Planning and Development Services

City of Aurora

Planning Division
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May 14, 2020

Ted Laudick
Aurora High Point at DIA Metropolitan District
4100 E Mississippi Avenue, Suite 500
Denver, CO 80246

Re: **Initial Submission Review:** High Point Pond PD1 – Infrastructure Site Plan
Application Number: DA-1746-24
Case Numbers: 2020-6015-00

Dear Mr. Laudick:

Thank you for your initial submission, which we started to process on Monday, April 20, 2020. We reviewed it and attached our comments along with this cover letter. This letter contains comments from all city departments and outside agencies.

Since many important issues remain, you will need to make another submission. Please revise your previous work and send us a new submission at your convenience. Please note that a Landscape Plan must be uploaded with the next submittal.

Note that all our comments are numbered. When you resubmit, include a cover letter specifically responding to each item. The Planning Department reserves the right to reject any resubmissions that fail to address these items. If you have made any other changes to your documents other than those requested, be sure to also specifically list them in your letter.

As always, if you have any comments or concerns, please give me a call. I may be reached at 303-739-7857.

Sincerely,

Sarah Wile

Sarah Wile, Senior Planner
City of Aurora
Planning and Development Services Department

cc: Adam Bent, Martin Martin Consulting Engineers, 12499 W Colfax Avenue, Lakewood, CO 80215
Meg Allen, Neighborhood Liaison
Cesarina Dancy, ODA
Filed: K:\$DA\1746-24rev1.rtf

First Submission Review

1. Planning (Sarah Wile / 303-739-7857 / swile@auroragov.org / Comments in teal)
1A. Include the zoning for the Adams County parcel in the Data Block.

1B. Add another signature block as there are two property owners within the ISP.

1C. Please clarify how access will be provided if 64th Avenue east of E-470 is not constructed prior to the pond being constructed.

1D. Please continue working on the MOU between the City of Aurora and Adams County. This must be finalized before the ISP is approved.

1E. Address other miscellaneous comments in the ISP.

1E. As a reminder, the city has developed CAD Data Submittal Standards for internal and external use to streamline the process of importing AutoCAD information into the city's Enterprise GIS. Please note that a digital submission meeting the CAD Data Submittal Standards is required before your final Infrastructure Site Plan mylars can be routed for signatures or recorded. Please review the CAD Data Submittal Standards and email the .DWG file to your Case Manager before submitting your final mylars.

2. Landscaping (Kelly Bish / 303-739-7189 / kbish@auroragov.org / Comments in bright teal)
2A. A Landscape Plan is required as part of the ISP, but should not be submitted until the final design of the pond has been coordinated and conceptually approved by Aurora Water, Public Works, and MHFD. The second submittal of the application should be delayed until this occurs.

3. Civil Engineering (Kristin Tanabe / 303-739-7306 / ktanabe@auroragov.org / Comments in green)
3A. The ISP will not be approved until the Preliminary Drainage Report is approved.

3B. Once finalized, the Memorandum of Understanding (MOU) regarding maintenance obligations between the City of Aurora and Adams County needs to be included in the Preliminary Drainage Report. The review of this MOU needs to occur outside of the DA process between the interested parties.

3C. Clearly show and label the drainage easement. An access easement is required from the drainage easement to a public right-of-way for maintenance access.

3D. The entire maintenance path needs to be included in the ISP, including grading.

3E. The berm has different widths on Sheets 2 and 3. Please ensure consistency.

4. Aurora Water (Casey Ballard / 303-739-7382 / cballard@auroragov.org / Comments in red)
4A. Provide a turnaround for maintenance vehicles.

4B. How does the maintenance path connect to the public right-of-way?

5. Traffic Engineering (Brianna Medema / 303-739-7336 / bmedema@auroragov.org / Comments in orange)
5A. As identified in the pre-application notes, please include the access road extents to an existing, building public right-of-way within the ISP. The response provided was "access from 64th Avenue right-of-way shown on the ISP." Include the access road extend to the public right-of-way.

6. Real Property (Maurice Brooks / 303-739-7294 / mbrooks@auroragov.org / Comments in magenta)
6A. Dedicate all easements by separate document. Please contact Andy Niquette to begin the process.

