Right-of-Way Use Procedure

Scope:

This document provides for the design and construction of facilities on the rights-of-way owned and/or operated by Columbia Pipeline Group (CPG) companies, including Columbia Gas Transmission, Columbia Gulf Transmission, Crossroads Pipeline, Millennium Pipeline Company, Hardy Storage Company, and Columbia Midstream Group (hereinafter called "CPG").

This document is intended for landowners, utility owners, general contractors and their subcontractors, pipeline/utility contractors, real estate developers, brokers and agents, and any other parties including their representatives whose proposed construction activities will impact CPG rights-of-way (hereinafter called "Permittee").

Applicable requirements in this document do apply to CPG construction or maintenance activities.

Purpose:

CPG's goal is to work proactively with the Permittee in the planning stages of proposed modifications, developments or construction activities. CPG's primary concern with construction activities near its pipeline and related facilities (pipeline facilities) is public safety and pipeline facility protection. The intent of this document is to provide a clear and consistent set of engineering requirements that shall:

- Reduce the risk of damage to CPG pipeline facilities.
- Ensure CPG's unencumbered access to its rights-of-way and related pipeline facilities.
- Provide for maximum use of workspace for CPG routine maintenance, future inspection, and/or repair work.
- Enable the effective corrosion protection of CPG pipeline facilities.

All construction activities and projects that are proposed on or near CPG pipeline rights-ofway are subject to formal review by CPG. Depending on the scope of the project and its impact on CPG rights-of-way and pipeline facilities, additional engineering requirements and protective measures may apply. Reimbursement or fees involved with the formal review may occur.

PROCEDURE NO.: 220.003.009

EFFECTIVE DATE: 8/05/2015

Keeping CPG facilities and pipelines safe is our first priority. CPG desires to be a good neighbor with residents along our pipeline rights-of-way, contractors, and excavators. To do so requires CPG to act responsibly to protect its right-of-way and prevent damage to the pipeline system. While CPG wants to accommodate the desired use of the property, its responsibility for public safety is paramount. Through proper planning and communications, CPG can help ensure the safety and integrity of CPG's pipeline system and the welfare of its neighbors.

NOTE

The transmittal of this document does not constitute CPG approval or permission for the Permittee to begin construction or work within or across the pipeline or facility right-of-way. Work may not begin until permission for such work has been given by CPG.

Specifications- Pipeline Facilities:

1. General Guidelines

Safety associated with the pipeline facilities shall be considered at all times. No attempt to probe for or engage in any construction activities, which might damage the pipeline, shall be permitted. Follow all applicable federal and state safety requirements at all times.

Before any preliminary field work or construction begins in the vicinity of CPG pipeline facilities the approximate location and/or elevation of the pipeline shall be made. Begin with a call to 811 or appropriate state "One Call" notification number (see Attachment A, "<u>One Call Contact Information</u>"). Request both the approximate location and depth of the pipeline to be determined in any area of proposed construction. The area of proposed construction shall be marked with white paint, flags, or as required by state law. Know what's below. Call before you dig.

Submit proposed drawings/plans to CPG Land Services Department (see Attachment B, "<u>CPG Design Plan Review Locations and Phone Numbers</u>") for review to determine the extent of CPG involvement. Drawings/plans shall be prepared in accordance with Attachment C, "<u>Requirements for Submission of Design Plans</u>," and should include a copy of Form 1050P17 – Location of Buried Facilities.

PROCEDURE NO.: 220.003.009

EFFECTIVE DATE: 8/05/2015

NOTE

Refer <u>Plan 220.02.06 Damage Prevention Plan</u>, Section 3.11 Guidelines for Design and Construction within Right-of-Way for additional guidance information.

When conducting construction activities in or around CPG pipeline facilities or rights-of-way, a CPG on-site Company Representative shall be present unless otherwise permitted by CPG. A CPG Representative will review the location of pipeline facilities prior to starting work.

Permittee shall notify the responsible State "One Call" center to request that CPG re-mark a pipeline if the existing markers are inadequate or no longer visible for any reason, including disturbance due to construction activities.

NOTE

Willful damage or removal of a pipeline marker is a Federal offense with a maximum fine of \$100,000 (and up to \$250,000 if the action results in a death), imprisonment of up to one year, or both for each offense.

Permittee shall not burn or bury trash, brush, or other items or substances within CPG pipeline rights-of-way.

Permittee shall not park equipment or store materials on the CPG right-of-way.

Use of vibratory equipment larger than walk-behind units shall not be permitted within 25 feet of the pipeline or related facility, unless otherwise permitted by CPG.

2. Excavation and Construction Restrictions

2.1. Mark and Locate

The Permittee shall mark any excavation area with white paint, flags, or as required by state law that the Permittee has proposed within CPG rights-of-way.

Before excavation can begin near a CPG right-of-way, the excavation area must be located and marked in according to the appropriate state one call regulation. Safe digging is no accident. Know what's below. Call 811 before you dig. CPG or its representative shall locate the pipeline and determine the approximate depth of cover before the Permittee can begin excavation.

PROCEDURE NO.: 220.003.009

EFFECTIVE DATE: 8/05/2015

The Permittee shall not perform any excavation, crossing, backfilling, or construction operations until a Company representative has reviewed the proposed work and given permission for work to proceed.

CPG shall place temporary pipeline markers consisting of "yellow" whiskers, markers/flags, or paint, or as required by state law. Yellow paint, markers/flags, or whiskers identify the approximate location of the pipeline and right-of-way within the proposed work area, and shall provide information on how to respond should the pipeline be damaged or a natural gas release occur. All personnel operating equipment over or around the pipeline shall be made aware of its location and what actions shall be taken if contact is made with the pipeline.

NOTE

If pipeline damage occurs (which could include pipeline breaks, significant leaks, nicks, dents, gouges, grooves or damage to above ground appurtenances, lines, conduits, coatings, or cathodic protection) immediately report the information to CPG:

- Columbia Gas Transmission, Crossroads Pipeline, Millennium Pipeline Company, Hardy Storage Company, - 1-800-835-7191
- Columbia Gulf Transmission 1-866-485-3427
- Columbia Midstream Group 1-855-511-4942

Damage that constitutes an emergency condition shall be reported to the local 911 Call Center or Public Safety Answering Point (PSAP).

2.2. Excavation and Monitoring

CPG shall have a Company representative present during all excavation activities. The Company representative shall have full authority to stop the work if it is determined that the work is being performed in an unsafe manner relative to CPG facilities or personnel.

No equipment shall work directly over the pipeline, unless CPG grants specific written permission. The Permittee shall install temporary fencing along the CPG right-of-way boundaries so equipment shall not inadvertently pass over the pipeline at locations other than those established for the crossing.

When excavating within a CPG right-of-way, in the presence of a loaded pipeline, the Permittee's excavation equipment shall have a plate welded or attached over the teeth of the excavator bucket. Remove side cutters from equipment before excavation.

PROCEDURE NO.: 220.003.009

EFFECTIVE DATE: 8/05/2015

CPG requires potholing techniques to be used when digging within 24" (2 feet) of the outer edge of the pipe, unless requirements that are more stringent are set forth by the applicable state's One Call system. Within this "tolerance zone" only hand excavation, air cutting, vacuum excavation or other CPG approved techniques are permitted.

No excavation shall be made on land adjacent to the pipeline that shall in any way impair, withdraw lateral support, cause subsidence, create the accumulation of water, or cause damage to the pipeline or right-of-way.

The Permittee shall ensure all excavation work complies with OSHA's excavation standards outlined in 29 CFR 1926 and correct any noncompliant excavation site before work within CPG right-of-way continues.

If conditions require, the Permittee shall be directed by CPG to install additional earthen fill or other suitable materials to maintain proper vertical clearance from the pipeline.

At any location where the pipeline is exposed, the Permittee shall provide CPG the opportunity to inspect the pipeline condition, install cathodic protection equipment, repair any pipe coating imperfections, and/or install underground warning materials.

The maximum unsupported exposed length of pipe shall be determined by CPG. When required, support the pipeline with sand bags, padded skids or other suitable material as permitted by CPG. At no time shall the pipeline be used as a brace to support equipment or sheeting/shoring materials.

2.3. Backfilling

No CPG buried pipeline shall be left exposed for any duration of time, unless otherwise permitted by CPG.

Backfill and compaction shall be performed to the satisfaction and in the presence of a Company representative. At least 6 inches of fine, loose earth or other permitted backfill material with no sharp gravel, rock, hard clods, vegetation, or other debris shall be added on all sides of any pipeline, and remaining backfill shall be placed so as not to disturb this padding material or damage the pipeline and its coating. Backfill over the pipe shall be compacted by hand until 18 inches of cover is achieved.

A flowable fill, mixed to CPG specifications, may be required by CPG to achieve necessary compaction and support under and around the pipe. Disturbed ground shall be compacted to at least the same degree of compaction as surrounding areas. The Permittee shall restore the site to its original condition unless otherwise permitted by CPG.

2.4. Cover, Grading, and Drainage

Variance of the existing depth of cover is not permitted without CPG's written permission. All proposed road crossings of buried facilities must be evaluated by

PROCEDURE NO.: 220.003.009

EFFECTIVE DATE: 8/05/2015

CPG. Protective measures may be required before construction activity can begin or during the course of such construction activity.

Where additional cover is permitted, the final grading shall meet a minimum cover of 36 inches over the pipeline but shall not exceed five (5) feet from the top of the pipeline without CPG written permission.

Detention or Retention ponds, lakes, structures or any type of impoundment of water, temporary or permanent, shall not be permitted within the right-of-way.

Any modifications to an existing drainage pattern shall be designed so there is no erosion of the cover over CPG right-of-way.

For drainage channels and ditches where a minimum cover of 36 inches cannot be maintained, the Permittee shall be responsible for the cost of installation of additional protection required by CPG.

