

WIND ROSE

INFRASTRUCTURE

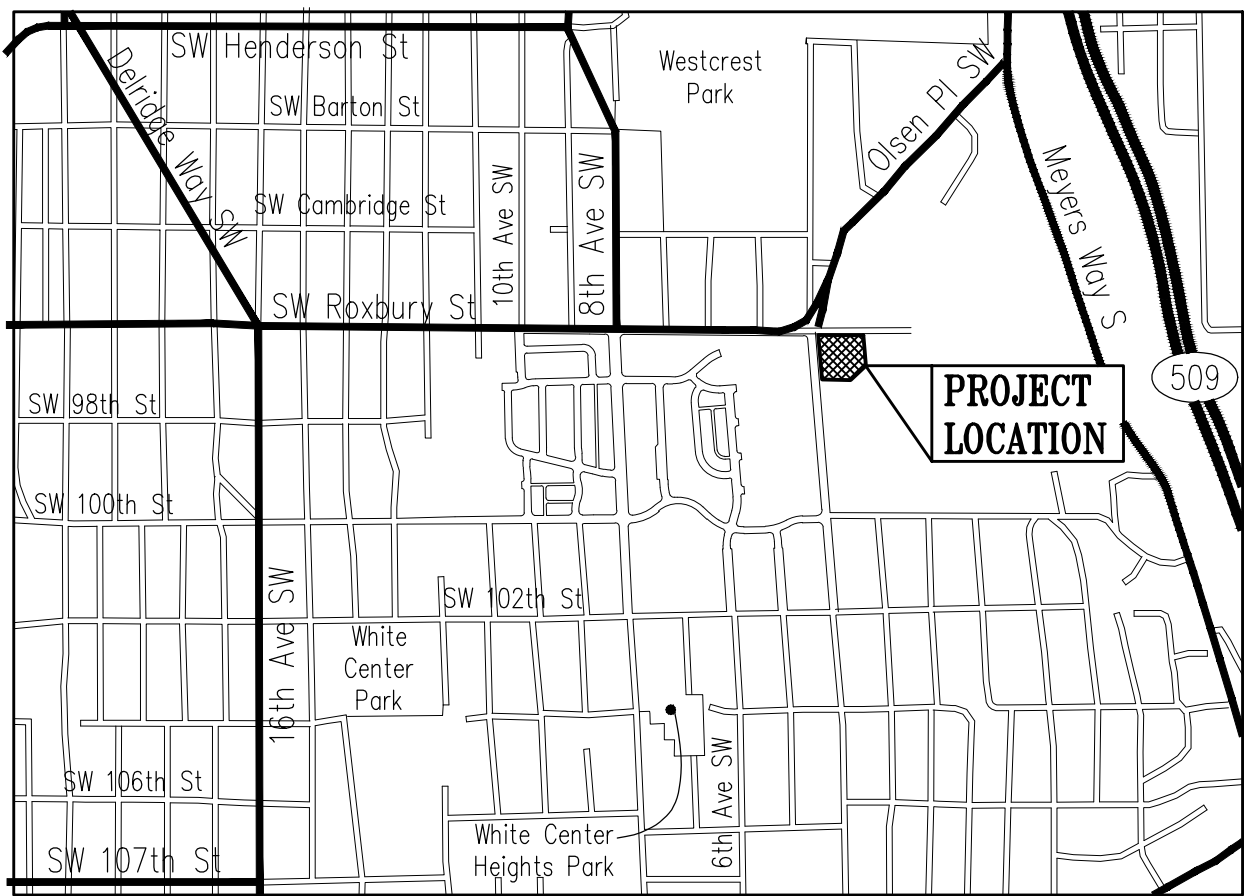
FRANCHISE UTILITY IMPROVEMENT PLANS

SEC. 6, T.23 N., R.4E., W.M.

King County, Washington

JULY 2018

PERMIT SUBMITTAL



VICINITY MAP
N.T.S.

CONTRACTOR NOTE

THIS PLAN HAS BEEN PREPARED BASED ON THE PRELIMINARY DESIGNS BY THE FRANCHISE UTILITY PROVIDERS. THIS PLAN IS FOR COORDINATION PURPOSES ONLY AND INTENDED TO SHOW THE RELATIONSHIP BETWEEN THE VARIOUS FRANCHISE UTILITIES AND THE SITE PLAN. THE OWNER/CONTRACTOR SHALL OBTAIN FINAL DESIGNS FROM THE FRANCHISE UTILITY PROVIDERS AND SHALL CONSTRUCT FRANCHISE UTILITIES BASED ON THE FINAL DESIGNS.

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ABBREVIATIONS:

BOC	BACK OF CURB
BOV	BOTTOM OF VAULT
E	EAST
EX./EXIST.	EXISTING
FOC	FACE OF CURB
HH	HAND HOLE
LTG	LIGHTING
MIN	MINIMUM
N	NORTH
PL	PROPERTY LINE
PRI	PRIMARY
PROP.	PROPOSED
ROW	RIGHT OF WAY
S	SOUTH
SCL	SEATTLE CITY LIGHT
SD	STORM DRAINAGE
SEC	SECONDARY
SS	SANITARY SEWER
SL	STREET LIGHT
STA	STATION
SVC	SERVICE
SW	SIDEWALK
TOV	TOP OF VAULT
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
W	WEST/WATER
XING	CROSSING

LEGEND

---	PROPERTY LINE / ROW
---	CENTERLINE
E---	CAP/STUB
[Symbol]	COMCAST CABLE VAULT/HANDHOLE
[Symbol]	CENTURY LINK TELEPHONE VAULT/HANDHOLE
[Symbol]	SCL POWER HANDHOLE
[Symbol]	SCL POWER VAULT
[Symbol]	SCL POWER VAULT
[Symbol]	SCL DUCT BANK
[Symbol]	COMM. DUCT BANK
---	SCL/COMM. SERVICE CONDUIT(S)
---	GAS MAIN AND SERVICES INSTALLED BY PSE
[Symbol]	SITE LIGHTING CONDUIT, HANDHOLE, AND LUMINAIRE

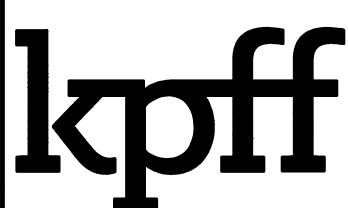
Contract No.

PROJECT DEVELOPER

KING COUNTY HOUSING AUTHORITY
600 ANDOVER PARK WEST
SEATTLE, WA. 98188-3326
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PROJECT ENGINEER


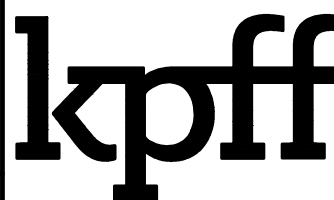



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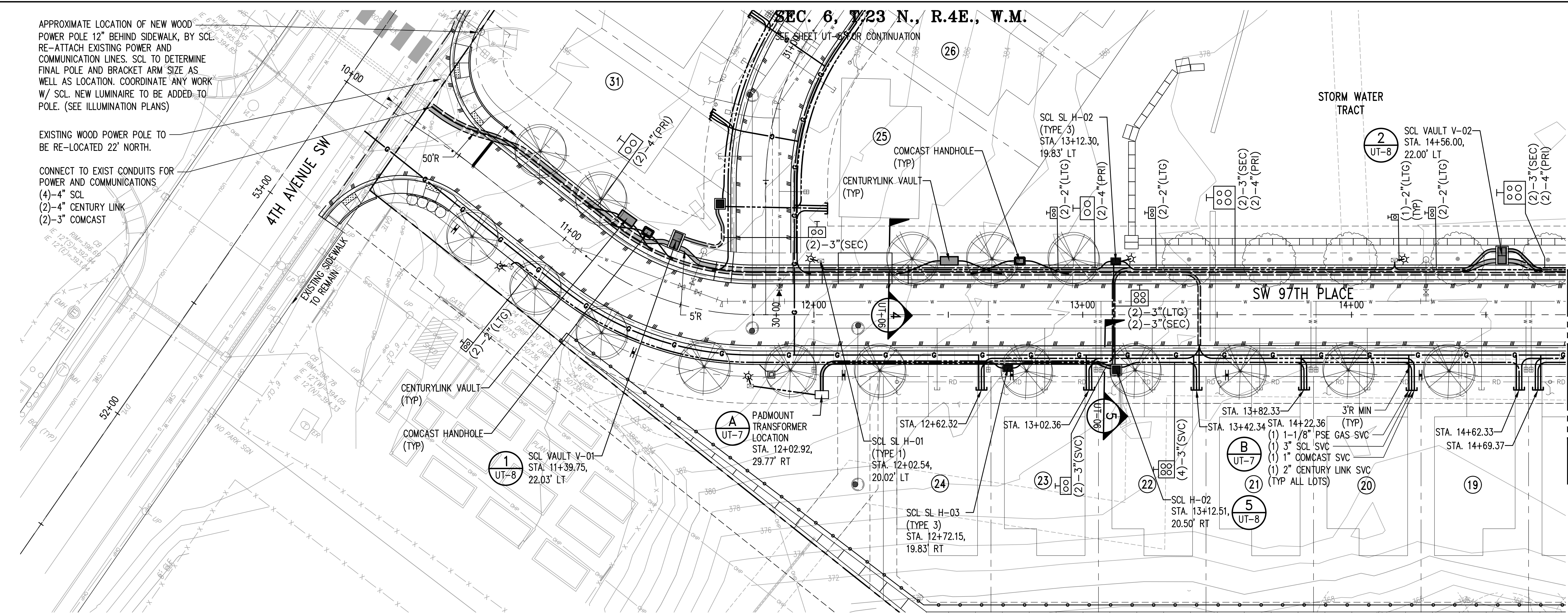
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						CHECKED BY BJB	APPROVED BY JCG						WIND ROSE COVER SHEET			UT-1
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NO.	DATE	BY	CHD.	APPR.		REVISION										
						J O B No. : 114137.10		S C A L E : AS NOTED								

