NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HKS UTILITY SERVICES.

ELECTRIC INSTALLATION

4681 W. 46TH AVE., DENVER, CO.

2025-UTIL-0000276

GENERAL NOTES:

1. THE LOCATION OF EXISTING UTILITIES IS SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE, AS SUPPLIED BY THE UTILITY OWNERS INCLUDING TYPE, SIZE, LOCATION AND NUMBER OF UTILITIES. ABANDONED, NON-DETECTABLE, UNDOCUMENTED OR NEWLY INSTALLED FACILITIES MAY NOT BE SHOWN.
2. UTILITY LOCATIONS SHOWN ARE APPROXIMATE AND NOT SCALEABLE.
3. THIS PLAN DOES NOT CONSTITUTE AN ASCE 38-COMPLIANT SUE INVESTIGATION.
4. UTILITIES SHOWN ARE UNDERGROUND UTILITIES, UNLESS OTHERWISE INDICATED. NOT ALL OVERHEAD UTILITIES ARE SHOWN.
5. ALL SANITARY SEWER SERVICE LOCATIONS (IF SHOWN) ARE BASED ON UTILITY MAP INFORMATION ONLY, UNLESS OTHERWISE INDICATED.
6. ALL SANITARY SEWER SERVICES SHALL BE LOCATED AND MARKED BY THE CONTRACTOR AT THE TIME OF CONSTRUCTION, UNLESS OTHERWISE REQUIRED BY LOCAL JURISDICTION.
7. COMCAST DID NOT PROVIDE MAPS TO VERIFY UTILITY LOCATIONS. ADDITIONAL LINES MAY EXIST THAT ARE NOT SHOWN.
8. VERIZON WIRELESS CLEARED THE PROJECT AREA OF ANY OWNED EXISTING UTILITIES PER THE 811 NOTIFICATION RESPONSE.
9. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL VERIFY EXISTENCE, SIZE, AND LOCATION OF EXISTING UTILITIES AND APPURTENANCES WITH UNCC, AND/OR UTILITY OWNERS AND SHALL IMMEDIATELY NOTIFY HKS UTILITY SERVICES OF ANY DISCREPANCIES. FOR ADDITIONAL INFORMATION CONTACT UNCC AT 811 OR 1-800-922-1987.
10. CONTRACTOR SHALL MAINTAIN A MINIMUM CLEARANCE OF 24" WHEN CROSSING ABOVE AN EXISTING UTILITY AND 36" WHEN CROSSING BELOW AN EXISTING UTILITY, UNLESS OTHERWISE INDICATED. ANY DEVIATION WILL REQUIRE APPROVAL FROM THE GOVERNING AUTHORITY.
11. WHEN BORING, ALL UTILITY CROSSINGS SHALL BE OBSERVED THROUGH OPEN TEST HOLES TO ENSURE THE PROTECTION OF EXISTING UTILITIES UNLESS OTHERWISE REQUIRED BY LOCAL JURISDICTION.
12. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES RESULTING FROM CONTRACTOR'S FAILURE TO LOCATE AND PRESERVE ANY AND ALL EXISTING UTILITIES.
13. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY AND COUNTY OF DENVER AND XCEL ENERGY STANDARDS AND BEST PRACTICES.
14. CONTRACTOR SHALL FOLLOW XCEL ENERGY - HDD BEST PRACTICES - THE SAFE 8 WHEN CROSSING ANY EXISTING XCEL OWNED UTILITIES.
15. UTILITY DESIGNATION WAS PERFORMED IN SEPTEMBER 2025.
16. UTILITY SURVEY WAS PERFORMED IN OCTOBER 2025.
17. ROW AND PARCELS ARE SHOWN PER CITY AND COUNTY OF DENVER GIS INFORMATION.
18. BASIS OF COORDINATES ARE GRID COORDINATES OF THE CITY AND COUNTY OF DENVER LOCAL LOW DISTORTION PROJECTION.

XCEL ENERGY - HDD BEST PRACTICES - THE SAFE 8

1. MAINTAIN ALL LOCATE DOCUMENTATION AT THE SITE AND VERIFY THAT ALL FACILITIES HAVE BEEN MARKED.
2. EXPOSE ALL EXITS WHEN WORKING WITHIN 10' OF A SWITCH CABINETS & TERMINAL POLES.
3. POTHOLE ALL FACILITIES AT THE CROSSING POINT.
4. WATCH THE BORE HEAD CROSS ALL FACILITIES.
5. MAINTAIN A 3' CLEARANCE WHEN CROSSING BELOW AN EXPOSED FACILITY.
6. MAINTAIN A 2' CLEARANCE WHEN CROSSING ABOVE AN EXPOSED FACILITY.
7. MAINTAIN A 3' SEPARATION WHEN PARALLELING A FACILITY.
8. NEVER STACK NEW FACILITIES ABOVE OR BELOW EXISTING FACILITIES.

VICINITY MAP
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SHEET INDEX

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PRELIMINARY
NOT FOR
CONSTRUCTION

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HKS UTILITY SERVICES

Xcel Energy℠

ELECTRIC INSTALLATION
4681 W. 46TH AVE.
DENVER, CO.
COVER PAGE

ISSUE DATE: 12-05-2025	DRAWN BY: CCF	HKS #: 2509025
DATE	REVISION COMMENTS	WO #: 114823023
12-31-2025	REVISED PER CCD COMMENTS	SHEET NUMBER
		1 OF 5

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NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HKS UTILITY SERVICES.

GENERAL NOTES

1. ALL CURRENT APPLICABLE FEDERAL, STATE, AND CITY AND COUNTY OF DENVER (CITY) RULES, REGULATIONS, POLICIES, PROCEDURES, SPECIFICATIONS, STANDARDS AND DETAILS SHALL BE FOLLOWED.
2. THE APPLICANT AND PERMITTEE ARE RESPONSIBLE FOR OBTAINING ALL NECESSARY PROJECT PERMITS ASSOCIATED WITH CONSTRUCTION AND RELATED ACTIVITIES SUCH AS STREET OCCUPANCY, STREET CUT, EROSION CONTROL, ENVIRONMENTAL AND/ OR AIR QUALITY, AND PARKS PERMITS.
3. UTILITY PLAN REVIEW APPROVAL DOES NOT CONSTITUTE APPROVAL FOR ANY WORK ON, IN, UNDER, OR OVER PRIVATE PROPERTY.
4. NO WORK SHALL BE PERMITTED AT NIGHT OR ON SATURDAYS, SUNDAYS, AND HOLIDAYS WITHOUT PRIOR AUTHORIZATIONS OR UNLESS OTHERWISE SPECIFIED IN THE STREET OCCUPANCY PERMIT. CITY MAY RESTRICT WORK ON RIGHT-OF-WAY (ROW) DURING ADVERSE WEATHER CONDITIONS OR DURING PERIODS OF HIGH TRAFFIC VOLUME.
5. UNLESS CONFINED IN A PREDEFINED BERM CONTAINMENT AREA, THE CLEANING OF CONCRETE DELIVERY CHUTES IS PROHIBITED AT THE JOB SITE. THE DISCHARGE OF WATER CONTAINING WASTE CONCRETE TO THE STORM SEWER SYSTEM IS PROHIBITED. (DENVER REVISED MUNICIPAL CODE §. 56-102 (A.) (C.))
6. ALL PROPOSED UTILITIES MUST REMAIN OUTSIDE THE SIGNAL EQUIPMENT CLEAR ZONE PER CURRENT TRANSPORTATION STANDARDS AND DETAILS. THIS APPLIES TO ALL INTERSECTIONS THROUGHOUT THE CITY, WHETHER OR NOT THERE IS AN EXISTING SIGNAL PRESENT.
7. THE PERMITTEE SHALL MAINTAIN AT LEAST ONE COPY OF THE APPROVED PLANS, SPECIFICATIONS, AND STANDARDS ON THE JOB SITE AT ALL TIMES.
8. DISTURBANCE TO PAVED PEDESTRIAN FACILITIES WITHIN 10 FEET OF AN EXISTING CURB RAMP WILL REQUIRE THAT CURB RAMP TO BE UPGRADED TO CURRENT CITY AND AMERICANS WITH DISABILITIES ACT (ADA) CRITERIA IF NOT CURRENTLY COMPLIANT.
9. WHERE POSSIBLE, UTILITY CORRIDOR ALIGNMENTS AND APPURTENANCES SHALL AVOID PARK FRONTAGES ALONG THE ROW AND LOCATE ON THE OPPOSITE SIDE OF STREET ADJACENT TO PARK LAND.
10. WHERE POSSIBLE, UTILITY CORRIDOR ALIGNMENTS AND APPURTENANCES SHALL AVOID DESIGNATED PARKWAYS. THE APPLICANT SHALL ATTEMPT TO LOCATE PROPOSED UTILITIES ALONG ALTERNATE ROADWAYS OR CORRIDORS, IF POSSIBLE.
11. PROPOSED UTILITIES SHALL REMAIN CLEAR OF CITY PARK-OWNED LAND, WITHOUT WRITTEN PERMISSION FROM PARKS.
12. SUBSURFACE UTILITY CORRIDORS SHOULD BE LOCATED UNDER SIDEWALKS, ROADS, OR OTHER HARDSCAPE WHENEVER POSSIBLE TO ALLOW FULL ACCESS TO THE "AMENITY ZONE" FOR STREET TREES, LANDSCAPE PLANTINGS, GREEN INFRASTRUCTURE AND ALTERNATE PUBLIC AMENITIES.
13. ABOVE GRADE EQUIPMENT IS SUBJECT TO SIGHT TRIANGLE RESTRICTIONS AS DESCRIBED IN THE CITY'S TRANSPORTATION ENGINEERING PLAN (TEP) REVIEW SUBMITTAL REQUIREMENTS.