3. Aboveground/Underground Structures, Gardening and Landscaping

3.1. General Requirements

Buildings or other structures, including but not limited to overhanging balconies, patios, decks, swimming pools, wells, walls, utility poles, septic systems, propane tanks, transformer pads, or the storage of materials which creates an obstruction or prevents the inspection of the right-of-way by air or foot, shall not be permitted within the CPG right-of-way.

The Permittee shall not build retaining walls, drive piling or sheeting, or install an engineered structure that may negatively impact the CPG right-of-way.

3.2. Gardening and Landscaping

The right-of-way area may be planted in lawn, flowerbeds, or vegetable gardens, or used for normal agricultural purposes.

Shrubs maturing at less than five feet tall shall be permitted in the right-of-way. Permitted shrubs shall be planted so that branches are a minimum of five feet away from the pipeline at maturity.

Shrubs maturing at more than five feet tall and all trees (including fruit/nut bearing and Christmas tree farms) shall not be permitted within the right-of-way.

CPG shall not be responsible for replacement of or reimbursement for any plantings within the right-of-way, unless otherwise stated in applicable land rights document.

3.3. Fences and Walls

PROCEDURE NO.: 220.003.009

EFFECTIVE DATE: 8/05/2015

Fences or continuous hedges that block visual inspection, interfere with access to CPG facilities, or are installed longitudinally to the pipeline shall not be permitted within the right-of-way.

Fence or hedge height may not exceed 5 feet in height. Commercial or residential chain link fence installations are permitted. Fence post shall not be placed within 3 feet of the outermost edge of the pipeline.

Electric fences equipped with insulated handled gate or some type of disconnect, that is available to CPG shall be permitted across CPG rights-of-way. Conductors for electric fences shall not be placed within 15 feet of any CPG above-grade piping with mechanical fittings.

Fences, including invisible dog fences, shall cross as near to 90 degrees as possible. Crossings at less than 45 degrees shall not be permitted.

Fences permitted to cross a CPG pipeline right-of-way must be designed and installed to allow at least a sixteen foot gate or opening centered on the pipeline and must cross at or near to 90 degrees as possible, or as permitted by CPG.

Permittee shall provide CPG access through all gates permitted within the CPG rightof-way. If Permittee installs locks on said gates, CPG shall also be allowed to install its own locks in a manner that allows CPG unimpeded access without limiting Permittee's access.

Masonry, brick, or stonewalls shall not be permitted on the right-of-way.

Permittee will allow CPG to place pipeline markers at or near, fences, walls or shrubs in order to identify the pipeline route.

4. Field Tile

Unless provided for by the right-of-way agreement, new terra cotta field tile shall not be placed within the CPG right-of-way.

Permittee shall execute the Field Tile Agreement (Attachment D) prior to any field tile installations that occur from the edge of CPG right of way to the edge of CPG right of way. Permitted field tile or drainage pipe shall cross the pipeline right-of-way at or as near to 90 degrees as possible with a minimum clearance of 12 inches above or below the pipeline. Crossings less than 45 degrees are not permitted. Field tile shall not drain onto a CPG right-of-way. Longitudinal runs of field tile shall not be closer than 15 feet from CPG pipelines

PROCEDURE NO.: 220.003.009

EFFECTIVE DATE: 8/05/2015

5. Roads, Driveways, Sidewalks, Parking Areas and Walking/Bicycling Paths

5.1. General Requirements

Roads, driveways, sidewalks, or parking areas shall not be constructed within CPG right-of-way without CPG's prior review and written permission. All plans for pavement within the right- of-way shall be submitted to the CPG Asset Management Department. CPG, as needed, will perform external load evaluations to determine if additional protective measures are required. Protective measures may be required before construction activity can begin or during the course of such construction activity.

Permitted roads, driveways, or sidewalks shall cross the right-of-way at as near to 90 degrees as possible. Crossings at less than 45 degrees are prohibited.

Roads, driveways and concrete sidewalks shall not be permitted to be installed longitudinally within the right-of-way.

Asphalt pavement shall not be permitted closer than five (5) feet from the pipeline except in the case of roadway, driveway, or parking lot "crossovers." Where parking areas are permitted within CPG rights-of-way, barriers shall be installed on the edge of the parking area closest to the pipeline.

Venting systems shall not be used as a means to extend crossovers or vent parking lots.

The use of alternative paving material designs (other than asphalt or concrete) shall be reviewed by CPG on a case-by-case basis. CPG will notify Permittee if design is permitted.

Cull de sacs shall not be permitted within the right-of-way area.

5.2. Concrete Roads, Driveways and Sidewalks

NOTE

All applicable general requirements listed in Roads, Driveways, Sidewalks, Parking Areas and Walking/Bicycling Paths applies to the additional requirements in this section.

Continuously poured, steel reinforced concrete shall not be permitted within CPG right-of-way.

PROCEDURE NO.: 220.003.009

EFFECTIVE DATE: 8/05/2015

Concrete sidewalks and/or curbs, which cross the pipeline, shall have expansion joints installed five (5) feet on either side of the pipeline.

Residential or commercial driveways may be permitted if the design and installation meet the requirements of Attachment E, "<u>Residential/Commercial Concrete</u> <u>Driveway within CPG Right-of-Way</u>".

Portable concrete slabs may be permitted for permanent or extended temporary crossings if the design and installation meet the requirements of "Attachment G - <u>Temporary or Permanent Crossings</u>".

PROCEDURE NO.: 220.003.009

EFFECTIVE DATE: 8/05/2015

Page **9** of **47**

5.3. Asphalt Roads and All Parking Areas

Parking areas require written permission from CPG.

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All applicable general requirements listed in Roads, Driveways, Sidewalks, Parking Areas and Walking/Bicycling Paths applies to the additional requirements in this section.

Asphalt roads shall not be greater than 25 feet in width.

Permitted parking areas, including but not limited to asphalt and gravel parking areas shall not be installed within five (5) feet of CPG pipeline facilities.

Parking lot "crossovers" may be permitted by CPG and shall be no greater than 25 feet in width. Parking lot "crossovers" shall be spaced at a minimum of 50-foot intervals (measured from the edge of the crossover).

5.4. Walking/Bicycling Paths

NOTE

All applicable general requirements listed in Roads, Driveways, Sidewalks, Parking Areas and Walking/Bicycling Paths applies to the additional requirements in this section.

Walking/bicycling paths shall be constructed at the outside edge of the CPG permanent right-of-way area. Path width within CPG rights-of-way shall be designed not to exceed six (6) feet.

CPG reserves the right to prohibit the construction of walking/bicycling paths inside its right-of-way area if, at CPG's sole determination, the proposed path may adversely impact operation and/or maintenance of the pipeline.

Paths shall cross the CPG pipeline as close to 90 degrees as possible, but in no case less than 45 degrees. CPG shall make the sole determination of number of path crossings permitted.

PROCEDURE NO.: 220.003.009

EFFECTIVE DATE: 8/05/2015

No motorized vehicles of any type, other than power driven wheelchairs, shall be permitted to utilize paths, which run longitudinally inside the right-of-way.

Paving shall be restricted to asphalt only. No concrete paving shall be permitted.

Landowner shall be responsible for maintaining the path to prevent right-of-way damage (including erosion, illegal dumping, etc.) Any change in grade or modifications to existing grade required to control erosion shall be approved by CPG.

6. Utility Crossings

6.1. General Requirements

Utilities shall include natural gas, water, electrical, sewer, television cable, telephone, fiber optic communications and all other metallic or non-metallic line crossings. Production, gathering or other pipelines transporting natural gas, oil, steam, petroleum, or other industrial gaseous materials shall comply with these requirements.

NOTE

The term foreign utility crossing is used interchangeable with utilities or utility crossing as used in this section.

All utility crossings must be approved by CPG before installation begins and must meet the criteria described in this section or covered by other sections in this document.

Every effort shall be made to have the utility cross the CPG right-of-way as near 90 degrees as possible. In no case shall the utility be permitted to cross the CPG right-of-way at an angle less than 45 degrees. Utilities shall not be installed longitudinally within the right-of-way.

Utilities shall cross beneath the pipeline with a minimum vertical clearance of 24 inches where CPG pipelines have at least 3 feet of cover to top of pipe. For circumstances where less than 3 feet of cover exists, CPG may require additional clearance. Under certain circumstances, CPG may permit a crossing above the pipeline while maintaining a vertical clearance of at least 24 inches. These circumstances include excessively deep pipelines (5 ft. or more,) the presence of consolidated rock, or for service entrances to single-family dwellings.

PROCEDURE NO.: 220.003.009

EFFECTIVE DATE: 8/05/2015

Earthen fill, or other CPG permitted isolation material shall be placed between the pipeline and the utility.

All water valves, curb boxes, manholes, sprinkler heads, splice boxes, service risers, energized equipment, poles, towers, guy wires, mechanical supports, ground rods, anchors and similar structures shall be placed outside the CPG right-of-way. Sprinkler systems shall be limited to a single line crossing unless otherwise permitted by CPG.

Except for trenchless excavation installation, warning tape, in accordance with A.P.W.A. Uniform Color Code, shall be placed above the utility, 12 inches below ground, across the CPG right-of-way.

All permitted underground utility crossings shall be marked with proper signage at the edge of the CPG right-of-way boundaries.

Permitted utility crossings shall be marked according to the A.P.W.A. Uniform Color Code, as listed below.

RED – Electric Power Lines, Cables,	YELLOW – Gas, Oil, Steam, Petroleum,
Conduit, and lighting Cables	or Gaseous Material
ORANGE – Communication, Alarm or	BLUE – Potable Water
Signal Lines, Cables, or Conduit	
GREEN – Sewers and Drain Lines	WHITE – Proposed Excavation Limits or
	Route
PINK – Temporary Survey Markings,	PURPLE – Reclaimed Water, Irrigation,
Unknown / Unidentified Facilities	and Slurry Lines

6.2. Trenchless Excavation

NOTE

Boring or directional drilling (see Definitions) and forms of horizontal borings (e.g. horizontal directional drilling or HDD are trenchless excavation methods.

