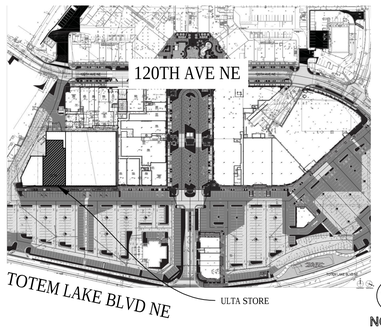



## SITE MAP

SCALE: NONE

**NOTICE**
**HOURS OF WORK: 7AM TO 8PM MON-FRI**
**9AM TO 6PM SAT. NO WORK SUNDAYS & HOLIDAYS (PER KZC SEC. 115.25)**
**Exceptions must be approved in writing by Planning Official**

**SEPARATE PERMITS REQUIRED:**
**-Building**
**-Plumbing**
**-Mechanical**
**-Fire**

# VILLAGE AT TOTEM LAKE
# KIRKLAND, WA - STORE #1384
# INTERIOR FINISH OF NEW ULTA STORE

G.C. TO RECEIVE, UNLOAD & INSTALL OWNER SUPPLIED GLASS & ARRAY SHELVES & BRACKETS (COORDINATE WITH OWNER). G.C. TO DISPOSE OF PACKAGING MATERIALS. SEE DESCRIPTION OF SHELF QUANTITIES ON SHEET A1.1

DEFERRED SUBMITTAL
1. FIRE SPRINKLER DRAWINGS TO BE SUBMITTED UNDER A DEFERRED SUBMITTAL.
2. FIRE ALARM DRAWINGS TO BE SUBMITTED UNDER A DEFERRED SUBMITTAL.

## BID ALTERNATES

| ITEM | SHEET # | REMARKS |
|---|---|---|
| ELECTRICAL FLOOR OUTLETS | | G.C. TO PROVIDE COST TO ADD (1) ADDITIONAL FLOOR OUTLET, PRIOR TO FINISH FLOOR. COST TO INCLUDE UP TO 10 LINEAL FEET OF ELECTRICAL TRENCHING. |
| ELECTRICAL FLOOR OUTLETS | | G.C. TO PROVIDE COST TO ADD (2-5) ADDITIONAL FLOOR OUTLETS, PRIOR TO FINISH FLOOR. COST TO INCLUDE UP TO 10 LINEAL FEET OF ELECTRICAL TRENCHING. |
| MOISTURE RESISTANT BARRIER (MRB) | | G.C. TO PROVIDE COST FOR A CEMENT BASED PRODUCT ONLY TO COVER THE ENTIRE SALES FLOOR. SUPPLY & INSTALL AN MRB AND A TOP COAT OF A CEMENTITIOUS BASED PRODUCT PER MANUFACTURER'S INSTRUCTIONS, SMOOTH, FLAT AND READY TO ACCEPT FLOOR FINISHES. |
| DUCTWORK INSULATION | | DUCT DROP TO BE LINED BY LANDLORD. THE FIRST 10' OF HORIZONTAL SUPPLY AND RETURN DUCTWORK FROM THE DUCT DROPS TO BE LINED AS PART OF THE BASE BID. BASE BID TO INCLUDE LINED SUPPLY AND RETURN DUCTWORK. PROVIDE AN ALTERNATE COST TO PROVIDE DUCT WRAP BEYOND THE 10' OF DUCT LINED DUCTWORK ADJACENT TO THE DUCT DROPS. |

SITE LOCATION:
VILLAGE AT TOTEM LAKE
12601 120TH AVE NE,
KIRKLAND, WA 98034

LANDLORD DEVELOPER:
VILLAGE AT TOTEM LAKE, LLC
1600 EAST FRANKLIN AVENUE
EL SEGUNDO, CA 90245
CONTACT: KARL HUNTER
PHONE: (310) 563-3900
EMAIL: khunter@centercal.com

TENANT:
ULTA
1000 REMINGTON BLVD., SUITE 120
BOLINGBROOK, IL 60440
CONTACT: GRAYSON DAVIS
PHONE: (415) 797-0128
E-MAIL: gdavis@2five4.com

ARCHITECTS:
CHIPMAN DESIGN ARCHITECTURE
1350 EAST TOUHY AVENUE
FIRST FLOOR EAST
DES PLAINES, ILLINOIS 60018
CONTACT: JUAN CASTILLO
PHONE: (847) 298-6900
FAX: (847) 298-6966
E-MAIL: jcastillo@chipman-design.com

MECHANICAL & PLUMBING:
WCW ENGINEERS, INC.
760 CREEL DRIVE
WOOD DALE, IL 60191
CONTACT: DAVID HORNSBERGER
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FAX: (630) 595-8818
E-MAIL: david.hornsberger@wcwengineers.com

ELECTRICAL:
DICKERSON ENGINEERING INC.
3343 NORTH RIDGE
ARLINGTON HEIGHTS, IL 60004
CONTACT: AUGUST HERNANDEZ
PHONE: (847) 966-0290
FAX: (847) 966-0294
EMAIL: augi.hernandez@dei-pe.com

BUILDING DEPARTMENT:
CITY OF KIRKLAND
PHONE: (425) 587-3600
FAX: (425) 587-3651
WEBSITE: www.kirklandwa.gov/depart/BuildingServices

## PROJECT CONTACTS

SCALE: NONE

THE INTENT OF THE SCOPE CONTAINED WITHIN THESE DOCUMENTS RELATES TO THE INTERIOR REMODELING /BUILD-OUT OF A MERCANTILE/ INTERIOR SPACE CONTAINED WITHIN AN EXISTING SHELL BUILDING. THE ARCHITECT HAS NOT INSPECTED THE CONDITIONS OR THE INTEGRITY OF THE EXISTING SHELL BUILDING AND SHALL NOT ASSUME RESPONSIBILITY OR LIABILITY FOR SAME. THE RESPONSIBILITY AND LIABILITY FOR THE EXISTING SHELL BUILDING CONDITIONS AND INTEGRITY, AND FOR THE CONFORMANCE OF THE EXISTING BUILDING SHELL TO ALL APPLICABLE LOCAL CODES AND ENVIRONMENTAL REQUIREMENTS, IS SOLELY THAT OF OTHERS, AND NOT THAT OF THE ARCHITECT. THE ARCHITECT'S SCOPE OF WORK IS STRICTLY LIMITED SOLELY TO THE INTERIOR BUILD-OUT OF AN EXISTING INTERIOR SPACE LOCATED WITHIN AN EXISTING SHELL BUILDING.

## SCOPE OF WORK STATEMENT

SCALE: NONE

1. IF SIGNIFICANT DISCREPANCIES OR CONFLICTS IN THE DETAILS OR DIMENSIONS ARISE, OR IF UNFORESEEN CONDITIONS IN THE EXISTING BUILDING IMPAIR THE ABILITY TO PERFORM THE WORK AS DESCRIBED AND/OR DETAILED. THEN REPORT SUCH OCCURRENCES TO THE ARCHITECT BEFORE PROCEEDING.
2. DO NOT SCALE DRAWINGS- WRITTEN DIMENSIONS TAKE PRECEDENT.
3. ALL THINGS SHOWN ARE NEW AND FURNISHED BY TENANT GENERAL CONTRACTOR UNLESS OTHERWISE NOTED.
4. WALL CONSTRUCTION FACING RESTROOM AREAS MUST UTILIZE MOISTURE RESISTANT GYPSUM BOARD.
5. ALL DOORS TO BE KEYLESS IN DIRECTION OF EGRESS.
6. DOORS SHALL HAVE A 5 SECOND MINIMUM CLOSING TIME FROM 90°-12° OPEN. MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED:
   A. 5 LBF (22 N) FOR INTERIOR DOORS.
   B. 8.5 LBF (38 N) FOR EXTERIOR DOORS.
   C. 15 LBF (67 N) FOR FIRE DOORS.
7. DOORS INDICATED AS PART OF THE REQUIRED MEANS OF EGRESS SHALL BE OF HARDWARE WHICH IS READILY OPERABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY, SPECIAL KNOWLEDGE OR EFFORT.
8. ALL WALL & CEILING FINISHES TO BE CLASS B OR BETTER, FLAME SPREAD 0-75 WITH A MAXIMUM SMOKE DEVELOPED OF 450.
9. ALL INTERIOR TRIM TO BE CLASS C FLAME SPREAD 76-200 WITH A MAXIMUM SMOKE DEVELOPED OF 450.
10. FLOOR FINISHINGS TO HAVE FLAME SPREAD RATING NOT TO EXCEED 75.
11. ALL COMBUSTIBLE INTERIOR FINISH & TRIM FLAMES ARE TO BE APPLIED DIRECTLY TO A NON-COMBUSTIBLE BASE.
12. G.C. SHALL FURNISH AND INSTALL FIRE EXTINGUISHERS AS REQUIRED PER APPLICABLE CODES AND COORDINATE EXACT LOCATION WITH FIRE MARSHAL.
13. G.C. SHALL FURNISH AND INSTALL OCCUPANCY SIGN IN A CONSPICUOUS LOCATION IN ACCORDANCE WITH STATE & LOCAL CODES.
14. ALL EXTERIOR WORK AND BUILDING SHELL WORK, INCLUDING THE STRUCTURAL INTEGRITY OF EXTERIOR WALLS, AND ROOF, AND ITS ABILITY TO SUPPORT THE TENANT'S AWNING AND/OR SIGNAGE OR ANY OTHER ELEMENTS, IS THE RESPONSIBILITY OF THE LANDLORD. ALL OF THE WORK SHALL BE IMPLEMENTED UNDER SEPARATE PERMIT AND ITS NOT A PART OF THESE PERMIT DRAWINGS. THIS SHALL INCLUDE VERIFICATION OF ANY EXISTING CONDITIONS AND BUILDING STRUCTURE THAT IS A PART OF THE LANDLORD'S WORK AS DESCRIBED IN THE LEASE AGREEMENT BETWEEN ULTA AND LANDLORD.
15. SIGNAGE AS SHOWN IN THESE DRAWINGS IS SCHEMATIC ONLY FOR ILLUSTRATION PURPOSES AND DOES NOT IMPLY OR DESCRIBE ANY MEANS, METHODS, OR DETAILS PERTAINING TO INSTALLATION OF THE AWNING OR SIGNAGE. IT SHALL BE SOLELY THE SIGN CONTRACTOR'S RESPONSIBILITY TO DESIGN FABRICATE, AND INSTALL THE SIGN UNDER SEPARATE PERMIT. ANY AND ALL STRUCTURAL CONSIDERATIONS SHALL BE COORDINATED BETWEEN THE SIGNAGE CONTRACTOR, LANDLORD, AND HIS DESIGN PROFESSIONALS. THE AWNING/SIGN CONTRACTOR SHALL SUBMIT SHOP DRAWINGS DESCRIBING THE AWNING/SIGNAGE DESIGN INCLUDING FINISHES, COLORS AND DESIGN DIMENSIONS TO THE OWNER FOR DESIGN INTENT REVIEW ONLY PRIOR TO AWNING/SIGN FABRICATION.
16. SPRINKLER WORK WHERE NEW OR WHERE MODIFICATIONS TO EXISTING SYSTEMS ARE REQUIRED BY CODE OR CONSTRUCTION CONDITIONS SHALL BE SUBMITTED UNDER SEPARATE PERMIT BY A LICENSED SPRINKLER CONTRACTOR. TIE SPRINKLER & FIRE ALARM INTO BASE BUILDING FIRE PROTECTION SYSTEM.
17. G.C. TO INSURE THAT PROPER ENVIRONMENTAL CONDITIONS ARE MET FOR THE INSTALLATION OF ALL INTERIOR FINISHES.
18. REFER TO FIXTURE MANUAL FOR INFORMATION ON ALL FIXTURES.
19. NO ELEMENTS ARE TO BE ATTACHED TO OR SUPPORTED FROM THE ROOF DECK OR BOTTOM CHORD OF ROOF JOISTS.
20. G.C. SHALL NOT USE GAS POWERED CONSTRUCTION EQUIPMENT.
21. VERIFY ALL EXISTING CONDITIONS PRIOR TO ANY CONSTRUCTION OR FABRICATION. IF DIFFERENT THAN SHOWN, NOTIFY ENGINEER/ARCHITECT IMMEDIATELY FOR MODIFICATION OF DRAWINGS.
22. ALL CONTRACTORS ARE REQUIRED TO COORDINATE THEIR WORK WITH ALL DISCIPLINES TO AVOID CONFLICTS. ALL STRUCTURAL, MECHANICAL, ELECTRICAL AND PLUMBING ASPECTS ARE NOT IN THE SCOPE OF THESE DRAWINGS. THEREFORE, ALL REQUIRED MATERIALS AND WORK MAY NOT BE INDICATED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE THESE DRAWINGS WITH ALL OTHER CONSTRUCTION DOCUMENTS. LOCATIONS, SIZES AND NUMBERS OF ALL OPENINGS MAY NOT BE COMPLETELY INDICATED IN THE ARCHITECTURAL DRAWINGS. THE RESPECTIVE CONTRACTOR SHALL VERIFY THEIR WORK WITH ALL OTHER DISCIPLINES.
23. THE CONTRACT DOCUMENTS DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT LIMITED TO, BRACING, SHORING, UNDERPINNING, ETC. ARCHITECT IS NOT RESPONSIBLE FOR THE CONTRACTOR'S MEANS, METHODS, TECHNIQUES, SEQUENCES OR SAFETY PROCEDURES DURING CONSTRUCTION.

## GENERAL NOTES

SCALE: NO SCALE

## APPLICABLE CODES

| | |
|---|---|
| BUILDING: | 2015 INTERNATIONAL BUILDING CODE |
| MECHANICAL: | 2015 INTERNATIONAL MECHANICAL CODE |
| PLUMBING: | 2015 UNIFORM PLUMBING CODE |
| ELECTRICAL: | 2014 NFPA 70 (CITIES ELECTRICAL CODE |
| ENERGY: | WASHINGTON STATE ENERGY CODE (IECC) |
| FIRE: | 2015 INTERNATIONAL FIRE CODE |
| ACCESSIBILITY: | ICC/ANSI A117.1 |
| OTHERS: | STATE OF WASHINGTON AMENDMENTS & CITY OF KIRKLAND AMENDMENTS |
| | 2015 INTERNATIONAL FUEL GAS CODE (NATURAL GAS) |
| | 2015 NATIONAL FUEL GAS CODE 58 (PROPANE) |

OCCUPANCY LOAD CALCULATIONS: TABLE 1004.5 MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT

| | | |
|---|---|---|
| GROSS AREA: | 10,300 S.F. | LEASE AREA: 10,300 S.F. |
| M: MERCANTILE (RETAIL AREA): | 8,720 SQ.FT./60 GROSS SQ.FT. PER PERSON = | 146 |
| B: BUSINESS (SALON AREA): | 700 SQ.FT./150 GROSS SQ.FT. PER PERSON = | 5 |
| B: OFFICE (MANAGER'S OFFICE): | 60 SQ.FT./150 GROSS SQ.FT. PER PERSON = | 1 |
| S-1: STAGING AREA : | 620 SQ.FT./300 GROSS SQ.FT. PER PERSON = | 3 |
| TOTAL OCCUPANCY: | | 155 PERSONS |

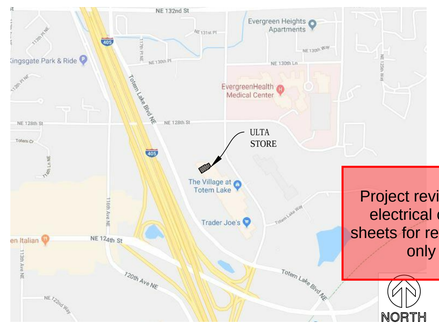
## BUILDING REQUIREMENTS

| DESCRIPTION | CODE SECTION | REQUIREMENTS |
|---|---|---|
| USE GROUP: | IBC CHAPTER 3, SECTION 309 | M (MERCANTILE) |
| NUMBER OF STORIES: | | 1 |
| CONSTRUCTION TYPE: | IBC TABLE 601 | TYPE V-B (EXISTING NO CHANGE) |
| SEISMIC CATEGORY: | | SEISMIC CATEGORY D |
| FIRE SPRINKLERS: | IBC SECTIONS 507.4 | FULLY SPRINKLERED |
| TENANT AREA: | IBC SECTION 507.4 | 10,300 GROSS S.F. AREA OF WORK |
| OCCUPANT LOAD: | | 159 PERSONS |
| NUMBER OF EXITS: | IBC TABLE 1006.3.2 | 2 REQUIRED<br>2 PROVIDED |
| EXIT WIDTH: | IBC SECTION 1005.3.2 (0.2" PER OCCUPANT) | 30" REQUIRED<br>108" PROVIDED |
| MAX. TRAVEL DIST.: | IBC TABLE 1017.2 | 250-FT. MAX. |

| REQUIRED PLUMBING FIXTURES | | MALE | FEMALE |
|---|---|---|---|
| LAVATORIES: | IBC TABLE 2902.1 | 1 REQUIRED<br>1 PROVIDED | 1 REQUIRED<br>1 PROVIDED |
| TOILETS: | IBC TABLE 2902.1 | 1 REQUIRED<br>1 PROVIDED | 1 REQUIRED<br>1 PROVIDED |
| DRINKING FOUNTAIN: | IBC TABLE 2902.1 | 1 REQUIRED<br>1 PROVIDED (HI-LO) | |
| SERVICE SINK: | IBC TABLE 2902.1 | 1 REQUIRED<br>1 PROVIDED | |

## CODE & BUILDING SUMMARY

SCALE: NO SCALE




Project review for electrical other sheets for reference only

## ABBREVIATIONS

SCALE: NONE

| | | | | | |
|---|---|---|---|---|---|
| A. | AREA | ETC. | ETCETERA | P.C.C. | PRE-CAST CONCRETE |
| ANCH. | ANCHOR BOLT | EXIST. | EXISTING | PH. BD. | PHONE BOARD |
| A.C.I. | AMERICAN CONCRETE INSTITUTE | EXP. | EXPANSION/ EXPOSED | PKG. | PARKING |
| | | EXT. | EXTERIOR | PL. | PLATE |
| ACOUST. | ACOUSTICAL | F.D. | FLOOR DRAIN | P.L. | PLATE LAM. |
| A.D.A. | AMERICANS WITH DISABILITIES ACT | FDN. | FOUNDATION | PLMB. | PLUMBING |
| | | F.E. | FIRE EXTINGUISHER | PLYWD. | PLYWOOD |
| ADH. | ADHESIVE | FIN. | FINISH | PR. | PAIR |
| ADJ. | ADJACENT | FIXT. | FIXTURE | P.O.C. | POINT OF CONNECTION |
| A.F.F. | ABOVE FINISHED FLOOR | FLR. | FLOOR | | |
| AHJ | AUTHORITY HAVING JURISDICTION | F.R.O. | FINISHED OPENING | PR. | PAIR |
| | | F.R.P. | FIBERGLASS REINFORCED PLASTIC | PREP. | PREPARATION/ PREPARED |
| ALT. | ALTERNATE | FT. | FEET/FOOT | P.S.F. | POUNDS PER SQUARE FOOT |
| AL/ALUM. | ALUMINUM | FTG. | FOOTING | P.S.I. | POUNDS PER SQUARE INCH |
| APP. | APPROXIMATE | GAGE/GUAGE | | | |
| ANOD. | ANODIZED | G.C. | GENERAL CONTRACTOR | PT. | PART/POINT |
| ANSI | AMERICAN NATIONAL STANDARDS INSTITUTE | GALV. | GALVANIZED | P.V.C. | POLY VINYL CHLORIDE |
| | | GD. | GRADE | | |
| | | GL. | GLASS | PVMT. | PAVEMENT |
| APPROX. | APPROXIMATE | GYP. | GYPSUM | QTY. | QUANTITY |
| ARCH. | ARCHITECTURAL | H. | HIGH | R.A. | RETURN AIR |
| A.S.T.M. | AMERICAN SOCIETY FOR TESTING MATERIALS | H.C. | HANDICAP ACCESSIBLE | R./RAD. | RADIUS |
| | | H.C. | HOLLOW CORE | R.D. | ROOF DRAIN |
| AVG. | AVERAGE | H.D. | HIGH DENSITY | REC. | RECEPTACLE |
| B/ | BOTTOM OF | HDR. | HEADER | REINF. | REINFORCING |
| BD. | BOARD | HDW. | HARDWARE | REQ'D. | REQUIRED |
| BEV. | BEVERAGE | HDWD. | HARDWOOD | RM. | ROOM |
| BLDG. | BUILDING | H.O. | HIGH OUTPUT | R.O. | ROUGH OPENING |
| B.F.P. | BACKFLOW PREVENTOR | HORIZ. | HORIZONTAL | R.R. | RESTROOM |
| | | H.P. | HIGH POINT | R.T.U. | ROOF TOP UNIT |
| | BLACK | H.R.C. | HEATING & REFRIGERATION CONTRACTOR(S) | SAN. | SANITARY |
| BLKG. | BLOCKING | | | S.C. | SOLID CORE |
| BRG. | BEARING | | | SCHD. | SCHEDULE |
| BRKT. | BRACKET | HT. | HEIGHT | SECT. | SECTION |
| BTM. | BOTTOM | H.V.A.C. | HEATING, VENTILATION, AIR CONDITIONING | SERV. | SERVICE |
| BTN. | BETWEEN | | | SEV. | SEVER |
| CAB. | CABINET | | | SF. | STOREFRONT |
| C.F.M. | CUBIC FEET PER MINUTE | HZ. | HERTZ | SHT. | SHEET |
| | | I.G. | ISOLATED GROUND | SIM. | SIMILAR |
| C.G.F. | COMPACTED GRANULAR FILL | IN. | INCHES | S.J. | SAWCUT JOINT |
| | | INCL. | INCLUDE/ED | SM. | SMALL |
| C.J. | CONTROL JOINT | INFO. | INFORMATION | SPECS. | SPECIFICATIONS |
| C.L. | CENTER LINE | INSTL. | INSTALLATION/ INSTALLED | SPRINK. | SPRINKLERS |
| CLG. | CEILING | | | SQ. | SQUARE |
| CLOS. | CLOSET | INSUL. | INSULATION | SQ. FT. | SQUARE FEET |
| CLR. | CLEAR | INT. | INTERIOR | S.S., S/S | STAINLESS STEEL |
| C.M.U. | CONCRETE MASONRY UNIT | J-BOX | JUNCTION BOX | STD. | STANDARD |
| | | JST. | JOIST | STL. | STEEL |
| CNTR. | COUNTER | JT. | JOINT | STN. | STATION |
| CO. | COMPANY | K.S.I. | KIPS PER SQ. IN. | STRUCT. | STRUCTURE/-AL |
| COL. | COLUMN | LAM. | LAMINATE | SUPPL. | SUPPLY-IED |
| CONC. | CONCRETE | LAV. | LAVATORY | SUSP. | SUSPENDED |
| COND. | CONDUIT | LBF. | POUNDS FORCE | T/ | TOP OF |
| CONN. | CONNECTION | LBS. | POUNDS | TB. | THROUGHBOLT |
| CONSTR. | CONSTRUCTION | L.F. | LINEAL FOOT | T&B | TOP & BOTTOM |
| CONT. | CONTINUOUS | L.G.C. | LANDLORD'S GENERAL CONTRACTOR | T&G | TONGUE & GROOVE |
| CONTR. | CONTRACTOR | | | TEMP. | TEMPERED |
| CORP. | CORPORATE | L.P. | LOW POINT | T.G.C. | TENANT GENERAL CONTRACTOR |
| C.T. | CERAMIC TILE | LL. | LANDLORD | | |
| C.S.I. | CONSTRUCTION SPECIFICATION INSTITUTE | MA. | MILLIAMPERE | THRU | THROUGH |
| | | MATL. | MATERIAL | TYP. | TYPICAL |
| | | MAX. | MAXIMUM | U.L. | UNDERWRITERS LABORATORIES |
| | CUBIC | MECH. | MECHANICAL | | |
| CUST. | CUSTOMER | MFG./ MANUF. | MANUFACTURER | U.N.O. | UNLESS NOTED OTHERWISE |
| D. | DEPTH | | | UV. | ULTRAVIOLET |
| DBL. | DOUBLE | MIN. | MINIMUM | V. | VOLT/VOLTAGE |
| DEG. | DEGREES | MISC. | MISCELLANEOUS | V.B. | VAPOR BARRIER |
| DIA. | DIAMETER | MM. | MILLIMETER | V.C. | VOLUME CONTROL |
| DIM. | DIMENSION | M.O. | MASONRY OPENING | V.C.T. | VINYL COMPO-SITION TILE |
| DISC. | DISCONNECT | M.R. | MOISTURE RESISTANT | | |
| DN. | DOWN | | | V.I.F. | VERIFY IN FIELD |
| D.O. | DOOR OPENING | MSRY. | MASONRY | V. P. | VENT PIPE |
| DR. | DOOR | MTD. | MOUNTED | VERT. | VERTICAL |
| DTL. | DETAIL | MTL. | METAL | W. | WIDE |
| DWG. | DRAWING | N/A | NOT APPLICABLE | w/-w/o | WITH/WITHOUT |
| DWLS. | DOWELS | N.I.C. | NOT IN CONTRACT | W.B. | WALL BASE |
| EA. | EACH | NOM. | NOMINAL | W.B.C. | WHITE BOX CONTRACTOR |
| E.I.F.S. | EXTERIOR INSULATION FINISH SYSTEM | NO./NUM. | NUMBER | | |
| | | N.T.S. | NOT TO SCALE | W.C. | WATER CLOSET |
| ELEC./ ELECT. | ELECTRIC/-AL | O.A. | OVER ALL | WD. | WOOD |
| | | O.C. | ON CENTER | WDW. | WINDOW |
| ELEV./EL. | ELEVATION | O.D. | OUTSIDE DIAMETER | W.H. | WATER HEATER |
| EMPL. | EMPLOYEE | O.H. | OPPOSITE HAND | WK. | WORK |
| ENG. | ENGINEER/ED | OPNG. | OPENING | WP. | WATER PROOF |
| EQ. | EQUAL | OPT. | OPTIONAL | WT. | WEIGHT |
| EQUIP. | EQUIPMENT | OPP. | OPPOSITE | W.W.F. | WELDED WIRE FABRIC |
| | | P.C. | PERSONAL COMPUTER | | |

## SYMBOL LEGEND

SCALE: NO SCALE

| SYMBOL | DESCRIPTION | SYMBOL | DESCRIPTION | SYMBOL | DESCRIPTION |
|---|---|---|---|---|---|
| X / X-X | SECTION TAG- SEE DWG. AS NOTED | X / X-X | ELEVATION TAG- SEE DWG. AS NOTED | X-X | WALL TYPE TAG- SEE WALL TYPE LEGEND |
| X / X-X | DETAIL TAG- SEE DWG. AS NOTED | X-X | FINISH TAG- SEE FINISH LEGEND | ROOM / XXX | ROOM NUMBER TAG |
| | ELEVATION BENCHMARK | X | DOOR TAG- SEE HARDWARE SCHEDULE | X | REVISION TAG |
| X | KEY NOTE / RESTROOM ACCESSORIES TAG | | | | |

## AREA MAP

SCALE: NO SCALE

## DRAWING INDEX

SCALE: NONE

| REVISION | SHEET # | SHEET NAME |
|---|---|---|
| 1 | CS1.0 | COVER SHEET |
| | CS2.0 | RESPONSIBILITY SCHEDULE |
| | CS3.0 | VENDOR CONTACT INFORMATION & SUBMITTAL REQUIREMENTS |
| | HC1.1 | ACCESSIBILITY DETAILS |
| | A0.1 | SITE PLAN (FOR REFERENCE ONLY) |
| | A1.0 | EGRESS PLAN |
| ● | A1.1 | FIXTURE PLAN & SPECIFICATIONS |
| | A2.0 | DIMENSION PLAN & DETAILS |
| | A2.1 | ENLARGED SALON PLAN |
| | A2.2 | ENLARGED SALES PLAN |
| | A2.3 | WALL TYPES, STUD FRAMING & WALL BLOCKING DETAILS |
| | A2.4 | DOOR & HARDWARE SCHEDULES |
| | A3.1 | REFLECTED CEILING PLAN & DETAILS |
| | A3.2 | ARCH & VALANCE LIGHTING PLAN & DETAILS |
| | A3.3 | ENLARGED SALON REFLECTED CEILING PLAN & DETAILS |
| | A4.1 | FLOOR FINISH PLAN, FINISH SCHEDULE & SPECIFICATIONS |
| | A6.1 | INTERIOR ELEVATIONS |
| | A6.2 | INTERIOR ELEVATIONS |
| | A6.3 | INTERIOR ELEVATIONS & ENLARGED TOILET ROOM PLAN |
| | A6.4 | INTERIOR ELEVATIONS |
| | A7.1 | EXTERIOR ELEVATION |
| | A8.1 | CONSTRUCTION DETAILS |
| | A8.2 | CONSTRUCTION DETAILS |
| | A8.3 | CONSTRUCTION DETAILS |
| | A8.4 | SEISMIC DETAILS |
| | F1.1A | WALL FIXTURE DETAILS |
| | F1.1B | WALL FIXTURE DETAILS |
| | F1.1C | FIXTURE ELEVATIONS |
| | SP1 | SPECIFICATIONS |
| | SP2 | SPECIFICATIONS |
| | SP3 | SPECIFICATIONS |
| | SP4 | SPECIFICATIONS |
| | SP5 | SPECIFICATIONS |
| | SP6 | VINYL FLOOR TILE PREP. INSTALLATION & ADHESIVE SPECIFICATION |
| | M-1 | MECHANICAL REFLECTED CEILING PLAN, NOTES, AND SYMBOLS |
| | M-2 | ENLARGED REFLECTED CEILING PLAN |
| | M-3 | MECHANICAL SCHEDULES AND DETAILS |
| | M-3.1 | MECHANICAL SCHEDULES |
| | M-4 | MECHANICAL SPECIFICATIONS |
| | M-5 | MECHANICAL SPECIFICATIONS |
| | P-1 | PLUMBING PLANS AND NOTES |
| | P-2 | SANITARY ISOMETRIC |
| | P-3 | WATER ISOMETRIC |
| | P-4 | PLUMBING SCHEDULES AND SPECIFICATIONS |
| | P-5 | PLUMBING DETAILS |
| | P-6 | PLUMBING SPECIFICATIONS |
| | P-7 | PLUMBING SPECIFICATIONS |
| | E0-1 | SYMBOL LIST, ONE LINE DIAGRAM & LIGHTING SCHEDULE |
| | E0-2 | PANEL SCHEDULES |
| | E-03 | ROOF PLAN - POWER, DETAILS & ARCH LIGHTING ELEVATIONS |
| | E1-1 | FLOOR PLAN - LIGHTING |
| | E2-1 | FLOOR PLAN - ELECTRICAL DIMENSIONS |
| | E2-2 | FLOOR PLAN - POWER |
| | E3-1 | FLOOR PLAN - LOW VOLTAGE WIRING |
| | E3-2 | FLOOR PLAN - VOICE/DATA & SECURITY |
| | E4-1 | ELECTRICAL SPECIFICATIONS |

**City of Kirkland Reviewed by J Tumelson 05/30/2018**

MUST REMAIN ON JOBSITE

ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

COVER SHEET

CHIPMAN DESIGN ARCHITECTURE INC
JOHN A CHIPMAN ARCHITECT
1350 EAST TOUHY AVENUE
FIRST FLOOR EAST
DES PLAINES, ILLINOIS 60018
PHONE 847.298.6900

Revisions
1 ISSUE FOR CL/LL REVIEW 04/20/18
2 ISSUE FOR PERMIT & BID 04/20/18

6367 REGISTERED ARCHITECT JOHN A. CHIPMAN STATE OF WASHINGTON

04/20/2018 DATE — 06/30/2018 EXPIRATION DATE

I HEREBY CERTIFY THAT THESE PLANS HAVE BEEN PREPARED UNDER MY SUPERVISION AND THAT TO THE BEST OF MY KNOWLEDGE, THE SAME COMPLY WITH ALL RULES, REGULATIONS AND ORDINANCES OF KIRKLAND, WA RELATING TO STRUCTURES AND BUILDINGS.

ARCHITECT

| Drawn By | Checked By |
|---|---|
| KC | BW/RD |
| Scale | Date |
| AS NOTED | 04/20/18 |
| Job No. | |
| 16-4170 | |
| Sheet No. | |
| CS1.0 | |

ENR18-03206
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# DIVISION OF WORK

| DESCRIPTION | DOES NOT APPLY | EXIST TO REMAIN | LANDLORD/ LGC | | ULTA GC | | ULTA | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | FURN | INSTALL | FURN | INSTALL | FURN | INSTALL | |
| **DIVISION 1 GENERAL REQUIREMENTS** | | | | | | | | | |
| AS APPLICABLE | | | ● | ● | ● | ● | | | SEE GENERAL NOTES |
| **DIVISION 2 SITE WORK** | | | | | | | | | |
| DEMOLITION WORK | | | ● | ● | ● | ● | | | SLAB CUTS AS REQUIRED AND AS NOTED. SEE TRENCHING DETAIL 6/A8.3. REMOVAL OF EXISTING GYP. BD. FOR IN WALL BLOCKING INSTALLATION. LANDLORD PROVIDING DEMOLITION OF ALL EXISTING TENANT ITEMS NOT BEING REUSED BY ULTA, REFER TO LANDLORD SHELL DRAWINGS FOR REFERENCE. |
| SITE WORK | | | ● | ● | | | | | SEE LANDLORD DRAWINGS |
| **DIVISION 3 CONCRETE** | | | | | | | | | |
| CONCRETE SLAB | | | ● | ● | ● | ● | | | LANDLORD FURNISHED 4"CONCRETE SLAB ON GRADE WITH MESH OVER COMPACTED GRANULAR FILL. THE SLAB SHALL BE LEVEL TO WITHIN 1/8 INCH TOLERANCE IN 10 FEET, SMOOTH, AND READY TO ACCEPT TENANT'S INTERIOR FLOOR FINISHES. SEE ENGINEERING SHEETS AND ADDITIONAL DETAILS FOR UNDER-SLAB DISTRIBUTION FURNISHED BY G.C. UNDER THIS PERMIT.<br><br>ULTA G.C. SHALL FURNISH AND INSTALL NEW SLAB AT TRENCH AREAS. SEE TRENCHING DETAIL 6/A8.3. G.C. TO MAKE SLAB LEVEL, SMOOTH, SEALED AND READY TO ACCEPT INTERIOR FLOOR FINISHES. |
| CONCRETE PAD AT WATER HEATER | | | | | ● | ● | | | SEE PLUMBING DRAWINGS |
| CONCRETE RECEIVING PAD | | | ● | ● | | | | | REFERENCE LANDLORD SHELL DRAWINGS. |
| **DIVISION 4 MASONRY** | | | | | | | | | |
| MASONRY WALL | | | ● | ● | | | | | SEE LANDLORD DRAWINGS FOR REFERENCE ONLY |
| **DIVISION 5 METALS** | | | | | | | | | |
| STRUCTURAL FRAMING SYSTEMS | | | ● | ● | ● | ● | | | SEE LANDLORD SHELL DRAWINGS FOR REFERENCE ONLY REGARDING THE SHELL BUILDING STRUCTURAL SYSTEMS. ULTA G.C. TO FURNISH AND INSTALL STRUCTURAL FRAMING SYSTEM AT MANAGER'S OFFICE. |
| STEEL LINTELS, H-FRAMES, RTU/DOAS-CURBS, MISC. FABRICATION | | | ● | ● | | | | | SEE GENERAL NOTES ON SHEET CS1.0. SEE LANDLORD DRAWINGS FOR REFERENCE ONLY. |
| REINFORCEMENT FOR HVAC EQUIPMENT | | | ● | ● | | | | | SEE LANDLORD DRAWINGS FOR REFERENCE ONLY |
| **DIVISION 6 WOODS & PLASTIC** | | | | | | | | | |
| ROUGH CARPENTRY | | | | | ● | ● | | | AS APPLICABLE TO EACH CONTRACTOR'S SCOPE OF WORK |
| FINISH CARPENTRY | | | | | ● | ● | | | AS APPLICABLE TO EACH CONTRACTOR'S SCOPE OF WORK |
| MILL WORK | | | | | | ● | ● | | |
| RESTROOM TRIM AND MOLDINGS | | | | | ● | ● | | | |
| WALL BLOCKING | | | | | ● | ● | | | SEE NOTES ON F1.1A & F1.1B SHEETS |
| BLOCKING FOR PERIMETER WALL FIXTURES IN SALES AREA | | | | | ● | ● | | | FOR SURFACE MOUNTED CLEATS SEE F1.1A & F1.1B SHEETS |
| WALL BLOCKING FOR EXTERIOR WALL SIGNS | | | ● | ● | ● | ● | | | LANDLORD FURNISHING 5/8" EXTERIOR GRADE PLYWOOD BLOCKING AT FRONT AND SIDE EXTERIOR WALL SIGNS. ULTA G.C. TO VERIFY WITH KIEFFER IF LOCATION OF PLYWOOD IS SUFFICIENT, IF NOT, ULTA G.C. TO FURNISH AND INSTALL ADDITIONAL BLOCKING AS REQUIRED. |
| **DIVISION 7 THERMAL & MOISTURE CONTROL** | | | | | | | | | |
| ROOF INSULATION | | | ● | ● | | | | | SEE LANDLORD DRAWINGS FOR REFERENCE ONLY |
| ROOF ACCESS AND LADDER | | | ● | ● | | | | | LANDLORD PROVIDING ROOF ACCESS IN LANDLORD COMMON UTILITY ROOM. FIELD VERIFY LOCATION WITH ONSITE MALL MANAGEMENT. |
| INSULATION IN EXTERIOR PERIMETER WALLS AND DEMSIING WALLS | | | ● | ● | | | | | SEE LANDLORD DRAWINGS FOR REFERENCE ONLY |
| INSULATION IN INTERIOR PARTITION WALLS | | | | | ● | ● | | | SEE A2.0 FOR LOCATIONS |
| **DIVISION 8 DOORS, WINDOWS & GLASS** | | | | | | | | | |
| EXTERIOR DOOR, FRAMES AND HARDWARE | | | ● | ● | ● | ● | | | SEE DOOR & HARDWARE SCHEDULES.<br>SEE LANDLORD DRAWINGS FOR REFERENCE ONLY. |
| INTERIOR DOOR, FRAMES AND HARDWARE | | | | | ● | ● | | | LANDLORD FURNISHING INTERIOR VESTIBULE DOOR, SEE LANDLORD DRAWINGS.<br>ALL OTHER INTERIOR DOORS BY ULTA G.C. SEE DOOR & HARDWARE SCHEDULES AND SEE LANDLORD DRAWINGS FOR REFERENCE ONLY. |
| EXTERIOR STOREFRONT GLAZING | | | ● | ● | ● | ● | | | 1" INSULATED CLEAR GLASS IN SATIN ANODIZED ALUMINUM FRAMES FURNISHED BY LANDLORD, SEE LANDLORD DRAWINGS FOR REFERENCE ONLY. ALSO, SEE PLANS AND ELEVATIONS. |
| INTERIOR STOREFRONT GLAZING | ● | | | | | | | | SEE PLANS AND ELEVATIONS. ALSO, SEE LANDLORD DRAWINGS FOR REFERENCE ONLY. |
| DOOR VISION PANELS WITH ONE WAY MIRRORS/GLAZING | | | | | ● | ● | | | SEE DOOR & HARDWARE SCHEDULES |
| COLUMN ENCLOSURES | | | | | ● | ● | | | |
| STOREFRONT MODIFICATION | | | | | ● | ● | | | SEE PLANS AND ELEVATIONS |
| VESTIBULE SYSTEM, SOFFIT ABOVE, DOORS & HARDWARE | | | ● | ● | | | | | REFER TO LANDLORD DRAWINGS |
| INTERIOR ENTRY ARCH PORTAL | ● | | | | | | | | |
| INTERIOR ENTRY ARCH DOORS AND HARDWARE | ● | | | | | | | | SEE DOOR & HARDWARE SCHEDULES |
| HANDRAILS | ● | | | | | | | | SEE DETAILS AND PLANS FOR LOCATIONS |

| DESCRIPTION | DOES NOT APPLY | EXIST TO REMAIN | LANDLORD/ LGC | | ULTA GC | | ULTA | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | FURN | INSTALL | FURN | INSTALL | FURN | INSTALL | |
| **DIVISION 9 FINISHES** | | | | | | | | | |
| DEMISING PARTITION | | | ● | ● | ● | ● | | | SEE A2.0 AND REFERENCE LANDLORD SHELL DRAWINGS. DETERMINE FINISH CONDITION FROM LANDLORDS WORK. G.C. TO FURNISH AND INSTALL FIRE SAFING TO MAINTAIN REQ'D. FIRE RATING. G.C. TO CONFIRM REQUIREMENTS WITH LOCAL FIRE MARSHAL/INSPECTOR. REPAIR DEMISING PARTITION AFTER INSTALLING BLOCKING TO MAINTAIN REQ'D. FIRE RATING. |
| METAL STUD AND GYP BD FURRING ON MASONRY PERIMETER WALLS | | | ● | ● | | | | | SEE LANDLORD DRAWINGS FOR REFERENCE ONLY. SEE ALSO A2.0. G.C. TO REMOVE EXISTING GYP. BD. AS REQUIRED TO FURNISH AND INSTALL IN-WALL MILLWORK BLOCKING AND REPLACE GYP. BD. |
| METAL STUD/GYP BD (INTERIOR PARTITION WALLS) | | | | | ● | ● | | | SEE A2.0 |
| FURRED GYP BD ON MASONRY WALLS/ CONCRETE | | | | | ● | ● | | | AS REQUIRED |
| ACOUSTICAL TILE CEILING | | | | | ● | ● | | | SEE SHT A3.1 FOR LOCATIONS & NOTES. PROVIDE (1) CASE OF ACT FOR ATTIC STOCK. |
| PORCELAIN TILE | | | | | | ● | ● | | SEE FINISH PLAN FOR LOCATIONS |
| VINYL STRIP FLOOR TILE, VT-3 | | | | | | ● | ● | | SEE FINISH PLAN & SCHEDULE FOR LOCATIONS. PROVIDE REMAINING VT-3 (NO GLUE ON BACK) FOR ATTIC STOCK. G.C. TO PROVIDE 3 YEARS INSTALLATION WARRANTY. SEE SHOP DRAWING, SUBMITTAL TESTING & INSPECTION REQUIREMENTS ON CS3.0. |
| VINYL FLOOR TILE, VT-4 AND VT-5 | | | | | | ● | ● | | SEE FINISH PLAN FOR LOCATIONS. PROVIDE REMAINING VINYL TILE FOR ATTIC STOCK. |
| WALL BASE (ALL PERIMETER WALL FIXTURES) | | | | | | ● | ● | | SEE FINISH PLAN FOR LOCATIONS. PROVIDE REMAINING WALL BASE FOR ATTIC STOCK. |
| WALL BASE (ALL WALLS AND COLUMNS) | | | | | | ● | ● | | SEE FINISH PLAN FOR LOCATIONS. PROVIDE REMAINING WB (NO GLUE ON BACK) FOR ATTIC STOCK. |
| WALL BASE ADHESIVE | | | | | ● | ● | | | SEE FINISH PLAN FOR WALL BASE LOCATIONS |
| FLOOR TRANSITION STRIPS | | | | | ● | ● | | | SEE FINISH PLAN FOR LOCATIONS |
| WALL COVERING VINYL | | | | | | ● | ● | | SEE ELEVATIONS FOR LOCATIONS |
| PAINTING EXTERIOR FACADE | | | ● | ● | | | | | SEE LANDLORD DRAWINGS FOR REFERENCE ONLY |
| PAINTING OF INTERIOR GYP BOARD AT STOREFRONT | | | | | ● | ● | | | SEE ELEVATIONS FOR LOCATIONS. PROVIDE (1) FULL GALLON OF EACH COLOR FOR ATTIC STOCK. |
| PAINTING INTERIOR PARTITIONS | | | | | ● | ● | | | SEE ELEVATIONS FOR LOCATIONS. PROVIDE (1) FULL GALLON OF EACH COLOR FOR ATTIC STOCK. |
| PAINTING INTERIOR DOORS & FRAMES/ WINDOW FRAMES | | | | | ● | ● | | | SEE ELEVATIONS FOR LOCATIONS. PROVIDE (1) FULL GALLON OF EACH COLOR FOR ATTIC STOCK. |
| PERIMETER WALL FIXTURES | | | | | | ● | ● | | SEE ELEVATIONS FOR LOCATIONS |
| FRP PANELS | | | | | ● | ● | | | MOP BASIN - SEE ELEVATIONS FOR LOCATIONS |
| WINDOW SHADES | | | | | | | ● | ● | |
| METAL PANELS AT INTERIOR STOREFRONT | ● | | | | | | | | |
| **DIVISION 10 MISCELLANEOUS SPECIALTIES** | | | | | | | | | |
| TOILET ROOM ACCESSORIES | | | | | ● | ● | ● | | SEE A6.3 DETAILS FOR LOCATION & SCHEDULE |
| TOILET ROOM MIRRORS | | | | | ● | ● | | | SEE A6.3 DETAILS FOR LOCATION & SCHEDULE |
| SKIN CARE MIRROR | ● | | | | | | | | |
| SALON STATION MIRRORS | | | | | | ● | ● | | |
| EXTERIOR SIGNS | | | | | | ● | ● | ● | FOR FULL SCOPE OF WORK REFER TO A7.1 & E1-1 |
| LED LETTER SET FOR INTERIOR MALL ENTRY | ● | | | | | | | | LED LETTER SET FOR INTERIOR MALL ENTRY FURNISHED BY ULTA VENDOR (KIEFFER SIGNS), INSTALLED BY LANDLORD G.C., FINAL ELECTRICAL WIRING AND CIRCUITING BY ULTA G.C. |
| CLINIQUE LIGHT BOX & FABRIC GRAPHIC PANEL | | | | | | ● | ● | | FABRIC LIGHT BOX FURNISHED BY ULTA MILWORK VENDOR (SEE CS3.0 FOR CONTACT), INSTALLED BY G.C., FINAL ELECTRICAL WIRING AND CIRCUITING BY ULTA G.C. FABRIC GRAPHIC PANEL SUPPLIED BY ULTA AND INSTALLED BY G.C. |
| CASH COUNTER/RECEPTION DESK | | | | | | ● | ● | | SCRIBE TOE KICK BASE TO FLOOR |
| SALES AREA FIXTURES | | | | | | ● | ● | | |
| INTERIOR SIGNAGE & GRAPHICS (NON-ILLUMINATED) | | | | | | ● | ● | ● | |
| INTERIOR SIGNAGE (ILLUMINATED) | | | | | | ● | ● | | |
| RECEIVING ROOM SHELVING, UPRIGHTS AND BRACKETS | | | | | | ● | ● | | |
| SOUND SYSTEM & SPEAKERS | | | | | | ● | ● | ● | REFER TO ELEC. FOR G.C. SCOPE OF WORK |
| SALON FIXTURES/SEATING/WALL CABINETS | | | | | | ● | ● | | |
| OFFICE FIXTURES, SHELVING UPRIGHTS & BRACKETS | | | | | | ● | ● | | |
| SAFE | | | | | | ● | ● | | SECURELY ADHERE TO FLOOR. COORDINATE WITH INSTALLATION INSTRUCTIONS & ULTA |
| COFFEE MAKER | | | | | | ● | ● | | |
| REFRIGERATORS | | | | | ● | ● | ● | | C-17 - FURNISHED BY G.C.<br>C-10 - FURNISHED BY TENANT. |
| FIRE EXTINGUISHERS | | | | | ● | ● | | | COMPLY WITH LOCAL CODE/FIRE MARSHALL REQUIREMENTS. G.C. MUST PURCHASE FIRE EXTINGUISHERS FROM ULTA'S VENDOR. SEE CONTACT INFO ON SHEET CS3.0. |
| SECURITY SYSTEMS | | | | | | ● | ● | ● | |
| LOCKERS | | | | | | ● | ● | | SECURELY ADHERE TO WALL. COORDINATE WITH INSTALLATION INSTRUCTIONS & ULTA |
| SALON TIP BOX | | | | | | ● | ● | | TO BE LOCATED NEAR THE TOP INSIDE EDGE OF THE CABINET DOOR WITHIN THE CONCIERGE DESK AND CASHWRAP. SEE SHEET F1.1C. |
| DRAWING STORAGE TUBE | | | | | ● | ● | | | 4" DIA. CAPPED PVC TUBE LOCATED NEAR ELECTRICAL PANELS |
| EXTERIOR AWNINGS | | | ● | ● | | | | | SEE SHEET A7.1 |
| WALL STORAGE SYSTEM | | | | | ● | ● | | | SEE INTERIOR ELEVATIONS OF STAGING AREA. STORAGE SYSTEM TO BE ORDERED AT START OF CONSTRUCTION. |
| IT COSMETICS LIGHT BOX & FABRIC GRAPHIC PANEL | ● | | | | | | | | FABRIC LIGHT BOX FURNISHED BY ULTA MILWORK VENDOR (SEE CS3.0 FOR CONTACT), INSTALLED BY G.C., FINAL ELECTRICAL WIRING AND CIRCUITING BY ULTA G.C. FABRIC GRAPHIC PANEL SUPPLIED BY ULTA AND INSTALLED BY G.C. |

