcoran Award, ECE Department, University of Maryland (1978)

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Faculty Directory



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Free space optical and directional RF communication systems, atmospheric turbulence, advanced surveillance systems, plasmonics, chemical and biological sensors, interferometry, optical systems, bioelectromagnetics, RF dosimetry. Currently active research includes optical and RF directional wireless, real-time advanced surveillance systems with "event" detection, the optical properties of nanostructures where surface plasmons can be excited, laser interferometry, dielectrometry, fiber sensors and biosensors, magneto-optics, optical trace detection, atmospheric turbulence, optical communication systems and devices, and studies of the biological effects of non-ionizing radiation. Latest papers: (1) R. Fainchtein, D.M. Brown, K.M. Siegrist, A.H. Monica, E. Hwang, S. D. Milner, and C.C. Davis, "Time-Dependent Near-Blackbody Thermal Emission from Pulsed Laser-Irradiated Vertically Aligned Carbon Nanotube Arrays," Physical Review B 85, 125432-1 125432-12. 2012. (2) H. Zhang, J. Llorca, C.C. Davis, and S.D. Milner. Nature-Inspired Self-Organization, Control, and Optimization in Heterogeneous Wireless Networks. IEEE Trans. Mob. Comp. 11, 1207-1222, 2012. His past research has covered gas lasers, photon counting, chemical lasers, molecular relaxation processes, diode-pumped solid-state lasers, laser noise and instabilities, injection locking of broad area laser diodes, nonlinear imaging of ferroelectric and ferromagnetic materials, and near-field scanning optical microscopy.

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A Brief Review of Wireless Communication Science and Issues

- Electromagnetic Fields
- The Spectrum
- Wireless Technologies and Applications
- Are the Radio Frequency Fields used in Wireless Communications a Health Hazard?

Christopher C. Davis
Department of Electrical and Computer Engineering
University of Maryland, College Park, USA

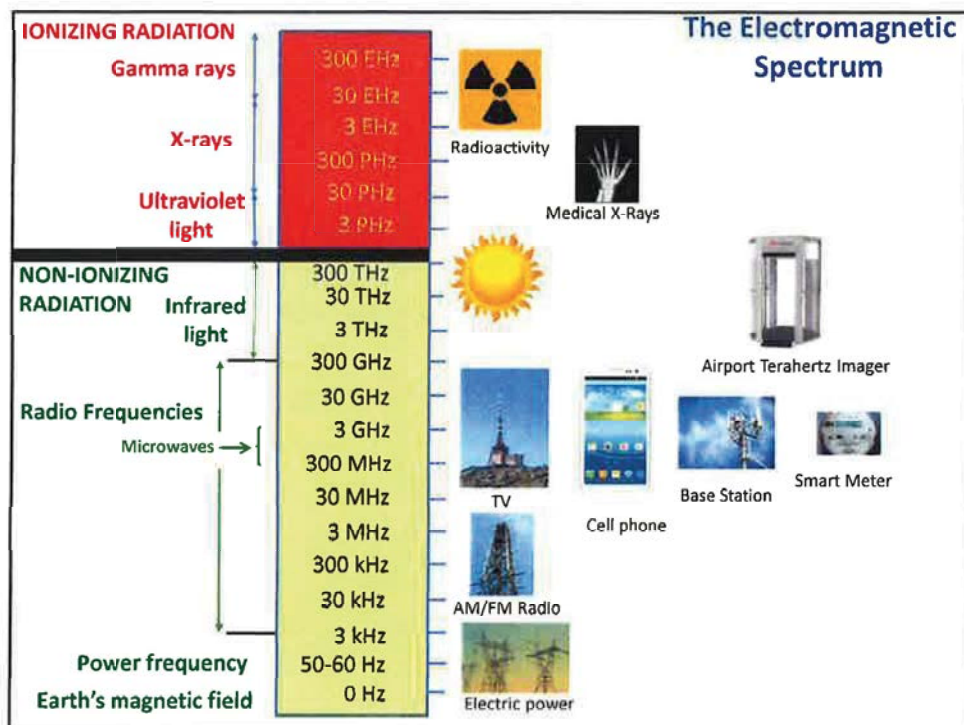
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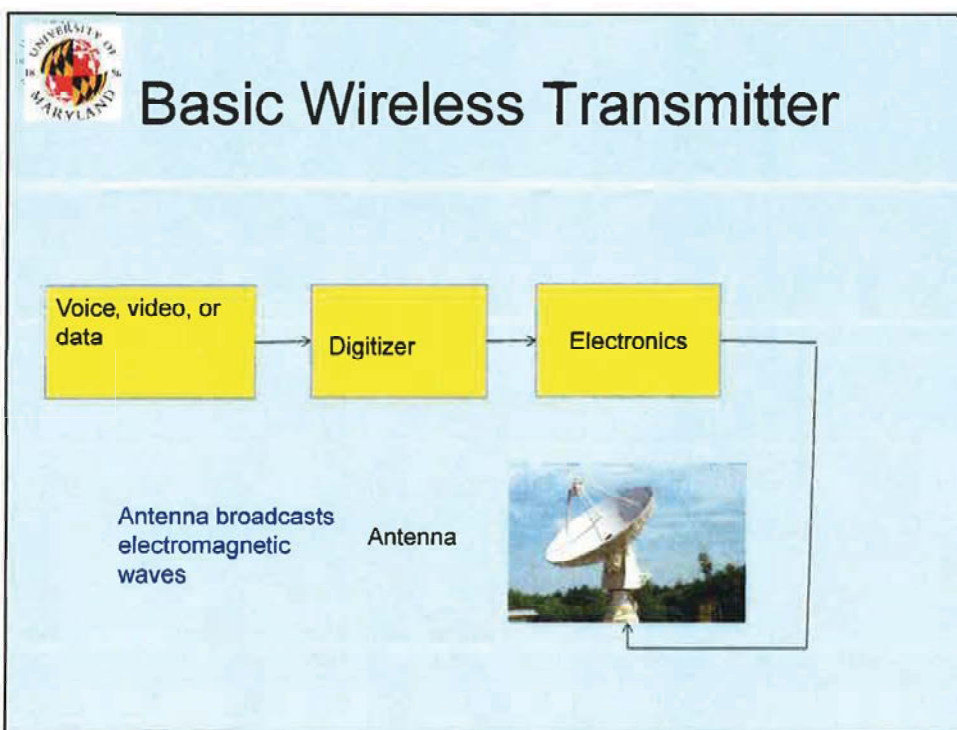
We live in a wireless world

- Radio
 - Television
 - Radar
 - Sensors
 - Phones
-
- Important parameters:
 - Power
 - Frequency
 - Directionality

2



3



4



Current Technologies will migrate from 4G LTE to 5G

- LTE stands for “long term evolution”
- 4G LTE has evolved from technologies like GSM, UMTS, and CDMA
- 5G will offer more capacity for more users
- 5G will offer higher data rates

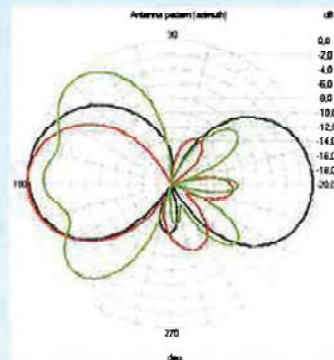
Cellular communications involves RF with complex modulation patterns

5



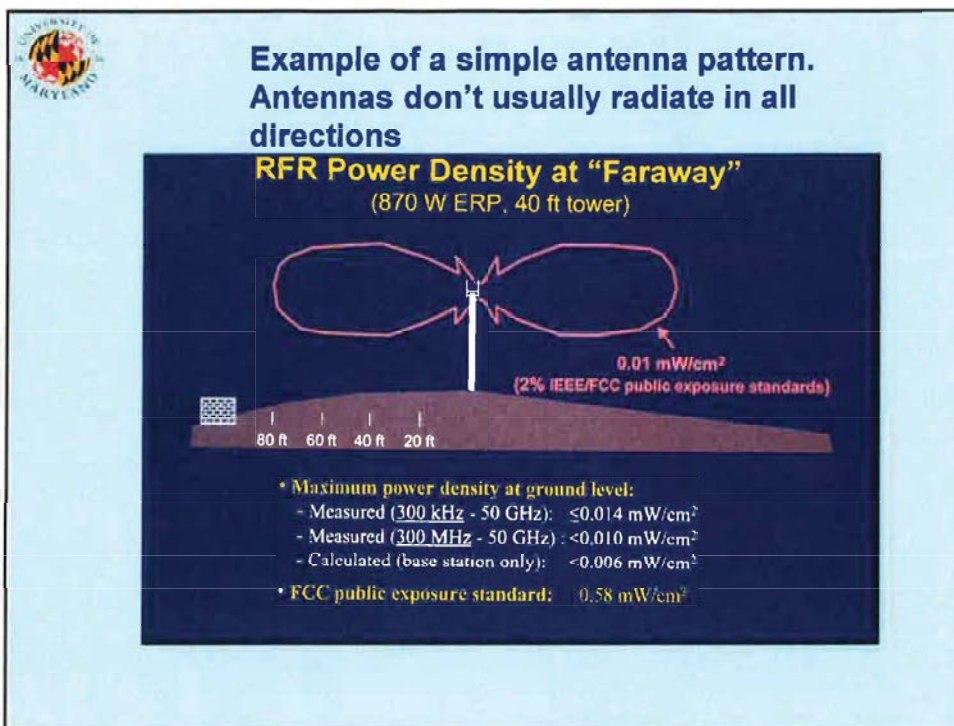
5G Antennas have complex radiation patterns

- The antenna can change its radiation pattern to optimize service to users
- Much of the radiation from an antenna on a pole travels in a horizontal direction
- There may be negligible radiation directly underneath the antenna



https://www.geozondas.com/image/antennas/AP_05_25_E_plane.gif

6



7



Safe exposure limits (MPE) for RF fields

- Maximum safe RF exposures obey FCC safety limits following the recommendation of safety panels:
- IEEE (Institute of Electrical and Electronics Engineers)
- NCRP (National Council on Radiation Protection)
- ICNIRP (International Council on Non-Ionizing Radiation Protection)
- Many international safety agencies such as the United Kingdom Health Protection Agency (2012), the Royal Society of Canada (2013), the New Zealand Ministry of Health (2015), and the European Commission's Scientific Committee on Emerging and Newly Identified Health Risks (2015).

MPE for far-field exposure is $f(\text{MHz})/1500 \text{ mW/cm}^2$ for $f < 1.5 \text{ GHz}$
 1 mW/cm^2 for $f > 1.5 \text{ GHz}$

High RF frequencies, which will be used in future 5G installations can only penetrate a few mm into the body, whereas current 4G cell phone frequencies penetrate a few cm. 5G power will need to be kept low to avoid users feeling warm if they use a hand set near their face.

8



How were safety standards established?

- Animals were exposed to different levels of exposure and the lowest exposure level where the animals showed a behavioral response was determined
- The animals were not harmed but clearly noticed a heating effect
- The safe exposure level for the general public was then set at a level 50 times lower than the lowest level that affected animals

The FCC has recently reaffirmed its RF exposure standards, finding that, "The record does not demonstrate that the science underpinning the current RF exposure limits is outdated or insufficient to protect human safety. Nor does the record include actionable alternatives or modifications to the current RF limits supported by scientifically rigorous data or analysis."

<https://www.fcc.gov/document/fcc-maintains-current-rf-exposure-safety-standards>

9



Example Exposures from Small Cell Installations (mW/cm² is milliwatts per square centimeter)

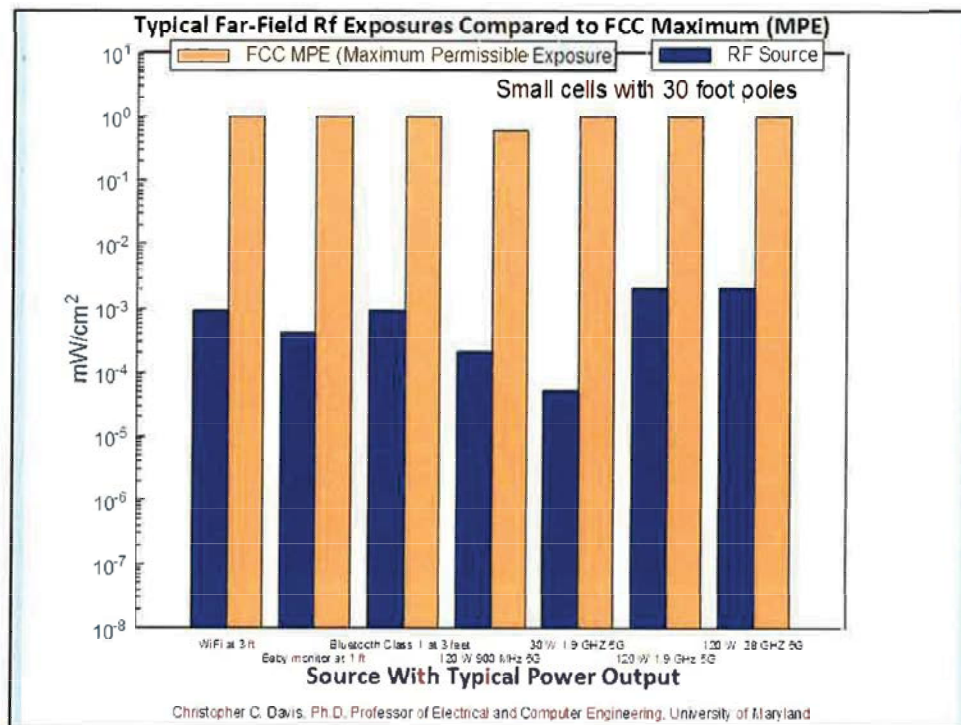
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ERP – Effective Radiate Power

MPE – Maximum Permissible Exposure

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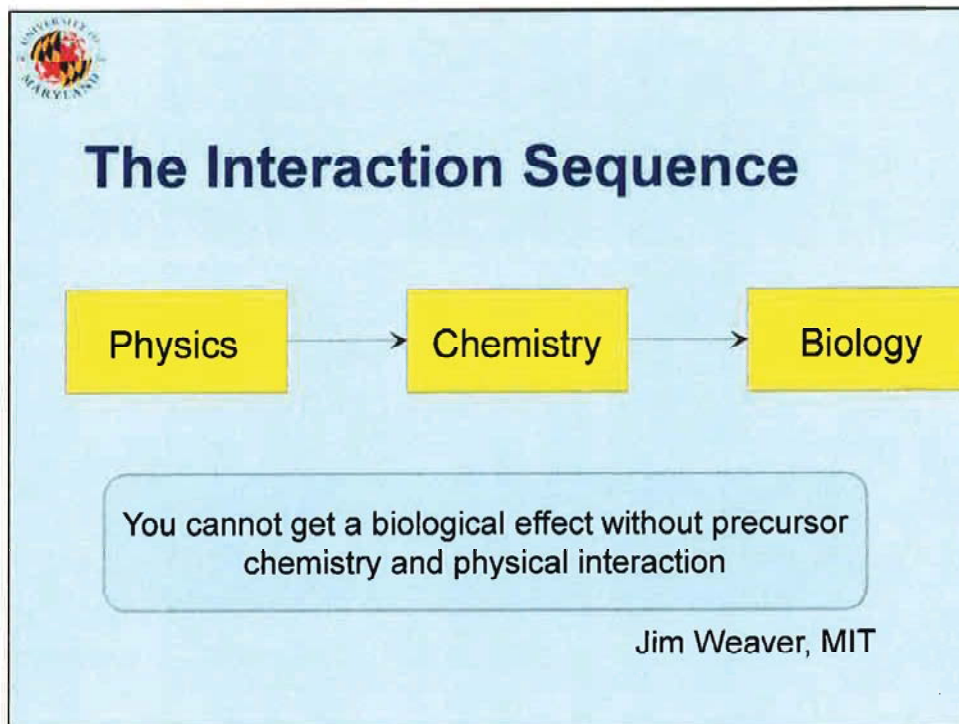


11

 **Is RF Exposure Dangerous?**

- Only at power levels large enough to cause heating
- Some publications claim biological effects at low power levels. Some of the effects claimed but not accepted or replicated include:
 - Activation of ion channels in cells
 - Permeability of the blood brain barrier
 - DNA breaks
 - Headaches
 - Effects on memory or sleep
 - Spermatogenesis
 - Autism

12



13



No effects observed in animal studies with long duration RF exposure

Based on the body of scientific research showing no consistent and reproducible effects from RF fields on cancer or other adverse health effects, the World Health Organization (WHO) has concluded that “no adverse health effects have been established as being caused by mobile phone use.”

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Cell phone use and Brain Cancer Incidence

- Cell phone use is continuing to increase
- About 4,000 new brain cancer cases in USA each year
- World-wide brain cancer incidence is not increasing in countries where usage is largest
- Some professions have a higher incidence of brain cancer, for example physicians
- Soon, everybody who gets cancer will be a cell phone user

15



Electromagnetic hypersensitivity (EHS)

- Some people claim that low levels of RF cause a host of symptoms such as headaches, tinnitus, heart arrhythmia, sleeplessness, etc.
- Provocation studies have shown that these individuals cannot tell when they are exposed and claim more symptoms when they are not actually exposed.
- The WHO and the medical community do not recognize the reality of EHS. They call it "Idiopathic Environmental Intolerance (IEI)."
- It is a "nocebo" effect.

16



Base Stations

- Cellular communications doesn't work without them
- Field levels are very low
 - especially right under the antenna
- Typical exposures are about the same as the light level from the planet Venus
- Base stations are increasingly disguised or placed on other already ugly structures – like high voltage transmission line towers
- 5G signals at high frequencies do not pass well through buildings or foliage so future 5G base stations will need to be small and closer to users



**MINUTES
FARRAGUT MUNICIPAL PLANNING COMMISSION**

June 18, 2020

MEMBERS PRESENT

Rita Holladay, Chairman
Ed St. Clair, Vice-Chairman
Ron Williams, Mayor
Louise Povlin
Scott Russ
Jon Greene
Rose Ann Kile
Betty Dick
Noah Myers

MEMBERS ABSENT

Staff Representatives: Mark Shipley, Community Development Director
David Smoak, Town Administrator
Trevor Hobbs, Assistant to the Town Administrator

This meeting was conducted through a remote Webex session due to Governor Lee's orders and the Knox County Health Department's orders regarding the COVID-19 pandemic.

Chairman Holladay called the meeting to order at 7 p.m. and provided background on why the meeting was being conducted through Webex and where it may be viewed.

1. Approval of agenda

Staff recommended approval of the agenda with Agenda Item #8 being postponed at the request of the applicant.

A motion was made by Commissioner Myers to follow staffs' recommendation. Motion was seconded by Commissioner St. Clair and motion passed 9-0 through a roll call vote.

2. Approval of minutes – May 21, 2020

Staff recommended approval of the minutes as submitted.

A motion was made by Mayor Williams to approve the minutes as submitted. Motion was seconded by Commissioner Povlin and motion passed 8-0-1 through a roll call vote with Commissioner Myers abstaining due to being absent.

3. Appointment of a youth representative for the next fiscal year

Staff and commissioners commended Melanie Coinfolo for her service during the past fiscal year as the youth representative. Mayor Williams noted that this would also be the last meeting

for Rose Ann Kile and commended her for her service on the Commission. Staff and commissioners also thanked Commissioner Kile for her service.

With regards to the youth representative, staff noted that there were four applicants with three of the four selecting the Planning Commission as their first choice. Commissioners discussed the applicants and expressed appreciation for each candidate.

A motion was made by Commissioner Povlin to nominate Austin Strobel, given his interest in Civil Engineering, as the Planning Commission Youth Representative for the upcoming fiscal year. Motion was seconded by Commissioner Dick and motion passed 9-0 through a roll call vote.

4. Discussion and public hearing on a request for a variance from the distance between driveways requirement for arterial streets as provided for in the Driveways and Other Accessways Ordinance in relation to a conceptual site plan for 13036 and 13038 Kingston Pike, two Acres, Zoned C-1 (MBH, Inc., Applicant)

Staff reviewed this item and noted that the modified access was seen by the Town Engineer as a significant improvement from the original full access that was shown on the concept drawing presented to the Planning Commission in May. Staff indicated that the requested variance would be approximately 214 feet from the typical 400-foot separation requirement for driveways along arterial streets. Staff noted that this only involves a variance request associated with the access. This is not a review of the overall site development. Staff indicated that they had discussed with the applicant the implications of the access being requested at this time with a future access point on the north side of Kingston Pike. The applicant is aware and in agreement that the goal is to have a cross access easement on the flag lot when the properties on the north side of Kingston Pike develop that would provide for a common access point to Kingston Pike for the flag lot and the two abutting lots. The applicant has already had a conversation with one of the property owners about such common access point. This would benefit all three properties and line up with the access being requested at this time.

After a short discussion, a motion was made by Mayor Williams to recommend approval of the requested variance and the modified access which reflected a right in and right out with a left in for west bound traffic. Motion was seconded by Commissioner St. Clair and motion passed 8-0-1 through a roll call vote with Commissioner Myers abstaining and not participating in the discussion.

5. Discussion and public hearing on a request to rezone Parcel 019, Tax Map 162, 1013 McFee Road, 24.85 Acres, from Agricultural (A) to Open Space Mixed Residential Overlay (R-1/OSMR) (Rackley Engineering, Applicant)

Staff reviewed this item and noted that R-1/OSR or R-1/OSMR are consistent with the future land use map. The difference is in form and bulk. The density is the same for both. Resolution PC-20-06 recommends approval of Ordinance 20-10 which would rezone Parcel 019, Tax Map 162 from Agricultural to Open Space Mixed Residential Overlay.

After a general discussion, staff read into the record citizen comments that had been provided with regards to the rezoning. A motion was made by Commissioner Greene to approve

Resolution PC-20-06 which recommends approval of the rezoning request. The rationale for the motion was due to the presence of a 100-foot wide transmission line easement that runs through the property and makes it more appropriate for a mix of single family detached and attached housing. Motion was seconded by Commissioner St. Clair and motion passed 8-1 through a roll call vote with Mayor Williams voting in opposition.

6. Discussion and public hearing on an ordinance to amend the Farragut Municipal Code, Appendix A – Zoning, Chapter 2., Definitions, and Chapter 3., Specific District Regulations, to define and establish development criteria associated with drug treatment clinics or facilities and pain management clinics or facilities (Town of Farragut, Applicant)

Staff reviewed this item and recommended approval of Resolution PC-20-05 which recommends approval of Ordinance 20-08.

A motion was made by Commissioner St. Clair to follow staffs' recommendation. The motion was seconded by Mayor Williams and the motion passed 9-0 through a roll call vote.

7. Discussion and public hearing on an ordinance to amend the Farragut Municipal Code, Chapter 109 – Signs, by replacing it in its entirety (Town of Farragut, Applicant)

Staff reviewed this item and noted that, at the request of Commissioner Greene, for clarification purposes, Sections 109-11 (a) (1) e. and 109-12 (a) (3) would be changed from "Signs governing campaigns, as provided for in TCA, Title 2, Chapter 7, Section 143. Tennessee Freedom of Speech Act." to "Political or campaign signs, as provided for in TCA, Title 2, Chapter 7, Section 143. Tennessee Freedom of Speech Act." With these minor clarifications, staff recommended approval of Resolution PC-20-02 which recommends approval of Ordinance 20-04.

A motion was made by Commissioner Myers to follow staffs' recommendation. The motion was seconded by Mayor Williams and the motion passed 9-0 through a roll call vote.

8. Discussion on a request to amend Appendix A – Zoning, Chapter 3., Specific District Regulations, Section XII., General Commercial District (C-1), B., 3., as it relates to the outdoor display and or storage of general farm implements and lawn care equipment, riding lawn mowers, and related accessories (Farragut Lawn and Tractor, Applicant)

For discussion purposes only.

9. Discussion on the development of an aesthetic plan for new vertical utility infrastructure within public rights of ways (Town of Farragut, Applicant)

For discussion purposes only.

10. Approval of utilities

None.

11. Citizen Forum

Staff read into the record citizen comments that had been provided for items that were not on the agenda.

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The meeting was adjourned at 10:11 p.m.

Rose Ann Kile, Secretary

REPORT TO THE FARRAGUT MUNICIPAL PLANNING COMMISSION

PREPARED BY: Mark Shipley, Community Development Director

SUBJECT: Discussion and public hearing on a new application and schedule for MCImetro 2020 Fiber Build, along portions of N. Campbell Station Road, Herron Road, West End Avenue, and portions of the Cove at Turkey Creek, Stonecrest, and Sweet Briar Subdivisions (Mastec, Applicant)

INTRODUCTION AND BACKGROUND: This item was reviewed at the May 21, 2020 Planning Commission meeting. At that time, staff made recommendations, including segmenting the overall project into smaller and more manageable phases with each phase being completed prior to initiating work in a new phase. It was noted during the discussion that some of the information in the applicant's submittal was incorrect and needed to be updated in a new submittal. Consequently, the Planning Commission voted to deny the project as submitted.

Since that time, the applicant has resubmitted plans and has broken the overall fiber build project into eight phases. At the June 30, 2020 staff/developer meeting, staff presented some discussion items that would need to be addressed in preparation for a Planning Commission review on July 16, 2020. These discussion items included:

1. Are there any remaining incomplete field items from currently permitted work?
2. Please include a copy of the contractor's (applicant's) license to do work in the public rights of ways. This should be part of the application submittal for any entity working in the Town's rights of ways.
3. Note that the updated schedule has fiber installation in residential areas beginning in early October 2020.
4. Please either correct or clarify the notes in the plan sets that reference "King County."
5. Please identify what is meant by the "5G Site Location Change" listed in the title blocks.
6. Please include a summary of the changes that have been made to the plans, schedules, etc., in response to the Planning Commission denial in May.
7. Page 32 for Phase 4 still incorrectly labels "Lark Meadow" as "Lake Meadow."
8. Staff did not see where aerial installations are proposed in Phase 5. Please clarify as the sheets included only specify underground installation.

RECOMMENDATION: The applicant has resubmitted plans to address the staffs' comments and included a letter (see letter dated July 6, 2020 from Mickey Harless) intended to respond to some of the comments. Staff will review the revised plans and provide a recommendation at the meeting. Staff will also follow up with the applicant to ensure that they have addressed any field related items from previously approved work.



July 6, 2020

Mark Shipley
Town of Farragut
11408 Municipal Center Dr
Farragut, TN 37934

Re: Staff/Developer Agenda Response

Dear Mr. Shipley:

Per your requests in the Staff/Developer meeting on June 30, 2020, here are answers to some of the questions you had for MasTec.

Changes made since the May council meeting when MasTec's application was denied include the following:

- The application has been broken down into smaller, more specific areas that should be easier for inspection and tracking by the Town of Farragut.
- Phases has been assigned and a corresponding construction schedule to more easily follow the projects.
- All references to 5G have been removed from the drawings. This is a project to place fiber optic cable for MCI Metro for their use in the future for whatever future technologies they desire to serve.
- Portions along Wardley Rd, Oran Rd and Dundee previously submitted for buried construction were found to good candidates for aerial construction and the drawings have been amended accordingly for council review.

A couple of other questions that came up during the Staff/Developer meeting:

- Per a question asked about the word "tier" on the drawings. This does not refer to construction of an above ground structure but refers to the weight class requirements of the handholes we propose to place. I have included an attachment from the manufacturer specifications for handholes.
- I have included a copy of MasTec's approved contractor license for the state of Tennessee.

Please let me know if there are any other items you might need at this time.

Sincerely,

Mickey Harless
Engineering Manager
Utility Services
MasTec North America, Inc.
2715 Byington Solway Rd
Knoxville, TN 37931-3216
Cell: (865) 318-6556
Email: Mickey.Harless@mastec.com

MCImetro 2020 Fiber Build - Town of Farragut (6/15/2020)

Phase	General Location Description	Proposed Construction Start	Proposed Construction Complete	Council Approval Date
Phase 1	N Campbell Station Rd, Kingston Pike, West End Blvd.	7/20/2020	8/14/2020	Current App
Phase 2	From int at Parkside, north on N Campbell Station Rd to approx Dunkin Donuts plus perpendicular lateral extensions for future services along Grigsby Chapel Rd, Station West Dr and Campbell Lakes Dr. Also underground installation in the Grigsby Chapel Rd and Smith Rd area.	8/17/2020	9/11/2020	12/9/2019 and Current App
Phase 3	Parkside Dr from N Campbell Station Rd east to Knoxville city limits.	9/14/2020	10/2/2020	12/9/2019
Phase 4	Underground installation in Sweet Briar and The Cove areas.	10/5/2020	10/23/2020	Current App
Phase 5	Underground and overhead installation in the Wardley Rd, Oran Rd, Dundee Rd area.	10/26/2020	11/13/2020	Current App
Phase 6	Kingston Pike from Lovell Rd to Concord Rd plus perpendicular lateral extensions for future services along Glenleigh Ct, Admiral Rd and Loudoun Rd.	1/4/2021	1/22/2021	12/9/2019
Phase 7	Kingston Pike from Concord Rd to Smith Rd plus perpendicular lateral extensions for future services along West End Av and north & south along Campbell Station Rd.	1/25/2021	2/12/2021	12/9/2019
Phase 8	Remaining portions of build in the western portion of Farragut including Kingston Pike west of Smith Rd to around Old Stage Rd, Kingston Pike near the Loudon County line, N Watt Rd, Union Rd at Everett Rd and Virtue Rd.	2/15/2021	3/5/2021	12/9/2019



STATE OF TENNESSEE
DEPARTMENT OF
COMMERCE AND INSURANCE



355824

MASTEC NORTH AMERICA, INC

ID NUMBER: 34429
LIC STATUS: ACTIVE
EXPIRATION DATE: May 31, 2021

BOARD FOR LICENSING CONTRACTORS
CONTRACTOR

THIS IS TO CERTIFY THAT ALL REQUIREMENTS
OF THE STATE OF TENNESSEE HAVE BEEN MET

MASTEC NORTH AMERICA, INC
209 ART BRYAN DRIVE
ASHEBORO, NC 27203

State of Tennessee

355824 **11614334**

BOARD FOR LICENSING CONTRACTORS

CONTRACTOR

MASTEC NORTH AMERICA, INC

This is to certify that all requirements of the State of Tennessee have been met.

ID NUMBER: 34429
LIC STATUS: ACTIVE
EXPIRATION DATE: May 31, 2021
Unlimited; CE; MU-A; S-Telecommunica



IN-1313
DEPARTMENT OF
COMMERCE AND INSURANCE



MCImetro
ACCESS TRANSMISSION SERVICES,LLC



OUTSIDE PLANT CONSTRUCTION

NA FARRAGUT_FH

PERMITS:
TO BE LABELED AT A LATER DATE

Phase 1

FRONTHAUL
CONSTRUCTION DRAWINGS

  Know what's below. Call 811 before you dig. 72 HOURS NOTICE REQUIRED	REVISIONS			CONSTRUCTION FIRM	PREPARED BY :	 OUTSIDE PLANT CONSTRUCTION	 MCImetro ACCESS TRANSMISSION SERVICES,LLC	COVER SHEET NA FARRAGUT_FH				
	DATE:	REV	DESCRIPTIONS:	BY:				CITY: FARRAGUT	STATE: TENNESSEE		COUNTY: KNOX	
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	01-13-2019	1	ROUTE MODIFICATION	CYI								
				MANAGER:	ENGINEER: C.PENNINGTON							
				PHONE:	PHONE:							

SHEET INDEX

<i>DESCRIPTION</i>	<i>SHEET NUMBER</i>
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SHEET INDEX	02
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KEY MAP SHEET	05
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TCP TYPICALS	19-29

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	DATE:	REV	DESCRIPTIONS:	BY:	CYIENT			NA FARRAGUT_FH					
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					MANAGER:	ENGINEER: C. PENNINGTON							
					PHONE:	PHONE:							

SYMBOL KEY

MCI PROPOSED CONSTRUCTION

	DIRECTIONAL BORE
	OPEN TRENCH
	PROPOSED STRAND
	UNDERGROUND FIBER OPTIC CABLE
	AERIAL FIBER OPTIC CABLE
	17"x30"x24" VAULT
	24"x36"x24" VAULT
	30"x36"x36" VAULT
	36"x48"x36" VAULT
	BORE PIT
	PROPOSED MANHOLE
	ANCHOR AND GUY
	OVERHEAD GUY
	PUSH BRACE
	SIDEWALK ANCHOR AND GUY
	RISER
	PROPOSED SPLICER
	RCL - FUTURE SPLICER
	F1 EQUIPMENT AERIAL
	F1 EQUIPMENT UG
	AERIAL SLACK LOOP
	UG SLACK LOOP
	VESPEK SITE
	DEMAND POINT
	OVERLASH

OTHER UTILITIES

	GAS LINE
	GAS METER
	GAS VALVE
	TELECOM MANHOLE
	TELECOM CABINET
	UNKNOWN MANHOLE
	UNKNOWN VAULT
	TREE LINE
	TELECOM LINE
	CABLE TV LINE
	FIBER OPTIC CABLE LINE
	RAIL ROAD
	WATER LINE
	FIRE HYDRANT
	WATER VALVE
	WATER METER
	STORM WATER LINE
	STORM WATER UTILITY
	WASTE WATER LINE
	WASTE WATER MANHOLE
	OVERHEAD POWER LINE
	UNDERGROUND POWER LINE

MCI EXISTING CONSTRUCTION

	EXISTING MCI METRO CONDUIT
	EXISTING MCI METRO VAULT
	EXISTING 17"x30"x24" VAULT
	EXISTING 24"x36"x24" VAULT
	EXISTING 24"x36"x36" VAULT
	EXISTING 30"x48"x36" VAULT
	EXISTING 36"x72"x48" VAULT
	EXISTING STRAND
	EXISTING MANHOLE
	EXISTING SPLICER
	ROAD SIGN
	SEWAGE MH
	EXISTING UTILITY
	POWER TRANSFORMER
	POWER MANHOLE
	POWER JUNCTION BOX
	POWER CABINET
	POWER VAULT
	WOODEN POLE
	STEEL POLE
	CONCRETE POLE
	STREET LIGHT
	TRAFFIC LIGHT
	ADA RAMP
	MAIL BOX

Know what's below. Call 811 before you dig. 72 HOURS NOTICE REQUIRED	REVISIONS			CONSTRUCTION FIRM	PREPARED BY :	OUTSIDE PLANT CONSTRUCTION	MCI metro ACCESS TRANSMISSION SERVICES, LLC	SYMBOL KEY NA FARRAGUT_FH				
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CONTACT INFORMATION

MCI METRO INC.

OUTSIDE PLANT ENGINEERING:

PROJECT ENGINEER:
STANLEY MAJKA (615)428-4943

PROJECT MANAGER:
JULIE FURUKAWA (925)393-3184

RIGHT-OF-WAY:

AGENT

MANAGER

CONTRACTS:

OTHERS:

DESIGN CONTRACTOR:

NAME OF FIRM
CYIENT INC
SENIOR PROJECT MANAGER
JOSH RIDINGS 662-620-6634

PROJECT MANAGER
TBD TBD

CONSTRUCTION CONTRACTOR:

NAME OF FIRM
MASTEC
PROJECT MANAGER
EILEEN WOODSTRA (984)212-1878

PROJECT SUPERVISOR
LEILA RAY WILLIAMS (629)201-1484

RAILROADS

KOHR: JARRETT MANKIN (800)818-0184

NORFOLK SOUTHERN: DYLAN ANGEL TBD

CSX: TBD TBD

UTILITIES

KUB: BEKIM HALITI (865)558-2376

LES BEAVER (865)558-2737

SARA AUER (865)558-2598

LCUB: HEATHER WATKINS (865)998-0758

FORT LOUDOUN ELECTRIC COOP: JARROD BRACKET 1-(877)353-2674

MICHAEL WEBB 1-(877)353-2674

CITY GOVERNMENT

CITY OF KNOXVILLE: TONY VANDERGRIF (865)215-6100

CITY OF KNOXVILLE: GEORGE DAWNS (865)215-6121

TOWN OF FARRAGUT: MARK SHIPLEY (865)966-7057

CITY OF MARYVILLE: KEITH BREWER (865)273-3515

BARON SWAFFORD (865)273-3305

DAVID PRICHARD (865)273-3507

CITY OF CLINTON: CURTIS PEREZ (865)259-1108

CITY OF ALCOA: STEVE REYNOLDS (865)380-4869

COUNTY GOVERNMENT

KNOX COUNTY: CHRIS SILVER (865)388-3447

KNOX COUNTY: JIM SNOWDEN (865)215-5808

SEVIER COUNTY: DOUG SAWYER (865)429-4585

BLOUNT COUNTY: JEFF HEADRICK (865)983-4662

CHICO MESSER (865)983-4652

THOMAS LLOYD (865)681-6001

JEFF HATCHER (865)984-3421

ANDERSON COUNTY: GARY LONG (865)457-2735

STATE GOVERNMENT

TDOT UTILITIES: ROYCE FOUT: (PERMITS) (865)755-3898

TDEC: BRANDON YATES (615)687-7101

BILL MURPH (615)687-7124

FEDERAL GOVERNMENT

USACE (CORP OF ENGINEERS) (615)369-7500

OTHER



72 HOURS NOTICE REQUIRED

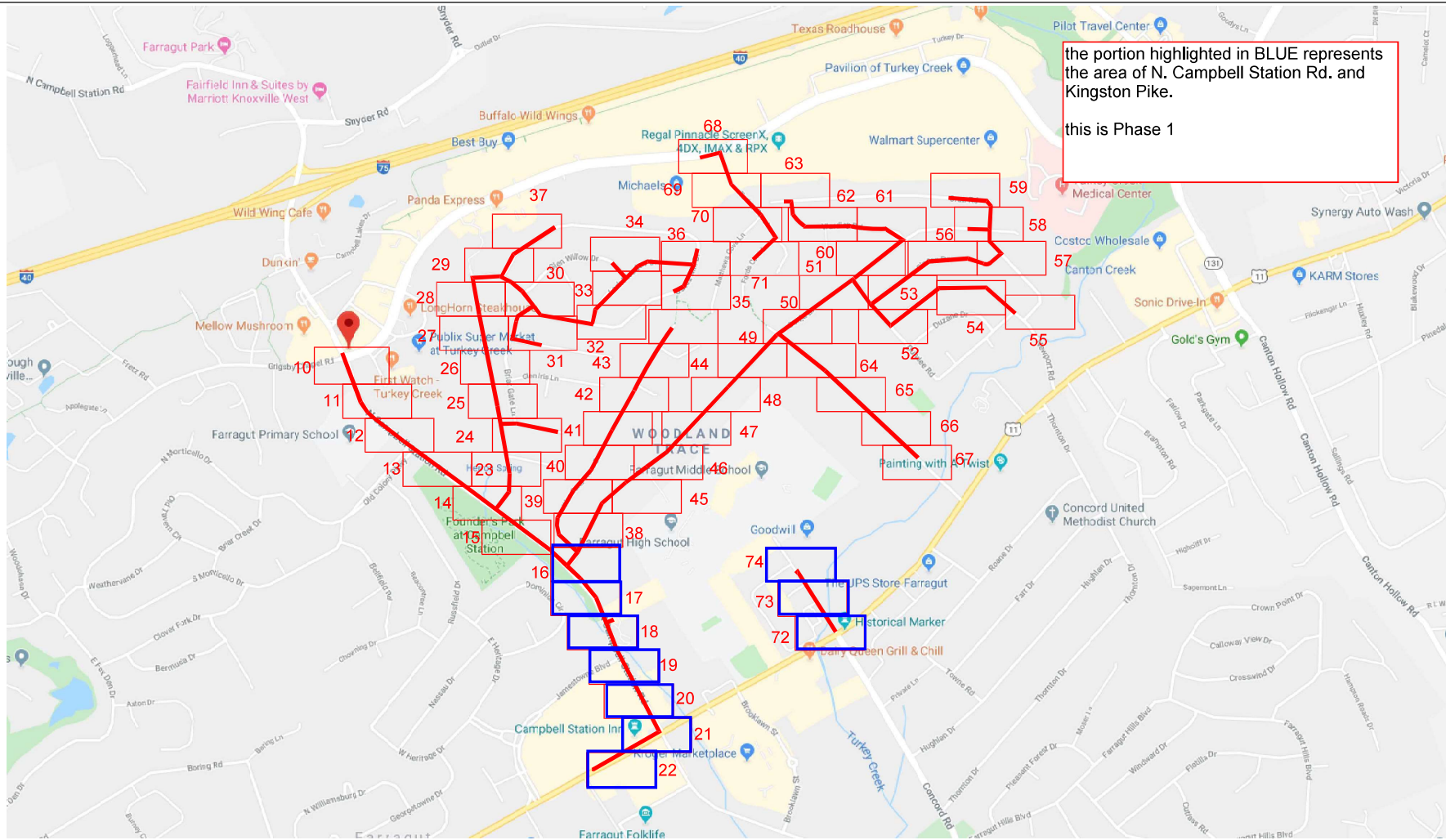
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CONTACT INFORMATION SHEET			
NA FARRAGUT_FH			
CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX	
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				PHONE:	PHONE:							

GENERAL NOTES AND REQUIREMENTS

GENERAL NOTES

1. MCI COMPRISES THE FOLLOWING OPERATING ENTITIES:
 - MCI COMMUNICATIONS SERVICES, INC.
 - MCI METRO ACCESS TRANSMISSION SERVICES, LLC
 - MCI METRO ACCESS TRANSMISSION SERVICES OF VIRGINIA, INC.
 - MCI METRO ACCESS TRANSMISSION SERVICES OF MASSACHUSETTS, INC.
 - METROPOLITAN FIBER SYSTEMS OF NEW YORK, INC.
2. ALL WORK TO BE PERFORMED IN STRICT ACCORDANCE WITH THE APPLICABLE CODES OR REQUIREMENTS OF ANY REGULATING GOVERNMENTAL AGENCY, MCI METRO, OR THE RIGHT-OF-WAY GRANTOR.
3. LOCATIONS OF SOME OF THE PHYSICAL FEATURES WERE OBTAINED FROM DATED RAILROAD VALUATION MAPS OR OTHER DRAWINGS, AND MAY BE AS SHOWN OR DEPICTED ON THESE DRAWINGS.
4. ALL KNOWN BURIED OBSTRUCTIONS ARE SHOWN ON SITE PLAN. ANY AND ALL OTHERS ENCOUNTERED ARE ALSO THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE, PROTECT, AND REPAIR, IF DAMAGED.
5. ANY AND ALL IMPROVEMENTS, SUCH AS ASPHALT OR CONCRETE PAVEMENT, CURBS, GUTTERS, WALKS, DRAINAGE DITCHES, EMBANKMENTS, SHRUBS, TREES, GRASS SOD, ETC., IF DAMAGED, SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITIONS.
6. EQUIPMENT TYPES SPECIFIED HEREIN (IE, "BACKHOE," "SWAMP PLOW," ETC.) ARE SUGGESTIONS ONLY AND ARE NOT INTENDED AS REQUIREMENTS, CONTRACTOR WILL BE NOTIFIED AS TO EXCEPTIONS.

OSP CONSTRUCTION GENERAL REQUIREMENTS

- ALL FEDERAL, STATE AND LOCAL SAFETY REGULATIONS MUST BE FOLLOWED WITHOUT EXCEPTION.
- PERSONAL PROTECTIVE EQUIPMENT APPROPRIATE FOR THE SPECIFIC WORK SITE SHALL BE USED AT ALL TIMES. AT A MINIMUM, HARD HAT, SAFETY SHOES/STEEL-TOED BOOTS, AND FLORESCENT ORANGE OR GREEN WORK VEST ARE REQUIRED UPON ENTERING ANY MCI WORK SITE.
- USE OF INTOXICANTS, DRUGS, INHALANTS OR ANY OTHER SUBSTANCES THAT MAY IMPAIR ALERTNESS ARE STRICTLY PROHIBITED.
- CONTRACTORS ARE NOT ALLOWED TO CUT ANY CABLE. CABLES SCHEDULED FOR REMOVAL WILL BE CUT BY MCI OPERATIONS PERSONNEL, AND ONLY AFTER VERIFICATION THAT ALL TRAFFIC HAS BEEN OFF-LOADED.
- EXTREME CAUTION MUST BE USED AT ALL TIMES WHEN WORKING ON OR NEAR ACTIVE CABLES. AN MCI EMPLOYEE OR CONTRACT REPRESENTATIVE MUST APPROVE AND BE PRESENT PRIOR TO AND DURING ALL CABLE HANDLING ACTIVITIES.
- TOOLS AND EQUIPMENT SPECIFICALLY DESIGNED FOR THE JOB AT HAND ARE REQUIRED, USE THE PROPER TOOL FOR THE JOB.
- CONDUIT WORK INVOLVING ACTIVE CABLES REQUIRES SPECIALIZED TOOLS SPECIFICALLY DESIGNED TO ACCESS DUCTS WITH ACTIVE CABLES.
- PROTECTING MCI FACILITIES IS EXTREMELY IMPORTANT; HOWEVER, SAFETY REGARDING YOURSELF AND OTHERS IS THE MOST IMPORTANT PART OF ANY PROJECT.



72 HOURS NOTICE REQUIRED

REVISIONS				CONSTRUCTION FIRM	PREPARED BY :
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GENERAL NOTES NA FARRAGUT_FH

CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX
DRAFTER:	SCALE: NTS	SHEET: 06 OF 86
		REVISION: 2

GENERAL NOTES AND REQUIREMENTS

CONSTRUCTION NOTES

1. ALL CONDUIT WILL BE 4" ID SCHEDULE 40 (i.e. PVC OR BSP/GSP, MANUFACTURED SPLIT PVC OR SPLIT BSP/GSP), UNLESS SPECIFIED OTHERWISE.
2. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES 48 HOURS PRIOR TO CONSTRUCTION ACTIVITY, SEE CONTACT SHEET FOR CONTACT NAME AND TELEPHONE NUMBER.
3. ALL UNDERGROUND OBSTRUCTIONS, WHEN LOCATED, WILL REQUIRE THE PLACEMENT OF A BURIED CABLE MARKER AND THE PLACEMENT OF 4" MANUFACTURED SPLIT PVC, BSP/GSP OVER OR UNDER EACH OBSTRUCTION.
4. SHORING MAY BE REQUIRED AND SHALL COMPLY WITH O.S.H.A. STANDARDS.
5. ALL BURIED CONDUIT/CABLE WILL BE PLACED AT 42" MINIMUM COVER UNLESS SPECIFIED OTHERWISE ON THE CONSTRUCTION DRAWINGS.
6. MECHANICAL PROTECTION SHALL BE REQUIRED ANYTIME A 36" MINIMUM COVER IS UNOBTAINABLE UNLESS SPECIFIED OTHERWISE ON THE CONSTRUCTION DRAWINGS.
7. ALL 90 DEGREE BENDS IN CONDUIT CONSTRUCTION WILL BE A MINIMUM 38.2" RADIUS UNLESS SPECIFIED OTHERWISE. ALL SPLIT CONDUIT BENDS AND SOLID PVC BENDS SHALL REQUIRE CONCRETE ENCASEMENT, UNLESS SPECIFIED OTHERWISE.
8. OPERATIONS PERSONNEL TO BE CONTACTED BY THE CONTRACTOR 48 HOURS PRIOR TO CONSTRUCTION, SEE CONTACT SHEET FOR CONTACT NAME AND TELEPHONE NUMBER.
9. ALL STATIONING IS BASED ON AS-BUILT INFORMATION. THEREFORE SOME VARIANCE SHOULD BE ANTICIPATED, ADJUST AS NEEDED.
10. RAILROAD COMMUNICATION AND SIGNAL CABLES TO BE LOCATED PRIOR TO THE CONSTRUCTION ACTIVITY, RAILROAD TO BE GIVEN 48 HOURS NOTICE PRIOR TO CONSTRUCTION.
11. ALL BURIED CABLE MARKER POSTS AND HARDWARE PLACED AND/OR REMOVED ON ALL NEW AND EXISTING ROUTES SHALL BE IMPLEMENTED AS FOLLOWS.
 - ON THOSE ROUTES THAT ARE CONSIDERED TO BE IN A NORTH TO SOUTH GEOGRAPHICAL ORIENTATION, THE SOUTHERN-MOST SIGN AND POST SHOULD BE REMOVED, FOR NEW ROUTES BEING CONSTRUCTED, ONE SIGN POST WILL BE PLACED AT THE NORTH END OF EACH HANDHOLE.
 - ON THOSE ROUTES THAT ARE CONSIDERED TO BE IN AN EAST TO WEST GEOGRAPHICAL ORIENTATION, THE WESTERN-MOST SIGN AND POST SHOULD BE REMOVED, FOR NEW ROUTES BEING CONSTRUCTED, ONE SIGN POST WILL BE PLACED AT THE EAST END OF THE EACH HANDHOLE.

FIBER OPTIC CABLE UNCOVERING SYSTEM

1. THE TITLE OF THIS PROGRAM, F.O.C.U.S., AN ACRONYM FOR "FIBER OPTIC CABLE UNCOVERING SYSTEM," WAS SELECTED TO REMIND EVERYONE INVOLVED WITH WORKING NEAR MCIS ACTIVE FIBER OPTIC SYSTEMS TO FOCUS ON PROTECTING THE FACILITIES. IF, DURING THE COURSE OF THE PROJECT, YOU NOTICE ANY ACTIVITY WHICH MAY JEOPARDIZE THE MCIS OSP FACILITIES, IT IS YOUR DUTY TO STOP THE WORK AND RE-F.O.C.U.S.
2. F.O.C.U.S. RULES MUST BE FOLLOWED ON ALL MCIS PROJECTS INVOLVING WORK ON OR NEAR MCIS OSP FACILITIES. SAFETY IS MCIS NUMBER ONE PRIORITY; EVERYONE MUST REFRAIN FROM UNSAFE AND IMPROPER PRACTICES.
3. REVIEW OF F.O.C.U.S. IS MANDATORY AT EVERY PRE-BID, PRE-CONSTRUCTION SITE MEETING AND DAILY TAILGATE MEETING. F.O.C.U.S. DISCUSSION MUST INCLUDE SITE-SPECIFIC HISTORY, UNIQUE PROBLEMS, FACILITY CONFIGURATIONS THAT MAY BE ENCOUNTERED, AND PAST ERRORS. "THOSE WHO DO NOT LEARN FROM HISTORY ARE DOOMED TO REPEAT IT." DO NOT LET THIS HAPPEN TO YOU.
4. ANY WORK NEAR OR REQUIRING HANDLING OF MCIS OUTSIDE PLANT FACILITIES CAN ONLY BE PERFORMED WITH AN MCIS EMPLOYEE OR CONTRACT REPRESENTATIVE PRESENT – THIS MEANS OUT OF HIS OR HER VEHICLE AND DIRECTLY MONITORING THE SYSTEM. THE REPRESENTATIVE MUST HAVE A PROPERLY OPERATING CABLE LOCATOR CHECKED FOR ACCURACY EVERY DAY PRIOR TO COMMENCEMENT OF WORK (COMPARISON OF LINE AND DEPTH READINGS TO ACTUAL LINE AND DEPTH OF THE CABLE).
5. LOCATE AND POTHOLE REQUIREMENTS:
 - PRIOR TO ANY EXCAVATION, THE MCIS EMPLOYEE OR CONTRACT REPRESENTATIVE MUST VERIFY THE INITIAL LOCATE MARKS COMPLETED BY MCIS OPERATIONS, DO NOT TRUST LOCATE RESULTS COMPLETED BY OTHERS! THE MCIS OR CONTRACT REPRESENTATIVE MUST LOCATE THE CABLE RUNNING LINE BY MAKING AT LEAST ONE PASS IN EACH DIRECTION, LOCATE RESULTS MUST THEN BE COMPARED WITH PREVIOUS MARKS AND THE AS-BUILTS.
 - IF THE PROPOSED WORK INVOLVES DIGGING OR EXCAVATING WITHIN 3 FEET OF THE CABLE, THE CABLE ROUTE WILL BE MARKED CONTINUALLY WITH ORANGE PAINT AND SUPPLEMENTED BY MARKER FLAGS PLACED EVERY 10 FT. THE EXCAVATION CONTRACTOR MUST POTHOLE (ALL POTHoles MUST BE COMPLETED BY HAND DIGGING OR VACUUM EXCAVATION) A MINIMUM OF EVERY 15 FT., THEN EXPOSE THE ENTIRE LENGTH OF THE CABLE BY HAND DIGGING OR VACUUM EXCAVATION.
 - IF THE PROPOSED WORK INVOLVES DIGGING OR EXCAVATING WITHIN 5 FEET (BUT NOT CLOSER THAN 3 FEET) OF THE CABLE, THE CABLE ROUTE WILL BE MARKED CONTINUALLY WITH ORANGE PAINT AND SUPPLEMENTED BY MARKER FLAGS PLACED EVERY 10 FT. THE EXCAVATION CONTRACTOR MUST POTHOLE THE CABLE A MINIMUM OF EVERY 15 FT.
 - IF THE PROPOSED WORK INVOLVES DIGGING OR EXCAVATING WITHIN 15 FEET (BUT NOT CLOSER THAN 5 FEET) OF THE CABLE, THE CABLE ROUTE WILL BE MARKED CONTINUALLY WITH ORANGE PAINT AND SUPPLEMENTED BY MARKER FLAGS PLACED EVERY 10 FT. THE EXCAVATION CONTRACTOR MUST POTHOLE THE CABLE A MINIMUM OF EVERY 30 FT.
 - THE CABLE WILL ALSO BE POTHOLED AT ANY CHANGE IN THE RUNNING LINE OF MORE THAN 1 FT. IN ANY DIRECTION, ANYTIME THE ACCURACY OF THE ELECTRONIC LOCATE IS QUESTIONED, OR THE MARKED RUNNING LINE DOES NOT MATCH THE AS-BUILTS.
6. EXPOSING REQUIREMENTS:
 - NO MECHANICAL EXCAVATION WITHIN 3 FT. OF OSP FACILITIES WILL BE ALLOWED UNLESS THE FACILITIES HAVE FIRST BEEN PROPERLY LOCATED, POTHOLED, POSITIVELY IDENTIFIED, CONTINUOUSLY EXPOSED BY HAND DIGGING OR VACUUM EXCAVATION, AND THE FACILITIES ARE CLEARLY VISIBLE.
 - IN ADDITION, MECHANICAL EXCAVATION WITHIN 3 FT. OF OSP FACILITIES REQUIRES ON-SITE PRIOR APPROVAL FROM MCIS EMPLOYEE OR CONTRACT REPRESENTATIVE.
7. PLEASE REFER TO THE LATEST EDITION OF THE MCIS OSP HANDBOOK FOR ADDITIONAL DETAILS. KNOW IT AND FOLLOW IT.



72 HOURS NOTICE REQUIRED

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11-18-2019	0	LLD	CYI				
01-13-2019	1	ROUTE MODIFICATION	CYI				
			CYI				
			CYI				
				MANAGER:	ENGINEER: C,PENNINGTON		
				PHONE:	PHONE:		

OUTSIDE PLANT CONSTRUCTION

ACCESS TRANSMISSION
SERVICES,LLC

GENERAL NOTES NA FARRAGUT_FH

CITY: FARRAGUT		STATE: TENNESSEE		COUNTY: KNOX	
DRAFTER:		SCALE: NTS	SHEET: 07 OF 86	REVISION: 2	

GENERAL NOTES AND REQUIREMENTS

CONSTRUCTION NOTES

- ALL DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FEDERAL WAY REVISED CODE (FWRC), APPLICABLE ORDINANCES, AND THE CITY COUNCIL CONDITIONS OF PROJECT APPROVAL. THESE DOCUMENTS ARE SUPPLEMENTED BY THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION (WSDOT/APWA), THE KING COUNTY ROAD STANDARDS (KCRS), AND THE KING COUNTY SURFACE WATER DESIGN MANUAL (KCSWDM).
 - THE DESIGN ELEMENTS WITHIN THESE PLANS HAVE BEEN REVIEWED ACCORDING TO THE FEDERAL WAY ENGINEERING REVIEW CHECKLIST. SOME ELEMENTS MAY HAVE BEEN OVERLOOKED OR MISSED BY THE CITY ENGINEERING PLAN REVIEWER. ANY VARIANCE FROM ADOPTED STANDARDS IS NOT ALLOWED UNLESS SPECIFICALLY APPROVED BY THE CITY OF FEDERAL WAY, PRIOR TO CONSTRUCTION.
 - BEFORE ANY CONSTRUCTION OR DEVELOPMENT ACTIVITY, A PRE-CONSTRUCTION MEETING MUST BE HELD BETWEEN THE CITY OF FEDERAL WAY, THE APPLICANT, AND THE APPLICANT'S CONSTRUCTION REPRESENTATIVE.
 - A SIGNED COPY OF THESE APPROVED PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
 - CONTRACTOR MAY ONLY PERFORM WORK IN THE RIGHT OF WAY BETWEEN THE HOURS OF 8:30 A.M. AND 3:00 P.M., MONDAY THROUGH FRIDAY, UNLESS DIFFERENT HOURS OF OPERATION ARE APPROVED IN WRITING BY THE CITY. NO WORK IS PERMITTED IN THE ROW ON WEEKENDS OR HOLIDAYS OBSERVED BY THE CITY. NO WORK WILL BE PERMITTED AFTER 12 PM (NOON) ON A DAY PRIOR TO A HOLIDAY WEEKEND.
 - CONSTRUCTION NOISE SHALL BE LIMITED AS PER FWRC (SECTION 19.105.040); NORMALLY THIS IS 7:00 A.M. TO 8:00 P.M., MONDAY THROUGH FRIDAY, AND 9:00 A.M. TO 8:00 P.M. ON SATURDAYS.
 - ALL HARD SURFACE ROADS ARE TO BE JACKED OR BORED, UNLESS OTHERWISE AGREED TO IN WRITING BY THE PUBLIC WORKS DIRECTOR OR THE DIRECTOR'S DESIGNEE.
 - ALL ROADWAY SUBGRADE SHALL BE BACKFILLED AND COMPACTED TO 95% DENSITY IN ACCORDANCE WITH WSDOT 2-06.3.
 - OPEN CUTTING OF EXISTING ROADWAYS IS NOT ALLOWED UNLESS SPECIFICALLY APPROVED BY THE PUBLIC WORKS DIRECTOR AND NOTED ON THESE APPROVED PLANS. ANY OPEN CUT SHALL BE RESTORED IN ACCORDANCE WITH KCRS 8.03(B) 3.
-
- WHENEVER PART OF A SQUARE OR SLAB OF EXISTING CONCRETE SIDEWALK OR DRIVEWAY IS CUT OR DAMAGE, THE ENTIRE SQUARE OR SLAB SHALL BE REMOVED OR REPLACED. ALL MATERIALS AND COMPACTION SHALL BE IN ACCORDANCE WITH THE CITY OF FEDERAL WAY DEVELOPMENT STANDARDS. CONCRETE MAY NOT BE PLACED IN TEMPERATURES AT OR BELOW FREEZING. 3000 PSI MAXIMUM CONCRETE ACCELERATOR .5%, CALCIUM IS NOT PERMITTED. NO MONOLITHIC POURS ALLOWED.
 - ALL UNDERGROUND UTILITY LINES MUST HAVE A MINIMUM 36" COVER FROM FINISHED GRADE, DITCH BOTTOM, OR NATURAL GROUND. REFER TO WSDOT UTILITY MANUAL FOR PIPE COVER REQUIREMENTS ON STATE ROUTES; SR 18, SR 99, SR 161, SR 509.
 - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY ALL UTILITY DISTRICTS AND PRIVATE PROPERTY OWNERS WHEN SUCH PROPERTY IS LIABLE TO INJURY OR DAMAGE THROUGH THE PERFORMANCE OF THE ABOVE WORK. CALL 1-800-424-6555 48 HOURS IN ADVANCE FOR UNDERGROUND UTILITY LOCATION. THIS INSTRUCTION DOES NOT RELIEVE THE CONTRACTOR FROM REQUIRED NOTIFICATION OF COUNTY INSPECTORS AS SPECIFIED IN PARAGRAPH 1, ABOVE.
 - CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS DEPARTMENT AT LEAST TWENTY-FOUR (24) HOURS, BUT NOT MORE THAN SEVENTY-TWO (72) HOURS, PRIOR TO COMMENCING THE WORK. CREW MUST CALL PERMIT # AND WORK LOCATION EACH MORNING THEY ARE TO BE WORKING IN TOWN TO VERIFY THE START OF WORK. FAILURE TO PROVIDE SUCH NOTICE WILL RESULT IN THE ASSESSMENT OF A JOB START PENALTY CHARGE PER EACH OCCURRENCE, IN ADDITION TO ANY OTHER FEES PROVIDED FOR IN THIS PERMIT.
 - AFTER COMPLETION OF CONSTRUCTION WORK THE CONTRACTOR SHALL RESTORE ALL RIGHTS OF WAY AND PUBLIC PLACES TO THE CONDITION WHICH IS EQUIVALENT TO OR BETTER THAN THE CONDITION OF THE RIGHT OF WAY PRIOR TO COMMENCING THE WORK AND TO A CONDITION SATISFACTORY TO THE CITY WITHIN 30 DAYS. CONTRACTOR SHALL REPAIR THE DAMAGE AT ITS SOLE COST AND EXPENSE, WITHOUT DELAY OR INTERRUPTION AND WITHIN THE TIME PERIOD PRESCRIBED BY THE CITY.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACTOR. ANY WORK WITHIN THE TRAVELED RIGHT-OF-WAY THAT MAY INTERRUPT NORMAL TRAFFIC FLOW SHALL REQUIRE AT LEAST ONE FLAGGER FOR EACH LANE OF TRAFFIC AFFECTED. ALL SECTIONS OF THE WSDOT STANDARD SPECIFICATIONS 1-07-23-TRAFFIC CONTROL, SHALL APPLY.

FIBER OPTIC CABLE UNCOVERING SYSTEM

- CONTRACTOR SHALL PROVIDE AND INSTALL ALL REGULATORY AND WARNING SIGNS PER THE LATEST EDITION OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- ESC FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUE FUNCTION.
- TEMPORARY EROSION AND SEDIMENTATION CONTROL SHOULD BE IN ACCORDANCE WITH THE KING COUNTY EROSION AND SEDIMENT CONTROL STANDARD. AT NO TIME SHALL MORE THAN ONE (1) FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT-LADEN WATER INTO THE DOWNSTREAM.
- ANY EXCAVATION WITHIN PROXIMITY OF TREE DRIP LINES SHALL BE PERFORMED VIA HYDRO VACUUM EXCAVATION.
- PERMITTEE SHALL NOT CLEAR, REMOVE OR DISTURB ANY TREES OR VEGETATION IN THE RIGHT OF WAY WITHOUT SUBMITTING A REVEGETATION AND EROSION CONTROL PLAN, IN FORM AND CONTENT ACCEPTABLE TO THE CITY.



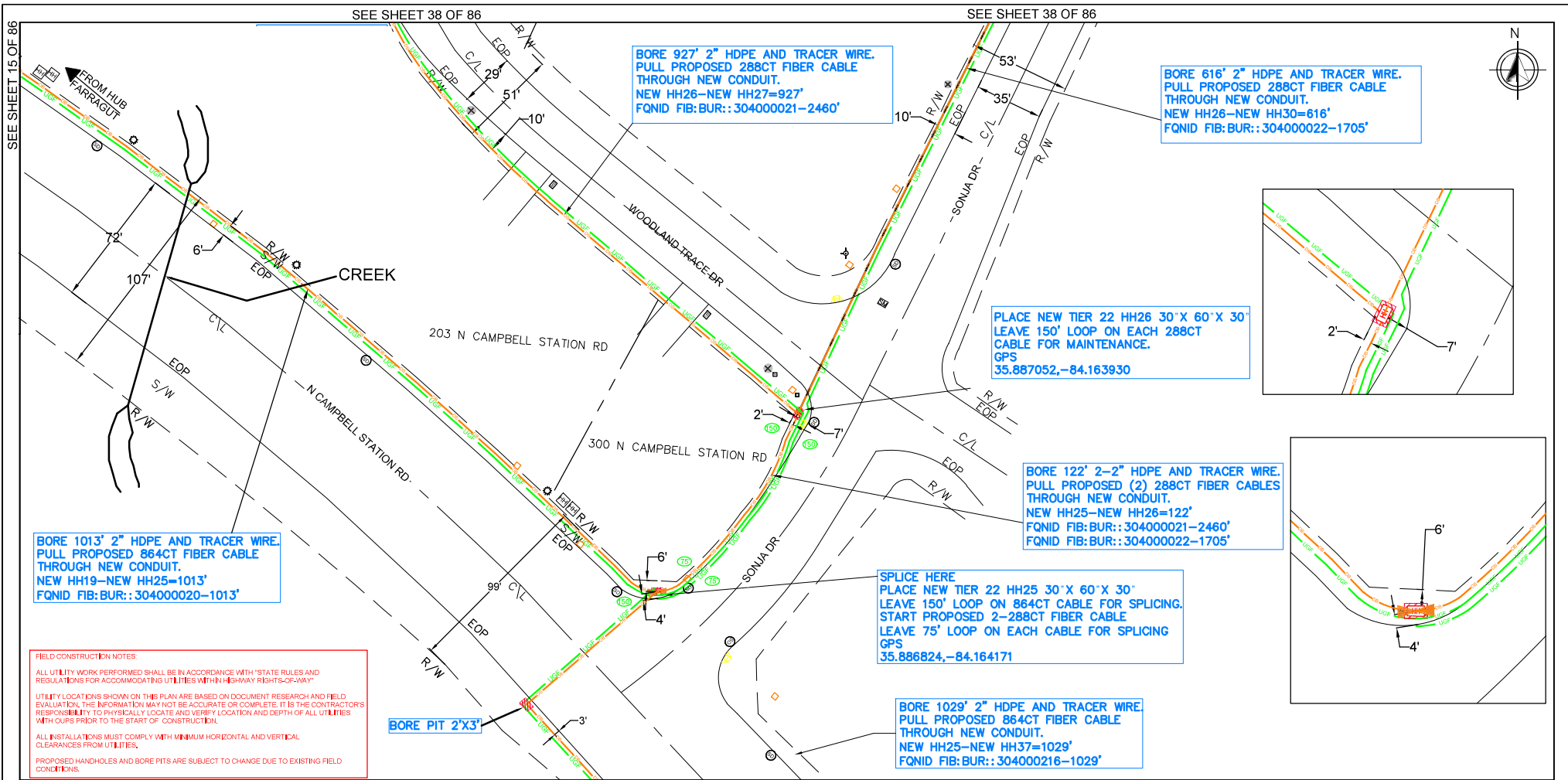
72 HOURS NOTICE REQUIRED

REVISIONS				CONSTRUCTION FIRM		PREPARED BY :	
DATE:	REV	DESCRIPTIONS:	BY:	CYIENT		MasTec OUTSIDE PLANT CONSTRUCTION	
11-18-2019	0	LLD	CYI				
01-13-2019	1	ROUTE MODIFICATION	CYI				
			CYI				
			CYI	MANAGER:	ENGINEER: C,PENNINGTON	MCI MCImetro ACCESS TRANSMISSION SERVICES,LLC	
				PHONE:	PHONE:		



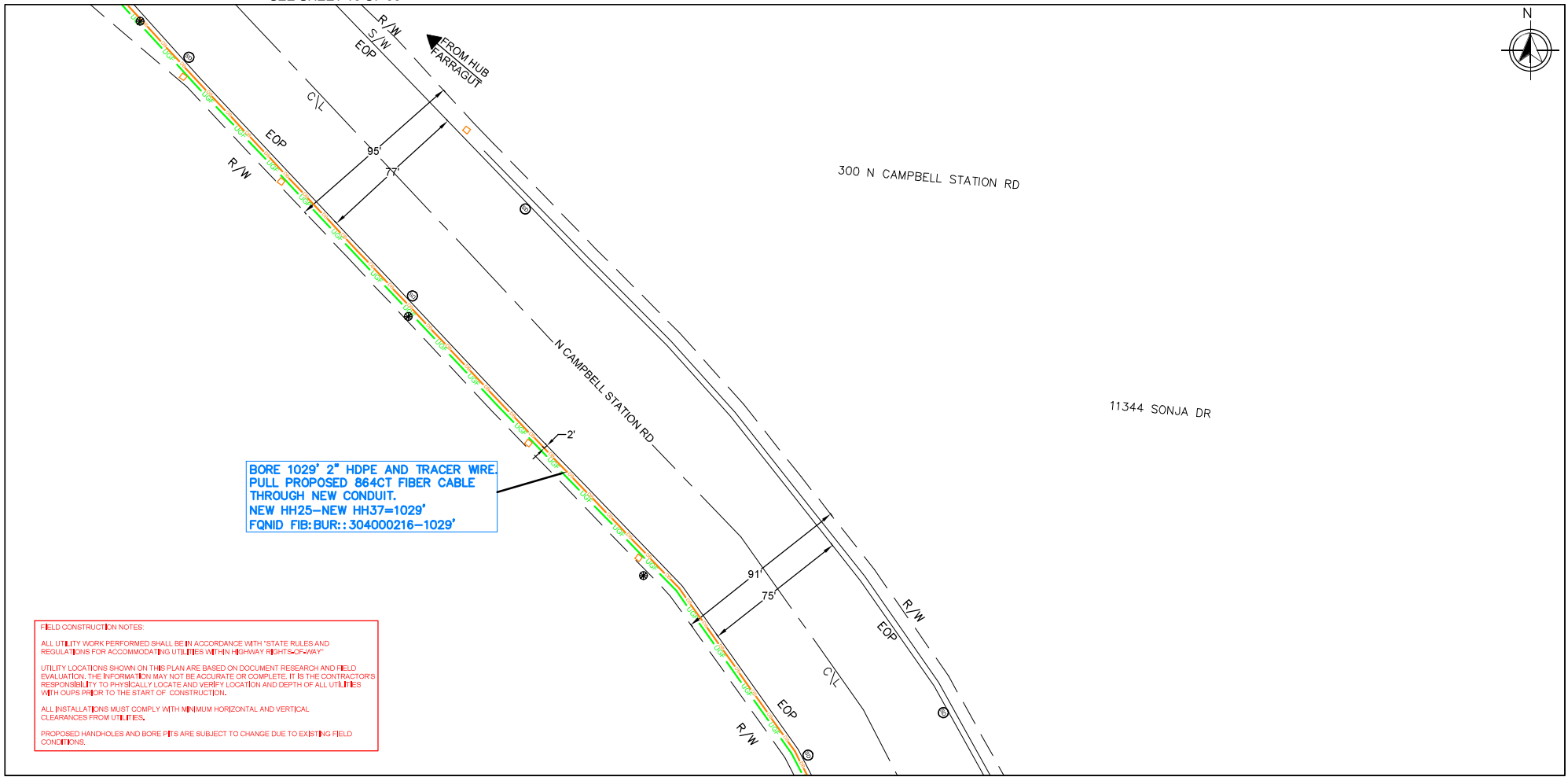
GENERAL NOTES NA FARRAGUT_FH

CITY: FARRAGUT		STATE: TENNESSEE		COUNTY: KNOX	
DRAFTER:		SCALE: NTS	SHEET: 08 OF 86	REVISION: 2	



  <i>Know what's below. Call 811 before you dig.</i> 72 HOURS NOTICE REQUIRED	REVISIONS				CONSTRUCTION FIRM		PREPARED BY :		 OUTSIDE PLANT CONSTRUCTION	 MCI metro ACCESS TRANSMISSION SERVICES, LLC	CONSTRUCTION DRAWING			
	DATE:	REV	DESCRIPTIONS:	BY:	 CYIENT		NA FARRAGUT_FH							
	11-18-2019	0	LLD	CYI			CITY: FARRAGUT							
	01-13-2019	1	ROUTE MODIFICATION	CYI			STATE: TENNESSEE							
				CYI			COUNTY: KNOX							
							DRAFTER:							
					MANAGER:	ENGINEER: C.PENNINGTON				SCALE: 1"=50'	SHEET: 16 OF 86	REVISION: 2		
					PHONE:	PHONE:								

SEE SHEET 16 OF 86



SEE SHEET 18 OF 86

FIELD CONSTRUCTION NOTES

ALL UTILITY WORK PERFORMED SHALL BE IN ACCORDANCE WITH "STATE RULES AND REGULATIONS FOR ACCOMMODATING UTILITIES WITHIN HIGHWAY RIGHT-OF-WAY"

UTILITY LOCATIONS SHOWN ON THIS PLAN ARE BASED ON DOCUMENT RESEARCH AND FIELD EVALUATION. THE INFORMATION MAY NOT BE ACCURATE OR COMPLETE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PHYSICALLY LOCATE AND VERIFY LOCATION AND DEPTH OF ALL UTILITIES WITH OUPS PRIOR TO THE START OF CONSTRUCTION.