Permittee is responsible for obtaining proper One Call notifications in the area of the entrance pit, along the proposed excavation path, and at the exit pit.

A minimum clearance of 24" above the top and below the bottom of CPG pipelines shall be required. CPG pipelines must have at least 3 feet of cover to top of pipe. For circumstances where less than 3 feet of cover exists, CPG may require additional

EFFECTIVE DATE: 8/05/2015

clearance. This clearance refers to the pipe being installed, not the location of the pilot drill.

Utility crossings proposed for installation using a trenchless excavation method (directional drilling, jacking, slick boring, etc.) shall use a tracking system to verify the exact location of the drill head. Blind boring shall not be permitted on the CPG right-of-way. The proper line and grade shall be established in order to maintain the required minimum clearance. Permittee shall also submit the bore profile drawing to CPG for review prior to starting operations.

Permittee will locate trenchless crossings of CPG right-of-way outside of rivers, streams, lakes, wetlands and other water bodies.

For normal directional drilling or trenchless operations, a four (4) feet by four (4) feet excavation window(s), 24 inches below the bottom of CPG pipeline shall be required for visual inspection to ensure the drill (or bore) does not impact the pipeline. For cases where an excavation window is not practical, such as HDD more than 5 ft. below CPG pipeline, the Permittee shall adhere to any additional CPG requirements, including but not limited to additional vertical clearance. Additional care may be needed during reaming.

Follow state and/or local requirements for trenchless excavation practices at all times. The Permittee shall also adhere to any additional requirements, as determined by CPG. Additional requirements may include, but are not limited to, providing documentation of trenchless operator qualification and/or documentation of operator training for the specific trenchless equipment used.

The trenchless equipment operator shall perform a site inspection that includes walking the entire trenchless excavation path, and verifying minimum clearances that are required prior to commencing any work.

Trenchless activities shall be stopped if at any time an abnormal condition, unknown substructure or other hidden hazard is encountered. Operations may proceed safely only if positive identification has been made.

6.3. Cable/Wire Utility Crossings

NOTE

All applicable general requirements listed in Utilities, Section 5.1 applies to the additional requirements in this section.

PROCEDURE NO.: 220.003.009

EFFECTIVE DATE: 8/05/2015

COLUMBIA PIPELINE GROUP

All permitted cable/wire utilities crossing **below** CPG pipelines including, but not limited to, fiber optic, electric, telephone and television (excluding single telephone and single television drops), shall be encased with a minimum of two (2)-inch Schedule 40 PVC pipe, or equivalent, for the complete width of the right-of-way, regardless of the installation method used.

For safety reasons, electric and fiber optic lines crossing **below** CPG pipelines shall **also** be surrounded with a minimum of six (6) inches of colored concrete in accordance with the A.P.W.A. Uniform Color Code or 4-inch minimum diameter, standard inch wall thickness, coated steel pipe across the full width of the CPG right-of-way, except in cases of trenchless installation or where the top of the conduit used for the crossing is at least three feet below CPG's pipeline and CPG's pipeline has at least three (3) feet of cover to top of pipe.

In cases where the utility will be installed in excess of 5 ft. below the bottom of CPG pipeline the additional requirement for colored concrete and 4-inch minimum coated steel pipe will be waived in lieu of applicable local, state and federal code requirements for said utilities.

All underground cable/wire utilities permitted by CPG to cross <u>above</u> the pipeline (excluding single telephone and single television drops), shall be encased in two(2)inch minimum diameter Schedule 40 PVC pipe <u>and</u> a four (4)-inch minimum diameter, standard inch wall thickness, coated steel pipe or Schedule 40 PVC pipe across the full width of the CPG right-of-way. <u>No concrete shall be used for crossings above the pipeline.</u>

Aboveground cables shall be installed with a minimum of 33 feet above-grade clearance for the full width of the CPG right-of-way to allow CPG contractors to work on our pipelines unimpeded by overhead utility lines, unless otherwise permitted by CPG. This does apply to residential service lines. Residential service lines may be buried in accordance with the requirements in Section 6.3.

Unacceptable levels of AC or DC stray current caused by the installation of a foreign utility crossing will be mitigated at the expense of the Permittee.

6.4. Spare Conduit Installation

Only conduits that can be identified for future use may be installed. Conduits must be at least three (3) feet below CPG's pipelines.

PROCEDURE NO.: 220.003.009

EFFECTIVE DATE: 8/05/2015

Conduits must be installed to meet all of the requirements for that specific type of crossing (including tracer wire, warning tape, etc.). Both ends of the conduits must be painted in accordance with the A.P.W.A. Uniform Color Code except for electric and fiber optic lines which shall also be surrounded with a minimum of six (6) inches of colored concrete painted in accordance with the A.P.W.A. Uniform Color or four (4)-inch minimum diameter, standard inch wall thickness, coated steel pipe across the full width of the CPG right-of-way, except in cases of trenchless installation or where the top of the conduit used for the crossing is at least three feet below CPG's pipeline.

Consult with local engineering support for additional marking requirements for spare conduit installation.

6.5. Metallic Utility Crossings

NOTE

All applicable general requirements listed in Utilities, Section 5.1 applies to the additional requirements in this section.

Corrosion protection (CP) materials including but not limited to bonds, test leads, test stations, magnesium anode current drains, and permanent reference electrodes shall be installed at the expense of the Permittee where necessary, at CPG's sole determination.

Minimum CP material requirements shall be:

- Installation of test leads on both the CPG pipeline and the Permittee's crossing structure.
- Installation of a permanent Copper-Copper Sulfate (CuCuSO4) reference electrode between the CPG pipeline and the Permittee's crossing structure.

Permittee shall be responsible for the corrosion protection of its facilities against CPG's cathodic protection system. Permittee shall be responsible for installation of facilities on its structures. CPG shall provide personnel, at the expense of Permittee, for installation of facilities on CPG's pipelines.

Utilities shall be coated with a non-conductive coating for the entire width of the CPG right-of-way.

PROCEDURE NO.: 220.003.009

EFFECTIVE DATE: 8/05/2015

It is strongly recommended for all metallic utility crossings that Permittee's Corrosion Engineers or their designee contact and communicate with CPG Corrosion Engineers concerning any existing or proposed CP system design details so as to facilitate the best design for any additional CP equipment as may be necessary to protect the assets and interests of both the Permittee and CPG.

6.6. Non-Metallic Utilities

NOTE

All applicable general requirements listed in Utilities, Section 6.1 applies to the additional requirements in this section.

Utilities shall be installed with tracer wire for the full width of the CPG ROW unless otherwise permitted by CPG. At locations where tracer wire is installed, tracer wire shall be raised to the ground surface and connected to a test station for monitoring.

Natural gas (or other industrial gases) line permitted by CPG to cross <u>below</u> the pipeline shall either be encased in a six (6)-inch envelope of yellow 2,000 psi concrete or encased in four (4)-inch minimum diameter, standard wall thickness, coated steel pipe across the full width of the CPG right-of-way.

Natural gas (or other industrial gases) line permitted by CPG to cross above the pipeline shall be encased in 4-inch minimum diameter, standard wall thickness, coated steel pipe across the full width of the CPG right-of-way. Do not use concrete for crossings above the pipeline.

7. <u>Temporary Access Roads and Heavy Construction Vehicle Crossings.</u>

7.1. General Requirements

Field personnel may authorize a temporary heavy construction vehicle crossing without engineering review for bridge crossings ONLY. The support materials for the bridge must be installed at least 3 feet away from the pipeline on each side, and a visible air space must be maintained between the bridge material and the ground directly above the pipeline at all times. CPG field personnel must be on-site to witness construction/placement of the temporary bridge. See examples of air bridges in "Attachment G".

PROCEDURE NO.: 220.003.009

EFFECTIVE DATE: 8/05/2015

For all other proposed temporary crossings, external load evaluations shall be performed by CPG Pipeline Engineer to determine if additional protective measures are required (see Attachment F, <u>Equipment Crossing Data Sheet</u>). Earthen ramps, swamp mats, reinforced concrete slabs, steel plates, bridges or other protective materials may be required prior to crossing or during the course of such crossing activity.

During the use of a permitted temporary construction road, the Permittee shall take all reasonable and necessary steps to maintain the integrity of the permitted crossing protection. CPG personnel should inspect crossing periodically and may require the Permittee to provide additional protective measures deemed necessary to prevent damage to the pipeline or right-of-way.

CPG shall limit the number of temporary construction roads constructed by the Permittee. Crossings shall be limited to pre-selected sites and shall be clearly defined and marked. <u>Random crossings are not permitted.</u>

8. Construction Induced Vibrations

Construction activities that generate ground vibrations, including but not limited to, pile driving, sheet driving, soil compaction work, jack hammering or ramming, shall be reviewed and permitted by CPG on a case-by-case basis. Ground vibration shall be limited to that permitted by the appropriate State's blasting law where CPG pipeline facilities exist or 1.25 in/sec velocity, whichever is less.

9. Blasting Operations

Any blasting proposed within 300 feet of CPG's facilities must be submitted to CPG in advance, along with a blasting plan outlining such proposed activity. No blasting may begin unless and until CPG's provides prior review and written confirmation that it does not object to such blasting.

Blasting plans shall be submitted ten (10) working days (excludes Saturday, Sunday or federal holiday) prior to the blasting event. It is the responsibility of the Permittee to complete the CPG blasting form (See Attachment H, "<u>Blasting Data Sheet</u>"). It is imperative that a drawing of the blast area be included with the submission of all blasting plans. Review of the blast data shall not be performed until a drawing is submitted showing the location and orientation of all charges relative to the CPG pipeline. Any modifications to the blasting plan must also be submitted to CPG for prior review and should not be implemented unless and until CPG provides prior written confirmation that it does not object to such modifications. All drawings shall be scalable and show the distance from the charges to the CPG pipeline.