| DESCRIPTION | DOES NOT APPLY | EXIST TO REMAIN | LANDLORD/ LGC | | ULTA GC | | ULTA | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | FURN | INSTALL | FURN | INSTALL | FURN | INSTALL | |
| **DIVISION 15 MECHANICAL** | | | | | | | | | |
| ROOF TOP UNITS/ HVAC EQUIPMENT | | | ● | ● | | | | | SEE MECH DRAWINGS & NOTES INCLUDES GAS PIPING. ALSO, SEE LANDLORD SHELL DRAWINGS FOR REFERENCE ONLY. |
| ROOF DRAINAGE | | | ● | ● | | | | | SEE MECH DRAWINGS & NOTES. ALSO, SEE LANDLORD SHELL DRAWINGS FOR REFERENCE ONLY. |
| CONDENSATE DRAINAGE | | | ● | ● | ● | ● | | | SEE MECH DRAWINGS FOR LOCATIONS & NOTES. ALSO, SEE LANDLORD SHELL DRAWINGS FOR REFERENCE ONLY. |
| HVAC DISTRIBUTION | | | | | ● | ● | | | SEE MECH DRAWINGS FOR LOCATIONS & NOTES. ALSO, SEE LANDLORD SHELL DRAWINGS FOR REFERENCE ONLY. LANDLORD FURNISHING METAL DUCT DROPS FOR TENANT CONNECTION. |
| WASHER DRYER VENTS | | | ● | ● | ● | ● | | | SEE MECH DRAWINGS FOR LOCATIONS & NOTES. COORDINATE WITH LGC. ALSO, SEE LANDLORD SHELL DRAWINGS FOR REFERENCE ONLY. |
| GAS WATER HEATER EXHAUST, 6" TYPE B VENT AND ROOF PENETRATION. | | | ● | ● | | | | | SEE LANDLORD SHELL DRAWINGS FOR REFERENCE ONLY. |
| ONE 10" ROUND INTAKE DUCT WITH ROOF CAP MODEL GREENHECK #GRS-10 | | | ● | ● | | | | | SEE LANDLORD SHELL DRAWINGS FOR REFERENCE ONLY. |
| ONE 10" DIAMETER EXHAUST VENT WITH GOOSE-NECK TERMINATION | | | ● | ● | | | | | SEE LANDLORD SHELL DRAWINGS FOR REFERENCE ONLY. |
| ROOF MOUNTED EXHAUST FAN | | | ● | ● | | | | | SEE LANDLORD SHELL DRAWINGS FOR REFERENCE ONLY. |
| WATER SUPPLY STUB IN TO SPACE | | | ● | ● | | | | | SEE PLUMBING DRAWINGS FOR LOCATIONS & NOTES. ALSO, SEE LANDLORD DRAWINGS FOR REFERENCE. LANDLORD TO PROVIDE 2" WATER SERVICE STUBBED AT REAR OF THE SPACE TIGHT TO STRUCTURE WITH 50 TO 60 GPM (90GPM MAX) FLOW, BACK FLOW PREVENTER AND WATER METER THAT WILL BE LOCATED IN MANHOLE ON SITE. |
| WATER SUPPLY DISTRIBUTION | | | | | ● | ● | | | SEE PLUMBING DRAWINGS FOR LOCATIONS & NOTES |
| SANITARY STUB IN TO SPACE | | | ● | ● | | | | | SEE PLUMBING DRAWINGS FOR LOCATIONS & NOTES . ALSO, SEE LANDLORD SHELL DRAWINGS FOR REFERENCE. LANDLORD TO PROVIDE 4" SANITARY SEWER LINE AT REAR OF SPACE. THE INVERT SHALL BE NO HIGHER THAN 43" BELOW FINISHED FLOOR. |
| SANITARY ROOF VENTS | | | ● | ● | | | | | LL SHALL FURNISH AND INSTALL TWO SANITARY ROOF VENTS IN WHICH G.C. IS TO CONNECT TO. SEE LANDLORD DRAWINGS FOR REFERENCE. |
| SANITARY SEWER ROUGH - INS FOR PLUMBING FIXTURES | | | | | ● | ● | | | SEE PLUMBING DRAWINGS FOR LOCATIONS & NOTES. G.C. TO PROVIDE ULTA PROJ. MANAGER WITH ROD AND VIDEO SCOPE OF SEWER LINES TO LANDLORD'S MAIN PRIOR TO CONSTRUCTION START & TURNING SPACE OVER TO ULTA. COPY OF VIDEO TO BE PROVIDED TO PROJ. MANAGER AT TIME OF PUNCH LIST. |
| TOILET, ELEC. WATER COOLER | | | | | ● | ● | | | SEE PLUMBING DRAWINGS FOR LOCATIONS & NOTES PLUMBING FIXTURE SCHEDULE |
| RESTROOM SINKS | | | | | ● | ● | | | SEE PLUMBING DRAWINGS FOR LOCATIONS & NOTES PLUMBING FIXTURE SCHEDULE. |
| SINKS IN MILLWORK | | | | | ● | ● | | | SEE PLUMBING DRAWINGS FOR LOCATIONS & NOTES PLUMBING FIXTURE SCHEDULE. |
| GAS LINE STUB IN FOR WH | | | ● | ● | | | | | SEE PLUMBING DRAWINGS FOR LOCATIONS & NOTES. ALSO, SEE LANDLORD SHELL DRAWINGS FOR REFERENCE. LANDLORD SHALL FURNISH APPROPRIATELY SIZED LOW PRESSURE GAS LINE STUB INTO SPACE FOR WATER HEATER. G.C. TO VERIFY LOCATION OF INCOMING STUB IN FIELD. |
| UTILITIES TO ROOF TOP UNITS | | | ● | ● | | | | | SEE LANDLORD SHELL DRAWINGS FOR REFERENCE. LANDLORD TO FURNISH FULLY FUNCTIONING UNITS CONNECTED TO THE GAS AND ELECTRIC SERVICE AND OPERATIONAL AND POWERED UP AS OF THE PREMISES DELIVERY DATE. THE LANDLORD SHALL COORDINATE AND SCHEDULE A FACTORY START-UP FOR EACH HVAC UNIT AT THE APPLICABLE TIME. G.C. TO COORDINATE FACTORY START UP SCHEDULE WITH LANDLORD IF REQUIRED AFTER COMPLETED DUCTWORK INSTALLATION. |
| GAS WATER HEATER | | | | | ● | ● | | | |
| SHAMPOO SINKS | | | | | | ● | ● | | |
| SPRINKLER MAIN & SPRINKLER SYSTEM | | | ● | ● | | | | | LANDLORD WILL FURNISH BUILDING WITH A COMPLETE AUTOMATIC FIRE SPRINKLER SYSTEM THROUGHOUT TIGHT TO THE UNDERSIDE OF THE ROOF STRUCTURE MIN 15' AFF AND TURNED UP HEADS AT THE TIME OF LANDLORD TURNOVER. G.C. TO PREPARE SPRINKLER SYSTEM DRAWINGS AND SUBMIT FOR SEPARATE PERMIT AS REQUIRED FOR MODIFICATION TO SYSTEM TO ACCOMMODATE INTERIOR TENANT LAYOUT. |
| REWORK OF SPRINKLER SYS INCL DESIGN, HEADS & ACCESSORIES | | | | | ● | ● | | | PER LOCAL REQUIREMENTS. G.C. TO PREPARE SPRINKLER SYSTEM DRAWINGS AND SUBMIT FOR SEPARATE PERMIT AS REQUIRED FOR MODIFICATION TO SYSTEM TO ACCOMMODATE INTERIOR TENANT LAYOUT. G.C. TO SUBMIT SPRINKLER DRAWINGS TO ULTA FOR REVIEW. |
| **DIVISION 16 ELECTRICAL** | | | | | | | | | |
| SERVICE/MAIN/ SUB-PANELS/ TRANSFORMERS | | | ● | ● | | | | | SEE ENGINEERING DRAWINGS FOR NOTES. ALSO, SEE LANDLORD SHELL DRAWINGS FOR REFERENCE. |
| ADDTL SUB-PANELS DISTRIBUTION, J-BOXES, WIRING & OUTLETS | | | | | ● | ● | | | SEE ENGINEERING DRAWINGS FOR NOTES |
| CIRCUIT BREAKERS | | | ● | ● | ● | ● | | | SEE ELECTRICAL ONE-LINE DIAGRAM NOTES ON E0-1 |
| UNDERGROUND CONDUIT & J-BOXES | | | | | ● | ● | | | SEE ENGINEERING DRAWINGS FOR NOTES |
| FLOOR BOXES | | | | | | ● | ● | | SEE ENGINEERING DRAWINGS FOR NOTES. SEE SPECIALTY LIGHTING GROUP VENDOR CONTACT INFO ON CS3.0 SHEET. |
| UNDERGROUND WIRING & BOXES | | | | | ● | ● | | | SEE ENGINEERING DRAWINGS FOR NOTES |
| WIRING & J-BOXES FOR FIXTURES | | | | | ● | ● | | | SEE ENGINEERING DRAWINGS FOR NOTES |
| EXIT SIGN WIRING & TIME CLOCKS | | | | | ● | ● | | | SEE ENGINEERING DRAWINGS FOR NOTES |
| STOREFRONT SIGNAGE | | | | | ● | ● | | | SEE ENGINEERING DRAWINGS FOR NOTES |
| EXTERIOR SITE LIGHTING | | | ● | ● | | | | | SEE LANDLORD SHELL DRAWINGS FOR REFERENCE |
| INTERIOR GENERAL LIGHTING W/ LAMPS | | | | | | | ● | ● | |
| WIRING & J-BOX/HARD WIRE BOX FOR INTERIOR LIGHTING AND TIMERS | | | | | ● | ● | | | SEE ENGINEERING DRAWINGS FOR NOTES |
| INTERIOR ACCENT LIGHTING W/ LAMPS | | | | | | | ● | ● | SEE ENGINEERING DRAWINGS FOR NOTES |
| EXIT & EMERGENCY LIGHTING | | | | | | | ● | ● | SEE ENGINEERING DRAWINGS FOR NOTES |
| POWER REQUIREMENTS FOR MECH EQUIPMENT | | | ● | ● | | | | | SEE ENGINEERING DRAWINGS FOR NOTES. ALSO, SEE LANDLORD SHELL DRAWINGS FOR REFERENCE. LANDLORD TO WIRE UNITS TO HIGHER VOLTAGE AND FURNISH AND INSTALL APPROPRIATE BREAKERS. |
| WEATHER PROOF RECEPTACLE @ EA. HVAC UNIT | | | ● | ● | | | | | |
| DOOR CHIME W/ TRANSFORMER & PUSH BUTTON | | | | | ● | ● | | | CONDUIT AND WIRE BY G.C. |
| FIRE ALARM SYSTEM | | | | | ● | ● | | | AS REQUIRED BY LANDLORD AND LOCAL CODES. G.C. TO PREPARE FIRE ALARM DRAWINGS AND SUBMIT FOR SEPARATE PERMIT. SEE VENDOR CONTACT INFORMATION FOR APPROVED ULTA FIRE ALARM VENDOR - VECTOR. |
| CHECK-POINT SECURITY SYSTEM | | | | | | ● | ● | ● | CONDUIT BY G.C. IF REQUIRED BY CODE. REFER TO ELEC. DWGS. AND NOTES FOR MORE INFO. |
| SECURITY SYSTEM (GENERAL) | | | | | | ● | ● | ● | CONDUIT BY G.C. IF REQUIRED BY CODE. REFER TO ELEC. DWGS. AND NOTES FOR MORE INFO. |
| CONDUIT, J-BOXES, COVERPLATES FOR SOUND SYSTEM | | | | | ● | ● | | | CONDUIT BY G.C. IF REQUIRED BY CODE. REFER TO ELEC. DWGS. AND NOTES FOR MORE INFO. |
| CONDUIT, J-BOXES, COVERPLATES FOR TELEPHONES | | | | | ● | ● | | | CONDUIT BY G.C. IF REQUIRED BY CODE. REFER TO ELEC. DWGS. AND NOTES FOR MORE INFO. |
| CONDUIT, SECURITY SYSTEM, J-BOXES COVERPLATES | | | | | ● | ● | | | CONDUIT BY G.C. IF REQUIRED BY CODE. REFER TO ELEC. DWGS. AND NOTES FOR MORE INFO. |
| TELEPHONE SERVICE CONDUIT STUB | | | ● | ● | | | | | |
| TELEPHONE BOARD | | | | | ● | ● | | | |
| TEMP LIGHTING DURING CONSTRUCTION PER OSHA STANDARDS | | | | | ● | ● | | | REGULATIONS (STANDARDS - 29 CFR) PART NUMBER 1926.56 |

## LEGEND

NOTE :
LGC LANDLORD GENERAL CONTRACTOR G.C. GENERAL CONTRACTOR VIF VERIFY IN FIELD

NOTE:
1. G.C. TO PROVIDE FORK-LIFT WITH FORK EXTENSIONS ON SITE DURING CONSTRUCTION THROUGH FIRST WEEKEND OF STOCKING. SEE VENDOR CONTACT INFORMATION ON CS3.0 SHEET.
2. G.C. TO CONTACT LANDLORD REPRESENTATIVE FOR LANDLORD REQUIRED CONTRACTORS. SEE COVER SHEET FOR LANDLORD CONTACT INFO.
3. G.C. TO FURNISH AND INSTALL TENANT SPACE ADDRESS PER LANDLORD'S REQUIREMENTS.
4. G.C. TO VERIFY SIZE AND SHAPE OF TENANT SPACE BEFORE LAYING OUT STORE.
5. G.C. TO PROVIDE 3/4" PLYWOOD PROTECTION UNDER ALL DEBRIS BOXES AND STORAGE CONTAINERS.
6. G.C. TO PERFORM FINAL CLEAN PRIOR TO PUNCHLIST WALK THROUGH. PRIOR TO STORE OPENING ULTA TO PERFORM PROFESSIONAL CLEANING AND FLOOR CLEANING THE WEDNESDAY BEFORE THE FRIDAY SOFT OPENING.
7. G.C. TO TOUCH UP PAINT PRIOR TO STORE OPENING.
8. G.C. TO USE ULTA VENDOR FOR FINAL CONSTRUCTION DUMPSTERS. SEE VENDOR CONTACT INFORMATION ON CS3.0 SHEET.
9. G.C. TO PROVIDE PHOTOGRAPHS TO ULTA CONSTRUCTION MANAGER. SEE REQUIRED PHOTO LIST ON CS3.0 SHEET. ALL PHOTOS ARE REQUIRED TO HAVE A DATE STAMP. ALL PHOTOS SHALL BE TAKEN AND PROVIDED TO CM PRIOR TO WALLS BEING ENCLOSED AND MIRRORS BEING INSTALLED TO ENSURE PROPER INSTALLATION.

ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

RESPONSIBILITY SCHEDULE

CHIPMAN DESIGN ARCHITECTURE INC
JOHN A CHIPMAN ARCHITECT
1511 3RD AVENUE SUITE
FIRST FLOOR EAST
SEATTLE, WA 98101
PHONE 206.216.0900

Revisions
1 ISSUE FOR CL/LL REVIEW 04/20/18
2 ISSUE FOR PERMIT & BID 04/20/18
3
4
5
6
7

6387 REGISTERED ARCHITECT JOHN A. CHIPMAN STATE OF WASHINGTON

04/20/2018 DATE
06/30/2018 EXPIRATION DATE

I HEREBY CERTIFY THAT THESE PLANS HAVE BEEN PREPARED UNDER MY SUPERVISION AND THAT TO THE BEST OF MY KNOWLEDGE, THE SAME COMPLY WITH ALL RULES, REGULATIONS AND ORDINANCES OF KIRKLAND, WA RELATING TO STRUCTURES AND BUILDINGS.

ARCHITECT

| Drawn By | Checked By |
|---|---|
| KC | BW/RD |
| Scale | Date |
| AS NOTED | 04/20/18 |

Job No. 16-4170

Sheet No. CS2.0

City of Kirkland
Reviewed by
J Tumelson
05/30/2018

THESE PLANS ARE NOT TO BE USED FOR CONSTRUCTION UNLESS SIGNED AND DATED BY THE BUILDING OFFICIAL

## SHOP DRAWING/PRODUCT TESTS/SUBMITTALS AND INSPECTION REQUIREMENTS

| SUBMITTAL ITEM | DESIGNED AND/OR DESIGNATED BY: | SUBMITTAL REVIEWED BY: | INSPECTION REQUIRED/BY: |
|---|---|---|---|
| ALUM. STOREFRONT SYSTEM/ WINDOW MULLION SYSTEM | ARCHITECT | ARCHITECT | NO |
| CONDUCT AAMA 501.2 - QUALITY ASSURANCE AND DIAGNOSTIC WATER LEAKAGE FIELD CHECK OF INSTALLED STOREFRONTS, CURTAIN WALLS, AND SLOPED GLAZING SYSTEMS. TEST SHALL BE PERFORMED BY AN INDEPENDENT THIRD PARTY TESTING AGENCY WITH RESULTS SUBMITTED TO ULTA. TESTING PERFORMED BY STOREFRONT/GLAZING INSTALLATION CONTRACTOR WILL NOT BE ACCEPTED BY ULTA.<br>AAMA 501.2 TEST BY ULTA G.C. FOR AS-IS STORES (ANY STOREFRONT MODIFICATION, HURRICANE/HIGH WIND AREAS AND WET CLIMATE).<br>AAMA 501.2 TEST BY LANDLORD WHEN: NEW STOREFRONT BY LL, HURRICANE/HIGH WIND AREAS AND WET CLIMATE | ARCHITECT | ULTA | INDEPENDENT TESTING AGENCY |
| AUTOMATIC DOORS/ SECURITY GRILLES | ARCHITECT | ULTA<br>(LOSS PREVENTION) | NO |
| CANOPIES / AWNINGS | ULTA VENDOR | ULTA | NO |
| INTERIOR/EXTERIOR PAINT | ARCHITECT | ARCHITECT | NO |
| CONTRACTOR SHALL CONDUCT CONCRETE SLAB MOISTURE VAPOR EMISSION, IN-SITU RELATIVE HUMIDITY AND PH (ALKALINITY) TESTING ON ALL CONCRETE SLABS SCHEDULED TO BE COVERED WITH A FLOOR COVERING OR COATING. CONCRETE SLAB MOISTURE AND PH TESTING SHALL BE PERFORMED UTILIZING ASTM F 710 - STANDARD PRACTICE FOR PREPARING CONCRETE FLOORS TO RECEIVE RESILIENT FLOORING, ASTM F1869 - STANDARD TEST METHOD FOR MEASURING MOISTURE VAPOR EMISSION RATE OF CONCRETE SUBFLOOR USING ANHYDROUS CALCIUM CHLORIDE AND ASTM F 2170 - STANDARD TEST METHOD FOR DETERMINING RELATIVE HUMIDITY IN CONCRETE FLOOR SLABS USING IN SITU PROBES USING RAPID RH® RELATIVE HUMIDITY AND TEMPERATURE SENSOR KIT AS MANUFACTURED BY WAGNER METERS (800) 634-9961, OR EQUAL. CONCRETE SLAB MOISTURE AND PH TESTING SHALL BE PERFORMED BY THE APPROVED NATIONAL ACCOUNT VENDOR, IFTI - INDEPENDENT FLOOR TESTING & INSPECTION, INC.: JENNIFER ARMSTRONG, 800-490-3657 X 217, ulta.spec@ifti.com. AT COMPLETION OF TESTING AND REPORTING, THE MOISTURE TEST REPORT SHALL BE FORWARDED TO ULTA'S CONSTRUCTION PROJECT MANAGER AND CONTRACTOR. TESTING PERFORMED BY FLOORING INSTALLATION CONTRACTOR SHALL NOT BE ACCEPTED BY ULTA. IF MOISTURE LEVELS ARE HIGHER THAN THE FLOOR COVERINGS ALLOWABLE LIMIT, THE SUBSTRATE SHOULD BE REMEDIATED WITH ARDEX MC RAPID. SEE ARDEX CONTACT INFORMATION ON THIS SHEET. | ARCHITECT | ULTA | NATIONAL ACCOUNT VENDOR - INDEPENDENT TESTING AGENCY<br><br>RECOMMENDED 3RD PARTY CONCRETE SLAB MOISTURE AND PH TESTING:<br>IFTI - INDEPENDENT FLOOR TESTING & INSPECTION, INC.<br>2300 CLAYTON ROAD<br>SUITE 1240<br>CONCORD, CA 94520<br>CONTACT: JENNIFER ARMSTRONG<br>TEL: 800-490-3657 X 217<br>ulta.spec@ifti.com |
| STOREFRONT SIGNAGE | ULTA VENDOR | ULTA | NO |
| OFFICE STORAGE FRAMING - IF REQUIRED BY LOCAL CODE, G.C. TO HIRE AN INDEPENDENT STRUCTURAL ENGINEER OR TESTING AGENCY TO INSPECT THE OFFICE FRAMING TO MEET THE STANDARDS SET FORTH FOR THE CONSTRUCTION OF THE OFFICE WALLS SUPPORTING THE PLATFORM. LETTER OF COMPLIANCE TO BE FORWARDED TO ULTA/AHJ. | STRUCT. ENGINEER | ULTA/AHJ | TESTING LAB |
| POST CONSTRUCTION AS BUILTS | G.C. | ULTA | NO |
| HVAC EQUIPMENT CUT SHEETS | MECH. ENGINEER | MECH. ENGINEER | NO |
| HVAC AIR BALANCE REPORT | MECH. ENGINEER | MECH. ENGINEER | INDEPENDENT TEST AGENCY |
| RODDING AND SCOPE OF SANITARY SYSTEM | G.C. | ULTA | INDEPENDENT TEST AGENCY |
| METAL STUD FRAMING | ARCHITECT | ARCHITECT | NO |

## SEPARATE PERMIT SUBMITTALS

(IF SYSTEM IS REQUIRED BY AHJ)

| SUBMITTAL ITEM | N/A | PERMIT AS REQUIRED: | | SUBMIT WITH ARCH DRAWINGS: | |
|---|---|---|---|---|---|
| | | YES | NO | YES | NO |
| FIRE SPRINKLER SHOP DRAWINGS | | ● | | | ● |
| FIRE ALARM DRAWINGS/ EQUIP SPECIFICATIONS | | ● | | | ● |
| BUILDING SIGNAGE | | ● | | | ● |
| STOREFRONT WINDOW GRAPHICS @ HANGING FRAMES | | | ● | | ● |

** ULTA G.C. AND FIRE ALARM VENDOR / SUBCONTRACTOR SHALL CONFIRM EXISTING BUILDING FIRE ALARM SYSTEM INSTALLED BY LANDLORD UNDER SEPARATE PERMIT. ULTA G.C. AND FIRE ALARM VENDOR / SUBCONTRACTOR SHALL CONTACT LOCAL BUILDING AUTHORITY TO CONFIRM PERMITTING REQUIREMENTS AND PREPARE FIRE ALARM MODIFICATION DRAWINGS AND SUBMIT FOR SEPARATE PERMIT AS REQUIRED.

## LOW VOLTAGE PERMITS / SUBMITTALS

(IF SYSTEM IS REQUIRED BY AHJ)

| SUBMITTAL ITEM | PERMIT AS REQUIRED: | | INSPECTIONS REQUIRED | |
|---|---|---|---|---|
| | YES | NO | * YES | NO |
| MUSIC SYSTEM | ● | | ● | |
| EAS SYSTEM | ● | | ● | |
| BURGLAR ALARM / C.C.T.V | ● | | ● | |
| TELE / DATA | ● | | ● | |

* IF INSPECTIONS ARE REQUIRED, THE VENDOR WHO PULLED THE PERMIT MUST CALL IN FOR EACH INSPECTION AND BE PRESENT FOR EACH INSPECTION.

## SEISMIC REQUIREMENTS

G.C. TO SEE MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR ADDITIONAL SEISMIC REQUIREMENTS.

## REQUIRED CONSTRUCTION PHOTOGRAPHS

| PHOTOGRAPHS | DATE SENT TO CPM: |
|---|---|
| "FOR NEW CONSTRUCTION" SITE WORK, PARKING AREAS IN FRONT OF STORE AND SHOW BOTH SIDE TENANTS | |
| IN-WALL BLOCKING AT MILLWORK FIXTURES | |
| IN-WALL BLOCKING - VALANCE BRACKETS | |
| IN-WALL BLOCKING - MIRRORS, INCLUDING J-CHANNEL INSTALLATION | |
| IN-WALL BLOCKING - TOILET ROOM ACCESSORIES | |
| CONTINUOUS PLYWOOD AT BACKSIDE OF VALANCE | |
| CEMENT BOARD IN TOILET ROOM AND AT MOP BASIN | |
| IN-CEILING CONTINUOUS BLOCKING AT ALU TRACK | |
| TOILET ROOMS THE SATURDAY PRIOR TO OPENING | |
| EXTERIOR SIGNS, INCLUDING PYLON - DAY AND NIGHT | |
| WIRING AT EAS - STORE ENTRANCE AND TOILET ROOM CORRIDOR | |
| ROOFTOP EQUIPMENT - IF FURNISHED AND INSTALLED BY TGC | |
| WALL BASE AT COLUMNS AND CORNERS | |
| WALL COVERING WHERE VALANCE MEETS ADJACENT WALL | |
| HANGING ALU FRAMES ALONG STOREFRONT TO VIEW ALIGNMENT | |
| ALL FLOOR TRANSITIONS AS INDICATED ON A4.1 | |
| ARDEX MATERIAL BEING USED | |
| VAPOR BARRIERS & DOWELS AT TRENCHES - MIN. OF 3 LOCATIONS REMOTE FROM EACH OTHER | |
| COMPLETED EXHAUST FAN DUCT WORK | |
| STRUCTURAL STUDS FOR OFFICE FRAMING SHOWING STUD GAUGE STAMP & CONNECTIONS | |

## NOTE: G.C. IS TO COORDINATE THE SHIPMENT, DELIVERY AND INSTALLATION OF ALL ITEMS TO BE FURNISHED BY OWNER AND ULTA'S VENDORS. VENDOR CONTACTS ARE AS FOLLOWS:

ACRYLIC PANEL:

CREATIVE CONCEPTS
CONTACT: BRYAN KOESTNER
(P): 630-940-0500

BACKROOM EQUIPMENT:

GRAINGER
CONTACT: JEFF GARDNER
(P): 312-519-7209
EMAIL: jeff.gardner@grainger.com
**LOCKERS, 4-WHEEL CARTS, LADDERS, BABY CHANGING TABLE & WET/DRY SHOP VAC

BRACKETS & GRAPHIC TRACK:

FHC MARKETING
CONTACT: KELLY MARTIN
(P): 773-724-3004
EMAIL: kmartin@fhcmarketing.com
**METAL BRACKETS FOR GONDOLA SHELVES – RECEIVED BY G.C. /INSTALLED BY STORE
**UNIWEB GONDOLA "ALLIED PANELS" BRACKETS
**W-8 SHELVING & LED LIGHTING

CCTV & BURGLAR ALARMS:

VECTOR SECURITY
CONTACT: JOE UTZ
13555 WELLINGTON CENTER CIRCLE, SUITE 123
GAINESVILLE, VA 20155
(C): 630-277-0858
EMAIL: jcutz@vectorsecurity.com

CEILING TILE:

ARMSTRONG
CONTACT: BETH RINEHART
(P): 800-442-4212
EMAIL:
armstrongcsa@armstrongceilings.com

CLEANER:

CLEANWAY
(P): 631-288-6300
800-332-6996

COLUMN COVER:

MOONLIGHT MOLDS, INC.
13720 S. WESTERN AVE. UNIT A
GARDENA, CA 90249
(P): 310-538-9142
(F): 310-538-9717
EMAIL: james@moonlightmolds.com

COLUMN COVER: (ALTERNATE)

FORMGLAS PRODUCTS LTD.
181 REGINA ROAD
VAUGHAN, ONTARIO L4L 8M3
(T): 416-635-8030
EMAIL: estimating@formglas.com
www.formglas.com

CONCRETE LEVELING AGENT:

ARDEX
CONTACT: LINDA ZIGMAN
NATIONAL ACCOUNTS SPECIALIST
(P): 312-218-6893
EMAIL: linda.zigman@ardexamericas.com

OR

MAPEI
CONTACT: KATHLEEN MCGINLEY
(C): 630-808-9944
EMAIL: kmcginley@mapei.com

CONSTRUCTION DUMPSTERS:

WASTE MANAGEMENT C & D TEAM
(REQUIRED FOR FINAL DEBRIS BOX)
(P): 800-796-9696, ENTER ZIP CODE AND A LIVE REPRESENTATIVE WILL BE READY TO TAKE YOUR CALL
THIS PHONE LINE IS AVAILABLE 24/7/365 OR EMAIL TO:
wmsscdteam@wm.com

DOOR HARDWARE:

LOCKNET
CONTACT: KORY CHANDLER
(P): 800-887-4307 x175
EMAIL: korycr@locknet.com
24 HOUR SERVICE
(P): 800-353-2562
EMAIL: service@locknet.com

EAS:

CHECKPOINT
CONTACT: SCOTT REITHMEIER
101 WOLF DRIVE
THOROFARE, NJ 08086
(P): 856-384-2318
(C): 609-682-0762
EMAIL: scott.reithmeier@checkpt.com

ENERGY MANAGEMENT SYSTEM:

NOVAR
CONTACT: CODY HATCH
(P): 216-682-1482
(C): 216-372-7827
EMAIL: cody.hatch@honeywell.com

EQUIPMENT RENTAL:

UNITED RENTALS
CONTACT: TOM PARETI
STRATEGIC ACCOUNT MANAGER
EMAIL: tpareti@ur.com
(C): 630-774-9896

EXTERIOR SIGNS:

KIEFFER
CONTACT: STEVE BORN
585 BOND ST.
LINCOLNSHIRE, IL 60069
(P): 847-415-5712
EMAIL: sborn@kieffersigns.com

FIRE EXTINGUISHERS:

COMMERCIAL FIRE, INC.
CONTACT: ERIC FABERT
2465 ST. JOHNS BLUFF RD. S.
JACKSONVILLE, FL 32246
(P): 800-241-1277 x285
EMAIL: eric.fabert@commercialfire.com

FLOOR BOXES:

SPECIALTY LIGHTING GROUP
CONTACT: JESSICA RIVEIRA
74 PICKERING STREET
PORTLAND, CT 06480
(P): 860-767-0110 x 212
EMAIL: jkr@sslighting.com

GLASS:

DILLMEIR GLASS
CONTACT: MALENY ALARCON
(P): 800-325-0596 x229
EMAIL: malarcon@dillmeirglass.com
**PROVIDES ALL GLASS SHELVES THAT WILL REQUIRE A LIFT TRUCK

GONDOLA "ALLIED PANELS":

UNIWEB, INC.
CONTACT: KARINA RAMIREZ
222 S PROMENADE AVE.
CORONA, CA 92879
(P): 800-486-4932 x131
EMAIL: karinar@uniwebinc.com

IT INSTALLER:

CPT NETWORKS
CONTACT: KEN VANOMERRING
1062 THORNDALE AVE.
BENSENVILLE, IL 60106
(C): 630-735-7006
EMAIL: ulta@cptnetworks.com

LIGHTS/LIGHT BULBS:

SPECIALTY LIGHTING GROUP
CONTACT: JESSICA RIVEIRA
74 PICKERING STREET
PORTLAND, CT 06480
(P): 860-767-0110 x 212
EMAIL: jkr@sslighting.com

MILLWORK:

CAP
CONTACT: ROBERT BARCA
455 McCORMICK BLVD.
COLUMBUS, OH 43213
(P): 614-863-3363
EMAIL: rbarca@cap-associates.com

RODGERS WADE
CONTACT: BARRY SHIVER
1401 3RD S.W.
PARIS, TEXAS 75460
(P): 903-783-3655
EMAIL: bshiver@rodgerswade.com

**WALL CLEATS (2 DAYS PRIOR TO FIXTURE DELIVERY)
**PERIMETER WALL FIXTURES & ARCHES, INCLUDING THE SALON ARCH
**CASHWRAP, SALON, CONCIERGE, COLOR LIBRARY, MGRS. OFFICE, SKIN CARE ROOM, BACK RM. STANDARDS & SHELVES
**GONDOLA (SALES FLOOR FIXTURES)
**HAIR DRYER BOX FIXTURES, PCA SHOP, NESTING, PROMO, FRAGRANCE & CHI TABLES, ID BOUTIQUE, NAIL BAR AND MISC. PRODUCT DISPLAYS
**BACKROOM SHELVES AND STANDARDS INCLUDING, 12" X 48" METAL, 20" X 48" METAL, 121 WALLMOUNT STD HD, HANG ROD BRACKETS, 12", HANG ROD, 48"

MUSIC:

PLAYNETWORK
CONTACT: KIMBERLEY BOHREN
8727 148TH AVE. NE
REDMOND, WA 98052
(P): 425-629-4516
EMAIL: kbohren@playnetwork.com

NEW STORE INSTALLATION/BREAK FIX SUPPORT:

TELAID
CONTACT: JACK THOMAS JR.
9550 MONTICELLO ROAD
LENEXA, KS 66227
(P): 913-768-1996
(C): 913-620-9092
EMAIL: jthomas@telaid.com

PAINT:

BENJAMIN MOORE
CONTACT: MICHAEL ECKE
(P): 201- 949-6130
(C): 201- 783-7658
EMAIL: michael.ecke@benjaminmoore.com
NATIONAL ACCOUNTS DIVISION
1-877-623-8484 PRESS 1 TO PLACE YOUR PAINT ORDER OR EMAIL: ccp@benjaminmoore.com

PAINT: (ALTERNATE)

PPG PAINTS
CONTACT: SHANE GLASCOCK
802 SUMMER OAK CT.
ST LOUIS, MO 63021
(C): 314-393-7807
(F): 314-567-6190
EMAIL: shane.glascock@ppg.com

PORCELAIN TILE:

TRANSCERAMICA
CONTACT: NOREEN SCHERTLER
314 WEST SUPERIOR
CHICAGO, IL 60654
(P): 312-342-4689
EMAIL: ns@transceramica.com

DALTILE
CONTACT: LYNN MILLS
1601 PRATT BLVD.
ELK GROVE VILLAGE, IL 60007
(C): 630-306-1550
EMAIL: lynn.mills@daltile.com
DALTILE NATIONAL ACCOUNT HOTLINE: 877-556-5728
NATIONAL ORDER DESK:
EMAIL: national.accounts@daltile.com

PORCELAIN TILE CLEANER:

(TEXSPAR PLUS)
WALTER LEGGE COMPANY
(P): 800-345-3443
www.leggesystems.com

PRESTIGE SHELVES/LIGHTS:

HARBOR INDUSTRIES
CONTACT: MICHELLE FRENCH
ACCOUNT MANAGER
(P): 616-850-8275
EMAIL: michelle_french@harborind.com

PRESTIGE UNIVERSAL FIXTURES:

ARRAY MARKETING
CONTACT: ANDREA WENT
(P): 416-299-9847 x129
EMAIL: awent@arraymarketing.com
**PRODUCT RECEIVED AND INSTALLED BY G.C.

SALON EQUIPMENT:

COLLINS MANUFACTURING
CONTACT: BEN SWANN
(P): 800-292-6450
EMAIL: ben@collinsmfgco.com OR CUSTOMER SERVICE
CONTACT: CINDY LOWERY
EMAIL: cindy@collinsmfgco.com
**SHAMPOO BOWLS & REMAINING SALON EQUIPMENT

SECURITY SERVICES:

ULTA
CONTACT: STEVE SCANLAN
(P): 630-410-5057
(C): 708-567-7384
EMAIL: sscanlan@ulta.com

TELEPHONE & DATA:

CPT NETWORKS
CONTACT: KEN VANOMERRING
1062 THORNDALE AVE.
BENSENVILLE, IL 60106
(C): 630-735-7006
EMAIL: ulta@cptnetworks.com

TILE GROUT:

MAPEI
CONTACT: KATHLEEN MCGINLEY
(C): 630-808-9944
EMAIL: kmcginley@mapei.com

TOILET ROOM ACCESSORIES:

CONTACT: SHARYN BYRNE
(P): 312-925-8057
EMAIL: sharynm.byrne@staples.com
**TOILET PAPER DISPENSER, PAPER TOWEL DISPENSER & TOILET SEAT COVER DISPENSER (FOR CA STORE ONLY)

WALLCOVERING:

DESIGNTEX
CONTACT: TRICIA HORWITZ
(P): 720-274-6007
(F): 800-829-3839
EMAIL: thorwitz@designtex.com

WINDOW SHADES:

ROLL-A-SHADE, INC.
CONTACT: DEANNA MCCOY
(P): 951-245-5077 x116
EMAIL: deanna.mccoy@rolashade.com

VINYL FLOORING & WALL BASE:

MANNINGTON MILLS, INC.
CONTACT: RICH CAMPBELL
PO BOX 1270
SAUGATUCK, MI 49453
(C): 773-791-3305
EMAIL: rich_campbell@mannington.com

VINYL GRAPHICS:
PRINTED BY:

GFX
CONTACT: JOEL McREE
(P): 847-543-4635
EMAIL: jmcree@gfxi.com OR ulta@gfxi.com

1 VENDOR CONTACT INFORMATION

SCALE: NONE

City of Kirkland
Reviewed by
J Tumelson
05/30/2018

ENR18-03206
Page 3 of 56

ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

VENDOR CONTACT INFORMATION & SUBMITTAL REQUIREMENTS


CHIPMAN DESIGN ARCHITECTURE INC
JOHN A CHIPMAN ARCHITECT
1511 3RD AVENUE
FIRST FLOOR EAST
SEATTLE, WA 98101
PHONE 206.576.0600


Revisions
- ISSUE FOR CL/LL REVIEW 04/20/18
- ISSUE FOR PERMIT & BID 04/20/18

6367 REGISTERED ARCHITECT JOHN A. CHIPMAN STATE OF WASHINGTON

04/20/2018 DATE
06/30/2018 EXPIRATION DATE

I HEREBY CERTIFY THAT THESE PLANS HAVE BEEN PREPARED UNDER MY SUPERVISION AND THAT TO THE BEST OF MY KNOWLEDGE, THE SAME COMPLY WITH ALL RULES, REGULATIONS AND ORDINANCES OF KIRKLAND, WA RELATING TO STRUCTURES AND BUILDINGS.

ARCHITECT

| Drawn By | Checked By |
|---|---|
| KC | BW/RD |
| Scale | Date |
| AS NOTED | 04/20/18 |

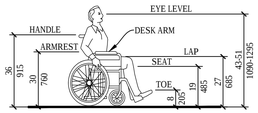
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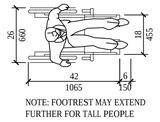
Sheet No. CS3.0


\\SEA1FS01\Projects\16-4170 - Kirkland, WA (Ulta)\Documents\Ulta Kirkland WA Documents\Ulta Kirkland Contract Documents\Ulta Kirkland Vendor Contact Info.rvt Revision Date: 4/20/2018 3:14 PM Revised By: Kristin Mathes Monday, April 23, 2018 3:14 PM

| Convention | Description |
|---|---|
| 36 / 915 | dimension showing English units (in inches unless otherwise specified) above the line and SI units (in millimeters unless otherwise specified) below the line |
| 6 / 150 | dimension for small measurements |
| 33 - 36 / 840 - 915 | dimension showing a range with minimum - maximum |
| min | minimum |
| max | maximum |
| > | greater than |
| ≥ | greater than or equal to |
| < | less than |
| ≤ | less than or equal to |
| | boundary of clear floor space or maneuvering clearance |
| | centerline |
| | a permitted element or its extension |
| | direction of travel or approach |
| | a wall, floor, ceiling or other element cut in section or plan |
| | a highlighted element in elevation or plan |
| | location zone of element, control or feature |

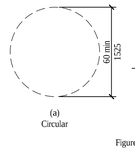
Figure 104.3
Graphic Convention for Figures



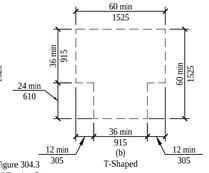




NOTE: FOOTREST MAY EXTEND FURTHER FOR TALL PEOPLE

FIG. A3
DIMENSIONS OF ADULT-SIZED WHEELCHAIRS




(a) Circular




(b) T-Shaped

Figure 304.3
Size of Turning Space

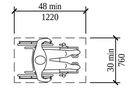
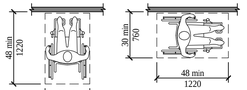
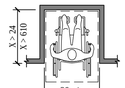



Figure 305.3
Size of Clear Floor Space

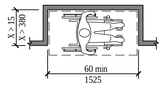



(a) Forward (b) Parallel

Figure 305.5
Position of Clear Floor Space

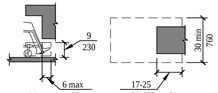



(a) Forward Approach



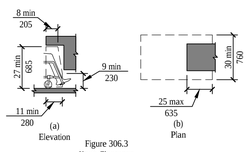

(b) Parallel Approach

Figure 305.7
Maneuvering Clearance in an Alcove




(a) Elevation (b) Plan

Figure 306.2
Toe Clearance




(a) Elevation (b) Plan

Figure 306.3
Knee Clearance

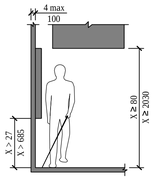



Figure 307.2
Limits of Protruding Objects

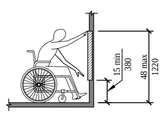
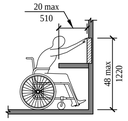
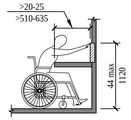



Figure 308.2.1
Unobstructed Forward Reach

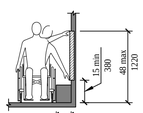



(a)

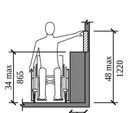



(b)

Figure 308.2.2
Obstructed High Forward Reach




(a)




(b)

Figure 308.3.1
Unobstructed Side Reach

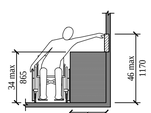



Figure 308.3.2
Obstructed High Side Reach

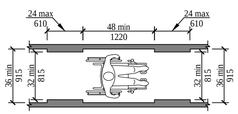
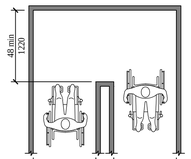
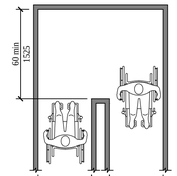



Figure 403.5
Clear Width of an Accessible Route

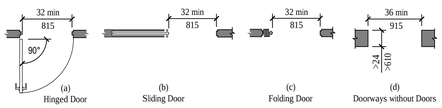



(a) 180 Degree Turn



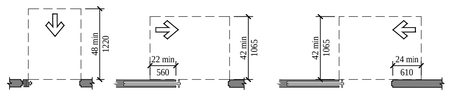

(b) 180 Degree Turn (Exception)

Figure 403.5.1
Clear Width at 180° Turn



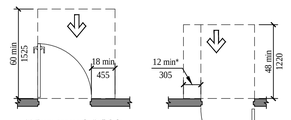

(a) Hinged Door (b) Sliding Door (c) Folding Door (d) Doorways without Doors

Figure 404.2.2
Clear Width of Doorways

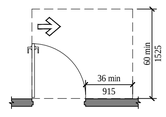



(a) Front Approach (b) Pocket or Hinge Approach (c) Stop or Latch Approach

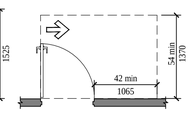
Figure 404.2.3.3
Maneuvering Clearance at Sliding and Folding Doors




(a) Front Approach, Pull Side



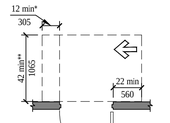

(c) Hinge Approach, Pull Side



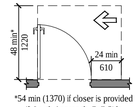

(d) Hinge Approach, Pull Side

* If both closer and latch are provided
(b) Front Approach, Push Side

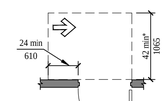
Figure 404.2.3.2
Maneuvering Clearance at Manual Swinging Doors




* If both closer and latch are provided
**48 min (1220) if both closer and latch provided
(e) Hinge Approach, Push Side




*54 min (1370) if closer is provided
(f) Latch Approach, Pull Side




*48 min (1220) if closer is provided
(g) Latch Approach, Push Side




(a) Front Approach (b) Side Approach

Figure 404.2.3.4
Maneuvering Clearances at Doorways Without Doors




(a) Pull Side




(b) Push Side




(c) Push Side, Door Provided with Both Closer and Latch

Figure 404.2.3.5
Maneuvering Clearances at Recessed Doors




(a)




(b)




(c)

Figure 404.2.5
Two Doors in Series







Drinking Fountains







Section 603.3
Mirrors

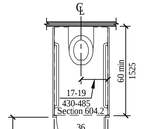



Figure 604.2
Water Closet Location

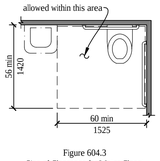



Figure 604.3
Size of Clearance for Water Closet

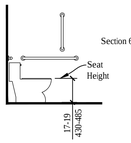



Figure 604.4
Water Closet Seat Height

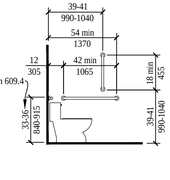



Figure 604.5.1
Side Wall Grab Bar for Water Closet

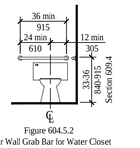



Figure 604.5.2
Rear Wall Grab Bar for Water Closet

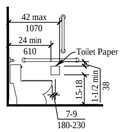
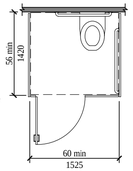
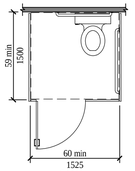



Figure 604.7
Dispenser Outlet Location

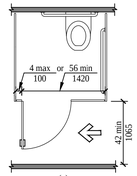



(a) Wall-Hung Water Closet - Adult

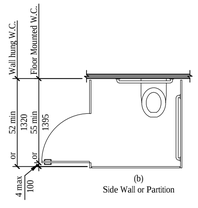



(b) Floor-Mounted Water Closet - Adult

Figure 604.9.2
Wheelchair Accessible Toilet Compartments




(a) Front Partition




(b) Side Wall or Partition

Figure 604.9.3.1
Wheelchair Accessible Compartment Door Openings

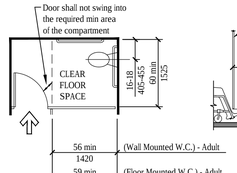
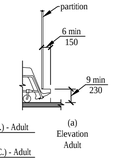
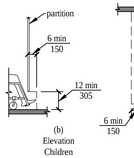



Figure 604.9.3.1 (c)
Wheelchair Accessible Compartment Door Openings - Alternate

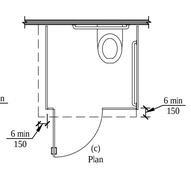



(a) Elevation Adult




(b) Elevation Children

Figure 604.9.5
Wheelchair Accessible Compartment Toe Clearance




(c) Plan




Figure 604.10
Ambulatory Accessible Compartment

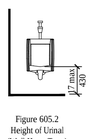



Figure 605.2
Height of Urinal (Wall-Hung Type)

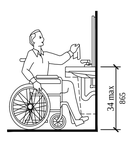



Figure 606.3
Height of Lavatories and Sinks

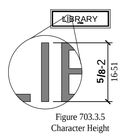



Figure 703.3.5
Character Height

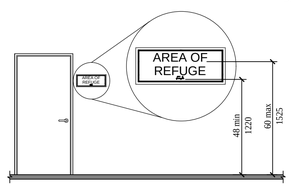



Figure 703.3.10 and Figure 703.4.5
Height of Raised/Braile Characters Above Floor

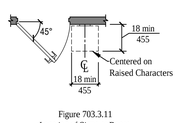



Figure 703.3.11
Location of Signs at Doors

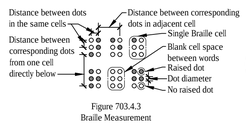



Figure 703.4.3
Braille Measurement

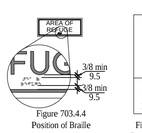



Figure 703.4.4
Position of Braille

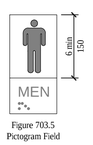



Figure 703.5
Pictogram Field



Figure 703.6.3.1
INTERNATIONAL SYMBOL OF ACCESSIBILITY



Figure 703.6.3.2
INTERNATIONAL TTY SYMBOL



Figure 703.6.3.3
INTERNATIONAL SYMBOL OF ACCESS FOR HEARING LOSS



Figure 703.6.3.4
VOLUME-CONTROLLED TELEPHONE

ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

ACCESSIBILITY DETAILS


CHIPMAN DESIGN ARCHITECTURE INC
JOHN A CHIPMAN ARCHITECT
1511 3RD AVENUE EAST
FIRST FLOOR EAST
SEATTLE, WA 98101
PHONE 206.216.4090


Revisions
- ISSUE FOR CL/LL REVIEW 04/20/18
- ISSUE FOR PERMIT & BID 04/20/18

6367 REGISTERED ARCHITECT JOHN A. CHIPMAN STATE OF WASHINGTON

04/20/2018 DATE
06/30/2018 EXPIRATION DATE

I HEREBY CERTIFY THAT THESE PLANS HAVE BEEN PREPARED UNDER MY SUPERVISION AND THAT TO THE BEST OF MY KNOWLEDGE, THE SAME COMPLY WITH ALL RULES, REGULATIONS AND ORDINANCES OF KIRKLAND, WA RELATING TO STRUCTURES AND BUILDINGS.

