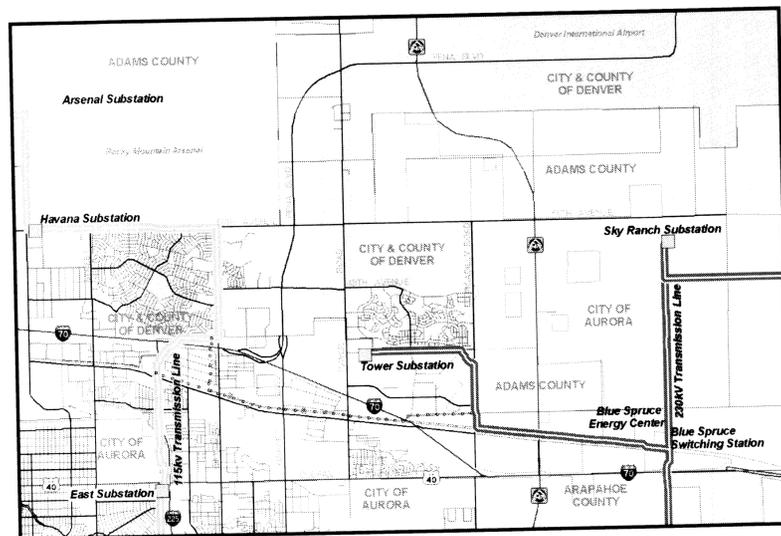


# CHAMBERS 230/115KV TRANSMISSION INTERTIE PROJECT

## CONDITIONAL USE PERMIT, HEIGHT WAIVER AND SITE PLAN

### NOTES:

- When possible, aspects of project construction, operation and maintenance will be geared to the preservation and conservation of natural resources. Construction plans, methods and practices are extremely important for the Project and shall be designed to minimize damage to privately owned lands involved in the Project. All work shall, therefore, be performed in a manner that will minimize marring and scarring of the landscape or silting of waterways. Proposed mitigation measures will include the following:
- The methods of construction shall take into account soil stability, protection of natural vegetation and protection of adjacent resources, such as the protection of natural habitat for wildlife and appropriate measures for the prevention of silt deposition in watercourses.
  - PSCo will assign company inspectors to follow the contractor and a right-of-way agent to act as a liaison with landowners to ensure compliance with the construction specifications.
  - PSCo will limit the movement of crews and equipment to the right-of-way and specified access routes. Movement along the right-of-way shall be limited to minimize damage to irrigated lands, grazing lands, crops and other property, and shall avoid marring the land when possible.
  - PSCo will supply temporary culverts, bridges and gates where required and at the option of the inspector; shall repair promptly any bridges, culverts, gates, phone lines, sidewalks, curbs, gutters or ditches damaged during construction; shall leave ditches, roads, fences, gates, culverts, phone lines, sidewalks, curbs, gutters and bridges in as good condition as found; and shall operate in such a manner as to keep property damage to a minimum.
  - PSCo will repair all property damaged by construction activities to the reasonable satisfaction of the owner and company.
  - All crates, boxes, metal bonds, lagging, wrappings and other material, equipment and refuse of any kind shall be cleaned up and disposed of during and following construction of the Project. This clean-up work shall be done to the satisfaction of the inspector before the contract shall be considered complete.
  - PSCo will adequately protect all open holes, where necessary, until concrete or poles are placed.
  - When weather and ground conditions permit, PSCo will obliterate all construction-caused deep ruts that are hazardous to farming operations and to movement of equipment. Such ruts shall be leveled, filled, and graded, or otherwise eliminated in an approved manner. In hay meadows, alfalfa fields, pastures, and cultivated productive lands, ruts, scars, and compacted soils shall have the soil loosened and leveled by scarifying, harrowing, disking, or other approved methods. Damage to the ditches, tile drains, terraces, roads, and other features of the land shall be corrected.
  - PSCo will comply with all applicable federal, state, and local environmental laws, orders, and regulations. Prior to construction, supervisory construction personnel will be instructed on the protection of cultural and ecological resources.
  - PSCo will exercise care to preserve the natural landscape and shall conduct its construction operations so as to prevent any unnecessary destruction, scarring, or defacing of the natural surroundings in the vicinity of the work. Except where clearing is required for permanent works, approved construction roads, or excavation operations, all trees, native shrubbery, and vegetation shall be preserved and protected from damage by the construction operations and equipment.
  - On completion of the work, all work areas (except existing access roads and cultivated fields) will be revegetated as soon as practical using an approved seed mixture. Alternatively, in areas where mutually agreed to by PSCo and landowner, the ground shall be scarified or left in a condition which will facilitate natural revegetation, provide for proper drainage and prevent erosion. Site-specific revegetation measures will be developed after consultation with the landowner or land manager. All destruction, scarring, damage or defacing of the landscape resulting from the contractor's operations shall be repaired by the contractor.
  - Construction roads not required for maintenance access shall be restored to the original condition or contour. The surface of such construction roads shall be revegetated or scarified as needed, to provide a condition which will facilitate natural revegetation, provide for proper drainage and prevent erosion.
  - Construction activities shall be performed by methods that will prevent entrance or accidental spillage of solid matter, contaminants, debris, and other objectionable pollutants and wastes into streams, flowing or dry watercourses, lakes and underground water sources. Such pollutants and wastes include, but are not restricted to, refuse, garbage, cement, concrete, sanitary waste, oil and other petroleum products.
  - Dewatering work for structure foundations or earthwork operations adjacent to or encroaching on streams or watercourses shall be conducted in a manner to prevent muddy water and eroded materials from entering the streams or watercourses by construction of intercepting ditches, bypass channels, barriers, settling ponds or by other approved means.
  - Excavated material or other construction materials shall not be stockpiled or deposited near or on streambanks, lake shorelines or other watercourse perimeters where they can be washed away by high water or storm runoff, or can in any way encroach upon the actual watercourse itself.
  - Wastewaters from concrete batching or other construction operations shall not enter streams, watercourses, or other surface waters without the use of such turbidity control methods as settling ponds, gravel filter entrapment dikes, approved flocculating processes that are not harmful to fish, recirculation systems for washing of aggregates or other approved methods. Any such wastewaters discharged into surface waters shall be essentially free of settleable material. Settleable material is defined as that material which will settle from the water by gravity during detention in a one-hour quiescent detention pond.
  - The emission of dust into the atmosphere will be minimized during the manufacture, handling, and storage of concrete aggregates, and the contractor shall use such methods and equipment as are necessary for the collection and disposal, or prevention of dust during these operations. The methods of storing and handling cement shall also include means of minimizing atmospheric discharges of dust.
  - Burning or burying of waste materials on the right-of-way at the construction site will not be allowed. PSCo will remove all waste materials from the construction area. All materials resulting from the clearing operations shall be removed from the right-of-way.
  - PSCo shall make all necessary provisions in conformance with safety requirements for maintaining the flow of public traffic, and shall conduct construction operations so as to offer the least possible obstruction and inconvenience to public traffic.
  - The operation of construction equipment will be minimized in drainages. Where needed, culverts will be installed during the dry season or during periods of no flows when possible. Crossing drainages will be minimized, especially during flow periods.
  - The transmission line alignment and pole locations will be coordinated with the City of Aurora Public Works Department Traffic Engineering Division. The transmission line will be designed to ensure adequate electrical clearances to proposed traffic signal poles of 40' in height.