STANDARD CONSTRUCTION ENGINEERING NOTES

1. ALL WORK SHALL COMPLY TO TRANSPORTATION STANDARDS & DETAILS (TS&D).
2. THE NEW UTILITY PEDESTALS NEAR THE ALLEY ENTRANCE SHOULD BE PLACED AS FAR BACK FROM THE CURB AS PRACTICAL, AND AT LEAST 50 FEET FROM THE ALLEY EDGE. MUST ALSO MEET ENCROACHMENT REGULATION
3. REVIEW THE CITY TRAFFIC ENGINEER'S REGULATIONS REGARDING THE PLACEMENT OF UNDERGROUND UTILITIES IN THE AREAS BEHIND THE CURB RETURNS AT INTERSECTIONS, AKA "CLEAR ZONE" RESTRICTIONS. (TS&D 7.9)
4. THE UTILITY SHOULD APPROACH THE PROPERTY OWNER AT ADJACENT PROPERTY AND DISCUSS THE PLACEMENT OF THE PROPOSED UTILITY PEDESTALS/BOXES.
5. ORIENT VALVES OUT OF THE PEDESTRIAN PATH.
6. POLE/PEDESTAL MUST BE POSITIONED 5 FEET MIN AWAY FROM FIRE HYDRANTS.
7. CONTACT DOTI - ROW SERVICES CONSTRUCTION ENGINEERING (RWSCE) SECTION FOR A PRECONSTRUCTION MEETING PRIOR TO START OF PERMITTING, (303) 446-3469 OR PWPERMITS@DENVERGOV.ORG
8. PERMIT APPLICANT MUST APPLY AT LEAST 5 BUSINESS DAYS BEFORE THE START OF WORK TO OBTAIN A REVOCABLE ST. OCCUPANCY PERMIT, A ST. CUT PERMIT OR A ROW CONSTRUCTION PERMIT. THE SUBMITTAL MUST INCLUDE A COMPLETED APPLICATION FORM & A DETAILED SITE-SPECIFIC TRAFFIC CONTROL PLAN TO BEGIN A REVIEW OF THE WORK SCOPE, SCHEDULE AND LOCATION. SUBMIT TO PWPERMITS@DENVERGOV.ORG
9. WORKING ON AN ARTERIAL ROAD MAYBE RESTRICTED TO EITHER NIGHT-ONLY OR WEEKEND WORK TIMES.
10. APPLICANT SHALL COORDINATE THE CLOSURE OF DRIVEWAYS IN THE PROJECT AREA WITH THE ADJACENT PROPERTIES. ACCESS MUST BE PROVIDED TO ALL BUILDINGS DURING CONSTRUCTION.
11. THE MAXIMUM ROAD CLOSURE AT ANY TIME IS LIMITED TO 2 BLOCKS AND 1 SINGLE INTERSECTION. SIDEWALKS SHALL REMAIN OPEN & FUNCTIONAL ON OPPOSITE SIDE OF CLOSURE
12. APPLICANT SHALL COORDINATE THE TEMPORARY CLOSURE AND RELOCATION OF RTD BUS STOPS WITHIN THE PROJECT AREA AS NEEDED. CONTACT RTD (303)299-6561 AT LEAST 1 WEEK IN ADVANCE OF THE START OF WORK.
13. APPLICANT SHALL ATTEND THE BI-WEEKLY DOWNTOWN COORDINATE MEETINGS, HELD AT THE DENVER WASTEWATER BUILDING ON EVERY OTHER WEDNESDAY AT 1:30PM. CONTACT JOE SAEJIW (JOE.SAEJIW@DENVERGOV.ORG) FOR INFO.
14. WORK MUST BE APPROVED FOR SCHEDULING DURING THE HOLIDAY CONSTRUCTION MORATORIUM. THE MORATORIUM IS IN EFFECT FROM THANKSGIVING TO JAN 1. EMERGENCY REPAIRS ARE EXCEPTED.
15. DURING COLORADO ROCKIES HOME GAMES, NO CLOSURES OF ANY TRAVEL LANE, PARKING LANE OR SIDEWALK WILL BE ALLOWED 2 HOURS BEFORE, DURING AND AFTER THE EVENT.
16. ALL FLOW-FILL OR NORMAL CLSM (CONTROLLED LOW-STRENGTH MATERIAL) SHALL BE AIR-ENTRAINED TO BETWEEN 6% - 25% WHEN USED IN THE UPPER 3 FEET OF TRENCHES. ALL FLASH-FILL MATERIAL (USING ONLY FLY ASH WITHOUT AGGREGATE) USED FOR RAPID SET TIME SHALL BE AIR-ENTRAINED TO BETWEEN 15% - 21% WHEN USED IN THE UPPER 3 FEET OF TRENCHES. MATERIAL AND METHODS SHALL MEET TS&D 12.4 & RULES & REGULATIONS FOR STREET CUTS. MATERIALS PLACED AT LESS THAN MINIMUM SLUMP SPECS WILL REQUIRE A 3-YEAR EXTENDED WARRANTY, 6 YEARS TOTAL.
17. FULL-PANEL REPLACEMENT IS REQUIRED ON ALL CONCRETE ROADWAYS, SIDEWALKS & ALLEYS.
18. ANY SURFACE FEATURE PROPOSED THAT IMPACTS A PEDESTRIAN RAMP ENOUGH TO REQUIRE CONCRETE PANEL REPLACEMENT SHALL REQUIRE UPGRADE OF THE AFFECTED RAMP TO CURRENT DENVER & ADA STANDARDS.
19. FINAL RESTORATION OF THE STREET PAVEMENT SHALL OCCUR WITHIN 14 CALENDAR DAYS OF THE INITIAL CUT ON RESIDENTIAL STREETS & ALLEYS, OR WITHIN 48 HOURS ON COLLECTOR & ARTERIAL STREETS.

DENVER TRANSPORTATION & INFRASTRUCTURE	City and County of Denver	Date: 05/18/20
	REQUIRED PLAN NOTES	SHEET NO. 1

STANDARD CONSTRUCTION ENGINEERING NOTES (CONT'D)

20. THE USE OF STEEL PLATES TO COVER EXCAVATIONS ON ROADWAYS ISN'T ALLOWED FROM 9/1 TO 4/30. SPECIAL PERMISSION BY THE CITY MAYBE GIVEN WHEN SNOW IS NOT FORECASTED BEFORE FINAL RESTORATION WILL OCCUR. ON CONCRETE ROADS, THE PLATE SHALL BE RAMPED WITH ASPHALT FOR A MINIMUM 24-INCH WIDTH AROUND THE EDGE OF THE PLATE. ON ASPHALT ROADS, PLATES SHALL BE RECESSED A MINIMUM 1.5-INCH DEEP AND AT LEAST A MINIMUM 18-INCH WIDTH AROUND THE EXCAVATION. ADDITIONAL METHODS OF SECURING THE PLACE FROM MOVEMENT MAY BE REQUIRED BY THE CITY. THE CONTRACTOR SHALL DESIGNATE AND SUPPLY THE CONTACT INFORMATION FOR A RESPONSIBLE PARTY TO BE AVAILABLE AS A 24-HOUR CONTACT DURING PLATE USE.
21. MORATORIUM ROADS ARE ASPHALT ROADS RESURFACED IN THE PAST 3 YEARS. STREET CUTS ON THESE ROADS SHALL BE MILLED A MINIMUM OF 50 FEET IN EACH DIRECTION OF THE EXCAVATION AND OVERLAID FROM CURB-TO-CURB OR CURB-TO-CENTER LINE OF STREET. SEE TS&D 12.2.

UTILITY NOTES

1. **CAUTION**: PRIOR TO DATE OF CONSTRUCTION, THE PERMITTEE SHALL VERIFY EXISTING UTILITIES WITH THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC OR COLORADO 811) AND/OR UTILITY COMPANIES. THE PERMITTEE SHALL VERIFY EXISTENCE, SIZE, AND LOCATION OF EXISTING UTILITIES AND FACILITIES PRIOR TO CONSTRUCTION AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES. CALL 811 OR VISIT HTTPS://COLORADO811.ORG.
2. PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE PERMITTEE SHALL CONTACT ALL AFFECTED OR NEARBY UTILITIES TO COORDINATE WORK TO BE PERFORMED AND PROPOSED SCHEDULING.
3. THE APPLICANT SHALL CORRECTLY SHOW ON SUBMITTED DRAWINGS THE LOCATIONS OF ALL UTILITIES IN THE VICINITY WHERE THE APPLICANT MAY BORE, TRENCH, EXCAVATE, AND INSTALL FACILITIES, CONDUIT, FIBER, FIBER ENCLOSURES, VAULTS, AND HANDHOLDS. IN THE EVENT THAT THE FACILITIES, CONDUIT RUN, FIBER ENCLOSURES, VAULTS, OR HANDHOLDS ARE LOCATED WITHIN THE 10 FEET OF ANY UTILITY, THE APPLICANT SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION THAT WILL PREVENT DAMAGE TO THE INSTALLATION UNDER NORMAL UTILITY OPERATING CONDITIONS. IT IS THE RESPONSIBILITY OF THE APPLICANT TO OBTAIN INFORMATION ON EACH OF THE UTILITIES AS APPLICABLE SUCH AS LOCATION, SIZE, PRESSURE, TEMPERATURE, VOLTAGE, ETC.
4. IT IS THE RESPONSIBILITY OF THE APPLICANT TO EXAMINE THE SITE FOR EVIDENCE OF FAILURES OF OR DEFICIENCIES IN UTILITY COMPANY FACILITIES (I.E. XCEL ENERGY, DENVER WATER, DENVER PUBLIC WORKS, DENVER FIBER OUTSIDE PLANT, DENVER WASTEWATER MANAGEMENT, METRO WASTEWATER RECLAMATION DISTRICT, ETC.) AND TO IMMEDIATELY CALL ANY SUCH EVIDENCE OF PRE-EXISTING DAMAGE TO THE ATTENTION OF THE UTILITY COMPANY ALONG WITH PROPER DOCUMENTATION. THE APPLICANT HEREBY AGREES THAT THE REPAIR OF ANY AND ALL DAMAGES (DIRECT OR INDIRECT), THAT MAY BE SUBSEQUENTLY DISCOVERED AND PROVEN TO HAVE BEEN CAUSED BY THE CONSTRUCTION ACTIVITIES, IS THE SOLE RESPONSIBILITY OF THE APPLICANT WITHOUT SUCH EVIDENCE OF PRE-EXISTING DAMAGE. FURTHERMORE, THE REPAIR IS AGREED TO BE THE SOLE RESPONSIBILITY OF THE APPLICANT. IT SHALL BE THE APPLICANT'S RESPONSIBILITY TO PROTECT ALL UTILITY COMPANY FACILITIES WITHIN THE AREA OF CONSTRUCTION. THIS INCLUDES ALL STEPS NECESSARY TO PREVENT SUBSIDENCE OF THE SOIL ADJACENT TO OR NEAR UTILITY COMPANY FACILITIES.
5. ANY CASING OR SLEEVE INSTALLED UNDER THE ROADWAY SHALL BE THE SAME DIAMETER AS THE BORE AS TO ELIMINATE A VOID AROUND THE CASING. IN THE EVENT JACKING OPERATIONS RESULT IN VOIDS, THE RESULTANT VOIDS SHALL BE GROUTED OR OTHERWISE BACKFILLED, SUBJECT TO CITY APPROVAL. ENDS OF BORED SECTIONS SHALL NOT BE COVERED BEFORE BEING INSPECTED.
6. FOR ALL MANHOLES IN ASPHALT STREETS, ADD A 2" RISER RING DIRECTLY UNDER THE COVER TO FACILITATE FUTURE ROTOMILL/OVERLAY OPERATIONS.
7. NEW UTILITY PEDESTALS NEAR THE ALLEY ENTRANCES MUST MEET RULES AND REGULATION FOR ENCROACHMENTS AND SHALL BE PLACED AS FAR BACK FROM THE CURB AS PRACTICAL, AND AT LEAST 50 FEET FROM THE ALLEY EDGE.
8. UTILITY COMPANY SHALL APPROACH THE PROPERTY OWNER AT ADJACENT PROPERTY AND DISCUSS THE PLACEMENT OF THE PROPOSED UTILITY PEDESTALS/BOXES.
9. TO AVOID POTENTIAL TRIPPING HAZARDS, ORIENT VALVES SO COVERS ARE OUTSIDE OF SIDEWALK.
10. PROPOSED UTILITY POLES/PEDESTALS MUST BE PLACED AT LEAST 5 FEET AWAY FROM FIRE HYDRANTS.
11. ALL UTILITIES SHALL BE INSTALLED WITH A MINIMUM 36 INCH BURY DEPTH (MEASURED FROM FINISH GRADE TO TOP OF UTILITY). IT IS PREFERRED UTILITIES ARE INSTALLED WITH A MINIMUM 48 INCH BURY DEPTH IN LANDSCAPED AREAS AND TREE LAWNS.

