RIGHT-OF-WAY PROCEDURES MANUAL

Permitting and Construction in the Public Right-of-Way

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LINCOLN™
PUBLIC WORKS AND UTILITIES

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1. INTRODUCTION

Because of the increasing number of facilities in the public right-of-way, the City has adopted a Right-of-Way Procedures Manual in order to guide and manage the use of the public right-of-way. This manual is intended to provide technical criteria and details necessary to construct, install and maintain facilities within the Public right-of-way, according to provisions stated in Chapters 5.17, 14.53, and 14.70 of the City of Lincoln Municipal Code, the Lincoln Standard Specifications, the Lincoln Standard Plans and the Traffic Control Guidelines

1.1 Definitions

1.1.1. "Obstruct" shall mean to place or remove any tangible object or material in the Right of Way in a manner that stops, hinders, disrupts, or otherwise interferes with free and open passage over a specific area or part of the Right of Way. The term does not include the otherwise legal parking of a vehicle subject to all the current parking regulations of the City.

1.1.2. "Public Street" means the surface, the area below the surface, and the airspace above the surface, of any highway, street, road, lane, alley, unpaved alleys, path, parkway, viaduct, bridge, sidewalk, or other public right of way for motor vehicle or pedestrian travel under the jurisdiction and control of the City which has been acquired, established, dedicated, or devoted to such purposes.

1.1.3. "Right of Way" means and includes all present and future: (i) Public Streets, (ii) utility easements or similar properties in which the City now or hereafter holds a property interest and/or a maintenance responsibility which, consistent with the purposes for which it was granted or dedicated. "Right of Way" does not include City Property; land dedicated for roads, streets, and not opened and not improved for motor vehicle use by the public; structures, including poles and conduits, located within the public way; federally granted trust lands or forest board trust lands; lands owned or managed by the state parks and recreation commission; federally granted railroad rights of way that are not open for motor vehicle use, or utility easements granted to utility companies (which may be reflected in a real property deed, subdivision plat, or other real property record) with respect to which the City holds no property interest or maintenance responsibility.

1.1.4. “Excavation” Permit means a construction permit which is generally required for single excavations within the public right-of-way for access to existing private facilities for the purpose of maintenance, repair or service hook-up.

1.1.5. “Right-of-Way” (ROW) Construction Permit means a construction permit which is required for any installation or maintenance of private facilities within the public right-of-way, by a private utility company and where once the facilities are installed, they will remain as owned by the private utility company.

1.1.6. "Fiber Optic" (FOP) Construction Permit means a construction permit which is required for any installation or maintenance of private communication facilities within the public right-of-way, by a private utility company and where once the facilities are installed, a portion of the installed facilities, will be transferred to "City" ownership. This permit is also required when the installation of private facilities utilizes existing City owned conduit.

1.1.7. "Major Project" shall mean any project that meets the following criteria:

1.1.7a. Franchisee or private utility company wishing to bore or trench within the public right-of-way for the purpose of installing or maintaining private facilities, are required to submit construction plans signed by a registered professional engineer. The plans shall be submitted, along with a Traffic Control Plan (TCP), as part of an application for a "ROW" or a "FOP" Construction Permit.

1.1.7b. Franchisee or private utility company wishing to install or maintain overhead facilities or wishing to pull communications or electrical cable through existing underground conduit along a collector or arterial street, where the time to conduct the work will exceed 60 minutes. This will require the submittal of a Traffic Control Plan (TCP) as part of an application for a "ROW" or a "FOP" Construction Permit.

2. AUTHORITY TO OCCUPY THE PUBLIC RIGHT-OF-WAY

All Certified Telecommunications Carriers and Telecommunications Providers, who own or operate telecommunications facilities within the public right-of-way, must register with the City, as per Chapter 5.17 of the Lincoln Municipal Code.

Any other person wishing to use any space underneath, on, or above the surface of any street, alley, sidewalk, public space, or other public ground within this city, shall apply for a permit as per Chapters 14.53 or 14.54 of the Lincoln Municipal Code. Both require approval by the Lincoln City Council.

3. CONSTRUCTION PERMITS

As per Chapters 5.17 and 14.70 of the Lincoln Municipal Code, a construction permit is required prior to any installation, construction or maintenance of private facilities located within the public right-of-way.

Any work to be completed within the right-of-way of a State Highway, shall require the acquisition of a State of Nebraska "Right-of-Way Permit". Applicants for City of Lincoln construction permits, shall be required to produce a copy of this State permit prior to commencing work. State Highways within the City Limits of Lincoln include:

a. Nebraska Highway from east City Limits to Van Dorn St.
b. Van Dorn St. from S. 10th St. to Homestead Expressway
c. Homestead Expressway from W. Van Dorn to I-80
d. Cornhusker Highway from east City Limits to N. 11th St.
e. Sun Valley Blvd. from Cornhusker Hwy. to W. 'O' St.
f. W. 'O' St. from Sun Valley Blvd. to west City Limits
g. 'O' St. from east City Limits to 9th St.
h. Hwy. 34 from NW 1st St./W. Fletcher Ave. to west City Limits
i. N. 56th St. (L55X) from Cornhusker Hwy. to north City Limits
j. S. 14 St. (L55W) from Nebraska Highway to Warlick Blvd.
k. Warlick Blvd. from S. 14th St. to Homestead Expressway

For more information regarding State "Right-of-Way Permits, check out the Nebraska Department of Roads website at: http://www.roads.nebraska.gov/media/2930/permit-application-guidelines.pdf

City Construction Permits:

In an effort to make your interactions with the City more efficient, convenient, and interactive, we have established a partnership with Accela, Inc. to deliver powerful e-government services. To use ALL the services we provide, you must register and create a user account. **All facility owners and contractors wishing to install, operate and/or maintain infrastructure within the public right-of-way, must register and create an account using the following process:** Currently, there are three (3) forms of "construction permits" issued by the City of Lincoln Building and Safety Department for private construction work to be conducted in the public right-of-way:

a. Excavation Permits
b. Right-Of-Way (ROW) Permits
c. Fiber (FOP) Permits

3.1 Account Setup – Excavation Permits

3.1.1 Complete a "Contractor Account Information Form"

3.1.2 File a bond with sureties approved by the City Attorney in the sum of $5,000.00 and obtain and maintain at all times public liability insurance in the form of a commercial or comprehensive general liability policy, or an acceptable substitute policy form as permitted by the City Attorney, with a minimum combined single limit of $500,000.00 aggregate for any one occurrence that meets the requirements as set forth in Chapter 14.70.020 of the Lincoln Municipal Code.

3.1.3 Submit completed form, bond, insurance certificate and a $250 registration fee to:

City of Lincoln Building & Safety Department
c/o Justin Meyer
555 S. 10th Street, Suite 203
Lincoln, NE 68508

3.1.4 In addition to submitting the above information, each entity wishing to acquire an Accela permit account, must go to https://my.lincoln.ne.gov/CitizenAccess/ , select "Register for and Account" and provide a user name, password, personal and contact information.

Once this account is created, the information form submitted and the bond and insurance certificate approved by the City Attorney, an Accela permit account will be activated. Then, using the user name and password created, users will be able to apply for a permit, check the status of permits and if needed, schedule inspections associated with a specific permit.

Any questions regarding the account registration process, may be directed to Justin Meyer either by email at jjmeyer@lincoln.ne.gov or by telephone at (402) 441-6455.

3.2 Account Setup – FOP & ROW Permits

3.2.1 Complete a "Facility Owner/Contractor Account Information Form". *(Note: On the form you will need to identify whether you are applying for a Fiber Optic Permit (FOP) Account or a Right-of-Way (ROW) Permit Account. If you will be utilizing existing City owned conduit or installing new conduit that will become City owned when completed, you will need an FOP Account. All other facilities installed that will be privately owned, will need a ROW Account.)*

3.2.2 File a bond with sureties approved by the City Attorney in the sum of $5,000.00 and obtain and maintain at all times public liability insurance in the form of a commercial or comprehensive general liability policy, or an acceptable substitute policy form as permitted by the City Attorney, with a minimum combined single limit of $500,000.00 aggregate for any one occurrence that meets the requirements as set forth in Chapter 14.70.020 of the Lincoln Municipal Code.

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Any questions regarding the account registration process, may be directed to Justin Meyer either by email at jjmeyer@lincoln.ne.gov or by telephone at (402) 441-6455.

3.3 Permit Application – Excavation Permits

Once a permit account is set up by the City Building & Safety Department, Excavation Permit applications may be submitted utilizing Accela Citizen Access (ACA). A minimum fee of $15.00/excavation will be charged. If the work associated with a permit, requires the permit holder to temporarily close parking stalls which are regulated by parking meters, a fee of $10/day per parking meter, will also be charged. The application process is as follows:

3.3.1 Go to https://my.lincoln.ne.gov/CitizenAccess/ and enter the user name and password that was provided during the account registration process.