LOCATION MAP

### SHEET INDEX

- 01 COVER SHEET
- 02 PREFERRED SUBSTATION SITE AND TRANSMISSION LINE CORRIDORS MAP
- 03 TRANSMISSION LINE ROUTE
- 04 POTENTIAL FRASER STREET DETAIL
- 05 SMITH ROAD DETAIL
- 06 CITY OF AURORA ZONING
- 07 INTERSTATE 70 PHOTOGRAPHIC SIMULATION
- 08 FRASER STREET TRANSMISSION LINE PHOTOGRAPHIC SIMULATION
- 09 CHAMBERS SUBSTATION GENERAL ARRANGEMENT
- 10 CHAMBERS SUBSTATION LANDSCAPE PLAN
- 11 CHAMBERS SUBSTATION ELEVATION

### TRANSMISSION LINE AND SUBSTATION CHARACTERISTICS

LAND AREA WITHIN AURORA CITY LIMITS	62.60 acres
LAND AREA WITHIN SUBSTATION	3.55 acres
LAND AREA FOR TRANSMISSION LINE	62.60 acres
LAND AREA WHERE TRANSMISSION LINE REMOVED	9.4 acres
VOLTAGE: INITIAL OPERATION (SINGLE CIRCUIT)	115kV
VOLTAGE: ULTIMATE OPERATION (DOUBLE CIRCUIT)	230kV
TOTAL PROJECT LENGTH	5.88 miles
LENGTH WITHIN CITY OF AURORA	5.88 miles
RIGHT OF WAY WIDTH	Varies between 100 - 150 feet
SPAN BETWEEN STRUCTURES: AVERAGE	800 feet
SPAN BETWEEN STRUCTURES: TYPICAL MAXIMUM	1000 feet
NUMBER OF STRUCTURES PER MILE: WITH AVERAGE SPAN	7 - 8
HEIGHT OF STRUCTURES: AVERAGE	130 feet
HEIGHT OF STRUCTURES: TYPICAL RANGE	110 - 150 feet
STRUCTURE BASE AREA	25 -144 sq. feet
MINIMUM GROUND CLEARANCE BENEATH CONDUCTOR	31 feet
MINIMUM GROUND CLEARANCE BENEATH CONDUCTOR OVER CITY ROADS	31 feet
CIRCUIT CONFIGURATION	Double Circuit, Vertical
CONDUCTOR TYPE & SIZE (cir. Mills in inches)	Bundled ACSR 636 kcmil
REFLECTIVITY OF CONDUCTOR	32%
INSULATOR COLOR	Brown, Dark Gray, Blue

### REQUIRED DATA BLOCKS

LAND AREA WITHIN PROPERTY LINES	See Transmission Line Characteristics
GROSS FLOOR AREA	N/A
NUMBER OF BUILDINGS	N/A
MAXIMUM HEIGHT OF BUILDINGS	N/A
TOTAL BUILDING COVERAGE	N/A
HARD SURFACE AREA	N/A
LANDSCAPE AREA	See Sheet 10
PRESENT ZONING CLASSIFICATION	N/A
PERMITTED MAXIMUM SIGN AREA	N/A
PROPOSED TOTAL SIGN AREA	N/A
PROPOSED NUMBER OF SIGNS	N/A
PARKING SPACES REQUIRED	N/A
PARKING SPACES PROVIDED	N/A
HANDICAP SPACES REQUIRED	N/A
HANDICAP SPACES PROVIDED	N/A
LOADING SPACES REQUIRED	N/A
LOADING SPACES PROVIDED	N/A

OWNER:  
PUBLIC SERVICE COMPANY OF COLORADO  
550 15TH STREET, SUITE 700  
DENVER, COLORADO 80202

CONSULTANT:  
EDAW, Inc.  
1809 BLAKE STREET, SUITE 200  
DENVER, COLORADO 80202

CONTACT: KEARY HALLACK  
(303) 571-7633

CONTACT: LARRY KEITH  
(303) 595-4522

### APPROVALS

THIS SITE PLAN AND ANY AMENDMENTS HERETO, UPON APPROVAL BY THE CITY OF AURORA AND RECORDING, SHALL BE BINDING UPON THE APPLICANTS THEREFORE, THEIR SUCCESSORS AND ASSIGNS. THIS PLAN SHALL LIMIT AND CONTROL THE ISSUANCE AND VALIDITY OF ALL BUILDING PERMITS, AND SHALL RESTRICT AND LIMIT THE CONSTRUCTION, LOCATION, USE, OCCUPANCY AND OPERATION OF ALL LAND AND STRUCTURES WITHIN THIS PLAN TO ALL CONDITIONS, REQUIREMENTS, LOCATIONS AND LIMITATIONS SET FORTH HEREIN. ABANDONMENT, WITHDRAWAL OR AMENDMENT OF THIS PLAN MAY BE PERMITTED ONLY UPON APPROVAL OF THE CITY OF AURORA.

in witness thereof Public Service Co. of CO has caused these presents to be  
(Corporation, Company or Individual)

executed this 18<sup>th</sup> day of August A.D. 20 09

By: J. Her Seal Corporate  
(Principals or Owners)

NOTARIAL  
STATE OF COLORADO )ss  
COUNTY OF Denver )

The foregoing instrument was acknowledged before me this 18<sup>th</sup> day of August

A.D. 2009 by Jay HERMANN  
(Principals or Owners)

Witness my hand and official seal

Carol J. Peterson  
Notary Public

My commission expires 3/10/2012

Notary/Business Address: 1225 17th St  
Denver, CO 80202

### CITY OF AURORA APPROVALS

City Attorney:	<u>Bob Ryan</u>	Date: <u>8/11, 2009</u>
Planning Director:	<u>Rita Watts</u>	Date: <u>9/11/2009</u>
Planning Commission:	<u>ff</u>	Date: <u>5/26/2009</u>
City Council:	Chairman <u>N/A</u>	Date: <u>N/A</u>
	Mayor <u>N/A</u>	Date: <u>N/A</u>
Attest:	City Clerk <u>N/A</u>	Date: <u>N/A</u>

### RECORDER'S CERTIFICATE

Accepted for filing in the office of the Clerk and Recorder of \_\_\_\_\_ County, Colorado at

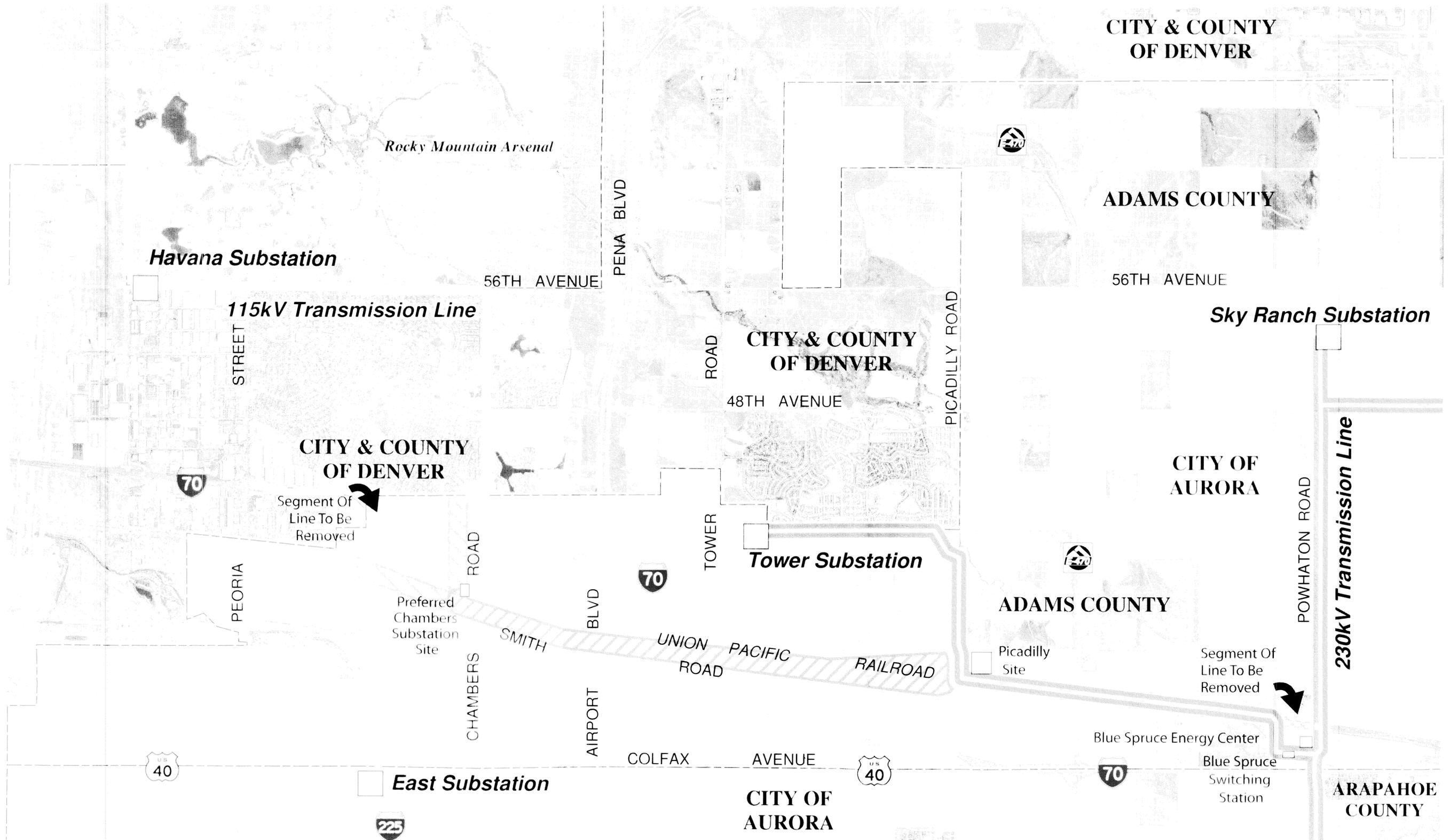
\_\_\_\_\_ o'clock \_\_\_\_\_ M, this \_\_\_\_\_ Day of \_\_\_\_\_ A.D. \_\_\_\_\_