ALL INSTALLATIONS MUST COMPLY WITH MINIMUM HORIZONTAL AND VERTICAL CLEARANCES FROM UTILITIES.

PROPOSED HANDHOLES AND BORE PITS ARE SUBJECT TO CHANGE DUE TO EXISTING FIELD CONDITIONS.



72 HOURS NOTICE REQUIRED

REVISIONS			
DATE:	REV	DESCRIPTIONS:	BY:
11-18-2019	0	LLD	CYI
01-13-2019	1	ROUTE MODIFICATION	CYI
			CYI

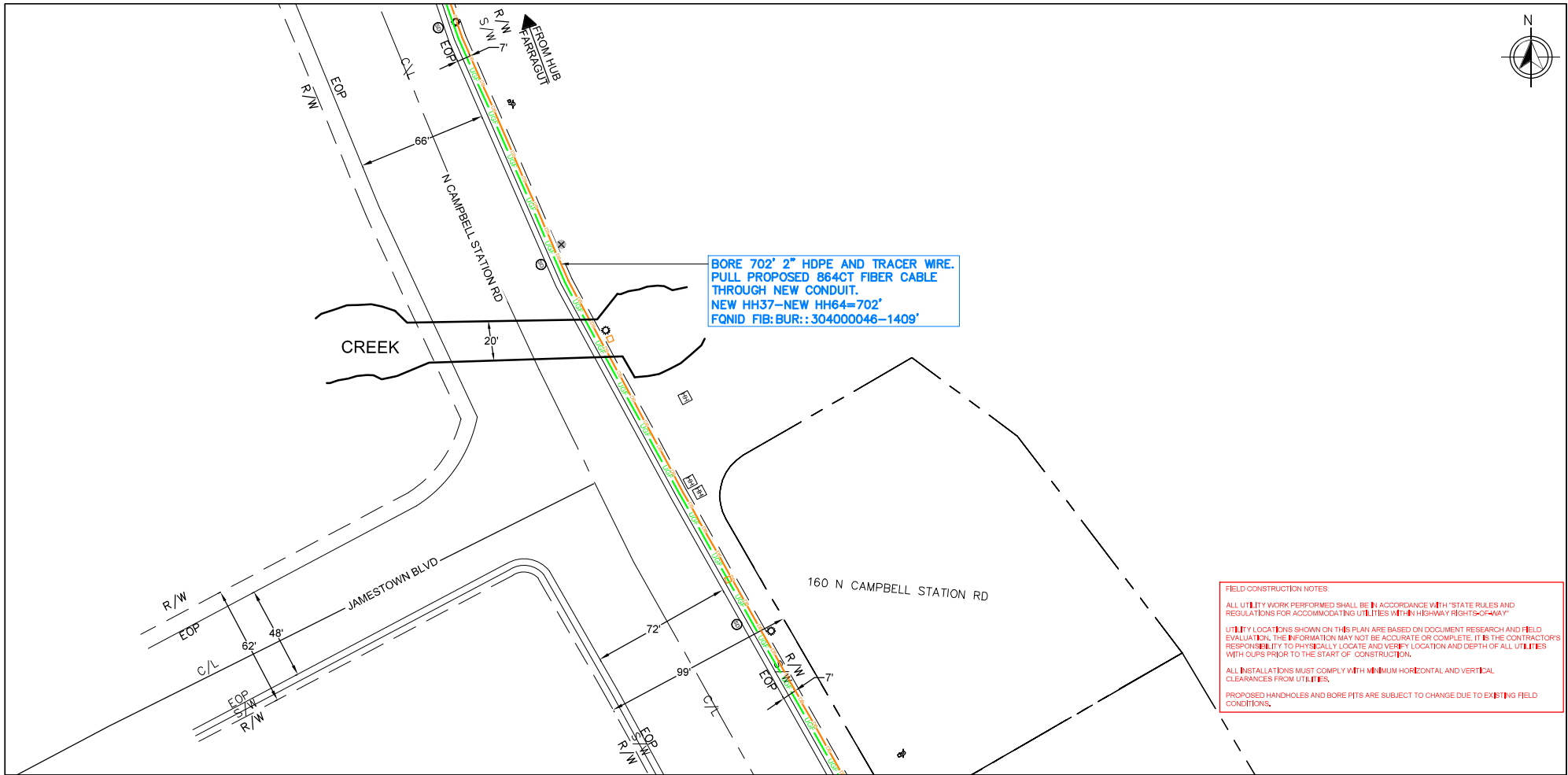
CONSTRUCTION FIRM
MANAGER:
PHONE:

PREPARED BY :
CYIENT
ENGINEER: C.PENNINGTON
PHONE:



CONSTRUCTION DRAWING			
NA FARRAGUT_FH			
CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX	
DRAFTER:	SCALE: 1"=50'	SHEET: 17 OF 86	REVISION: 2

SEE SHEET 18 OF 86



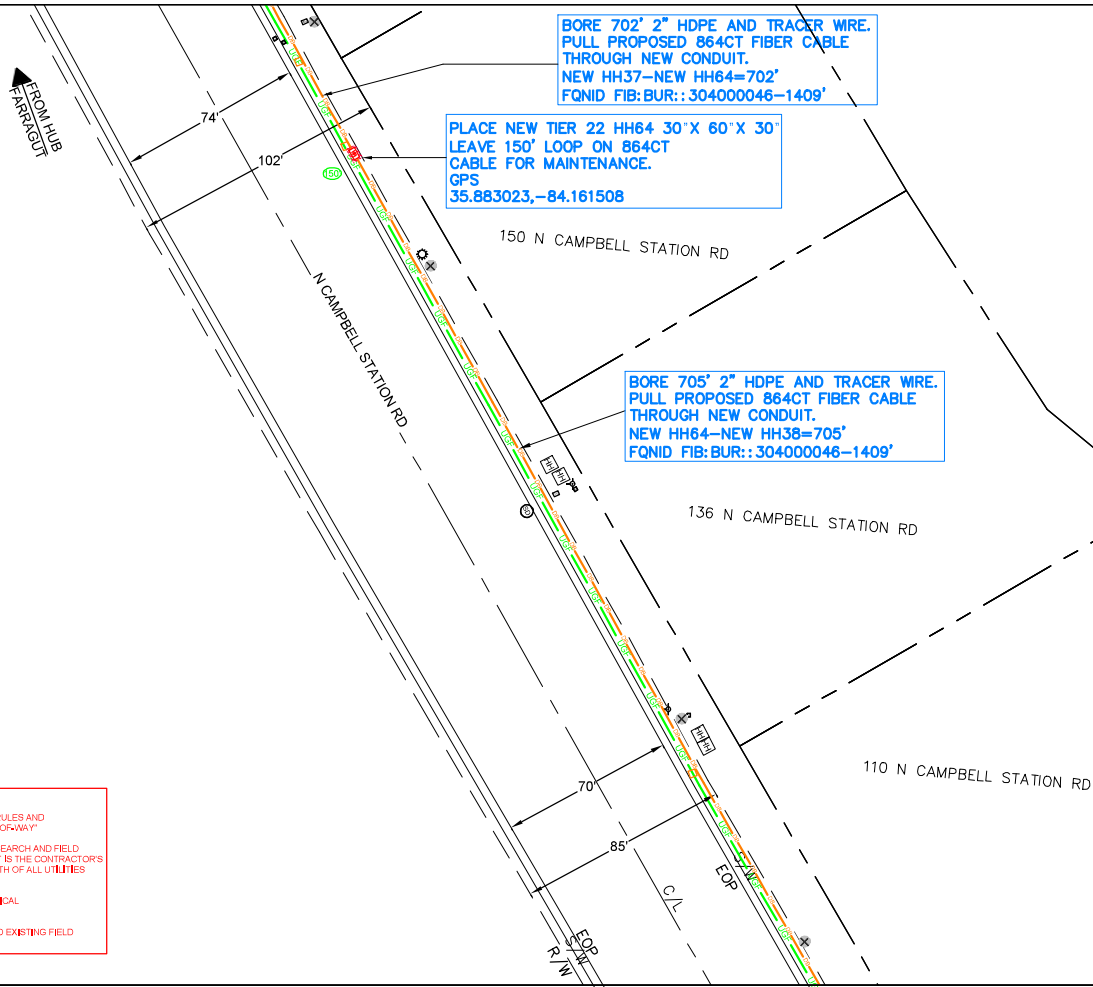
BORE 702' 2" HDPE AND TRACER WIRE.
PULL PROPOSED 864CT FIBER CABLE
THROUGH NEW CONDUIT.
NEW HH37-NEW HH64=702'
FQID FIB: BUR:: 304000046-1409'

FIELD CONSTRUCTION NOTES:
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SEE SHEET 20 OF 86

  72 HOURS NOTICE REQUIRED	REVISIONS			CONSTRUCTION FIRM		PREPARED BY :						CONSTRUCTION DRAWING		
	DATE:	REV	DESCRIPTIONS:	BY:				OUTSIDE PLANT CONSTRUCTION		MCImetro ACCESS TRANSMISSION SERVICES, LLC		NA FARRAGUT_FH		
	11-18-2019	0	LLD	CYI								CITY: FARRAGUT STATE: TENNESSEE COUNTY: KNOX		
	01-13-2019	1	ROUTE MODIFICATION	CYI								DRAFTER: SCALE: 1"=50' SHEET: 19 OF 86 REVISION: 2		
					MANAGER:	ENGINEER: C.PENNINGTON								
					PHONE:	PHONE:								

SEE SHEET 19 OF 86



FIELD CONSTRUCTION NOTES:

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SEE SHEET 21 OF 86



72 HOURS NOTICE REQUIRED

REVISIONS			
DATE:	REV	DESCRIPTIONS:	BY:
11-18-2019	0	LLD	CYI
01-13-2019	1	ROUTE MODIFICATION	CYI
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			CYI

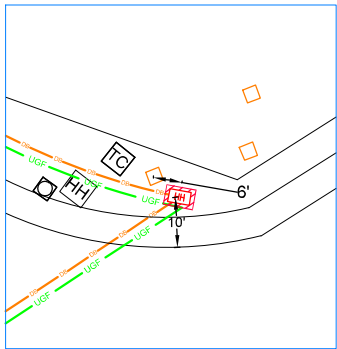
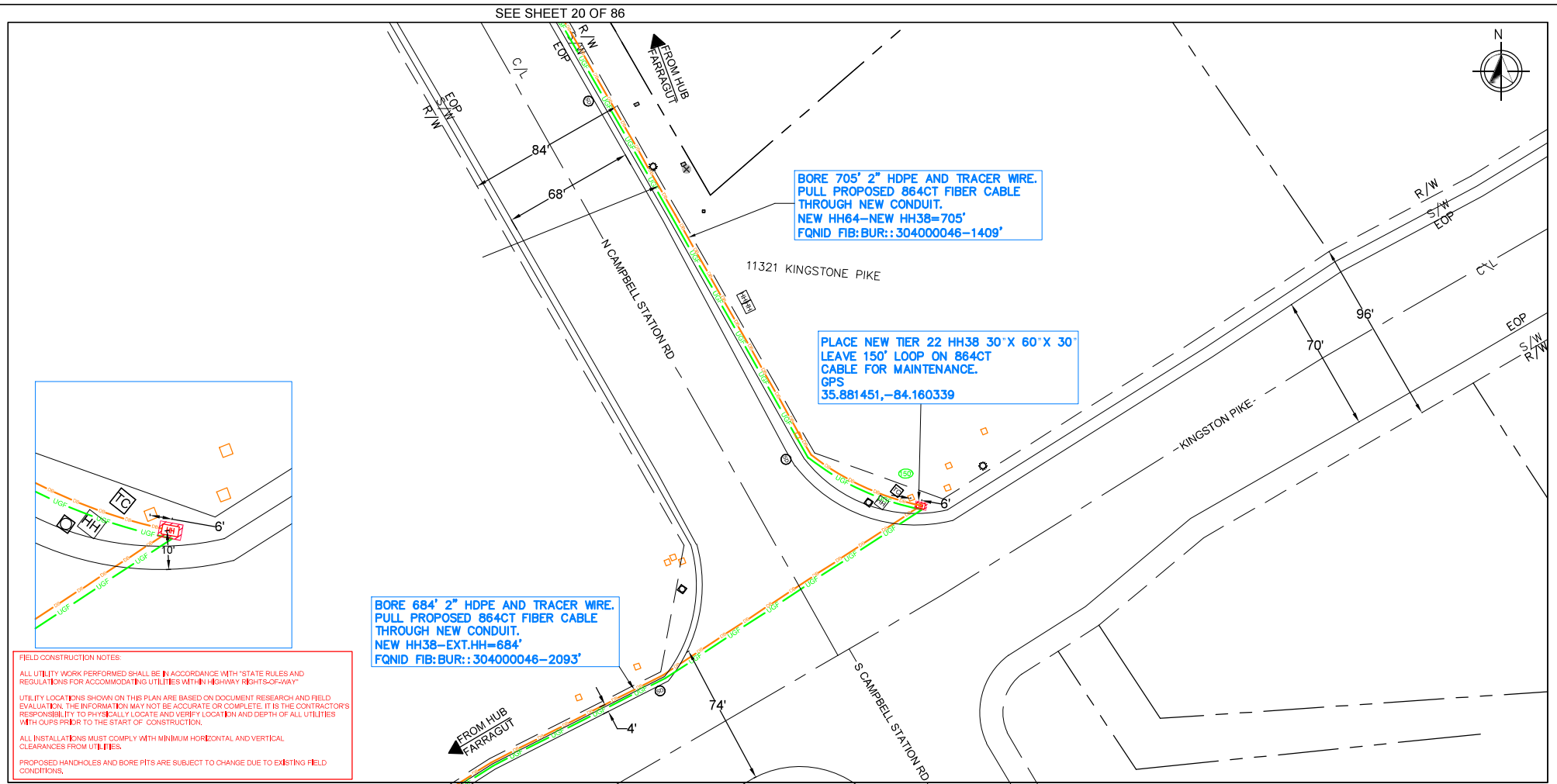
CONSTRUCTION FIRM		PREPARED BY :	
MANAGER:		ENGINEER: C.PENNINGTON	
PHONE:		PHONE:	

MasTec
OUTSIDE PLANT CONSTRUCTION

MCI
MCI metro
ACCESS TRANSMISSION
SERVICES, LLC

CONSTRUCTION DRAWING
NA FARRAGUT_FH

CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX
DRAFTER:	SCALE: 1"=50'	SHEET: 20 OF 86
		REVISION: 2



FIELD CONSTRUCTION NOTES:

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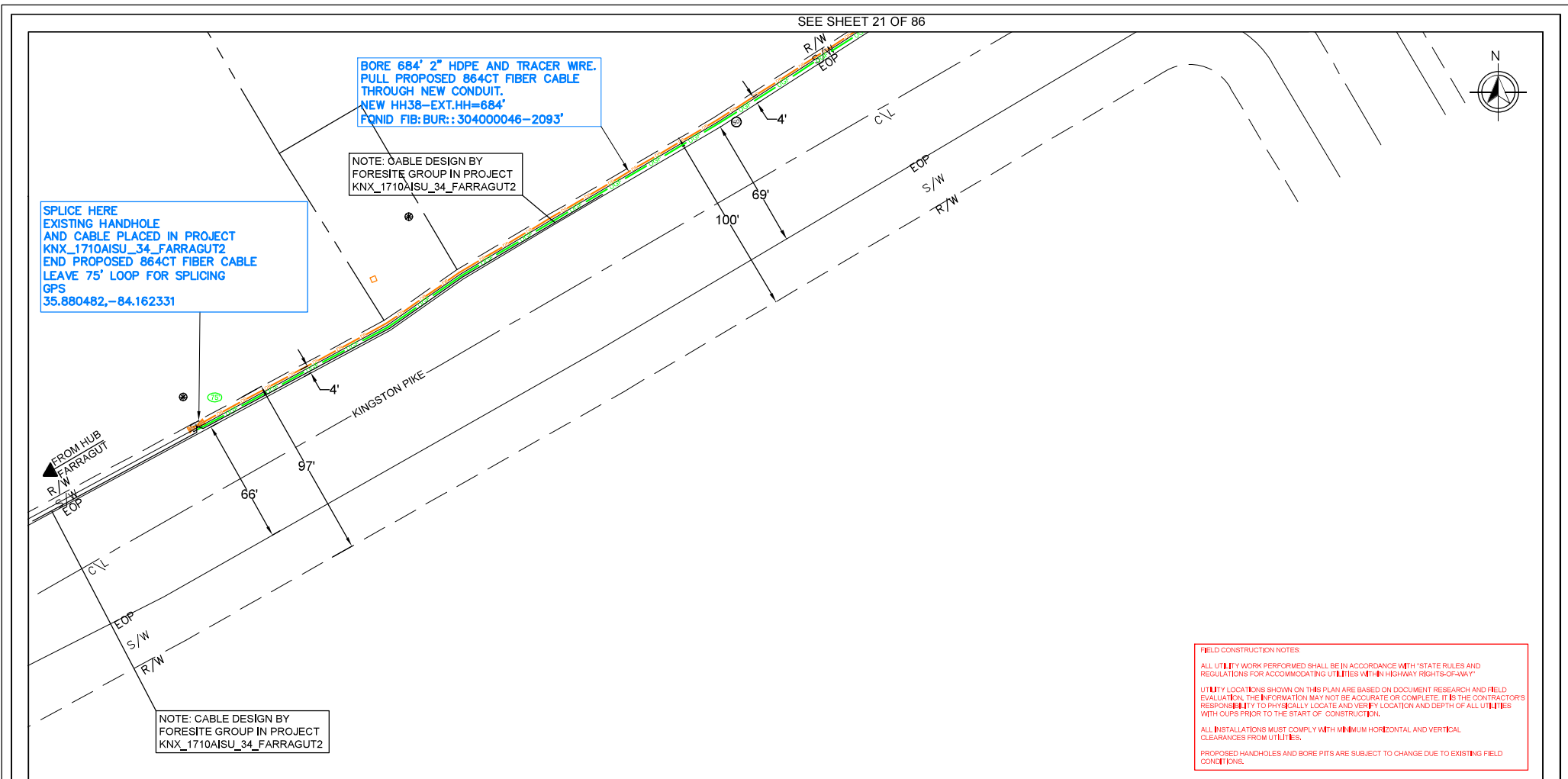
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PROPOSED HANDHOLES AND BORE PITS ARE SUBJECT TO CHANGE DUE TO EXISTING FIELD CONDITIONS.

SEE SHEET 22 OF 86

SEE SHEET 20 OF 86

  Know what's below. Call 811 before you dig. 72 HOURS NOTICE REQUIRED	REVISIONS			CONSTRUCTION FIRM	PREPARED BY :	 MasTec OUTSIDE PLANT CONSTRUCTION	 MCI MCImetro ACCESS TRANSMISSION SERVICES,LLC	CONSTRUCTION DRAWING				
	DATE:	REV	DESCRIPTIONS:	BY:	 CYIENT			NA FARRAGUT_FH				
	11-18-2019	0	LLD	CYI				CITY: FARRAGUT				
	01-13-2019	1	ROUTE MODIFICATION	CYI								
				CYI								
				CYI								
				MANAGER:	ENGINEER: C,PENNINGTON	STATE: TENNESSEE			COUNTY: KNOX			
				PHONE:	PHONE:	DRAFTER:			SCALE: 1"=50'		SHEET: 21 OF 86	REVISION: 2



 Know what's below. Call 811 before you dig. 72 HOURS NOTICE REQUIRED	REVISIONS				CONSTRUCTION FIRM		PREPARED BY :		 OUTSIDE PLANT CONSTRUCTION	 MCI metro ACCESS TRANSMISSION SERVICES, LLC	CONSTRUCTION DRAWING			
	DATE:	REV	DESCRIPTIONS:	BY:		MANAGER:	ENGINEER: C,PENNINGTON	NA FARRAGUT_FH						
	11-18-2019	0	LLD	CYI				CITY: FARRAGUT			STATE: TENNESSEE		COUNTY: KNOX	
	01-13-2019	1	ROUTE MODIFICATION	CYI				DRAFTER:			SCALE: 1"=50'	SHEET: 22 OF 86	REVISION: 2	
				CYI										

SEE SHEET 73 OF 86



BORE 582' 2" HDPE AND TRACER WIRE.
PULL PROPOSED 24 PORT MST TAIL
THROUGH NEW CONDUIT.
EXT.HH-NEW HH43=582'
FQND FIB:BUR::116053675-902'

SPLICE HERE
EXISTING HANDHOLE
AND CABLE PLACED IN PROJECT
KNX_1710AISU_34_FARRAGUT2
START PROPOSED 24 PORT MST TAIL
START PROPOSED 12 PORT MST TAIL
LEAVE 75' LOOP ON EACH TAIL FOR
SPlicing
GPS
35.884669,-84.153211

NOTE: CABLE DESIGN BY
FORESITE GROUP IN PROJECT
KNX_1710AISU_34_FARRAGUT2

NOTE: CABLE DESIGN BY
FORESITE GROUP IN PROJECT
KNX_1710AISU_34_FARRAGUT2

FIELD CONSTRUCTION NOTES:
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72 HOURS NOTICE REQUIRED

REVISIONS			
DATE:	REV	DESCRIPTIONS:	BY:
11-18-2019	0	LLD	CYI
01-13-2019	1	ROUTE MODIFICATION	CYI
			CYI
			CYI

CONSTRUCTION FIRM
MANAGER:
PHONE:

PREPARED BY :
CYIENT
ENGINEER: C.PENNINGTON
PHONE:



CONSTRUCTION DRAWING NA FARRAGUT_FH

CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX
DRAFTER:	SCALE: 1"=50'	SHEET: 72 OF 86
		REVISION: 1

SEE SHEET 74 OF 86



BORE 320' 2" HDPE AND TRACER WIRE.
PULL PROPOSED 24CT FIBER CABLE
THROUGH NEW CONDUIT.
NEW HH43-NEW HH44=320'
FQPID FIB: BUR::116053675-902'

PLACE NEW TIER 22 HH43 30"X 60"X 30"
LEAVE 150' LOOP ON 24CT
CABLE FOR MAINTENANCE.
GPS
35.885901,-84.154433

BORE 582' 2" HDPE AND TRACER WIRE.
PULL PROPOSED 24 PORT MST TAIL
THROUGH NEW CONDUIT.
EXT.HH-NEW HH43=582'
FQPID FIB: BUR::116053675-902'

FIELD CONSTRUCTION NOTES:

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PROPOSED HANDHOLES AND BORE PITS ARE SUBJECT TO CHANGE DUE TO EXISTING FIELD CONDITIONS.

SEE SHEET 72 OF 86



72 HOURS NOTICE REQUIRED

REVISIONS			
DATE:	REV	DESCRIPTIONS:	BY:
11-18-2019	0	LLD	CYI
01-13-2019	1	ROUTE MODIFICATION	CYI
			CYI
			CYI

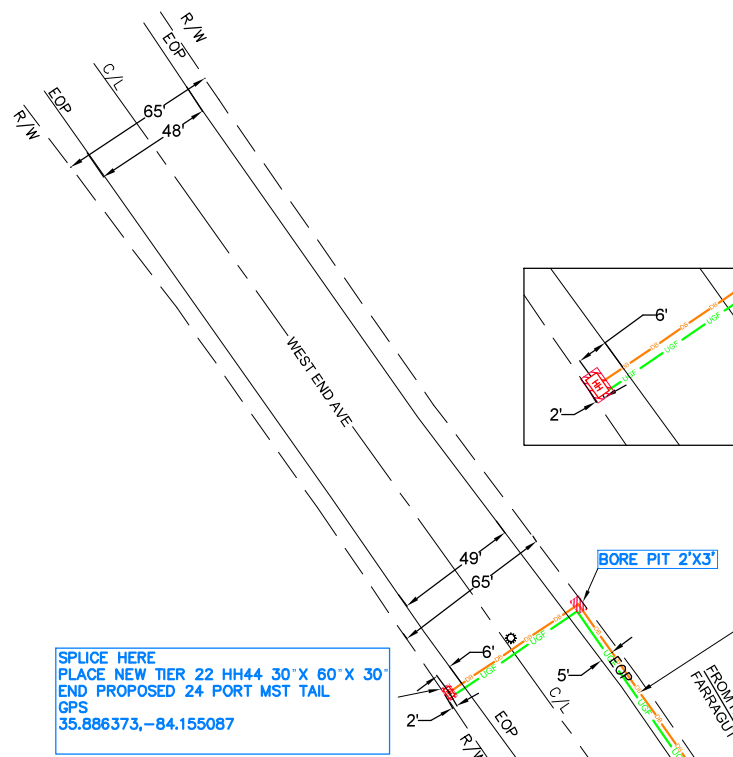
CONSTRUCTION FIRM		PREPARED BY :	
MANAGER:		ENGINEER: C.PENNINGTON	
PHONE:		PHONE:	

MasTec
OUTSIDE PLANT CONSTRUCTION

MCI
MCI metro
ACCESS TRANSMISSION
SERVICES, LLC

CONSTRUCTION DRAWING
NA FARRAGUT_FH

CITY: FARRAGUT		STATE: TENNESSEE		COUNTY: KNOX	
DRAFTER:		SCALE: 1"=50'	SHEET: 73 OF 86	REVISION: 1	



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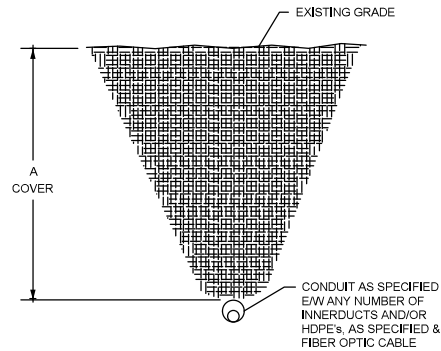
BORE 320' 2" HDPE AND TRACER WIRE.
PULL PROPOSED 24 PORT MST TAIL
THROUGH NEW CONDUIT.
NEW HH43-NEW HH44=320'
FQID FIB: BUR.: 30400025-902'

 Know what's below. Call 811 before you dig.	REVISIONS			CONSTRUCTION FIRM		PREPARED BY :		 OUTSIDE PLANT CONSTRUCTION	 MCI metro	CONSTRUCTION DRAWING			
	DATE:	REV:	DESCRIPTIONS:	BY:			NA FARRAGUT_FH						
	11-18-2019	0	LLD	CYI									
	01-13-2019	1	ROUTE MODIFICATION	CYI									
				CYI									
72 HOURS NOTICE REQUIRED				MANAGER:	ENGINEER: C.PENNINGTON	ACCESS TRANSMISSION SERVICES,LLC				CITY: FARRAGUT			
				PHONE:	PHONE:					STATE: TENNESSEE			
												COUNTY: KNOX	
												DRAFTER:	
												SCALE: 1"=50'	
												SHEET: 74 OF 86	
												REVISION: 1	

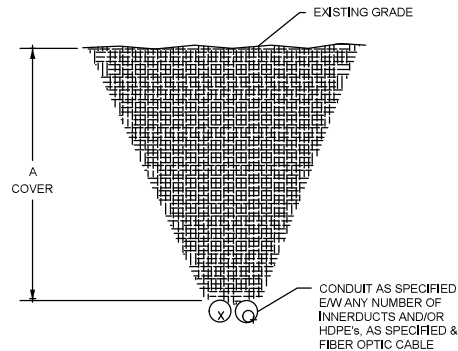
CONSTRUCTION DETAILS/TYPICALS

TYPICAL DIRECTIONAL BORE DETAIL

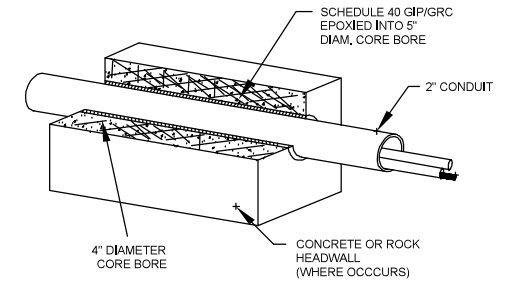
TYPICAL DETAIL A
DIRECTIONAL BORE CROSS SECTION
FOR CONDUIT



TYPICAL DETAIL B
DIRECTIONAL BORE CROSS SECTION
FOR JOINT CONDUIT



TYPICAL DETAIL C
4" CORE BORE



NOTE:
EPOXY GROUT IS USED AT BOTH ENDS OF CORE BORE
TO SEAL GAP BETWEEN 2" CONDUIT AND PVC SLEEVE.



72 HOURS NOTICE REQUIRED

REVISIONS			
DATE:	REV	DESCRIPTIONS:	BY:
11-18-2019	0	LLD	CYI
01-13-2019	1	ROUTE MODIFICATION	CYI
			CYI
			CYI

CONSTRUCTION FIRM
MANAGER:
PHONE:

PREPARED BY :
CYIENT
ENGINEER: C.PENNINGTON
PHONE:

MasTec
OUTSIDE PLANT CONSTRUCTION

MCI
MCImetro
ACCESS TRANSMISSION
SERVICES,LLC

CONSTRUCTION DETAIL DRAWINGS
NA FARRAGUT_FH

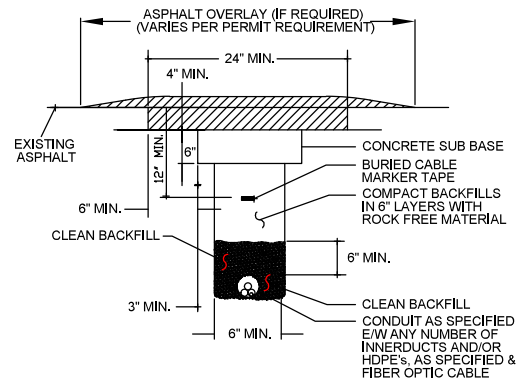
CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX
DRAFTER:	SCALE: NTS	SHEET: 76 OF 86
		REVISION: 1

CONSTRUCTION DETAILS/TYPICALS

RESTORATION DETAILS

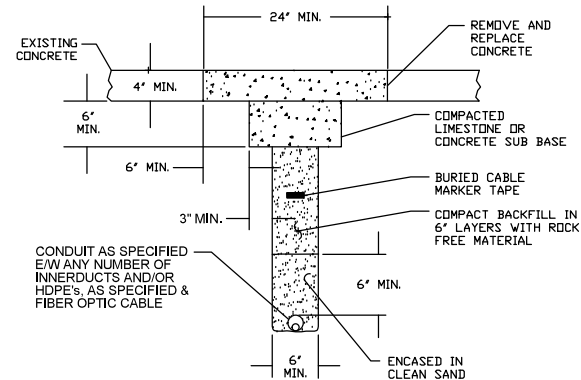
TYPICAL DETAIL A

REMOVE AND RESTORE ASPHALT FOR CONDUIT



TYPICAL DETAIL B

REMOVE AND RESTORE CONCRETE FOR CONDUIT



72 HOURS NOTICE REQUIRED

REVISIONS				CONSTRUCTION FIRM	PREPARED BY :
DATE:	REV	DESCRIPTIONS:	BY:		CYIENT
11-16-2019	0	LLD	CYI		
01-13-2019	1	ROUTE MODIFICATION	CYI		
			CYI		
			CYI		
				MANAGER:	ENGINEER: C.PENNINGTON
				PHONE:	ENGINEER:



CONSTRUCTION DETAIL DRAWINGS

NA FARRAGUT_FH

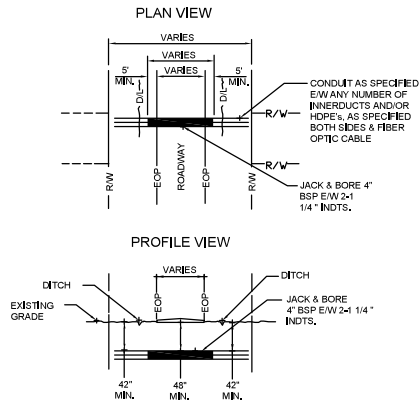
CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX
DRAFTER:	SCALE: NTS	SHEET: 77 OF 86
		REVISION: 1

CONSTRUCTION DETAILS/TYPICALS

JACK AND BORE DETAIL

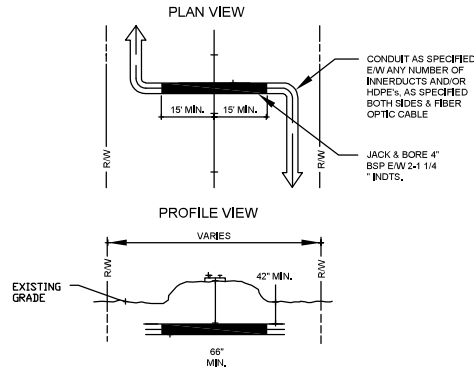
TYPICAL DETAIL A

JACK & BORE ROADWAY



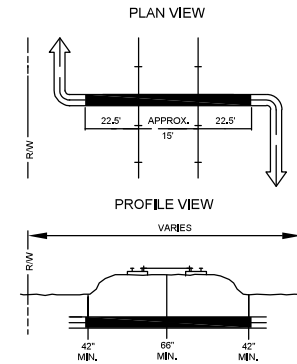
TYPICAL DETAIL B

JACK & BORE MAIN TRACK



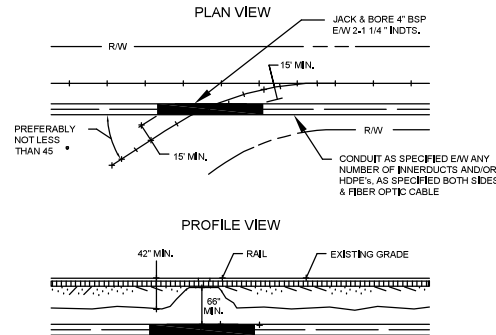
TYPICAL DETAIL C

JACK AND BORE DUAL TRACKS



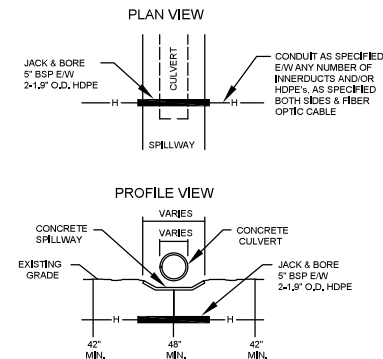
TYPICAL DETAIL D

JACK & BORE AUXILIARY TRACK



TYPICAL DETAIL E

JACK AND BORE CULVERT AND/OR SPILLWAY



72 HOURS NOTICE REQUIRED

REVISIONS			
DATE:	REV	DESCRIPTIONS:	BY:
11-18-2019	0	LLD	CYI
01-13-2019	1	ROUTE MODIFICATION	CYI
			CYI

CONSTRUCTION FIRM		PREPARED BY:	
		CYIENT	
MANAGER:		ENGINEER: C.PENNINGTON	
PHONE:		PHONE:	

MasTec
OUTSIDE PLANT CONSTRUCTION

MCI
MCImetro
ACCESS TRANSMISSION
SERVICES, LLC

CONSTRUCTION DETAIL DRAWINGS

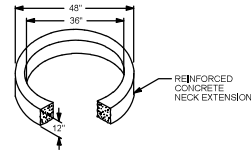
NA FARRAGUT_FH

CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX
DRAFTER:	SCALE: NTS	SHEET: 78 OF 86
		REVISION: 1

CONSTRUCTION DETAILS/TYPICALS

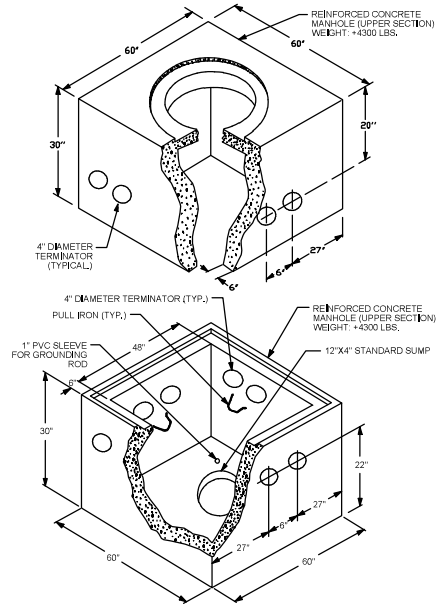
4'x4'x4' OR 4'x4'x2' MANHOLE DETAILS

TYPICAL DETAIL "A"
TYPICAL NECK EXTENSION DETAIL

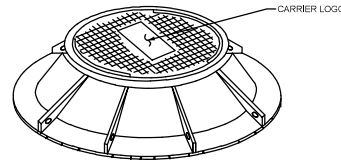


TYPICAL DETAIL "D"

DALWORTH QUICKSET MANHOLE
WALLS: 6in. HEADROOM: 48in.



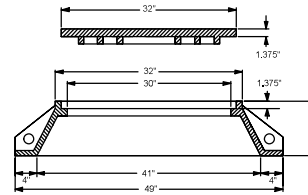
TYPICAL DETAIL "B"
MANHOLE COVER IRONWORKS #B-30



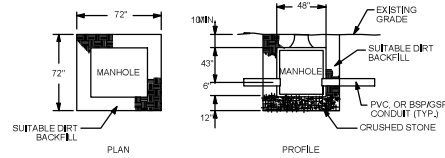
NOTES:
1. EACH COVER TO HAVE (4) PICK SLOTS FOR REMOVING.
2. STAMP CARRIERS ID IN COVER.
3. ACCESS HOLE: 30"

TYPICAL DETAIL "E"

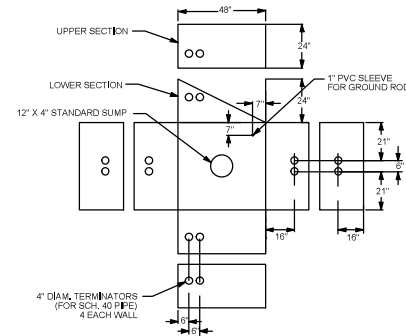
RING AND COVER DETAIL
RING: 390lbs. COVER: 300lbs.



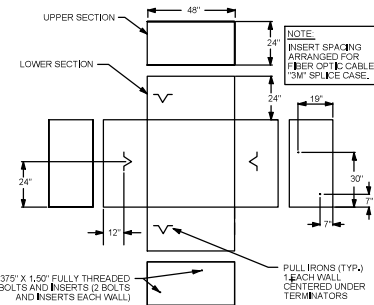
TYPICAL DETAIL "G"
TYPICAL MANHOLE EXCAVATION PIT



TYPICAL DETAIL "C"
TERMINATORS, SUMP, & GROUND ROD SLEEVE
2 SECTIONS



TYPICAL DETAIL "F"
BOLT INSERTS AND PULL IRONS
2 SECTIONS



NOTES:
1. VOID IN EXCAVATED AREAS TO BE BACKFILLED WITH SELECT MATERIAL.
2. BOTTOM OF EXCAVATED PIT TO BE BACKFILLED WITH 12\"/>

811  Know what's below. Call 811 before you dig. 72 HOURS NOTICE REQUIRED	REVISIONS			CONSTRUCTION FIRM	PREPARED BY :	MasTec OUTSIDE PLANT CONSTRUCTION	MCI MCImetro ACCESS TRANSMISSION SERVICES,LLC	CONSTRUCTION DETAIL DRAWINGS				
	DATE:	REV:	DESCRIPTIONS:	BY:	CYIENT			NA FARRAGUT_FH				
	11-18-2019	0	LLD	CYI				MANAGER:	ENGINEER: C.PENNINGTON	CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX
	01-13-2019	1	ROUTE MODIFICATION	CYI				PHONE:	SCALE: NTS	SHEET: 79 OF 86	REVISION:1	
				CYI								

2.5' x 5' x 2.5' HANDHOLE DETAILS

SEE DETAIL "A-3" THIS SHEET

NON-SKID SURFACE

EMS MARKER
3M CAT# #1411
(ONE SIDE ONLY)

LOCK DOWN
DEVICE AND
OERT SHIELD
SEE DETAIL "A-1"
THIS SHEET

UNISTRUT CHANNEL
SUPPORT BEAM
1,625" X 1" X 33"
(3 REQUIRED)

375" INSERT

SEE DETAIL "A-4"
THIS SHEET

4.50" BELL ENDS W/ PVC
PLUG, BELL ENDS TO
ACCOMMODATE SCHED.
40 PVC (BOTH ENDS)

2" KNOCKOUT (BOTH ENDS)

2.50" KNOCKOUT (BOTH ENDS)

SEE DETAIL "A-2"
THIS SHEET

LOCKING BEAM
(CENTER ONLY)

REINFORCED POLYMER
MORTAR FRAME (RPM)
BONDED TO VAULT BY
MANUFACTURER

FIBERGLASS REINFORCED
PLASTIC VAULT (FRP)

3" REINFORCED
RIB

LIFTING BOLTS (TYP. 4 PLACES)

2" KNOCKOUT (BOTH ENDS)

2.50" KNOCKOUT (BOTH ENDS)

TWO PIECE REINFORCED
POLYMER MORTAR (RPM) COVER FOR
20,000 LBS. LOADING WEIGHT

LIFTING SLOT
4" X 2" WITH CENTER PIN

MCI
1-800-624-0975

75 IN.

50 IN.

30"

60"

4.75"

5.65"

NEOPRENE RUBBER
4" X 1.50" X .25"

A

.1875" SCREW
WITH FLAT
WASHER

Diagram illustrating the reinforced polymer mortar cover and frame for a fiberglass vault. The diagram shows a cross-section of the structure, with labels pointing to the 'REINFORCED POLYMER MORTAR COVER AND FRAME' and the 'FIBERGLASS VAULT'.

**VAULT BOTTOM
PLAN VIEW**
(144 SQ. IN. TOTAL DRAINAGE)

6" 6" 12" TYP. 1" DIA HOLE FOR GROUND ROD (TYP = 4 PL.) 6" X 6" DRAIN .50" OPENING (MAX) (TYP = 4 PL.) 29.50" 58.50" 12" TYP.

The diagram shows a rectangular vault bottom plan view. The overall dimensions are 58.50" in width and 29.50" in height. There are four 6" x 6" drains, each with a .50" opening, spaced evenly. The drains are located 6" from the left and right walls and 12" from the top and bottom walls. A 1" diameter hole for a ground rod is also shown, typical of the layout. The total drainage area is 144 square inches.

Diagram illustrating the side wall view inside looking out. The diagram shows a cross-section of a wall with a horizontal line representing the wall surface. Above the wall, there are two horizontal dimensions of 30 inches each, separated by a vertical dashed line. Below the wall, there are two vertical dimensions of 7 inches each, separated by a vertical dashed line. A horizontal dimension of 17 inches is shown between the two vertical dashed lines. A 25-degree angle is indicated between a horizontal line and a diagonal line. A .375 inch lag bolt anchor is shown, with a note '(TYP)' indicating it is typical.

Diagram illustrating the assembly of a neoprene cover for a P1000 unistrut. The components shown are:

- NEOPRENE COVER
- .50" STAINLESS STEEL ACME THD. BOLT & CAPTURE NUT W/ STAINLESS END CAP (SELF-CLEANING)
- P1000 UNISTRUT

Diagram illustrating the assembly of the cover hold down bracket (hot dipped galv) (2 REQ'D). The bracket is secured to the structure using .75" x 1.25" hex bolts with nuts and washers. A .375" insert (typ 4 places/lgs) is shown inserted into the bracket.

**SUPPORT BEAM
INSTALLATION
(TYP. AT 6 PLACES)**

The diagram illustrates the installation of a support beam. A cross-section of the structure shows a horizontal support beam embedded within a wall. The wall is composed of an outer layer labeled 'RPM COVER' and an inner layer labeled 'RPM FRAME'. The support beam is labeled 'SUPPORT BEAM'. The interior of the structure is labeled 'FIBERGLASS VAULT'. The installation is noted as being typical at 6 places.

EXCAVATION PIT

A cross-sectional diagram of a handhole. The handhole is a rectangular structure. Above the top edge of the handhole, there is a layer of material labeled "SUITABLE DIRT BACKFILL". A dimension line indicates a horizontal distance of "7' - 0\" from the centerline of the handhole to the edge of the backfill. Another dimension line indicates a vertical distance of "6\" from the top edge of the handhole to the top of the backfill layer.

Diagram illustrating the cross-section of a trench for a 4-inch diameter pipe. The trench is 4 feet wide and 12 inches deep. The pipe is 4 inches in diameter and is surrounded by 4.75 inches of suitable dirt backfill. The trench is lined with crushed stone on the bottom and sides. The top of the trench is at the existing grade. An EMS marker is shown on one side of the trench. The diagram is labeled with dimensions and materials:

- EMS MARKER (ONE SIDE ONLY)
- 5'-0"
- EXISTING GRADE
- SUITABLE DIRT BACKFILL
- 4"
- 25.25' MIN
- 12"
- 4.75"
- CRUSHED STONE
- PVC, BSP/GSP 40 LB PIPE

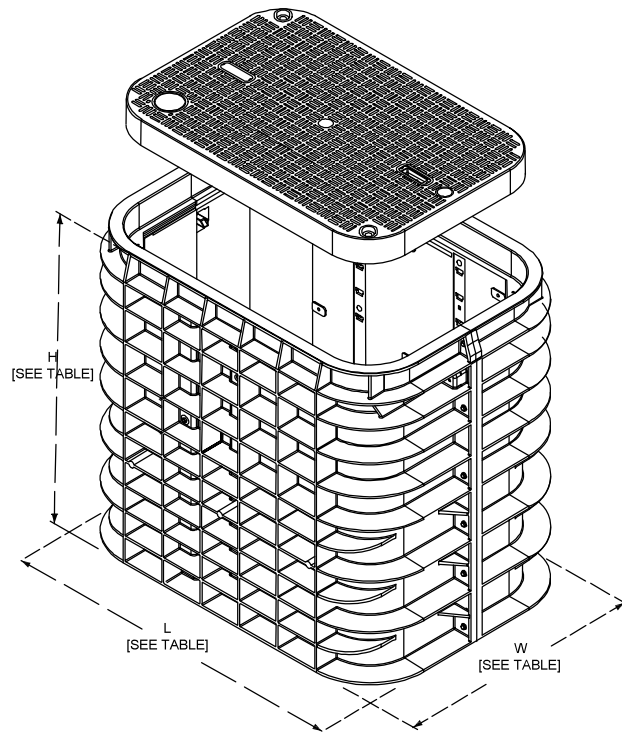
1. VOID IN EXCAVATED AREAS TO BE BACKFILLED WITH SELECT MATERIAL.
2. BOTTOM OF EXCAVATED PIT TO BE BACKFILLED WITH 12" OF CRUSHED STONE (.75" GRADE).
3. SHORING WILL BE REQUIRED.
4. ALL HANDHOLES SHALL BE PLACED AT EXISTING GRADE.

LINEAR DISTANCE BETWEEN
LAG BOLT ANCHORS MUST
BE 25".

 Know what's below. Call 811 before you dig. 72 HOURS NOTICE REQUIRED	REVISIONS			CONSTRUCTION FIRM		PREPARED BY:		 OUTSIDE PLANT CONSTRUCTION	 MCI metro ACCESS TRANSMISSION SERVICES, LLC	CONSTRUCTION DETAIL DRAWINGS								
										NA FARRAGUT_FH								
	DATE:	REV	DESCRIPTIONS:	BY:						CITY: FARRAGUT		STATE: TENNESSEE		COUNTY: KNOX				
	11-16-2019	0	LLD	CYI						DRAFTER:		SCALE: NTS		SHEET: 80 OF 86		REVISION: 1		
	01-13-2019	1	ROUTE MODIFICATION	CYI														
					MANAGER:	ENGINEER: C.PENNINGTON												
					PHONE:													

CONSTRUCTION DETAILS/TYPICALS

TYPICAL VAULT DETAIL



VAULT MODEL	L (LENGTH)	W (WIDTH)	H (HEIGHT)
BULK324V073	30 IN.	17 IN.	24 IN.
BULK424V073	36 IN.	24 IN.	24 IN.
BULK436V073	36 IN.	24 IN.	36 IN.
BULK736V073	48 IN.	30 IN.	36 IN.
BULK942V073	76 IN.	36 IN.	42 IN.

*NOTE: SEE SITE PLAN FOR LOCATION AND TYPE



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REVISIONS			
DATE:	REV	DESCRIPTIONS:	BY:
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01-13-2019	1	ROUTE MODIFICATION	CYI
			CYI
			CYI

CONSTRUCTION FIRM		PREPARED BY :	
		CYIENT	
MANAGER:		ENGINEER: C.PENNINGTON	
PHONE:		PHONE:	



CONSTRUCTION DETAIL DRAWINGS

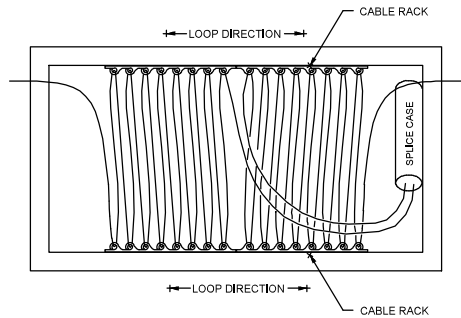
NA FARRAGUT_FH

CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX
DRAFTER:	SCALE: NTS	SHEET: 81 OF 86
		REVISION: 1

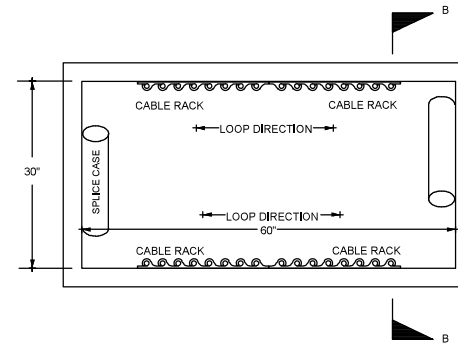
CONSTRUCTION DETAILS/TYPICALS

HANDHOLE SLACK STORAGE DETAILS

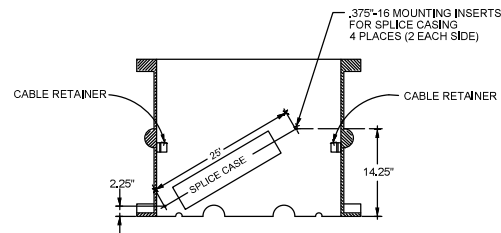
DETAIL "A"
CABLE SLACK ARRANGEMENT



DETAIL "B"
HANDHOLE LAYOUT



SECTION B-B



72 HOURS NOTICE REQUIRED

REVISIONS			
DATE:	REV	DESCRIPTIONS:	BY:
11-18-2019	0	LLD	CYI
01-13-2019	1	ROUTE MODIFICATION	CYI
			CYI

CONSTRUCTION FIRM	
MANAGER:	ENGINEER: C.PENNINGTON
PHONE:	PHONE:

PREPARED BY :	
CYIENT	

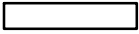
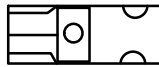
MasTec
OUTSIDE PLANT CONSTRUCTION

MCI
MCImetro
ACCESS TRANSMISSION
SERVICES,LLC

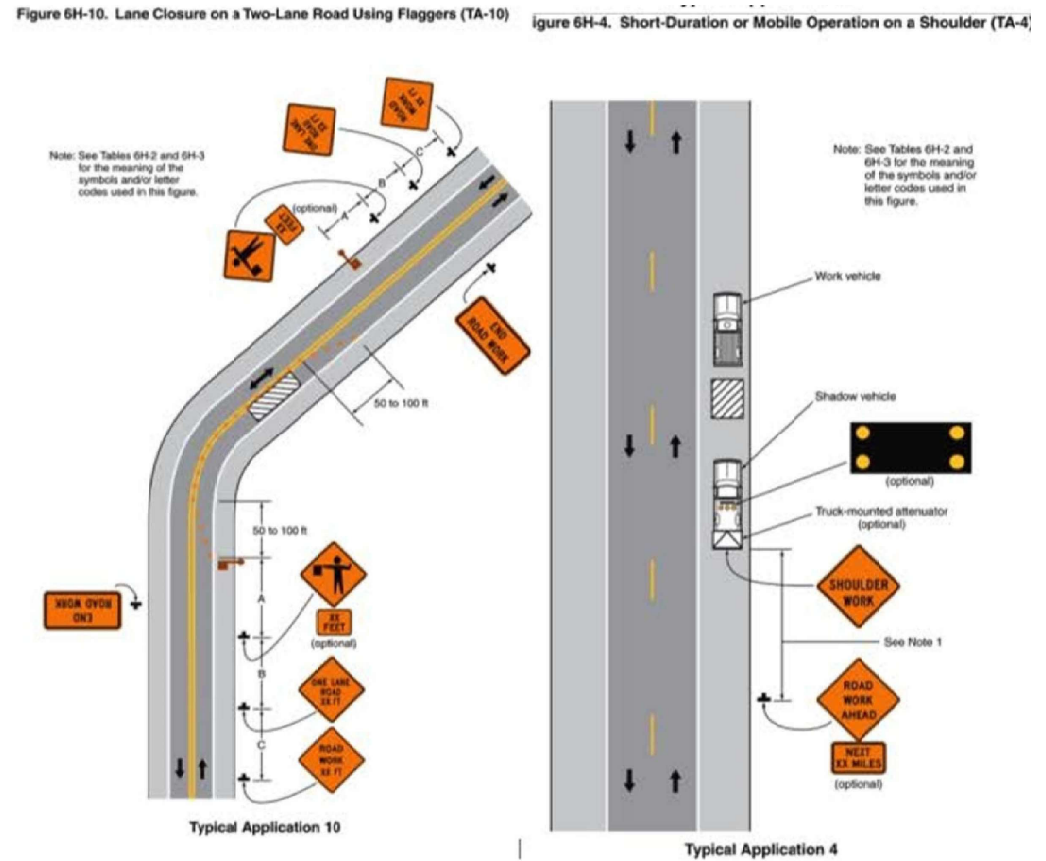
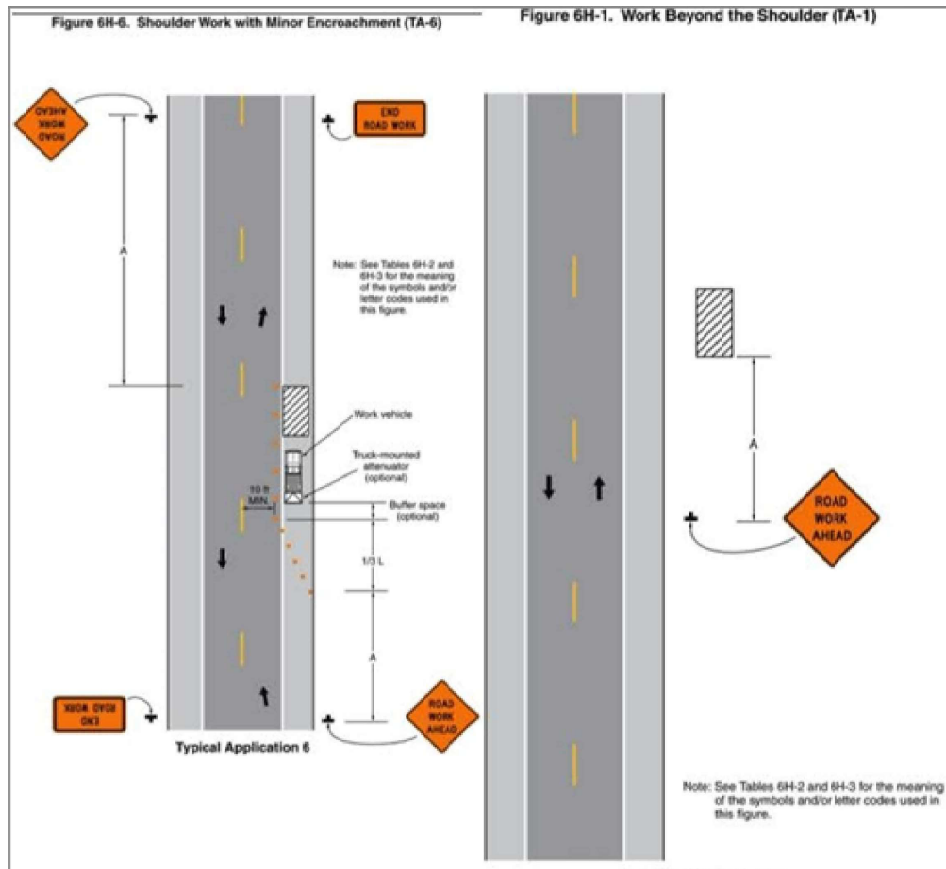
CONSTRUCTION DETAIL DRAWINGS
NA FARRAGUT_FH

CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX
DRAFTER:	SCALE: NTS	SHEET: 82 OF 86
		REVISION: 1

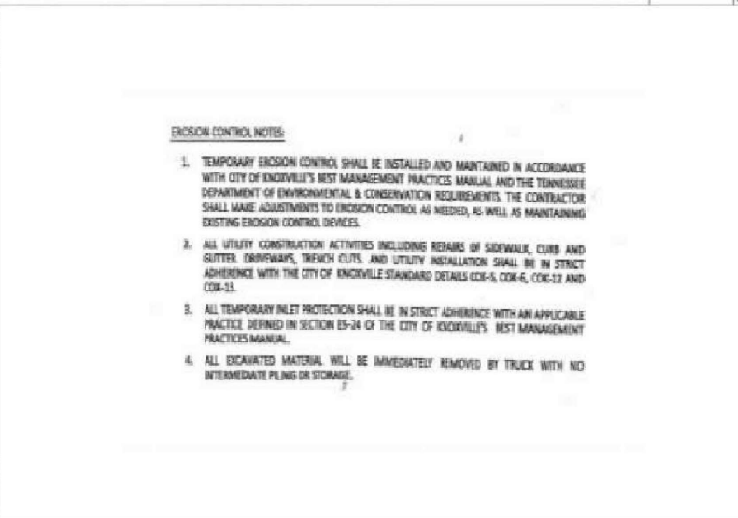
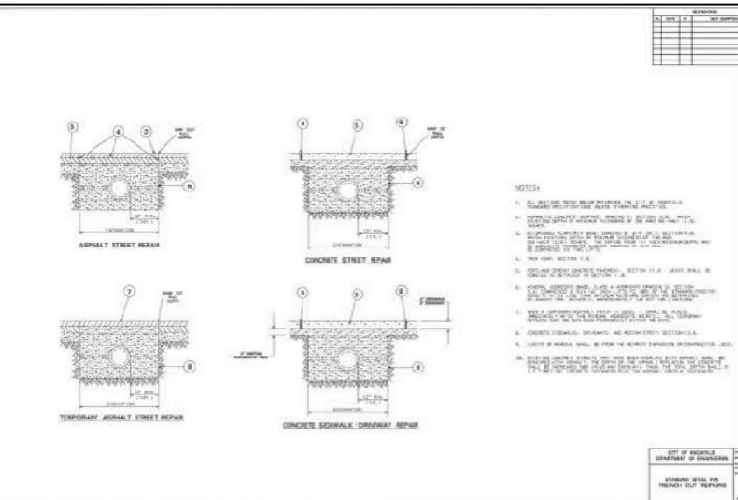
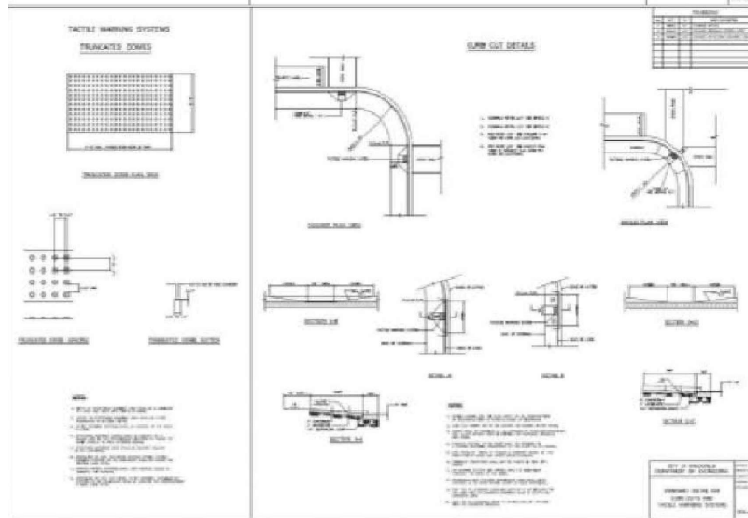
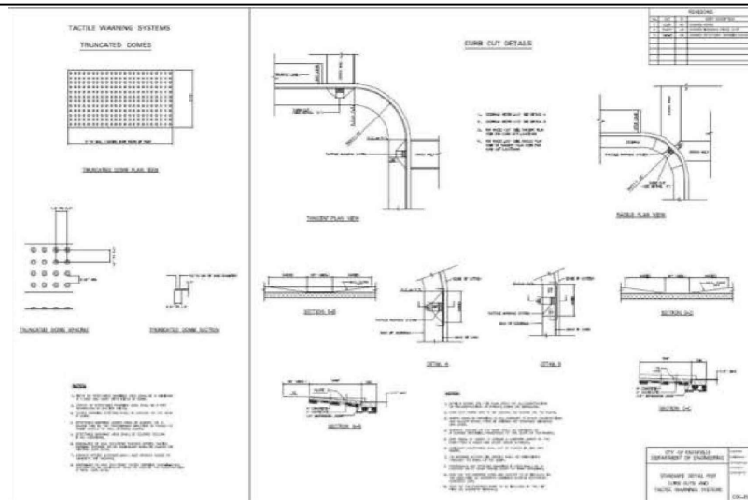
Table 6h-2. Meaning of Symbols on Typical Application Diagrams

Symbols	Description	Symbols	Description
	Arrow board		Shadow vehical
	Arrow board support or trailer (shown facing down)		Sign (shown facing left)
	Changeable message sign or trailer		Surveyor
	Channelizing device		Temporary barrier
	Crash cushion		Temporary barrier with warning light
	Direction of temporary traffic detour		Temporary barrier with warning light
	Direction of traffic		Truck-mounted attenuator
	Flagger		Type barricade
	High-level warning device (free tree)		Warning light
	Langitudinal channeelizing device		Work space
	Luminaire		Work vehicle
	Pavement marking that should be removed for a long-term project		

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	11-18-2019	0	LLD	CYI							
	01-13-2019	1	ROUTE MODIFICATION	CYI							
				CYI							
				MANAGER:	ENGINEER: C.PENNINGTON						
				PHONE:	PHONE:						
CITY: FARRAGUT		STATE: TENNESSEE		COUNTY: KNOX							
DRAFTER:		SCALE: NTS		SHEET: 83 OF 86		REVISION: 1					



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					CYIENT			NA FARRAGUT_FH				
	DATE:	REV	DESCRIPTIONS:	BY:				CITY: FARRAGUT	STATE: TENNESSEE		COUNTY: KNOX	
	11-18-2019	0	LLD	CYI				DRAFTER:	SCALE: NTS	SHEET: 85 OF 86	REVISION: 1	
	01-13-2019	1	ROUTE MODIFICATION	CYI								
				CYI								
				MANAGER:	ENGINEER: C.PENNINGTON							
				PHONE:	PHONE:							



EROSION CONTROL NOTES:

1. TEMPORARY EROSION CONTROL SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH CITY OF KNOXVILLE'S BEST MANAGEMENT PRACTICES MANUAL AND THE TENNESSEE DEPARTMENT OF ENVIRONMENTAL & CONSERVATION REQUIREMENTS. THE CONTRACTOR SHALL MAKE ADJUSTMENTS TO EROSION CONTROL AS NEEDED, AS WELL AS MAINTAINING EXISTING EROSION CONTROL DEVICES.
2. ALL UTILITY CONSTRUCTION ACTIVITIES INCLUDING REPAIRS OF SIDEWALK, CURB AND GUTTER, DRIVEWAYS, TRENCH CUTS, AND UTILITY INSTALLATION SHALL BE IN STRICT ADHERENCE WITH THE CITY OF KNOXVILLE'S STANDARD DETAILS (CDB-6, CDB-6, CDB-12 AND CDB-11).
3. ALL TEMPORARY INLET PROTECTION SHALL BE IN STRICT ADHERENCE WITH AN APPLICABLE PRACTICE DEFINED IN SECTION 03-24 OF THE CITY OF KNOXVILLE'S BEST MANAGEMENT PRACTICES MANUAL.
4. ALL EXCAVATED MATERIAL WILL BE IMMEDIATELY REMOVED BY TRUCK WITH NO INTERMEDIATE PILING OR STORAGE.