DENVER WATER NOTES

1. THE PERMITTEE SHALL NOTIFY DENVER WATER AT (303) 628-6671 PRIOR TO ANY CONSTRUCTION THAT COULD AFFECT OR DISTURB A DENVER WATER FACILITY.
2. APPLICANT ASSUMES FULL RESPONSIBILITY FOR ALL DAMAGES INCURRED TO DENVER WATER FACILITIES DUE TO ACTIVITIES AUTHORIZED BY THE APPROVED PLANS.
3. DENVER WATER, AT THE SOLE EXPENSE OF THE APPLICANT WILL MAKE ALL REPLACEMENT OR REPAIR OF DENVER WATER FACILITIES ATTRIBUTED TO THE WORK.
4. IN THE EVENT THE APPLICANT'S FACILITIES ARE DAMAGED OR DESTROYED DUE TO DENVER WATER'S REPAIR, REPLACEMENT AND/OR OPERATION OF ITS FACILITIES, REPAIRS SHALL BE MADE BY THE APPLICANT AT ITS SOLE EXPENSE.
5. ADDING FIBER OPTICS TO AN EXISTING DUCT NOT PREVIOUSLY PERMITTED REQUIRES THE DUCT TO BE SEPARATELY APPROVED BY THE CITY AND COUNTY OF DENVER PUBLIC WORKS DEPARTMENT VIA UTILITY PLAN REVIEW PRIOR TO INSTALLATION, AND AS SUCH WILL BE SUBJECT TO THE AFOREMENTIONED PROVISIONS.
6. PARALLEL DUCTS OR CABLE WILL NOT BE PERMITTED WITHIN FIVE (5) FEET OF A DENVER WATER FACILITY (MAINS OR CONDUITS), AND A MINIMUM OF TEN (10) FEET OF CLEARANCE IS REQUIRED BETWEEN POTABLE AND NON-POTABLE MAINS (E.G., STORM, SANITARY, REUSE).
7. WHEN CROSSING A DENVER WATER MAIN OR CONDUIT, A MINIMUM VERTICAL CLEARANCE OF EIGHTEEN (18) INCHES IS REQUIRED.
8. A DENVER WATER REPRESENTATIVE MUST BE PRESENT WHEN INSTALLATION CROSSES A SIXTEEN (16) INCH OR LARGER MAIN.
9. LOCATES AND POTHOLES SHALL BE REQUIRED FOR ALL CROSSINGS INVOLVING DENVER WATER FACILITIES INCLUDING, BUT NOT LIMITED TO, HYDRANT LATERAL RUNS AND SERVICE LINE CROSSINGS.
10. IN THE EVENT OF A CONFLICT WITH REQUIREMENTS, THE LATEST VERSIONS OF DENVER WATER'S ENGINEERING STANDARDS AND CAPITAL PROJECTS CONSTRUCTION STANDARDS SHALL SUPERSEDE THESE PROVISIONS.

DENVER TRANSPORTATION & INFRASTRUCTURE	City and County of Denver	Date: 05/18/20
	REQUIRED PLAN NOTES	SHEET NO. 2

DENVER FIBER OUTSIDE PLANT NOTES

1. BY APPROVAL OF THESE DRAWINGS, THE APPLICANT ACKNOWLEDGES THAT THE CITY AND COUNTY OF DENVER OPERATES ITS OWN OUTSIDE PLANT (OSP) FIBER OPTIC INFRASTRUCTURE THROUGHOUT THE CITY, AND THAT SAID INFRASTRUCTURE SERVES TO PROMOTE THE HEALTH, SAFETY, AND WELFARE OF THE CITY. SAID FACILITIES ARE CRITICAL TO CITY OPERATIONS, ARE CONTINUALLY BEING ENHANCED AND EXTENDED, AND CANNOT BE DISTURBED.
2. APPLICANT ASSUMES FULL RESPONSIBILITY FOR ALL DAMAGES INCURRED TO THE DENVER FIBER OSP INFRASTRUCTURE DUE TO ACTIVITIES AUTHORIZED BY THE APPROVED PLANS.
3. IF DAMAGE OCCURS TO THE DENVER FIBER OSP THE APPLICANT MUST IMMEDIATELY CONTACT TRANSPORTATION OPERATIONS AT 720-865-4000. INITIAL RESTORATION MUST BE COMPLETED WITHIN A MAXIMUM OF 24 HOURS.
4. DENVER FIBER OSP STAFF OR APPROVED PERMITTEE, AT THE SOLE EXPENSE OF THE APPLICANT, WILL MAKE ALL REPLACEMENT OR REPAIR OF DENVER FIBER OSP CABLING INFRASTRUCTURE ATTRIBUTED TO THE WORK.
5. IF DURING REPAIR DAMAGE IS SUSTAINED TO ANY OTHER INFRASTRUCTURE, REPAIRS SHALL BE MADE AT THE SOLE EXPENSE OF THE APPLICANT.
6. ADDITIONAL EMPTY CONDUIT MAY BE REQUIRED BY THE CITY TO BE INSTALLED BY THE APPLICANT, AT THE SOLE EXPENSE OF THE APPLICANT, AND ACKNOWLEDGED ON THESE DRAWINGS, IF DEEMED APPROPRIATE TO ADVANCE CITY OSP PURPOSES.
7. LOCATES AND POTHOLES SHALL BE REQUIRED FOR ALL CROSSINGS INVOLVING ALL DENVER FIBER OSP CABLING INFRASTRUCTURE INCLUDING BUT NOT LIMITED TO ACCESS VAULTS AND CONDUIT. CONTACT COLORADO 811 FOR OSP FACILITY LOCATES.

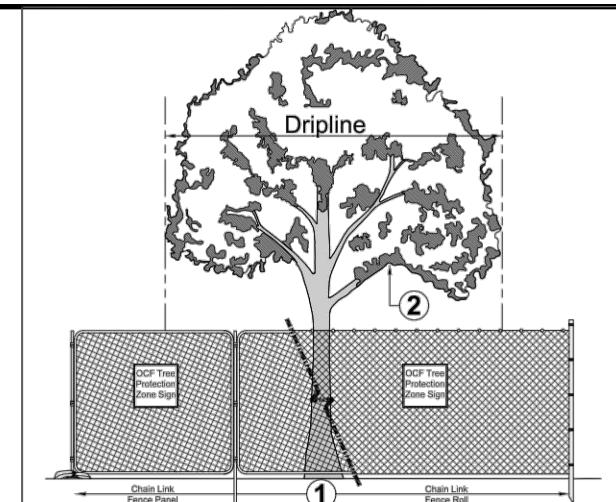
DENVER PARKS NOTES

1. PARK LANDS AND DESIGNATED PARKWAYS ARE PRIMARY COMMUNITY AND NEIGHBORHOOD AMENITY FEATURES THAT DEFINE COMMUNITY CHARACTER, SUPPORTS PUBLIC USE, ENHANCES MANAGEMENT OF AIR AND WATER AND PROMOTES ENVIRONMENTAL HEALTH. IN CONSIDERATION OF THE SIGNIFICANCE OF THESE AREAS AS PUBLIC AMENITIES, DENVER PARKS UTILITY POLICY LIMITS SURFACE AND SUBSURFACE UTILITIES ON PARK LANDS AND PARKWAYS AND PUBLIC ROW ADJACENT TO THEM.
2. UTILITY CORRIDOR ALIGNMENTS, SURFACE BOXES AND TRANSMISSION POLES SHALL AVOID BEING PLANNED ON OR UNDER PARK LANDS, DESIGNATED PARKWAYS, OR PUBLIC ROW ADJACENT TO PARK LANDS.
3. UTILITY CORRIDOR ALIGNMENTS AND SURFACE BOXES LOCATED ON PARKS LANDS AND DESIGNATED PARKWAYS SHOULD BE AVOIDED. ANY UTILITY CORRIDOR ALIGNMENT LOCATED ON PARKS LAND OR DESIGNATED PARKWAYS SHALL BE COORDINATED WITH DENVER PARKS.
4. UTILITY CORRIDOR ALIGNMENTS AND SURFACE BOXES LOCATED IN PUBLIC ROW ADJACENT TO PARKS LAND SHALL LOCATED ACROSS THE STREET FROM PARKS LANDS IF POSSIBLE. IF UTILITY CORRIDOR ALIGNMENT CAN NOT BE LOCATED ACROSS THE STREET FROM PARK LANDS, THE UTILITY CORRIDOR ALIGNMENT AND ALL SURFACE BOX LOCATIONS ADJACENT TO PARKS LANDS SHALL BE COORDINATED WITH DENVER PARKS.