Clerk and Recorder: \_\_\_\_\_

WAIVER:  
PSCo IS REQUESTING A VARIANCE FROM THE DEVELOPMENT STANDARDS FOR THE PROPOSED 115KV AND 230KV TRANSMISSION LINE POLES

9/25/24 Updates to the perimeter fence and security upgrades.

CHAMBERS 230/115KV TRANSMISSION LINE INTERTIE PROJECT	FILE NAME: 01 - Cover Sheet.dwg	SCALE:
Xcel Energy PUBLIC SERVICE COMPANY	DATE: 08/11/2009	DATE: 08/11/2009
Sheet 1	DATE: 08/11/2009	DATE: 08/11/2009
EDAW	DATE: 08/11/2009	DATE: 08/11/2009
SHEET 1	REV	REV



**CHAMBERS 230/115kV TRANSMISSION INTERTIE PROJECT**

CONDITIONAL USE PERMIT, HEIGHT WAIVER AND SITE PLAN

PREFERRED SUBSTATION SITE AND TRANSMISSION LINE CORRIDOR

-  Preferred 115kV Intertie Corridor
-  Preferred 230kV Corridor
-  230kV Segment Of Line To Be Removed
-  115kV Segment Of Line To Be Removed

WAIVER:  
PSCo IS REQUESTING A VARIANCE FROM THE DEVELOPMENT STANDARDS FOR THE PROPOSED 115kV AND 230kV TRANSMISSION LINE POLES

Sheet 2

 PUBLIC SERVICE COMPANY	
CHAMBERS 230/115kV TRANSMISSION INTERTIE PROJECT	
	<small>                 REVISION                  FILE NAME                  FILE LOCATION             </small>



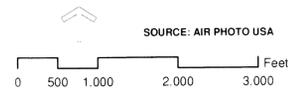
- Preferred 230kV Transmission Line 100ft ROW
- Preferred 115kV Transmission Line 100ft ROW
- 115kV Transmission Line 65ft ROW
- Substation
- Existing 230kV Transmission Line
- Existing 115kV Transmission Line
- Existing 115kV Transmission Line to be Removed

## CHAMBERS 230/115kV TRANSMISSION INTERTIE PROJECT

Conditional Use Permit, Height Waiver and Site Plan

### PROPOSED TRANSMISSION LINE ROUTE

WAIVER  
PSCo IS REQUESTING A VARIANCE FROM DEVELOPMENT STANDARDS FOR PROPOSED 115 kV AND 230 kV TRANSMISSION LINE POLES



CHAMBERS 230/115kV  
TRANSMISSION LINE  
INTERTIE PROJECT



Sheet 3

DRAWN BY: DATE: 8/12/2009

CHK: DATE:

EDAW

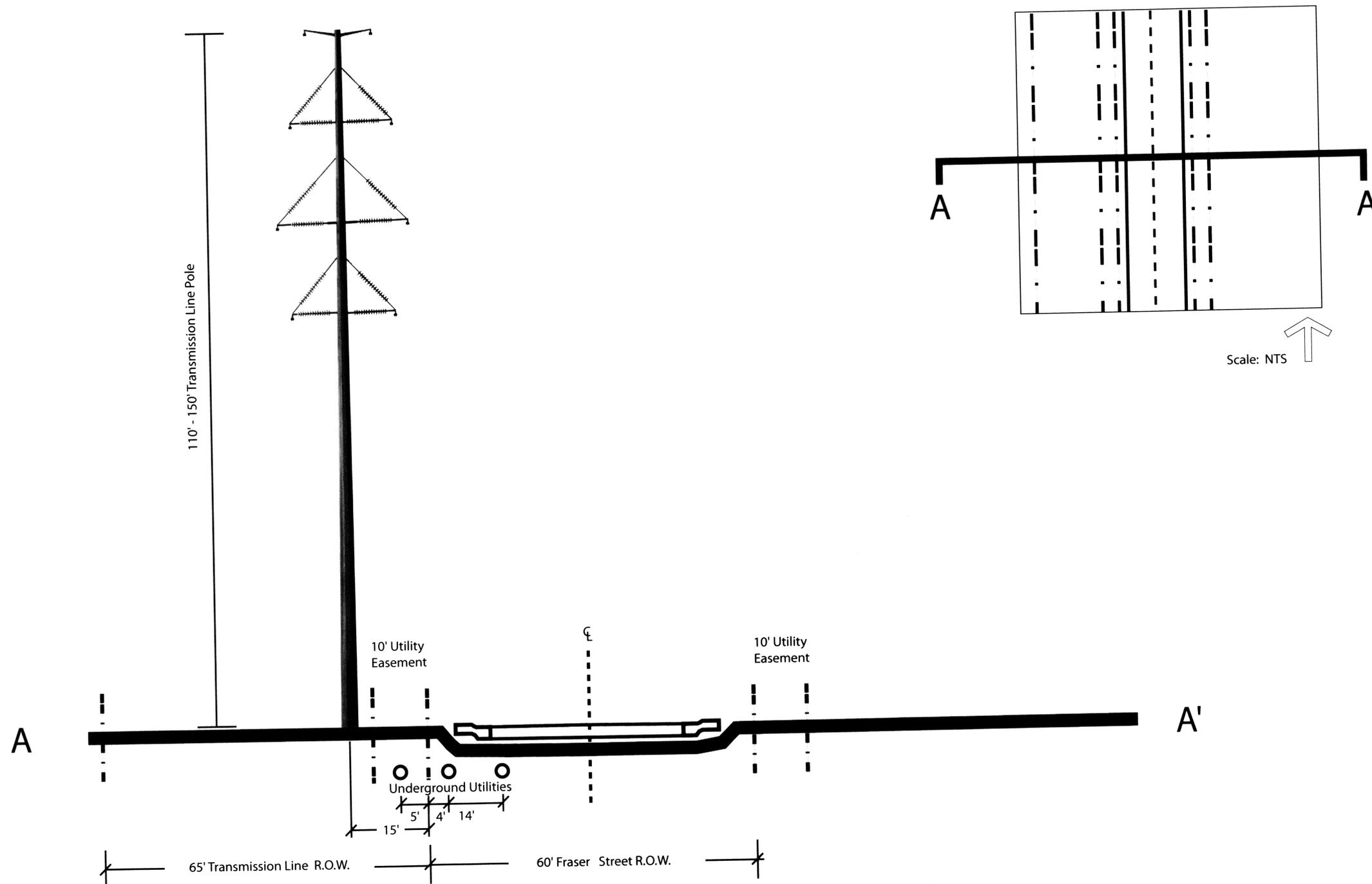
REV

AMENDMENTS

DRAWING TITLE  
REFERENCE DRAWINGS

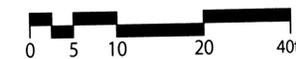
# CHAMBERS 230/115kV TRANSMISSION INTERTIE PROJECT