72 HOURS NOTICE REQUIRED

REVISIONS			
DATE:	REV	DESCRIPTIONS:	BY:
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01-13-2019	1	ROUTE MODIFICATION	CYI
			CYI
			CYI

CONSTRUCTION FIRM		PREPARED BY:	
		CYIENT	
		OUTSIDE PLANT CONSTRUCTION	
MANAGER:		ENGINEER: C.PENNINGTON	
PHONE:		PHONE:	



CONSTRUCTION DETAIL DRAWINGS **NA FARRAGUT_FH**

CITY: FARRAGUT		STATE: TENNESSEE		COUNTY: KNOX	
DRAFTER:		SCALE: NTS	SHEET: 86 OF 86	REVISION: 1	



MCImetro

ACCESS TRANSMISSION SERVICES, LLC



OUTSIDE PLANT CONSTRUCTION



ENGINEERING SERVICES

(KVSWTN_TO_FARRAGUT) 1801AWEJ.18

KNOXVILLE, TN

BACKHAUL

CONSTRUCTION DRAWINGS

ASSOCIATED NFIDS:

1710AISU.8 / 1710AISU.55
1710AISU.59 / 1710AISU.87
1710AISU.60 / 1710AISU.24
1710AISU.61
1710AISU.62
1710AIUG.1

ASSOCIATED PERMITS:

CITY OF FARRAGUT
KNOX COUNTY
TDOT
LCUB / TDS
TDEC
CITY OF KNOXVILLE

PROJECT STATUS: CONSTRUCTION DRAWINGS

STATUS DATE: 6/15/2020

PROJECT OVERVIEW



PROJECT:

1801AWEJ.18

CITY OF FARRAGUT

KNOXVILLE, TN

Mastec
OUTSIDE PLANT CONSTRUCTION

KVSWTN_TO_FARRAGUT_1801AWEJ.18

FORESITE
group

Foresite Group, Inc.
2000 Peachtree Plaza
Suite 260
Norcross, GA 30092

P 770.361.180
F 770.361.184
W 770.361.184

ASSOCIATED PERMITS:

CITY OF FARRAGUT

KNOX COUNTY

TDOT

LCUB / TDS

TDEC

CITY OF KNOXVILLE

ASSOCIATED NFIDS:

1710AISU.8 / 1710AISU.55

1710AISU.59 / 1710AISU.87

1710AISU.60 / 1710AISU.24

1710AISU.61

1710AISU.62

1710AUG.1

DATE: 6/15/2020

ENGINEER: MDS

DRAWN BY: DLA

REVISIONS

DATE	DESCRIPTION	INITIAL
6/15/20	REVISION	KS

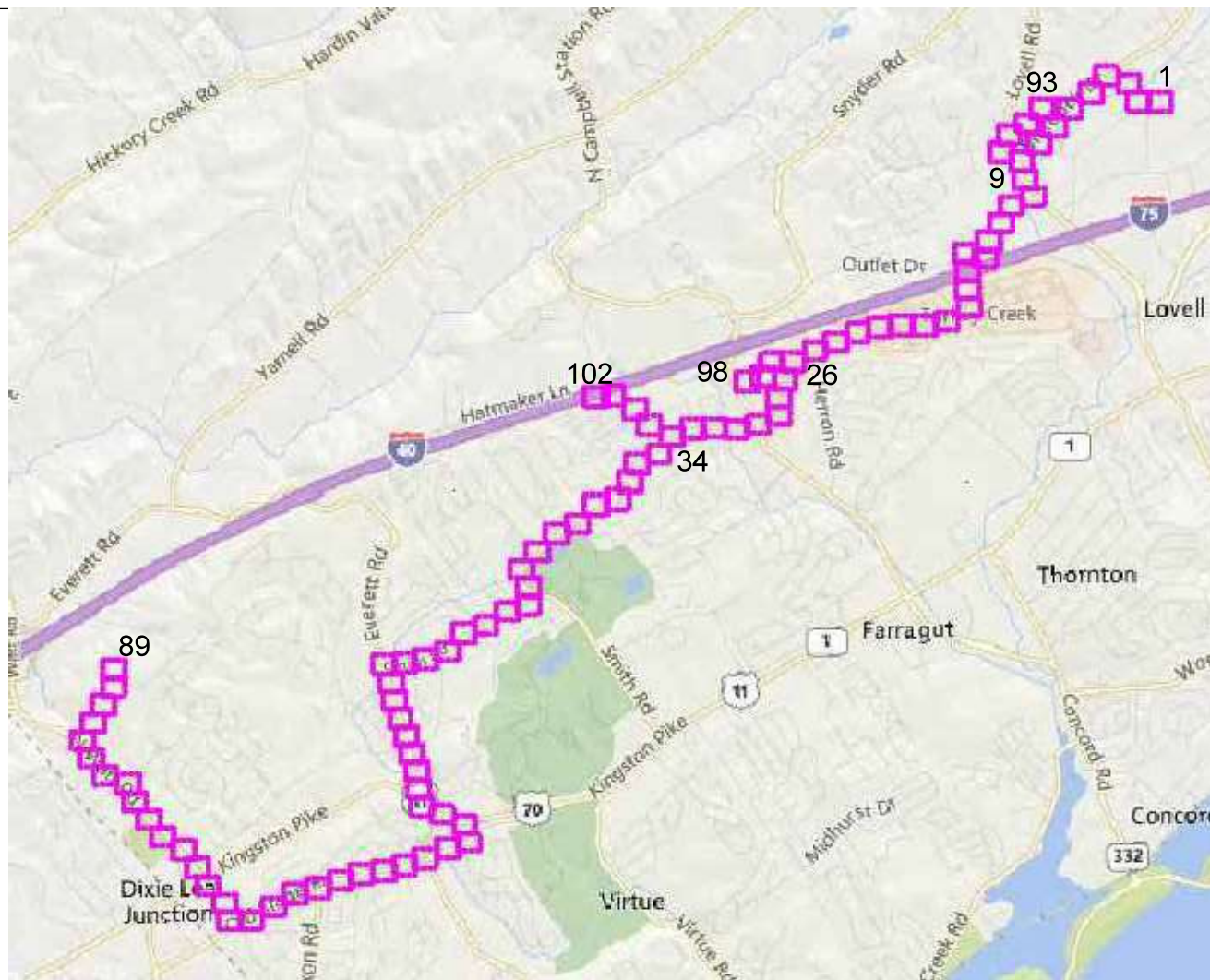
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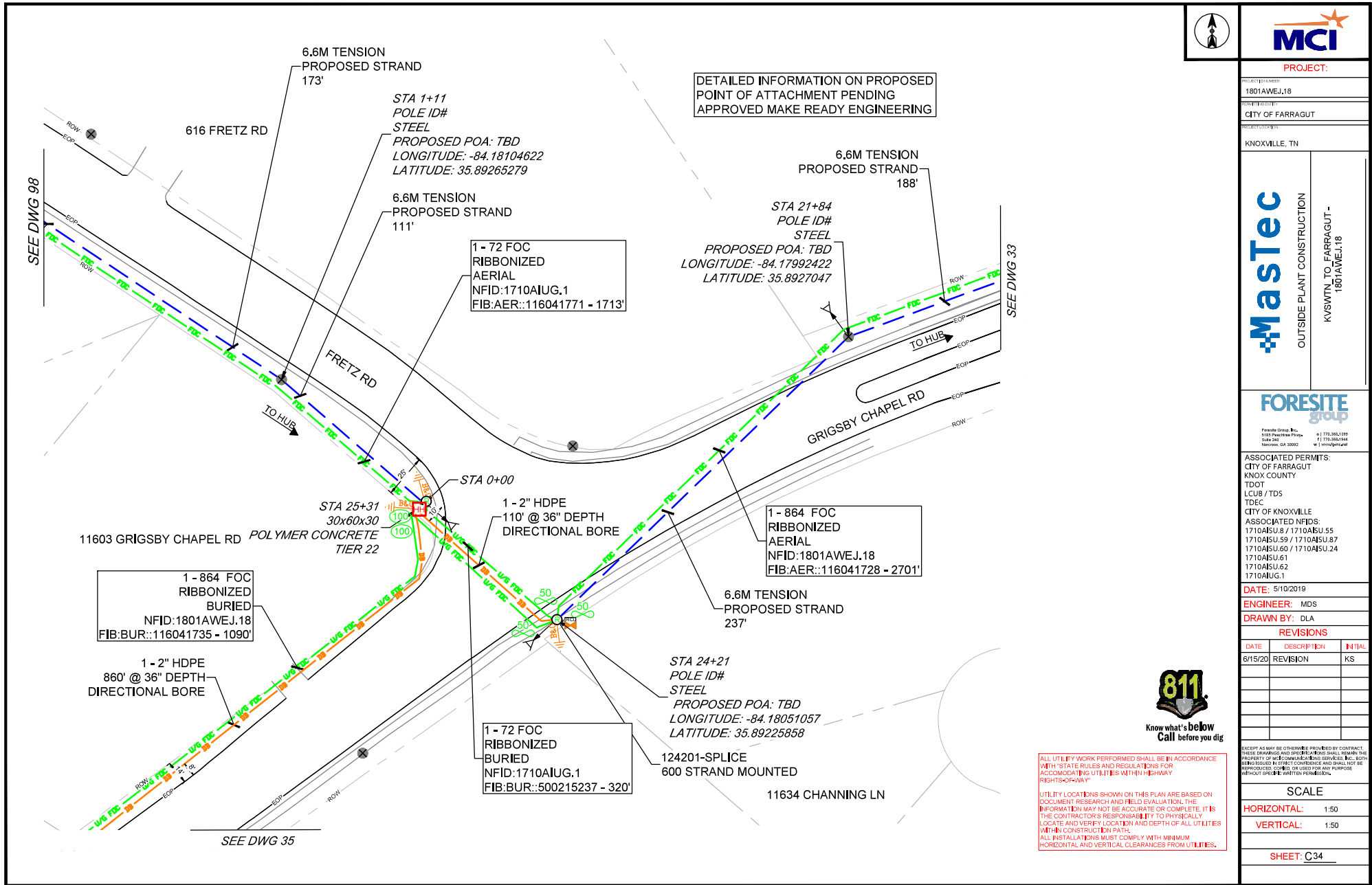
SCALE

HORIZONTAL: 1:50

VERTICAL: 1:50

SHEET: A-02







PROJECT:

PROJECT NUMBER: 1801AWEJ.18

PROJECT LOCATION: CITY OF FARRAGUT

PROJECT DESCRIPTION: KNOXVILLE, TN

Mastec

OUTSIDE PLANT CONSTRUCTION

KVSWTN_TO_FARRAGUT - 1801AWEJ.18

FORESITE

ForeSite Group, Inc.
2050 Peachtree Plaza, Suite 260
Norcross, GA 30092

Phone: 770.361.1500
Fax: 770.361.1544
Web: www.foresitegroup.com

ASSOCIATED PERMITS:

CITY OF FARRAGUT
KNOX COUNTY
TDOT
LCUB / TDS
TDEC
CITY OF KNOXVILLE

ASSOCIATED NFIDS:

1710AISU.8 / 1710AISU.55
1710AISU.59 / 1710AISU.87
1710AISU.61 / 1710AISU.24
1710AISU.62
1710AUG.1

DATE: 5/10/2019

ENGINEER: MDS

DRAWN BY: DLA

REVISIONS

DATE	DESCRIPTION	INITIAL
6/15/20	REVISION	KS

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SCALE

HORIZONTAL: 1"=50'

VERTICAL: 1"=50'

SHEET: C34



PROJECT:

PROJECT NUMBER:
1801AWEJ.18

CITY OF FARRAGUT

KNOXVILLE, TN

Mastec

OUTSIDE PLANT CONSTRUCTION

KVSWTN_TO_FARRAGUT -
1801AWEJ.18

FORESITE
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Foresite Group, Inc.
2155 Peachtree Pkwy.
Suite 200
Norcross, GA 30092
P: 770.381.1100
F: 770.381.1144
W: foresitegroup.com

ASSOCIATED PERMITS:

CITY OF FARRAGUT
KNOX COUNTY
TDOT
LCUB / TDS

TDEC

CITY OF KNOXVILLE

ASSOCIATED NFIDS:

1710AISU.8 / 1710AISU.55
1710AISU.59 / 1710AISU.87
1710AISU.60 / 1710AISU.24
1710AISU.61
1710AISU.62
1710AUG.1

DATE: 5/10/2019

ENGINEER: MDS

DRAWN BY: DLA

REVISIONS

DATE	DESCRIPTION	INITIAL
6/15/20	REVISION	KS



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ALL UTILITY WORK PERFORMED SHALL BE IN ACCORDANCE WITH STATE RULES AND REGULATIONS FOR ACCOMMODATING UTILITIES WITHIN HIGHWAY RIGHTS-OF-WAY.

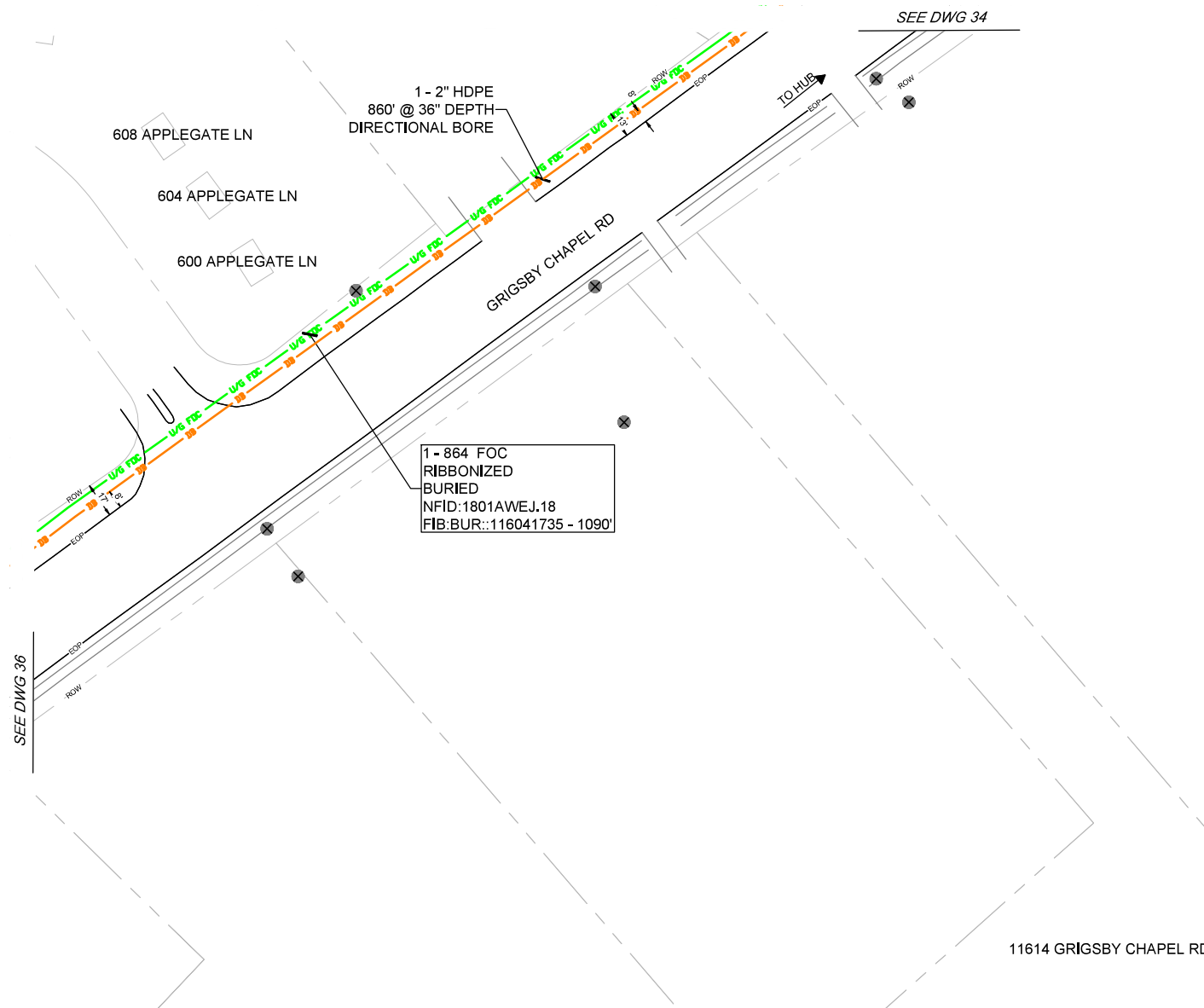
UTILITY LOCATIONS SHOWN ON THIS PLAN ARE BASED ON DOCUMENT RESEARCH AND FIELD EVALUATION. THE INFORMATION MAY NOT BE ACCURATE OR COMPLETE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PHYSICALLY LOCATE AND VERIFY LOCATION AND DEPTH OF ALL UTILITIES WITHIN CONSTRUCTION PATH.
ALL INSTALLATIONS MUST COMPLY WITH MINIMUM HORIZONTAL AND VERTICAL CLEARANCES FROM UTILITIES.

SCALE

HORIZONTAL: 1:50

VERTICAL: 1:50

SHEET: C35





PROJECT:

1801AWEJ.18

CITY OF FARRAGUT

KNOXVILLE, TN

Mastec

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Foresite Group, Inc.
3155 Peachtree Pkwy., Suite 200
Norcross, GA 30092

770.361.1800
770.361.1844
www.foresitegroup.com

ASSOCIATED PERMITS:

CITY OF FARRAGUT

KNOX COUNTY

TDOT

LCUB / TDS

TDCC

CITY OF KNOXVILLE

ASSOCIATED NFIDS:

1710AISU.8 / 1710AISU.55

1710AISU.59 / 1710AISU.87

1710AISU.60 / 1710AISU.24

1710AISU.61

1710AISU.62

1710AUG.1

DATE: 5/10/2019

ENGINEER: MDS

DRAWN BY: DLA

REVISIONS

DATE	DESCRIPTION	INITIAL
6/15/20	REVISION	KS



Know what's below
Call before you dig

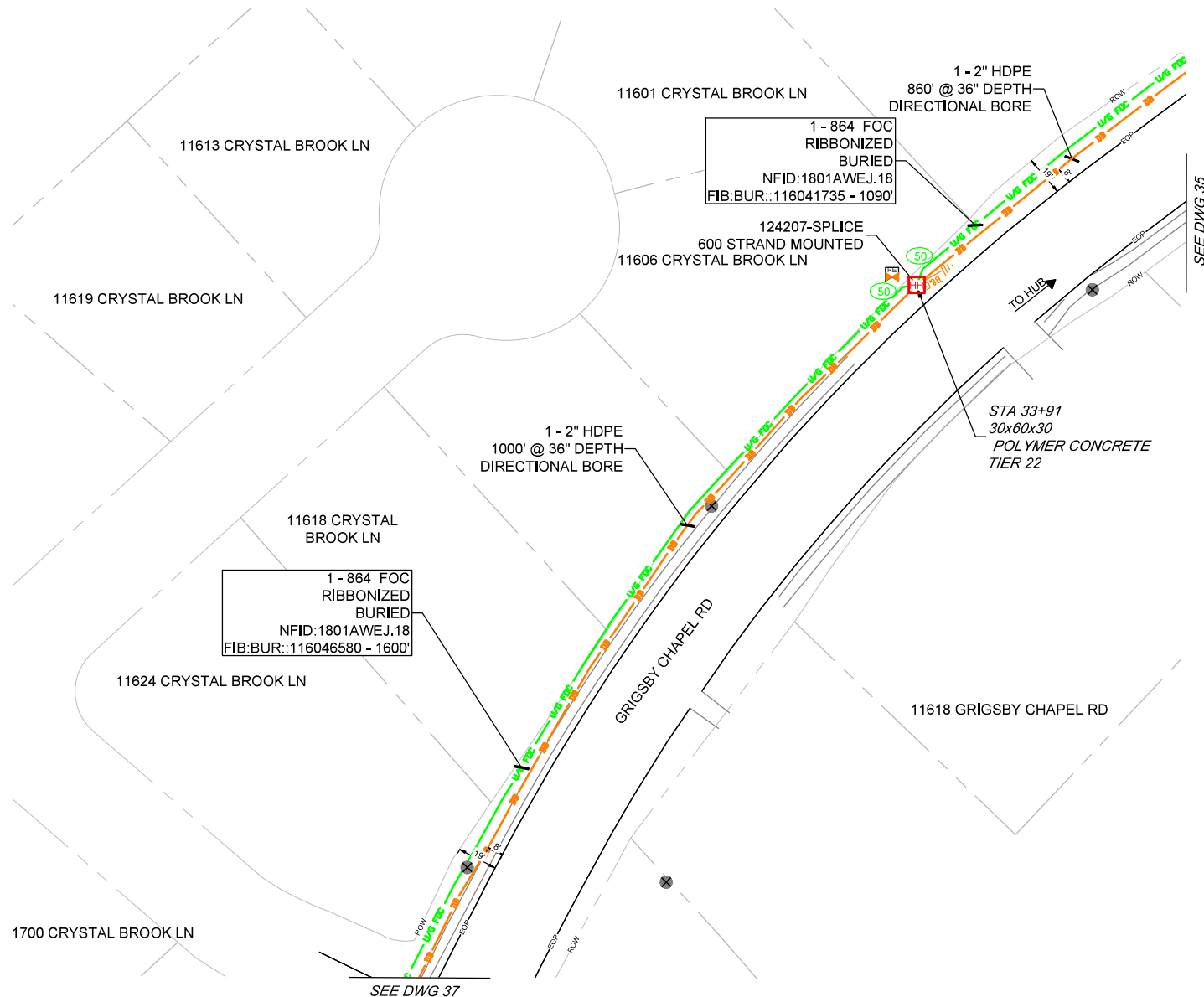
ALL UTILITY WORK PERFORMED SHALL BE IN ACCORDANCE WITH STATE RULES AND REGULATIONS FOR ACCOMMODATING UTILITIES WITHIN HIGHWAY RIGHTS-OF-WAY.
UTILITY LOCATIONS SHOWN ON THIS PLAN ARE BASED ON DOCUMENT RESEARCH AND FIELD EVALUATION. THE INFORMATION MAY NOT BE ACCURATE OR COMPLETE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PHYSICALLY LOCATE AND VERIFY LOCATION AND DEPTH OF ALL UTILITIES WITHIN CONSTRUCTION PATH.
ALL INSTALLATIONS MUST COMPLY WITH MINIMUM HORIZONTAL AND VERTICAL CLEARANCES FROM UTILITIES.

SCALE

HORIZONTAL: 1:50

VERTICAL: 1:50

SHEET: C36





PROJECT:

1801AWEJ.18

CITY OF FARRAGUT

KNOXVILLE, TN

Mastec

OUTSIDE PLANT CONSTRUCTION

KVSWTN_TO_FARRAGUT -
1801AWEJ.18

FORESITE
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Foresite Group, Inc.
2155 Peachtree Pkwy.
Suite 200
Norcross, GA 30092

770.361.1100
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ASSOCIATED PERMITS:

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KNOX COUNTY

TDOT

LCUB / TDS

TDEC

CITY OF KNOXVILLE

ASSOCIATED NFIDS:

1710AISU.8 / 1710AISU.55

1710AISU.59 / 1710AISU.87

1710AISU.60 / 1710AISU.24

1710AISU.61

1710AISU.62

1710AUG.1

DATE: 5/10/2019

ENGINEER: MDS

DRAWN BY: DLA

REVISIONS

DATE	DESCRIPTION	INITIAL
6/15/20	REVISION	KS



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SCALE

HORIZONTAL: 1:50

VERTICAL: 1:50

SHEET: C37

11708 CRYSTAL BROOK LN

11712 CRYSTAL BROOK LN

1 - 864 FOC
RIBBONIZED
BURIED
NFID:1801AWEJ.18
FIB:BUR::116046580 - 1600'

1 - 2" HDPE
1000' @ 36" DEPTH
DIRECTIONAL BORE

11715 GRIGSBY CHAPEL RD

GRIGSBY CHAPEL RD

531 SAINT CHARLES LN

523 SAINT CHARLES LN

519 SAINT CHARLES LN

SEE DWG 36

TO HUB

SEE DWG 38

1739 GRIGSBY CHAPEL RD

2 - 2" HDPE
981' @ 36" DEPTH
DIRECTIONAL BORE

1 - 864 FOC
RIBBONIZED
BURIED
NFID:1801AWEJ.18
FIB:BUR::116043471 - 4277'

STA 48+41
208875-STRUC - HH-
30x60x30
POLYMER CONCRETE
TIER 22
LAT: 35.88817148
LONG: -84.18602782

STA 0+00

1 - 864 FOC
RIBBONIZED
BURIED
NFID:1801AWEJ.18
FIB:BUR::116046580 - 1600'

1 - 2" HDPE
450' @ 36" DEPTH
DIRECTIONAL BORE

GRIGSBY CHAPEL RD

SEE DWG 37

1 - 2" HDPE
1000' @ 36" DEPTH
DIRECTIONAL BORE

516 ALTAMIRA DR
STA 43+91
30x60x30
POLYMER CONCRETE
TIER 22

513 ALTAMIRA DR

509 ALTAMIRA DR

524 ALTAMIRA DR



PROJECT:

PROJECT NUMBER:
1801AWEJ.18

PROJECT LOCATION:
CITY OF FARRAGUT

PROJECT ADDRESS:
KNOXVILLE, TN

Mastec
OUTSIDE PLANT CONSTRUCTION
KVSMTN_TO_FARRAGUT -
1801AWEJ.18

FORESITE
group

Foresite Group, Inc.
2155 Peachtree Plank
Suite 200
Norcross, GA 30092
P: 770.361.1500
F: 770.361.7444
W: www.foresitegroup.com

ASSOCIATED PERMITS:
CITY OF FARRAGUT
KNOX COUNTY
TDO
LCUB / TDS
TDEC
CITY OF KNOXVILLE
ASSOCIATED NFIDS:
1710AISU.8 / 1710AISU.55
1710AISU.59 / 1710AISU.87
1710AISU.60 / 1710AISU.24
1710AISU.61
1710AISU.62
1710AUG.1

DATE: 5/10/2019

ENGINEER: MDS

DRAWN BY: DLA

REVISIONS

DATE	DESCRIPTION	INITIAL
6/15/20	REVISION	KS



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Call before you dig

ALL UTILITY WORK PERFORMED SHALL BE IN ACCORDANCE WITH STATE RULES AND REGULATIONS FOR ACCOMMODATING UTILITIES WITHIN HIGHWAY RIGHTS-OF-WAY.
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SCALE

HORIZONTAL: 1:50

VERTICAL: 1:50

SHEET: C38



PROJECT:

PROJECT NUMBER:
1801AWEJ.18

PROJECT LOCATION:
CITY OF FARRAGUT

PROJECT LOCATION:
KNOXVILLE, TN

Mastec

OUTSIDE PLANT CONSTRUCTION

KVSWTN_TO_FARRAGUT -
1801AWEJ.18

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3155 Peachtree Plaza, Suite 260
Norcross, GA 30092

P 770.361.1100
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W www.foresitegroup.com

ASSOCIATED PERMITS:
CITY OF FARRAGUT
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TDOT
LCUB / TDS

TDCC
CITY OF KNOXVILLE

ASSOCIATED NFIDS:
1710AISU.8 / 1710AISU.55

1710AISU.59 / 1710AISU.87

1710AISU.60 / 1710AISU.24

1710AISU.61

1710AISU.62

1710AUG.1

DATE: 5/10/2019

ENGINEER: MDS

DRAWN BY: DLA

REVISIONS

DATE	DESCRIPTION	INITIAL
6/15/20	REVISION	KS



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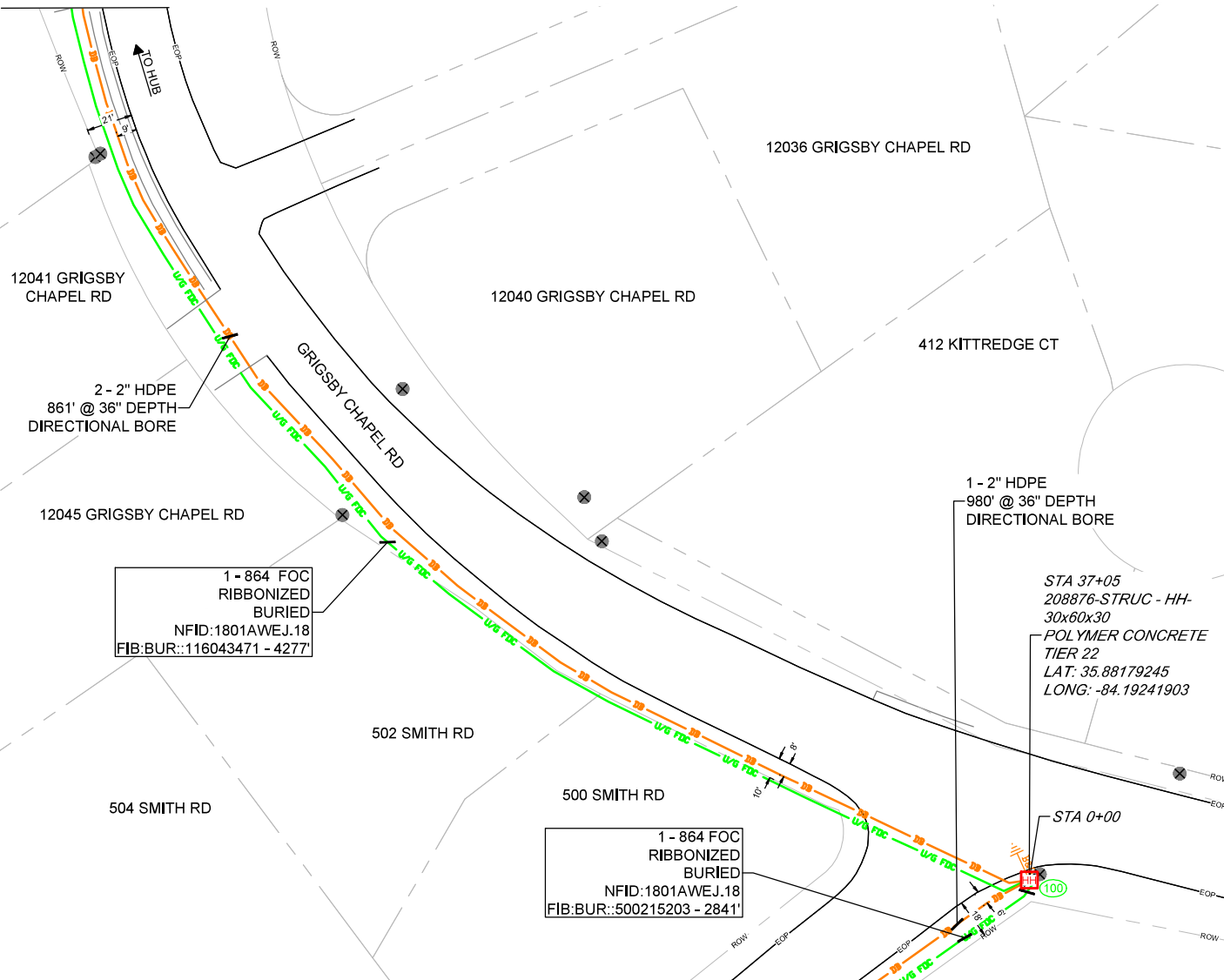
SCALE

HORIZONTAL: 1:50

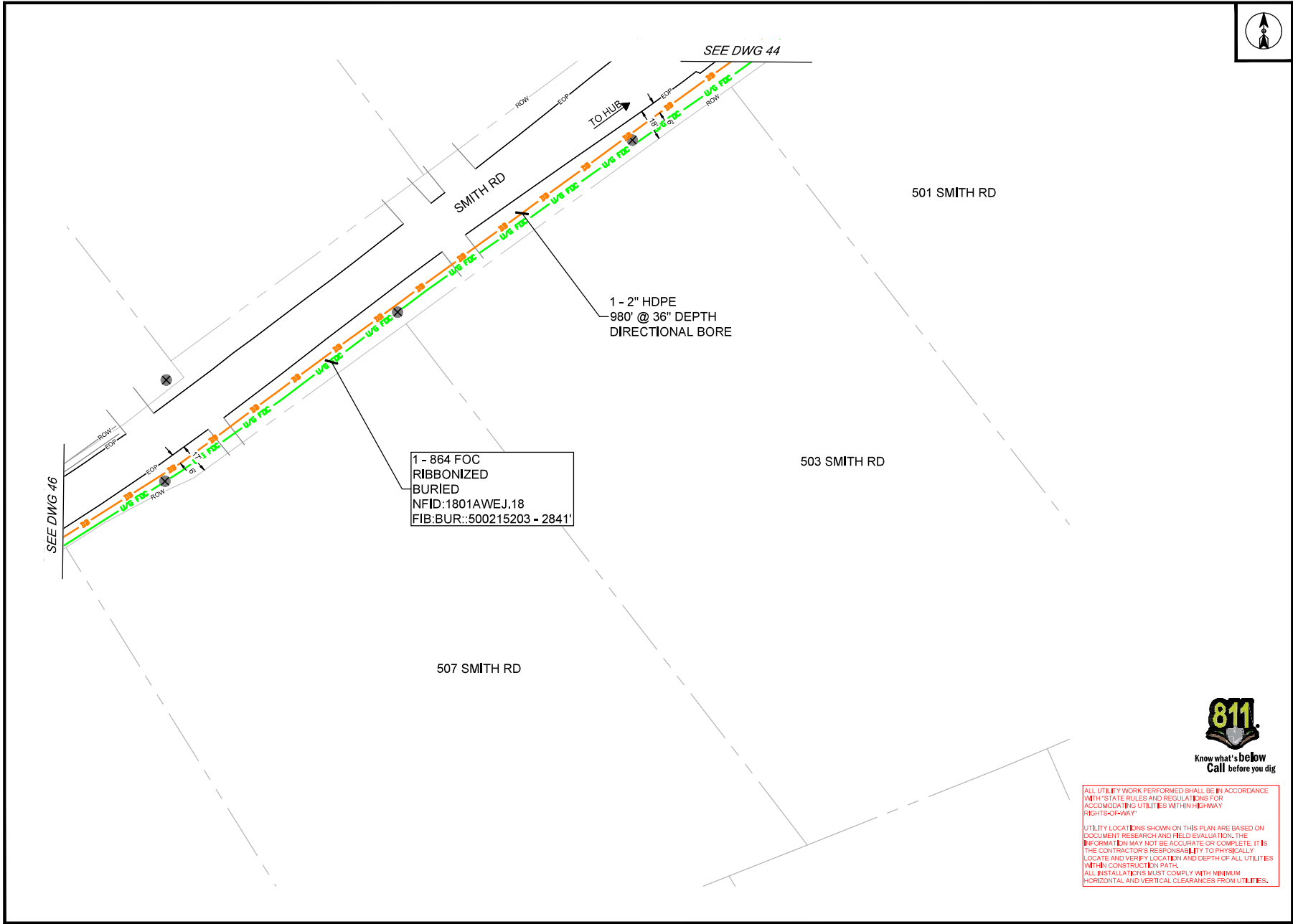
VERTICAL: 1:50

SHEET: C44

SEE DWG 43



SEE DWG 45



PROJECT:

PROJECT NUMBER: 1801AWEJ.18

PROJECT LOCATION: CITY OF FARRAGUT

PROJECT DESCRIPTION: KNOXVILLE, TN

OUTSIDE PLANT CONSTRUCTION

KVSWTN_TO_FARRAGUT - 1801AWEJ.18

FORESITE group

Foresite Group, Inc.
2155 Peachtree Pkwy., Suite 200
Norcross, GA 30092

PH 770.385.1500
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www.foresitegroup.com

ASSOCIATED PERMITS:

CITY OF FARRAGUT
KNOX COUNTY
TDOT
LCUB / TDS
TDEC
CITY OF KNOXVILLE

ASSOCIATED NFIDS:

1710AISU.8 / 1710AISU.55
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1710AISU.61
1710AISU.62
1710AUG.1

DATE: 5/10/2019

ENGINEER: MDS

DRAWN BY: DLA

REVISIONS

DATE	DESCRIPTION	INITIAL
6/15/20	REVISION	KS

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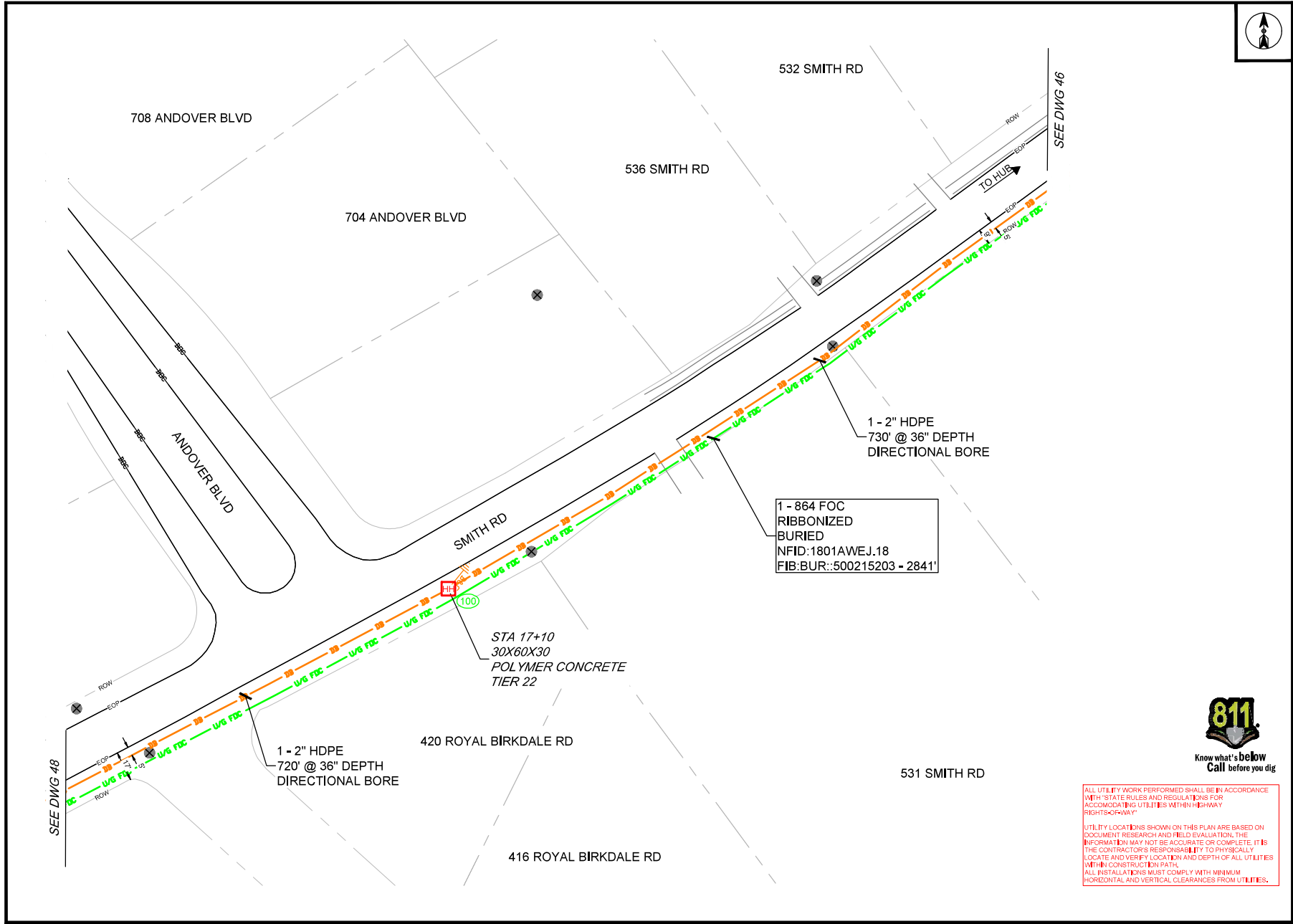
SCALE

HORIZONTAL: 1"=50'

VERTICAL: 1"=50'

SHEET: C45

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PROJECT:

PROJECT NUMBER:
1801AWEJ.18

PROJECT LOCATION:
CITY OF FARRAGUT

PROJECT COMMENTS:
KNOXVILLE, TN



OUTSIDE PLANT CONSTRUCTION

KVSWTN_TO_FARRAGUT -
1801AWEJ.18

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LCUB / TDS
TDEC
CITY OF KNOXVILLE

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1710AUG.1

DATE: 5/10/2019

ENGINEER: MDS

DRAWN BY: DLA

REVISIONS

DATE	DESCRIPTION	INITIAL
6/15/20	REVISION	KS



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SCALE

HORIZONTAL: 1"=50'

VERTICAL: 1"=50'

SHEET: C47



PROJECT:

PROJECT NUMBER:
1801AWEJ.18

PROJECT LOCATION:
CITY OF FARRAGUT

PROJECT LOCATION:
KNOXVILLE, TN

Mastec

OUTSIDE PLANT CONSTRUCTION

KVSWTN_TO_FARRAGUT -
1801AWEJ.18

FORESITE
group

Foresite Group, Inc.
3155 Peachtree Plaza, Suite 260
Norcross, GA 30092

Phone: 770.361.1800
Fax: 770.361.1844
Web: foresitegroup.com

ASSOCIATED PERMITS:

CITY OF FARRAGUT
KNOX COUNTY
TDOT / TDS

TDOT / TDS

CITY OF KNOXVILLE

ASSOCIATED NFIDS:

1710AISU.8 / 1710AISU.55

1710AISU.59 / 1710AISU.87

1710AISU.60 / 1710AISU.24

1710AISU.61

1710AISU.62

1710AISU.1

DATE: 5/10/2019

ENGINEER: MDS

DRAWN BY: DLA

REVISIONS

DATE	DESCRIPTION	INITIAL
6/15/20	REVISION	KS



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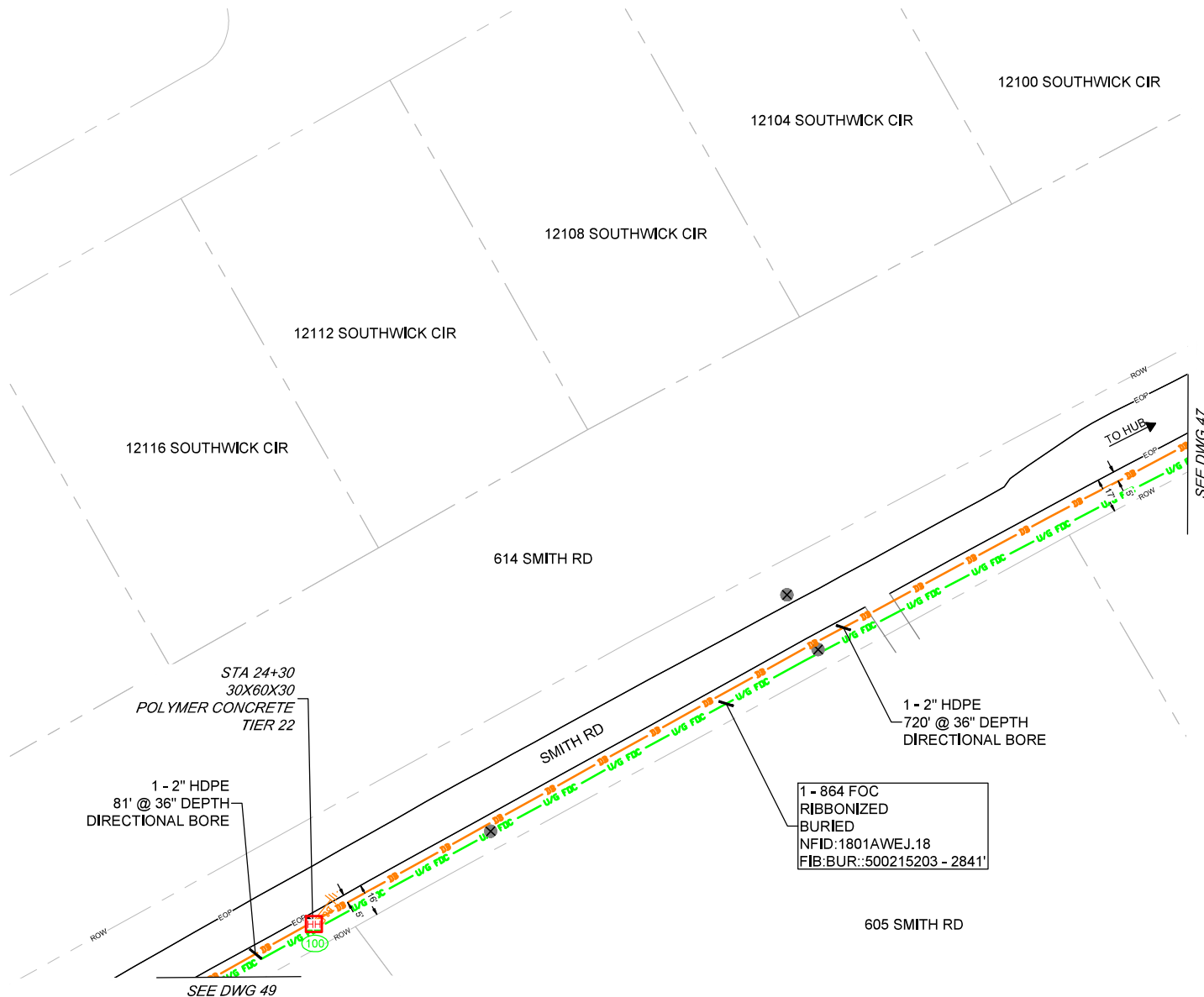
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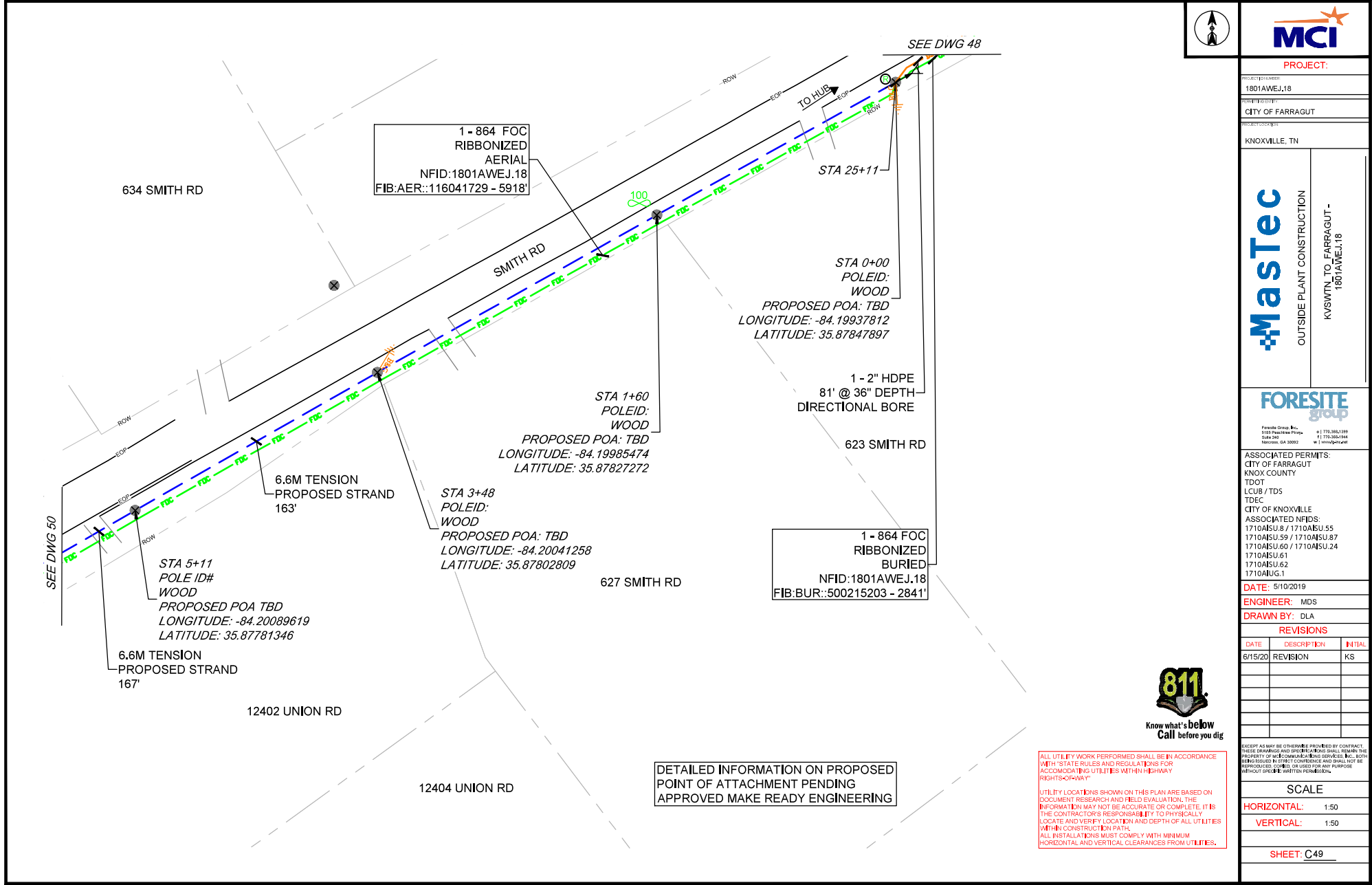
SCALE

HORIZONTAL: 1"=50'

VERTICAL: 1"=50'

SHEET: C48







PROJECT:

PROJECT NUMBER: 1801AWEJ.18

PROJECT LOCATION: CITY OF FARRAGUT

PROJECT DESCRIPTION: KNOXVILLE, TN



OUTSIDE PLANT CONSTRUCTION

KVSWTN_TO_FARRAGUT - 1801AWEJ.18



Foresite Group, Inc.
2155 Peachtree Pkwy., Suite 200
Norcross, GA 30092

Phone: 770.361.1500
Fax: 770.361.1544
Web: www.foresitegroup.com

ASSOCIATED PERMITS:

CITY OF FARRAGUT
KNOX COUNTY
TDOT
LCUB / TDS
TDEC
CITY OF KNOXVILLE

ASSOCIATED NFIDS:

1710AISU.8 / 1710AISU.55
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1710AISU.60 / 1710AISU.24
1710AISU.61
1710AISU.62
1710AISU.1

DATE: 5/10/2019

ENGINEER: MDS

DRAWN BY: DLA

REVISIONS

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6/15/20	REVISION	KS



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SCALE

HORIZONTAL: 1"=50'

VERTICAL: 1"=50'

SHEET: C49



MCImetro
ACCESS TRANSMISSION SERVICES,LLC



OUTSIDE PLANT CONSTRUCTION

NA FARRAGUT_FH

PERMITS:
TO BE LABELED AT A LATER DATE

PHASE 4

FRONTHAUL
CONSTRUCTION DRAWINGS

  72 HOURS NOTICE REQUIRED	REVISIONS			CONSTRUCTION FIRM	PREPARED BY :	 OUTSIDE PLANT CONSTRUCTION	 MCImetro ACCESS TRANSMISSION SERVICES,LLC	COVER SHEET NA FARRAGUT_FH					
	DATE:	REV	DESCRIPTIONS:	BY:				CITY: FARRAGUT	STATE: TENNESSEE		COUNTY: KNOX		
	11-18-2019	0	LLD	CYI					SCALE:	NTS	SHEET:	01 OF 86	REVISION: 2
	01-13-2019	1	ROUTE MODIFICATION	CYI					MANAGER:	ENGINEER: C.PENNINGTON			
				CYI	PHONE:	PHONE:							

SHEET INDEX

<i>DESCRIPTION</i>	<i>SHEET NUMBER</i>
COVER SHEET	01
SHEET INDEX	02
SYMBOL KEY	03
CONTACT INFORMATION SHEET	04
KEY MAP SHEET	05
GENERAL NOTES	06-08
BILL OF MATERIALS	09
SITE PLAN SHEETS	10-75
TCP TYPICALS	76-86

  Know what's below. Call 811 before you dig. 72 HOURS NOTICE REQUIRED	REVISIONS		CONSTRUCTION FIRM		PREPARED BY :		 Mastec OUTSIDE PLANT CONSTRUCTION	 MCI metro ACCESS TRANSMISSION SERVICES, LLC	SHEET INDEX NA FARRAGUT_FH			
	DATE:	REV	DESCRIPTIONS:	BY:					CITY: FARRAGUT DRAFTER:	STATE: TENNESSEE SCALE: NTS	SHEET: 02 OF 86	COUNTY: KNOX REVISION: 2
	11-18-2019	0	LLD	CYI								
	01-13-2019	1	ROUTE MODIFICATION	CYI								
				CYI								
				CYI								
				MANAGER:	ENGINEER: C.PENNINGTON							
				PHONE:								

SYMBOL KEY

MCI PROPOSED CONSTRUCTION

	DIRECTIONAL BORE
	OPEN TRENCH
	PROPOSED STRAND
	UNDERGROUND FIBER OPTIC CABLE
	AERIAL FIBER OPTIC CABLE
	17x30x24" VAULT
	24x36x24" VAULT
	30x48x36" VAULT
	36x48x36" VAULT
	BORE PIT
	PROPOSED MANHOLE
	ANCHOR AND GUY
	OVERHEAD GUY
	PUSH BRACE
	SIDEWALK ANCHOR AND GUY
	RISER
	PROPOSED SPLICER
	RCL - FUTURE SPLICER
	12 EQUIPMENT AERIAL
	75 AERIAL SLACK LOOP
	150 UG SLACK LOOP
	VESPEK SITE
	DEMAND POINT
	OVERLASH

OTHER UTILITIES

	GAS LINE
	GAS METER
	GAS VALVE
	TELECOM MANHOLE
	TELECOM CABINET
	UNKNOWN MANHOLE
	UNKNOWN VAULT
	TREE LINE
	TELECOM LINE
	CABLE TV LINE
	FIBER OPTIC CABLE LINE
	RAIL ROAD
	WATER LINE
	FIRE HYDRANT
	WATER VALVE
	WATER METER
	STORM WATER LINE
	STORM WATER UTILITY
	WASTE WATER LINE
	WASTE WATER MANHOLE
	OVERHEAD POWER LINE
	UNDERGROUND POWER LINE

MCI EXISTING CONSTRUCTION

	EXISTING MCI METRO CONDUIT
	EXISTING MCI METRO VAULT
	EXISTING 17x30x24" VAULT
	EXISTING 24x36x24" VAULT
	EXISTING 24x36x36" VAULT
	EXISTING 30x48x36" VAULT
	EXISTING 36x48x48" VAULT
	EXISTING STRAND
	EXISTING MANHOLE
	EXISTING SPLICER
	ROAD SIGN
	SEWAGE MH
	EXISTING UTILITY
	POWER TRANSFORMER
	POWER MANHOLE
	POWER JUNCTION BOX
	POWER CABINET
	POWER VAULT
	WOODEN POLE
	STEEL POLE
	CONCRETE POLE
	STREET LIGHT
	TRAFFIC LIGHT
	ADA RAMP
	MAIL BOX

Know what's below. Call 811 before you dig. 72 HOURS NOTICE REQUIRED	REVISIONS			CONSTRUCTION FIRM	PREPARED BY :	OUTSIDE PLANT CONSTRUCTION	MCI metro ACCESS TRANSMISSION SERVICES, LLC	SYMBOL KEY				
	DESCRIPTIONS:			BY:				NA FARRAGUT_FH				
	DATE: 11-18-2019 REV: 0 DESCRIPTION: LLD ROUTE MODIFICATION	BY: CYI CYI CYI	CITY: FARRAGUT STATE: TENNESSEE COUNTY: KNOX									
	MANAGER:			ENGINEER: C. PENNINGTON				DRAFTER:		SCALE: NTS SHEET: 03 OF 86 REVISION: 2		
PHONE:			PHONE:									

CONTACT INFORMATION

MCI METRO INC.

OUTSIDE PLANT ENGINEERING:

PROJECT ENGINEER:
STANLEY MAJKA (615)428-4943

PROJECT MANAGER:
JULIE FURUKAWA (925)393-3184

RIGHT-OF-WAY:

AGENT

MANAGER

CONTRACTS:

OTHERS:

DESIGN CONTRACTOR:

NAME OF FIRM
CYIENT INC
SENIOR PROJECT MANAGER
JOSH RIDINGS 662-620-6634

PROJECT MANAGER
TBD TBD

CONSTRUCTION CONTRACTOR:

NAME OF FIRM
MASTEC
PROJECT MANAGER
EILEEN WOODSTRA (984)212-1878

PROJECT SUPERVISOR
LEILA RAY WILLIAMS (629)201-1484

RAILROADS

KOHR: JARRETT MANKIN (800)818-0184

NORFOLK SOUTHERN: DYLAN ANGEL TBD

CSX: TBD TBD

UTILITIES

KUB: BEKIM HALITI (865)558-2376

LES BEAVER (865)558-2737

SARA AUER (865)558-2598

LCUB: HEATHER WATKINS (865)998-0758

FORT LOUDOUN ELECTRIC COOP: JARROD BRACKET 1-(877)353-2674

MICHAEL WEBB 1-(877)353-2674

CITY GOVERNMENT

CITY OF KNOXVILLE: TONY VANDERGRIF (865)215-6100

CITY OF KNOXVILLE: GEORGE DAWNS (865)215-6121

TOWN OF FARRAGUT: MARK SHIPLEY (865)966-7057

CITY OF MARYVILLE: KEITH BREWER (865)273-3515

BARON SWAFFORD (865)273-3305

DAVID PRICHARD (865)273-3507

CITY OF CLINTON: CURTIS PEREZ (865)259-1108

CITY OF ALCOA: STEVE REYNOLDS (865)380-4869

COUNTY GOVERNMENT

KNOX COUNTY: CHRIS SILVER (865)388-3447

KNOX COUNTY: JIM SNOWDEN (865)215-5808

SEVIER COUNTY: DOUG SAWYER (865)429-4585

BLOUNT COUNTY: JEFF HEADRICK (865)983-4662

CHICO MESSER (865)983-4652

THOMAS LLOYD (865)681-6001

JEFF HATCHER (865)984-3421

ANDERSON COUNTY: GARY LONG (865)457-2735

STATE GOVERNMENT

TDOT UTILITIES: ROYCE FOUT: (PERMITS) (865)755-3898

TDEC: BRANDON YATES (615)687-7101

BILL MURPH (615)687-7124

FEDERAL GOVERNMENT

USACE (CORP OF ENGINEERS) (615)369-7500

OTHER



72 HOURS NOTICE REQUIRED

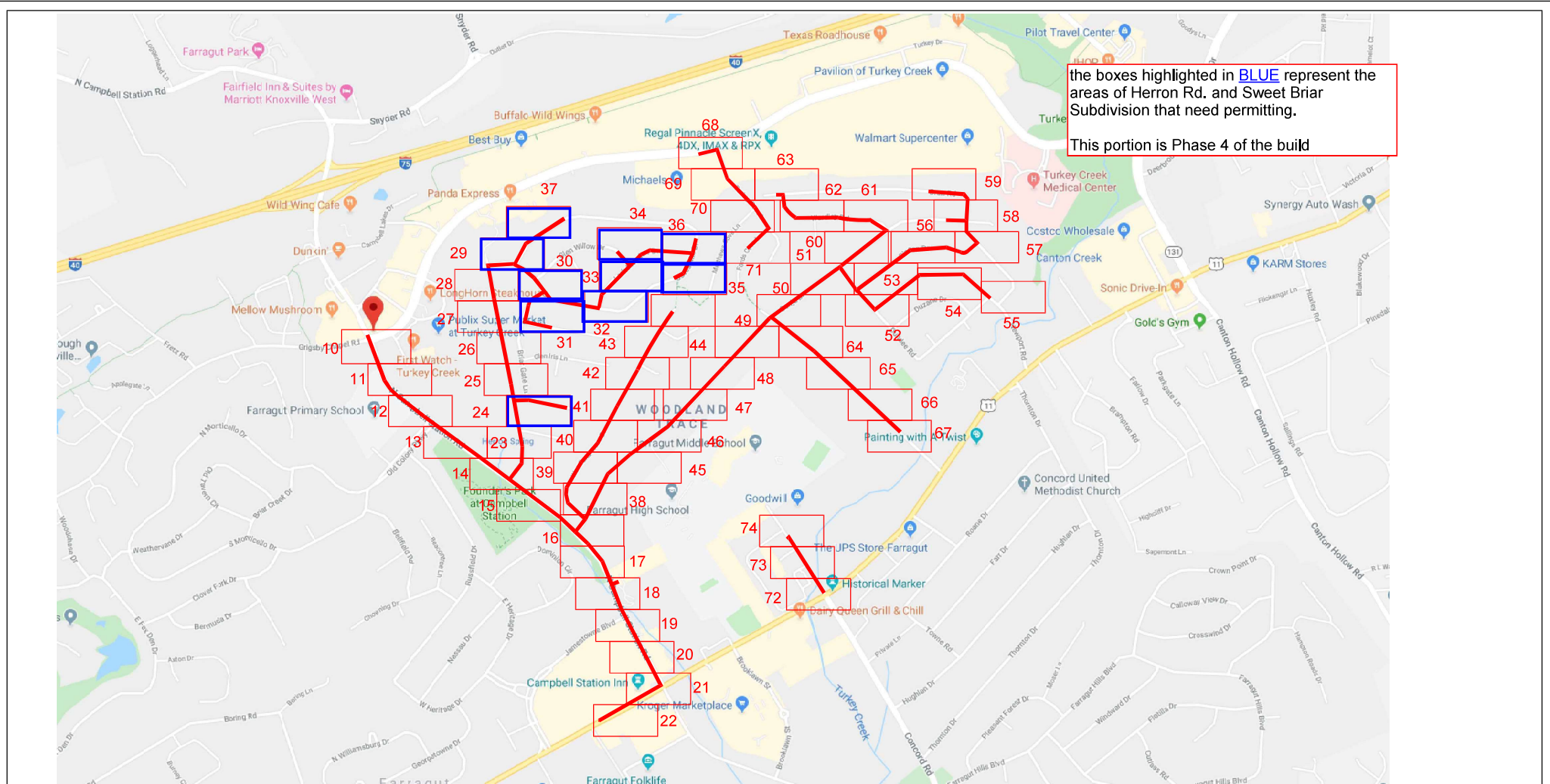
REVISIONS			
DATE:	REV	DESCRIPTIONS:	BY:
11-18-2019	0	LLD	CYI
01-13-2019	1	ROUTE MODIFICATION	CYI
			CYI
			CYI

CONSTRUCTION FIRM
MANAGER:
PHONE:

PREPARED BY :
CYIENT
ENGINEER: C,PENNINGTON
PHONE:



CONTACT INFORMATION SHEET			
NA FARRAGUT_FH			
CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX	
DRAFTER:	SCALE: NTS	SHEET: 04 OF 86	REVISION: 2



the boxes highlighted in **BLUE** represent the areas of Herron Rd. and Sweet Briar Subdivision that need permitting.

This portion is Phase 4 of the build

 Know what's below. Call 811 before you dig. 72 HOURS NOTICE REQUIRED	REVISIONS			CONSTRUCTION FIRM	PREPARED BY :	 OUTSIDE PLANT CONSTRUCTION  ACCESS TRANSMISSION SERVICES, LLC	KEY MAP			
	DATE:	REV	DESCRIPTIONS:	BY:			NA FARRAGUT_FH			
	11-18-2019	0	LLD	CYI						
	01-13-2019	1	ROUTE MODIFICATION	CYI						
				CYI						
				CYI						
					MANAGER:		ENGINEER: C.PENNINGTON	CITY: FARRAGUT		
				PHONE:	PHONE:	STATE: TENNESSEE				
							COUNTY: KNOX			
							DRAFTER:			
							SCALE: NTS			
							SHEET: 05 OF 86			
							REVISION: 2			

GENERAL NOTES AND REQUIREMENTS

GENERAL NOTES

1. MCI COMPRISES THE FOLLOWING OPERATING ENTITIES:
 - MCI COMMUNICATIONS SERVICES, INC.
 - MCI METRO ACCESS TRANSMISSION SERVICES, LLC
 - MCI METRO ACCESS TRANSMISSION SERVICES OF VIRGINIA, INC.
 - MCI METRO ACCESS TRANSMISSION SERVICES OF MASSACHUSETTS, INC.
 - METROPOLITAN FIBER SYSTEMS OF NEW YORK, INC.
2. ALL WORK TO BE PERFORMED IN STRICT ACCORDANCE WITH THE APPLICABLE CODES OR REQUIREMENTS OF ANY REGULATING GOVERNMENTAL AGENCY, MCI METRO, OR THE RIGHT-OF-WAY GRANTOR.
3. LOCATIONS OF SOME OF THE PHYSICAL FEATURES WERE OBTAINED FROM DATED RAILROAD VALUATION MAPS OR OTHER DRAWINGS, AND MAY BE AS SHOWN OR DEPICTED ON THESE DRAWINGS.
4. ALL KNOWN BURIED OBSTRUCTIONS ARE SHOWN ON SITE PLAN. ANY AND ALL OTHERS ENCOUNTERED ARE ALSO THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE, PROTECT, AND REPAIR, IF DAMAGED.
5. ANY AND ALL IMPROVEMENTS, SUCH AS ASPHALT OR CONCRETE PAVEMENT, CURBS, GUTTERS, WALKS, DRAINAGE DITCHES, EMBANKMENTS, SHRUBS, TREES, GRASS SOD, ETC., IF DAMAGED, SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITIONS.
6. EQUIPMENT TYPES SPECIFIED HEREIN (IE: "BACKHOE" "SWAMP PLOW", ETC.) ARE SUGGESTIONS ONLY AND ARE NOT INTENDED AS REQUIREMENTS, CONTRACTOR WILL BE NOTIFIED AS TO EXCEPTIONS.

OSP CONSTRUCTION GENERAL REQUIREMENTS

- ALL FEDERAL, STATE AND LOCAL SAFETY REGULATIONS MUST BE FOLLOWED WITHOUT EXCEPTION.
- PERSONAL PROTECTIVE EQUIPMENT APPROPRIATE FOR THE SPECIFIC WORK SITE SHALL BE USED AT ALL TIMES. AT A MINIMUM, HARD HAT, SAFETY SHOES/STEEL-TOED BOOTS, AND FLORESCENT ORANGE OR GREEN WORK VEST ARE REQUIRED UPON ENTERING ANY MCI WORK SITE.
- USE OF INTOXICANTS, DRUGS, INHALANTS OR ANY OTHER SUBSTANCES THAT MAY IMPAIR ALERTNESS ARE STRICTLY PROHIBITED.
- CONTRACTORS ARE NOT ALLOWED TO CUT ANY CABLE. CABLES SCHEDULED FOR REMOVAL WILL BE CUT BY MCI OPERATIONS PERSONNEL, AND ONLY AFTER VERIFICATION THAT ALL TRAFFIC HAS BEEN OFF-LOADED.
- EXTREME CAUTION MUST BE USED AT ALL TIMES WHEN WORKING ON OR NEAR ACTIVE CABLES. AN MCI EMPLOYEE OR CONTRACT REPRESENTATIVE MUST APPROVE AND BE PRESENT PRIOR TO AND DURING ALL CABLE HANDLING ACTIVITIES.
- TOOLS AND EQUIPMENT SPECIFICALLY DESIGNED FOR THE JOB AT HAND ARE REQUIRED, USE THE PROPER TOOL FOR THE JOB.
- CONDUIT WORK INVOLVING ACTIVE CABLES REQUIRES SPECIALIZED TOOLS SPECIFICALLY DESIGNED TO ACCESS DUCTS WITH ACTIVE CABLES.
- PROTECTING MCI FACILITIES IS EXTREMELY IMPORTANT; HOWEVER, SAFETY REGARDING YOURSELF AND OTHERS IS THE MOST IMPORTANT PART OF ANY PROJECT.