6B. If license agreements for are required for any encroachments into easements, please coordinate with Grace Gray.

7. Xcel Energy (Donna George / 303-571-3306 / donna.l.george@xcelenergy.com)
7A. See the attached comment letter.

Right of Way & Permits

1123 West 3rd Avenue
Denver, Colorado 80223
Telephone: **303.571.3306**
Facsimile: 303. 571. 3284
donna.l.george@xcelenergy.com

May 8, 2020

City of Aurora Planning and Development Services
15151 E. Alameda Parkway, 2nd Floor
Aurora, CO 80012

Attn: Sarah Wile

Re: High Point Pond PD1, Case # DA-1746-24

Public Service Company of Colorado's (PSCo) Right of Way and Permits Referral Desk has determined that an **engineering review** is necessary for the above captioned project. Public Service Company has an existing high-pressure natural gas transmission pipeline and associated land rights as shown within this property. Any activity including grading, proposed landscaping, erosion control or similar activities involving our existing right-of-way will require Public Service Company approval. Encroachments across PSCo's easements must be reviewed for safety standards, operational and maintenance clearances, liability issues, and acknowledged with a Public Service Company License Agreement to be executed with the property owner. PSCo is requesting that, prior to any final approval of the development plan, it is the responsibility of the property owner/developer/contractor to contact PSCo's Encroachment Team for development plan review and execution of a License Agreement (upload all files in PDF format) at:
https://www.xcelenergy.com/working_with_us/builders/encroachment_requests and click on Colorado if necessary. An engineer will then be in contact to request specific plan sheets. Please see the attached Exhibit B for more information.

Donna George
Right of Way and Permits
Public Service Company of Colorado / Xcel Energy
Office: 303-571-3306 – Email: donna.l.george@xcelenergy.com

Exhibit B

Minimum Requirements for Grading and Excavation near Public Service Company of Colorado Transmission Pipeline(s)

1) General

a. Colorado State Law Requires notification before excavation around utilities occurs. Requestor or Requestor's Contractor must call the Utility Notification Center of Colorado (UNCC) 1-800-922-1987 (811 when calling within Colorado) 48 hours prior to excavation, including the grading of the right of way, begins. Public Service Company of Colorado (PSCo) representatives provide these construction locates at its' cost as a participant in the one call system.

b. All costs for labor, equipment and materials required to repair any damage to the pipeline(s) caused by Requestor or its' Contractors will be the responsibility of the Requestor and/or its Contractors for reimbursement to PSCo.

c. Requestor's Contractor shall provide access to PSCo facilities on the project site for inspection by PSCo Personnel. Open excavations that need to be entered by PSCo Personnel shall conform to all federal, state and local jurisdictional codes and regulations governing safe entry and exit from open excavations.

d. A fully executed agreement, applicable to the type of right being requested, between the Requestor and PSCo must be completed prior to construction activity within the PSCo ROW.

e. Requests for installation of improvements by Requestor within the PSCo ROW must be reviewed and approved by PSCo High Pressure (HP) Gas Engineering and Operations. Installation of, and all costs associated with any improvements, are the responsibility of the Requestor. All costs associated with repairs or relocation of these improvements to accommodate PSCo Operations and Maintenance work on the existing pipeline(s) or installation of a new pipeline will be the responsibility of the Owner of record of the property at the time the work is performed.

f. In the mutual interest of project coordination and scheduling of PSCo resources for your project, PSCo requests invitation to the Pre-Construction Meeting to obtain actual schedules and construction plans, make introductions and address any site specific conditions or project changes that have occurred between Final Design Review and Construction.

g. Any exceptions to the Minimum Requirements stated in this document must be requested in writing and reviewed by PSCo HP Gas Engineering and Operations before approval for construction activity on the PSCo pipeline(s) permitted ROW is given.

h. Any change in Requestor's construction plan and or scope of work that was agreed to between the Requestor and PSCo prior to, or during, construction must be presented to PSCo HP Gas Engineering and Operations for additional review and modification of requirements.

i. Additional requirements may apply to address issues not foreseen during review of Requestor's proposal.