CONDITIONAL USE PERMIT, HEIGHT WAIVER AND SITE PLAN



POTENTIAL FRASER STREET DETAIL  
LOOKING NORTH

Scale: 1" = 10' @  
24x 36 Landscape Layout



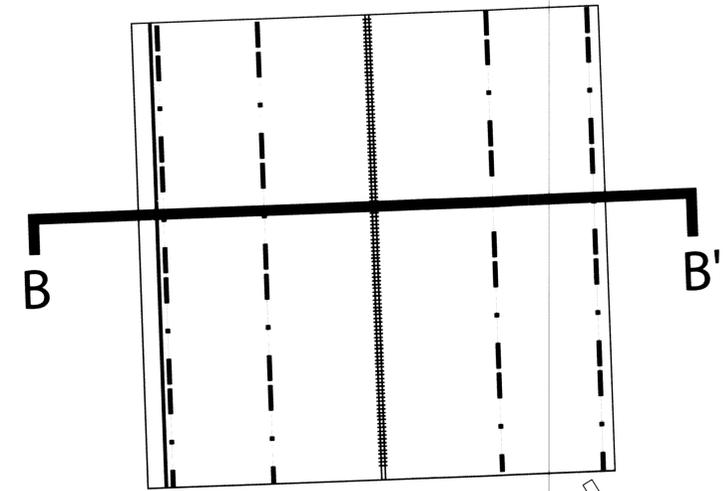
WAIVER:  
PSCo IS REQUESTING A VARIANCE FROM THE DEVELOPMENT STANDARDS FOR  
THE PROPOSED 115kV AND 230kV TRANSMISSION LINE POLES

Sheet 4

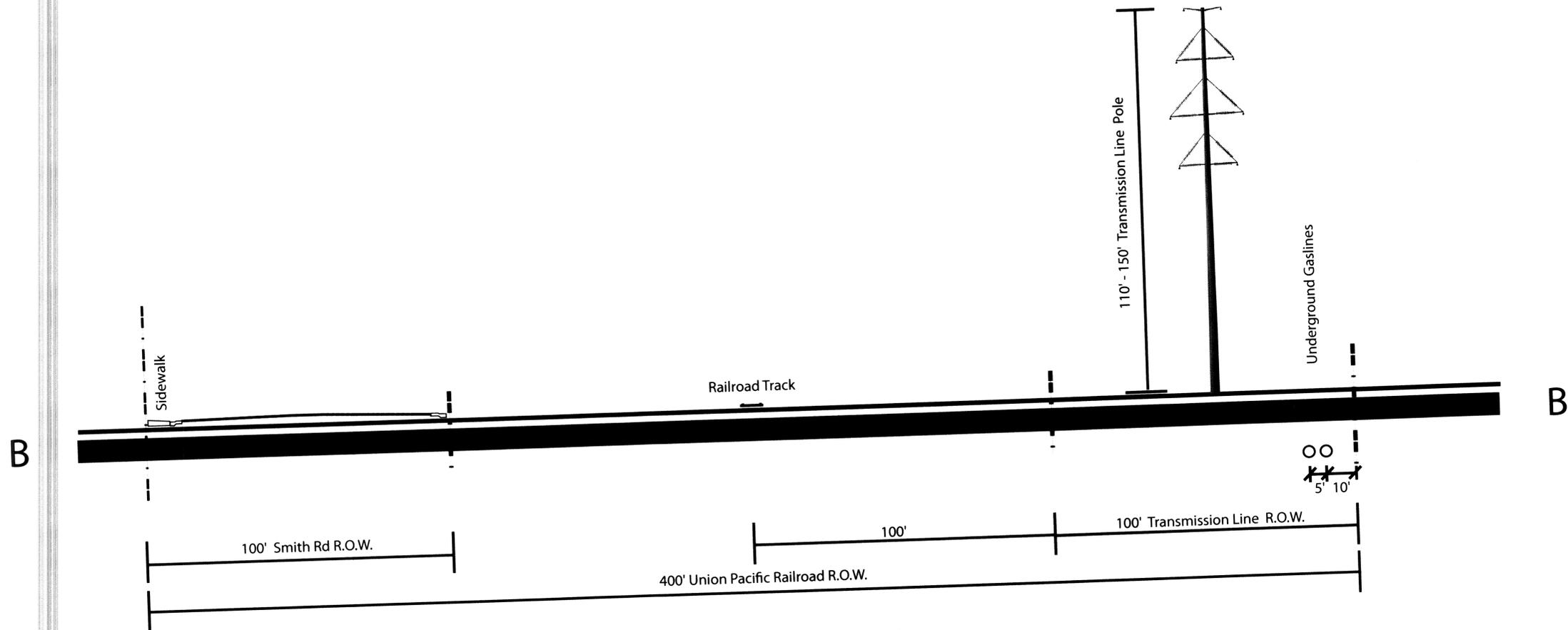
 PUBLIC SERVICE COMPANY	
<b>CHAMBERS 230/115kV TRANSMISSION INTERTIE PROJECT</b>	
<b>EDAW</b> <small>1809 Blake St., Ste 200, Denver, CO 80202          (P) 303.585.4322 (F) 303.585.4434</small>	<small>REVISED: August 11, 2009          FILE NAME: 04_fraser_street_detail.dwg          FILE LOCATION: P:\2001\110441_07\chambers\115kV\2009\0811_09\chambers\04_fraser_street_detail.dwg</small>

# CHAMBERS 230/115kV TRANSMISSION INTERTIE PROJECT

CONDITIONAL USE PERMIT, HEIGHT WAIVER AND SITE PLAN

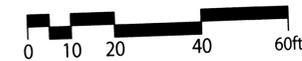


Scale: NTS



SMITH ROAD DETAIL  
LOOKING WEST

Scale: 1" = 20' @  
24x 36 Landscape Layout



WAIVER:  
PSCo IS REQUESTING A VARIANCE FROM THE DEVELOPMENT STANDARDS FOR  
THE PROPOSED 115KV AND 230KV TRANSMISSION LINE POLES

Sheet 5

 PUBLIC SERVICE COMPANY	
<b>CHAMBERS 230/115KV TRANSMISSION INTERTIE PROJECT</b>	
<b>EDAW</b>	REVISED: August 11, 2009 FILE NAME: 05_ssmith_street_detail.dwg FILE LOCATION: P:\2009\115KV\115KV\2009\115KV\05_ssmith_street.dwg
1609 Blake St., Ste 200, Denver, CO 80202 (P) 303.595.4522 (F) 303.595.4434	2009 Xcel Energy, Inc.