72 HOURS NOTICE REQUIRED

REVISIONS				CONSTRUCTION FIRM	PREPARED BY :
DATE:	REV	DESCRIPTIONS:	BY:		
11-18-2019	0	LLD	CYI		
01-13-2019	1	ROUTE MODIFICATION	CYI		
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			CYI		
				MANAGER:	ENGINEER: C,PENNINGTON
				PHONE:	PHONE:

MasTec
OUTSIDE PLANT CONSTRUCTION

MCI
MCI metro
ACCESS TRANSMISSION
SERVICES, LLC

GENERAL NOTES
NA FARRAGUT_FH

CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX
DRAFTER:	SCALE: NTS	SHEET: 06 OF 86
		REVISION: 2

GENERAL NOTES AND REQUIREMENTS

CONSTRUCTION NOTES

1. ALL CONDUIT WILL BE 4" JD SCHEDULE 40 (i.e. PVC OR BSP/GSP, MANUFACTURED SPLIT PVC OR SPLIT BSP/GSP), UNLESS SPECIFIED OTHERWISE.
2. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES 48 HOURS PRIOR TO CONSTRUCTION ACTIVITY, SEE CONTACT SHEET FOR CONTACT NAME AND TELEPHONE NUMBER.
3. ALL UNDERGROUND OBSTRUCTIONS, WHEN LOCATED, WILL REQUIRE THE PLACEMENT OF A BURIED CABLE MARKER AND THE PLACEMENT OF 4" MANUFACTURED SPLIT PVC, BSP/GSP OVER OR UNDER EACH OBSTRUCTION.
4. SHORING MAY BE REQUIRED AND SHALL COMPLY WITH O.S.H.A. STANDARDS.
5. ALL BURIED CONDUIT/CABLE WILL BE PLACED AT 42" MINIMUM COVER UNLESS SPECIFIED OTHERWISE ON THE CONSTRUCTION DRAWINGS.
6. MECHANICAL PROTECTION SHALL BE REQUIRED ANYTIME A 36" MINIMUM COVER IS UNOBTAINABLE UNLESS SPECIFIED OTHERWISE ON THE CONSTRUCTION DRAWINGS.
7. ALL 90 DEGREE BENDS IN CONDUIT CONSTRUCTION WILL BE A MINIMUM 38.2" RADIUS UNLESS SPECIFIED OTHERWISE. ALL SPLIT CONDUIT BENDS AND SOLID PVC BENDS SHALL REQUIRE CONCRETE ENCASEMENT, UNLESS SPECIFIED OTHERWISE.
8. OPERATIONS PERSONNEL TO BE CONTACTED BY THE CONTRACTOR 48 HOURS PRIOR TO CONSTRUCTION, SEE CONTACT SHEET FOR CONTACT NAME AND TELEPHONE NUMBER.
9. ALL STATIONING IS BASED ON AS-BUILT INFORMATION. THEREFORE SOME VARIANCE SHOULD BE ANTICIPATED, ADJUST AS NEEDED.
10. RAILROAD COMMUNICATION AND SIGNAL CABLES TO BE LOCATED PRIOR TO THE CONSTRUCTION ACTIVITY, RAILROAD TO BE GIVEN 48 HOURS NOTICE PRIOR TO CONSTRUCTION.
11. ALL BURIED CABLE MARKER POSTS AND HARDWARE PLACED AND/OR REMOVED ON ALL NEW AND EXISTING ROUTES SHALL BE IMPLEMENTED AS FOLLOWS.
 - ON THOSE ROUTES THAT ARE CONSIDERED TO BE IN A NORTH TO SOUTH GEOGRAPHICAL ORIENTATION, THE SOUTHERN-MOST SIGN AND POST SHOULD BE REMOVED, FOR NEW ROUTES BEING CONSTRUCTED, ONE SIGN POST WILL BE PLACED AT THE NORTH END OF EACH HANDHOLE.
 - ON THOSE ROUTES THAT ARE CONSIDERED TO BE IN AN EAST TO WEST GEOGRAPHICAL ORIENTATION, THE WESTERN-MOST SIGN AND POST SHOULD BE REMOVED, FOR NEW ROUTES BEING CONSTRUCTED, ONE SIGN POST WILL BE PLACED AT THE EAST END OF THE EACH HANDHOLE.

FIBER OPTIC CABLE UNCOVERING SYSTEM

1. THE TITLE OF THIS PROGRAM, F.O.C.U.S., AN ACRONYM FOR "FIBER OPTIC CABLE UNCOVERING SYSTEM," WAS SELECTED TO REMIND EVERYONE INVOLVED WITH WORKING NEAR MCIS ACTIVE FIBER OPTIC SYSTEMS TO FOCUS ON PROTECTING THE FACILITIES. IF, DURING THE COURSE OF THE PROJECT, YOU NOTICE ANY ACTIVITY WHICH MAY JEOPARDIZE THE MCIS OSP FACILITIES, IT IS YOUR DUTY TO STOP THE WORK AND RE-F.O.C.U.S.
2. F.O.C.U.S. RULES MUST BE FOLLOWED ON ALL MCIS PROJECTS INVOLVING WORK ON OR NEAR MCIS OSP FACILITIES. SAFETY IS MCIS NUMBER ONE PRIORITY; EVERYONE MUST REFRAIN FROM UNSAFE AND IMPROPER PRACTICES.
3. REVIEW OF F.O.C.U.S. IS MANDATORY AT EVERY PRE-BID, PRE-CONSTRUCTION SITE MEETING AND DAILY TAILGATE MEETING. F.O.C.U.S. DISCUSSION MUST INCLUDE SITE-SPECIFIC HISTORY, UNIQUE PROBLEMS, FACILITY CONFIGURATIONS THAT MAY BE ENCOUNTERED, AND PAST ERRORS. "THOSE WHO DO NOT LEARN FROM HISTORY ARE DOOMED TO REPEAT IT." DO NOT LET THIS HAPPEN TO YOU.
4. ANY WORK NEAR OR REQUIRING HANDLING OF MCIS OUTSIDE PLANT FACILITIES CAN ONLY BE PERFORMED WITH AN MCIS EMPLOYEE OR CONTRACT REPRESENTATIVE PRESENT – THIS MEANS OUT OF HIS OR HER VEHICLE AND DIRECTLY MONITORING THE SYSTEM. THE REPRESENTATIVE MUST HAVE A PROPERLY OPERATING CABLE LOCATOR CHECKED FOR ACCURACY EVERY DAY PRIOR TO COMMENCEMENT OF WORK (COMPARISON OF LINE AND DEPTH READINGS TO ACTUAL LINE AND DEPTH OF THE CABLE).
5. LOCATE AND POTHOLE REQUIREMENTS:
 - PRIOR TO ANY EXCAVATION, THE MCIS EMPLOYEE OR CONTRACT REPRESENTATIVE MUST VERIFY THE INITIAL LOCATE MARKS COMPLETED BY MCIS OPERATIONS, DO NOT TRUST LOCATE RESULTS COMPLETED BY OTHERS! THE MCIS OR CONTRACT REPRESENTATIVE MUST LOCATE THE CABLE RUNNING LINE BY MAKING AT LEAST ONE PASS IN EACH DIRECTION, LOCATE RESULTS MUST THEN BE COMPARED WITH PREVIOUS MARKS AND THE AS-BUILTS.
 - IF THE PROPOSED WORK INVOLVES DIGGING OR EXCAVATING WITHIN 3 FEET OF THE CABLE, THE CABLE ROUTE WILL BE MARKED CONTINUALLY WITH ORANGE PAINT AND SUPPLEMENTED BY MARKER FLAGS PLACED EVERY 10 FT. THE EXCAVATION CONTRACTOR MUST POTHOLE (ALL POTHoles MUST BE COMPLETED BY HAND DIGGING OR VACUUM EXCAVATION) A MINIMUM OF EVERY 15 FT., THEN EXPOSE THE ENTIRE LENGTH OF THE CABLE BY HAND DIGGING OR VACUUM EXCAVATION.
 - IF THE PROPOSED WORK INVOLVES DIGGING OR EXCAVATING WITHIN 5 FEET (BUT NOT CLOSER THAN 3 FEET) OF THE CABLE, THE CABLE ROUTE WILL BE MARKED CONTINUALLY WITH ORANGE PAINT AND SUPPLEMENTED BY MARKER FLAGS PLACED EVERY 10 FT. THE EXCAVATION CONTRACTOR MUST POTHOLE THE CABLE A MINIMUM OF EVERY 15 FT.
 - IF THE PROPOSED WORK INVOLVES DIGGING OR EXCAVATING WITHIN 15 FEET (BUT NOT CLOSER THAN 5 FEET) OF THE CABLE, THE CABLE ROUTE WILL BE MARKED CONTINUALLY WITH ORANGE PAINT AND SUPPLEMENTED BY MARKER FLAGS PLACED EVERY 10 FT. THE EXCAVATION CONTRACTOR MUST POTHOLE THE CABLE A MINIMUM OF EVERY 30 FT.
 - THE CABLE WILL ALSO BE POTHOLED AT ANY CHANGE IN THE RUNNING LINE OF MORE THAN 1 FT. IN ANY DIRECTION, ANYTIME THE ACCURACY OF THE ELECTRONIC LOCATE IS QUESTIONED, OR THE MARKED RUNNING LINE DOES NOT MATCH THE AS-BUILTS.
6. EXPOSING REQUIREMENTS:
 - NO MECHANICAL EXCAVATION WITHIN 3 FT. OF OSP FACILITIES WILL BE ALLOWED UNLESS THE FACILITIES HAVE FIRST BEEN PROPERLY LOCATED, POTHOLED, POSITIVELY IDENTIFIED, CONTINUOUSLY EXPOSED BY HAND DIGGING OR VACUUM EXCAVATION, AND THE FACILITIES ARE CLEARLY VISIBLE.
 - IN ADDITION, MECHANICAL EXCAVATION WITHIN 3 FT. OF OSP FACILITIES REQUIRES ON-SITE PRIOR APPROVAL FROM MCIS EMPLOYEE OR CONTRACT REPRESENTATIVE.
7. PLEASE REFER TO THE LATEST EDITION OF THE MCIS OSP HANDBOOK FOR ADDITIONAL DETAILS. KNOW IT AND FOLLOW IT.



72 HOURS NOTICE REQUIRED

REVISIONS				CONSTRUCTION FIRM		PREPARED BY :	
DATE:	REV	DESCRIPTIONS:	BY:				
11-18-2019	0	LLD	CYI				
01-13-2019	1	ROUTE MODIFICATION	CYI				
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				MANAGER:	ENGINEER: C,PENNINGTON		
				PHONE:	PHONE:		

MasTec
OUTSIDE PLANT CONSTRUCTION

MCI metro
ACCESS TRANSMISSION
SERVICES,LLC

GENERAL NOTES NA FARRAGUT_FH

CITY: FARRAGUT		STATE: TENNESSEE		COUNTY: KNOX	
DRAFTER:		SCALE: NTS	SHEET: 07 OF 86	REVISION: 2	

GENERAL NOTES AND REQUIREMENTS

CONSTRUCTION NOTES

- ALL DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FEDERAL WAY REVISED CODE (FWRC), APPLICABLE ORDINANCES, AND THE CITY COUNCIL CONDITIONS OF PROJECT APPROVAL. THESE DOCUMENTS ARE SUPPLEMENTED BY THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION (WSDOT/APWA), THE KING COUNTY ROAD STANDARDS (KCRS), AND THE KING COUNTY SURFACE WATER DESIGN MANUAL (KCSWDM).
 - THE DESIGN ELEMENTS WITHIN THESE PLANS HAVE BEEN REVIEWED ACCORDING TO THE FEDERAL WAY ENGINEERING REVIEW CHECKLIST. SOME ELEMENTS MAY HAVE BEEN OVERLOOKED OR MISSED BY THE CITY ENGINEERING PLAN REVIEWER. ANY VARIANCE FROM ADOPTED STANDARDS IS NOT ALLOWED UNLESS SPECIFICALLY APPROVED BY THE CITY OF FEDERAL WAY, PRIOR TO CONSTRUCTION.
 - BEFORE ANY CONSTRUCTION OR DEVELOPMENT ACTIVITY, A PRE-CONSTRUCTION MEETING MUST BE HELD BETWEEN THE CITY OF FEDERAL WAY, THE APPLICANT, AND THE APPLICANT'S CONSTRUCTION REPRESENTATIVE.
 - A SIGNED COPY OF THESE APPROVED PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
 - CONTRACTOR MAY ONLY PERFORM WORK IN THE RIGHT OF WAY BETWEEN THE HOURS OF 8:30 A.M. AND 3:00 P.M., MONDAY THROUGH FRIDAY, UNLESS DIFFERENT HOURS OF OPERATION ARE APPROVED IN WRITING BY THE CITY. NO WORK IS PERMITTED IN THE ROW ON WEEKENDS OR HOLIDAYS OBSERVED BY THE CITY. NO WORK WILL BE PERMITTED AFTER 12 PM (NOON) ON A DAY PRIOR TO A HOLIDAY WEEKEND.
 - CONSTRUCTION NOISE SHALL BE LIMITED AS PER FWRC (SECTION 19.105.040); NORMALLY THIS IS 7:00 A.M. TO 8:00 P.M., MONDAY THROUGH FRIDAY, AND 9:00 A.M. TO 8:00 P.M. ON SATURDAYS.
 - ALL HARD SURFACE ROADS ARE TO BE JACKED OR BORED, UNLESS OTHERWISE AGREED TO IN WRITING BY THE PUBLIC WORKS DIRECTOR OR THE DIRECTOR'S DESIGNEE.
 - ALL ROADWAY SUBGRADE SHALL BE BACKFILLED AND COMPACTED TO 95% DENSITY IN ACCORDANCE WITH WSDOT 2-06.3.
 - OPEN CUTTING OF EXISTING ROADWAYS IS NOT ALLOWED UNLESS SPECIFICALLY APPROVED BY THE PUBLIC WORKS DIRECTOR AND NOTED ON THESE APPROVED PLANS. ANY OPEN CUT SHALL BE RESTORED IN ACCORDANCE WITH KCRS 8.03(B) 3.
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- WHENEVER PART OF A SQUARE OR SLAB OF EXISTING CONCRETE SIDEWALK OR DRIVEWAY IS CUT OR DAMAGE, THE ENTIRE SQUARE OR SLAB SHALL BE REMOVED OR REPLACED. ALL MATERIALS AND COMPACTION SHALL BE IN ACCORDANCE WITH THE CITY OF FEDERAL WAY DEVELOPMENT STANDARDS. CONCRETE MAY NOT BE PLACED IN TEMPERATURES AT OR BELOW FREEZING. 3000 PSI MAXIMUM CONCRETE ACCELERATOR .5%, CALCIUM IS NOT PERMITTED. NO MONOLITHIC POURS ALLOWED.
 - ALL UNDERGROUND UTILITY LINES MUST HAVE A MINIMUM 36" COVER FROM FINISHED GRADE, DITCH BOTTOM, OR NATURAL GROUND. REFER TO WSDOT UTILITY MANUAL FOR PIPE COVER REQUIREMENTS ON STATE ROUTES; SR 18, SR 99, SR 161, SR 509.
 - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY ALL UTILITY DISTRICTS AND PRIVATE PROPERTY OWNERS WHEN SUCH PROPERTY IS LIABLE TO INJURY OR DAMAGE THROUGH THE PERFORMANCE OF THE ABOVE WORK. CALL 1-800-424-6555 48 HOURS IN ADVANCE FOR UNDERGROUND UTILITY LOCATION. THIS INSTRUCTION DOES NOT RELIEVE THE CONTRACTOR FROM REQUIRED NOTIFICATION OF COUNTY INSPECTORS AS SPECIFIED IN PARAGRAPH 1, ABOVE.
 - CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS DEPARTMENT AT LEAST TWENTY-FOUR (24) HOURS, BUT NOT MORE THAN SEVENTY-TWO (72) HOURS, PRIOR TO COMMENCING THE WORK. CREW MUST CALL PERMIT # AND WORK LOCATION EACH MORNING THEY ARE TO BE WORKING IN TOWN TO VERIFY THE START OF WORK. FAILURE TO PROVIDE SUCH NOTICE WILL RESULT IN THE ASSESSMENT OF A JOB START PENALTY CHARGE PER EACH OCCURRENCE, IN ADDITION TO ANY OTHER FEES PROVIDED FOR IN THIS PERMIT.
 - AFTER COMPLETION OF CONSTRUCTION WORK THE CONTRACTOR SHALL RESTORE ALL RIGHTS OF WAY AND PUBLIC PLACES TO THE CONDITION WHICH IS EQUIVALENT TO OR BETTER THAN THE CONDITION OF THE RIGHT OF WAY PRIOR TO COMMENCING THE WORK AND TO A CONDITION SATISFACTORY TO THE CITY WITHIN 30 DAYS. CONTRACTOR SHALL REPAIR THE DAMAGE AT ITS SOLE COST AND EXPENSE, WITHOUT DELAY OR INTERRUPTION AND WITHIN THE TIME PERIOD PRESCRIBED BY THE CITY.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACTOR. ANY WORK WITHIN THE TRAVELED RIGHT-OF-WAY THAT MAY INTERRUPT NORMAL TRAFFIC FLOW SHALL REQUIRE AT LEAST ONE FLAGGER FOR EACH LANE OF TRAFFIC AFFECTED. ALL SECTIONS OF THE WSDOT STANDARD SPECIFICATIONS 1-07-23-TRAFFIC CONTROL, SHALL APPLY.

FIBER OPTIC CABLE UNCOVERING SYSTEM

- CONTRACTOR SHALL PROVIDE AND INSTALL ALL REGULATORY AND WARNING SIGNS PER THE LATEST EDITION OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- ESC FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUE FUNCTION.
- TEMPORARY EROSION AND SEDIMENTATION CONTROL SHOULD BE IN ACCORDANCE WITH THE KING COUNTY EROSION AND SEDIMENT CONTROL STANDARD. AT NO TIME SHALL MORE THAN ONE (1) FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT-LADEN WATER INTO THE DOWNSTREAM.
- ANY EXCAVATION WITHIN PROXIMITY OF TREE DRIP LINES SHALL BE PERFORMED VIA HYDRO VACUUM EXCAVATION.
- PERMITTEE SHALL NOT CLEAR, REMOVE OR DISTURB ANY TREES OR VEGETATION IN THE RIGHT OF WAY WITHOUT SUBMITTING A REVEGETATION AND EROSION CONTROL PLAN, IN FORM AND CONTENT ACCEPTABLE TO THE CITY.



72 HOURS NOTICE REQUIRED

REVISIONS				CONSTRUCTION FIRM		PREPARED BY :	
DATE:	REV	DESCRIPTIONS:	BY:	CYIENT		MasTec OUTSIDE PLANT CONSTRUCTION	
11-18-2019	0	LLD	CYI				
01-13-2019	1	ROUTE MODIFICATION	CYI				
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			CYI	MANAGER:	ENGINEER: C,PENNINGTON	MCI MCImetro ACCESS TRANSMISSION SERVICES,LLC	
				PHONE:	PHONE:		



GENERAL NOTES NA FARRAGUT_FH

CITY: FARRAGUT		STATE: TENNESSEE		COUNTY: KNOX	
DRAFTER:		SCALE: NTS	SHEET: 08 OF 86	REVISION: 2	

SEE SHEET 25 OF 86



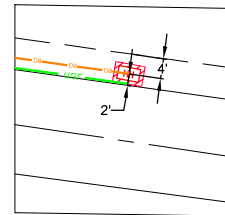
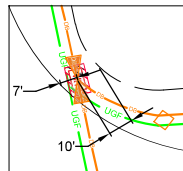
BORE 489' 2" HDPE AND TRACER WIRE.
PULL PROPOSED 288CT FIBER CABLE
THROUGH NEW CONDUIT.
NEW HH20-NEW HH21=489'
FQND FIB: BUR:: 304000018-489'

SPLICE HERE
PLACE NEW TIER 22 HH20 30" X 60" X 30"
START PROPOSED 12 PORT MST TAIL
LEAVE 150' LOOP ON 288CT CABLE FOR SPLICING
LEAVE 75' LOOP ON TAIL
GPS
35.891128, -84.166734

BORE 460' 2" HDPE AND TRACER WIRE.
PULL PROPOSED 12 PORT MST TAIL
THROUGH NEW CONDUIT.
NEW HH20-NEW HH42=460'
FQND TERM: TAIL:: 304000171-460'

PLACE NEW TIER 22 HH42 17" X 30" X 24"
END PROPOSED 12 PORT MST TAIL
PLACE 460' 12 PORT MST TAIL
FQND FIB: MST:: 304000172-BURIED(E)
GPS
35.891115, -84.165306

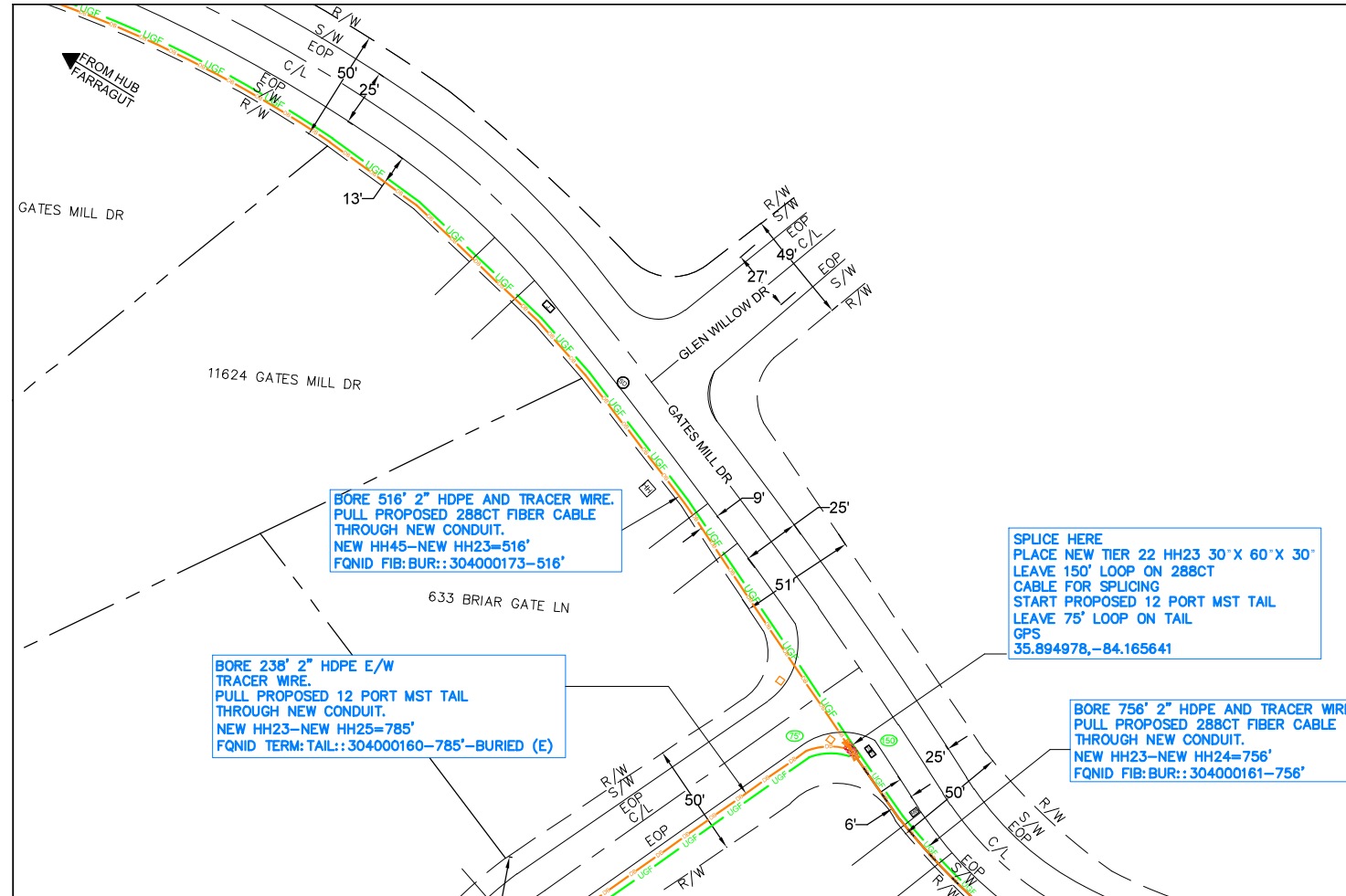
BORE 1101' 2" HDPE AND TRACER WIRE.
PULL PROPOSED 288CT FIBER CABLE
THROUGH NEW CONDUIT.
NEW HH19-NEW HH20=1101'
FQND FIB: BUR:: 304000169-1101'



FIELD CONSTRUCTION NOTES:
ALL UTILITY WORK PERFORMED SHALL BE IN ACCORDANCE WITH "STATE RULES AND REGULATIONS FOR ACCOMMODATING UTILITIES WITHIN HIGHWAY RIGHTS-OF-WAY"
UTILITY LOCATIONS SHOWN ON THIS PLAN ARE BASED ON DOCUMENT RESEARCH AND FIELD EVALUATION. THE INFORMATION MAY NOT BE ACCURATE OR COMPLETE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PHYSICALLY LOCATE AND VERIFY LOCATION AND DEPTH OF ALL UTILITIES WITH OURS PRIOR TO THE START OF CONSTRUCTION.
ALL INSTALLATIONS MUST COMPLY WITH MINIMUM HORIZONTAL AND VERTICAL CLEARANCES FROM UTILITIES.
PROPOSED HANDHOLES AND BORE PITS ARE SUBJECT TO CHANGE DUE TO EXISTING FIELD CONDITIONS.

SEE SHEET 23 OF 86

  <i>Know what's below. Call 811 before you dig.</i> 72 HOURS NOTICE REQUIRED	REVISIONS			CONSTRUCTION FIRM	PREPARED BY :	 OUTSIDE PLANT CONSTRUCTION	 MCImetro ACCESS TRANSMISSION SERVICES,LLC	CONSTRUCTION DRAWING			
	DATE:	REV	DESCRIPTIONS:	BY:				NA FARRAGUT_FH			
	11-18-2019	0	LLD	CYI				CITY: FARRAGUT	STATE: TENNESSEE		COUNTY: KNOX
	01-13-2019	1	ROUTE MODIFICATION	CYI					SCALE: 1"=50'	SHEET: 24 OF 86	REVISION: 2
									MANAGER:	ENGINEER: C.PENNINGTON	
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FIELD CONSTRUCTION NOTES

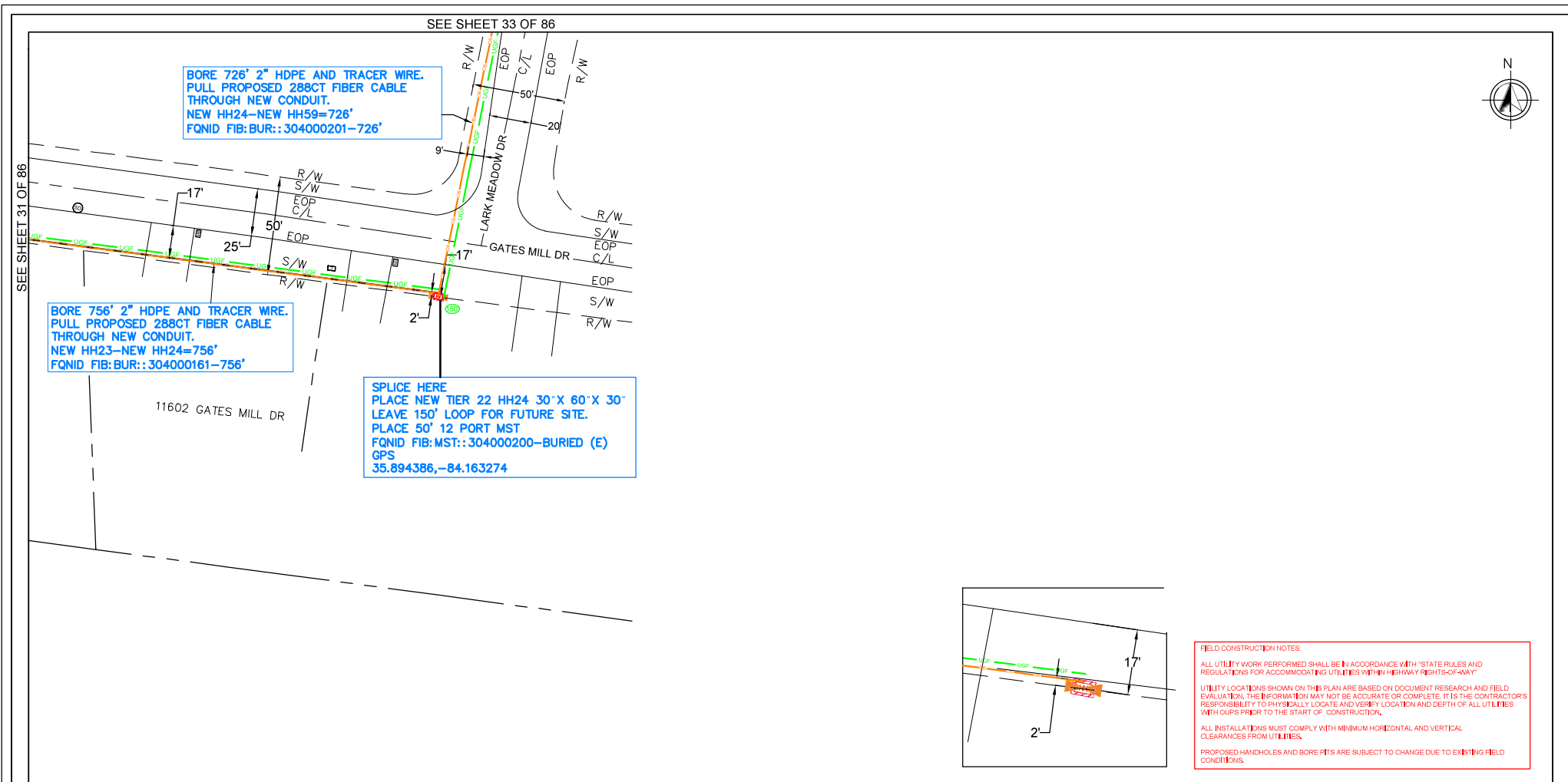
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											NA FARRAGUT_FH									
	DATE:		REV	DESCRIPTIONS:		BY:							CITY: FARRAGUT		STATE: TENNESSEE		COUNTY: KNOX			
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72 HOURS NOTICE REQUIRED

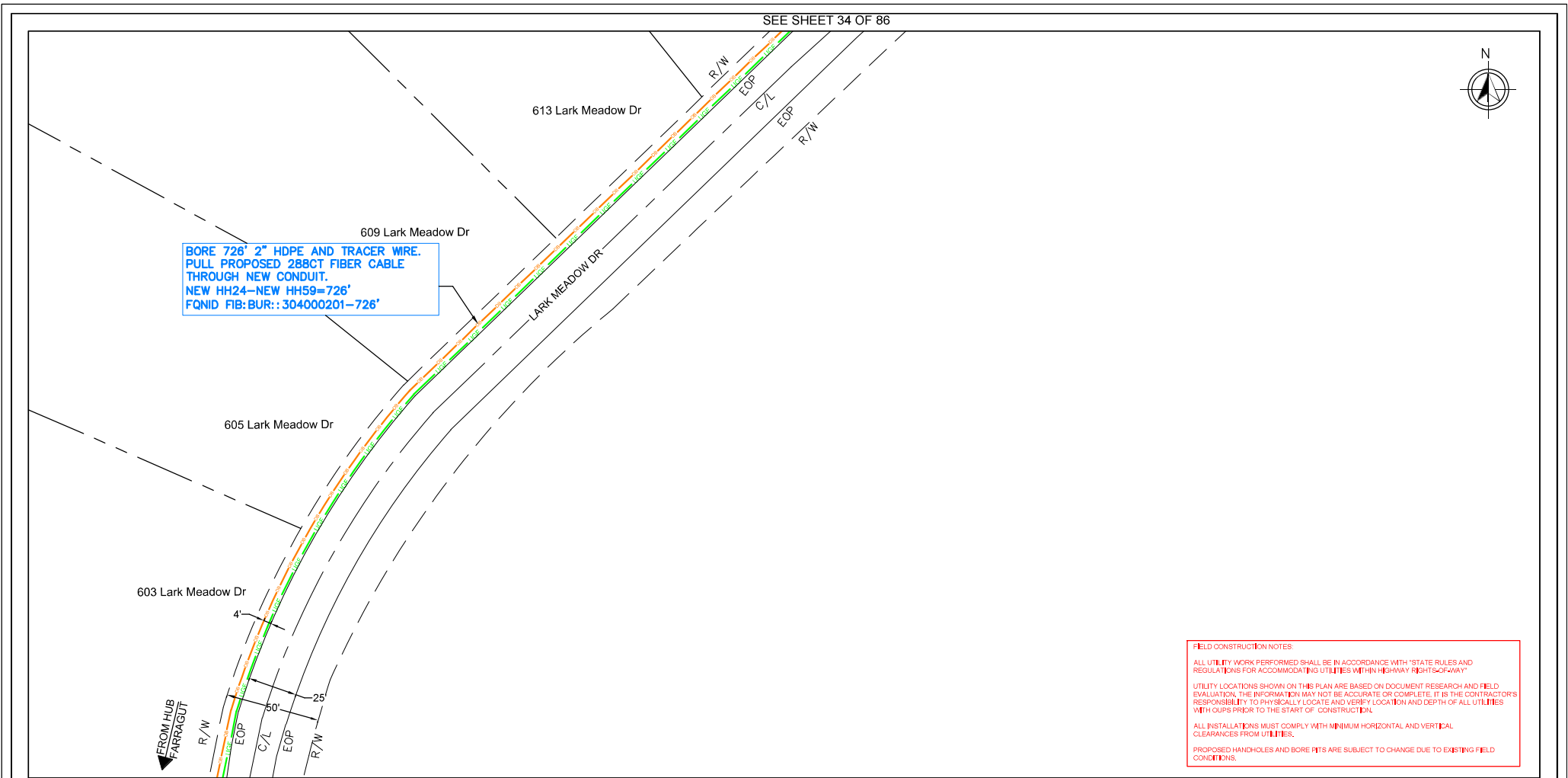
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DATE:	REV	DESCRIPTIONS:	BY:				
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01-13-2019	1	ROUTE MODIFICATION	CYI				
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				PHONE:	PHONE:		

MasTec
OUTSIDE PLANT CONSTRUCTION

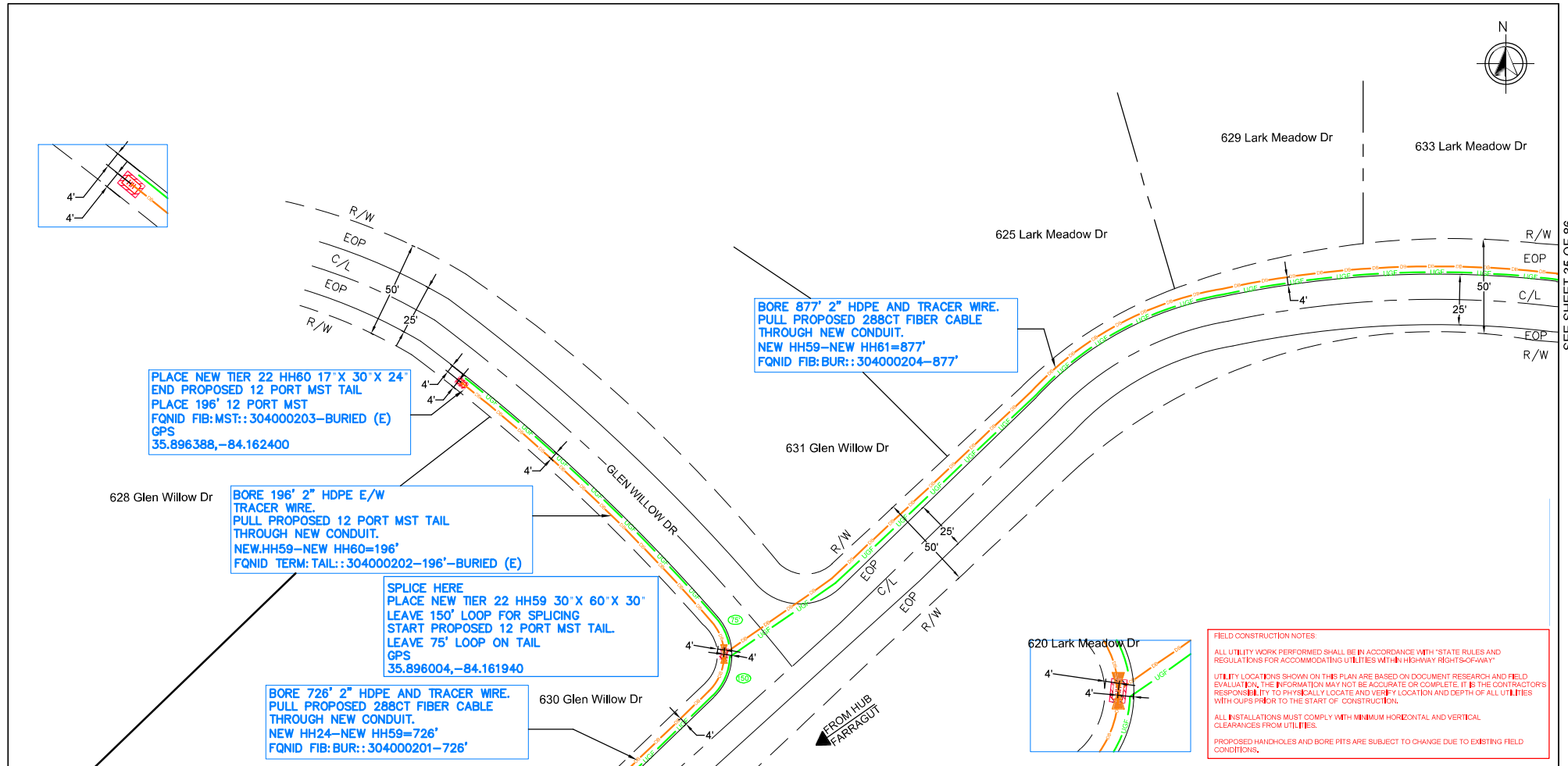
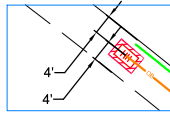
MCI
MCI metro
ACCESS TRANSMISSION
SERVICES, LLC

CONSTRUCTION DRAWING
NA FARRAGUT_FH

CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX
DRAFTER:	SCALE: 1"=50'	SHEET: 32 OF 86
		REVISION: 2



  <i>Know what's below. Call 811 before you dig.</i> 72 HOURS NOTICE REQUIRED	REVISIONS			CONSTRUCTION FIRM	PREPARED BY :	 OUTSIDE PLANT CONSTRUCTION	 ACCESS TRANSMISSION SERVICES, LLC	CONSTRUCTION DRAWING						
	DESCRIPTIONS:			BY:				NA FARRAGUT_FH						
	DATE:	REV		CYI				CITY: FARRAGUT			STATE: TENNESSEE		COUNTY: KNOX	
	11-18-2019	0	LLD	CYI				DRAFTER:			SCALE: 1"=50'	SHEET: 33 OF 86	REVISION: 2	
	01-13-2019	1	ROUTE MODIFICATION	CYI				MANAGER:			ENGINEER: C.PENNINGTON			
				CYI				PHONE:			PHONE:			



FIELD CONSTRUCTION NOTES:

ALL UTILITY WORK PERFORMED SHALL BE IN ACCORDANCE WITH "STATE RULES AND REGULATIONS FOR ACCOMMODATING UTILITIES WITHIN HIGHWAY RIGHTS-OF-WAY"

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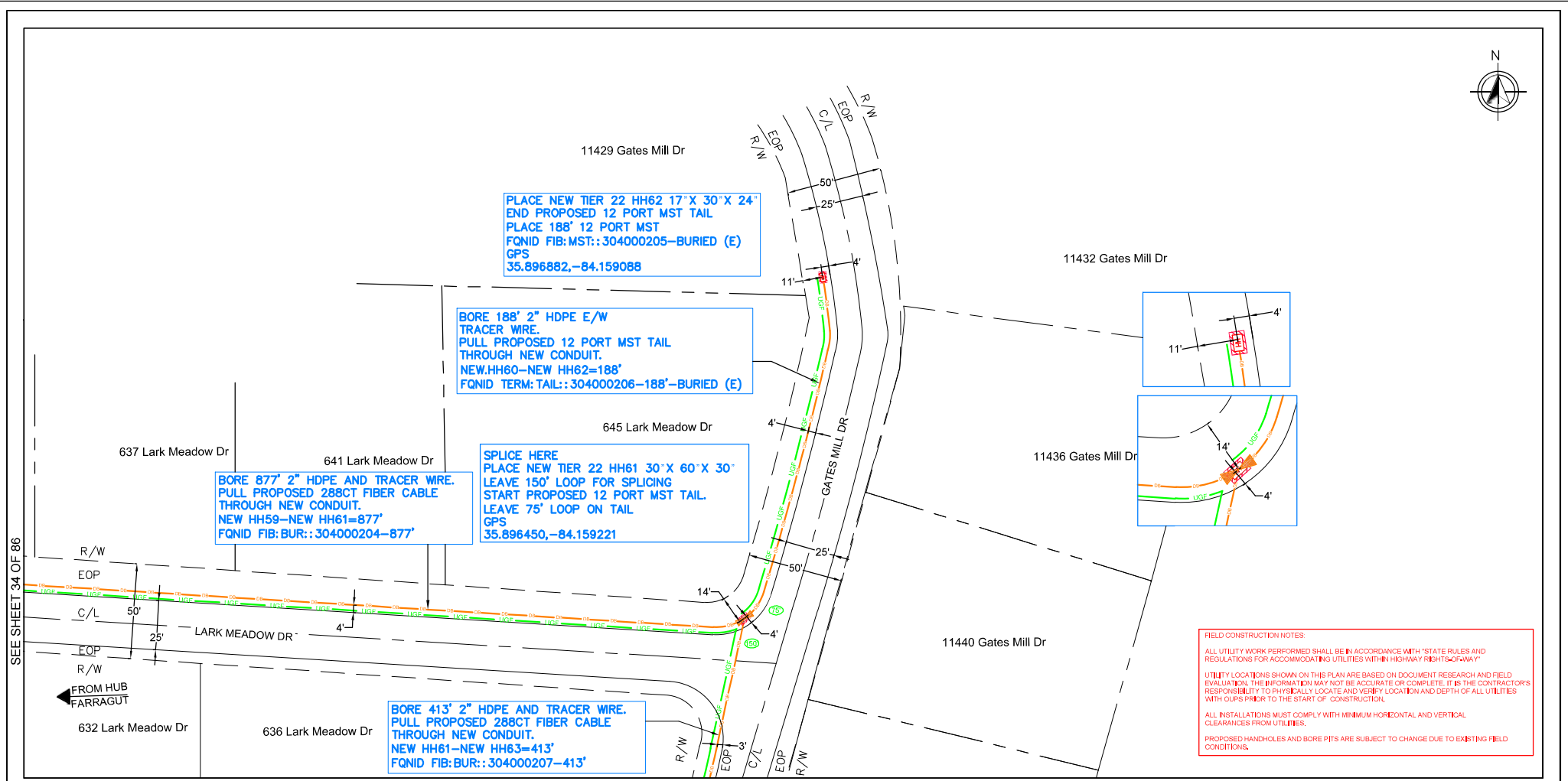
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PROPOSED HANDHOLES AND BORE PITS ARE SUBJECT TO CHANGE DUE TO EXISTING FIELD CONDITIONS.

SEE SHEET 33 OF 86

		REVISIONS		CONSTRUCTION FIRM		PREPARED BY :						CONSTRUCTION DRAWING	
DATE: REV		DESCRIPTIONS:		BY:				OUTSIDE PLANT CONSTRUCTION		MCI metro		NA FARRAGUT_FH	
11-18-2019 0		LLD		CYI		MANAGER:		ENGINEER: C.PENNINGTON		ACCESS TRANSMISSION SERVICES, LLC		CITY: FARRAGUT	
01-13-2019 1		ROUTE MODIFICATION		CYI		PHONE:		PHONE:				STATE: TENNESSEE	
												COUNTY: KNOX	
												DRAFTER:	
												SCALE: 1"=50'	
												SHEET: 34 OF 86	
												REVISION: 2	

72 HOURS NOTICE REQUIRED



FIELD CONSTRUCTION NOTES:

ALL UTILITY WORK PERFORMED SHALL BE IN ACCORDANCE WITH "STATE RULES AND REGULATIONS FOR ACCOMMODATING UTILITIES WITHIN HIGHWAY RIGHTS-OF-WAY"

UTILITY LOCATIONS SHOWN ON THIS PLAN ARE BASED ON DOCUMENT RESEARCH AND FIELD EVALUATION. THE INFORMATION MAY NOT BE ACCURATE OR COMPLETE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PHYSICALLY LOCATE AND VERIFY LOCATION AND DEPTH OF ALL UTILITIES WITH OURS PRIOR TO THE START OF CONSTRUCTION.

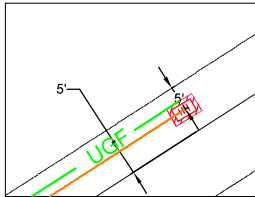
ALL INSTALLATIONS MUST COMPLY WITH MINIMUM HORIZONTAL AND VERTICAL CLEARANCES FROM UTILITIES.

PROPOSED HANDHOLES AND BORE PITS ARE SUBJECT TO CHANGE DUE TO EXISTING FIELD CONDITIONS.

SEE SHEET 34 OF 86

SEE SHEET 36 OF 86

  <i>Know what's below. Call 811 before you dig.</i> 72 HOURS NOTICE REQUIRED	REVISIONS			CONSTRUCTION FIRM		PREPARED BY :		 OUTSIDE PLANT CONSTRUCTION	 MCI metro ACCESS TRANSMISSION SERVICES,LLC	CONSTRUCTION DRAWING						
	DESCRIPTIONS:			BY:			NA FARRAGUT_FH									
	DATE:	REV														
	11-18-2019	0		LLD												
	01-13-2019	1		ROUTE MODIFICATION												



11320 Gates Mill Dr

PLACE NEW TIER 22 HH46 17" X 30" X 24"
END PROPOSED 12 PORT MST TAIL
PLACE 669' 12 PORT MST
FQID FIB:MST::304000175-BURIED (E)
GPS
35.897229,-84.165421

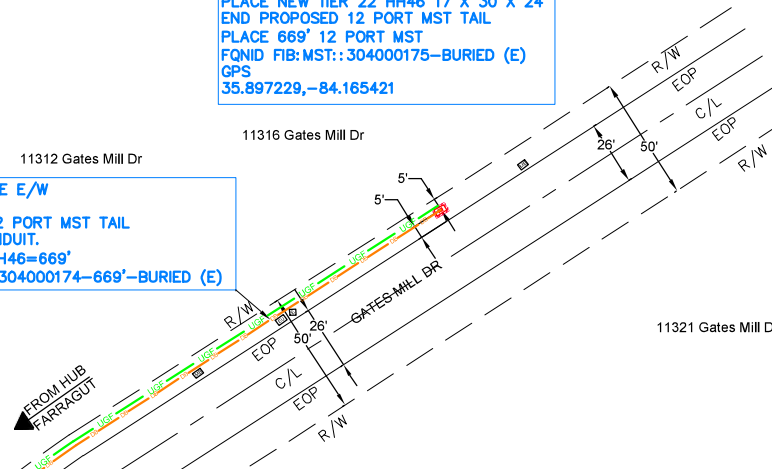
11312 Gates Mill Dr

BORE 669' 2" HDPE E/W
TRACER WIRE.
PULL PROPOSED 12 PORT MST TAIL
THROUGH NEW CONDUIT.
NEW HH45-NEW HH46=669'
FQID TERM: TAIL::304000174-669'-BURIED (E)

11316 Gates Mill Dr

11325 Gates Mill Dr

11308 Gates Mill Dr



11321 Gates Mill Dr

FIELD CONSTRUCTION NOTES:
ALL UTILITY WORK PERFORMED SHALL BE IN ACCORDANCE WITH "STATE RULES AND REGULATIONS FOR ACCOMMODATING UTILITIES WITHIN HIGHWAY RIGHTS-OF-WAY"
UTILITY LOCATIONS SHOWN ON THIS PLAN ARE BASED ON DOCUMENT RESEARCH AND FIELD EVALUATION. THE INFORMATION MAY NOT BE ACCURATE OR COMPLETE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PHYSICALLY LOCATE AND VERIFY LOCATION AND DEPTH OF ALL UTILITIES WITH COURTESY PRIOR TO THE START OF CONSTRUCTION.
ALL INSTALLATIONS MUST COMPLY WITH MINIMUM HORIZONTAL AND VERTICAL CLEARANCES FROM UTILITIES.
PROPOSED HANDHOLES AND BORE PITS ARE SUBJECT TO CHANGE DUE TO EXISTING FIELD CONDITIONS.

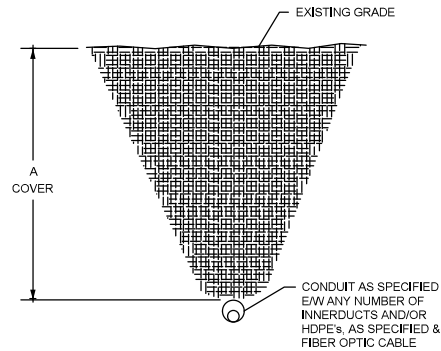
SEE SHEET 29 OF 86

 Know what's below. Call 811 before you dig. 72 HOURS NOTICE REQUIRED	REVISIONS			CONSTRUCTION FIRM	PREPARED BY :	 OUTSIDE PLANT CONSTRUCTION 	 MCI metro ACCESS TRANSMISSION SERVICES, LLC	CONSTRUCTION DRAWING			
	NA FARRAGUT_FH										
	CITY: FARRAGUT		STATE: TENNESSEE		COUNTY: KNOX						
	DRAFTER:		SCALE: 1"=50'	SHEET: 37 OF 86	REVISION: 2						
	DATE:	REV:	DESCRIPTIONS:	BY:							
	11-18-2019	0	LLD	CYI							
	01-13-2019	1	ROUTE MODIFICATION	CYI							
				CYI							
				CYI	MANAGER:	ENGINEER: C.PENNINGTON					
					PHONE:	PHONE:					

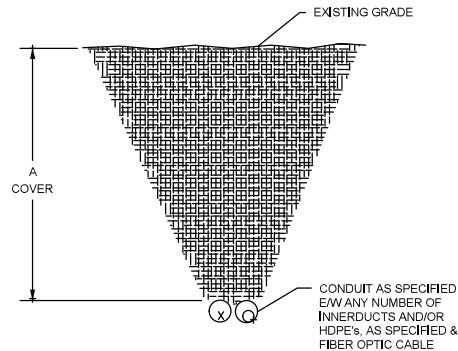
CONSTRUCTION DETAILS/TYPICALS

TYPICAL DIRECTIONAL BORE DETAIL

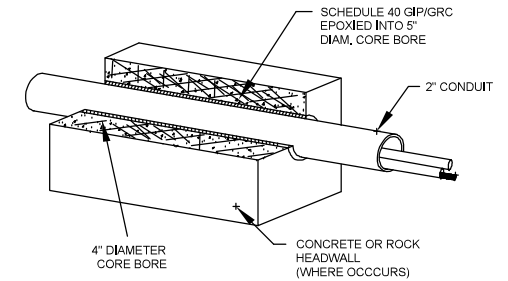
TYPICAL DETAIL A
DIRECTIONAL BORE CROSS SECTION
FOR CONDUIT



TYPICAL DETAIL B
DIRECTIONAL BORE CROSS SECTION
FOR JOINT CONDUIT



TYPICAL DETAIL C
4" CORE BORE



NOTE:
EPOXY GROUT IS USED AT BOTH ENDS OF CORE BORE
TO SEAL GAP BETWEEN 2" CONDUIT AND PVC SLEEVE.



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REVISIONS			
DATE:	REV	DESCRIPTIONS:	BY:
11-18-2019	0	LLD	CYI
01-13-2019	1	ROUTE MODIFICATION	CYI
			CYI
			CYI

CONSTRUCTION FIRM
MANAGER:
PHONE:

PREPARED BY :
CYIENT
ENGINEER: C.PENNINGTON
PHONE:

MasTec
OUTSIDE PLANT CONSTRUCTION

MCI
MCImetro
ACCESS TRANSMISSION
SERVICES,LLC

CONSTRUCTION DETAIL DRAWINGS
NA FARRAGUT_FH

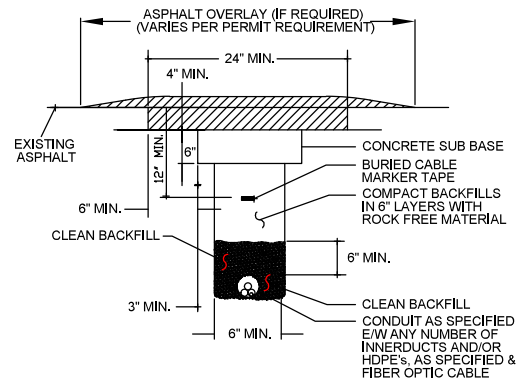
CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX
DRAFTER:	SCALE: NTS	SHEET: 76 OF 86
		REVISION: 1

CONSTRUCTION DETAILS/TYPICALS

RESTORATION DETAILS

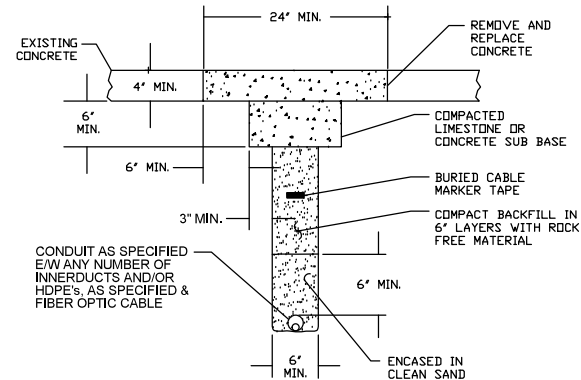
TYPICAL DETAIL A

REMOVE AND RESTORE ASPHALT FOR CONDUIT



TYPICAL DETAIL B

REMOVE AND RESTORE CONCRETE FOR CONDUIT



72 HOURS NOTICE REQUIRED

REVISIONS				CONSTRUCTION FIRM	PREPARED BY :
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11-16-2019	0	LLD	CYI		
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			CYI		
			CYI		
				MANAGER:	ENGINEER: C.PENNINGTON
				PHONE:	ENGINEER:



CONSTRUCTION DETAIL DRAWINGS

NA FARRAGUT_FH

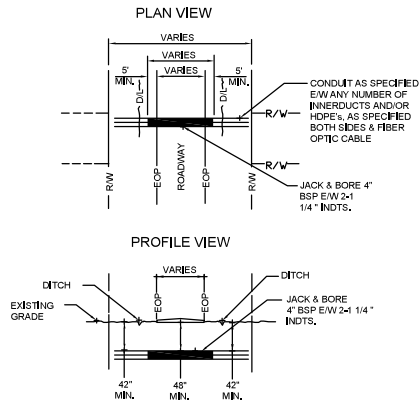
CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX
DRAFTER:	SCALE: NTS	SHEET: 77 OF 86
		REVISION: 1

CONSTRUCTION DETAILS/TYPICALS

JACK AND BORE DETAIL

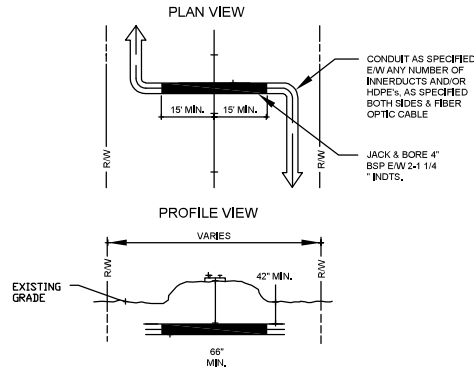
TYPICAL DETAIL A

JACK & BORE ROADWAY



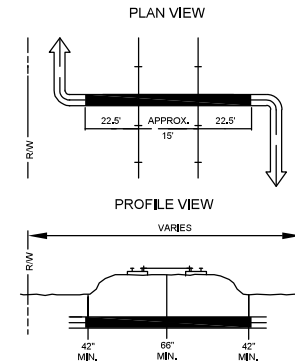
TYPICAL DETAIL B

JACK & BORE MAIN TRACK



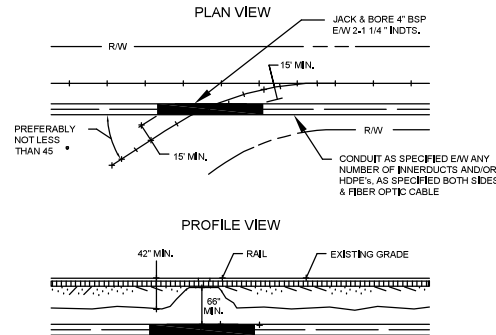
TYPICAL DETAIL C

JACK AND BORE DUAL TRACKS



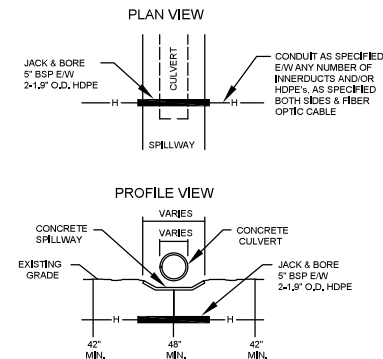
TYPICAL DETAIL D

JACK & BORE AUXILIARY TRACK



TYPICAL DETAIL E

JACK AND BORE CULVERT AND/OR SPILLWAY



REVISIONS			
DATE:	REV	DESCRIPTIONS:	BY:
11-18-2019	0	LLD	CYI
01-13-2019	1	ROUTE MODIFICATION	CYI
			CYI

CONSTRUCTION FIRM		PREPARED BY:	
		CYIENT	
MANAGER:		ENGINEER: C.PENNINGTON	
PHONE:		PHONE:	

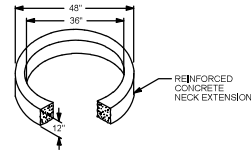


CONSTRUCTION DETAIL DRAWINGS			
NA FARRAGUT_FH			
CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX	
DRAFTER:	SCALE: NTS	SHEET: 78 OF 86	REVISION: 1

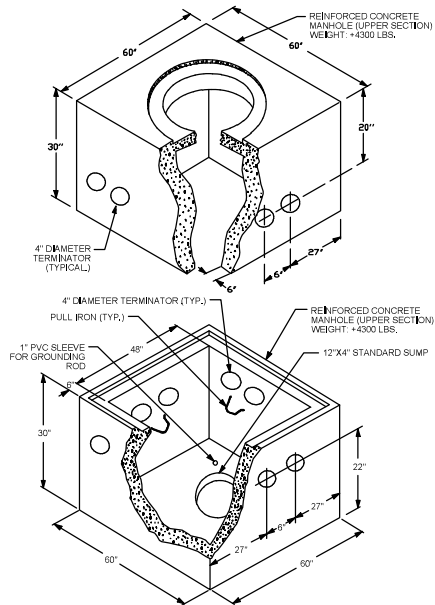
CONSTRUCTION DETAILS/TYPICALS

4'x4'x4' OR 4'x4'x2' MANHOLE DETAILS

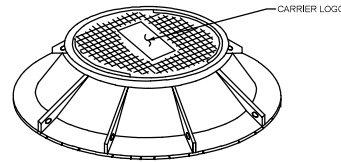
TYPICAL DETAIL "A"
TYPICAL NECK EXTENSION DETAIL



TYPICAL DETAIL "D"
DALWORTH QUICKSET MANHOLE
WALLS: 6in. HEADROOM: 48in.

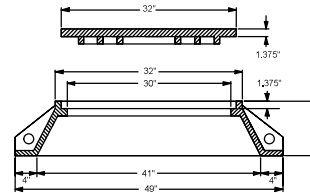


TYPICAL DETAIL "B"
MANHOLE COVER IRONWORKS #B-30

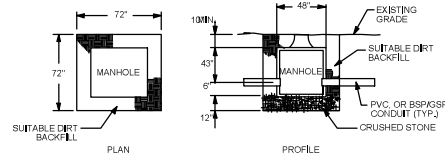


NOTES:
1. EACH COVER TO HAVE (4) PICK SLOTS FOR REMOVING.
2. STAMP CARRIER'S ID IN COVER.
3. ACCESS HOLE: 30"

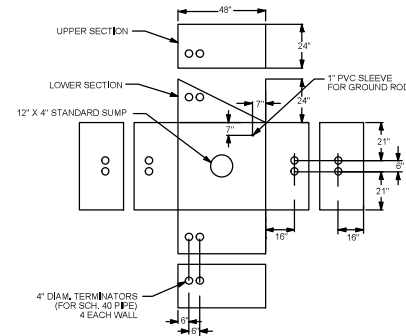
TYPICAL DETAIL "E"
RING AND COVER DETAIL
RING: 390lbs. COVER: 300lbs.



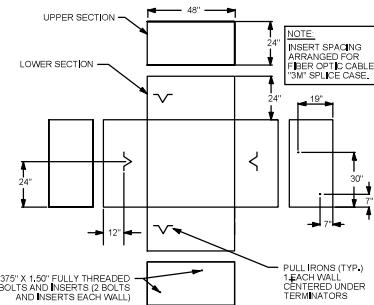
TYPICAL DETAIL "G"
TYPICAL MANHOLE EXCAVATION PIT



TYPICAL DETAIL "C"
TERMINATORS, SUMP, & GROUND ROD SLEEVE
2 SECTIONS



TYPICAL DETAIL "F"
BOLT INSERTS AND PULL IRONS
2 SECTIONS



NOTES:
1. VOID IN EXCAVATED AREAS TO BE BACKFILLED WITH SELECT MATERIAL.
2. BOTTOM OF EXCAVATED PIT TO BE BACKFILLED WITH 12" OF CRUSHED STONE (3/4" GRADE).
3. SHORING WILL BE REQUIRED.
4. ALL MANHOLES SHALL BE PLACED WITH COVER FLUSH WITH EXISTING GRADE.



72 HOURS NOTICE REQUIRED

REVISIONS			
DATE:	REV	DESCRIPTIONS:	BY:
11-18-2019	0	LLD	CYI
01-13-2019	1	ROUTE MODIFICATION	CYI
			CYI

CONSTRUCTION FIRM		PREPARED BY:	
		CYIENT	
MANAGER:		ENGINEER: C.PENNINGTON	
PHONE:		PHONE:	



CONSTRUCTION DETAIL DRAWINGS

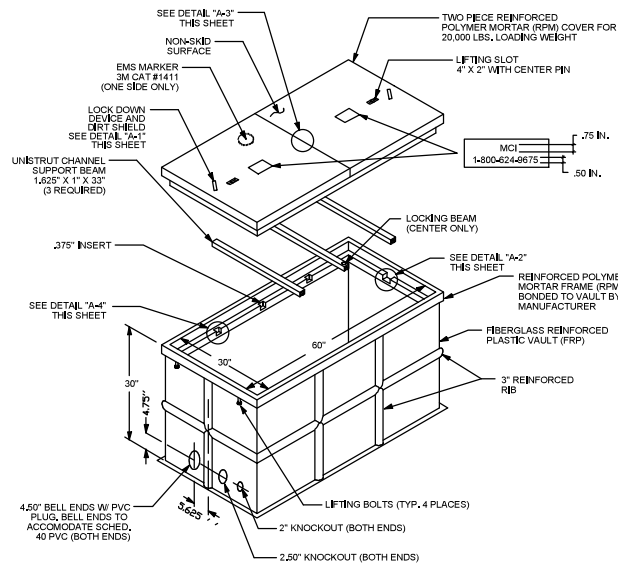
NA FARRAGUT_FH

CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX
DRAFTER:	SCALE: NTS	SHEET: 79 OF 86
		REVISION: 1

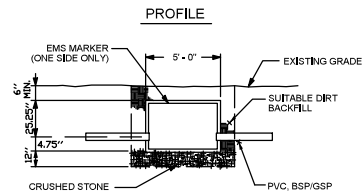
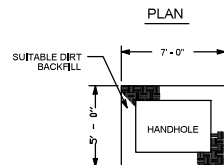
2.5' x 5' x 2.5' HANDHOLE DETAILS

DETAIL "A"

EXPLODED ISOMETRIC DETAIL

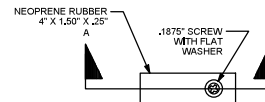


DETAIL "C"
EXCAVATION PIT

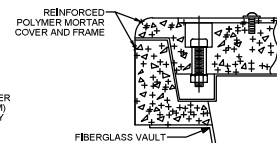


DETAIL "A-1"

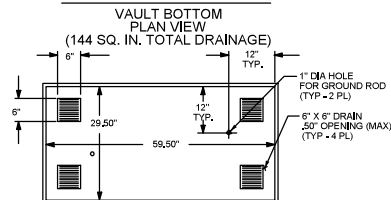
LOCK DOWN DEVICE



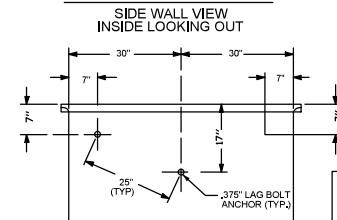
SECTION A-A
LOCKING DEVICE
CROSS SECTION



DETAIL "B"



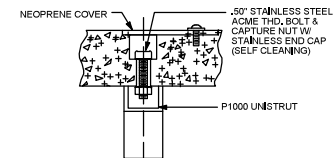
DETAIL "D"



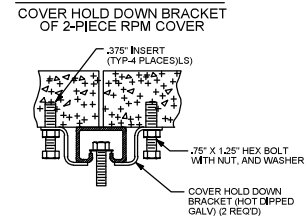
NOTE:
LINEAR DISTANCE BETWEEN
LAG BOLT ANCHORS MUST
BE 25".

DETAIL "A-2"

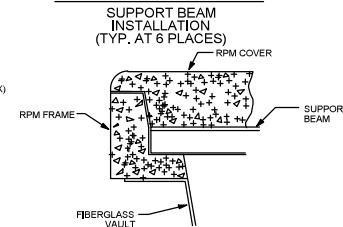
ENGAGED LOCK
DOWN DEVICE



DETAIL "A-3"



DETAIL "A-4"



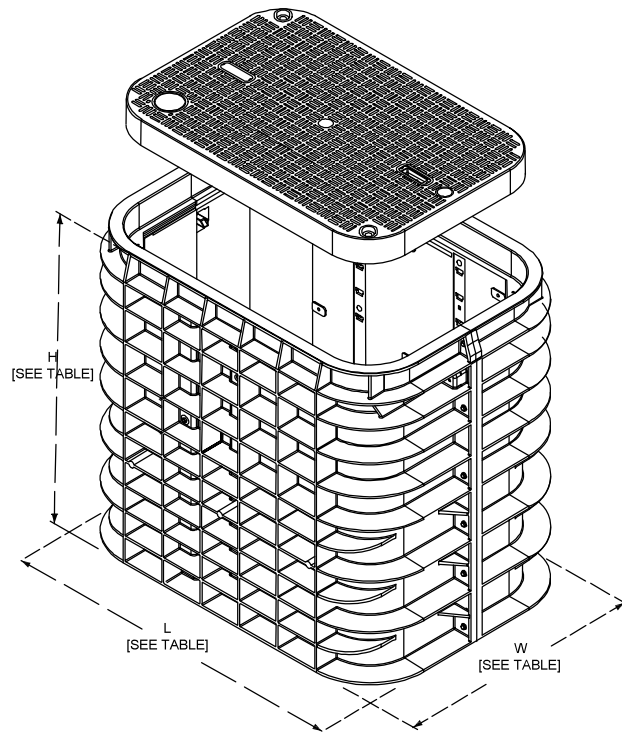
NOTES:

1. VOID IN EXCAVATED AREAS TO BE BACKFILLED WITH SELECT MATERIAL.
2. BOTTOM OF EXCAVATED PIT TO BE BACKFILLED WITH 12" OF CRUSHED STONE (.75" GRADE).
3. SHORING WILL BE REQUIRED.
4. ALL HANDHOLES SHALL BE PLACED AT EXISTING GRADE.

  Know what's below. Call 811 before you dig. 72 HOURS NOTICE REQUIRED	REVISIONS				CONSTRUCTION FIRM	PREPARED BY:	 MasTec OUTSIDE PLANT CONSTRUCTION	 MCI metro ACCESS TRANSMISSION SERVICES, LLC	CONSTRUCTION DETAIL DRAWINGS						
	DATE:	REV	DESCRIPTIONS:	BY:	CYIENT				NA FARRAGUT_FH						
	11-16-2019	0	LLD	CYI					CITY: FARRAGUT	STATE: TENNESSEE	SHEET: 80 OF 86	COUNTY: KNOX			
	01-13-2019	1	ROUTE MODIFICATION	CYI									DRAFTER:	SCALE: NTS	REVISION: 1
				CYI											
				CYI											
				MANAGER:	ENGINEER: C.PENNINGTON										
				PHONE:	PHONE:										

CONSTRUCTION DETAILS/TYPICALS

TYPICAL VAULT DETAIL



VAULT MODEL	L (LENGTH)	W (WIDTH)	H (HEIGHT)
BULK324V073	30 IN.	17 IN.	24 IN.
BULK424V073	36 IN.	24 IN.	24 IN.
BULK436V073	36 IN.	24 IN.	36 IN.
BULK736V073	48 IN.	30 IN.	36 IN.
BULK942V073	76 IN.	36 IN.	42 IN.

