Guide to New Residential Construction

Electric



Revision Date: November 1, 2019

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Dear Developer:

I would like to personally welcome and thank you for considering investing in our community. The Clinton Utilities Board (CUB) is committed to providing you with excellent and responsive service, and it is our desire to assist you in making your project a success. We are pleased to provide you with this brief guide to introduce you to our Electric Department's policies and procedures regarding new residential construction.

We would also like to take this opportunity to tell you a little about who we are. The Electric Department is a division of the CUB that provides electric service to approximately 30,000 accounts in six counties (Anderson, Campbell, Knox, Morgan, Roane, and Union) and four municipalities (Clinton, Norris, Oliver Springs, and Rocky Top). CUB purchases wholesale power from the Tennessee Valley Authority (TVA). CUB then provides the necessary facilities to distribute electric service over approximately 1,500 miles of high voltage circuitry to our customers.

We hope this guide will make it easier for you to do business with CUB's Electric Department and will provide answers to most of your questions. Telephone numbers and web site references are provided throughout for additional information. Please feel free to contact us with any questions or issues not addressed in this guide.

Thank you for allowing us to serve you.

CLINTON UTILITIES BOARD

Gregory (Greg) J. Fay, CEO (865) 220-6201

This handbook is provided for informational purposes only and is not intended to be a legal document. Information is current as of the revision date that appears on the front cover. For more recent updates and amendments, please visit Clinton Utilities Board's website at www.clintonub.com or call 865-457-9232 and ask to speak to the Electrical Engineering Department.

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Clinton Utilities Board – Electric Department Overhead Residential Development Procedures



Revision Date: April 11, 2019

- 1. CUB / Developer meet to discuss overall project goals, timelines, and responsibilities. In order to schedule a meeting please call 865-457-9232 and ask to speak to the Electrical Engineering Department.
- 2. Developer provides CUB with a Preliminary Plat indicating all lots and planned infrastructure.
- 3. CUB performs preliminary engineering indicating initial overall utility design and plat review.
- 4. CUB will work to minimize the impact of easements on planned developments. As a general rule electrical easements will be 10 to 15 feet inside all front lot lines and 5 feet inside all rear and side lot lines unless specific site conditions require exceptions such as large lots, flag lots, or lots involving joint permanent easements (JPE's).
- 5. CUB will provide preliminary non-binding cost estimates for its required work at no charge to Developer.
- 6. CUB / Developer meet to review the initial utility design and discuss the preliminary cost estimate.
- 7. Once agreement between CUB and Developer is reached, CUB coordinates design efforts with neighboring utilities (i.e., telephone, CATV, gas, water, and sewer). Developer is responsible for any cost reimbursement arrangements with other utilities.
- 8. Developer clears all trees, debris, structures, vegetation, etc. identified by CUB as being an encumbrance to utility construction.
- 9. Developer performs all site grading work to bring roadways and areas involving utility construction to rough final grade (± 6 in.).
- 10. Developer's surveyor places identifying markers (i.e., stakes) at each lot line and boundary line, including any utility infrastructure to be installed by the Developer (i.e., pump stations, detention ponds, drainage easements, water/sewer lines, etc.).
- 11. CUB / Developer / Surveyor meet in field to view site layout prior to final platting and engineering.
- 12. CUB prepares a final cost estimate and Construction Agreement for Overhead Residential Development.
- 13. Developer makes payment to CUB based upon final cost estimate and executes Construction Agreement.
- 14. After final engineering, any continued revision of the plat by the developer that necessitates additional design work or estimate revisions on the part of CUB may result in additional costs to the developer.

- 15. Developer's surveyor places iron pins as per final plat.
- 16. CUB performs final engineering design, including field staking of utility infrastructure to be owned by CUB, begins procurement process, issues job drawing(s) for construction.
- 17. CUB installs all necessary infrastructure, such as poles, conductors, guys, anchors, etc. for the complete overhead primary system.
- 18. If underground secondary road crossings are desired, Developer shall open / close all trenches, provide excavation work & gravel as required by CUB, and install all secondary conduits and pedestals according to CUB specifications.
- 19. If underground services are desired, Owner / Developer provides and installs all underground services from CUB poles or pedestals to homes, buildings, developed infrastructure, etc. The type of electric supply together with the location of the service equipment and meter center must be approved by CUB prior to the commencement of wiring. Owner / Developer is responsible for all State of Tennessee Electrical Inspection costs.
- 20. Unless additional requirements are identified by CUB, Owner / Developer work efforts meeting the requirements of the latest editions of applicable National Electrical Safety Code, National Electrical Code, all other federal, state, and local codes, ordinances, and regulations are acceptable.
- 21. In the event a dispute or issue arises, and the Developer is not satisfied with the outcome after working with the appropriate CUB staff, the issue will be reviewed and a determination made by the General Manager.
- 22. This document is intended to provide the basic steps and guidelines for working with CUB on overhead residential developments and is not intended to be a legal document. Information is current as of the revision date that appears at the top.