# CHAMBERS 230/115kV TRANSMISSION INTERTIE PROJECT

CONDITIONAL USE PERMIT, HEIGHT WAIVER AND SITE PLAN

Existing  
Conditions

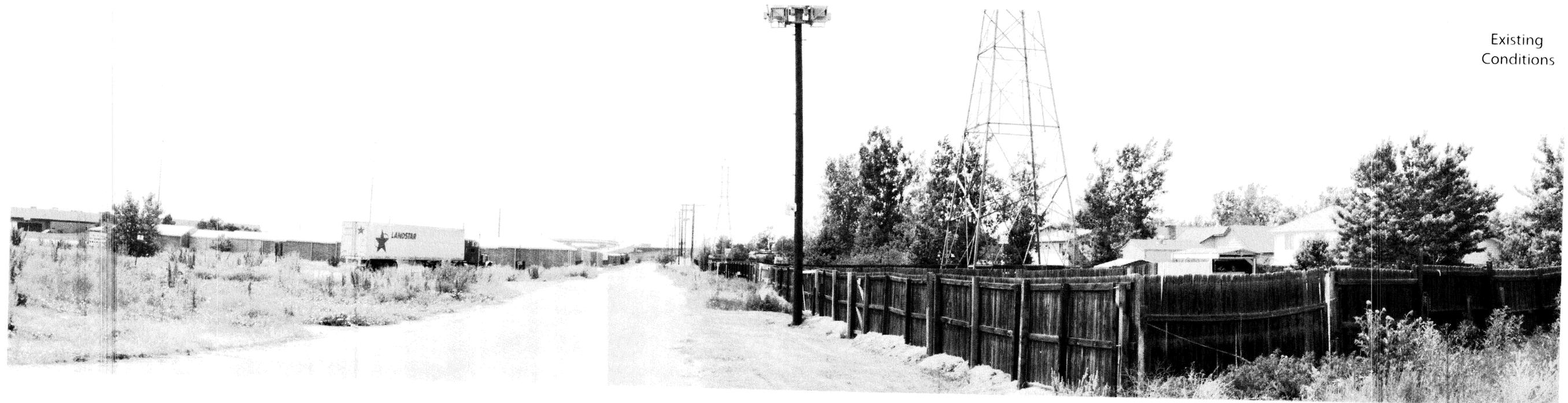


Photo  
Simulation



SIMULATION NORTH OF INTERSTATE 70  
LOOKING WEST ON 40TH AVENUE ILLUSTRATING  
REMOVED 115KV LATTICE TOWERS

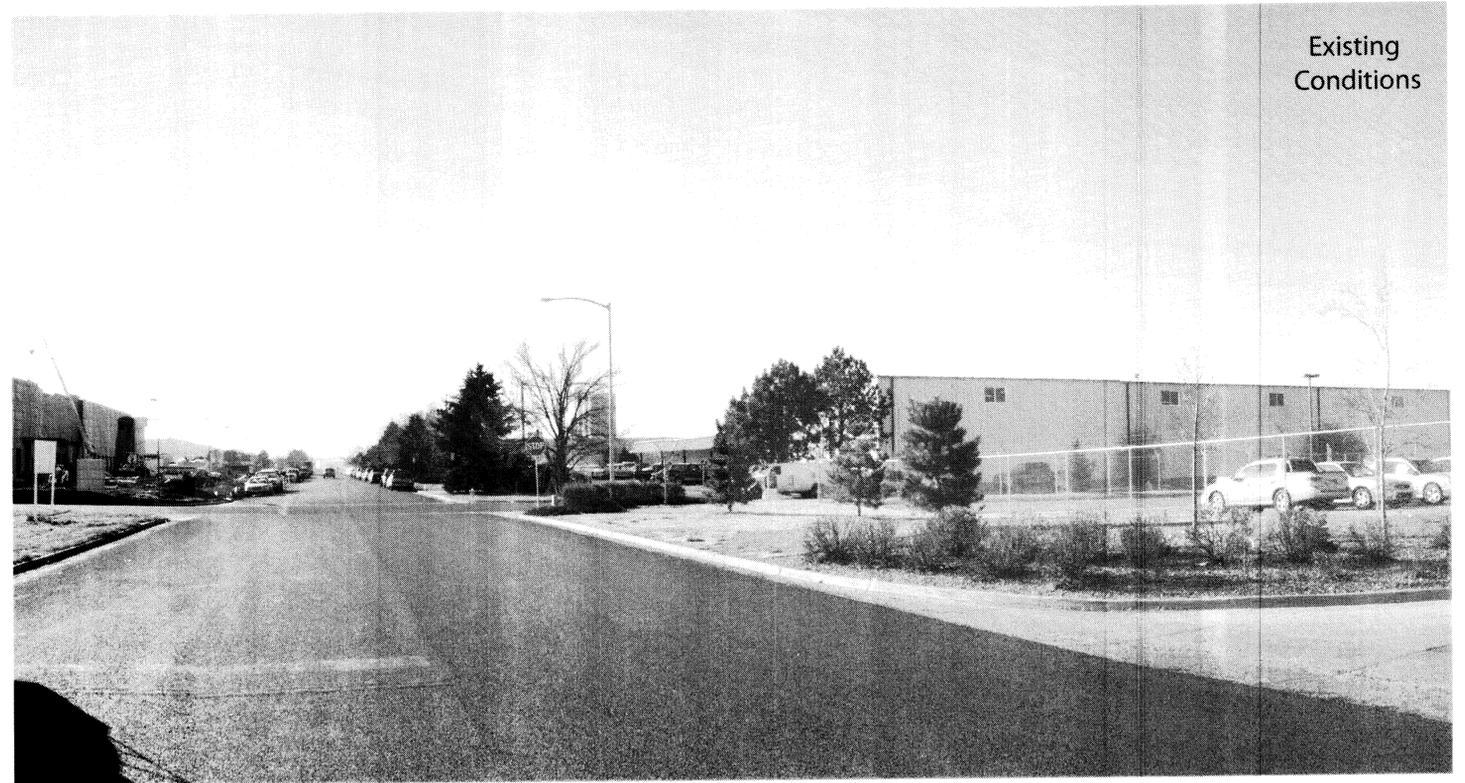
WAIVER:  
PSCo IS REQUESTING A VARIANCE FROM THE DEVELOPMENT STANDARDS FOR  
THE PROPOSED 115KV AND 230KV TRANSMISSION LINE POLES

Sheet 7

 PUBLIC SERVICE COMPANY	
CHAMBERS 230/115KV TRANSMISSION INTERTIE PROJECT	
 <small>1400 Blake St. Ste 200 Denver, CO 80202          (303) 555-4527 (T) 303 599-4534</small>	<small>REVISED</small> FILE NAME: _____ FILE LOCATION: _____

# CHAMBERS 230/115kV TRANSMISSION INTERTIE PROJECT

CONDITIONAL USE PERMIT, HEIGHT WAIVER AND SITE PLAN



Existing  
Conditions

## SIMULATION OF TRANSMISSION LINE ALONG FRASER ROAD LOOKING SOUTH ILLUSTRATING PROPOSED 115kV DOUBLE CIRCUIT TRANSMISSION LINE

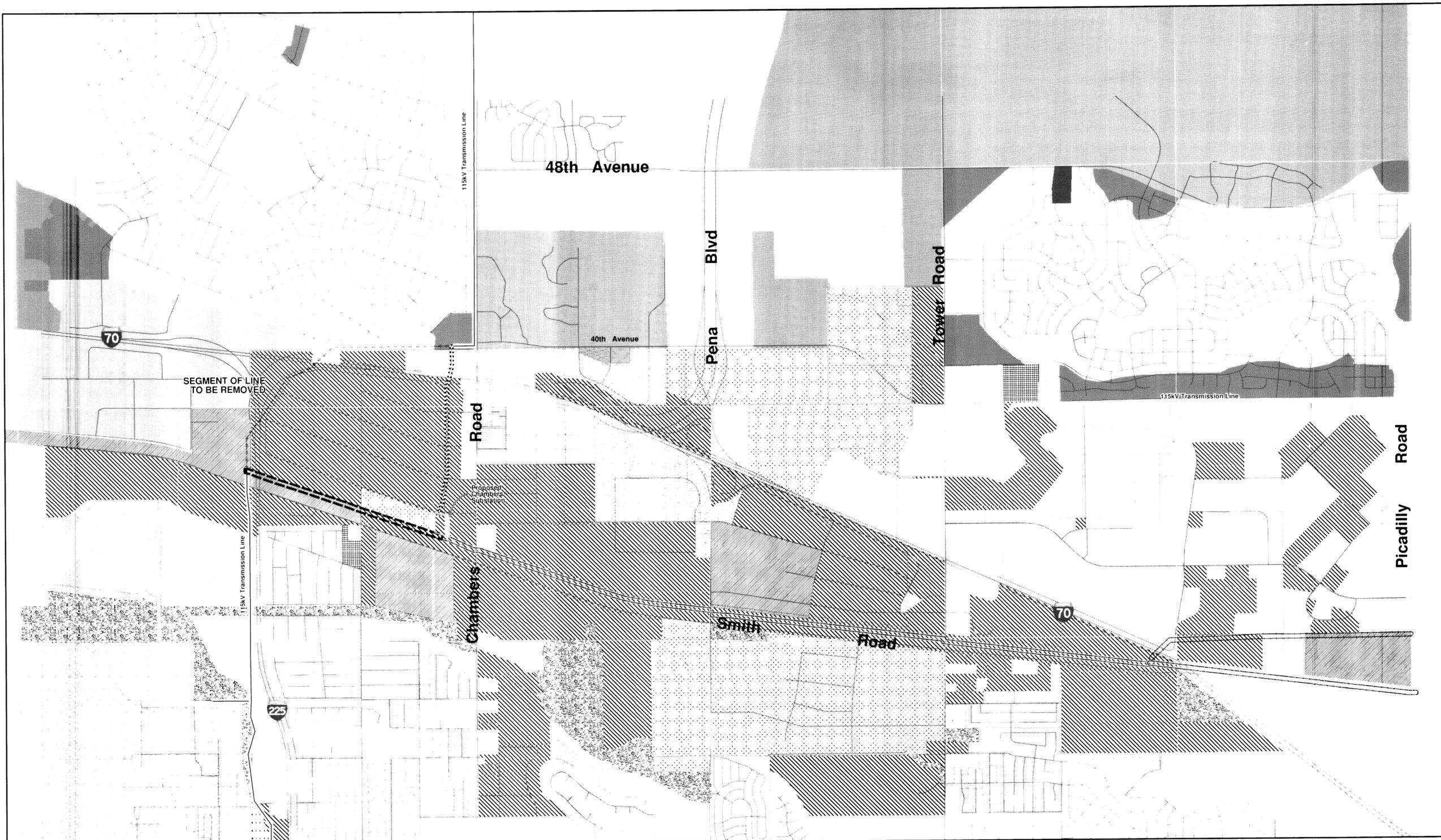


Photo  
Simulation

Sheet 8

 <small>PUBLIC SERVICE COMPANY</small>	
CHAMBERS 230/115kV TRANSMISSION INTERTIE PROJECT	
 <small>1809 Ridge St. Ste 200 - Denver, CO 80202                  (303) 733-4327 • Fax: (303) 733-4344</small>	<small>REVISED                  FILE NAME                  FILE LOCATION</small>

