SOLACE APARTMENTS FILING NO. 2

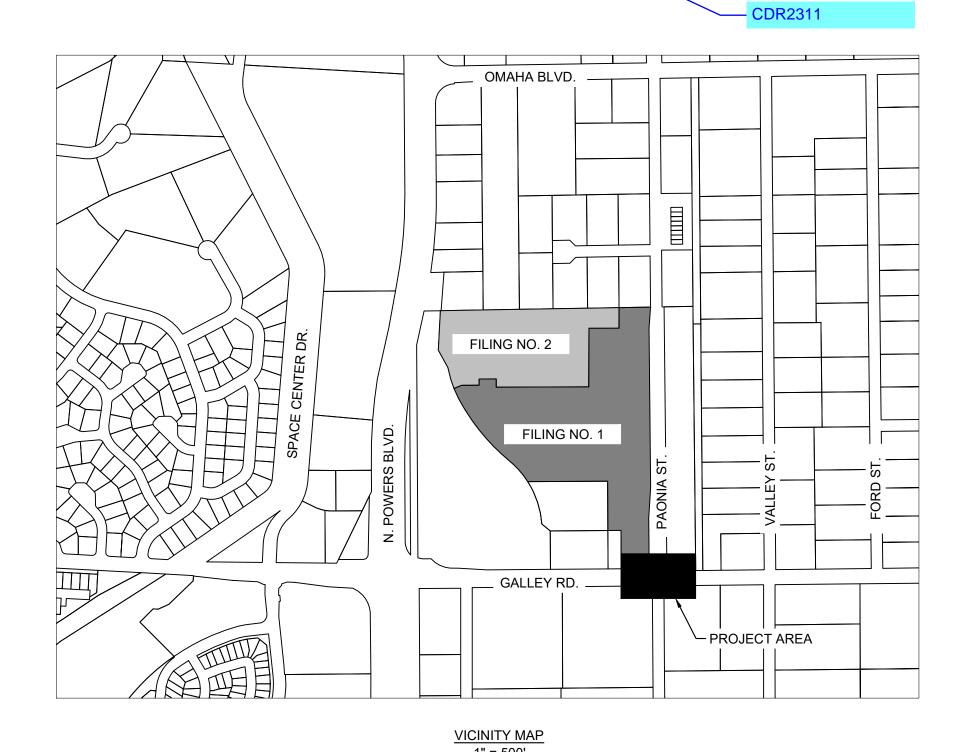
A PORTION OF SECTION 7, TOWNSHIP 14 SOUTH, RANGE 65 SEST OF THE P.M. EL PASO COUNTY, COLORADO

CONSTRUCTION DOCUMENTS

GALLEY RD. & PAONIA ST. - TRAFFIC SIGNAL PLANS

| PCD | NO: | CDR- | -23- | -XX |
|-----|------|------|------|-----|
| | 140. | | 20 | |

| SHEET INDEX | | | | |
|---------------------------------------|-----------|--|--|--|
| SHEET TITLE | SHEET NO. | | | |
| COVER SHEET | 1 | | | |
| CDOT M&S STANDARD DRAWINGS LIST | 2 | | | |
| NOTES | 3 | | | |
| SUMMARY OF QUANTITIES | 4 | | | |
| EXISTING CONDITIONS & DEMOLITION PLAN | 5 | | | |
| SIGNAGE AND STRIPING PLAN | 6 | | | |
| SIGNAL PLAN | 7 | | | |
| CONDUIT PLAN | 8 | | | |
| GRADING DETAIL | 9 | | | |
| DETAILS | 10 | | | |



CONTACTS

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CIVIL ENGINEER:
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EL PASO COUNTY
PCD DEPARTMENT
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COLORADO SPRINGS, CO 80910
PHONE: (719) 520-6300

DEVELOPER'S SIGNATURE BLOCK

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS SPECIFIED IN THESE DETAILED PLANS AND SPECIFICATIONS.

DANE OLMSTEAD DATE

ENGINEER'S SIGNATURE BLOCK

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION. SAID PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR DETAILED ROADWAY, DRAINAGE, GRADING AND EROSION CONTROL PLANS AND SPECIFICATIONS AND SAID PLANS AND SPECIFICATIONS ARE IN CONFORMITY WITH THE APPLICABLE MASTER DRAINAGE PLANS AND MASTER TRANSPORTATION PLANS. SAID PLANS AND SPECIFICATIONS MEET THE PURPOSES FOR WHICH THE PARTICULAR ROADWAY AND DRAINAGE FACILITIES ARE DESIGNED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARATION OF THE DETAILED PLANS AND SPECIFICATIONS

KEVIN KOFFORD, PE - KIMLEY-HORN AND ASSOCIATES, INC. DATE

EL PASO COUNTY REVIEW STATEMENT

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN DIMENSIONS AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.

FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUAL VOLUMES 1 AND 2, AND ENGINEERING CRITERIA MANUAL, AS AMENDED.

IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS, THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTORS DISCRETION.

JOSHUA PALMER, P.E.
COUNTY ENGINEER / ECM ADMINISTRATOR

DATE

GENERAL NOTE:

THE PARTIES RESPONSIBLE FOR THIS PLAN HAVE FAMILIARIZED THEMSELVES WITH ALL CURRENT ACCESSIBILITY CRITERIA AND SPECIFICATIONS AND THE PROPOSED PLAN REFLECTS ALL THE SITE ELEMENTS REQUIRED BY THE APPLICABLE ADA DESIGN STANDARDS AND GUIDELINES AS PUBLISHED BY THE UNITED STATES DEPARTMENT OF JUST. APPROVAL OF THIS PLAN BY EL PASO COUNTY DOES NOT ASSURE COMPLIANCE WITH THE ADA OR ANY REGULATIONS OR GUIDELINES ENACTED OR PROMULGATED UNDER OR WITH RESPECT TO SUCH LAWS.

BENCHMARK

FIMS MONUMENT F81, BEING MONUMENTED BY A 3-1/4" ALUMINUM CAP IN RANGE BOX WITH NO TOP, LOCATED 900 FEET EAST OF THE INTERSECTION OF E. PLATTE AVENUE AND VALLEY STREET, APPROXIMATELY 80 FEET NORTH OF THE CENTERLINE OF E PLATTE AVENUE. SAID MONUMENT HAVING A PUBLISHED ELEVATION OF 6275.86 FEET, NAVD88

Know what's below.
Call before you dig.

OLACE APARTMENTS FILING NO. CONSTRUCTION DOCUMENTS EY RD & PAONIA ST - TRAFFIC SIGNAL PL

FOR REVIEW ONLY
NOT FOR
CONSTRUCTION
Kimley»Horn

PROJECT NO. 096668009

Kimley-Horn and Associates, Inc.