PROCEDURE NO.: 220.003.009

EFFECTIVE DATE: 8/05/2015

Permittee shall conduct a three (3) axis seismic survey for each blast event within 300 feet of a CPG pipeline, unless otherwise permitted by CPG. Seismic equipment shall be placed over the pipeline in the proximity of the closest charge hole to the pipeline, aligning one of the axes parallel to the pipeline and another axis perpendicular to the pipeline.

NOTE

Blasting conducted without seismic equipment and using the Scaled Distance Formula shall be evaluated on a case-by-case basis.

Ground vibration shall be limited to that permitted by the appropriate State's blasting law where CPG pipeline facilities exist or 1.25 in/sec velocity, whichever is less. The value shall be expressed as the Peak Particle Velocity (PPV) in units of inches per second. Pipeline facilities are recognized by federal blasting laws as a structure and must be protected from excessive ground vibrations.

Specifications – Storage Wells:

1. General Guidelines

Any third party activity or development that impedes CPG's ability to safely, efficiently and legally drill, operate and maintain storage wells, shall not be permitted.

CPG's storage well setback specifications are within the confines of applicable leases and laws and allow CPG access to potential and existing storage well operations while ensuring employee and public safety.

CPG requires notification of any proposed aboveground or belowground construction activities or placement of objects closer than 300 feet in any direction of a wellhead. Notification shall be to the CPG Asset Management Department and the Permittee shall submit with this notification a full description of the proposed construction or placement of the object, complete with dimensions, location and distance from the wellhead.

CPG reserves the right to object to such construction activities or placement of objects closer than 300 feet from any wellhead when certain topographical and/or safety conditions exist. These topographical features and permanent structures include, but are not limited to, wellheads situated near significant changes in elevation, rivers, ponds, streams, existing roads, railroad rights-of-way, power line rights-of-way, and high-pressure wells.

Additional distances over 300 feet may be necessary for certain CPG activities, including but not limited to, the presence of hydrogen sulfide, flaring of wells, horizontal or directional

EFFECTIVE DATE: 8/05/2015

drilling, drilling of multiple wells from a single location, salt cavern development, aquifer storage development, high pressure and high deliverability wells.

Except as otherwise provided in the applicable lease, there shall be no aboveground or belowground construction activities or placement of objects within 200 feet in any direction from a wellhead by the Permittee.

Construction induced vibration and blasting requirements as specified in "Specifications-Pipeline Facilities" applies to activity near a CPG storage well.

Letters of Conditional Acceptance and Waivers:

Construction activities that follow CPG Minimum Construction Guidelines provided on the back of Form 1050P17 – Location of Buried Facilities can be approved by local Frontline Lead or Team Leader.

Construction activities that require additional requirements as specified by this document, over the minimum requirements listed in CPG Minimum Construction Guidelines require a "Letter of Conditional Acceptance". Letters are provided by local engineering or Land Agent and approved by the local Operations Manager or designee.

Any deviation from the requirements in this document requires an approved waiver (Waiver Request Form) prior to construction. Waiver Request Form and supporting documentation must be submitted to the local Land Agent. Waivers require prior approval by Operations Manager, Land Manager, and Engineering Manager. Additional approval by Vice President, Safety, Training, and Natural Resource Management is also required. Approval to begin construction is not granted until CPG notifies Permittee that a waiver has been approved.

Disclaimers:

In the event that the provisions of an applicable land rights document conflict with the requirements set forth above, the land rights document shall supersede these requirements.

CPG may permit certain property improvements in its rights-of-way. However, in the course of operating and maintaining its pipeline system, CPG may sometimes remove these improvements from its right-of-way in order to facilitate operation and maintenance work. CPG shall not assume responsibility, financial or otherwise, for any improvements directly or indirectly damaged as a result of routine or emergency maintenance or repairs on the pipeline facilities.

These Right-of-Way Use Specifications were compiled to address the majority of issues concerning the design and construction of facilities on CPG rights-of-way. CPG at its sole

PROCEDURE NO.: 220.003.009

EFFECTIVE DATE: 8/05/2015

discretion may elect to modify specific requirements for a project. Modifications shall be made by appropriate CPG personnel and shall be properly documented.

Documentation Requirements:

- Attachment A: "One Call Contact Information"
- Attachment B: "<u>CPG Design Plan Review Locations and Phone Numbers</u>"
- Attachment C: "<u>Requirements for Submission of Design Plans</u>"
- Attachment D: "Field Tile Agreement"
- Attachment E: "<u>Residential Concrete Driveway within CPG ROW</u>"
- □ Attachment F: "Equipment Crossing Data Sheet"
- Attachment G "<u>Temporary or Permanent Crossings</u>"
- □ Attachment H:- "<u>Blasting Data Sheet</u>"
- Attachment I:- "<u>Waiver Request Form</u>"

Reference Documents:

Related Plans

Document Number	Document Title
Plan 220.02.06	Damage Prevention

Other Reference Documents

Common Ground Alliance Best Practices Pipelines and Informed Planning Alliance

Definitions:

Boring or Directional Drilling: A type of trenchless installation that may employ a variety of cutting, jetting, boring, reaming or jacking techniques to install an underground facility but without the use of an open trench. The technique involves opening holes at either end of the installation, and using different types of equipment, creating a tunnel, shaft or bore underground between the two points.

Company Representative: Company employees, "Operations Personnel" (see definition), third party, or subcontractors who are knowledgeable of Company plans and procedures and are qualified to observe, witness, supervise or make decisions on behalf of the Company as it relates to the activity and as applicable to the responsibilities provided in the Company O&M Manual.

Excavation Activities: Include excavation, blasting, boring, tunneling, mining, trenching, backfilling, the removal of above ground structures by either explosive or mechanical means, or any other earth moving operations.

EFFECTIVE DATE: 8/05/2015

Excavator: Includes any Company personnel, employees of Company contractors, or third-party individuals or personnel who perform excavation activities with mechanically powered equipment.

Operations Personnel: Internal employees who possess the proper operator qualifications, approved by the local Operations Team Leaders and/or Operations Managers to perform locates. The use of temporary/contract employees who are properly qualified, and with the proper operator qualifications, will be considered on a case-by-case basis with approval of the specific operating areas Regional Director.

Pipeline: All parts of those physical facilities through which gas moves, including pipe, valves and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holder, fabricated assemblies and components of a cathodic protection system.

Pipeline Facility: All parts of those physical facilities through which gas moves or is stored, including but not limited to the associated rights-of-way or set-back area, pipes, valves and other appurtenances attached to pipe, compressor units, metering stations, regulator stations, delivery and receipt stations, holders and fabricated assemblies, pipelines, storage wells and including associated non-gas equipment, facilities or building used as part of the pipeline system.

Right-of-Way: A pipeline right-of-way is a strip of land over and around pipelines where some of the property owner's legal rights have been granted to a pipeline company. A right-of-way agreement between the pipeline company and the property owner is also called an easement and is usually filed in the public records with property deeds. Rights-of-ways and easements provide a permanent, limited interest in the land that enables the pipeline company to operate, test, inspect, repair, maintain, replace, and protect one or more pipelines on property owned by others. The agreement may vary the rights and widths of the right-of-way, but generally, the pipeline company's rights-of-way extend 25 feet from each side of a pipeline unless special conditions exist.

Setback: The distance in all directions from any storage well that must remain free from any construction activities or placement of any objects with the exceptions of facility related construction and appurtenances.

Storage Well: Any active, special or storage observation well and associated appurtenances located within the protective boundaries of a federally certificated storage field.

Temporary Crossing: Where an individual, company or landowner will traverse over an existing pipeline for a short period with a vehicle or heavy equipment.

Underground Pipeline Facility: Any pipeline facility, which is buried or placed below ground.

PROCEDURE NO.: 220.003.009

EFFECTIVE DATE: 8/05/2015

Change Log:

Date	Change Location	Changed By	Brief Description of Change
9/15/2014	Throughout	M. Newman	Editorial and format changes. Replaced CPG representative with Company representative.
9/15/2014	Section 8	M. Newman	Added definitions for "Company representative" from Plan 220.02.06 and "Operation Personnel".
10/1/2014	Section 5.3 Section 3.6.2- I – trenchless excavation, Section 3.6.2	S. Parrish, M. Kubincanek	Section 5.3-comment, section 3.6.1-I and 3.6.2 – various comments and edits.
12/2/2014	Attachment E	M. Newman	Added GPS coordinates.
9/15/2014	Throughout	M. Newman	Editorial and format changes. Replaced CPG representative with Company representative.
9/15/2014	Section 8	M. Newman	Added definitions for "Company representative" from Plan 220.02.06 and "Operation Personnel".
2/3/2015	Throughout	M. Newman	Format to new procedure template. To see previous version go to SharePoint Version History. Added edits to Attachment B.
2/3/2015	Purpose	M. Newman	Edits made to content
2/3/2015	Specifications – Pipeline Facilities – Section 1 General Requirements	M. Newman	Edits made to content
2/3/2015	Specifications – Pipeline Facilities – Section 2.1 Mark and Locate	M. Newman	Edits made to content

PROCEDURE NO.: 220.003.009

EFFECTIVE DATE: 8/05/2015

Date	Change Location	Changed By	Brief Description of Change
2/3/2015	Specifications – Pipeline Facilities – Section 5.3 Cable/Wire Utility Crossings	M. Newman	Edits made concerning requests for lower than 33' clearances.
2/3/2015	Specifications – Pipeline Facilities – Section 5.3 to 5.5	M. Newman	Edits made to reflect references to information removed by document format revisions.
2/3/2015	Waiver	M. Newman	Created Section for Waiver Process
2/4/2015	Attachments	M. Newman	Edit attachments E
4/30/2015	Section 4	S. Parrish	Revised Section 4 – Field Tile, as agreed upon after consultation with Ohio Land agents, TL's and Mgr. Added Attachment D – Field Tile Agreement. Added language to construction induced vibrations and blasting operations sections.
5/6/2015	Throughout	M. Newman	Edit and format. Prepare document for Technical Writer to send for Manager and Legal Review/Approval. Set up attachments as separate documents for S&P Library.
5/12/15	Section 2.4 and 3.3	M. Newman	Edited and updated cover and fence requirements.
5/15/2015	Attachment B	M. Newman	Updated information as provided from Land Services.
5/18/2015	Throughout	J. Scaggs	Preparing document for legal review. Made minor wording changes for clarification.
6/1/2015		J. Scaggs	Legal review completed, routing to John Bentley and Butch McCoy for approval.