SIMULATION OF 115kV TRANSMISSION LINE WEST OF FRASER STREET



**Denver Zoning**

- Adams County
- Business
- Business Residential
- Gateway
- Industrial
- Institutional
- Mixed Use
- Open Space
- Residential

**Aurora Zoning**

- B-1 Business
- B-3 Business
- B-4 Business
- FBAD
- M-1 Industrial
- M-2 Industrial
- M-3 Industrial
- Mobile Home
- Industrial Office

- Master Planned Industrial
- Open
- Planned Community
- Planned Development
- Residential
- Residential Agriculture

- Existing 230kV Transmission Line
- Existing 115kV Transmission Line
- Existing 115kV Transmission Line To Be Removed
- Potential Alternative 230 kV Transmission Line 100ft ROW
- Preferred 230 kV Transmission Line 100ft ROW
- Preferred 115 kV Transmission Line 100ft ROW
- 115 kV Transmission Line 65ft ROW

## CHAMBERS 230/115kV TRANSMISSION INTERTIE PROJECT

Conditional Use Permit, Height Waiver and Site Plan



11/20/11 10h43:07 (35: 040800 Layouts 09/18/11) M:\a\zoning\_B&W24x.mxd

WAIVER: PSCo IS REQUESTING A VARIANCE FROM DEVELOPMENT STANDARDS FOR PROPOSED 115kV AND 230kV TRANSMISSION LINE POLES  
SOURCE: CITY OF DENVER 1996; CITY OF AURORA 2001

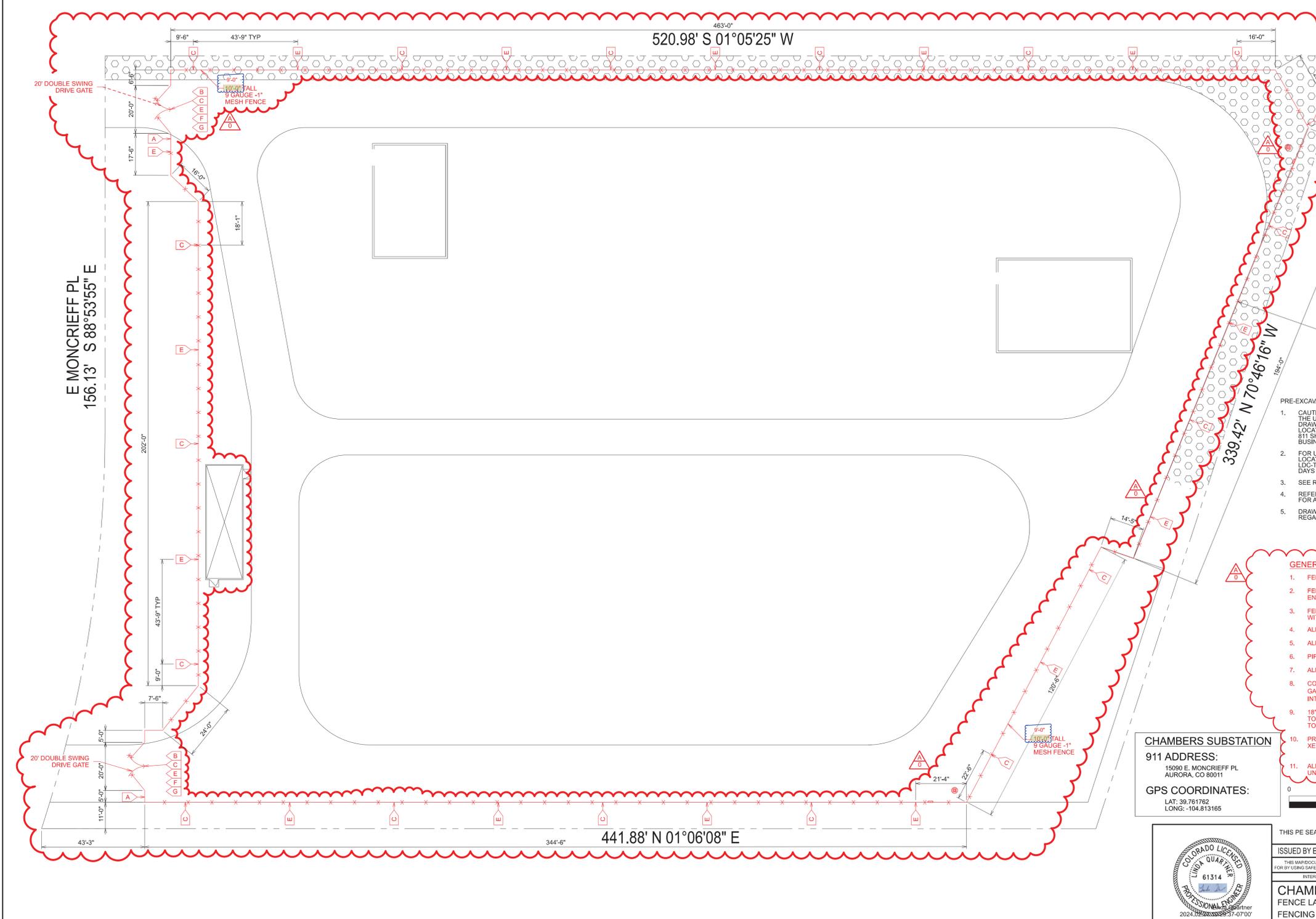
CHAMBERS 230/115kV  
TRANSMISSION LINE  
INTERTIE PROJECT



Sheet 6







**LEGEND**

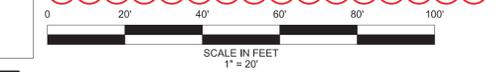
- 9 GAUGE 1 INCH MESH FENCE (HEIGHT AS NOTED ON DRAWING)
- PROPERTY LINE

- A - SUBSTATION IDENTIFICATION SIGN (02-001), MOUNTED ADJACENT TO DRIVE GATES. SEE DETAIL 5.
- B - TEXT TO ENTER SIGN (02-002), MOUNTED NEAR THE CENTER OF THE GATE. SEE DETAIL 6.
- C - WARNING SIGN (SGN055), MOUNTED 35-45' APART, ALTERNATING WITH NO TRESPASSING SIGN. ONE SIGN SHOULD BE PLACED ON THE OUTSIDE OF EACH DRIVE GATE. SEE DETAIL 7.
- E - NO TRESPASSING SIGN (SGN071), MOUNTED 35-45' APART, ALTERNATING WITH NO TRESPASSING SIGN. ONE SIGN SHOULD BE PLACED ON THE OUTSIDE OF EACH DRIVE GATE. SEE DETAIL 8.
- F - MATERIAL THEFT SIGN (02-003), MOUNTED ADJACENT TO TEXT TO ENTER SIGN ON GATE. SEE DETAIL 9.
- G - NO PARKING SIGN (02-004), MOUNTED BELOW TEXT TO ENTER SIGN ON GATE. SEE DETAIL 10.