*NOTE: SEE SITE PLAN FOR LOCATION AND TYPE



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DATE:	REV	DESCRIPTIONS:	BY:
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			CYI
			CYI

CONSTRUCTION FIRM
MANAGER:
PHONE:

PREPARED BY :
CYIENT
ENGINEER: C.PENNINGTON
PHONE:

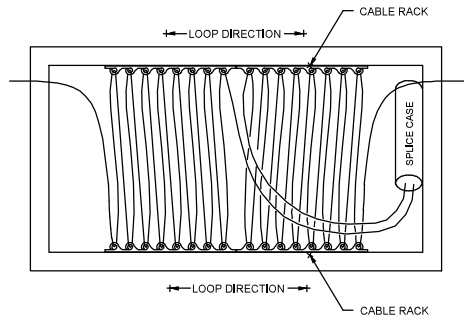


CONSTRUCTION DETAIL DRAWINGS			
NA FARRAGUT_FH			
CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX	
DRAFTER:	SCALE: NTS	SHEET: 81 OF 86	REVISION: 1

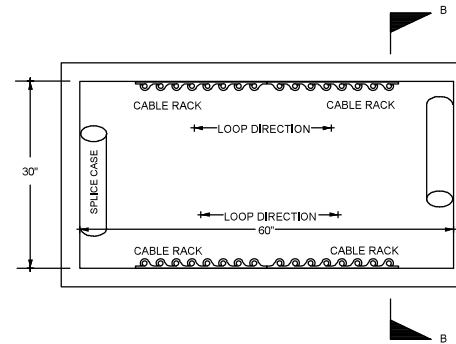
CONSTRUCTION DETAILS/TYPICALS

HANDHOLE SLACK STORAGE DETAILS

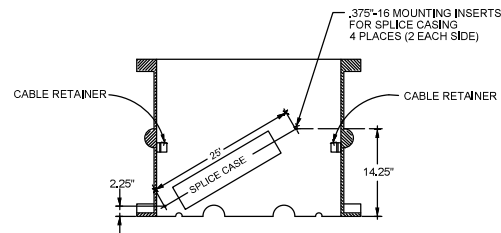
DETAIL "A"
CABLE SLACK ARRANGEMENT



DETAIL "B"
HANDHOLE LAYOUT



SECTION B-B



72 HOURS NOTICE REQUIRED

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DATE:	REV	DESCRIPTIONS:	BY:
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			CYI

CONSTRUCTION FIRM
MANAGER:
PHONE:

PREPARED BY :
CYIENT
ENGINEER: C.PENNINGTON
PHONE:

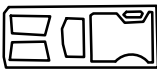
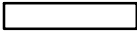
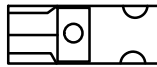
MasTec
OUTSIDE PLANT CONSTRUCTION

MCI
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ACCESS TRANSMISSION
SERVICES,LLC

CONSTRUCTION DETAIL DRAWINGS
NA FARRAGUT_FH

CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX
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		REVISION: 1

Table 6h-2. Meaning of Symbols on Typical Application Diagrams

Symbols	Description	Symbols	Description
	Arrow board		Shadow vehical
	Arrow board support or trailer (shown facing down)		Sign (shown facing left)
	Changeable message sign or trailer		Surveyor
	Channelizing device		Temporary barrier
	Crash cushion		Temporary barrier with warning light
	Direction of temporary traffic detour		Temporary barrier with warning light
	Direction of traffic		Truck-mounted attenuator
	Flagger		Type barricade
	High-level warning device (free tree)		Warning light
	Langitudinal channeelizing device		Work space
	Luminaire		Work vehicle
	Pavement marking that should be removed for a long-term project		

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	11-18-2019	0	LLD	CYI							
	01-13-2019	1	ROUTE MODIFICATION	CYI							
					MANAGER:	ENGINEER: C.PENNINGTON					
					PHONE:	PHONE:					
CITY: FARRAGUT		STATE: TENNESSEE		COUNTY: KNOX							
DRAFTER:		SCALE: NTS		SHEET: 83 OF 86		REVISION: 1					

Figure 6H-11. Lane Closure on a Two-Lane Road with Low Traffic Volumes (TA-11)

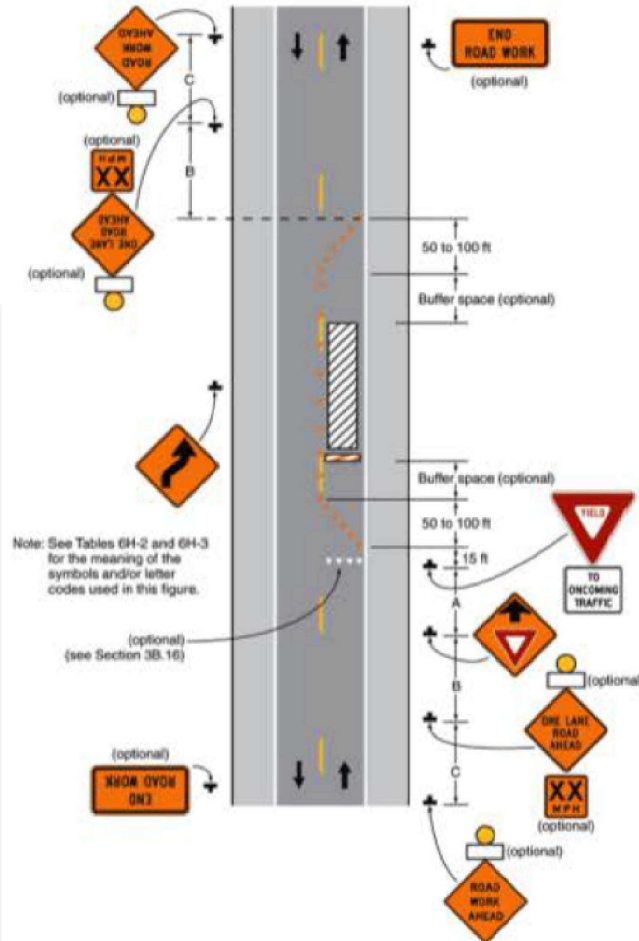
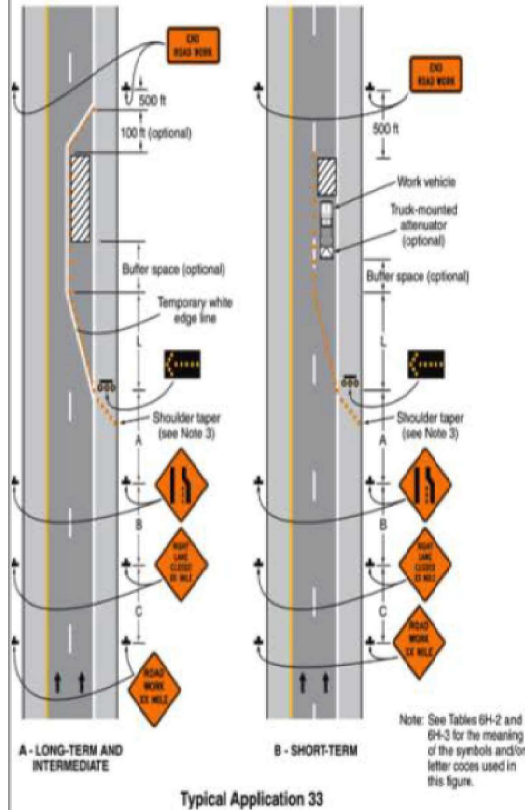
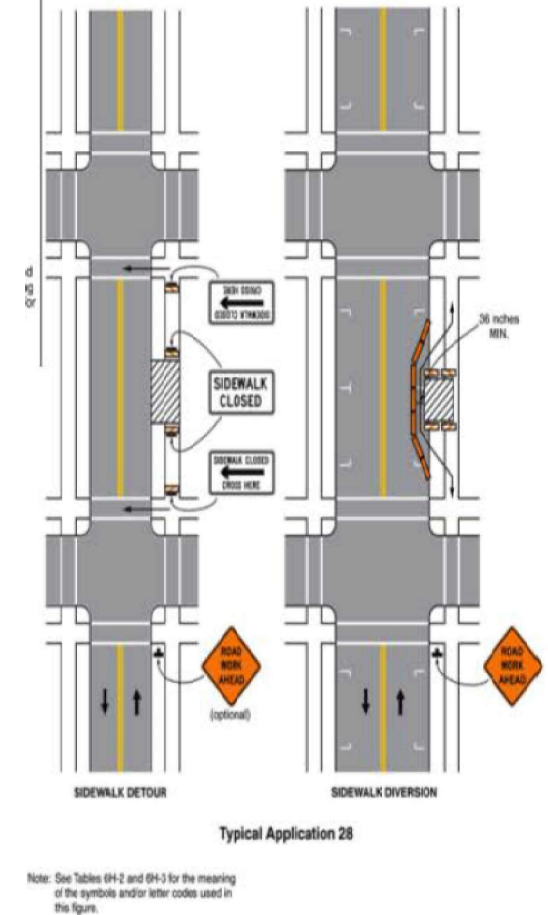


Figure 6H-33. Stationary Lane Closure on a Divided Highway (TA-33)



Typical Application 11
Figure 6H-28. Sidewalk Detour or Diversion (TA-28)

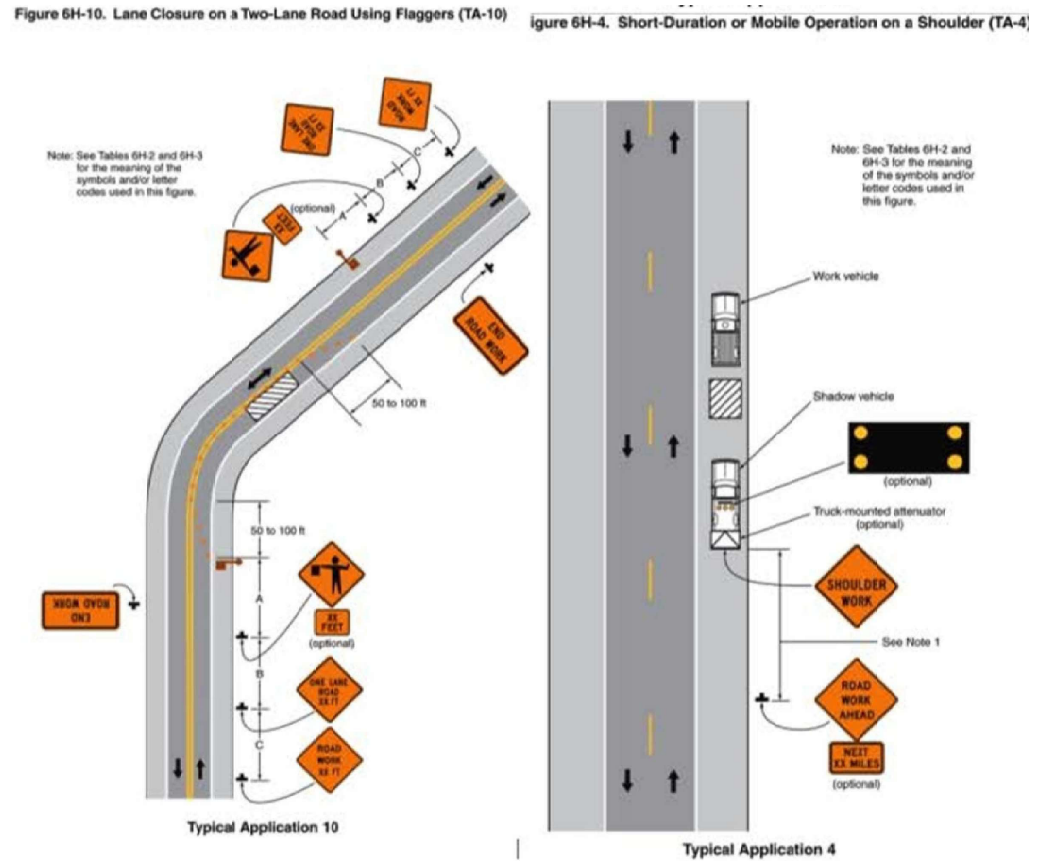
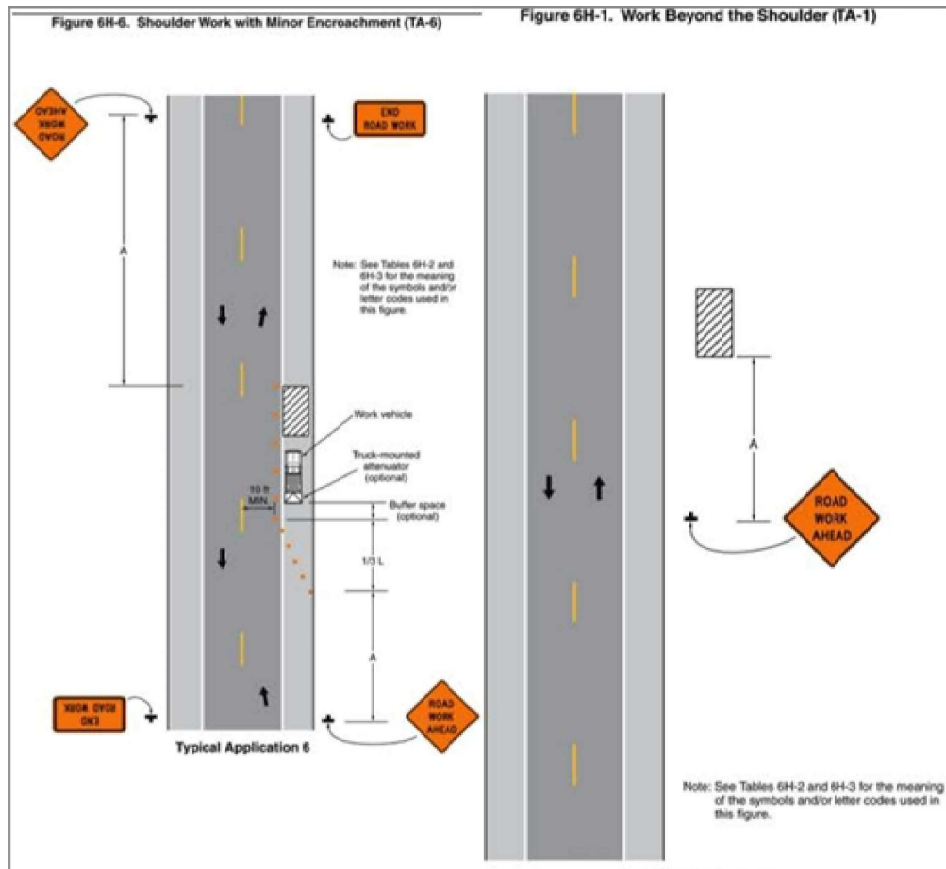


REVISIONS		CONSTRUCTION FIRM		PREPARED BY :	
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11-18-2019	0	LLD	CYI		
01-13-2019	1	ROUTE MODIFICATION	CYI		
			CYI		
			CYI		

MANAGER:		ENGINEER: C.PENNINGTON	
PHONE:		PHONE:	



CONSTRUCTION DETAIL DRAWINGS			
NA FARRAGUT_FH			
CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX	
DRAFTER:	SCALE: NTS	SHEET: 84 OF 86	REVISION: 1



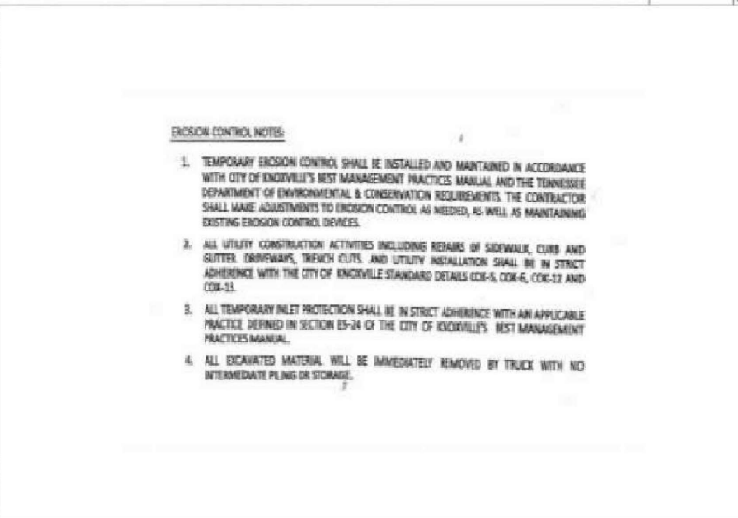
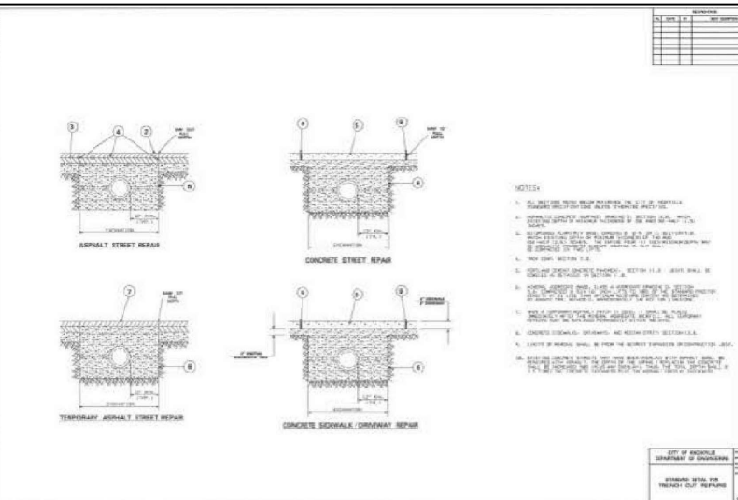
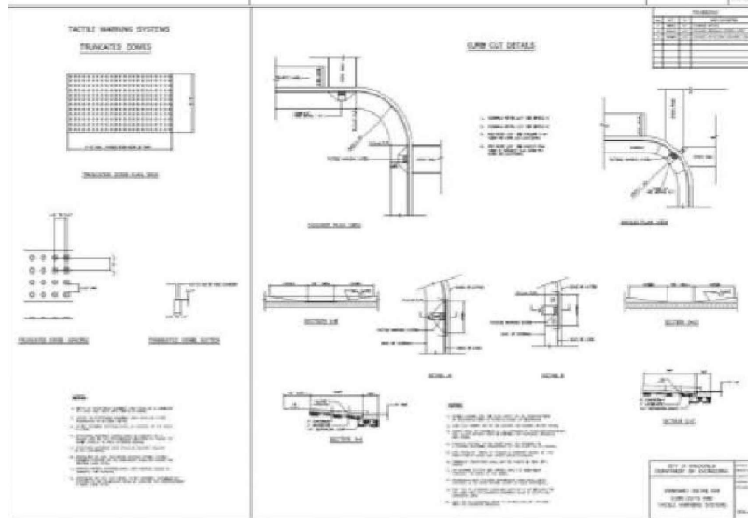
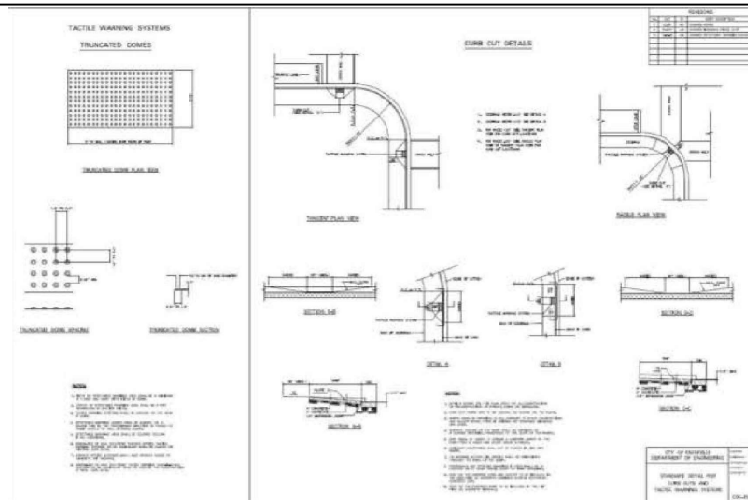
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CONSTRUCTION FIRM	
MANAGER:	ENGINEER: C.PENNINGTON
PHONE:	PHONE:

PREPARED BY :	
CYIENT	



CONSTRUCTION DETAIL DRAWINGS			
NA FARRAGUT_FH			
CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX	
DRAFTER:	SCALE: NTS	SHEET: 85 OF 86	REVISION: 1



EROSION CONTROL NOTES:

1. TEMPORARY EROSION CONTROL SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH CITY OF KNOXVILLE'S BEST MANAGEMENT PRACTICES MANUAL AND THE TENNESSEE DEPARTMENT OF ENVIRONMENTAL & CONSERVATION REQUIREMENTS. THE CONTRACTOR SHALL MAKE ADJUSTMENTS TO EROSION CONTROL AS NEEDED, AS WELL AS MAINTAINING EXISTING EROSION CONTROL DEVICES.
2. ALL UTILITY CONSTRUCTION ACTIVITIES INCLUDING REPAIRS OF SIDEWALK, CURB AND GUTTER, DRIVEWAYS, TRENCH CUTS, AND UTILITY INSTALLATION SHALL BE IN STRICT ADHERENCE WITH THE CITY OF KNOXVILLE STANDARDS DETAILS CDB-6, CDB-6, CDB-12 AND CDB-11.
3. ALL TEMPORARY INLET PROTECTION SHALL BE IN STRICT ADHERENCE WITH AN APPLICABLE PRACTICE DEFINED IN SECTION 03-24 OF THE CITY OF KNOXVILLE'S BEST MANAGEMENT PRACTICES MANUAL.
4. ALL EXCAVATED MATERIAL WILL BE IMMEDIATELY REMOVED BY TRUCK WITH NO INTERMEDIATE PILING OR STORAGE.



72 HOURS NOTICE REQUIRED

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CONSTRUCTION FIRM		PREPARED BY:	
		CYIENT	
		OUTSIDE PLANT CONSTRUCTION	
MANAGER:		ENGINEER: C.PENNINGTON	
PHONE:		PHONE:	



CONSTRUCTION DETAIL DRAWINGS **NA FARRAGUT_FH**

CITY: FARRAGUT		STATE: TENNESSEE		COUNTY: KNOX	
DRAFTER:		SCALE: NTS	SHEET: 86 OF 86	REVISION: 1	



MCImetro

ACCESS TRANSMISSION SERVICES,LLC



OUTSIDE PLANT CONSTRUCTION

NA FARRAGUT_FH

PERMITS:
TO BE LABELED AT A LATER DATE

PHASE 5

FRONTHAUL CONSTRUCTION DRAWINGS

  Know what's below. Call 811 before you dig. 72 HOURS NOTICE REQUIRED	REVISIONS			CONSTRUCTION FIRM	PREPARED BY :	 OUTSIDE PLANT CONSTRUCTION	 MCImetro ACCESS TRANSMISSION SERVICES,LLC	COVER SHEET			
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	01-13-2019	1	ROUTE MODIFICATION	CYI				STATE: TENNESSEE			
					MANAGER:	ENGINEER: C.PENNINGTON	COUNTY: KNOX				
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							SCALE: NTS				
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SHEET INDEX

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 Know what's below. Call 811 before you dig. 72 HOURS NOTICE REQUIRED	REVISIONS			CONSTRUCTION FIRM		PREPARED BY :		 OUTSIDE PLANT CONSTRUCTION	 MCI metro ACCESS TRANSMISSION SERVICES, LLC	SHEET INDEX						
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SYMBOL KEY

MCI PROPOSED CONSTRUCTION

	DIRECTIONAL BORE
	OPEN TRENCH
	PROPOSED STRAND
	UNDERGROUND FIBER OPTIC CABLE
	AERIAL FIBER OPTIC CABLE
	17"x30"x24" VAULT
	24"x36"x24" VAULT
	30"x36"x36" VAULT
	36"x48"x36" VAULT
	BORE PIT
	PROPOSED MANHOLE
	ANCHOR AND GUY
	OVERHEAD GUY
	PUSH BRACE
	SIDEWALK ANCHOR AND GUY
	RISER
	PROPOSED SPLICE
	RCL - FUTURE SPLICE
	F1 EQUIPMENT AERIAL
	F1 EQUIPMENT UG
	AERIAL SLACK LOOP
	UG SLACK LOOP
	VESTAK SITE
	DEMAND POINT
	OVERLASH

OTHER UTILITIES

	GAS LINE
	GAS METER
	GAS VALVE
	TELECOM MANHOLE
	TELECOM CABINET
	UNKNOWN MANHOLE
	UNKNOWN VAULT
	TREE LINE
	TELECOM LINE
	CABLE TV LINE
	FIBER OPTIC CABLE LINE
	RAIL ROAD
	WATER LINE
	FIRE HYDRANT
	WATER VALVE
	WATER METER
	STORM WATER LINE
	STORM WATER UTILITY
	WASTE WATER LINE
	WASTE WATER MANHOLE
	OVERHEAD POWER LINE
	UNDERGROUND POWER LINE

MCI EXISTING CONSTRUCTION

	EXISTING MCI METRO CONDUIT
	EXISTING MCI METRO VAULT
	EXISTING 17"x30"x24" VAULT
	EXISTING 24"x36"x24" VAULT
	EXISTING 24"x36"x36" VAULT
	EXISTING 30"x48"x36" VAULT
	EXISTING 36"x72"x48" VAULT
	EXISTING STRAND
	EXISTING MANHOLE
	EXISTING SPLICE
	ROAD SIGN
	SEWAGE MH
	EXISTING UTILITY
	POWER TRANSFORMER
	POWER MANHOLE
	POWER JUNCTION BOX
	POWER CABINET
	POWER VAULT
	WOODEN POLE
	STEEL POLE
	CONCRETE POLE
	STREET LIGHT
	TRAFFIC LIGHT
	ADA RAMP
	MAIL BOX

Know what's below. Call 811 before you dig. 72 HOURS NOTICE REQUIRED	REVISIONS			CONSTRUCTION FIRM	PREPARED BY :	OUTSIDE PLANT CONSTRUCTION	MCI metro ACCESS TRANSMISSION SERVICES, LLC	SYMBOL KEY NA FARRAGUT_FH				
	DATE:	REV	DESCRIPTIONS:	BY:				CITY	CITY: FARRAGUT	STATE: TENNESSEE		COUNTY: KNOX
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				MANAGER:	ENGINEER: C. PENNINGTON							
				PHONE:	PHONE:							

CONTACT INFORMATION

MCI METRO INC.

OUTSIDE PLANT ENGINEERING:

PROJECT ENGINEER:
STANLEY MAJKA (615)428-4943

PROJECT MANAGER:
JULIE FURUKAWA (925)393-3184

RIGHT-OF-WAY:

AGENT

MANAGER

CONTRACTS:

OTHERS:

DESIGN CONTRACTOR:

NAME OF FIRM
CYIENT INC
SENIOR PROJECT MANAGER
JOSH RIDINGS 662-620-6634

PROJECT MANAGER
TBD TBD

CONSTRUCTION CONTRACTOR:

NAME OF FIRM
MASTEC
PROJECT MANAGER
EILEEN WOODSTRA (984)212-1878

PROJECT SUPERVISOR
LEILA RAY WILLIAMS (629)201-1484

RAILROADS

KOHR: JARRETT MANKIN (800)818-0184

NORFOLK SOUTHERN: DYLAN ANGEL TBD

CSX: TBD TBD

UTILITIES

KUB: BEKIM HALITI (865)558-2376

LES BEAVER (865)558-2737

SARA AUER (865)558-2598

LCUB: HEATHER WATKINS (865)998-0758

FORT LOUDOUN ELECTRIC COOP: JARROD BRACKET 1-(877)353-2674

MICHAEL WEBB 1-(877)353-2674

CITY GOVERNMENT

CITY OF KNOXVILLE: TONY VANDERGRIF (865)215-6100

CITY OF KNOXVILLE: GEORGE DAWNS (865)215-6121

TOWN OF FARRAGUT: MARK SHIPLEY (865)966-7057

CITY OF MARYVILLE: KEITH BREWER (865)273-3515

BARON SWAFFORD (865)273-3305

DAVID PRICHARD (865)273-3507

CITY OF CLINTON: CURTIS PEREZ (865)259-1108

CITY OF ALCOA: STEVE REYNOLDS (865)380-4869

COUNTY GOVERNMENT

KNOX COUNTY: CHRIS SILVER (865)388-3447

KNOX COUNTY: JIM SNOWDEN (865)215-5808

SEVIER COUNTY: DOUG SAWYER (865)429-4585

BLOUNT COUNTY: JEFF HEADRICK (865)983-4662

CHICO MESSER (865)983-4652

THOMAS LLOYD (865)681-6001

JEFF HATCHER (865)984-3421

ANDERSON COUNTY: GARY LONG (865)457-2735

STATE GOVERNMENT

TDOT UTILITIES: ROYCE FOUT: (PERMITS) (865)755-3898

TDEC: BRANDON YATES (615)687-7101

BILL MURPH (615)687-7124

FEDERAL GOVERNMENT

USACE (CORP OF ENGINEERS) (615)369-7500

OTHER



72 HOURS NOTICE REQUIRED

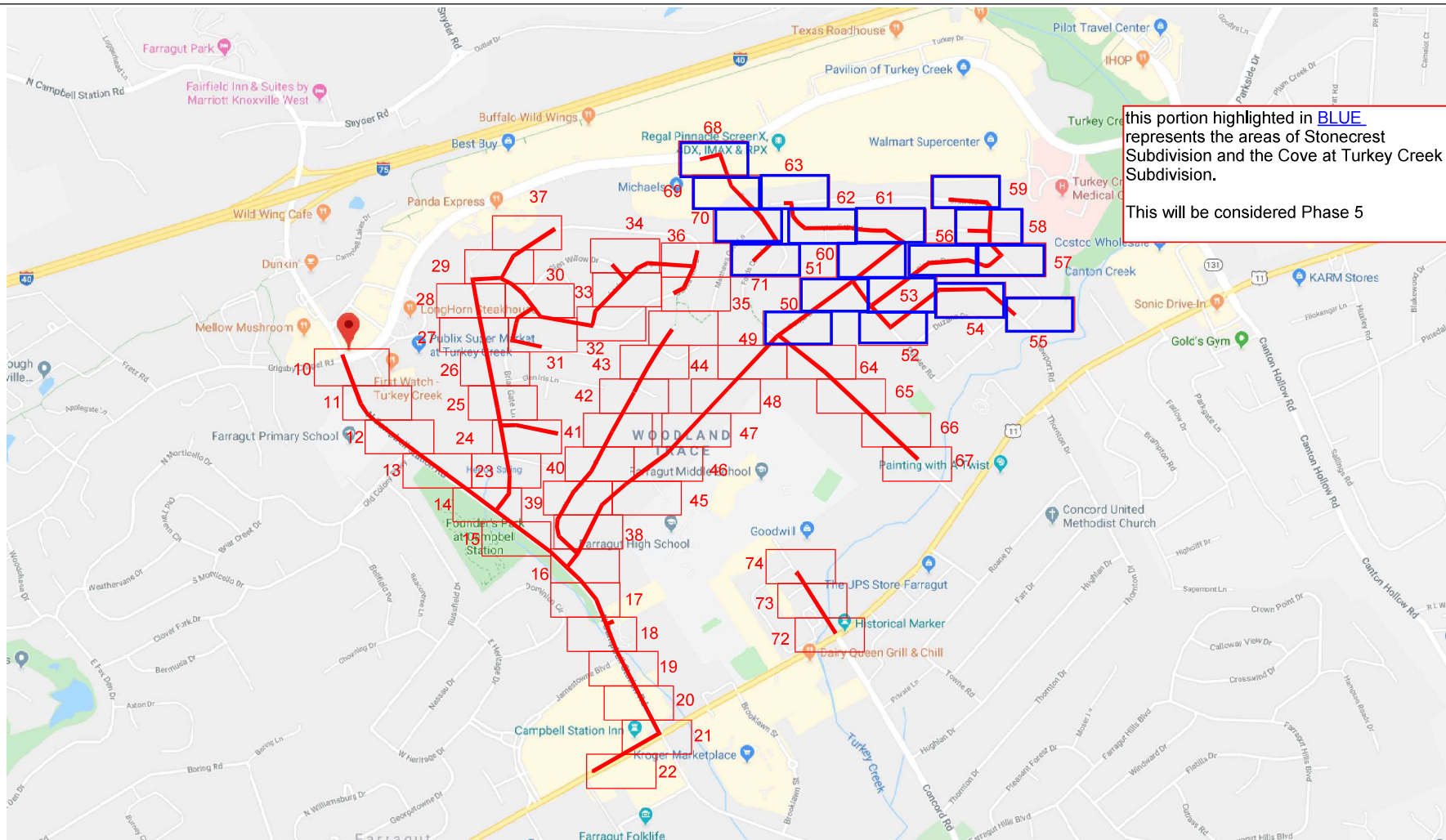
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CONSTRUCTION FIRM
MANAGER:
PHONE:

PREPARED BY :
CYIENT
ENGINEER: C,PENNINGTON
PHONE:



CONTACT INFORMATION SHEET			
NA FARRAGUT_FH			
CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX	
DRAFTER:	SCALE: NTS	SHEET: 04 OF 86	REVISION: 2



72 HOURS NOTICE REQUIRED

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CONSTRUCTION FIRM	PREPARED BY :
	CYIENT
MANAGER:	ENGINEER: C.PENNINGTON
PHONE:	PHONE:



KEY MAP			
NA FARRAGUT_FH			
CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX	
DRAFTER:	SCALE: NTS	SHEET: 05 OF 86	REVISION: 2

GENERAL NOTES AND REQUIREMENTS

GENERAL NOTES

1. MCI COMPRISES THE FOLLOWING OPERATING ENTITIES:
 - MCI COMMUNICATIONS SERVICES, INC.
 - MCI METRO ACCESS TRANSMISSION SERVICES, LLC
 - MCI METRO ACCESS TRANSMISSION SERVICES OF VIRGINIA, INC.
 - MCI METRO ACCESS TRANSMISSION SERVICES OF MASSACHUSETTS, INC.
 - METROPOLITAN FIBER SYSTEMS OF NEW YORK, INC.
2. ALL WORK TO BE PERFORMED IN STRICT ACCORDANCE WITH THE APPLICABLE CODES OR REQUIREMENTS OF ANY REGULATING GOVERNMENTAL AGENCY, MCI METRO, OR THE RIGHT-OF-WAY GRANTOR.
3. LOCATIONS OF SOME OF THE PHYSICAL FEATURES WERE OBTAINED FROM DATED RAILROAD VALUATION MAPS OR OTHER DRAWINGS, AND MAY BE AS SHOWN OR DEPICTED ON THESE DRAWINGS.
4. ALL KNOWN BURIED OBSTRUCTIONS ARE SHOWN ON SITE PLAN. ANY AND ALL OTHERS ENCOUNTERED ARE ALSO THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE, PROTECT, AND REPAIR, IF DAMAGED.
5. ANY AND ALL IMPROVEMENTS, SUCH AS ASPHALT OR CONCRETE PAVEMENT, CURBS, GUTTERS, WALKS, DRAINAGE DITCHES, EMBANKMENTS, SHRUBS, TREES, GRASS SOD, ETC., IF DAMAGED, SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITIONS.
6. EQUIPMENT TYPES SPECIFIED HEREIN (IE: "BACKHOE" "SWAMP PLOW", ETC.) ARE SUGGESTIONS ONLY AND ARE NOT INTENDED AS REQUIREMENTS, CONTRACTOR WILL BE NOTIFIED AS TO EXCEPTIONS.

OSP CONSTRUCTION GENERAL REQUIREMENTS

- ALL FEDERAL, STATE AND LOCAL SAFETY REGULATIONS MUST BE FOLLOWED WITHOUT EXCEPTION.
- PERSONAL PROTECTIVE EQUIPMENT APPROPRIATE FOR THE SPECIFIC WORK SITE SHALL BE USED AT ALL TIMES. AT A MINIMUM, HARD HAT, SAFETY SHOES/STEEL-TOED BOOTS, AND FLORESCENT ORANGE OR GREEN WORK VEST ARE REQUIRED UPON ENTERING ANY MCI WORK SITE.
- USE OF INTOXICANTS, DRUGS, INHALANTS OR ANY OTHER SUBSTANCES THAT MAY IMPAIR ALERTNESS ARE STRICTLY PROHIBITED.
- CONTRACTORS ARE NOT ALLOWED TO CUT ANY CABLE. CABLES SCHEDULED FOR REMOVAL WILL BE CUT BY MCI OPERATIONS PERSONNEL, AND ONLY AFTER VERIFICATION THAT ALL TRAFFIC HAS BEEN OFF-LOADED.
- EXTREME CAUTION MUST BE USED AT ALL TIMES WHEN WORKING ON OR NEAR ACTIVE CABLES. AN MCI EMPLOYEE OR CONTRACT REPRESENTATIVE MUST APPROVE AND BE PRESENT PRIOR TO AND DURING ALL CABLE HANDLING ACTIVITIES.
- TOOLS AND EQUIPMENT SPECIFICALLY DESIGNED FOR THE JOB AT HAND ARE REQUIRED, USE THE PROPER TOOL FOR THE JOB.
- CONDUIT WORK INVOLVING ACTIVE CABLES REQUIRES SPECIALIZED TOOLS SPECIFICALLY DESIGNED TO ACCESS DUCTS WITH ACTIVE CABLES.
- PROTECTING MCI FACILITIES IS EXTREMELY IMPORTANT; HOWEVER, SAFETY REGARDING YOURSELF AND OTHERS IS THE MOST IMPORTANT PART OF ANY PROJECT.



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GENERAL NOTES NA FARRAGUT_FH

CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX
DRAFTER:	SCALE: NTS	SHEET: 06 OF 86
		REVISION: 2

GENERAL NOTES AND REQUIREMENTS

CONSTRUCTION NOTES

1. ALL CONDUIT WILL BE 4" ID SCHEDULE 40 (i.e. PVC OR BSP/GSP, MANUFACTURED SPLIT PVC OR SPLIT BSP/GSP), UNLESS SPECIFIED OTHERWISE.
2. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES 48 HOURS PRIOR TO CONSTRUCTION ACTIVITY, SEE CONTACT SHEET FOR CONTACT NAME AND TELEPHONE NUMBER.
3. ALL UNDERGROUND OBSTRUCTIONS, WHEN LOCATED, WILL REQUIRE THE PLACEMENT OF A BURIED CABLE MARKER AND THE PLACEMENT OF 4" MANUFACTURED SPLIT PVC, BSP/GSP OVER OR UNDER EACH OBSTRUCTION.
4. SHORING MAY BE REQUIRED AND SHALL COMPLY WITH O.S.H.A. STANDARDS.
5. ALL BURIED CONDUIT/CABLE WILL BE PLACED AT 42" MINIMUM COVER UNLESS SPECIFIED OTHERWISE ON THE CONSTRUCTION DRAWINGS.
6. MECHANICAL PROTECTION SHALL BE REQUIRED ANYTIME A 36" MINIMUM COVER IS UNOBTAINABLE UNLESS SPECIFIED OTHERWISE ON THE CONSTRUCTION DRAWINGS.
7. ALL 90 DEGREE BENDS IN CONDUIT CONSTRUCTION WILL BE A MINIMUM 38.2" RADIUS UNLESS SPECIFIED OTHERWISE. ALL SPLIT CONDUIT BENDS AND SOLID PVC BENDS SHALL REQUIRE CONCRETE ENCASEMENT, UNLESS SPECIFIED OTHERWISE.
8. OPERATIONS PERSONNEL TO BE CONTACTED BY THE CONTRACTOR 48 HOURS PRIOR TO CONSTRUCTION, SEE CONTACT SHEET FOR CONTACT NAME AND TELEPHONE NUMBER.
9. ALL STATIONING IS BASED ON AS-BUILT INFORMATION. THEREFORE SOME VARIANCE SHOULD BE ANTICIPATED, ADJUST AS NEEDED.
10. RAILROAD COMMUNICATION AND SIGNAL CABLES TO BE LOCATED PRIOR TO THE CONSTRUCTION ACTIVITY, RAILROAD TO BE GIVEN 48 HOURS NOTICE PRIOR TO CONSTRUCTION.
11. ALL BURIED CABLE MARKER POSTS AND HARDWARE PLACED AND/OR REMOVED ON ALL NEW AND EXISTING ROUTES SHALL BE IMPLEMENTED AS FOLLOWS.
 - ON THOSE ROUTES THAT ARE CONSIDERED TO BE IN A NORTH TO SOUTH GEOGRAPHICAL ORIENTATION, THE SOUTHERN-MOST SIGN AND POST SHOULD BE REMOVED, FOR NEW ROUTES BEING CONSTRUCTED, ONE SIGN POST WILL BE PLACED AT THE NORTH END OF EACH HANDHOLE.
 - ON THOSE ROUTES THAT ARE CONSIDERED TO BE IN AN EAST TO WEST GEOGRAPHICAL ORIENTATION, THE WESTERN-MOST SIGN AND POST SHOULD BE REMOVED, FOR NEW ROUTES BEING CONSTRUCTED, ONE SIGN POST WILL BE PLACED AT THE EAST END OF THE EACH HANDHOLE.

FIBER OPTIC CABLE UNCOVERING SYSTEM

1. THE TITLE OF THIS PROGRAM, F.O.C.U.S., AN ACRONYM FOR "FIBER OPTIC CABLE UNCOVERING SYSTEM," WAS SELECTED TO REMIND EVERYONE INVOLVED WITH WORKING NEAR MCIS ACTIVE FIBER OPTIC SYSTEMS TO FOCUS ON PROTECTING THE FACILITIES. IF, DURING THE COURSE OF THE PROJECT, YOU NOTICE ANY ACTIVITY WHICH MAY JEOPARDIZE THE MCIS OSP FACILITIES, IT IS YOUR DUTY TO STOP THE WORK AND RE-F.O.C.U.S.
2. F.O.C.U.S. RULES MUST BE FOLLOWED ON ALL MCIS PROJECTS INVOLVING WORK ON OR NEAR MCIS OSP FACILITIES. SAFETY IS MCIS NUMBER ONE PRIORITY; EVERYONE MUST REFRAIN FROM UNSAFE AND IMPROPER PRACTICES.
3. REVIEW OF F.O.C.U.S. IS MANDATORY AT EVERY PRE-BID, PRE-CONSTRUCTION SITE MEETING AND DAILY TAILGATE MEETING. F.O.C.U.S. DISCUSSION MUST INCLUDE SITE-SPECIFIC HISTORY, UNIQUE PROBLEMS, FACILITY CONFIGURATIONS THAT MAY BE ENCOUNTERED, AND PAST ERRORS. "THOSE WHO DO NOT LEARN FROM HISTORY ARE DOOMED TO REPEAT IT." DO NOT LET THIS HAPPEN TO YOU.
4. ANY WORK NEAR OR REQUIRING HANDLING OF MCIS OUTSIDE PLANT FACILITIES CAN ONLY BE PERFORMED WITH AN MCIS EMPLOYEE OR CONTRACT REPRESENTATIVE PRESENT – THIS MEANS OUT OF HIS OR HER VEHICLE AND DIRECTLY MONITORING THE SYSTEM. THE REPRESENTATIVE MUST HAVE A PROPERLY OPERATING CABLE LOCATOR CHECKED FOR ACCURACY EVERY DAY PRIOR TO COMMENCEMENT OF WORK (COMPARISON OF LINE AND DEPTH READINGS TO ACTUAL LINE AND DEPTH OF THE CABLE).
5. LOCATE AND POTHOLE REQUIREMENTS:
 - PRIOR TO ANY EXCAVATION, THE MCIS EMPLOYEE OR CONTRACT REPRESENTATIVE MUST VERIFY THE INITIAL LOCATE MARKS COMPLETED BY MCIS OPERATIONS, DO NOT TRUST LOCATE RESULTS COMPLETED BY OTHERS! THE MCIS OR CONTRACT REPRESENTATIVE MUST LOCATE THE CABLE RUNNING LINE BY MAKING AT LEAST ONE PASS IN EACH DIRECTION, LOCATE RESULTS MUST THEN BE COMPARED WITH PREVIOUS MARKS AND THE AS-BUILTS.
 - IF THE PROPOSED WORK INVOLVES DIGGING OR EXCAVATING WITHIN 3 FEET OF THE CABLE, THE CABLE ROUTE WILL BE MARKED CONTINUALLY WITH ORANGE PAINT AND SUPPLEMENTED BY MARKER FLAGS PLACED EVERY 10 FT. THE EXCAVATION CONTRACTOR MUST POTHOLE (ALL POTHOLES MUST BE COMPLETED BY HAND DIGGING OR VACUUM EXCAVATION) A MINIMUM OF EVERY 15 FT., THEN EXPOSE THE ENTIRE LENGTH OF THE CABLE BY HAND DIGGING OR VACUUM EXCAVATION.
 - IF THE PROPOSED WORK INVOLVES DIGGING OR EXCAVATING WITHIN 5 FEET (BUT NOT CLOSER THAN 3 FEET) OF THE CABLE, THE CABLE ROUTE WILL BE MARKED CONTINUALLY WITH ORANGE PAINT AND SUPPLEMENTED BY MARKER FLAGS PLACED EVERY 10 FT. THE EXCAVATION CONTRACTOR MUST POTHOLE THE CABLE A MINIMUM OF EVERY 15 FT.
 - IF THE PROPOSED WORK INVOLVES DIGGING OR EXCAVATING WITHIN 15 FEET (BUT NOT CLOSER THAN 5 FEET) OF THE CABLE, THE CABLE ROUTE WILL BE MARKED CONTINUALLY WITH ORANGE PAINT AND SUPPLEMENTED BY MARKER FLAGS PLACED EVERY 10 FT. THE EXCAVATION CONTRACTOR MUST POTHOLE THE CABLE A MINIMUM OF EVERY 30 FT.
 - THE CABLE WILL ALSO BE POTHOLED AT ANY CHANGE IN THE RUNNING LINE OF MORE THAN 1 FT. IN ANY DIRECTION, ANYTIME THE ACCURACY OF THE ELECTRONIC LOCATE IS QUESTIONED, OR THE MARKED RUNNING LINE DOES NOT MATCH THE AS-BUILTS.
6. EXPOSING REQUIREMENTS:
 - NO MECHANICAL EXCAVATION WITHIN 3 FT. OF OSP FACILITIES WILL BE ALLOWED UNLESS THE FACILITIES HAVE FIRST BEEN PROPERLY LOCATED, POTHOLED, POSITIVELY IDENTIFIED, CONTINUOUSLY EXPOSED BY HAND DIGGING OR VACUUM EXCAVATION, AND THE FACILITIES ARE CLEARLY VISIBLE.
 - IN ADDITION, MECHANICAL EXCAVATION WITHIN 3 FT. OF OSP FACILITIES REQUIRES ON-SITE PRIOR APPROVAL FROM MCIS EMPLOYEE OR CONTRACT REPRESENTATIVE.
7. PLEASE REFER TO THE LATEST EDITION OF THE MCIS OSP HANDBOOK FOR ADDITIONAL DETAILS. KNOW IT AND FOLLOW IT.



72 HOURS NOTICE REQUIRED

REVISIONS				CONSTRUCTION FIRM		PREPARED BY :	
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			CYI				
				MANAGER:	ENGINEER: C,PENNINGTON		
				PHONE:	PHONE:		

MasTec
OUTSIDE PLANT CONSTRUCTION


MCI metro
ACCESS TRANSMISSION
SERVICES,LLC

GENERAL NOTES NA FARRAGUT_FH

CITY: FARRAGUT		STATE: TENNESSEE		COUNTY: KNOX	
DRAFTER:		SCALE: NTS	SHEET: 07 OF 86	REVISION: 2	

GENERAL NOTES AND REQUIREMENTS

CONSTRUCTION NOTES

- ALL DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FEDERAL WAY REVISED CODE (FWRC), APPLICABLE ORDINANCES, AND THE CITY COUNCIL CONDITIONS OF PROJECT APPROVAL. THESE DOCUMENTS ARE SUPPLEMENTED BY THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION (WSDOT/APWA), THE KING COUNTY ROAD STANDARDS (KCRS), AND THE KING COUNTY SURFACE WATER DESIGN MANUAL (KCSWDM).
 - THE DESIGN ELEMENTS WITHIN THESE PLANS HAVE BEEN REVIEWED ACCORDING TO THE FEDERAL WAY ENGINEERING REVIEW CHECKLIST. SOME ELEMENTS MAY HAVE BEEN OVERLOOKED OR MISSED BY THE CITY ENGINEERING PLAN REVIEWER. ANY VARIANCE FROM ADOPTED STANDARDS IS NOT ALLOWED UNLESS SPECIFICALLY APPROVED BY THE CITY OF FEDERAL WAY, PRIOR TO CONSTRUCTION.
 - BEFORE ANY CONSTRUCTION OR DEVELOPMENT ACTIVITY, A PRE-CONSTRUCTION MEETING MUST BE HELD BETWEEN THE CITY OF FEDERAL WAY, THE APPLICANT, AND THE APPLICANT'S CONSTRUCTION REPRESENTATIVE.
 - A SIGNED COPY OF THESE APPROVED PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
 - CONTRACTOR MAY ONLY PERFORM WORK IN THE RIGHT OF WAY BETWEEN THE HOURS OF 8:30 A.M. AND 3:00 P.M., MONDAY THROUGH FRIDAY, UNLESS DIFFERENT HOURS OF OPERATION ARE APPROVED IN WRITING BY THE CITY. NO WORK IS PERMITTED IN THE ROW ON WEEKENDS OR HOLIDAYS OBSERVED BY THE CITY. NO WORK WILL BE PERMITTED AFTER 12 PM (NOON) ON A DAY PRIOR TO A HOLIDAY WEEKEND.
 - CONSTRUCTION NOISE SHALL BE LIMITED AS PER FWRC (SECTION 19.105.040); NORMALLY THIS IS 7:00 A.M. TO 8:00 P.M., MONDAY THROUGH FRIDAY, AND 9:00 A.M. TO 8:00 P.M. ON SATURDAYS.
 - ALL HARD SURFACE ROADS ARE TO BE JACKED OR BORED, UNLESS OTHERWISE AGREED TO IN WRITING BY THE PUBLIC WORKS DIRECTOR OR THE DIRECTOR'S DESIGNEE.
 - ALL ROADWAY SUBGRADE SHALL BE BACKFILLED AND COMPACTED TO 95% DENSITY IN ACCORDANCE WITH WSDOT 2-06.3.
 - OPEN CUTTING OF EXISTING ROADWAYS IS NOT ALLOWED UNLESS SPECIFICALLY APPROVED BY THE PUBLIC WORKS DIRECTOR AND NOTED ON THESE APPROVED PLANS. ANY OPEN CUT SHALL BE RESTORED IN ACCORDANCE WITH KCRS 8.03(B) 3.
-
- WHENEVER PART OF A SQUARE OR SLAB OF EXISTING CONCRETE SIDEWALK OR DRIVEWAY IS CUT OR DAMAGE, THE ENTIRE SQUARE OR SLAB SHALL BE REMOVED OR REPLACED. ALL MATERIALS AND COMPACTION SHALL BE IN ACCORDANCE WITH THE CITY OF FEDERAL WAY DEVELOPMENT STANDARDS. CONCRETE MAY NOT BE PLACED IN TEMPERATURES AT OR BELOW FREEZING. 3000 PSI MAXIMUM CONCRETE ACCELERATOR .5%, CALCIUM IS NOT PERMITTED. NO MONOLITHIC POURS ALLOWED.
 - ALL UNDERGROUND UTILITY LINES MUST HAVE A MINIMUM 36" COVER FROM FINISHED GRADE, DITCH BOTTOM, OR NATURAL GROUND. REFER TO WSDOT UTILITY MANUAL FOR PIPE COVER REQUIREMENTS ON STATE ROUTES; SR 18, SR 99, SR 161, SR 509.
 - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY ALL UTILITY DISTRICTS AND PRIVATE PROPERTY OWNERS WHEN SUCH PROPERTY IS LIABLE TO INJURY OR DAMAGE THROUGH THE PERFORMANCE OF THE ABOVE WORK. CALL 1-800-424-6555 48 HOURS IN ADVANCE FOR UNDERGROUND UTILITY LOCATION. THIS INSTRUCTION DOES NOT RELIEVE THE CONTRACTOR FROM REQUIRED NOTIFICATION OF COUNTY INSPECTORS AS SPECIFIED IN PARAGRAPH 1, ABOVE.
 - CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS DEPARTMENT AT LEAST TWENTY-FOUR (24) HOURS, BUT NOT MORE THAN SEVENTY-TWO (72) HOURS, PRIOR TO COMMENCING THE WORK. CREW MUST CALL PERMIT # AND WORK LOCATION EACH MORNING THEY ARE TO BE WORKING IN TOWN TO VERIFY THE START OF WORK. FAILURE TO PROVIDE SUCH NOTICE WILL RESULT IN THE ASSESSMENT OF A JOB START PENALTY CHARGE PER EACH OCCURRENCE, IN ADDITION TO ANY OTHER FEES PROVIDED FOR IN THIS PERMIT.
 - AFTER COMPLETION OF CONSTRUCTION WORK THE CONTRACTOR SHALL RESTORE ALL RIGHTS OF WAY AND PUBLIC PLACES TO THE CONDITION WHICH IS EQUIVALENT TO OR BETTER THAN THE CONDITION OF THE RIGHT OF WAY PRIOR TO COMMENCING THE WORK AND TO A CONDITION SATISFACTORY TO THE CITY WITHIN 30 DAYS. CONTRACTOR SHALL REPAIR THE DAMAGE AT ITS SOLE COST AND EXPENSE, WITHOUT DELAY OR INTERRUPTION AND WITHIN THE TIME PERIOD PRESCRIBED BY THE CITY.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACTOR. ANY WORK WITHIN THE TRAVELED RIGHT-OF-WAY THAT MAY INTERRUPT NORMAL TRAFFIC FLOW SHALL REQUIRE AT LEAST ONE FLAGGER FOR EACH LANE OF TRAFFIC AFFECTED. ALL SECTIONS OF THE WSDOT STANDARD SPECIFICATIONS 1-07-23-TRAFFIC CONTROL, SHALL APPLY.

FIBER OPTIC CABLE UNCOVERING SYSTEM

- CONTRACTOR SHALL PROVIDE AND INSTALL ALL REGULATORY AND WARNING SIGNS PER THE LATEST EDITION OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- ESC FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUE FUNCTION.
- TEMPORARY EROSION AND SEDIMENTATION CONTROL SHOULD BE IN ACCORDANCE WITH THE KING COUNTY EROSION AND SEDIMENT CONTROL STANDARD. AT NO TIME SHALL MORE THAN ONE (1) FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT-LADEN WATER INTO THE DOWNSTREAM.
- ANY EXCAVATION WITHIN PROXIMITY OF TREE DRIP LINES SHALL BE PERFORMED VIA HYDRO VACUUM EXCAVATION.
- PERMITTEE SHALL NOT CLEAR, REMOVE OR DISTURB ANY TREES OR VEGETATION IN THE RIGHT OF WAY WITHOUT SUBMITTING A REVEGETATION AND EROSION CONTROL PLAN, IN FORM AND CONTENT ACCEPTABLE TO THE CITY.



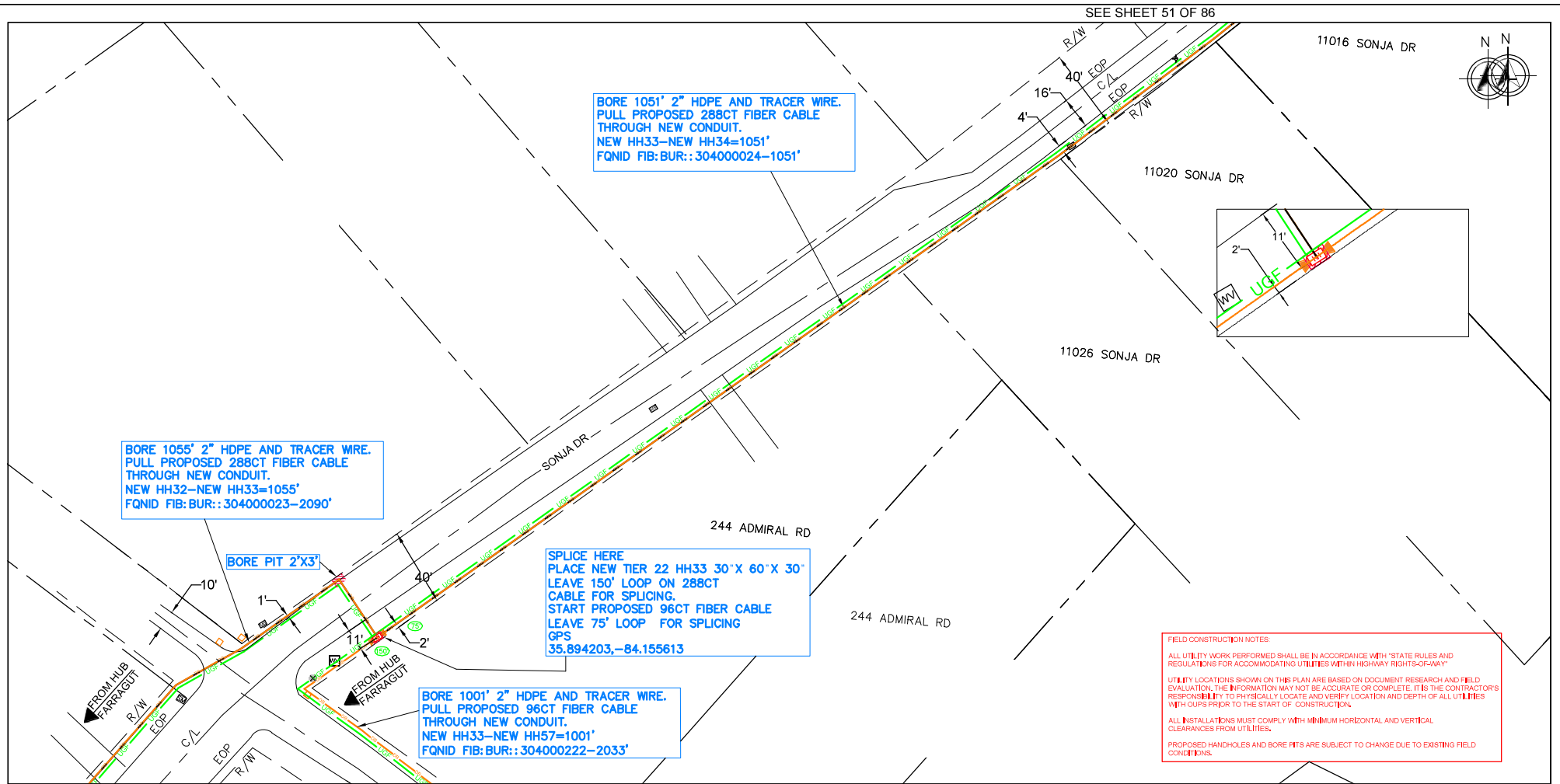
72 HOURS NOTICE REQUIRED

REVISIONS				CONSTRUCTION FIRM		PREPARED BY :	
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11-18-2019	0	LLD	CYI				
01-13-2019	1	ROUTE MODIFICATION	CYI				
			CYI				
			CYI	MANAGER:	ENGINEER: C,PENNINGTON	MCI MCImetro ACCESS TRANSMISSION SERVICES,LLC	
				PHONE:	PHONE:		



GENERAL NOTES NA FARRAGUT_FH

CITY: FARRAGUT		STATE: TENNESSEE		COUNTY: KNOX	
DRAFTER:		SCALE: NTS	SHEET: 08 OF 86	REVISION: 2	



FIELD CONSTRUCTION NOTES:

ALL UTILITY WORK PERFORMED SHALL BE IN ACCORDANCE WITH "STATE RULES AND REGULATIONS FOR ACCOMMODATING UTILITIES WITHIN HIGHWAY RIGHTS-OF-WAY"

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PROPOSED HANDHOLES AND BORE PITS ARE SUBJECT TO CHANGE DUE TO EXISTING FIELD CONDITIONS.