Clinton Utilities Board – Electric Department Underground Residential Development Procedures



Revision Date: April 11, 2019

- CUB / Developer meet to discuss overall project goals, timelines, and responsibilities.
 In order to schedule a meeting please call 865-457-9232 and ask to speak to the Electrical Engineering Department.
- 2. Developer provides CUB with a Preliminary Plat indicating all lots and planned infrastructure.
- 3. CUB performs preliminary engineering indicating initial overall utility design and plat review.
- 4. CUB will work to minimize the impact of easements on planned developments. As a general rule, electrical easements will be 10 to 15 feet inside all front lot lines and 5 feet inside all rear and side lot lines unless specific site conditions require exceptions such as large lots, flag lots, or lots involving joint permanent easements (JPE's).
- 5. CUB will provide preliminary non-binding cost estimates for its required work at no charge to Developer.
- 6. CUB / Developer meet to review the initial utility design and discuss the preliminary cost estimate.
- 7. Once agreement between CUB and Developer is reached, CUB coordinates design efforts with neighboring utilities (i.e., telephone, CATV, gas, water, and sewer). Developer is responsible for any cost reimbursement arrangements with other utilities.
- 8. Developer clears all trees, debris, structures, vegetation, etc. identified by CUB as being an encumbrance to utility construction.
- 9. Developer performs all site grading work to bring roadways and areas involving utility construction to rough final grade (± 6 in.).
- 10. Developer's surveyor places identifying markers (i.e., stakes) at each lot line and boundary line, including any utility infrastructure to be installed by the Developer (i.e., pump stations, detention ponds, drainage easements, water/sewer lines, etc.).
- 11. CUB / Developer / Surveyor meet in field to view site layout prior to final platting and engineering.
- 12. CUB prepares a final cost estimate and Construction Agreement for Underground Residential Development.
- 13. Developer makes payment to CUB based upon final cost estimate and executes Construction Agreement.
- 14. After final engineering any continued revision of the plat by the developer that necessitates additional design work or estimate revisions on the part of CUB may result in additional costs to the developer.

- 15. Developer's surveyor places iron pins as per final plat.
- 16. CUB performs final engineering design, including field staking of utility infrastructure to be owned by CUB, begins procurement process, issues job drawing(s) for construction.
- 17. Developer to open / close all trenches, provide excavation work & gravel as required by CUB, install all secondary conduits, pedestals, vaults, and concrete pads (if required), all according to CUB specifications.
- 18. In coordination with Developer, CUB installs all primary conduits and trains conduit bends within vaults. If desired, Developer will be allowed to provide and install primary conduits using an approved licensed contractor according to CUB specifications and with inspection and approval by CUB.
- 19. CUB pulls and terminates all high voltage underground cables and places the necessary pad-mounted equipment.
- 20. Owner / Developer provides and installs all underground services from CUB padmounted transformers to homes, buildings, developed infrastructure, etc. The type of electric supply together with the location of the service equipment and meter center must be approved by CUB prior to the commencement of wiring. Owner / Developer is responsible for all State of Tennessee Electrical Inspection costs.
- 21. Unless additional requirements are identified by CUB, Owner / Developer work efforts meeting the requirements of the latest editions of applicable National Electrical Safety Code, National Electrical Code, all other federal, state, and local codes, ordinances, and regulations are acceptable.
- 22. In the event a dispute or issue arises, and the Developer is not satisfied with the outcome after working with the appropriate CUB staff, the issue will be reviewed and a determination made by the General Manager.
- 23. This document is intended to provide the basic steps and guidelines for working with CUB on underground residential developments and is not intended to be a legal document. Information is current as of the revision date that appears at the top.

CLINTON UTILITIES BOARD

April 11, 2019

EXTENSION OF NEW OVERHEAD ELECTRIC UTILITY SERVICE

RESIDENTIAL DEVELOPMENTS

The improvement cost to supply new overhead electric utility service to a residential development such as, but not limited to, new subdivisions, condominiums, apartment complexes, planned unit developments, or any high density housing project, shall be paid by the developer in the form of a deposit that may be refunded to the developer on per lot basis paid annually over a period not to exceed seven (7) years. Lots shall have a permanent service and be an occupied dwelling to be classified as eligible for refund. Said refundable amount shall be requested annually by the developer each December and shall be paid by CUB with no accumulated interest returned. All of the remaining deposit shall be payable to the developer when fifty percent (50%) of the total number of lots have a permanent service and an occupied dwelling within the seven (7) year period. In no event shall the total refundable amount exceed the amount of the deposit paid by the developer.