ARCHITECT

| Drawn By | Checked By |
|---|---|
| KC | BW/RD |
| Scale | Date |
| AS NOTED | 04/20/18 |

Job No.
16-4170

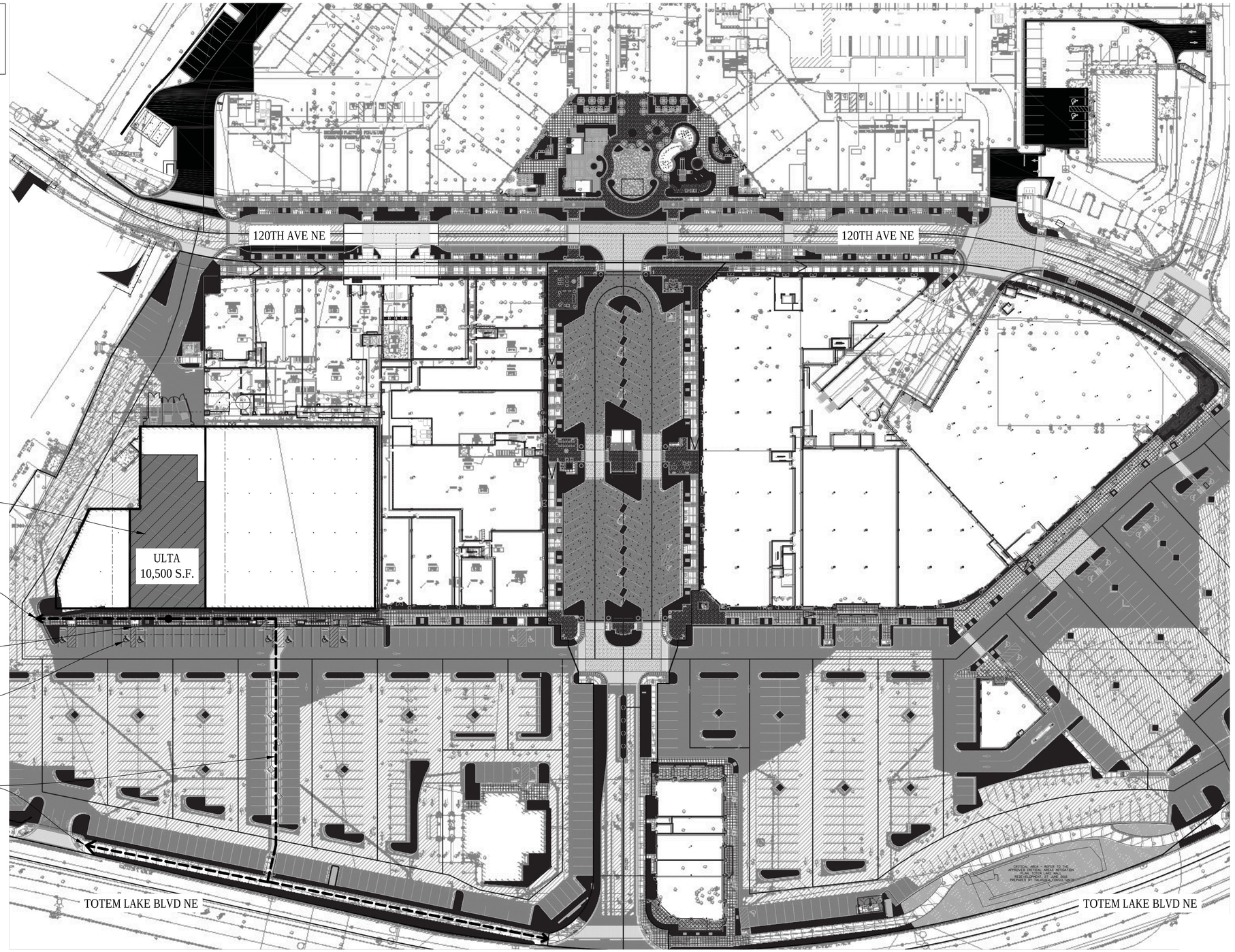
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1 ACCESSIBILITY DETAILS
SCALE: NONE

City of Kirkland
Reviewed by
J Tumelson
05/30/2018

ENR18-03206
Page 4 of 56

SITE PLAN FOR REFERENCE ONLY.
ALL EXTERIOR AND SHELL
BUILDING WORK BY LANDLORD
UNDER SEPARATE PERMIT




AREA OF WORK -
INTERIOR TENANT
IMPROVEMENT FOR
PROPOSED ULTA BEAUTY

EXISTING ACCESSIBLE PATH OF
TRAVEL TO PUBLIC SIDEWALK

EXISTING ACCESSIBLE
CURB RAMPS

EXISTING ACCESSIBLE
PARKING BY LANDLORD

EXISTING ACCESSIBLE PATH OF
TRAVEL TO PUBLIC SIDEWALK

PLAN NORTH

City of Kirkland
Reviewed by
J Tumelson
05/30/2018

ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

SITE PLAN (FOR REFERENCE ONLY)

CHIPMAN DESIGN
ARCHITECTURE INC
JOHN A CHIPMAN ARCHITECT
1511 THIRD AVENUE
FIRST FLOOR EAST
SEATTLE, WA 98101
PHONE 206.576.0600

Revisions
- ISSUE FOR CL/LL REVIEW 04/20/18
- ISSUE FOR PERMIT & BID 04/20/18

6367
REGISTERED ARCHITECT
JOHN A. CHIPMAN
STATE OF WASHINGTON

04/20/2018 DATE
06/30/2018 EXPIRATION DATE

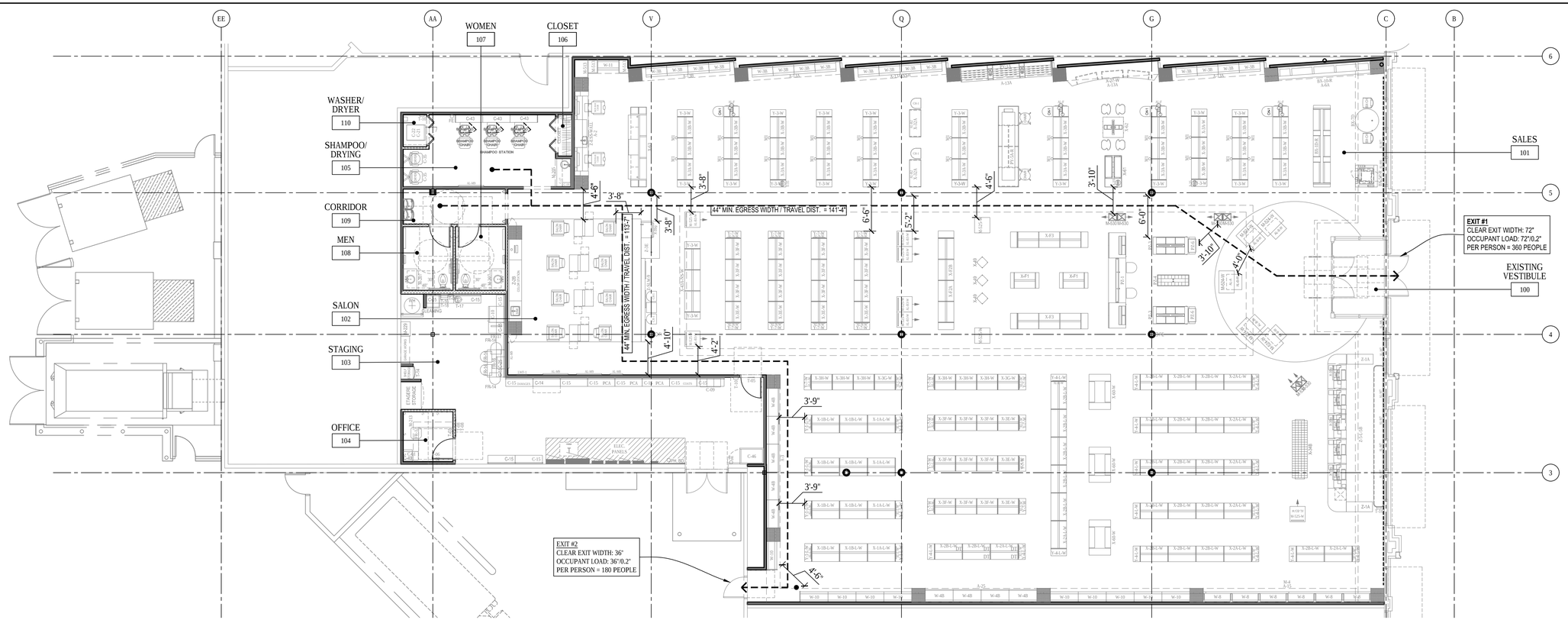
I HEREBY CERTIFY THAT THESE PLANS HAVE BEEN PREPARED UNDER MY SUPERVISION AND THAT TO THE BEST OF MY KNOWLEDGE, THE SAME COMPLY WITH ALL RULES, REGULATIONS AND ORDINANCES OF KIRKLAND, WA RELATING TO STRUCTURES AND BUILDINGS.

ARCHITECT

| Drawn By | Checked By |
|---|---|
| KC | BW/RD |
| Scale | Date |
| AS NOTED | 04/20/18 |

Job No. 16-4170

Sheet No. A0.1




# A EGRESS PLAN

SCALE: 1/8"=1'-0"

ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

EGRESS PLAN

CHIPMAN DESIGN ARCHITECTURE INC
JOHN A CHIPMAN ARCHITECT
1148 FIFTH AVENUE EAST
FIRST FLOOR EAST
SEATTLE, WA 98102
PHONE 425.216.4000

Revisions
- ISSUE FOR CL/LL REVIEW 04/20/18
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6367
REGISTERED ARCHITECT
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ARCHITECT

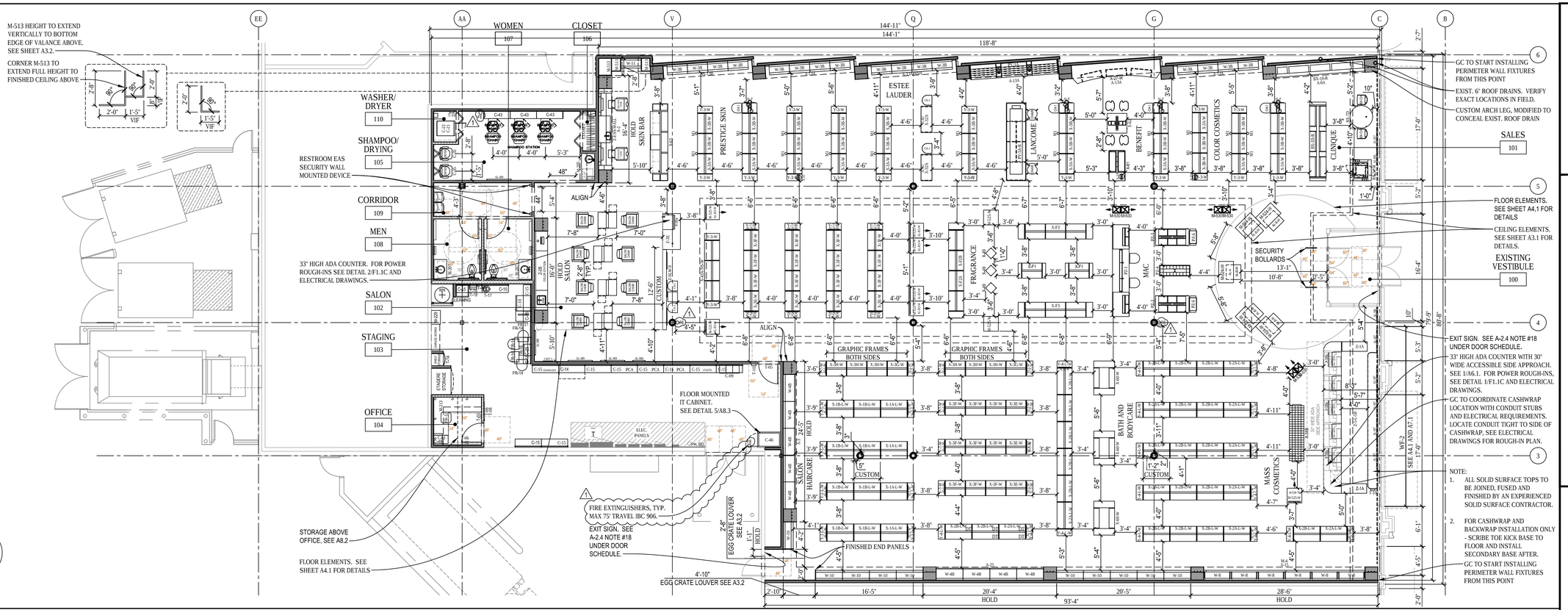
| Drawn By | Checked By |
|---|---|
| KC | BW/RD |
| Scale | Date |
| AS NOTED | 04/20/18 |

Job No. 16-4170

Sheet No. A1.0

City of Kirkland
Reviewed by
J Tumelson
05/30/2018

ENR18-03206
Page 6 of 56




# A FIXTURE PLAN

SCALE: 1/8"=1'-0"

## FURNITURE SCHEDULE

| # | Description | Remarks | Furnished by | Installed by |
|---|---|---|---|---|
| A-2 | PRESTIGE SKIN ARCH | 148" INSIDE WIDTH | ULTA | G.C. |
| A-3 | SALON HAIRCARE ARCH | 245" INSIDE WIDTH | ULTA | G.C. |
| A-6 | PRESTIGE ARCH | 162" INSIDE WIDTH (ARCH WITH NO RETURN) | ULTA | G.C. |
| A-6A | PRESTIGE ARCH | 162" INSIDE WIDTH (WITH ARCH TOWER RETURN) | ULTA | G.C. |
| A-6-2S | PRESTIGE DOUBLE SIDED ARCH | 162" INSIDE WIDTH | ULTA | G.C. |
| A-13A | PRESTIGE ARCH | 162" INSIDE WIDTH (WITH ARCH TOWER RETURN) | ULTA | G.C. |
| A-13B | PRESTIGE ARCH | 162" INSIDE WIDTH (ARCH WITH NO RETURN) | ULTA | G.C. |
| A-14 | PRESTIGE SKIN ARCH | 165" INSIDE WIDTH | ULTA | G.C. |
| A-14A | PRESTIGE SKIN ARCH | 165" INSIDE WIDTH | ULTA | G.C. |
| A-15 | ULTA BEAUTY COLLECTION ARCH | 294" INSIDE WIDTH | ULTA | G.C. |
| A-16 | PRESTIGE SKIN ARCH | 177" INSIDE WIDTH | ULTA | G.C. |
| A-25 | STYLING TOOLS | 196" INSIDE WIDTH | **ULTA** | G.C. |
| AL-A | 22x28 SIGNHOLDER | | ULTA | G.C. |
| AL-A | TABLE MOUNTED SIGNAGE | | ULTA | G.C. |
| AL-B | TABLE MOUNTED SIGNAGE | | ULTA | ULTA |
| AL-B2 | TABLE MOUNTED SIGNAGE | | ULTA | G.C. |
| AL-B3 | 11X14 W/ PANEL PIVOT MOUNT | | ULTA | G.C. |
| AL-F | DEMO STATION | | ULTA | G.C. |
| AL-H | MIRROR - TABLE MOUNTED | | ULTA | G.C. |
| AL-L-W | ENDCAP SIGN HOLDER | | ULTA | G.C. |
| AL-M | TRACK | VERIFY LINEAR FOOT | ULTA | G.C. |
| AL-M1 | SMALL GRAPHIC FRAME - TRACK HUNG | | ULTA | G.C. |
| AL-M2 | LARGE GRAPHIC FRAME - TRACK HUNG | | ULTA | G.C. |
| AL-M4 | LARGE GRAPHIC FRAME - WALL HUNG | | ULTA | G.C. |
| AL-M5 | SMALL GRAPHIC FRAME - WALL HUNG | | ULTA | G.C. |
| AL-M6 | SMALL GRAPHIC FRAME - TRACK HUNG | | ULTA | G.C. |
| AL-M7 | LARGE GRAPHIC FRAME - TRACK HUNG | | ULTA | G.C. |
| AL-M8 | SMALL GRAPHIC FRAME - WALL HUNG | | ULTA | G.C. |
| AL-M9 | LARGE GRAPHIC FRAME - TRACK HUNG | | ULTA | G.C. |
| AL-W | ENDCAP SIGN HOLDER | | ULTA | G.C. |
| AP4B | 30"X48" ALLIED PANEL | | ULTA | G.C. |
| AP54 | 48"X54" ALLIED PANEL | | ULTA | G.C. |
| BX-CH | CONSULTATION CHAIR | | ULTA | G.C. |
| BX-CC-2 | CLINIQUE SHELF | | ULTA | G.C. |
| BX-CC-3 | CLINIQUE SHELF | | ULTA | G.C. |
| BX-1C-L | LARGE GONDOLA - LEFT | | ULTA | G.C. |
| BX-1C-R | LARGE GONDOLA - RIGHT | | ULTA | G.C. |
| BX-1D-L | CLINIQUE GONDOLA - LEFT | | ULTA | G.C. |
| BX-1D-R | CLINIQUE GONDOLA - RIGHT | | ULTA | G.C. |
| BX-2A | ARCH WALL TABLE | | ULTA | G.C. |
| BX-3 | CLINIQUE SHELF | | ULTA | G.C. |
| BX-3D-L | CONSULTATION TABLE - LEFT | | ULTA | G.C. |
| BX-3D-R | CONSULTATION TABLE - RIGHT | | ULTA | G.C. |
| BX-5B-L | COLUMN SURROUND - LEFT | | ULTA | G.C. |
| BX-5B-R | COLUMN SURROUND - RIGHT | | ULTA | G.C. |
| BX-5C-L | TOWER - LEFT HAND | | ULTA | G.C. |
| BX-5C-R | TOWER - RIGHT HAND | | ULTA | G.C. |
| BX-6A | 36" PLAY TABLE | | ULTA | G.C. |
| BX-6B | 32" PLAY TABLE | | ULTA | G.C. |
| BX-7A-R | 59" CONSULTATION TABLE | | ULTA | G.C. |
| BX-7B | CONSULTATION CART | | ULTA | G.C. |
| BX-7C | CONSULTATION TABLE | | ULTA | G.C. |
| BX-10-L | TREATMENT WALL - LEFT | | ULTA | G.C. |
| BX-10-R | TREATMENT WALL - RIGHT | | ULTA | G.C. |
| C-01 | 4 DRAWER FILE CABINET (OFFICE) | | ULTA | G.C. |
| C-09 | LOCKERS. TGC TO ALSO FURNISH AND INSTALL 1 1/2" DIA HANG ROD | G.C. TO VERIFY HANG ROD LENGTH AND LOCATION OF LOCKERS WITH ULTA PRIOR TO INSTALLATION | ULTA | G.C. |
| C-10 | REFRIGERATOR IN STAGING | | ULTA | G.C. |
| C-13 | SHELVING | INSTALL 121" STREATER HEAVY WEIGHT DOUBLE SLOT UPRIGHTS & 16" FLANGE BRACKETS (36" OC) CA ONLY | ULTA | G.C. |
| C-14 | SHELVING | INSTALL 121" STREATER HEAVY WEIGHT DOUBLE SLOT UPRIGHTS & 16" FLANGE BRACKETS (48" OC) | ULTA | G.C. |
| C-15 | SHELVING | INSTALL 121" STREATER HEAVY WEIGHT DOUBLE SLOT UPRIGHTS & 16" FLANGE BRACKETS (48" OC) | ULTA | G.C. |
| C-17 | UNDER COUNTER REFRIGERATOR, DANBY 2.6 CU. FT. COMPACT REFRIGERATOR (WHITE) MODEL: DAR026A1WDD ALTERNATE: HAIER 2.7 CU. FT. COMPACT REFRIGERATOR (WHITE) MODEL: HC27SG22RBW | SEE MILLWORK CUT SHEETS FOR COFFEE BAR AND INTERIOR ELEVATIONS FOR ALLOWABLE AREA FOR REFRIGERATOR | G.C. | G.C. |
| C-19 | COFFEE MAKER | | ULTA | G.C. |
| C-21 | WASHER | | ULTA | G.C. |
| C-22 | DRYER | | ULTA | G.C. |
| C-25 | MICROWAVE IN LOUNGE | | ULTA | G.C. |
| C-32 | SKINCARE ROOM STOOL | | ULTA | G.C. |
| C-35 | ROLLING HAIR DRYER AND CHAIR | | ULTA | G.C. |
| C-39 | ROLLING CLIMAZON AND CHAIR | | ULTA | G.C. |
| C-42 | ESTHETICIAN CHAIR | | ULTA | G.C. |
| C-43 | SHAMPOO BOWL W/ 48"W. CABINETS | | ULTA | G.C. |
| C-45 | SKIN SINK | | ULTA | G.C. |
| C-46 | SERVER CUBE | | ULTA | SYSTEMS |
| C-48 | DEMO STATION | | ULTA | G.C. |
| C-49 | CHARGING STATION | | ULTA | G.C. |
| C-50 | SKINCARE CHAIR | | ULTA | G.C. |
| C-51 | DERMALOGICA CAB | | ULTA | G.C. |
| CB-1 | 30"H. ALUMINUM BAR STOOL | | ULTA | G.C. |
| COAT-3 | COAT HOOKS | QTY. 3 | G.C. | G.C. |
| DT | DRYER TESTING. POWEER REQUIRED | | ULTA | G.C. |
| FR-12 | OFFICE CHAIR | | ULTA | G.C. |
| FR-14 | LOUNGE CHAIR | | ULTA | G.C. |
| FR-15 | BREAK TABLE | | ULTA | G.C. |
| FR-16 | BREAK TABLE | | ULTA | G.C. |
| FR-17 | MOBILE STATION | | ULTA | G.C. |
| IT-1 | IT COSMETICS WALL FIXTURE | | ULTA | G.C. |
| LWF-1 | SALON LICENSE FRAME (18x22) | | ULTA | G.C. |
| LWF-2 | SALON LICENSE FRAME (18x28) | | ULTA | G.C. |
| M1 | PRESTIGE MIRROR | | ULTA | G.C. |
| M2 | WALL DISPLAY HYGIENE UNITS | | ULTA | G.C. |
| M4 | ULTA BEAUTY COLLECTION MIRROR | | ULTA | G.C. |
| M-205 | COFFEE BAR | SINK AND FAUCET FURNISHED & INSTALLED BY G.C. | ULTA | G.C. |
| M-206 | DOUBLE RESTROOM VANITY | SINK AND FAUCET FURNISHED & INSTALLED BY G.C. | ULTA | G.C. |
| M-207 | SINGLE RESTROOM VANITY | SINK AND FAUCET FURNISHED & INSTALLED BY G.C. | ULTA | G.C. |
| M-213 | MANAGERS OFFICE COUNTER TOP AND SHELVING REEVE STANDARDS | VERIFY SIZES WITH MILLWORKER | ULTA | G.C. |
| **M-229** | GLASS STORAGE CABNET | | ULTA | G.C. |
| **M-513** | MILLWORK CORNER FILLER | TO BE ASSEMBLED IN FIELD. PANELS TO BE LARGER THAN SPECIFIED FOR ADJUSTMENTS IN FIELD. | ULTA | G.C. |
| M-524-W | NESTED TABLE | | ULTA | G.C. |
| M-525-W | TIERED PROMO | | ULTA | G.C. |
| M-528A | SKIN CARE ROOM | | ULTA | G.C. |
| M-530 | ETAGERE | | ULTA | G.C. |
| PK-1 | KIEHLS SKIN WALL | | ULTA | G.C. |
| PK-2 | KIEHLS SKIN CARE GONDOLA | | ULTA | G.C. |
| PY-1A | LANCOME WALL FIXTURE | | ULTA | G.C. |
| PY-2A | LANCOME PAD FIXTURE | | ULTA | G.C. |
| PY-2B | LANCOME PAD FIXTURE | | ULTA | G.C. |
| PY-3A | LANCOME SKINCARE ISLAND | | ULTA | G.C. |
| PY-4A | LANCOME SECONDARY ISLAND | | ULTA | G.C. |
| PY-5A-L | LANCOME BOUTIQUE - LEFT | | ULTA | G.C. |
| PY-5A-R | LANCOME BOUTIQUE - RIGHT | | ULTA | G.C. |
| PZ-1 | MAC ISLAND GONDOLA | | ULTA | G.C. |
| PZ-2 | MAC BACKWALL | | ULTA | G.C. |
| PZ-3 | MAC GONDOLA | | ULTA | G.C. |
| PZ-4 | MAC PLAY TABLE | | ULTA | G.C. |
| PZ-5 | MAC TOWER | | ULTA | G.C. |
| PZ-6 | MAC GONDOLA END CAP | | ULTA | G.C. |
| T-01, T-02 | (7) CLIP BOARD HOLDER | CLIP BOARD HOLDER 48" IN LENGTH (1)14 PAINTED P-1 WITH 7 HOOKS) TO BE MOUNTED DIRECTLY BELOW BULLETIN BOARD AT 2'-9" A.F.F. | G.C. | G.C. |
| T-03 | MAIL SLOT/FILE | MOUNT BOTTOM AT 3'-6" A.F.F. | ULTA | G.C. |
| T-05 | BATTERY OPERATED WALL CLOCK | MOUNT AS INDICATED ON INTERIOR ELEVATIONS | ULTA | G.C. |
| T-06 | BULLETIN BOARD 36"X48" | BOTTOM MOUNTED AT 2'-5" AFF | ULTA | G.C. |
| T-08 | BULLETIN BOARD | 24"X36" MOUNT AT 2'-5" AFF | ULTA | G.C. |
| T-09 | FIRST AID KIT | MOUNT AS INDICATED ON INT. ELEV. AND MDP SINK ACCESSORIES DETAIL. | ULTA | G.C. |
| T-10 | SAFETY CONE | WALL MOUNT AT 48" AFF LOCATE AT BACKROOM DOOR LEADING TO SALES FLOOR. INSIDE DISPENSARY ROOM, AND NEAR FRONT DOORS. | ULTA | G.C. |
| T-14 | LADDER STORAGE | SECURE 2 HEAVY DUTY EYE BOLTS IN A 2x4 SECURED TO WALL, @ 60" AFF WITH CHAIN. VERIFY LOCATION WITH ULTA. | ULTA | G.C. |
| T-16 | PAPER TOWEL DISPENSER | | ULTA | G.C. |
| T-17 | WET/DRY SHOP VAC | | ULTA | G.C. |
| T-18 | BLOOD BORNE KIT | MOUNT AS INDICATED ON INT. ELEV. AND MDP SINK ACCESSORIES DETAIL. | ULTA | G.C. |
| W-3B | 37"W. PERIMETER WALL UNIT | NO DIVIDERS | ULTA | G.C. |
| W-4B | 49" W. PERIMETER WALL UNIT | NO DIVIDERS | ULTA | G.C. |
| W-4B-S | 49" W. PERIMETER WALL UNIT W/ DRYER TESTING | NO DIVIDERS | ULTA | G.C. |
| W-8 | 49"W 60CH PERIMETER WALL UNIT W/ MIRRORS, DRAWER & POWER | NO DIVIDERS | ULTA | G.C. |
| W-9 | 37" PERIMETER WALL UNIT | | ULTA | G.C. |
| W-9-D | 37" PERIMETER WALL UNIT W/ DRYER TESTING | | ULTA | G.C. |
| W-9-F | 37" PERIMETER WALL UNIT (FRAGRANCE) | | ULTA | G.C. |
| W-9-S | 37" PERIMETER WALL UNIT (MASS) | | ULTA | G.C. |
| W-10 | 49" PERIMETER WALL UNIT | NO DIVIDERS | ULTA | G.C. |
| W-10-S | 49"W PERIMETER WALL UNIT W/ DRYER TESTING INSERT | NO DIVIDERS | ULTA | G.C. |
| W-11 | 37" PERIMETER WALL UNIT | NO DIVIDERS | ULTA | G.C. |
| X-1A-L-W | MASS GENERAL, PCA & PRO RETAIL GONDOLA | | ULTA | G.C. |
| X-1B-L-W | MASS GENERAL, PCA & PRO RETAIL GONDOLA | | ULTA | G.C. |
| X-2A-L-W | MASS COSMETICS GONDOLA | | ULTA | G.C. |
| X-2B-L-W | MASS COSMETICS GONDOLA | | ULTA | G.C. |
| X-3A-W | PRESTIGE GONDOLA | | ULTA | G.C. |
| X-3B-W | PRESTIGE GONDOLA | | ULTA | G.C. |
| X-3E-W | MASS GONDOLA | | ULTA | G.C. |
| X-3F-W | MASS GONDOLA | | ULTA | G.C. |
| X-4L | LOW FIXTURE | | **ULTA** | **G.C.** |
| X-4LE | LOW END FIXTURE | | ULTA | G.C. |
| X-10H | PCA HIGH GONDOLA | | ULTA | G.C. |
| X-10HE | PCA HIGH GONDOLA END UNIT | | ULTA | G.C. |
| X-10L-W | PCA LOW GONDOLA | | ULTA | G.C. |
| X-10LE-W | PCA LOW GONDOLA END UNIT | | ULTA | G.C. |
| X-16-W | B.E. WALL UNIT | | ULTA | G.C. |
| X-16D-W | BARE ARCH | | ULTA | G.C. |
| X-27PL | BENEFIT PAD | | ULTA | G.C. |
| X-27-W | BENEFIT BACKWALL PERIMETER FIXTURE | | ULTA | G.C. |
| X-30 | BENEFIT BROW BAR | | ULTA | G.C. |
| X-30B | BENEFIT LINEAR BOUTIQUE | | ULTA | G.C. |
| X-30C | BENEFIT LINEAR BOUTIQUE | | ULTA | G.C. |
| X-34A | IMPULSE TOWER | | ULTA | G.C. |
| X-35 | GIFTCARD MERCHANDISER | | ULTA | G.C. |
| X-35RP | ACRYLIC CLEAR GIFT CARD HOLDER | | ULTA | G.C. |
| X-41 | BARE GONDOLA ISLAND | | ULTA | G.C. |
| X-42 | BARE 3' ROUND TABLE | | ULTA | G.C. |
| X-43-SS-W | SALON WALL COLOR | | ULTA | G.C. |
| X-44 | FRAGRANCE GONDOLA | | ULTA | G.C. |
| X-45 | FRAGRANCE TABLE | | ULTA | G.C. |
| X-46 | FRAGRANCE FEATURE | | ULTA | G.C. |
| X-49 | FRAGRANCE ETAGERE | | ULTA | G.C. |
| X-52 | CLARINS WALL BOUTIQUE | | ULTA | G.C. |
| X-53 | BARE WALL BOUTIQUE | | ULTA | G.C. |
| X-54 | GONDOLA BOUTIQUE | | ULTA | G.C. |
| X-54-LH | LH GONDOLA BOUTIQUE | | ULTA | G.C. |
| X-54-RH | RH GONDOLA BOUTIQUE | | ULTA | G.C. |
| X-54-3B | BARE LINEAR BOUTIQUE | | ULTA | G.C. |
| X-55 | BARE MINERALS GLORIFIER | | ULTA | G.C. |
| X-55-MG | BARE MINERALS GLORIFIER | | ULTA | G.C. |
| X-56-L | BENEFIT BEAUTY BAR GONDOLA - LEFT | | ULTA | G.C. |
| X-56-R | BENEFIT BEAUTY BAR GONDOLA - RIGHT | | ULTA | G.C. |
| X-57 | **BENEFIT WAX PAY STATION** | | ULTA | G.C. |
| X-58 | BARE MINERALS LINEAR | | ULTA | G.C. |
| X-59 | BARE MINERALS LINEAR HYGIENE STAND | | ULTA | G.C. |
| X-60-W | BATH & BODYCARE TABLE | | ULTA | G.C. |
| X-61 | BENEFIT 2-BAY GONDOLA | | ULTA | G.C. |
| X-62 | BENEFIT WAX STATION | | ULTA | G.C. |
| X-63 | SKIN BAR GONDOLA | | ULTA | G.C. |
| **X-F1** | FRAGRANCE GONDOLA 1 BAY | | ULTA | G.C. |
| X-F2A | FRAGRANCE GONDOLA 2 BAY A | | ULTA | G.C. |
| X-F2B | FRAGRANCE GONDOLA 2 BAY B | | ULTA | G.C. |
| X-F3 | FRAGRANCE GONDOLA 3 BAY | | ULTA | G.C. |
| Y-1-L-W | MASS GENERAL, PCA & PRO ENDCAP | | ULTA | G.C. |
| Y-3-W | PRESTIGE ENDCAP | | ULTA | G.C. |
| Y-4-L-W | CW MASS COSMETICS END CAP LOW | | ULTA | G.C. |
| Y-6 | PRO NAIL ENDCAP | | ULTA | G.C. |
| Y-7-W | GONDOLA END CAP W/ SHELVES | | ULTA | G.C. |
| Z-1A | SERVICE COUNTER GATE | | ULTA | G.C. |
| Z-2B, Z-2C | STYLING, CUTTING, COLOR AND WASHING STATIONS W/ ARCH | SINK AND FAUCET FURNISHED AND INSTALLED BY G.C. | ULTA | G.C. |
| Z-3E | CONCIERGE DESK | | ULTA | G.C. |
| Z-4 | SIDEWRAP | | ULTA | G.C. |
| Z-5L-5B | CASHWRAP 5 BAY LEFT | | ULTA | G.C. |
| Z-5R-5B | CASHWRAP 5 BAY RIGHT | | ULTA | G.C. |

| # | Description | Remarks | Furnished by | Installed by |
|---|---|---|---|---|
| LESS WALL | SKIN BAR WALL | | ULTA | G.C. |
| 2-SLW-9 | MILLWORK- PARTIAL HEIGHT SALON WALL | LOW MILLWORK FIXTURE FURNISHED BY MILLWORK AND ASSEMBLED IN FIELD BY G.C. FURNISH AND INSTALL WB-1 AT BASE. SEE A4.1 FOR SPECS | ULTA | G.C. |

## ALLOWABLE FINISH AREA

| | AREA/S.F. |
|---|---|
| SALES/RETAIL AREA | 8,610 |
| SALON AREA | 705 |
| SUPPORT AREA (STAGING, OFFICE, RESTROOMS, DISPENSARY, HALLWAYS, ETC. | 1,185 |
| TOTAL SQUARE FOOTAGE | 10,500 |

AREAS ARE NOT TO BE USED FOR CALCULATING OCCUPANCY, EXITING, PLUMBING FIXTURES, ETC. FOR USE BY ULTA ONLY. SEE CS1.0 FOR OCCUPANCY CALCULATIONS

NOTE:

1. ANY REVISED / ADJUSTED FIXTURE PLANS RECEIVED FROM ULTA, WILL SUPERSEDE THE FIXTURE LAYOUT INDICATED ON THIS SHEET. PLEASE NOTIFY ARCHITECT IF ANY CONFLICTS OCCUR.
2. REFER TO FIXTURE MANUAL FOR INFORMATION ON ALL FIXTURES.
3. TENANT CONTRACTOR TO RECEIVE, UNLOAD & INSTALL THE ARRAY ORDER WHICH CONSISTS OF 25 PALLETS OF STORE EQUIPMENT.
4. LEVEL ALL OWNER SUPPLIED FIXTURES..
5. THE FOLLOWING FIXTURES WILL RECEIVE GLASS SHELVES: W-4B, W-4B-S, W-10, W-10-S, X-1A-L-W, X-1B-L-W, X-2A-L-W, X-2B-L-W, X-10L-W, AND X-10H.
6. SCRIBE M-513 PANELS TO ADJACENT WALLS AS REQUIRED.
7. PLUG IN ALL OWNER FIXTURES THAT NEED TO BE PLUGGED INTO OUTLETS.
8. ADJUST THE HEIGHTS OF THE ILLUMINATED ARCH FIXTURES AS REQUIRED TO MAINTAIN THE CEILING ELEVATION BY CUTTING DOWN THE BASE TO ACCOMMODATE THE UNEVEN FLOOR SLAB. VERIFY WITH MILLWORK MANUFACTURER.
9. ASSEMBLE THE ROLL-AROUND CARTS (6 ROLL-AROUND CARTS TYP. PER STORE). SHELVES ARE TO BE 12" O.C.
10. UNLOAD ETAGERE UNITS & STORE THEM IN THEIR ASSIGNED STORAGE AREA.
11. ALL JOINTS/SEAMS TO BE CAULKED WHERE MILLWORK MEETS WALL U.N.O., CAULK COLOR: WHITE
12. SECURE I.D. BOUTIQUE END CAP SHELVES TO BRACKETS.
13. G.C. TO FURNISH AND INSTALL STANDARDS, BRACKETS, AND J-HOOKS FOR MSSC. FIXTURE STORAGE IN STAGING. SEE INTERIOR STAGING ELEVATIONS.
14. FIXTURE RUN DIMENSIONS ARE SHOWN FOR REFERENCE ONLY. CONFIRM ACTUAL MILLWORK DIMENSIONS WITH FIXTURE MANUFACTURER.
15. G.C. TO INSTALL OWNER FURNISHED FIRST AID KITS IN SALON AND STAGING. COORDINATE WITH ULTA CONSTRUCTION MANAGER FOR EXACT LOCATION.
16. CAULK SEAMS & JOINTS IN FIXTURES USING WHITE CAULK. CAULK COUNTERTOPS TO CABINETS.
17. G.C. TO COORDINATE FINAL SHELF LOCATION WITH STORE SET TEAM AND STORE MANAGER.
18. SEE F1.1A & F1.1B SHEETS FOR WALL FIXTURE DETAILS.

ALLIED PANEL (AP48 & AP54) PLACEMENT NOTES:

HAIR FASHIONS - ALL ALLIED PANELS
HAIR ACCESSORIES - ALL ALLIED PANELS
COSMETIC APPLICATORS - ALL ALLIED PANELS
TRIAL - ALL ALLIED PANELS
PRO BRUSH - 1 ALLIED PANEL AT OUTSIDE END
BATH ACCESSORIES - ALL ALLIED PANELS
MASS COSMETICS - ALL ALLIED PANELS - NO DIVIDER PANELS
EASI HAIR - ALLIED PANEL

WHEN THERE IS 24' OF MASS COSMETICS ON THE WALL THE BRANDS THAT WILL GO IN THAT LINEAR WILL ALWAYS BE ALMAY AND REVLON. FOR THOSE BRANDS, THE OUTRIGGERS THAT GO ON THE PERIMETER WALL DO NOT GO ON THOSE SECTIONS DUE TO THE CABINETRY BEING USED BY THE VENDOR.

ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

FIXTURE PLAN & SPECIFICATIONS


CHIPMAN DESIGN ARCHITECTURE INC
JOHN A CHIPMAN ARCHITECT
1 PIKE STREET, SUITE 1500
FIRST FLOOR EAST
SEATTLE, WA 98101
PHONE 917.216.6000


Revisions
1. ISSUE FOR CL/LL REVIEW 04/20/18
2. ISSUE FOR PERMIT & BID 04/20/18
3. REVISION PER CITY 05/11/08

6367 REGISTERED ARCHITECT JOHN A. CHIPMAN STATE OF WASHINGTON

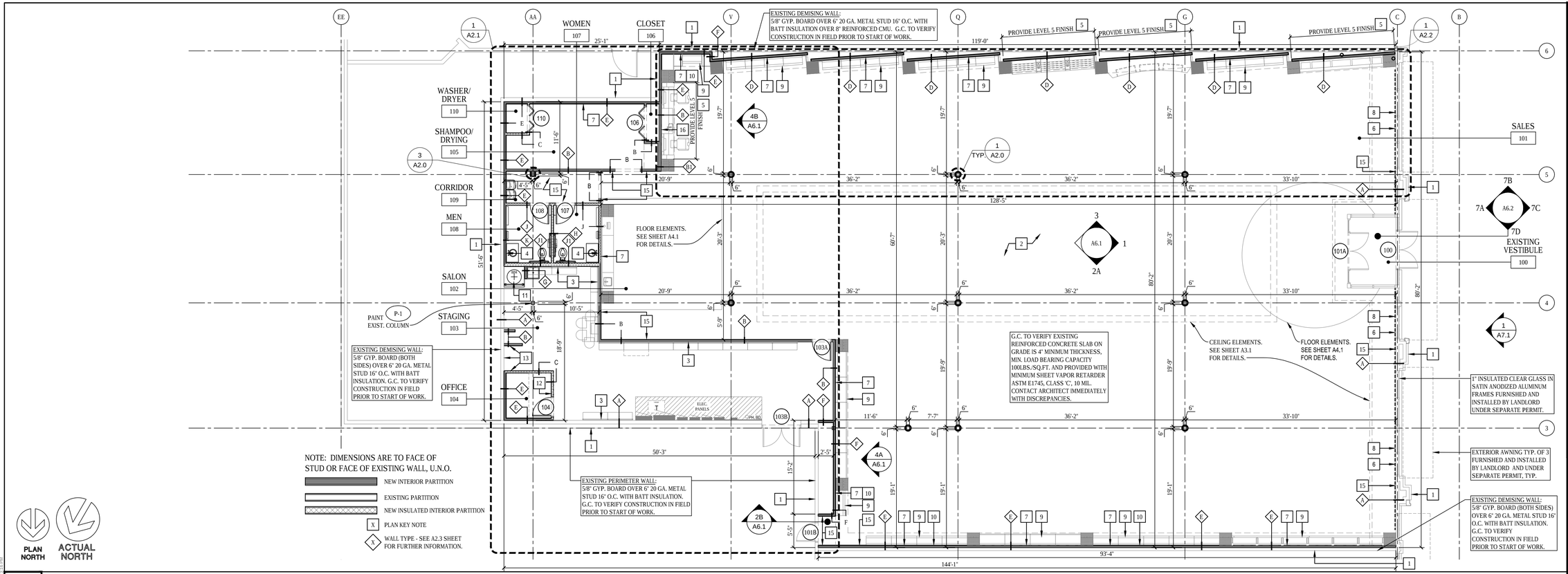
04/20/2018 DATE
06/30/2018 EXPIRATION DATE

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ARCHITECT

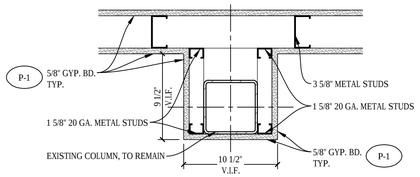
Drawn by: KC
Checked by: BW/RD
Scale: AS NOTED
Date: 04/20/18
Job No. 16-4170
Sheet No. A1.1

City of Kirkland
Reviewed by
J Tumelson
05/30/2018



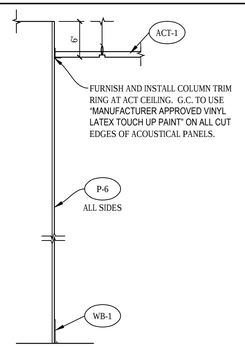

## A DIMENSION PLAN

SCALE: 1/8"=1'-0"



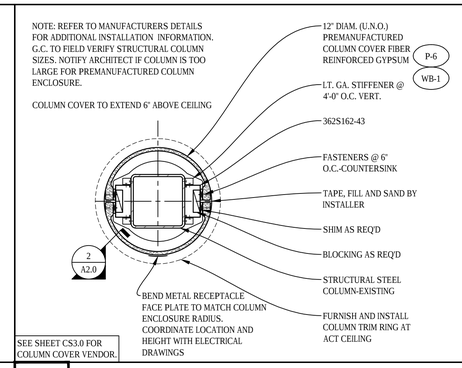

## 3 COLUMN ENCLOSURE DETAIL

SCALE: 1-1/2" = 1' = 0"




## 2 SECTION @ COLUMN COVER

SCALE: N.T.S.




## 1 COLUMN COVER DETAIL

SEE A4.1 FOR FINISH SPECIFICATIONS

SCALE: 1-1/2" = 1' = 0"

## PLAN KEY NOTES

SCALE: NONE

| | |
|---|---|
| 1 | EXISTING DEMISING/BUILDING WALL TO REMAIN. |
| 2 | G.C. TO FIELD VERIFY COLUMN LOCATIONS & NOTIFY ARCHITECT & ULTA CONSTRUCTION PROJECT MANAGER IMMEDIATELY OF ANY DISCREPANCY. |
| 3 | G.C. SHALL FURNISH AND INSTALL (7) ROWS OF 2 x 4 HORIZONTAL FIRE RATED BLOCKING FOR INSTALLATION OF 10'-0" TALL STANDARDS. SEE DETAIL 7/A8.3 FOR ADDITIONAL INFORMATION. |
| 4 | G.C. SHALL FURNISH AND INSTALL PLYWOOD BLOCKING IN WALL FOR MIRRORS. REFER TO ELEVATIONS FOR MORE INFO. |
| 5 | SKIM COAT WALL TO LEVEL 5 FINISH FROM FLOOR TO UNDERSIDE OF ARCH. |
| 6 | CONTINUOUS 4" x 3/4" FIRE-RATED PLYWOOD BACKING PLACED ABOVE GYP. BOARD & SECURE TO GYP. BOARD CEILING FRAMING SYSTEM BETWEEN STUDS. TRACK STARTS @ 6" FROM INTERIOR PARTITION OR ARCH FIXTURE U.N.O. |
| 7 | G.C. TO INSTALL ULTA (FIXTURE CONTRACTOR) SUPPLIED WALL CLEAT & G.C. SUPPLIED & INSTALLED WALL BLOCKING (2 ROWS) AT HEIGHTS INDICATED IN PERIMETER WALL. SECURE CLEAT TO BLOCKING. FOR BLOCKING & LOOSE CLEAT HEIGHTS, REFER TO F1.1A & F1.1B SHEETS. WINDOW SHADES ARE TO BE INSTALLED ON ALL WINDOWS. SHADES WILL NOT BE LOCATED ON TRANSOM AND VESTIBULE WINDOWS. SEE A4.1 FOR SHADE SPEC. |
| 8 | SEE DETAIL 8/A8.3 FOR WALL BASE INSTALLATION AT PERIMETER FIXTURES. |
| 9 | G.C. TO FURNISH AND INSTALL (2) 2 x 12 FIRE TREATED WOOD BLOCKING IN WALL FOR LENGTH OF VALANCE. ATTACH PLATE WITH 3 1/2" LONG LAG BOLTS. SEE DETAIL 1/A3.2 FOR ADDITIONAL INFORMATION. |
| 10 | REFER TO SHEET P-5 FOR WATER HEATER PROTECTION REQUIREMENTS. REFER TO DETAIL 1/A8.4 FOR WATER HEATER SEISMIC BRACING. |
| 11 | REFER TO ELECTRICAL DRAWINGS AND INTERIOR ELEVATIONS FOR TEMPERATURE SENSOR AND LIGHT SWITCH LOCATIONS AT OFFICE AND COORDINATE METAL STUD FRAMING. |
| 12 | 3/4" FIRE RATED PLYWOOD FLOOR SLAB TO 6" ABOVE CEILING ON ALL THREE SIDES OF ETAGERE STORAGE PAINTED P-1. |
| 13 | NOT USED. |
| 14 | G.C. TO FLAT TAPE WALLS POST INSTALLATION OF FLOORING; G.C. TO FLAT TAPE ALL WALLS TO FLOOR FOR WALLS THAT REQUIRE COVE BASE. |
| 15 | G.C. TO INSTALL WALL BLOCKING (1 ROW) IN PERIMETER WALL. FOR BLOCKING HEIGHT, REFER TO SHEET F1.1B. |
| 16 | |

## BLOCKING NOTES:

GENERAL NOTES:
1. ALL IN WALL BLOCKING BY G.C.
2. PLYWOOD BLOCKING IN WALL BETWEEN STUDS FOR ANCHORING
3. ALL WOOD BLOCKING TO BE MIN. 3/4" THICK FIRE RETARDANT TREATED (AS REQ'D. BY CODE)
4. ALL PLYWOOD AND BLOCKING TO BE FIRE RETARDANT TREATED (AS REQ'D. BY CODE)
5. SEE 6/A2.3 FOR TYPICAL BLOCKING DETAIL.

SALES:
PERIMETER WALL CASE FIXTURES:
FIXTURE CLEATS FURNISHED BY ULTA & INSTALLED BY G.C., BLOCKING FURNISHED & INSTALLED BY G.C. SEE MILLWORK FIXTURE CUT SHEETS AND BLOCKING AT WALL FIXTURE DETAIL ON F1.1A & F1.1B SHEETS.

FOR RETROFIT INSTALLATION AT EXISTING GYP. BD., REMOVE DRYWALL AS REQUIRED TO INSTALL CONTINUOUS 2x8 AND REPAIR WITH NEW GYP. BD. TO MATCH EXISTING DRYWALL TYPE AND THICKNESS. 2X8 CONTINUOUS WOOD BLOCKING WITH KERF AT STUD RETURN. SCREW BLOCKING TO EXISTING STUDS THROUGH STUD FLANGE AND STUD WEB TO SECURE EACH SIDE. USE "TRU-GRIP" SCREWS.

OFFICE:
COUNTER TOP - 18" HIGH BLOCKING @ 30" A.F.F. CENTERED
SHELVING - 36" HIGH BLOCKING @ 63" A.F.F. CENTERED

STAGING AREA:
CONTINUOUS SURFACE MOUNTED HORIZONTAL FIRE RETARDANT (AS REQ'D. BY CODE) 2x4 BLOCKING AT EACH SCREW HOLE IN WALL STANDARDS. SEE INTERIOR ELEVATIONS FOR MORE INFORMATION.
- G.C. SHALL FURNISH AND INSTALL SUFFICIENT WALL BLOCKING FOR WALL MOUNTED STORAGE. SEE INTERIOR ELEVATIONS FOR LOCATIONS & SPECIFICATIONS.

RESTROOMS:
G.C. SHALL FURNISH AND INSTALL SUFFICIENT WALL BLOCKING FOR WALL MOUNTED TOILETS - GRAB BARS AND ACCESSORIES. SEE PLUMBING SHEETS FOR TOILET SPECIFICATIONS.