3.3.2 Once logged in, under the "Building" tab, select "Create an Application".

3.3.3 Check the box after reading the disclaimer and click "Continue Application"

3.3.4 This will take you to the "Select a License" page. Select "Excavation Company" from the pull down list. Verify your company's contact information. If this information needs to be updated, you may do so in Step 7 of the application process. Click "Continue Application".

3.3.5 This will take you to the "Select a Record Type" page. Select "Excavation" from the pull down list.

3.3.6 This will take you to the "Location" page. On this page, you are to enter an address for the location of the work to be completed. Once you've entered the address, click "Search". This should automatically load the necessary "Parcel" and "Owner" information related to the address of the excavation. Confirm that the information is correct and click "Continue Application". If you have no specific address, enter the closest address to the point at which the job will begin.

3.3.7 This will take you to the "People" page where you can review and edit information associated with your "license". Review your contact information, update, if necessary, and "Save". If information is correct, click "Continue Application".

3.3.8 This will take you to a page where you will now need to select your contact information. Click "Select from Account", choose your account and click "Continue". Again, verify your account and information and click on "Continue Application".

3.3.9 This will take you to the "Application Details" page where you will enter a detailed description of the work to be done and you will enter the number of excavations you intend to make in the "Street", "Parking" (the space between the curb and the sidewalk) and/or the "Alley. ***Need to add information on this page asking if Parking Meters are being blocked. If so, list the "Meter Number" for each parking meter being blocked and the duration.*** Then click "Continue Application".

3.3.10 This will take you to the "Review" page. Verify that all information is correct. If corrections are needed, click on the appropriate "Edit" button, make the necessary corrections and click "Save and Close" or "Continue Application".

3.3.11 This will take you to the "Pay Fees" page. This page will display a calculation of "preliminary fees" that you owe. ***Need to include a calculation for parking meters that are being blocked***. Click "Continue Application".

3.3.12 This will take you to the page where you can choose from two (2) payment options to pay the fee owed. If you prefer to pay by credit card, select the "Pay with Credit Card" option, enter all of the required information and click "Submit Payment". If you have set up a "Trust Account" with the City Building & Safety Department, select the "Pay with Trust Account" option. Then select "Record" and click on "Submit Payment".

3.3.13 This will take you to the "Record Issuance" page where you will need to print your permit. Click on the "Print/View Receipt" button and print your permit.

3.3.14 Once you've successfully printed your permit, you may logout of the system.

3.4 Permit Application – FOP & ROW Permits

Once a permit account is set up by the City Building & Safety Department, all Fiber Optic and Right-of-Way permit applications may be submitted utilizing Accela Citizen Access (ACA). Every "Fiber" (FOP) and "Right-of-Way" (ROW) Permit has a minimum fee of $340.00. This fee is intended to cover City staff time for the review of plans and the inspection of the work to be completed. If additional staff time is required for either plan review or for additional inspections, the permit holder will billed to cover the cost of this additional service. Also, if the work associated with a permit, requires the permit holder to temporarily close parking stalls which are regulated by parking meters, a fee of $10/day per parking meter, will also be charged. All new submittals for FOP or ROW permits shall contain a completed application, which includes construction plans and traffic control plans. In addition, depending on the type of work, a storm water pollution prevention plan and trench safety plan may also be required.

(NOTE: Separate Permits are required for each one (1) mile of a linear project or for each portion of a discontinuous project). The application process is as follows:

3.4.1 Go to https://my.lincoln.ne.gov/CitizenAccess/ and enter the user name and password that was provided during the account registration process.

3.4.2 Once logged in, under the "Building" tab, select "Create an Application".

3.4.3 Check the box after reading the disclaimer and click "Continue Application"

3.4.4 This will take you to the "Select a License" page. If you are applying for a "FOP Permit", select "Fiber Optic Contractor" from the pull down list. If you are applying for a "ROW Permit", select "Right of Way Contractor" from the pull down list and click "Continue Application".

3.4.5 This will take you to the "Select a Record Type" page. Select from the pull down list, either a "Fiber" or "ROW" Record Type, whichever is applicable.

3.4.6 This will take you to the "Address" page. On this page, you are to enter the address for the location of the work to be completed. Complete the information in all of the fields and click "Continue Application". If you have no specific address, enter the closest address to the point at which the job will begin.

3.4.7 This will take you to the "People" page where you can review and edit information associated with your "license". Review your contact information, update, if necessary, and "Save". If information is correct, click "Continue Application".

3.4.8 This will take you to a page where you will now need to select your contact information. Click "Select from Account", choose your account and click "Continue". Again, verify your account and information and click on "Continue Application".

3.4.9 This will take you to the "Contacts" page. Under the "Facility Owner", select the "Add New" button and add contact information for the primary contact from the "Facility Owner" (typically, this will be the Facility Owner's project manager or project contact). Next, under the first "24 Hour Contact", select the "Add New" button and add contact information for a second contact person from the "Facility Owner". Then under the second "24 Hour Contact", select the "Add New" button and add contact information for the contractor that will be conducting the work associated with the permit. Once all contact information has been entered, click "Continue Application".

3.4.10 This will take you to the "Project Details" page. On this page, you are required to enter various details regarding the project associated with the permit. Enter all information and Click "Continue Application". The fields where you are "required" to provide information are as follows:

a. **L.E.S. Permit?** – Check "Yes" or "No" if there is any form of a Lincoln Electric System permit associated with the FOP or ROW Permit request.
b. **Project Name –** Enter a brief project name for project associated with the FOP or ROW Permit request. (Preference would be to give the project a name that generally describes the bounds of the project)
c. **Start Date –** give the anticipated start date of the project
d. **End Date –** give the anticipated end date of the project
e. **Associated Permit –** Check "Yes" or "No" if there is/are any other City permit(s) associated with the FOP or ROW Permit request. If "Yes", provide the associated permit number (i.e. Flood Plain, Plumbing, etc.)
f. **Street or Alley cut?** – Check "Yes" or "No' if the permitted project will be cutting either a street, alley or a sidewalk. If "Yes", select the type of street to be cut (arterial, non-arterial, alley, or sidewalk), the address where the street, alley or sidewalk will be cut, the dimension of the cut and a brief description of the purpose of the cut.
g. **Blocking Traffic? –** Check "Yes" or "No" if the permitted project will be blocking a street, alley or a sidewalk. If "Yes", select the type of street, alley or sidewalk that will be blocked. (arterial, non-arterial, alley, sidewalk), the location where it will be blocked, if on a street, the number of travel lanes that will be blocked (if the blocked area is only a sidewalk or alley, just enter a zero (0), the duration in days of the blockage and the estimated start and end times of the blockage. **(NOTE: Permission must be granted by the Right-of-Way Construction Inspector, for lane closures during Peak Times and unless approved by the inspector, lane closures will only be allowed while actively working.**
h. **Parking Meters** – If you are working in the downtown area and your work area will block parking spaces that are controlled by parking meters, click on the "Add a Row" button. You will then need to enter all Parking Meter Numbers (each meter has a number or "stall" number, which can be found on the meter head). Enter the number, the duration that the meter will be out of commission and a brief description of the work causing the meters to be taken out of commission. Then hit the "Submit" button. For additional parking meters, continue this process until all affected meters are entered.
i. **Subcontractors** – If you have subcontractors working on the project, you will need to enter their contact information. **(NOTE: All contractors must be registered through the City Building & Safety Department prior to being**

allowed to work under an "FOP" or "ROW" Permit.) Click on the "Add a Row" button. Then enter the Contractor's name, the "License Type" for which the contractor is registered (FOP or ROW or both), their mobile phone number and an email address. Then hit the "Submit" button. For additional subcontractors, continue this process until all subcontractors are listed.

j. **Site Supervisors –** A condition of the permit is that there be at least one (1) person on the job site at all times who have been "Site Supervisor Certified". Click on the "Add a Row" button and enter the name of the certified individual, the date that the certification exam was passed, their mobile phone number and email address.

k. **Detail Information –** Enter a detailed description and location of the work to be conducted under the permit.

3.4.11 This will take you to the "Documents" page where you must upload "Construction Plans" and if you are blocking a lane of traffic or the sidewalk, you must upload "Work Zone Traffic Control Plans", as well. (**NOTE: Do not exceed a document size of greater than 26 MB**). Click on the "Add" button, then the "Select Files" button. Select the .pdf file of the Construction Plans and hit the "Continue" button. In the pull down titled "Type", select the "Construction Plans" option. Next enter in the "Description" box, "Construction Plans" and hit the "Save" button. To add the "Work Zone Traffic Control Plans", go through this process again, except select "Traffic Plans" from the "Type" pull down and in the "Description" enter "Traffic Plans". Remember to hit the "Save" button again.

3.4.12 This will take you back to the "Documents" page where can review the document(s) that you have uploaded. Confirm that all necessary documents have been uploaded successfully and hit the "Continue Application".

3.4.13 This will take you to the "Review" page where you can review and if necessary, edit any information that you have entered. Once you've verified all information is correct, hit the "Continue Application" button.

3.4.14 This will take you to the "Pay Fees" page. This page will show the amount of fees owed, based upon you permit application. Hit the "Continue Application" button.