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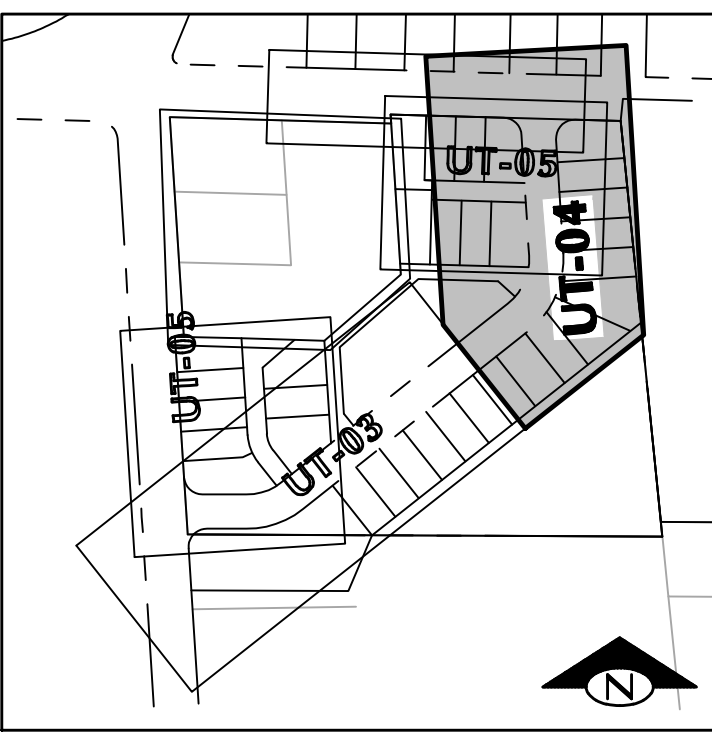
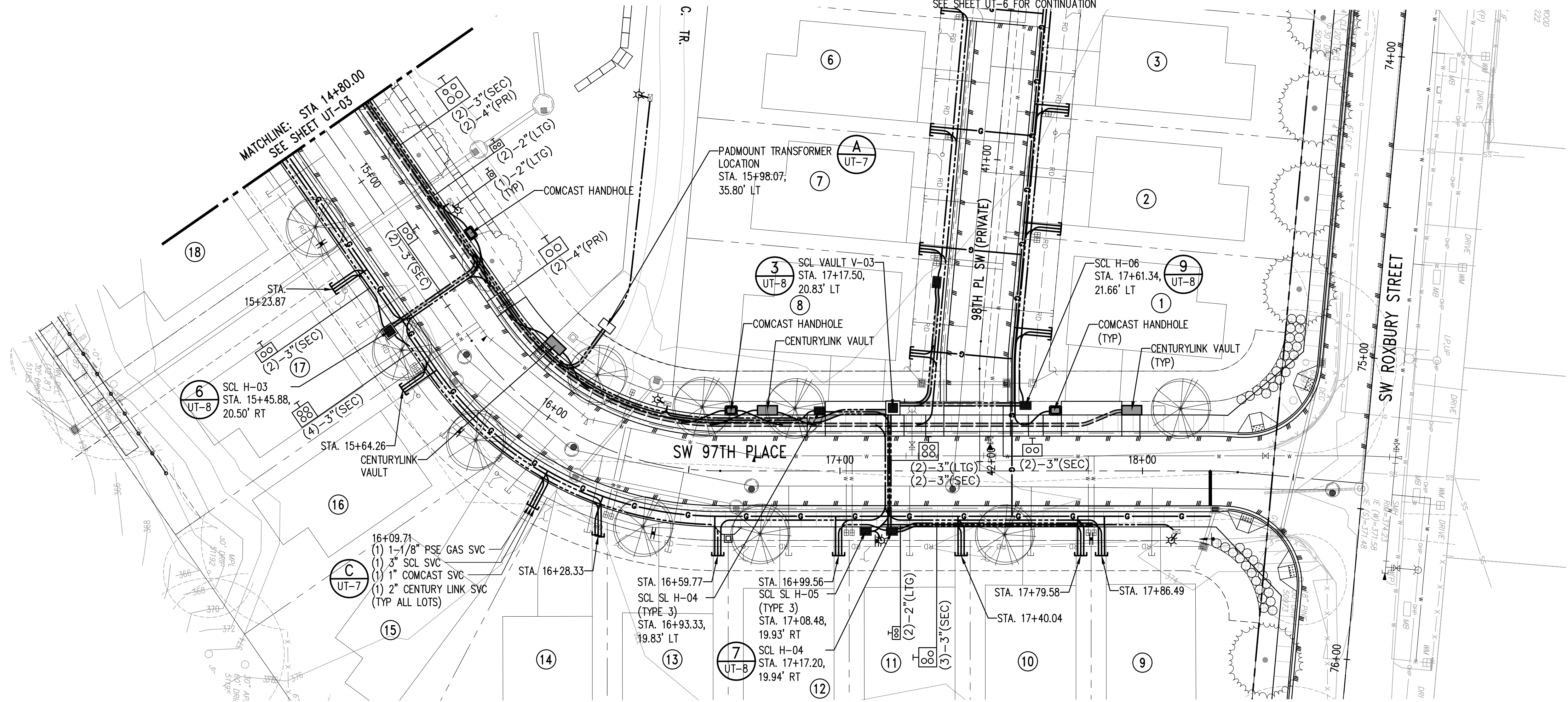
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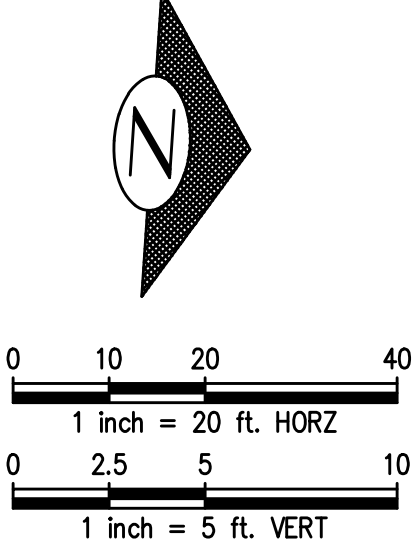
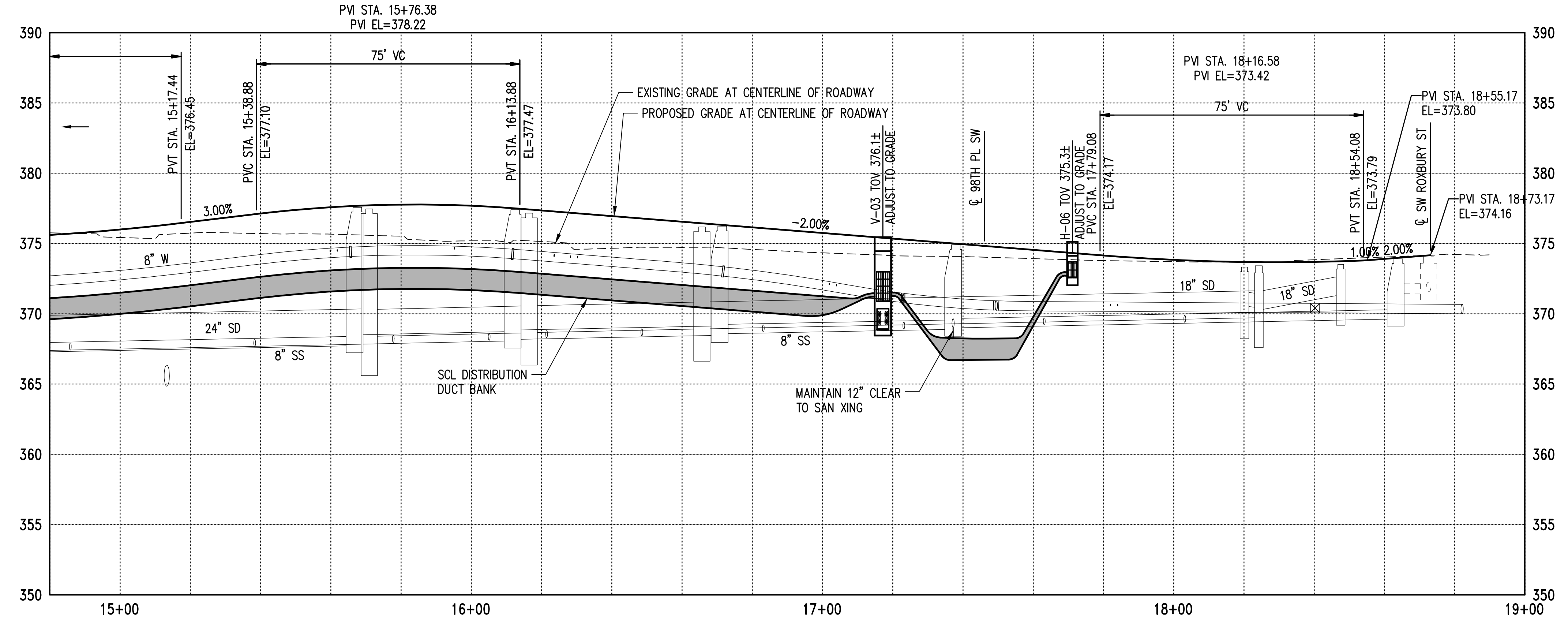
GENERAL NOTES					SEATTLE CITY LIGHT GENERAL NOTES (PER SCL ENGINEERING PLAN SR#1606535)					CENTURY LINK GENERAL NOTES														
1.	A COPY OF THE APPROVED PLANS AND THE MOST RECENT SCL CONSTRUCTION GUIDELINES SHALL BE ON SITE WHENEVER CONSTRUCTION IS IN PROGRESS.				1.	<u>CONSTRUCTION MATERIALS:</u> USE ONLY SCL APPROVED MANUFACTURES. PHONE DAVID MANNERY, ELECTRICAL SERVICE CONSULTANT – (206) 386–4245, IN ADVANCE OF PURCHASING/INSTALLING CONSTRUCTION MATERIALS. 1. POWER FACILITIES – USE OLDCASTLE PRECAST OR SCL APPROVED EQUIVALENT MANUFACTURER. 2. CONDUITS – REFER TO LIST BELOW OR MATERIAL STANDARD, 7015.05. NOTE MANUFACTURER LIMITATIONS FOR PVC FEMALE ADAPTERS. 3. CONDUIT BENDS – GALVANIZED STEEL MATERIAL STANDARD 7050.05. CLEAN AND MANDREL THE CONDUITS THEN INSTALL A FLAT, PRE–LUBRICATED, POLYESTER OR ARAMID PULL TAPE OF 2,500 LB. MINIMUM TENSILE STRENGTH (FIBERTEK INC. OR EQUAL); CITY LIGHT STOCK NO. 012293 AND 012480 IN EACH CONDUIT. IN EACH TRENCH, PLACE A DETECTABLE UNDERGROUND MARKING TAPE ACCORDING TO SCL CONSTRUCTION GUIDELINE U2–11.40.				7.	<u>PRIMARY (HIGH VOLTAGE) CONDUITS:</u> • EXISTING CONDUIT STUBS AT MAIN ENTRANCE OF THE PROPERTY. INTERCEPT AND EXTEND TWO 4–INCH PVC SCH–40 PRIMARY CONDUITS FROM EXISTING SCL VAULT (V–665) INTO NEW VAULT (V–01). • PROVIDE AND INSTALL TWO 4–INCH PVC SCH–40 PRIMARY CONDUITS BETWEEN: (V–01 AND V–02), (V–02 AND V–03) PER SCL CONSTRUCTION GUIDELINES/STANDARDS 0214.00, 0222.02, 0224.05, U2–11.40, & 0226.06. AS SHOWN ON SITE PLAN AND VAULT DETAILS. <u>SPECIFIC REQUIREMENTS:</u> • CONDUIT SHALL BE INSTALLED IN RIGHT OF WAY AND PRIVATE PROPERTY TO BE SERVED. • JOINTS SHALL MEET SQUARELY, WITHOUT GAPS. • CONDUITS SHALL ENTER A VAULT PERPENDICULAR TO WALL. • ALL PRIMARY CONDUITS DEPTH TO BE 36–INCHES MINIMUM IN RIGHT–OF–WAY, EASEMENT AREA, AND IN PRIVATE PROPERTY. • BENDS SHALL BE GALVANIZED RIGID STEEL. (4–FOOT RADIUS). • A MAXIMUM OF 180’ OF BENDS IS ALLOWED IN EACH PRIMARY CONDUIT RUN. • PVC SCH–40 CONDUIT (10–FT SECTIONS) SHALL NOT BE BENT MORE THAN 15’ (8’ DEFLECTION AT END). • ALL PRIMARY CONDUITS SHALL BE ENCASED WITH RED–DYED HIGH–STRENGTH FLUIDIZED THERMAL BACKFILL (FTB) WITHIN 3 INCHES OF THE CONDUITS. TRENCH BACKFILL SHALL BE NON–DYED CONTROLLED DENSITY FILL (CDF) AS DESCRIBED IN SCL CONSTRUCTION STANDARDS: 0224.05, 0222.02, & 0226.06, AND MATERIAL STANDARD 7150.00. • FURNISH & INSTALL END BELLS FLUSH WITH INTERIOR WALLS ON ALL CONDUITS ENTERING THE VAULTS (V–01, V–02, & V–03). CONDUITS SHALL BE GROUTED BOTH INSIDE & OUTSIDE OF VAULTS				1.	CENTURY LINK HANDHOLES, VAULTS, LIDS AND CONDUITS SHALL BE INSTALLED IN ACCORDANCE WITH SCL CONSTRUCTION GUIDELINES, UNLESS OTHERWISE NOTED ON THE PLANS OR REQUIRED BY CENTURY LINK INSPECTORS.								
2.	THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED FOR WORK WITHIN THE PUBLIC RIGHT OF WAY.				2.	<u>NEW DISTRIBUTION LOAD BREAK & TRANSFORMER VAULT (V–01 & V–02):</u> PROVIDE AND INSTALL 577–LDA VAULTS, WITH COVER SLAB (57–2–332–NS–GV–SA–80), ONE NON–SLIP SOLID HATCH AND ONE GRATED VENT HATCH, ONE REMOVAL DIVIDER WALL, AND ONE BASE (577–LA W/GRD IN & OUT) PER SCL CONSTRUCTION STANDARDS 0232.05, U10–7, AND U2–14.2, AND SCL MATERIAL STANDARD 7203.41 AT FINISHED GRADE LEVEL AS SHOWN ON THE SITE PLAN AND VAULT DETAILS.									2.	CONTRACTOR SHALL COORDINATE WITH CENTURY LINK A MINIMUM OF ONE WEEK IN ADVANCE FOR ANY REQUIRED INSPECTION AND AS–BUILT RECORDING FOR THE CENTURY LINK SYSTEM. CENTURY LINK CONTACT:								
3.	PRIOR TO ANY CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL SCHEDULE AND ATTEND A PRE–CONSTRUCTION CONFERENCE WITH KING COUNTY. THE CONTRACTOR SHALL NOTIFY SEATTLE CITY LIGHT, CENTURY LINK, COMCAST, PSE REPRESENTATIVES AND THE OWNER’S PROFESSIONAL ENGINEERING CONSULTANT OF THE PRE–CONSTRUCTION MEETING TIME AND LOCATION.				3.	<u>NEW DISTRIBUTION TRANSFORMER VAULT (V–03):</u> PROVIDE AND INSTALL 507–LA TRANSFORMER VAULT, VENT COVER WITH HATCH (55–332 GV), ONE 507–BL BASE PER SCL CONSTRUCTION STANDARDS 0232.05, U10–7, AND U2–14.2, AND SCL MATERIAL STANDARD 7203.36 AT FINISHED GRADE LEVEL AS SHOWN ON THE SITE PLAN AND VAULT DETAILS.									3.	ALL CENTURY LINK CONDUITS SHALL BE CLEANED, MANDRELLED/PROOFED AND INCLUDE A PULL STRING (MULE TAPE) PER CENTURY LINK REQUIREMENTS.								
4.	ALL MATERIALS AND WORK ASSOCIATED WITH THE CONSTRUCTION OF THE FRANCHISE UTILITIES SHALL BE PERFORMED TO SCL CONSTRUCTION GUIDELINES, UNLESS OTHERWISE NOTED ON THE PLANS OR REQUIRED BY SCL, COMCAST, CENTURY LINK OR PSE INSPECTORS.				4.	<u>NEW DISTRIBUTION SECONDARY HANDHOLES (H–01, H–02, H–03, H–04, H–05, & H–06):</u> • PROVIDE AND INSTALL 444–LA HANDHOLES (H–01, H–02, AND H–03) FROM OLDCASTLE PRECAST OR CITY LIGHT APPROVED EQUIVALENT. • PROVIDE AND INSTALL 233–LA HANDHOLES (H–04, H–05, AND H–06) WITH 12–INCH RISERS FROM OLDCASTLE PRECAST OR CITY LIGHT APPROVED EQUIVALENT, IN ACCORDANCE WITH SCL CONSTRUCTION GUIDELINES 0232.05, 0231.01 & U2–14.2, AND SCL MATERIAL STANDARDS 7203.08 AND 7203.26 AT INDICATED LOCATIONS AND AT FINISHED GRADE LEVEL AS SHOWN ON THE SITE PLAN AND HANDHOLE DETAILS.				8.	<u>SECONDARY & SERVICE (LOW VOLTAGE) CONDUITS:</u> • PROVIDE AND INSTALL TWO 3–INCH PVC SCH–40 SECONDARY CONDUITS BETWEEN: V–01 AND H–01; V–02 AND H–02; V–02 AND H–03; V–03 AND H–04; V–03 AND H–05; V–03 AND H–06. • PROVIDE AND INSTALL ONE 3–INCH SERVICE CONDUIT: FROM H–01 TO EACH LOT METER BASE: (25, 26, 27, 28, 29, 30, AND 31). • PROVIDE AND INSTALL ONE 3–INCH SERVICE CONDUIT: FROM H–02 TO EACH LOT METER BASE: (19, 20, 21, 22, 23, AND 24). • PROVIDE AND INSTALL ONE 3–INCH SERVICE CONDUIT: FROM H–03 TO EACH LOT METER BASE: (13, 14, 15, 16, 17, AND 18). • PROVIDE AND INSTALL ONE 3–INCH SERVICE CONDUIT: FROM H–04 TO EACH LOT METER BASE: (9, 10, 11, AND 12). • PROVIDE AND INSTALL ONE 3–INCH SERVICE CONDUIT: FROM H–05 TO EACH LOT METER BASE: (5, 6, 7, AND 8). • PROVIDE AND INSTALL ONE 3–INCH SERVICE CONDUIT: FROM H–06 TO EACH LOT METER BASE: (1, 2, 3, AND 4). • IN ACCORDANCE WITH SCL CONSTRUCTION GUIDELINES 0214.00, 0224.05, U2–11.40, U12–1.3, & 0231.01 AS SHOWN ON SITE PLAN AND HANDHOLE DETAILS. <u>SPECIFIC REQUIREMENTS:</u> • SECONDARY/SERVICE CONDUITS SHALL BE INSTALLED IN RIGHT OF WAY AND PRIVATE PROPERTY TO BE SERVED. • JOINTS SHALL MEET SQUARELY, WITHOUT GAPS. • ALL SECONDARY/SERVICE CONDUITS DEPTH TO BE 36–INCHES MINIMUM IN RIGHT–OF–WAY, AND 24–INCHES MINIMUM IN PRIVATE PROPERTY. • BENDS SHALL BE GALVANIZED RIGID STEEL. (3–FOOT RADIUS). • A MAXIMUM OF 270’ OF BENDS IS ALLOWED IN EACH SECONDARY/SERVICE CONDUIT RUN. • PVC SCH–40 CONDUIT (10–FT SECTIONS) SHALL NOT BE BENT MORE THAN 15’ (8’ DEFLECTION AT END). • CONDUITS SHALL ENTER THE HANDHOLES PERPENDICULAR TO WALL. • FURNISH & INSTALL END BELLS FLUSH WITH INTERIOR WALLS ON ALL CONDUITS ENTERING HANDHOLES. • CONDUITS SHALL BE GROUTED BOTH INSIDE & OUTSIDE OF THE HANDHOLES.									4.	CONTRACTOR SHALL PROVIDE TO CENTURY LINK THE FINAL CONDUIT LENGTHS BETWEEN ADJACENT VAULTS AND HANDHOLES.			
5.	VERTICAL DATUM: NAVD 88 BENCHMARK “A” ELEVATION = 414.77 TOP FLANGE BOLT BETWEEN “E” AND “L” IN MULLER FIRE HYDRANT AT SOUTHEAST CORNER OF SW 115TH STREET AND 4TH AVENUE SW.				5.	<u>VAULT GROUNDING (V–01, V–02, & V–03) PER SCL CONSTRUCTION STANDARDS 0461.10 SECTION 6.4 (PAGE 5 OF 6) & 0468.90:</u> FOR EACH DUCT BANK THAT PENETRATES THE VAULT, INSTALL 50 FT OF BARE 250 KCMIL WIRE IN THE BOTTOM OF THAT DUCT BANK TO FORM A CONCRETE–ENCASED ELECTRODE. WIRE MUST BE POSITIONED TO ENSURE IT IS SURROUNDED BY 2 INCHES OF CONCRETE ON ALL SIDES WHEN CONCRETE IS POURED. INSTALL 20 FT OF ADDITIONAL WIRE IN ORDER TO ROUTE IT FROM THE DUCT BANK, UP THROUGH DRILLED HOLE IN THE VAULT, AND DOWN TO COMMON GROUNDING POINT WITHIN VAULT. DRILL A HOLE IN EACH VAULT WALL FOR EACH GROUNDING ELECTRODE ENTRY. DRILL EACH HOLE THROUGH THE VAULT ON THE SAME WALL THAT THE DUCT BANK ENTERS, ABOVE THE WATER TABLE IF PRESENT. AT THE ENTRY INTO VAULT, EXOTHERMICALLY WELD EACH WIRE TO ELIMINATE AIR GAPS BETWEEN STRANDS. SEAL THE WIRES ENTRY INTO VAULT TO PREVENT WATER INTRUSION.																		
6.	THE CONTRACTOR SHALL NOTIFY THE SEATTLE FIRE DEPARTMENT DISPATCHER (386–1495) AT LEAST TWENTY–FOUR (24) HOURS IN ADVANCE OF ALL WATER SERVICE INTERRUPTIONS, HYDRANT SHUTOFFS, AND STREET CLOSURES OR OTHER ACCESS BLOCKAGE. THE CONTRACTOR SHALL ALSO NOTIFY THE DISPATCHER OF ALL NEW, RELOCATED, OR ELIMINATED HYDRANTS RESULTING FROM THIS WORK.				6.	<u>HANDHOLE GROUNDING (H–01, H–02, H–03, H–04, H–05 & H–06) PER SCL CONSTRUCTION STANDARDS 0461.10 SECTION 6.2 (PAGE 4 OF 6) & 0468.90:</u> PROVIDE AND INSTALL (5/8” DIA. X 8’ L) IN EACH HANDHOLE, AND INSTALL A CONTINUOUS #2 AWG WIRE THROUGHOUT THE SYSTEM AND EXOTHERMICALLY CONNECT TO THE GROUND ROD IN EACH HANDHOLE. ROUTE WIRE ELECTRODE IN THE BOTTOM OF THE TRENCH. DRILL A HOLE INTO EACH HANDHOLE WALL FOR EACH GROUNDING ELECTRODE ENTRY. DRILL EACH HOLE THROUGH THE HANDHOLE ON THE SAME WALL THAT THE CONDUITS ENTER, ABOVE THE WATER TABLE IF PRESENT. AT THE ENTRY INTO HANDHOLE, EXOTHERMICALLY WELD EACH WIRE TO ELIMINATE AIR GAPS BETWEEN STRANDS. SEAL THE WIRE’S ENTRY INTO HANDHOLE TO PREVENT WATER INTRUSION. NOTE: AFTER GROUNDING INSTALLATION IS COMPLETE, THE SEATTLE CITY LIGHT ELECTRICAL REVIEWER MUST TEST AND APPROVE GROUNDING BEFORE VAULTS/HANDHOLES WILL BE ACCEPTED FOR SERVICE. <u>SPECIFIC REQUIREMENTS VAULTS/HANDHOLES:</u> • VAULTS/HANDHOLES COVER SHALL HAVE HINGED SLIP–RESISTANT LID WITH “SCL” DESIGNATION. • POSITION VAULTS/HANDHOLES TO AVOID COLLECTING SURFACE WATER. • DO NOT INSTALL VAULTS/HANDHOLES IN STREET, PARKING AREA, OR DRIVEWAY. • ENSURE VAULTS/HANDHOLES LOCATION WILL NOT BE OBSCURED OVER TIME BY PLANNED LANDSCAPING. • VAULTS/HANDHOLES LID MUST OPEN FLAT. • VAULTS CAN NOT BE INSTALLED IF GRADE EXCEEDS 5.6% IN ANY DIRECTION. • VAULTS/HANDHOLES MUST BE SET AT INDICATED LOCATION, AS SHOWN ON SITE PLAN. • VAULT VENTILATION OPENINGS MUST BE A MINIMUM OF 10 FEET FROM WINDOW, DOOR, OR FLAMMABLE SURFACE AND 3 FEET FROM • 3–HOUR RATED FIRE RESISTANCE (NON–COMBUSTIBLE STRUCTURE). • PROVIDE A PERMANENT, LEVEL, UNOBSTRUCTED 8–FEET WIDE WORKING AREA AROUND THE TRANSFORMER VAULTS. • PROVIDE 25–FEET CLEAR SPACE ABOVE EACH TRANSFORMER VAULT (V–01, V–02, AND V–03). • THERE SHALL NOT BE ANY PLANTED TREES WITHIN 2–FEET OF SCL VAULTS, HANDHOLES, AND CONDUITS. • VAULTS: BACKFILL CONTROLLED DENSITY FILL (CDF) PER U2–15.1 SECTION #6 PAGE (3 OF 3).																		
7.	ALL LOCATIONS OF EXISTING UTILITIES SHOWN HEREON HAVE BEEN ESTABLISHED BY FIELD SURVEY OR OBTAINED FROM AVAILABLE RECORDS AND SHOULD THEREFORE BE CONSIDERED APPROXIMATE ONLY AND NOT NECESSARILY COMPLETE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INDEPENDENTLY VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS SHOWN AND TO FURTHER DISCOVER AND AVOID ANY OTHER UTILITIES NOT SHOWN HEREON WHICH MAY BE AFFECTED BY THE IMPLEMENTATION OF THIS PLAN.																							
8.	THE CONTRACTOR SHALL LOCATE AND PROTECT ALL CASTINGS AND UTILITIES DURING CONSTRUCTION AND SHALL CONTACT THE UNDERGROUND UTILITIES LOCATOR SERVICE (1–800–424–5555) AT LEAST TWO BUSINESS DAYS PRIOR TO CONSTRUCTION.																							
9.	THE CONTRACTOR SHALL ADJUST ALL EXISTING MANHOLE RIMS, DRAINAGE STRUCTURE LIDS, VALVE BOXES, AND UTILITY ACCESS STRUCTURES TO FINISH GRADE WITHIN AREAS AFFECTED BY THE PROPOSED IMPROVEMENTS.																							
10.	UTILITY SERVICE CONNECTIONS ARE TO BE MAINTAINED PRIVATELY AND NOT BY THE CITY OF SEATTLE OR KING COUNTY.																							
11.	CARE SHALL BE EXERCISED WHEN EXCAVATING NEAR EXISTING CHARGED WATER MAINS.																							
12.	ALL WORK PERFORMED BY SEATTLE CITY LIGHT, SPU, AND OTHER PUBLIC/PRIVATE UTILITIES TO REMOVE OR RELOCATE EXISTING UTILITIES AT THE DEVELOPER’S EXPENSE SHALL BE COORDINATED BY THE CONTRACTOR.																							
13.	THE CONTRACTOR SHALL FIELD VERIFY THE CROSSING ELEVATIONS OF PROPOSED AND EXISTING UTILITIES ABOVE AND BELOW THE PROPOSED DUCT BANKS AND MODIFY THE FRANCHISE UTILITY CONDUIT BENDS AND SEPARATIONS AS REQUIRED BY SCL CONSTRUCTION GUIDELINES.																							
14.	CONTRACTOR IS RESPONSIBLE FOR OFFSETTING VAULTS AND HANDHOLES BEHIND THE BACK OF CURB OR BEHIND THE SIDEWALK, AS LABELED ON THE PLAN. THE CONTRACTOR IS RESPONSIBLE FOR AVOIDING POTENTIAL CONFLICTS WITH EXISTING AND PROPOSED UTILITIES.																							
15.	SOME ELEMENTS OF THE SURVEY BACKGROUND HAVE BEEN REMOVED FROM THESE PLANS AS REQUESTED BY SCL. CONTRACTOR IS RESPONSIBLE FOR REFERRING TO THE SURVEY AND DEMOLITION PLANS PROVIDED WITH THE CONTRACT DOCUMENTS TO ASCERTAIN ANY POTENTIAL CONFLICTS WITH THE IMPLEMENTATION OF THIS UTILITY CONSTRUCTION.																							
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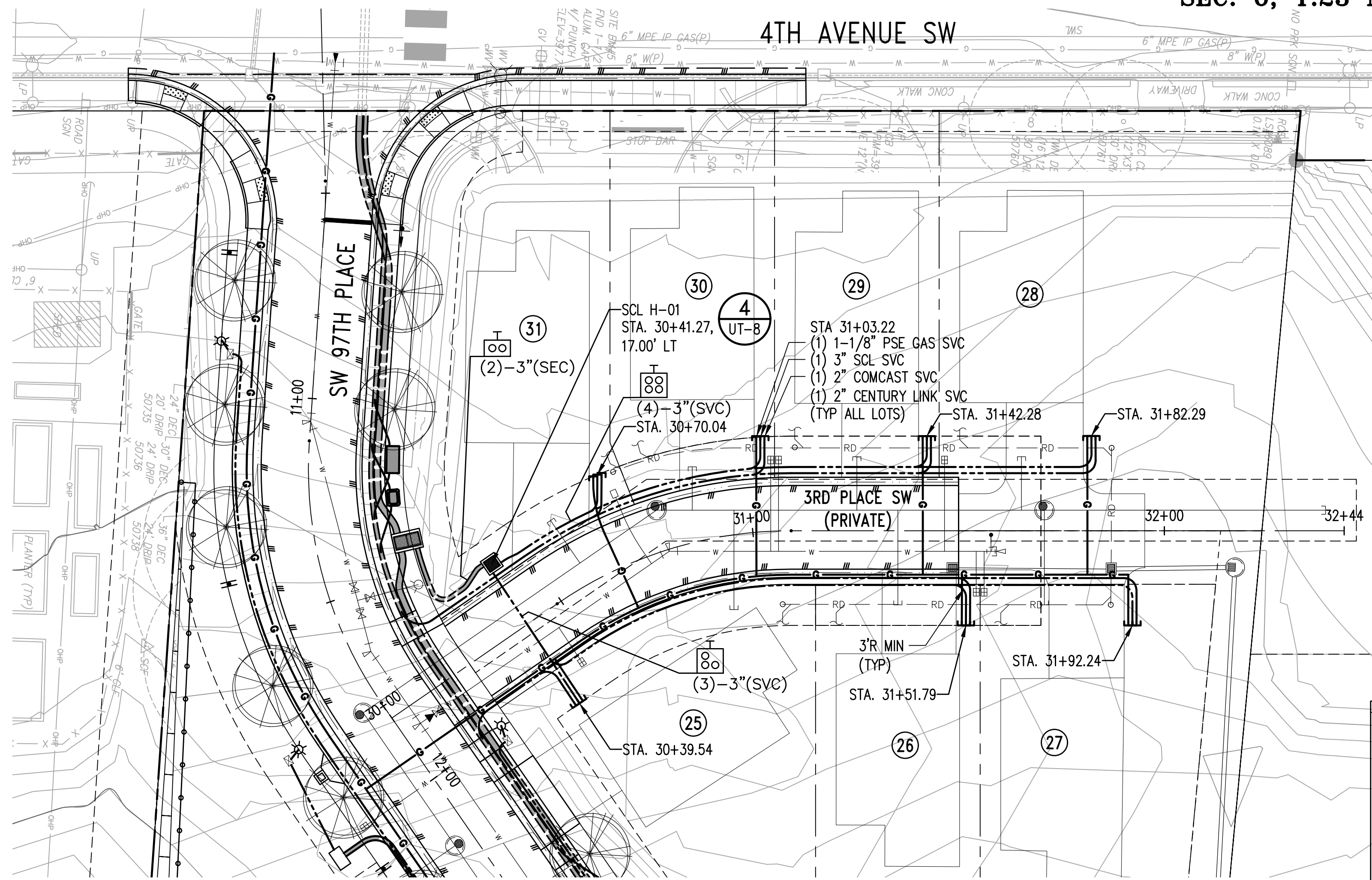