Under the terms of the deposit arrangement defined above, developers of residential subdivisions will be required to pay the total cost of providing electric utility service to all the lots in the subdivision. The estimated cost will include all material, labor, equipment and overheads, including transformers. CUB will provide a non-binding cost estimate based on the preliminary subdivision plat provided by the developer. Once a final plat is received, CUB will prepare a final cost estimate as part of the final engineering design in order to determine the deposit amount and any other charges required of the developer. After final engineering has begun, continued revision of the plat by the developer which necessitates additional design work or estimate revisions on the part of CUB will result in additional costs to the developer. The need for system extensions or improvements that may be necessary to provide overhead electric utility service to the development or any three-phase loads needed to support the development will be paid by the developer as a part of the deposit arrangement defined above and shall be eligible for refund under the same terms and conditions, up to twenty-five percent (25%) of the total cost of providing electric service to all lots in the subdivision. Any extension or improvement costs in excess of twenty-five percent (25%) of the total cost of providing electric service to all lots in the subdivision shall be included in the total amount to be paid by the developer, but will not be eligible for refund. The developer will be required to execute a Construction Agreement for Overhead Residential Development and to make a single lump sum payment of the estimated amount in full prior to final engineering and issuance of the job for construction.

Developers desiring underground electrical service to serve a residential development shall be responsible for the cost difference between a complete underground primary electric system including transformers versus the cost of a complete overhead primary electric system including

transformers, in addition to the deposit as defined above for the estimated cost of a complete overhead system. The excess cost of the underground system will not be eligible for refund. The developer will be required to execute a Construction Agreement for Underground Residential Development and to make a single lump sum payment of the total estimated amount including both the deposit and the excess cost amount as required to provide underground electric service in full prior to final engineering and issuance of the job for construction.

Any residential developer who requests an electric utility line extension must secure the necessary easements along the entire route, provide new easements within the development, and clear the initial right-of-way of any trees and vegetative growth, all to the specifications of CUB.

CONSTRUCTION AGREEMENT (Sample)

Overhead Residential Development

THIS AGREEMENT, made and entered into on this the <DAY> day of <MONTH>, <YEAR>, by and between the CLINTON UTILITIES BOARD, an agency of the City of Clinton, hereafter referred to as the "BOARD" and <OWNER>, owners and developers of <DEVELOPMENT>, hereafter referred to as "OWNER".

WHEREAS, the OWNER desires to develop and is presently developing a certain track of land known as <<u>DEVELOPMENT</u>>.

WHEREAS, the OWNER desires overhead electrical service to said development be furnished by the BOARD and THEREFORE the BOARD and OWNER herein covenant and agree to the following:

- 1. When the Construction Agreement has been executed by all parties, the OWNER shall pay the BOARD a total sum of AMOUNT. This total sum being a deposit equal to the complete overhead electrical primary cost including transformers. The deposit shall also include any costs associated with off-site infrastructure improvements required for the development, up to twenty-five percent of the cost of the overhead electrical primary system. Any off-site infrastructure improvement costs in excess of twenty-five percent of the cost of the overhead electrical primary system shall be included in the total amount to be paid by the OWNER and shall be non-refundable.
- 2. The amount of the deposit is a total refundable amount and shall be refundable to the OWNER by the BOARD on a per lot basis. Lots shall have a permanent service and be an occupied dwelling to be classified eligible for refund. Said refundable amount shall be requested annually by the OWNER each December and shall be paid by the BOARD with no accumulated interest returned. All of the remaining deposit shall be payable to the OWNER when fifty percent (50%) of the total number of lots have a permanent service and are occupied dwellings. The refundable deposit amount equals <REFUND/LOT> per lot and the total number of lots equals <LOTS>. The total refundable deposit equals <FULLREFUND>. It is mutually agreed that no part of the deposit will be eligible for refund after seven (7) years from the date of this agreement.
- 3. The OWNER agrees that in the event he or other parties fail to make the covenants and agreements as stated in the Construction Agreement, the BOARD shall be under no obligation to furnish electrical service under this agreement and further shall have all remedies available either in law or equity for breach of contract.
- 4. This AGREEMENT shall inure to the benefit of the heirs, successors, or assigns to the parties hereto and shall not be altered unless in writing signed by all of the parties.
- 5. It is further agreed by the parties that the performance of these contractual obligations is a condition precedent to the furnishing of electrical power to said subdivision. The