3.4.15 This will take you to a page where you can either pay by "Credit Card" or by "Trust Account". To pay by "Credit Card", enter all required information and hit the "Submit" button. If you would like to use a "Trust Account" to pay for permits, you will first need to work with the City Building and Safety Department to have an account set up. Contact Justin Meyer of the Building and Safety

Department at (402) 441-6455 or JJMeyer@lincoln.ne.gov. Once your account is set up, when you reach the "Pay Fees" page, you will select "Pay with Trust Account", select from the "Licenses" pull down, the Trust Account License type and select from the name of your Trust Account from the "Trust Account Name" pull down. Then hit "Submit Payment"

3.4.16 Your payment will be processed at this point. When the payment is approved, you will be taken to the "Record Issuance" page where you will should see that your "Application had been successfully submitted" and where you can find your "Permit Number". You may print or view your receipt if you click on the "Print/View Receipt" button.

This completes your Permit Application process and begins the Plan Review process.

3.5 Permit Intake, Review and Issuance – FOP & ROW Permits

Once a permit application is completed using the ACA process, the Public Works, Right-of-Way Construction Section, will distribute the plans utilizing an electronic review process. Plans are distributed to various Public Works Divisions with the goal of either approving the permit or notifying the applicant to make changes or adjustments to the plans within two business days. (*Please note that this turn-around is our goal, however, dependent upon factors such as the current workload of the plan reviewers or other factors beyond our control, the turn-around time may be longer.)*

Notification to the applicant regarding the need to make changes to the plans, is made through an email. Once the applicant has made the necessary changes to the plans, the updated plans must be re-submitted utilizing the applicant's ACA account. The re-submittal process is as follows:

3.5.1 Log into your ACA permit account by going to https://my.lincoln.ne.gov/CitizenAccess/.

3.5.2 Once logged in, under the "Building" tab, select "Search Applications".

3.5.3 This will take you to a "Search" page. Enter your Permit # in the space titled "Record Number" and click "Search".

3.5.4 This will take you to a page which shows all information associated with the permit that you selected. Scroll down and click on the "Attachments" tab.

3.5.5 This will activate an "Add" button. Click on the "Add" button.

3.5.6 This will open a box that will allow you to select the file(s) you wish to upload. Click on the "Select Files" button.

3.5.7 You may now browse and select the file you wish to upload. Once you select the file(s), click on the "Open" button, then the "Continue" button.

3.5.8 This will take you back to the page which shows all information associated with the permit, and files that were uploaded with the original permit application. In order to complete the process of uploading the revised plans, you will need to select from the "Type" pulldown list, the type of revised plans you are attempting to upload ("Construction" or "Traffic" plans), in the "Description" box, enter "Revised Construction Plans" or "Revised Traffic Plans", whichever is applicable, and hit the "Save" button. This will upload the "Revised" plans.

Once the upload is complete, an automated email is sent to Public Works, Right-of-Way Construction staff, notifying them of the re-submitted plans. The plans will then be reviewed and if all concerns have been addressed, the permit will be issued. Again, the goal is to approve the permit within two business days of receiving the revised plans.

3.6 Construction Plans

The construction plans shall be submitted electronically and are required to show the following:

3.6.1 A Professional Engineer registered in the State of Nebraska, is required to stamp and sign all plans associated with any projects where there will be underground boring or multiple excavations within the public right-of-way.

3.6.2 Plans associated with pulling fiber through existing conduits or overhead work where new lines are either installed on existing poles or where the new lines are over lashed to existing overhead facilities, need not be stamped and signed by an engineer.

3.6.3 A Cover Sheet that shows the full limits of the proposed work.

3.6.4 A plan size of 11" x 17" and minimum scale is 1" = 100', unless otherwise approved.

3.6.5 The location of all existing and proposed public facilities, including City water lines, storm drainage facilities and sanitary sewer lines and related appurtenances (hydrants, valves, manholes, etc.) in relation to all proposed utilities. Proposed facilities shall be dimensioned with measurements taken from existing adjacent visible structures (curbs, poles, cabinets, manholes, inlets, fire hydrants, etc.) and showing the spatial relationship between the facilities and adjacent right-of-way or easement line, to clearly identify the location of such facilities. ***Right-of-Way and/or easement lines shall be shown, complete with dimensioning, on all plans.***

3.6.6 All streets must be clearly labeled.

3.6.7 The elevation of the existing and proposed public facilities should be noted, or a profile shown, in relation to the proposed utility line, if there is a potential for conflict. The plans shall indicate how potential conflicts will be avoided.

3.6.8 The location of the City's overhead and underground electric, detector and communication lines and associated pull boxes for streetlights and traffic signals.

3.6.9 Detail of proposed facility installation, i.e., pipe size, depth and dimensions of occupied space. If utility structure is proposed, dimensions, type, and location shall be indicated on the plans. ***Any facilities being installed for the City, must be identified on the plans.***

3.6.10 A complete Legend of drawings.

3.6.11 "Required Right of Way Construction Plan Sheet Notes"

3.6.12 Project Coordination Contact information (Phone number & email address) for both the Facility Owner and City of Lincoln Right-of-Way Construction Section contacts.

3.6.13 Clearly show any removal limits for impacted paving, sidewalks, etc. (when allowed) and material used to replace the item(s).

3.6.14 The length and depth of all bores.

3.6.15 All concrete driveways and streets shall be bored rather than open cut.

3.6.16 Detailed drawings of any bores, trenches, hand holes, manholes, vaults, switch gears, transformers, pedestals, valves and regulating stations including height, width and depth. Utility structures need a dimensional drawing and the placement site pre-approved by the City of Lincoln.

3.6.17 Landscape protection measures.

3.7 Traffic Control Plans

Traffic Control Plans are required as part of the permit application process, whenever a project causes any lane of traffic, any alley, any sidewalk or bike trail to be closed or obstructed. The following guidelines should be used to determine the complexity of the Traffic Control Plans:

3.7.1 All work zone traffic control, including pedestrian control measures, shall be in compliance with "Part 6" of the MUTCD, Chapter 15 of the Lincoln City Standard Specifications, "LSP 99" of the Lincoln City Standard Plans and the Lincoln Traffic Control Guidelines.

3.7.2 All pedestrian detours and any reconstruction of pedestrian facilities, shall meet current ADA standards and specifications.

3.7.3 A Traffic Control Plan is required for any closure of a traffic lane, alley or sidewalk for a duration of more than one hour.

3.7.4 There shall be no lane closures on any arterial street during Peak Hours (7:00-8:00am and 3:30-6:00pm) or from noon the day before to noon the day after a University of Nebraska home football game, without prior approval from Public Works Department. Also, no lane closures will be allowed on any streets located

directly adjacent to a school, unless authorized by the Public Works Department, Right-of-Way Construction or Traffic Operations Sections. The Contractor shall strictly adhere to all time limits and other restrictions as specified.

3.7.5 There shall be no instance where pedestrian facilities are closed or restricted on both sides of the street, simultaneously, unless authorized by the Public Works Department, Right-of-Way Construction Section.

3.7.6 All lane closures shall be re-opened at the end of each day, unless authorized by the Public Works Department, Right-of-Way Construction Section. ***(NOTE: All traffic control associated with the lane closure(s), shall be relocated out of the traffic flow and advance signs turned or some way removed from the sight of oncoming traffic.)***

3.7.7 Except in the case of emergency, the permittee is required to obtain written approval (email is acceptable) to work on a weekend or holiday. A written request must be made to the Public Works inspector, no later than end of business the Wednesday prior to the weekend or holiday.

3.7.8 Except in the case of emergency, no work will be permitted between the hours of 10 pm and 6 am, except for instances when the Public Works Department deems it necessary to expedite construction and/or minimize traffic disruption. In these instances, the permittee will be required to obtain a noise permit from the Lincoln/Lancaster County Health Department.

3.7.9 Dependent upon the individual situation, the requirement for submitting a Traffic Control Plan may be fulfilled by submitting a copy of the appropriate Traffic Control scenario spelled out in either the Lincoln Standard Plan (LSP) 99 or the Lincoln Traffic Control Guidelines booklet.

3.7.10 The minimum requirements for the placement of Temporary Traffic Control for "Short Duration" work (Less than 60 minutes) on arterial streets are the use of "4-Way Flashers", a flashing beacon, traffic cones and a lighted arrow panel. "Warning Signs are recommended. Refer to the Lincoln Traffic Control Guidelines for more guidance.

3.8 Trench Safety Plan

Trench safety systems shall meet or exceed U.S. Occupational Safety and Health Administration Standards.