| PLAN | M STAN | _ | PAGE | PLAN | M STANDARD | PAGE | PLAN | S STAN | NDARD | PAGE |
|---|--|------------------|---------------------|-------------------------------------|---|--------------------|-------------------------------------|--|---------------------------------------|---------------------------------------|
| NUMBER 100 1 | TITE | | NUMBER 1 7 | NUMBER Number | IIILE | NUMBER 70 07 | NUMBER D S 612 1 | DELINEATOR INSTALLATIONS (| <u>LE</u> (o cueeto) | NUMBER 171 179 |
| \square M-100-1 \square M-100-2 | STANDARD SYMBOLS (3 SHEET: ACRONYMS AND ABBREVIATION: | , | | M - 606 - 1 | MIDWEST GUARDRAIL SYSTEM TYPE 3 W-BEAM 31 INCHES (19 SHEETS) <i>(REVISED ON MARCH 5, 2020)</i> | | □ S-612-1 | DELINEATOR INSTALLATIONS ((REVISED ON JANUARY 19, 2 | | |
| \square M-203-1 | APPROACH ROADS | , , | | ■ M-606-13 | GUARDRAIL TYPE 7 F-SHAPE BARRIER (4 SHEETS) | | □ S-613-1 | ROADWAY LIGHTING (6 SHEET | | 179–186- |
| □ M-203-2 | DITCH TYPES | | | \square M-606-14 | PRECAST TYPE 7 CONCRETE BARRIER (4 SHEETS) (REVISED ON FEBRUARY 9, 2023) | 102–104 | □ S-613-2 | (REVISED ON SEPTEMBER 30, Alternative roadway light | • | |
| □ M-203-11 | SUPERELEVATION CROWNED AND | | 10-12 | □ M-606-15 | · | 105 115 | _ 3 010 2 | (NEW, ISSUED ON SEPTEMBET | | |
| M−203−12 | DIVIDED HIGHWAYS (3 SHEETS) SUPERELEVATION STREETS (2 S | | 1.3—14 | | (11 SHEETS) (REVISED ON FEBRUARY 17, 2023) | | □ S-614-1 | GROUND SIGN PLACEMENT (2 | | |
| \square M-206-1 | EXCAVATION AND BACKFILL FOR | , | | \square M-607-1 \square M-607-2 | WIRE FENCES AND GATES (3 SHEETS) | | S-614-2 | CLASS SIGNS | | |
| | (2 SHEETS) | | | M = 607 = 2 | CHAIN LINK FENCE (3 SHEETS) | | \square S-614-3 \square S-614-4 | CLASS II SIGNS | | |
| \square M-206-2 \square M-208-1 | EXCAVATION AND BACKFILL FOI TEMPORARY EROSION CONTROL | | , | \square M-607-4 | DEER FENCE, GATES, AND GAME RAMPS (7 SHEETS) | | □ S-614-5 | BREAK-AWAY SIGN SUPPORT | | |
| M = 200 = 1 $M = 210 = 1$ | MAILBOX SUPPORTS (2 SHEETS | · · | | | (REVISED ON JULY 13, 2020) | 4.0.0 | | FOR CLASS III SIGNS (2 SHE | , | 100 107 |
| M−214−1 | NURSERY STOCK DETAILS | | | M-607-10 $M-607-15$ | PICKET SNOW FENCE ROAD CLOSURE GATE (9 SHEETS) | | □ S-614-6 | CONCRETE FOOTINGS AND SIGNS (2 SHE | | 196-197 |
| □ M-216-1 | SOIL RETENTION COVERING (2 S | SHEETS) | 33-34 | \square M-608-1 | CURB RAMPS (10 SHEETS) | | □ S-614-8 | TUBULAR STEEL SIGN SUPPO | | 198-204 |
| \square M-412-1 | CONCRETE PAVEMENT JOINTS ((REVISED ON JANUARY 31, 202 | | .35-39 | □ M-609-1 | CURBS, GUTTERS, AND SIDEWALKS (4 SHEETS) | | - S 614 9 - | <i>(REVISED ON DECEMBER 29,</i> — Pedestrian push button f | • | FTS) .205 206 |
| \square M-412-2 | CONCRETE PAVEMENT CRACK R | • | | M-611-1 | CATTLE GUARD (2 SHEETS) | 152-153 | | (SUPERSEDED ON JANUARY | , | . ' |
| | (REVISED ON SEPTEMBER 6, 20 | • | | M-611-2 | DEER GUARD (2 SHEETS) | | □ S-614-10 | MARKER ASSEMBLY INSTALLA | | |
| \square M-510-1 | STRUCTURAL PLATE PIPE H-20 | | | | RUMBLE STRIPS (3 SHEETS) | | | MILEPOST SIGN DETAIL FOR F STRUCTURE NUMBER INSTALL | | |
| \square M-601-1 | SINGLE CONCRETE BOX CULVER (2 SHEETS) | (CAST-IN-PLACE | 2)41-42 | \square M-614-2 \square M-615-1 | SAND BARREL ARRAYS (2 SHEETS) EMBANKMENT PROTECTOR TYPE 3 | | | FLASHING BEACON AND SIGN | · · · · · · · · · · · · · · · · · · · | |
| □ M-601-2 | DOUBLE CONCRETE BOX CULVE | RT (CAST-IN-PLAC | E) 43-44 | \square M-615-2 | EMBANKMENT PROTECTOR TYPE 5 | | | TYPICAL POLE MOUNT SIGN I | ` | , , , , , , , , , , , , , , , , , , , |
| M−601−3 | (2 SHEETS) TRIPLE CONCRETE BOX CULVER | T (CAST—IN—PLACE | 45-46 | | INVERTED SIPHON | | □ S-614-21 | CONCRETE BARRIER SIGN POS | | 216-217 |
| | (2 SHEETS) | | | M - 620 - 1 | FIELD LABORATORY CLASS 1 | | □ S-614-22 | (2 SHEETS) <i>(REVISED ON SE</i> Typical multi-sign install | • | 218 |
| □ M-601-10 | HEADWALL FOR PIPES | | | \square M-620-2 | FIELD LABORATORY CLASS 2 (2 SHEETS) | | □ S-614-40 | TYPICAL TRAFFIC SIGNAL 30' | | |
| \square M-601-11 \square M-601-12 | TYPE "S" SADDLE HEADWALLS HEADWALLS AND PIPE OUTLET | | | \square M-620-11 | FIELD OFFICE CLASS 1 | | | 65'-75' SINGLE MAST ARMS (REVISED ON JULY 22, 2022) | (5 SHEETS) | |
| M = 601 - 12 | WINGWALLS FOR PIPE OR BOX | | | M - 629 - 1 | SURVEY MONUMENTS (2 SHEETS) | | S-614-40A | ALTERNATIVE TRAFFIC SIGNAL | | 224-227 |
| M−603−1 | METAL PIPE (4 SHEETS) | · | | | | | | 25'-55' SINGLE MAST ARMS (REVISED ON JULY 22, 2022) | (4 SHEETS) | |
| □ M-603-2 | REINFORCED CONCRETE PIPE . | | 56 | | | | □ S-614-41 | TEMPORARY SPAN WIRE SIGN | | 228-240 |
| □ M-603-3 | PRECAST CONCRETE BOX CULV (REVISED ON SEPTEMBER 10, 2 | _ | 57 | | COLORADO DEDADIMENT OF TRANSPORTATION | | S-614-42 | CABINET FOUNDATION DETAIL | (4 SHEETS) | 241-244 |
| M−603−4 | CORRUGATED POLYETHYLENE P | IPE (AASHTO M294 |) AND 58 | | DEPARTMENT OF TRANSPORTATION | | S-614-43 | TRAFFIC LOOP AND MISCELLA (8 SHEETS) | NEOUS SIGNAL DETAILS | 245-252 |
| | CORRUGATED POLYPROPYLENE (REVISED ON MARCH 7, 2022) | PIPE (AASHTO M33 | 0) (2 sheets) | M | &S STANDARDS PLANS LIST | | S-614-44 | PEDESTAL POLE SIGNALS (2 | SHEETS) | 253-254 |
| □ M-603-5 | POLYVINYL CHLORIDE (PVC) PIF | | 59 | | 1 71 0010 | | | PEDESTRIAN PUSH BUTTON P | OST ASSEMBLY DETAILS | |
| □ M-603-6 | STEEL REINFORCED POLYETHYLE | | 60 | | July 31, 2019 | | - C C14 50 | (REVISED ON DECEMBER 3, 2 | • | 255 200 |
| M−603−10 | RIBBED PIPE (AASHTO MP 20) CONCRETE AND METAL END SE | | 61 | | | | | STATIC SIGN MONOTUBE STRU DYNAMIC SIGN MONOTUBE ST | , | |
| | TRAVERSABLE END SECTIONS A | | | R | evised on February 17, 2023 | | | PAVEMENT MARKINGS (9 SHE | ETS) | |
| | (3 SHEETS) | | | | | | | (REVISED ON JULY 22, 2022) |) | |
| \square M-604-10 | INLET, TYPE C | | | ΔΙΙ | DF THE M&S STANDARD PLANS, AS SUPPLEMENTED | <u> </u> | □ S-630-1 | TRAFFIC CONTROLS FOR HIGH (26 SHEETS) <i>(REVISED ON C</i> | | 2 90-313- |
| \square M-604-11 \square M-604-12 | INLET, TYPE D | | | | REVISED, APPLY TO THIS PROJECT WHEN USED | | □ S-630-2 | BARRICADES, DRUMS, CONCR | ETE BARRIERS (TEMP) | 314 |
| \square M-604-13 | CONCRETE INLET TYPE 13 | · | | | ESIGNATED PAY ITEM OR SUBSIDIARY ITEM. | | □ S-630-3 | AND VERTICAL PANELS FLASHING BEACON (PORTABL | F) DETAILS | 315 |
| □ M-604-20 | MANHOLES (3 SHEETS) | | 70-72 | | | | □ S-630-4 | STEEL SIGN SUPPORT (TEMPO | | |
| □ M-604-25 | VANE GRATE INLET (5 SHEETS) (REVISED ON FEBRUARY 3, 202 | | 73-77 | THE M&S STA | NDARD PLANS USED TO DESIGN THIS PROJECT AR | F | | DETAILS (2 SHEETS) | | 740 740 |
| M−605−1 | SUBSURFACE DRAINS | • | 78 | | A MARKED BOX AND WILL BE ATTACHED TO | | □ S-630-5 □ S-630-6 | PORTABLE RUMBLE STRIPS (** EMERGENCY PULL—OFF AREA | , , | |
| | | | | | OTHER M&S STANDARD PLANS ARE STILL ELIGIBLE | | □ S-630-7 | ROLLING ROADBLOCKS FOR T | · · | |
| | | | | IN CONSTRUCT | TION IF APPROVED BY AN APPROPRIATE CDOT ENC | SINEER. | | (3 SHEETS) | | |
| Computer | File Information | | Sheet Revisions | | Joseph Description and C.T. | | | | STANDARD |) DI ANINO |
| Creation Date: 07/31/ | | Date: | Comments | | Norado Department of Transportation 2829 West Howard Place | | STANI | JAKD | | |
| Designer Initials: JBK | | (R-X) | | 00000 | CDOT HQ, 3rd Floor | | PLANS | TOILE | STANDARDS | |
| Last Modification Date: Detailer Initials: LTA | , , | R=X | | | Denver, CO 80204 Phone: 303-757-9021 FAX: 303-757-98 | 868 | | | Standard She | eet No. 1 of 1 |
| | | R=X | | Co | nstruction Engineering Services JBK | Issued by | the Project Developr | nent Branch: July 31, 2019 | Project Shee | et Number: |

DESIGNED BY: KRK DRAWN BY: RES CHECKED BY: EJG DATE: 04/17/2023

SOLACE APARTMENTS FILING NO. 2
CONSTRUCTION DOCUMENTS
GALLEY RD & PAONIA ST - TRAFFIC SIGNAL PLANS
CDOT M&S STANDARD DRAWINGS LIST

FOR REVIEW ONLY
NOT FOR
CONSTRUCTION
Kimley»Horn
Kimley-Horn and Associates, Inc.

PROJECT NO. 096668009 SHEET

CDOT STANDARD NOTES

- ALL MATERIALS, EQUIPMENT, INSTALLATION AND CONSTRUCTION WITHIN THE STATE HIGHWAY ROW SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FOLLOWING STANDARD REFERENCES AS APPLICABLE:
 - A. CDOT MATERIALS MANUAL
 - B. CDOT CONSTRUCTION MANUAL
 - CDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION
 - D. CDOT STANDARD SPECIAL PROVISIONS, AS APPLICABLE TO PROJECT
 - CDOT STANDARD PLANS (M&S STANDARDS) F. FHWA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR STREETS AND HIGHWAYS AND THE
 - COLORADO SUPPLEMENT THERETO G. AASHTO ROADSIDE DESIGN GUIDE
 - PLEASE NOTE THAT SOME OF THE REFERENCE MATERIALS LISTED ABOVE MAY BE PURCHASED FROM: COLORADO DEPARTMENT OF TRANSPORTATION
 - BID PLANS ROOM
 - 4201 EAST ARKANSAS AVENUE
 - DENVER, CO 80222-3400 (303) 757-9313
- 2. ACCESS CONSTRUCTION WITHIN HIGHWAY ROW AND ALL HIGHWAY IMPROVEMENTS SHALL COMPLY WITH THE ACCESS PERMIT AND NOTICE TO PROCEED (NTP). A COPY OF THE PERMIT AND NTP SHALL BE AVAILABLE ON THE CONSTRUCTION SITE AT ALL TIMES.
- 3. PERMITTEE SHALL DESIGNATE A CERTIFIED TRAFFIC CONTROL SUPERVISOR (TCS) TO MANAGE CONSTRUCTION SIGNAGE AND SAFETY OF OPERATIONS DURING ACTIVITIES WITHIN CDOT RIGHT OF WAY. THE TCS SHALL BE AVAILABLE WHENEVER WORK IS IN PROGRESS.
- 4. ACCESS CONSTRUCTION SHALL NOT NEGATIVELY IMPACT PRIVATE PROPERTY OR THE STATE HIGHWAY ROW.
- 5. NO VEHICLES ARE ALLOWED TO PARK IN CDOT RIGHT OF WAY.
- 6. CONTRACTOR IS RESPONSIBLE FOR ALL EROSION CONTROL ELEMENTS
- 7. THE PERMITTEE SHALL COMPLETE ALL WORK IN THE CDOT RIGHT OF WAY WITHIN 45 CALENDAR DAYS AND WITHIN A SINGLE CONSTRUCTION SEASON.
- 8. IT IS THE RESPONSIBILITY OF THE PERMITTEE TO DETERMINE WHICH ENVIRONMENTAL CLEARANCES AND/OR REGULATIONS APPLY TO THE PROJECT, AND TO OBTAIN ANY CLEARANCES THAT ARE REQUIRED DIRECTLY FROM THE APPROPRIATE AGENCY PRIOR TO COMMENCING WORK. PLEASE REFER TO OR REQUEST A COPY OF THE "CDOT ENVIRONMENTAL CLEARANCE INFORMATION SUMMARY" (ECIS) FOR DETAILS. THE ECIS MAY BE OBTAINED FROM CDOT PERMITTING OFFICES OR MAY BE ACCESSED VIA THE CDOT PLANNING/CONSTRUCTION-ENVIRONMENTAL GUIDANCE WEBPAGE AT:

http://www.dot.state.co.us/AccessPermits/PDF/EnvironmentalClearancesInformationSummary.pdf

FAILURE TO COMPLY WITH REGULATORY REQUIREMENTS MAY RESULT IN SUSPENSION OR REVOCATION OF YOUR CDOT PERMIT, OR ENFORCEMENT ACTIONS BY OTHER AGENCIES.