ENVIRONMENTAL NOTES

1. REGULATED ASBESTOS CONTAMINATED SOILS (RACS) MAY BE ENCOUNTERED IN BUILDING DEBRIS THROUGHOUT THE CITY DURING EXCAVATION. ALL RACS MUST BE MANAGED, DOCUMENTED, AND DISPOSED IN ACCORDANCE WITH STATE REGULATIONS PERTAINING TO SOLID WASTE SITES AND FACILITIES, SECTION 5 - ASBESTOS WASTE MANAGEMENT. STATE REGULATIONS REQUIRE ANY DISTURBED DEBRIS BE CHARACTERIZED TO DETERMINE APPLICABILITY OF THE REGULATION. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING COMPETENT TRAINED PERSONNEL CAPABLE OF IDENTIFYING RACS IN DEBRIS AND HAVING ACCESS TO AN ONSITE CERTIFIED ASBESTOS BUILDING INSPECTOR (CABI) IN CASE OF RACS DISCOVERY.
2. CONTRACT OR SHALL TAKE REASONABLE MEASURES TO PREVENT PARTICULATE MATTER FROM BECOMING AIRBORNE AND TO PREVENT THE VISIBLE DISCHARGE OF FUGITIVE PARTICULATE EMISSIONS BEYOND THE PROPERTY LINE FROM WHICH THE EMISSIONS ORIGINATE. THE MEASURES TAKEN MUST BE EFFECTIVE AT ALL TIMES ON THE SITE, INCLUDING PERIODS OF INACTIVITY SUCH AS EVENINGS, WEEKENDS, AND HOLIDAYS AS WELL AS ANY OTHER PERIOD OF INACTIVITY.
3. DURING ANY SOIL DISTURBING ACTIVITIES, IF UNKNOWN/UNIDENTIFIED UNDERGROUND STORAGE TANKS, DRUMS, ODOROUS SOIL, STAINED SOIL, ASBESTOS-CEMENT PIPE (TRANSIT), BUILDING DEBRIS, OR WASTE MATERIALS ARE ENCOUNTERED, CONTRACTOR SHALL IMMEDIATELY STOP WORK IN THE AREA OF THE DISCOVERY UNTIL DENVER DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT (DDPHE) MAKES A DETERMINATION OF HOW TO PROCEED. CONTRACTOR SHALL IMMEDIATELY NOTIFY DDPHE OF THE DISCOVERY AT (720) 460-8376.
4. ANY SOIL EXCAVATED AND REUSED ON THE PROPERTY OR IMPORTED TO THE PROPERTY MUST MEET APPLICABLE SOIL REUSE ACCEPTANCE CRITERIA AS EXPLAINED IN THE DDPHE OCTOBER 10, 2017 MEMORANDUM TITLED "GUIDANCE FOR REUSE OF SOIL ON CITY PROJECTS" LOCATED ON THE DENVER DDPHE WEBSITE UNDER THE "ABOUT" TAB FOR ENVIRONMENTAL REVIEW AND ASSESSMENT: HTTPS://WWW.DENVERGOV.ORG/CONTENT/DENVERGOV/EN/ENVIRONMENTAL-HEALTH/ENVIRONMENTAL-QUALITY/LAND-USE-ANDPLANNING.HTML
5. THE CONTRACTOR SHALL DIRECT NON-RECYCLABLE, NON-HAZARDOUS WASTES FROM CITY-OWNED OR CONTROLLED PROPERTY OR FACILITIES TO THE DENVER ARAPAHOE DISPOSAL SITE (DADS) LANDFILL FOR DISPOSAL, FOLLOWING THE REQUIREMENT AND PROCEDURAL GUIDANCE PER CITY EXECUTIVE ORDER 115. LABORATORY ANALYTICAL RESULTS WILL BE REQUIRED PRIOR TO DADS ACCEPTANCE FOR SOIL AND POSSIBLY OTHER MATERIALS. EARLY TESTING IS RECOMMENDED; DDPHE CAN ASSIST. CONTACT DDPHE AT (720) 865-5448 WITH QUESTIONS.
6. NOISE CONTROL. ALL NOISE CAUSED BY CONSTRUCTION OF, OR RESULTING FROM COMPLETED PROJECTS, MUST COMPLY WITH DENVER'S NOISE ORDINANCE, DENVER REVISED MUNICIPAL CODE CHAPTER 36 "NOISE CONTROL". EXEMPTED HOURS FOR CONSTRUCTION IN THE CITY AND COUNTY OF DENVER ARE FROM 7 AM TO 9 PM MONDAY THROUGH FRIDAY AND 8 AM TO 5 PM ON SATURDAYS AND SUNDAYS. IF THERE IS A NEED TO WORK OUTSIDE OF THE EXEMPTED HOURS: 1) THE CONTRACTOR SHALL REQUEST A VARIANCE, AND 2) THE VARIANCE PROCESS NEEDS TO BE STARTED A MINIMUM OF THREE MONTHS PRIOR TO THE DESIRED START DATE. ANY QUESTIONS SHOULD BE DIRECTED TO DDPHE COMMUNITY NOISE PROGRAM AT (720) 865-5410.

DENVER TRANSPORTATION & INFRASTRUCTURE	City and County of Denver	Date: 05/18/20
	REQUIRED PLAN NOTES	SHEET NO. 3



Any work in these areas must have written approval of OCF prior to commencement of activity. Contact OCF for instruction.

Area 1: Tree Protection Zone and Critical Root Zone Protection

The Tree Protection Zone (TPZ) shall be equal to dripline or 1.5 feet radially from the tree for every one inch of trunk diameter at breast height (DBH = 4.5' above soil line), whichever is greater.

A. Min 6' in height steel chain link fence is required unless otherwise approved by the Office of the City Forester (OCF). Steel chain link fence panels or rolls are acceptable.
   1. When chain link panels are installed, anchor to ground or weight with sandbags to hold panels in place.
   2. When chain link rolls are installed, it shall be fastened to heavy duty steel posts with safety caps at minimum five (5) attachment points with 12-gauge wire, including points at top and bottom. Weave wire through top of roll to eliminate sag.
   3. Posts shall be driven 2' to 3' below grade and spaced at max. five to ten foot (5' - 10') o.c. intervals. Fencing must be kept taut at all times.
   4. "Tree Protection Zone" signs shall be placed one (1) per each tree protection zone minimum or more per direction of the OCF; maintain in the location and condition in which approved.
   5. TPZ, including signage, shall be maintained in the location and condition in which approved.
   6. Trunk protection may be required and shall be installed at the direction of the OCF.

Area 2: Canopy Protection

Contact OCF if potential for damage exists and/or if pruning is needed for any clearance issues prior to performing work.

Notes

1. OCF Tree Retention and Protection Specifications shall be followed throughout duration of work.
2. After TPZ is approved;
   A. TPZ shall not be resized, modified, removed, or altered in any manner without prior written approval. TPZ shall be maintained in place as approved until removal is authorized by OCF.
   B. Entrance/access to the TPZ is not permitted without prior written approval from the OCF.
   C. No materials, debris, equipment, or site amenities shall be stored within the TPZ without prior written approval from the OCF.
3. While TPZ fencing is in place, trees shall be deep-root watered at an interval of once every two weeks when temperatures are at or above 40 degrees F. Trees shall be watered at the rate of twenty-five (25) gallons per inch DBH. OCF may ask for proof of watering.
4. Violation of TPZ or damage to protected trees is subject to penalty per City Ordinance.

DENVER THE MILE HIGH CITY	City and County of Denver Office of the City Forester 101 W. Colfax Ave, Denver, CO 80202	Tree Protection Zone - Public Space Fencing Detail	Detail: OCF-TPZ 1 Effective: 4-01-2022

EROSION CONTROL NOTES

THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL ENSURE THAT ALL POTENTIAL POLLUTANTS GENERATED DURING DEMOLITION OR CONSTRUCTION WORK ASSOCIATED WITH THIS PROJECT, BE PREVENTED FROM DISCHARGE TO STORMWATER CONVEYANCE SYSTEMS IN THE VICINITY OF THIS PROJECT SITE IN ACCORDANCE WITH THE FOLLOWING:

1. THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL PREVENT SEDIMENT, DEBRIS AND ALL OTHER POLLUTANTS FROM ENTERING THE STORM SEWER SYSTEM DURING ALL DEMOLITION, EXCAVATION, TRENCHING, BORING, GRADING, OR OTHER CONSTRUCTION OPERATIONS THAT ARE PART OF THIS PROJECT. THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL BE HELD RESPONSIBLE FOR REMEDIATION OF ANY ADVERSE IMPACTS TO THE MUNICIPAL SEPARATE STORM SEWER SYSTEM, RECEIVING WATERS, WATERWAYS, WETLANDS, AND OR OTHER PUBLIC OR PRIVATE PROPERTIES, RESULTING FROM WORK DONE AS PART OF THIS PROJECT.
2. THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO OR, ACCUMULATE IN THE FLOW LINES OF STORM DRAINAGE APPURTENANCES, AND PUBLIC RIGHTS OF WAYS OF THE CITY AND COUNTY OF DENVER, AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT. ALL REMOVALS SHALL BE CONDUCTED IN A TIMELY MANNER.
3. THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL INSURE THAT ALL LOADS OF CUT AND FILL MATERIAL IMPORTED TO OR EXPORTED FROM THIS SITE SHALL BE PROPERLY COVERED TO PREVENT LOSS OF THE MATERIAL DURING TRANSPORT ON PUBLIC RIGHTS OF WAY. (SEC.49-552; REVISED MUNICIPAL CODE).
4. THE USE OF REBAR TO ANCHOR BEST MANAGEMENT PRACTICES, OTHER THAN PORTABLE TOILETS, IS PROHIBITED.
5. THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL IMPLEMENT THE FOLLOWING BEST MANAGEMENT PRACTICES (BMPS) ON SITE DURING CONSTRUCTION:
   A) VEHICLE TRACKING CONTROL: THIS BMP IS REQUIRED AT ALL ACCESS POINTS FOR INGRESS/EGRESS FROM OFF-SITE IMPERVIOUS SURFACES TO CONSTRUCTION SITE PERVIOUS AREAS THAT ARE USED BY VEHICULAR TRAFFIC OR CONSTRUCTION EQUIPMENT.
   B) INLET PROTECTION: THIS BMP IS REQUIRED ON ALL EXISTING OR PROPOSED STORM SEWER INLETS IN THE VICINITY OF THE CONSTRUCTION SITE THAT MAY RECEIVE SITE RUNOFF. THE BMP MUST BE APPROPRIATE TO THE TYPE OF STORM INLET AND APPROPRIATE FOR THE GROUND SURFACE AT THE INLET.
   C) INTERIM SITE STABILIZATION: THIS BMP IS REQUIRED TO PROVIDE A MEASURE FOR PREVENTING THE DISCHARGE OF SEDIMENT FROM CONSTRUCTION SITES WHERE OVERLOT GRADING OR OTHER SITE DISTURBANCE HAS OCCURRED. THIS BMP IS PARTICULARLY NECESSARY ON SITES WHERE CONSTRUCTION ACTIVITIES/DISTURBANCE WILL BE LIMITED TO SMALL AREAS OF THE PROJECT SITE. ACCEPTABLE BMPS INCLUDE:
      i. PRESERVING EXISTING VEGETATION
      ii. SEEDING AND PLANTING
      iii. MULCHING
      iv. MULCHING AND SEEDING
      v. TEMPORARY/PERMANENT RE-VEGETATION OPERATIONS
      vi. CHEMICAL SOIL STABILIZER APPLICATION (REQUIRES WMD APPROVAL)
   D) WASTE MANAGEMENT/CONTAINMENT: THIS BMP REQUIRES THAT ALL CONSTRUCTION WASTES, FUELS, LUBRICANTS, CHEMICAL WASTES, TRASH, SANITARY WASTES, CONTAMINATED SOILS OR DEBRIS SHALL BE CONTAINED ON SITE, PROTECTED FROM CONTACT WITH PRECIPITATION OR SURFACE RUNOFF, PERIODICALLY REMOVED FROM THE CONSTRUCTION SITE, AND PROPERLY DISPOSED OF.
   E) SPILL PREVENTION /CONTAINMENT: THIS BMP DEFINES THE MEASURES PROPOSED FOR PREVENTING, CONTROLLING, OR CONTAINING SPILLS OF FUEL, LUBRICANTS, OR OTHER POLLUTANTS; AND PROTECTING POTENTIAL POLLUTANTS FROM CONTACT WITH PRECIPITATION OR RUNOFF.
   F) CHUTE WASHOUT CONTAINMENT: WATER USED IN THE CLEANING OF CEMENT TRUCK DELIVERY CHUTES SHALL BE DISCHARGED INTO A PREDEFINED, BERMED CONTAINMENT AREA ON THE JOB SITE. THE REQUIRED CONTAINMENT AREA IS TO BE BERMED SO THAT WASH WATER IS TOTALLY CONTAINED. WASH WATER DISCHARGED INTO THE CONTAINMENT AREA SHALL BE ALLOWED TO INFILTRATE OR EVAPORATE. DRIED CEMENT WASTE IS REMOVED FROM THE CONTAINMENT AREA AND PROPERLY DISPOSED OF.
      i. THE DIRECT OR INDIRECT DISCHARGE OF WATER CONTAINING WASTE CEMENT TO THE STORM SEWER SYSTEM IS PROHIBITED (SEC.56-102A, C; REVISED MUNICIPAL CODE, CITY AND COUNTY OF DENVER).
   G) SWEEPING: THIS BMP REQUIRES THAT IMPERVIOUS SURFACES WHICH ARE ADJACENT TO OR CONTAINED WITHIN CONSTRUCTION SITES BE SWEPT ON A DAILY BASIS OR AS NEEDED DURING THE DAY WHEN SEDIMENT AND OTHER MATERIALS ARE TRACKED OR DISCHARGED ON TO THEM. EITHER SWEEPING BY HAND OR USE OF STREET SWEEPERS IS ACCEPTABLE. STREET SWEEPERS USING WATER WHILE SWEEPING IS PREFERRED IN ORDER TO MINIMIZE DUST. FLUSHING OFF PAVED SURFACES WITH WATER IS PROHIBITED.
   H) PERIMETER CONTROL: THIS BMP REQUIRES THAT A CONSTRUCTION SITE INSTALL A PERIMETER CONTROL MEASURE ALONG THE EDGE OF THE CONSTRUCTION SITE, TO PREVENT, OR FILTER THE DISCHARGE OF SURFACE RUNOFF FROM THE CONSTRUCTION SITE. THE TYPE OF PERIMETER CONTROL USED SHALL BE DETERMINED BASED ON-SITE CONDITIONS AND LOCATION. MAINTENANCE AND REPAIR OF THE CONTROL MEASURE SHALL OCCUR AS NEEDED, IN A TIMELY MANNER.
   I) STOCK PILES: SOILS THAT WILL BE STOCKPILED FOR MORE THAN THIRTY (30) DAYS SHALL BE PROTECTED FROM WIND AND WATER EROSION WITHIN FOURTEEN (14) DAYS OF STOCKPILE CONSTRUCTION. STABILIZATION OF STOCKPILES LOCATED WITHIN 100 FEET OF RECEIVING WATERS, OR WITH SLOPES 3 TO 1 OR GREATER SHALL BE COMPLETED WITHIN SEVEN (7) DAYS FOLLOWING STOCKPILE CONSTRUCTION. STABILIZATION AND PROTECTION OF THE STOCKPILE MAY BE ACCOMPLISHED BY ANY OF THE FOLLOWING: MULCHING, TEMPORARY/PERMANENT REVEGETATION OPERATIONS, CHEMICAL SOIL STABILIZER APPLICATION (REQUIRES DENVER DOTI APPROVAL), OR EROSION CONTROL MATTING/GEOTEXTILES. IF STOCKPILES ARE LOCATED WITHIN 100 FEET OF RECEIVING WATERS, A DRAINAGEWAY OR THE SITE PERIMETER, ADDITIONAL SEDIMENT CONTROLS SHALL BE REQUIRED.
   J) SAW CUTTING OPERATIONS: THE CONTRACTOR SHALL PROTECT ALL STORM SEWER FACILITIES ADJACENT TO ANY LOCATION WHERE PAVEMENT CUTTING OPERATIONS INVOLVING WHEEL CUTTING, SAW CUTTING, OR ABRASIVE WATER JET CUTTING ARE TO TAKE PLACE. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL WASTE PRODUCTS GENERATED BY SAID CUTTING OPERATIONS ON A DAILY BASIS OR AS NEEDED THROUGHOUT THE WORK DAY. THE DISCHARGE OF ANY WATER CONTAMINATED BY WASTE PRODUCTS FROM CUTTING OPERATIONS TO THE STORM SEWER SYSTEM IS PROHIBITED. (SEC.56-102A, C; REVISED MUNICIPAL CODE, CITY AND COUNTY OF DENVER).
   K) STRUCTURAL CONTROLS: DEVELOPMENT SITES THAT ARE REQUIRED TO PROVIDE DETENTION AND WATER QUALITY ENHANCEMENT FACILITIES FOR STORM RUNOFF NEED TO INSTALL THE DETENTION FACILITIES EARLY IN THE CONSTRUCTION BUILD-OUT OF THE SITE. PROJECTS THAT ARE USING UNDERGROUND DETENTION ARE REQUIRED TO INSTALL A PRETREATMENT STRUCTURE(S) OR SEDIMENTATION BASIN(S) AS A MEANS OF TREATING POTENTIALLY POLLUTED STORM WATER PRIOR TO ENTERING THE DETENTION STRUCTURE. USE OF THESE STRUCTURES IS REQUIRED FOR ENTRAPPING SEDIMENT AND CONSTRUCTION DEBRIS DURING THE ACTIVE CONSTRUCTION PHASE OF THE PROJECT. A NARRATIVE SECTION OF A MANAGEMENT PLAN SHOULD ADDRESS OPERATION AND MAINTENANCE OF THE STRUCTURAL CONTROLS BEING USED AS AN ACTIVE CONSTRUCTION BMP.
6. EROSION AND SEDIMENT CONTROL 'BEST MANAGEMENT PRACTICES' SHALL BE MAINTAINED AND KEPT IN EFFECTIVE OPERATING CONDITION FOR THE DURATION OF THIS PROJECT. ALL NECESSARY MAINTENANCE AND REPAIR SHALL BE COMPLETED IMMEDIATELY UPON DISCOVERY OF ANY DEFICIENCY OR DEFECT.

DENVER TRANSPORTATION & INFRASTRUCTURE	City and County of Denver	Date: 05/18/20
	REQUIRED PLAN NOTES	SHEET NO. 4