3.9 Emergency Repairs

Any emergency excavation or repair of private facilities within the public right-of-way required to maintain the safety and well-being of the general public or to restore service to the facility owners' customers, should be commenced without delay. Notification of the emergency repairs must be provided to the Public Works, Right-of-Way Construction Section within twenty-four (24) hours of the commencement of the emergency repair project. If the emergency repair was due to damage caused by a contractor or City agency, authorized to be working in the public right-of-way, contact must be made to the Public Works, Right-of-Way Construction Section as soon as possible for assistance with the investigation. When notification is made, please provide the following information:

3.9.1 Location of the damaged facility
3.9.2 Date and time of the incident that caused the damage to the facility.
3.9.3 Any additional work zone traffic control needed.
3.9.4 Anticipated duration to complete repairs.
3.9.5 The name and contact information of the owner and any agent or contractor performing work on behalf of the owner;
3.9.6 General description of the type of construction activity and/or facilities repaired.

Whenever emergency repairs are needed, the facility owner shall apply for a standard Excavation, Right of Way construction or Fiber permit within two (2) business days. If the repair involves simply excavating the damaged facility and making the repairs, plans stamped by an Engineer are not required. ***The following is the process that will be followed by City Right-of-Way Construction staff to investigate accidental utility hits:***

Step 1: Go to the scene of the utility hit ASAP. Locate and interview the actual operator and/or job foreman on site. Document the operator's name and what instructions were given to the operator. If not the same person, also make contact and interview the contact person identified on the "One Call" ticket(s). Document all names and titles of any individuals interviewed or anyone who was present at the time of the hit. Also, document the company name of the contractor and the owner of the facility for which the contractor is working.

Step 2: When at the scene of the hit, take photos of all pertinent locate marks and/or flags, as well as anything else at the scene that will help to tell the story behind the hit.

Step 3: Using the "OneCall G.I.S. Viewer" in Internet Explorer, find the records information for the location where the City utility was hit.

Step 4: Using the GIS Map Portal on the City's "Intralinc", search for all "One Call" tickets associated with the location where the utility was hit.

Step 5: If it is a "City" utility that was hit, contact the appropriate staff person to find out any information related to the hit.

Water: Steve Owen or Dave Beyersdorf

Wastewater: Brian Kramer or Mike Mandery

Traffic: Lonnie Burklund or Benjamin Cosier

Step 6: From the "One Call" ticket(s), attempt to determine a contact for the contractor who hit the utility.

Step 7: When all information has been gathered, create a folder in F:/Eng Services/ROW/Private/Utility Hit Investigations and download all photos, .pdf's of any current record information and .pdf's of the "One Call" tickets.

Step 8: Write a brief report memo of the findings. If it is a "City" utility, submit the memo to the appropriate City Utility staff person.

3.10 Erosion

Erosion prevention measures shall be incorporated into all work within the ROW as described in Chapter 9 of the "Drainage Criteria Manual". All gutters, ditches, and other drainage features shall be maintained free and unobstructed of sediment, dirt, and debris. The handling, grading, excavating, or moving of excess construction materials or the movement or cleaning of construction vehicles or equipment shall be conducted in such a manner that materials and washout will not be deposited into catch basins, gutters, ditches, or areas where runoff may carry materials into any public or private storm water system.

3.11 Flood Plain Permit

The permittee may be required to obtain a flood plain permit as part of the plan process. In addition, any excavation taking place within the "500 foot Critical Area" of the Salt Creek levee system and the "500 foot Critical Area" of the Antelope Creek levee, from 'J' Street north to Salt Creek, shall require review by the Lower Platte South Natural Resources District.

3.12 Storm Water Pollution Prevention Plan

The permittee is required to implement erosion and sediment control measures for construction activities in accordance with the City's Regulations for Construction Site Discharges (Chapter

28.01 of the L.M.C. and related "Drainage Criteria Manual" Section 9, as amended and other City ordinances, state laws, and federal regulations).

The permittee shall submit an electronic set of the Stormwater Pollution Prevention Plan to the Department of Public Works – Watershed Management Division in cases where construction activities are one acre or more, or where stream/creek crossings are open cut. A four foot vertical clearance below the bottom of the proposed stream bed or drainage facility is required. The permittee shall contact the Department of Public Works for future improvements to the stream/creek, which may impact the proposed alignment or capacity of the stream/creek.

The following pollution prevention measures shall be used where applicable:

3.12.1 Any work in the floodplain requires a separate floodplain permit through the Building and Safety Department. In most cases, avoid placing pollution prevention structural controls in the floodway.

3.12.2 Trap/contain boring "mud" or waste material to prevent flow in the street and/or storm drain system through the use of a vacuum excavator, or equivalent method.

3.12.3 Remove construction debris and trash daily.

3.12.4 Stabilize disturbed areas as soon as practicable, but in no case more than 14 days after final grade has been attained. Temporary or permanent vegetation, erosion control matting, or a combination of measures should be employed as quickly as possible after land is disturbed, but no later than 14 days after site becomes inactive.

3.12.5 Inspections are required every other week and after significant rainfall events. Electronic submittals of the inspections are preferred.

3.12.6 Follow all other regulations related to the Stormwater Pollution Prevention Plan.

3.13 Permit Conditions

As a condition of any Right of Way construction permit, all parties shall adhere to the following requirements:

3.13.1 All City of Lincoln, Public Works engineering requirements and construction standards imposed;

3.13.2 All current FOP or ROW construction permits shall be present on each work site.

3.13.3 All current FOP or ROW construction permits shall be presented upon request to any representative of the Director;

3.14 Renewal

In the event that a permitted project is not concluded prior to expiration of the FOP or ROW construction permit under which it is being performed, the contractor shall apply to the

Director or representative, for an extension of the permit. In such case, the following information shall be submitted:

3.14.1 Statement from the Contractor indicating the reason for the delay in completion of the project;

3.14.2 Date that the Contractor anticipates the project to be completed; and

3.14.3 A new permit fee may be assessed for the renewal.

NOTE: If for any reason, the scope of work associated with an approved permit changes, the facility owner, may be required to re-submit an application for a new permit.

3.15 Site Supervisor Certification

As per the Lincoln Standard Specifications, General Conditions and Requirements, Part VII D., all contractors shall work under the supervision of a Site Supervisor. The Construction Permit requirement is that at least one person who has received Site Supervisor Certification, shall be on the worksite at all times. The certification requirements for individuals working on Private Utility Projects are that the individual must review and pass an open book exam that covers the Lincoln Standard Specifications, the Lincoln Traffic Control Guidelines, the "Right-of-Way Procedures Manual" and the "Required Right-of-Way Construction Plan Sheet Notes" document, all of which can be found using the following link: http://lincoln.ne.gov/city/pworks/engine/row/#s. Below is additional information related to Site Supervisor Certification:

3.15.1 To schedule a time to take the "Site Supervisor" test, contact the City of Lincoln Public Works and Utilities Department (402) 441-7711. Please make this request at least two days in advance of desired date and time.

3.15.2 Following completion of the test, a Site Supervisor certification card will be mailed to the applicant.

3.15.3 At the time of testing the applicant will be provided with current copies of the City of the Lincoln "Standard Specifications", the Lincoln Traffic Control Guidelines, the "Right-of-Way Procedures Manual" and the "Required Right-of-Way Construction Plan Sheet Notes" document.

3.15.4 The Site Supervisor Certification is valid for a one year period.

3.15.5 You may complete the Site Supervisor Test at the City's Annual Spring Workshop, typically held in March.

3.15.6 You may be asked by any city staff to provide the "Site Supervisor Card" while conducting work in the city right of way.

3.15.7 It shall be the applicant's responsibility to maintain a valid "Site Supervisor" certification.

4. CONSTRUCTION REQUIREMENTS

All construction must conform to the City of Lincoln Standard Specifications for Municipal Construction, the City of Lincoln Standard Plans, Approved Special Provisions, The City of Lincoln Traffic Control Guidelines and this manual.

Link: *Standard Specification for Municipal Construction*

Link: *City of Lincoln Standard Plans*

Link: *City of Lincoln Approved Special Provisions*

Link: *City of Lincoln Traffic Control Guidelines*

Following issuance of a construction permit, the permittee shall give the Department of Public Works a minimum notice of 48 hours, prior to commencing work, so that a City of Lincoln Right-of-Way inspector may be assigned.

4.1 Notification to the Public

The following notification procedures apply if work is to be performed in the street or within a public right-of-way:

4.1.1. For all construction within the right of way in front or rear of property, the Permittee shall conspicuously mark their vehicle with the company name and telephone number.

4.1.2. The closure of a traffic lane(s) on an arterial street may require the placement of a dynamic message sign a minimum of 48 hours in advance of the work. If required, the sign shall contain:

- 4.1.2.1. The date and time of the closures;
- 4.1.2.2. What closures will be in effect.

4.1.3. Any closure of a traffic lane on a public street or blocking of a public sidewalk or alley lasting longer than one day, must be identified by a 3 foot by 3 foot sign that is clearly legible to the traveling public. The sign must be posted at or in close proximity to the work site without obstructing safe sight distances and must contain:

- 4.1.3.1. The name of the owner and permittee;
- 4.1.3.2. The name of the person performing the construction on behalf of the public service provider, if any; and
- 4.1.3.3. A local 24 hour contact number that can be used in case of an emergency.

4.1.4. The requirements above are in addition to any signs, barricades, or warning devices required by law or ordinance. The sign information listed above may not be included on barricades or warning devices.