2) Engineering

a. Specifications of weight and type of any heavy equipment or trucks planned to be run over or along the pipeline(s) are required to be submitted to PSCo HP Gas Engineering for analysis of excessive live load stresses induced on the pipeline(s) prior to approval for crossing is given.

   i. Should calculated allowable stresses induced by Requestor equipment traveling over the PSCo pipeline(s) be exceeded, Requestor will be required to install additional temporary fill over the pipeline(s).

   ii. If calculated allowable combined stress on the pipeline(s) can not be reduced below limits by adding additional protective fill over the pipeline(s) or the depth of additional fill is deemed impractical, a temporary bridging structure installed over the pipeline(s) will be required to mitigate the excess stress on the pipeline(s).

      1. This bridging structure must be constructed of timbers, plates or other material that does not allow the driving surface to come in contact with the ground surface. The supports for the driving surface of the bridging structure may be of dirt or other material with the inside edges of the supports placed a minimum of 5 feet from the center line of the PSCo pipeline(s).

b. Requestor's Plans must contain surveyed horizontal location of the PSCo pipeline(s) throughout the project area based on current field locates. Surveyed vertical location of the PSCo pipeline(s) based on pothole information must be presented on the Proposed Construction Drawings Profile Sheets at all Requestor facility crossing locations of the pipeline(s) prior to final comment and approval of the plans.

c. Locates and or potholing for the purpose of Requestor's engineering, design and construction drawings to establish the horizontal and vertical locations of PSCo facilities and all associated costs will be the responsibility of Requestor. A PSCo representative will be required to be on site during any pothole operations.

   i. Potholing with excavation equipment during frost conditions will not be allowed unless contractor thaws ground prior to excavation. Potholing with vac-truck will be allowed under any conditions

d. **Any excavator acting in a reckless manner while working in the area of Xcel Energy pipelines shall be asked to stop their work in that area. Work will not be allowed to continue until Xcel Energy personnel deem the situation has returned to a safe situation.**

e. Blasting Near PSCo Facilities

i. Notification

1. In accordance with Article 7 of Title 9 of CRS "Explosive Act", Section 6.1.7, Utilities must be notified at least 24 hours prior to commencement of blasting activity. If Blasting is anticipated for this project an "Explosive Use Application and Notification" and the associated Agreement Document must be processed before blasting activities may commence near the PSCo pipeline(s). It is recommended that this notification be made at least one month in advance of actual blasting activities to allow for processing of these documents and any studies that may need to be performed to access the applicants blasting plan.

ii. Limits

1. Buried Pipe - Total Combined (Effective) Stresses on the pipe must not exceed **50**% of the specified minimum yield strength of the pipe.

2. Above Ground Pipe –Blasting operations must not generate Peak Particle Velocity (PPV) greater than 1 in/sec.

f. Vibrations from dynamic compaction equipment or other sources must be maintained at a peak particle velocity of not greater than 1 in /sec as measured in any one of the three components of a seismographic reading.

3) **Inspection**

a. PSCo will require that one of its Field Operators be on site during the potholing, excavation, site grading, backfill operations, compaction, and installation of your facilities when working within the pipeline(s) easement and/or a minimum of fifteen (15) Ft from the outer limits of the locate marks for the PSCo pipeline(s). This standby expense is covered by PSCo during a normal 8 hour day Monday - Friday. Any time required in excess of 8 hours per day or weekend and holidays will be billed to the Third Party of the facilities under construction at the applicable PSCo Labor Overtime Rates and Equipment/Vehicle Rates.

b. Requests for standby will be filled on a first-come, first-served basis, consistent with the number of personnel available for standby and Xcel Energy workload at that time. It is not our intent to unnecessarily impede the work schedule of the installation contractor, and we will strive to be as available as possible.

c. Appointments for standby excavations shall be scheduled to minimize the amount of time Xcel Energy personnel are waiting during contractor setup. Contractors will be charged at the applicable straight time or overtime PSCo labor rate and Equipment/Vehicle per hour for time between appointment time and actual start time (i.e. a call for an 8:00 A.M. standby and actual construction start time of 10:00 A.M. will result in 2 hours of the applicable straight time or overtime PSCo labor and Equipment/vehicle charges)

d. Frequency and duration of Field Operator Standby will be determined during the initial site visit with the Requestor's Construction Contractor based on construction schedule and phasing of construction activities as they relate to work near the PSCo pipeline(s).

e. Potholing frequency during construction will be at the discretion of the PSCo Inspector on site on an as needed basis based on field conditions and proximity of the excavation to the pipe.

f. Potholing with excavation equipment during frost conditions will not be allowed unless contractor thaws ground prior to excavation. Potholing with vac-truck will be allowed under any conditions.