SEE SHEET 49 OF 86

SEE SHEET 64 OF 86

 Know what's below. Call 811 before you dig. 72 HOURS NOTICE REQUIRED	REVISIONS			CONSTRUCTION FIRM		PREPARED BY :		 MasTec OUTSIDE PLANT CONSTRUCTION	 MCI ACCESS TRANSMISSION SERVICES, LLC	CONSTRUCTION DRAWING								
										NA FARRAGUT_FH								
	DATE:	REV	DESCRIPTIONS:	BY:			CYIENT MANAGER: ENGINEER: C.PENNINGTON PHONE: PHONE:			CITY: FARRAGUT		STATE: TENNESSEE	COUNTY: KNOX					
	11-18-2019	0	LLD	CYI						DRAFTER:		SCALE: 1"=50'		SHEET: 50 OF 86		REVISION: 1		
	01-13-2019	1	ROUTE MODIFICATION	CYI														

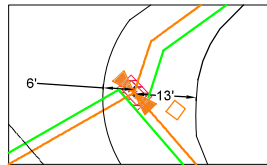
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SEE SHEET 60 OF 86

BORE 753' 2" HDPE AND TRACER WIRE.
PULL PROPOSED 96CT FIBER CABLE
THROUGH NEW CONDUIT.
NEW HH34-NEW HH65=753'
FQND FIB: BUR:: 304000225-1789'

SPLICE HERE
PLACE NEW TIER 22 HH34 30" X 60" X 30"
LEAVE 150' LOOP ON 288CT
CABLE FOR SPLICING
START PROPOSED 96CT FIBER CABLE
LEAVE 75' LOOP FOR SPLICING
GPS
35.895878, -84.152714

BORE 311' 2" HDPE AND TRACER WIRE.
PULL PROPOSED 288CT FIBER CABLE
THROUGH NEW CONDUIT.
NEW HH34-NEW HH39=311'
FQND FIB: BUR:: 304000231-311'

SPLICE HERE
PLACE NEW TIER 22 HH39 30" X 60" X 30"
LEAVE 150' LOOP ON 288CT
CABLE FOR SPLICING
START PROPOSED 96CT FIBER CABLE
LEAVE 75' LOOP FOR SPLICING
GPS
35.895179, -84.152079

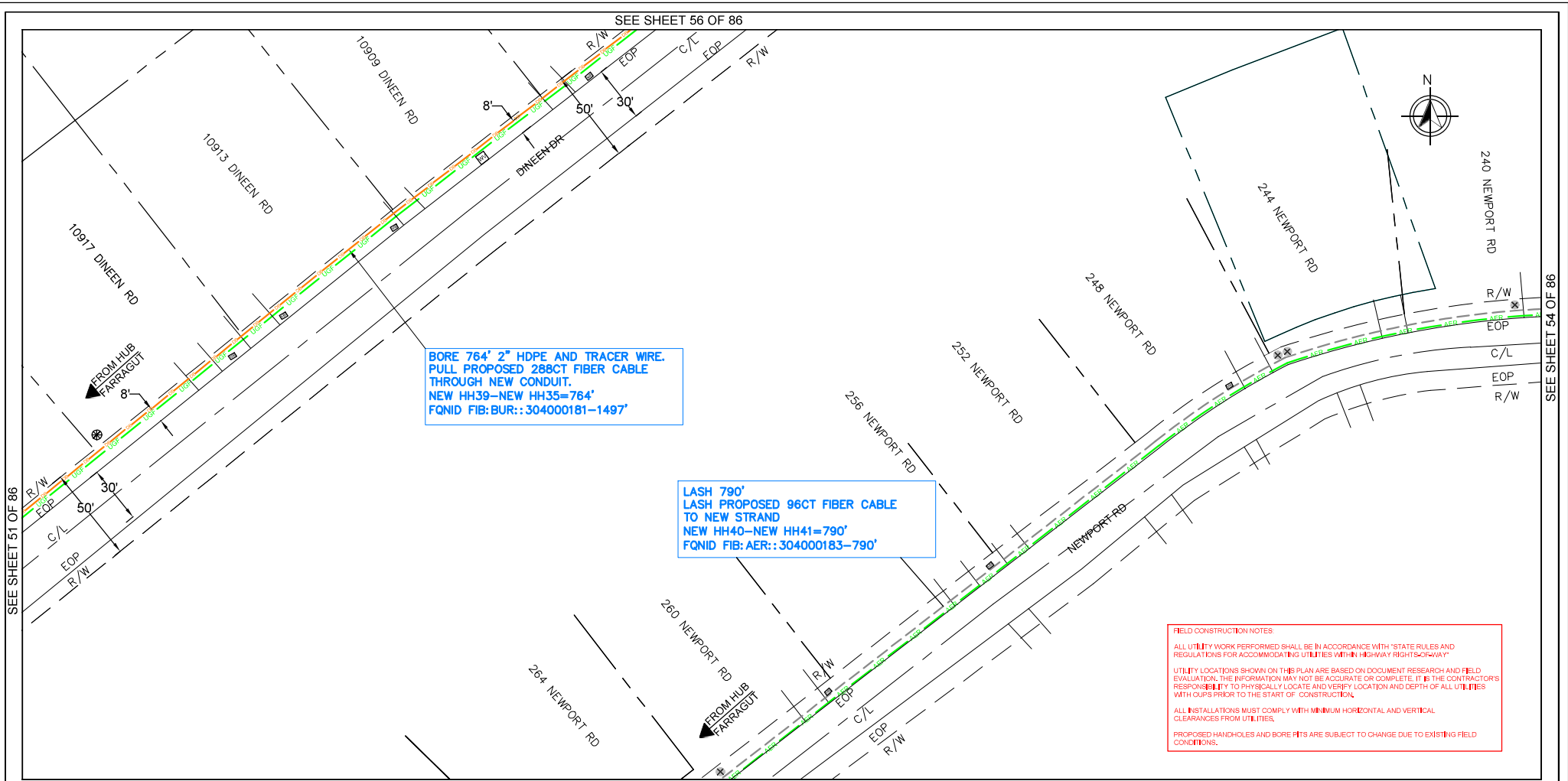
BORE 1051' 2" HDPE AND TRACER WIRE.
PULL PROPOSED 288CT FIBER CABLE
THROUGH NEW CONDUIT.
NEW HH33-NEW HH34=1051'
FQND FIB: BUR:: 304000024-1051'

BORE 564' 2" HDPE AND TRACER WIRE.
PULL PROPOSED 96CT FIBER CABLE
THROUGH NEW CONDUIT.
NEW HH39-NEW HH40=564'
FQND FIB: BUR:: 304000182-564'

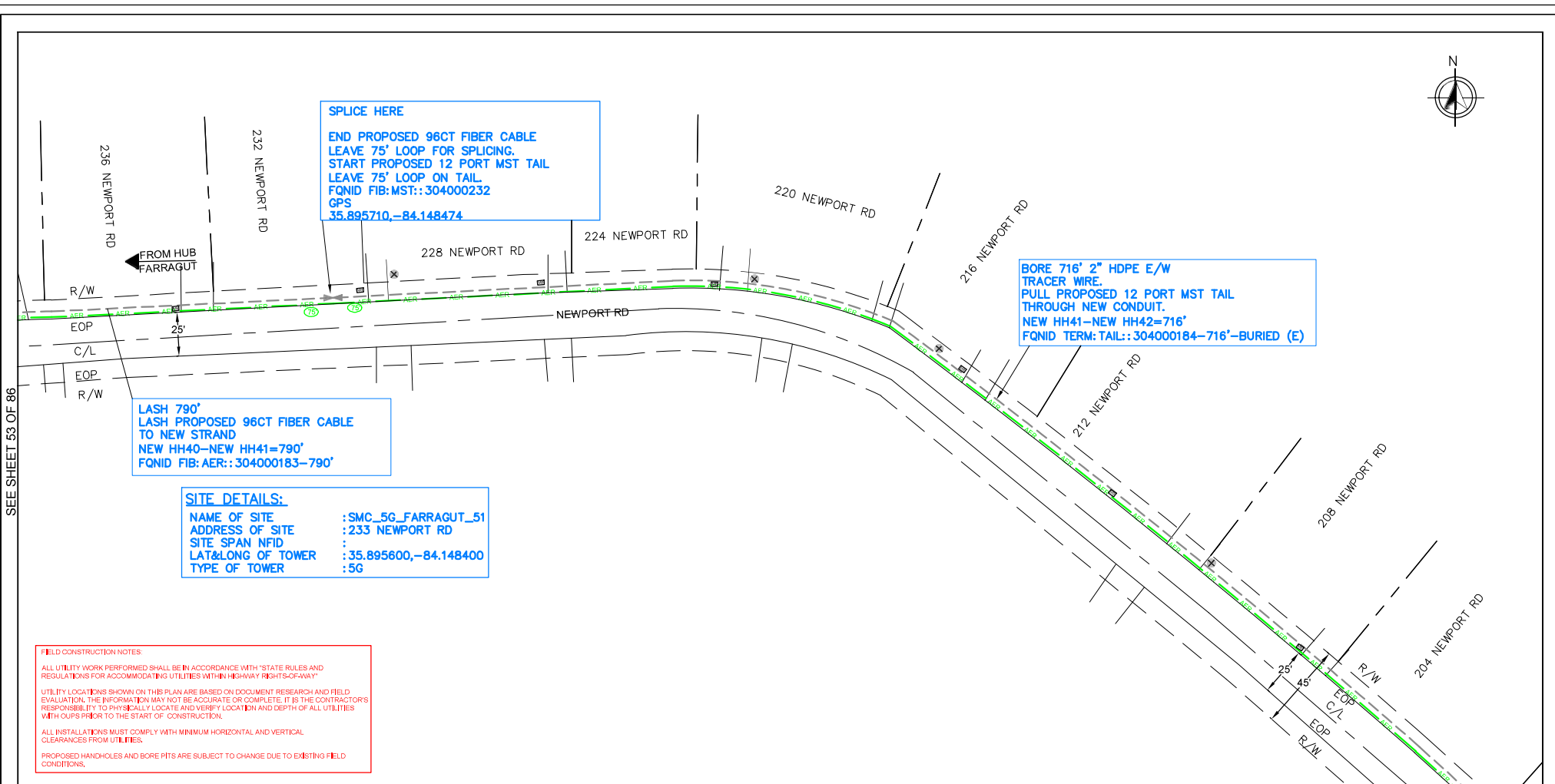
SEE SHEET 50 OF 86

SEE SHEET 52 OF 86

  72 HOURS NOTICE REQUIRED	REVISIONS			CONSTRUCTION FIRM		PREPARED BY :		 OUTSIDE PLANT CONSTRUCTION	 ACCESS TRANSMISSION SERVICES, LLC	CONSTRUCTION DRAWING																								
	<table border="1"> <thead> <tr> <th>DATE:</th> <th>REV</th> <th>DESCRIPTIONS:</th> <th>BY:</th> </tr> </thead> <tbody> <tr> <td>11-18-2019</td> <td>0</td> <td>LLD</td> <td>CYI</td> </tr> <tr> <td>01-13-2019</td> <td>1</td> <td>ROUTE MODIFICATION</td> <td>CYI</td> </tr> <tr> <td></td> <td></td> <td></td> <td>CYI</td> </tr> <tr> <td></td> <td></td> <td></td> <td>CYI</td> </tr> </tbody> </table>			DATE:	REV	DESCRIPTIONS:	BY:			11-18-2019	0	LLD	CYI	01-13-2019	1	ROUTE MODIFICATION	CYI				CYI				CYI	<table border="1"> <tr> <td>MANAGER:</td> <td>ENGINEER: C,PENNINGTON</td> </tr> <tr> <td>PHONE:</td> <td>PHONE:</td> </tr> </table>		MANAGER:	ENGINEER: C,PENNINGTON	PHONE:	PHONE:	NA FARRAGUT_FH		
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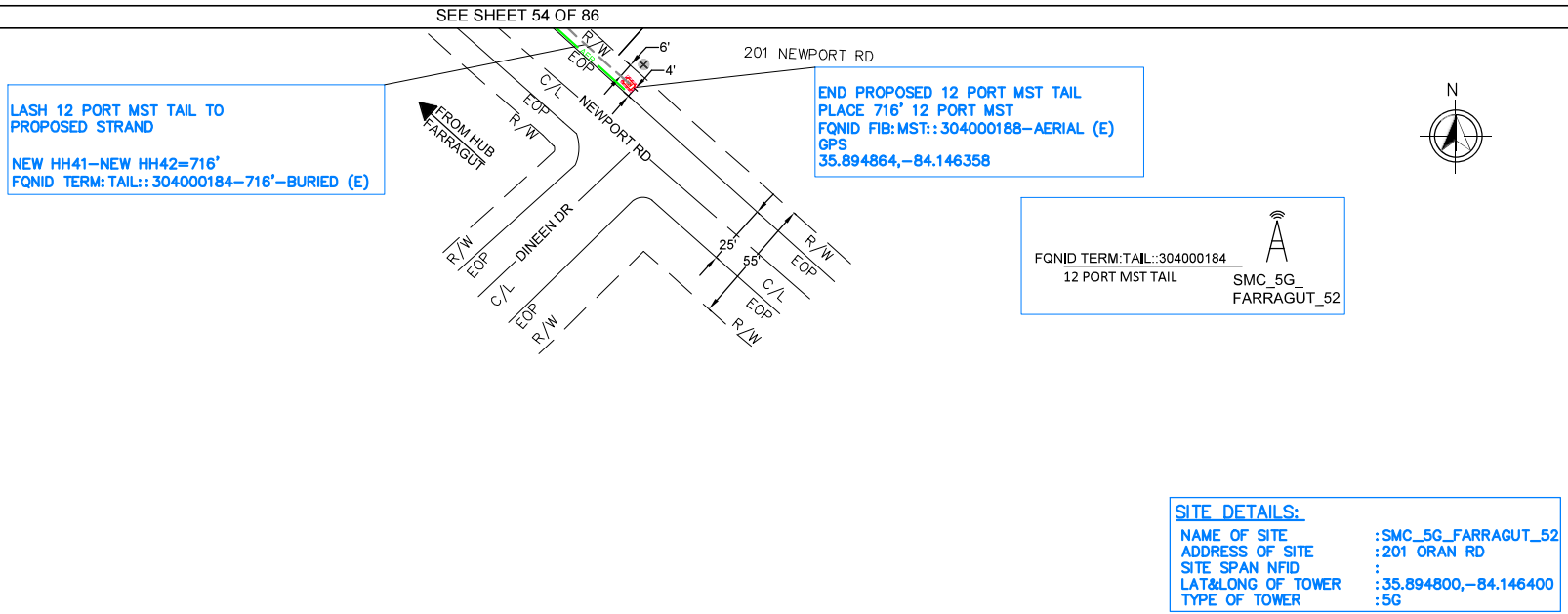


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SEE SHEET 16 OF 86

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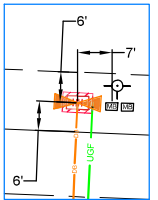
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SEE SHEET 32 OF 86

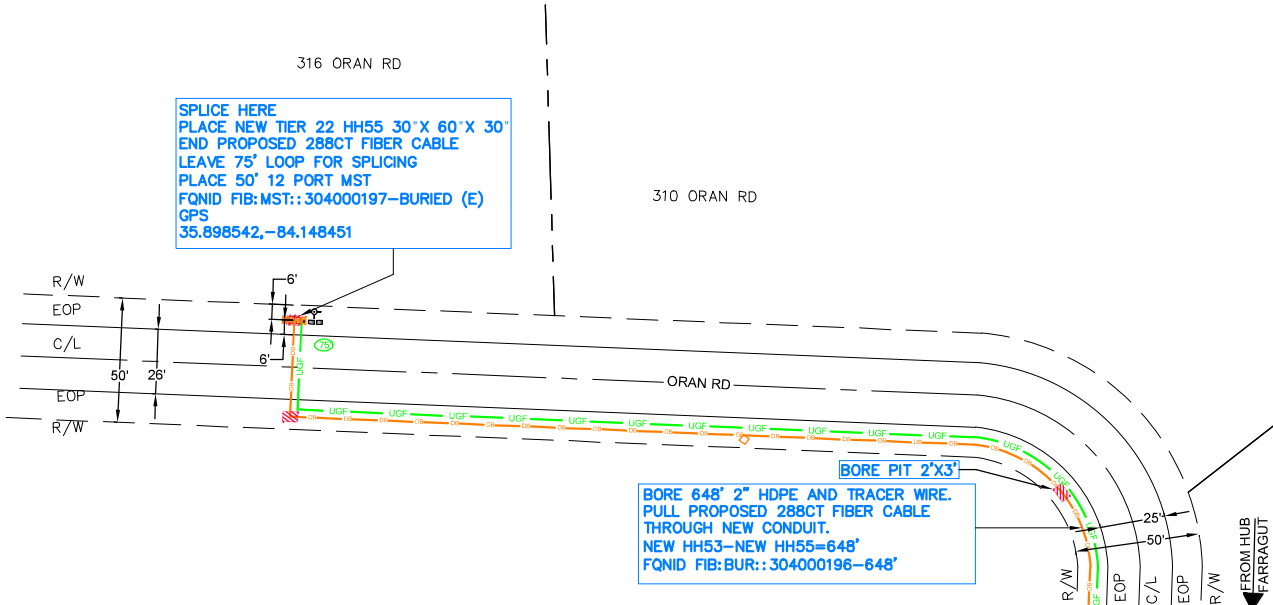
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316 ORAN RD

SPLICE HERE
PLACE NEW TIER 22 HH55 30"X 60"X 30"
END PROPOSED 288CT FIBER CABLE
LEAVE 75' LOOP FOR SPLICING
PLACE 50' 12 PORT MST
FQID FIB:MST::304000197-BURIED (E)
GPS
35.898542,-84.148451

310 ORAN RD



304 Oran Rd

FIELD CONSTRUCTION NOTES
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SEE SHEET 32 OF 86

SEE SHEET 58 OF 86



REVISIONS			
DATE:	REV	DESCRIPTIONS:	BY:
11-18-2019	0	LLD	CYI
01-13-2019	1	ROUTE MODIFICATION	CYI
			CYI

CONSTRUCTION FIRM		PREPARED BY :	
		CYIENT	
		ENGINEER: C.PENNINGTON	
		PHONE:	



CONSTRUCTION DRAWING			
NA FARRAGUT_FH			
CITY: FARRAGUT		STATE: TENNESSEE	
DRAFTER:		COUNTY: KNOX	
SCALE: 1"=50'		SHEET: 59 OF 86	
		REVISION: 1	

SEE SHEET 61 OF 86

BORE 1036' 2" HDPE AND TRACER WIRE.
PULL PROPOSED 96CT FIBER CABLE
THROUGH NEW CONDUIT.
NEW HH65-NEW HH66=1036'
FQND FIB: BUR:: 304000225-1789'

PLACE NEW TIER 22 HH65 30" X 60" X 30"
LEAVE 150' LOOP ON 96CT
CABLE FOR MAINTENANCE.
GPS
35.897101, -84.150729

BORE 753' 2" HDPE AND TRACER WIRE.
PULL PROPOSED 96CT FIBER CABLE
THROUGH NEW CONDUIT.
NEW HH34-NEW HH65=753'
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SEE SHEET 50 OF 86



72 HOURS NOTICE REQUIRED

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01-13-2019	1	ROUTE MODIFICATION	CYI
			CYI
			CYI

CONSTRUCTION FIRM

MANAGER:

PHONE:

PREPARED BY :

CYIENT

ENGINEER: C.PENNINGTON

PHONE:

MasTec
OUTSIDE PLANT CONSTRUCTION

MCI
MCI metro
ACCESS TRANSMISSION
SERVICES, LLC

CONSTRUCTION DRAWING
NA FARRAGUT_FH

CITY: FARRAGUT

DRAFTER:

STATE: TENNESSEE

SCALE: 1"=50'

COUNTY: KNOX

SHEET: 60 OF 86

REVISION: 1



LASH 1036'
LASH PROPOSED 96CT FIBER CABLE
TO NEW STRAND
NEW HH65-NEW HH66=1036'
FQPID FIB: AER:: 304000225-1789'

312 WARDLEY RD

308 WARDLEY RD

10831 SONJA DR

WARDLEY RD

SEE SHEET 62 OF 86

FROM HUB
FARRAGUT

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PHONE:		PHONE:	

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OUTSIDE PLANT CONSTRUCTION

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ACCESS TRANSMISSION
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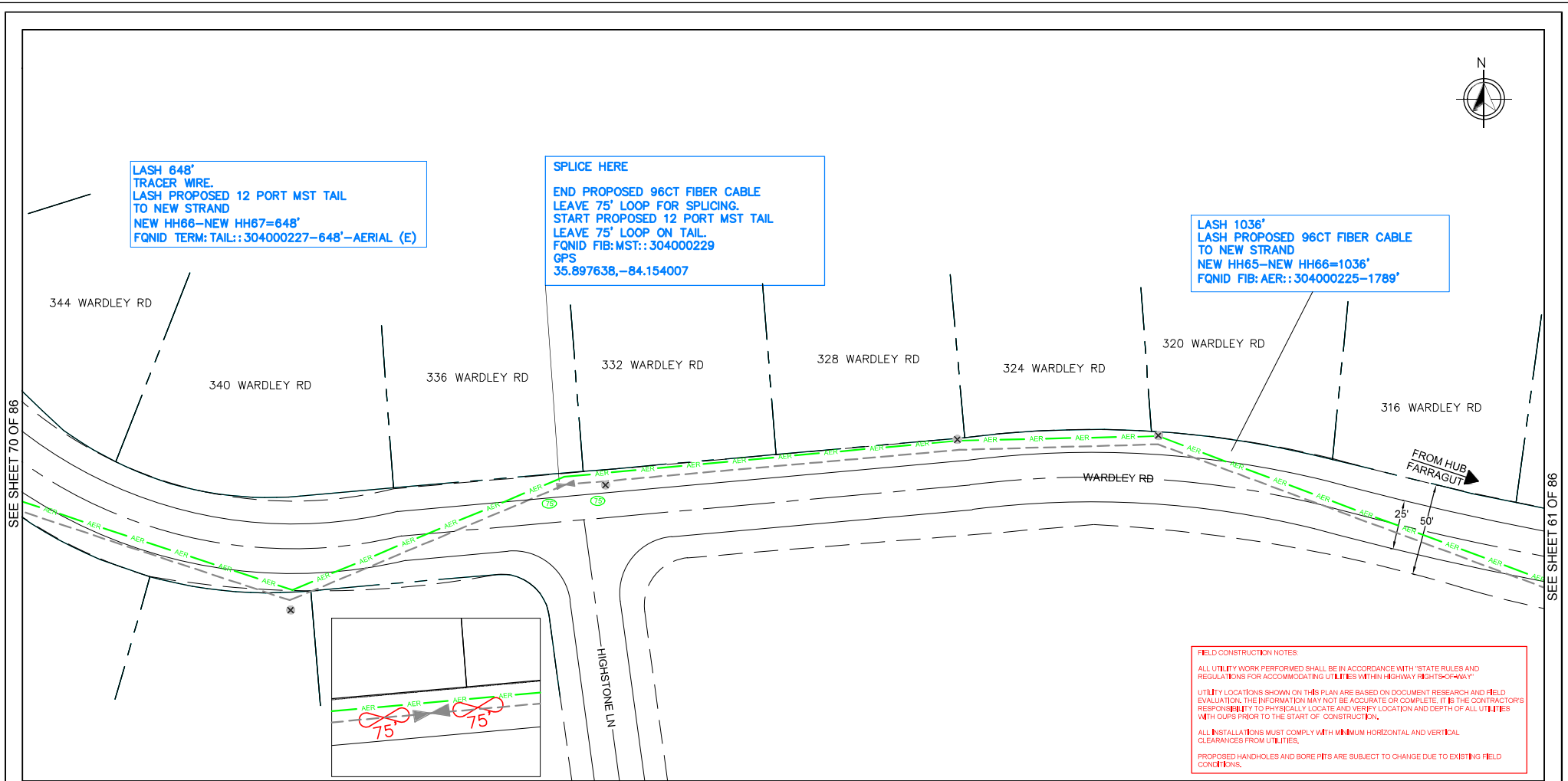
CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX
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LASH 648'
TRACER WIRE.
LASH PROPOSED 12 PORT MST TAIL
TO NEW STRAND
NEW HH66-NEW HH67=648'
FQID TERM: TAIL::304000227-648'-AERIAL (E)

SPLICE HERE
END PROPOSED 96CT FIBER CABLE
LEAVE 75' LOOP FOR SPLICING.
START PROPOSED 12 PORT MST TAIL
LEAVE 75' LOOP ON TAIL.
FQID FIB:MST::304000229
GPS
35.897638,-84.154007

LASH 1036'
LASH PROPOSED 96CT FIBER CABLE
TO NEW STRAND
NEW HH65-NEW HH66=1036'
FQID FIB:AER::304000225-1789'



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 Know what's below. Call 811 before you dig. 72 HOURS NOTICE REQUIRED		<table><tr><th colspan="2">REVISIONS</th><th rowspan="2">DESCRIPTIONS</th><th rowspan="2">BY:</th></tr><tr><th>DATE:</th><th>REV</th></tr><tr><td>11-18-2019</td><td>0</td><td>LLD</td><td>CYI</td></tr><tr><td>01-13-2019</td><td>1</td><td>ROUTE MODIFICATION</td><td>CYI</td></tr><tr><td></td><td></td><td></td><td>CYI</td></tr><tr><td></td><td></td><td></td><td>CYI</td></tr></table>		REVISIONS		DESCRIPTIONS	BY:	DATE:	REV	11-18-2019	0	LLD	CYI	01-13-2019	1	ROUTE MODIFICATION	CYI				CYI				CYI	<table><tr><th colspan="2">CONSTRUCTION FIRM</th><th rowspan="2">PREPARED BY :</th></tr><tr><td colspan="3">  </td></tr><tr><td colspan="2">MANAGER:</td><td>ENGINEER: C.PENNINGTON</td></tr><tr><td colspan="2">PHONE:</td><td>PHONE:</td></tr></table>		CONSTRUCTION FIRM		PREPARED BY :				MANAGER:		ENGINEER: C.PENNINGTON	PHONE:		PHONE:	 OUTSIDE PLANT CONSTRUCTION  ACCESS TRANSMISSION SERVICES,LLC		<table><tr><th colspan="4">CONSTRUCTION DRAWING</th></tr><tr><th colspan="4">NA FARRAGUT_FH</th></tr><tr><td>CITY: FARRAGUT</td><td>STATE: TENNESSEE</td><td colspan="2">COUNTY: KNOX</td></tr><tr><td>DRAFTER:</td><td>SCALE: 1"=50'</td><td>SHEET: 62 OF 86</td><td>REVISION:1</td></tr></table>				CONSTRUCTION DRAWING				NA FARRAGUT_FH				CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX		DRAFTER:	SCALE: 1"=50'	SHEET: 62 OF 86	REVISION:1
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SEE SHEET 70 OF 86

LASH 1036'
LASH PROPOSED 96CT FIBER CABLE
TO NEW STRAND
NEW HH65-NEW HH66=1036'
FQND FIB:AER::304000225-1789'

SEE SHEET 70 OF 86



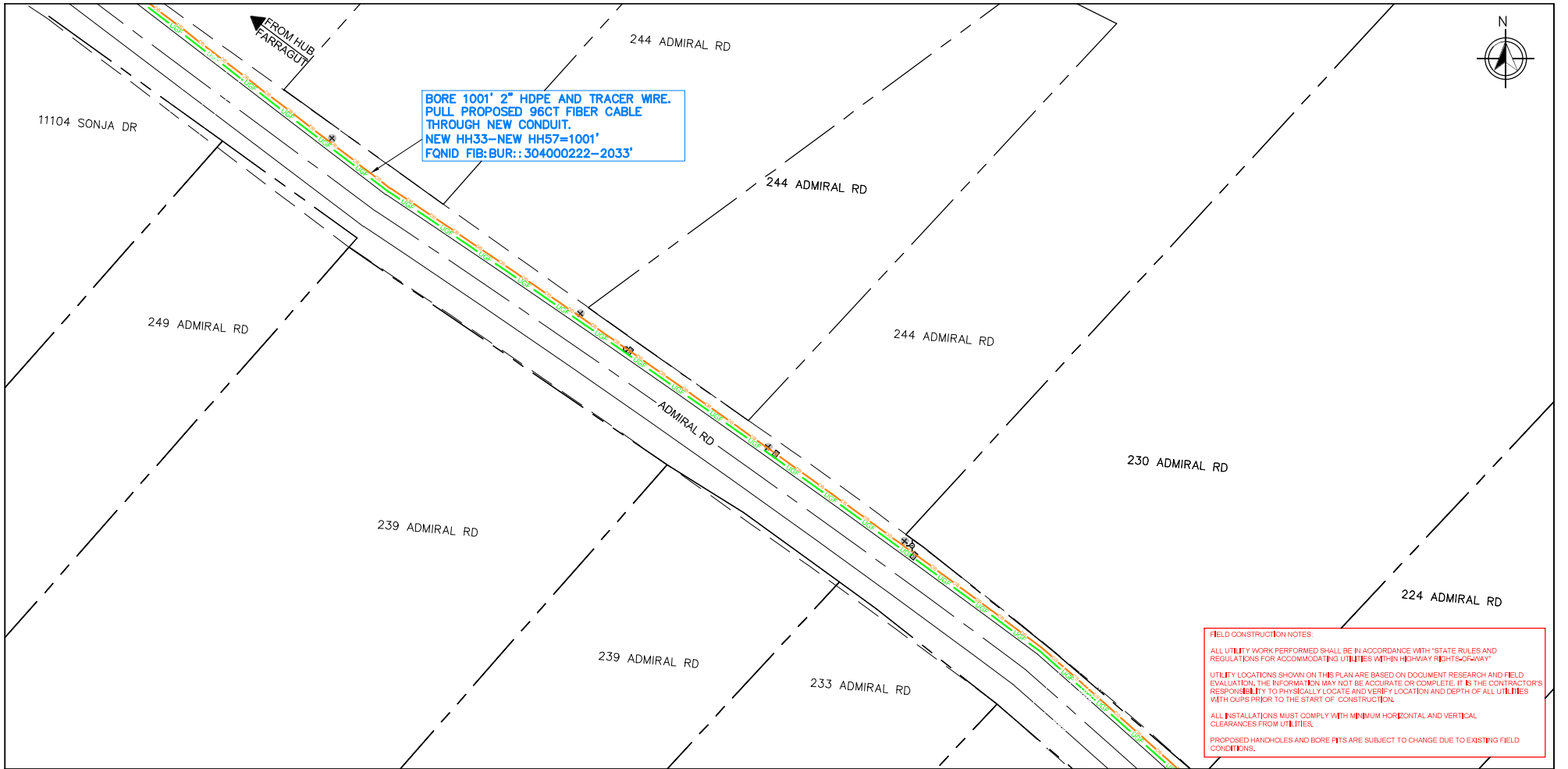
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DATE:	REV	DESCRIPTIONS:	BY:		
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01-13-2010	1	ROUTE MODIFICATION	CYI		
			CYI		
			CYI		
				MANAGER:	ENGINEER: C,PENNINGTON
				PHONE:	PHONE:



CONSTRUCTION DRAWING
NA FARRAGUT FH

CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX	
DRAFTER:	SCALE: 1"=50'	SHEET: 63 OF 86	REVISION: 1

SEE SHEET 51 OF 86



BORE 1001' 2" HDPE AND TRACER WIRE.
PULL PROPOSED 96CT FIBER CABLE
THROUGH NEW CONDUIT.
NEW HH33-NEW HH57=1001'
FQND FIB: BUR: : 304000222-2033'

FIELD CONSTRUCTION NOTES:
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SEE SHEET 65 OF 86

 72 HOURS NOTICE REQUIRED	REVISIONS			CONSTRUCTION FIRM	PREPARED BY :	 MasTec OUTSIDE PLANT CONSTRUCTION	 MCI MCI metro	CONSTRUCTION DRAWING					
	DATE:	REV	DESCRIPTIONS:	BY:	 CYIENT			ENGINEER: C.PENNINGTON	NA FARRAGUT_FH				
	11-18-2019	0	LLD	CYI					MANAGER:	PHONE:	CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX
	01-13-2019	1	ROUTE MODIFICATION	CYI							DRAFTER:	SCALE: 1"=50'	SHEET: 64 OF 86

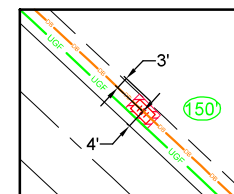
SEE SHEET 64 OF 86

FROM HUB
FARRAGUT

BORE 1001' 2" HDPE AND TRACER WIRE.
PULL PROPOSED 96CT FIBER CABLE
THROUGH NEW CONDUIT.
NEW HH33-NEW HH57=1001'
FQND FIB: BUR:: 304000222-2033'

PLACE NEW TIER 22 HH57 30"X 60"X 30"
LEAVE 150' LOOP ON 96CT
CABLE FOR MAINTENANCE.
GPS
35.892464, -84.153239

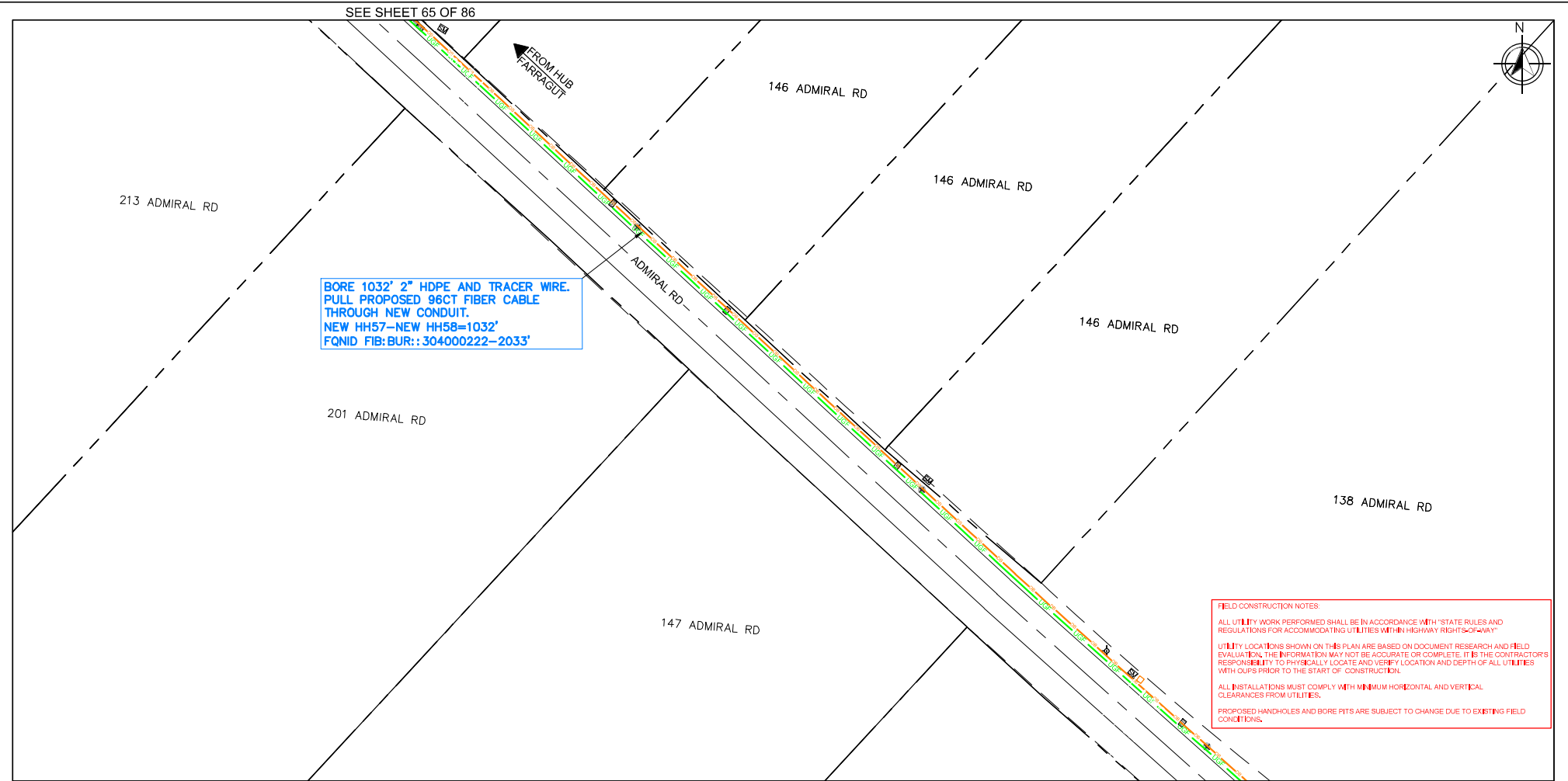
BORE 1032' 2" HDPE AND TRACER WIRE.
PULL PROPOSED 96CT FIBER CABLE
THROUGH NEW CONDUIT.
NEW HH57-NEW HH58=1032'
FQND FIB: BUR:: 304000222-2033'



FIELD CONSTRUCTION NOTES
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SEE SHEET 66 OF 86

Know what's below. Call 811 before you dig. 72 HOURS NOTICE REQUIRED	REVISIONS <table border="1"> <thead> <tr> <th>DATE</th> <th>REV</th> <th>DESCRIPTIONS</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td>11-18-2019</td> <td>0</td> <td>LLD</td> <td>CYI</td> </tr> <tr> <td>01-13-2019</td> <td>1</td> <td>ROUTE MODIFICATION</td> <td>CYI</td> </tr> </tbody> </table>			DATE	REV	DESCRIPTIONS	BY	11-18-2019	0	LLD	CYI	01-13-2019	1	ROUTE MODIFICATION	CYI	CONSTRUCTION FIRM <table border="1"> <tr> <td>MANAGER:</td> <td>ENGINEER: C.PENNINGTON</td> </tr> <tr> <td>PHONE:</td> <td>PHONE:</td> </tr> </table>		MANAGER:	ENGINEER: C.PENNINGTON	PHONE:	PHONE:	PREPARED BY : 		OUTSIDE PLANT CONSTRUCTION		MCImetro ACCESS TRANSMISSION SERVICES, LLC		CONSTRUCTION DRAWING NA FARRAGUT_FH			
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72 HOURS NOTICE REQUIRED

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11-18-2019	0	LLD	CYI
01-13-2019	1	ROUTE MODIFICATION	CYI
			CYI
			CYI

CONSTRUCTION FIRM
MANAGER:
PHONE:

PREPARED BY :
CYIENT
ENGINEER: C.PENNINGTON
PHONE:



CONSTRUCTION DRAWING			
NA FARRAGUT_FH			
CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX	
DRAFTER:	SCALE: 1"=50'	SHEET: 66 OF 86	REVISION: 1

SEE SHEET 66 OF 86

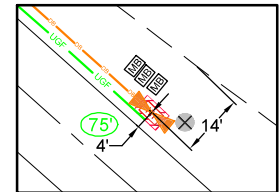
139 ADMIRAL RD

BORE 1032' 2" HDPE AND TRACER WIRE.
PULL PROPOSED 96CT FIBER CABLE
THROUGH NEW CONDUIT.
NEW HH57-NEW HH58=1032'
FQID FIB: BUR::304000222-2033'

133 ADMIRAL RD

SPLICE HERE
PLACE NEW TIER 22 HH58 30" X 60" X 30"
END PROPOSED 96CT FIBER CABLE
LEAVE 75' LOOP FOR FUTURE SITE
FQID FIB: MST::304000230.
GPS
35.898542,-84.148451

128 ADMIRAL RD



FIELD CONSTRUCTION NOTES:
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01-13-2019	1	ROUTE MODIFICATION	CYI
			CYI

CONSTRUCTION FIRM
MANAGER:
PHONE:

PREPARED BY :
CYIENT
ENGINEER: C.PENNINGTON
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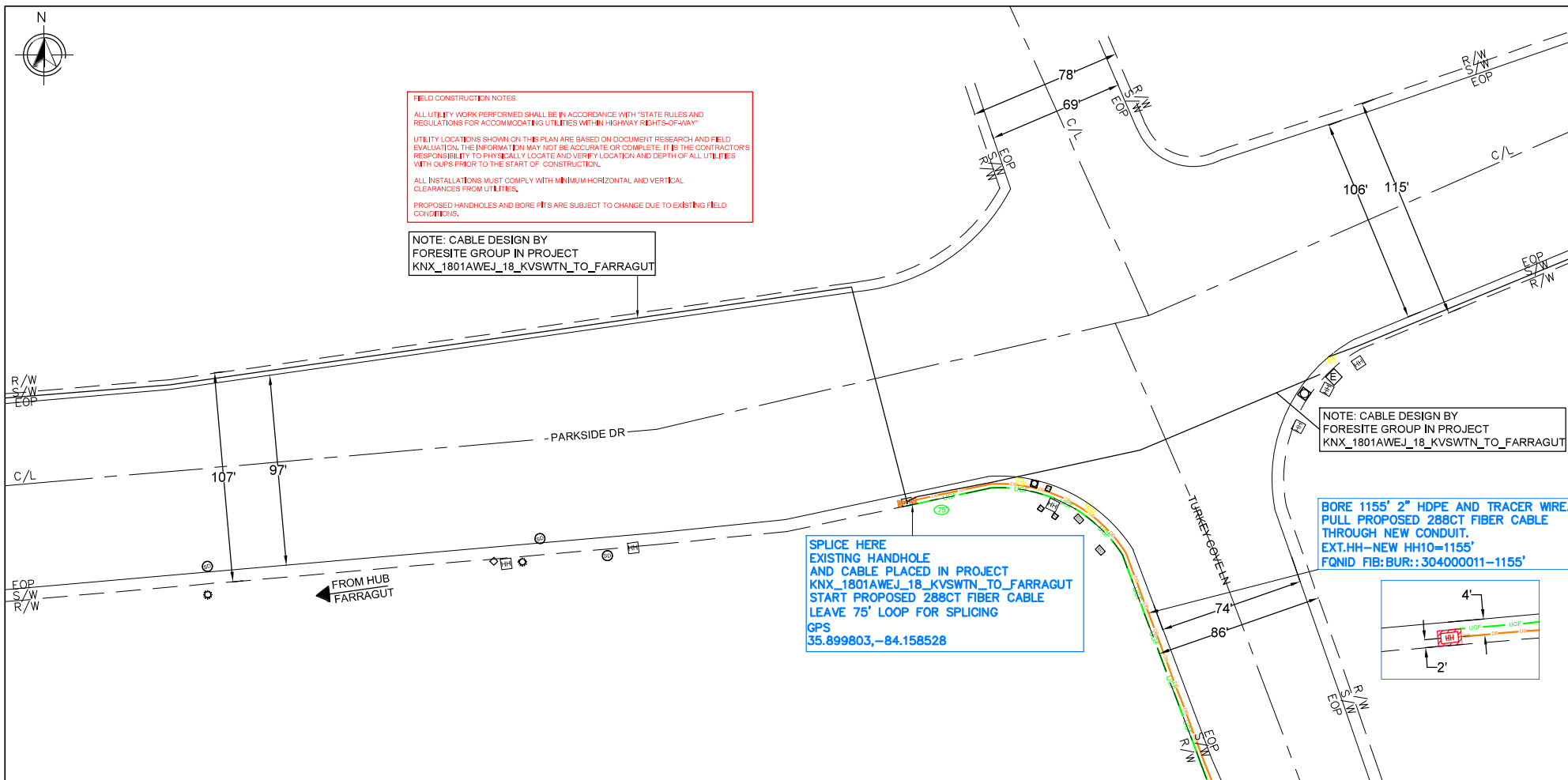


CONSTRUCTION DRAWING			
NA FARRAGUT_FH			
CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX	
DRAFTER:	SCALE: 1"=50'	SHEET: 67 OF 86	REVISION: 1



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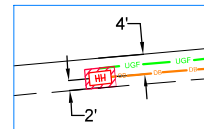
NOTE: CABLE DESIGN BY
FORESITE GROUP IN PROJECT
KNX_1801AWEJ_18_KVSWTN_TO_FARRAGUT



SPLICE HERE
EXISTING HANDHOLE
AND CABLE PLACED IN PROJECT
KNX_1801AWEJ_18_KVSWTN_TO_FARRAGUT
START PROPOSED 288CT FIBER CABLE
LEAVE 75' LOOP FOR SPLICING
GPS
35.899803, -84.158528

NOTE: CABLE DESIGN BY
FORESITE GROUP IN PROJECT
KNX_1801AWEJ_18_KVSWTN_TO_FARRAGUT

BORE 1155' 2" HDPE AND TRACER WIRE.
PULL PROPOSED 288CT FIBER CABLE
THROUGH NEW CONDUIT.
EXT.HH-NEW HH10=1155'
FQND FIB: BUR.: 304000011-1155'



SEE SHEET 69 OF 86



72 HOURS NOTICE REQUIRED

REVISIONS			
DATE:	REV	DESCRIPTIONS:	BY:
11-18-2019	0	LLD	CYI
01-13-2019	1	ROUTE MODIFICATION	CYI
			CYI
			CYI

CONSTRUCTION FIRM		PREPARED BY :	
CYIENT		ENGINEER: C.PENNINGTON	
MANAGER:		ENGINEER: C.PENNINGTON	
PHONE:		PHONE:	

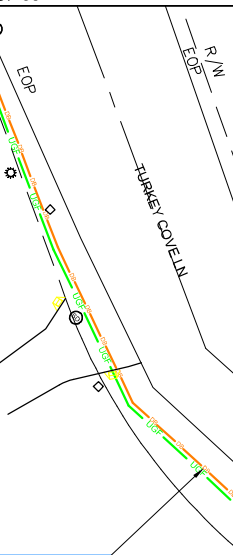


CONSTRUCTION DRAWING			
NA FARRAGUT_FH			
CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX	
DRAFTER:	SCALE: 1"=50'	SHEET: 68 OF 86	REVISION: 1



SEE SHEET 68 OF 86

FROM HUB
FARRAGUT



SEE SHEET 63 OF 86

FIELD CONSTRUCTION NOTES:

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			CYI
			CYI

CONSTRUCTION FIRM
MANAGER:
PHONE:

PREPARED BY :
CYIENT
ENGINEER: C.PENNINGTON
PHONE:



CONSTRUCTION DRAWING			
NA FARRAGUT_FH			
CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX	
DRAFTER:	SCALE: 1"=50'	SHEET: 69 OF 86	REVISION: 1

SEE SHEET 63 OF 86

SEE SHEET 63 OF 86



437 ORAN RD

FROM HUB
FARRAGUT

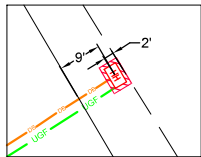
BORE 1155' 2" HDPE AND TRACER WIRE.
PULL PROPOSED 288CT FIBER CABLE
THROUGH NEW CONDUIT.
EXT.HH-NEW HH10=1155'
FQID FIB:BUR::304000011-1155'

BORE 44' 2" HDPE E/W
TRACER WIRE.
PULL PROPOSED 12 PORT MST TAIL
THROUGH NEW CONDUIT.
NEW HH10-NEW HH47=44'
FQID TERM:TAIL::304000177-44'-BURIED (E)

PLACE NEW TIER 22 HH47 17"X 30"X 24"
END PROPOSED 12 PORT MST TAIL
PLACE 44' 12 PORT MST
FQID FIB:MST::304000221-BURIED (E)
GPS
35.897539,-84.156013

BORE 526' 2" HDPE E/W
TRACER WIRE.
PULL PROPOSED 12 PORT MST TAIL
THROUGH NEW CONDUIT.
NEW HH10-NEW HH56=526'
FQID TERM:TAIL::304000178-526'-BURIED (E)

SPLICE HERE
PLACE NEW TIER 22 HH10 30"X 60"X 30"
END PROPOSED 288CT FIBER CABLE
START PROPOSED (2) 12 PORT MST TAILS
LEAVE 75' LOOP FOR SPLICING
LEAVE 75' LOOP ON TAILS
GPS
35.897470,-84.156136



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SEE SHEET 71 OF 86



72 HOURS NOTICE REQUIRED

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01-13-2019	1	ROUTE MODIFICATION	CYI
			CYI

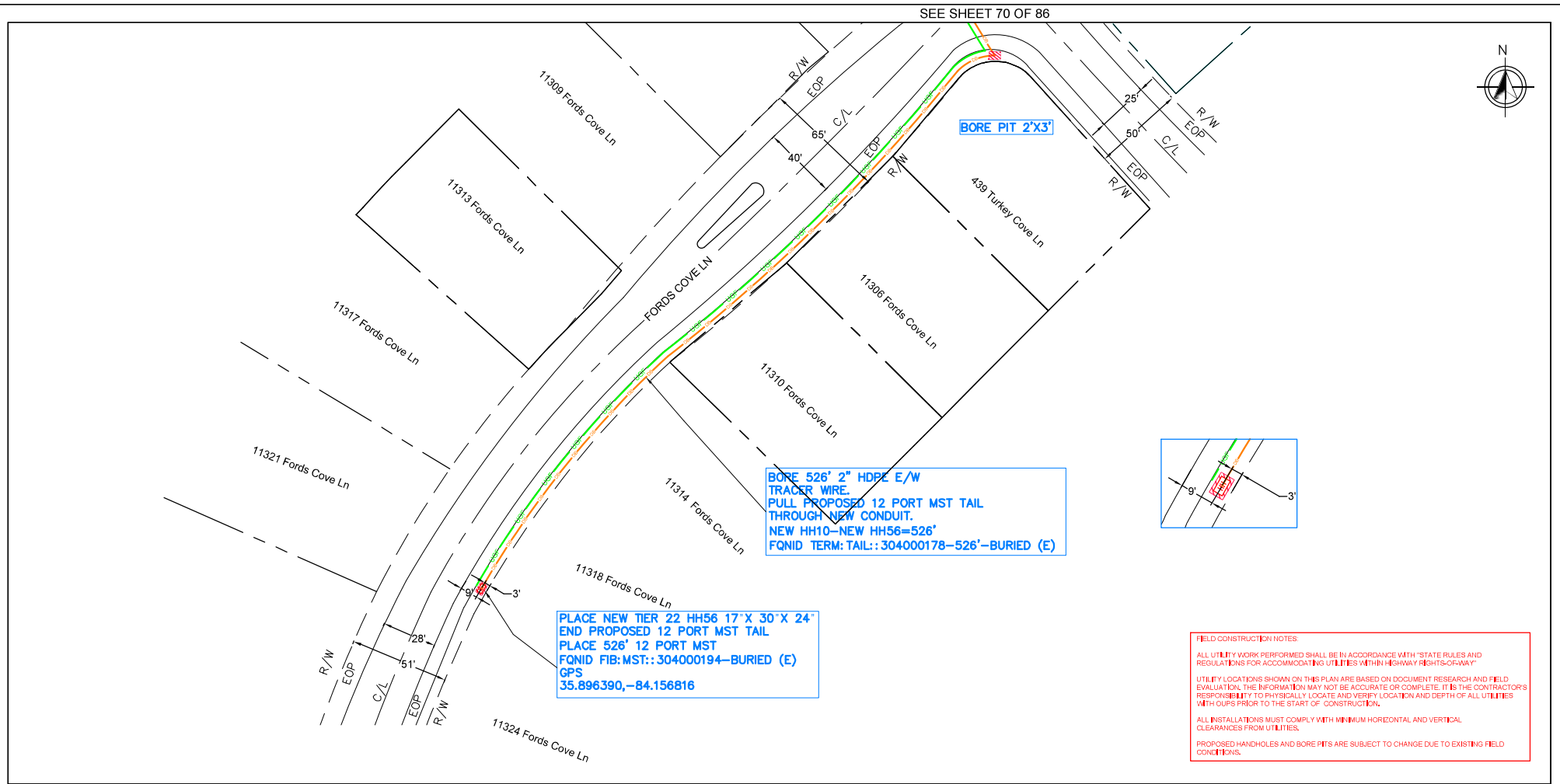
CONSTRUCTION FIRM		PREPARED BY:	
MANAGER:		ENGINEER: C,PENNINGTON	
PHONE:		PHONE:	

MasTec
OUTSIDE PLANT CONSTRUCTION

MCI
MCI metro
ACCESS TRANSMISSION
SERVICES,LLC

CONSTRUCTION DRAWING
NA FARRAGUT_FH

CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX
DRAFTER:	SCALE: 1"=50'	SHEET: 70 OF 86
		REVISION: 1



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			CYI
			CYI

CONSTRUCTION FIRM
MANAGER:
PHONE:

PREPARED BY :
CYIENT
ENGINEER: C.PENNINGTON
PHONE:

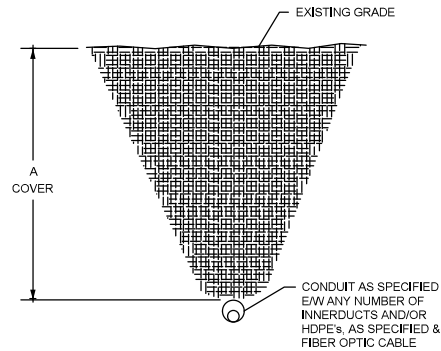


CONSTRUCTION DRAWING			
NA FARRAGUT_FH			
CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX	
DRAFTER:	SCALE: 1"=50'	SHEET: 71 OF 86	REVISION: 1

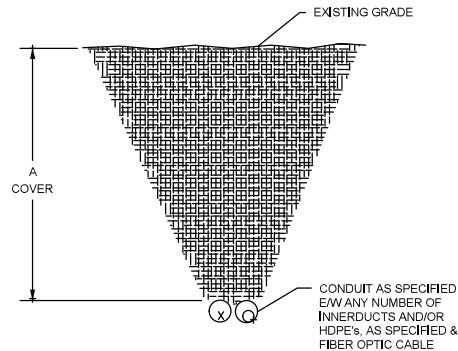
CONSTRUCTION DETAILS/TYPICALS

TYPICAL DIRECTIONAL BORE DETAIL

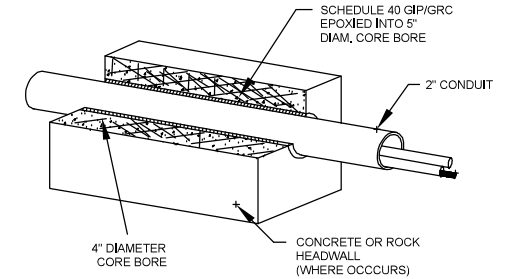
TYPICAL DETAIL A
DIRECTIONAL BORE CROSS SECTION
FOR CONDUIT



TYPICAL DETAIL B
DIRECTIONAL BORE CROSS SECTION
FOR JOINT CONDUIT



TYPICAL DETAIL C
4" CORE BORE



NOTE:
EPOXY GROUT IS USED AT BOTH ENDS OF CORE BORE
TO SEAL GAP BETWEEN 2" CONDUIT AND PVC SLEEVE.



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			CYI
			CYI

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MANAGER:
PHONE:

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ENGINEER: C.PENNINGTON
PHONE:

MasTec
OUTSIDE PLANT CONSTRUCTION

MCI
MCImetro
ACCESS TRANSMISSION
SERVICES,LLC

CONSTRUCTION DETAIL DRAWINGS
NA FARRAGUT_FH

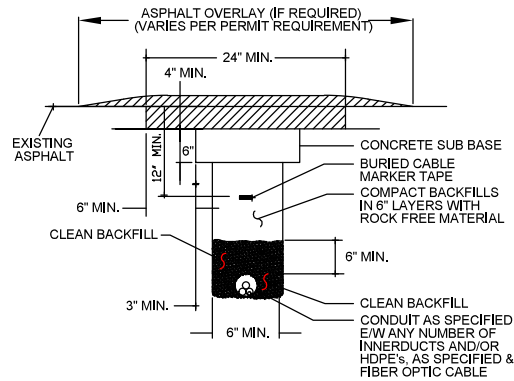
CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX
DRAFTER:	SCALE: NTS	SHEET: 76 OF 86
		REVISION: 1

CONSTRUCTION DETAILS/TYPICALS

RESTORATION DETAILS

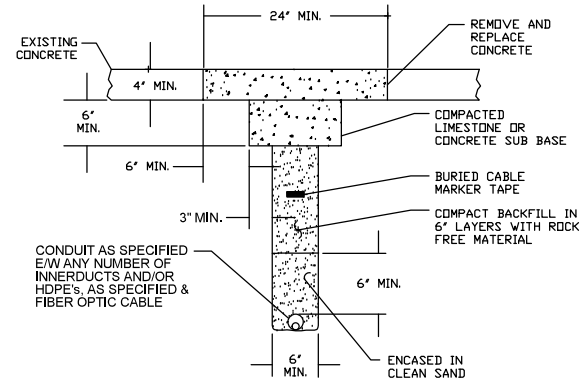
TYPICAL DETAIL A

REMOVE AND RESTORE ASPHALT
FOR CONDUIT



TYPICAL DETAIL B

REMOVE AND RESTORE CONCRETE
FOR CONDUIT



72 HOURS NOTICE REQUIRED

REVISIONS			
DATE:	REV	DESCRIPTIONS:	BY:
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01-13-2019	1	ROUTE MODIFICATION	CYI
			CYI

CONSTRUCTION FIRM		PREPARED BY :	
		CYIENT	
		MANAGER:	
		ENGINEER: C.PENNINGTON	
		PHONE:	



CONSTRUCTION DETAIL DRAWINGS
NA FARRAGUT_FH

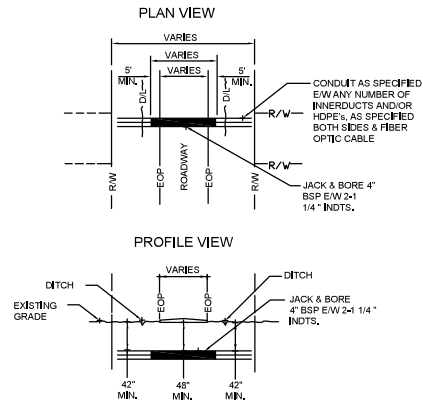
CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX
DRAFTER:	SCALE: NTS	SHEET: 77 OF 86
		REVISION: 1

CONSTRUCTION DETAILS/TYPICALS

JACK AND BORE DETAIL

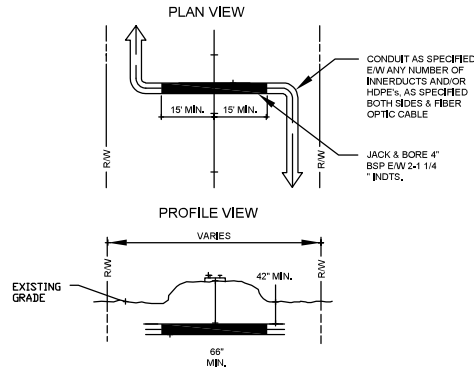
TYPICAL DETAIL A

JACK & BORE ROADWAY



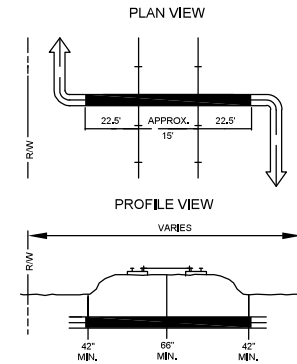
TYPICAL DETAIL B

JACK & BORE MAIN TRACK



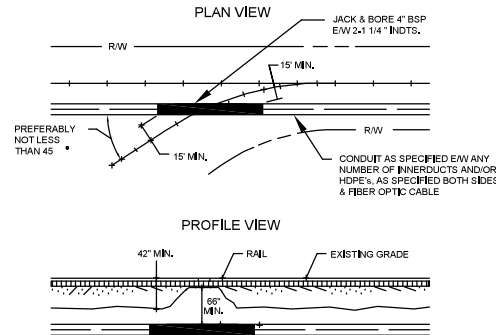
TYPICAL DETAIL C

JACK AND BORE DUAL TRACKS



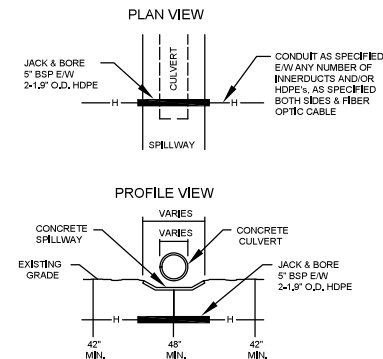
TYPICAL DETAIL D

JACK & BORE AUXILIARY TRACK



TYPICAL DETAIL E

JACK AND BORE CULVERT AND/OR SPILLWAY



72 HOURS NOTICE REQUIRED

REVISIONS				CONSTRUCTION FIRM		PREPARED BY :	
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			CYI				
				MANAGER:	ENGINEER: C.PENNINGTON		
				PHONE:	PHONE:		

MasTec
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CONSTRUCTION DETAIL DRAWINGS

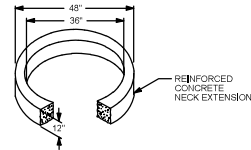
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CITY: FARRAGUT	STATE: TENNESSEE	COUNTY: KNOX
DRAFTER:	SCALE: NTS	SHEET: 78 OF 86
		REVISION: 1

CONSTRUCTION DETAILS/TYPICALS

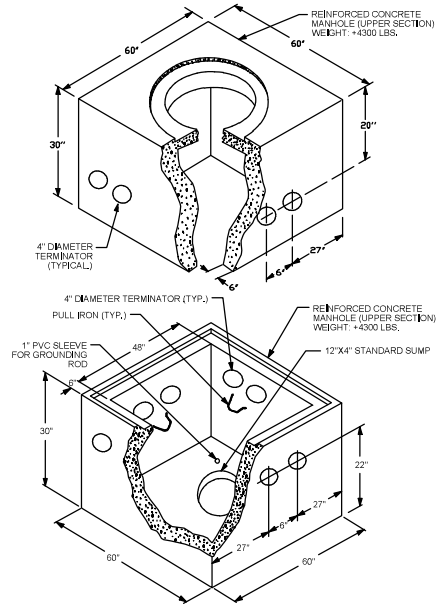
4'x4'x4' OR 4'x4'x2' MANHOLE DETAILS

TYPICAL DETAIL "A"
TYPICAL NECK EXTENSION DETAIL

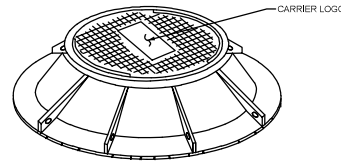


TYPICAL DETAIL "D"

DALWORTH QUICKSET MANHOLE
WALLS: 6in. HEADROOM: 48in.



TYPICAL DETAIL "B"
MANHOLE COVER IRONWORKS #B-30

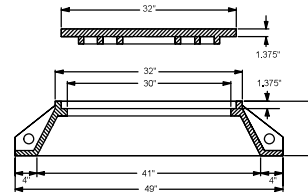


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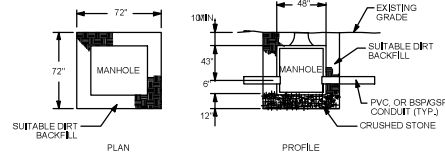
1. EACH COVER TO HAVE (4) PICK SLOTS FOR REMOVING.
2. STAMP CARRIERS ID IN COVER.
3. ACCESS HOLE: 30"

TYPICAL DETAIL "E"

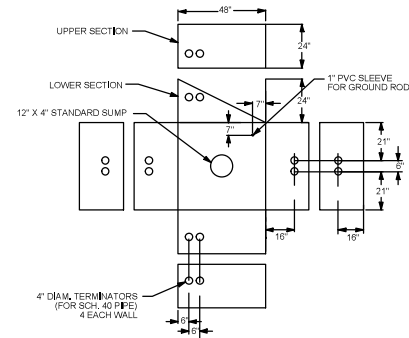
RING AND COVER DETAIL
RING: 390lbs. COVER: 300lbs.



TYPICAL DETAIL "G"
TYPICAL MANHOLE EXCAVATION PIT

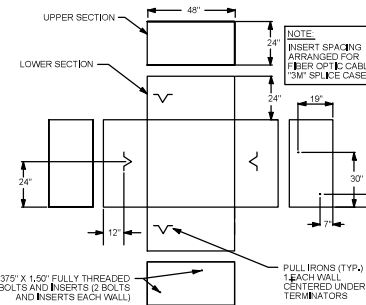


TYPICAL DETAIL "C"
TERMINATORS, SUMP, & GROUND ROD SLEEVE
2 SECTIONS



TYPICAL DETAIL "F"

BOLT INSERTS AND PULL IRONS
2 SECTIONS



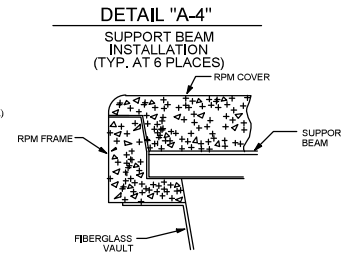
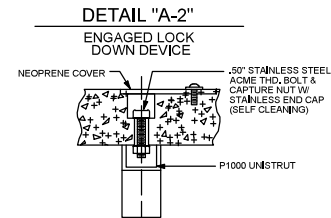
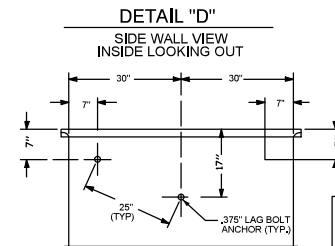
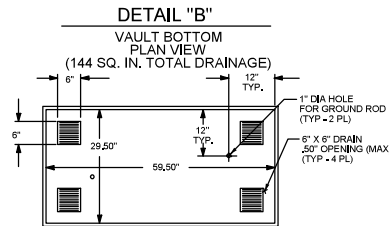
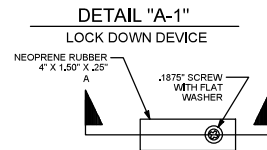
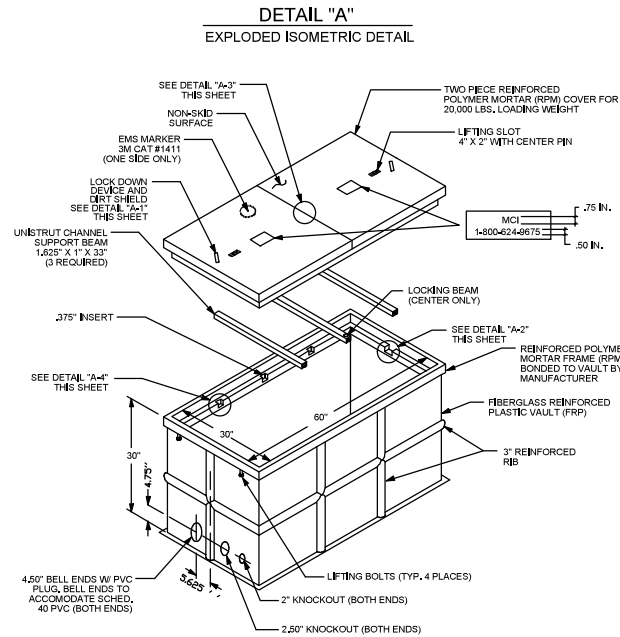
NOTES:

1. VOID IN EXCAVATED AREAS TO BE BACKFILLED WITH SELECT MATERIAL.
2. BOTTOM OF EXCAVATED PIT TO BE BACKFILLED WITH 12\"/>

 Know what's below. Call 811 before you dig. 72 HOURS NOTICE REQUIRED		<table><tr><th colspan="4">REVISIONS</th></tr><tr><th>DATE:</th><th>REV</th><th>DESCRIPTIONS:</th><th>BY:</th></tr><tr><td>11-18-2019</td><td>0</td><td>LLD</td><td>CYI</td></tr><tr><td>01-13-2019</td><td>1</td><td>ROUTE MODIFICATION</td><td>CYI</td></tr><tr><td></td><td></td><td></td><td>CYI</td></tr><tr><td></td><td></td><td></td><td>CYI</td></tr></table>		REVISIONS				DATE:	REV	DESCRIPTIONS:	BY:	11-18-2019	0	LLD	CYI	01-13-2019	1	ROUTE MODIFICATION	CYI				CYI				CYI	<table><tr><th colspan="2">CONSTRUCTION FIRM</th></tr><tr><td colspan="2">CYIENT</td></tr><tr><td>MANAGER:</td><td>ENGINEER: C.PENNINGTON</td></tr><tr><td>PHONE:</td><td></td></tr></table>		CONSTRUCTION FIRM		CYIENT		MANAGER:	ENGINEER: C.PENNINGTON	PHONE:		 OUTSIDE PLANT CONSTRUCTION  MCImetro ACCESS TRANSMISSION SERVICES,LLC		<table><tr><th colspan="5">CONSTRUCTION DETAIL DRAWINGS</th></tr><tr><th colspan="5">NA FARRAGUT_FH</th></tr><tr><td colspan="2">CITY: FARRAGUT</td><td colspan="2">STATE: TENNESSEE</td><td>COUNTY: KNOX</td></tr><tr><td>DRAFTER:</td><td>SCALE: NTS</td><td>SHEET: 79 OF 86</td><td colspan="2">REVISION:1</td></tr></table>				CONSTRUCTION DETAIL DRAWINGS					NA FARRAGUT_FH					CITY: FARRAGUT		STATE: TENNESSEE		COUNTY: KNOX	DRAFTER:	SCALE: NTS	SHEET: 79 OF 86	REVISION:1	
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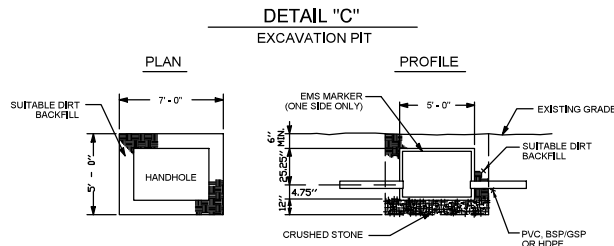
CONSTRUCTION DETAILS/TYPICALS

2.5' x 5' x 2.5' HANDHOLE DETAILS



- NOTES:**
1. VOID IN EXCAVATED AREAS TO BE BACKFILLED WITH SELECT MATERIAL.
 2. BOTTOM OF EXCAVATED PIT TO BE BACKFILLED WITH 12" OF CRUSHED STONE (.75" GRADE).
 3. SHORING WILL BE REQUIRED.
 4. ALL HANDHOLES SHALL BE PLACED AT EXISTING GRADE.

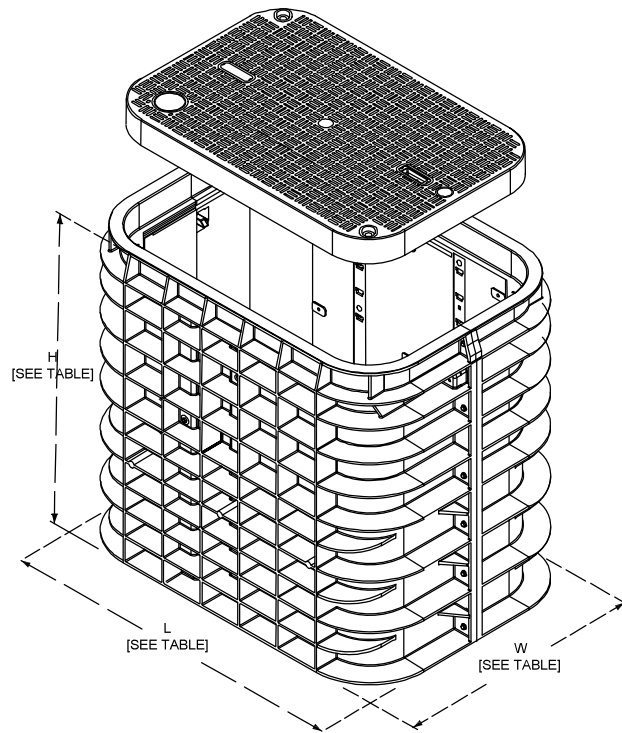
NOTE:
LINEAR DISTANCE BETWEEN LAG BOLT ANCHORS MUST BE 25".



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						CYIENT			NA FARRAGUT_FH						
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CONSTRUCTION DETAILS/TYPICALS

TYPICAL VAULT DETAIL



VAULT MODEL	L (LENGTH)	W (WIDTH)	H (HEIGHT)
BULK324V073	30 IN.	17 IN.	24 IN.
BULK424V073	36 IN.	24 IN.	24 IN.
BULK436V073	36 IN.	24 IN.	36 IN.
BULK736V073	48 IN.	30 IN.	36 IN.
BULK942V073	76 IN.	36 IN.	42 IN.