EFFECTIVE DATE: 8/05/2015

Date	Change Location	Changed By	Brief Description of Change
6/2/2015	Section 4	M. Newman	Edits to field tile installation, remove perforated pipe reference. Type of pipe will be determined on a case by case basis and agreed to under the Field Tile Agreement.
6/05/2015	Attachment B	Dave Anderson	Added CMG contact information
6/8/2015	Attachment H Section 2.3	Stan Parrish	Add a line in the Blaster's section of Attachment F - Blasting Data Sheet for the Blaster to record Peak Particle Velocity (PPV) in inches per second at the nearest pipeline(s). Section 2.3 added fill may be required under and around the pipe.
6/8/2015	Throughout	Mark Newman	Review and merge edits to most recent version, ready for Publishing.
7/7/2015	Section 3.3	Mark Newman	Revised language to clarify installation of fences and gates along the ROW.
7/8/2015	Section 6.1	Mark Newman	Added "Production, gathering or other pipelines transporting natural gas, oil, steam, petroleum, or other industrial gaseous materials shall comply with these requirements."
7/8/2015	Letters of Conditional Acceptance and Waivers	Mark Newman	Update required due to addition of Attachment I.
7/8/2015	Attachment I	Mark Newman	New "Waiver Request Form".
7/8/2015	Section 9	Mark Newman	Added review and approval requirements for blasting and modifications to blasting plan.
7/29/2015	Sections 2.4, 3.2, 3.3, 5.1, 5.3, 6.1, 7.1, and 9	Mark Newman	Revisions or additions following modifications to the 1050 Buried Facilities Form to align documents.
8/3/2015	Attachment B	Butch McCoy	Corrected table.

EFFECTIVE DATE: 8/05/2015

Attachment A

One-Call Contact Information*

DELAWARE Miss Utility of Delmarva Center: 1-800-282-8555 or (800) 441-8355 www.missutility.net	New York City – Long Island One Call Center Center: 1-(800)272-4480 www.nycli1calldsi.com
INDIANA Indiana 811 (Indiana Underground Plant Protection Service, Inc.) Center: 1-800-382-5544 or (317) 842-8378 www.Indiana811.org	NORTH CAROLINA North Carolina One-Call Center, Inc. Center: 1-800-632-4949 or (336) 855-7799 www.ncocc.org
KENTUCKY Kentucky 811 (Kentucky Underground Protection, Inc.) Center: 1-800-752-6007 or (502) 266-5677 www.kentucky811.org	OHIO Ohio Utilities Protection Services (OUPS) Center: 1-800-362-2764 www.oups.org
	Oil and Gas Producers Underground Protection Service Center: 1-(800) 925-0988 www.ogpups.com
LOUISIANA Louisiana One Call System, Inc. Center: (800) 272-3020 www.laonecall.com	PENNSYLVANIA Pennsylvania One Call System, Inc. Center: 1-800-242-1776 or (412) 464-7100 www.paonecall.org
MARYLAND Miss Utility of Delmarva Center: 1-800-282-8555 or (800) 441-8355 www.missutility.net	TENNESSEE Tennessee 811 (Tennessee One Call System) Center: 1-(800) 351-1111 or (615) 367-1111 www.tnonecall.com
Miss Utility Center: (800) 257-7777 www.missutility.net District of Columbia	VIRGINIA Miss Utility of Virginia Center: 1-800-552-7001
District One Call Center: 1-800-257-7777 www.missutility.net	www.missutilityofvirginia.com
MISSISSIPPI Mississippi One Call System, Inc. Center: 1-(800) 227-6477 or (601) 362-4374 www.ms1call.org	WEST VIRGINIA West Virginia 811 or WV811 (Miss Utility of West Virginia, Inc.) Center: 811 or 1-800-245-4848 www.wv811.com
NEW JERSEY New Jersey One Call Center: 1-800-272-1000 (in state) or (732) 394-3000 www.nj1-call.org	
NEW YORK Dig Safely New York Center: 1-800-962-7962 www.digsafelynewyork.com	NATIONAL ONE CALL 811 or 1-888-258-0808**
*Information obtained from One Call System International at	

PROCEDURE NO.: 220.003.009

EFFECTIVE DATE: 8/05/2015



Attachment B

Plan Review Locations and Phone Numbers

Note: Mail all plans to the attention of the "Asset Management Department."

Company Name	Coverage Area (State/County)	Office Address	Contact Phone #
Columbia Gas Transmission (TCO)	DE – TCO New Castle	4800 Freemansburg Ave Easton PA 18045	610-865-9257
Crossroads Pipeline	IN – TCO Elkhart, Lake, Laporte, Marshall, Noble, Porter, St. Joseph, DeKalb	589 North State Road Medina OH 44256	330-721-4163
Columbia Gas Transmission (TCO)	KY – TCO Bath, Bourbon, Bracken, Campbell, Carter, Clark, Clay, Estill, Fayette, Floyd, Johnson, Knott, Lee, Letcher, Lewis, Madison, Magoffin, Martin, Mason, Menifee, Montgomery, Morgan, Nicholas, Owsley, Pendleton, Pike, Robertson	1675 Muddy Creek Road Winchester KY 40391	859-745-6405
Columbia Gas Transmission (TCO)	KY – TCO Boyd, Greenup, Lawrence	485 Industrial Road St. Albans WV 25177-1831	304-722-8541
Columbia Gulf Transmission (CGT)	KY – CGT Bath, Boyd, Carter, Estill, Madison, Menifee, Montgomery, Powell, Rowan	1675 Muddy Creek Road Winchester KY 40391	859-745-6405
Columbia Gulf Transmission (CGT)	KY – CGT Adair, Allen, Casey, Garrard, Lincoln, Metcalfe, Monroe	5422 Green Grove Road Hartsville TN 37074	615-374-2165 Ext 2149

PROCEDURE NO.: 220.003.009

EFFECTIVE DATE: 8/05/2015

Company Name	Coverage Area (State/County)	Office Address	Contact Phone #
Columbia Gulf Transmission (CGT)	LA (Parishes) – CGT Acadia, Avoyelles, Cameron, Catahoula, East Carroll, Evangeline, Franklin, Iberia, Jeff Davis, Lafayette, Lafourche, LaSalle, Madison, Plaquemines, Rapides, St. Charles, St. Landry, St. Mary, Terrebonne, Vermilion	201 Energy Parkway Suite 100 Lafayette LA 70508	337-266-4695
Columbia Gas Transmission (TCO)	MD – TCO Allegany, Garrett, Washington	12001 Industrial Park Street Cumberland MD 21502	301-729-5624
Columbia Gas Transmission (TCO)	MD – TCO Cecil, Harford	4800 Freemansburg Ave Easton PA 18045	610-865-9257
Columbia Gas Transmission (TCO)	MD – TCO Baltimore, Howard, Montgomery	34646 Old Valley Pike Strasburg VA 22657	540-465-6441
Columbia Gulf Transmission (CGT)	MS – CGT Alcorn, Prentiss, Tippah, (northern) Union	5422 Green Grove Road Hartsville TN 37074	615-374-2165 Ext 2149
Columbia Gulf Transmission (CGT)	MS – CGT Calhoun, Grenada, Humphries, Isaquena, Leflore, Pontotoc, Sharkey, Sunflower, (southern) Union, Washington, Yalabousha	201 Energy Parkway Suite 100 Lafayette LA 70508	337-266-4695
Columbia Gas Transmission (TCO)	NC - TCO Northampton	1596 Baxter Road Petersburg VA 23875	804-733-2486
Columbia Gas Transmission (TCO)	NJ – TCO Gloucester, Hunterdon, Morris, Salem, Warren	4800 Freemansburg Ave Easton PA 18045	610-865-9257
Columbia Gas Transmission (TCO)	NY – TCO Broome, Chemung, Delaware, O range, Rockland, Schuyler, Steuben, Sullivan, Tioga, Yates	36 Philo Road West Elmira NY 14903	607-739-4831

EFFECTIVE DATE: 8/05/2015

Company Name	Coverage Area (State/County)	Office Address	Contact Phone #
Columbia Gas Transmission (TCO)	NY – TCO Cattaraugus	315 Shady Rest Road Ellwood City PA 16117	724-758-5507
Columbia Gas Transmission (TCO)	OH – TCO Athens, Champaign, Clark, Clinton, (southern) Crawford, Delaware, Fairfield, Fayette, Franklin, Gallia, Greene, Hocking, Jackson, Knox, Lawrence, Licking, Madison, (eastern) Marion, Meigs, Montgomery, Morgan, Morrow, (northeaster n) Muskingum, Pickaway, (southern) Perry, Ross, Scioto, Union, Vinton, Warren, Washington, (southeastern) Wyandot	301 Maple Street Sugar Grove OH 43155	740-746-2234
Columbia Gas Transmission (TCO)	OH – TCO Allen, (northern) Ashland, (northern) Crawford, Cuyahoga, Defiance, Erie, Geauga, Hancock, Hardin, Henry, Huron, Logan, Lorain, Lucas, (western) Marion, Medina, Ottawa, Paulding, Putnam, Richland, Sandusky, Seneca, Wood, (northern) Wyandot	589 North State Road Medina OH 44256	330-721- 4163
Columbia Gas Transmission (TCO)	OH – TCO (southern) Ashland, Belmont, Coshocton, Guernsey, Holmes, (western) Monroe, Muskingum, Noble, (northeastern) Perry, (so uthern and eastern) Richland, Tuscarawas, (north and southwest) Wayne	8462 State Route 179 Lakeville OH 44638	419-827-2620