4) Construction

a. Grading, Excavation, Installation, Backfill

i. A "Method of Construction Plan" shall be provided to PSCo HP Gas Engineering and Operations for review and approval prior to the beginning of construction.

ii. For Parallel Encroachments, the recommended method of construction is to place the trench spoils between the Requestor line and the PSCo line and set the working side on the opposite side of the trench from the spoil pile.

1. Alternate Method of Construction
   a. Install a layer of straw or some other method of identifying the top of the existing ground elevation then place trench spoils on top of the line. During backfill operations, removal of the spoil shall stop at the level of the warning material.

   b. Requests to work above existing PSCo pipeline(s), either on top of existing ground elevation or top of spoil pile, will be reviewed on a case by case basis. Requestor must provide specs for all equipment that will be traveling on top of the line for calculation of combined stresses for determination if allowable combined stress levels are exceeded prior to approval of this method

iii. The maximum unsupported length of PSCo's 2" and larger diameter High Pressure Natural Gas pipeline(s) is **15** feet.

1. Specific calculations can be made for pipe diameter's greater than 2" in outside diameter to determine greater free span lengths.

2. Should Requestor excavation require a greater length of the pipe be exposed than allowable stress limits dictate, plans for providing support will be required to be submitted to PSCo HP Gas Engineering for review and approval. This support system can be provided by the third party's contractor and installed under the supervision of the on-site PSCo Energy Employee. A list of qualified pipeline contractors to perform this work, if needed, can be supplied to you if so requested.

iv. If site re-grading leaves less than 36" of cover over the PSCo pipeline(s), the pipe will have to be lowered or additional protection measures installed over the pipe such as concrete capping or steel plating. Any mitigation measures, including engineering of such structures, will be at the expense of the Third Party of the facilities being constructed.

v. Backfill operations around exposed sections of PSCo's pipeline(s) shall be inspected by a PSCo representative.

vi. Any sections of the PSCo pipeline(s) that are exposed during construction must be padded with material passing ¾" minus screens that is non-angular in shape to a depth of one (1) foot above the top of pipe before native material passing 6" minus screens or two (2) feet above the top of pipe before native material passing greater than 6" plus screens can be used for the remaining backfill. Bedding material of an angular nature and/or passing 2" minus screens may be used if rock shield, epoxy coating applied to a thickness of 30 mils or greater, or other abrasion resistant coating, is installed around the pipe over the entire exposed length. Installation of any such additional protective coating installation shall be inspected by a PSCo representative.

vii. Utilization of flowable fill with cement or fly ash binder material may be utilized once one (1) foot of cover is established over the PSCo pipeline(s) with consolidated, non-abrasive, bedding material. The flowable fill must be able to be excavated with a shovel. The flowable fill shall extend ten feet on either side of the PSCo pipe and extend to the trench walls. The use of flowable fills is subject to approval of the local government authorities.

viii. Other backfill material not requiring additional compactive effort to obtain required dry densities of the project specifications may be utilized around the pipe. Submittal of a backfill plan and material specifications shall be presented to PSCo HP Gas Engineering and local government authorities for review before approval is granted.

ix. Permanently added fill over PSCo pipeline(s) shall not exceed a typical depth of cover of four (4) feet over the top of PSCo's pipeline(s) at final grade. Exceptions due to terrain, grading requirements and re-establishment of slopes must be reviewed with PSCo HP Gas Engineering but shall not exceed eight (8) feet of cover over the top of the PSCo pipeline(s).