*NOTE: SEE SITE PLAN FOR LOCATION AND TYPE



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CONSTRUCTION FIRM
MANAGER:
PHONE:

PREPARED BY :
CYIENT
ENGINEER: C.PENNINGTON
PHONE:

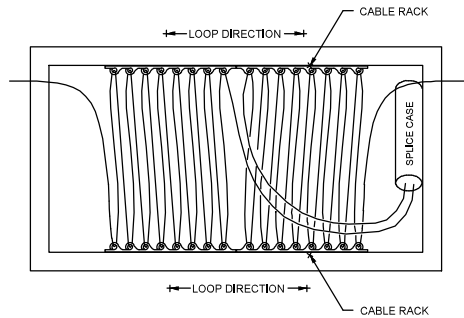


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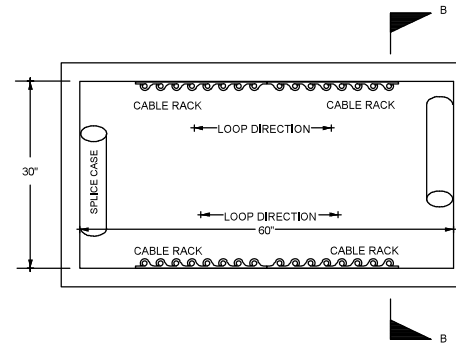
CONSTRUCTION DETAILS/TYPICALS

HANDHOLE SLACK STORAGE DETAILS

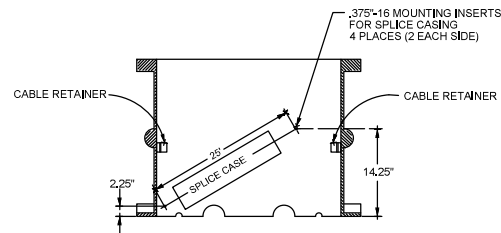
DETAIL "A"
CABLE SLACK ARRANGEMENT



DETAIL "B"
HANDHOLE LAYOUT



SECTION B-B



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PHONE:	PHONE:

PREPARED BY :	
CYIENT	

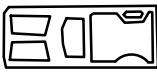
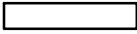
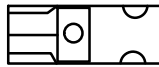
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Table 6h-2. Meaning of Symbols on Typical Application Diagrams

Symbols	Description	Symbols	Description
	Arrow board		Shadow vehical
	Arrow board support or trailer (shown facing down)		Sign (shown facing left)
	Changeable message sign or trailer		Surveyor
	Channelizing device		Temporary barrier
	Crash cushion		Temporary barrier with warning light
	Direction of temporary traffic detour		Temporary barrier with warning light
	Direction of traffic		Truck-mounted attenuator
	Flagger		Type barricade
	High-level warning device (free tree)		Warning light
	Langitudinal channeelizing device		Work space
	Luminaire		Work vehicle
	Pavement marking that should be removed for a long-term project		

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				PHONE:	PHONE:						
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DRAFTER:		SCALE: NTS		SHEET: 83 OF 86		REVISION: 1					

Figure 6H-11. Lane Closure on a Two-Lane Road with Low Traffic Volumes (TA-11)

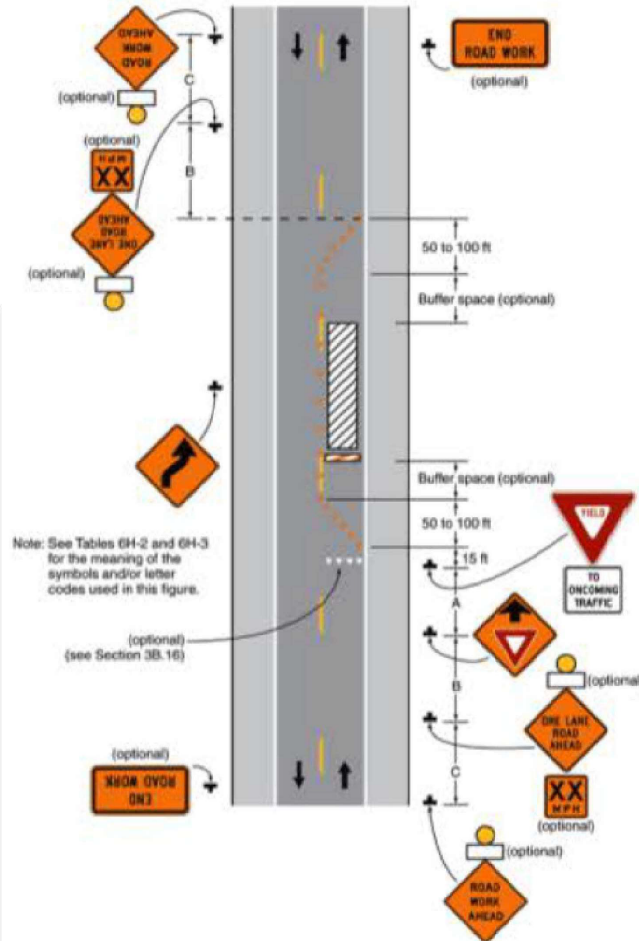
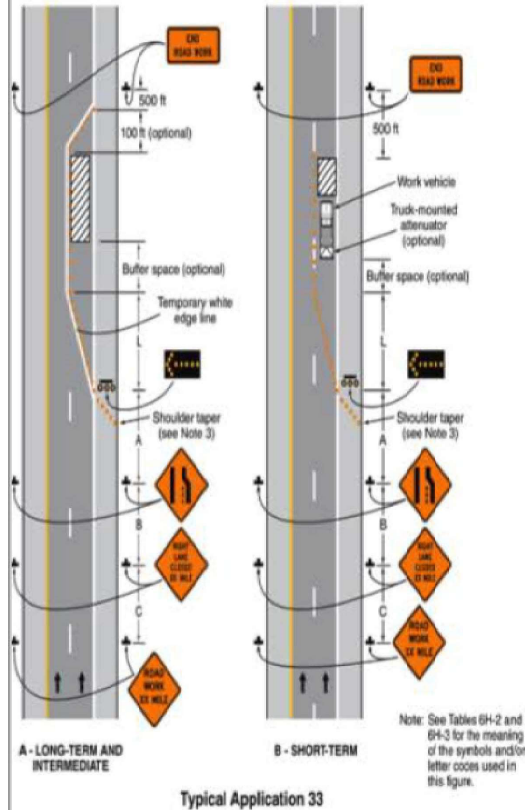
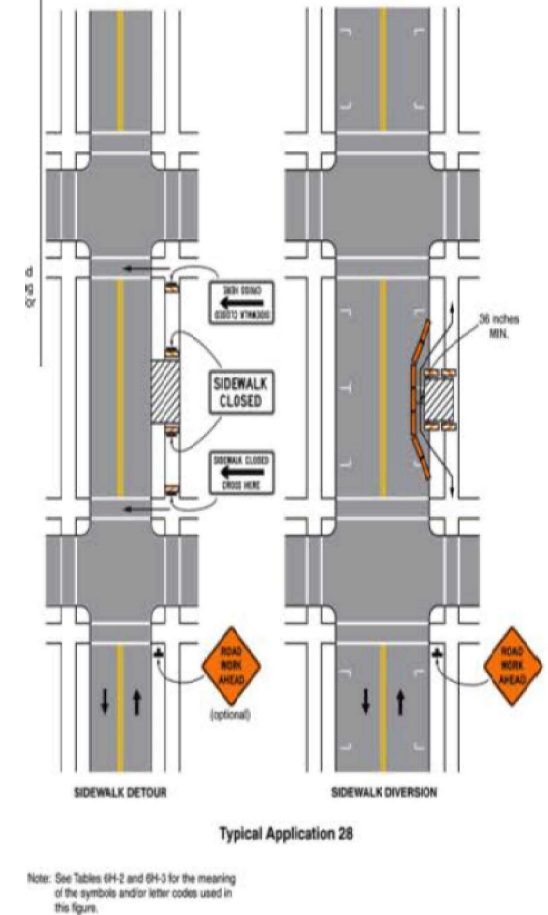


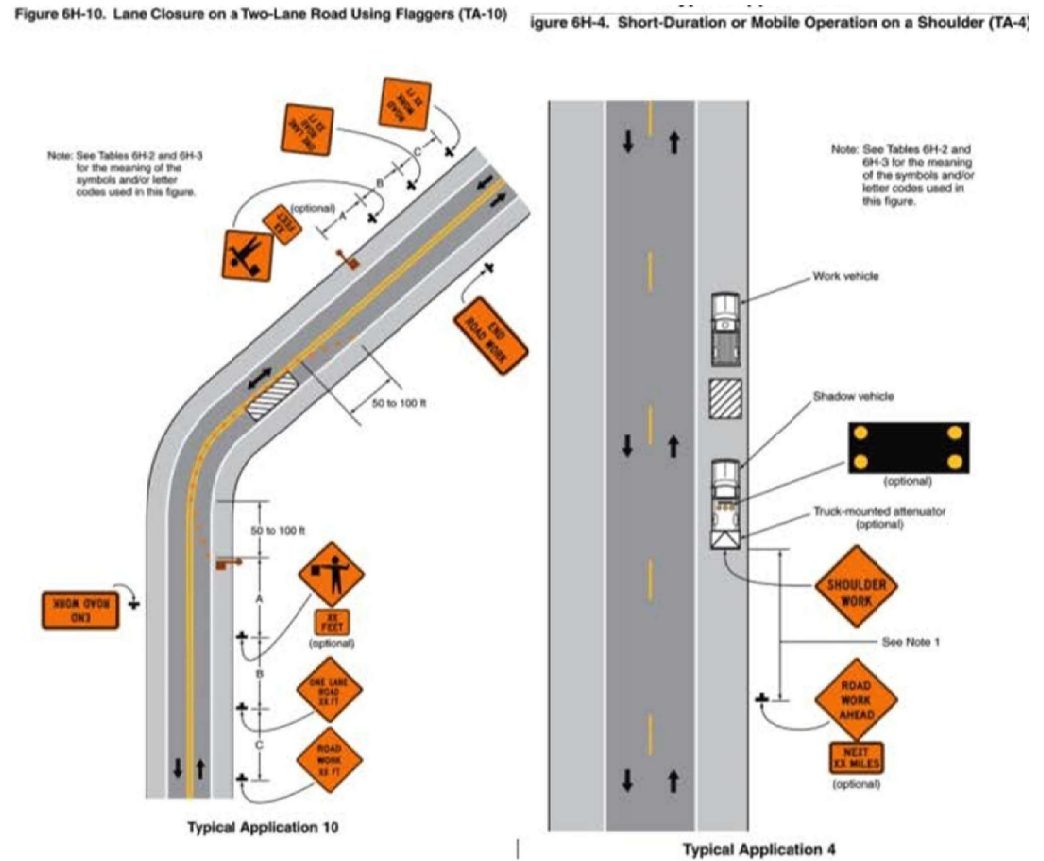
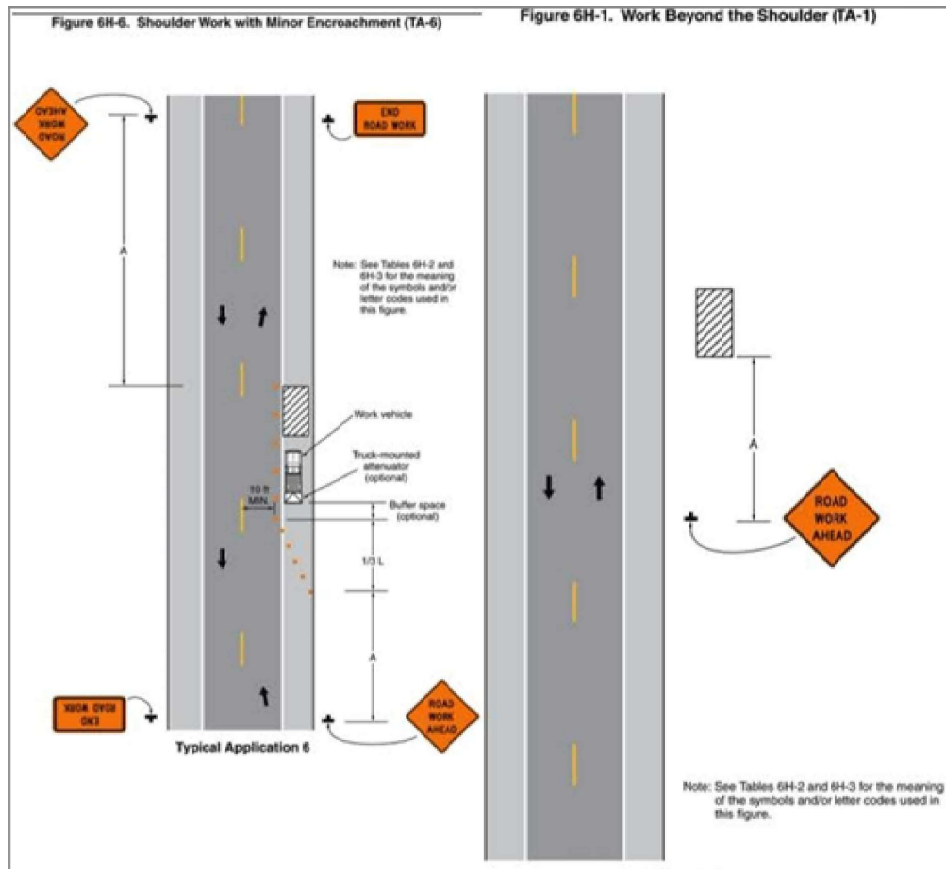
Figure 6H-33. Stationary Lane Closure on a Divided Highway (TA-33)



Typical Application 11
Figure 6H-28. Sidewalk Detour or Diversion (TA-28)



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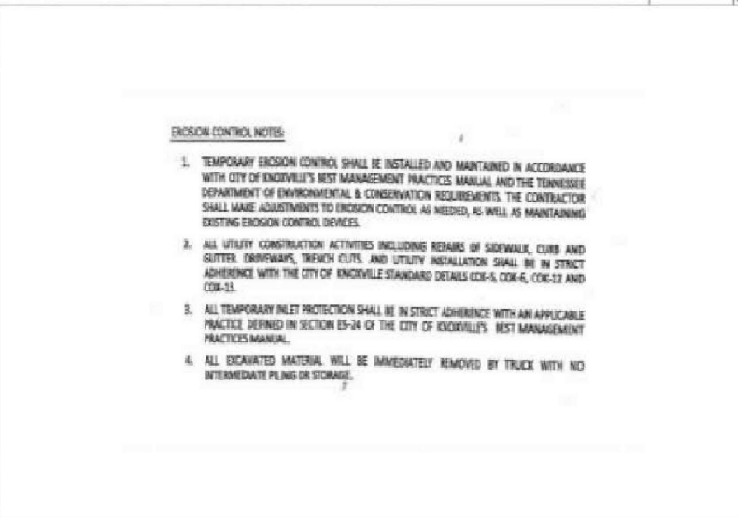
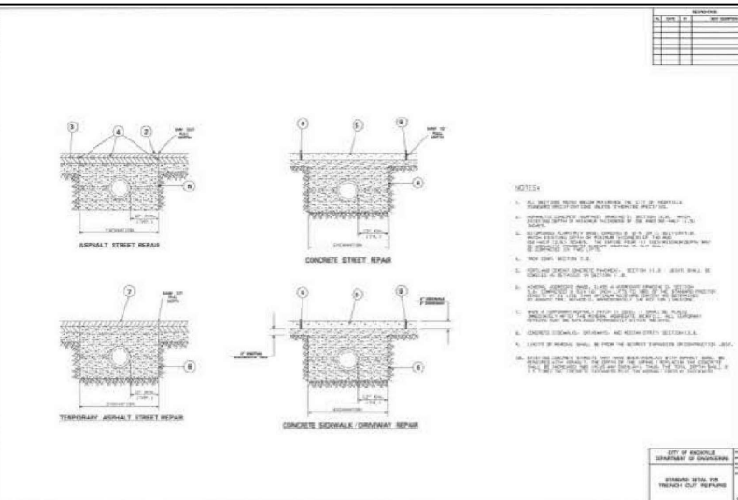
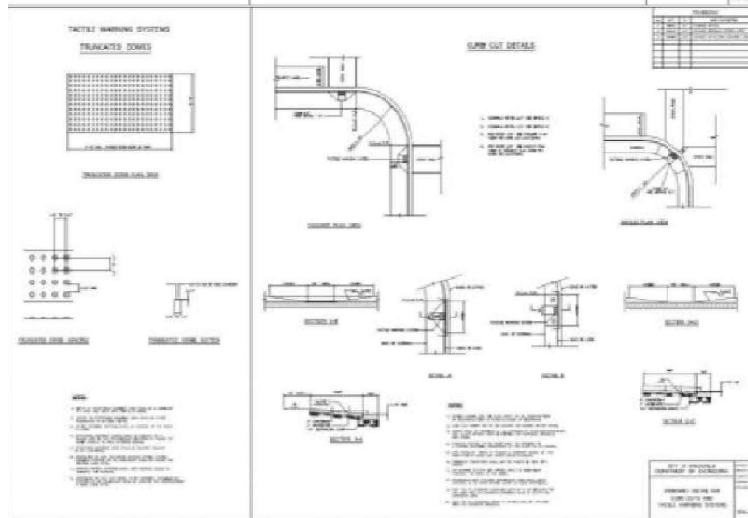
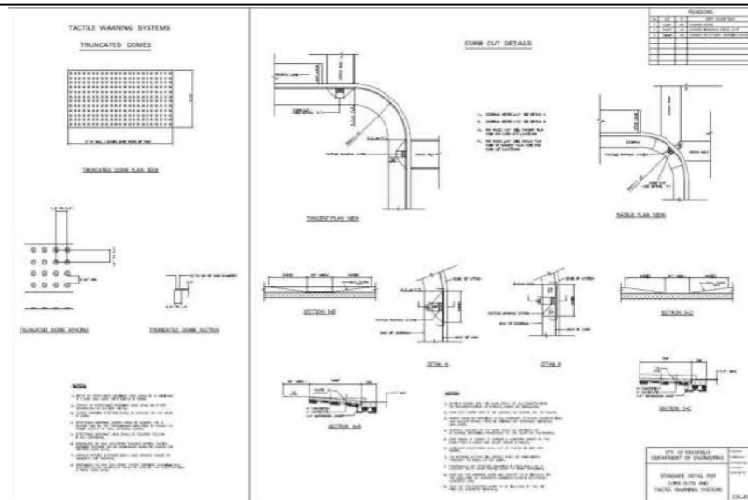
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PHONE:		PHONE:	



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PHONE:		PHONE:	



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ANSI/SCTE Tier Selection Guide

Load Ratings – Steadfast Reliability

Many Hubbell underground enclosures are designed to meet or exceed the load requirements set forth in the American National Standards Institute's ANSI/SCTE 77 2017 "Specification for Underground Enclosure Integrity." ANSI tier designations represent the minimum allowable load requirements in the industry to ensure underground enclosures are always secure and reliable.

The ANSI application tier number relates to a nominal design load multiplied by 1,000 pounds. For example, Tier 8 is 8 x 1,000 pounds, or 8,000 lbs. All ANSI tier loadings will have a corresponding test load, which is 50% greater than the design load. The maximum deflection at the indicated design load shall be a half-inch for vertical tests and a quarter-inch per foot of length for lateral tests.

Application Tiers & Static Vertical Wheel Load Ratings per ANSI/SCTE 77 2017 "Specification for Underground Enclosure Integrity"

NOTE — Quazite® products are not intended for use in deliberate traffic areas.

Application Tiers	Loading Requirements				UL Listed to meet ANSI 77 Requirements
Light Duty Pedestrian Traffic Only	Vertical	Test Load	13.3kN	3,000 lbs.	
Tier 5 Sidewalk applications with a safety factor for occasional non-deliberate vehicular traffic	Vertical	Design Load	22.2 kN	5,000 lbs.	PC 13"x24" or PC 17"x30" style enclosure and cover assemblies with standard covers (CA) and standard covers w/o bolts (WA) .
	Lateral	Design Load	28.7 kPa	600 lbs./sq. ft.	
TIER 8 Sidewalk applications with a safety factor for non-deliberate vehicular traffic	Vertical	Test Load	33.3 kN	7,500 lbs.	PG and PT style enclosure and cover assemblies up to 30"x 48" and PC style in sizes 6"x 8", 8"x18", 11"x18" and 12"x12" with standard covers (CA) and standard covers w/o bolts (WA) .
	Lateral	Design Load	43.1 kPa	900 lbs./sq. ft.	
TIER 15 Driveway, parking lot, and off-roadway applications subject to occasional non-deliberate heavy vehicular traffic	Vertical	Design Load	35.6 kN	8000 lbs.	PG, PT and PC style enclosure and cover assemblies up to 30"x48" with heavy duty covers (HA) .
	Lateral	Design Load	53.4 kN	12,000 lbs.	
TIER 22 Driveway, parking lot, and off-roadway applications subject to occasional non-deliberate heavy vehicular traffic	Vertical	Design Load	28.7 kPa	600 lbs./sq. ft.	PG, PD, PG and PT style enclosure and cover assemblies up to 30"x 48" with extra heavy duty covers (HH) .
	Lateral	Design Load	43.1 kPa	900 lbs./sq. ft.	
	Vertical	Design Load	66.7 kN	15,000 lbs.	
	Lateral	Design Load	100.1 kN	22,500 lbs.	
	Vertical	Design Load	38.3 kPa	800 lbs./sq. ft.	
	Lateral	Design Load	57.5 kPa	1,200 lbs./sq. ft.	
	Vertical	Design Load	100.1 kN	22,500 lbs.	
	Lateral	Design Load	150.1 kN	33,750 lbs.	
	Vertical	Design Load	38.3 kPa	800 lbs./sq. ft.	
	Lateral	Design Load	57.5 kPa	1,200 lbs./sq. ft.	

AASHTO H-20

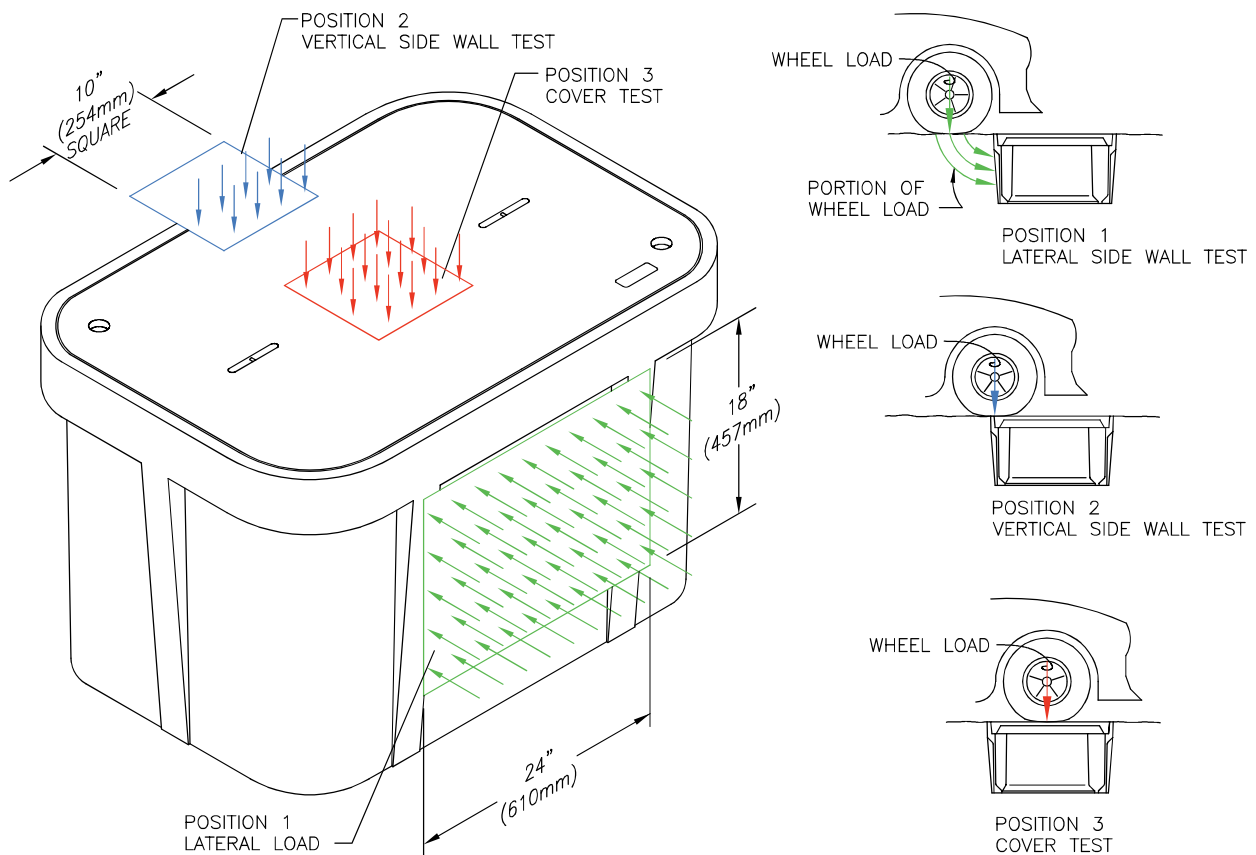
Deliberate vehicular traffic applications ONLY.

Certified precast concrete, cast iron or other AASHTO recognized materials.

Three-Position Testing – Proven Endurance.

A key requirement outlined in ANSI/SCTE 77 2017 is three-position testing for enclosures. Three-position testing is a method to verify product performance, and is accomplished by test loading at three pre-designated critical points. Quazite products have been tested at each of the three positions and all have met or surpassed requirements.

- The latest copy of the standard may be purchased from ANSI. It may also be viewed in PDF form on SCTE's website at https://www.scte.org/SCTEDocs/Standards/ANSI_SCTE%2077%202017.pdf



REPORT TO THE FARRAGUT MUNICIPAL PLANNING COMMISSION

PREPARED BY: Mark Shipley, Community Development Director

SUBJECT: Discussion and public hearing on a conceptual master plan for the redevelopment of the old Kroger property – Farragut Town Center at Biddle Farms, Parcels 3.02, 3.03, a portion of 3.18, and a portion of 3.19, Tax Map 143, 45 Acres (SITE Incorporated, Applicant)

INTRODUCTION AND BACKGROUND: This agenda item was most recently reviewed by the Planning Commission on May 21, 2020. As the applicant continues to move forward with their project they are asking for input along the way. Since the May meeting, the applicant has been working on the master concept plan. A version of the plan which included some angled parking along a portion of Brooklawn Street and other layout updates was reviewed at the June 30, 2020 staff/developer meeting.

Staff provided the following discussion items for the June 30 meeting:

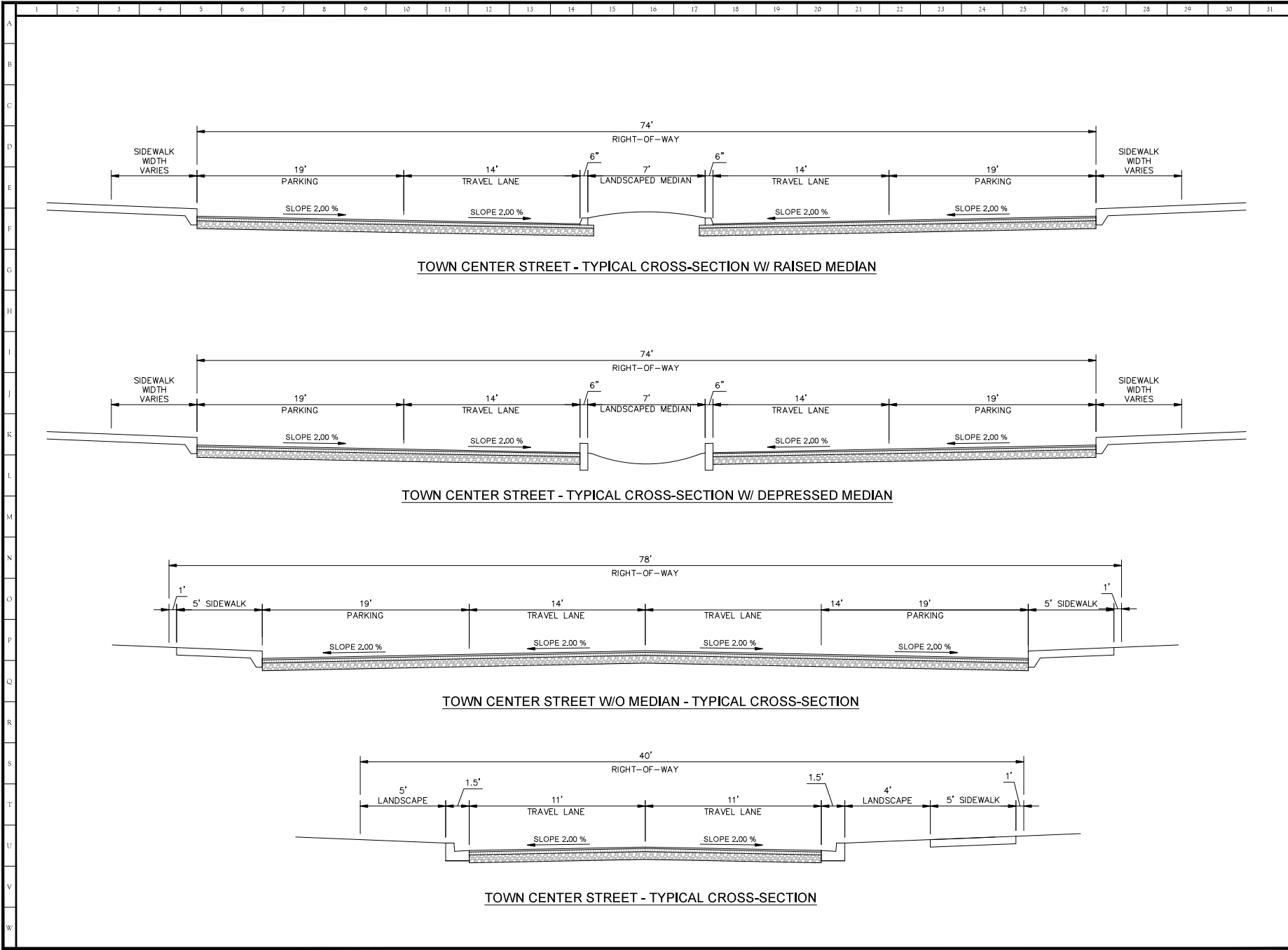
1. The action that could be taken by the Planning Commission in July would be the general acceptance of the major components of the project and their general placement with the understanding that modifications may occur as more detailed analysis is completed.
2. Consider larger landscaped islands with raised crosswalks for the tier of parking along the eastern portion of the property abutting the park area. This is a long section of parking.
3. Town Engineer needs to review changes affecting Brooklawn.
4. The central gathering space area is still fragmented and may be somewhat limited as a venue for major events. Staff would still like to see a more uninterrupted gathering space at the transect between residential and non-residential and tying this to the linear park area to the east.
5. What is the iconic element to be used as one enters the Town Center portion of the project?
6. Please identify planned streetscape and outdoor open space areas, especially within the Town Center portion of the project.
7. Is a traditional clubhouse and pool that is usually associated with multi-family developments needed if the multi-family portion of this project is tied into larger gathering spaces in the remainder of the development? These public spaces could help serve as amenities for both the multi-family residents and the larger community.
8. Do you have other site information that will be ready for the Planning Commission to see? For example, floodplain information, wetlands, new building elevations, new street cross sections, etc.
9. The commercial portion of this project is within the C-1 MUTC. All but two apartment buildings are within the C-1 MUTC. The other two buildings are within the Medium Density Residential land use. An extension of the MUTC on the future land use map may be needed to include the entire project.
10. Some amendments may be needed with regards to the C-1 MUTC and the Parking and Loading sections of the Zoning Ordinance. Some examples include:
 - a) Height and density for residential buildings.
 - b) Placement of residential (not restricted to upper floors).
 - c) Clarify side and rear setbacks where buildings are not connected or to be connected.
 - d) Update LID provisions to match more recent language.

- e) Update signage provisions to address existing projects vs. new developments.
- f) Consider developing a Town Center street cross section with recommended rights of ways based on the parking configuration and other design elements that may be specific to a Town Center street section.
- g) On a street identified as a Town Center street, the parking is not subject to a setback requirement only the dimensions of the parking space, aisle widths, etc., would apply.
- h) Clarify how the parking will be maintained and who is responsible for liability related to the various elements of a Town Center street.
- i) Change prohibition of backing into a public street for non-local streets or classify any Town Center street or street section as a local street.

The applicant is working on the development of more detailed plans. A flood study has been completed and the applicant is assessing the development potential of the property in relation to the Town's adopted requirements. With the understanding the Conceptual Site Plan could change as more detailed analysis is completed, the applicant is requesting the Planning Commission make a formal recommendation on the general layout and key components of the development. An additional objective would be to obtain feedback on amendments that will be needed to different land use related plans and ordinances that would apply to this project. These were discussed in very general terms at the June 30 staff/developer meeting.

In response to some items noted during the staff/developer meeting, the applicant has made some updates to the Conceptual Site Plan. They have provided some options for a Town Center Street cross section and have identified streets within the development that they would like to be publicly owned and maintained. Some building elevation images are also included. Staff has not yet reviewed these documents but will do so prior to the meeting and provide some discussion points.

In terms of the Future Land Use Map and Zoning Map, staff has included in the packet the Conceptual Site Plan reviewed during the staff/developer meeting and generally where components of the project would be situated in relation to each map.



CONCEPTUAL

Proposed Town Center Street Cross Sections

Farragut Town Center at Biddle Farms

Kingston Pike, Brooklawn Street, & Concord Road

Civil District No. 6 of Knox County, Tennessee

Town of Farragut

REVISIONS	DATE	COMMENTS

ORIGINAL ISSUE: 07/05/2020

SITE PROJECT #: 1904

FILE: 189-025

XS











REPORT TO THE FARRAGUT MUNICIPAL PLANNING COMMISSION

PREPARED BY: Mark Shipley, Community Development Director

SUBJECT: Discussion and public hearing on a request for a variance from the number of access points permitted on a local street as provided for in the Driveways and Other Accessways Ordinance in relation to the property at 11740 Weathervane Drive (Jon-David and Allison Deeson, Applicant)

INTRODUCTION AND BACKGROUND: This agenda item involves a request for a variance from the number of access points permitted on a local street in accordance with the Farragut Code of Ordinances, Chapter 22, Article 5., Driveways and Other Access Ways ordinance. The applicant's lot is located at the corner of South Monticello Drive and Weathervane Drive. The lot fronts on South Monticello Drive for approximately 154 feet and Weathervane Drive for approximately 204 feet. Based on the applicant's total frontage, they would be permitted two access points.

DISCUSSION: The house on the property is undergoing significant renovations which are nearly complete. The garage (pre and post renovation) faces Weathervane Drive and has a roughly 60- foot deep driveway from curb to face of garage. As part of the renovation process, the applicant would like to have a circular drive on Monticello which would result in two access points along that frontage. Included with this agenda item are the applicant's reasons for the circular drive and other information to provide context for the applicant's position.

The idea for a circular drive was discussed in May of 2018 with staff (Mark Shipley) before plans were submitted (see copy of emails included in packet). Staff noted, at that time, that they would not be able to have two access points as proposed. Staff asked if they could add a turn-around area so that some off-street parking could be provided. Staff also provided the applicant with the process for appeal.

When the building plans were submitted for review, the circular drive with the two access points was included as a site plan sheet in the overall submittal and approved, in error, with the building plans in January of 2019. When the circular drive was subsequently graded a few weeks ago, codes staff asked that further activity associated with the driveway be suspended until this site related matter could be heard on appeal by the Planning Commission and Board of Mayor and Aldermen.

The applicant has included a section in their submittal which describes the property and, from the applicant's perspective, how the property is unique with regards to the justification for a circular drive. The applicant also takes the position that the ordinance provides for a circular drive where certain criteria can be satisfied and, in effect, becomes an equivalent alternative to the one access point that may otherwise be permitted along the same street without regard to the more-strict criteria associated with a circular drive.

RECOMMENDATION: Staff would note that if this was the intent of the circular drive criteria, the text of the ordinance should be amended accordingly to make this clear. The ordinance currently states that

“circular drives shall be considered as two driveways.” Should the Commission recommend approval of the variance in this case, staff would recommend that it also include a recommendation that the text of the ordinance be amended in relation to circular drives being considered as two driveways.

In this manner, those that may desire the same access allowance as the applicant will be permitted the same opportunity.

Homeowner Variance Request

July 16 Planning Commission

Summary of Request and Attachments

Date submitted:

June 15 to Mark Shipley, Town of Farragut

Submitted by:

Jon-David and Allison Deeson, property owners

Property:

11740 Weathervane Drive

Homeowner Variance Request for July 16 Planning Commission

Date submitted: June 15 to Mark Shipley, Town of Farragut

Submitted by: Jon-David and Allison Deeson, property owners

Property: 11740 Weathervane Drive

Variance Request:

Complete a circular drive on the Monticello Drive road frontage at the 11740 Weathervane Drive property that was stopped during construction by Town of Farragut officials in May 2020

Purpose and Use of Circular Drive:

- To **improve the efficiency and safety** of pedestrians, visitors, and vehicles entering, leaving, or crossing the Weathervane Drive and Monticello Drive roadways in the Village Green subdivision
- To provide **more efficient and safe vehicle parking** at property to keep vehicles off the street
- To **improve on-site circulation of vehicles** (ingress/egress on both roads to/from property)
- To **improve the overall appearance of the property** by preserving trees, enhancing landscape, and integrating the best use of driveway space to create the safest and best design and curb appeal solution for the neighborhood
- To **improve the efficiency of access from vehicles to the home's two (2) original entries** (i.e. Front Door and Friends Door Entry) on Monticello Drive frontage

Construction Project Background, Property History and Timeline:

See attached Site Plan, Site Plan with Measurements, and Landscape Design Plan

- Property is nearing completion of a **12+ month renovation project approved by the Town of Farragut and Village Green Homeowner's Association in 2019**
 - Project is a "gutted, whole-house" remodel with new space added
 - Project includes 100% new landscaping, drainage and irrigation systems, and driveways, which are important safety and design features of the site and landscaping plan to improve the property (originally developed in 1980)
 - Homeowners purchased property in August 2017 from original homeowner family's (James and Mary Jones) son, T. Scott Jones
 - Homeowner spent over one (1) year working with architect, contractor, Town of Farragut, and Village Green subdivision to design a renovation project that was the best use of the property to achieve mutually beneficial goals of the town, neighborhood, and homeowner
 - Homeowners have been Farragut residents since 2003 and renovated two (2) prior homes in Woodchase II (805 West Woodchase Road) and Andover Place (12244 West Ashton Court)
- After 12-months of construction and approximately six weeks before project completion, the **Town of Farragut stopped construction of a circular drive (in late May 2020) that was on the site plan of the construction documents reviewed and approved by the Town of Farragut in March 2019**
 - Town of Farragut stated in May 2020 that the circular drive approval had been an oversight during the March 2019 construction document review approval
 - For the homeowner, the approved site plan in the construction documents has meant several renovation and construction decisions being made for months prior to stoppage based on the circular drive plans including a landscape design plan, landscape demolition including tree removal,

front yard, circular drive, and entry pathway excavating and approximately 48 tons of gravel poured in the circular drive area, and new irrigation and drainage pipe system installation – all based on circular drive plans

- Upon learning the Town of Farragut stopped construction of the circular drive, homeowner contacted Town of Farragut officials to work to find a solution since 1- it had previously been approved, 2- it still provided a safer and more efficient ingress/egress of vehicles and parking on the property, and 3- appeared to the homeowner to be permitted based on an existing circular drive provision in the code of ordinances outlined further below
- Homeowner spoke with David Smoak first due to the concern and frustrations of being told to stop construction on a prior approved site plan, and to seek guidance on the best resolution moving forward. Mr. Smoak was very helpful and arranged for homeowner to meet Mark Shipley and Darryl Smith onsite to review the circular drive work to-date and plans moving forward on Friday, May 29. Prior to this meeting, homeowner contacted the project architect and contractor to re-measure and paint markings onsite of all property setbacks, driveway measurements, and distance to the intersection for the circular drive to highlight compliance with codes. During the onsite meeting, homeowner was encouraged there might be an immediate resolution since neither Town of Farragut official observed an onsite problem with the circular drive as proposed meeting fundamental “efficiency and safety of a street” standards associated with ordinance policy. Unfortunately, Mr. Shipley reviewed the ordinance language upon returning to his office that same day, and emailed the homeowner he was unable to change the approval stoppage of the circular drive. He stated the variance request with the Planning Commission would be required.
- Since the circular drive stoppage in May, homeowner has been unable to complete exterior work on the home. While the Town of Farragut is working to assist with a temporary certificate of occupancy, the delay has created a project timing issue that is now requiring the homeowner to seek temporary housing since their Andover Place home sold “day one” of MLS listing, and requires them to move out in early July before the updated construction timeline will be completed
- Homeowner’s understanding is the Town of Farragut officials have remained neutral in their assessment of the circular drive; that is, not objecting to its usefulness on this property for purposes outlined herein, but unable to approve it officially apart from the Planning Commission variance process
- All events described above have added substantial stress, time, and costs to the homeowner, but we remain committed to do the right thing and work with the Town of Farragut to resolve this problem without compromising the process or code of ordinances standards and purposes

Property Description and Existing Conditions:

See attached photos of property frontages and existing conditions, KGIS Property Map and Details

- Corner lot, which fronts on Weathervane Drive and Monticello Drive
- No stop sign on Weathervane Drive, which includes high volume traffic from E. Fox Den leading to a right turn onto the property’s Monticello Drive frontage
- Two (2) front entries on Monticello Drive bringing vehicle parking for the property on the Monticello Drive street frontage

- Mature trees on corner of Weathervane and Monticello Drive poses concerns regarding line of sight restrictions as vehicles turn on Monticello Drive without a stop sign, if vehicles are parked on the street
- A long, downhill traffic pattern from E. Fox Den turn onto Weathervane Drive poses concerns about vehicle parking on street frontages of Weathervane Drive and Monticello Drive
- A garage-side driveway alone does not provide adequate parking off the street and poses a hazardous egress from the property since cars would be backing out onto Weathervane Drive traffic patterns with no approaching stop sign at the intersection of Weathervane and Monticello Drive
- Multiple alternative driveway options were considered but none accomplished the current circular drive site plan goals of safety, efficiency, and property aesthetics (and use of concrete)

Code of Ordinances – Supporting Information:

See attached Article 5. – Driveways and Other Access Ways with highlights where homeowner has looked for guidance and compliance with Code of Ordinances policy purposes

The following are existing Code of Ordinances provisions from Chapter 22 – Streets, Sidewalks and Other Public Places for the Town of Farragut, Tennessee that support the unique conditions of this corner lot when evaluated in-total (which is required by ordinances) and by individual street frontage (i.e. Monticello and Weathervane Drive) for the property. Homeowner contends the individual street frontage evaluation of both streets of the corner lot is important to ensure the best solution for all parties.

1. Article 5. Section 22-150. (2)a. *Number of Access Points* defines circular drives as two (2) driveways, **but provides circular drive provisions that permit the circular drive to be a safe alternative for certain properties otherwise restricted to one (1) access point**
 - a. Monticello Drive Frontage of this property: 154+ feet
 - b. Article 5. Street classification is: Local Streets*, 0-200 feet, 1 access point
 - c. Asterisk (*) in ordinance notates **circular drives are permitted on properties with less than 200 feet of road frontage provided the following criteria are met:**
 - i. The property is zoned residential and the street on which the property fronts is located within a residential subdivision;
 - ii. The maximum lot coverage in the front yard (area in front of the house): 35 percent;
 - iii. The maximum driveway width: 15 feet;
 - iv. The minimum distance between the driveways: 60 feet; and
 - v. The setback from the side property lines: A total on two sides of at least 40 feet, but not less than ten feet on any one side.
 - d. **Monticello Drive road frontage of this property and the proposed circular drive meet all five (5) of these criteria**
2. The proposed circular drive meets the Article 5. Section 22-150. (1)a.1. *Distance from Intersection* minimum requirement of 50 feet. The proposed circular drive is 77 feet from the intersection of Monticello and Weathervane Drive
3. The proposed non-circular drive street (i.e. Weathervane Drive) of this property provides additional support from Article 5. Section 22-150 that make the non-circular drive street of a corner lot a factor of consideration when the circular drive provision cited in 1. above is applied to a corner lot
 - a. Weathervane Drive Frontage of this property: 204+ feet

- b. Article 5. Street classification is: Local Streets, 201-800 feet, 2 access points
 - c. Weathervane Drive frontage of this property will only have one (1) access point, but enough road frontage length to support two (2) access points
4. In total, this property's street frontage facts are:
- a. Monticello and Weathervane Drives – total frontage of both streets as measured by ordinance for this property: 392 feet
 - b. Article 5. Street classification is: Local Streets, 201-800 feet, 2 access points
 - c. The above two facts (a. and b.) limit a further review of facts by individual street frontage that support the unique conditions of this corner lot property supporting a circular drive for the betterment of ordinance policy purposes
 - d. Street Frontage 1: Monticello Drive frontage of property (proposed circular drive): is less than 200 feet and meets the provisions to safely permit a circular drive by ordinance including distance from intersection requirements
 - i. **As currently permitted by ordinance, a two-driveway access point circular drive (by definition) is actually counted like (or as) a one-drive access point such that a property does not exceed the access point limits based on street frontage distance and classification.** For 11740 Weathervane Drive, the circular drive can be counted as one (1) access point because it complies with the above circular drive provisions. This is a helpful and important approach to a resolution since it 1- uses current ordinance language provisions for a circular drive already in place, and 2- preserves the total of access points on this property to two (2) when the circular drive is counted as one (1) with this provision and then added to the garage drive on Weathervane.
 - e. Street Frontage 2: Weathervane Drive frontage of property (proposed non-circular drive): is both greater than 200 feet and limits its access point to one (1)
 - i. The distance of the non-circular drive supports more access points than it utilizes (i.e. two, but only has one access point). It provides another unique condition of this property that establishes an additional fact that would be rare for other neighborhood corner lots. That is, the non-circular drive street frontage being greater than 200 feet.

Thus, not all corner lots will meet the Monticello or Weathervane Drive conditions on this property. For example, none of the three (3) neighboring lots at this intersection meet both of the independent street evaluations cited herein. In addition, other unique conditions of this property related to traffic patterns and safety advantages of additional off-street parking and ingress/egress make the circular drive at 11740 Weathervane Drive in the best interest of the Town of Farragut, Village Green, and the property homeowner and its visitors to the property.

Thank you for the time and consideration of this request and your review of all documents submitted in support of the proposed circular drive. The purpose of this summary is to provide a comprehensive perspective based on a set of verifiable facts of how the proposed circular drive works to meet the purposes of existing ordinances and preserves a high standard of facts to this end the Planning Commission can rely upon for any subsequent similar request.

Attachments

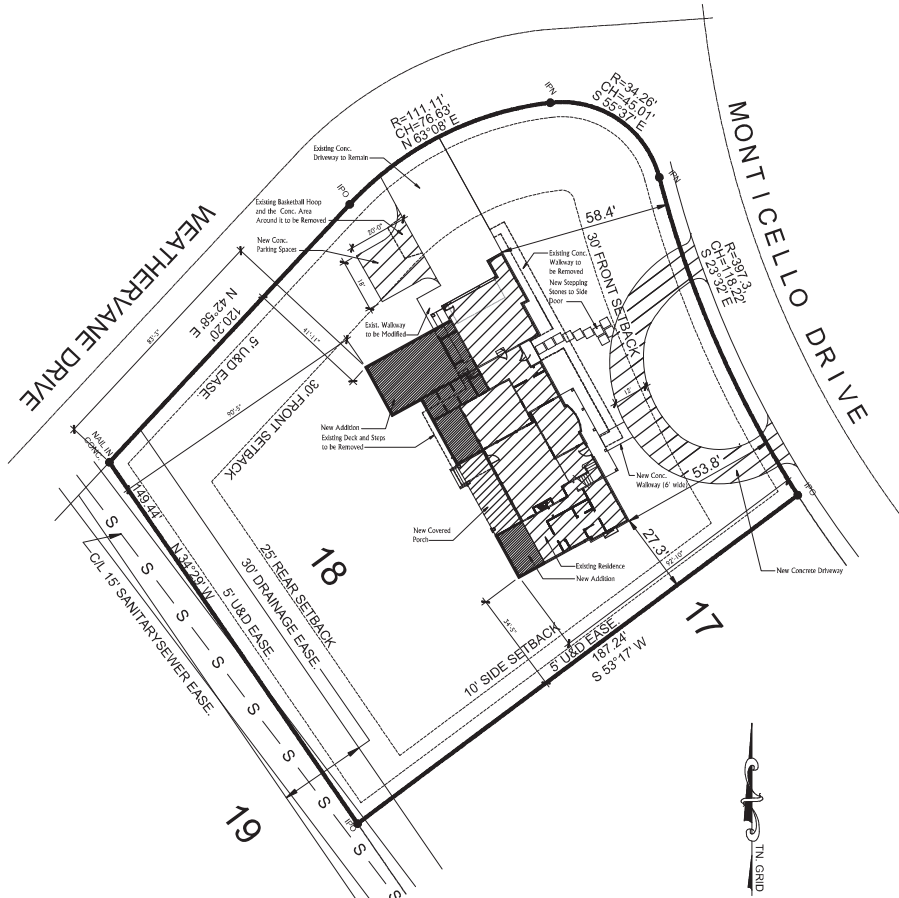
Site Plan
(approved March 2019)

ABBREVIATIONS:

IE	AND	LD.	INSIDE DIAMETER
AT	Ø	INC.	INCORPORATED
A.B.	ANCHOR BOLT	INGUL.	INGULATED
ACCU.	ACOUSTICAL	INT.	INTERIOR
ADJ.	ADJUSTABLE	IT.	JOINT
A.F.F.	ABOVE FINISHED FLOOR	ITC.	ITCHEN
AGGR.	AGGREGATE	L	LEFT OR LENGTH
APPROX.	APPROXIMATE	LAM.	LAMINATE
ARCH.	ARCHITECT	LAV.	LAVATORY
AUX.	AUXILIARY	LT.	LIGHT
BS.	BOARD	MAS.	MASONRY
BLDG.	BUILDING	MAX.	MAXIMUM
BLDG.	BLOCKING	M.C.	MECHANICAL CONTRACTOR
BN.	BULLNOSE	M.D.F.	MAIN DISTRIBUTION PANEL
BOT.	BOTTOM	MECH.	MECHANICAL
BSMT.	BASEMENT	MIN.	MINIMUM
CAB.	CABINET	MIS.	MISCELLANEOUS
CAN.	CANISTER	M.O.	MASONRY OPENING
CER.	CERAMIC	MTD.	MOUNTED
CL.	CENTERLINE	MTL.	METAL
CLG.	CEILING	MFR.	MANUFACTURER
CLUG.	CAULKING	MUL.	MULLION
CLO.	CLOSET	N.	NORTH
C.D.	CASED OPENING	N.C.	NOT IN CONTRACT
COL.	COLUMN	NO.	NUMBER
CONC.	CONCRETE	NOM.	NOMINAL
CONC.BLK.	CONCRETE BLOCK	N.T.S.	NOT TO SCALE
CONTR.	CONSTRUCTION	O.C.	ON CENTER
CONT.	CONTINUOUS	O.D.	OUTSIDE DIAMETER
CONTR.	CONTRACTOR	OPNG.	OPENING
CORR.	CORRIDOR	P.	PLASTIC
CP.	CARPET	PART.	PARTITION
CPT.	CARPET TILE	PLAS.	PLASTER
C.T.	CERAMIC TILE	PBL.	PANEL
CR.	CHAIR RAIL	PL.	PLATE
CTR.	CENTER	PLAM.	PLASTIC LAMINATE
CV.	COVE	PLYWD.	PLYWOOD
D.	DEPTH	PL.	PL
DBL.	DOUBLE	P.T.	PRESSURE TREATED
DEPT.	DEPARTMENT	PR.	PRINTER
DIA.	DIAMETER	PTD.	PAINTED
DIH.	DIVISION	R.	RIGHT
DIN.	DOWN	RAD.	RADIUS
D.O.	DOOR OPENING	REF.	REFRIGERATOR
DWG.	DRAWINGS	REF.	REFINISH
DWB.	DRAWER	REL.	RELOCATE
D.W.	DRYWALL	REQD.	REQUIRED
E.	EAST	RH.	ROOM
EA.	EACH	R.O.	ROUGH OPENING
E.F.	EXHAUST FAN	S.	SOUTH
E.C.	ELECTRICAL CONTRACTOR	S.C.	SOLID CORE
E.L.	EXPANSION JOINT	SCHED.	SCHEDULE
ELEV.	ELEVATION	SECT.	SECTION
ELC.	ELECTRICAL	SH.	SEAT HEIGHT
EMER.	EMERGENCY	SHN.	SHOWN
ENCL.	ENCLOSURE	SHT.	SHEET
E.P.	ELECTRICAL PANEL	SHT.MTL.	SHEET METAL
EQ.	EQUAL	SHR.	SHOWER
EQUR.	EQUIPMENT	SHL.	SHOWER
EXP.	EXPANSION	SPEC.	SPECIFICATION
EXT.	EXTERIOR	SQ.	SQUARE
EXIST.	EXISTING	SQFT.	SQUARE FEET
F.D.	FLOOR DRAIN	S.S.	STAINLESS STEEL
FND.	FOUNDATION	STD.	STAINED
FIN.	FINISH	STOR.	STORAGE
FL.	FLOOR	STRUC.	STRUCTURAL
FLGR.	FLOORGRABENT	SYN.	SYMMETRICAL
F.O.C.	FACE OF CONCRETE	T.	THERMOSTAT
F.O.F.	FACE OF FINISH	TWG.	TONGUE & GROOVE
F.O.S.	FACE OF STUDS	T.B.	TOWEL BAR
F.S.	FULL SIZE	TEL.	TELEPHONE
FT.	FOOT OR FEET	T.O.F.	TOP OF FOOTING
FTG.	FOOTING	T.V.	TELEVISION
FURN.	FURNING	TYP.	TYPICAL
FUT.	FUTURE	U.N.O.	UNLESS NOTED OTHERWISE
GA.	GAUGE	V.	VINYL
G.C.	GENERAL CONTRACTOR	VAR.	VARIABLE
GEN.	GENERAL	V.T.R.	VENT THRU ROOF
G.I.	GALVANIZED IRON	VERT.	VERTICAL
GL.	GLASS	W.	WEST
G.W.B.	GYP(SUM) WALL BOARD	W.	WITH
GYP.	GYP(SUM)	WC.	WATER CLOSET
GYP.L.	GYP(SUM) LATH	W.HTD.	WALL MOUNTED
GRD.	GROUND	WD.	WOOD
H.	HEIGHT	WH.	WATER HEATER
H.B.	HOSE BIB	WDM.	WINDOW
H.C.	HOLLOW CORE	W.D.	WITHOUT
H.M.	HOLLOW METAL	WP.	WATER PROOF
HWR.	HARDWARE	WCT.	WAINSCOT
H.M.F.	HOLLOW METAL FRAME	WT.	WEIGHT
HORIZ.	HORIZONTAL	W.	WIDTH

GENERAL LAYOUT AND GRADING NOTES:

1. BASE INFORMATION IS TAKEN FROM THE SURVEY PREPARED BY STANLEY HINDS, HINDS SURVEYING CO., DATED JULY 1, 2017, AND PROVIDED BY OWNER, THE ARCHITECT, ANY OF THEIR CONSULTANTS, AND THE OWNER SHALL NOT BE HELD RESPONSIBLE FOR THE ACCURACY AND/OR COMPLETENESS OF THIS INFORMATION. PHYSICAL FEATURES TO BE DEMOLISHED, IF ANY, HAVE BEEN OMITTED FROM THE BASE FOR CLARITY.
2. THE SITE LAYOUT SHALL BE BASED ON THE SITE PLAN AS PROVIDED. MINOR ADJUSTMENTS TO THE LAYOUT MAY BE NECESSARY IN THE FIELD TO MAINTAIN EXISTING TREES AND TO ACHIEVE THE DESIRED ALIGNMENT WITH EXISTING FEATURES TO REMAIN, IF ANY. THE CONTRACTOR SHALL CONTACT THE ARCHITECT FOR APPROVAL PRIOR TO ADJUSTMENTS.
3. THE CONTRACTOR SHALL CHECK ALL GRADES AND FINAL DIMENSIONS ON THE GROUND AND REPORT ANY DISCREPANCIES TO THE ARCHITECT IMMEDIATELY FOR A RECORD.
4. THE CONTRACTOR SHALL CONFORM TO ALL LOCAL CODES AND RECEIVE LOCAL APPROVAL WHERE NECESSARY PRIOR TO CONSTRUCTION. OWNER IS RESPONSIBLE FOR OBTAINING APPROVALS FROM LOCAL NEIGHBORHOOD AUTHORITIES, DESIGN REVIEW BOARDS OR ANY OTHER LOCAL AUTHORITY WHICH MAINTAINS JURISDICTION OVER CONSTRUCTION APPROVAL OR COMMENCEMENT.
5. THE EXACT LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION COMMENCEMENT. CARE SHALL BE TAKEN TO PROTECT ANY UTILITIES THAT ARE TO REMAIN AND ALL CONSTRUCTION SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY. ANY DAMAGE OR RELOCATION SHALL BE ACCOMPLISHED PER LOCAL STANDARD. DAMAGE RELOCATION OR REPAIR SHALL BE AT THE CONTRACTOR'S EXPENSE.
6. MINOR GRAD ON ALL NEW PAVING SHALL BE 1.0% UNLESS OTHERWISE NOTED.
7. TRANSITION BETWEEN EXISTING PAVEMENT AND PROPOSED PAVEMENTS SHALL BE SMOOTH IN BOTH VERTICAL AND HORIZONTAL ALIGNMENT. FIELD ADJUSTMENT MAY BE NECESSARY.
8. THE CONTRACTOR SHALL CUT CLEAN EDGES ON EXISTING PAVEMENT AND PROVIDE SMOOTH TRANSITION INTO PROPOSED PAVEMENT. PROPOSED CURBS SHALL MEET EXISTING CURBS TANGENT TO THE EXISTING CURBS SHOWN.
9. ALL DIMENSIONS ARE TO THE FACE OF CURB OR FACE OF STUD OF THE BUILDING UNLESS OTHERWISE NOTED.
10. CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO MAINTAIN ALL EXISTING TREES, AND ALL EXISTING TREES OUTSIDE THE GRADING LIMITS.
11. LOCATION OF UTILITY CONNECTIONS ARE FOR SCHEMATIC PURPOSES ONLY AND BASED ON INFORMATION ILLUSTRATED ON THE OWNER PROVIDED SURVEY. CONTRACTOR TO ENSURE ALL PLACEMENT & UTILITY CONNECTIONS ARE IN COMPLIANCE WITH ALL LOCAL CODES & ORDINANCES.



1 SITE LAYOUT PLAN
SCALE: 1" = 20'-0"

ZONING INFORMATION:

DISTRICT NO. 6, TOWN OF FARRAGUT, COUNTY KNOX,
LOT NO. 18, BLOCK W, UNIT 9, VILLAGE GREEN S/D
ZONE : R-2

TOTAL LOT AREA:	32,449.2 SF
EXISTING RESIDENCE FOOTPRINT:	2,768.6 SF (8.53 %)
EXISTING COVERED PORCHES:	190.9 SF (0.58 %)
EXISTING CONC. DRIVEWAY	1,312.5 SF (4.04 %)
NEW ADDITIONS :	1,027.0 SF (3.16 %)
NEW COVERED PORCH:	283.0 SF (0.87 %)
NEW DRIVEWAY & WALKWAYS:	2,206.4 SF (6.79 %)

BUILDING AREA COVERAGE:	4,269.5 SF (13.14 %)
LOT COVERAGE:	3,518.9 SF (10.84 %)
TOTAL LOT COVERAGE :	23.98 %

5' UTILITY AND DRAINAGE EASEMENT INSIDE ALL INTERIOR LOT LINE AND 10' INSIDE EXTERIOR LOT LINES AND ROAD LINES.
15' SANITARY SEWER EASEMENT, 7.5 EACH SIDE OF SEWER LINE AS INSTALLED.

DATE: January 11, 2019
FILE NAME: Deeson_a10
PROJECT NO: 2018-07

DRAWING TITLE:
Site Plan
Notes

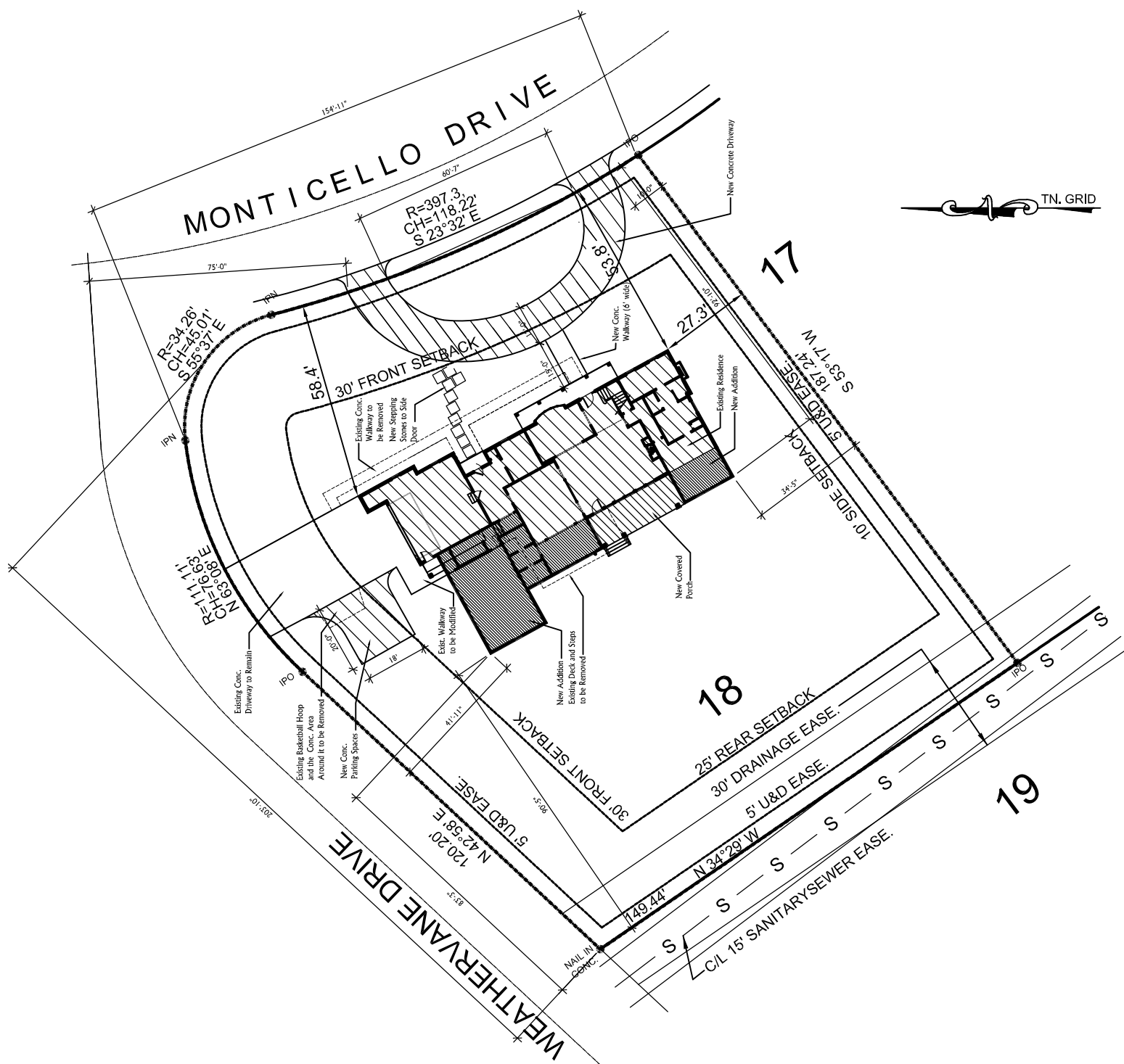
REVISIONS:

Additions and Renovations for:
Deeson Residence
11740 Weatherlane Drive
Knoxville, Tennessee

SHEET NO.

a1.0

**Site Plan with Measurements
(showing ordinance compliance)**



Landscape Design Plan
**(showing circular drive use with front entries and
overall exterior site plan)**

PLANT MATERIAL

PROTECTION

Protection of Existing Plant Materials: The Contractor shall be responsible for all unauthorized cutting or damage to existing trees, shrubs, and ground covers caused by operation of equipment, stockpiling of materials, careless labor, etc. This shall include compaction by driving or parking inside the drip-line of trees or the spilling of oil, gasoline, or other deleterious materials within the drip-line of trees.

MAINTENANCE

Plant Grading: Plant species and size shall conform to those indicated on the drawings. Nomenclature shall conform to *Standardized Plant Names*, 1942 Edition. All plants not otherwise specified as being specimen, shall be excellent quality or better, as determined by the local plant industry. All plants shall be freshly dug, sound, healthy, vigorous, well branched and free of disease and insect eggs and larvae and shall have adequate root systems.

Planting Soil: Planting soil shall be fertile, friable without mixture of subsoil materials, and obtained from a well-drained, industry acceptable site. It shall be free from heavy clay, stones, lumps, plants, root or other foreign materials, or noxious grass [such as Torpedo, Bermuda or nut grass] and noxious weeds. The PH range shall be 5.0 to 7.0 inclusive. Soil conditioner is to be mixed into soil as shown on planting details. All planting beds are to grade away from any structure or building to ensure proper drainage.

PLANTING PROCEDURES

Cleaning Up Before Commencing Work: The Contractor shall clean-up work and planting areas of all rubbish or objectionable matter and it shall be removed from the surface of all plant beds. These materials shall not be mixed with the soil. Should this Contractor find conditions beneath the soil which will in any way adversely affect the plant growth, he shall immediately call it to the attention of the Owner. Failure to do so before planting shall make the corrective measure the responsibility of this Contractor.

Obstruction Below Ground: Contractor is responsible for underground utilities verification. If underground construction, utilities or obstructions are encountered during the excavation of planting areas, or pits, alternate locations for the plant material shall be selected and approved by the Designer.

Plant Material Layout: It is suggested that Contractor stake tree or plant locations from the planting plans prior to digging pits, making any necessary adjustments.

Tree Guying and Bracing: Procedure shall be at the discretion of the Contractor in accordance with sound nursery practices and by the approval of Designer to insure stability and maintain plants in an upright position. See planting details for specific procedure for each plant requirement. Staking the trees is at the discretion of the Contractor, however any plants showing adverse growth at end of warranty period due to not staking will need to be replaced at Contractors cost.

Mulching: Provide a three (3) inch minimum layer of specified mulch over the entire area of each shrub bed, ground cover and vine bed and tree pit or as otherwise specified.

Digging and Handling: Protect roots or balls of plants at all times from sun and drying winds, excess water and freezing, as necessary until planting. No plants moved with a ball shall be planted if the ball is cracked or broken.

Watering: Water plants in thoroughly upon planting. Contractor is responsible for watering all plant material until project is complete.

LAWN SODDING

Work: Work consists of soil preparation, lawn bed preparation, and sodding complete, in strict accordance with the specifications and the applicable drawings, to produce a grass lawn acceptable to the Owner/Designer.

Soil Preparation: All areas that are to be sodded, shall be cleared of any rough grass, weeds, and debris, and the ground brought to a smooth and even grade.

Fertilizer: Fertilizer shall be a commercial type, 12-6-8, complying with local fertilizer laws and applied at a rate consistent with industry standards.

Sodding: The Contractor shall sod all the areas as designated on the drawings within the contract limits, unless specified otherwise. The sod shall meet all local specifications, absolutely true to variety type, and free from

weeds, fungus, insects and disease of any kind. Each sod panel shall have sufficient root and soil base to assure proper sod growth. Sod panels shall be laid tightly together so as to make a solid sodded lawn area. Sod shall be laid uniformly against the edges of all buildings, paved and planted areas. Immediately following sod laying, the Designer shall collect a soil sample from each sod panel and thoroughly wash the sod panel to the opinion of the Designer, top-dressing and over-seeding may be required. All the weeds between the sod panels shall be removed and to even out inconsistencies in the sod. For top-dressing, clean sand as approved by the Designer shall be uniformly spread over the entire surface of the sod and thoroughly watered in. During delivery, prior to and during the planting of the lawn areas, the sod panels shall at all times be protected from excessive drying and unnecessary exposure of the roots to the sun. Any sod damaged as noted shall not be used on the site.

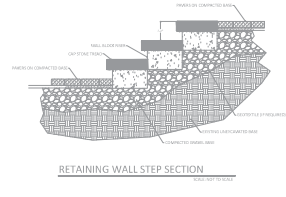
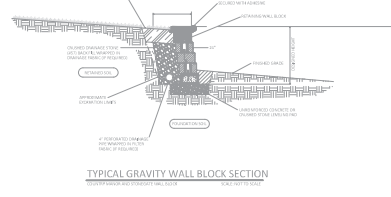
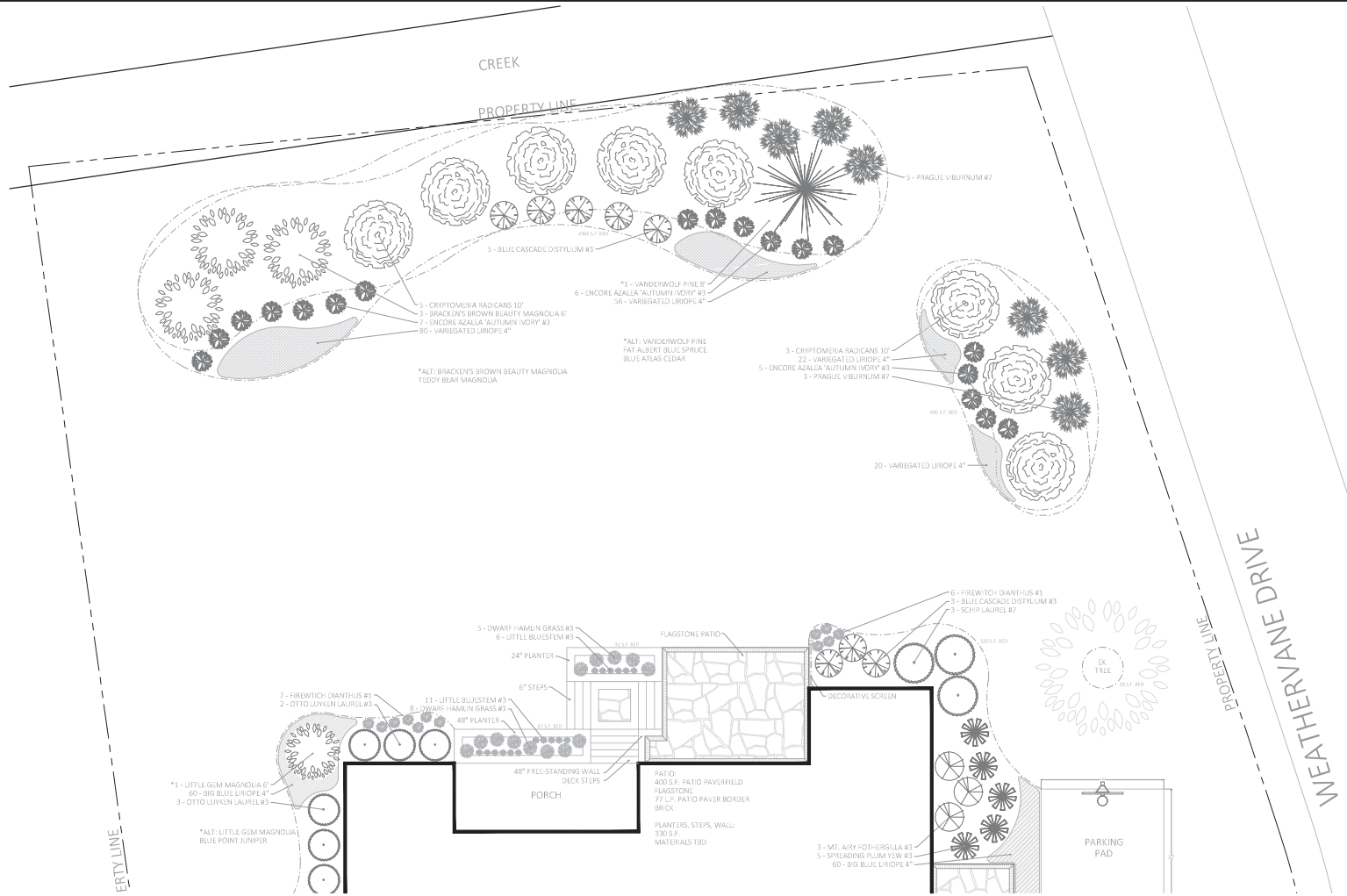
PLANTING DETAILS

Refer to drawings.

CLEAN UP

During Construction: Contractor is responsible for clean-up of all areas affected by construction. This includes roadways, driveways, parking lots, sidewalks, lawn and planting areas. No bulk materials to be stored on street unless approved by Owner. Any materials in roadways, driveways etc. shall be clearly visible with tape, cones etc. Any open holes left shall be covered with plywood or other safety device. All areas not constructed, planted or sodded shall receive grass seed and straw unless otherwise stipulated.





GENERAL DRAINAGE NOTES

DRAINAGE MATERIAL

All materials to be installed according to manufactures specifications unless otherwise stipulated. Contractor to provide a minimum of one (1) year warranty on installation and parts. Refer to manufacturer warranty on product warranties.

PROTECTION

Protection of Existing Structures: All existing buildings, walks, walls, paving, piping (and other items of construction) and planting (trees, shrubs, ground covers, etc.) already completed or established shall be protected from damage by the Contractor. All damage resulting from negligence shall be repaired or replaced to the satisfaction of the Designer or Owner.

Protection of Existing Plant Materials: The Contractor shall be responsible for all unauthorized cutting or damage to existing trees, shrubs, and ground covers caused by operation of equipment, stockpiling of materials, careless labor, etc. This shall include compaction by driving or parking inside the drip-line of trees or the spilling of oil, gasoline, or other deleterious materials within the drip-line of trees.

CONSTRUCTION

Scope: Contractor shall furnish all, tools, equipment, and labor necessary to execute the installation shown in the applicable drawing(s) and detailed in any accompanying proposal. Contractor will provide all materials listed, in quantities listed, with finishes as specified. Any discrepancy with estimated materials is the responsibility of the Contractor.