ULTA BEAUTY

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DIMENSION PLAN & DETAILS

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Revisions
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- ISSUE FOR PERMIT & BID 04/20/18

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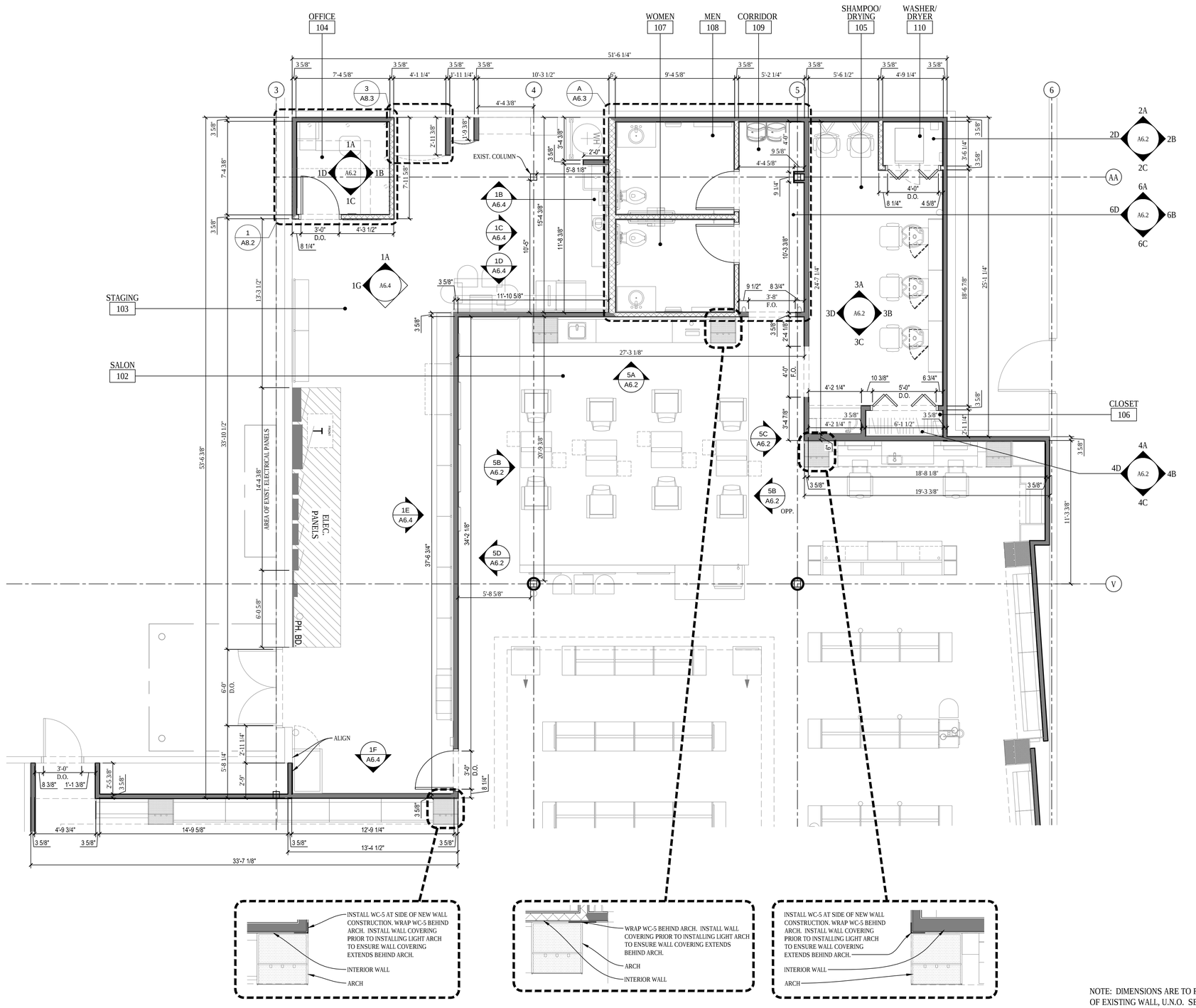
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| KC | BW/RD |
| Scale | Date |
| AS NOTED | 04/20/18 |

Job No. 16-4170

Sheet No. A2.0

City of Kirkland
Reviewed by
J Tumelson
05/30/2018




NOTE: DIMENSIONS ARE TO FACE OF STUD OR FACE OF EXISTING WALL, U.N.O. SEE WALL TYPES ON A-2.0 & A2.3 SHEETS FOR FURTHER INFORMATION.

NEW INTERIOR PARTITION

EXISTING PARTITION

NEW INSULATED INTERIOR PARTITION

PLAN NORTH

NORTH

1 ENLARGED SALON PLAN

SCALE: 1/4"=1'-0"

City of Kirkland
Reviewed by
J Tumelson
05/30/2018

ENR18-03206
Page 9 of 56

ULTA BEAUTY

ULTA - STORE #1384
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ENLARGED SALON PLAN

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Revisions
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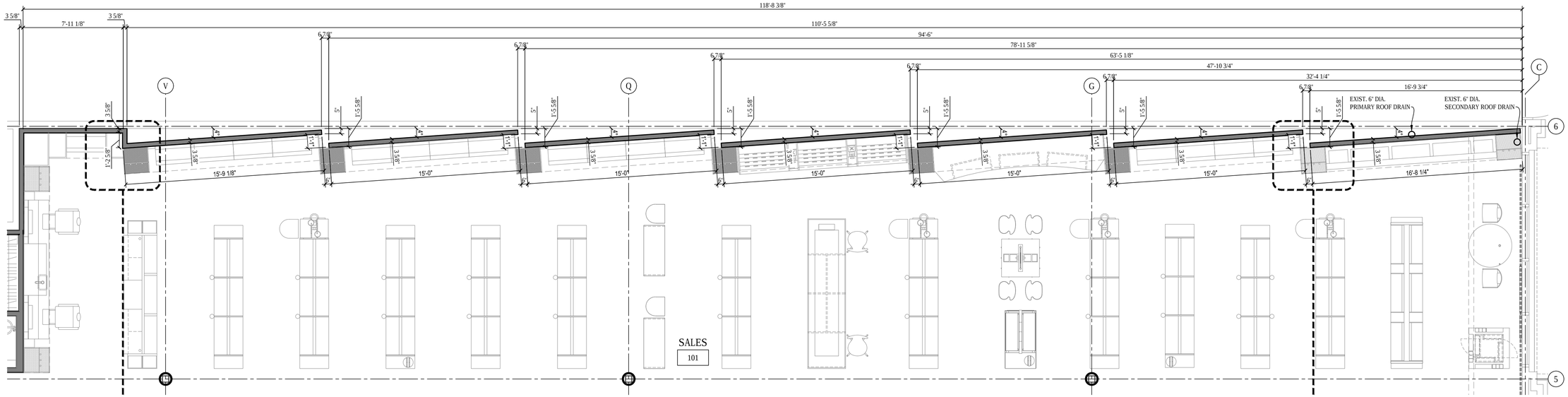
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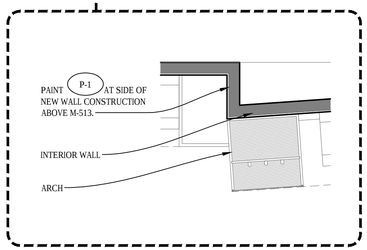
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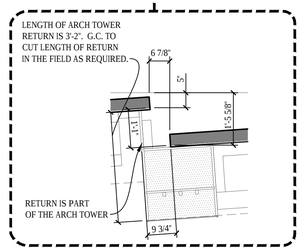
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| KC | BW/RD |
| Scale | Date |
| AS NOTED | 04/20/18 |

Job No. 16-4170

Sheet No. A2.1




TYP.

NOTE: DIMENSIONS ARE TO FACE OF STUD OR FACE OF EXISTING WALL, U.N.O. SEE WALL TYPES ON A-2.0 & A2.3 SHEETS FOR FURTHER INFORMATION.

NEW INTERIOR PARTITION

EXISTING PARTITION

NEW INSULATED INTERIOR PARTITION

PLAN NORTH

NORTH

1 ENLARGED SALES PLAN

SCALE: 1/4"=1'-0"

City of Kirkland
Reviewed by
J Tumelson
05/30/2018

ULTA BEAUTY

ULTA - STORE #1384
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ENLARGED SALES PLAN


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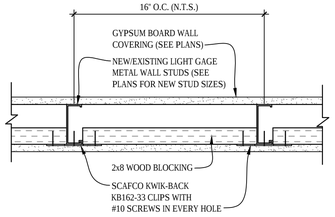
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| Drawn By | Checked By |
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| KC | BW/RD |
| Scale | Date |
| AS NOTED | 04/20/18 |

Job No. 16-4170

Sheet No. A2.2

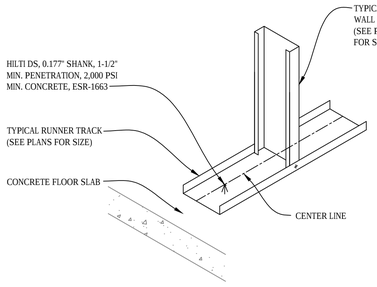
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NOTE: SEE F1.1A & F1.1B SHEETS FOR BLOCKING HEIGHTS/LOCATIONS

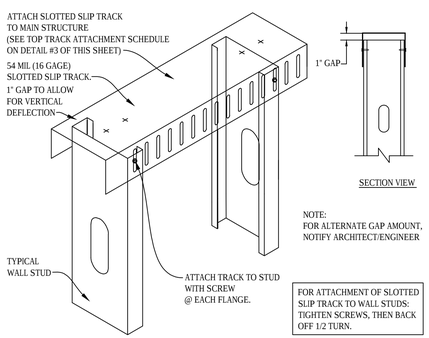
## 6 BLOCKING DETAIL

SCALE: N.T.S.



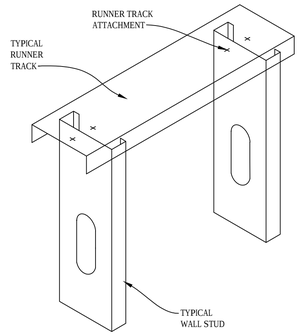

## 5 PARTITION DETAIL - TRACK ANCHORAGE

SCALE: N.T.S.




## 4 PARTITION DETAIL - SLOTTED TRACK

SCALE: N.T.S.



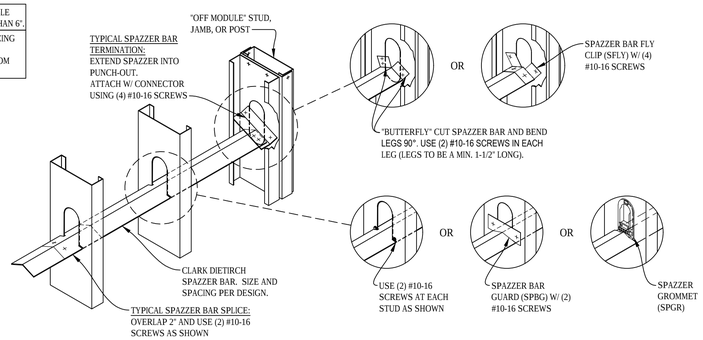

| TOP TRACK ATTACHMENT SCHEDULE | | | |
|---|---|---|---|
| MATERIAL | FASTENER | SPACING | REMARKS |
| CONCRETE | HILTI DS, 0.177" SHANK, 1-1/2" MIN. PENETRATION, 2,000 PSI MIN. CONCRETE, ESR-1663 X-U P.A.F. | 32" O.C. | EMBED 1" MINIMUM |
| STEEL | (1) - #10 SCREW | 32" O.C. | MATERIAL ≥ 43 MILS (≥ 18 GA.) |
| | (1) - #10 SCREW | 16" O.C. | MATERIAL < 43 MILS (< 18 GA.) |
| OTHER | ATTACHMENT TO BE APPROVED BY DESIGN ENGINEER | | |

## 3 PARTITION DETAIL - TOP TRACK

SCALE: N.T.S.

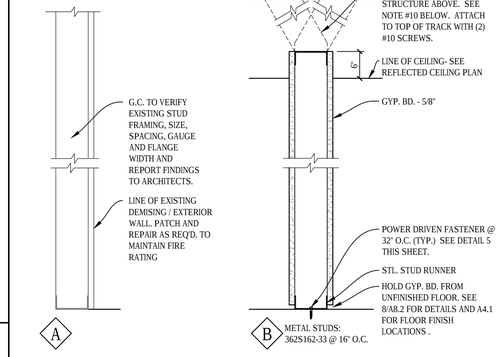
SPAZZER BAR IS NOT SUITABLE FOR WALL STUDS DEEPER THAN 6".

EACH END OF LATERAL BRACING MUST BE RIGIDLY FIXED OR OTHERWISE PREVENTED FROM HORIZONTAL MOVEMENT.




## 2 PARTITION DETAIL - LATERAL BRACING

SCALE: N.T.S.




DEPTH (1/100 IN) — FLANGE WIDTH (1/100 IN) — MEMBER TYPE — THICKNESS (MILS=.001")

800 J 200 – 54

J=JOIST (OR STUD)
S=STUD
T=TRACK

| CONVERSION TABLE | |
|---|---|
| MILS | GAGE |
| 18 | 25 |
| 27 | 22 |
| 33 | 20 |
| 43 | 18 |
| 54 | 16 |
| 68 | 14 |
| 97 | 12 |

NOTE: GAUGE EQUIVALENT STUDS ARE NOT AN ACCEPTABLE ALTERNATE. G.C. TO PROVIDE COPY OF MANUFACTURER'S METAL STUD SUBMITTAL TO ARCHITECT PRIOR TO ORDERING.

1) THE BOTTOM PLATE OF ALL INTERIOR PARTITIONS SHALL BE ATTACHED @ FLOOR W/ .177 SHANK DIA. x 1 3/4" PENETRATION @ 32" O.C. POWER DRIVEN FASTENER HILTI DS, 0.177" SHANK, 1-1/2" MIN. PENETRATION, 2,000 PSI MIN. CONCRETE, ESR-1663.

2) WALL STUD TABLE:

| MAXIMUM WALL HEIGHT | STUD SIZE | SPACING | REMARKS |
|---|---|---|---|
| 13'-6" | 362S162-33 | 16" O.C. | |
| 16'-0" | 362S162-43 | 16" O.C. | |
| 18'-0" | 362S162-54 | 16" O.C. | |
| 20'-0" | 362S162-68 ALT. 600S162-33 | 16" O.C. | |
| 22'-0" | 600S162-33 | 16" O.C. | |
| 24'-0" | 600S162-43 | 16" O.C. | |
| 26'-0" | 600S162-54 | 16" O.C. | Fy = 50 KSI |
| 28'-0" | 600S162-54 | 16" O.C. | Fy = 50 KSI |
| 30'-0" | 800S162-43 | 16" O.C. | |

NOTE: ALL STEEL TO BE MIN. Fy = 33 KSI U.N.O.

3) THE TOP TRACK OF EACH FULL HEIGHT WALL SHALL BE ATTACHED DIRECTLY TO THE STRUCTURE WHEN THE WALL IS PERPENDICULAR TO FRAMING. THE TOP TRACK OF EACH FULL HEIGHT WALL SHALL BE ATTACHED DIRECTLY TO BLOCKING WHEN THE WALL IS PARALLEL TO THE STRUCTURE @ 4'-0" O.C.
4) G.C. SHALL FURNISH AND INSTALL MIN 4'-0" HIGH CEMENT BOARD @ FLOOR BEHIND ALL FRP.
5) G.C. SHALL FURNISH AND INSTALL CEMENT BOARD UNDER ALL WALL TILE.
6) NOTE: ALL BRACING AND SUSPENDED COMPONENTS ARE FROM STRUCTURE (NOT FROM DECK). DO NOT PENETRATE THROUGH DECK ABOVE.
7) ALL COLD FORMED STEEL FRAMING COMPONENTS BY CLARK DIETRICH, ESR1166P.
8) INSTALL COLD-FORMED METAL FRAMING ACCORDING TO TABLE AND AISI'S "STANDARD FOR COLD-FORMED STEEL FRAMING - GENERAL PROVISIONS" AND TO MANUFACTURER'S WRITTEN INSTRUCTIONS.
9) WATER-RESISTANT GYPSUM BACKING BOARD SHALL BE USED AS A BASE FOR THE TILE IN WATER CLOSET COMPARTMENT WALLS INSTALLED IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.
10) WALLS TO BE BRACED TO STRUCTURE ABOVE USING ALTERNATING STUDS (362S162-33). MAX. UNBRACED LENGTH OF 4'-0". SEE CONNECTION DETAILS ON SHEET A8.1.
11) SEE F1.1A & F1.1B SHEETS FOR BLOCKING HEIGHTS/LOCATIONS.

NOTE: G.C. TO FURNISH AND INSTALL WOOD BLOCKING WITHIN WALL, PATCH/REPAIR GYP. BD. TO ORIGINAL CONDITION WHEN BLOCKING IS [illegible] WALLS.

NOTE:
FOR WALL CLEATS AND WOOD BLOCKING, REFER TO WALL FIXTURE DETAILS ON F1.1A & F1.1B SHEETS.

## 1 WALL TYPES

SCALE: 1-1/2"=1'-0"

ULTA BEAUTY

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KIRKLAND, WA 98034

WALL TYPES, STUD FRAMING & WALL BLOCKING DETAILS

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JOHN A CHIPMAN ARCHITECT
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DANVILLE, CA 94526
PHONE 925.736.0900

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ARCHITECT

| Drawn By | Checked By |
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| KC | BW/RD |
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| AS NOTED | 04/20/18 |

Job No. 16-4170

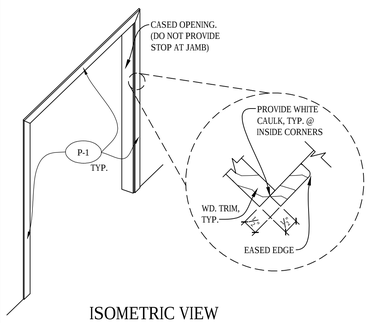
Sheet No. A2.3

City of Kirkland
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J Tumelson
05/30/2018

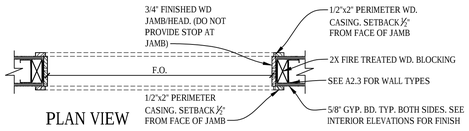
ENR18-03206
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NOTE: CABINET GRADE WOOD TRIM PROVIDED AND INSTALLED BY G.C. TRIM PIECES TO BE STANDARD ITEM IN STOCK. CUSTOM PIECE IS NOT REQUIRED.

NOTE: SEE PLAN AND INTERIOR ELEVATIONS FOR APPLICABLE LOCATIONS.



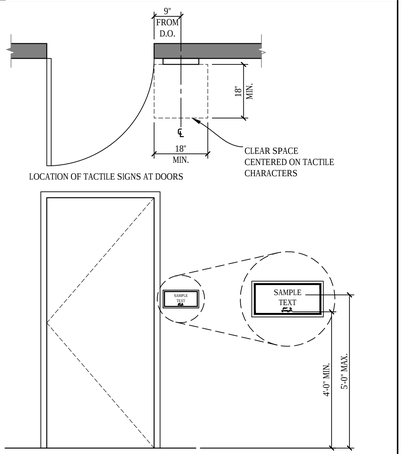

ISOMETRIC VIEW




PLAN VIEW

## 7 WOOD CASED WALL OPENING DETAIL

SCALE: N.T.S.



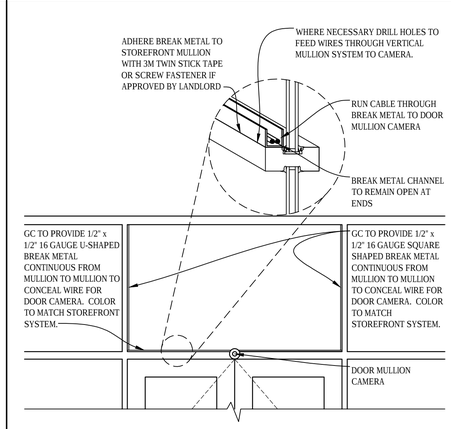

LOCATION OF TACTILE SIGNS AT DOORS

HEIGHT OF TACTILE CHARACTERS ABOVE FLOOR OR GROUND

## 6 LOCATION OF TACTILE SIGNS AT DOORS

SCALE: 1/2" = 1'-0"

| MARK | LOCATION | TYPE | SIZE | DOOR | FRAME TYPE | FINISH | HARDWARE | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 100 | VESTIBULE | A | (2) 3'-0" X 8'-0" X 1-3/4" EXIST. | ALUM. | ALUM. | EXIST. | 100 | 1,3,4,5,7,8,9,18 |
| 101A | SALES | A | (2) 3'-0" X 8'-0" X 1-3/4" EXIST. | ALUM. | ALUM. | EXIST. | 101A | 1,5,8,9,18 |
| 101B | SALES | F | 3'-0" X 7'-0" X 1-3/4" EXIST. | EXIST. | EXIST. | SEE DOOR TYPE | 101B | 1,3,5, 8,10,13,18 |
| 103A | STAGING | D | 3'-0" X 7'-0" X 1-3/4" | WOOD | H.M. | SEE DOOR TYPE | 103A | 1,2,8,11,13,15,16,17 |
| 103B | STAGING | E | (2) 3'-0" X 7'-0" X 1-3/4" EXIST. | EXIST. | EXIST. | SEE DOOR TYPE | 103B | 1,2,3,4,5,8,10,12,13 |
| 104 | OFFICE | D | 3'-0" X 7'-0" X 1-3/4" | WOOD | H.M. | SEE DOOR TYPE | 104 | 1,2,8,11,13,17 |
| 106 | CLOSET | C | (4) 1'-3" X 7'-0" X 1-3/4" | WOOD | H.M. | SEE DOOR TYPE | 106 | 1,2,13 |
| 107 | WOMEN | B | 3'-0" X 7'-0" X 1-3/4" | WOOD | H.M. | SEE DOOR TYPE | 107 | 1,2,8,11,13,14,17 |
| 108 | MEN | B | 3'-0" X 7'-0" X 1-3/4" | WOOD | H.M. | SEE DOOR TYPE | 108 | 1,2,8,11,13,14,17 |
| 110 | WASHER/DRYER | C | (4) 1'-0" X 7'-0" X 1-3/4" | WOOD | H.M. | SEE DOOR TYPE | 110 | 1,2,13,14 |




## 5 TYPICAL DOOR MULLION CAMERA DETAIL

SCALE: 1/2" = 1'-0"

REMARKS:
1. ALL HARDWARE SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE LOCAL ACCESSIBILITY CODES (INCLUDING BUT NOT LIMITED TO MOUNTING HEIGHTS, OPERATING FORCE, & GRIP REQUIREMENTS).
2. ALL TRIM FOR INTERIOR DOORS TO MATCH DOOR FINISH
3. ALL EXTERIOR DOOR HARDWARE SHALL BE PROVIDED BY G.C. UNLESS NOTED OTHERWISE.
4. G.C. VERIFY HARDWARE ON EXISTING EXTERIOR DOORS.
5. ALL EXITS TO BE OPENABLE FROM INSIDE WITHOUT KEY OR SPECIAL KNOWLEDGE.
6. G.C. TO REPLACE CONSTRUCTION LOCK CYLINDER WITH ULTA SPECIFIC LOCK CYLINDER.
7. EXTERIOR EXIT DOOR SHALL HAVE SIGN ON OR ADJACENT TO DOOR THAT STATES "THIS DOOR TO REMAIN UNLOCKED WHENEVER THE BUILDING IS OCCUPIED" WITH 1" HIGH LETTERS IN CONTRASTING COLOR WITH BACKGROUND.
8. DOORS SHALL HAVE A 5 SECOND MINIMUM CLOSING TIME FROM 90°-12° OPEN. MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED:
   A. 5 LBF (22 N) FOR INTERIOR DOORS.
   B. 8.5 LBF (38 N) FOR EXTERIOR DOORS.
   C. 15 LBF (67 N) FOR FIRE DOORS.
   ADJUST CLOSER SO THAT IT COMPLIES WITH THESE REQUIREMENTS.
9. COORDINATE LOCATION AND MOUNTING HEIGHT FOR THE HOURS OF OPERATION DECALS WITH ULTA.
10. LOCKNET HARDWARE. T.G.C. TO CONTACT LOCKNET AT START OF CONSTRUCTION. G.C. TO COORDINATE INSTALLATION WITH LOCKNET. LOCKNET CONTACT: JEFF CARROLL 800-887-4307 EXT. 239
11. HM FRAMES TO BE KNOCK-DOWN TYPE AND TO BE INSTALLED AFTER FLOORING INSTALLATION. FINISH FRAME JOINTS TO PROVIDE AN EVEN SURFACE AND NO IMPERFECTIONS. ALL SCREWS SHALL BE RECESSED. CAULK FRAME TO WALL.
12. G.C. TO INSTALL ULTA SUPPLIED STICKER WITH STORE TELEPHONE NUMBER ON REAR DOOR TO COORDINATE DELIVERIES (AFTER CONSTRUCTION).
13. G.C. TO PURCHASE ALL DOORS, FRAMES, AND HARDWARE THROUGH LOCKNET. LOCKNET CONTACT : KORY CHANDLER 800-887-4307 EXT. 175
14. UNDERCUT DOOR 1". SEE ALSO MECHANICAL DRAWINGS.
15. G.C. TO INSTALL "EMPLOYEE ONLY" SIGNAGE.
16. PAINT DOOR AND FRAME P-6 (BOTH SIDES). REFER TO FINISH SPECIFICATIONS ON A4.1 SHEET.
17. ALL WOOD DOOR CLOSERS ARE TO BE INSTALLED WITH THRU BOLTS WITH SNB FASTENERS.
18. PROVIDE TACTILE EXIT SIGNAGE TO COMPLY WITH IBC 1013.4. REFER TO DETAIL #6 THIS SHEET FOR TACTILE LOCATION.

## 4 DOOR SCHEDULE

SCALE: NONE

### 100 VESTIBULE

| ITEM | QUANTITY | FINISH | MANUF. | MODEL # |
|---|---|---|---|---|
| CVR EXIT DEVICE | EXIST. | | ADAMS RITE | 8600-36-US32D-MEC |
| ESCUTCHEON | EXIST. | | ADAMS RITE | 8650-US32D |
| MORTISE CYLINDER | EXIST. | | EXIST. | BEST 7 PIN SFIC COMPATIBLE |
| BUTTS | EXIST. | | EXIST. | 4 1/2"X4 1/2" B.B. W/ NON REMOVABLE PINS |
| PULL | EXIST. | - | ROCKWOOD | RM3131 |
| CLOSERS/ PIVOTS | 2 EXIST. | | EXIST. | TOP JAMB MOUNTING |
| THRESHOLD | EXIST. | | PEMKO #255A GROUT SOLID | IN COMPLIANCE W/ ANSI CABO 117.A4.13.B. |
| WEATHERSTRIP | EXIST. | | EXIST. | GASKETING & SILL SWEEPS |

### 101A SALES

| ITEM | QUANTITY | FINISH | MANUF. | MODEL # |
|---|---|---|---|---|
| BUTTS | EXIST. | - | EXIST. | 4 1/2"X4 1/2" B.B. W/ NON REMOVABLE PINS |
| PUSH | EXIST. | - | ROCKWOOD | SERIES 47 |
| PULL | EXIST. | - | ROCKWOOD | RM3131 |
| CLOSERS | 2 EXIST. | - | EXIST. | TOP JAMB MOUNTING |

### 101B SALES - EXTERIOR

| ITEM | QUANTITY | FINISH | MANUF. | MODEL # |
|---|---|---|---|---|
| BUTTS | EXIST. | STAINLESS STEEL | - | 4 1/2"X4 1/2" HEAVY DUTY |
| PANIC DEVICE | 1 | - | LOCKNET | #TEL105 LOCKNET CONTACT: JEFF CARROLL 800-887-4307 EXT. 239 |
| CLOSERS | EXIST. | ALUMINUM | - | HEAVY-DUTY SPEC. W/ THRU BOLT |
| WEATHERSTRIP | EXIST. | - | - | GASKETS & SILL SWEEPS |
| THRESHOLD | EXIST. | | EXIST. | IN COMPLIANCE W/ ANSI CABO 117.A4.13.B |
| KICKPLATE | EXIST. | SATIN STAINLESS STEEL | - | #8400, 10" HIGH X 34" WIDE - 8400 PUSH SIDE |

### 103A STAGING

| ITEM | QUANTITY | FINISH | MANUF. | MODEL # |
|---|---|---|---|---|
| BUTTS | 1-1/2 PR. | US26-D | BOMMER | BB5000 4 1/2 X 4 1/2 |
| LOCKSET | 1 | 626 | YALE | PASSAGE LOCKSET AU5401LN |
| VISION PANEL | 1 | ONE- WAY | - | 12"x28" ONE WAY GLASS MIRROR TEMPERED GLASS |
| STOP | 1 | US32-D | ROCKWOOD | WALL BUMPER 409 |
| KICKPLATE | 2 | US32-D | ROCKWOOD | K1050 10" HIGH x 34" WIDE |
| CLOSER | 1 | 689 | DORMA | 7414 ARP SNB |

### 103B STAGING - EXTERIOR DOUBLE DOOR

| ITEM | QUANTITY | FINISH | MANUF. | MODEL # |
|---|---|---|---|---|
| BUTTS | 2 PR EA. LEAF EXIST. | STAINLESS STEEL | | NON REMOVABLE PINS |
| CLOSER | EXIST. | - | - | HEAVY-DUTY SPEC. W/ THRU BOLTS. 1609 STRIKE |
| THRESHOLD | EXIST. | - | - | IN COMPLIANCE W/ ANSI CABO 117.A4.13.B |
| DOOR SWEEPS | EXIST. | | | |
| WEATHERSTRIP | EXIST. | | | GASKETING AND SILL SWEEP |
| RAIN HOOD | EXIST. | | | |
| VIEWER | EXIST. | SATIN STAINLESS STEEL | - | #622 ONE WAY VIEWER ON ACTIVE DOOR |
| KICKPLATE | EA. LEAF - EXIST. | SATIN STAINLESS STEEL | - | K1050, 10" HIGH x 34" WIDE - PUSH SIDE |
| FLUSH BOLT | 1 PR. EXIST. | STAINLESS STEEL | | MTD. ON INACTIVE LEAF |
| SILENCERS | GC TO PROVIDE AS REQUIRED | - | ROCKWOOD | 608 |
| PANIC DEVICE | CONTACT LOCKNET | - | LOCKNET | # TEL-105 TEL-DDA 4822B-TTXX-377; LOCKNET CONTACT: JEFF CARROLL 800-887-4307 EXT. 239 |
| DOOR HOLDER | 2 | US26-D | ROCKWOOD | 461L KICK DOWN STOP 4 5/8" |
| DOOR BELL | 1 | | EDWARDS SIGNALING/ TRINE | 156G SERIES WITH TRANSFORMERS AND WEATHERPROOF PUSH BUTTONS TRINE 65P |

## 3 HARDWARE SCHEDULE

SCALE: NONE

### 104 OFFICE

| ITEM | QUANTITY | FINISH | MANUF. | MODEL # |
|---|---|---|---|---|
| BUTTS | 1-1/2 PR. | US26-D | BOMMER | BB5000 4 1/2 X 4 1/2 |
| LOCKSET | 1 | 626 | YALE | ENTRANCE LOCKSET B-AU5407LN |
| STOP | 1 | US26D | ROCKWOOD | 440 |
| VISION PANEL | 1 | ONE- WAY | - | 12"x28" ONE WAY GLASS MIRROR TEMPERED GLASS |
| CLOSER | 1 | 689 | DORMA | 7414 ARP SNB |
| KICKPLATE | 2 | US32-D | ROCKWOOD | K1050 10" HIGH x 34" WIDE |

### 106 CLOSET

| ITEM | QUANTITY | FINISH | MANUF. | MODEL # |
|---|---|---|---|---|
| TRACK | 1 | - | JOHNSON | 100 |
| TOP PIVOT SET | 1 | - | JOHNSON | 107 |
| DOOR HANGER | 1 | - | JOHNSON | 1125 |
| TRACK STOP | 1 | - | JOHNSON | 1155 |
| PANEL HINGE | 1-1/2 PR. | - | JOHNSON | 1703 |
| BOTTOM PIVOT | 1 | - | JOHNSON | 1706 |
| BOTTOM PIVOT BRACKET | 1 | - | JOHNSON | 1011 |
| DOOR ALIGNER | 1 | - | JOHNSON | 1808 |
| DOOR KNOB | 1 | - | JOHNSON | 33 |

### 107 WOMEN

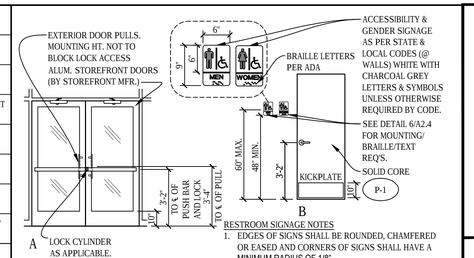
| ITEM | QUANTITY | FINISH | MANUF. | MODEL # |
|---|---|---|---|---|
| BUTTS | 1-1/2 PR. | US26-D | BOMMER | BB5000 4 1/2 X 4 1/2 |
| LOCKSET | 1 | 626 | YALE | PRIVACY LOCKSET AU5402LN |
| STOP | 1 | US26D | ROCKWOOD | 440 |
| CLOSER | 1 | 689 | DORMA | 7414 ARP SNB |
| KICKPLATE | 1 | US32-D | ROCKWOOD | K1050 10" HIGH x 34" WIDE |

### 108 MEN

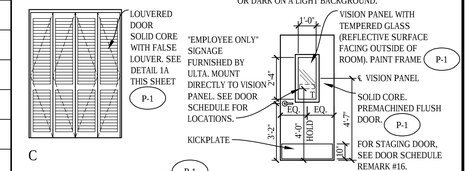
| ITEM | QUANTITY | FINISH | MANUF. | MODEL # |
|---|---|---|---|---|
| BUTTS | 1-1/2 PR. | US26-D | BOMMER | BB5000 4 1/2 X 4 1/2 |
| LOCKSET | 1 | 626 | YALE | PRIVACY LOCKSET AU5402LN |
| STOP | 1 | US26D | ROCKWOOD | 440 |
| CLOSER | 1 | 689 | DORMA | 7414 ARP SNB |
| KICKPLATE | 1 | US32-D | ROCKWOOD | K1050 10" HIGH x 34" WIDE |

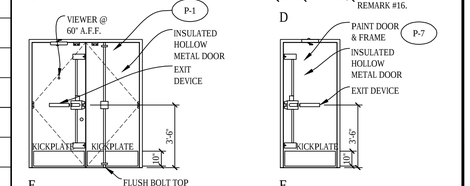
### 110 WASHER / DRYER CLOSET

| ITEM | QUANTITY | FINISH | MANUF. | MODEL # |
|---|---|---|---|---|
| TRACK | 1 | - | JOHNSON | 100 |
| TOP PIVOT SET | 2 | - | JOHNSON | 107 |
| DOOR HANGER | 2 | - | JOHNSON | 1125 |
| TRACK STOP | 2 | - | JOHNSON | 1155 |
| PANEL HINGE | 3 PR. | - | JOHNSON | 1703 |
| BOTTOM PIVOT | 2 | - | JOHNSON | 1706 |
| BOTTOM PIVOT BRACKET | 2 | - | JOHNSON | 1011 |
| DOOR ALIGNER | 1 | - | JOHNSON | 1808 |
| DOOR KNOB | 2 | - | JOHNSON | 33 |




RESTROOM SIGNAGE NOTES
1. EDGES OF SIGNS SHALL BE ROUNDED, CHAMFERED OR EASED AND CORNERS OF SIGNS SHALL HAVE A MINIMUM RADIUS OF 1/8".
2. SIGNAGE SHALL BE ¼" THICK.
3. THE DOOR SYMBOL SHALL CONTRAST WITH THE WALL FINISH, EITHER LIGHT ON A DARK BACKGROUND OR DARK ON A LIGHT BACKGROUND.

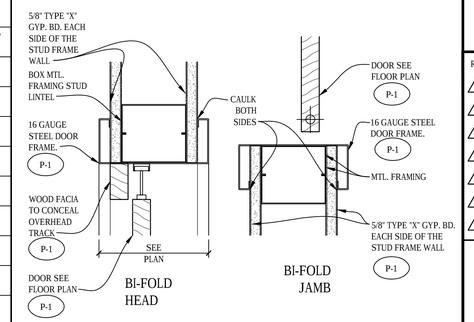



## 2 DOOR TYPES

SCALE: 1/4" = 1'-0"

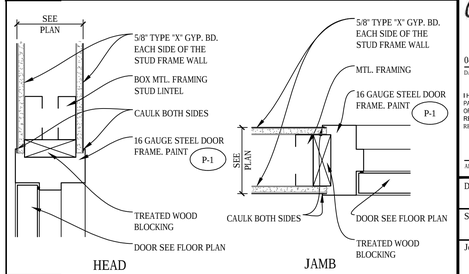
SEE A4.1 FOR FINISH SPECIFICATIONS.




## 1A BI-FOLD DOOR DETAIL

SCALE: 3"=1'-0"

SEE A4.1 FOR FINISH SPECIFICATIONS.




## 1 DOOR DETAIL

SCALE: 3"=1'-0"

SEE A4.1 FOR FINISH SPECIFICATIONS.

City of Kirkland
Reviewed by
J Tumelson
05/30/2018

ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

DOOR AND HARDWARE SCHEDULES


CHIPMAN DESIGN ARCHITECTURE INC
JOHN A CHIPMAN ARCHITECT
1191 SECOND AVENUE
FIRST FLOOR EAST
SEATTLE, WA 98101
PHONE 206.749.0500


Revisions
- ISSUE FOR CL/LL REVIEW 04/20/18
- ISSUE FOR PERMIT & BID 04/20/18

6367 REGISTERED ARCHITECT JOHN A. CHIPMAN STATE OF WASHINGTON

04/20/2018 DATE — 06/30/2018 EXPIRATION DATE

I HEREBY CERTIFY THAT THESE PLANS HAVE BEEN PREPARED UNDER MY SUPERVISION AND THAT TO THE BEST OF MY KNOWLEDGE, THE SAME COMPLY WITH ALL RULES, REGULATIONS AND ORDINANCES OF KIRKLAND, WA RELATING TO STRUCTURES AND BUILDINGS.

ARCHITECT

| Drawn By | Checked By |
|---|---|
| KC | BW/RD |
| Scale | Date |
| AS NOTED | 04/20/18 |

Job No. 16-4170

Sheet No. A2.4

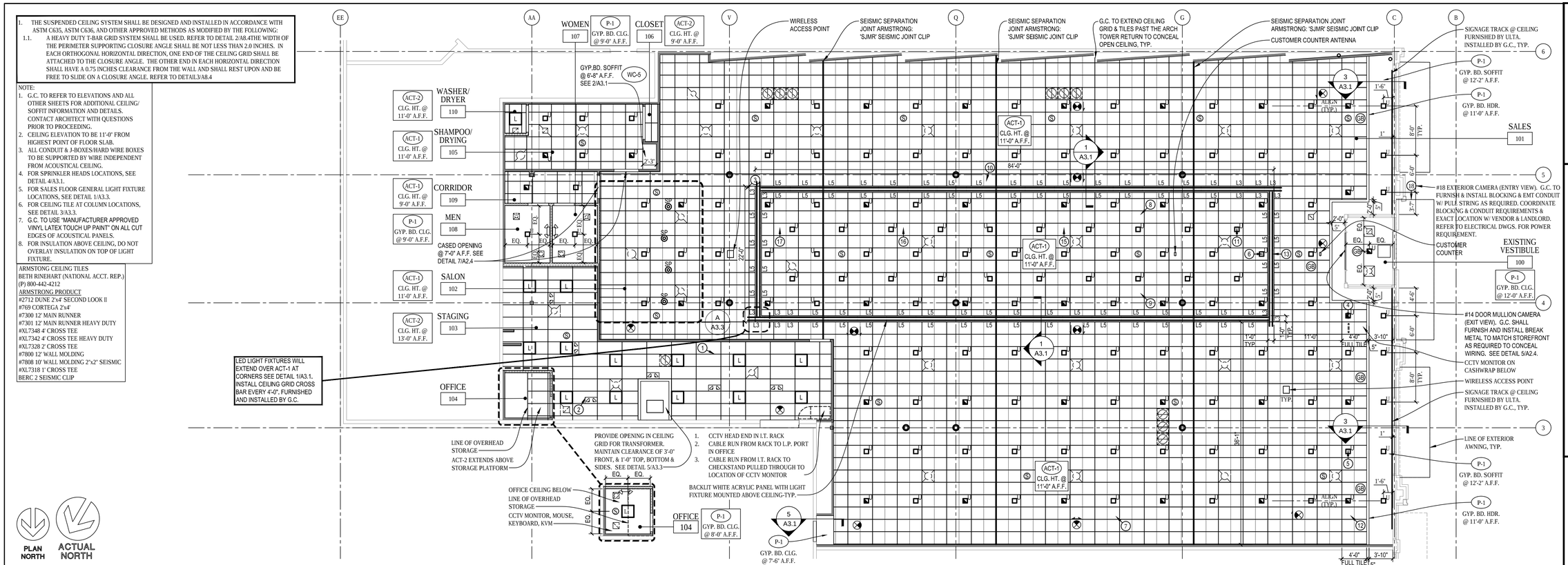

Autodesk Docs://16-4170_ULTA Kirkland_Permit/16-4170_ULTA Kirkland_Permit_R20_Central_ARCH.rvt Plotted By: Kevin Cotter Monday, April 16, 2018 11:29 AM Printed by Kevin Cotter May 1, 2018 1:17 PM

1. THE SUSPENDED CEILING SYSTEM SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH ASTM C635, ASTM C636, AND OTHER APPROVED METHODS AS MODIFIED BY THE FOLLOWING:
   1.1. A HEAVY DUTY T-BAR GRID SYSTEM SHALL BE USED. REFER TO DETAIL 2/A8.4THE WIDTH OF THE PERIMETER SUPPORTING CLOSURE ANGLE SHALL BE NOT LESS THAN 2.0 INCHES. IN EACH ORTHOGONAL HORIZONTAL DIRECTION, ONE END OF THE CEILING GRID SHALL BE ATTACHED TO THE CLOSURE ANGLE. THE OTHER END IN EACH HORIZONTAL DIRECTION SHALL HAVE A 0.75 INCHES CLEARANCE FROM THE WALL AND SHALL REST UPON AND BE FREE TO SLIDE ON A CLOSURE ANGLE. REFER TO DETAIL3/A8.4

NOTE:
1. G.C. TO REFER TO ELEVATIONS AND ALL OTHER SHEETS FOR ADDITIONAL CEILING/ SOFFIT INFORMATION AND DETAILS. CONTACT ARCHITECT WITH QUESTIONS PRIOR TO PROCEEDING.
2. CEILING ELEVATION TO BE 11'-0" FROM HIGHEST POINT OF FLOOR SLAB.
3. ALL CONDUIT & J-BOXES/HARD WIRE BOXES TO BE SUPPORTED BY WIRE INDEPENDENT FROM ACOUSTICAL CEILING.
4. FOR SPRINKLER HEADS LOCATIONS, SEE DETAIL 4/A3.1.
5. FOR SALES FLOOR GENERAL LIGHT FIXTURE LOCATIONS, SEE DETAIL 1/A3.3.
6. FOR CEILING TILE AT COLUMN LOCATIONS, SEE DETAIL 3/A3.3.
7. G.C. TO USE "MANUFACTURER APPROVED VINYL LATEX TOUCH UP PAINT" ON ALL CUT EDGES OF ACOUSTICAL PANELS.
8. FOR INSULATION ABOVE CEILING, DO NOT OVERLAY INSULATION ON TOP OF LIGHT FIXTURE.

ARMSTONG CEILING TILES
BETH RINEHART (NATIONAL ACCT. REP.)
(P) 800-442-4212
ARMSTRONG PRODUCT
#2712 DUNE 2'x4' SECOND LOOK II
#769 CORTEGA 2'x4'
#7300 12' MAIN RUNNER
#7301 12' MAIN RUNNER HEAVY DUTY
#XL7348 4' CROSS TEE
#XL7342 4' CROSS TEE HEAVY DUTY
#XL7328 2' CROSS TEE
#7800 12' WALL MOLDING
#7808 10' WALL MOLDING 2"x2" SEISMIC
#XL7318 1' CROSS TEE
BERC 2 SEISMIC CLIP

LED LIGHT FIXTURES WILL EXTEND OVER ACT-1 AT CORNERS SEE DETAIL 1/A3.1. INSTALL CEILING GRID CROSS BAR EVERY 4'-0". FURNISHED AND INSTALLED BY G.C.




PLAN NORTH
ACTUAL NORTH

SEE SHEET A4.1 FOR FINISH SPECIFICATIONS

## A REFLECTED CEILING PLAN

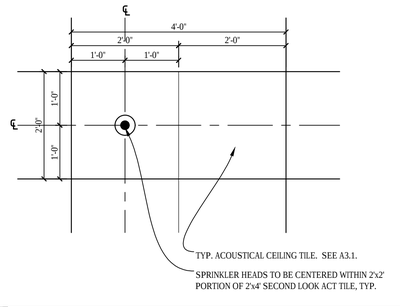
SCALE: 1/8"=1'-0"

| | | | |
|---|---|---|---|
| L | LED PANEL LIGHTING. REFER TO LIGHTING FIXTURE SCHEDULE ON ELECTRICAL DRAWINGS FOR TYPE OF LIGHT FIXTURE. | | GRAPHIC TRACK |
| L1 | 11" LINEAR STRIP - LED. REFER TO LIGHTING FIXTURE SCHEDULE ON ELECTRICAL DRAWINGS FOR TYPE OF LIGHT FIXTURE. | S | SPEAKERS BY MUSIC VENDOR (DOME SPEAKER IN SKINCARE ROOM) G.C. SHALL FURNISH AND INSTALL CEILING GRID SUPPORT WIRES ONE AT EACH CORNER OF CEILING TILE CONTAINING SPEAKER. |
| L2 | 21-1/2" LINEAR STRIP - LED. REFER TO LIGHTING FIXTURE SCHEDULE ON ELECTRICAL DRAWINGS FOR TYPE OF LIGHT FIXTURE. | | EMERGENCY LED EXIT LIGHT WITH BATTERY BACKUP |
| L3 | 33" LINEAR STRIP - LED. REFER TO LIGHTING FIXTURE SCHEDULE ON ELECTRICAL DRAWINGS FOR TYPE OF LIGHT FIXTURE. | | SURFACE MOUNTED 2-HEAD EMERGENCY LED LIGHT WITH BATTERY BACKUP |
| L4 | 45" LINEAR STRIP - LED. REFER TO LIGHTING FIXTURE SCHEDULE ON ELECTRICAL DRAWINGS FOR TYPE OF LIGHT FIXTURE. | | CEILING/PENDANT MOUNTED 2-HEAD EMERGENCY LED LIGHT WITH BATTERY BACKUP |
| L5 | 57" LINEAR STRIP - LED. REFER TO LIGHTING FIXTURE SCHEDULE ON ELECTRICAL DRAWINGS FOR TYPE OF LIGHT FIXTURE. | | OUTDOOR SURFACE MOUNTED 2-HEAD EMERGENCY LED LIGHT WITH BATTERY BACKUP |
| SP | LED PENDANT. SEE ELEV. FOR MOUNTING HEIGHTS. | | SUPPLY DIFFUSER GRILLES, VERIFY WITH MECHANICAL DRAWINGS |
| J | LED DOWNLIGHT - REFER TO LIGHTING FIXTURE SCHEDULE ON ELECTRICAL DRAWINGS FOR TYPE OF LIGHT FIXTURE | | RETURN DIFFUSER GRILLE, VERIFY WITH MECHANICAL DRAWINGS |
| EJ | LED DOWNLIGHT, FIXTURE WIRED TO EMERGENCY LIGHTING SYSTEM - REFER TO LIGHTING FIXTURE SCHEDULE ON ELEC. DRAWINGS FOR TYPE OF LIGHT FIXTURE | # | SECURITY CAMERA BY ULTA VENDOR. COORDINATE FINAL LOCATIONS WITH ULTA. |
| | | GB | GLASS BREAK SENSOR BY ULTA VENDOR. REFER TO ELECTRICAL DRAWINGS FOR POWER REQUIREMENTS. COORDINATE FINAL LOCATIONS WITH ULTA. |

## CEILING SYMBOL LEGEND

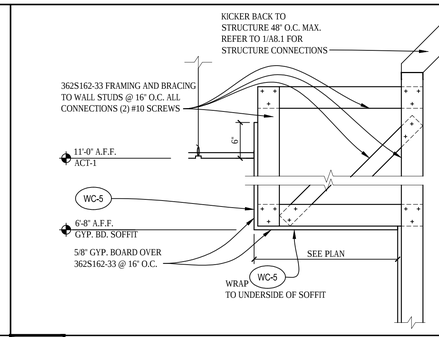
SEE SHEET CS3.0 FOR ULTA LIGHTING VENDOR

SCALE: NONE



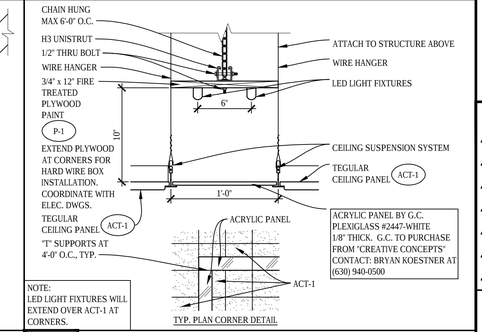

## 4 SPRINKLER HEAD DETAIL

SCALE: 3/4"=1'-0"



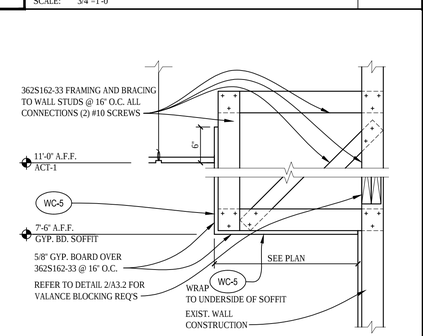

## 2 SOFFIT DETAIL

SCALE: 1"=1'-0"



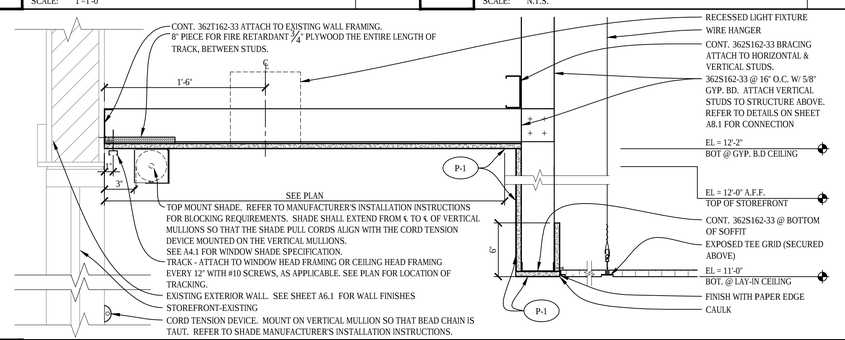

## 1 DETAIL

SCALE: N.T.S.