ALL DISCHARGES ARE SUBJECT TO THE PROVISIONS OF THE COLORADO WATER QUALITY ACT AND THE COLORADO DISCHARGE PERMIT REGULATIONS. PROHIBITED DISCHARGES INCLUDE SUBSTANCES SUCH AS: WASH WATER, PAINT, AUTOMOTIVE FLUIDS, SOLVENTS, OILS OR SOAPS.

UNLESS OTHERWISE IDENTIFIED BY CDOT OR THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENTAL (CDPHE) WATER QUALITY CONTROL DIVISION (WQCD) AS SIGNIFICANT SOURCES OF POLLUTANTS TO THE WATERS OF THE STATE, THE FOLLOWING DISCHARGES TO STORM WATER SYSTEMS ARE ALLOWED WITHOUT A COLORADO DISCHARGE PERMIT SYSTEM PERMIT: LANDSCAPE IRRIGATION, DIVERTED STREAM FLOWS, UNCONTAMINATED GROUND WATER INFILTRATION TO SEPARATE STORM SEWERS, DISCHARGES FROM POTABLE WATER SOURCES, FOUNDATION DRAINS, AIR CONDITION CONDENSATION, IRRIGATION WATER, SPRINGS, FOOTING DRAINS, WATER LINE FLUSHING, FLOWS FROM RIPARIAN HABITATS AND WETLANDS, AND FLOW FROM FIRE FIGHTING ACTIVITIES.

ANY OTHER DISCHARGES, INCLUDING STORM WATER DISCHARGES FROM INDUSTRIAL FACILITY OR CONSTRUCTION SITES, MAY REQUIRE COLORADO DISCHARGE PERMIT SYSTEM PERMITS FROM CDPHE BEFORE WORK BEGINS. FOR ADDITIONAL INFORMATION AND FORMS, GO TO THE CDPHE WEBSITE AT:

http://www.cdphe.state.co.us/wg/PermitsUnit/index.html

- CONTRACTOR SHALL MAINTAIN A COPY OF THE COLORADO DEPARTMENT OF TRANSPORTATION APPROVED PLANS ONSITE AT ALL TIMES.
- 10. CONTRACTOR SHALL MAINTAIN A COPY OF THE CURRENT COLORADO DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS ONSITE AT ALL TIMES.
- 11. CONTRACTOR SHALL OBTAIN AT CONTRACTOR'S COST ALL CONSTRUCTION PERMITS REQUIRED TO COMPLETE THIS WORK.

clude the County Standard Signage & Striping Notes.

clude the County Standard Construction Notes.

SIGNAL NOTES:

- 1. TRAFFIC SIGNAL MATERIALS AND INSTALLATION SHALL COMPLY WITH THE SPECIFICATIONS FOR THIS PROJECT, THE PROJECT SPECIAL PROVISIONS, "STATE OF COLORADO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", "COLORADO STANDARD PLANS", THE CURRENT EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", "THE NATIONAL ELECTRIC CODE", AND ALL LOCAL ORDINANCES AND REGULATIONS.
- 2. THE COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD PLAN SHEETS S-614-40 FOR MAST ARMS GREATER THAN 55 FEET "TYPICAL TRAFFIC SIGNAL INSTALLATION DETAILS" ARE TO BE USED TO CONSTRUCT THIS PROJECT. FOR MAST ARMS 55 FEET/OR LESS SHALL USE COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD PLAN SHEETS S-614-40A.
- 3. THE CONTACT FOR THIS PROJECT IS CDOT REGION 2 AND EL PASO COUNTY. ALL SUBMITTALS SHALL BE MADE TO THE CONTACT. OBTAIN ALL REQUIRED PERMITS FOR THE WORK. PREPARE AND SUBMIT A TRAFFIC CONTROL PLAN FOR THE WORK. CONTACT CDOT 96 HOURS IN ADVANCE OF BEGINNING CONSTRUCTION.
- 4. LOCATIONS OF ALL CONDUM, DETECTORS, POLES, CONTROLLER CABINETS, PULL BOXES, AND FOUNDATIONS SHALL BE FIELD APPROVED BY CDOT. THE CONTRACTOR SHALL VERIFY POLE FOUNDATION AND ANCHOR BOLT ELEVATIONS WITH RESPECT TO TOP OF EXISTING OR FUTURE CURB AND SLOPE OF SIDEWALK PRIOR TO INSTALLATION OF ANY EQUIPMENT.
- 5. ALL CONDUITS SHALL BE PVC SCHEDULE 80. ALL ELBOWS SHALL ALSO BE PVC SCHEDULE 80 AS WELL. ALL FITTINGS SHOULD BE UL LISTED FOR THE USE.
- 6. ALL PAVING, SIDEWALK, LANDSCAPING AND LAWN IRRIGATION SYSTEMS DISTURBED BY THE CONTRACTOR SHALL BE REPLACED IN KIND, EQUAL TO OR EXCEEDING ORIGINAL CONDITIONS OR AS DIRECTED BY THE OWNER.
- TRAFFIC SIGNALS MOUNTED ON MAST ARMS SHALL BE FURNISHED WITH ASTRO-TYPE MOUNTING BRACKETS AND SHALL HAVE LOUVERED BLACK ALUMINUM BACKPLATES WITH REFLECTIVE BORDER.
- 8. OPTICAL UNITS OF ALL VEHICLE SIGNAL FACES AND ALL PEDESTRIAN SIGNAL FACES SHALL BE LED.
- 9. CONTRACTOR TO FIELD VERIFY THE TRAFFIC SIGNAL POWER SOURCE AND COORDINATE HOOK-UP WITH COLORADO SPRINGS UTILITIES AND REQUEST/OBTAIN SERVICE ADDRESS AND PERMIT.
- 10. STREET NAME SIGNS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AND MAY BE INSPECTED BY CDOT BEFORE AND AFTER CONSTRUCTION.
- 11. ALL CONDUCTOR RUNS FOR EACH SIGNAL PHASE TO EACH TERMINAL BLOCK ON A POLE SHALL BE DIRECT FROM THE CONTROLLER HOME RUN PULL BOX. CONDUCTORS SHALL NOT BE SPLICED AT INTERMEDIATE PULL BOXES.
- 12. CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.
- 13. MASTARM LENGTHS SHALL BE FIELD VERIFIED WITH CDOT AND CONTRACTOR PRIOR TO ORDERING.
- 14. ALL TRAFFIC SIGNAL FIELD WORK REQUIRES A LEVEL 1 IMSA TECHNICIAN. ALL CABINET, DETECTION OR PROGRAMMABLE TRAFFIC DEVICES REQUIRE IMSA LEVEL 2. A JOURNEYMAN ELECTRICIAN MUST BE ON SITE FOR ALL ELECTRICAL AND CONDUIT WORK. A COPY OF ALL LICENSES NEED TO BE PROVIDED TO THE PROJECT ENGINEER PRIOR TO THE PERSONNEL DOING ANY WORK ON THE PROJECT.
- 15. ALL CONDUITS WITHOUT ELECTRICAL WIRING NEED TO HAVE A MULE TAPE AND A 12AWG TRACER WIRE INSTALLED. ALL CONDUITS SHOULD HAVE A MULE TAPE INSTALLED.
- 16. SECONDARY SIGNAL HEADS MOUNTED ON THE SIDE OF POLE SIGNAL HEADS SHALL BE BANDED WITH ¾—INCH STAINLESS STEEL BANDING, NOT DRILLED AND TAPPED.
- 17. CONTRACTOR SHALL WORK WITH COOT TO DEVELOP SIGNAL TIMING PLAN, DETERMINE PROGRAMING AND TESTING OF THE CONTROLLER PER CDOT STANDARDS AND SPECIFICATIONS.

GENERAL NOTES:

- 1. THE CONTRACT DOCUMENTS SHALL NOT CREATE, NOR SHALL BE CONSTRUED TO CREATE, ANY CONTRACTUAL RELATIONSHIP BETWEEN THE ENGINEER AND THE CONTRACTOR AND/OR ANY SUBCONTRACTOR.
- 2. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OR FOR SAFETY PRECAUTIONS OR PROGRAMS UTILIZED IN CONNECTION WITH THE WORK, AND WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL FURNISH ALL NECESSARY MATERIALS, EQUIPMENT, MACHINERY, TOOLS, MEANS OF TRANSPORTATION AND LABOR NECESSARY TO COMPLETE THE WORK IN FULL AND COMPLETE IN ACCORDANCE WITH THE SHOWN, DESCRIBED AND REASONABLY INTENDED REQUIREMENTS OF THE CONTRACT DOCUMENTS AND JURISDICTIONAL AGENCY REQUIREMENTS.
- 4. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN, BUT SHALL BE APPROVED BY RESPECTIVE AGENCY.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL REQUIRED CONSTRUCTION PERMITS, CERTIFICATIONS, BONDS, ETC. REQUIRED FOR CONSTRUCTION PRIOR TO COMMENCING CONSTRUCTION.
- 6. THE ENGINEER AND APPLICABLE AGENCY MUST APPROVE, PRIOR TO CONSTRUCTION, ANY ALTERATION OR VARIANCE FROM THESE PLANS, ANY VARIATIONS FROM THESE PLANS SHALL BE PROPOSED ON CONSTRUCTION FIELD PRINTS AND TRANSMITTED TO THE ENGINEER.
- 7. ANY INSPECTION BY THE CDOT, COUNTY, OR THE ENGINEER SHALL NOT, IN ANY WAY, RELIEVE THE CONTRACTOR FROM ANY OBLIGATION TO PERFORM THE WORK IN STRICT COMPLIANCE WITH THE APPLICABLE CODES AND AGENCY
- 8. CONTRACTOR TO LOCATE ALL EXISTING PROPERTY MONUMENTS PRIOR TO CONSTRUCTION, ANY MONUMENTS DISTURBED DURING THE CONSTRUCTION OF THIS PROJECT SHALL BE REPLACED BY REGISTERED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.
- 9. CONTRACTOR SHALL VERIFY BENCHMARKS AND DATUMS PRIOR TO COMMENCING CONSTRUCTION OR STAKING OF IMPROVEMENTS. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER PRIOR TO COMMENCING WITH CONSTRUCTION.
- 10. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND NOTIFICATION TO THE ENGINEER. NO CONSIDERATION WILL BE GIVEN TO CHANGE ORDERS FOR WHICH THE OWNER AND ENGINEER WERE NOT CONTACTED PRIOR TO CONSTRUCTION OF THE EFFECTED ITEM. CONTRACTOR SHALL LIST ALL PLAN CHANGES AND NOTIFY CDOT OF ANY PLAN DEVIATIONS.
- 11. THE SCALE OF THESE DRAWINGS MAY HAVE BEEN DISTORTED DURING THE REPRODUCTION PROCESS. CONTRACTOR SHALL UTILIZE PROVIDED DIMENSIONS FOR CONSTRUCTION. CONTRACTOR SHALL NOT SCALE FROM ANY DRAWING. SHOULD ADDITIONAL DIMENSIONS BE NEEDED, THE CONTRACTOR SHALL CONTACT THE ENGINEER.
- 12. THE CONTRACTOR TO ARRANGE FOR ALL COPIES OF COMPACTION, CONCRETE AND OTHER REQUIRED TEST RESULTS TO BE SENT TO THE OWNER AND DESIGN ENGINEER OF RECORD DIRECTLY FROM THE TESTING AGENCY.
- 13. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES, JURISDICTIONAL AGENCIES AND/OR UTILITY SERVICE COMPANIES IS REQUIRED OF THE CONTRACTOR AND SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES.
- 14. PREPARATION OF TRAFFIC CONTROL PLAN(S) IS THE CONTRACTOR'S RESPONSIBILITY.
- 15. CONTRACTOR TO PROVIDE COPIES OF THE AS—BUILT DOCUMENTATION DELIVERED TO CDOT (HEATH EVANS, 719-248-5715) TRAFFIC DEPARTMENT AND TO REMAIN INSIDE THE CABINET AFTER CONSTRUCTION

nclude the followir County Traffic Signa

TRAFFIC SIGNAL NOTES:

THE CONTRACTOR HALL PROVIDE, FOR REVIEW, BY THE ENGINEER, A COMPLETE TRAFFIC SIGNAL MATERIAL SUBMITTAL PACKAGE THAT CONTAINS, ALL OF THE PROPOSED TRAFFIC SIGNAL EQUIPMENT, INCLUDING MATERIAL SPECIFICATIONS AND DESCRIPTIONS THAT WILL BE NECESSARY TO COMPLETE THE TRAFFIC SIGNAL WORK. THE CONTRACTOR SHALL ALLOW FOR A MINIMUM THREE WEEK SUBMITTAL REVIEW PERIOD AND SHALL NOT ORDER ANY SIGNAL EQUIPMENT UNTIL AFTER A REVIEW OF ALL SUBMITTALS HAVE BEEN COMPLETED BY THE ENGINEER AND VERIFIED BY THE CONTRACTOR.

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he City of Colorado

- FUNCTIONAL AND OPERATIONAL RESPONSIBILITY FOR ALL NEWLY INSTALLED AND EXISTING TRAFFIC SIGNAL EQUIPMENT WILL BECOME THE RESPONSIBILITY OF THE CONTRACTOR UNTIL FINAL ACCEPTANCE OF THE PROJECT. THE CONTRACTOR SHALL CONSIDER THIS WORK INCIDENTAL TO THE OVERALL WORK BEING PERFORMED AND SHALL BE INCLUDED AS PART OF THE PROJECT.
- SEE COLORADO DEPARTMENT OF TRANSPORTATION SIGNAL DETAILS FOR CONSTRUCTION / INSTALLATION DETAILS NOT SHOWN ON THESE PLANS
- ALL SIGNAL EQUIPMENT REMOVED BY THE CONTRACTOR SHALL BE SALVAGED AND BECOME THE PROPERTY OF EL PASO COUNTY. THE SALVAGED EQUIPMENT SHALL BE DELIVERED AS DIRECTED BY THE ENGINEER. DELIVERY OF THE SIGNAL EQUIPMENT WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE INCLUDED IN THE WORK FOR REMOVAL OF TRAFFIC SIGNAL EQUIPMENT
- OVERHEAD STREET NAME SIGN DESIGN AND LAYOUT INFORMATION SHALL BE PER THE STREET MANE SIGN DETAIL CONTAINED IN THE PROJECT PLAN
- TRAFFIC SIGNS MOUNTED ON SIGNAL POLES, MAST ARMS, AND PEDESTALS SHALL BE MOUNTED USING BANDING, ALUMINUM CHANNELS, AND BACKING ZEES PER APPLICABLE CDOT STANDARD PLANS, OR SIMILAR RIGID SIGN BRACING MOUNTING ASSEMBLY.
- ONCE THE PROFESSIONAL ENGINEERING CONSULTANT HAS COMPLETED ALL TRAFFIC SIGNAL CONTROLLER TIMING DEVELOPMENT AND CONTROLLER PROGRAMMING, THE CONTRACTOR WILL COORDINATE THE DELIVERY DATE OF THE PROGRAMMED TRAFFIC SIGNAL CONTROLLER FOR REVIEW OF EPC DEPARTMENT OF PUBLIC WORKS, HIGHWA' DIVISION SIGNAL SHOP AND ALLOW FOR A MINIMUM TWO WEEK REVIEW PERIOD, AFTER WHICH TIME THE CONTRACTOR MAY MAKE ARRANGEMENTS FOR PICKING UP THE SIGNAL CONTROLLER
- CONTROLLER CABINET SHALL BE FURNISHED WITH A "BEST" DOOR LOCK KIT LOCK AND CODE IS "BEST": 5L6R LEFT
- CONDUIT IS TO BE REPLACED IN THE EVENT THAT EXISTING CONDUIT IS DAMAGED AND AS DIRECTED BY THE
- 10. ELECTRICAL SERVICE DISCONNECT BOXES SHALL BE LOCKABLE AND WEATHER PROOF WITH NEMA TYPE CIRCUIT BREAKER. ENCLOSURES SHALL BE PROVIDED AT THE CONNECTION POINT OF EACH POWER SOURCE OR POINT OF SERVICE AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL FURNISH AND INSTALL ALL WIRING REQUIRED TO COMPLETE THE INSTALLATION AND ESTABLISH THE FUNCTIONALITY OF ALL TRAFFIC SIGNAL EQUIPMENT.
- 12. ALL INCIDENTAL ITEMS NOT SHOWN IN THE SUMMARY OF APPROXIMATE QUANTITIES OR TABULATION OF SIGNAL EQUIPMENT SHALL BE CONSIDERED TO BE INCLUDED AS PART OF THE TRAFFIC SIGNAL INSTALLATION AND WILL NOT BE MEASURED AND PAID FOR SEPARATELY. ALL QUANTITIES ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK NECESSARY TO COMPLETE THE CONSTRUCTION SHOWN ON THESE PLANS.
- . THE SIGNAL SHALL NOT BE TURNED ON OR STARTED UNTIL DIRECTED BY THE ENGINEER. PRIOR TO SIGNAL ACTIVATION, THE ENGINEER SHALL CONFIRM THAT THE APPROPRIATE PAVEMENT MARKINGS AND SIGNING ARE IN PLACE AND THAT ALL WORK NECESSARY FOR PROPER SIGNAL OPERATION HAS BEEN COMPLETED.
- 14. THE SIGNAL CONTROLLER SHALL BE A MACCAIN 2070 FLEX ATC CONTROLLER AND THE CONFLICT MONITOR SHALL BE MODEL 2010 ECLIP W/ ETHERNET PORT (EDI). THE CONTROLLER CABINET SHALL BE A CDOT SPECIFICATION MODEL 332D WITH BATTERY BACKUP AND AUX RACK AND SHALL CONTAIN ANTI-GRAFFITI SILVER FINISH COATING. THE CABINET SHALL BE MOUNTED ON A CAST-IN-PLACE CONCRETE FOUNDATION PER APPLICABLE CDOT'S STANDARDS STANDARD PLAN AND THE CABINET SHALL BE POSITIONED SUCH THAT, WITH THE FRONT DOOR OPEN, BOTH THE CONTROLLER DISPLAY AND THE SIGNAL INSTALLATION BE VISIBLE.
- 15. LUMINAIRES SHALL CONSIST OF AN ASSEMBLY THAT UTILIZES LEDS AS THE LIGHT SOURCE. IN ADDITION, A COMPLETE LUMINAIRE SHALL CONSIST OF A HOUSING, LED ARRAY, AND ELECTRONIC DRIVER (POWER SUPPLY), ALL LUMINAIRES SHALL BE WIRED 120 VOLTS AC WITH MULTI-TAP HEADS. THE LED FIXTURE MUST HAVE A COLOR TEMPERATURE OF 4100K (+/- 500K), MUST BE DESIGNED TO OPERATE AT A TEMPERATURE RANGE OF -40°F TO 105°F (-40°C TO 40°C), AND PROVIDE A MINIMUM OF 70,000 HOURS OF OPERATION. LUMINAIRES SHALL BE E-LIGHT-STAR LED STREET LIGHT, OF APPROVED EQUAL. THE CONTRACTOR SHALL PROVIDE A RECOMMENDATION FOR TYPE OF THE STREET LIGHT BASED ON THE CONSTRUCTION PLANS AND MANUFACTURER'S SPECIFICATIONS. TO BE APPROVED BY THE ENGINEER. THE FIXTURE MUST BE CAST ALUMINUM, PROVIDED WITH FUSING, SURGE SUPPRESSION AND MUST BE ULLISTED FOR WET LOCATIONS. THE FIXTURE MUST HAVE AN INTERNAL, WEATHER-TIGHT LED DRIVE. NO ACTIVE COOLING FEATURES (FANS, ETC.) WILL BE ALLOWED. THE FINISHED SHALL MATCH THE EXTENSION ARM SHAFTS. THE LUMINAIRES WILL BE INSTALLED ON 15 FOOT EXTENSION ARM SHAFTS AT NOMINAL HEIGHT OF 40 FEET AND SHALL BE WELDED TO THE SIGNAL POLE PER CDOT TYPICAL TRAFFIC SIGNAL INSTALLATION DETAILS STANDARD PLAN S-614-40. LUMINAIRE ARM SHAFT SHALL BE IN ACCORDANCE WITH THE PROJECT PLANS.
- . THE INTERSECTION DETECTION SYSTEM (MICROWAVE RADAR) CONTRACT ITEM INCLUDES DEVICE INSTALLATION (I.E., DETECTOR UNIT, HARDWARE, WIRING, PROCESSOR MODULE, ETC.), AND VERIFICATION OF SUCCESSFUL IN-FIELD DETECTION ZONE OPERATION BASED ON SEVERAL VEHICLE ACTUATIONS IN ALL DETECTION ZONES.