Workmanship: All operations shall be completed in a substantial and workmanlike manner. Drawings and details are to serve as a guide and shall be followed as closely as is practical, but minor on-site adjustments may be made. Contractor will maintain proper insurance (General Liability, Workman's Compensation, etc.) for the duration of this project.

Concealed Contingencies: This project is subject to an extra charge for concealed contingencies, such as rock, debris, poor drainage situations, etc., not readily apparent in estimating the materials and work specified. This Contract does not include additional fill dirt from off-site as may be necessary to establish the proper grade unless otherwise stipulated herein.

Obstruction Below Ground: Contractor is responsible for underground utilities verification. If underground construction, utilities or obstructions are encountered during the excavation alternate design options shall be approved by the Designer. Some utilities (i.e. cable, invisible pet fence, drain lines, septic systems, etc.) will be the responsibility of the owner or representative to have all underground utilities clearly marked on work site prior to start date. If this is not done prior to starting date, any damage to the utilities mentioned above, but not limited to, will be the responsibility of the Owner or representative. A list of utilities marked can be obtained from Contractor.

Measurements and Adjustments: Contractor reserves the right to do necessary field adjustments without notice, due to excessive obstructions, and/or obstacles that might cause potential problems. All measurements are subject to a 10% variance in field layout.

Change Order: All jobs are done as specified and any request for additional work or changes will require a signed Change Order. NO verbal agreements expressed or implied will be honored. All agreements must be in writing.

CONSTRUCTION DETAILS

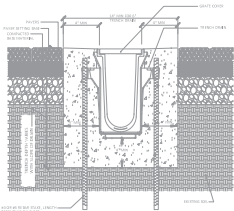
4" PVC pipe under all hardscape elements. 4" perforated corrugated black pipe for French drains behind walls, 4" corrugated pipe for drain lines. Black NDS gutter connections for standard gutters, regular pipe overlap for round gutters. 8" PVC pipe for low point drainage outfall to shoreline.

CLEAN UP

During Construction: Contractor is responsible for clean-up of all areas affected by construction. This includes roadways, driveways, parking lots, sidewalks, lawn and planting areas. No bulk materials to be stored on street unless approved by Owner. Any materials in roadways, driveways etc. shall be clearly visible with tape, cones etc. Any open holes left shall be covered with plywood or other safety device. All trenches will be back-filled and lawn areas seeded.

PERMITS

Contractor is responsible for any permits required to complete project.



TYPICAL STRIP DRAIN INSTALLATION



CLEAN-OUT



SYSTEM



12" NDS CATCH BASIN



IRON AGE DESIGN GRATE



NOTE: DRAWING IS THE PROPERTY OF CAREX DESIGN GROUP AND CANNOT BE USED WITHOUT WRITTEN PERMISSION

Photos:

Weathervane Drive Frontage

Monticello Drive Frontage

Circular Drive Existing Conditions



E. Fox Den turn onto Weathervane Drive



Backside of property: Weathervane Drive



Weathervane Drive approach to Monticello Drive right turn



Weathervane Drive corner, no stop sign,
mature trees



Weathervane Drive turn onto Monticello Drive



Monticello Drive right view of circular drive



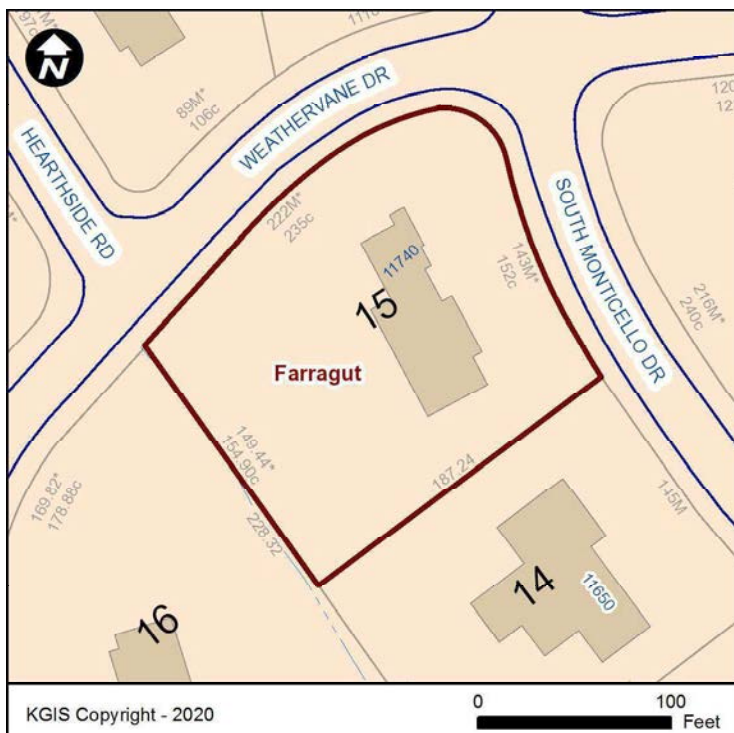
Monticello Drive left view of circular drive



Monticello Drive circular drive, front entry, friends entry

KGIS Map and Property Details

11740 WEATHERVANE DR - Property Map and Details Report



Property Information

Parcel ID:	142GB015
Location Address:	11740 WEATHERVANE DR
CLT Map:	142
Insert:	G
Group:	B
Condo Letter:	
Parcel:	15
Parcel Type:	
District:	FW
Ward:	
City Block:	
Subdivision:	VILLAGE GREEN UNIT 9
Rec. Acreage:	0
Calc. Acreage:	0
Recorded Plat:	61S - 8
Recorded Deed:	20170831 - 0014215
Deed Type:	Deed:Full Coven
Deed Date:	8/31/2017

Address Information

Site Address:	11740 WEATHERVANE DR KNOXVILLE - 37934
Address Type:	DWELLING, SINGLE-FAMILY
Site Name:	VILLAGE GREEN

Owner Information

DEESON JON DAVID & DEESON ALLISON
11740 WEATHERVANE DR
KNOXVILLE, TN 37934

The owner information shown in this section does **not** necessarily reflect the person(s) responsible for Last Year's property taxes. Report any errors to the Knox County Property Assessor's office at (865) 215-2365.

Jurisdiction Information

County:	KNOX COUNTY
City / Township:	Farragut

MPC Information

Census Tract:	58.09
Planning Sector:	Southwest County

Please contact Knox County Metropolitan Planning Commission (MPC) at (865) 215-2500 if you have questions.

Political Districts

Voting Precinct:	66N
Voting Location:	Farragut Middle School 200 WEST END AVE
TN State House:	14 Jason Zachary
TN State Senate:	7 Richard Briggs
County Commission:	5 John Schoonmaker
(at large seat 10)	Larsen Jay
(at large seat 11)	Justin Biggs
Farragut Aldermen:	1 Louise Povlin Scott Meyer
School Board:	5 Susan Horn

Please contact Knox County Election Commission at (865) 215-2480 if you have questions. For questions regarding Farragut districts please call the Township at (865) 966-7057.

School Zones

Elementary:	FARRAGUT PRIMARY
Intermediate:	FARRAGUT INTERMEDIATE
Middle:	FARRAGUT MIDDLE
High:	FARRAGUT HIGH

Please contact Knox County Schools Transportation and Zoning Department at (865) 594-1550 if you have questions.

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Address Info:

Address: 11740 WEATHERVANE DR.
Site Name: VILLAGE GREEN
Parcel ID: 142GB015



Town of Farragut Code of Ordinances

Article 5

Driveways and Other Access Ways

CODE OF ORDINANCES OF THE TOWN OF FARRAGUT, TENNESSEE

ARTICLE 5. - DRIVEWAYS AND OTHER ACCESS WAYS

Sec. 22-145. - Policy.

The efficiency and safety of a street, road, or highway is greatly affected by vehicles entering, leaving, or crossing the roadway. Commercial, office, and residential developments are major contributors to increased volume of traffic upon municipal streets, roads, and highways. Such developments also give rise to increased traffic volume of a type and pattern characterized by frequent ingress and egress to the same. Therefore, such development significantly affects the efficiency and safety of streets, roads, or highways within the municipality. In the interests of safety, the town must regulate access to the streets, roads, and highways within its town limits in a uniform manner that is fair to the general public, land-owners, and developers.

(Code 2007, § 16-401; Ord. No. 96-30, 1-1997)

Sec. 22-146. - General provisions.

- (a) All access ways shall meet the minimum access requirements of this article or as determined by a traffic impact study.
- (b) The town municipal planning commission shall review access requests through the site plan review process and forward its recommendation to the board of mayor and aldermen.
- (c) The town municipal planning commission shall review new proposed roadway accesses to an existing public road through the subdivision platting process. These roadway accesses shall meet the minimum access requirements of this article or as determined by a traffic impact study.
- (d) The board of mayor and aldermen shall review access applications as provided in this article, except new roadway accesses to an existing public road created through the subdivision platting process.
- (e) Developments requiring the submittal of a site plan or a preliminary subdivision plat may require a traffic impact study.
- (f) The town municipal planning commission may require a traffic impact study as part of the rezoning submittal process when the requested zoning change increases the overall density from the base zone.
- (g) State department of transportation access permits shall be the responsibility of the applicant.

(Code 2007, § 16-402; Ord. No. 96-30, 1-1997; [Ord. No. 14-18, § 2, 12-11-2014](#).)

Sec. 22-147. - Traffic impact study requirements.

(a) *Generally.*

- (1) The submission of a traffic impact study shall be required with rezoning, site plan and preliminary plat requests in accordance with the following table:

24-Hour Trip Generation	Traffic Study Scope
0—750 ADT	Level I
750—6,000 ADT	Level II
> 6,000 ADT	Level III

CODE OF ORDINANCES OF THE TOWN OF FARRAGUT, TENNESSEE

- (2) Trip generation rates for proposed uses shall be calculated using the ITE Trip Generation Manual, 5th (or latest) edition.
 - (3) Upon being provided proof by the developer's traffic engineer that a lower level traffic impact study would be adequate for a proposed development, or that a traffic study is not warranted, the town engineering staff may reduce the level of study required or waive the requirement.
- (b) *Traffic impact study guidelines and procedures.*
- (1) These traffic impact study guidelines and procedures define when proposed rezoning, site plans and preliminary plat requests warrant a detailed traffic study and what information should be included in it. All applicants will be required to follow the town guidelines.
 - (2) The purpose of performing a traffic impact study, as defined by the institute of traffic engineers (ITE), is to:
 - a. Provide guidance for short term and long term planning of site access;
 - b. Provide guidance for on-site circulation and the interface between on-site circulation and off-site traffic;
 - c. Provide guidance for off-site improvements needed to permit the roadway system to function satisfactorily so as to accommodate site and non-site traffic;
 - d. Assist developers and land owners in making land use site planning decisions regarding traffic;
 - e. Identify the contribution a particular development makes to roadway system traffic volumes;
 - f. Provide a basis for estimating roadway improvement requirements attributable to a particular project;
 - g. Assess the compatibility with local transportation plans;
 - h. Enable staff to better evaluate zoning changes and development plans; and
 - i. Allow appointed and elected officials to know implications of their voting decisions.
- (c) *Scope of required traffic impact studies.* Three levels of study have been identified based on the number of trips that a development is projected to generate in a 24-hour period:
- (1) Level I studies require analysis of each access, per engineering staff, that the development has to an existing roadway. Access points to be analyzed include public and private roads, joint permanent easements, and private drives.
 - (2) Level II studies require analysis of each access that the development has to an existing roadway, and to the first control point beyond those access points. A control point is an intersection controlled by a traffic signal or stop sign on the existing roadway onto which the development has access. For cases where a traffic control device does not exist, engineering staff will determine the extent of the study. If a freeway interchange is near the property to be developed and is not signalized, engineering staff will determine if the ramps need to be included in the study. This level of study is commonly required for larger residential subdivisions, commercial developments, and office complexes.
 - (3) Level III studies require a complete traffic impact study. This study must address each access point, the first control point beyond each access point, and the nearest collector intersection or street of higher classification or as determined by the engineering staff. The exact area to be studied will be determined by the engineering staff with input from the study preparer. Level III studies are uncommon, as they are usually warranted only with very large mixed-use and commercial developments.
- (d) *Submission and review procedures for traffic impact studies.*
- (1) Applicants should conduct a preliminary trip generation assessment of any proposed rezoning, site plan or preliminary plat request to determine if a traffic impact study will be required. This preliminary assessment should be conducted well in advance of the actual submission of plans.
 - (2) If the preliminary assessment indicates that a traffic impact study will be required, the applicant should consult as early as possible in the plan-development process with the town's engineering staff

CODE OF ORDINANCES OF THE TOWN OF FARRAGUT, TENNESSEE

to verify a development's projected trip generation, and to confirm whether or not a study will be required. If a study is required, the required level can be determined at that time.

- (3) The applicant shall then select a licensed traffic or transportation engineer to prepare the study, who may need to consult with the engineering staff periodically to review the collected data and any assumptions made in the draft report.
- (4) Four copies of the completed draft traffic impact study shall be submitted along with the development application and all other materials required for submission.
- (5) The engineering staff shall review the draft traffic impact study in conjunction with the other elements of the development application. If the draft traffic impact study is not of the proper scope or is executed improperly, the applicant shall be notified of the deficiencies and be required to submit corrections on the same schedule that applies to the other elements of the development application. Failure to submit corrections in a timely manner may lead to a postponement of the application until the next regularly scheduled planning commission meeting.

Since a completed traffic impact study must be submitted at the same time as the application for a development, it is critical that the applicant conduct steps one through three early in their planning of a proposed development. Failure to submit a traffic impact study, or submission of an inadequate study, is likely to slow the review process and may lead to postponements.

(e) *Required qualifications for preparers of traffic impact studies.* Traffic impact studies shall be prepared under the supervision of a qualified engineer who has specific training in traffic and transportation engineering and experience related to preparing traffic studies for existing or proposed developments. The study shall be signed and sealed by the supervising engineer. The ability to forecast and analyze traffic needs for both developments and roadway systems is essential. All design work implementing the recommendations of the traffic impact study shall be completed under the supervision of a registered professional engineer.

(f) *Required specifications for traffic impact studies.*

(1) *Report requirements: Level I studies.*

a. *Intersection.*

1. Description of site including a location map.
2. Type of project.
 - (i) If residential, number and type of units.
 - (ii) If commercial or office, include square footage and occupancy.
3. Site plan with access points shown to scale.

b. *Existing conditions.*

1. Distance from nearest intersection in both directions.
2. Distance to nearest drive or access points in both directions.
3. Location shown relative to opposing street, driveways, or access points.

c. *Proposed conditions.*

1. Width, radius, and markings of proposed street, driveway, or access point.
2. Proposed improvements adjacent to access point, including, but not limited to, acceleration, deceleration lanes, and pavement marking adjustments.

(2) *Report requirements: Level II studies.*

a. *Introduction.*

1. Description of site including a location map.
2. Type of project.

CODE OF ORDINANCES OF THE TOWN OF FARRAGUT, TENNESSEE

- (i) If residential, number and type of dwelling units.
 - (ii) If commercial or office, square footage and type of occupancy.
- 3. Map of project with proposed access points shown.
- b. *Existing conditions.*
 - 1. Directional traffic counts on roads adjacent to property with access to development: Traffic counts should be no more than one year old.
 - 2. Level of service of intersections (if applicable):
 - (i) Highway capacity software is recommended.
 - (ii) Other nationally recognized software can be used.
- c. *Trip generation rates.*
 - 1. Listing of trip generation rates.
 - 2. Listing of sources for rates used.
 - (i) ITE 5th Edition of Trip Generation or latest edition.
 - (ii) If the type of proposed development is not addressed in the ITE manual, then other rates may be used as long as they are documented and have been approved by engineering staff.
 - 3. Calculation of trip ends by type of generator.
 - (i) Traffic generated by phase.
 - (ii) 100 percent occupancy and development.
- d. *Trip distribution.*
 - 1. Assumptions as to the directional distribution of traffic to and from the development.
 - 2. Assumptions as to the peak hour percentages.
 - 3. Assumptions as to the peak hour directional splits.
 - 4. Assumptions as to the pass-by trips, if applicable, must be approved by engineering staff.
- e. *Analysis.*
 - 1. Level of service (LOS) and capacity analysis for peak periods.
 - (i) Compute the projected LOS and capacity analysis for each access point and control point to the adjacent road system based on the development by phase.
 - A. Highway capacity software is recommended.
 - B. Other nationally recognized software can be used.
 - (ii) Compare LOS before development to LOS after development if applicable.
 - (iii) Link analysis if applicable.
 - 2. Intersection and roadway geometry; existing and proposed.
 - (i) Distances from existing streets, driveways, and/or median cuts.
 - (ii) Alignment with existing streets, driveways, and/or median cuts.
 - (iii) Intersection layouts.
 - (iv) Sight distance.
 - (v) Right-of-way width.
 - (vi) Lane width.
 - 3. Site circulation.

CODE OF ORDINANCES OF THE TOWN OF FARRAGUT, TENNESSEE

4. Pedestrian facilities.
 - (i) Sidewalks.
 - (ii) Transit stops.
 - (iii) School bus stops.
 - f. *Recommendations.*
 1. Site access.
 2. Intersection improvements.
 - (i) Traffic control devices: modify existing or need for new.
 - (ii) Left and/or right turn lanes.
 - (iii) Acceleration and/or deceleration lanes.
 - (iv) Length of storage bays.
 3. Off-site improvements.
 - (i) Modification to existing traffic control devices.
 - (ii) Additional traffic control devices.
 - (iii) Additional lanes at major intersections.
 - (iv) Additional roads.
 4. Improvements by phasing (if applicable).
 - g. *Appendix.*
 1. Raw traffic count data.
 2. Documentation of analysis.
- (3) *Report requirements: Level III studies.* In addition to the preceding information for Level I and II, the following information on trip assignment shall be provided in the report prior to the analysis and recommendation section:

Trip assignment.

1. Show existing ADTs, proposed development traffic, and total traffic for all affected links on map which identifies the project and surrounding roads.
 2. Show a.m. and p.m. peak hour turning movements for the existing traffic, the proposed development traffic, and the combined traffic at all project entrance intersections, and effected intersections within the study area.
 3. Discuss the effects of phasing of the proposed project.
- (g) *Additional information.* Additional information on traffic impact studies can be obtained from Traffic Access and Impact Studies for Site Development: A Recommended Practice by the Institute of Transportation Engineers.

(Code 2007, § 16-403; Ord. No. 96-30, 1-1997; [Ord. No. 14-18, § 3, 12-11-2014.](#))

Sec. 22-148. - Permit required.

- (a) No driveway or other means of access to any right-of-way of any road, street, or highway within the limits of the town shall be constructed nor shall any existing driveway or other means of access be altered except pursuant to a permit issued by the town. The submission of an access permit application shall be required.
- (b) For minor revisions to existing drives and residential drives onto non-local streets, an application for an access permit shall be accompanied by four copies of a plan of access which shall as a minimum, consist

CODE OF ORDINANCES OF THE TOWN OF FARRAGUT, TENNESSEE

of clear drawings or a sketch showing the general layout and dimensions necessary to prove compliance with this article, and a brief description of the proposed use of the property.

- (c) For residential drives onto local streets, an application for an access permit shall be accompanied with the building permit and shown on the required site plan.

(Code 2007, § 16-404; Ord. No. 96-30, 1-1997)

Sec. 22-149. - Permit approval.

- (a) The planning commission and the board of mayor and aldermen shall review applications for access for all developments requiring the submittal of a site plan and residential drives onto non-local streets. Minor revisions to existing drives shall be reviewed by engineering staff.
- (b) The planning commission, the board of mayor and alderman, and town staff shall review applications for access for compliance with the requirements of this article. The planning commission, the board of mayor and alderman, or the town staff may require such revisions, corrections, and additions to the plans of access and such additional supporting documentation of the plan of access as may be reasonable considering the locations of proposed and existing access, the traffic impact study if required, and considerations of public safety and welfare. All revisions, corrections, and additions required shall be recorded on a final copy of a subdivision plat, site plan, or "drawing or sketch" of the access requested for approval before issuance of a permit.
- (c) An access permit shall be secured before issuance of a building permit.
- (d) No final certificate of occupancy or certificate of completion shall be issued until all applicable access control requirements as outlined in this article and other requirements of the individual access permit have been completed.

(Code 2007, § 16-405; Ord. No. 96-30, 1-1997)

Sec. 22-150. - Specifications; permanent access.

The following constitutes minimum specifications for access to streets, roads, and highways within the town and additional reasonable specifications may be imposed as required for public safety. Such additional specifications shall be required upon recommendation of the town engineer, his designee, or the planning commission and approval by the board of mayor and aldermen.

(1) *Distance requirements.*

a. *Distance from intersections.*

1. The minimum distance of an access point from an intersection, measured from intersecting right-of-way to the edge of the driveway pavement, shall be as follows:

Street Classification	Minimum Distance
Arterial streets	400 feet
Collector streets	200 feet
Local streets ¹	100 feet
Local Streets ²	50 feet

CODE OF ORDINANCES OF THE TOWN OF FARRAGUT, TENNESSEE

Note:

¹ Denotes commercial and office zoned properties.

² Denotes residential and agricultural zoned properties.

2. Access shall be located and constructed so as to provide adequate stopping sight distance for drivers entering and exiting the property using a design speed of ten miles above the legal speed limit as determined by the town engineer or his designee in accordance with current AASHTO (A Policy on Geometric Design of Highways and Streets, American Association of State Highway and Transportation Officials) and adopted ITE (Institute of Traffic Engineers) standards.

- b. *Distance between driveways.* For the following street classifications, the following requirements specify the minimum allowed distances between driveways ¹:

Street classification	Distance between driveways
Arterial streets	400 feet
Collector streets	200 feet
Local streets ²	100 feet

Note:

¹ Town may require joint permanent access easements to minimize the number of curb cuts.

² Residential properties are exempt from local street requirement for the distance between driveways.

- c. *Joint permanent access easements.* Controlled access to a joint permanent access easement shall be maintained for a minimum length of 40 feet perpendicular from the right-of-way or as determined by the traffic impact study.
 - (2) *Access to and from property being developed.*
 - a. *Number of access points.* The number of access points of a property shall be determined by its road frontage. Lots which front on more than one street shall add total street frontage lengths together to determine total road frontage to calculate the number of driveways permitted. Circular drives shall be considered as two driveways.

CODE OF ORDINANCES OF THE TOWN OF FARRAGUT, TENNESSEE

Street classification	Length of road frontage	Number of access points
Arterial streets	0—400 feet	1
Arterial streets	401—800 feet	2
Collector streets	0—200 feet	1
Collector streets	201—800 feet	2
Local streets*	0—200 feet	1
Local streets	201—800 feet	2
All streets	801 feet and above	2 + 1/each 800 feet of additional road frontage

Circular drives shall be permitted to property with less than 200 feet of road frontage provided the following criteria are met:

- (i) The property is zoned residential and the street on which the property fronts is located within a residential subdivision;
- (ii) The maximum lot coverage in the front yard (area in front of the house): 35 percent;
- (iii) The maximum driveway width: 15 feet;
- (iv) The minimum distance between the driveways: 60 feet; and
- (v) The setback from the side property lines: A total on two sides of at least 40 feet, but not less than ten feet on any one side.

CODE OF ORDINANCES OF THE TOWN OF FARRAGUT, TENNESSEE

- b. *Pavement or surface width of access points.* The pavement or surface width of all access points on and within the right-of-way of any road, street, or highway shall be within the minimum and maximum limits (excluding turn radius) specified as follows:

	Minimum	Maximum
Residential (single-family, duplex and quadraplex) driveway	12 feet	25 feet
One-way other than residential driveway	15 feet	26 feet
Two-way other than residential driveway	25 feet	36 feet

Roads with median shall be considered two one-way streets.

24 feet maximum for two-way access.

36 feet maximum for two-way access and center turn lane for left turns.

- (3) *Paved acceleration and deceleration lane requirement.* Paved acceleration and deceleration lanes may be required along any arterial or collector street or highway at the determination of the board of mayor and alderman upon the recommendation of the town engineer or his designee.
- (4) *Circulation drives and frontage roads.* Circulation drives (drives which interconnect all lot access points with all vehicle parking, loading, servicing, and like areas and structures) and frontage roads (roads which parallel the public streets giving access and which extend along the entire frontage of a particular property) shall be constructed in order to provide safe and efficient vehicular movement between specified access points as specified in subsection (2) of this section. The location, width, and design of all circulation drives and frontage roads shall be approved by the board of mayor and aldermen upon recommendation of the town engineer or his designee. All frontage roads shall be dedicated as public streets and shall be maintained by the public.
- (5) *Subdivision standards for circulation drives and frontage roads.* Frontage roads and circulation drives shall be constructed in conformance with the subdivision regulations standards. Dedicated right-of-way for frontage roads shall be ten feet greater than the width of the newly constructed frontage road. All circulation drives shall be clearly defined and marked appropriately to assist public circulation into, on, and out of the property and through parking lot areas.

(Code 2007, § 16-406; Ord. No. 96-30, 1-1997; Ord. No. 09-14, § 1, 8-27-2009)

Sec. 22-151. - Access to two or more roads, streets, or highways.

In the event a parcel of land abuts and lies adjacent to two or more separate roads, streets, or highways, the board of mayor and alderman may limit or prohibit access to one or more such roads (provided that access to at least one such road shall always be permitted) if the safety and welfare of the public will be promoted by so doing. In so limiting or prohibiting access, consideration shall be first given to limiting or prohibiting access to the more heavily traveled abutting or adjacent road, street, or highway. Any party aggrieved by any action taken

CODE OF ORDINANCES OF THE TOWN OF FARRAGUT, TENNESSEE

under the provisions of this section shall have the burden of establishing that such action taken does not promote the safety and welfare of the public.

(Code 2007, § 16-407; Ord. No. 96-30, 1-1997)

Sec. 22-152. - Variance.

Notwithstanding anything contained herein to the contrary, the board of mayor and aldermen may grant approval for access and/or frontage roads other than as specifically herein permitted, provided such an access is reviewed with a recommendation by the town engineer or his designee and the planning commission.

(Code 2007, § 16-408; Ord. No. 96-30, 1-1997)

Sec. 22-153. - Temporary access.

- (a) Temporary access ways may be granted by the board of mayor and alderman upon review with a recommendation by the town engineer or his designee and the planning commission at locations other than specified for permanent access where it is expedient for the purpose of staged development. Temporary access ways shall cease to exist at such time that any other means of access to a property occurs which more nearly conforms to the requirements of this article.
- (b) Temporary construction access ways may be granted by the town engineer or his designee to facilitate construction. The length of time shall be based on the duration of the grading permit.

(Code 2007, § 16-410; Ord. No. 96-30, 1-1997)

Sec. 22-154. - Appeals.

- (a) An appeal from adverse determinations on any application for an access permit shall be to the board of mayor and aldermen. Any party aggrieved or refused issuance of an access permit shall notify in writing the town recorder of applicant's desire to appeal the action taken. Such notice shall be given within 30 days of denial of the permit.
- (b) Upon receipt of notice of appeal the town recorder shall place the appeal for consideration before the board of mayor and aldermen within 30 days of receipt of notice of appeal. The town engineer or his designee shall appear at such scheduled meeting, and the applicant may appear, to present the matter to the board of mayor and aldermen. The determination by the board of mayor and aldermen is administratively final.

(Code 2007, § 16-411; Ord. No. 96-30, 1-1997)

Secs. 22-155—22-176. - Reserved.

Maria Rayas

From: Mark Shipley
Sent: Thursday, July 9, 2020 10:00 AM
To: Maria Rayas
Subject: FW: Follow-up: 11740 Weathervane Drive: Circle Driveway

Please print this email string out and include with Agenda Item #6. I will also be sending you a pdf for this item shortly.

From: Jon-David Deeson <jddeeson@gmail.com>
Sent: Thursday, May 24, 2018 3:18 PM
To: Mark Shipley <mshipley@townoffarragut.org>
Subject: Re: Follow-up: 11740 Weathervane Drive: Circle Driveway

Mark,

That works. Daria and Grant McMahan (McCamy Construction) will be with me.

We will see you next Tuesday (May 29) at 9:00 am.

Thanks!

Jon-David Deeson

On Thu, May 24, 2018 at 2:07 PM, Mark Shipley <mshipley@townoffarragut.org> wrote:

How about 9 at the codes office on second floor?

Sent from my iPhone

On May 24, 2018, at 1:05 PM, Jon-David Deeson <jddeeson@gmail.com> wrote:

Hi Mark,

I left you a voice mail. I am just trying to confirm that meeting next Tuesday morning at 10:00 am is good. If so, please give me your office location too.

Thanks!

Jon-David Deeson

On Wed, May 23, 2018 at 5:50 PM, Jon-David Deeson <jddeeson@gmail.com> wrote:

Mark,

Thanks for your reply. Let's meet at 10:00 am on Tuesday.

Please confirm this day/time is good and the location of your office.

Jon-David Deeson

On Wed, May 23, 2018 at 4:54 PM, Mark Shipley <mshipley@townoffarragut.org> wrote:

Thank you. The process for appealing goes initially to the planning commission and they would then make a recommendation to the board of mayor and aldermen. It appeared that Adam Price had made some good suggestions that would address your concern but if you still want to appeal this that would be the process. I am in the office on Tuesday if you want to send me a time. Perhaps the morning would work better since I already have meetings in the afternoon.

From: Jon-David Deeson [mailto:jddeeson@gmail.com]

Sent: Wednesday, May 23, 2018 11:33 AM

To: Mark Shipley <mshipley@townoffarragut.org>

Cc: Adam Price <aprice@townoffarragut.org>

Subject: Follow-up: [11740 Weathervane Drive: Circle](#) Driveway

Good morning Mark,

You have corresponded with our architect, Daria Krol, during the past two weeks as shown below. The matter in question has been a proposed circle driveway at our 11740 Weathervane Drive home.

We understand the intent of the code that's limited permitting to this point, but believe the decision not to grant permit of the circle driveway is an adverse determination given the unique circumstances of this specific parcel of land. We would like to appeal the current action not to grant a permit for the circle driveway.

We believe we can establish that a denial to permit is not in the best interest of the safety and welfare of the neighborhood residents. We also believe its denial does not promote safe traffic or road passage at more heavily traveled neighborhood roadways that include both Weathervane Drive and Monticello Drive. Therefore, we would appreciate the opportunity to discuss this decision (and next steps) further with you in person.

Please advise us on a time next week that you would be available to meet to discuss. We look forward to speaking with you soon.

Thank you, in advance, for your time and consideration of this important matter to us.

Jon-David

Jon-David Deeson
(865) 806-1172

From: dkrol@r2studio.com <dkrol@r2studio.com>
Sent: Tuesday, May 15, 2018 3:54 PM
To: 'Mark Shipley' <mshipley@townoffarragut.org>
Cc: 'Adam Price' <aprice@townoffarragut.org>
Subject: RE: follow up

Mark,

I would like to set up an appointment with you to discuss different options. Please let me know when you would be available.

Thanks,

Daria

From: Mark Shipley <mshipley@townoffarragut.org>
Sent: Monday, May 14, 2018 2:43 PM
To: dkrol@r2studio.com
Subject: RE: follow up

Thanks Daria. Yes, sorry but they would not be able to have two access points as proposed. Could they add a turn around area so that some parking could be provided off street?

From: dkrol@r2studio.com [<mailto:dkrol@r2studio.com>]
Sent: Monday, May 14, 2018 10:59 AM
To: Mark Shipley <mshipley@townoffarragut.org>
Cc: Adam Price <aprice@townoffarragut.org>
Subject: follow up

Good morning Mark,

I know it's your first day back, but just wanted to follow up on my email I sent you last week. I have a meeting with the Deesons tomorrow and hoped I could give them an update.

I appreciate your time in reviewing it.

Thanks,

Daria

Daria A. Krol

<image001.jpg>

R2R studio, llc
[2575 Willow Point Way, Ste 105](#)
[Knoxville, Tennessee 37931](#)
[865.769.8075 v.](#)
[865.769.8076 f.](#)
dkrol@r2studio.com

Please visit our website: www.R2Rstudio.com

From: dkrol@r2studio.com <dkrol@r2studio.com>
Sent: Monday, May 7, 2018 1:36 PM
To: mshipley@townoffarragut.org
Cc: 'Adam Price' <aprice@townoffarragut.org>
Subject: [11740 Weathervane dr](#)

Mark,

I'm sorry I missed your call on Friday.

I hope I can explain everything via email, and I can always schedule a meeting with you, and Adam, upon your return.

We currently working on the renovation/ addition project for Deeson Residence, at [11740 Weathervane Dr. in Village Green](#). Adam have already reviewed the project and emailed the comments to our contractor, one of which was to address the driveway situation as we proposed a circular drive.

Currently the house has a driveway of off Weathervane Drive that leads directly to the garage. The front door is facing Monticello Drive and is on the opposite corner from the garage. The property has approximately 400 feet of road frontage.

As the plans progressed, the Owners had asked for a circular drive at the front of the house (of Monticello Drive) to avoid awkward, long, and hardly noticed walkway to the front door from the current driveway, but most importantly to keep the visiting cars off the road at a fairly busy neighborhood intersection. That really is the main reason why we proposed it. They have two teenagers that drive, and have frequent visitors, and guests. The hope was not have them park on either of the two streets and block the intersection, and keep everybody safe.

My hope was to speak with you and see what would our options be in terms of keeping that circular drive in some form. Would you suggest that we apply for the variance? Or are there any options as to minimize the impact and introduce a grass strip in the middle, possibly to not to have to call it a driveway?

I'd like to hear your recommendation in that matter.

I'm copying Adam Price on the correspondence as he is familiar with the project.

Also, I am attaching the submitted site plan for your quick reference.

Thank you,

Daria

Daria A. Krol

<image001.jpg>

R2R studio, llc
[2575 Willow Point Way, Ste 105](#)
[Knoxville, Tennessee 37931](#)
865.769.8075 v.
865.769.8076 f.

dkrol@r2rstudio.com

Please visit our website: www.R2Rstudio.com

REPORT TO THE FARRAGUT MUNICIPAL PLANNING COMMISSION

PREPARED BY: Mark Shipley, Community Development Director

SUBJECT: Discussion on a request to amend Appendix A – Zoning, Chapter 3., Specific District Regulations, Section XII., General Commercial District (C-1), B., 3., as it relates to the outdoor display and or storage of general farm implements and lawn care equipment, riding lawn mowers, and related accessories (Farragut Lawn and Tractor, Applicant)

INTRODUCTION AND BACKGROUND: This item was postponed last month at the request of the applicant. As background to this item, when the current building was constructed for the Farragut Lawn and Tractor business at 13131 Kingston Pike, the Town worked with the property owner, Wayne Davis, to develop language in the Zoning Ordinance that would address the unique display and storage needs for retail outlets that sell general farm implements and lawn care equipment. This language was included under the “Permitted principal and accessory uses and structures (Non-Mixed-Use Town Center) section of the General Commercial District (C-1). The specific language is as follows:

3. Retail outlets for the sale of general farm implements and lawn care equipment such as tractors (less than 10,000 pounds), riding lawn mowers, and related accessories.
 - a. The outdoor display and/or storage of such implements and equipment shall be permitted provided the following development criteria are met:
 - (1) The outdoor storage and/or display of the implements and/or equipment shall lie behind a straight line running from side lot line to side lot line that coincides with the rear wall of the principal building located on the property;
 - (2) The equipment and/or implements to be stored and/or displayed outdoors must be removed from the crate or cartons and displayed and/or stored in such a way as to allow for viewing and inspection, but so as not to prevent passage on sidewalks, walkways, or other vehicle ways;
 - (3) Such businesses necessarily involve the use of outdoor areas on the premises for the unloading, uncrating, positioning and repositioning of items that are often larger and more cumbersome than most retailers handle. The temporary use of outdoor areas of the premises for such purposes during hours of operation shall not be a violation of this ordinance; and
 - (4) Such businesses necessarily utilize packaging that is to be destroyed or reused. Such packaging materials shall be stored in areas on the premises to which access shall be restricted by means of a physical barrier such as an opaque fence or similar to a dumpster enclosure and shall comply with Chapter 4, Section I.B. of this ordinance.
 - b. The outdoor display of merchandise, except as provided for above, is permitted provided such merchandise is displayed in a permanent, covered porch. Such covered porch shall be

attached to the principal building and shall meet all setback requirements of the principal building.

DISCUSSION: Though this language was developed in consultation with the applicant, the issue has been that, for some time, the applicant has not complied with the adopted requirements. The photographs included with this item demonstrate how merchandise is being displayed frequently in areas that are not permitted for such use. The only area where display is permitted in front of the rear wall of the principal building is the covered display portion of the building that extends toward Kingston Pike in front of the main portion of the building. This portion of the building was specifically constructed for display.

In response to the unapproved storage and display, staff sent the applicant a violation notice and asked that this be discontinued or a citation to municipal court would be issued. The applicant is now requesting to amend some of the language that is currently in place so that display may occur in front of the rear wall of the principal building. The applicant is also asking that the temporary use of the premises for unloading, uncrating, positioning and repositioning, demonstrating and displaying equipment larger and more cumbersome than most retailers handle not be a violation of the ordinance.

RECOMMENDATION: Staff does not support the applicant's requested amendment. A long-standing aspect of the Town's Zoning Ordinance has been to ensure that outdoor storage/display is contained in an approved area so that it is not randomly scattered over the premises. When Gander Mountain was located on Parkside Drive, their outdoor storage/display was in an area designed and approved for such use.

The applicant claims that some of the storage is incidental to unloading and unpackaging products. While there may be a transitional element to the placement of the equipment, it is very clear that products are being used for advertising purposes and display and are completely uncontrolled in terms of placement. There has even been equipment placed on the sidewalk that connects the building to the sidewalk along Kingston Pike. The sign in the back of the gator that can be seen on some of the photographs is an additional indication of how the equipment is being used to attract attention. This is also a violation of the Sign Ordinance.

This business is located at a gateway area to the Town and, in addition to being consistent with similar uses and Town provisions concerning storage and display, having the front yard full of farm and lawn equipment may not be the image one would want as you enter or leave the Town.

Farragut
Zoning/Municipal Code Text Amendments
2020-81-CT

Submitted by Wayne Davis
JDVOL1@TDS.NET
(865) 966-6576

Address of Proposed Work: **13131 KINGSTON PIKE**

City: **KNOXVILLE** State: **TN** Zip: **37934**

Contact Information

Applicant's Contact Information

Title: First Name: **Wayne** Last Name: **Davis** Suffix:
Business Name: **Farragut Lawn and Tractor**
Mailing Address: **13131 KINGSTON PIKE**
City: **KNOXVILLE** State: **TN** Zip: **37934**
Email Address: **JDVOL1@TDS.NET**
Cell Phone: **(865) 414-5313** Work Phone: **(865) 675-6576** Home Phone: **(865) 675-4240**

Owner's Contact Information

Title: First Name: **Wayne** Last Name: **Davis** Suffix:
Business Name: **Farragut Lawn and Tractor**
Mailing Address:
City: State: **TN** Zip:
Email Address: **JDVOL1@TDS.NET**
Cell Phone: Work Phone: Home Phone: **(865) 966-6576**

Application Questionnaire (* denotes required question)

Ordinance Text Amendment

Project Name *

13131 Kingston Pike

CHANGE REQUESTED *

Amend Zoning Ordinance, Sign Ordinance, or Municipal Code text as follows:

3.a.(1) Remove "and/or display" to read: "The outdoor storage of implements and/ or equipment shall ---".

3.a.(3) Change to read: " Such businesses necessarily involve the use of outdoor areas on the premises for the unloading, uncrating, positioning and repositioning, demonstrating and displaying equipment larger and more cumbersome than most retailers handle. The temporary use of outdoor areas of the premises for such purposes shall not be a violation of this ordinance."

Application Acknowledgement *

I HEREBY CERTIFY THAT THE ABOVE INFORMATION IS ACCURATE AND COMPLETE AND I AM THE APPLICANT OR THE LEGAL REPRESENTATIVE OF THE APPLICANT FOR THIS PROJECT. enter your full name to acknowledge.

Wayne Davis,

FLTInc. dba Farragut Lawn and Tractor

Proposed Amendment Necessity *

The proposed amendment is necessary due to the following changed or changing conditions: (be specific)

Reflects routine daily activities that are essential to providing safe, effective and responsive support for our customers during business hours: equipment demonstration, evaluation, and test operations; moving tractors/ equipment from and repositioning to storage areas. Removes confusion from terms: "storage (permanent)" and "temporary" activities: demonstration, evaluation, and display".

Documents Uploaded

The following documents are attached to the Application.







DIXIE LEE FIREWORKS

DIXIE LEE FIREWORKS

FIREWORKS

ACE Hardware

ON SALE

Coca-Cola

UBWAY

2199

OBJECTS IN MIRROR ARE CLOSER THAN THEY APPEAR





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Farragut Lawn and Tractor

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REPORT TO THE FARRAGUT MUNICIPAL PLANNING COMMISSION

PREPARED BY: Bart Hose, Assistant Community Development Director

SUBJECT: Discussion on a request to rezone the property at 11824 Kingston Pike, Parcel 025, Tax Map 152C, Group J., 1.81 Acres from Office (O-1) to General Single-Family Residential (R-2) (Troy and Evangella Stavros, Applicant)

INTRODUCTION AND BACKGROUND: This item involves a rezoning request for an approximately 1.81-acre parcel located along Federal Boulevard and immediately behind the First Bank and West Knox Chamber of Commerce properties. The applicants are seeking to have the property rezoned from Office (O-1) to General Single Family Residential (R-2).

DISCUSSION: The property in question contains an existing residential structure that had previously been converted and used as a small office. The applicants intend to convert the structure back to a residence and will also likely subdivide the existing parcel into three lots at some point in the future. The property abuts R-2 zoned residential lots to the south and west, and two commercially (C-1) zoned lots to the north. The proposed rezoning would be consistent with the Future Land Use Plan and the existing land use and development pattern in the area.



Zoning Map

From
O-1 (Office)

to

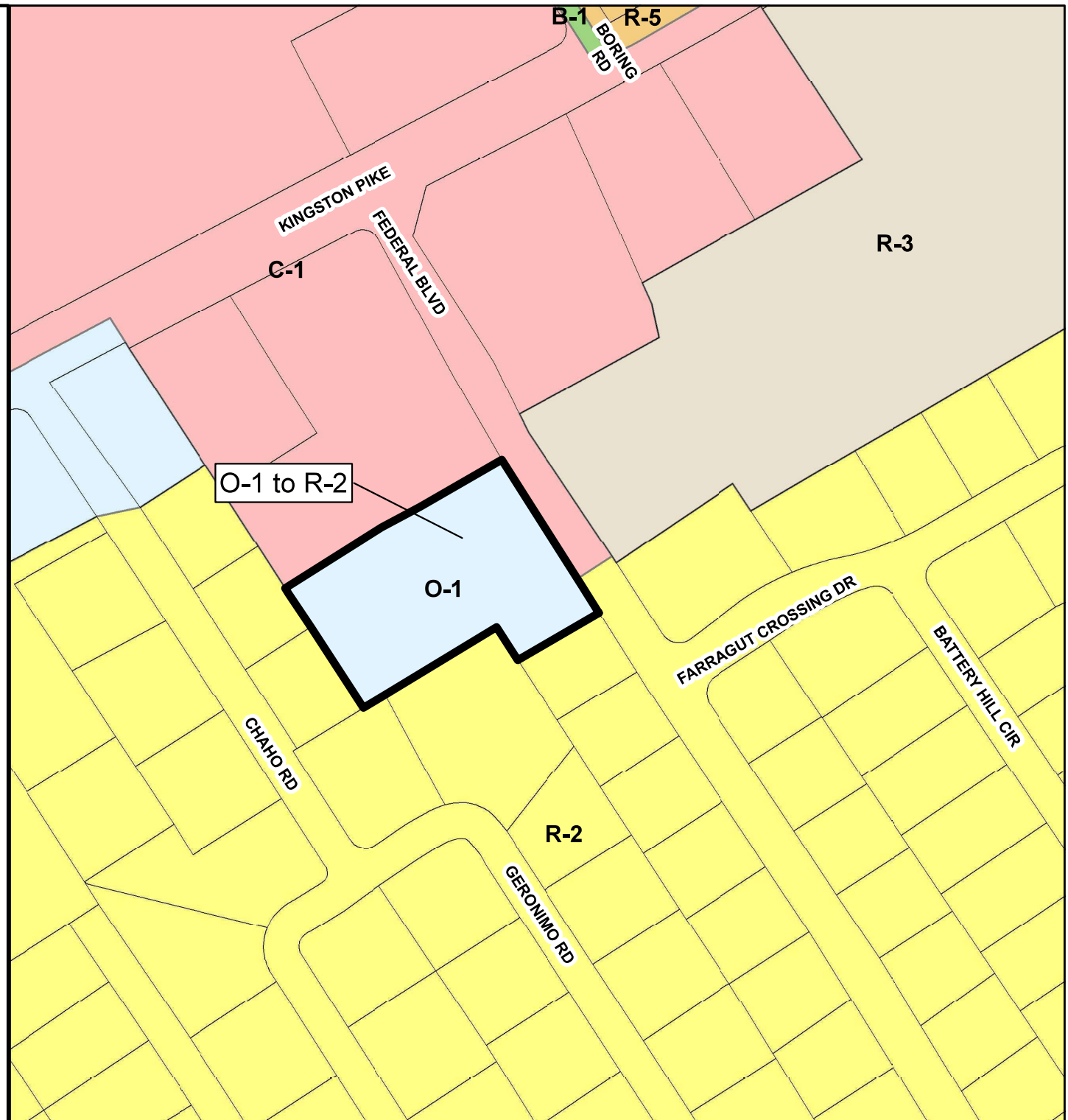
R-2 (General Single-Family Residential)

Legend

-  Subject Property
-  Parcels
-  B-1, Buffer
-  R-2, General Single-Family Residential
-  R-3, Small Lot Single-Family Residential
-  R-5, Two-Family Residential
-  O-1, Office
-  C-1, General Commercial



1 in = 200 ft





Future Land Use Map

From
O-1 (Office)

to

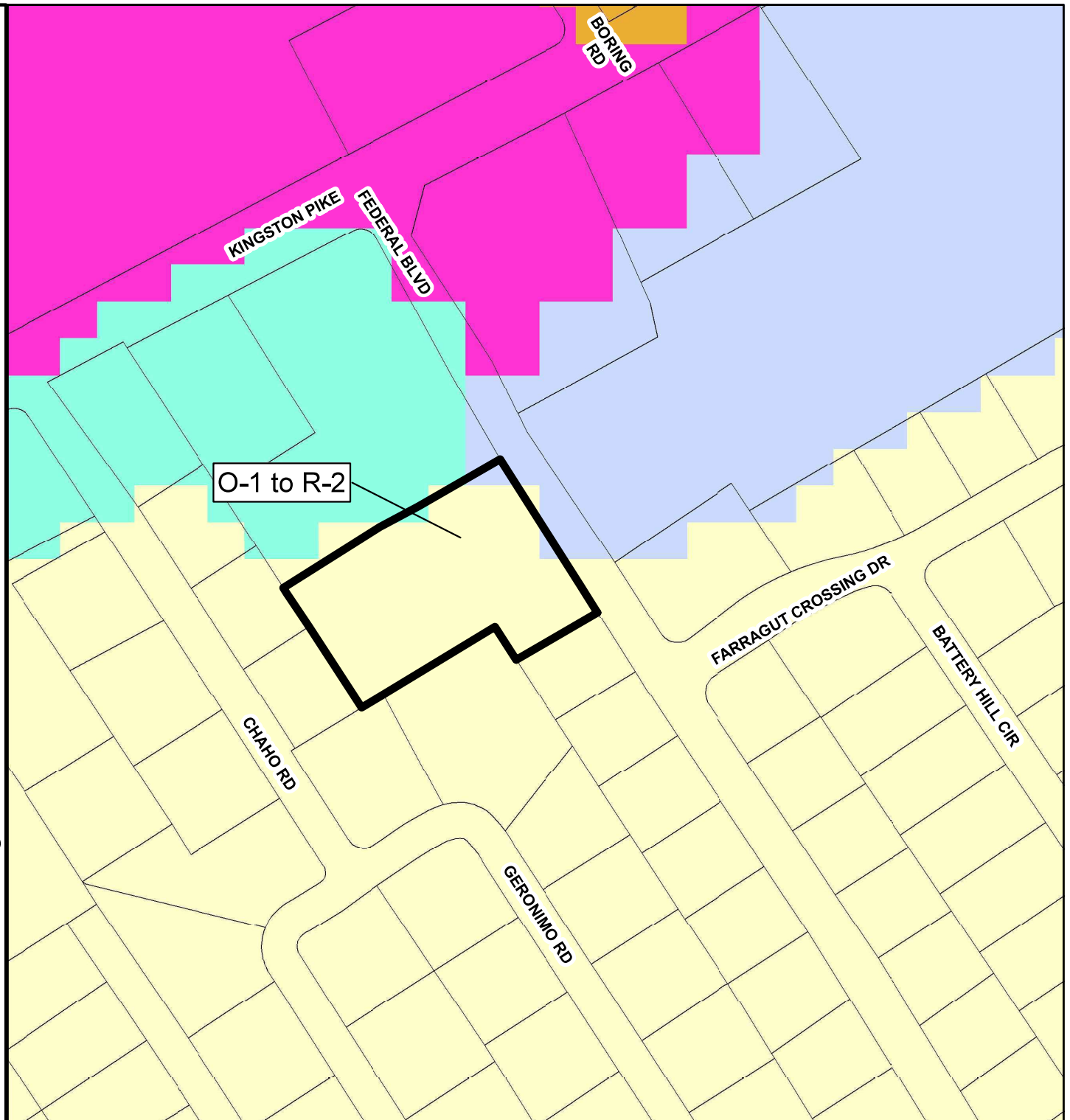
R-2 (General Single-Family Residential)

Legend

-  Subject Property
-  Parcels
-  Civic/Insitutional
-  Office/Light industrial
-  Very Low Density Residential (2-4 DUs / Acre)
-  Med Density Residential (6-12 DUs / Acre)
-  Mixed Use Neighborhood (6-10 DUs / Acre)



1 in = 200 ft



REPORT TO THE FARRAGUT MUNICIPAL PLANNING COMMISSION

PREPARED BY: Bart Hose, Assistant Community Development Director

SUBJECT: Discussion on a request to rezone Parcel 021.03, Tax Map 153 (end of Spring Branch Lane), from Rural Residential (R-1) to General Single-Family Residential (R-2), 6.84 Acres (Rackley Engineering, Applicant)

INTRODUCTION AND BACKGROUND: This item involves a rezoning request for an approximately 6.84-acre tract located off, and at the end of Spring Branch Lane. The applicants are seeking to have the property rezoned from Rural Residential (R-1) to General Single Family Residential (R-2).

DISCUSSION: The property in question abuts Inverness Subdivision and is accessed via Spring Branch Lane, a cul-de-sac located within that development. The section of Inverness Subdivision that abuts the subject property is zoned R-2 and the existing land use is single family residential. The property also abuts Briarstone Subdivision to the west, which is zoned R-1/OMSR. The existing land use in Briarstone is predominately small lot detached single family residential in nature.

The applicants have indicated that they desire to further subdivide the property. The Town's Future Land Use Map identifies the subject property as Very Low Density Residential (1-2 DUs/Acre). The minimum lot size, with sewer, in the R-2 zone is 15,000 square feet, which equates to a gross density of approximately 2.9 units per acre. This does not, however, account for the streets, drainage infrastructure, and open-space dedication requirements that are typically associated with subdivision development. Given this, any subdivision of the property would likely fall within, or close to, the density range of 1-2 dwelling units per acre.

A more significant issue related to the rezoning and associated planned subdivision of the property is the current single point of road access to Spring Branch Lane. In its current configuration, subdividing the property would require the development of a new road off the cul-de-sac turn around at the end of Spring Branch Lane. The Inverness Unit 3 final plat states that "vehicular" access is allowed to lot 1 of the Goins tract from Spring Branch Lane". The question is, what was meant by "vehicular access" in the plat note? Was it intended to allow for future road extension/connection or simply a driveway access? It would appear that, under its subdivision control and regulation authority, the Planning Commission could make this determination. It also does not appear that the platted cul-de-sac was originally planned or laid-out for the future extension of a road into the Goins Tract. This is not to say that such a connection/extension could not be properly designed, but the Planning Commission can consider it within its responsibility for coordinating the location and development of streets within the Town.

There was also a discussion during the Staff/Developer meeting about the possibility of obtaining access to Turkey Creek Road for the potential subdivision. Such an access would appear to alleviate the noted road connection concerns along Spring Branch Lane.



Zoning Map

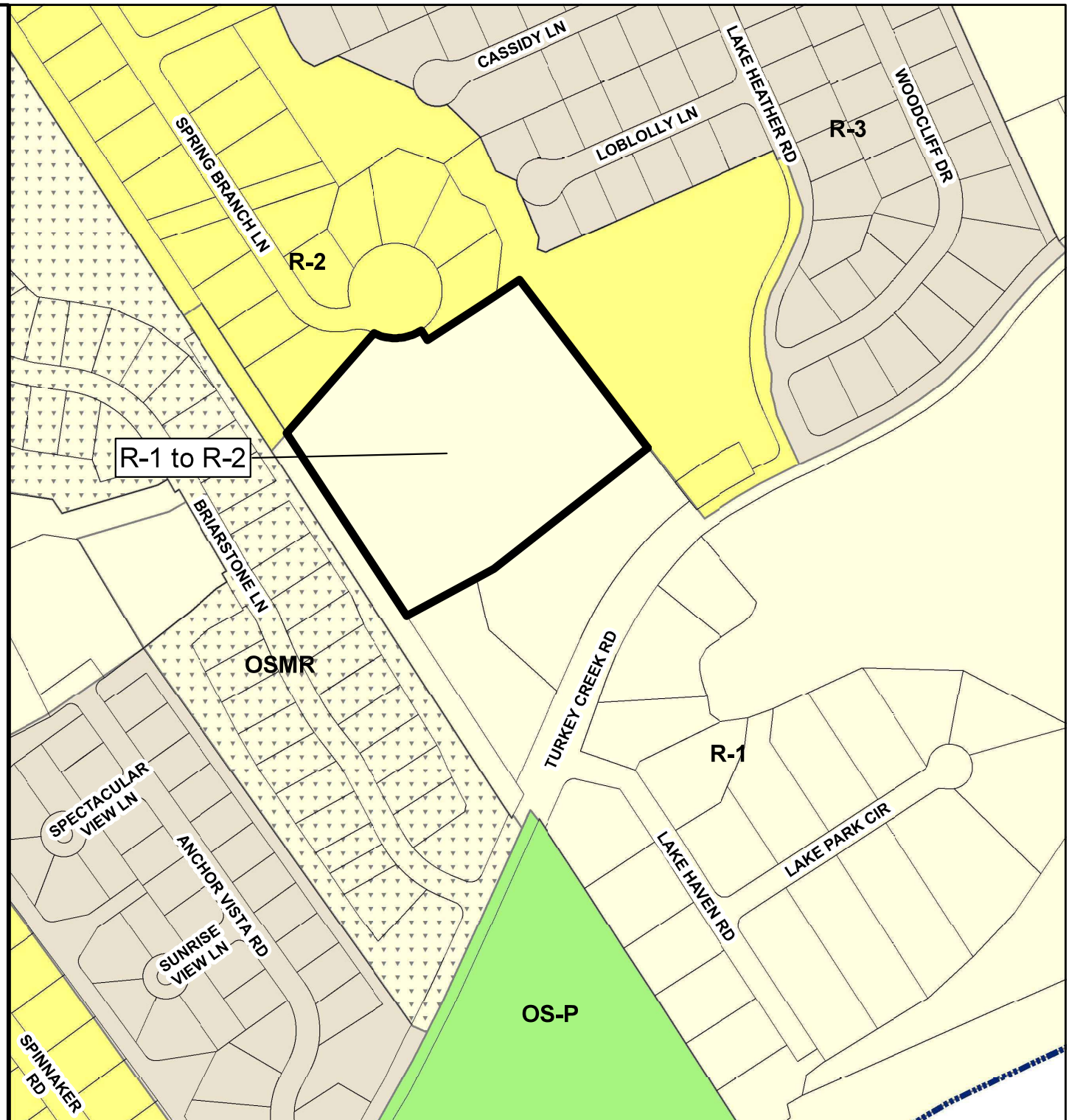
From
R-1 (Rural Single-Family Residential)
to
R-2 (General Single-Family Residential)

Legend

-  Subject Property
-  Town Limit
-  Parcels
-  OS-P, Open Space/Park
-  R-1, Rural Single-Family Residential
-  R-2, General Single-Family Residential
-  R-3, Small Lot Single-Family Residential
-  R-1/OSMR, Open Space Mixed Residential Overlay



1 in = 300 ft





Future Land Use Map

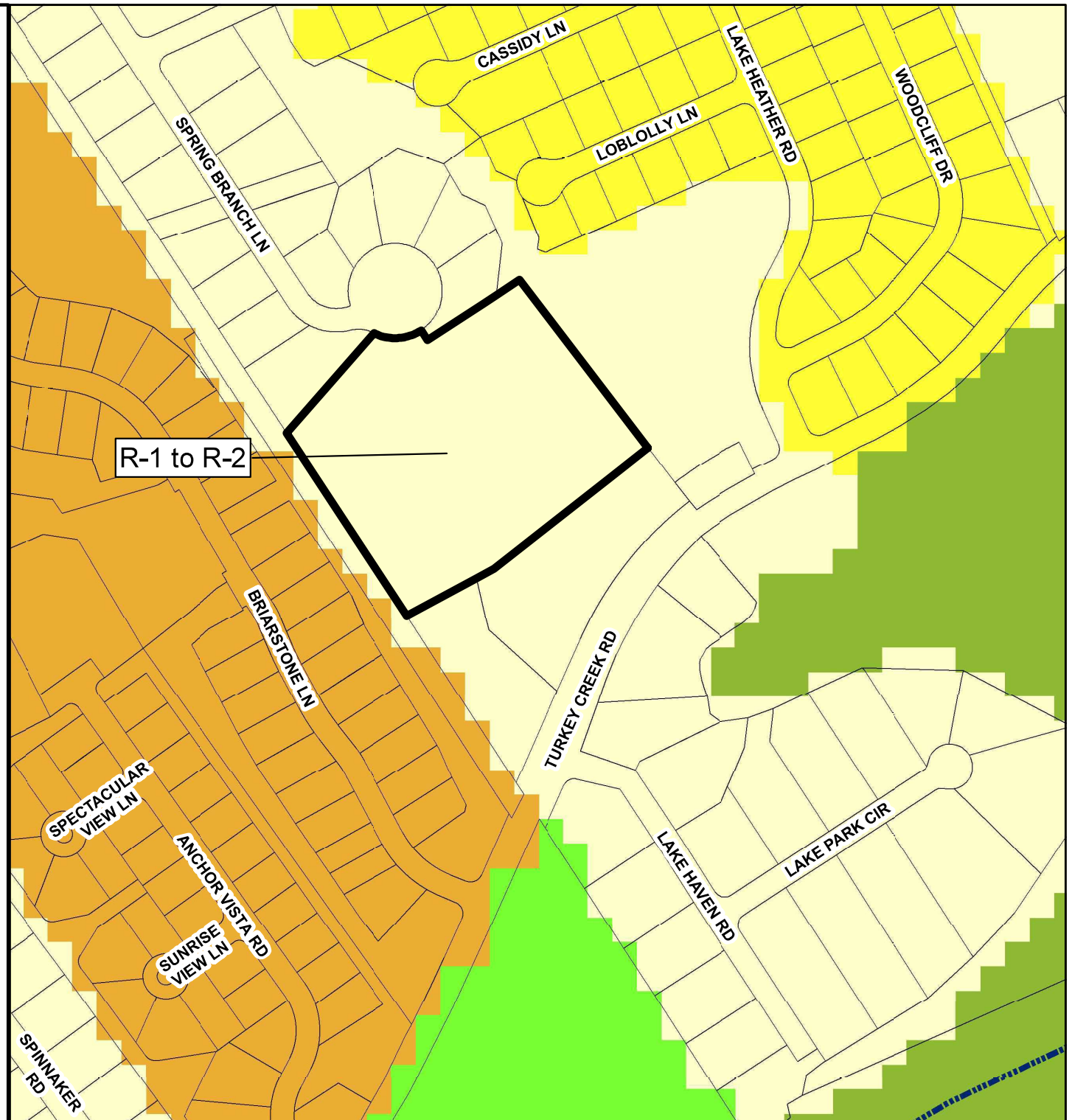
From
R-1 (Rural Single-Family Residential)
to
R-2 (General Single-Family Residential)

Legend

-  Subject Property
-  Town Limit
-  Parcels
-  Open Space
-  Parks and Rec
-  Very Low Density Residential (2-4 DUs / Acre)
-  Low Density Residential (3-6 DUs / Acre)
-  Med Density Residential (6-12 DUs / Acre)



1 in = 300 ft



REPORT TO THE FARRAGUT MUNICIPAL PLANNING COMMISSION

PREPARED BY: Trevor Hobbs, Assistant to the Town Administrator
Bart Hose, Assistant Community Development Director

SUBJECT: Discussion on a request to amend the Farragut Zoning Ordinance to permit a microbrewery and brewpub (Carlos Cortez, Applicant)

INTRODUCTION AND BACKGROUND: In response to application from a local business, The Planning Commission is asked to consider the Town's adoption of zoning regulations for restaurant establishments that manufacture beer on a small scale. The purpose of this item is to discuss potential elements of amendments to the Zoning Ordinance related to small-scale beer manufacturing.

BACKGROUND: Admiral's Corner, a future restaurant currently under construction, has applied to amend the Farragut Municipal Code in order to provide for a new use that would allow small-scale beer manufacturing (micro/craft brewing) for on-site sale and distribution. Because the Town's zoning regulations do not currently provide for the manufacturing of beer, it is proposed that amendments be made to the zoning ordinance to include a definition for "Brewpub" along with related minimum requirements to be placed on brewpubs.

It is anticipated that food sales percentage requirements, production and distribution limits, square footage restrictions, and proximity to schools and churches will be governed by the Beer Board, through various beer permits and other existing regulations. For this reason, staff are not requesting feedback regarding those elements at this time.

DISCUSSION: Based on research conducted of regulations in other communities in conjunction with the applicant's requests, staff have identified potential elements to be considered as part of the discussion on amendments to the Farragut Zoning Ordinance:

1. New Use/Definition:

Brewpub: An establishment licensed by the State of Tennessee for the manufacture, blending, fermentation, processing, packaging, and distribution of beer or malt beverages, operating in conjunction with an eating establishment involving the preparation and serving of food to seated patrons in addition to on-premise consumption of beer or malt beverages, including beer produced at the microbrewery on the same premises.

2. Permitted use in the following districts:

- C-1 Mixed-use Town Center Overlay (MUTCD)?
- Neighborhood/Convenience Commercial (NCC)?
- Regional Commercial (C-2)?
- Outlet drive regional entertainment and employment district (OD-RE/E)?

3. Minimum Requirements:

- Use is conditioned upon obtaining necessary permits from the Beer Board
- All manufacturing, processing, packaging, and distribution equipment shall be maintained within completely enclosed structures.
- Loading areas in a newly constructed facility facing a public street or an adjacent residential district must be screened by a solid wall or opaque fence with a minimum height of six feet, and a maximum height of eight feet, in addition to any required landscape buffer that may apply.
- Service doors in a newly constructed facility facing a public street or an adjacent residential district must be screened by a solid wall or opaque fence with a minimum height of six feet, and a maximum height of eight feet, in addition to any required landscaping buffer that may apply.
- For adaptive reuse of existing buildings, newly constructed loading areas and service doors should be located to minimize any impact on surrounding public streets. Existing loading areas and service doors should be screened to the extent feasible from view from public streets or any adjacent residential district.

Conclusion: Staff requests feedback on these potential elements related the application for zoning text amendment. Based on this feedback, staff would return with proposed amendments for the Planning Commission to recommend to the Board of Mayor and Aldermen for adoption.

Zoning for Micro-Brewing

Definition of Micro-Brewing for Farragut Zoning Purposes

Issues to Consider:

- Basic Elements (Brewpub, Microbrewery)
- Food Service Requirements (Brewpub vs Brewery),
- Size and Scale of Operations Thresholds,
- On-Site Sales and Service, Wholesale Distribution

Note: The Town will likely be making amendments to its alcohol related ordinances and requirements to address issues such as food sale percentages for different classes of serving establishments, and in the case of brewing, production limitations.



Example Definitions – Collierville, TN

BREWERY. An industrial uses that brews ales, beers, and/or similar beverages on site. Breweries are classified as a use that manufactures more than 15,000 barrels of beverage (all beverages combined) annually. In addition, uses that manufacture 15,000 barrels of beverage or less, but which do not meet one or more of the additional requirements needed to be considered microbreweries, are breweries.

MICROBREWERY. An eating place that includes the brewing of beer as an accessory use. The brewing operation processes water, malt, hops, and yeast into the beer or ale by mashing, cooking, and fermenting. The area used for brewing, including bottling and kegging, shall not exceed 25% of the total floor area of the commercial space.



Example Definitions – Knoxville, TN

Industrial – Craft. Artisan-related crafts and industrial processes that are more intensive uses, such as small-scale metalworking, glassblowing, furniture making, and small-scale food production that includes preparation, processing, canning, or packaging of food products. Micro-breweries, micro-distilleries, and micro-wineries are regulated separately from craft industrial.

Micro-Brewery. A facility for the production and packaging of malt beverages of alcoholic content for wholesale distribution, where the area of the establishment devoted to the production of malt alcoholic beverages does not exceed 25,000 square feet in commercial districts or 40,000 square feet in industrial zone districts, and may include a tasting room for consumption on-premises. A tasting room allows customers to taste/consume products manufactured on site and purchase beverages manufactured on site and related items. Brewery facilities that exceed this capacity are considered light industrial uses.



If Permitted, Where?

What zoning districts should make provisions for micro-brewing?

- C-1/Mixed-Use Town Center Overlay (MUTCD)?
- Neighborhood/Convenience Commercial (NCC) ?
- Regional Commercial (C-2)?
- Outlet drive regional entertainment and employment district (OD-RE/E)?

Permitted by right (with or without additional criteria) or as conditional uses?



Additional Development Criteria?

Knoxville Example - Micro-Brewery/Distillery/Winery

- a. Where production facilities of craft breweries, distilleries, and wineries of 8,000 sf or less in gross floor area abut a residential district, a Class B buffer yard per [Section 12.8](#) is required. Production facilities of craft breweries, distilleries, and wineries that are greater than 8,000 square feet in gross floor area must be separated from residential districts by 200 feet, as measured on a straight line from lot line to lot line.
- b. All malt, vinous or distilled liquor production must be within completely enclosed structures.
- c. Loading areas in a newly constructed facility cannot be oriented toward a public street, nor can loading docks be located on the side of any building facing a residential district. Where such district abuts on all sides of the lot, these loading areas must be screened by a solid wall or opaque fence with a minimum height of six feet to a maximum of eight feet, in addition to any required landscape buffer.
- d. Service doors in a newly constructed facility facing a public street or an adjacent residential district must be screened by a solid wall or opaque fence with a minimum height of six feet to a maximum of eight feet, in addition to any required landscape buffer.
- e. For adaptive reuse of existing buildings, newly constructed loading areas and service doors should be located to minimize any impact on surrounding public streets. Existing loading areas and services doors should be screened to the extent feasible from view from public streets or any adjacent residential district.



Potential Definition

Concept:

Brewpub = Microbrewery + Restaurant

Brewpub: An establishment licensed by the State of Tennessee for the manufacture, blending, fermentation, processing, packaging, and distribution of beer or malt beverages, operating in conjunction with an eating establishment involving the preparation and serving of food to seated patrons in addition to on-premise consumption of beer or malt beverages, including beer produced at the microbrewery on the same premises.



Potential Additional Development Criteria

- All manufacturing, processing, packaging, and distribution equipment shall be maintained within completely enclosed structures. All related storage shall also be contained completely within enclosed structures.
- Loading areas and/or service doors in a newly constructed facility shall be screened with opaque materials and shall not be visible from adjacent rights-of-way or residential districts. Such screening shall be architecturally compatible with the building.
- For adaptive reuse of existing buildings, newly constructed loading areas and service doors should be located to minimize impacts on surrounding rights-of-way and residential areas and screened to the extent feasible. Existing loading areas and service doors should be screened to the extent feasible from view from rights-of-way or any adjacent residential district.
- Use is conditioned upon obtaining necessary permits from the Beer Board



Scale of Operation

75% of all breweries produce less than 1000 barrels per year

95% of all breweries produce less than 15,000 barrels per year

Alcohol and Tobacco Tax and Trade Bureau, U.S
Department of Treasury



Example Images



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