## 5 SOFFIT DETAIL

SCALE: 1"=1'-0"




## 3 DETAIL

SCALE: 1-1/2"=1'-0"

NOTE: ALSO REFER

City of Kirkland
Reviewed by
J Tumelson
05/30/2018

ENR18-03206
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ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

REFLECTED CEILING PLAN & DETAILS


CHIPMAN DESIGN ARCHITECTURE INC
JOHN A CHIPMAN ARCHITECT
1148 FIRST FLOOR, EAST
LANGLEY, WASHINGTON 98260
PHONE 360.730.0600


Revisions
- ISSUE FOR CL/LL REVIEW 04/20/18
- ISSUE FOR PERMIT & BID 04/20/18

6367 REGISTERED ARCHITECT JOHN A. CHIPMAN STATE OF WASHINGTON

04/20/2018 DATE
06/30/2018 EXPIRATION DATE

I HEREBY CERTIFY THAT THESE PLANS HAVE BEEN PREPARED UNDER MY SUPERVISION AND THAT TO THE BEST OF MY KNOWLEDGE, THE SAME COMPLY WITH ALL RULES, REGULATIONS AND ORDINANCES OF KIRKLAND, WA RELATING TO STRUCTURES AND BUILDINGS.

ARCHITECT

| Drawn By | Checked By |
|---|---|
| KC | BW/RD |
| Scale | Date |
| AS NOTED | 04/20/18 |

Job No. 16-4170

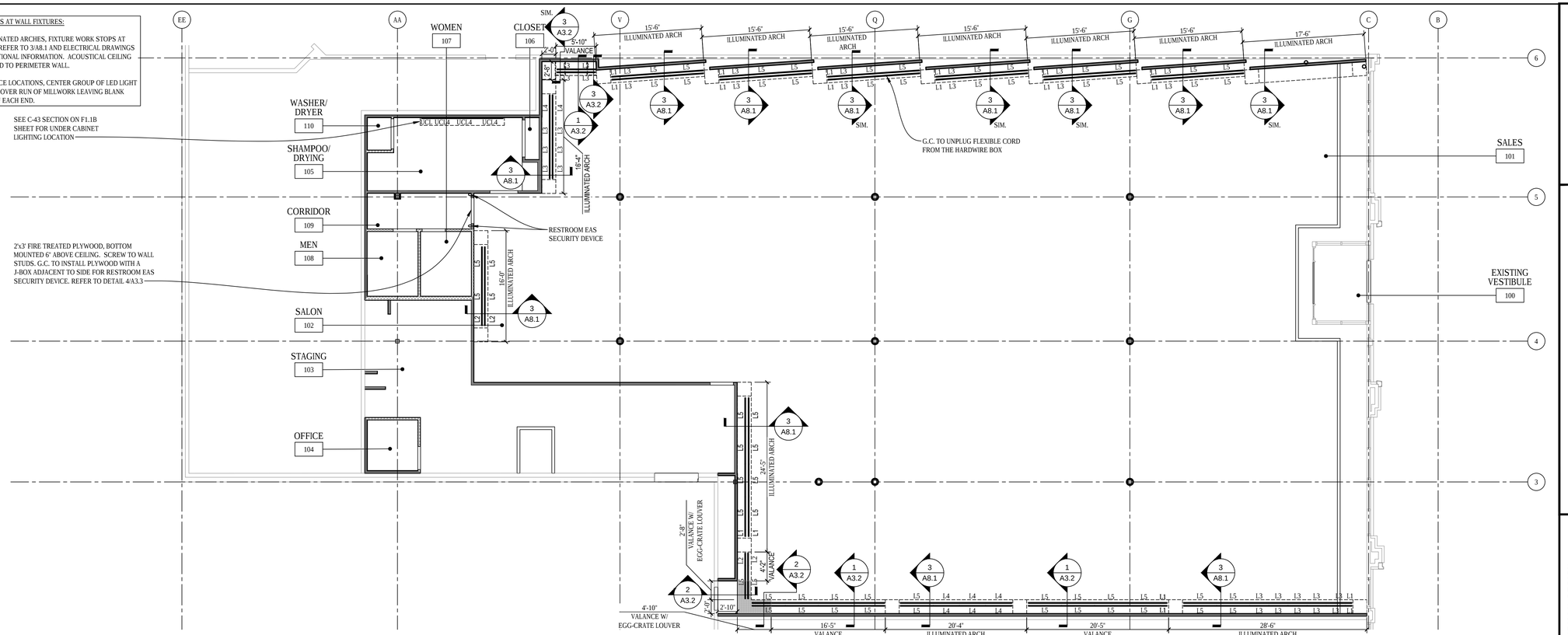
Sheet No. A3.1

NOTE:
1. G.C. TO REFER TO ELEVATIONS AND ALL OTHER SHEETS FOR ADDITIONAL CEILING/ SOFFIT INFORMATION AND DETAILS. CONTACT ARCHITECT WITH QUESTIONS PRIOR TO PROCEEDING.
2. ALL CONDUIT & J-BOXES/HARD WIRE BOXES TO BE SUPPORTED BY WIRE INDEPENDENT FROM ACOUSTICAL CEILING.
3. FIXTURE RUN DIMENSIONS ARE SHOWN FOR REFERENCE ONLY. CONFIRM ACTUAL MILLWORK DIMENSIONS WITH FIXTURE MANUFACTURER.

LIGHTING NOTES AT WALL FIXTURES:

1. AT ILLUMINATED ARCHES, FIXTURE WORK STOPS AT CEILING. REFER TO 3/A8.1 AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION. ACOUSTICAL CEILING TO EXTEND TO PERIMETER WALL.

2. AT VALANCE LOCATIONS, CENTER GROUP OF LED LIGHT FIXTURES OVER RUN OF MILLWORK LEAVING BLANK AREAS ON EACH END.




# A ARCH & VALANCE LIGHTING PLAN

SCALE: 1/8"=1'-0"

SEE SHEET A4.1 FOR FINISH SPECIFICATIONS

| | | | |
|---|---|---|---|
| L1 | 11" LINEAR STRIP - LED. REFER TO LIGHTING FIXTURE SCHEDULE ON ELECTRICAL DRAWINGS FOR TYPE OF LIGHT FIXTURE. | UCL4 | 44 1/8" UNDER CABINET LED LIGHTING. FIXTURE TO BE MOUNTED TO UNDERSIDE OF CABINET. REFER TO LIGHTING FIXTURE SCHEDULE ON ELECTRICAL DRAWINGS FOR TYPE OF LIGHT FIXTURE. |
| L2 | 21-1/2" LINEAR STRIP - LED. REFER TO LIGHTING FIXTURE SCHEDULE ON ELECTRICAL DRAWINGS FOR TYPE OF LIGHT FIXTURE. | WS | LED WALL SCONCE-REFER TO LIGHTING FIXTURE SCHEDULE ON ELECTRICAL DRAWINGS FOR TYPE OF LIGHT FIXTURE. |
| L3 | 33" LINEAR STRIP - LED. REFER TO LIGHTING FIXTURE SCHEDULE ON ELECTRICAL DRAWINGS FOR TYPE OF LIGHT FIXTURE. | | |
| L4 | 45" LINEAR STRIP - LED. REFER TO LIGHTING FIXTURE SCHEDULE ON ELECTRICAL DRAWINGS FOR TYPE OF LIGHT FIXTURE. | | |
| L5 | 57" LINEAR STRIP - LED. REFER TO LIGHTING FIXTURE SCHEDULE ON ELECTRICAL DRAWINGS FOR TYPE OF LIGHT FIXTURE. | | |
| UCL | 7 3/8" UNDER CABINET LED LIGHTING. FIXTURE TO BE MOUNTED TO UNDERSIDE OF CABINET. REFER TO LIGHTING FIXTURE SCHEDULE ON ELECTRICAL DRAWINGS FOR TYPE OF LIGHT FIXTURE. | | |
| UCL1 | 11 1/8" UNDER CABINET LED LIGHTING. FIXTURE TO BE MOUNTED TO UNDERSIDE OF CABINET. REFER TO LIGHTING FIXTURE SCHEDULE ON ELECTRICAL DRAWINGS FOR TYPE OF LIGHT FIXTURE. | | |
| UCL2 | 22 1/8" UNDER CABINET LED LIGHTING. FIXTURE TO BE MOUNTED TO UNDERSIDE OF CABINET. REFER TO LIGHTING FIXTURE SCHEDULE ON ELECTRICAL DRAWINGS FOR TYPE OF LIGHT FIXTURE. | | |
| UCL3 | 33 1/8" UNDER CABINET LED LIGHTING. FIXTURE TO BE MOUNTED TO UNDERSIDE OF CABINET. REFER TO LIGHTING FIXTURE SCHEDULE ON ELECTRICAL DRAWINGS FOR TYPE OF LIGHT FIXTURE. | | |

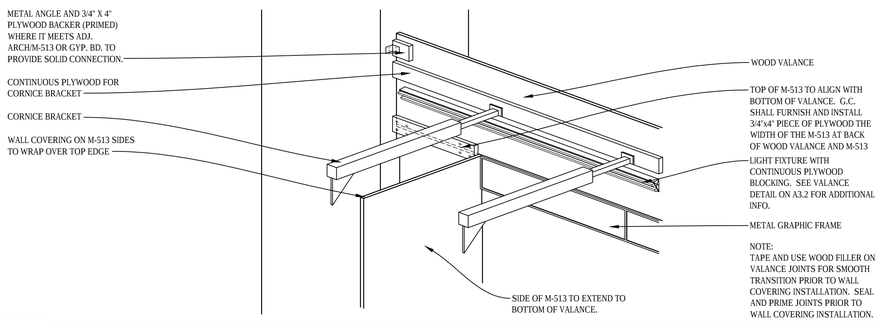
## LIGHTING SYMBOL LEGEND

SEE SHEET CS3.0 FOR ULTA LIGHTING VENDOR

SCALE: NONE

## 3 VALANCE LIGHTING OVER M-513

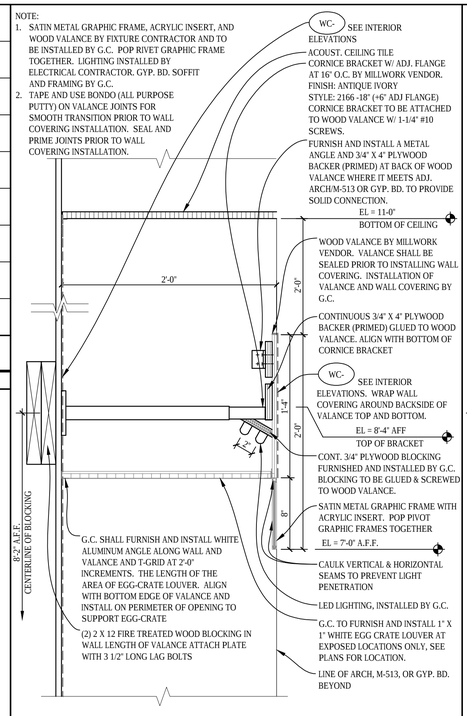
SCALE: N.T.S.




## 2 EGGCRATE VALANCE DETAIL

SCALE: 1 1/2"=1'-0"

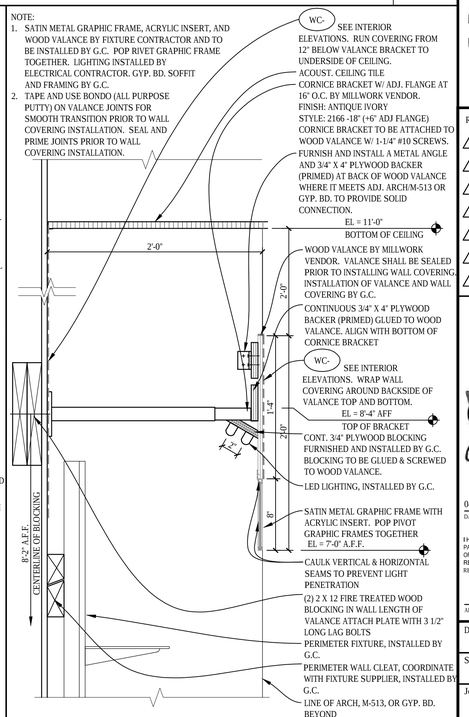
NOTE:
1. SATIN METAL GRAPHIC FRAME, ACRYLIC INSERT, AND WOOD VALANCE BY FIXTURE CONTRACTOR AND TO BE INSTALLED BY G.C. POP RIVET GRAPHIC FRAME TOGETHER. LIGHTING INSTALLED BY ELECTRICAL CONTRACTOR. GYP. BD. SOFFIT AND FRAMING BY G.C.
2. TAPE AND USE BONDO (ALL PURPOSE PUTTY) ON VALANCE JOINTS FOR SMOOTH TRANSITION PRIOR TO WALL COVERING INSTALLATION. SEAL AND PRIME JOINTS PRIOR TO WALL COVERING INSTALLATION.




## 1 VALANCE DETAIL

SCALE: 1 1/2"=1'-0"

NOTE:
1. SATIN METAL GRAPHIC FRAME, ACRYLIC INSERT, AND WOOD VALANCE BY FIXTURE CONTRACTOR AND TO BE INSTALLED BY G.C. POP RIVET GRAPHIC FRAME TOGETHER. LIGHTING INSTALLED BY ELECTRICAL CONTRACTOR. GYP. BD. SOFFIT AND FRAMING BY G.C.
2. TAPE AND USE BONDO (ALL PURPOSE PUTTY) ON VALANCE JOINTS FOR SMOOTH TRANSITION PRIOR TO WALL COVERING INSTALLATION. SEAL AND PRIME JOINTS PRIOR TO WALL COVERING INSTALLATION.




City of Kirkland
Reviewed by
J Tumelson
05/30/2018

ENR18-03206
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ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

ARCH & VALANCE LIGHTING PLAN & DETAILS


CHIPMAN DESIGN ARCHITECTURE INC
JOHN A CHIPMAN ARCHITECT
1148 BROADWAY PLAZA
FIRST FLOOR EAST
TACOMA, WA 98402
PHONE 253.761.6900


Revisions
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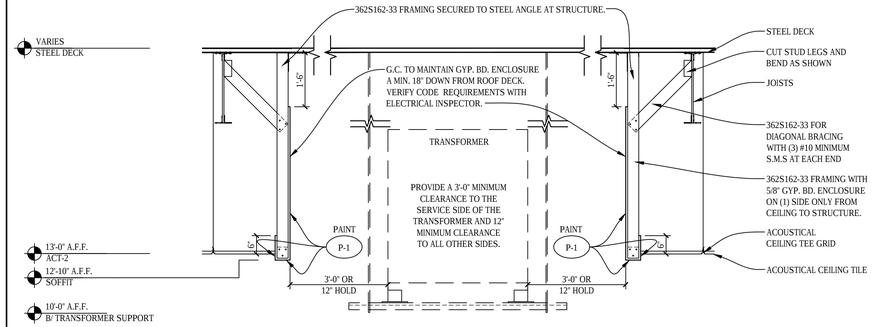
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ARCHITECT

| Drawn By | Checked By |
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| KC | BW/RD |
| Scale | Date |
| AS NOTED | 04/20/18 |

Job No. 16-4170

Sheet No. A3.2

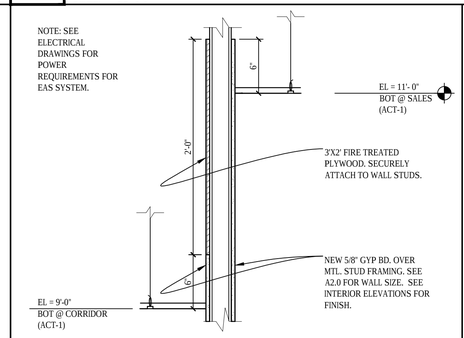



## 5 ACCESS DETAIL

SCALE: 1/2"=1'-0"

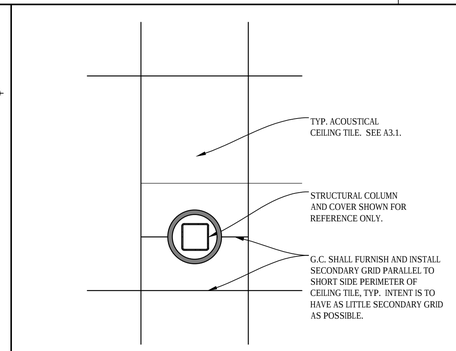
## 6 NOT USED

SCALE: NONE




## 4 EAS AT TOILET ROOM CORRIDOR

SCALE: 1-1/2"=1'-0"

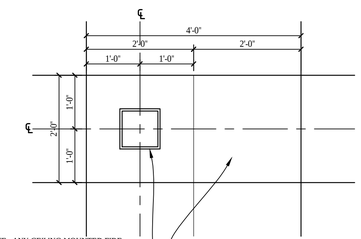



## 3 CEILING TILE AT COLUMN DETAIL

SCALE: 3/4"=1'-0"

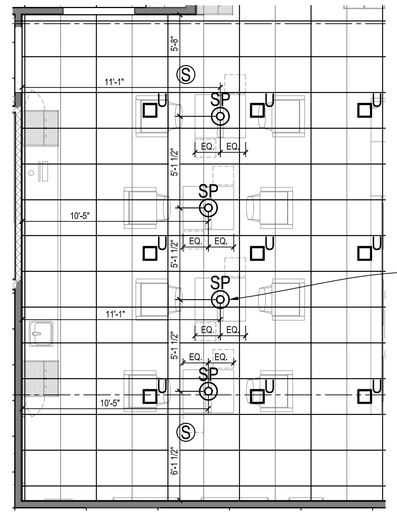
## 2 NOT USED

SCALE: NONE




## 1 LIGHT FIXTURE DETAIL

SCALE: 3/4"=1'-0"




## A ENLARGED SALON REFLECTED CEILING PLAN

SCALE: 1/4"=1'-0"

PLAN NORTH

NORTH

City of Kirkland
Reviewed by
J Tumelson
05/30/2018

ENR18-03206
Page 15 of 56

ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

ENLARGED SALON REFLECTED CEILING PLAN & DETAILS

CHIPMAN DESIGN ARCHITECTURE INC
JOHN A CHIPMAN ARCHITECT
1191 2ND AVENUE
FIRST FLOOR EAST
SEATTLE, WA 98101
PHONE 206.749.0500

Revisions
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ARCHITECT

| Drawn By | Checked By |
|---|---|
| KC | BW/RD |
| Scale | Date |
| AS NOTED | 04/20/18 |

Job No. 16-4170

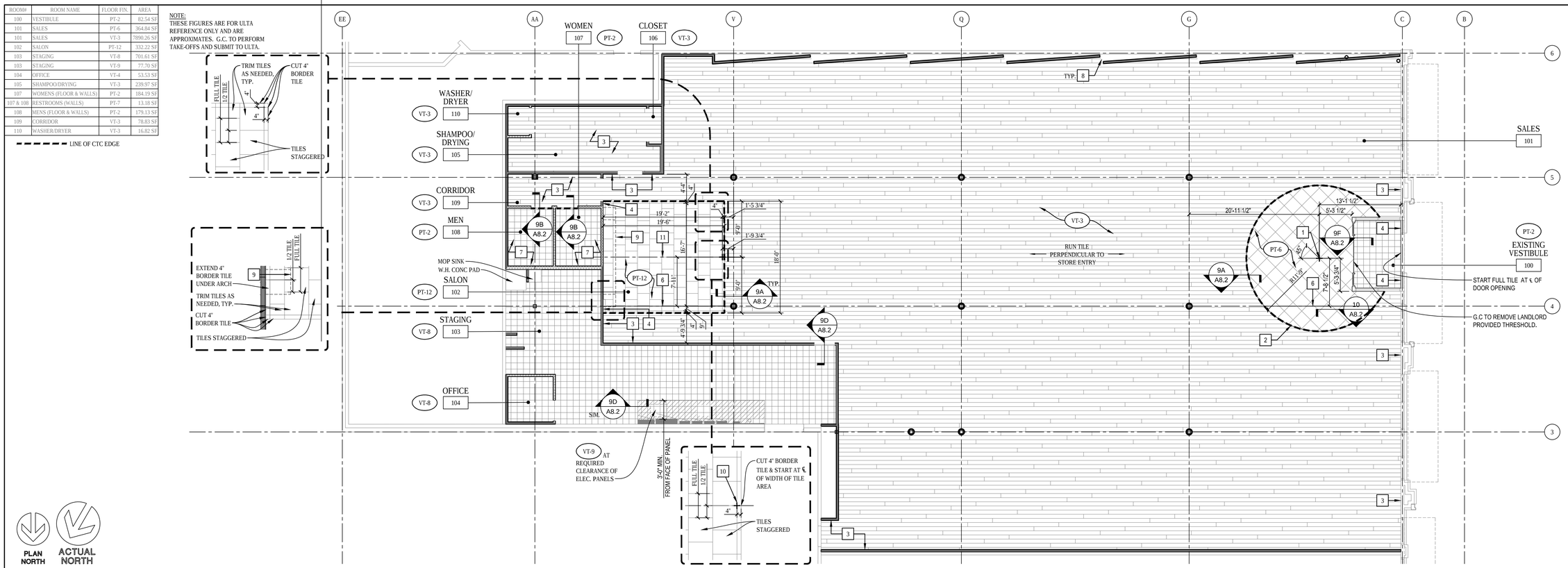
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Plotted By: Stephen Chinn, May 15, 2018 3:17 PM
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| ROOM# | ROOM NAME | FLOOR FIN. | AREA |
|---|---|---|---|
| 100 | VESTIBULE | PT-2 | 82.54 SF |
| 101 | SALES | PT-6 | 364.84 SF |
| 101 | SALES | VT-3 | 7890.26 SF |
| 102 | SALON | PT-12 | 332.22 SF |
| 103 | STAGING | VT-8 | 701.61 SF |
| 103 | STAGING | VT-9 | 77.70 SF |
| 104 | OFFICE | VT-4 | 53.53 SF |
| 105 | SHAMPOO/DRYING | VT-3 | 239.97 SF |
| 107 | WOMENS (FLOOR & WALLS) | PT-2 | 184.19 SF |
| 107 & 108 | RESTROOMS (WALLS) | PT-7 | 13.18 SF |
| 108 | MENS (FLOOR & WALLS) | PT-2 | 179.13 SF |
| 109 | CORRIDOR | VT-3 | 78.83 SF |
| 110 | WASHER/DRYER | VT-3 | 16.82 SF |

LINE OF CTC EDGE

NOTE:
THESE FIGURES ARE FOR ULTA REFERENCE ONLY AND ARE APPROXIMATES. G.C. TO PERFORM TAKE-OFFS AND SUBMIT TO ULTA.




PLAN NORTH

ACTUAL NORTH

# A FINISH PLAN & ESTIMATED TILE AREAS

SCALE: 1/8"=1'-0"

# 1 FINISH SPECIFICATIONS

SCALE: NONE

| KEY | MAT'L. DESCRIPT. | MFG. | SPECIFICATION | FLAME SPREAD & SMOKE DEVELOPMENT | NOTES: | REMARKS |
|---|---|---|---|---|---|---|
| ACT-1 | ACOUSTIC TILE | ARMSTRONG | DUNE SECOND LOOK #2712 2'X4'X3/4", 15/16" ANGLED TEGULAR WITH PRELUDE 15/16" | CLASS A - 25 & 50 | SEE VENDOR CONTACT INFO ON SHEET CS3.0 FOR ULTA NATIONAL ACCOUNT | |
| ACT-2 | ACOUSTIC TILE | ARMSTRONG | CORTEGA - 769 - 24x48x5/8" WITH PRELUDE XL 15/16" EXPOSED TEE SYSTEM (WHITE) | CLASS A - 25 & 10 | SEE VENDOR CONTACT INFO ON SHEET CS3.0 FOR ULTA NATIONAL ACCOUNT | |
| P-1 | PAINT | BENJAMIN MOORE | REGAL SELECT - PEARL 550 FINISH<br>READY MIX; COLOR: WHITE<br>TEL. (773) 597-8698; CONTACT: JASON WALKER | N/A | FINISH GYP. BD. WITH PRIMER AND PAINT TO FLOOR. PEARL (550) FINISH ON WALLS AND FLAT (547) FINISH ON SOFFITS AND CEILINGS. SEMI GLOSS (551) ON DOOR FRAMES & TRIM. SEE DOOR SCHEDULE. | ALTERNATE PAINT: PPG PAINTS<br>COLOR: PPG1011-1 PACIFIC PEARL<br>PRIMER (6-4900X SPEEDHIDE), WALLS (82-400 MANOR HALL SATIN), SOFFIT/CEILINGS (82-100 MANOR HALL FLAT), DOOR FRAMES/TRIM (82-500 MANOR HALL S/G)<br>TEL. (314) 393-7807; CONTACT: SHANE GLASCOCK |
| P-6 | COATING | BENJAMIN MOORE | ULTRA SPEC SCUFF-X<br>READY MIX WHITE<br>EGG SHELL FINISH | N/A | APPLY TO COLUMN ENCLOSURES, STAGING DOOR AND FRAME. APPLY BENJAMIN MOORE ULTRA SPEC PRIMER N534 (FOR ANY METAL SUBSTRATE, USE DTM PRIMER). AFTER PRIMER HAS DRIED, APPLY (2) COATS OF P-6 PRIOR TO INSTALLATION OF WB-1. SEE VENDOR CONTACT INFO ON SHEET CS3.0. | ALTERNATE PAINT: PPG PAINTS<br>COLOR: PPG1011-1 PACIFIC PEARL<br>PRIMER (17-921 SEAL GRIP), METAL PRIMER (90-712 DTM PRIMER), FINISH (16-310 WB1 PRE-CAT EPOXY EGGSHELL)<br>TEL. (314) 393-7807; CONTACT: SHANE GLASCOCK |
| P-7 | PAINT | SHERWIN WILLIAMS | SW 7071 GREY SCREEN, SEMI-GLOSS FINISH | N/A | SEE DOOR TYPES ON DETAIL 2/A2.4 FOR LOCATIONS. | ALTERNATE PAINT: PPG PAINTS<br>COLOR: PPG1012-4 GRAY FROST<br>DOORS (82-500 MANOR HALL SEMI-GLOSS)<br>TEL. (314) 393-7807; CONTACT: SHANE GLASCOCK |
| PT-2 | PORCELAIN TILE | GRANITI FIANDRE | 860539 PEZZATO BIANCO (MATTE)<br>SETTING MATERIAL: ARDEX X5<br>GROUT COLOR: MAPEI 27 SILVER<br>12"x12"x3/8" NOM., 30 CM x 30 CM<br>TEL. (312) 342-4689; CONTACT: NOREEN SCHERTLER | N/A | 1/8" GROUT JOINT<br>G.C. TO USE TEXSPAR PLUS TILE CLEANER IN THEIR FINAL CLEANING OF THE TILE. SEE VENDOR CONTACT INFO ON SHEET CS3.0 FOR TEXSPAR PLUS INFO | TILE FURNISHED BY ULTA INSTALLED BY G.C. SETTING MATERIALS & GROUT FURNISHED & INSTALLED BY G.C. ALSO SEE SPECIFICATION SHEETS. |
| PT-6 | PORCELAIN TILE | GRANITI FIANDRE | 866539 PEZZATO BIANCO (MATTE)<br>SETTING MATERIAL: ARDEX X5<br>GROUT COLOR: MAPEI 27 SILVER<br>24"x24"x3/8" NOM., 60 CM x 60 CM<br>TEL. (312) 342-4689; CONTACT: NOREEN SCHERTLER | N/A | 1/8" GROUT JOINT<br>G.C. TO USE TEXSPAR PLUS TILE CLEANER IN THEIR FINAL CLEANING OF THE TILE. SEE VENDOR CONTACT INFO ON SHEET CS3.0 FOR TEXSPAR PLUS INFO | TILE FURNISHED BY ULTA INSTALLED BY G.C. SETTING MATERIALS & GROUT FURNISHED & INSTALLED BY G.C. ALSO SEE SPECIFICATION SHEETS. |
| PT-7 | PORCELAIN TILE | GRANITI FIANDRE | 861999 PEZZATO BIANCO (MATTE)<br>SETTING MATERIAL: ARDEX X5<br>GROUT COLOR: MAPEI 27 SILVER<br>3"x12"x 3/8"<br>TEL. (312) 342-4689; CONTACT: NOREEN SCHERTLER | N/A | 1/8" GROUT JOINT<br>G.C. TO USE TEXSPAR PLUS TILE CLEANER IN THEIR FINAL CLEANING OF THE TILE. SEE VENDOR CONTACT INFO ON SHEET CS3.0 FOR TEXSPAR PLUS INFO. G.C. TO USE MAPEI KERACAULK S (COLOR: SILVER) TO TOP OF BULLNOSE WHERE IT MEETS THE WALLPAPER. | TILE FURNISHED BY ULTA INSTALLED BY G.C. SETTING MATERIALS & GROUT FURNISHED & INSTALLED BY G.C. ALSO SEE SPECIFICATION SHEETS. |
| PT-12 | PORCELAIN TILE | DALTILE | STYLE: EX0924241P; PATTERN: EXHIBITION<br>SETTING MATERIAL: ARDEX X5<br>GROUT COLOR: MAPEI 47 CHARCOAL<br>24"x24"x 3/8" NOM., 59.50 CM x 59.50 CM<br>TEL. (630) 306-1550; CONTACT: LYNN MILLS | | 1/8" GROUT JOINT<br>G.C. TO USE TEXSPAR PLUS TILE CLEANER IN THEIR FINAL CLEANING OF THE TILE. SEE VENDOR CONTACT INFO ON SHEET CS3.0 FOR TEXSPAR PLUS INFO | TILE FURNISHED BY ULTA INSTALLED BY G.C. SETTING MATERIALS & GROUT FURNISHED & INSTALLED BY G.C. ALSO SEE SPECIFICATION SHEETS. |
| VT-3 | VINYL FLOOR TILE | AMTICO | SPACIA LIMED WOOD NATURAL SS5W2549<br>4.5" X 36" X 2.5MM | CLASS 1 - <450 | | VINYL TILE AND ADHESIVE FURNISHED BY ULTA. INSTALLED BY G.C. |
| VT-8 | VINYL FLOOR TILE | MANNINGTON | MANNINGTON GROOVE<br>C120 STERLING GRAY - 12" x 12" x 0.08" | CLASS 1 - <450 | | VINYL TILE AND ADHESIVE FURNISHED BY ULTA. INSTALLED BY G.C. |
| VT-9 | VINYL FLOOR TILE | MANNINGTON | MANNINGTON GROOVE<br>C103 POPPY RED - 12" x 12" x 0.08" | CLASS 1 - <450 | | VINYL TILE AND ADHESIVE FURNISHED BY ULTA. INSTALLED BY G.C. |
| W-1 | WINDOW SHADE | ROLL-A-SHADE, INC. | CHAIN DRIVE ROLLER SHADE<br>PHIFER SHEERWEAVE STYLE 4400; 3% OPENNESS; COLOR: CHALK WITH WHITE MECHANICALLY FASTENED FASCIA. | | SEE VENDOR CONTACT INFO ON SHEET CS3.0 FOR ULTA NATIONAL ACCOUNT | ULTA TO FURNISH AND INSTALL ON ALL STOREFRONT EXCEPT TRANSOM & VESTIBULE |
| WB-1 | RUBBER BASE | MANNINGTON | PREMIUM EDGE TYPE TP, 4" WALL COVE MOLDING<br>NUMBER: 8174GR; COLOR: SILVER METALLIC | CLASS 1 - <450 | G.C. TO SCRIBE THE 4" BASE TO FIT UNDER THE PERIMETER SALES AREA FIXTURES. | WALL BASE FURNISHED BY ULTA. INSTALLED BY G.C. ADHESIVE FURNISHED BY G.C. INSTALLATION TO BE COMPLETED BY PROFESSIONAL RUBBER BASE INSTALLER. SEE PERIMETER FIXTURE BASE DETAIL 8/A8.3. |

| KEY | MAT'L. DESCRIPT. | MFG. | SPECIFICATION | FLAME SPREAD & SMOKE DEVELOPMENT | NOTES: | REMARKS |
|---|---|---|---|---|---|---|
| WB-2 | RUBBER BASE | MANNINGTON | PREMIUM EDGE TYPE TP, 4" WALL COVE MOLDING<br>NUMBER: 9424GR; COLOR: BEDROCK | CLASS 1 - <450 | | WALL BASE FURNISHED BY ULTA. INSTALLED BY G.C. ADHESIVE FURNISHED BY G.C. INSTALLATION TO BE COMPLETED BY PROFESSIONAL RUBBER BASE INSTALLER. |
| WC-5 | VINYL WALLCOVERING | DESIGN TEX | CUSTOM PRODUCT, 'SILVER VINYL WALLCOVERING', PRODUCT #439-20152 PROJECT #439/2001595 | CLASS A - 20 & 60 | SEE VENDOR CONTACT INFO ON SHEET CS3.0 FOR ULTA NATIONAL ACCOUNT | FURNISHED BY ULTA INSTALLED BY G.C. |
| WC-6 | VINYL WALLCOVERING | DESIGN TEX | CUSTOM PRODUCT, 'WHITE VINYL WALLCOVERING', PRODUCT #439-20157 PROJECT #439/2001595 | CLASS A - 20 & 60 | SEE VENDOR CONTACT INFO ON SHEET CS3.0 FOR ULTA NATIONAL ACCOUNT | FURNISHED BY ULTA INSTALLED BY G.C. |
| WF-2 | WINDOW FILM | 3M COMMERCIAL GRAPHICS DIVISION | FASARA - OPAQUE WHITE - SH2MAOW | | WINDOW FILM NOT BE INSTALLED PER MANUFACTURER'S INSTALLATION DIRECTIONS | WINDOW FILM TO BE APPLIED TO WINDOWS ON THE INTERIOR SURFACE OF GLASS, PRIOR TO INTERIOR ADJACENT WALL CONSTRUCTION, WHEN APPLICABLE. PROVIDE SAMPLE OF WINDOW FILM TO LANDLORD REPRESENTATIVE FOR APPROVAL PRIOR TO INSTALLATION. SEE EXTERIOR ELEVS. |

| ROOM | | FLOOR | | WALLS | | REFER TO PLAN NORTH | | CEILING | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| MARK | LOCATION | FINISH | BASE | NORTH | EAST | SOUTH | WEST | FINISH | HEIGHT | |
| 100 | VESTIBULE | PT-2 | WB-1 | P-1 | P-1 | P-1 | P-1 | GYP. BD. P-1 | 12'-0" | |
| 101 | SALES | PT-2/PT-6/VT-3 | WB-1 | WC-5/WC-6 | WC-5/WC-6 | P-1 | WC-5/WC-6 | GYP. BD. P-1/ ACT-1 | 12'-2"/11'-0" | ALIGN WALL COVERING AT BACKING MATERIAL CHANGES, CORNERS, AND WHERE SOFFIT/VALANCE ABUTS ADJACENT WALLS/FILLER PANELS |
| 102 | SALON | PT-12 | WB-1 | WC-5 | WC-5 | WC-5 | WC-5 | ACT-1 | 11'-0" | ALIGN WALL COVERING AT BACKING MATERIAL CHANGES, CORNERS, AND WHERE SOFFIT/VALANCE ABUTS ADJACENT WALLS/FILLER PANELS |
| 103 | STAGING | VT-4/VT-5 | WB-2 | P-1 | P-1 | P-1 | P-1 | ACT-2 | 13'-0" | |
| 104 | OFFICE | VT-4 | WB-2 | P-1 | P-1 | P-1 | P-1 | GYP. BD. P-1 | 8'-0" | |
| 105 | SHAMPOO/DRYING | VT-3 | WB-1 | WC-5 | WC-5 | WC-5 | WC-5 | ACT-1 | 11'-0" | ALIGN WALL COVERING AT BACKING MATERIAL CHANGES, CORNERS, AND WHERE SOFFIT/VALANCE ABUTS ADJACENT WALLS/FILLER PANELS |
| 106 | CLOSET | VT-3 | WB-2 | P-1 | P-1 | P-1 | P-1 | ACT-2 | 9'-0" | |
| 107 | WOMEN | PT-2 | PT-2 | WC-5/PT-2, PT-7 | WC-5/PT-2, PT-7 | WC-5/PT-2, PT-7 | WC-5/PT-2, PT-7 | GYP. BD. P-1 | 9'-0" | |
| 108 | MEN | PT-2 | PT-2 | WC-5/PT-2, PT-7 | WC-5/PT-2, PT-7 | WC-5/PT-2, PT-7 | WC-5/PT-2, PT-7 | GYP. BD. P-1 | 9'-0" | |
| 109 | CORRIDOR | VT-3 | WB-1 | WC-5 | WC-5 | WC-5 | WC-5 | ACT-1 | 9'-0" | |
| 110 | WASHER/DRYER | VT-3 | WB-2 | P-1 | P-1 | P-1 | P-1 | ACT-2 | 11'-0" | |

*-# SPECIFICATION. (SEE FINISH SPECS. ON A4.1)
FINISH MATERIAL

PT - PORCELAIN TILE
WD - WOOD
VT - VINYL TILE
ACT - ACOUSTICAL CLG. TILE
WB - WALL BASE
PL - PLASTIC LAMINATE
WC - WALL COVERING
P - PAINT

# 2 ROOM FINISH SCHEDULE

SCALE: NONE

1. REFER TO FINISH SCHEDULE FOR FLOOR COVERING AND FINISH CODES AND SPECIFICATIONS.
2. TILE IS SHOWN FOR FIELD RUN AND PATTERN ONLY. REFER TO COLOR AND FINISH SCHEDULE FOR MATERIAL SPECIFICATIONS.
3. INSTALL WB-1 @ WALLS AND COLUMN ENCLOSURES
4. ALL PAINTED AND WALL COVERING SURFACES SHALL BE PRIMED. SEE ARCHITECT'S SPECIFICATION SHEET AND PAINT MANUFACTURER SPECIFICATIONS.
5. PAINT ALL SURFACES FLOOR TO CEILING, INCLUDING PRIMING VALANCE PANELS BEFORE WALL COVERING INSTALLATION.
6. ALL METAL SURFACES TO BE PAINTED WITH LOW GLOSS OIL BASE PRIMER AND OIL BASE FINISH COATS IN COLOR INDICATED ON DRAWING.
7. PAINT ON ALL GYP. BD. SURFACES TO BE APPLIED WITH A HEAVY KNAP ROLLER.
8. GROUT TO BE SEALED PER MANUFACTURER'S RECOMMENDATIONS. CLEAN SEALER OFF THE ADJACENT FLOOR FINISHES.
9. INSURE PROPER ENVIRONMENTAL CONDITIONS ARE MET FOR THE INSTALLATION OF ALL INTERIOR FINISHES.
10. SEE DETAIL 9/A8.2 FOR INSTALLATION AT CONCRETE CONTROL JOINTS. FOR TILE CONTROL JOINTS, FOLLOW TILE MANUFACTURER'S RECOMMENDATIONS.
11. FLOOR FINISHES TO CONTINUE UNDER GYP. BD. GYP. BD. TO BE HELD UP FROM FLOOR SLAB. SEE DETAIL ON SHEET 8/A8.2. IF GYP. BD. DOES NOT ALLOW FINISH UNDERNEATH, HOLD FLOOR FINISH AS TIGHT AS POSSIBLE TO GYP. BD.
12. TRANSITION STRIPS TO BE MITERED AT INTERSECTIONS
13. CUT PORCELAIN TILE WITH A WATER JET. DO NOT CUT PORCELAIN TILE ON SITE.
14. G.C. TO TOUCH UP PAINT PRIOR TO STORE OPENING.
15. G.C. TO FURNISH AND INSTALL TWO LAYERS OF CRAFT PAPER OVER ALL TILE AND GROUT ON FLOORS. TAPE DOWN AND STAGGER SEAMS BY HALF THE PAPER WIDTH ON THE SECOND LAYER.
16. FLOOR COVERINGS ARE TO BE SLIP RESISTANT THROUGHOUT THE MEANS OF EGRESS.
17. G.C. TO INSPECT CONDITION OF EXISTING FLOOR SLAB AND PATCH/REPAIR SURFACE IMPERFECTIONS. IF FLOOR LEVELING IS REQUIRED, ARDEX MUST BE USED AND IT MUST BE INSTALLED BY AN ARDEX LEVEL MASTER® ELITE OR ARDEX CHOICE CONTRACTOR INSTALLER. SEE VENDOR CONTACT INFO ON CS3.0 SHEET. G.C. TO PROVIDE A WARRANTY LETTER ON ARDEX CORPORATE LETTERHEAD. A MINIMUM OF 5 YEAR WARRANTY MUST BE PRESENTED.
18. SEE SHEET CS3.0 FOR CONCRETE SLAB MOISTURE TEST REQUIREMENTS. TESTING PERFORMED BY FLOORING INSTALLATION CONTRACTOR WILL NOT BE ACCEPTED.

# GENERAL NOTES

SCALE: NONE

## PLAN KEY NOTES:

1. START TILE @ CENTER OF CIRCLE.
2. CUT PORCELAIN TILE WITH A WATERJET. DO NOT CUT PORCELAIN TILE ON SITE.
3. DETAIL AT PERIMETER/INTERIOR WALL. SEE DETAIL 8A/A8.2.
4. DETAIL AT PERIMETER/INTERIOR WALL. SEE DETAIL 8B/A8.2.
5. CONTROL JOINT. SEE DETAIL 9C/A8.2.
6. CONTROL JOINT. SEE DETAIL 9E/A8.2.
7. G.C. TO EXTEND PORCELAIN TILE 4'-0 UP ALL RESTROOM WALLS. SEE INTERIOR ELEVATIONS.
8. G.C. TO EXTEND VINYL TILE FLOORING PAST THE ARCH TOWER RETURN SO THERE IS NO EXPOSED UNFINISHED CONCRETE SLAB.
9. DASHED LINE INDICATES LIMITS OF SALON ARCH.
10. START FULL TILE AT ℄ OF TILE AREA.
11. ℄ OF TILE AREA (ALIGNED WITH ℄ OF SALON ARCH).

ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

FLOOR FINISH PLAN, FINISH SCHEDULE & SPECIFICATIONS


CHIPMAN DESIGN ARCHITECTURE INC
JOHN A CHIPMAN ARCHITECT
10 LAKE BELLEVUE DRIVE
FIRST FLOOR EAST
BELLEVUE, WA 98005
PHONE 425.216.6900


Revisions
- ISSUE FOR CL/LL REVIEW 04/20/18
- ISSUE FOR PERMIT & BID 04/20/18

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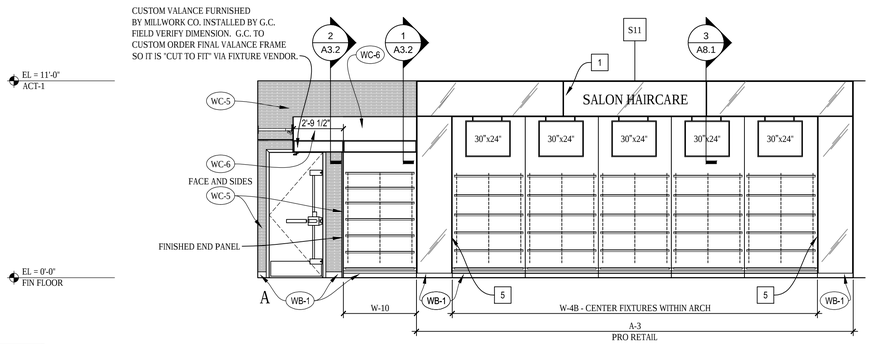
ARCHITECT

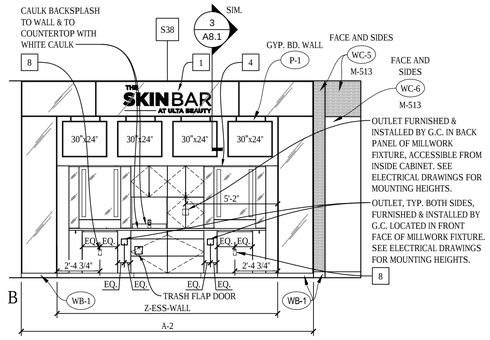
| Drawn By | Checked By |
|---|---|
| KC | BW/RD |
| Scale | Date |
| AS NOTED | 04/20/18 |

Job No. 16-4170

Sheet No. A4.1

City of Kirkland
Reviewed by
J Tumelson
05/30/2018




## GENERAL NOTES:

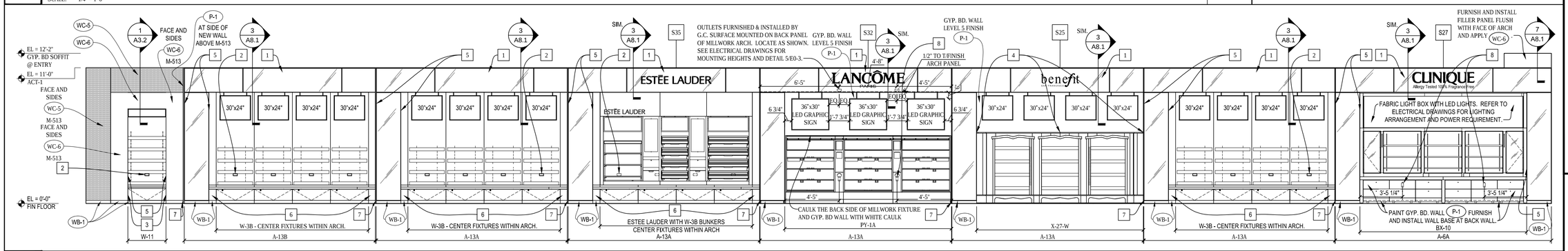
1. INSTALL ALL ARCHES TIGHT TO CEILING TILE.
2. VINYL ARCH SIGNAGE FURNISHED AND INSTALLED BY ULTA GRAPHIC VENDOR - GFX.
3. G.C. TO COORDINATE FINAL SHELF LOCATION WITH STORE SET TEAM AND STORE MANAGER.
4. G.C. SHALL FURNISH AND INSTALL GRAY ELECTRICAL DEVICES AND STAINLESS STEEL COVER PLATES AT LOCATIONS WHERE WC-5 OCCURS.
5. SEE F1.1A, F1.1B AND F1.1C FOR FIXTURE DETAILS.
6. ACCESS PANEL TO BE FURNISHED AND INSTALLED AS REQUIRED. SEE MEP DRAWINGS. ALL ACCESS PANEL MUST BE METAL. ACCESS PANELS HIGHER THAN 24" A.F.F. TO BE FINISHED TO MATCH SURROUNDING WALL. ACCESS PANELS BELOW 24" A.F.F. TO BE PAINTED TO MATCH WALL FINISH.
7. FIX CHIPS AS REQUIRED ON ALL FIXTURES, TYP.
8. G.C. TO CAULK ALL VERTICAL AND HORIZONTAL SEAMS BETWEEN ABUTTING VALANCE SEGMENTS WITH WHITE CAULK TO PREVENT LIGHT PENETRATION, TYP.

## ELEVATION KEY NOTES:

1. ILLUMINATED ACRYLIC ARCH FURNISHED BY ULTA. INSTALLED BY G.C. SEE ELECTRICAL DWGS. FOR LIGHTING ARRANGEMENT.
2. OUTLETS FURNISHED & INSTALLED BY G.C. CENTERED IN THE BACK PANEL OF MILLWORK FIXTURE. LOCATE AS SHOWN. SEE ELECTRICAL DRAWINGS FOR MOUNTING HEIGHTS.
3. G.C. TO PLANE DOWN ENTIRE BUNKER EDGE AS REQUIRED TO FIT BEYOND WALL BASE & REAPPLY EDGE BANDING.
4. CAULK THE PERIMETER OF THE MILLWORK TOP, TO SIDES OF ARCH AND GYP. BD. WALL WITH WHITE CAULK.
5. FIXTURE INSTALLATION CONTRACTOR/G.C. TO ENSURE SQUARING/LEVELING OF THE FIXTURES AS BEST AS POSSIBLE. CAULK SEAM BETWEEN WALL FIXTURE AND ARCH/M-513, TYP. EACH SIDE. CAULK SHOULD BE USED AT A MINIMUM. IF GAP IS LARGER THAN 1/4", CONTACT FIXTURE VENDOR FOR 1" PIECE OF MELAMINE AND INSTALL TIGHT TO ARCH. SEE CS3.0 SHEET FOR FIXTURE VENDOR CONTACT INFORMATION.
6. BUNKER FILLER PANEL FURNISHED BY MILLWORK VENDOR, INSTALLED BY G.C. BOTH SIDES, TYP.
7. WRAP WALL BASE TO CONTINUE TO THE SIDE OF THE ARCH.
8. OUTLETS FURNISHED AND INSTALLED BY G.C. IN WALL. LOCATE AS SHOWN. SEE ELECTRICAL DRAWINGS FOR MOUNTING HEIGHTS.