- CONSTRUCTION NOTES:**
- UTILITY SERVICES SHALL BE STUBBED 5' BEYOND RIGHT OF WAY LINE (UNLESS NOTED OTHERWISE). CONDUITS SHALL BE STUBBED PER SCL CONSTRUCTION GUIDELINE U2-11 AND LOCATION SHALL BE CLEARLY MARKED AND IDENTIFIED FOR FUTURE EXTENSION.
 - SEE ILLUMINATION PLANS FOR STATIONS, OFFSETS, AND DETAILS OF LUMINAIRES.
 - SEE ILLUMINATION PLANS FOR LUMINAIRE POLE FOUNDATION DETAIL, HANDHOLE LOCATIONS, AND CONDUIT ROUTING.
 - FRANCHISE UTILITY VAULTS AND CONDUITS MAY VARY BASED ON FINAL ENGINEERING DESIGNS.



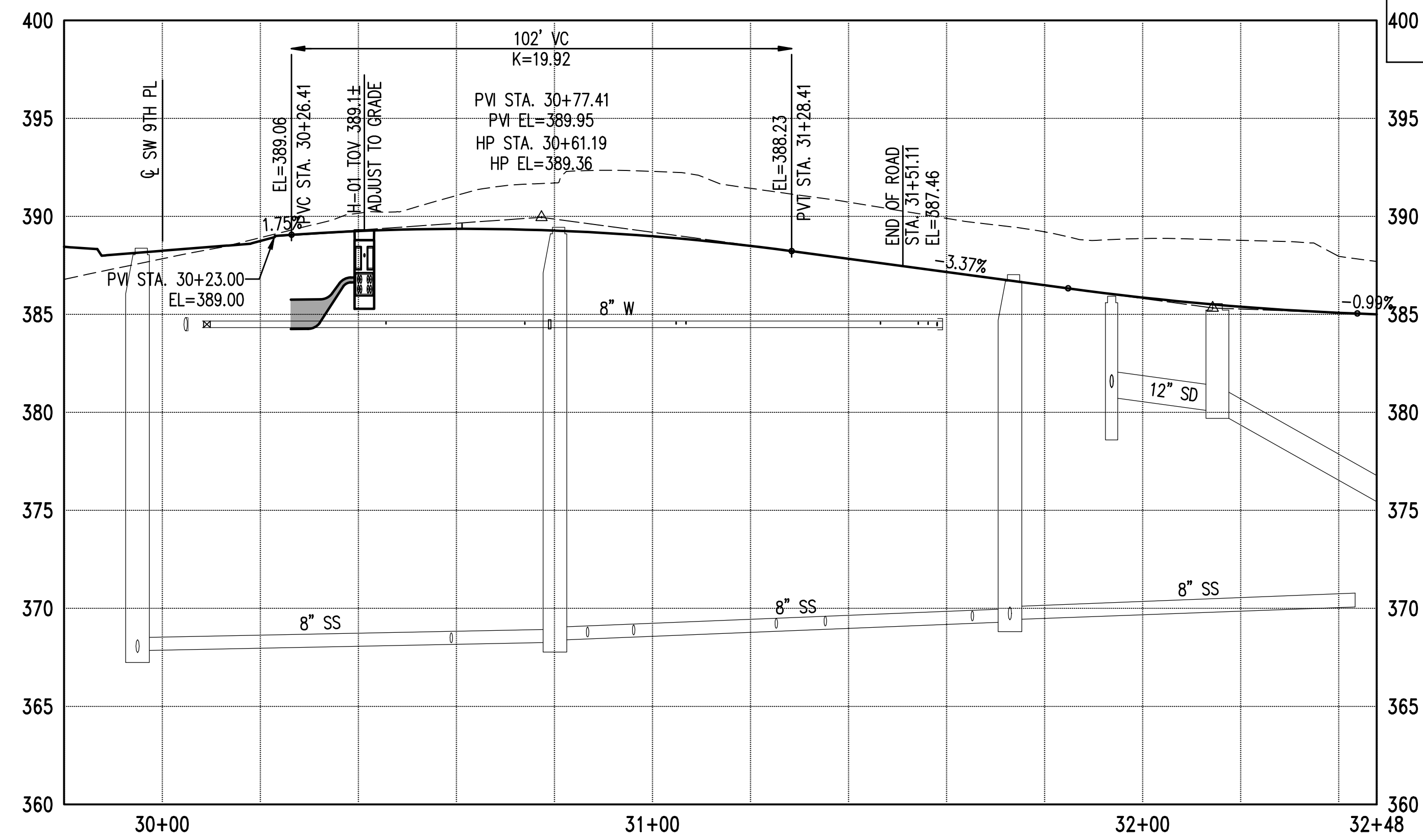
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SEC. 6, T.23 N., R.4E., W.M.



SEE SHEET UT-3 FOR CONTINUATION

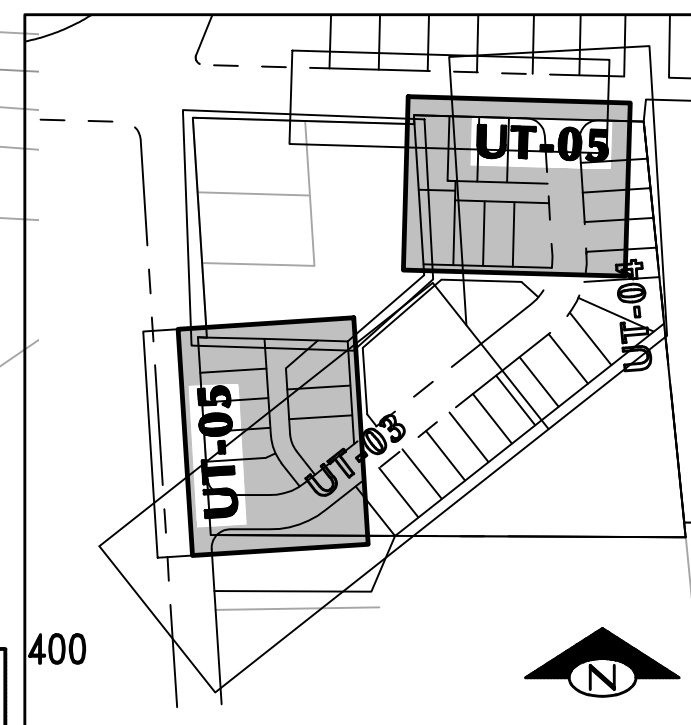
3RD PLACE SW PLAN VIEW



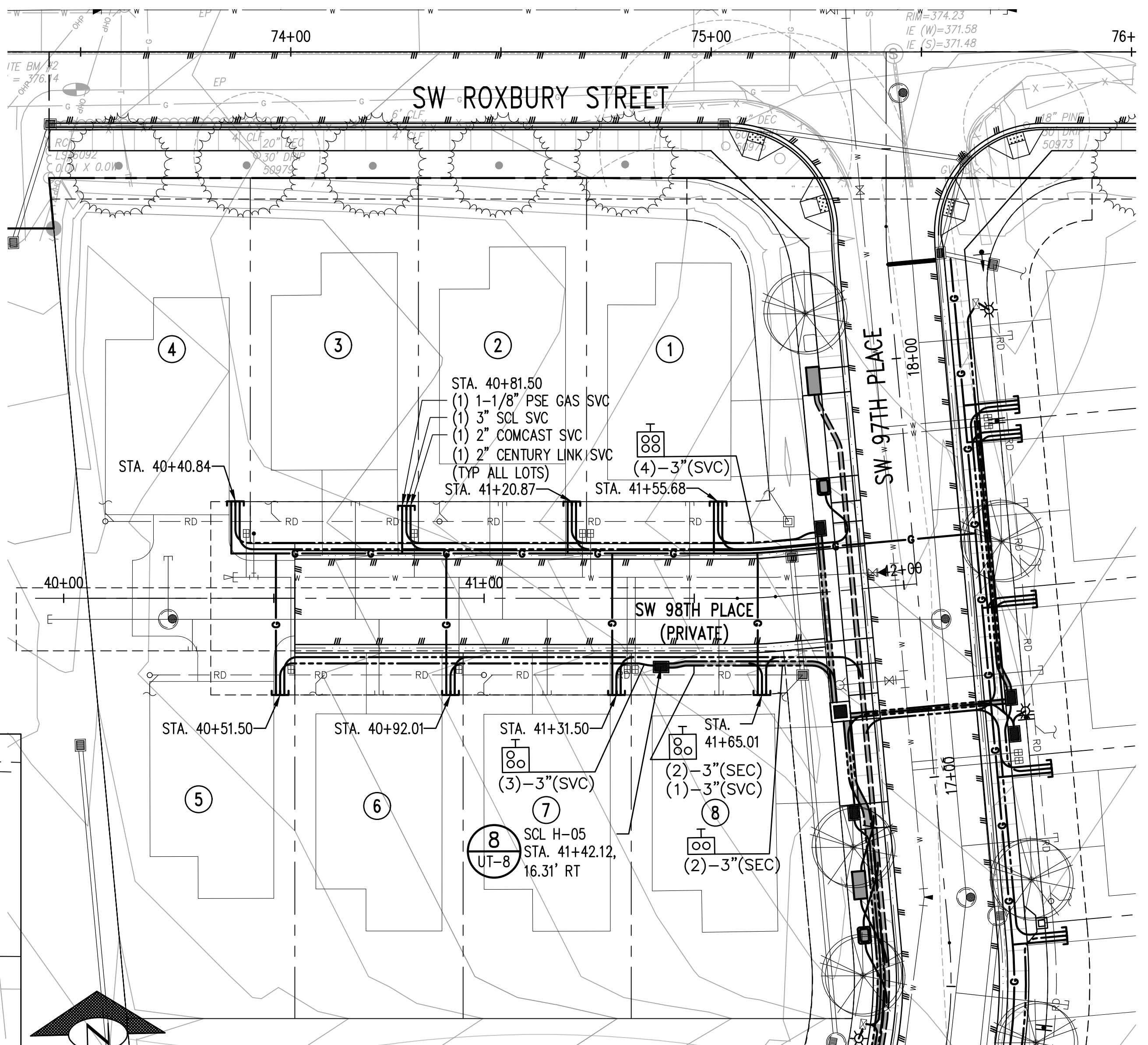
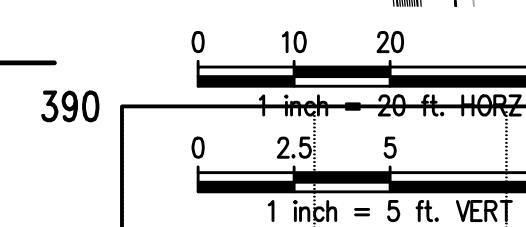
3RD PLACE SW PROFILE