b. Compaction over PSCo Pipelines

i. No heavy vibratory compaction equipment (driver operated) will be allowed over or along the length of the PSCo pipeline(s) in the area requiring compaction and for a distance of ten (10) feet on either side of the outside wall of the pipe and ten (10) feet from the ends of the pipe length at the compaction area limits if less than three (3) feet of cover is left over the pipe after sub excavation work is completed.

ii. Light vibratory compaction equipment (jumping jacks, walk behind or remote control rollers) may be utilized once the minimum one (1) foot of bedding material cover over the top of the PSCo pipeline(s) is established.

c. Facility Crossings

i. Buried Facility Crossings of the PSCo pipeline(s) will be required to go under or over the PSCo pipeline(s) with a minimum clearance of two (2) feet to the bottom or top respectively of the PSCo pipeline(s).

ii. Buried facilities installed parallel to the PSCo pipeline(s) must maintain a minimum horizontal separation of ten (10) feet from the pipeline(s). If this minimum horizontal separation cannot be maintained, the top of the facility being installed will be required to be one (1) feet below the bottom of the PSCo pipeline(s) for every foot closer than ten (10) feet to the pipeline(s).

d. Improvements/Structure/Facility Placement

i. No surface or sub-grade structures or utility facilities will be allowed within the PSCo ROW limits without plan review approval from PSCo HP Gas Engineering and Operations. Potential ignition source facilities shall be a minimum of fifteen (15) from the outside wall of the pipe

e. Landscape Installation

i. No planting of vegetation will be allowed within the PSCo ROW limits without plan review approval from PSCo HP Gas Engineering and Operations. Under no circumstances will trees be allowed to be planted over the pipeline(s) within the PSCo ROW limits and shall be no closer than fifteen (15) feet from the outside wall of the pipe.

f. Cathodic Protection

i. A copy of the Requestor Cathodic Protection (CP) System design shall be provided to PSCo for review prior to construction. .

ii. At crossing locations, Stray Current Mitigation will be required if either pipeline is cathodically protected from a rectified ground bed system. At a minimum this shall consist of a run of two # 8 wires from Public Service Company (PSCo) pipe and 2 # 8 wires up from the third party facility pipe into a common or separate test station for bonding of the two systems together if necessary. The wires could either run to the test station in a common conduit or separate conduits. In addition, four 17# or larger anodes are to be placed in each quadrant of the crossing pipes and placed vertically equidistant between the two pipelines. PSCo will provide the material for its CP test station and assist **Requestor's** contractor with installation of the test station.

iii. For parallel encroachments, at locations where third party is installing a CP Test Station, the third party will be required to expose the PSCo pipeline(s) for installation of a CP test station for monitoring of interference. PSCo will provide the material for its CP test station and assist the third party's contractor with installation of the test station.

5) Post Construction

a. Permanent Private Road Crossings

i. Permanent private access roads intended for use by vehicles with a loaded single axle rating of less than or equal to CDOT load limits, must provide and maintain a minimum of **4** feet of cover over the PSCo pipeline(s). Any party needing to cross the PSCo pipeline(s) with vehicles in excess of the CDOT Load Limits per single axel must contact PSCo for additional requirements or place bridging structures over the located pipeline(s).

ii. Permanent private access roads intended for use by vehicles with a loaded single axle rating of less than or equal to 20,000 lb per axle, must provide and maintain a minimum of **4 (four)** feet of cover over the PSCo pipeline(s).

iii. Tracked equipment crossings of the PSCo pipeline(s) must be made via tractor/lowboy transport adhering to the restrictions of section 5.a.i. and 5.a.ii. If it is desired to track the equipment over the PSCo pipeline(s), PSCo must be contacted to calculate the limits for the specific piece of equipment or provide a bridging structure over the pipeline(s) in accordance with Section 2.a.ii.1.

b. Four wheel all terrain sport and utility vehicles and dirt bikes are exempt from this section's restrictions. A minimum cover of twelve (12") inches of dirt over the pipe must be present before these vehicles can cross over the pipe.
c. It is recommended that Requestor install and maintain load limit signage at all road crossings of the PSCo pipeline(s).
d. PSCo will place pipeline markers at all permanent road crossings that are to remain at the conclusion of the installation of the Requestor pipeline.