TRAFFIC SIGNAL NOTES (CON'T):

- 17. THE CONTRACTOR SHALL COORDINATE THE SCHEDULES OF THE CONTRACTED PROFESSIONAL ENGINEERING CONSULTANT AND THE EPC DEPARTMENT OF PUBLIC WORKS. HIGHWAY DIVISION TRAFFIC SIGNAL STAFF FOR SCHEDULING THE ON-SITE FIELD IMPLEMENTATION OF ALL TRAFFIC SIGNAL TIMING AND OPERATIONAL PROGRAMMING, VEHICLE DETECTION ZONE PLACEMENT, AND DETECTION EQUIPMENT POSITIONING. THIS WORK SHALL BE SCHEDULED NEAR THE END OF THE PROJECT. PRIOR TO PROJECT ACCEPTANCE, AND ONLY AFTER ALL FINAL PAVEMENT MARKINGS, SIGNING, AND TRAFFIC SIGNAL WORK HAS BEEN COMPLETED
- 18. THE MICROWAVE RADAR DETECTION SYSTEM SHALL UTILIZE MS SEDCO INTERSECTOR TC-CK1-SBE WITH INTERFACE

- 19. PEDESTRIAN SIGNAL HEAD INSTALLATION SHALL INCLUDE ALUMINUM AND POWDER COATED GLOSS BLACK SIGNAL HEAD WITH APPROVED LED COUNTDOWN DISPLAY, ALUMINUM OPEN VISOR WITH THE OUTSIDE POWDER COATED GLOSS BLACK, PUSHBUTTON, AND INSTRUCTIONAL R10-3E COUNTDOWN PEDESTRIAN ACTUATION SIGN. PUSHBUTTONS SHALL BE POLERA INAVIGATOR S 2-WIRE PUSH BUTTONS, SPECIFIED AS INS2 5 U N 1-B-BD-ES, OR APPROVED EQUIVALENT. CUSTOM MESSAGING SHALL NOT INTERFERE WITH TRADITIONAL NON-VISUAL FORMATS SPECIFIED IN 4E OF THE MUTCD AND SHALL ONLY PROVIDE ADDITIONAL INFORMATION AS DIRECTED BY THE
- 20. ALL TRAFFIC SIGNAL POLES, MAST ARMS, PEDESTALS, AND LUMINAIRE ARMS SHALL HAVE A GLOSS BLACK COAT FINISH OVER HOT DIP GALVANIZED BASE COAT, INSTALLED IN ACCORDANCE WITH THE PAINT MANUFACTURER'S INSTRUCTIONS.
- 21. ALL SIGNAL POLE AND CONTROLLER LOCATIONS SHOWN ARE APPROXIMATE ONLY. MAST ARMS SHALL BE OF SUFFICIENT LENGTH AND DESIGN TO ALLOW PROPER PLACEMENT OF SIGNAL HEADS AND OVERHEAD SIGNING PER THE PLANS, ACTUAL LOCATIONS SHALL BE STAKED IN THE FIELD AND FIELD VERIFIED BY THE ENGINEER PRIOR TO DRILLING, EXCAVATION, AND ORDERING THE SIGNAL EQUIPMENT AND MAST ARMS. THE LOCATION OF EACH SIGNAL POLE FOUNDATION SHALL BE POTHOLED PRIOR TO DRILLING TO CONFIRM WHETHER OR NOT ANY UTILITY CONFLICTS
- 22. LATERAL OFFSETS FROM THE NEAR EDGE OF TRAFFIC SIGNAL POLES, PEDESTALS, AND CABINETS TO THE FACE OF CURB OR EDGE OF PAVED SHOULDER SHOULD BE AT LEAST SIX FEET, HOWEVER, A MINIMUM LATERAL OFFSET OF AT LEAST FOUR FEET MAY BE PROVIDED FOR CURB OFFSETS. IF NO PAVED SHOULDER EXISTS, A MINIMUM LATERAL OFFSET OF AT LEAST EIGHT FEET SHOULD BE PROVIDED FROM THE EDGE OF PAVEMENT FOR AN AUXILIARY LANI AND A MINIMUM LATERAL OFFSET OF AT LEAST TWELVE FEET SHOULD BE PROVIDED FROM THE EDGE OF PAVEMENT
- 23. SHOULD THE CONTRACTOR ENCOUNTER WATER IN THE CAISSON, ANY DE-WATERING METHODS AND NECESSARY PERMITS SHALL BE INCLUDED IN THE COST OF THE CAISSON AND WILL BE CONSIDERED INCIDENTAL TO THE WORK.
- 24. ALL TRAFFIC SIGNAL COMPONENT PULL BOXES SHALL BE PRE CAST HIGH DENSITY POLYMER CONCRETE (HDPC) MATERIAL WITH THE FOLLOWING SIZES: 36 INCH X 48 INCH X 18 INCH FOR THE PULL BOX ADJACENT TO THE CONTROLLER CABINET FOUNDATION AND 24 INCH X 36 INCH X 18 INCH FOR THE REMAINING PULL BOXES.
- 25. TRAFFIC PULL BOX LOCATIONS SHOWN IN THE PROJECT PLANS ARE APPROXIMATE. ACTUAL LOCATIONS SHALL BE VERIFIED IN THE FIELD BY THE ENGINEER. PULL BOXES SHALL BE FLUSH WITH THE FINISHED GROUND SURFACE AND SHALL NOT BE PLACED IN AREAS THAT ARE SUSCEPTIBLE TO WATER RUNOFF OR STANDING WATER. CONDUIT RUNS BETWEEN PULL BOXES SHALL NOT EXCEED APPROXIMATELY 200 FEET AND PULL BOXES SHALL NOT BE LOCATED IN HANDICAP RAMPS, PEDESTRIAN LANDING AREAS, SIDEWALKS, PRIMARY SIDEWALK PATHS, OR ROADWAY PAVEMENT
- 26. THE CONDUIT NUMBER AND SIZES FOR TYPICAL CONDUIT RUNS INCLUDE THE FOLLOWING FOR A PREEMINENT MAST ARM SIGNAL INSTALLATION A. BETWEEN THE SIGNAL POLE FOUNDATION AND ADJACENT SIGNAL POLE PULL BOX: TWO (2) 2 INCH AND ONE (1)
- B. BETWEEN SIGNAL PULL BOXES: TWO (2) 2 INCH AND THREE (3) 3 INCH.
- C. BETWEEN THE CONTROLLER CABINET FOUNDATION AND ADJACENT PULL BOX: THREE (3) 2 INCH AND FOUR (4) 3

D. BETWEEN THE SECONDARY SERVICE PEDESTAL METER FOUNDATION AND THE CONTROLLER CABINET

FOUNDATION ONE (1) 2 INCH FOR THE ELECTRICAL SERVICE FEED 27. ALL CONDUIT AND FITTINGS SHALL BE SCHEDULE 80 PVC AND ALL CONDUIT SHALL HAVE A PULL ROPE LEFT IN THEM

THIS WORK SHALL AVOID DISTURBING OR DAMAGING EXISTING FACILITIES AND THE CONTRACTOR SHALL BE

- WHEN CONSTRUCTION IS COMPLETED. ALL CONDUIT ENTERING THE CABINET FOUNDATION AND PULL BOXES SHALL HAVE BELL END STYLE COUPLINGS ON ALL CONDUIT ENDS. 28. ALL CONDUIT THAT IS DIRECTIONALLY BORED SHALL BE A MINIMUM OF THREE FEET BELOW THE EXISTING PAVEMENT.
- RESPONSIBLE FOR THE PROMPT RECONSTRUCTION, ALTERATION, REPAIR OR MAINTENANCE OF HIGHWAY PROPERTY, AS NECESSARY, TO REPAIR DAMAGE CAUSED BY THE ACCOMMODATION OF THE UTILITY, AND TO RESTORE THE HIGHWAY TO PRE-EXISTING OR BETTER CONDITIONS 29. ALL SIGNAL CABLE SHALL BE CONTINUOUS FROM CONNECTIONS MADE IN THE HANDHOLE COMPARTMENT OF THE SIGNAL POLE BASE TO THE TERMINAL COMPARTMENT OF THE CONTROLLER CABINET AND SHALL CONTAIN NO

SPLICES, EACH SIGNAL HEAD SHALL CONTAIN SEPARATE AND CONTINUOUS SIGNAL CABLE FROM THE SIGNAL HEAD

30. A SEPARATE AND CONTINUOUS 21 CONDUCTOR CABLE SHALL RUN FROM THE CONTROLLER CABINET TO THE HANDHOLE AT EACH SIGNAL POLE AND SHALL CONTAIN NO SPLICES.

TO THE ABOVE GROUND HANDHOLE AT THE BASE OF THE SIGNAL POLE AND SHALL CONTAIN NO SPLICES.

TRAFFIC SIGNAL NOTES (CON'T):

- 31. ALL SIGNS MOUNTED ON SIGNAL POLES, MAST ARMS, AND PEDESTALS SHALL BE MOUNTED USING BANDING ALUMINUM CHANNELS, AND BACKING ZEES PER CDOT TYPICAL POLE MOUNT SIGN INSTALLATIONS STANDARD PLAN S-614-20, OR SIMILAR RIGID SIGN BRACING MOUNTING ASSEMBLY, AS DIRECTED BY THE ENGINEER. MAST ARM SIGNS THAT REQUIRE Z-BRACKETS SHALL BE MOUNTED ON ASTRO-STYLE BRACKETS AND RISERS. THE COST OF ALL HARDWARE FITTINGS, TOOLS, AND EQUIPMENT NECESSARY FOR A COMPLETE INSTALLATION OF MAST ARM SIGNS WILL NOT BE MEASURED AND PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE WORK.
- 32. ALL CONDUCTORS AND CABINET WIRING SHALL BE COLOR CODED AND PERMANENTLY TAGGED PER ENGINEER DIRECTION AND IN ACCORDANCE WITH THE SIGNAL PHASE NUMBERING AND DETECTION ZONE PHASE NUMBERING INFORMATION CONTAINED IN THE PROJECT PLANS.
- 33. ALL VEHICLE SIGNAL HEADS SHALL HAVE APPROVED 12 INCH LED INDICATIONS AND SHALL BE ALUMINUM WITH POWDER COATED GLOSS BLACK FINISH AND SHALL CONTAIN 12 INCH ALUMINUM TUNNEL VISORS WITH THE OUTSIDE POWDER COATED GLOSS BLACK. ALL VEHICLE SIGNAL HEADS SHALL HAVE ALUMINUM LOUVERED BACK PLATES WITH POWDER COATED GLOSS BLACK FINISH AND YELLOW RETRO REFLECTIVE BORDER, MAST ARM SIGNAL HEADS SHALL USE ASTRO- TYPE MOUNTING ASSEMBLIES AND SHALL BE INSTALLED APPROXIMATELY LEVEL WITH ONE ANOTHER AT A 17 TO 19 FOOT VERTICAL CLEARANCE ABOVE THE HIGH POINT OF THE PAVEMENT GRADE.
- 33. FINAL VEHICLE DIRECTION ZONE PLACEMENT AND DIMENSIONS. IN ACCORDANCE WITH THE PROJECT PLAN, AND FINAL SIGNAL PROGRAMMING SHALL BE COMPLETED IN THE FIELD AND THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR COORDINATING AND SCHEDULING THIS WORK.
- 34. ALL VEHICLE AND PEDESTRIAN SIGNAL HEADS THAT HAVE NOT BEEN PLACED IN SERVICE SHALL BE COVERED WITH PREFARRICATED WEATHER RESISTANT NYLON FORM FITTING SIGNAL FACE COVER MATERIAL. THE SIGNAL FACE SHALL REMAIN COMPLETELY COVERED UNTIL THE SIGNAL HEAD IS PLACED IN SERVICE AND IS FULLY FUNCTIONAL
- 35. ALL DETECTION EQUIPMENT, DETECTION ZONES, AND SIGNAL TIMING OPERATION SHALL BE CONFIRMED IN THE FIELD BY THE PROFESSIONAL ENGINEERING CONSULTANT TO BE ACHIEVING SATISFACTORY TRAFFIC SIGNAL OPERATION.
- 36. COMMUNICATION SYSTEM SHALL BE A DYMEC ETHERNET SWITCH KY-3170EMX AND CELLULAR MODEM MICROHARD BULLET LTE, WITH CITEL SURGE SUPPRESSION ON ALL THESE COMPONENTS
- THE CONTRACTED PROFESSIONAL ENGINEERING TRAFFIC SIGNAL TIMING. CONTROLLER PROGRAMMING AND OPERATION AND OVERALL TRAFFIC SIGNAL OPERATIONAL CONSULTANT SERVICES THAT ARE TO BE RETAINED BY THE OWNER / DEVELOPER / DISTRICT SHALL INCLUDE, BUT NOT BE LIMITED TO:
- A. DEVELOPING ALL TRAFFIC SIGNAL TIMING AND ALL OPERATIONAL PARAMETERS FOR ACHIEVING ISOLATED. FULL-ACTUATED VEHICLE AND PEDESTRIAN INTERSECTION OPERATION AND, WHEN DOCUMENTED TO BE NECESSARY, COORDINATED SIGNAL SYSTEM TIMING PLAN OPERATION DURING VARIOUS TIMES OF THE DAY.
- B. PROGRAMMING ALL SIGNAL TIMING PARAMETERS INTO THE TRAFFIC SIGNAL CONTROLLER. C. FIELD IMPLEMENTING AND FINE-TUNING / ADJUSTING ALL TRAFFIC SIGNAL TIMING PARAMETERS, INCLUDING