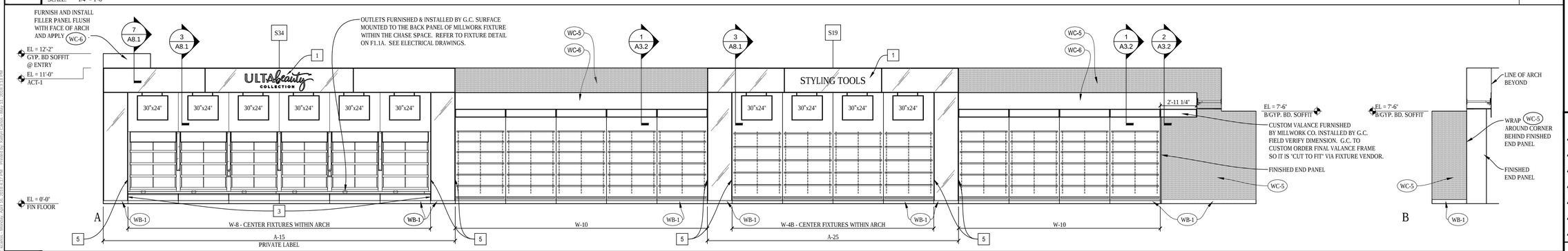
## 4 ELEVATION - SALES

SCALE: 1/4" = 1'-0"



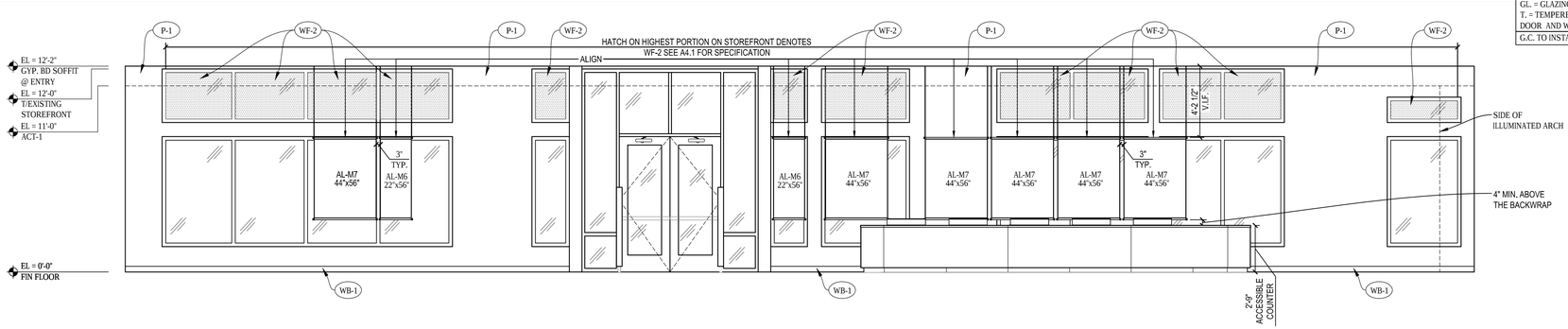

## 3 ELEVATION - SALES

SCALE: 1/4" = 1'-0"




## 2 ELEVATION - SALES

SCALE: 1/4" = 1'-0"




GL. = GLAZING (EXISTING)
T. = TEMPERED SAFETY EXISTING GLAZING. WITHIN 24" OF EITHER SIDE OF DOOR AND WITHIN 18" OF A WALKING SURFACE.
G.C. TO INSTALL GRAPHIC HANGING RODS PLUMB.

ULTA Interior Signage

| Tag | Description | Remarks |
|---|---|---|
| S4 | ADVANCED SKINCARE | APPLIED TO FACE OF PANEL |
| S11 | SALON HAIRCARE | APPLIED TO FACE OF PANEL |
| | STYLING TOOLS | APPLIED TO FACE OF PANEL |
| S19 | THE SALON AT ULTA BEAUTY | APPLIED TO FACE OF PANEL |
| S20 | THE COLOR LIBRARY | APPLIED TO FACE OF PANEL |
| S21 | COLOR COSMETICS | APPLIED TO FACE OF PANEL |
| S22 | prestigefragrances | APPLIED TO FACE OF PANEL |
| S23 | BENEFIT | APPLIED TO FACE OF PANEL |
| S25 | DERMALOGICA | APPLIED TO FACE OF PANEL |
| S26 | CLINIQUE | APPLIED TO FACE OF PANEL - FINAL ARTWORK TO BE DETERMINED BY ULTA |
| S27 | BATH & BODYCARE | APPLIED TO FACE OF PANEL |
| S28 | PHILOSOPHY | APPLIED TO FACE OF PANEL |
| S29 | SKIN & BODYCARE | APPLIED TO FACE OF PANEL |
| S30 | BARE MINERALS | APPLIED TO FACE OF PANEL |
| S31 | LANCOME | APPLIED TO FACE OF PANEL |
| S32 | URBAN DECAY | APPLIED TO FACE OF PANEL |
| S33 | ULTA BEAUTY COLLECTION | APPLIED TO FACE OF PANEL |
| S34 | ESTEE LAUDER | APPLIED TO FACE OF PANEL |
| S35 | MAC | APPLIED TO FACE OF PANEL |
| S36 | IT COSMETICS | APPLIED TO FACE OF PANEL |
| S37 | SKIN BAR | APPLIED TO FACE OF PANEL |
| S38 | | |

## 1 ELEVATION - SALES

SCALE: 1/4" = 1'-0"

City of Kirkland
Reviewed by
J Tumelson
05/30/2018

ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

INTERIOR ELEVATIONS

CHIPMAN DESIGN ARCHITECTURE INC
JOHN A CHIPMAN ARCHITECT
1148 - 1ST FLOOR - EAST
FIFTH AVENUE SOUTH
SEATTLE, WA 98134
PHONE 206.216.4900

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ARCHITECT

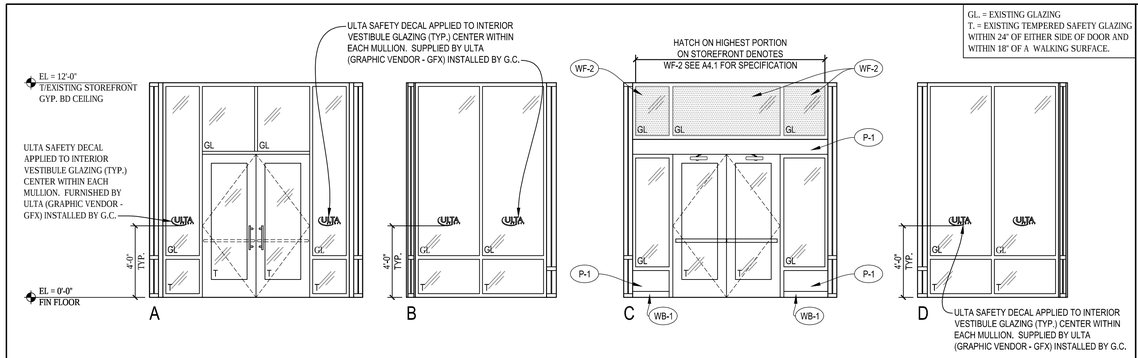
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|---|---|
| CP/KC | BW/RD |
| Scale: AS NOTED | Date: 04/20/18 |

Job No. 16-4170

Sheet No. A6.1

## 7 ELEVATION - VESTIBULE

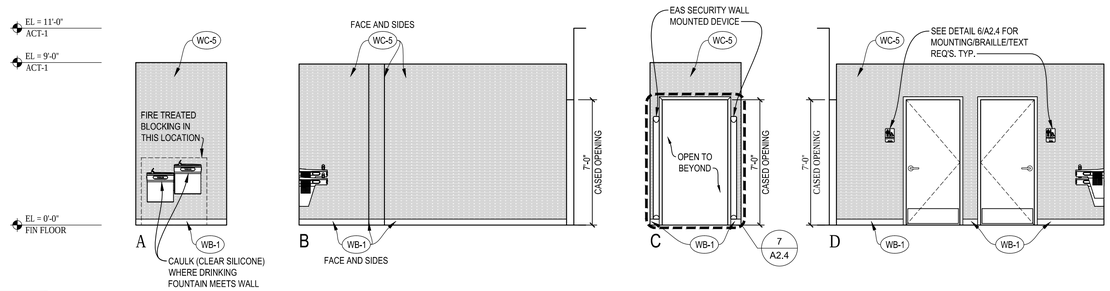
SCALE: 1/4" = 1'-0"




## 6 ELEVATION - CORRIDOR

SCALE: 1/4" = 1'-0"

G.C. SHALL FURNISH AND INSTALL GRAY ELECTRICAL DEVICES AND STAINLESS STEEL COVER PLATES AT LOCATIONS WHERE WC-5 OCCURS.



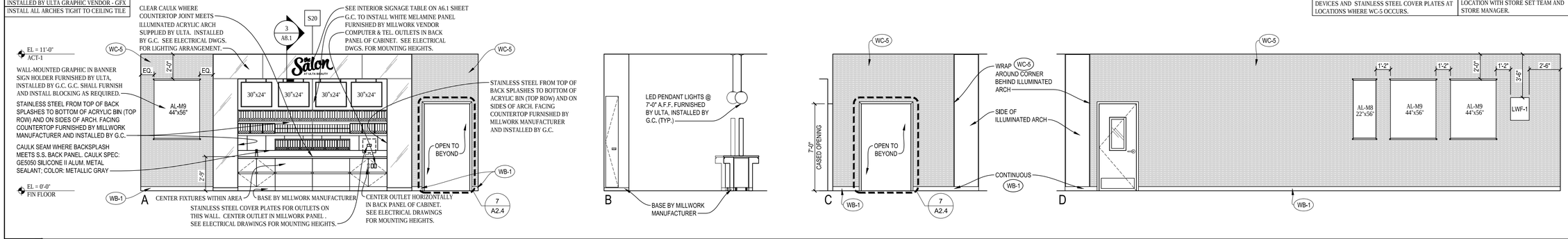

## 5 ELEVATION - SALON

SCALE: 1/4" = 1'-0"

VINYL ARCH SIGNAGE FURNISHED AND INSTALLED BY ULTA GRAPHIC VENDOR - GFX
INSTALL ALL ARCHES TIGHT TO CEILING TILE

G.C. TO COORDINATE FINAL SHELF LOCATION WITH STORE SET TEAM AND STORE MANAGER.

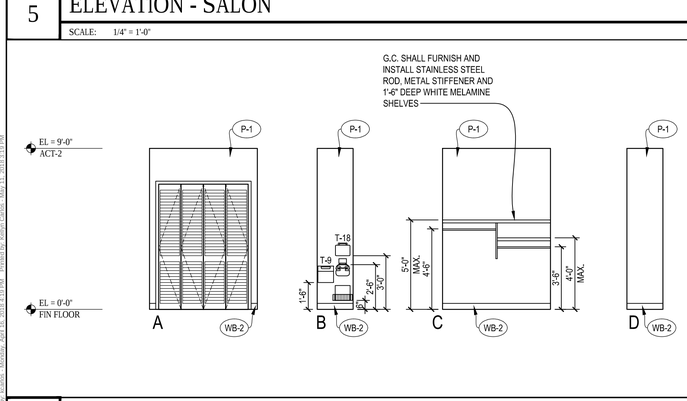
SEE A6.1 FOR SIGN TAG DESCRIPTIONS




## 4 ELEVATION - CLOSET

SCALE: 1/4" = 1'-0"

G.C. TO COORDINATE FINAL SHELF LOCATION WITH STORE SET TEAM AND STORE MANAGER.

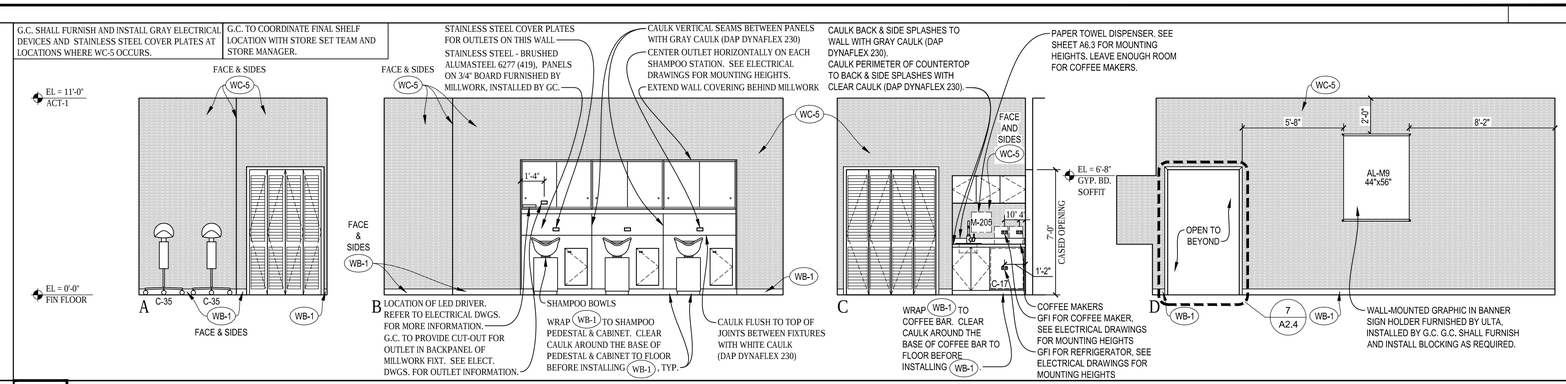



## 3 ELEVATION -SHAMPOO/DRYING

SCALE: 1/4" = 1'-0"

G.C. SHALL FURNISH AND INSTALL GRAY ELECTRICAL DEVICES AND STAINLESS STEEL COVER PLATES AT LOCATIONS WHERE WC-5 OCCURS.

G.C. TO COORDINATE FINAL SHELF LOCATION WITH STORE SET TEAM AND STORE MANAGER.




## 2 ELEVATION - WASHER/DRYER

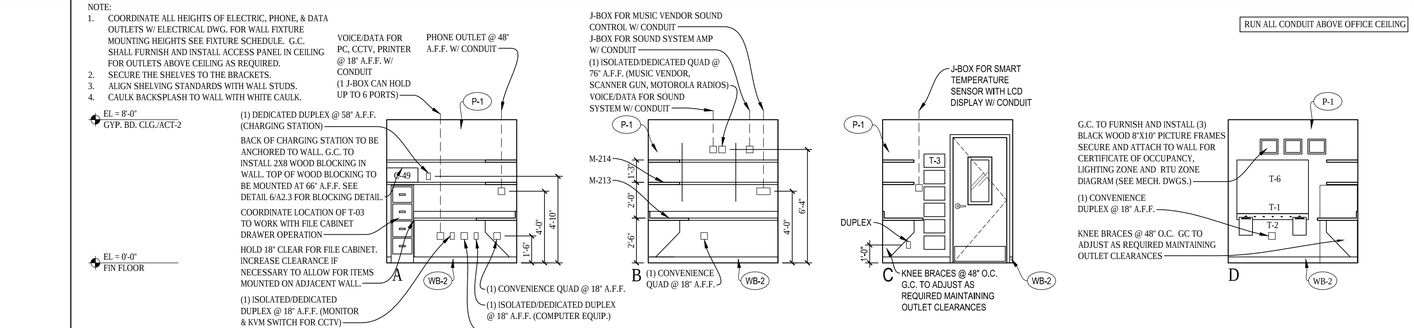
SCALE: 1/4" = 1'-0"

## 1 ELEVATION - OFFICE

SCALE: 1/4" = 1'-0"

NOTE:
1. COORDINATE ALL HEIGHTS OF ELECTRIC, PHONE, & DATA OUTLETS W/ ELECTRICAL DWG. FOR WALL FIXTURE MOUNTING HEIGHTS SEE FIXTURE SCHEDULE. G.C. SHALL FURNISH AND INSTALL ACCESS PANEL IN CEILING FOR OUTLETS ABOVE CEILING AS REQUIRED.
2. SECURE THE SHELVES TO THE BRACKETS.
3. ALIGN SHELVING STANDARDS WITH WALL STUDS.
4. CAULK BACKSPLASH TO WALL WITH WHITE CAULK.

RUN ALL CONDUIT ABOVE OFFICE CEILING




ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

INTERIOR ELEVATIONS


CHIPMAN DESIGN ARCHITECTURE INC
JOHN A CHIPMAN ARCHITECT
1511 3RD AVE, SUITE 1001
FIRST FLOOR EAST
SEATTLE, WA 98101
PH (206) 749-0500


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ARCHITECT

| Drawn By | Checked By |
|---|---|
| CP/KC | BW/RD |
| Scale | Date |
| AS NOTED | 04/20/18 |

Job No. 16-4170

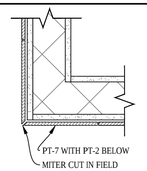
Sheet No. A6.2

City of Kirkland Reviewed by J Tumelson 05/30/2018

NOTE:
1. ALL JOINTS/SEAMS TO BE CAULKED WHERE CERAMIC TILE MEETS WALL COVERING, GRAY CAULK (DAP DYNAFLEX 230)
2. AT OUTSIDE TILED CORNERS, TILE TO HAVE MITERED CORNER JOINT.
3. CAULK BACKSPLASH TO WALL TILE WITH WHITE CAULK.
4. CAULK ALL PLUMBING FIXTURES WHERE IT MEETS WALL/FLOOR TILE & COUNTERTOP WITH WHITE CAULK.
5. ALIGN GROUT LINES ON THE WALL AND FLOOR TILE.
6. G.C. SHALL FURNISH AND INSTALL GRAY ELECTRICAL DEVICES AND STAINLESS STEEL COVER PLATES AT LOCATIONS WHERE WC-5 OCCURS.

## RESTROOM GENERAL NOTES

SCALE: NONE




## D MITERED CORNER JOINT DETAIL

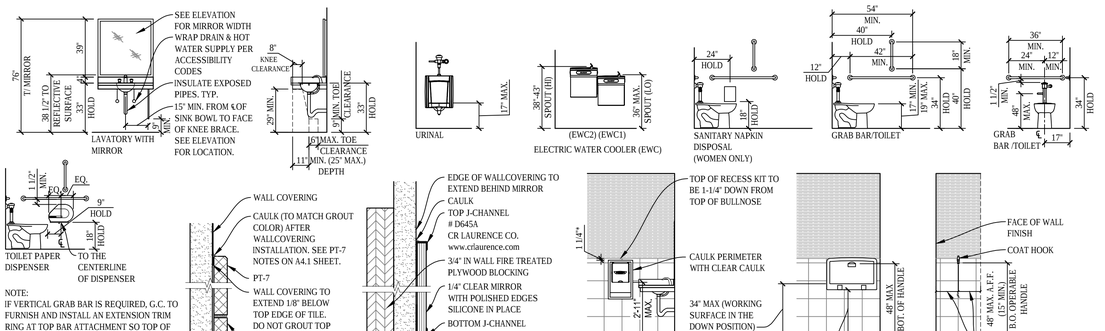
SCALE: N.T.S.

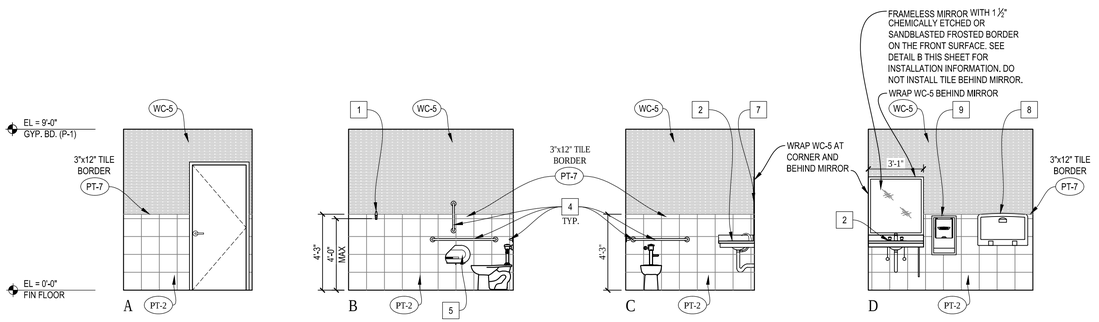
| ITEM # | DESCRIPTION | COMPANY | MODEL | MOUNT | FINISH | REMARKS/SUPPLY |
|---|---|---|---|---|---|---|
| 1 | COAT HOOK | HAGER | 945P | | SATIN-FINISH STAINLESS STEEL | UNLESS NOTED OTHERWISE, MOUNTED @ 48" A.F.F. / BY G.C. FURNISH AND INSTALL BLOCKING AS REQ'D |
| 2 | ACCESSIBLE LAVATORY | ELKAY | RLL-VR12 | | SATIN FINISH STAINLESS STEEL | SEE TYP. MOUNTING HEIGHTS DETAILS / BY G.C. |
| 3 | PAPER TOWEL DISPENSER | | | SURFACE | | AT MOP SINK & COFFEE BAR LOCATION. FURNISHED BY ULTA AND INSTALLED BY G.C. MTD. MAX. 46" TO OPERABLE PARTS/LOCAL CODES |
| 4 | GRAB BAR | BOBRICK | B-5806 | CONCEALED MOUNT | SATIN-FINISH STAINLESS STEEL | SEE TYP. MOUNTING HEIGHTS DETAILS / BY G.C. FURNISH AND INSTALL BLOCKING AS REQ'D. |
| 5 | TOILET PAPER DISPENSER | | | SURFACE | | SEE TYP. MOUNTING HEIGHTS DETAILS. FURNISHED BY ULTA AND INSTALLED BY G.C. |
| 6 | SANITARY NAPKIN DISPOSAL | BOBRICK | B-270, SURFACE | SURFACE | SATIN-FINISH STAINLESS STEEL | SEE TYP. MOUNTING HEIGHTS DETAILS / BY G.C. |
| 7 | WALL MIRROR | | | SURFACE | | SEE TYP. MOUNTING HEIGHTS DETAILS / BY G.C. |
| 8 | BABY CHANGING STATION | GRAINGER | RUBBERMAID FG781888LPLAT | SURFACE | | SEE TYP. MOUNTING HEIGHTS DETAILS. FURNISHED BY ULTA, INSTALLED BY G.C. |
| 9 | HAND DRYER | EXCEL DRYER INC. XLERATOR® | XL-W WITH RECESS KIT | RECESSED/ LOW PROFILE | COLOR: WHITE EPOXY | FURNISHED BY ULTA AND INSTALLED BY G.C. MTD. 35" (MAX.) TO BOTTOM OF HAND DRYER/LOCAL CODES |

NOTE: G.C. TO FURNISH ALL RESTROOM ACCESSORIES UNLESS NOTED OTHERWISE

## C TOILET ACCESSORIES

SCALE: NONE

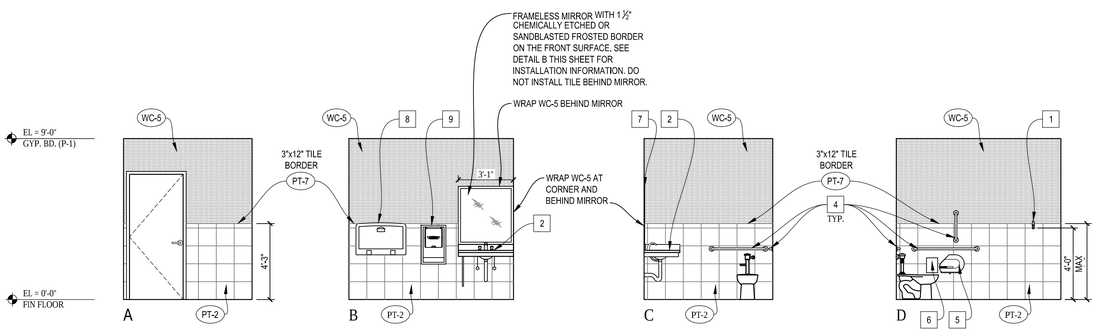



## 2 ELEVATION - MEN

SCALE: 1/4"=1'-0"

NOTE: SEE SHEET A4.1 FOR FINISH SPECIFICATIONS




## 1 ELEVATION - WOMEN

SCALE: 1/4"=1'-0"

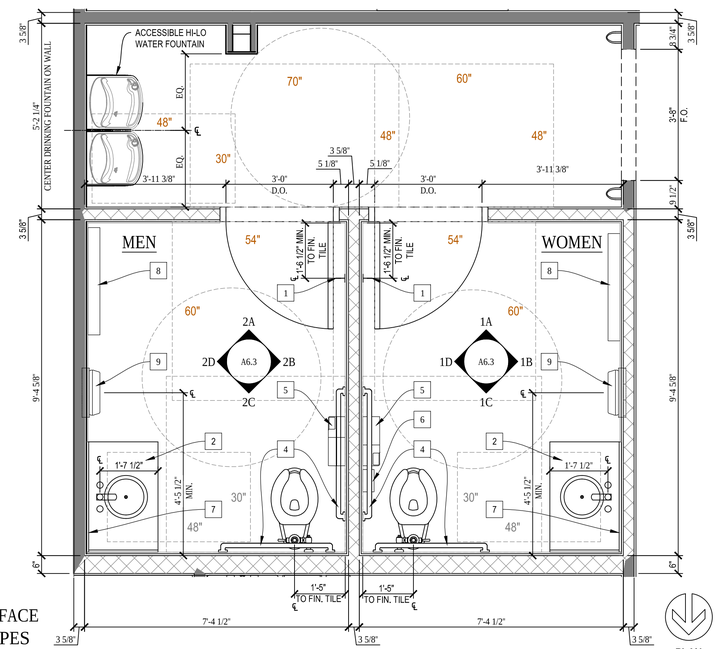
NOTE: SEE SHEET A4.1 FOR FINISH SPECIFICATIONS

## B TYPICAL MOUNTING DETAILS

SCALE: 1/4" = 1'-0"

NOTE:
1. ALL JOINTS/SEAMS TO BE CAULKED WHERE CERAMIC TILE MEETS WALL COVERING, CAULK COLOR: GRAY (DAP DYNAFLEX 230)
2. AT OUTSIDE TILED CORNERS, TILE TO HAVE MITERED CORNER JOINT.

[#] TOILET ACCESSORY TAG. SEE TOILET ACCESSORIES SCHEDULE ON THIS SHEET.




DIMENSIONS ARE TO FACE OF STUD OR FACE OF EXISTING WALL, U.N.O. SEE WALL TYPES ON A2.3 SHEET FOR FURTHER INFORMATION.

PLAN NORTH

ACTUAL NORTH

## A RESTROOM DIMENSION PLAN

SCALE: 1/2"=1'-0"

City of Kirkland
Reviewed by
J Tumelson
05/30/2018

ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

INTERIOR ELEVATIONS & ENLARGED TOILET ROOM PLAN

CHIPMAN DESIGN ARCHITECTURE INC
JOHN A CHIPMAN ARCHITECT
1215 1ST AVE S
FIRST FLOOR EAST
SEATTLE, WA 98134
PHONE 206.749.0500

Revisions
- ISSUE FOR CL/LL REVIEW 04/20/18
- ISSUE FOR PERMIT & BID 04/20/18

6367 REGISTERED ARCHITECT
JOHN A. CHIPMAN
STATE OF WASHINGTON

04/20/2018 DATE
06/30/2018 EXPIRATION DATE

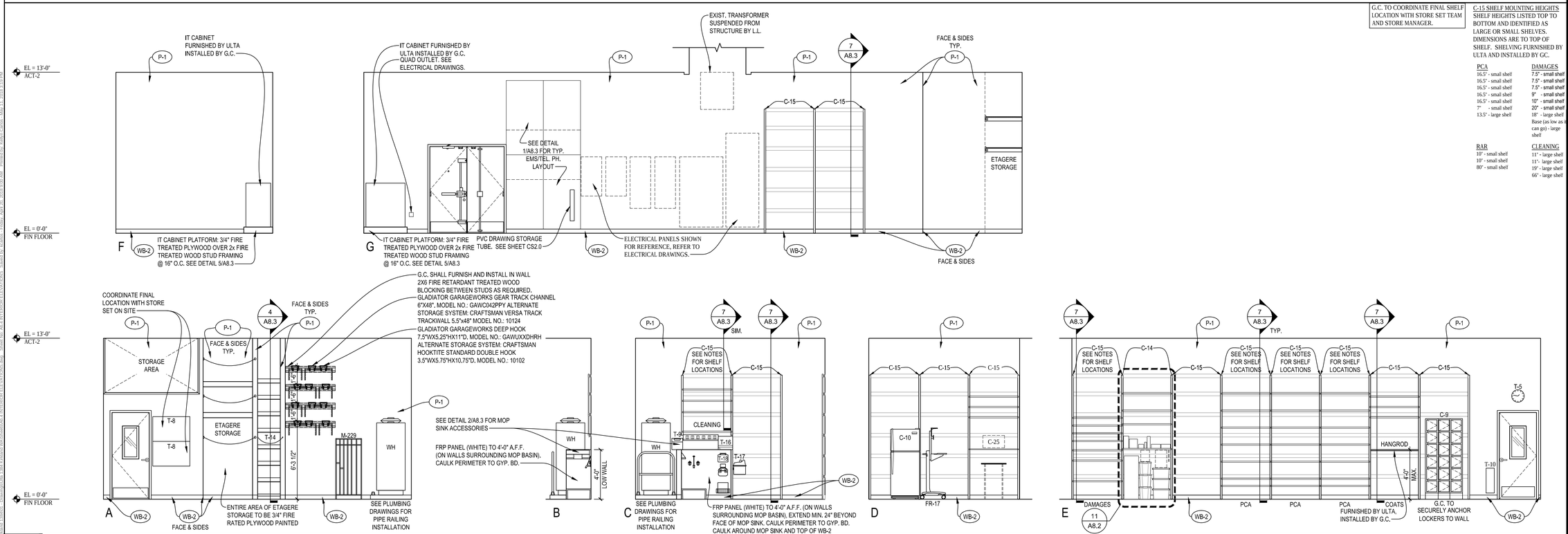
I HEREBY CERTIFY THAT THESE PLANS HAVE BEEN PREPARED UNDER MY SUPERVISION AND THAT TO THE BEST OF MY KNOWLEDGE, THE SAME COMPLY WITH ALL RULES, REGULATIONS AND ORDINANCES OF KIRKLAND, WA RELATING TO STRUCTURES AND BUILDINGS.

ARCHITECT

| Drawn By | Checked By |
|---|---|
| KC | BW/RD |
| Scale | Date |
| AS NOTED | 04/20/18 |

Job No. 16-4170

Sheet No. A6.3




1 ELEVATION - STAGING

SCALE: 1/4" = 1'-0"

G.C. TO COORDINATE FINAL SHELF LOCATION WITH STORE SET TEAM AND STORE MANAGER.

C-15 SHELF MOUNTING HEIGHTS
SHELF HEIGHTS LISTED TOP TO BOTTOM AND IDENTIFIED AS LARGE OR SMALL SHELVES. DIMENSIONS ARE TO TOP OF SHELF. SHELVING FURNISHED BY ULTA AND INSTALLED BY GC.

| PCA | DAMAGES |
|---|---|
| 16.5" - small shelf | 7.5" - small shelf |
| 16.5" - small shelf | 7.5" - small shelf |
| 16.5" - small shelf | 7.5" - small shelf |
| 16.5" - small shelf | 9" - small shelf |
| 16.5" - small shelf | 10" - small shelf |
| 7" - small shelf | 20" - small shelf |
| 13.5" - large shelf | 18" - large shelf |
| | Base (as low as it can go) - large shelf |

| RAR | CLEANING |
|---|---|
| 10" - small shelf | 11" - large shelf |
| 10" - small shelf | 11"- large shelf |
| 80" - small shelf | 19" - large shelf |
| | 66" - large shelf |

ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

INTERIOR ELEVATIONS

CHIPMAN DESIGN ARCHITECTURE INC
JOHN A CHIPMAN ARCHITECT
1911 FIRST AVENUE
FIRST FLOOR, EAST
SEATTLE, WA 98101
PHONE 206.728.4000

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Job No. 16-4170

Sheet No. A6.4

City of Kirkland
Reviewed by
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05/30/2018

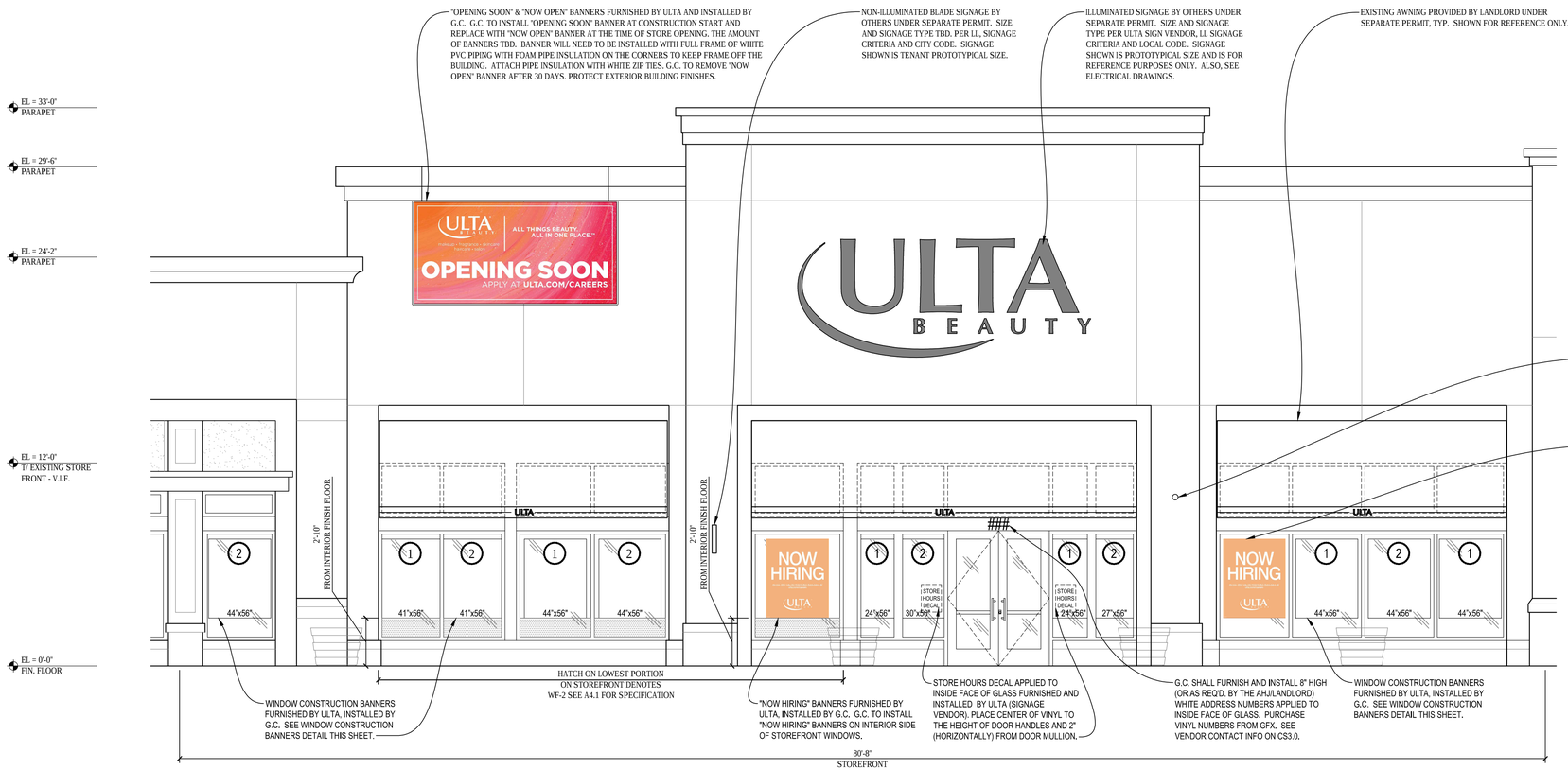



1 2

NOTE:
1. G.C. TO INSTALL WINDOW CONSTRUCTION BANNERS AS INDICATED. VERIFY WITH ULTA CONSTRUCTION MANAGER PRIOR TO INSTALLATION.
2. SEND DIGITAL PICTURES TO ULTA ONCE BANNERS ARE INSTALLED (WEEK 1).
3. ATTACH THE BANNERS TO THE STORE FRONT WINDOWS USING THE TAPE ON THE FRONT OF THE BANNERS. REPEAT THE LAYOUT PATTERN UNTIL WINDOWS ARE COVERED.
4. RE-ATTACH WITH TAPE TO ALU FRAMES AFTER FINAL CLEANING.
5. CONSTRUCTION BANNERS ARE TEMPORARY AND ARE REMOVED PRIOR TO STORE OPENING.
6. CONSTRUCTION BANNERS ARE NOT APPLICABLE TO MALL STOREFRONT. COORDINATE BARRICADE GRAPHICS WITH ULTA.

## 2 WINDOW CONSTRUCTION BANNERS

SCALE: NONE — NEW STORES




NOTE:
1. EXTERIOR ELEVATION SIGNAGE FOR REFERENCE ONLY.
2. POWER CONNECTION FOR SIGN NEEDS TO BE WITHIN 6 FT. FROM SIGN. G.C. TO COORDINATE SIGN AND AWNING INSTALLATION WITH ULTA SIGN VENDOR (KIEFFER SIGNS) PRIOR TO ROUGH-IN. SEE CS3.0 SHEET FOR SIGN VENDOR CONTACT INFO.
3. G.C. TO VERIFY QUALITY OF EXISTING EXTERIOR FINISHES, FOR EXAMPLE: PATCH AND REPAIR AREAS OF FINISHES. NOTIFY ULTA CONSTRUCTION MANAGER OF ANY AREAS REQUIRING WORK. IF AREAS OF EXTERIOR FINISH WORK ARE REQUIRED SEPARATE OUT THIS COST WITH EXPLANATION IN BID.
4. G.C. TO CAULK AROUND WALL PENETRATIONS CREATED BY SIGN INSTALLATIONS. CAULK COLOR TO MATCH EXTERIOR FINISH.
5. G.C. TO PATCH, REPAIR AND PAINT EXTERIOR TO MATCH EXISTING.
6. THE OPENING SOON AND NOW OPEN BANNERS WILL BE FURNISHED BY ULTA AND INSTALLED BY G.C. G.C. TO REFER TO INSTALLATION GUIDELINE PROVIDED BY SIGN VENDOR.

## 1 EXTERIOR ELEVATION

SCALE: 1/4"=1'-0"

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ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

EXTERIOR ELEVATION

CHIPMAN DESIGN ARCHITECTURE INC
JOHN A CHIPMAN ARCHITECT
1511 THIRD AVENUE
FIRST FLOOR EAST
SEATTLE, WA 98101
PHONE 206.340.1600

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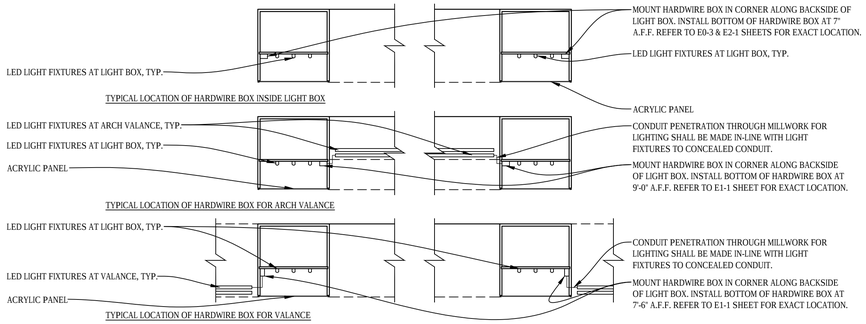
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## 6 TYPICAL HARDWIRE BOX LOCATIONS

SCALE: N.T.S.

## 5 NOT USED

SCALE:

## 4 NOT USED

SCALE: NONE

CEILING/SOFFIT INSTALLATION NOTES:

1. SUPPORT, BRACE, AND CONNECTIONS OF CEILINGS/SOFFITS TO ROOF STRUCTURE ABOVE AS PER APPLICABLE CODES AND MANUFACTURER DESIGN/SPECIFICATIONS. ATTACHMENT TO ROOF DECK IS NOT PERMITTED.

2. ALL GALVANIZED STUD AND JOISTS SHALL BE FORMED FROM STEEL THAT CORRESPONDS TO THE MINIMUM REQUIREMENTS OF THE LATEST EDITION OF THE A.I.S.I. STANDARDS

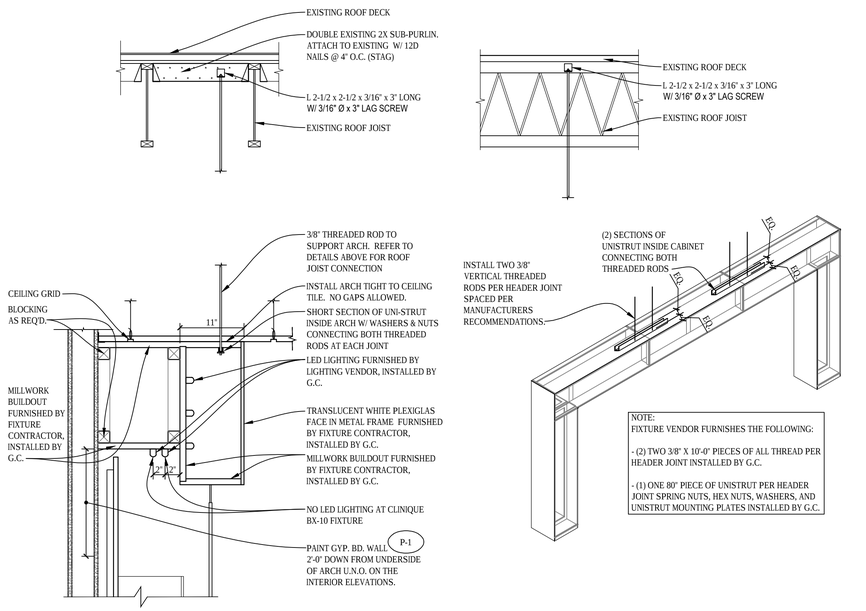
2. ALL STRUCTURAL MEMBERS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE AMERICAN IRON AND STEEL INSTITUTE(A.I.S.I.) "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS" LATEST EDITION.

3. G.C. SHALL FURNISH AND INSTALL ALL ACCESSORIES INCLUDING , BUT NOT LIMITED TO, TRACKS, CLIPS, WEB STIFFENERS, ANCHORS, FASTENING DEVICES, RESILIENT CLIPS, AND OTHER ACCESSORIES REQUIRED FOR COMPLETE AND PROPER INSTALLATION, AND AS RECOMMENDED BY THE MANUFACTURER FOR THE STEEL MEMBERS USED.

4. FASTENING OF COMPONENTS SHALL BE WITH SELF-DRILLING SCREWS OR WELDING. SCREWS OR WELDS SHALL BE OF SUFFICIENT SIZE TO INSURE THE STRENGTH OF THE CONNECTION. ALL WELDS OF GALVANIZED STEEL SHALL BE TOUCHED UP WITH A ZINC-RICH PAINT. ALL WELDS OF CARBON STEEL SHALL BE TOUCHED WITH PAINT. WIRE TYING OF COMPONENTS SHALL NOT BE PERMITTED.

## 3 ARCH VALANCE SECTION DETAIL

SCALE: 1" = 1'-0"




## 2 SOFFIT/CEILING NOTES

SCALE: N.T.S.

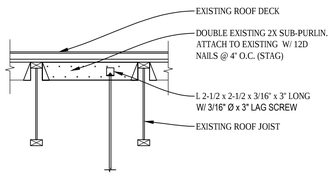
### WOOD JOIST PARALLEL TO DEMISING WALL



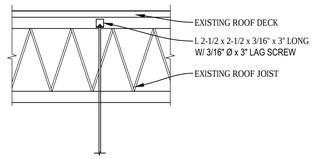

### WOOD JOIST PERPENDICULAR TO DEMISING WALL

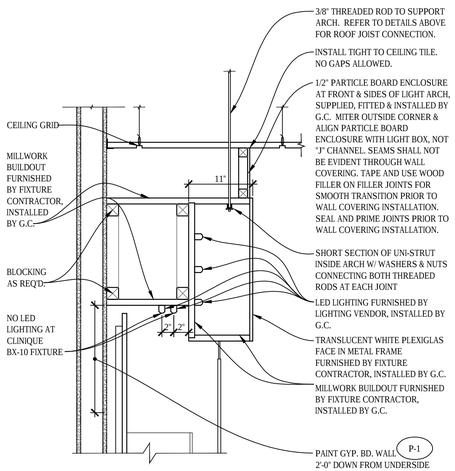


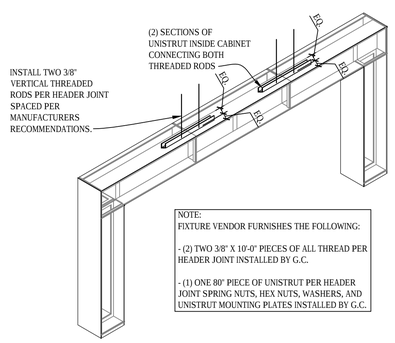

### (ROOF JOISTS PARALLEL TO DEMISING WALL)




### (ROOF JOISTS PERPENDICULAR TO DEMISING WALL)

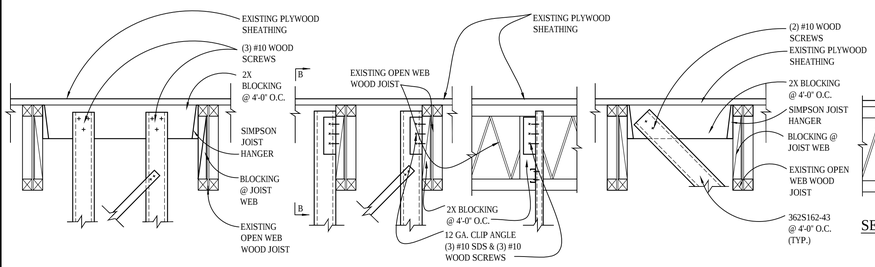



## 7 ARCH VALANCE SECTION DETAIL

SCALE: 1" = 1'-0"




A. CONNECTION DETAIL
PERPENDICULAR TO JOIST

B. CONNECTION DETAIL
PERPENDICULAR TO JOIST

C. CONNECTION DETAIL
PARALLEL TO JOIST

D. LATERAL BRACE CONNECTION DETAIL
AT ROOF STRUCTURE

E. WALL CONNECTION DETAIL
AT LATERAL BRACE

## 1 CONNECTION DETAILS

SCALE: N.T.S.

ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

CONSTRUCTION DETAILS

CHIPMAN DESIGN ARCHITECTURE INC
JOHN A CHIPMAN ARCHITECT
1511 3RD AVENUE
FIRST FLOOR, EAST
SEATTLE, WA 98101
PHONE 206.343.7340

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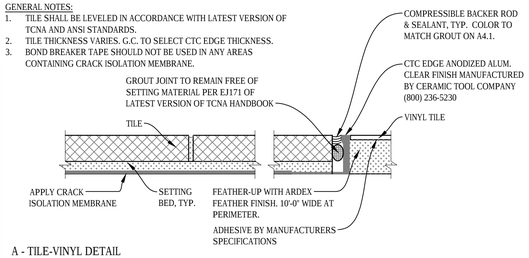
Job No. 16-4170

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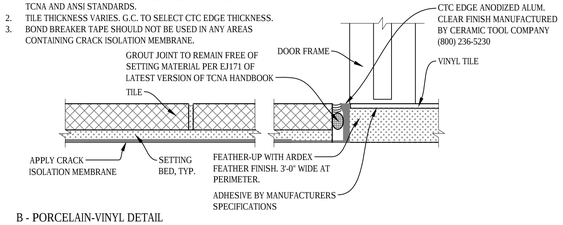
ENR18-03206
Page 22 of 56

GENERAL NOTES:
1. TILE SHALL BE LEVELED IN ACCORDANCE WITH LATEST VERSION OF TCNA AND ANSI STANDARDS.
2. TILE THICKNESS VARIES. G.C. TO SELECT CTC EDGE THICKNESS.
3. BOND BREAKER TAPE SHOULD NOT BE USED IN ANY AREAS CONTAINING CRACK ISOLATION MEMBRANE.



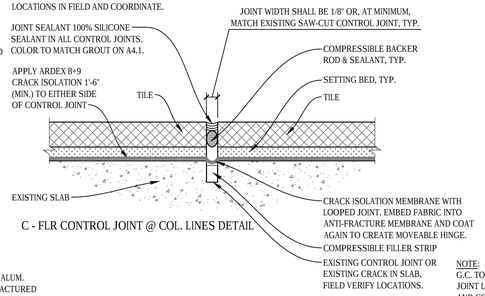

A - TILE-VINYL DETAIL

GENERAL NOTES:
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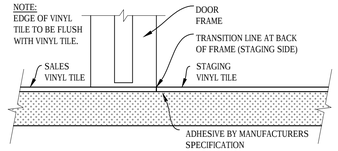

B - PORCELAIN-VINYL DETAIL

NOTE:
G.C. TO VERIFY CONTROL JOINT LOCATIONS IN FIELD AND COORDINATE.

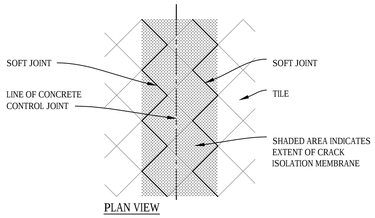



C - FLR CONTROL JOINT @ COL. LINES DETAIL

NOTE:
EDGE OF VINYL TILE TO BE FLUSH WITH VINYL TILE.