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1. UTILITY SERVICES SHALL BE STUBBED 5' BEYOND RIGHT OF WAY LINE (UNLESS NOTED OTHERWISE). CONDUITS SHALL BE STUBBED PER SCL CONSTRUCTION GUIDELINE U2-11 AND LOCATION SHALL BE CLEARLY MARKED AND IDENTIFIED FOR FUTURE EXTENSION.
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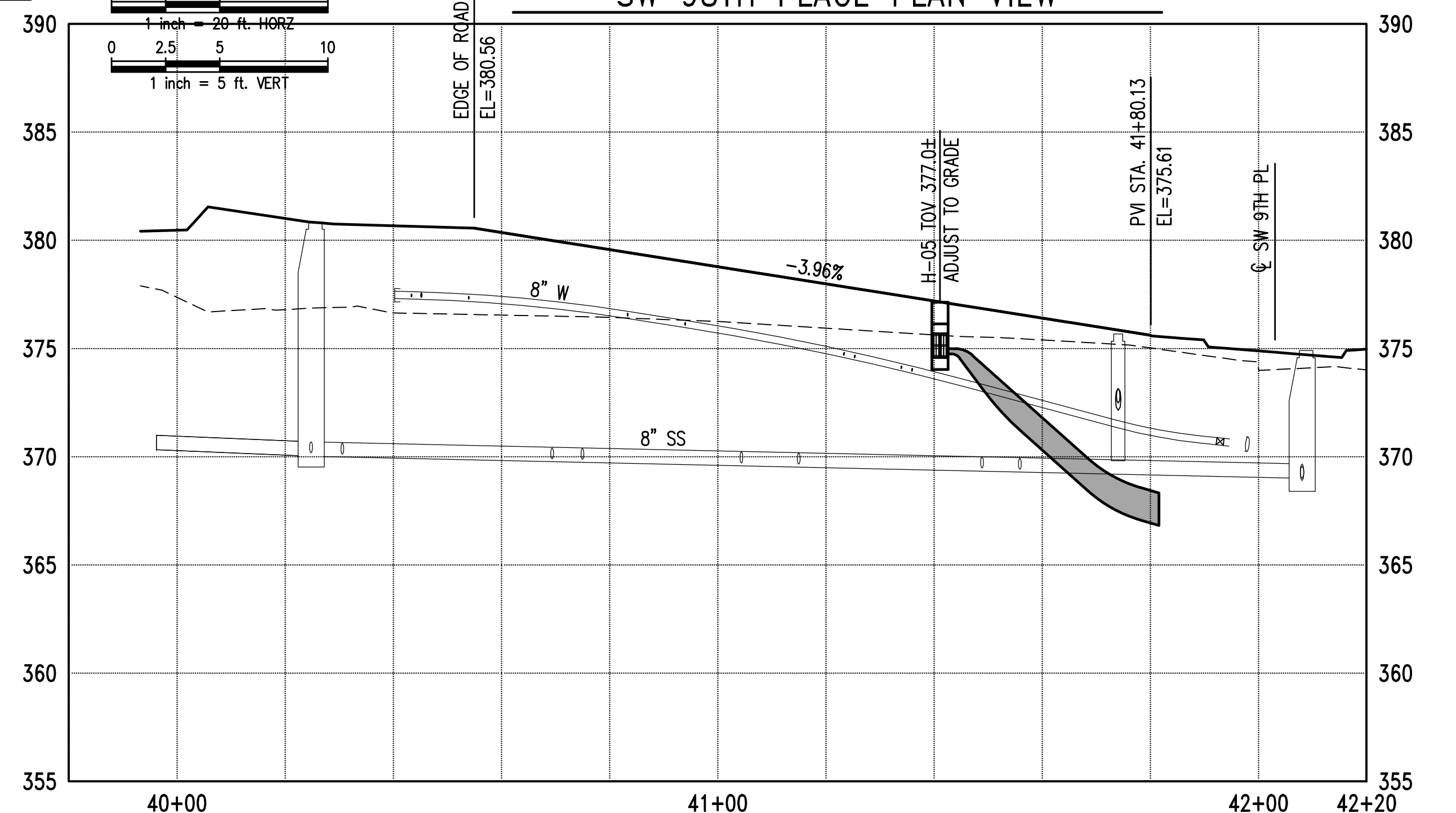


KEY MAP






SW 98TH PLACE PLAN VIEW

SEE SHEET UT-4 FOR CONTINUATION



SW 98TH PLACE PROFILE

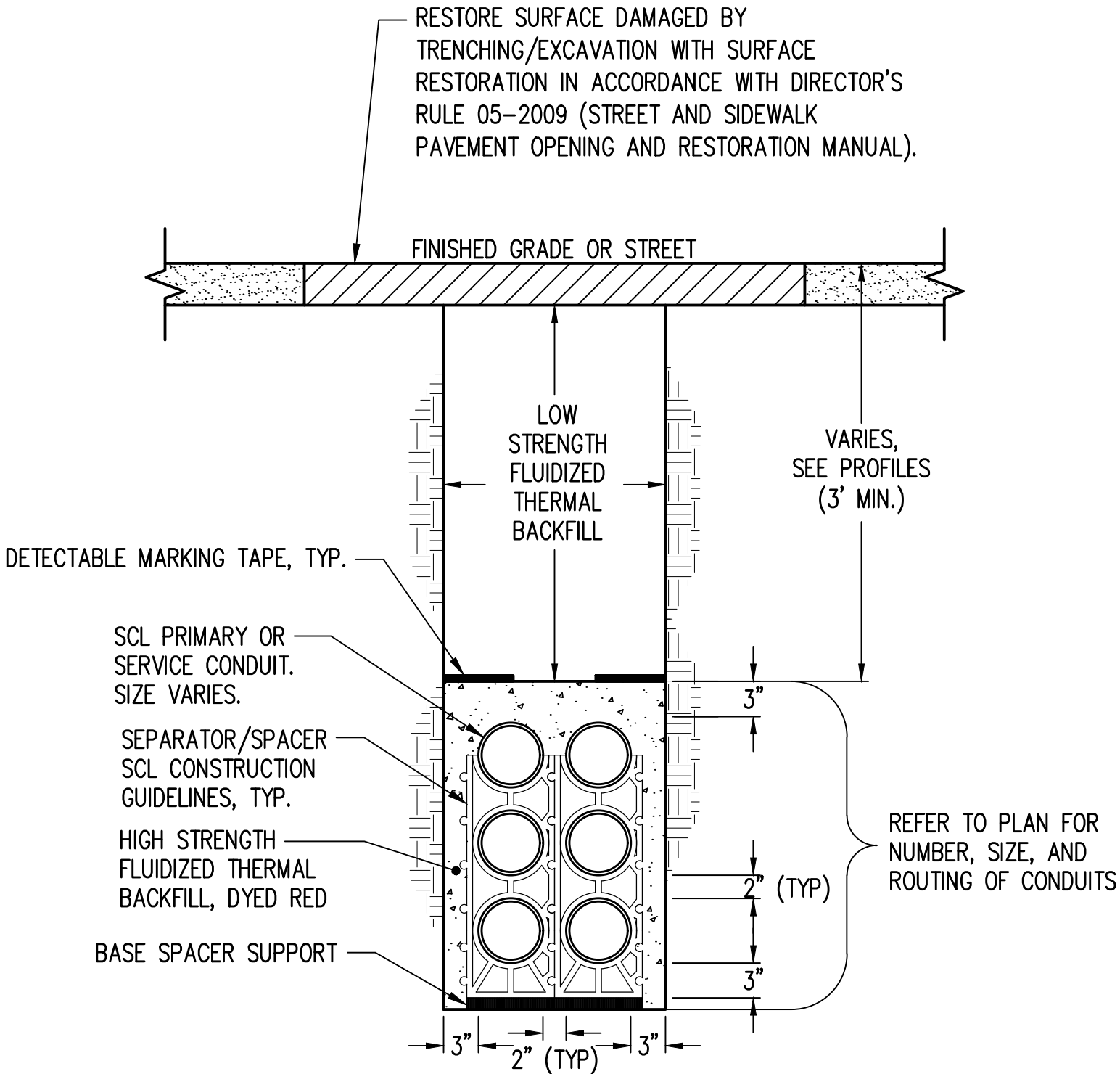
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2	07/04/18					REVISED PLAN									
1	06/21/18					PER SCL REVIEW COMMENTS		DATE MAY 25, 2018							
NO.	DATE	BY	CHD.	APPR.	REVISION		J O B No. : 114137.10		SCALE: AS NOTED						

SECTION LEGEND

- S SCL CONDUIT (4")
- SV SCL SERVICE CONDUIT (3", UNLESS NOTED OTHERWISE)
- Q CENTURY LINK CONDUIT (4")
- QV CENTURY LINK DISTRIBUTION OR SERVICE CONDUIT (2")
- C COMCAST CONDUIT (3")
- CV COMCAST SERVICE CONDUIT (1")
- L LIGHTING CONDUIT (2")
- G GAS LINE

CONSTRUCTION NOTES:

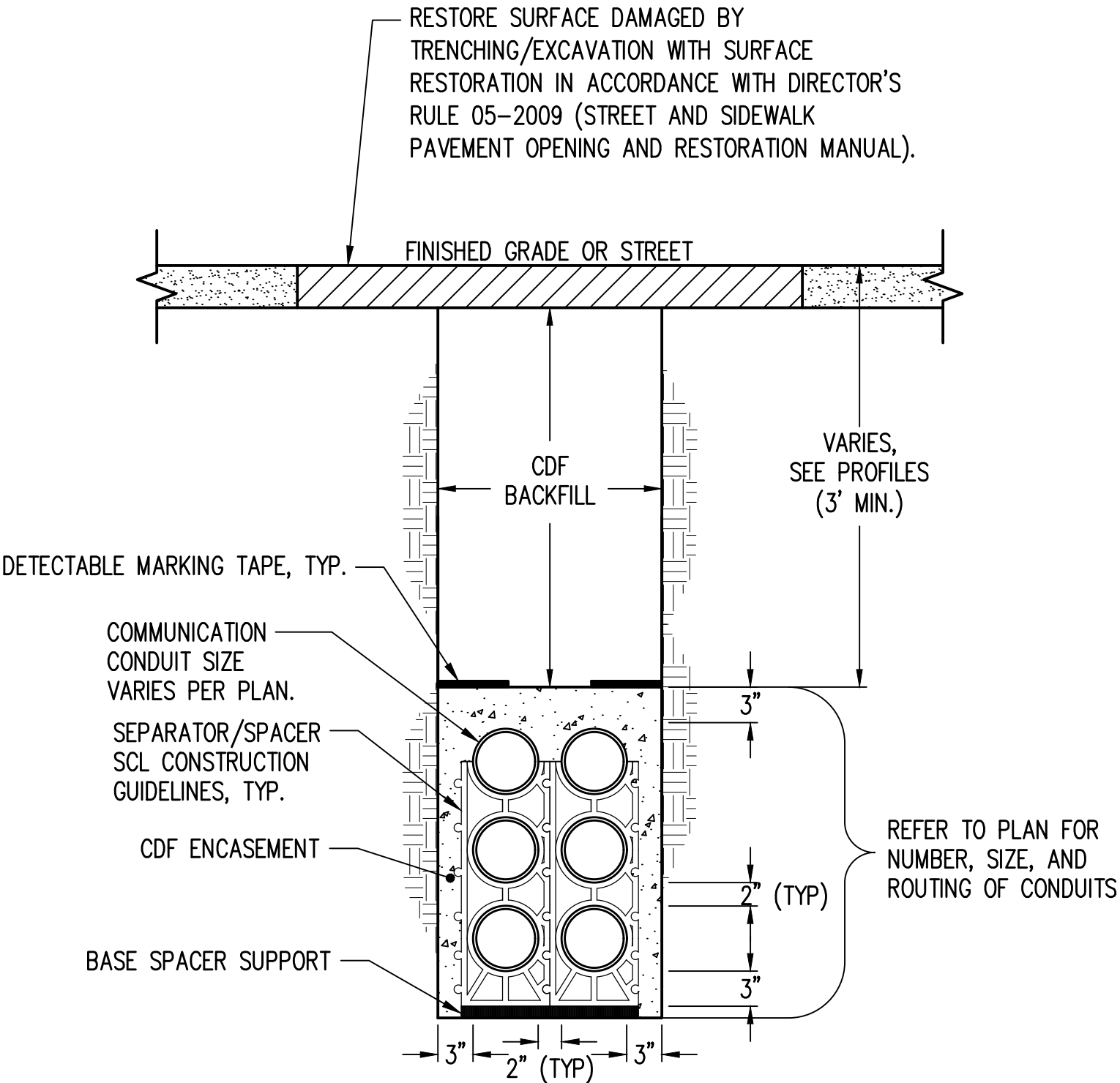
- 1. CONDUIT COUNTS VARY ACROSS THE SITE. CONTRACTOR IS RESPONSIBLE FOR ADJUSTING THE SECTIONS TO ACCOMMODATE MORE OR LESS CONDUITS WHILE STILL CONFORMING TO SCL CONSTRUCTION GUIDELINES. REFER TO SCL CONSTRUCTION GUIDELINES U2-10, U2-11 AND U12-1.4.



TYPICAL SCL
DUCT BANK SECTION

NTS

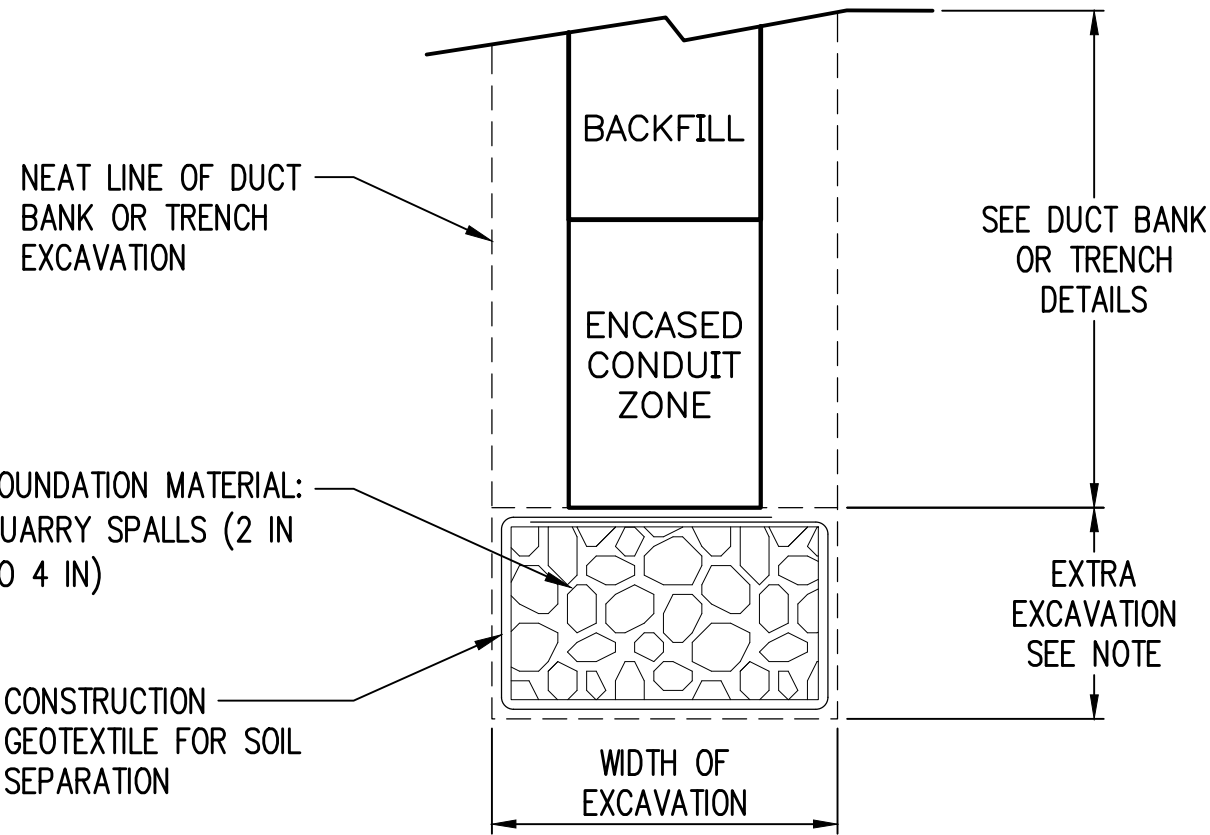
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(TYP)