4.1.5. The permittee will give written notification to all adjacent property occupants by conspicuously posting the notification on each adjacent property at least 48 hours before commencement of construction. This requirement will not apply if the Public Works Director or representative determines that an emergency exists.

4.1.6. The permittee shall also keep adjacent property owners updated when construction phases change that affect the areas of work associated with the permit and any changes in work zone traffic control or if the completion date of the permitted project has been extended.

4.2 Existing Facility Locates

Prior to construction, the contractor shall obtain utility locates by contacting Nebraska 811 at 1-800-311-5666 or online at http://www.ne1call.com/

4.3 Street Cuts and Excavation

The removal of portions of existing pavement, drives, slabs, and sidewalks shall be completed in accordance with the City of Lincoln Standard Specifications and Approved Special Provisions. Where concrete removal is approved by the Director or representative, locations of the removal shown on the plans are indicative only of the need for a saw cut; removal shall be to existing joints or as directed by the City's project inspector. Where a saw cut has to be made in a drive approach, the contractor shall replace, to the nearest joint, the area of concrete which has been cut. In the event that it is necessary to place a temporary surface on any cut opening, the temporary surface shall be composed of hot mix asphalt or approved materials. All potholes made in City of Lincoln streets or alley pavements for the purpose of performing vacuum excavations to locate underground utilities, shall be restored as per Section 7.4 of this manual. All potholes in sidewalk panels will require **Full Panel** replacement. If colored, textured or patterned concrete is existing, replacement panels will be replaced to match as practicable. Owner may be required to put money into Escrow to cover all repairs prior to starting work. ***(NOTE: all potholes shall be covered immediately, either by permanent restoration or by the use of plates. No open potholes are allowed to be left open overnight.)***

Gravel or flexbase surface material shall not be used as a temporary surface on any cut without prior approval of the Director or representative.

Temporary surfaces shall be adequately compacted to prevent deterioration of repair during the temporary period.

If a pavement cut is to be covered, the permittee shall use steel plates. Plates must be sufficiently secured in place so as not to become dislodged or in any way cause a hazard to traffic. Asphalt transitions may be required to provide a smooth riding surface. Plates must be marked with the name of the person performing the construction and with a local 24 hour contact number that can be used in case of an emergency, unless a sign identifying the contractor is posted at or in close proximity to the work site. (*See Chapter 5 of this manual for procedures for installation of steel plates over transverse and longitudinal excavations*). **NOTE: If *steel plates are used between the dates of December 1st and May 1st of each year, the contractor will be responsible to monitor the weather for any predicted snow events. When a snow event is predicted, plates must be removed from all paved surfaces, prior to the snow event, and the holes are to be either temporarily or permanently filled as per the above requirements. Any plates that have not been removed and that cause damage to snow removal equipment, may result in a claim being filed against the responsible contractor or facility owner.***

Any temporary surface that fails to provide a non-deteriorating riding surface or fails to meet the requirements of these specifications shall be removed and replaced at the Director's discretion and at the permittee's expense.

4.4 Traffic, Street Lighting and Utility Poles, Electrical and Communication Enclosures

4.4.1. No one may move, adjust and/or relocate any portion of a City traffic light or street light system without receiving approval from the City of Lincoln Traffic Operations Section or the Lincoln Electric System.

4.4.2. Utility companies must obtain permission before installing any type of enclosures. All enclosures, poles, and guy wire installation and/or removal must have an approved drawing signed off by City of Lincoln, Right-of-Way Construction Section, before obtaining a permit.

4.5 Electrical and Communication Wires, Fiber Optics, and Conduits

4.5.1. Any installation of electrical or communication wires, fiber optic cables, or conduits must be installed as per Chapter 24 of the City of Lincoln Standard Specifications, Standard Plans and Approved Special Provisions and to National Electrical Safety Code (NESC) specifications or the violator will be responsible for all corrective measures and fines.

4.5.2. All conduits placed within the City rights-of-way must be Schedule 40 or better. All electrical conduits must be installed at a depth of 30" below finish grade in the City right-of-way and all communications conduits shall be installed at a

depth of 48" in the soil, below the projected slope from the flowline of a ditch, below the surface of a roadway or under the design flow line of a storm sewer or creek channel, unless approved in writing by the City of Lincoln, Right-of-Way Construction Section.

5. PROCEDURES FOR STEEL PLATE INSTALLATION

Steel plate placement on transverse and longitudinal excavations shall be in accordance with the following:

5.1.1 For roadways with a posted speed limit of 35 mph or less, a 1 inch minimum steel plate, meeting ASTM A36 steel requirements (is a low carbon steel that exhibits good strength coupled with formability) and the ability to withstand H-20 Traffic Loading (AASHTO Bridge Design Criteria that consists of truck axle loading of 32,000 lbs. or wheel loading of 16,000 lbs.), must be used.

5.1.2 For roadways with a posted speed limit of greater than 35 mph, a 1 ¼ inch minimum steel plate, meeting ASTM A36 steel requirements and the ability to withstand H-20 Traffic Loading, must be used.

5.1.3 Steel plates must extend a minimum of 12 inches beyond the edges of the excavation.

5.1.4 It is ***recommended*** that temporary paving with a cold asphalt mix be used to feather the edges of the plate to form a wedged taper to cover the edges of the steel plate, on plates being installed on roadways with a posted speed limit of 35 mph or less.

5.1.5 It is ***required*** that temporary paving with a cold asphalt mix be used to feather the edges of the plate to form a wedged taper to cover the edges of the steel plate, on plates being installed on roadways with a posted speed limit of greater than 35 mph.

5.1.6 In all cases, the steel plate shall be anchored securely, to prevent movement.

5.1.7 In addition to the required work zone traffic control devices, an additional roadway construction sign (black on orange), meeting MUTCD requirements, shall be installed 100 feet in advance of the steel plate location. The sign shall state "STEEL PLATE AHEAD".

5.1.8 Steel plates used for covering potholes that have been drilled for the purpose of performing vacuum excavations to locate underground utilities, shall be ½ inch in thickness for potholes 10 inches in diameter or less and ¾ inch for potholes between 10 and 24 inches in diameter.

6. CONSTRUCTION RESTORATION

6.1 Street, Sidewalk, Gutters, Curb Ramps and Grass Areas

6.1.1. All street, sidewalk and curb construction, reconstruction, repair, cutting, alteration or grading shall be done in accordance with City of Lincoln Standard Specifications, Standard Plans, Approved Special Provisions and Traffic Control Guidelines, and shall be subject to inspection.

6.1.2. No party shall construct, reconstruct, repair, cut, alter or grade any sidewalk curb or driveway in the public right-of-way without first obtaining all necessary permits from the City of Lincoln.

6.1.3. All roadways must be saw cut before removing pavement. The permittee is responsible for any other damages due to saw cutting. No removal or excavation in any street shall extend beyond the center line of the street before being backfilled and the surface of the street temporarily restored unless specific prior written permission is obtained from the Director or representative.

6.1.4. When any work in the public right-of-way involves the removal or disturbance of a sidewalk and/or curb ramp adjacent to an intersection, the new sidewalk and curb ramp shall be constructed to meet current City standards and specifications.

6.1.5. The Director or representative, is authorized to waive the requirements for a ramp where such installation would not be feasible due to location or physical construction limitations.

6.2 Additional Traffic Control at Worksite

6.2.1. All parties working within the public rights-of-way may be required to construct and maintain adequate and safe crossings over excavations and across streets under construction to accommodate vehicular and pedestrian traffic. If required, vehicular crossings shall be constructed of adequate size to accommodate regular vehicular traffic in a satisfactory manner. Temporary fill and surfacing or the use of steel plates shall be properly maintained. All excavation in the public rights-of-way shall be permanently repaired as soon as weather permits. When an opening is not permanently repaired and an unsafe condition exists (e.g., steel plate has moved, temporary patch has settled), the responsible contractor(s) must repair the condition immediately. If the contractor(s) fail to do so, the Director or representative, shall have the authority to cause such necessary labor and materials to be furnished by the City and all costs thereof shall be charged against the responsible entity.

6.2.2. As per Chapter 15 of the Lincoln Standard Specifications (page 1501, 4th & 5th paragraphs), All parties performing excavation in or adjacent to any sidewalk shall

provide and maintain pedestrian and ADA access throughout the period the construction or maintenance activity disrupts or causes the closure of existing sidewalks, curb ramps or crosswalks.

6.2.3. All parties working within the public rights-of-way shall erect fencing, railings or barriers around the site of the excavation work sufficient to minimize danger to persons using the street or sidewalks, and such protective barriers shall be maintained until the work is completed or the danger eliminated. Safety fence with top and bottom rails shall be used if excavations and devices are in the sidewalk area or within 2' of the sidewalk. If the excavations are to remain open overnight, the use of lighted drums or barricades, in addition to fencing, railings or other barriers, shall be required. Permittee shall inspect barriers and other protective devices every twenty-four (24) hours.