OFFICE OF THE FORESTER UTILITY PLAN NOTES

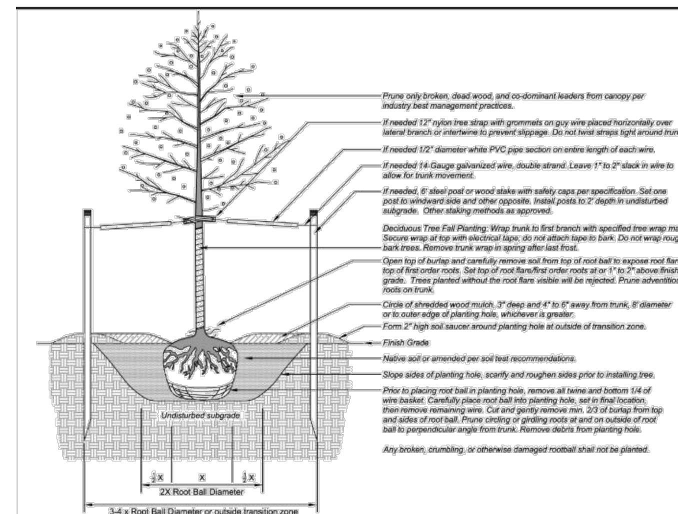
1. UTILITY PROJECTS THAT DO NOT GO THROUGH THE OFFICE OF THE CITY FORESTER (OCF) REVIEW PROCESS OR DO NOT RECEIVE OCF APPROVAL; OCF RESERVES THE RIGHT TO PLANT IN THE PRW AND CANNOT BE HELD LIABLE FOR ANY DAMAGE THAT OCCURS TO UTILITY WITHIN PRW WHERE UTILITY IS NOT PLACED AT A MINIMUM DEPTH OF 36 INCHES.
2. OCF RESERVES THE RIGHT TO DECLARE UNENCUMBERED SPACE IN THE PRW FOR FUTURE AND REPLACEMENT PRW TREES. SHOULD THESE AREAS BE VIOLATED BY ANY UTILITY, THE UTILITY OWNER SHALL (RE)MOVE UTILITY AT OWNER'S EXPENSE.
3. THE CONTRACTOR SHALL NOT CUT, PRUNE, PLANT, REMOVE, INJECT OR SPRAY TREES OR OTHER LANDSCAPING ELEMENTS WITHIN ROW, UNLESS SUCH WORK IS OTHERWISE SPECIFIED ON THE APPROVED PLANS OR RECEIVES PRIOR WRITTEN AUTHORIZATION FROM THE OCF.
4. ANY DISTURBED LANDSCAPING WILL BE REPLACED TO EQUAL OR BETTER CONDITION THAN THAT WHICH EXISTED PRIOR TO WORK.
5. SEEDING, SODDING, AND PLANTING SHALL BE AS SPECIFIED OR OTHERWISE APPROVED BY THE CITY. CONSTRUCTION, MAINTENANCE, AND WATERING REQUIREMENTS SHALL CONFORM TO THE CITY STANDARD SPECIFICATIONS. WHERE LANDSCAPE RESTORATION MUST BE DELAYED DUE TO SEASONAL REQUIREMENTS, A SEPARATE PERMIT MAY AUTHORIZE SUCH WORK.
6. THE CITY REQUIRES COMPLIANCE WITH THE FOLLOWING WHEN WORK IS NECESSARY AND/OR REQUIRED ADJACENT TO TREES IN THE PRW OR OTHER PUBLIC SPACES:
   A) TREE PROTECTION ZONE (TPZ) IS THE AREA EQUAL TO 1.5 FEET PER 1-INCH DIAMETER TREE MEASURED AT 4.5 FEET ABOVE GRADE OR THE DRIPLINE OF THE TREE, WHICHEVER IS GREATER.
      i. TPZ FENCING SHALL BE ESTABLISHED PRIOR TO WORK COMMENCING, SEE TREE PROTECTION DETAIL AVAILABLE ON WEBSITE
      ii. ALL WORK WITHIN TPZ MUST BE AUTHORIZED IN WRITING BY OCF, INCLUDING BUT NOT LIMITED TO:
         a. ENTRANCE AND/OR ACCESS
         b. MOVING, RESIZING, REMOVING, OR ALTERING IN ANY MANNER
         c. STORAGE OF SOILS/MATERIALS/DEBRIS/EQUIPMENT
         d. CHANGES IN GRADE
      iii. ALL PIT LOCATIONS MUST BE STAKED AND APPROVED PRIOR TO AN EXCAVATION.
      iv. EXCAVATION; INCLUDING BUT NOT LIMITED TO TRENCHING, POTHOLING, BORE PITS, AND HANDHOLE INSTALLATION; SHALL NOT OCCUR WITHIN THE TPZ WITHOUT PRIOR WRITTEN AUTHORIZATION FROM OCF AND VERIFYING LOCATION OF EXISTING ROOTS THAT MAY BE IMPACTED BY EXCAVATION:
         a. APPROVED ROOT DISCOVERY METHODS INCLUDE: HAND WORK, PNEUMATIC EXCAVATION, GROUND PENETRATING RADAR, OR OTHER OCF APPROVED METHOD.
         b. ADJUST THE ROUTE TO AVOID ROOTS AS MUCH AS POSSIBLE.
         c. ROOTS 2 INCHES IN DIAMETER AND LARGER SHALL NOT BE CUT, PRUNED, SEVERED, OR DAMAGED. IF CONFLICT ARISES, CONTRACTOR MUST CONTACT OCF PRIOR TO CONTINUANCE OF WORK.
            i. ROOTS OF ANY SIZE SHALL BE PRUNED PRIOR TO EXACTION TO MINIMIZE DAMAGE FROM RIPPING OR TEARING
         d. MINIMIZE THE WORK PIT TO NO WIDER THAN THE TRENCH.
         e. STORE SOIL OPPOSITE THE TREE SIDE OF THE TRENCH.
         f. BACKFILL QUICKLY AND CLEANLY, AND WATER ROOTS DEEPLY.
         g. EXPOSED ROOTS MUST BE KEPT MOIST AT ALL TIMES. COVER EXPOSED ROOTS WITH BURLAP OR OTHER MATERIAL THAT WILL HOLD MOISTURE AGAINST EXPOSED ROOTS.
      v. TUNNELING/DIRECTIONAL BORING MUST BE AT LEAST 36 INCHES BELOW GRADE, 48 INCHES PREFERRED.
         a. FINAL DEPTH OF INSTALLED UTILITY MUST BE AT A MINIMUM OF 36 INCHES BELOW FINAL GRADE. DUE TO THE INABILITY TO CONSISTENTLY MAINTAIN ACCURATE BORING DEPTHS, IT IS STRONGLY RECOMMENDED TO TARGET A DEPTH OF 48 INCHES TO ENSURE NO VIOLATION OF THE 36-INCH MINIMUM DEPTH OCCURS. THE CITY MAY ORDER THE LOWERING OF INSTALLED UTILITIES WHEN THEY ARE DISCOVERED NOT TO BE DEEPER THAN THE 36-INCH MINIMUM.
   B) THE CRITICAL ROOT ZONE (CRZ) IS THE AREA WITHIN THE TPZ AND EQUAL TO 1 LINEAR FOOT RADIUS PER 1-INCH DIAMETER OF TREE TRUNK MEASURED AT 4.5 FEET ABOVE THE GROUND.
      i. NO ROOT DISTURBANCE SHALL OCCUR WITHIN THIS AREA.
         a. IF NOT POSSIBLE, CONTRACTOR MUST MEET WITH OCF PERSONNEL ON SITE.
            i. WHEN WORK OCCURS WITHIN CRZ, EXCAVATION MUST BE PERFORMED WITH HAND-TOOLS, PNEUMATIC EXCAVATION OR OTHER OCF APPROVED METHOD.
   C) THE STRUCTURAL ROOT ZONE (SRZ) IS THE AREA WITHIN THE TPZ AND EQUAL TO 0.9 TIMES PER INCH DIAMETER OF THE TREE MEASURED AT 4.5 FEET ABOVE THE GROUND (0.9*X).
      i. NO ACTIVITY SHALL OCCUR WITHIN THIS ZONE WITH THE EXCEPTION OF DIRECTIONAL BORING AT A MINIMUM DEPTH OF 36 INCHES BELOW GRADE, 48 INCHES PREFERRED.
         a. FINAL DEPTH OF INSTALLED UTILITY MUST BE AT A MINIMUM OF 36 INCHES BELOW FINAL GRADE. DUE TO THE INABILITY TO CONSISTENTLY MAINTAIN ACCURATE BORING DEPTHS, IT IS STRONGLY RECOMMENDED TO TARGET A DEPTH OF 48 INCHES TO ENSURE NO VIOLATION OF THE 36-INCH MINIMUM DEPTH OCCURS. THE CITY MAY ORDER THE LOWERING OF INSTALLED UTILITIES WHEN THEY ARE DISCOVERED NOT TO BE DEEPER THAN THE 36-INCH MINIMUM.
7. SHOULD ANY TREE DAMAGE OCCUR, CONTRACTOR SHALL CONTACT THE OCF IMMEDIATELY
   A) OCF SHALL ISSUE AN ORDER DIRECTING THE RESPONSIBLE PARTY TO PRUNE, REMOVE, OR OTHERWISE TAKE SUCH ACTION AS IS NECESSARY TO REPAIR SAID DAMAGE
   B) IF DAMAGE IS BEYOND REPAIR, THE RESPONSIBLE PARTY SHALL COMPENSATE THE CITY FOR THE LOST MONETARY VALUE OF THE TREE AND MAY INCLUDE REPLACEMENT
8. THE CITY & COUNTY OF DENVER TREE RETENTION AND PROTECTION SPECIFICATIONS MUST BE FOLLOWED. FOR A COPY OF THE TREE PROTECTION SPECIFICATIONS PLEASE CONTACT THE OFFICE OF THE CITY FORESTER AT (720) 913-0651 OR EMAIL AT FORESTRY@DENVERGOV.ORG

DENVER TRANSPORTATION & INFRASTRUCTURE	City and County of Denver	Date: 12/17/19
	OCF REQUIRED NOTES ALL UTILITY PLANS	SHEET NO. 1

OFFICE OF THE FORESTER TREE PROTECTION NOTES

1. EXISTING TREES TO BE PRESERVED IN PUBLIC RIGHT OF WAY (ROW) OR PUBLIC PLACE SHALL BE PROTECTED PER OCF STANDARDS AND PRACTICES. TREE PROTECTION SHALL BE;
   A) INSTALLED PRIOR TO COMMENCEMENT OF DEMOLITION AND/OR CONSTRUCTION ACTIVITIES
   B) INSPECTED AND APPROVED BY OCF STAFF
   C) REMAIN IN PLACE AND AS APPROVED UNTIL CERTIFICATE OF OCCUPANCY OR SUBSTANTIAL COMPLETION AND FINAL ACCEPTANCE IS ISSUED
2. TREE PROTECTION REQUIREMENTS;
   A) TREE PROTECTION ZONE (TPZ) SHALL BE INSTALLED AT THE DRIPLINE, FURTHEST EXTENT OF TREE CANOPY, OR IS EQUAL TO EIGHTEEN INCHES RADIALLY FROM THE TREE FOR EVERY ONE INCH OF TRUNK DIAMETER AT BREAST HEIGHT (DBH = 4.5' ABOVE SOIL LINE), WHICHEVER IS GREATER
   B) INSTALL SIX FOOT (6') CHAIN LINK FENCING PRIOR TO COMMENCEMENT OF PROJECT CONSTRUCTION ACTIVITIES
   C) OCF STAFF SHALL INSPECT AND APPROVE BOUNDARIES OF TREE PROTECTION ZONE(S) PRIOR TO COMMENCEMENT OF DEMOLITION OR CONSTRUCTION A ACTIVITIES
   D) ONCE TPZ IS IN PLACE, THE FOLLOWING ARE NOT PERMITTED WITHIN TPZ WITHOUT PRIOR WRITTEN APPROVAL FROM OCF:
      i. ENTRANCE AND/OR ACCESS
      ii. MOVING, RESIZING, REMOVING, OR ALTERING IN ANY MANNER
      iii. STORAGE OF MATERIALS/DEBRIS/EQUIPMENT
      iv. CONSTRUCTION ACTIVITIES INCLUDING BUT NOT LIMITED TO; ROTOTILLING, TRENCHING, GRADING, INSTALLATION OF UNDERGROUND UTILITIES AND/OR SITE IMPROVEMENTS, LANDSCAPING, IRRIGATION WORK
         a. IRRIGATION LINE WORK SHALL BE COMPLETED BY DIRECTIONAL BORE
   E) "TREE PROTECTION ZONE" SIGNS SHALL REMAIN IN PLACE AS POSTED BY OCF AND SHALL BE MAINTAINED IN THE CONDITION IN WHICH THEY WERE INSTALLED
   F) TREE PRUNING FOR CLEARANCE ISSUES MUST HAVE PRIOR AUTHORIZATION BY OCF STAFF
   G) NO ROOT 2 INCHES OR LARGER SHALL BE CUT; CONSULT WITH OCF STAFF
3. EXISTING ROW OR PUBLIC PLACE TREES APPROVED FOR REMOVAL BY OCF MUST BE PROTECTED IN PLACE UNTIL REMOVED BY AN OCF-LICENSED TREE CONTRACTOR;
   A) AN OCF TREE REMOVAL PERMIT IS REQUIRED
   B) TREE REMOVAL PERMITS ARE NOT INCLUDED WITH BUILDING PERMITS AND/OR PLAN APPROVAL AND MUST BE OBTAINED SEPARATELY FROM THE OCF
   C) FAILURE TO PROTECT TREES UNTIL REMOVAL OR REMOVING WITHOUT A OCF-ISSUED PERMIT WILL RESULT IN NOTICE OF VIOLATION AND/OR MAY INCLUDE CITATIONS/FINES
4. CLEAR VISIBILITY INTO TPZ MUST BE MAINTAINED. ALL CONSTRUCTION BANNERS, SCREENS, BARRIERS, AND/OR SIGNS (EXCEPT OCF-POSTED TPZ SIGNS) MUST BE SEMI-TRANSPARENT AND NOT IMPEDE INSPECTION OF TPZ BY OCF STAFF
5. FOR PROJECTS WITH A DURATION OF 5 DAYS OR LONGER;
   A) PROTECTED TREES SHALL BE DEEP-ROOT WATERED AT A MINIMUM INTERVAL OF ONCE PER WEEK WHEN TEMPERATURES ARE AT OR ABOVE 40-DEGREES F
   B) TREES SHALL BE WATERED AT THE RATE OF 20 GALLONS PER INCH CALIPER
   C) INSECT AND DISEASE TREATMENTS SHALL BE APPLIED WHEN NECESSARY OR AS ORDERED BY OCF
      i. OCF MAY ASK FOR DOCUMENTED PROOF OF WATERING AND/OR TREATMENT.