TYPICAL COMMUNICATION
DUCT BANK SECTION

NTS

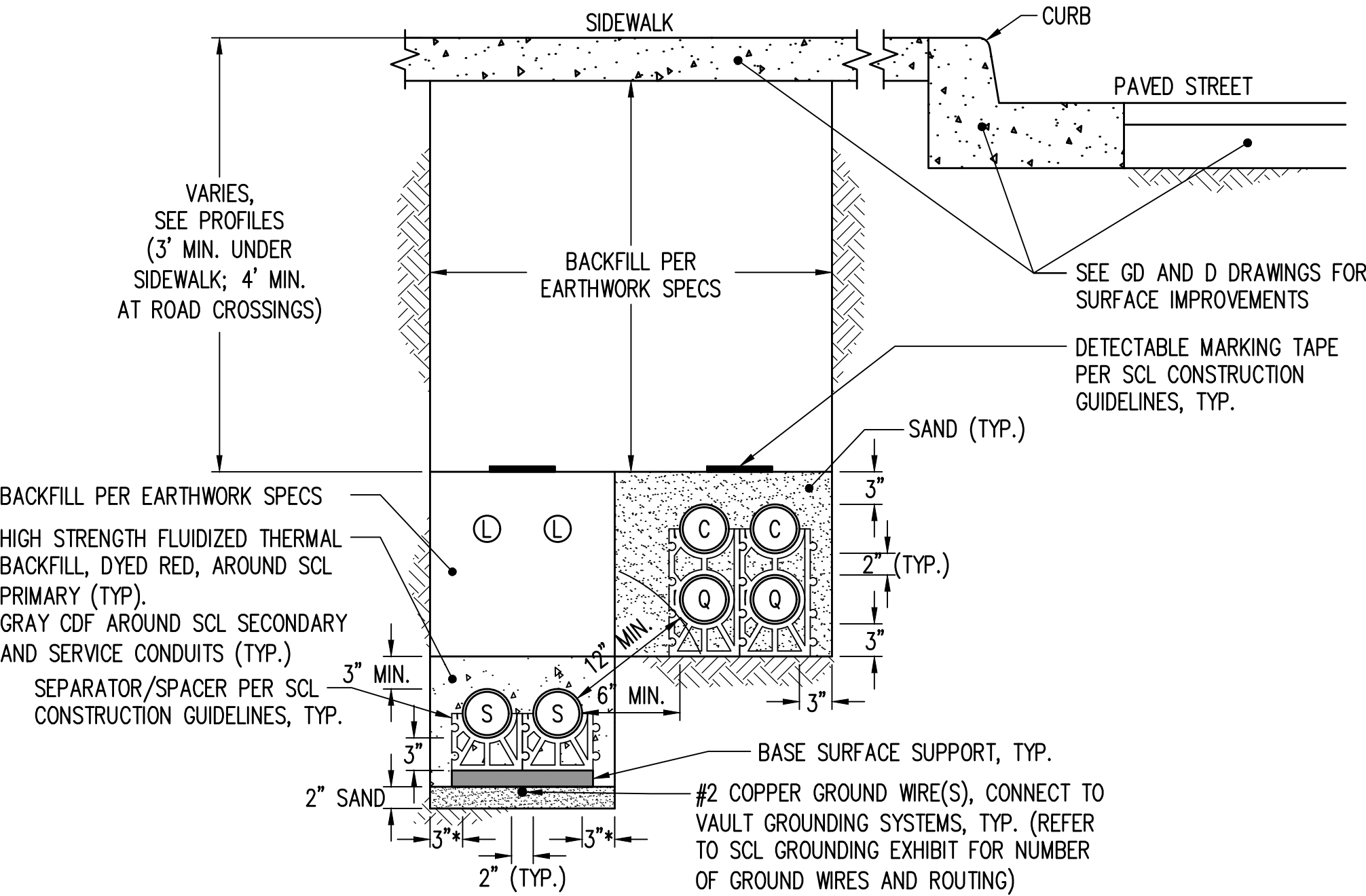
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OVEREXCAVATION
BELOW DUCT BANK

NTS

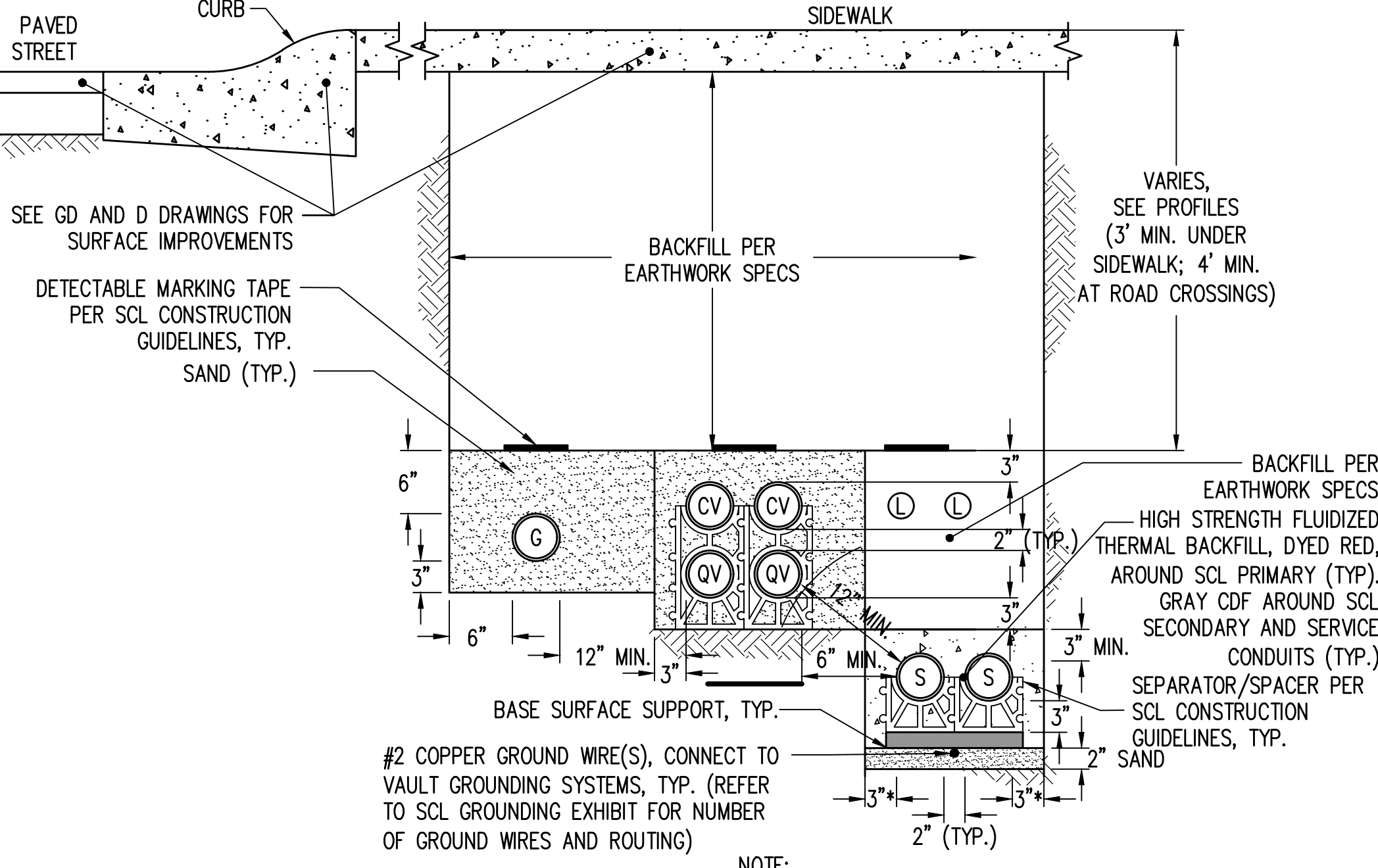
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(TYP)



TYPICAL SCL
DUCT BANK SECTION

NTS

4
(TYP)



TYPICAL SCL
DUCT BANK SECTION

NTS

5
(TYP)

- NOTE:
- 1. TYPICAL SECTIONS ARE TO SHOW FRANCHISE UTILITIES SPACING AND ORIENTATION WITHIN THE SHARED DUCT BANK SECTION. REFER TO POWER AND COMMUNICATION PLANS FOR ACTUAL CONDUIT COUNTS AND SIZING.
 - 2. FLUIDIZED THERMAL BACKFILL OVERPOUR SHALL NOT EXCEED 6"

- NOTE:
- 1. TYPICAL SECTIONS ARE TO SHOW FRANCHISE UTILITIES SPACING AND ORIENTATION WITHIN THE SHARED DUCT BANK SECTION. REFER TO POWER AND COMMUNICATION PLANS FOR ACTUAL CONDUIT COUNTS AND SIZING.
 - 2. FLUIDIZED THERMAL BACKFILL OVERPOUR SHALL NOT EXCEED 6"

2	07/04/18				REVISED PLAN
1	06/21/18				PER SCL REVIEW COMMENTS
NO.	DATE	BY	CHD.	APPR.	REVISION

DRAWN BY BUB	DESIGNED BY BUB
CHECKED BY BUB	APPROVED BY JCG
DATE MAY 25, 2018	
J O B No. : 114137.10	

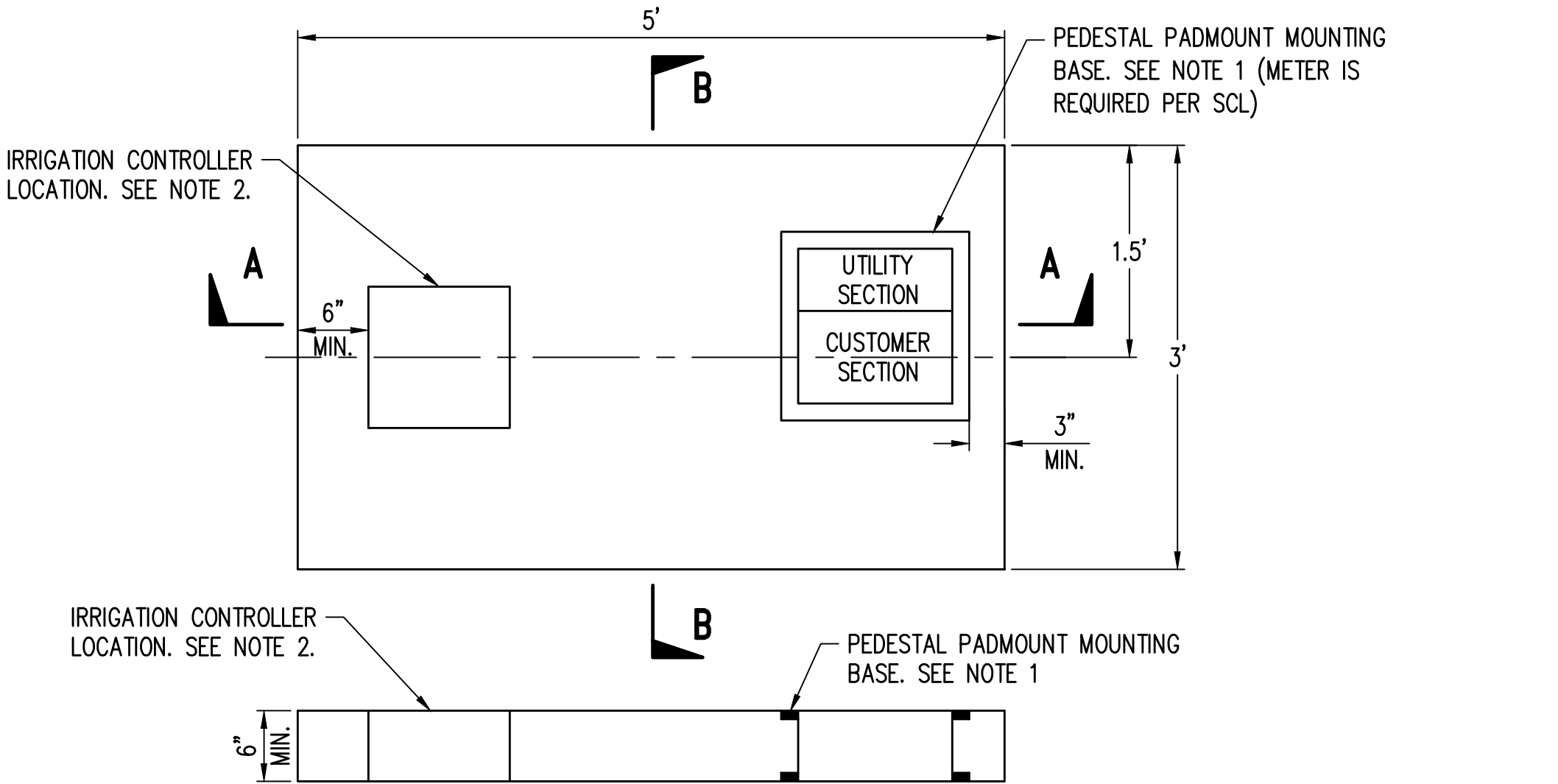
811 Call 811 two business days before you dig
SCALE: AS NOTED

kpff	1601 5th Avenue, Suite 1600 Seattle, WA 98101 206.622.5822 www.kpff.com
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King County Housing Authority
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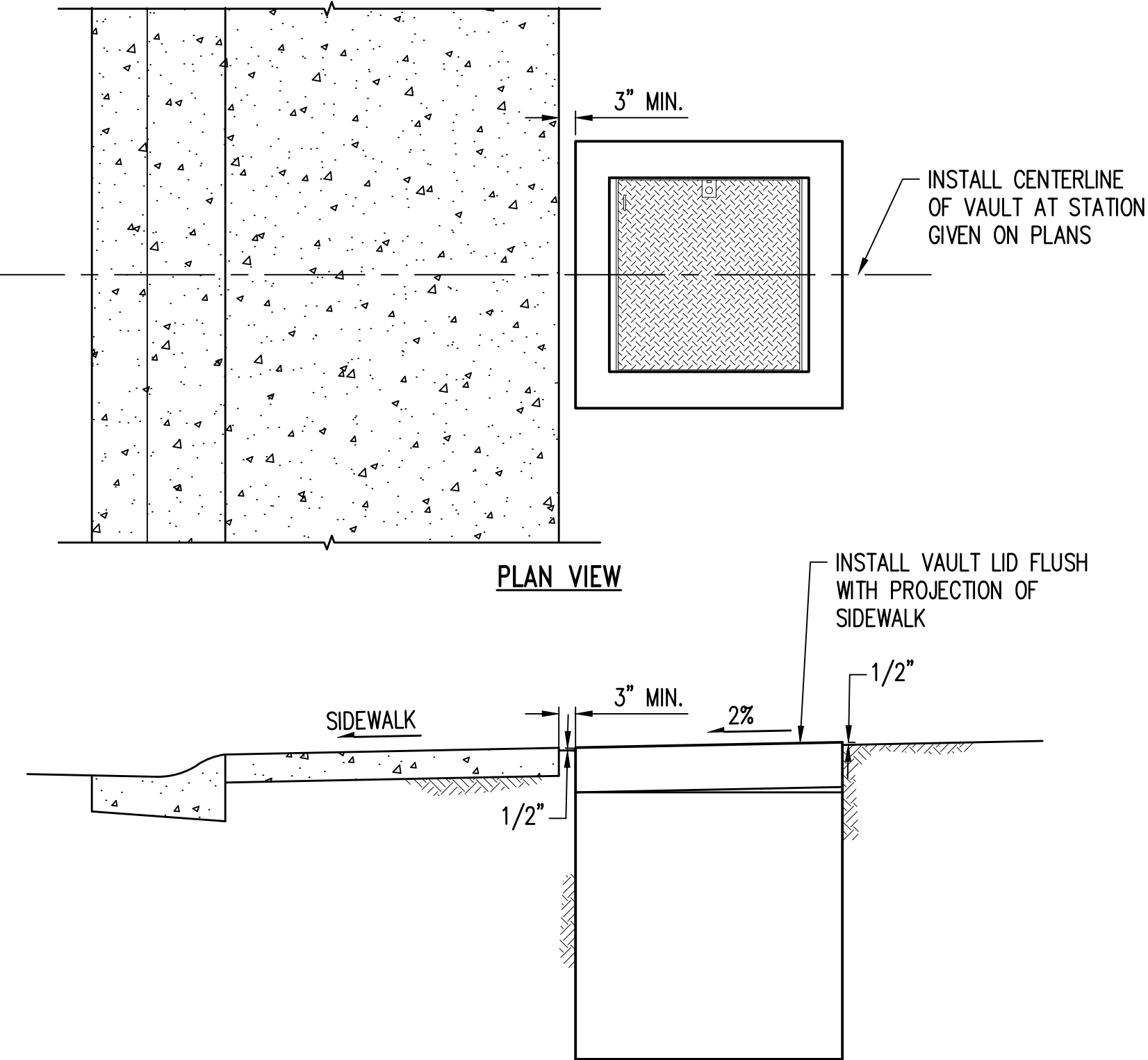
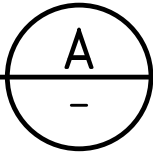
MARK A. VILLUCCI 2475 REGISTERED PROFESSIONAL ENGINEER
--