EFFECTIVE DATE: 8/05/2015

Company Name	Coverage Area (State/County)	Office Address	Contact Phone #
Columbia Gas Transmission (TCO)	OH – TCO (southeast) Columbiana, Jefferson	4115 Cork Bocktown Road Clinton PA 15026	724-223-3944
Columbia Gas Transmission (TCO)	OH – TCO (eastern) Monroe	950 Manifold Road Washington PA 15301	724-223- 2789
Columbia Gas Transmission (TCO)	OH – TCO Carroll, Columbiana, Harrison, Mahoning, Portage, Stark, Trumbull	315 Shady Rest Road Ellwood City PA 16117	724-758-5507
Columbia Gas Transmission (TCO)	PA – TCO (northern) Pike, Wayne	36 Philo Road West Elmira NY 14903	607-739-4831
Columbia Gas Transmission (TCO)	PA – TCO Fayette, Greene, Westmoreland	950 Manifold Road Washington PA 15301	724-223- 2789
Columbia Gas Transmission (TCO)	PA – TCO Allegheny, (southern) Beaver, Jefferson, Washington	4115 Cork Bocktown Road Clinton PA 15026	724-223-3944
Columbia Gas Transmission (TCO)	PA – TCO Armstrong, (northern) Beaver, Butler, Cameron, Centre, Clarion, Clearfield, Clinton, Elk, I ndiana, Jefferson, Lawrence, Mc Kean	315 Shady Rest Road Ellwood City PA 16117	
Columbia Gas Transmission (TCO)	PA – TCO Bucks, Chester, Delaware, Lancaster, Lehigh, Montgomery, Monroe, Northampton, (southern) Pike,	4800 Freemansburg Ave Easton PA 18045	610-865-9257
Columbia Gas Transmission (TCO)	PA – TCO Adams, Bedford, Cumberland, (southeastern) Fayette, Franklin, Fulton, Somerset, York	12001 Industrial Park Street Cumberland MD 21502	301-729-5624

EFFECTIVE DATE: 8/05/2015

Company Name	Coverage Area (State/County)	Office Address	Contact Phone #	
Columbia Gulf Transmission (CGT)	TN – CGT Davidson, Hardin, Lewis, Macon, Maury, McNairy, Sumner, Trousdale, Wayne, Williamson, Wilson	5422 Green Grove Road Hartsville TN 37074	615-374-2165 Ext 2149	
Columbia Gas Transmission (TCO)	VA – TCO Alleghany, Augusta, Botetourt, Giles, Rockbridge	485 Industrial Road St Albans WV 25177	304-722-8541	
Columbia Gas Transmission (TCO)	VA – TCO Albemarle, Chesapeake, Chesterfield, Culpeper, Dinwiddie, (southern) Fauquier, Goochland, Greene, Greensville, Hanover, Henrico, Isle of Wight, James City, Louisa, Madison, Newport News, Orange, Powhatan, Prince George, Prince William, Suffolk, Southampton, Surry, Sussex	1596 Baxter Road Petersburg VA 23875	804-733-2486	
Columbia Gas Transmission (TCO)	VA – TCO Fairfax, (northern) Fauquier, Page, Rockingham, Shenandoah, Clarke, Loudoun, Warren	34646 Old Valley Pike Strasburg VA 22657	540-465-6441	
Columbia Gas Transmission (TCO)	abia Gas Transmission (TCO) (western) Braxton, Calhoun, Clay, (southern) Gilmer, Jackson, Kanawha, Roane, Wirt, Wood,		304-722- 8411	
Columbia Gas Transmission (TCO)	Transmission (TCO) (eastern) Braxton, Grant, Lewis, Pendleton, Pocahontas, (southern) Preston, Randolph, Tucker, Upshur, Webster		304-635-2100	

EFFECTIVE DATE: 8/05/2015

Company Name	Coverage Area (State/County)	Office Address	Contact Phone #
Columbia Gas Transmission (TCO)	WV – TCO Boone, Cabell, Fayette, Greenbrier, Lincoln, Logan, Mason, McDowell, Mercer, Mingo, Monroe, Putnam, Raleigh, Summers, Wayne, Wyoming	485 Industrial Road St Albans WV 25177	304-722-8541
Columbia Gas Transmission (TCO)	WV – TCO (northern) Gilmer, Harrison, Marion, Tyler, Wetzel, (western) Monongalia, Doddridge	950 Manifold Road Washington PA 15301	724-223- 2789
Columbia Gas Transmission (TCO)	WV – TCO Brooke, Hancock, Marshall, Ohio	4115 Cork Bocktown Road Clinton PA 15026	724-223-3944
Columbia Gas Transmission (TCO)	umbia Gas Transmission (TCO) Mineral, (eastern) Monongalia, (northern) Preston		301-729-5624
Columbia Gas Transmission (TCO)	WV – TCO Hampshire, Hardy	34646 Old Valley Pike Strasburg VA 22657	540-465-6441
Columbia Gulf Transmission (CGT)	WY – CGT Uinta	201 Energy Parkway Suite 100 Lafayette LA 70508	337-266-4695
Columbia Midstream Group (CMG)	OH- Columbiana, Mahoning	315 Shady Rest Road Ellwood City PA 16117	724-758-5507
Columbia Midstream Group (CMG)	PA- Lawrence, Mercer, Washington	4115 Cork Bocktown Road Clinton PA 15026	724-223-3944

EFFECTIVE DATE: 8/05/2015



Requirements for Submission of Design Plans

1. Permittee shall arrange an on-site visit with a CPG Field Representative for field determination of pipeline location and depth to be recorded on the design plans for submission. This can be coordinated through the national "Call Before You Dig" hotline, 811.

Note: Test Holes(s) may be required by CPG at Permittee expense to verify exact location and elevation of pipeline facilities, or to locate the edge of an existing casing. You may be required to provide excavation equipment (at your expense) in order to assist the CPG Field Representative in accurately locating the pipeline.

- 2. The location along with the corresponding depth of the pipeline(s) shall be recorded by the Permittee. CPG will consider site conditions and pipeline(s) location to determine the number of measurement locations required. At a minimum, the pipeline(s) shall be located at each proposed road or utility crossing, drainage channel or ditch, areas of proposed grade change within the pipeline right-of-way, and wherever the pipeline changes direction (angle points.)
- 3. Using the pipeline location data, Permittee shall accurately show CPG pipeline(s) on the design plans to be submitted. Include all reference and location information for each verification site on the design plan, including the date and the name of the CPG Field Representative who performed the field work.
- 4. The pipeline location data must be shown on individual drawings depicting the existing site conditions and the proposed site conditions. Pipeline facilities shall be highlighted in yellow. All drawing sheets corresponding with CPG facilities shall be identified/ listed within a design plan transmittal letter submitted within each drawing package.
- 5. CPG pipeline(s) shall be indicated on all applicable plan sheets by pipe diameter and labeled, "CPG Gas Transmission Pipeline".
- 6. Permittee shall add CPG to the Utilities List and include the name and phone number of the CPG Land Agent assigned to the project. (Note: for Land Agent name, call the appropriate CPG office, as listed in Attachment B)
- Permittee shall indicate the following information on the design plans: [1] ground disturbances (blasting, seismic testing, pile driving, jack hammering, etc.) within 300 feet of the pipeline(s);
 [2] proposed location(s) where construction equipment may cross the pipeline right(s)-of-way;
 [3] structure setback distances from the pipeline ROW; [4] proposed landscaping within the pipeline ROW; [5] any proposed fencing within the pipeline right-of-way; and [6] any proposed utility crossings.

PROCEDURE NO.: 220.003.009

EFFECTIVE DATE: 8/05/2015

- 8. If the proposed drainage pattern of the existing site will be altered in any way that impacts the pipeline right-of-way, the Permittee shall submit a drainage plan that specifically identifies new flow paths and all inlet/outfall/collection points.
- 9. Permittee shall include/incorporate the applicable portions of the CPG right-of-way Use Specification as a part of the final design plans.
- 10. For property improvements that involve grade/pavement alterations, road work (new construction or improvements of existing), utility crossings (buried and overhead), or other subsurface or on-surface structure installations within the CPG right-of-way, the following are required for plan submission:
 - A. Prepare a separate plan and profile drawing of CPG pipeline(s) for the existing and the proposed conditions for the project.
 - B. Include sub-grade details that show materials and the thickness of each layer/course.
 - C. Indicate the amount of existing cover that will be removed from the pipeline(s). Indicate the amount of cover that will be added over the pipeline(s). Indicate the proposed finished/final grade amount of cover over the pipeline(s).
 - D. Show the clearances between CPG pipeline(s) and any existing and new buried or overhead utilities that cross the pipeline right-of-way.
 - E. Show the clearances between CPG pipeline(s) and each proposed substructure at the two closest reference points.
 - F. For any utility to be installed via boring, drilling, or tunneling, include a detailed procedure and profile drawing of this work with the design plans for CPG review and permitting. Note: "Blind" boring is not permitted. CPG pipeline(s) must be exposed during the bore operation to ensure that the bore head crosses safely underneath the pipeline(s).
 - G. Indicate any areas of disturbance or other work that will require CPG pipeline(s) to be exposed in order to perform the work.
- 11. The following "Design Plans Submission Checklist" shall be signed, dated, and submitted within the design submittal package and sent to CPG for review. Mail one full size set and one reduced size (11"x17") set of design plans to the CPG office. Inquire with the local office on whether Electronic Submissions will be accepted.