WNER agrees to advise any subsequent purchase of said development of the existence and bligations of this contract.
IN WITNESS WHEREOF, we have affixed our seals and signatures on the day and ate aforesaid.
BOARD: CLINTON UTILITIES BOARD
Gregory J. Fay, General Manager
ATTESTED:
OWNER: <owner></owner>

CONSTRUCTION AGREEMENT (Sample)

Underground Residential Development

THIS AGREEMENT, made and entered into on this the <DAY> day of <MONTH>, <YEAR>, by and between the CLINTON UTILITIES BOARD, an agency of the City of Clinton, hereafter referred to as the "BOARD" and <OWNER>, owners and developers of <DEVELOPMENT>, hereafter referred to as "OWNER".

WHEREAS, the OWNER desires to develop and is presently developing a certain track of land known as <<u>DEVELOPMENT</u>>.

WHEREAS, the OWNER desires underground electrical service to said development be furnished by the BOARD and THEREFORE the BOARD and OWNER herein covenant and agree to the following:

- 1. The OWNER agrees to proceed with due diligence to provide the materials and labor for all trenching, excavation, and necessary backfill to allow the BOARD to construct or cause to be constructed an underground electrical conduit system in accordance with the plans and specifications of the BOARD. At the OWNER's discretion, the OWNER may choose to construct or cause to be constructed the underground electrical conduit system in accordance with the plans and specifications of the BOARD. The BOARD and OWNER agree that the BOARD or its representatives or agents shall have the right to inspect said construction at any reasonable time. The OWNER agrees to provide all needed materials and labor (if applicable) for the said installation at the OWNER'S expense.
- 2. The OWNER agrees that it will require the builders or residence owners to take underground electrical service at the BOARD'S facility and provide all needed ditching, conduits, and conductors to supply underground electric service from said facility to the residence. The BOARD agrees to provide all needed connections at the transformer.
- 3. The BOARD will not own or maintain the primary electric conduit system until primary cable is installed within conduit and cable is energized. The primary conduit and cable system shall become an integral part of the BOARD'S entire distribution system. The OWNER, builders, or residence owner shall own and maintain said secondary electric conduit and service from the BOARD'S facility to the residence. The BOARD reserves the right to inspect said installation of OWNER, builder, or resident owned underground electrical system at the time of installation.
- 4. When the Construction Agreement has been executed by all parties, the OWNER shall pay the BOARD a total sum of AMOUNT. This total sum being that of the cost difference between a complete underground electrical primary system including transformers versus the complete cost of an overhead electrical primary system including transformers, plus a deposit equal to the complete overhead electrical primary cost including transformers. The deposit shall also include any costs associated with off-site infrastructure improvements required for the

development, up to twenty-five percent of the cost of the overhead electrical primary system. Any off-site infrastructure improvement costs in excess of twenty-five percent of cost of the overhead electrical primary system shall be included in the total amount to be paid by the OWNER and shall be non-refundable.

- 5. The amount of the deposit is a total refundable amount and shall be refundable to the OWNER by the BOARD on a per lot basis. Lots shall have a permanent service and be an occupied dwelling to be classified eligible for refund. Said refundable amount shall be requested annually by the OWNER each December and shall be paid by the BOARD with no accumulated interest returned. All of the remaining deposit shall be payable to the OWNER when fifty percent (50%) of the total number of lots have a permanent service and are occupied dwellings. The refundable deposit amount equals <REFUND/LOT> per lot and the total number of lots equals <LOTS>. The total refundable deposit equals <FULLREFUND>. It is mutually agreed that no part of the deposit will be eligible for refund after seven (7) years from the date of this agreement.
- 6. It is agreed between the parties hereto that in the event solid rock is encountered during the necessary excavation of underground electrical conduit system that the OWNER shall bear the entire cost and expense for the excavation of said rock. Also, the OWNER agrees to pay for all material needed for back-filling in the event soil back filling is not adequate.
- 7. The OWNER agrees that in the event he or other parties fail to make the covenants and agreements as stated in the Construction Agreement, the BOARD shall be under no obligation to furnish electrical service under this agreement and further shall have all remedies available either in law or equity for breach of contract.
- 8. This AGREEMENT shall inure to the benefit of the heirs, successors, or assigns to the parties hereto and shall not be altered unless in writing signed by all of the parties.
- 9. It is further agreed by the parties that the performance of these contractual obligations is a condition precedent to the furnishing of electrical power to said subdivision. The OWNER agrees to advise any subsequent purchase of said development of the existence and obligations of this contract.

IN WITNESS aforesaid.	WHEREOF,	we ha	ave	affixed	our	seals	and	signatures	on	the	day	and	date
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