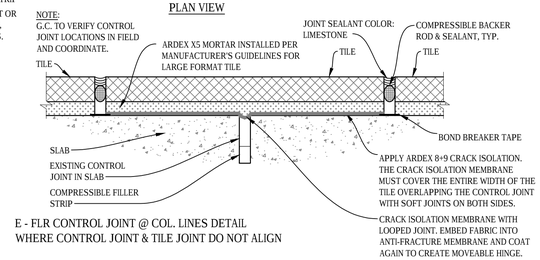



D - VINYL TILE - VINYL TILE

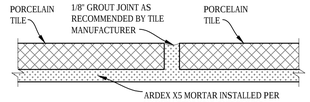



PLAN VIEW

NOTE:
G.C. TO VERIFY CONTROL JOINT LOCATIONS IN FIELD AND COORDINATE.



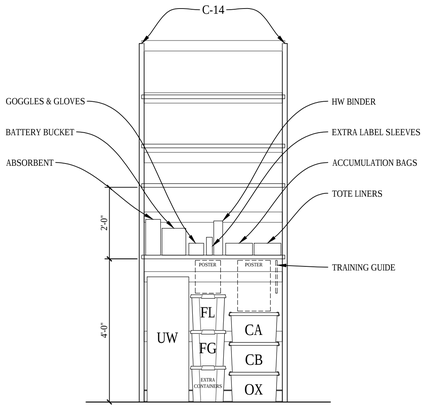

E - FLR CONTROL JOINT @ COL. LINES DETAIL
WHERE CONTROL JOINT & TILE JOINT DO NOT ALIGN




F - PORCELAIN-PORCELAIN DETAIL

# 9 FLOOR TRANSITION DETAILS

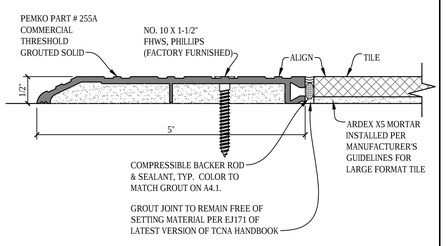
SCALE: NONE




# 11 C-14 DETAIL

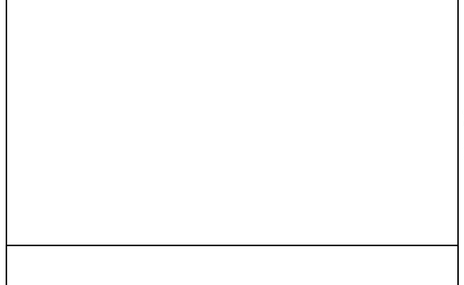
SCALE: N.T.S.

NOTE:
IF LL HAS NOT INSTALLED THIS THRESHOLD, REMOVE EXISTING AND FURNISH AND INSTALL AS SPECIFIED.




# 10 ENTRY DOOR TRANSITION

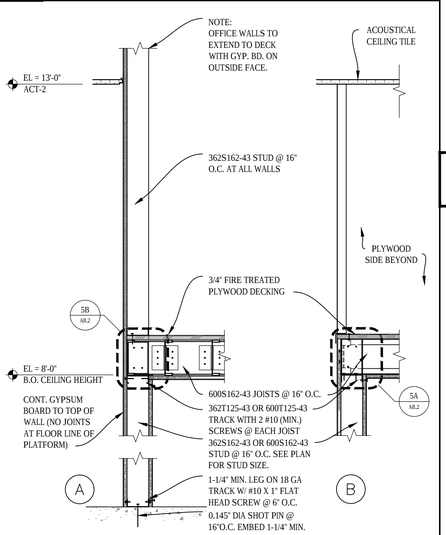
SCALE: N.T.S.




CERTAIN ELEMENTS NOT SHOWN FOR CLARITY

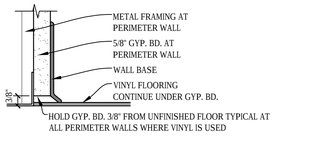
# 5 OFFICE STORAGE FRAMING DETAILS

SCALE: 3" = 1'-0"

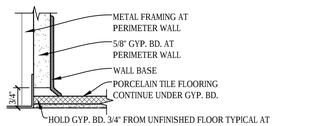



# 4 OFFICE STORAGE FRAMING DETAILS

SCALE: 1" = 1'-0"




A - DETAIL AT PERIMETER & INTERIOR WALLS & VINYL FLOORING



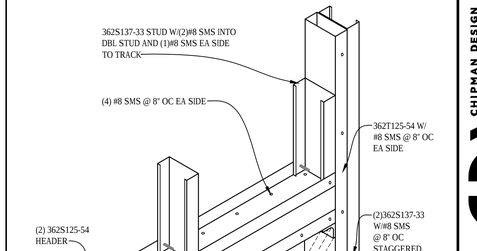

B - DETAIL AT PERIMETER & INTERIOR WALLS & PORCELAIN FLOORING

# 8 DETAIL AT PERIMETER WALLS

SCALE: N.T.S.

# 7 NOT USED

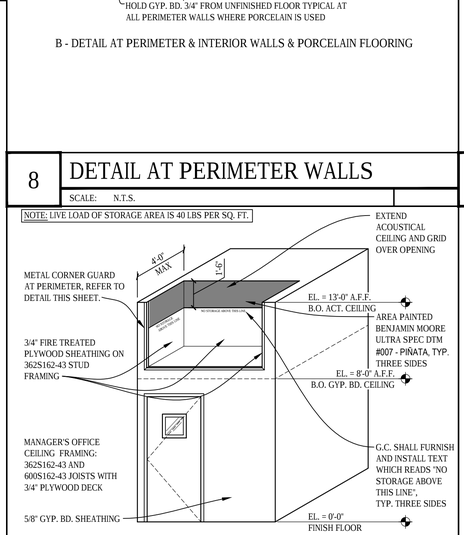
SCALE: NONE




# 6 OFFICE STORAGE HEADER DETAIL

SCALE: N.T.S.

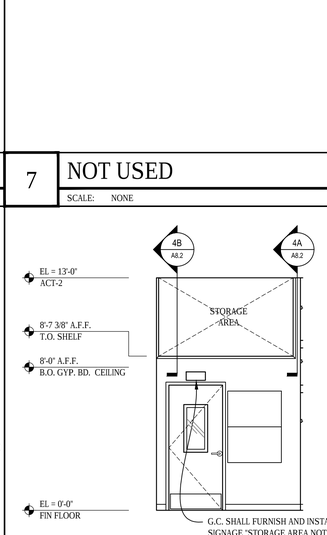
NOTE: LIVE LOAD OF STORAGE AREA IS 40 LBS PER SQ. FT.




NOTE:
NOT ALL ELEMENTS SHOWN FOR DIAGRAM CLARITY. SEE DETAILS.

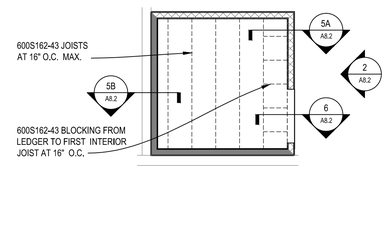
# 3 OFFICE STORAGE DIAGRAM

SCALE: 1/4" = 1'-0"




# 2 OFFICE STORAGE ELEVATION DETAIL

SCALE: 1/4" = 1'-0"




# 1 OFFICE STORAGE FRAMING DETAIL

SCALE: 1/4" = 1'-0"

ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

CONSTRUCTION DETAILS


CHIPMAN DESIGN ARCHITECTURE INC
JOHN A CHIPMAN ARCHITECT
1148 NE 45TH STREET
FIRST FLOOR EAST
SEATTLE, WA 98105
PHONE 206.547.1960


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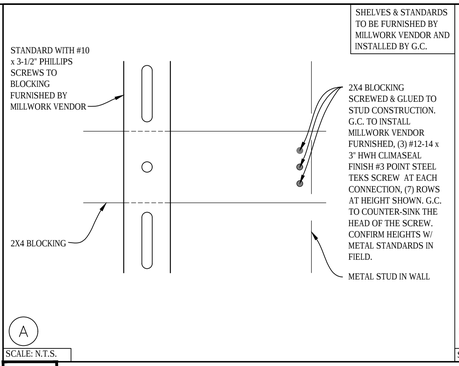
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Sheet No. A8.2

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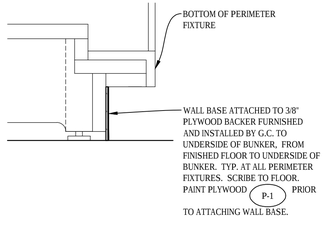
ENR18-03206
Page 23 of 56


Copyright Chipman Design Architecture Inc. 2018 C:\Users\Chipman Design\Documents\Revit Projects\1384_Kirkland_WA_Central_20180419_KC.rvt 4/20/2018 8:15:54 AM Printed: Apr 20, 2018 8:15:54 AM



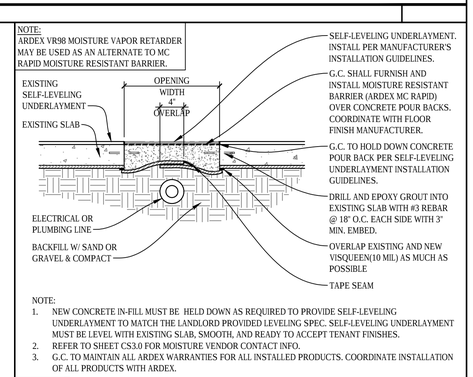

## 7 STAGING BLOCKING DETAIL

SCALE: AS NOTED




## 8 PERIMETER FIXTURE BASE DETAIL

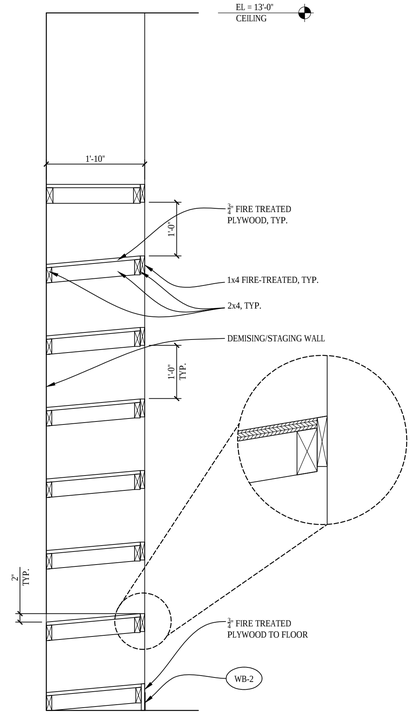
SCALE: 3" = 1'-0"




NOTE:
1. NEW CONCRETE IN-FILL MUST BE HELD DOWN AS REQUIRED TO PROVIDE SELF-LEVELING UNDERLAYMENT TO MATCH THE LANDLORD PROVIDED LEVELING SPEC. SELF-LEVELING UNDERLAYMENT MUST BE LEVEL WITH EXISTING SLAB, SMOOTH, AND READY TO ACCEPT TENANT FINISHES.
2. REFER TO SHEET CS3.0 FOR MOISTURE VENDOR CONTACT INFO.
3. G.C. TO MAINTAIN ALL ARDEX WARRANTIES FOR ALL INSTALLED PRODUCTS. COORDINATE INSTALLATION OF ALL PRODUCTS WITH ARDEX.

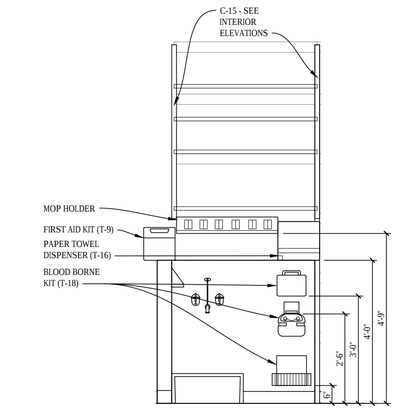
## 6 SLAB ON GRADE TRENCH DETAIL

SCALE: 1" = 1'-0"




## 4 SHELF STORAGE SECTION

SCALE: 3/4" = 1'-0"

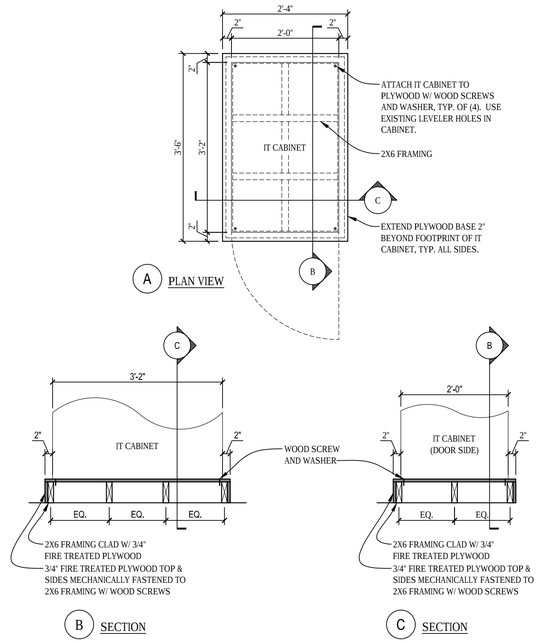



NOTE:
ALL MOP SINK ACCESSORIES ARE TO BE FURNISHED BY ULTA AND INSTALLED BY G.C. ULTA IS TO FURNISH (2) MOP HOLDERS. G.C. TO COORDINATE FINAL LOCATION OF THE 2ND MOP HOLDER W/ STORE SET TEAM

## 2 MOP SINK ACCESSORIES

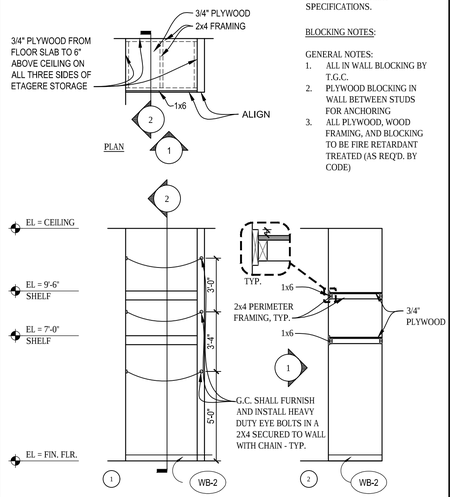
SCALE: 1/2" = 1'-0"

IT CABINET WEIGHT: 475 LBS.




## 5 IT CABINET BASE

SCALE: 3/4" = 1'-0"



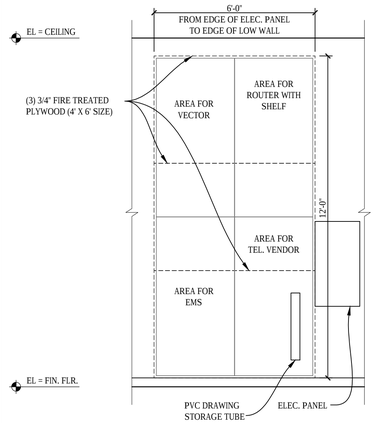

NOTE:
ALL SURFACES TO BE PAINTED P-1. REFER TO FINISH SPECIFICATIONS.

BLOCKING NOTES:

GENERAL NOTES:
1. ALL IN WALL BLOCKING BY T.G.C.
2. PLYWOOD BLOCKING IN WALL BETWEEN STUDS FOR ANCHORING
3. ALL PLYWOOD, WOOD FRAMING, AND BLOCKING TO BE FIRE RETARDANT TREATED (AS REQ'D. BY CODE)

## 3 ETAGERE SHELF DETAILS

SCALE: 1/4" = 1'-0"




## 1 TYPICAL EMS/TEL. LAYOUT

SCALE: N.T.S.

City of Kirkland
Reviewed by
J Tumelson
05/30/2018

ENR18-03206
Page 24 of 56

ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

CONSTRUCTION DETAILS

CHIPMAN DESIGN ARCHITECTURE INC
JOHN A CHIPMAN ARCHITECT
1008 WESTLAKE AVE N
FIRST FLOOR EAST
SEATTLE, WA 98109
PHONE 206.216.0600

Revisions
- ISSUE FOR CL/LL REVIEW 04/20/18
- ISSUE FOR PERMIT & BID 04/20/18

6367 REGISTERED ARCHITECT JOHN A. CHIPMAN STATE OF WASHINGTON

04/20/2018 DATE
06/30/2018 EXPIRATION DATE

I HEREBY CERTIFY THAT THESE PLANS HAVE BEEN PREPARED UNDER MY SUPERVISION AND THAT TO THE BEST OF MY KNOWLEDGE, THE SAME COMPLY WITH ALL RULES, REGULATIONS AND ORDINANCES OF KIRKLAND, WA RELATING TO STRUCTURES AND BUILDINGS.

ARCHITECT

| Drawn By | Checked By |
|---|---|
| KC | BW/RD |
| Scale | Date |
| AS NOTED | 04/20/18 |

Job No. 16-4170

Sheet No. A8.3

\\SEA-FS01\Projects\16-4170 ULTA Kirkland WA\Drawings\CAD\Construction Documents\CS Sheets\16-4170 CS Sheets.dwg, Sheet No. A8.3 Details, 05/30/2018 10:54:15 AM, Plotted by Caitlin Duncan, 30x42

SEISMIC REQUIREMENTS FOR ACOUSTICAL CEILINGS. THESE CHANGES ARE AS FOLLOWS:
A. WASHINGTON FALLS UNDER IBC SEISMIC CATEGORIES C, D.
B. ONLY HEAVY DUTY GRID MAY BE USED
C. MINIMUM 3/4" CLEARANCE FROM GRID END TO WALL
D. GRID MUST BE ATTACHED ON TWO ADJACENT WALLS, NO ATTACHMENT ON OTHER TWO WALLS
E. PERIMETER TENDS TIED TOGETHER AT PERIMETERS (SPACER/STABILIZER BAR) ON TEES THAT ARE NOT ATTACHED TO PERIMETER MOLDING
F. PARTITION ATTACHMENT BRACING IS REQUIRED TO BE INDEPENDENT FROM CEILING SPLAY BRACING
G. SEISMIC SEPARATION JOINT REQUIRED FOR AREAS> 2500 SQ. FT. (OR FULL HEIGHT PARTITIONS)

SUSPENDED CEILING SYSTEMS SHALL COMPLY WITH IBC 803.9, 1613.1 AND CISCA CATEGORY D. COMPLIANCE ALSO WITH ASTM C635 & C636 MODIFIED PER ASCE 7. COMPLY WITH ESR-1308

1. THE SUSPENDED CEILING SYSTEM SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH ASTM C635, ASTM C636, AND OTHER APPROVED METHODS AS MODIFIED BY THE FOLLOWING:
   - 1.1. A HEAVY DUTY T-BAR GRID SYSTEM SHALL BE USED.
   - 1.2. THE WIDTH OF THE PERIMETER SUPPORTING CLOSURE ANGLE SHALL BE NOT LESS THAN 2.0 INCHES. IN EACH ORTHOGONAL HORIZONTAL DIRECTION, ONE END OF THE CEILING GRID SHALL BE ATTACHED TO THE CLOSURE ANGLE. THE OTHER END IN EACH HORIZONTAL DIRECTION SHALL HAVE A 0.75 INCHES CLEARANCE FROM THE WALL AND SHALL REST UPON AND BE FREE TO SLIDE ON A CLOSURE ANGLE.
   - 1.3. MINIMUM 3/4" CLEARANCE FROM GRID END TO WALL
   - 1.4. GRID MUST BE ATTACHED ON TWO ADJACENT WALLS, NO ATTACHMENT ON OTHER TWO WALLS
   - 1.5. PERIMETER TENDS TIED TOGETHER AT PERIMETERS (SPACER/STABILIZER BAR) ON TEES THAT ARE NOT ATTACHED TO PERIMETER MOLDING
   - 1.6. PARTITION ATTACHMENT BRACING IS REQUIRED TO BE INDEPENDENT FROM CEILING SPLAY BRACING
   - 1.7. SEISMIC SEPARATION JOINT REQUIRED FOR AREAS> 2500 SQ. FT. (OR FULL HEIGHT PARTITIONS)

# GENERAL NOTES

SCALE: N.T.S.

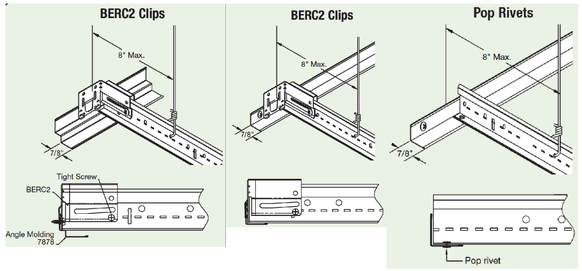
PERIMETER MOLDING OPTIONS
A. (ESR-1308)- 7/8" MOLDING - BERC2 CLIP
B. 2" PERIMETER WALL MOLDING

NOTES:
1. ALTERNATE METHODS ARE APPROVED PRIOR TO INSTALLATION BY THE LOCAL BUILDING DEPARTMENT AND THE DESIGNER OF RECORD. ONE END OF THE CEILING GRID SHALL BE ATTACHED TO THE WALL MOLDING, THE OTHER END SHALL A 3/4" CLEARANCE FROM THE WALL AND FREE TO SLIDE.

2. THE GRID SHALL BE ATTACHED AT TWO ADJACENT WALLS (POP RIVETS OR APPROVED METHOD).

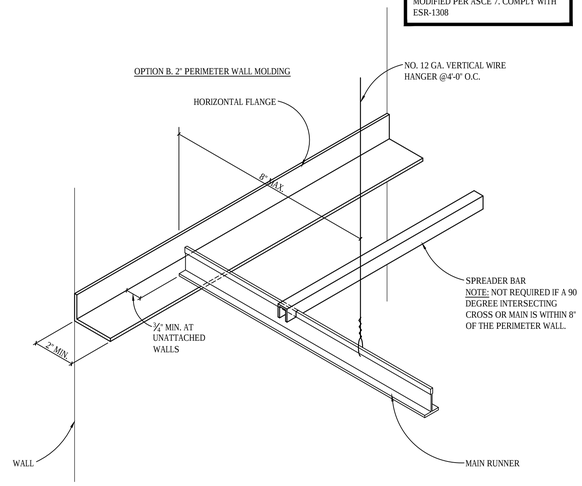
3. THERE SHALL BE A MINIMUM 3/4" CLEARANCE FROM THE END OF THE GRID SYSTEM AT UN-ATTACHED WALLS.

OPTION A. BERC2 CLIP




SUSPENDED CEILING SYSTEMS SHALL COMPLY WITH IBC 803.9, 1613.1 AND CISCA CATEGORY D.COMPLIANCE ALSO WITH ASTM C635 & C636 MODIFIED PER ASCE 7. COMPLY WITH ESR-1308

OPTION B. 2" PERIMETER WALL MOLDING




# 3 SUSPENDED CEILING - WALL MOLDINGS

SCALE: NONE

SUSPENDED CEILING WIRE HANGER AND STRUT DETAIL

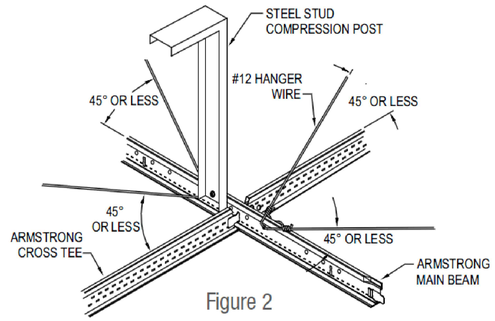
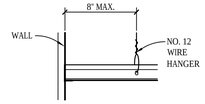



Figure 2

SUSPENDED CEILING SYSTEMS SHALL COMPLY WITH IBC 803.9, 1613.1 AND CISCA CATEGORY D.COMPLIANCE ALSO WITH ASTM C635 & C636 MODIFIED PER ASCE 7. COMPLY WITH ESR-1308

SUSPENDED CEILING NOTES:
1. PROVIDE HEAVY DUTY CEILING SUSPENSION SYSTEM.
2. MAIN RUNNER SUPPORT TO BE NO. 12 GA. VERTICAL WIRE HANGER @ 4'-0" O.C. @ AND 8" MAX. FROM EACH WALL. ATTACH TO SUSPENSION SYSTEM AND TO STRUCTURE ABOVE WITH MINIMUM THREE TIGHT TURNS IN 1-1/2".
3. LATERAL BRACING @ 12'-0" O.C. EACH WAY AND 6'-0" FROM EACH WALL. BRACING TO BE FOUR(4) NO. 12 WIRES ATTACHED TO MAIN RUNNER WITH FOUR TIGHT TURNS IN 1-1/2". ATTACH WITHIN 2" OF CROSS RUNNER. SPLAY WIRES 90 DEGREES FROM EACH OTHER AND 45 DEGREES FROM THE PLANE OF THE CEILING. PROVIDE STRUT AT LOCATION OF SPLAY WIRES AND FASTEN TO THE MAIN RUNNER AND TO THE STRUCTURE ABOVE.
4. ALL CEILING RECESSED LIGHT FIXTURES TO HAVE TWO NO. 12 WIRE HANGERS CONNECTED TO THE FIXTURE HOUSING WITHIN 3" CORNERS AT OPPOSITE CORNERS. CONNECT TO STRUCTURE ABOVE. THESE WIRES MAY BE SLACK.
5. EACH SURFACE MOUNTED LIGHT FIXTURE TO HAVE MINIMUM OF TWO 14 GA. POSITIVE CLAMPING DEVISES. PROVIDE A NO. 12 WIRE HANGER AT EACH CLAMPING DEVICE TO THE STRUCTURE ABOVE.
6. CEILING MECHANICAL AND LIGHT FIXTURES OVER 56 LBS. TO BE SUPPORTED SEPARATELY FROM STRUCTURE ABOVE.
7. PROVIDE 1" CLEARANCE AROUND ALL PENETRATIONS
8. PROVIDE POSITIVE BRACING AT CEILING

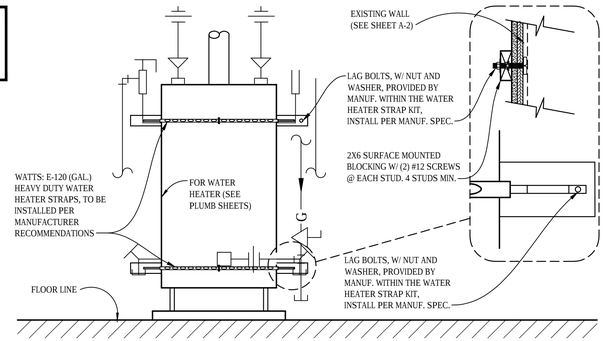



SUSPENDED CEILING AT WALL DETAIL

# 2 SUSPENDED CEILING INSTALLATION DETAILS

SCALE: NONE

NOTE:
ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. PROVIDE SEISMIC STRAP OR BRACING PER LOCAL AUTHORITIES.




# 1 WATER HEATER BRACING

SCALE: N.T.S.

City of Kirkland
Reviewed by
J Tumelson
05/30/2018

ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

SEISMIC DETAILS


CHIPMAN DESIGN ARCHITECTURE INC
JOHN A CHIPMAN ARCHITECT
1215 1ST AVENUE
FIRST FLOOR EAST
SEATTLE, WA 98101
PHONE 206.576.0600


Revisions
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6367 REGISTERED ARCHITECT JOHN A. CHIPMAN STATE OF WASHINGTON

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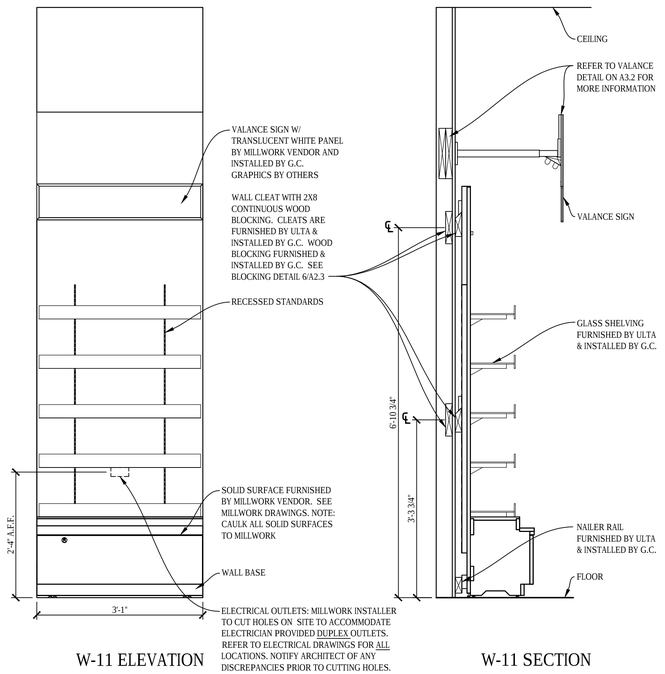
ARCHITECT

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|---|---|
| KC | BW/RD |
| Scale: AS NOTED | Date: 04/20/18 |

Job No. 16-4170

Sheet No. A8.4


\\pw\Projects\Active Projects\ULTA\Seismic\ULTA Seismic A1.0.dwg Thursday, May 31, 2018 9:23:53 PM Plotted By: Kelly Cullen Thursday, May 31, 2018 9:23 PM

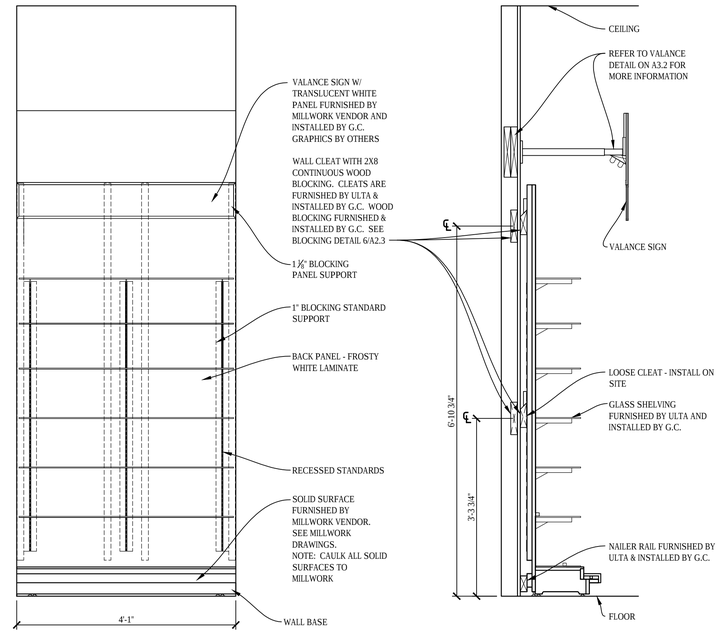



W-11 ELEVATION

W-11 SECTION

5 W-11 FIXTURE

SCALE: N.T.S.




W-10 ELEVATION

W-10 SECTION

4 W-10 FIXTURE

SCALE: N.T.S.

GENERAL NOTES:

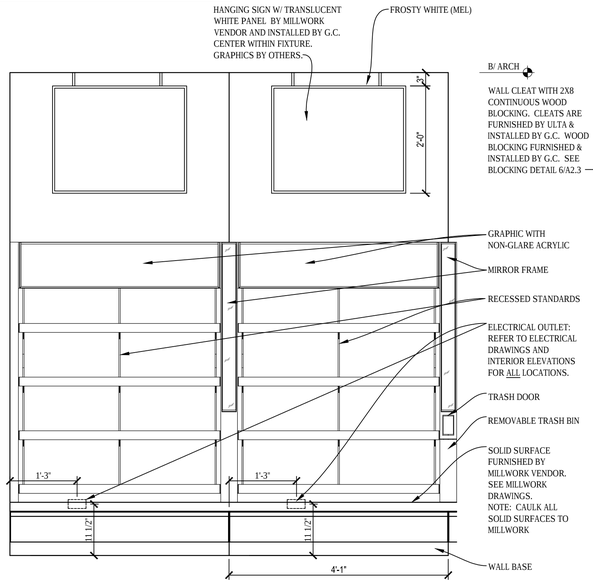
1. MILLWORK PROVIDED FOR REFERENCE ONLY. FOR QUESTIONS AND SITE SPECIFIC MILLWORK INFORMATION, CONTACT:
   CAP & ASSOCIATES, INC.
   CONTACT: ROBERT BARCA
   455 McCORMICK BLVD.
   COLUMBUS, OH 43213
   (P): 614-863-3363

   RODGERS WADE
   CONTACT: BARRY SHIVER
   1401 3RD S.W.
   PARIS, TEXAS 75460
   (P): 903-783-3655
2. REFER TO A1.1 FOR MILLWORK LOCATIONS.
3. REFER TO DETAIL 8/A8.3 FOR WALL BASE INSTALLATION AT PERIMETER MILLWORK FIXTURES.
4. G.C. TO COORDINATE ALL SHELF HEIGHTS WITH ULTA.
5. G.C.TO FURNISH AND INSTALL WOOD BLOCKING WITHIN WALL. PATCH/REPAIR GYP. BD. TO ORIGINAL CONDITION WHEN BLOCKING IS REQUIRED INSIDE EXISTING WALLS.
6. G.C. TO ADJUST THE 2x8 WOOD BLOCKING IN THE FIELD (AS REQ'D.) IF IT INTERFERES WITH LOCATION OF THE SPAZZER BAR BRACING. THE 2x8 WILL NEED TO REMAIN ALIGNED WITH THE FIXTURE CLEAT TO ENSURE SECURE ATTACHMENT.

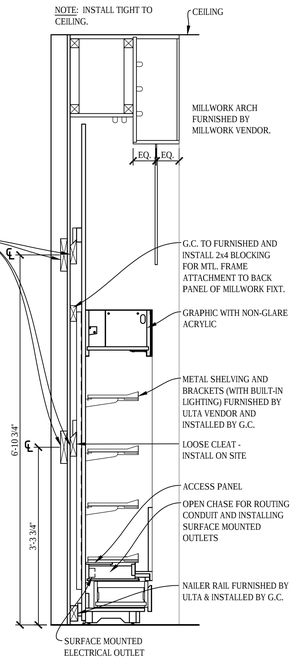
GENERAL NOTES

SCALE: N.T.S.

G.C. TO RUN AND TUCK ALL LED CORDS INTO THE RECESSED STANDARDS BETWEEN SHELVES THEN INSERT BACKER RODS. SHELVES SHOULD BE INSTALLED AFTER WIRING IS RECESSED INSIDE STANDARDS BUT PRIOR TO BACKER RODS. WHITE RUBBER PLUGS BY MILLWORK VENDOR FOR THE STANDARDS ABOVE THE TOP SHELF WILL NEED TO BE INSERTED INTO THE STANDARD CHANNEL TO CONCEAL THE CHANNEL ABOVE THE SHELF. NO LED CORDS DANGLING BETWEEN SHELVES. LED CORDS SHOULD ALL BE CONCEALED, TYP. G.C. TO FURNISH AND INSTALL SELF ADHERING WIRE CORNER WALL MOLD TO CONCEAL WIRES AS THEY LEAVE THE RECESSED STANDARDS AND ENTER THE OPENING TO THE OPEN CHASE WITHIN MILLWORK; BETWEEN BOTTOM SHELVES. CONSULT WITH ULTA PM IF THERE ARE ANY QUESTIONS.



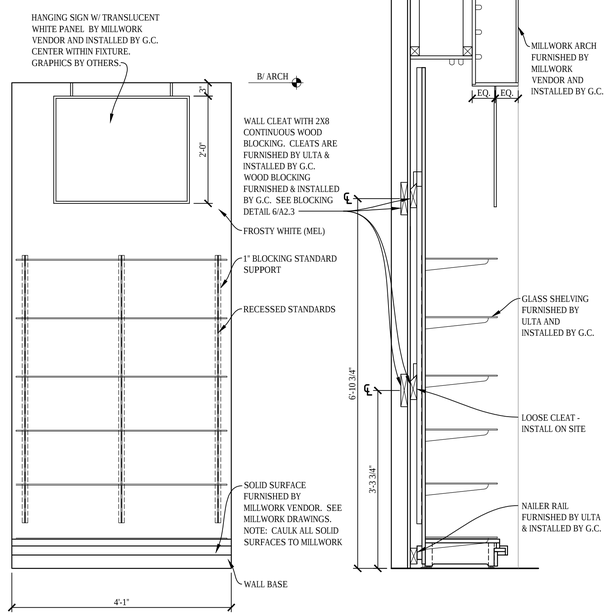

W-8 ELEVATION




W-8 SECTION

3 W-8 FIXTURE

SCALE: N.T.S.



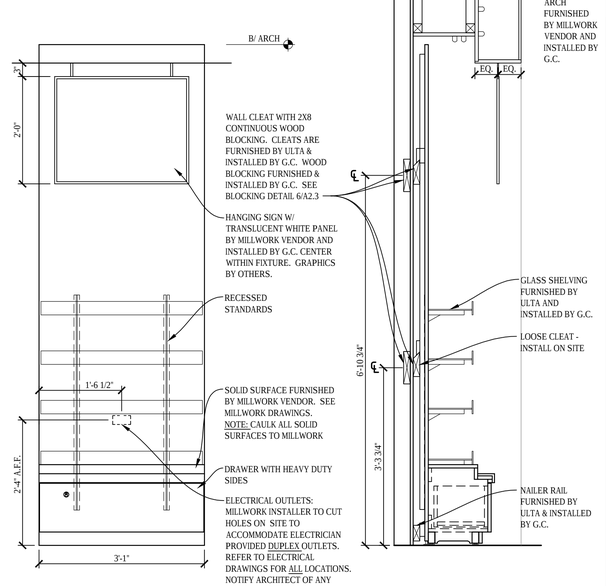

W-4B ELEVATION



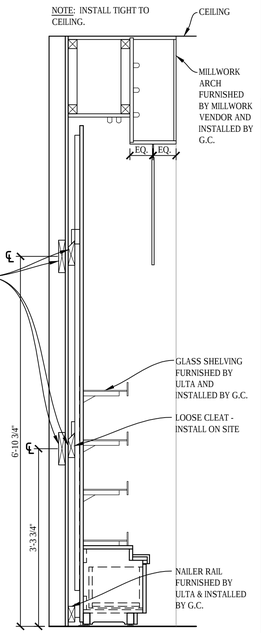

W-4B SECTION

2 W-4B FIXTURE

SCALE: N.T.S.




W-3B ELEVATION




W-3B SECTION

1 W-3B FIXTURE

SCALE: N.T.S.

City of Kirkland
Reviewed by
J Tumelson
05/30/2018

ENR18-03206
Page 26 of 56

ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

WALL FIXTURE DETAILS

CHIPMAN DESIGN ARCHITECTURE, INC.
JOHN A CHIPMAN ARCHITECT
1335 E. FOURTH AVE.
SUITE 100
DES PLAINES, IL 60018
PHONE 847.298.4900

Revisions
- ISSUE FOR CL/LL REVIEW 04/20/18
- ISSUE FOR PERMIT & BID 04/20/18

6367 REGISTERED ARCHITECT JOHN A. CHIPMAN STATE OF WASHINGTON

04/20/2018 DATE
06/30/2018 EXPIRATION DATE

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ARCHITECT

| Drawn By | Checked By |
|---|---|
| KC | BW/RD |
| Scale | Date |
| AS NOTED | 04/20/18 |

Job No. 16-4170

Sheet No. F1.1A

Document Set ID: 7180814 Version: 1 Comment: PERMIT SET

Z-ESS-WALL SECTION AT MIRROR




Z-ESS-WALL SECTION AT SINK




BX-10/X-27-W/X-53-W/PY-1A SECTION




Z-2B SECTION




C-43 SECTION

GENERAL NOTES:

1. MILLWORK PROVIDED FOR REFERENCE ONLY. FOR QUESTIONS AND SITE SPECIFIC MILLWORK INFORMATION, CONTACT:
   CAP & ASSOCIATES, INC.
   CONTACT: ROBERT BARCA
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   COLUMBUS, OH 43213
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6. G.C. TO ADJUST THE 2x8 WOOD BLOCKING IN THE FIELD (AS REQ'D.) IF IT INTERFERES WITH LOCATION OF THE SPAZZER BAR BRACING. THE 2x8 WILL NEED TO REMAIN ALIGNED WITH THE FIXTURE CLEAT TO ENSURE SECURE ATTACHMENT.

| | | |
|---|---|---|
| 4 | Z-ESS-WALL FIXTURE | SCALE: N.T.S. |
| 3 | BX-10/X-27-W/X-53-W/PY-1A FIXTURE | SCALE: N.T.S. |
| 2 | Z-2B FIXTURE | SCALE: N.T.S. |
| 1 | C-43 FIXTURE | SCALE: N.T.S. |
| | GENERAL NOTES | SCALE: N.T.S. |

CHIPMAN DESIGN ARCHITECTURE INC
JOHN A CHIPMAN ARCHITECT
1315 E. FOURTH AVE.
DES PLAINES, IL 60016
PHONE 847.298.4700

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

WALL FIXTURE DETAILS

Revisions
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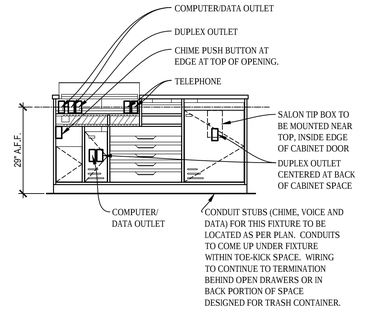
ARCHITECT

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| KC | BW/RD |
| Scale | Date |
| AS NOTED | 04/20/18 |

Job No. 16-4170

Sheet No. F1.1B

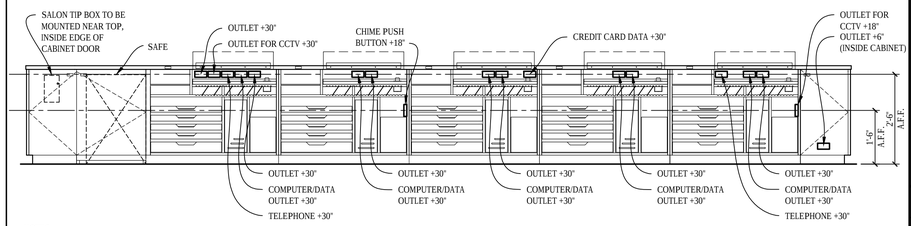
City of Kirkland
Reviewed by
J Tumelson
05/30/2018




NOTES:
1. FIXTURE FURNISHED BY MILLWORK MANUFACTURER. INSTALLED BY G.C. COORDINATE OUTLET LOCATIONS WITH MILLWORK MANUFACTURER.
2. ALL CONDUIT / WIRING WITHIN FIXTURE FURNISHED & INSTALLED BY G.C.
3. REFER TO ELECTRICAL DRAWINGS.
4. INSTALL OUTLETS ON INSIDE FACE OF BACK PANEL OF CASHWRAP UNLESS INDICATED OTHERWISE.

## 2 CONCIERGE / POWER ROUGH-IN ELEVATION

SCALE: 1/2" = 1'-0"




NOTES:
1. FIXTURE FURNISHED BY MILLWORK MANUFACTURER. INSTALLED BY G.C. COORDINATE OUTLET LOCATIONS WITH MILLWORK MANUFACTURER.
2. ALL CONDUIT / WIRING WITHIN FIXTURE FURNISHED & INSTALLED BY G.C.
3. REFER TO ELECTRICAL DRAWINGS.
4. INSTALL OUTLETS ON INSIDE FACE OF BACK PANEL OF CASHWRAP UNLESS INDICATED OTHERWISE.

## 1 CASHWRAP/ POWER ROUGH-IN ELEVATION

SCALE: 1/2" = 1'-0"

City of Kirkland
Reviewed by
J Tumelson
05/30/2018

ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

FIXTURE ELEVATIONS

CHIPMAN DESIGN ARCHITECTURE INC
JOHN A CHIPMAN ARCHITECT
1325 E FOURTH AVE
TWO ARLINGTON PLAZA
DES PLAINES, IL 60016
PHONE 847.298.4900

Revisions
- ISSUE FOR CL/LL REVIEW 04/20/18
- ISSUE FOR PERMIT & BID 04/20/18

6387 REGISTERED ARCHITECT JOHN A. CHIPMAN STATE OF WASHINGTON

04/20/2018 DATE
06/30/2018 EXPIRATION DATE

I HEREBY CERTIFY THAT THESE PLANS HAVE BEEN PREPARED UNDER MY SUPERVISION AND THAT TO THE BEST OF MY KNOWLEDGE, THE SAME COMPLY WITH ALL RULES, REGULATIONS AND ORDINANCES OF KIRKLAND, WA RELATING TO STRUCTURES AND BUILDINGS.

ARCHITECT

| Drawn By | Checked By |
|---|---|
| KC | BW/RD |
| Scale: AS NOTED | Date: 04/20/18 |

Job No. 16-4170

Sheet No. F1.1C

J:\2016\16-4170 Ulta 13845 - Bridgevine, WA\Revit\16-4170 F1.1 ELEVATIONS.rvt Sheet No. F1.1C ELEVATIONS Sheet Name: ELEVATIONS Saved by: kcarter Monday, April 23, 2018 1:58:59 PM Printed by: kcarter Friday, May 11, 2018 2:21 PM

SECTION 01010 - SUMMARY OF WORK

1.1 GENERAL

A. The Project consists of Tenant build-out within an existing Landlord owned building.

1. Project Location: As described on Cover Sheet.

2. Tenant: As described on Cover Sheet

B. Contract documents, dated 04/20/2018, were prepared for this Project by Chipman Design Architecture, Inc.

C. The Specifications following are generic, performance requirement type for general extend of work on systems performance, and set forth the intent of the Tenant, Ulta Salon, Cosmetics, Fragrance for materials and services to be provided to develop a complete and ready to operate tenant space.

D. The Work will be constructed under a single prime contract.

E. All construction procedures used must meet or exceed all national, state, O.S.H.A., and local codes.

F. Separate Contract: The Tenant, Ulta, Salon, Cosmetics, Fragrance has awarded a separate contracts for construction operations that will be conducted simultaneously with work under this Contract. That Contract includes the following:

1. Contract: Separate contracts are awarded for signage, display fixtures, security and alarms. Refer to section N and O for additional information.

G. Cooperate with separate contractors so that work under those contracts may be carried out smoothly, without interfering with or delaying work under this Contract.

H. Not Assigned.

I. The Work will be conducted in a single phase.

J. Contractor Use of Premises: During construction the Contractor shall have full use of premises, including use of the site. The Contractor's use of premises is limited only by the Tenant's right to perform work or employ other contractors on portions of the Project.

1. General Contractor shall contact Landlord to verify the times that he may work, routes of access and areas of use, storage, etc. including deliveries, and secure written approval of same prior to work start.

2. Bidders are to better acquaint themselves with conditions under which they will work at project site and locate all utilities before beginning work.

K. Use of the Site: Limit use of premises to areas indicated. Do not disturb portions of the site beyond the areas indicated.

1. Allow for Owner/Landlord and adjacent tenant occupancy and use by the public.

2. Keep driveways and entrances clear. Do not use these areas for parking or material storage. Schedule deliveries to minimize on-site storage of materials and equipment. Delivery schedule shall be approved by Landlord.

L. Use of the Existing Building: Maintain building weather tight. Repair damage caused by construction. Protect the building and its occupants during construction. Contractor shall provide barricades as necessary so as to prevent public access to unsafe conditions and construction site. Work must be secured each evening, or when construction is not preformed, to ensure that patrons/public do not have access to dangerous conditions.

M. Partial Tenant Occupancy: The Tenant reserves the right to occupy and to place and install equipment in completed areas of the tenant lease area prior to Substantial Completion. Placing equipment and partial occupancy do not constitute acceptance of the Work.

1. General Contractor is to apply for and obtain a Certificate of Occupancy from building officials prior to Tenant occupancy.

2. Mechanical and electrical systems shall be operational and required inspections and tests completed prior to partial Tenant occupancy. Upon occupancy, the Tenant will operate and maintain systems serving occupied portions of the lease area.

3. The Tenant will be responsible for maintenance and custodial service for occupied portions of the lease area.

N. Products Ordered in Advance: The Tenant has negotiated purchase orders with suppliers of material and equipment to be incorporated into the Work. Purchase orders are assigned to the Contractor. Receiving, handling, storage, and installation costs are included in the Contract Sum.

Tenant Supplied Items. The Work includes providing support systems to receive Tenant's equipment, and mechanical and electrical connections.

1. The Tenant will arrange for and deliver shop drawings,product data, and samples to the Contractor.

2. The Tenant will arrange and pay for delivery according to the Contractor's Construction Schedule.

3. Contractor shall submit a construction schedule to Tenant/Landlord prior to work start.

4. The Contractor will inspect items delivered for damage.

5. If items are damaged, defective, or missing, the Tenant will arrange for replacement.

6. The Tenant will arrange for field services and for the delivery of warranties to the Contractor.

7. The Contractor shall designate delivery dates in the Contractor's Construction Schedule.

8. The Contractor shall review shop drawings, product data, and samples and return them noting discrepancies or problems anticipated in using the product.

9. The Contractor is responsible for receiving, unloading, and handling Tenant furnished items at the site.

10. The Contractor is responsible for protecting items from damage, including exposure to the elements. The Contractor shall repair or replace items damaged as a result of his operations.

1.2 PRODUCTS (Not Applicable)

1.3 EXECUTION END OF SECTION 01010

SECTION 01019 - CONTRACT CONSIDERATIONS

1.GENERAL

1.1. SECTION INCLUDES

A. Schedule of Values.

B. Application for Payment.

C. Change procedures.

1.2 RELATED SECTIONS

A. Section 01300 - Submittals: Schedule of Values.

B. Section 01600 - Material and Equipment: Product substitutions and alternates.

1.3 SCHEDULE OF VALUES

A. Submit typed schedule on AIA Form G703 - Application and Certificate for Payment Continuation Sheet. Contractor's standard form or electronic media printout will be considered.