EFFECTIVE DATE: 8/05/2015



DESIGN PLANS - SUBMISSION CHECKLIST

Project Name:							
Project Location:							
GPS Coordinates:							
Developer's Name:							
Address:							
Phone Number:							
Our project involves the following impacts to CPG facilities:							
Cover, grading, and drainage pattern changes							
Aboveground and/or underground structures							
Road, driveway, sidewalks, and parking areas							
Utility crossings including gas, water (steam), sewer (storm & sanitary), electrical, fiber-optic, and							
communications cables Temporary access roads for the crossing of heavy/construction equipment 							
 Temporary access roads for the crossing of heavy/construction equipment Farming and field tile 							
 Construction-induced vibrations 							
 Blasting operations (attach completed BLASTING DATA SHEET) 							
 Seismic vibrating operations (attach SEISMIC VIBRATING PLAN) 							
 Exposure of the pipeline (attach SUPPORT PLAN) 							
 Boring, drilling, or tunneling near the pipeline (attach DRILL PLAN) 							
□ Other:							
CPG pipeline location performed by:							
Name of CPG Employee Date of Pipeline Locating Activity							
Attach a copy of the field data provided by Company representative							
Signature: Date:							
Print Name:							
Title:							
Email:							
OMISSION OF ANY INFORMATION REQUESTED ABOVE WILL DELAY YOUR DESIGN PLAN REVIEW. CPG							
requires a minimum of 60 days for technical review upon receipt of complete and accurate design plans.							
CPG COMPLETE THIS SECTION							
Received By:Date Received:							
Pipelines Involved: UTM Map No:							

PROCEDURE NO.: 220.003.009

EFFECTIVE DATE: 8/05/2015



Field Tile Agreement

Pipeline UTM Crossing (x) Pipeline Station Longitudinal installation (x) from Pipeline Stat ROW # Parcel # Property Address	tions to
Landowner Address	
Home Phone Cell Phone Email	

When notified by CPG of an upcoming project involving excavation of the pipeline, Landowner agrees to divert or stop the flow of water in the field tile (drainage pipe) located within 25 feet of the CPG pipeline by a date specified by CPG. Landowner further agrees to, at Landowner's expense, make repairs to any field tile damaged as a result of CPG's operations, maintenance or construction activities. Landowner agrees to indemnify and hold harmless, CPG against any direct damage to field tile and any indirect damage or loss resulting from the temporary loss of the use of the field tile.

Landowner

_____ (Signature)

_____ (Printed name)

_____(Date)

PROCEDURE NO.: 220.003.009

EFFECTIVE DATE: 8/05/2015



Attachment E - Residential/Commercial Concrete Driveway within CPG ROW

Control Joint Depth: Joints can be constructed either by forming, hand tooling them in fresh concrete, or cutting them into cured concrete with a saw. The width of these joints should be between one-sixteenth and one-quarter inch, depending on the method used in forming them.

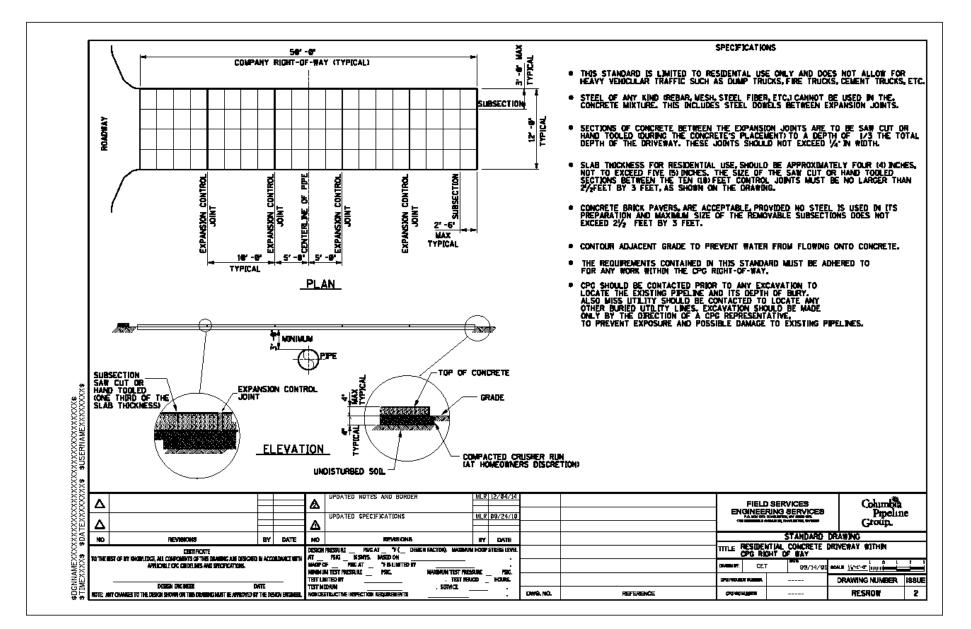
<u>Subsection Size</u>: Each concrete subsection is 2.5' by 3' and approximately 4" thick (not to exceed 5" thick). This yields the total volume equal to 2.5 cubic feet. Assume cured concrete weighs approximately 150 lbs. per cubic foot; this makes the subsection weigh approximately 375 pounds.

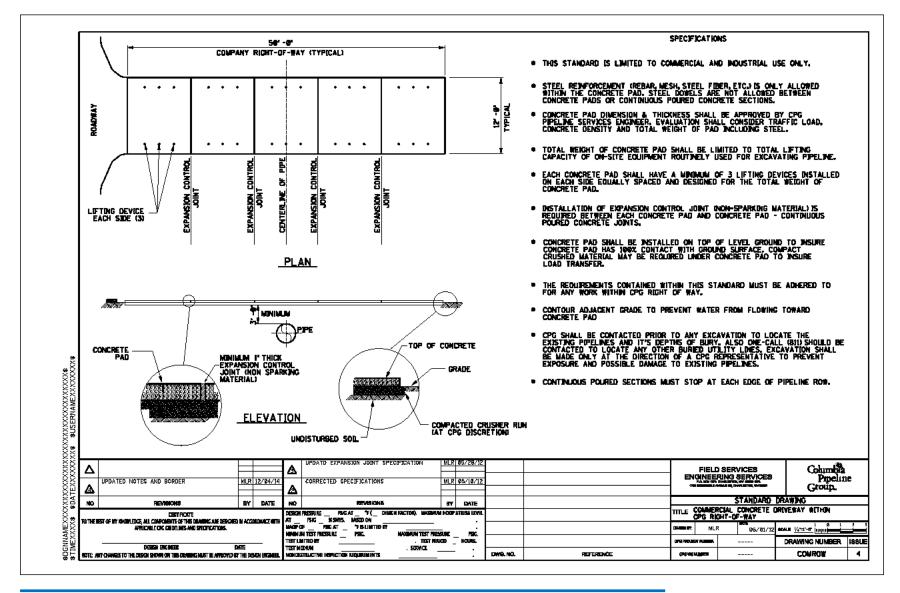
Permittee must follow specifications provided in the drawings unless otherwise permitted by CPG.

PROCEDURE NO.: 220.003.009

EFFECTIVE DATE: 8/05/2015

Page **36** of **47**





EFFECTIVE DATE: 8/05/2015

Page **38** of **47**

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Attachment F- Equipment Crossing Data Sheet

Operator / Contractor (Complete this Section):

Dates						

Contact:	Phone:
Company:	Location of Work (include vicinity map)
Company.	Location of work (include vicinity indp)
Address:	
City, State, Zip:	Temporary Impact Permanent Impact Logging

	Equipment Information	Equipment #1	Equipment #2	Equipment #3	Equipment #4
Туре о	f Model of Equipment				
Total V	Veight – Fully Loaded				
Track	Width of Track Shoe				
Tra	Length of Track on round				
eel	Number of Wheels				
Wheel	Number of Axles				
Pavem	ent Type / Thickness				
0	Clay				
ſype	Wet Clay				
Soil Type	Sand & Gravel				
	Wet Top Soil				

CPG (Complete this Section):

Field Office:	Contact:		Asset Group:	
Phone:	Township/District:		State:	
Pipeline Name / Number				
Pipeline MAOP				
Inventory Map #				
Inventory Station #				
GPS Latitude				
GPS Longitude				
Pipe Size				
Grade / Wall Thickness				
Coating Type / Class Location				
Coupled, Welded or Threaded				
Bored or Open Cut/Rock				
Pipe Depth				

Evaluation Results % SMYS		

Crossing Plan Evaluated by: _____ Date: _____

PROCEDURE NO.: 220.003.009 EFFECTIVE DATE: 8/05/2015

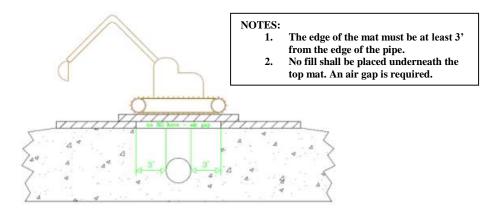
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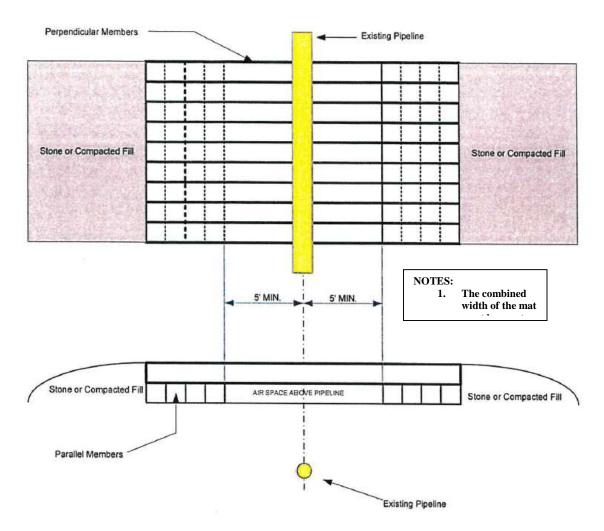
Attachment G – Temporary Example 1 - Temporary Wooden 1 or Permanent Crossings