FOLLOW-UP FIELD REVIEWS AS MAY BE NECESSARY

- D. DEVELOPING, PROGRAMMING, FIELD IMPLEMENTING, AND FINE-TUNING ALL VEHICLE DETECTION ZONE DIMENSIONS, ZONE LOCATIONS, AND OPERATIONAL PARAMETERS.
- ALL OF THE AFOREMENTIONED CONTRACTED PROFESSIONAL ENGINEERING TRAFFIC SIGNAL OPERATIONAL CONSULTANT SERVICED DELIVERABLES SHALL BE CONSISTENT WITH NATIONAL PUBLICATIONS, INCLUDING BUT NOT LIMITED TO: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) LATEST EDITION / REVISION, FHWA-HOP-08-024 "TRAFFIC SIGNAL TIMING MANUAL" (JUNE 2008), FHWA-HRT-04-091 "SIGNALIZED INTERSECTIONS: INFORMATIONS GUIDE" (AUGUST 2004), FHWA-HOP-06-006 "TRAFFIC CONTROL SYSTEMS HANDBOOK" (OCTOBER 2005), FHWA-DTFH61-01-C-00183 "SIGNAL TIMING PROCESS FINAL REPORT" (DECEMBER 2003), NCHRP REPORT 731 "GUIDELINES FOR TIMING YELLOW AND ALL-RED INTERVALS AT SIGNALIZED INTERSECTIONS" (2012), NCHRP REPORT 812 "SIGNAL TIMING MANUAL SECOND EDITION" (2015)

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ESIGNED BY: KR

DRAWN BY: RE

CHECKED BY: EJ

DATE: 04/17/202

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> PROJECT NO. 096668009

'Kimley»Horn Kimley-Horn and Associates, In-

DESIGNED BY: KRK
DRAWN BY: RES
CHECKED BY: EJG
DATE: 04/17/2023

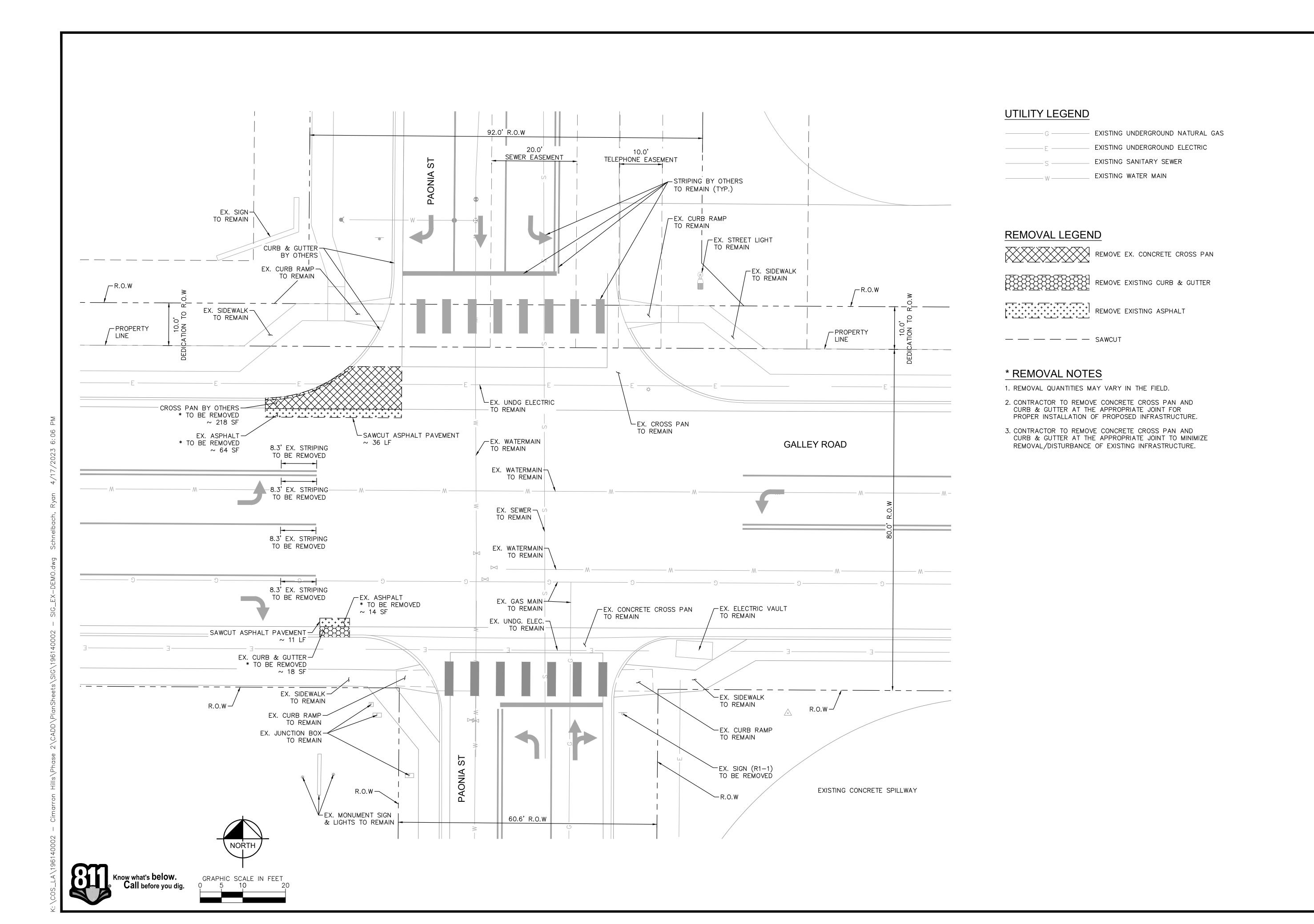
SOLACE APARTMENTS FILING NO. 2
CONSTRUCTION DOCUMENTS
ALLEY RD & PAONIA ST - TRAFFIC SIGNAL PLANS
SUMMARY OF QUANTITIES

FOR REVIEW ONLY
NOT FOR
CONSTRUCTION
Kimley Horn
Kimley-Horn and Associates, Inc.

PROJECT NO. 096668009

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CONSTRUCTION DOCUMENTS
ALLEY RD & PAONIA ST - TRAFFIC SIGNAL PLANS
EXISTING CONDITIONS & DEMOLITION PLAN