**CONSTRUCTION NOTE:**  
 REMOVE AND SCRAP EXISTING FENCE 1488 LF.  
 INSTALL NEW FENCE AS SHOWN

- PRE-EXCAVATION PROCEDURE**
- CAUTION: THERE MAY BE UNDERGROUND UTILITIES/OBSTRUCTIONS IN THIS AREA. THE UNDERGROUND UTILITIES SHOWN ON THE PROVIDED ELECTRICAL REFERENCE DRAWINGS SHALL NOT BE ASSUMED COMPLETE OR ACCURATE. CONSTRUCTION SHALL LOCATE AND CLEARLY MARK THE LOCATION PRIOR TO ANY EXCAVATION ACTIVITY. 811 SHALL BE CALLED FOR EVERY EXCAVATION PROJECT AT LEAST THREE (3) BUSINESS DAYS PRIOR TO EXCAVATION WORK.
  - FOR UNDERGROUND UTILITY LOCATES INSIDE THE SUBSTATION FENCE, REQUEST LOCATES FROM SYSTEMS TESTING DEPARTMENT VIA EMAIL AT LDC-TEST-CREW-NOTIFICATION@XCELENERGY.COM, AT LEAST TEN (10) BUSINESS DAYS PRIOR TO EXCAVATION WORK.
  - SEE REFERENCE DRAWINGS FOR KNOWN UNDERGROUND UTILITIES.
  - REFER TO CONSTRUCTION SPECIFICATION SECTION 7010 AND THE PROJECT MANUAL FOR ADDITIONAL LOCATE INFORMATION.
  - DRAWINGS SHALL NOT BE RELIED ON AS THE SOLE SOURCE OF INFORMATION REGARDING UNDERGROUND UTILITIES.

- GENERAL NOTES**
- FENCE 10'-0" HIGH CHAIN LINK FABRIC W/ 1" MESH.
  - FENCE DESIGNED FOR: LCM1 90 MPH WIND, NO ICE ENGINEERING CALCS NX-272398
  - FENCE FABRIC TO BE 9 GAUGE, 1" GALVANIZED DIAMOND MESH CHAIN LINK STYLE WITH BARBED SELVAGE TOP AND BOTTOM.
  - ALL GATE CONNECTIONS ARE WELDED.
  - ALL GATES DESIGNED TO OPEN OUTWARD.
  - PIPE OR TENSION BAR INSTALLED TO FILL GAP BETWEEN THE GATE POST & GATE.
  - ALL PIPE MATERIAL IS SCH. 40.
  - CORNER POST SHALL BE 4" O.D., GATE POST SHALL BE 6 1/2" O.D., INTERMEDIATE LINE POSTS SHALL BE 2 1/2" O.D @ A MAX SPACING OF 6'-0" O.C.
  - 18" WIDE GALVANIZED SHEET METAL (24-28 GAUGE) TO DETER ANIMALS CLIMBING OVER FENCE, ATTACHED TO TOP RAIL & FABRIC WITH GALVANIZED OR ALUMINUM WIRE.
  - PROPOSED FENCE TO MATCH EXISTING LOCATION. REFERENCE XEL-STD-323213-CHAIN LINK FENCES AND GATES.
  - ALL SIGNS SHALL BE ATTACHED 5'-0" FROM FINISHED GRADE TO TOP OF SIGN UNLESS OTHERWISE NOTED.



**CHAMBERS SUBSTATION**  
**911 ADDRESS:**  
 15090 E. MONCRIEFF PL  
 AURORA, CO 80011  
**GPS COORDINATES:**  
 LAT: 39.761762  
 LONG: -104.813165



THIS PE SEAL IS ONLY APPLICABLE TO THE CURRENT CONSTRUCTION REVISION

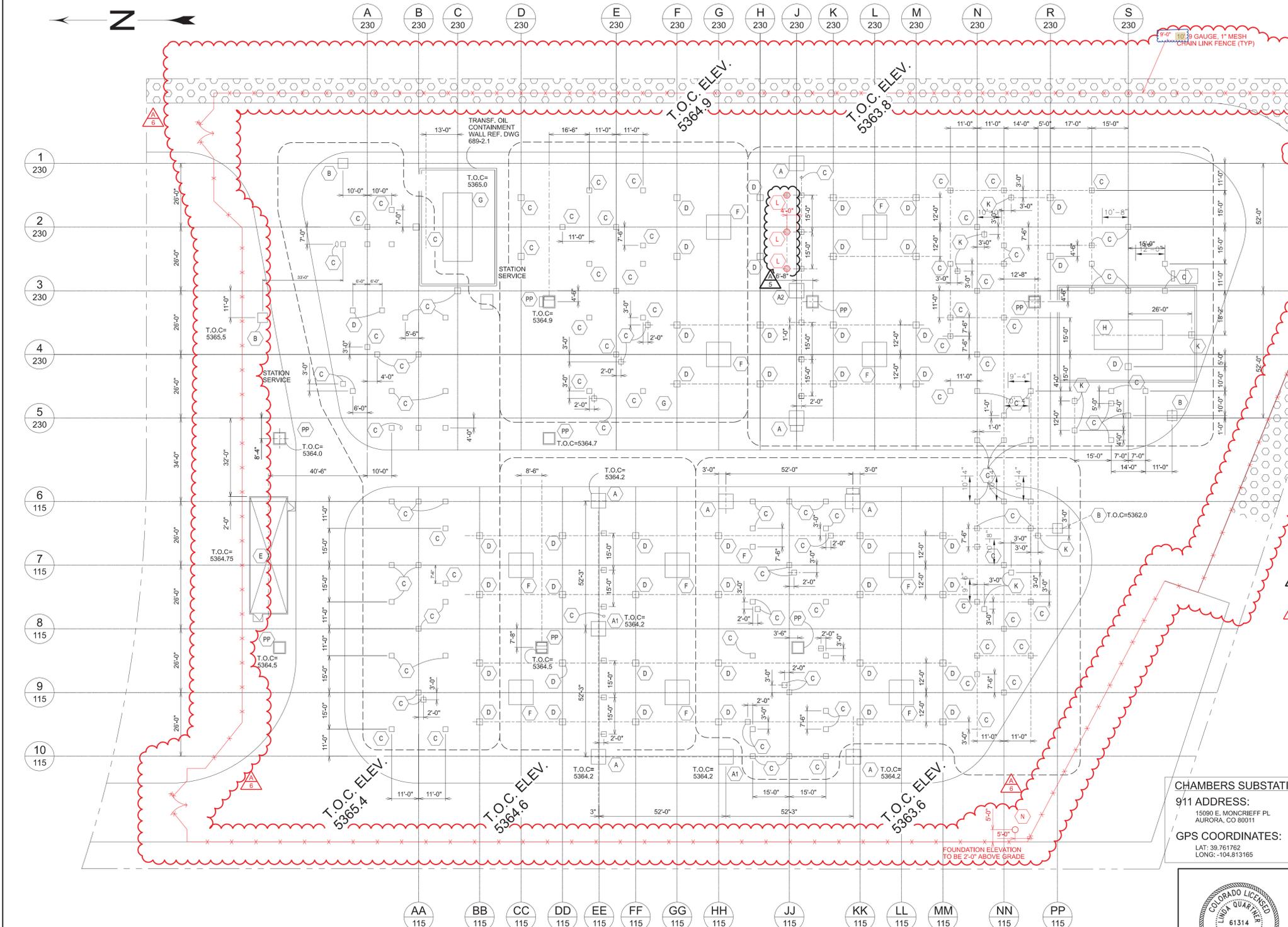
ISSUED BY ENGINEERING DEPT FOR: CONSTRUCTION

CHAMBERS SUBSTATION CHAM  
 FENCE LAYOUT  
 FENCING PLAN

XcelEnergy 0689-002.013S01 SCALE 1"=20'-0" REV 0

REV	DATE	WBS #	REVISION DESCRIPTION	REV	DATE	WBS #	REVISION DESCRIPTION
DA	2024/02/27	AJ000710.095.001.002	#FC-CHAM SUB PHY SECURITY UPGRADE-#PFA				

17/15/2024 2:56:02 PM



- NOTES:**
1. T.O.C. ELEVATIONS FOR PIERS SHALL MATCH NEAREST EXISTING.
  2. T.O.C. FOR BREAKERS SHALL BE 6" ABOVE TOP OF DRESSING ROCK.
  3. CONTRACTOR TO ENSURE THAT THERE IS A MINIMUM OF 4" AND A MAXIMUM OF 18" OF FOUNDATION REVEAL ABOVE DRESSING ROCK. NOTIFY ENGINEER IF PROPER REVEAL CANNOT BE ACHIEVED.
  4. IF GROUND WATER IS ENCOUNTERED DURING CONSTRUCTION, TEMPORARY STEEL CASINGS MAY BE REQUIRED FOR CONSTRUCTION OF DRILLED PIERS. CONTRACTOR SHALL PUMP OUT ALL STANDING WATER BEFORE ANY CONCRETE POURS.