KING COUNTY HOUSING AUTHORITY WHITE CENTER, WASHINGTON	SHEET
WIND ROSE FRANCHISE UTILITY SECTIONS AND DETAILS	UT-6

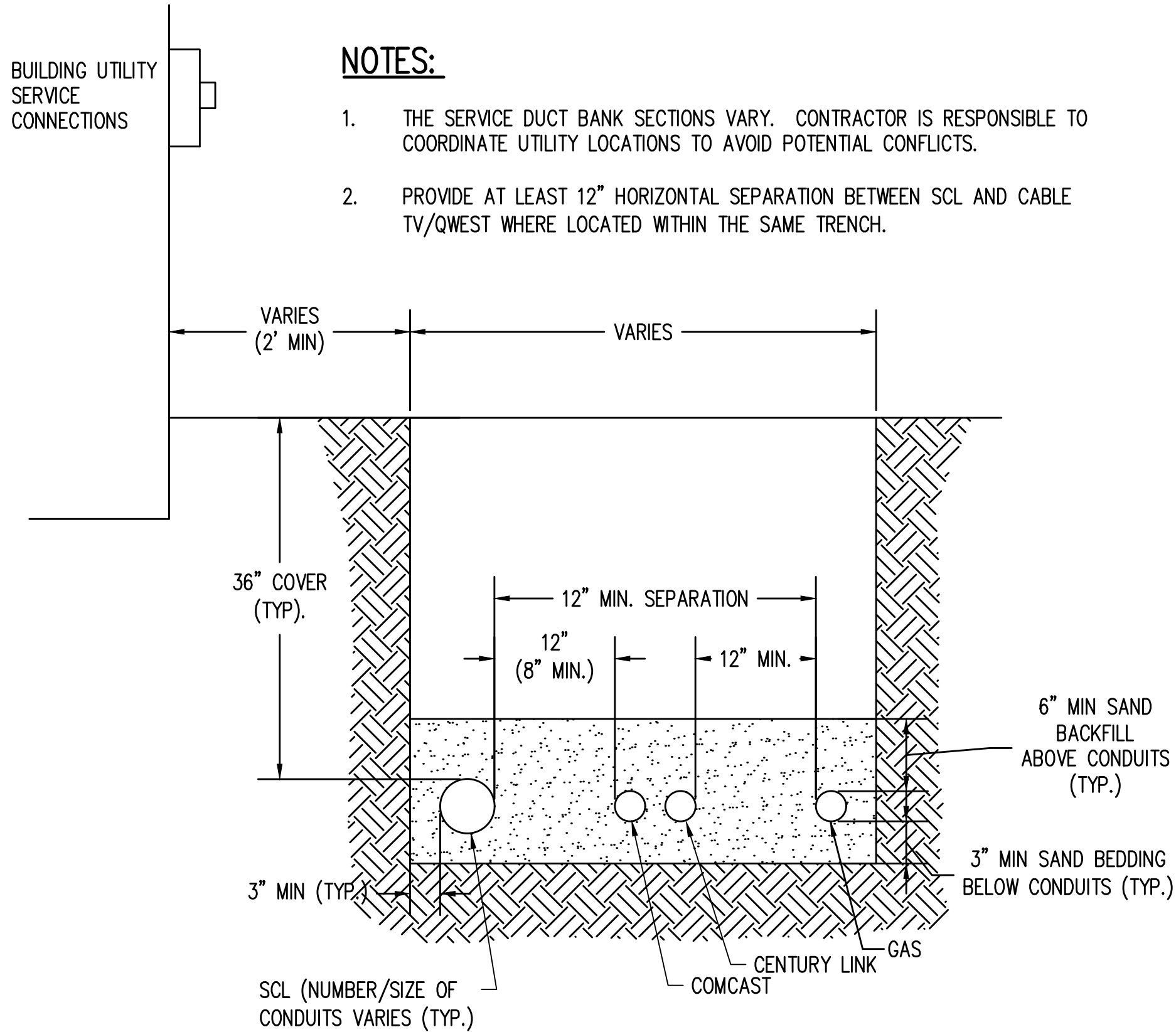
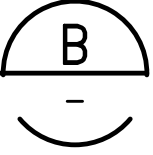


- NOTES:**
- 1. CONTRACTOR SHALL VERIFY OPENING SIZE AND PADMOUNT MOUNTING BASE LOCATION PRIOR TO CASTING THE PADMOUNT.
 - 2. COORDINATE THE OPENING FOR THE IRRIGATION CONTROLLER PEDESTAL WITH LANDSCAPE ARCHITECT.
 - 3. PADMOUNT SHALL BE CONSTRUCTED WITH PORTLAND CEMENT CONCRETE CLASS 4000 CONFORMING TO THE REQUIREMENTS OF WSDOT SPECIFICATION 5-05. CORNERS SHALL BE CHAMFERED.

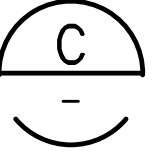
PADMOUNT TRANSFORMER DETAIL
NTS



VAULT/HANDHOLE BEHIND SIDEWALK
TYPICAL LOCATION DETAIL
NTS



TYPICAL BUILDING SERVICE SECTION
NTS



2	07/04/18				REVISED PLAN
1	06/21/18				PER SCL REVIEW COMMENTS
NO.	DATE	BY	CHD.	APPR.	REVISION

DRAWN BY BJB	DESIGNED BY BJB
CHECKED BY BJB	APPROVED BY JCG
DATE MAY 25, 2018	
J O B No. : 114137.10	



Call 811
two business days
before you dig

SCALE:
AS NOTED



1601 5th Avenue, Suite 1600
Seattle, WA 98101
206.622.5822
www.kpff.com



King County
Housing
Authority



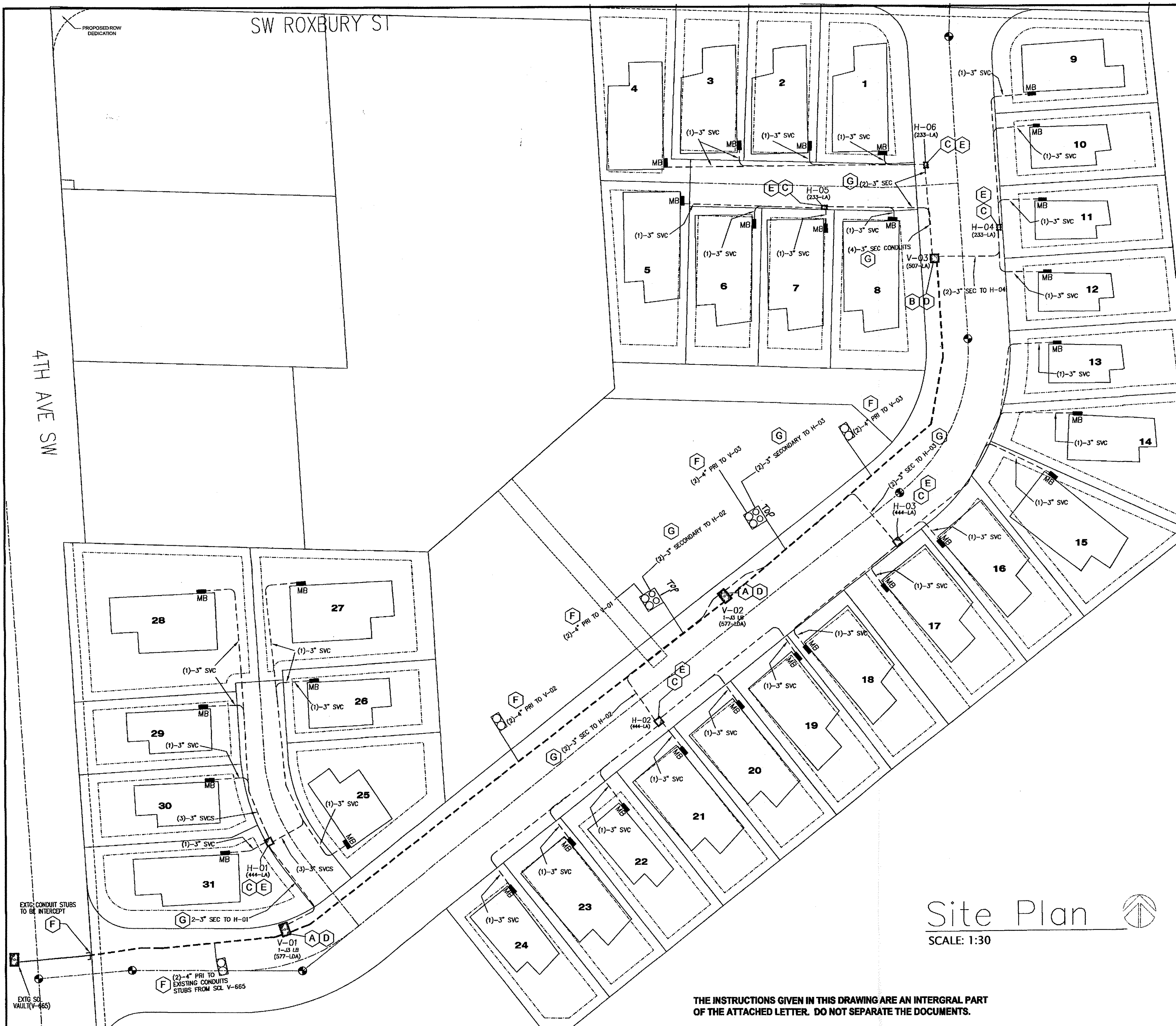
MARK A. VELASCO
STATE OF WASHINGTON
24717
715118
REGISTERED PROFESSIONAL ENGINEER

KING COUNTY HOUSING AUTHORITY
WHITE CENTER, WASHINGTON

WIND ROSE
FRANCHISE UTILITY SECTIONS AND DETAILS

SHEET

UT-7



NOTES:
Installations that differ from specifications must be corrected & may cause additional project costs and/or delays.
Ensure conduits & service termination facility will not discharge water into building. Install service conduits or equipment at elevations that will prevent water from entering service equipment or building.
Provide adequate City Light vehicular (truck) access to the vault/handhole at all times for installation and service of electrical equipment.

CONSTRUCTION MATERIALS:
Use only SCL approved manufacturers. Phone David Mannery, Electrical Service Consultant - (206) 386-4245, in advance of purchasing/installing construction materials.
1. Power Facilities - use Oldcastle Precast or SCL approved equivalent manufacturer.
2. Conduits - refer to list below or Material Standard, 7015.05. Note manufacturer limitations for PVC female adapters.
3. Conduit Bends - Galvanized Steel Matl Std 7050.05.
Clean and mandrel the conduits then install a flat, pre-lubricated, polyester or Aramid pull tape of 2,500 lb. minimum tensile strength (Fibertek Inc. or equal; City Light Stock No. 012293 and 012480 in each conduit. In each trench, place a detectable underground marking tape according to SCL Construction Guideline U2-11.40.

A NEW DISTRIBUTION LOAD BREAK & TRANSFORMER VAULT (V-01, & V-02):
Provide and install Two 577-LDA vaults, with cover slab (57-2-332-NS-GV-SA-80), one non-slip solid hatch and one grated vent hatch, one removal divider wall, and one base (577-LA w/GRD in & out) per SCL Construction Standards 0232.05, U10-7, and U2-14.2, and SCL Material Standard 7203.41 at finished grade level as shown **SITE PLAN & VAULT DETAILS**.
SEE VAULT PARTS ON PAGE (2 OF 2) IN VAULT DETAILS.

B NEW DISTRIBUTION TRANSFORMER VAULT (V-03):
Provide and install One 507-LA transformer vault, vent cover with hatch (55-332 GV), one 507-BL base per SCL Construction Standards 0232.05, U10-7, and U2-14.2, and SCL Material Standard 7203.36 at finished grade level as shown **SITE PLAN & VAULT DETAILS**.
SEE VAULT PARTS ON PAGE (2 OF 2) IN VAULT DETAILS.

C NEW DISTRIBUTION SECONDARY HANDHOLES (H-01, H-02, H-03, H-04, H-05, & H-06):
• Provide and install Three 444-LA handholes (H-01, H-02, and H-03) from Oldcastle Precast or City Light approved equivalent.
• Provide and install Three 233-LA handholes (H-04, H-05, and H-06) with 12-inches risers from Oldcastle Precast or City Light approved equivalent, in accordance with SCL construction guidelines 0232.05, 0231.01 & U2-14.2, and SCL Material Standards 7203.08 and 7203.26 at indicated locations and at finished grade level as shown on **SITE PLAN & HANDHOLE DETAIL**.
SEE HANDHOLES PARTS ON PAGE (2 OF 2) IN HANDHOLE DETAILS.

D VAULT GROUNDING (V-01, V-02, & V-03) PER SCL CONSTRUCTION STANDARDS 0461.10 Section 6.4 (Page 5 of 6) & 0468.90:
For each duct bank that penetrates the vault. Install 50 ft of bare 250 kcmil wire in the bottom of that duct bank to form a concrete-encased electrode. Wire must be positioned to ensure it is surrounded by 2 inch of concrete on all sides when concrete is poured. Install 20 ft of additional wire in order to route it from the duct bank, up through drilled hole in vault, and down to common grounding point within vault. Drill a hole into each vault wall for each grounding electrode entry. Drill each hole through the vault on the same wall that the duct bank enters, above the water table if present. At entry into vault, exothermically weld each wire to eliminate air gaps between strands. Seal the wire's entry into vault to prevent water intrusion.

E HANDHOLE GROUNDING (H-01, H-02, H-03, H-04, H-05, & H-06) PER SCL CONSTRUCTION STANDARDS 0461.10 Section 6.2 (Page 4 of 6) & 0468.90:
Provide and install (5/8" DIA. X 8' L) in each handhole, and install a continuous #2 AWG wire throughout the system and exothermically connect to the ground rod in each handhole. Route wire electrode in the bottom of the trench. Drill a hole into each handhole wall for each grounding electrode entry. Drill each hole through the handhole on the same wall that the conduits enter, above the water table if present. At entry into handhole, exothermically weld each wire to eliminate air gaps between strands. Seal the wire's entry into handhole to prevent water intrusion.

NOTE: After grounding installation is complete, the Seattle City Light electrical reviewer must test and approve grounding before vaults/handholes will be accepted for service.

- Specific Requirements Vaults/Handholes:**
- Vaults/Handholes: cover shall have hinged slip-resistant lid with "SCL" designation.
 - Position Vaults/Handholes to avoid collecting surface water.
 - Do not install Vaults/Handholes in street, parking area, or driveway.
 - Ensure Vaults/Handholes location will not be obscured over time by planned landscaping.
 - Vaults/Handholes lid must open flat.
 - Vaults can not be installed if grade exceeds 5.6% in any direction.
 - Vaults/Handholes must be set at indicated location (Sidewalk), as shown on **SITE PLAN**.
 - Vault ventilation openings must be a minimum of 10 feet from window, door, or flammable surface and 3 feet from 3-hour rated fire resistance (Non-combustible Structure).
 - Provide a permanent, level, unobstructed 8-foot wide working area around the transformer vaults.
 - Provide 25-foot clear space above each transformer vault (V-01, V-02, and V-03).
 - There shall not be any planted trees within 2-feet of SCL vaults, handholes, and conduits.
 - Vaults: Backfill Controlled Density Fill (CDF) per U2-15.1 section#6 page(3 of 3).

F PRIMARY (HIGH VOLTAGE) CONDUITS:

- Existing conduit stubs at main entrance of the property. Intercept and extend two 4-inches PVC SCH-40 primary conduits from existing SCL vault(V-665) into new vault(V-01).
- Provide and install Two 4-inches PVC SCH-40 primary conduits between: V-01 and V-02; V-02 and V-03.

Per SCL construction guidelines/standards 0214.00, 0222.02, 0224.05, U2-11.40, & 0226.06 as shown on **SITE PLAN, AND VAULT DETAILS**.

- Specific Requirements:**
- Conduit shall be installed in Right of Way and private property to be served.
 - Joints shall meet squarely, without gaps.
 - Conduits shall enter a vault perpendicular to wall.
 - All primary Conduits depth to be 36-inches minimum in right-of-way, easement area, and in private property.
 - Bends shall be Galvanized Rigid Steel. (4-foot radius).
 - A maximum of 180° of bends is allowed in each primary conduit run.
 - PVC SCH-40 conduit (10-ft sections) shall not be bent more than 15° (8" deflection at end).
 - All primary conduits shall be encased with red-dyed high-strength fluidized thermal backfill (FTB) within 3 inches of the conduits. Trench backfill shall be non-dyed controlled density fill (CDF) as described in SCL Construction Standards: 0224.05, 0222.02, & 0226.06, and Material Standard 7150.00.
 - Furnish & install and bells flush with interior walls on all conduits entering the vaults(V-01, V-02, and V-03). Conduits shall be grouted both inside & outside of vaults.