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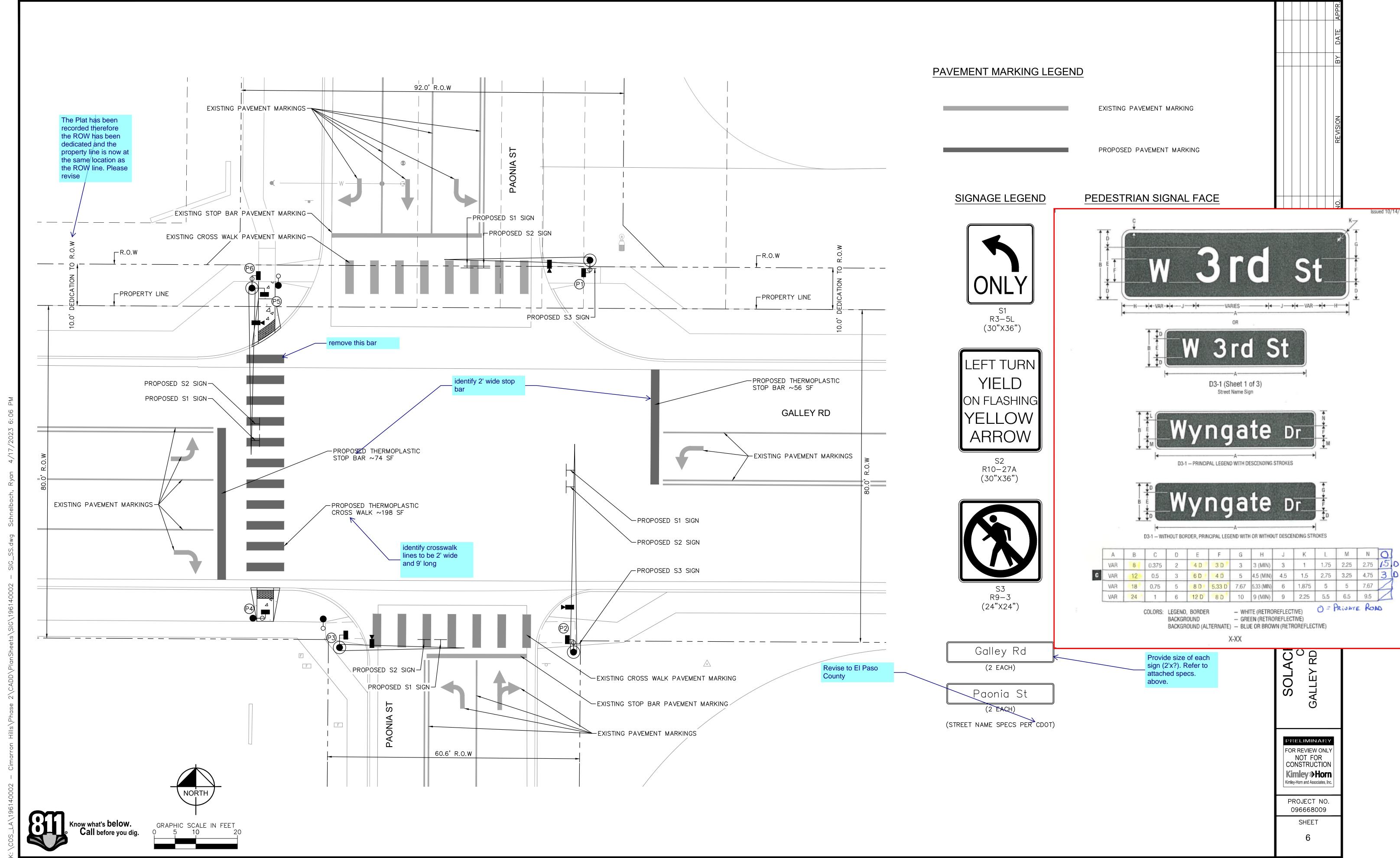
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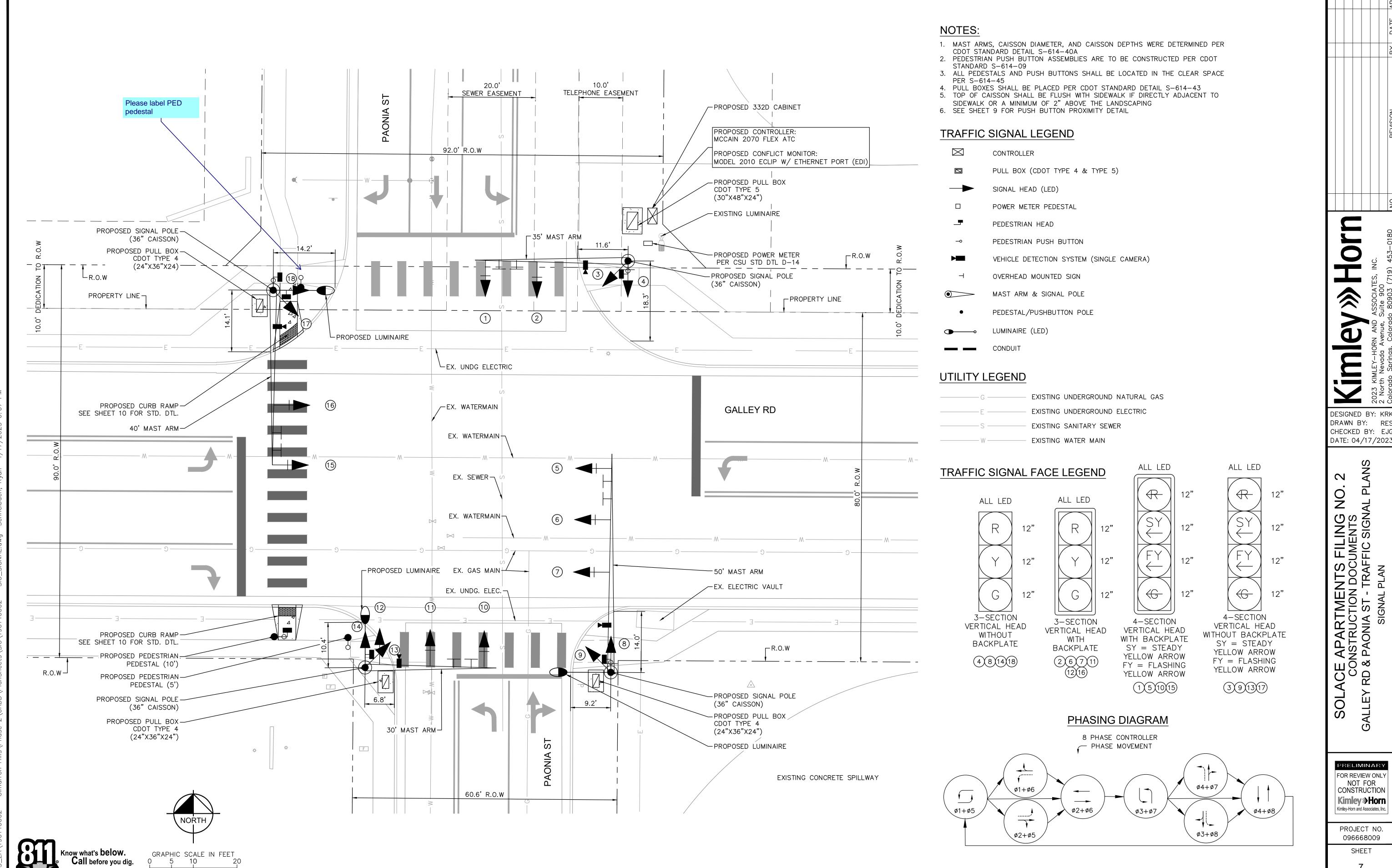
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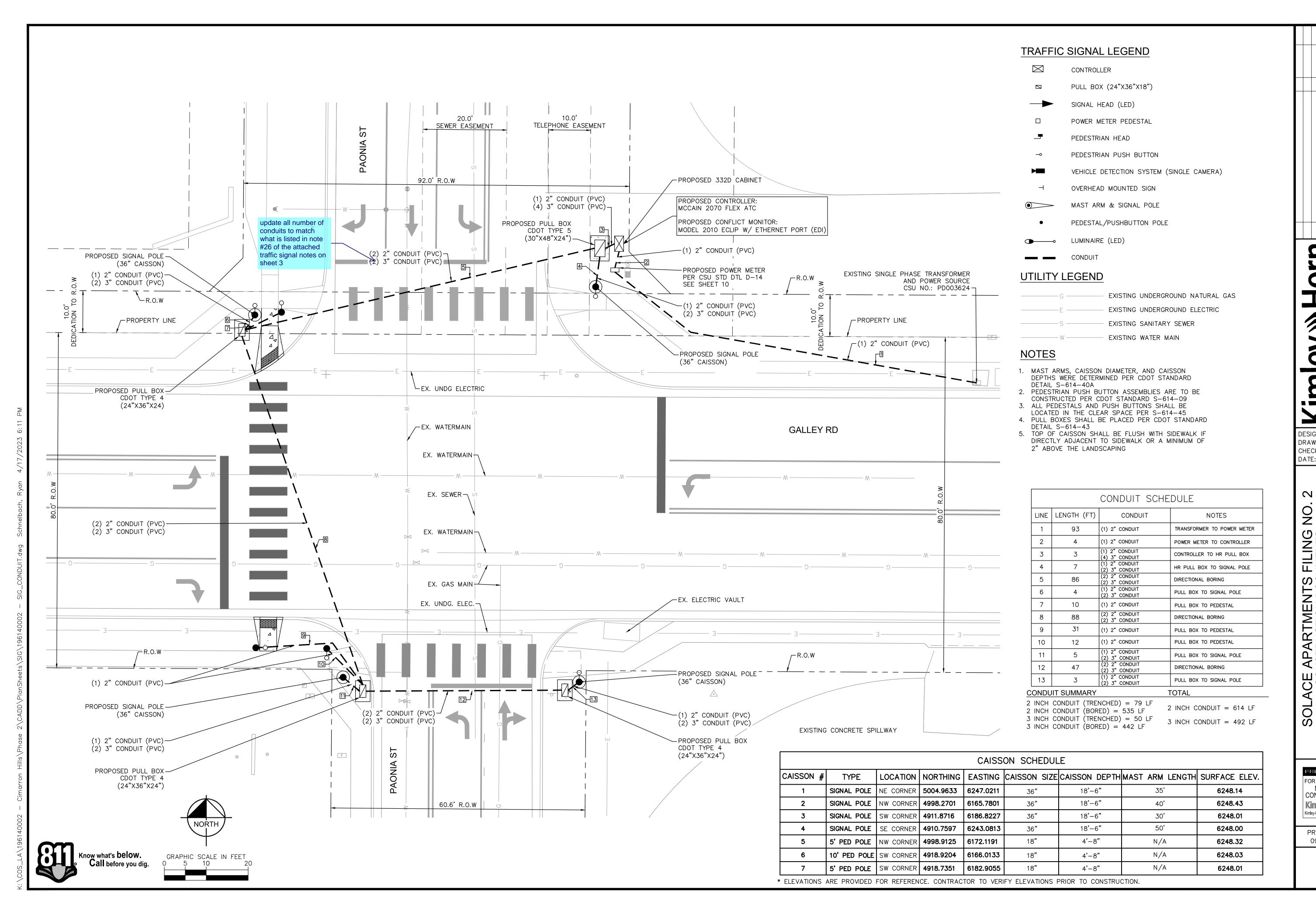
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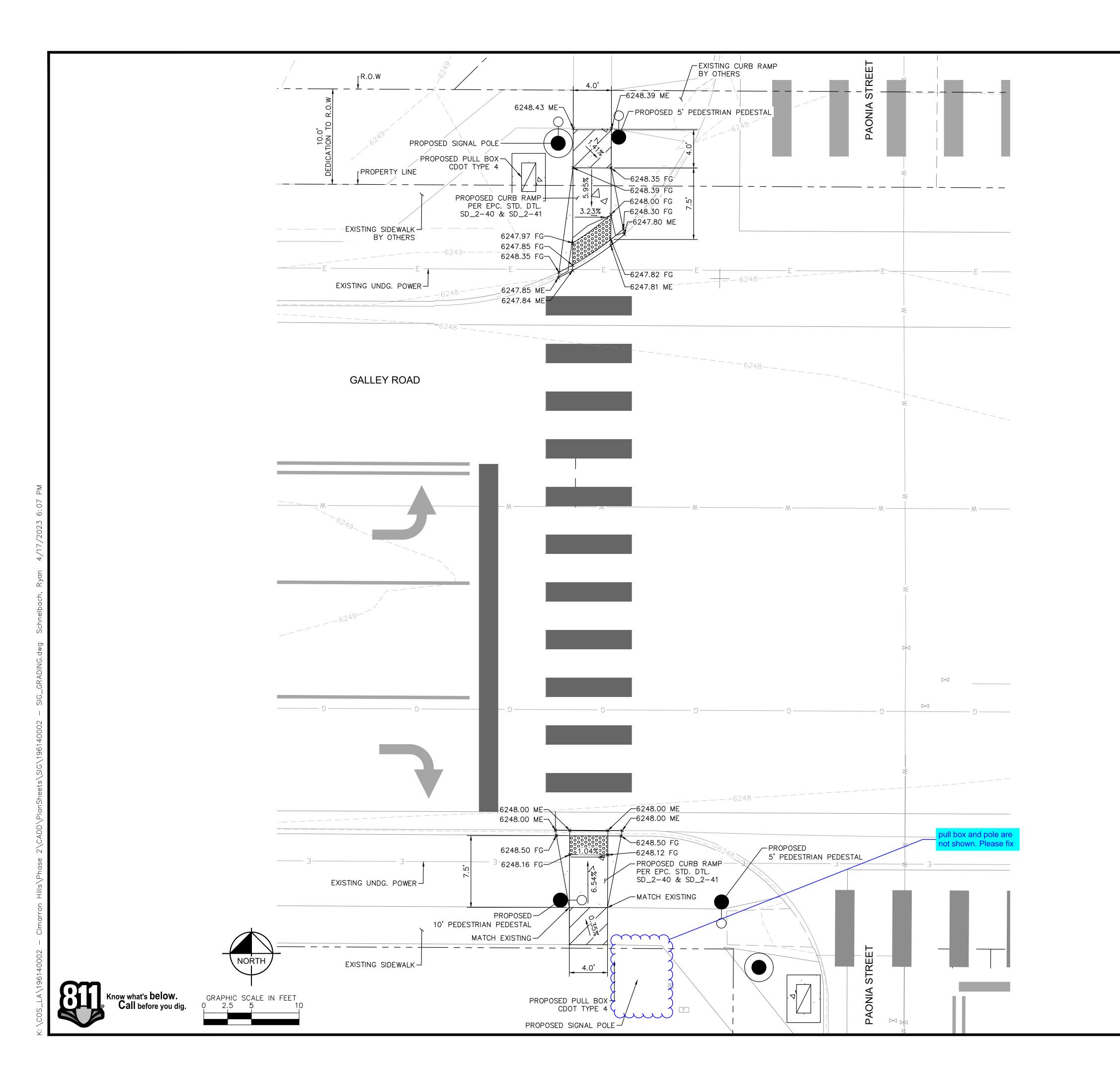
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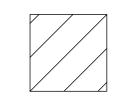
<u>LEGEND</u>