DENVER TRANSPORTATION & INFRASTRUCTURE	City and County of Denver	Date: 12/17/19
	OCF REQUIRED NOTES ALL NON—UTILITY PLANS	SHEET NO. 1



Trees planted upon park land, public property, or within the Public Right of Way (PRW) are subject to the following restrictions:

- Prior to digging, the Utility Notification Center of Colorado shall be contacted at 811 to locate underground utilities.
- A planting permit from the Office of the City Forester (OCF) is required at all times, regardless of approved plans. Penalties shall be issued for trees planted without an OCF issued permit.
  - Tree planting shall not occur when daytime temperatures reach or exceed 90-degrees Fahrenheit, unless approved by OCF. In general, all tree planting should be performed avoiding the hottest part of the day.
- Only tree species approved by the OCF shall be planted. For a list of prohibited or suspended trees, visit the OCF website.
- Trees shall not be planted in tree lawns less than five feet wide unless authorized by the OCF.
- Trees shall be centered in tree lawns and/or planting areas. Where sidewalks are not present, trees shall be located as designated by the OCF.
- Unless authorized by the OCF, trees shall be located:
  - Outside street intersection sight distance triangle, measured 30 (thirty) feet along the PRW in each direction from the corner.
  - Min. 10 (Ten) feet from alleys and driveways
  - Min. 20 (Twenty) feet from stop signs and curb ramps
  - Min. 25 (Twenty-five) feet from street lights
  - Min. 10 (Ten) feet from electric/gas/water lines, water meters/pits, and fire hydrants
  - Min. 15 (Fifteen) feet from small cell towers
  - Min. 10 (Ten) feet from RTD light rail lines
- If overhead utility wires exist, only trees with an expected mature size that meet current clearance regulations may be planted.
- Tree spacing shall be based on projected mature canopy size and above restrictions, or as approved by the OCF.
- No vegetation to be planted over top of or within root ball area (denoted as X above).
- Omit weed barrier fabric from tree planting areas, including landscaped areas.
- All electric fixtures and utilities, including but not limited to outlets and lights, shall be located at outside perimeter of tree planting areas within hardscape. In tree lawns, fixtures shall be placed minimum 3 (three) feet radially from base of trunk.

When planting is completed, contact forestry@denvergov.org for final inspection.

DENVER THE MILE HIGH CITY	City and County of Denver Office of the City Forester 101 W. Colfax Ave, Denver, CO 80202	Tree Planting Detail - Public Space	Detail: OCF-PLNT 1 Effective: 4-01-2022

811 Know what's below. Call before you dig.

HKS UTILITY SERVICES

Xcel Energy℠

ELECTRIC INSTALLATION
4681 W. 46TH AVE.
DENVER, CO.
CCD NOTES & DETAILS

ISSUE DATE: 12-05-2025	DRAWN BY: CCF	HKS #: 2509025
DATE	REVISION COMMENTS	WO #: 114823023
12-31-2025	REVISED PER CCD COMMENTS	SHEET NUMBER
		2 OF 5

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HKS UTILITY SERVICES

DENVER PUBLIC WORKS

Department of Public Works
Engineering, Regulatory, & Analytics
201 W. Colfax Ave., Dept. 507
Denver, Colorado 80202-5304

denver.pwera@denvergov.org
www.denvergov.org/pwera

Comment Report

Department of Public Works

Xcel - HKS Utility Services - 4681 W. 46th Ave.

Master ID: 2025-PROJMSTR-0000006 **Review End Date:** 12/30/2025
Review ID: 2025-UTIL-0000276
Location: 4681 W. 46th Ave.

Any denials listed below must be rectified in writing to this office before project approval is granted.

Reviewing Agency: City Forester Review Review Status: Approved
Reviewers Name: Eric Huetig
Reviewers Email: Eric.Huetig@denvergov.org

Status Date: 12/16/2025
Status: Approved
Comments: 2025-UTIL-0000276
OCF Comments 12-16-25
1. Plan is approved. If one or more of the following items occur, contractor shall contact Office of the City Forester to review changes to approved plans:
A. Utility routing changes
B. Trenching in public right of way is required
C. Additional utility structures (including stands, handholes, and utility poles) are proposed for placement within driplines of existing public right of way trees.
2. Contractor shall contact adjacent property owner(s) when existing trees in public rights of way or private property are to be impacted by proposed construction. Potentially impacting construction includes installation of bore pits & hand holes adjacent to trees.

Reviewing Agency: Parks and Recreation Review Review Status: Approved - No Response
Reviewers Name: Jennifer Cervera
Reviewers Email: Jennifer.Cervera@denvergov.org

Status Date: 12/31/2025
Status: Approved - No Response
Comments:

Reviewing Agency: ERA Transportation Review Review Status: Denied
Reviewers Name: Vanesa Cuellar Leyva
Reviewers Email: Vanesa.Cuellarleyva@denvergov.org

Status Date: 12/30/2025
Status: Denied POLE HAS BEEN RELOCATED OUT OF THE SIGHT TRIANGLE.
Comments: 1. Pole is located within the pedestrian sight triangle. Please remove or relocate proposed pole.

Reviewing Agency: ERA Utility Review Review Status: Approved - No Response
Reviewers Name: Emily Rush
Reviewers Email: Emily.Rush@denvergov.org

Comment Report

Xcel - HKS Utility Services - 4681 W. 46th Ave.

Master ID: 2025-PROJMSTR-0000006 **Review End Date:** 12/30/2025
Review ID: 2025-UTIL-0000276
Location: 4681 W. 46th Ave.

Any denials listed below must be rectified in writing to this office before project approval is granted.

Status Date: 12/31/2025
Status: Approved - No Response
Comments:

Reviewing Agency: PW Construction Engineering R Review Status: Approved
Reviewers Name: Porames Saejiw
Reviewers Email: Joe.Saejiw@denvergov.org

Status Date: 12/17/2025
Status: Approved
Comments: 1. Prior to the solicitation of bids or proposals from general contractors, the developer of this project is strongly encouraged to schedule an office meeting with the Right-of-Way Services Construction Inspections team (303) 446-3469 to discuss the project's installation of City Approved Plans for Traffic Closures, Row Items and Landscaping and the associated ROW permit fees that will need to be paid by the selected general contractor.

2. Hand holes, vaults, valves, poles and cabinets should not be placed in the direct pedestrian path. A 5ft min unobstructed pedestrian path must be present after construction.

Reviewing Agency: PW Traffic Operations Review Review Status: Approved
Reviewers Name: Victor L Barela
Reviewers Email: Victor.Barela@denvergov.org

Status Date: 12/31/2025
Status: Approved
Comments: PWPRS Project Number: 2025-UTIL-0000276 - Xcel - HKS Utility Services - 4681 W. 46th Ave
Reviewing Agency/Company: City and County of Denver
Reviewers Name: Victor L. Barela
Reviewers Phone: 7204906276
Reviewers Email: victor.barela@denvergov.org
Approval Status: Approved

Comments:

Reviewing Agency: Denver Water Referral Review Status: Approved
Reviewers Name: Kela Naso
Reviewers Email: Kela.Naso@denverwater.org

Status Date: 12/31/2025
Status: Approved
Comments: PWPRS Project Number: 2025-UTIL-0000276 - Xcel - HKS Utility Services - 4681 W. 46th Ave
Reviewing Agency/Company: Denver Water
Reviewers Name: Kela Naso
Reviewers Phone: 303-628-6302
Reviewers Email: kela.naso@denverwater.org

Comment Report

Xcel - HKS Utility Services - 4681 W. 46th Ave.

Master ID: 2025-PROJMSTR-0000006 **Review End Date:** 12/30/2025
Review ID: 2025-UTIL-0000276
Location: 4681 W. 46th Ave.

Any denials listed below must be rectified in writing to this office before project approval is granted.

Approval Status: Approved

Comments:

Reviewing Agency: Traffic Signal Review Review Status: Approved - No Response
Reviewers Name: Joshua Jones
Reviewers Email: Joshua.Jones2@denvergov.org

Status Date: 12/31/2025
Status: Approved - No Response
Comments:

Reviewing Agency: Additional Reviewer 1 Review Status: Approved w/Conditions
Reviewers Name: Greg Neitzke
Reviewers Email: Greg.Neitzke@denvergov.org

Status Date: 12/31/2025
Status: Approved w/Conditions
Comments: PWPRS Project Number: 2025-UTIL-0000276 - Xcel - HKS Utility Services - 4681 W. 46th Ave
Reviewing Agency/Company: Parks Planning Design and Construction
Reviewers Name: Greg Neitzke
Reviewers Phone: 3039162689
Reviewers Email: greg.neitzke@denvergov.org
Approval Status: Approved with conditions

Comments:
Contact Matthew Gutierrez at matthew.gutierrez@denvergov.org to schedule a pre-con meeting and obtain a Temporary Construction and Access Permit for project activity in Berkeley Park

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HKS UTILITY SERVICES

Xcel Energy℠

ELECTRIC INSTALLATION
4681 W. 46TH AVE.
DENVER, CO.
CCD COMMENT REPORT

ISSUE DATE: 12-05-2025	DRAWN BY: CCF	HKS #: 2509025
DATE	REVISION COMMENTS	WO #: 114823023
12-31-2025	REVISED PER CCD COMMENTS	SHEET NUMBER
		3 OF 5

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NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HKS UTILITY SERVICES.