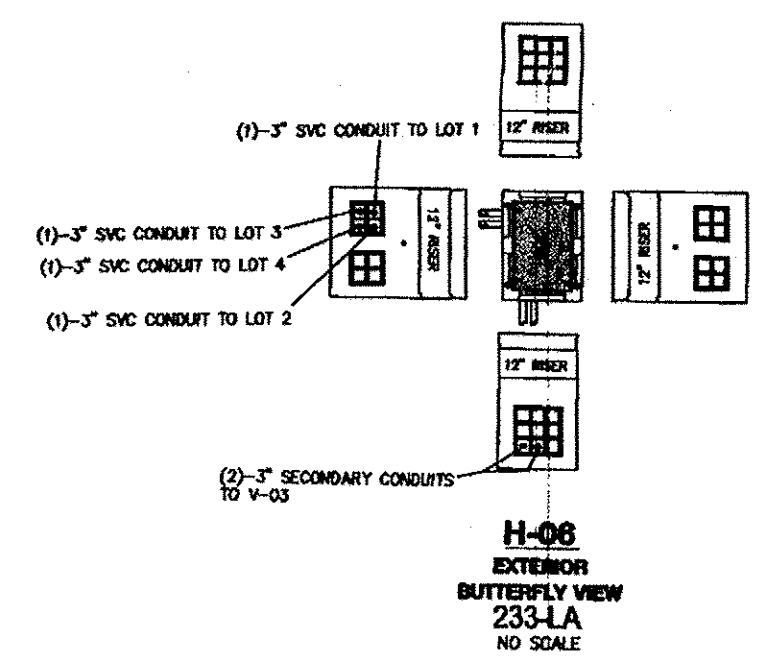
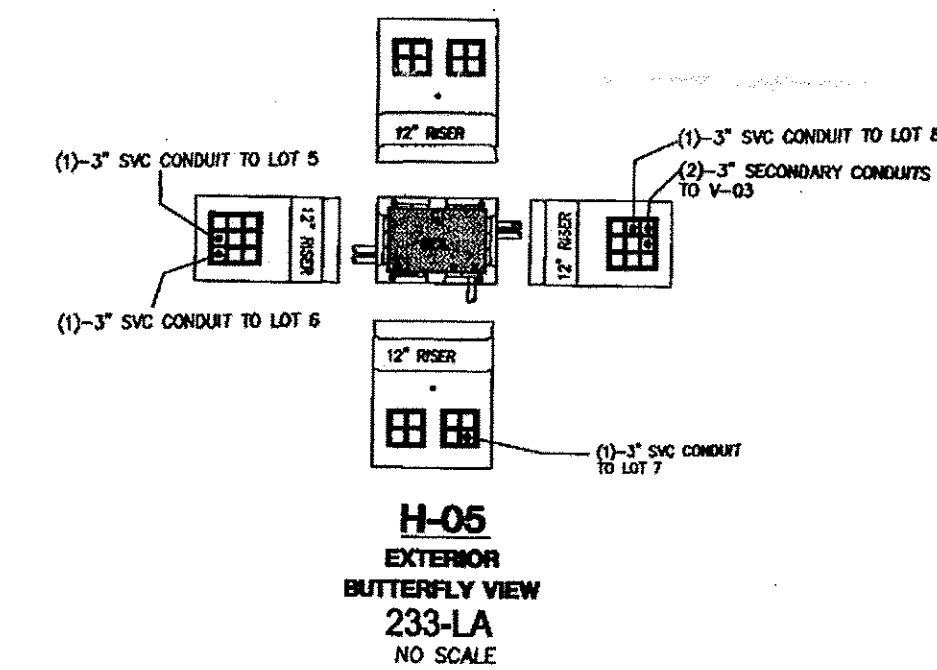
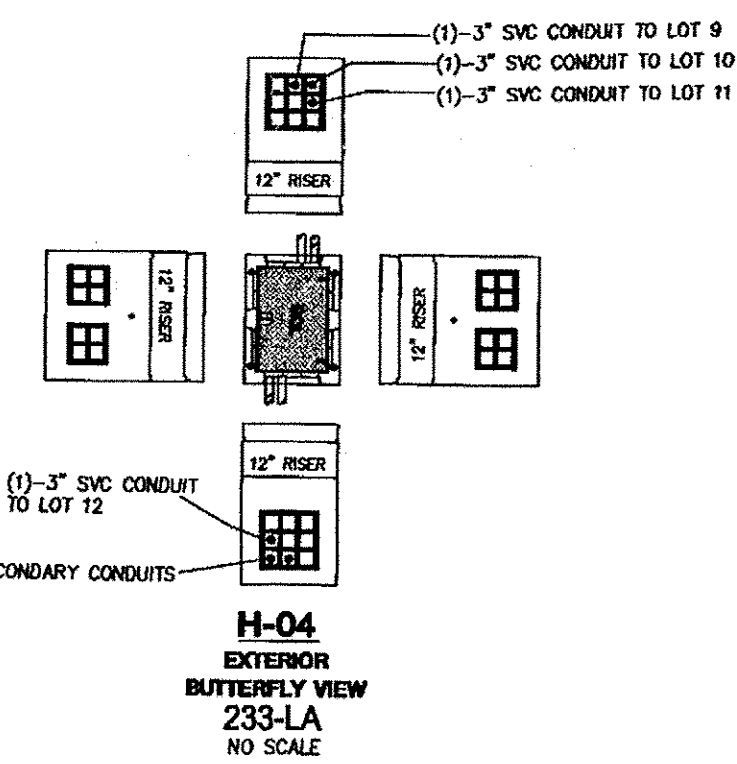
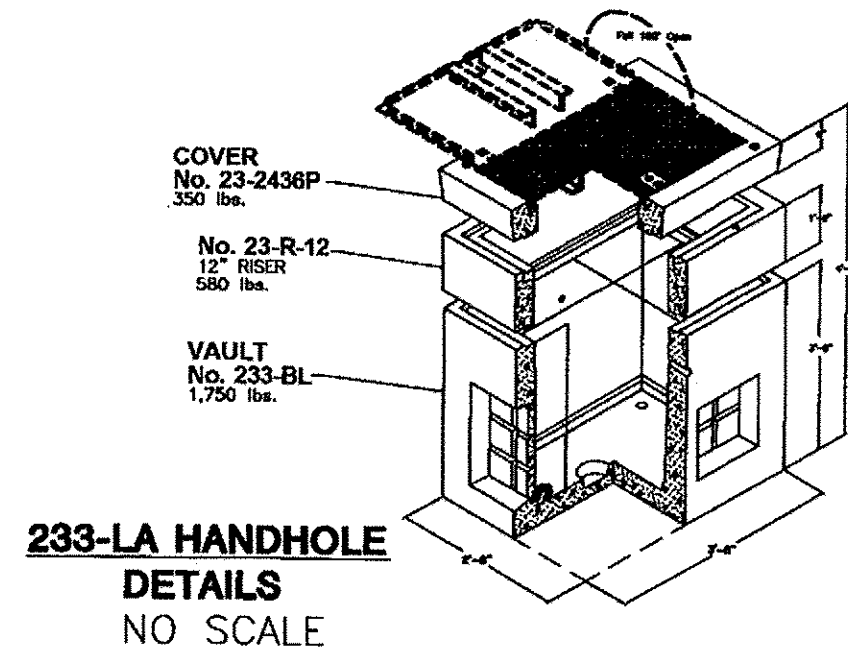
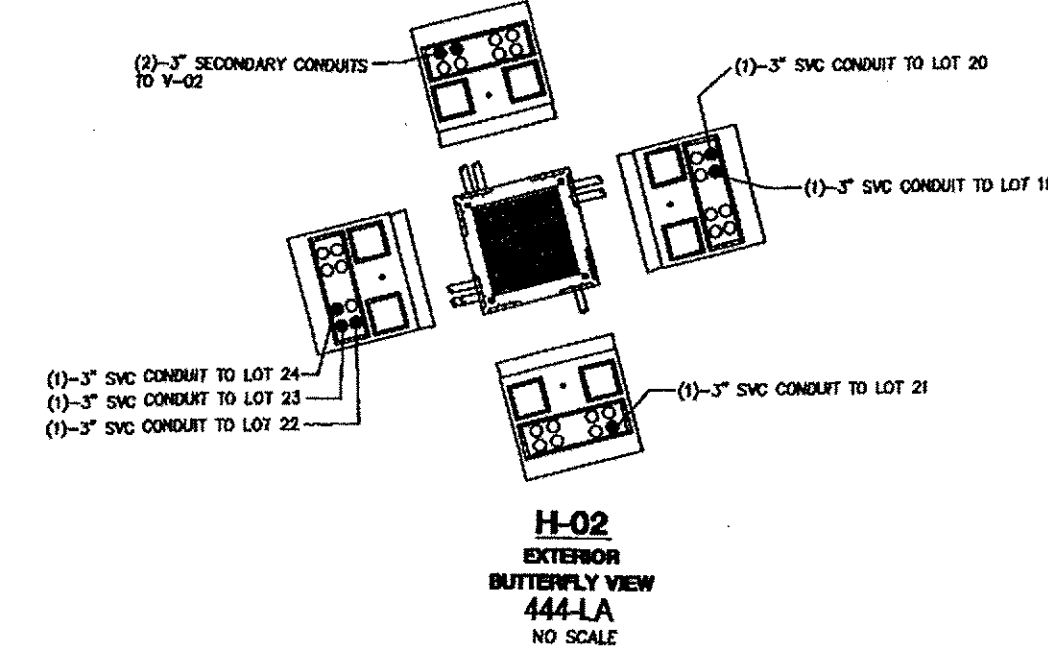
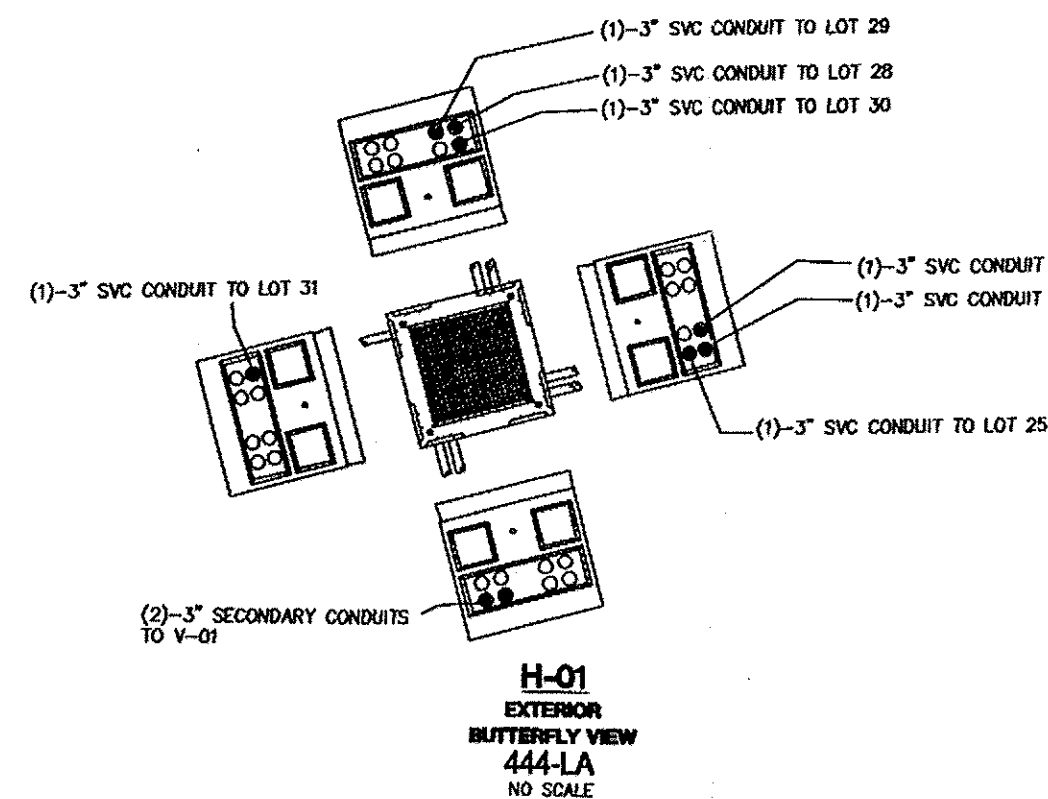
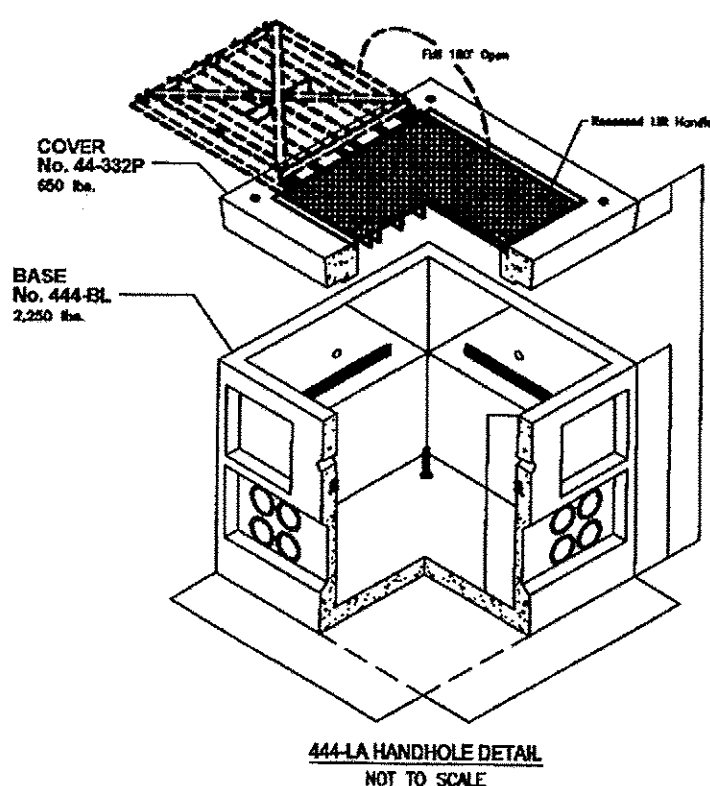
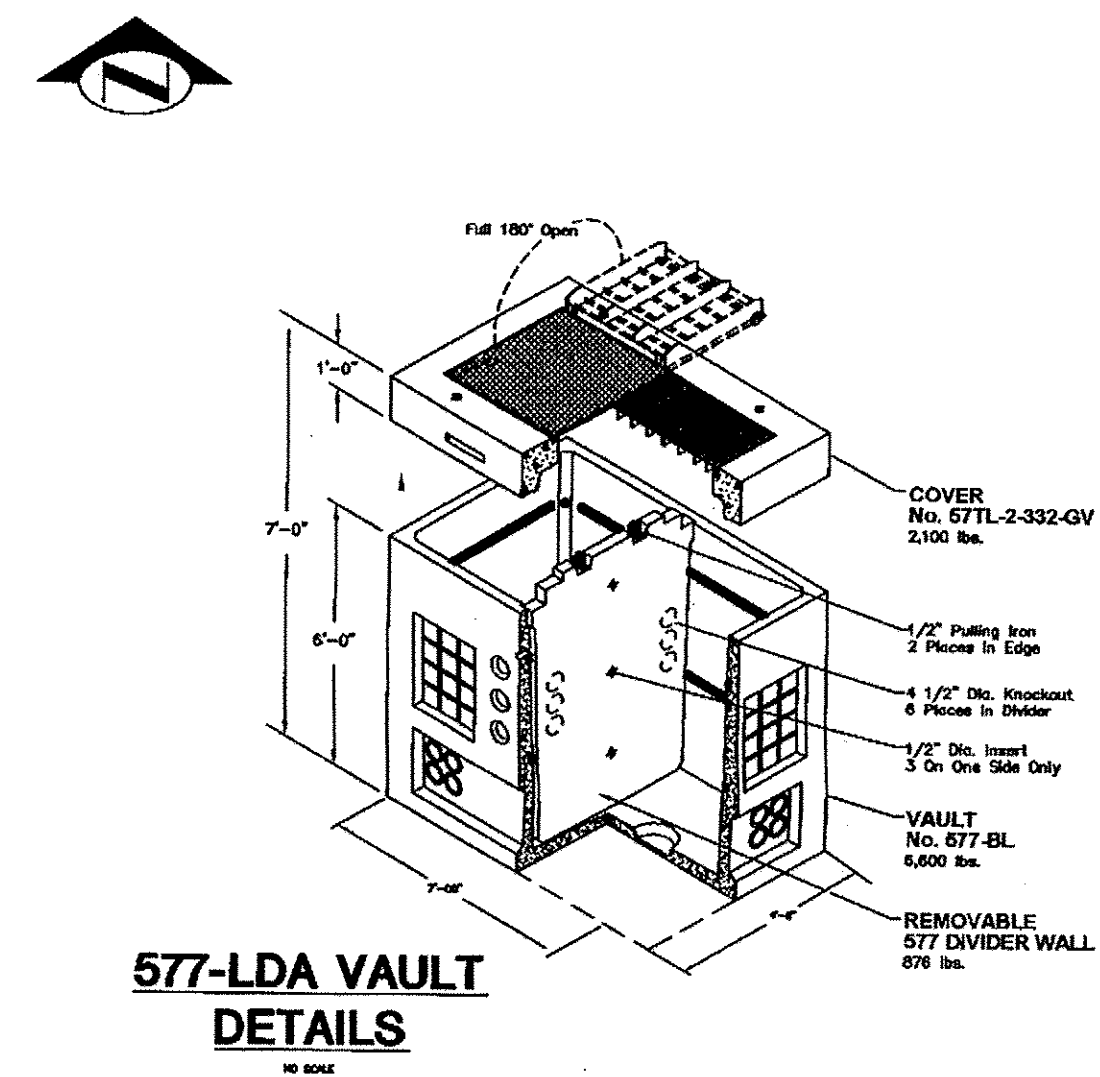
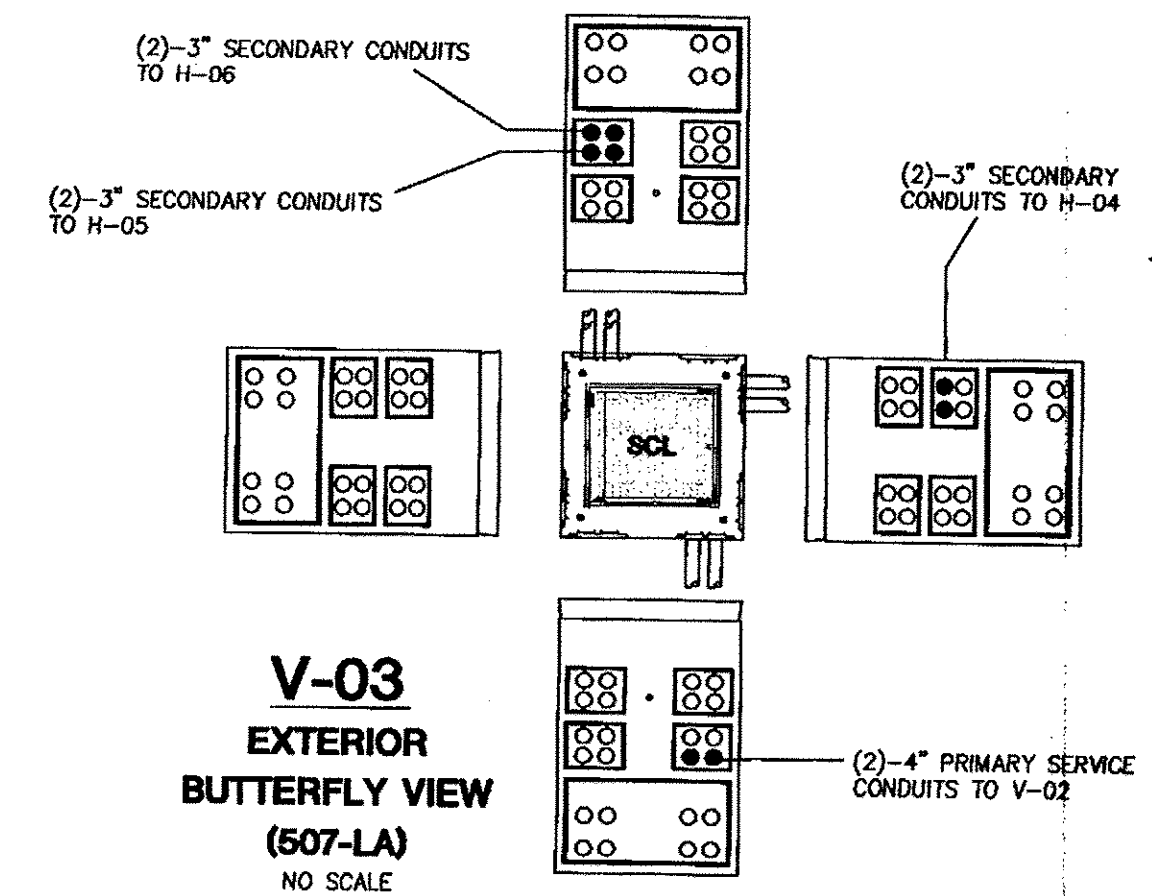
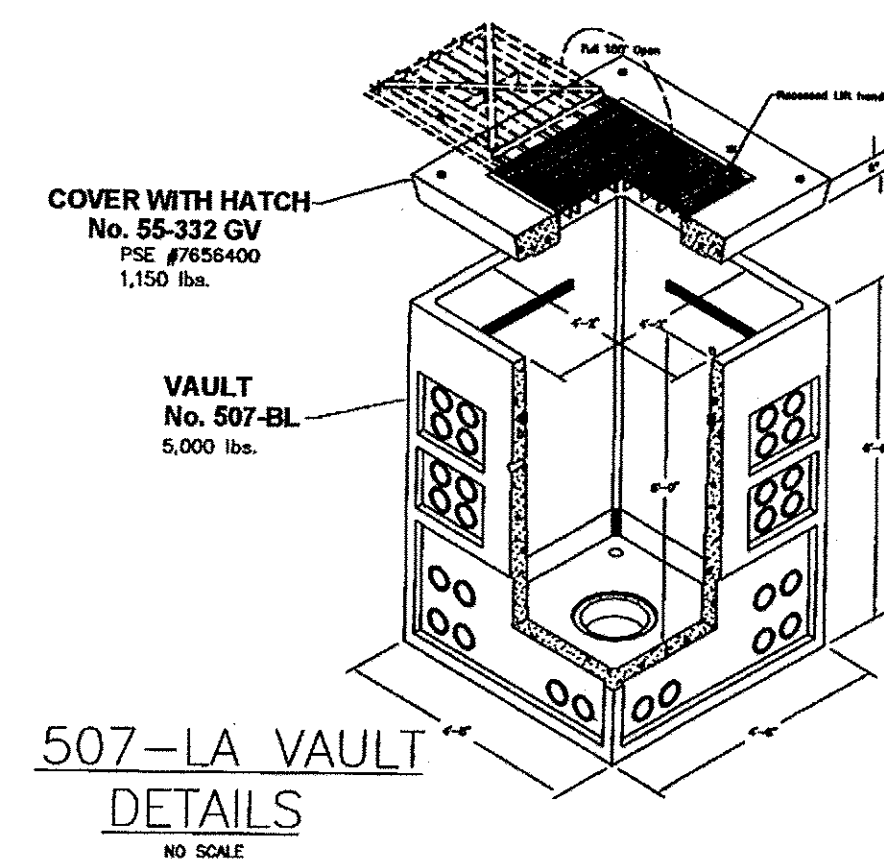
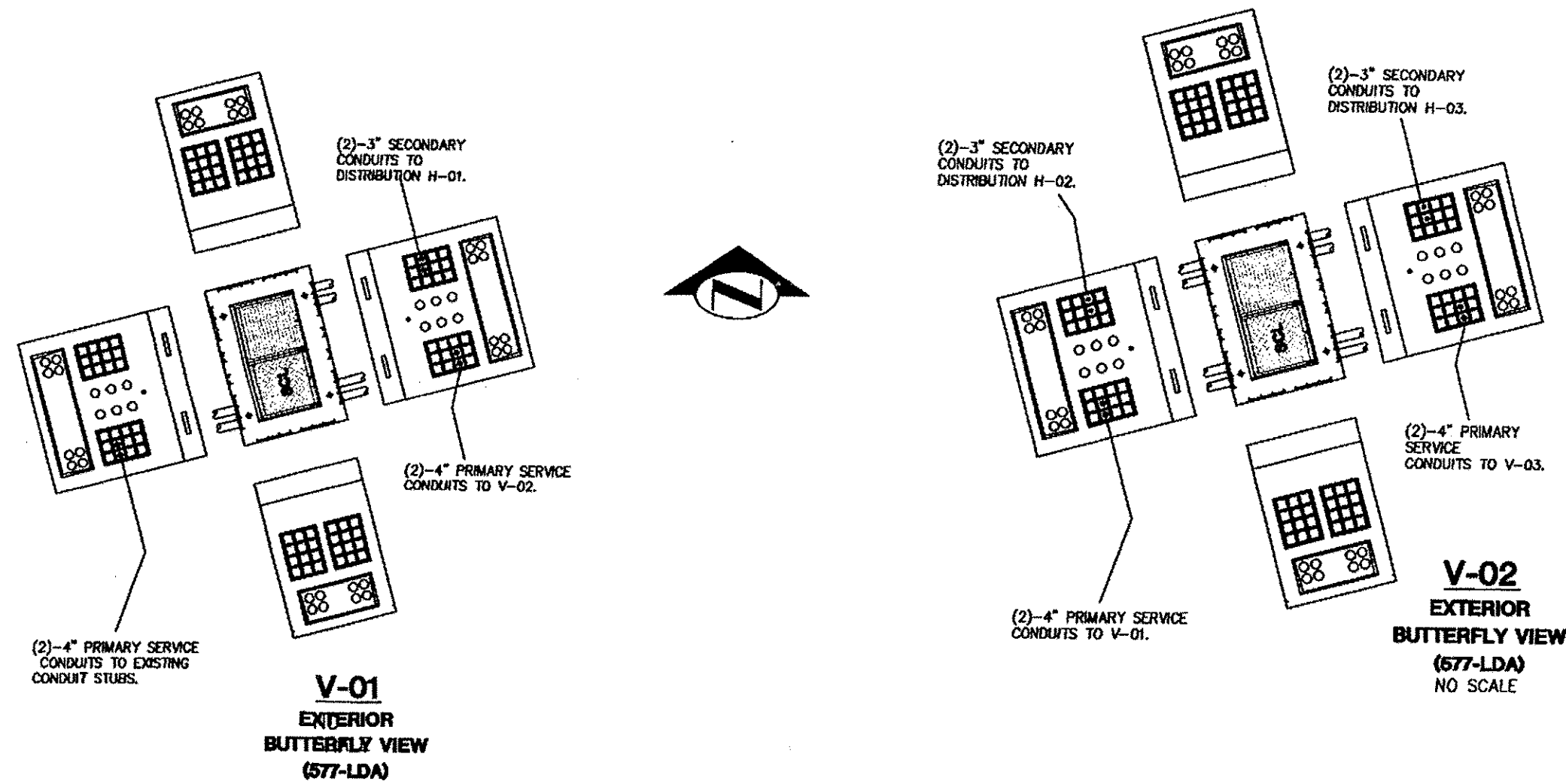
Site Plan
SCALE: 1:30