EXISTING CONCRETE SIDEWALK

PROPOSED CONCRETE CURB RAMP PER SD_2-40 & SD_2-41

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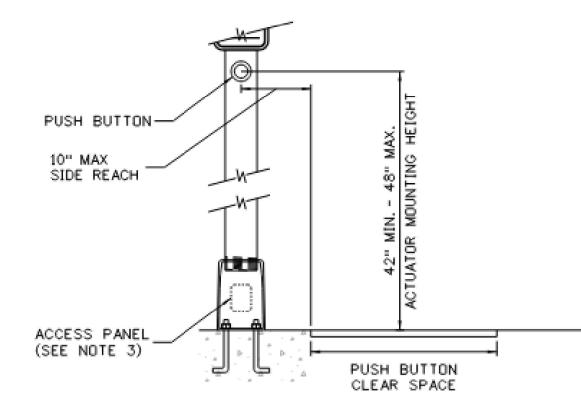
PROPOSED DETECTABLE WARNING SURFACE (DWS)

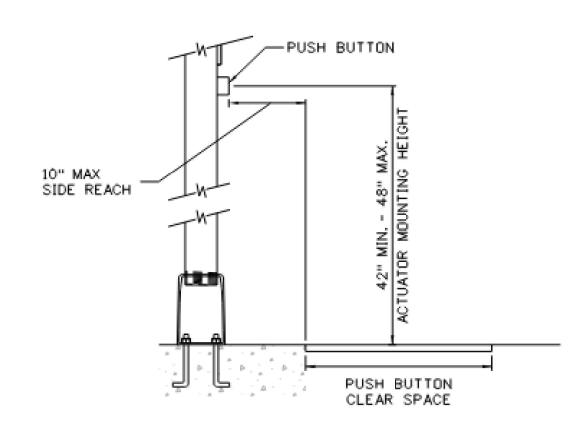


4' X 4' MIN TURNING SPACE 2% MAX. SLOPE (IN ANY DIRECTION)

GENERAL NOTES

- 1. CONTROL JOINT SPACING SHALL BE 4' TYPICAL AND NO GREATER THAN 10 FT.
- 2. EXPANSION JOINT SPACING SHALL BE 20' TYPICAL. 3. ALL ACCESSIBLE AREAS SHALL COMPLY WITH ALL ADA
- REQUIREMENTS INCLUDING A LONGITUDINAL SLOPE OF 5.0% MAXIMUM AND A CROSS SLOPE OF 2% MAXIMUM. 4. CONTRACTOR TO CONFIRM EXISTING ELEVATIONS IN THE FIELD.
- 5. CONTRACTOR IS RESPONSIBLE FOR APPLYING FOR AND OBTAINING THE STATE STORMWATER DISCHARGE PERMIT AT LEAST TEN (10) BUSINESS DAYS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.
- 6. CONTRACTOR TO VERIFY ALL ELEVATIONS IN THE FIELD.
- 7. CONTRACTOR TO MATCH ELEVATIONS AT EXISTING SIDEWALK TIE-IN LOCATIONS.





SIDE VIEW

PUSH BUTTON LOCATION DETAIL

PER CDOT STANDARD DETAIL S-614-45

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DESIGNED BY: KRK DRAWN BY: RES CHECKED BY: EJG DATE: 04/17/2023

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SOLACE APARTMENTS FILING Noconstruction documents
ALLEY RD & PAONIA ST - TRAFFIC SIGNAL
GRADING DETAIL

PRELIMINARY FOR REVIEW ONLY
NOT FOR
CONSTRUCTION Kimley » Horn Kimley-Horn and Associates, Inc.

> PROJECT NO. 096668009 SHEET

SD_2-40

ALL NON-CURRENT CARRYING METALLIC

PARTS TO BE BONDED TO NEUTRAL AND EFFECTIVELY GROUNDED -SEE APPENDIX D, DRAWINGS 16 & 17 FOR TYPICAL GROUNDING

> UTILITY SECTION (DOUBLE — LINE TERMINALS FIT #6-350 KCMIL CU/AL- BOND NEUTRAL TO METAL ENCLOSURE)

> > MANUFACTURER GRADE -

LEVEL LINE INDICATOR MARKED ON PEDESTAL

POLE SET FOAM, OR -

EQUAL (SEE NOTE 5)

6" HIGH WIRE ENTRANCE CONDUIT (COMMERCIAL)
CONDUCTOR (RESIDENTIAL)

MIN 2" PVC CONDUIT REQUIRED —

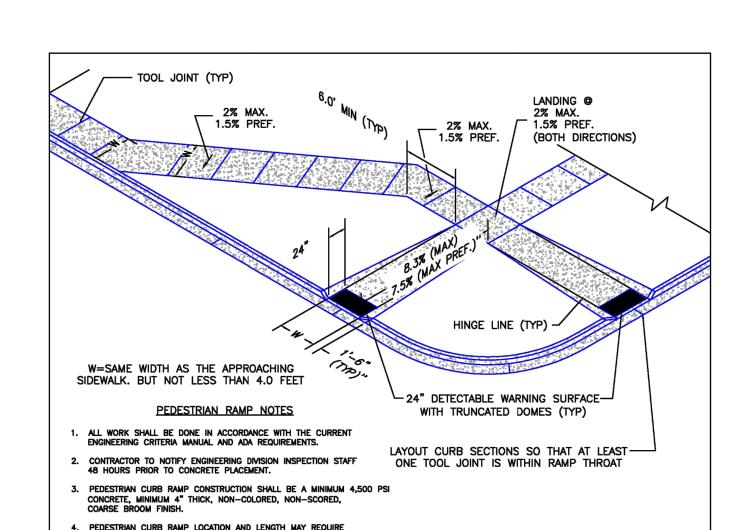
AND BONDING DETAILS

6/23/20

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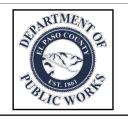
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DEPARTMENT OF PUBLIC WORKS



- 4. PEDESTRIAN CURB RAMP LOCATION AND LENGTH MAY REQUIRE MODIFICATION TO MAINTAIN THE 8.3% MAXIMUM RUNNING RAMP SLOPE DUE TO STREET INTERSECTION GRADES AND/OR ALIGNMENTS. SEE ECM SECTION 6.3.6 FOR PEDESTRIAN PUSHBUTTON LOCATION REQUIREMENTS.
- DETECTABLE WARNING SURFACE SHALL START A MINIMUM OF 6" BUT NOT MORE THAN 8" FROM THE FLOWLINE OF THE CURB AT ANY POINT.
- DETECTABLE WARNING SURFACE SHALL BE PREFABRICATED, CAST IRON (PATINA NATURAL FINISH) AND IN ACCORDANCE WITH ECM CHAPTER 6 AND SD_2-42. THERMOPLASTIC TRUNCATED DOMES AND PAVERS WILL NOT BE ACCEPTED.
- THE DETECTABLE WARNING SURFACE SHALL BE 24" IN LENGTH AND THE FULL WIDTH OF THE RAMP.
- 8. PEDESTRIAN CURB RAMP WIDTH REQUIRED IS SAME AS APPROACHING SIDEWALK; 4' MINIMUM.
- ALL PEDESTRIAN CURB RAMPS WILL BE PERPENDICULAR TO TRAFFIC WITH THE EXCEPTION OF MID-BLOCK OR TERMINAL RAMPS WHICH MAY BE PARALLEL SUBJECT TO APPROVAL.
- DRAINAGE STRUCTURES, TRAFFIC SIGNAL/SIGNAGE, UTILITIES/JUNCTION BOXES, OR OTHER OBSTRUCTIONS WITHIN PROPOSED PEDESTRIAN CURB RAMP AREAS AND LANDINGS ARE PROHIBITED.
- 11. THE COUNTER SLOPE OF THE GUTTER OR ROAD AT THE FOOT OF A RAMP SHALL NOT EXCEED 5%.

| 6/23/20 | Pedestrian Curb | | | |
|----------------------------|------------------------|-----------------------|--|--|
| DATE APPROVED: | Ramp Detail | | | |
| Jennifer E. Irvine | Standard Drawing | | | |
| DEPARTMENT OF PUBLIC WORKS | REVISION DATE: 6/23/20 | FILE NAME: SD_2-41 | | |

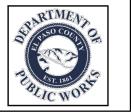


GENERAL NOTES

WHERE THE 1'-6" FLARED SIDE(S) OF A PERPENDICULAR CURB RAMP IS (ARE) CONTIGUOUS WITH A PEDESTRIAN OR HARD SURFACE AREA (PEDESTRIAN CIRCULATION PATH), THE MAXIMUM FLARE SLOPE SHALL NOT EXCEED 10:1.

PEDESTRIAN WALKWAY (PEDESTRIAN ACCESS ROUTE) AND/OR LOCATION OF EXISTING OR FUTURE PEDESTRIAN RAMPS ON OPPOSITE CORNERS SHALL BE REVIEWED BEFORE CONSTRUCTING NEW RAMPS.

AT MARKED PEDESTRIAN CROSSINGS, THE BOTTOM OF THE RAMPS, EXCLUSIVE OF THE FLARE SIDES, SHALL BE TOTALLY CONTAINED WITHIN THE MARKINGS.



Colorado Springs Utilities Electric Line Extension & Service Standards - 2023

3. Installation by customer with Regional Building inspections.

DESIGNED BY: KRK DRAWN BY: RE CHECKED BY: EJG DATE: 04/17/202 LACE APARTMENTS FILING N CONSTRUCTION DOCUMENTS Y RD & PAONIA ST - TRAFFIC SIGNAI

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PRELIMINARY FOR REVIEW ONLY NOT FOR CONSTRUCTION Kimley » Horn

> PROJECT NO. 096668009

Kimley-Horn and Associates, Inc.

https://mcclibrary.blob.core.usgovcloudapi.net/codecontent/15646/367064/AppF-27.png

1. May be used for commercial services, i.e., traffic signals, site lighting and sprinkler systems, as well as mobile

2. Pedestal and related equipment furnished by customer. Pedestal to meet Colorado Springs Utilities Electric Distribution Construction Standard 8-5 (Appendix-F) and Material Specification 194-113-406 (Appendix-E).

6. Pedestal must be placed within 10 feet of existing transformer or secondary junction box (commercial policy).

When served from an overhead source, meter pedestal must be no closer than 15 feet from the pole.

DRAWING 9 - PERMANENT AND TEMPORARY METER PEDESTAL (100 OR 200 AMP)

18" RADIUS 90° ELBOW AND CONDUIT
WHERE REQUIRED (MIN 2" PVC REQUIRED)

— CUSTOMER SECTION

OUTLET RECEPTACLES

ELECTRODE AS REQUIRED

BY REGIONAL BUILDING

CUSTOMER (AS REQUIRED BY REGIONAL BUILDING DEPARTMENT)

CONDUIT RISER TO

home sites.

4. Refer to trench information: 7.02a (residential) or 10.1f (commercial).

5. Concrete flowable fill may be used as long as conductor is not encased.