LEGEND:

- PROPOSED BORE PIT
- PROPOSED OPEN TRENCH
- B — PROPOSED BORE LINE
- OT — PROPOSED OPEN TRENCH
- EASEMENT
- ROW — RIGHT-OF-WAY
- PARCEL
- G — NATURAL GAS MAIN
- NATURAL GAS SERVICE
- P — PETROLEUM PIPELINE
- UE — UNDERGROUND ELECTRIC
- UNDERGROUND ELECTRIC SERVICE
- OU — OVERHEAD UTILITY
- UT — UNDERGROUND TELECOM
- TELECOM SERVICE
- FO — FIBER OPTIC
- TR — TRAFFIC
- W — WATER MAIN
- WATER SERVICE
- RW — RECLAIMED WATER MAIN
- IR — IRRIGATION MAIN
- SS — SANITARY SEWER
- SANITARY SEWER SERVICE
- ST — STORM SEWER
- MC — MISCELLANEOUS CONDUIT
- UU — UNKNOWN UTILITY
- ABANDONED UTILITY
- CURB AND GUTTER

- NATURAL GAS VALVE
- GM — NATURAL GAS METER
- E — ELECTRIC HANDHOLE/PULL-BOX
- E — ELECTRIC VAULT
- E — ELECTRIC PEDESTAL
- SC — ELECTRIC SWITCH CABINET
- LBC — LOAD BREAK CAPACITOR BANK
- ELECTRIC TRANSFORMER
- E — ELECTRIC METER
- E — ELECTRIC MANHOLE
- UTILITY POLE
- R — RISER POLE
- GUY WIRE
- STREET LIGHT
- T — TELECOM HANDHOLE/PULL-BOX
- T — TELECOM VAULT
- T — TELECOM PEDESTAL
- X — TELECOM JUNCTION BOX
- T — TELECOM MANHOLE
- TR — TRAFFIC HANDHOLE/PULL-BOX
- TR — TRAFFIC VAULT
- TR — TRAFFIC SIGNAL POLE
- TR — TRAFFIC SIGNAL CONTROL CABINET

- FIRE HYDRANT
- W — WATER VAULT
- WM — WATER METER
- WATER VALVE
- WATER VENT
- W — WATER MANHOLE
- S — SANITARY SEWER MANHOLE
- SC — SANITARY SEWER CLEANOUT
- STORM SEWER INLET (GRATE)
- ST ST — STORM SEWER INLET
- ST — STORM SEWER MANHOLE
- STORM SEWER FLARED-END SECTION
- I — IRRIGATION HANDHOLE/PULL-BOX
- I — IRRIGATION CONTROLLER BOX
- END OF GAS MAIN
- END OF WATER MAIN
- END OF SANITARY MAIN
- EOI — END OF INFORMATION
- X X — TREE PROTECTION ZONE
- TREE CANOPY DRIPLINE
- TRAFFIC CLEAR ZONE

ABBREVIATIONS:

AC	ASBESTOS CONCRETE
BMP	BEST MANAGEMENT PRACTICE
BOC	BACK OF CURB
CB	CAPACITOR BANK
CI	CAST IRON
DIP	DUCTILE IRON PIPE
EOP	EDGE OF PAVEMENT
EX	EXISTING
FH	FIRE HYDRANT
FO	FIBER OPTICS
℄	FLOW LINE
FM	FORCE MAIN
IP	INTERMEDIATE PRESSURE
INV	INVERT
LBC	LOAD BREAK CAPACITOR
MH	MANHOLE
NTS	NOT TO SCALE
PE	POLYETHYLENE
PR	PROPOSED
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT-OF-WAY
SAN	SANITARY SEWER
SC	SWITCH CABINET
SL	STREET LIGHT
STL	STEEL
STM	STORM SEWER
TBC	TOP BACK OF CURB
TYP	TYPICAL
VCP	VITRIFIED CLAY PIPE
WALK	SIDEWALK
WM	WATER METER
BOW	BACK OF SIDEWALK

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NOT FOR
CONSTRUCTION

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HKS UTILITY SERVICES

Xcel Energy℠

ELECTRIC INSTALLATION
4681 W. 46TH AVE.
DENVER, CO.
LEGEND & ABBREVIATIONS

ISSUE DATE: 12-05-2025	DRAWN BY: CCF	HKS #: 2509025
DATE	REVISION COMMENTS	WO #: 114823023
12-31-2025	REVISED PER CCD COMMENTS	SHEET NUMBER
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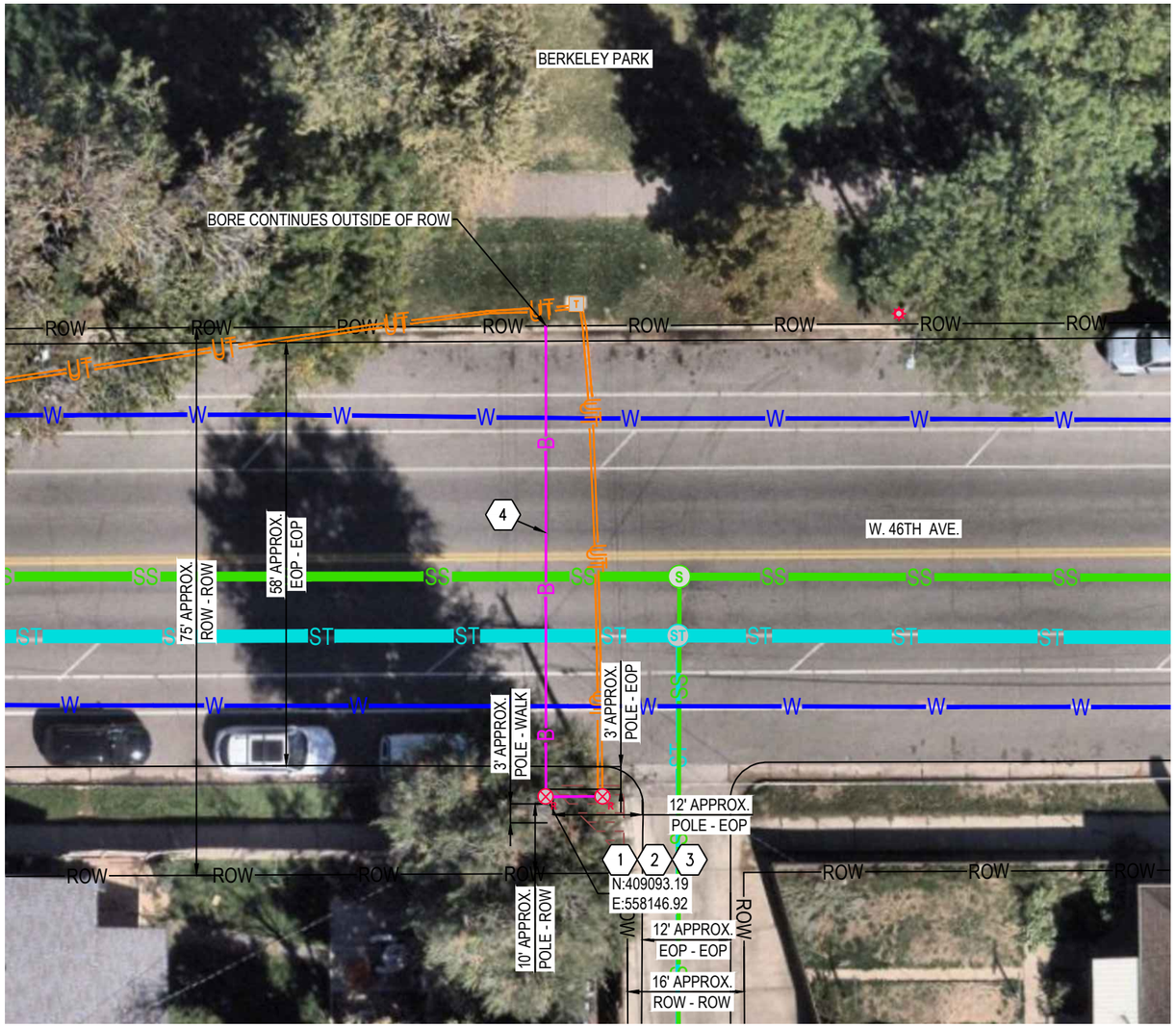
NOTES:

1. ALL UTILITIES LOCATIONS AND ROW ARE TO BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO STARTING CONSTRUCTION.
2. PER P.W. RULES AND REGULATIONS ARTICLE VII, CHAPTER 20 OF THE REVISED MUNICIPAL CODE: IF CONSTRUCTION IS WITHIN 10 FEET OF THE PEDESTRIAN CURB RAMP, THE RAMP AND SURROUNDING SIDEWALK SHALL BE BROUGHT UP TO CURRENT CCD STANDARDS.
3. IF ONE OR MORE OF THE FOLLOWING ITEMS OCCUR, CONTRACTOR SHALL CONTACT OFFICE OF THE CITY FORESTER TO REVIEW CHANGES TO APPROVED PLANS:
   - A. UTILITY ROUTING CHANGES
   - B. TRENCHING IN PUBLIC RIGHT OF WAY IS REQUIRED
   - C. UTILITY STRUCTURES (INCLUDING STANDS & HANDHOLES) ARE PROPOSED FOR PLACEMENT WITHIN DRIPLINES OF EXISTING PUBLIC RIGHT-OF-WAY TREES.
4. CONTRACTOR SHALL CONTACT ADJACENT PROPERTY OWNER(S) WHEN EXISTING TREES IN PUBLIC RIGHTS OF WAY OR PRIVATE PROPERTY ARE TO BE IMPACTED BY PROPOSED CONSTRUCTION. POTENTIALLY IMPACTING CONSTRUCTION INCLUDES INSTALLATION OF BORE PITS & HAND HOLES ADJACENT TO TREES.
5. CONTRACTOR SHALL OBTAIN PROPERTY OWNER'S PERMISSION BEFORE PERFORMING ANY WORK OUTSIDE OF RIGHT-OF-WAY.
6. CONTRACTOR TO PROTECT ALL GREEN INFRASTRUCTURE, SANITARY SEWER AND STORM DRAIN PIPES AND APPURTENANCES DURING CONSTRUCTION.
7. ALL BORING SHALL MAINTAIN A MINIMUM DEPTH OF 36" AND 48" IN PREFERRED LANDSCAPE AREAS.
8. NO CONSTRUCTION EQUIPMENT, MATERIALS, OR VEHICLES PERMITTED ON THE TREE LAWN AT ANY TIME.
9. DENVER WATER CONDUIT(S) MUST BE POTHOLED PRIOR TO CONSTRUCTION AND A 2" VERTICAL CLEARANCE MUST BE MAINTAINED WHILE CROSSING THE CONDUIT(S).
10. STREET CUT PAVEMENT REPAIR MARKERS WILL BE REQUIRED PER DOTI MEMORANDUM DATED AUGUST 12, 2022.



UTILITY PLAN

20 0 20 40

SCALE: 1" = 20'

KEY MAP
NTS

KEYED NOTES

#	
1	ALL BORE PITS (BORE MACHINE SETUP LOCATIONS) AND OPEN TRENCHES SHALL PROVIDE BMPS IN ACCORDANCE WITH GOVERNING MUNICIPALITY STANDARDS AND DETAILS (TYP)
2	DISTURBED AREAS SHALL BE RESTORED PER CCD STD DWGS 12.0: ASPHALT PATCH, 12.1: TRENCH PATCH THROUGH EXISTING GRAVEL OR LANDSCAPE MATERIALS, 12.3: TRENCH (T) PATCH CONCRETE. FULL PANEL CONCRETE IS REQUIRED PER CCD.
3	PROPOSED UTILITY POLE (NO GUY WIRE PER XCEL ENERGY DESIGN)
4	PROPOSED BORE - 2AL ELECTRIC PRIMARY
5	APPROXIMATE LOCATION SHOWN PER UTILITY RECORDS AND/OR 811 MARKS

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ELECTRIC INSTALLATION
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UTILITY PLAN

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