PROCEDURE NO.: 220.003.009

EFFECTIVE DATE: 8/05/2015

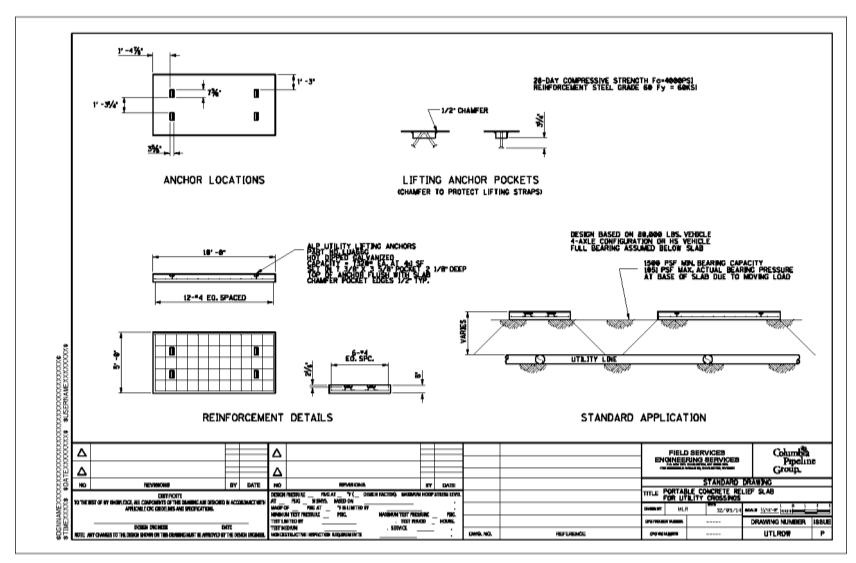
Page **40** of **47**



Example 2 – Temporary Wooden Timber Utility Crossing

PROCEDURE NO.: 220.003.009

EFFECTIVE DATE: 8/05/2015



Example 3 – Portable Concrete Relief Slab

PROCEDURE NO.: 220.003.009

EFFECTIVE DATE: 8/05/2015

Page **42** of **47**

COLUMBIA PIPELINE GROUP



		Section to	be compl	eted by Bla	aster				
Blasting Contractor	Information			-	Compa	ny Hiring Bla	asting Cont	ractor	
Company				Company					_
Contact				Contact					
Address				Address					_
Telephone				Telephone					
Blasting Permit #									
L Project Name:									
2 Purpose of Blasting:									
B Type of Explosive:									
Planned Blasting Date:									
5 Number of Charges in Front Row of Ex	xplosive Grid								
6 Number of Rows Making Explosive Gr	id								
7 Spacing Between Charges in Explosive	Line		feet						
3 Spacing Between Explosive Line			feet						
9 Weight of Each Charge in Explosive Gr	rid		lbs						
10 Distance of Nearest Row to Pipeline			feet						
11 Angle Betweeen Pipe and Grid									
12 Number of Holes Detonated During Sh	not								
13 Blaster's calculated Peak Particle Velo		pipeline(s)			inches per second		inc	hes per second	
Select Blast Pattern:	Single Point Charge			Line Charge		Gri	id Charge		
Select Blast Orientation to Pipeline:	Parallel			Angled		Perp	endicular		
	Blaster's	sketch - page	2 (MUST	BE INCLUD	ED FOR REVIEW	1)			
		Section to be	complete	d by Gas C	ompany				
								nel	
Gas Company Information - Engineering	Services Personnel			Gas Comp	any Information - O	perations Pipe	eline Person		
	Services Personnel			Gas Comp Asset or Se		perations Pipe	eline Personi		
Pipeline Name	Services Personnel				ection	perations Pipe	eline Personi		
Pipeline Name	Services Personnel			Asset or Se	ection	perations Pipe	eline Personi		
Gas Company Information - Engineering S Pipeline Name Diameter Wall Thickness Grade	Services Personnel			Asset or Se Field Office	ection	perations Pipe	eline Personi		
Pipeline Name Diameter Wall Thickness	Services Personnel			Asset or Se Field Office County/Pa	ection	perations Pipe	eline Personi		
Pipeline Name Diameter Wall Thickness Grade	Services Personnel			Asset or Se Field Office County/Pa State	etion	perations Pipe	eline Personi		
Vipeline Name Diameter Vall Thickness Grade VAOP Coupled or Welded	Services Personnel			Asset or Se Field Office County/Pa State Map # Mile Post/	etion				
Vipeline Name Viant Thickness Grade VIADP Coupled or Welded Vivaluation Results - Engineering	Services Personnel			Asset or Se Field Office County/Pa State Map # Mile Post/ Blast Resu	ection e rish Inv. Sta.				
Vipeline Name Vipeline Name Viant Thickness Grade ViAOP Coupled or Welded Viant Results - Engineering Viercent SMYS	Services Personnel			Asset or Se Field Office County/Pa State Map # Mile Post/ Blast Resu Name of C	e				
Pipeline Name Diameter Wall Thickness Grade WAQP	Services Personnel			Asset or Se Field Office County/Pa State Map # Mile Post/ Blast Resu Name of C	e				

EFFECTIVE DATE: 6/4/2015

Page **43** of **47**

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Company Information - Francous - Company		Gas Company Informer 1	n Operations Dinaline Dem	
Company Information - Engineering Services Personne			n - Operations Pipeline Personn	21
eline Name		Asset or Section		
meter		Field Office		
II Thickness		County/Parish		
de		State		
OP		Map#		
upled or Welded		Mile Post/Inv. Sta.		
luation Results - Engineering		Blast Results - Operations		
cent SMYS		Name of On Sight Inspect	or	
s (Y / N)		One-Call Ticket Number		
sting Plan Evaluated by:		Leak Survey Date		
e Evaluated:		Leakage (Y / N)		
	Chatab. Ta ba assure	latad by Diastan		
	Sketch - To be comp	Dieted by Blaster		
ject Name:				
tch Prepared By:			Date:	
Blaster	s sketch - show orientation of bla	sting grid to pipeline(s).		
nments:				
of Attachments (if any):				
· "				

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Right-of-Way Use Procedure Waiver Request Form

This form is for use with <u>Procedure 220.003.009 Right of Way Use Procedure</u> and should be used only where a deviation from the procedure requirements is requested.

This section to be complete	d by Columbia Pinelin	e Group Operation	s or Land Representative
This section to be complete	u by columbia Pipelin	e droup operations	s of Lanu Representative.

Pipeline: [Type here]	UTM: [Type here]	Pipeline Station: [Type here]				
GPS Coordinates:	Latitude: : [Type here]	Longitude: : [Type here]				
ROW #: [Type here]	Parcel #: [Type here]	State/County or Parish: [Type here]				
Property Address: [Type Here]						
Landowner Name: : [Type Here]						
Landowner Address: : [Type Here]						
Landowner Home Phone: :	[Type Here]	Landowner Cell Phone: : [Type Here]				
Landowner Email: [Type Here]						
Contractor Name: [Type Here]						
Contractor Phone: [Type Here]						
Contractor Email: [Type Her	re]					
Requestor Name: [Type Her	re]	Date of Request: [Type Here]				
Requestor Title: [Type Here]	Requestor Email: [Type Here]				

Attached the following documents to the Waiver request for review as it applies:

- Form 1050P17 Location of Buried Facilities (*Required*)
- Design Plan Submission Checklist and supporting documents
- Photographs
- Drawings

PROCEDURE NO.: 220.003.009

EFFECTIVE DATE: 6/4/2015

Page **45** of **47**

COLUMBIA PIPELINE GROUP

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A request for a waiver will alter the following CPG requirements (check all that apply):

- □ Backfilling operations: [Type here]
- □ Cover, grading, and drainage requirements: [Type here]
- □ Aboveground/underground structures, Gardening and Landscaping: [Type here]
- □ Field Tile (Attach Field Tile Agreement): [Type here]
- □ Road, driveways, sidewalks, parking areas and walking/bike paths: [Type here]
- □ Utility crossings □ Natural Gas, Hazardous Liquid, or Petro □Steam □Water □ Sewer
 □Storm & Sanitary □ Electrical □ Fiber-Optic □Communication Cable/TV □ Conduit:
 [Type here]
- □ Construction-induced vibrations: [Type here]
- □ Blasting operations (Attach completed Blasting Data Sheet): [Type here]
- □ Seismic vibrating operations (Attach Seismic Vibrating Plan): [Type here]
- □ Exposure of the pipeline (Attach Support Plan): [Type here]
- □ Boring, drilling, or tunneling near the pipeline (Attach Drill Plan): [Type here]
- □ Storage Well

Operations Manager

□ Other (Attach supporting Documents): [Type here]

Provide a justification for the Waiver: [Type here]:

This section to be completed by Columbia Pipeline Group Approvers:

		_
Signature	Print Name	Date
Land Manager		
Signature	Print Name	Date
Engineering Services Manager or	Manager of Well Services	
Signature	Print Name	Date
PROCEDURE NO.: 220.003.009	EFFECTIVE DATE: 6/4/2015	Page 46 of 47
	Columbia Pipeline Group	

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Vice President, Safety, Training, and Natural Resource Management

Signature			Print Name		Date		
Request:	Approved		Not Approved (with comments)				
Reason the Waiver was not approved: [Type here]							
Waiver request records are maintained by Land Services. This form with supporting documentation shall be stored in <u>Online Land System</u> and <u>Maximo</u>							

Comments: [Type here]

PROCEDURE NO.: 220.003.009

EFFECTIVE DATE: 6/4/2015

Page **47** of **47**