6.3 General Worksite Information

6.3.1. If an excavation is to remain open overnight, all material (spoil) excavated, shall be properly covered and protected. If the excavation is to remain open for more than five (5) business days, all excavated material shall be removed from the job site. If excavating and backfilling on the same day, all unsuitable material (spoil) shall not be used for backfill (Reference Chapter 20.02 of the Lincoln Standard Specifications for the definition of unsuitable material). It shall be the permittee's responsibility to secure the necessary permission and make all necessary arrangements for all required storage and disposal sites.

6.3.2. All damage done to existing infrastructure during the progress of the excavation work shall be repaired by the permittee to the satisfaction of the Director or representative. If upon being ordered to do so the permittee fails to furnish the necessary labor and materials for such repairs, the Director or representative shall have the authority to cause such necessary labor and materials to be furnished by the City and all costs shall be charged to the permittee.

6.3.3. As per Chapter 14.70 Sections .040 & .050, all backfill in any cuts, trenches, or excavations beneath any paved or unpaved roadway shall be placed by the Department of Public Works and Utilities. In addition, the Department of Public Works and Utilities shall replace all roadway surfaces removed or damaged as a result of the work done under such permit. The costs and expenses incident thereto shall be collected from the permittee. All excavated material (spoils) removed from under a paved or unpaved street that are unsuitable for backfill, shall be removed from the site on the same day that it was excavated. Any suitable backfill material that remains on site, must be covered and protected. As

noted in 6.2.1 above, the permittee may be required to place a temporary surface over openings made in paved traffic lanes.

6.3.4. From November 1 to April 30, temporary restoration may be necessary due to weather conditions. Temporary restoration work may be completed with cold patch, hot asphalt, or concrete to grade. All temporary patches must be maintained by the contractor, at all times until permanent repairs are made.

6.4 Restoration

6.4.1. On full depth concrete streets, the Director of Public Works or representative, may require full panel replacement meeting the requirements as detailed in LSP 660 and LSP 670 of the Lincoln Standard Plans and Chapter 4 of the Lincoln Standard Specifications for all utility cuts. On asphalt streets with concrete base, the Director or representative shall require the replacement of the asphalt or brick with concrete base as detailed in LSP 670 of the Lincoln Standard Plans, for all utility cuts.

6.4.2 Acceptance or approval of any excavation/ restoration work by the City shall not prevent the City from asserting a claim against the permittee and/or the representative surety under the surety bond required hereunder for incomplete or defective work, if discovered within twenty-four (24) months from the completion of the excavation work or the length of any warranty, whichever is longer. Verbal/non-written discussion with City personnel shall not relieve the permittee of any responsibilities under City ordinance or this policy.

6.4.3 In any excavation work, all streets and private properties shall be thoroughly cleaned of all rubbish, excess earth, rock and other debris resulting from such work. All clean-up operations at the location of such excavation shall be accomplished at the sole expense of the permittee and shall be completed to the satisfaction of the Director or representative.

6.4.4 The permittee shall expeditiously and diligently complete all excavation work (in accordance with the excavation permit) and shall promptly restore the street to its original condition or better, as soon as practicable. In any event, said work shall be completed no later than the date specified in the construction permit.

6.4.5 The permittee shall not disturb any surface survey monuments or hubs found on the line of excavation work until authorized to do so by the Director or representative.

6.5 Construction Markings, Disturbed Areas, etc.

6.5.1 Construction markings shall be large enough and spaced enough so as to be seen by a contractor, but not so large as to become a blemish on the pavements. Curb and sidewalk markings of valve boxes and service locations shall be made neatly and be less than 4" square.

6.5.2 The removal of existing traffic signs, pavement markings or any other traffic control device, shall be approved by the City of Lincoln, Right-of-Way Construction Inspector to ensure that the proper traffic control is in place during the construction activities. All signs, fastening hardware and posts, as well as other devices which may be reused, shall be returned to the Public Works, Traffic Operations Shop, immediately following removal. Any material damaged during removal, storage or transport, shall be repaired or replaced at the contractor's expense. Damage to existing pavement markings shall be assessed by the construction inspector and the cost for the replacement shall be the responsibility of the contractor. For damage to Thermoplastic, Polyurea and paint, a price per lineal foot will be assessed. For damage to Raised Pavement Markers (RPM's), a cost per RPM will be assessed. In addition, if it is determined by the Public Works Traffic Operations Section, that "temporary" pavement markings are necessary, the cost to install and maintain the "temporary" pavement markings will be the responsibility of the contractor, until such time as the permanent markings can be installed. The installation of any permanent or temporary pavement markings, as well as any traffic signs or other traffic control devices, shall be done in accordance with the Manual On Uniform Traffic Control Devices (MUTCD), Chapters 13 & 14 of the City of Lincoln Standard Specifications and LSP 78 & LSP 79 of the Lincoln Standard Plans. Restoration of all traffic control devices removed or damaged by parties accessing the public rights-of-way shall be replaced by such parties before restoration will be considered complete. The parties shall take direction from City of Lincoln construction inspectors as to approved products and applications.

6.5.3 Disturbed areas shall be limited to 100 linear feet of open trench before temporary repairs may be required.

7. INSTALLATION

Trenching. Permittee shall not proceed with additional trench work exceeding a maximum of one hundred (100) feet of open trench without the approval of the Director or representative. If trench is to remain open overnight or longer, all excavation spoils which are unsuitable for backfill

and any other construction debris will be removed by the end of the same day that it has been excavated.

Crossings. All underground crossings of paved roadways and storm water and creek channels shall be made by a bore method approved by the Director or representative. Any alternate method shall be reviewed and subject to approval by the Director or representative. Voids and all holes shall be properly grouted. Crossings shall be at approximately right angles to the roadway and in no case shall any facility be placed in any culvert or drainage pipe or within three (3) feet of a culvert or storm sewer unless approved by Director or representative.

7.1 Facility Spacing Requirements

All facilities installed under pavement shall be buried to a depth of 30 inches under top of pavement for electrical conduits and 48 inches under top of pavement for communications conduit, unless approved in writing by the City of Lincoln, Right-of-Way Construction Section. This measurement shall be made from the existing or proposed top of pavement, whichever is lower. For this section, proposed improvements are defined as any facility with a designated location and elevation as shown on available construction plans. In the parkway, the facilities shall be buried at a depth of 30 inches in the soil, if electrical and 48 inches in the soil, if communication. If below a ditch, storm sewer or creek channel, these depths will be from the projected slope of the flowline of the ditch or the design flow line of the storm sewer or creek channel, unless approved in writing by the City of Lincoln, Right-of-Way Construction Section. These stipulations are with the condition that additional depth may be necessary due to other constraints or utilities.

7.1.1. All facilities that cross existing drainage facilities, sanitary sewer, or water mains shall either be buried under the existing pipes with a two foot minimum vertical clearance at the underside of the existing pipes, or be placed above the existing pipes with a two foot vertical clearance at the top of the existing pipe. In either case, the proposed facility shall be 48 inches under top of pavement. The location and elevation of all crossed existing utilities must be potholed prior to installation of new facility.

7.1.2. All facilities that run parallel to an existing or proposed drainage facility, sanitary sewer, or water main shall have a three foot minimum horizontal clearance from the exterior face of the pipes or manholes. Please note that the elevation of the individual lateral services of these pipes may vary. All conduits must be 24 inches below all lateral service pipes.

7.2 Pull Box Installation Requirements

All pull boxes being installed in conjunction with Fiber Optics installation that will be owned and operated by the City of Lincoln, Public Works Department, shall be T48 Pull Boxes, unless written approval is given to install an alternate size. In addition, all pull boxes installed in the public right-of-way, shall be installed following Chapter 24.05 of the Lincoln Standard Specifications and LSP 81 of the Lincoln Standard Plans.

7.3 Landscape Protection Requirements

The proposed facility route should be designed to minimize damage to trees and/or landscaping.

7.3.1 All lines that are bored under trees within street rights-of-way, must be bored a minimum of 48 inches under the surface, to avoid the root system of the trees.

7.3.1.1 Bore pits shall be located a minimum of 24 inches outside of the drip line of the tree. The drip line is an imaginary line that extends from the tree's outer branches and leaves, directly to the ground.

7.3.2 Manholes shall be placed outside the drip line of the tree, unless approved by the City Parks & Recreation Department.

7.3.3 Should work need to be performed near a tree, a temporary construction fence shall be erected 12 inches outside the drip line of the tree.

7.3.4 Permittee shall be responsible for any damage to public or private landscaping and sprinkler systems.

7.4 Keyhole Pothole Excavation and Backfill

GENERAL

7.4.1 This specification covers the requirements for keyhole coring, vacuum excavation, backfilling, and reinstatement of the keyhole core in asphalt or concrete pavements to allow for underground utility repairs and underground potholing.

7.4.2 Quality control field inspection and testing requirements including frequency shall be in accordance with Contracting Agency requirements.

DEFINITIONS

7.4.3 **Keyhole coring:** The operation of coring a circular hole through the roadway pavement using diamond core drilling equipment.