- CONCRETE NOTES:**
1. CONCRETE AND STEEL REINFORCEMENT TO BE IN ACCORDANCE WITH XCEL ENERGY SUBSTATION & TRANSMISSION LINE STANDARD "XCEL-STD-033000- READY MIX CONCRETE", DATED OCTOBER 2022.
  2. SPECIFIED MINIMUM 28 DAY COMPRESSIVE STRENGTH = 4500 PSI
  3. USE ASTM TYPE II PORTLAND CEMENT

**FOUNDATION SCHEDULE 2012 ADDITION**

MK	QTY	DWG NO	REV	DESCRIPTION
B	1	689-7.7	1	DRILLED PIER SCHEDULE
C	24	689-7.7	1	DRILLED PIER SCHEDULE
D	3	689-7.7	1	DRILLED PIER SCHEDULE
K	9	689-7.7	1	DRILLED PIER SCHEDULE
H	1	689-7.8	0	230/115 KV TRANSFORMER FOUNDATION
F	2	689-7.4	1	230 KV CIRCUIT BREAKER FDN.

**FOUNDATION SCHEDULE**

MK	QTY	DWG NO	REV	DESCRIPTION
A	7	689-7.2	0	DEAD END TOWER FDN DRILLED PIER SCHEDULE
A1	2	689-7.2	1	DEAD END TOWER FDN DRILLED PIER SCHEDULE
A2	1	689-7.2	1	DEAD END TOWER FDN DRILLED PIER SCHEDULE
B	3	689-7.2	0	STATIC MAST FDN DRILLED PIER SCHEDULE
C	79	689-7.2	0	DRILLED PIER SCHEDULE
D	22	689-7.2	0	DRILLED PIER SCHEDULE
E	1	689-7.3	0	230 KV SWITCHING STATION E.E.E. FDN.
F	8	689-7.4	0	230 KV CIRCUIT BREAKER FDN.
G	1	689-7.5	0	230/115KV AUTO TRANSFORMER FDN.
PP	8	689-7.6	0	FULL PIT & DETAILS

- PRE-EXCAVATION PROCEDURE**
1. CAUTION: THERE MAY BE UNDERGROUND UTILITIES/OBSTRUCTIONS IN THIS AREA. THE UNDERGROUND UTILITIES SHOWN ON THE PROVIDED ELECTRICAL REFERENCE DRAWINGS SHALL NOT BE ASSUMED COMPLETE OR ACCURATE. CONSTRUCTION SHALL LOCATE AND CLEARLY MARK THE LOCATION PRIOR TO ANY EXCAVATION ACTIVITY. \$11 SHALL BE CALLED FOR EVERY EXCAVATION PROJECT AT LEAST THREE (3) BUSINESS DAYS PRIOR TO EXCAVATION WORK.
  2. FOR UNDERGROUND UTILITY LOCATES INSIDE THE SUBSTATION FENCE, REQUEST LOCATES FROM SYSTEMS TESTING DEPARTMENT VIA EMAIL AT LDC-TEST-CREW-NOTIFICATION@xcelenergy.com. AT LEAST TEN (10) BUSINESS DAYS PRIOR TO EXCAVATION WORK.
  3. SEE REFERENCE DRAWINGS ( 0689-004.001S01) FOR KNOWN UNDERGROUND UTILITIES.
  4. REFER TO CONSTRUCTION SPECIFICATION SECTION 7010 AND THE PROJECT MANUAL FOR ADDITIONAL LOCATE INFORMATION.
  5. DRAWINGS SHALL NOT BE RELIED ON AS THE SOLE SOURCE OF INFORMATION REGARDING UNDERGROUND UTILITIES.

**CHAMBERS SUBSTATION**  
 911 ADDRESS:  
 15090 E. MONCRIEFF PL  
 AURORA, CO 80011  
 GPS COORDINATES:  
 LAT: 39.761762  
 LONG: -104.813165



THIS PE SEAL IS ONLY APPLICABLE TO THE CURRENT CONSTRUCTION REVISION

ISSUED BY ENGINEERING DEPT FOR: CONSTRUCTION  
 THIS MAP/DOCUMENT IS A TOOL TO ASSIST EMPLOYEES IN THE PERFORMANCE OF THEIR JOBS. YOUR PERSONAL SAFETY IS PROVIDED FOR BY USING SAFETY PRACTICES, PROCEDURES AND EQUIPMENT AS DESCRIBED IN THE SAFETY TRAINING PROGRAMS, MANUALS AND SPARS.  
 INTERNAL INFORMATION: DO NOT COPY OR DISTRIBUTE WITHOUT EXPRESS WRITTEN CONSENT FROM XCEL ENERGY

**CHAMBERS SUBSTATION**  
 FOUNDATION LAYOUT  
 LOCATION PLAN  
 CHAM



REV	DATE	WBS #	REVISION DESCRIPTION	REV	DATE	WBS #	REVISION DESCRIPTION	REV	DATE	WBS #	REVISION DESCRIPTION	REV	DATE	WBS #	REVISION DESCRIPTION

XcelEnergy 0689-007.001S01 SCALE 1"=20'-0" REV 6

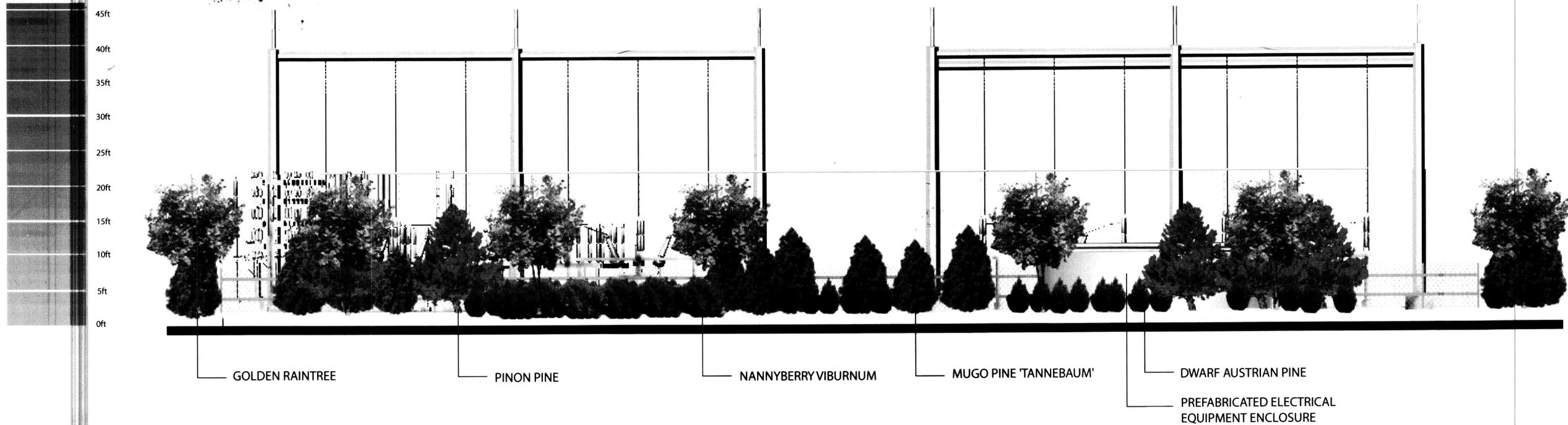
1/15/2024 1:56:46 PM





# CHAMBERS 230/115kV TRANSMISSION INTERTIE PROJECT

CONDITIONAL USE PERMIT, HEIGHT WAIVER AND SITE PLAN  
ELEVATION



North Elevation Facing South of  
the Substation Ultimate Build-Out

WAIVER  
PSCO IS REQUESTING A HEIGHT VARIANCE FROM THE DEVELOPMENT STANDARDS  
FOR THE PROPOSED 115KV AND 230KV TRANSMISSION LINE POLES.

DRAWING TITLE		REFERENCE DRAWINGS
DWG NO	MANUFACTURER	
E	M	C
REVISION		
BY	CHK	
DATE		
NO	ZONE	
CHAMBERS SUBSTATION ELEVATION		
FILENAME: 11 Elevation.dwg	R: CODE:	SCALE:
SHEET 11		
DWN: gj	DATE: 8/13/2009	
CHK:	DATE:	
SHEET 16	REV	