THE INSTRUCTIONS GIVEN IN THIS DRAWING ARE AN INTEGRAL PART OF THE ATTACHED LETTER. DO NOT SEPARATE THE DOCUMENTS.

PRIMARY CONDUITS-ROUTE		
BETWEEN FACILITIES	CONDUIT'S QUANTITY-SIZE	APPROX. DISTANCE
EXTD SCL VAULT(V-665) TO V-01	TWO 4-INCHES PVC SCH-40	150 FEET
V-01 TO V-02	TWO 4-INCHES PVC SCH-40	300 FEET
V-02 TO V-03	TWO 4-INCHES PVC SCH-40	240 FEET

SR# 1606535

REVISIONS REV. DATE IMAGE DRAWN BY CHECKED BY APPROVED BY WORK ORDER #:		APPROVED PVC CONDUIT MFRS (8): PRIME CONDUIT CANTEX CRESLINE NW HERITAGE PLASTICS IPEX JM EAGLE ROYAL PIPE SYSTEMS RIDGELINE PIPE		CALL BEFORE YOU DIG TO LOCATE EXISTING UNDERGROUND UTILITIES TWO BUSINESS DAYS IN ADVANCE KING CO. ONE CALL 1-800-424-5555		ENDORSEMENTS SIGNATURE DATE DRAWN: MM 03/10/2017 CHECK: <i>L. G. 4/5/17</i> APPROVED: <i>David Mannery</i> ESR: David Mannery (206) 386-4245		Seattle City Light Distribution Engineering APPROVED FOR SEATTLE CITY LIGHT PROJECT ENGINEER M. NUMIN (206) 615-0662 QUARTERSECTION NUMBER(S) 302NE		PROJECT TYPE WIND ROSE (KING COUNTY HOUSING AUTHORITY) PROJECT NAME NEW UNDERGROUND PRIMARY AND SECONDARY EXTENTION 31 SINGLE FAMILY LOTS: 200A, 120/240V, 1Ø, 3W EA. PROJECT ADDRESS 235 SW 97TH PL		SHEET 1 OF 2 WORK ORDER NO.-TASK 1700359 CITY KING COUNTY DRAWING NO. REV. NO. 0	
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C SECONDARY & SERVICE (LOW VOLTAGE) CONDUITS:

- Provide and install Two 3-inches PVC SCH-40 secondary conduits between: V-01 and H-01; V-02 and H-02; V-02 and H-03; V-03 and H-04; V-03 and H-05; V-03 and H-06.
- Provide and install One 3-inch service conduit: from H-01 to each Lot Meter Base: (25, 26, 27, 28, 29, 30, and 31).
- Provide and install One 3-inch service conduit: from H-02 to each Lot Meter Base: (19, 20, 21, 22, 23, and 24).
- Provide and install One 3-inch service conduit: from H-03 to each Lot Meter Base: (13, 14, 15, 16, 17, and 18).
- Provide and install One 3-inch service conduit: from H-04 to each Lot Meter Base: (9, 10, 11, and 12).
- Provide and install One 3-inch service conduit: from H-05 to each Lot Meter Base: (5, 6, 7, and 8).
- Provide and install One 3-inch service conduit: from H-06 to each Lot Meter Base: (1, 2, 3, and 4). In accordance with SCL construction guidelines 0214.00, 0224.05, U2-11.40, U12-1.3, & 0231.01 as shown on **SITE PLANT & HANDHOLE DETAILS**.

Specific Requirements:

- Secondary/Service Conduits shall be install Right of Way and private property to be served.
- Joints shall meet squarely, without gaps.
- All secondary/service conduits depth to 36-inches in Right of Way, and 24-inches minimum in private property.
- Bends shall be Galvanized Rigid Steel. (3-foot radius).
- A maximum of 270° of bends is allowed in each secondary/service conduit run.
- PVC SCH-40 conduit (10-ft sections) shall not be bent more than 15° (8" deflection at end).
- Conduits shall enter the handholes perpendicular to wall.
- Furnish & install end bells flush with interior walls on all conduits entering handholes. Conduits shall be grouted both inside & outside of the Handholes.

BETWEEN FACILITIES	SECONDARY CONDUITS-ROUTE CONDUIT'S QUANTITY-SIZE	APPROX. DISTANCE
V-01 TO H-01	TWO 3-INCHES PVC SCH-40	90 FEET
V-02 TO H-02	TWO 3-INCHES PVC SCH-40	130 FEET
V-02 TO H-03	TWO 3-INCHES PVC SCH-40	146 FEET
V-03 TO H-04	TWO 3-INCHES PVC SCH-40	70 FEET
V-03 TO H-05	TWO 3-INCHES PVC SCH-40	80 FEET
V-03 TO H-06	TWO 3-INCHES PVC SCH-40	70 FEET

THE INSTRUCTIONS GIVEN IN THIS DRAWING ARE AN INTERGRAL PART OF THE ATTACHED LETTER. DO NOT SEPARATE THE DOCUMENTS.

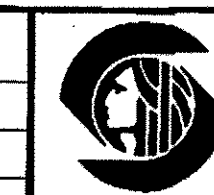
HANDHOLES	(FAULT CURRENT) AIC AT HANDHOLES
HANDHOLE (H-01)	12,000 AMPS
HANDHOLE (H-02)	10,000 AMPS
HANDHOLE (H-03)	10,000 AMPS
HANDHOLE (H-04)	14,000 AMPS
HANDHOLE (H-05)	14,000 AMPS
HANDHOLE (H-06)	14,000 AMPS

CALL BEFORE YOU DIG TO LOCATE
EXISTING UNDERGROUND UTILITIES
TWO BUSINESS DAYS IN ADVANCE
KING CO. ONE CALL
1-800-424-5555

THIS DRAWING IS THE PROPERTY OF THE CITY OF SEATTLE AND ITS SEATTLE CITY LIGHT DEPARTMENT. IT IS PRODUCED SOLELY FOR THE USE BY SEATTLE CITY LIGHT AND OTHER CITY DEPARTMENTS. THE USE, REPRODUCTION, AND TRANSFER OF THIS DRAWING AND/OR ANY INFORMATION CONTAINED IN THE DRAWING REQUIRES THE WRITTEN PERMISSION OF SEATTLE CITY LIGHT.

ENDORSEMENTS

SIGNATURE DATE
DRAWN: MM 03/10/2017
CHECK: *[Signature]*
APPROVED: *[Signature]*
ESR: David Mannery
(206) 386-4245



Seattle City Light
Distribution
Engineering

APPROVED FOR SEATTLE CITY LIGHT

PROJECT ENGINEER
M. MUMIN (206) 615-0662
QUARTERSECTION NUMBER(S)
302NE

SHEET CONTENTS
CUST'S CONSTRUCTION DRWG
SECTION / TOWNSHIP / RANGE
6/23/4

PROJECT TYPE

WIND ROSE(KING COUNTY HOUSING AUTHORITY)

PROJECT NAME

NEW UNDERGROUND PRIMARY AND SECONDARY EXTENSION
31 SINGLE FAMILY LOTS: 200A, 120/240V, 10, 3W EA

PROJECT ADDRESS

235 SW 97TH PL

SR# 1606535

SHEET

1 OF 1

WORK ORDER NO.-TASK

1700359

CITY

KING COUNTY

DRAWING NO.

0

ONE INCH AT FULL SIZE	REVISIONS	DATE	IMAGE
REV	DATE	IMAGE	
DRAWN BY/CHECKED BY/APPROVED BY			
WORK ORDER #			
DESCRIPTION			