MATERIALS

7.4.4 The material and placement requirements in the pipe zone and final backfill area shall be in accordance with Chapter 20 – Construction for Utilities & Structures.

7.4.5 Pavement keyhole cores removed shall either be removed from the work site or stored in a safe and secure on-site location. The cores shall be made readily available for restoring the pavement after backfilling is complete and approved.

7.4.6 **Bonding Agent:** The bonding agent shall be a single component cementitious, rapid hardening, high strength waterproof bonding agent conforming to the physical properties shown in Table 1.

7.4.6.1 The bonding material shall be impervious to water penetration at the joint after application.

7.4.6.2 The bonding materials shall securely bond the undamaged keyhole core to the pavement and shall completely fill the annular space at the joint.

7.4.6.3 The bonding materials shall within 30 minutes at an ambient temperature of 70 degrees Fahrenheit allow the core to support an equivalent traffic load condition of at least three (3) times the AASHTO H-25 standard.

7.4.6.4 The bonding material shall be Utilibond, manufactured by Utilicor Technologies Inc., or Engineer approved equal.

TABLE 1 - BONDING MATERIAL PROPERTIES

Property	ASTM Test Method	Requirements
Bond Strength (Slant Shear), psi (70 deg. F., 30 min. cure)	C882	200 min.
Compressive Strength, psi (70 deg. F., 60 min. cure)	C109	1500 min.

POTHOLE EXCAVATION, GENERAL

7.4.7 The vertical alignment of the keyhole coring shall be perpendicular to the horizon, and the cutting shall extend to the full depth of the existing pavement section.

7.4.8 No keyhole cores shall be drilled within 2-feet of an existing contraction, construction, or control joint. Full depth patches shall be used in these areas.

7.4.9 No keyhole cores shall be drilled within the approach pavement of a bridge or box culvert structures.

7.4.10 Unless otherwise approved by the City's Project Manager, keyhole cores shall not be greater than 24-inches in diameter. Adjacent cores shall not be closer than 3-feet from each other (edge to edge), shall not contain a joint or any pavement cracks greater than 1/8-inch wide, and shall not be performed in pavements where the section is less than 6-inches thick.

7.4.11 In the event of a misaligned keyhole with the underground facility, a second overlapping core may be drilled provided there is at least 1/3 overlap and BOTH cores are drilled consecutively. This method is not applicable to existing restored cores that may be present in the surface. If the second keyhole is also misaligned, then a conventional full depth patch will be required for restoration.

7.4.12 Coring shall be performed with a keyhole coring saw.

7.4.13 The contractor shall place a temporary mark on the keyhole core prior to cutting to insure that the removed section is replaced in the same orientation as originally found in the pavement.

7.4.14 Soils within potholes shall be removed by air/hydro-excavation methods to expose utilities. The zone of soil removal shall remain essentially within a vertical plane extending below the edges of the removed pavement.

7.4.15 The Contractor shall remove all unsuitable materials from the site.

POTHOLE BACKFILL AND COMPACTION

7.4.16 The backfilling of each zone shall be completed in accordance with Chapter 20 – Construction for Utilities & Structures, unless otherwise approved by the City's Project Manager.

7.4.17 In lieu of compacted soil backfill the contractor may elect to use, with City's Project Manager's approval, Flowable Fill, Coarse Aggregate, Fine Aggregate, or approved equal meeting City of Lincoln Specifications.

7.4.18 Pneumatic compaction equipment (pneumatic rammers or equivalent) shall be used for compaction of the backfill material. The size of the compactor shall not exceed 2/3 of the diameter of the cored keyhole.

7.4.19 Jetting or hydro-flushing of the backfill shall not be permitted. Care shall be taken to ensure that the utility is properly bedded with material of an approved density or in accordance with these Standard Specifications. The initial 12 inches of backfill above the top of the pipe shall be carefully placed to protect the pipe bedding from further backfilling operations. Backfill shall be mechanically compacted to a minimum density of ninety-five percent (95%) of the maximum

dry density of the material as determined by AASHTO Method T-99. The moisture content of the soils shall be between two percent (2%) below and four percent (4%) above the optimum moisture content as determined by the above test.

PAVEMENT RESTORATION

7.4.20 The surface cut by keyhole coring restored to its original condition with the reinstated core flush with and in the original orientation as the existing surface matching existing pavement surface appearance.

7.4.21 Excess bonding material shall be removed from the restored surface. A patched appearance shall be avoided in surface restoration wherever possible.

7.4.22 Unless otherwise approved by the City's Project Manager, the Contractor shall reinstate the bonded keyhole core within 24 hours of cutting the pavement. Openings within public access or openings allowed to be left open greater than 24 hours shall be covered with a steel road plate capable of supporting traffic loads without movement or racking.

7.4.23 **Surface Tolerances:** The reinstated core shall be flush and level with the adjacent pavement. Gaps attributable to the positioning of the core shall be less than 1/16-inch between the bottom of a minimum 3-foot long straight edge and the surface of the pavement in any direction of the surface of the keyhole core.

DEFICIENCIES

7.4.24 Where the keyhole core is found to be fractured or defective upon removal, or becomes damaged after removal and prior to reinstatement, the core shall not be used to restore the pavement.

7.4.25 A keyhole core shall be considered unacceptable when one of the following conditions exist:

- 7.4.25.1 The keyhole core contains any vertical cracks wider than 1/8-inch extending full depth through the core; or
- 7.4.25.2 Any deteriorated piece of the keyhole core is larger than ten percent of the overall area of the core; or
- 7.4.25.3 Two or more successive layers of pavement in the keyhole core become horizontally delaminated and cannot be re-bonded to each other with the bonding material.

7.4.26 All keyhole cores that are damaged or do not meet the surface tolerances shall be removed and disposed of off-site. The pavement at damaged keyhole core locations shall have a permanent full-depth patch installed by the Contractor in accordance with the City of Lincoln Standard Specifications and Standard Plans

including but not limited to: LSP 642, LSP 670, and the Approved Special Provision for Pavement Repair.

8. TRENCHLESS TECHNOLOGY

8. TRENCHLESS TECHOLOGY

8.1 Boring Requirements

In using trenchless technology or boring, the following applies:

8.1.1 When crossing over or under existing public facilities or where the proposed facility will be running in the same direction as the public facilities and is within five (5) feet of the existing facilities, it shall be the responsibility of the contractor to physically locate the existing facilities by either potholing or by hand digging.

8.1.2 The contractor is responsible for the protection of all existing public and private facilities.

8.1.3 Casing pipe or Conduit shall be placed as indicated on the drawings and shall be as specified in the section entitled “Materials.”

8.1.4 Casing pipe or Conduit shall be placed to the minimum depths indicated on the drawings.

8.1.5 Unless otherwise required by permit, all bores shall be guided and tracked by equipment that gives continuous, accurate monitoring of the drill bit position. All guidance equipment shall be subject to the acceptance of the engineer. Auger bores are acceptable when required by permit entities.

8.1.6 Bore methods and procedures shall follow industry established best practices.

8.1.7 Non-guided boring (such as what has been referred to as “missile” or “thumper”) shall not be permitted at any location within the corporate limits of the City of Lincoln.

8.1.8 Drill fluid and the use of drill fluid, shall meet the requirements identified in Chapter 20 of the Lincoln Standard Specifications. Used drilling fluid shall be properly, immediately and legally, disposed of.

8.1.8.1 The contractor shall continuously monitor boring operations for the possible frac-out of drill fluid. Any frac-out or surface uplifting shall be immediately reported to the engineer, contained, repaired and cleaned up. Any drill fluid released into waterways shall be immediately reported to the Director, contractor and permit agency governing the water. In water, the frac-out shall be contained, in accordance with the permit. Clean up shall be in accordance with the permits. Drill fluid shall not be allowed to remain in the water.

8.1.8.2 The contractor shall be responsible for dewatering, diverting water, and controlling water surface runoff that would affect downstream water turbidity as required for the site conditions.

8.1.9 At bore locations with lengths in excess of 600 feet as indicated on the drawings, the contractor may be allowed to establish intermediate bore pits. The Director or representative shall make the determination on the acceptability of intermediate bore pits.

8.2 Backfill

Backfill and compaction of all bore pits shall follow as closely after the installation of the new facility as possible and in accordance with Chapter 20.02 D. of the Lincoln Standard Specifications.

8.2.1 The permittee shall notify the City inspector prior to the start of backfill operations.

8.2.2 The City may request density tests on compaction.

8.2.3 If the tests on the backfill do not meet the Lincoln Standard Specifications, the backfill shall be considered unacceptable and shall be removed and replaced. The permittee shall bear the cost of all corrections and subsequent testing if the backfill is deemed unacceptable.

8.3 Restoration of the public right-of-way

A permittee performing construction in the public right-of-way shall restore the public right-of-way to a condition that is equal to or better than the condition prescribed in this manual or other applicable City design and construction standards. Restoration work must be performed to the satisfaction of the Director or representative.

Restoration work to the public right-of-way must include, but is not limited to, the following:

8.3.1 Any trees or shrubs damaged during construction, shall be referred to the City Forestry Department for determination of mitigation requirements, which will be the responsibility of the permittee.

8.3.2 Turf replacement shall meet the requirements of Chapter 30 of the Lincoln Standard Specifications.

8.3.3 Ruts shall be removed and the topsoil shall be prepared to provide a smooth surface free of rock and gravel. Irrigation systems shall be repaired to preconstruction condition and extent.

8.3.4 Installation or reinstallation of all manholes and hand holes, as required by the director or representative.

8.3.5 Backfilling and compaction of all completed bore pits, potholes, or other holes must be performed on a daily basis, or provide proper protection as per Section 6.2 above.

8.3.6 All sub-grade, streets, sidewalks and alleys shall be restored as provided in the Standard Specifications.

8.3.7 Leveling of all trenches and disturbed areas.

8.3.8 Restoration of any damaged traffic control devices, including but not limited to, imbedded loop detectors, pavement markings, underground conduits and signs.

8.3.9 All locate flags must be removed during the cleanup process at the completion of the work.

8.3.10 Restoration of special street, sidewalk, or drive approach surfaces must be done so that the restoration matches the color, texture, and pattern of the surrounding special surfaces.

8.3.11 Restoration must be made in a timely manner. If restoration is unsatisfactory or not performed in a timely manner, then all of the permittee's work on the project in question will be halted, no projects which have previously issued permits will be allowed to begin or continue is started and no additional permits will be issued until the restoration is completed to the satisfaction of the Director or representative.

8.4 Exceptions

The Director or their representative must approve any exceptions to these provisions.

9. MORATORIUM

Excavation within newly constructed or renovated streets will not be allowed for five (5) years after completion of street construction or renovation. Upon written request, after being reviewed by City of Lincoln, permission to excavate in these moratorium streets may be granted by the Director or representative, when one of the following conditions is met:

- An emergency that endangers life or property
- Interruption of essential utility service
- Service for buildings where no other reasonable means of providing service exists
- Work that is mandated by City, State or Federal legislation

In circumstances where permission to excavate is granted, excavations made in moratorium streets shall be permanently patched according to the current City specifications and may include

curb-to-curb restoration. Requests for variances must be submitted in writing to City of Lincoln for review.

10. INSPECTIONS

The City of Lincoln, through a uniform and responsive inspection process, can assure that work in the rights-of-way is completed in accordance with current City standards and national codes for reconstruction and site restoration. The objective of the Department's inspection effort is to ensure that the City infrastructure is preserved, public safety is maintained and that restoration-related callbacks are minimized.

10.1 Quality Control Inspection

10.1.1 City of Lincoln inspectors may serve as liaison among entities who access the public rights-of-way to advise on construction standards, to coordinate activities between permit holders, and to advise on the procedure for restoration.

10.1.2 Inspection will be provided by the City of Lincoln inspectors, and assisted by other City officials as necessary and appropriate.

10.1.3 City of Lincoln inspectors will inspect to ensure that all restoration shall result in a condition equal to or better than that which existed prior to construction.

10.1.4 City of Lincoln inspectors shall inspect the restoration of the right-of-way, and shall monitor backfilling, compaction, repaving, and hazard protection.

10.2 Method of Inspection

Every ROW or FOP Permit, carries with it, the requirement that the Public Works, Right-of-Way Construction Inspector, will conduct a **minimum** of three (3) inspections. These inspections are defined as follows:

Initial Inspection – This inspection is intended to serve as a "pre-construction conference" where the inspector meets on the job site with the "Facility Owner's" field representative and the contractor and shall be scheduled with the Right-of-Way Construction Inspector a minimum of 48 hours prior to the anticipated start of construction. Each "Initial Inspection" will review the following:

1. Discuss schedule of work
2. Verification that all adjacent property owners have been notified.
3. Verification that all Facility Owner & contractor vehicles have proper identification information and if required, verification that signs displaying the contact information will also be placed near the jobsite.
4. Verification that all existing utilities have been or will be located.

5. Verification that work will be completed as per plans
6. Verification of bore pit locations & conduit depth
7. Review Work Zone Traffic Control - Streets
8. Review Work Zone Traffic Control – Sidewalks/Trails (this includes review of excavation protection requirements)
9. Review requirements for the temporary and permanent restoration of "potholes" in turf areas, sidewalks and in the street.
10. Review Street Tree protection requirements
11. Review requirements if any permanent traffic control device is going to be temporarily removed or if any traffic control device is damaged.
12. Remind Facility Owner's field representative and contractor that no open trench greater than 100' will be allowed unless approved by the City Right-of-Way Construction Inspector.

Construction Inspection – Dependent upon the complexity and scale of the project, the number of "Construction Inspections" may range from a single inspection to several. These inspections may be pre-scheduled by the Facility Owner's field representative, contractor and Right-of-Way Construction Inspector to coincide with certain phases of the project (i.e. – backfill inspection maybe scheduled at the time the contractor is ready to begin backfilling a bore pit) or the Right-of-Way Construction Inspector may choose to conduct spot inspections during certain phases of the project. Items included on the "Construction Inspection" checklist will include:

1. Location of work according to plan.
2. Review of "As-built" drawings.
3. Work Zone Traffic Control (both street & sidewalk) set according to plan.
4. Review existing conditions with contractor & Facility Owner's Representative.
5. Review and if necessary, identify equipment and material staging areas.
6. Verification of proper backfill and proper backfill techniques being used.
7. Verification that pull boxes, conduits, etc. are being installed as per City specifications.
8. Review and documentation that new facilities being installed are being installed at the proper depth.
9. Review any necessary site grading.
10. Observe and document any damage to existing pavement, other existing City or private facilities, caused by the contractor. (This includes but not limited to signs, trees, landscape materials, pavement markings, landscape furnishings)
11. Verification that any pavement that has been removed, either sidewalk or street, is being replaced as per City Standard Specifications.

12. Verification that utility pull boxes and/or manholes are being installed as per Lincoln Standard Specifications and Standard Plans.
13. Documentation of any turf damage and verification of proper turf restoration.

Final Inspection – This inspection will serve as the mechanism to begin the process to "close out" the permit and shall be scheduled with the Right-of-Way Construction Inspector by the Facility Owner's field representative. Once the "Final Inspection" has been approved by the inspector, the Facility Owner will have thirty (30) days to submit construction "as-built" drawings to the City, utilizing the process outlined in Section 3.5 above. Each "Final Inspection" will review the following:

1. If "As-built" drawings have been completed
2. All Work Zone Traffic Control has been properly removed from the site.
3. Verification that all paved and unpaved surfaces, have been restored to a condition that is equal to or better than the condition prior to construction.
4. Verification that all removed or damaged traffic control devices have been reinstalled or replaced.
5. Verification that all construction material and equipment have been removed.
6. Verification that all pull boxes and/or manholes have been installed as per Lincoln Standard Specifications and Standard Plans.
7. Verification that all excavations have been properly backfilled and compacted. Inspector may require materials testing should conditions warrant.

11. FAILURE TO COMPLY

In the event any Permittee fails to comply with requirements of this section, they may be precluded from obtaining any Right of Way construction permit or performing any further construction within the City's Right of Way for up to twelve (12) months from the date of notification.

11.1 Work without a Permit

11.1.1 **Non-emergency situations:** Except in the case of an emergency, any person who fails to obtain all permits required under this Article before commencing any opening or excavation of a street or sidewalk is subject to immediate termination of work, and is responsible for the costs of all mitigating and restorative work required by the City.

11.1.2 **Emergency situations:** Shall be in compliance with Section 3.9 above.

11.2 Revocation of Permits

11.2.1 The City reserves its right, as provided herein, to revoke any permit, without refunding any fees already tendered, in the event a Permittee fails to comply with the terms and conditions of any City Code, ordinance, rule or regulation, or any condition of the permit.

11.2.2 If the City determines that the Permittee has failed to comply with a term or condition of any statute, ordinance, article, rule, regulation, or any condition of the permit, the City shall make a written demand upon the Permittee to remedy such failure. The demand shall state that continued failure to comply may be cause for revocation of the permit.

11.2.3 Within twenty-four (24) hours of receiving notification of failure to comply, the Permittee shall provide the City with an accepted plan for correction of such failure. Permittee's failure to so contact the City, or the Permittee's failure to submit or implement an acceptable plan, shall be cause for immediate revocation of the permit.

11.2.4 If a permit is revoked, the Permittee shall reimburse the City for the City's reasonable costs, including mitigating and restorative measures and reasonable attorneys' fees incurred in connection with such revocation.

11.3 Probationary Status

11.3.1 Any Permittee who fails to comply with the permit conditions and who has had a permit revoked for cause shall be deemed to be on probation. The probationary period shall be in effect for one (1) year from the date that a person has been notified in writing that they are on probation.

11.3.2 If, while on probation, a Permittee fails to comply with any requirement of a permit, the permit automatically will be revoked, and the person will not be issued further permits for one (1) calendar year, except for emergency repairs.