B. Submit Schedule of Values in duplicate within 20 days after date of Owner-Contractor Agreement.

C. Format: Identify each line item with number and title of the major specification Section.

D. Include in each line item, the amount of Allowances specified in this Section.

E. Include separately from each line item, a directly proportional amount of Contractor's overhead and profit.

F. Revise schedule to list approved Change Orders, with each Application For Payment.

1.4 APPLICATIONS FOR PAYMENT

A. Submit three copies of each application on AIA Form G702 - Application and Certificate for Payment.

B. Content and Format: Utilize Schedule of Values for listing items in Application for Payment.

C. Payment Period: 30 days.: Waiver of Lien to Date.

1.5 CHANGE PROCEDURES

A. The Architect/Engineer will advise of minor changes in the Work not involving an adjustment to Contract Sum/Price or Contract Time as authorized by AIA A201, 1987 Edition, Paragraph 7.4 by issuing supplemental instructions on AIA Form G710.

B. The Architect/Engineer may issue a Notice of Change which includes a detailed description of a proposed change with supplementary or revised Drawings and specifications, a change in Contract Time for executing the change with a stipulation of any overtime work required. Contractor will prepare and submit an estimate with seven days.

C. The Contractor may propose a change by submitting request for change to the Architect/Engineer, describing the proposed change and its full effect on the Work, including a complete breakdown indicating labor and materials costs. Include a statement describing the reason for the change, and the effect on the Contract Sum/Price and Contract Time with full documentation. Document any requested substitutions in accordance with Section 01600.

D. Stipulated Sum/Price Change Order: Based on Notice of Change and Contractor's fixed price quotation or Contractor's request for a Change Order as approved by Architect/Engineer.

E. Construction Change Directive: Architect/Engineer may issue a directive, on AIA Form G714 Construction Change Directive signed by the Owner, instructing the Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order. Document will describe changes in the Work, and designate method of determining any change in Contract Sum/Price or Contract Time. Promptly execute the change.

F. Time and Material Change Order: Submit itemized account and supporting data after completion of change, within time limits indicated in the Conditions of the Contract. Architect/Engineer will determine the change allowable in Contract Sum/Price and Contract Time as provided in the Contract Documents.

G. Maintain detailed records of work done on Time and Material basis. Provide full information required for evaluation of proposed changes, and to substantiate costs for changes in the Work.

H. Change Order Forms: AIA G701 Change Order.

I. Execution of Change Orders: Architect will issue Change Orders for signatures of parties as provided in the Conditions of the Contract.

1.6 ALTERNATES

A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at the Owner's option. Accepted Alternates will be identified in Owner-Contractor Agreement.

B. Coordinate related work and modify surrounding work as required.

2. PART 2 PRODUCTS

A. Not Used.

3. PART 3 EXECUTION

A. Insurance: Contractor shall, prior to commencement of work, Certificates of Insurance naming Owner, Architect, Construction Manager (if any), Landlord (if any) and their agents as Additional Insured, for the coverages below:

1. Public Liability including Contractor's Protective Liability, covering explosion and collapse, completed operations coverages (covering a period of at least two years after the date acceptance of the work by Owner), and broad form blanket contractual liability coverage, and shall insure against any and all claims for bodily injury, including death resulting therefrom and damage to the property of other and arising from its operations under the Contract, whether such operations are performed by such Contractors, or by anyone directly or indirectly employed by any of them.

2. Workman's Compensation and Employer's Liability Insurance as required by any Employee Benefit Acts or other statuses applicable where the work is to be performed as will protect Owner's Contractors from liability under aforementioned.

3. Comprehensive Automobile Liability Insurance, including the ownership, maintenance, and operation of any automotive equipment owned, hired and non-owned.

4. Personal injury and Property Damage.

5. Umbrella Liability Coverage: Contractor agrees to hold aforesaid parties harmless on all O.S.H.A. and Federal and State worker safety requirements, and shall fully comply with all such requirements as they apply to the methods and devices used in the execution of the work.

SECTION 01039 - COORDINATION AND MEETINGS

1. PART 1 GENERAL

1.1 SECTION INCLUDES

A. Coordination.

B. Field engineering.

C. Cutting and patching.

1.2 COORDINATION

A. Coordinate scheduling, submittals, and Work of the various Sections of specifications to assure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.

B. Verify that utility requirement characteristics of operating equipment are compatible with building utilities. Coordinate work of various Sections having interdependent responsibility for installing, connecting to, and placing in service, such equipment.

C. Coordinate space requirements and installation of mechanical and electrical work which are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with line of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.

D. In finished areas, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.

E. Coordinate completion and clean up of Work of separate Sections in preparation for Substantial Completion.

F. After Owner occupancy of premises, coordinate access to site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

1.3 FIELD ENGINEERING

A. Employ a Land Surveyor registered in the State of the project location and acceptable to the Owner and Architect/Engineer.

B. Owner will locate and protect survey control and reference points.

C. Control datum for survey is that established by Owner provide survey.

D. Provide field engineering services. Establish elevations, lines, and levels, utilizing recognized engineering survey practices.

E. Submit a copy of registered site drawing and certificate signed by the Land Surveyor that the elevations and locations of the Work are in conformance with the Contract Documents.

1.4 CUTTING AND PATCHING

A. Employ skilled and experienced installer to perform Cutting and patching.

B. Submit written request in advance of cutting or altering elements which affects:

4. Structural integrity of element.

5. Integrity of weather-exposed or moisture-resistant elements.

6. Efficiency, maintenance, or safety of element.

7. Visual qualities of sight-exposed elements.

8. Work of Owner or separate contractor.

C. Execute cutting, fitting, and patching including excavation and fill, to complete Work, and to:

1. Fit the several parts together, to integrate with other Work.

2. Uncover Work to install or correct ill-timed Work.

3. Remove and replace defective and non-conforming Work.

4. Remove samples of installed Work for testing.

5. Provide openings in elements of work for penetrations of mechanical and electrical Work.

D. Execute work by methods which will avoid damage to other Work, and provide proper surfaces to receive patching and finishing.

E. Cut rigid materials using masonry saw or core drill.

F. Restore Work with new products in accordance with requirements of Contract Documents.

G. Fit Work tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.

H. Maintain integrity of wall, ceiling, or floor construction completely seal voids.

I. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection; for an assembly, refinish entire unit.

J. Identify any hazardous substance or condition exposed during the Work to the Architect/Engineer for decision or remedy. Verify and locate all, buried or hidden, utilities prior to any sawcutting or coring.

2.1. PART 2 PRODUCTS

A. Not Used.

3.1.PART 3 EXECUTION

A. Not Used.

SECTION 01150 - ENVIRONMENTAL PROCEDURES

A. General Environmental Concerns: Project requires maximum environmentally conscious work feasible within limits specified, available materials, equipment, and products.

B. Special Environmental Definitions:

1. Environmental Pollution and Damage: Presence of chemical physical, or biological elements or agents which could:

a. Adversely affect human health or welfare.

b. Unfavorably alter ecological balances important to human life, affect other species of importance to humanity.

c. Degrade the utility of the environment for aesthetic, cultural or historical purposes.

2. Class III Landfill: Landfill that accepts non-hazardous waste such as household, commercial, and industrial waste, including construction, remodeling, repair, and demolition operations.

3. Construction and Demolition Waste: Solid wastes such as building materials, packaging, rubbish, debris, and rubble resulting from construction, remodeling, repair, and demolition operations.

4. Chemical Waste: Petroleum products, bituminous materials, salts, acids, alkals, herbicides, pesticides, organic chemical, and inorganic chemical wastes.

C. Special Environmental Submittals: Comply with general requirements specified in Section 01300 for submittals and with following special requirements.

D. Special Recycling Requirements:

1.Implement recycling program as required that includes separate collection of waste materials

E. Environmental Controls: Comply with federal, state, and local regulations pertaining to water, air, solid waste, chemical waste, sanitary waste, sediment and noise pollution.

F. Protection of Natural Resources: Preserve the natural resources within Project boundaries and outside limits of permanent work performed under Contract in existing condition or restore to an equivalent or improved condition upon completion of Work.

G. Hazardous Materials: If hazardous materials are discovered Client Landlord are to immediately notified for remediation.

SECTION 01300 - SUBMITTALS

1. PART 1 GENERAL

1.1 SECTION INCLUDES

A. Submittal procedures.

B. Construction progress schedules.

C. Shop drawings.

D. Product data.

E. Samples.

F. Manufacturers' instructions.

G. Manufacturers' certificates.

1.2 RELATED SECTIONS

A. Section 01019 - Contract Considerations: Schedule of Values.

B. Section 01400 - Quality Control: Manufacturers' field services and reports.

C. Section 01700 - Contract Closeout: Contract warranty and manufacturer's certificates closeout submittals.

1.3 SUBMITTAL PROCEDURES

A. Transmit each submittal with AIA Form G810.

B. Sequentially number the transmittal forms. Re-submittals to have original number with an alphabetic suffix.

C. Identify Project, Contractor, Subcontractor or supplier; pertinent Drawing sheet and detail number(s), and specification Section number, as appropriate.

D. Apply Contractor's stamp, signed or initialed certifying that review, verification of Products required, field dimensions, adjacent construction Work, and coordination of information, is in accordance with the requirements of the Work and Contract Documents.

E. Schedule submittals to expedite the Project, and deliver to Architect/Engineer at business address.Coordinate submission of related items.

F. Identify variations from Contract Documents and Product or system limitations which may be detrimental to successful performance of the completed Work.

G. Provide space for Contractor and Architect/Engineer review stamps. Architect's review will commence upon receipt of contractor reviewed and stamped submittals. Submittals received without such General Contractor review will be returned not reviewed.

H. Revise and resubmit submittals as required, identify all changes made since previous submittal.

I. Distribute copies of reviewed submittals to concerned parties Instruct parties to promptly report any inability to comply with provisions.

1.4 CONSTRUCTION PROGRESS SCHEDULES

A. Submit initial progress schedule in duplicate within 20 days after date of Owner-Contractor Agreement for Architect/Engineer review.

B. Revise and resubmit as required.

C. Submit a horizontal bar chart with separate line for each major section of Work or operation, identifying first work day of each week.

D. Show complete sequence of construction by activity, identifying Work of separate stages and other logically grouped activities. Indicate the early and late start, early and late finish, float dates, and duration.

1.5 SHOP DRAWINGS

A. Submit in electronic format.

B. After review, reproduce and distribute in accordance with Article on Procedures above and for Record Documents described in Section 01700 - Contract Closeout.

1.6 PRODUCT DATA

A. Submit the number of copies which the Contractor requires, plus two copies which will be retained by the Architect/Engineer. Electronic format preferred.

B. Mark to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information unique to this Project.

C. After review, distribute in accordance with Article on Procedures above and provide copies for Record Documents described in Section 01700 - Contract Closeout.

1.7 SAMPLES

A. Submit samples to illustrate functional and aesthetic characteristics of the Product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work

B. Submit samples of finishes from the full range of colors selected, textures, and patterns for Architect/Engineer's selection.

C. Include identification on each sample, with full project information.

D. Submit the number or samples specified in individual specification Sections; one of which will be retained by Architect/Engineer.

1.8 MANUFACTURER'S INSTRUCTIONS

A. When specified in individual specification sections, submit manufacturers' printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, in quantities specified for Product Data.

B. Identify conflicts between manufacturers' instructions and Contract Documents. 1.8 MANUFACTURER'S CERTIFICATES

C. When specified in individual specification sections, submit manufacturers' certificate to Architect/Engineer for review, in quantities specified for Product Data.

D. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference date, affidavits, and certifications as appropriate.

E. Certificates may be recent or previous test results on material or Product, but must be acceptable to Architect/Engineer.

F. After Owner occupancy of premises, coordinate access to site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

1.3 FIELD ENGINEERING

A. Employ a Land Surveyor registered in the State of the project location and acceptable to the Owner and Architect/Engineer.

B. Owner will locate and protect survey control and reference points.

C. Control datum for survey is that established by Owner provide survey.

D. Provide field engineering services. Establish elevations, lines, and levels, utilizing recognized engineering survey practices.

E. Submit a copy of registered site drawing and certificate signed by the Land Surveyor that the elevations and locations of the Work are in conformance with the Contract Documents.

1.4 CUTTING AND PATCHING

A. Employ skilled and experienced installer to perform Cutting and patching.

B. Submit written request in advance of cutting or altering elements which affects:

4. Structural integrity of element.

5. Integrity of weather-exposed or moisture-resistant elements.

6. Efficiency, maintenance, or safety of element.

7. Visual qualities of sight-exposed elements.

8. Work of Owner or separate contractor.

C. Execute cutting, fitting, and patching including excavation and fill, to complete Work, and to:

1. Fit the several parts together, to integrate with other Work.

2. Uncover Work to install or correct ill-timed Work.

3. Remove and replace defective and non-conforming Work.

4. Remove samples of installed Work for testing.

5. Provide openings in elements of work for penetrations of mechanical and electrical Work.

D. Execute work by methods which will avoid damage to other Work, and provide proper surfaces to receive patching and finishing.

E. Cut rigid materials using masonry saw or core drill.

F. Restore Work with new products in accordance with requirements of Contract Documents.

G. Fit Work tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.

H. Maintain integrity of wall, ceiling, or floor construction completely seal voids.

I. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection; for an assembly, refinish entire unit.

J. Identify any hazardous substance or condition exposed during the Work to the Architect/Engineer for decision or remedy. Verify and locate all, buried or hidden, utilities prior to any sawcutting or coring.

2.1. PART 2 PRODUCTS

A. Not Used.

3.1.PART 3 EXECUTION

A. Not Used.

SECTION 01400 - QUALITY CONTROL

1. PART 1 GENERAL

1.1 SECTION INCLUDES

A. Quality assurance and control of installation.

B. References.

C. Manufacturers' field services and reports.

1.2 RELATED SECTIONS

A. Section 01300 - Submittals: Submission of Manufacturers' Instructions and Certificates.

B. Section 01600 - Material and Equipment: Requirements for material and product quality.

1.3 QUALITY ASSURANCE/CONTROL OF INSTALLATION

A. Monitor quality control over suppliers, manufacturers, Products, services, site conditions, and workmanship, to produce Work of specified quality.

B. Comply fully with manufacturers' instructions, including each step in sequence.

C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.

D. Comply with specified standards as a minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

E. Perform work by persons qualified to produce workmanship of specified quality.

F. Secure Products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.

1.4 REFERENCES

A. Conform to reference standard by date of issue current on date of Contract Documents.

B. Obtain copies of standards when required by Contract Documents.

C. Should specified reference standards conflict with Contract Documents, request clarification for Architect/Engineer before proceeding.

D. The Contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

1.5 MANUFACTURERS' FIELD SERVICES AND REPORTS

A. When specified in individual specification Sections, require material or Product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust, and balance of equipment as applicable, and to initiate instructions when necessary.

B. Individuals to report observations and sit decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

C. Submit report in duplicate within 30 days of observation to Architect/Engineer for review.

2. PART 2 PRODUCTS

A. Not Used.

3. PART 3 EXECUTION

A. Not Used.

SECTION 01450 - CONCRETE SLAB MOISTURE AND pH TESTING

Part 1 - General

1.01 Section Includes

A. Provide concrete slab moisture vapor emission in-situ relative humidity and surface pH (alkalinity) testing on all concrete slabs specified to be covered with floor coverings or resinous coatings.

1.02 Related Sections

A. Section 09620 - Specialty Flooring

B. Section 09640 - Wood Flooring

C. Section 09650 - Resilient Flooring

D. Section 09660 - Static Control Flooring

E. Section 09670 - Fluid Applied Flooring

F. Section 09680 - Carpet

1.03 References

- ASTM F-1869 - Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.
- ASTM F-2170-11 - Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using In-Situ Probes.
- ASTM F-710-11 - Standard Practice for Preparing Concrete Floor and Other Monolithic Floors to Receive Resilient Flooring.
- ICRI Guideline 03732 - Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, and Polymer Overlays.

1.04 Submittals

A. At completion of testing, Owner's National Moisture Testing Vendor shall submit a Certified Moisture Test Report to Architect, General Contractor, and Tenant's Construction Project Manager. Report shall include the following:

A. Executive Summary

B. Moisture and pH Test Report

C. Test Site Floor Plan

D. Test Site Photographs

E. Test Result Mapping Diagram

F. Risk Assessment and Repair Option Chart

B. Information furnished in Moisture Test Report shall not be used to modify requirements unless otherwise specified or directed by Tenant.

1.05 Quality Assurance

A. Digital "Reader" and calibrated relative humidity sensors

1. Factory-calibrated "Smart Sensors" using Touch-n-Sense™ technology.

2. NIST-traceable factory calibration

B. Wide range pH paper, and distilled or de-ionized water.

1.06 Scheduling and Sequencing

A. Provide access for and cooperate with Tenant's National Account Vendor:

1. IFTI - Independent Floor Testing & Inspection, Inc. Contact: Jennifer Armstrong (800) 490-3657 x217. Email: ulta.spec@ifti.com

2. No substitutions or alternate testing company is permitted.

B. Ensure that the building is enclosed and at service conditions or within ASTM range for at least 48 hours prior to testing.

1. Maintain ambient temperatures of not less than 65°f or more than 85°f in spaces to receive testing for 48 hours prior to commencement of and during testing.

2. Maintain relative humidity between 40 and 60 percent in spaces to receive testing for 48 hours prior to commencement of and during testing.

C. Notify Tenant's National Account Vendor no less than 10 working days prior to commencement of testing. Tenant's National Account Vendor will require no more than 4 working days for testing on Site and will issue Moisture Testing Report no more than 3 working days after completion of testing.

D. Notify Tenant's National Account Vendor when the building is enclosed and temperature and relative humidity meet the requirements for testing.

1. In the event that a return trip by Tenant's National Account Vendor is required as a result of contractor's failure to achieve the specified temperature and humidity criteria, then the contractor shall be responsible for paying all associated costs which shall be billed accordingly by Tenant's National Account Vendor to the contractor.

E. Testing shall take place after allowing new concrete to dry for minimum of 28 days. Testing is to commence no less than 3 and no more than 6 weeks prior to the scheduled flooring installation.

Part 2 - Products

2.01 - Manufacturers

A. Rapid RH® relative humidity and temperature sensor kit as manufactured by Wagner Meters (800) 634-9961, or equal.

B. pH test paper as manufactured by Micro Essential Laboratory, or equal.

Part 3 - Execution

3.01 - Quantification of Relative Humidity at 40% of Concrete Thickness

A. The test site should be maintained at the same temperature and humidity conditions as those anticipated during normal occupancy. These temperature and humidity levels should be maintained for 48 hours prior and during test period. When a building is not under HVAC control, a recording hygrometer or data logger shall be in place recording conditions during the test period. A transcript of this information must be included with the test report.

B. The number of in-situ relative humidity test sites is determined by the square footage of the facility. The minimum number of tests to be placed is equal to 3 in the first 1,000 sq.ft. and 1 per each additional 1,000 square feet.

C. Determine the thickness of the concrete slab, typically from construction documents.

D. Utilizing a roto-hammer, drill test holes to a depth equal to 40% of the concrete thickness*, i.e, 2" deep for a 5" thick slab, or 1 ½" deep for a 4" thick slab. Hole diameter shall not exceed outside diameter of the probe by more than 0.04". Drilling operation must be dry.

E. Vacuum and brush all concrete dust from test hole.

F. Insert a relative humidity probe (sensor) to the full depth of test hole. Place cap over probe.

G. Permit the test site to acclimate, or equilibrate for 1-2 hours prior to taking relative humidity readings.

H. Remove the cap, insert the cylindrical reading device, and press button on the device to obtain reading from the in-situ probe.

I. Read and record temperature and relative humidity at the test site.

* Elevated structural slab (not poured in pans) should be tested at a depth equal to 20% of its thickness.

3.02 Quantifying pH level.

A. At or near the relative humidity test site perform pH test.

1. Place several drops of water onto the concrete surface to form a puddle approximately 1" in diameter.

2. Allow the water to set for approximately 60 seconds

3. Dip the pH paper into the water and remove immediately, compare color to chart provided by paper supplier to determine pH reading

B. Record and report results.

C. Flatness/Levelness Testing: Comply with ASTM E1155, but provide a minimum of one line of sampling in two perpendicular directions through each structural bay.

1. Perform testing using a "Dipstick Profiler" within 72 hours of concrete placement.

2. Concrete coning from Tenant's Criteria or which fails required Quality Assurance testing, including Flatness/Levelness requirements, shall be removed and replaced at Tenant's discretion. Copy of Flatness/Levelness Test is required to be submitted to Tenant as part of the Project Close Out Requirements.

01500 CONSTRUCTION FACILITIES

A. Temporary Power: Provide power service and lighting required for operations, with branch wiring and distribution boxes located to allow service and lighting by means of construction-type power cords.

B. Noise, Dust and Pollution Control: Provide materials and equipment necessary to comply with Landlord and local requirements for noise, dust and pollution control.

C. Barriers and Enclosures: Provide environmentally safe barriers as may be required to protect adjacent properties from damage from operations: and as required by governing authorities and/or Landlord.

D. Cleaning: Control accumulation of waste materials and rubbish; recycle or dispose of off-site at intervals approved by Landlord and complying with special environmental procedures specified in Section 01150.

E. Signs: No signage shall be allowed.

F. Removal and Cleaning: Remove construction facilities, clean and repair damage, in excess of Contract requirements,caused by operations or use of temporary facilities.

SECTION 01650 - STARTING OF SYSTEMS

1.PART 1 GENERAL

1.1 SECTION INCLUDES

A. Starting systems.

B. Demonstration and instructions.

C. Testing, adjusting, and balancing.

1.2 RELATED SECTIONS

A. Section 01400 - Quality Control: Manufacturers field reports.

B. Section 01700 - Contract Closeout: System operation and maintenance data and extra materials.

1.3 STARTING SYSTEMS

A. Coordinate schedule for start-up of various equipment and systems.

B. Notify Owner seven days prior to start-up of each.

C. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, or other conditions which may cause damage.

D. Verify that tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.

E. Verify wiring and support components for equipment are complete and tested.

F. Execute start-up under supervision of responsible manufacturer's representative in accordance with manufacturers' instructions.

G. When specified in individual specification Sections, require manufacturer to provide authorized representative to be present at site to inspect, check and approve equipment or system installation prior to start-up, and to supervise placing equipment or system in operation.

H. Submit a written report in accordance with Section 01400 that equipment or system has been properly installed and is functioning correctly.

1.4 DEMONSTRATION AND INSTRUCTIONS

A. Demonstrate operation and maintenance of Products to Owner's personnel one week prior to date of Substantial Completion.

B. For equipment or systems requiring seasonal operation, perform demonstration for other season within six months.

C. Utilize operation and maintenance manuals as basis for instruction. Review contents of manual with Owners' personnel in detail to explain all aspects of operation and maintenance.

D. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment at agreed-upon times, at equipment location.

E. Prepare and insert additional data in operations and maintenance manuals when need for additional data becomes apparent during instruction.

1.5 TESTING, ADJUSTING, AND BALANCING

A. Contractor will appoint, employ, and pay for services of an independent firm to perform testing, adjusting and balancing.

B. The independent firm will perform services specified in Mechanical sections.

C. Reports will be submitted by the independent firm to the Architect/Engineer indicating observations and results of tests and indicating compliance or non-compliance with specified requirements and with the requirements of the Contract Documents.

2.PART 2 PRODUCTS

A. Not Used.

3.PART 3 EXECUTION

A. Not Used.

SECTION 01700 - CONTRACT CLOSEOUT

1. PART 1 GENERAL

1.1 SECTION INCLUDES

A. Closeout procedures.

B. Final cleaning.

C. Adjusting.

D. Project record documents.

E. Operation and maintenance data.

F. Warranties.

G. Spare parts and maintenance materials.

1.2 RELATED SECTIONS

A. Section 01500 - Construction Facilities and Temporary Controls: Progress cleaning.

B. Section 01650 - Starting of Systems: System start-up, testing, adjusting, and balancing.

1.3 CLOSEOUT PROCEDURES

A. Submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for Owner's inspection.

B. Provide submittals to Owner that are required by governing or other authorities.

C. Submit final Application for Payment identifying total adjusted Contract Sum, previous payments and sum remaining due to Owner.

1.4 FINAL CLEANING

A. Execute final cleaning prior to final inspection.

B. Clean interior and exterior glass and surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.

C. Clean equipment and fixtures to a sanitary condition.

D. Replace filters of operating equipment.

E. Clean debris from roofs, gutters, downspouts, and drainage systems.

F. Clean site; sweep paved areas, rake clean landscaped surfaces.

G. Remove waste and surplus materials, rubbish, and construction facilities from the site.

1.5 ADJUSTING

A. Adjust operating Products and equipment to ensure smooth and unhindered operation.

1.6 PROJECT RECORD DOCUMENTS

A. Maintain on site, one set of the following record documents; record actual revisions to the Work:

1. Contract Drawings.

2. Specifications.

3. Addenda.

4. Change Orders and other Modifications to the Contract.

5. Reviewed shop drawings, product data, and samples.

B. Record information concurrent with construction progress.

C. Specifications: Legibly mark and record at each Product section description of actual Products installed.

D. Record Documents and Shop Drawings: Legibly mark each item to record actual construction.

E. Delete Architect/Engineer title block and seal from all documents.

F. Submit owner required documents to Owner in format required by owner with claim for final Application for Payment.

1.7 OPERATION AND MAINTENANCE DATA

A. Submit two sets prior to final inspection, bound in 8-1/2 x 11 inch text pages to Owner, three ring binders with durable covers.

B. Prepare binder covers with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS", title of project.

C. Subdivide the binder contents with page dividers, organized as described below; with tab titling clearly printed under plastic tabs.

D. Contents: Prepare a Table of Contents for each volume, with each Product or system description identified, type on white paper.

E. Part 1: Directory, listing names, addresses, and telephone numbers of Architect/Engineer, Contractor, Subcontractors, and major equipment suppliers.

F. Part 2: Operation and maintenance instructions, arranged by system and subdivided by specification section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers.

G. Part 3: Project documents and certificates, including the following:

1. Shop drawings and product data.

2. Air and water balance reports.

3. Certificates.

4. Photocopies of warranties.

H. Submit one copy of completed volumes in final form 7 days prior to final inspection. This copy will be returned after final inspection, with Owner comments. Revise content of documents as required prior to final submittal.

I. Submit final volumes revised, within 15 days after final inspection to Owner.

1.8. WARRANTIES

A. Provide duplicate notarized copies.

B. Execute and assemble documents from Subcontractors, suppliers, and manufacturers. Provide Table of Contents and assemble in three ring binder with durable cover.

C. Submit prior to final Application for Payment.

D. For items of Work delayed beyond date of Substantial Completion, provide updated submittal within 15 days after acceptance, listing date of acceptance as start of warranty period.

1.9 SPARE PARTS AND MAINTENANCE MATERIALS

A. Provide products, spare parts, maintenance and extra materials in quantities specified in individual specification Sections.

B. Deliver to Project site; obtain receipt prior to final payment.

2.0 PART 2 PRODUCTS

A. Not used.

3.0 PART 3 EXECUTION

A. Not used.

SECTION 02070 - SELECTIVE DEMOLITION

1.1 GENERAL

A. Definitions: As follows:

1. Remove: Remove and legally dispose of items except those indicated to be reinstalled, salvaged, or to remain the Landlord's property.

2. Remove and Salvage: Items indicated to be removed and salvaged remain the Landlord's property. Remove, clean, and pack or crate items to protect against damage. Identify contents of containers and deliver to Owner's designated storage area.

3. Remove and Reinstall: Remove items indicated; clean, service, and otherwise prepare them for reuse; store and protect against damage. Reinstall items in locations indicated.

4. Existing to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by the Owner, items may be removed to a suitable, protected storage location during selective demolition and then cleaned and reinstalled in their original locations.

B. Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain the Landlord's property, demolished materials shall become the Contractor's property and shall be removed from the site with further disposition at the Contractor's option.

C. Photographs or videotape, sufficiently detailed, of existing conditions of adjoining construction and site improvements that might be misconstrued as damage caused by selective demolition operations.

D. Record drawings at Project closeout according to Division 1 Section "Contract Closeout."

1. Identify and accurately locate capped utilities and other subsurface structural, electrical, or mechanical conditions.

E. Regulatory Requirements: Comply with governing EPA notification regulations before starting selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.

F. Landlord will occupy portions of the building immediately adjacent to selective tenant demolition area. Conduct selective demolition so that Landlord's operations will not be disrupted. Provide not less than 72 hours notice to Landlord of activities that will affect Landlord operations.

G. Landlord assumes no responsibility for actual condition of buildings to be selectively demolished.

H. Storage or sale of removed items or materials on-site will not be permitted.

1.2 PRODUCTS (Not Applicable)

1.3 EXECUTION

A. Survey the condition of the building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of the structure or adjacent structures during selective demolition.

B. Perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.

C. Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations

D. Utility Services: Locate, identify, shut off, disconnect, and seal or cap off indicated utility services serving building to be selectively demolished.

1. Where utility services are required to be removed, relocated, or abandoned, provide bypass connections to maintain continuity of service to other parts of the building before proceeding with selective demolition.

E. Drain, purge, or otherwise remove, collect, and dispose of chemicals, gases, explosives, acids, flammables, or other dangerous materials before proceeding with selective demolition operations.

F. Employ a certified, licensed exterminator to treat building and to control rodents and vermin before and during selective demolition operations.

G. Conduct demolition operations and remove debris to ensure minimum interference with roads, streets, walks, and other adjacent occupied and used facilities.

H. Conduct demolition operations to prevent injury to people and damage to adjacent buildings, facilities, and site improvements to remain. Ensure safe passage of persons around are of demolition. Erect temporary barricades and/or covered passageways as required to prevent injury to persons.

1. Provide temporary weather protection, during interval between demolition and removal of existing construction, on exterior surfaces and new construction to ensure that no water leakage or damage occurs to structure or interior areas.

2. Protect walls, ceilings, floors, and other existing finish work that are to remain and are exposed during selective demolition operations.

3. Cover and protect furniture, furnishings, and equipment that have not been removed.

I. Erect and maintain dust proof partitions and temporary enclosures to limit dust and dirt migration and to separate areas from fumes and noise.

J. Provide and maintain interior and exterior shoring, bracing, or structural support to preserve stability and prevent movement, settlement, or collapse of building to be selectively demolished.

K. Use water mist, temporary enclosures, and other suitable methods to limit the spread of dust and dirt. Comply with governing environmental protection regulations.

L. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

M. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before start of selective demolition.

N. Demolish and remove existing

2.6 CONCRETE MIXTURES FOR BUILDING ELEMENTS

A. Slabs-on-Grade: Proportion normal-weight concrete mixture as follows:

1. Minimum Compressive Strength: minimum 4000 psi (27.6 MPa) at 28 days or match existing (only if greater).
2. Air Content: Do not allow air content of troweled finished floors to exceed 3 percent.
3. Slump: 4 inches (100 mm).

B. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94 and ASTM C 1116, and furnish batch ticket information.

C. Project-Site Mixing: Measure, batch, and mix concrete materials and concrete according to ASTM C 94. Mix concrete materials in appropriate drum-type batch machine mixer.

2.7 ADMIXTURES

No calcium chloride or chloride-ion producing admixture shall be used in any concrete.

A. Air-Entraining Admixture: ASTM C 260.

B. Water-Reducing Admixture: ASTM C 494, Type A.

C. High-Range, Water-Reducing Admixture: ASTM C 494, Type F.

D. Water-Reducing and Accelerating Admixture: ASTM C 494, Type E.

E. Water-Reducing and Retarding Admixture: ASTM C 494, Type D.

2.8 FABRICATING REINFORCEMENT

A. Fabricate steel reinforcement according to CRSI's "Manual of Standard Practice."

2.9 CURING MATERIALS

A. Evaporation Retarder: Waterborne, monomolecular film forming, manufactured for application to fresh concrete.

B. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.

C. Clear, Solvent-Borne, Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B.

PART 3 - EXECUTION

3.1 FORMWORK

A. Design, construct, erect, shore, brace, and maintain formwork according to ACI 301.

B. Support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until structure can support such loads.

C. Construct formwork so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117.

D. Construct forms tight enough to prevent loss of concrete mortar.

E. Fabricate forms for easy removal without hammering or prying against concrete surfaces. Provide crush or wrecking plates where stripping may damage cast concrete surfaces. Provide top forms for inclined surfaces steeper than 1.5 horizontal to 1 vertical.

1. Install keyways, reglets, recesses, and the like, for easy removal.
2. Do not use rust-stained steel form-facing material.

F. Set edge forms, bulkheads, and intermediate screed strips for slabs to achieve required elevations and slopes in finished concrete surfaces. Provide and secure units to support screed strips; use strike-off templates or compacting-type screeds.

G. Chamfer exterior corners and edges of permanently exposed concrete.

H. Clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt, and other debris just before placing concrete.

I. Retighten forms and bracing before placing concrete, as required, to prevent mortar leaks and maintain proper alignment.

J. Coat contact surfaces of forms with form-release agent, according to manufacturer's written instructions, before placing reinforcement.

3.2 VAPOR RETARDER

A. Install, protect, and repair vapor-retarder sheets according to ASTM E 1643; place sheets in position with longest dimension parallel with direction of pour.

B. Lap joints 4 inches and seal with manufacturer's recommended tape.

3.3 EMBEDDED ITEMS

A. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete. Use Setting Drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.

3.4 STEEL REINFORCEMENT

A. Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.

1. Do not cut or puncture vapor retarder. Repair damage and reseal vapor retarder before placing concrete.

3.5 JOINTS

A. General: Construct joints true to line with faces perpendicular to surface plane of concrete.

B. Construction Joints: Locate and install so as not to impair strength or appearance of concrete, at locations indicated or as approved by Architect.

C. Isolation Joints: Install joint-filler strips at junctions with slabs-on-grade and vertical surfaces, such as column pedestals, foundation walls, grade beams, and other locations, as indicated.

1. Extend joint fillers full width and depth of joint, terminating flush with finished concrete surface, unless otherwise indicated.

D. Contraction (Control) Joints in Slabs-on-Grade: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of the concrete thickness.

E. Doweled Joints: Install dowel bars and support assemblies at joints where indicated. Lubricate or asphalt coat one-half of dowel length to prevent concrete bonding to one side of joint.

3.6 CONCRETE PLACEMENT

A. Comply with recommendations in ACI 304R, ASTM C 94, ASTM C 1116 and ACI 301, for measuring, mixing, transporting, and placing concrete.

1. Deposit concrete continuously and avoid segregation. Deposit concrete in forms in horizontal layers no deeper than 24 inches (600 mm), avoiding cold joints, and in depths not to exceed formwork design pressures.
2. Consolidate concrete with mechanical vibrating equipment.
3. Screed and initial-float concrete floors and slabs using bull floats or darbies to form a uniform and open-textured surface plane, free of humps or hollows, before excess moisture or bleedwater appears on the surface. Do not further disturb slab surfaces before starting finishing operations.
4. Floors to be level to within $\frac{1}{8}$" tolerance in 10 feet, smooth and sealed.Verify intended floor finish. Do not seal concrete surface where sealer would interfere with floor coating. Comply with floor finish manufacturer specifications.

3.7 FINISHING FLOORS AND SLABS

A. Finish formed surfaces as follows:

1. Apply rough-formed finish, defined in ACI 301, to concrete surfaces indicated or not exposed to public view.
2. Apply smooth-formed finish, defined in ACI 301, to concrete surfaces indicated and exposed to public view or to be covered with a coating or covering material applied directly to concrete, such as waterproofing, dampproofing, veneer plaster, or painting.

A. Do not apply rubbed finish to smooth-formed finish.

1. Apply smooth-rubbed finish to smooth-formed finished concrete surfaces indicated or exposed to public view.

B. Finishing Floors and Slabs: Comply with recommendations in ACI 302.1R for screeding, restraightening, and finishing operations for concrete surfaces.

1. Scratch Finish: Apply scratch finish, defined in ACI 301, to surfaces indicated and to surfaces to receive concrete floor topping or mortar setting beds for ceramic or quarry tile, portland cement terrazzo, and other bonded cementitious floor finishes.
2. Float Finish: Apply float finish, defined in ACI 301, to surfaces indicated, to surfaces to receive trowel finish, and to surfaces to be covered with fluid-applied or sheet waterproofing, built-up or membrane roofing, or sand-bed terrazzo.
3. Trowel Finish: Apply a trowel finish to surfaces indicated and to surfaces exposed to view or to be covered with resilient flooring, carpet, ceramic or quarry tile set over a cleavage membrane, paint, or another thin film-finish coating system.

a. After applying float finish, apply first trowel finish and consolidate concrete by hand or power-driven trowel. Continue troweling passes and restraighten until surface is free of trowel marks and uniform in texture and appearance. Grind smooth any surface defects that would telegraph through applied coatings or floor coverings.

b. Finish and measure surface so gap at any point between concrete surface and an unleveled freestanding 10-foot- (3.05-m-) long straightedge, resting on two high spots and placed anywhere on the surface, does not exceed the following:

1) 1/8 inch (3.2 mm).

4. Trowel and Fine-Broom Finish: Apply a partial trowel finish, stopping after second troweling, to surfaces indicated and to surfaces where ceramic or quarry tile is to be installed by either thickset or thin-set method. Immediately after second troweling, and when concrete is still plastic, slightly scarify surface with a fine broom.
5. Broom Finish: Apply a broom finish to exterior concrete, brooming with fiber-bristle broom perpendicular to main traffic route, to platforms, steps, and ramps, and elsewhere as indicated.
6. Verify intended floor finish. Do not seal concrete surface where sealer would interfere with floor coating. Comply with floor finish manufacturer specifications.

3.8 CONCRETE PROTECTION AND CURING

General: Protect concrete from excessive cold or hot temperatures. Comply with ACI 306.1-1990 for cold-weather protection and with recommendations in ACI 305R-1990 for hot-weather protection during curing.

1. Apply evaporation retarder to unformed concrete surfaces if hot, dry, or windy conditions cause excessive moisture loss.
2. Begin curing after finishing concrete but not before free water has disappeared from concrete surface.
3. Cure formed and unformed concrete for at least seven days by moisture curing, moisture-retaining-cover curing, or curing compound.
4. Cure and seal floors and slabs with a curing and sealing compound according to manufacturer's written instructions.

3.9 FIELD QUALITY CONTROL

A. Testing Agency: Engage a qualified independent testing and inspecting agency see CS-3 for additional requirements.

B. Testing Agency: Tests wil be performed according to ACI 301, and additional requirements as indicated in these drawings, CS-3, Specifications and manufacturer requirements. General contractor shall coordinate and arrange with appropriate parties, Village, etc., and coordinate with the Owner's Construction Manager all such testing.

3.10 REPAIRS

A. Defective Concrete: Repair and patch defective areas when approved by Architec/Ownert. Remove and replace concrete that cannot be repaired and patched to requirements of these drawings.

END OF SECTION 03300

## SECTION 035416 - HYDRAULIC CEMENT UNDERLAYMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings, general provisions of the Contract, and other related construction documents such as Division 01 specifications apply to this Section

1.2 SUMMARY

A. This Section includes a cement-based self-leveling underlayment formulated with a special blend of polymers used to level and smooth interior concrete, terrazzo, ceramic & quarry tile, metal, wooden substrates, and non-soluble adhesive residue on concrete prior to the installation of finished flooring on all grade levels.

1. ARDEX K-15® Premium Self-Leveling Underlayment
2. ARDEX P 51™ Primer
3. ARDEX P 82™ Ultra Prime
4. ARDEX E 25™ Resilient Emulsion

B. Related Sections include the following:

1. Section 03 30 00, Cast-In-Place Concrete
2. Section 07 26 19, Topical Moisture Vapor Mitigation
3. Division 09 Flooring Sections

1.3 REFERENCES

A. ASTM C 109M, Compressive Strength Air-Cure Only
B. ASTM C348, Flexural Strength of Hydraulic-Cement Mortars
C. ASTM E84, Surface Burning Characteristics of Building Materials
D. ASTM F2170, Relative Humidity in Concrete Floor Slabs Using in situ Probes
E. ASTM F1869, Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Ca Chloride
F. ASTM 710 - Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring

1.4 SUBMITTALS

A. Product Data: Submit manufacturer's product data and installation instructions for each material and product used. Include manufacturer's Material Safety Data Sheets.

B. Qualification Data: For Installer

1.5 QUALITY ASSURANCE

A. Installation of the ARDEX product must be completed by a factory-trained applicator, such as an ARDEX LevelMaster® Elite or Choice Contractor, using mixing equipment and tools approved by the manufacturer. Contact ARDEX for a list of certified installers. See Ardex contact information on CS3.0 sheet.

B. Product must have a hydraulic cement-based inorganic binder content as the primary binder which includes portland cement per ASTM C150: Standard Specification for Portland Cement and other specialty hydraulic cements. Gypsum-based products are not acceptable.

C. Manufacturer Experience: Provide products of this section by companies which have successfully specialized in production of this type of work for not less than 10 years. Contact Manufacturer Representative prior to installation.

1.6 WARRANTY ARDEX K15® installed as part of a floor system, shall be installed in conjunction with the recommended ARDEX Tile & Stone Installation Materials or WW HENRY Flooring Adhesive, as appropriate, to provide the ARDEX SystemOne 10-year comprehensive warranty.

1.7 DELIVERY, STORAGE AND HANDLING

A. Deliver products in original packaging, labeled with product identification, manufacturer, batch number and shelf life.

B. Store products in a dry area with temperature maintained between 50° and 85° F (10° and 29° C) and Protect from direct sunlight.

C. Handle products in accordance with manufacturer's printed recommendations

1.8 PROJECT CONDITIONS

A. Do not install material below 50° F (10° C) surface and air temperatures. These temperatures must also be maintained during and for 48 hours after the installation of products included in this section. Install quickly if substrate is warm and follow warm weather instructions available from the ARDEX Technical Service Department.

PART 2 - PRODUCTS

2.1 HYDRAULIC CEMENT UNDERLAYMENT

A. Hydraulic Cement-based Self-Leveling Underlayment

1. Acceptable Products:

a. ARDEX K 15®; Manufactured by ARDEX Engineered Cements: 400 Ardex Park Drive, Aliquippa, Pa 15001 USA, (724) 203-5000, www.ardex.com

i. Primer Standard Porous Concrete: ARDEX P 51™ Primer

ii. Primer Non-porous substrates, ceramic & quarry tile, non-water soluble adhesive residue, concrete treated with silicate compounds, metal, and wooden subfloors: ARDEX P 82™ Ultra Prime

iii. Additive: ARDEX E 25™ Resilient Emulsion

2. Performance and Physical Properties: Meet or exceed the following values for material cured at 73° F+/-3°F (23° C+/-3°C) and 50% +/-5% relative humidity:

a. Application: Barrel Mix or Pump
b. Flow Time: 10 minutes
c. Initial Set: Approx. 30 minutes
d. Final Set: Approx. 90 minutes
e. Compressive Strength: 4100 psi at 28 days, ASTM C109M.
f. Flexural Strength: 1000 psi at 28 days, ASTM C78.
g. VOC: 0 g/l, calculated SCAQMD 1168

2.2 WATER: Water shall be clean, potable, and sufficiently cool (not warmer than 70°F).

2.3 ALTERNATE UNDERLAYMENTS: When appropriate and when technical criteria are met for each underlayment, ARDEX K10, K13, K16, K60 and V1200 are also approved underlayments for use on Ulta projects. Alternate underlayments must meet technical requirements of conditions and moisture mitigation system being used (if any).

PART 3 - EXECUTION

3.1 PREPARATION

A. Concrete Subfloors: Prepare substrate in accordance with manufacturer's instructions.

1. Prior to proceeding please refer to ASTM F710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring. All concrete subfloors must be sound, solid, clean, and free of all oil, grease, dirt, curing compounds and any substance that might act as a bond breaker before priming. Mechanically clean if necessary using shot blasting or other. Acid etching and the use of sweeping compounds and solvents are not acceptable.
2. All cracks in the subfloor shall be repaired to minimize telegraphing through the underlayment.
3. Substrates shall be inspected in accordance with ASTM F1869 or ASTM F2170 and corrected for moisture or any other conditions that could affect the performance of the underlayment or the finished floor covering. For areas where moisture vapor emissions exceed the limits required by the floor covering manufacturer refer to Section 07 26 19, Topical Moisture Vapor Mitigation Systems and install the appropriate ARDEX Moisture Control System.

B. Joint Preparation:

1. Moving Joints - honor all expansion and isolation joints up through the underlayment. A flexible sealing compound such as ARDEX ARDISEAL™ Rapid Plus may be installed.
2. Saw Cuts and Control Joints - fill all non-moving joints with ARDEX ARDIFIX™ Joint Filler or ARDEX SD-F™ FEATHER FINISH® as recommended by the manufacturer.

C. Wooden subfloors: must be clean and free of all foreign matter. Sand to bare wood then vacuum to remove all dust. Re-nail any loose boards exhibiting movement.

D. Metal subfloors must be clean and free of all rust and foreign matter. Where required, a corrosive resistant coating should be applied and allowed to dry before priming.

E. Cutback and other non-water soluble adhesive residues must be wet scraped to a thin, well-bonded layer.

F. Non-porous subfloors such as ceramic and quarry tile as well as terrazzo should be clean and free of all waxes and sealers. If necessary, clean by mechanical methods such as shot blasting or other.

3.2 APPLICATION OF ARDEX K 15®:

A. Examine substrates and conditions under which materials will be installed. Do not proceed with installation until unsatisfactory conditions are corrected.

B. Coordinate installation with adjacent work to ensure proper sequence of construction. Protect adjacent areas from contact due to mixing and handling of materials.

C. Priming:

1. Primer for standard absorbent concrete subfloors: Mix ARDEX P-51 1:1 with water and apply evenly with a soft push broom. Do not leave any bare spots. Remove all puddles and excess primer. Allow to dry to a clear, thin film (min. 3 hours, max. 24 hours). Underlayment shall not be applied until the primer is dry. Primer coverage is approximately 400 to 600 sq. ft. per gallon.
2. Primer for extremely absorbent concrete subfloors: Make an initial application of ARDEX P-51mixed with 3 parts water using a soft push broom. Do not leave any bare spots. Remove all puddles and excess primer. Allow to dry thoroughly before proceeding with the standard application of primer as described above for standard absorbent concrete.
3. Primer for non-porous subfloors, wooden or metal subfloors, or cutback and other non-water soluble adhesive residues over concrete: Prime with ARDEX P-82 Ultra Prime. Mix Part A (red) with Part B (white) and apply with a short-nap or sponge paint roller, leaving a thin coat of primer no heavier than a thin coat of paint. Do not leave any bare spots. Remove all puddles and excess primer. Allow to dry to a clear, slightly tack film (minimum 3 hours, maximum 24 hours). Underlayment shall not be installed until primer is dry. Primer coverage is approximately 200 to 400 square feet per gallon.
4. Minimum drying time for ARDEX P-82 Ultra-Prime over cutback adhesive is 18 hours.

D. Mixing: Comply with manufacturer's printed instructions and the following.

1. Add 7 quarts (6.5 L) of clean potable water per two 55-pound bag.
2. Mix using a ½" (650 rpm) low speed heavy-duty mixing drill with an ARDEX T-1 mixing paddle. Do not overwater.
3. Aggregate mix: For areas to be installed over 1 ½" thick, aggregate may be added to reduce material costs. Mix ARDEX K 15® with water first, then add from 1/3 up to 1 part by volume of washed, well graded pea gravel aggregate (1/8" to 1/4" or larger). Do not use sand. Note: The addition of aggregate will diminish the workability of the make it necessary to install a finish coat to obtain a smooth surface. Ardex recommends a ¼" application of ARDEX K 15® neat to be installed as the finish coat.
4. For pump installations, ARDEX K 15® shall be mixed using the ARDEX Levelcraft Automatic Mixing Pump. Start the pump at 210 gallons of water per hour, and then adjust to the minimum water reading that still allows self-leveling properties. Do not overwater. Check the consistency of the product on the floor to ensure a uniform distribution of the sand aggregate at both the top surface and bottom of the pour.

E. Application: Comply with manufacturer's printed instructions and the following.

1. ARDEX K 15® must be installed at a minimum thickness of 1/8" over the highest point in the floor, which typically results in an average thickness of ¼" over the entire floor. ARDEX K 15® can be installed up to 1 ½" over large areas neat, and up to 5" with the addition of proper aggregate. ARDEX K 15® can also be featheredged to match existing elevations.
2. Pour or pump the liquid ARDEX K 15® and spread in place with the ARDEX T-4 Spreader. Use the ARDEX T-5 Smoother and featheredge and touch-up. Wear non-metallic cleats to avoid leaving marks in the liquid ARDEX K 15®.
3. Wood subfloors require the use of the mesh-reinforced ARDEX K15® + E25™ Resilient Emulsion Underlayment System. After priming, install 3.4 galvanized diamond metal lath by stapling to the wooden subfloor approximately every 6 inches to center.
4. Metal subfloors require the use ARDEX K15® + E25™ Resilient Emulsion Underlayment System.
5. Steel subfloors require that the substrate first be primed with an anti-corrosive paint. After thorough drying of the paint, prime the surface with ARDEX P82™ Ultra Prime.

F. Curing

1. ARDEX K15® can be walked on in 2-3 hours. Moisture-insensitive tiles such as ceramic quarry and porcelain can be installed after 6 hours. Underlayment can accept all other finish floor covering materials after 16 hours at 70°F and 50% relative humidity. For resinous systems such as epoxy and polyurethane floors please contact the ARDEX Technical Services Department.

3.4 FIELD QUALITY CONTROL

A. Where specified, field sampling of the Ardex underlayment is to be done by taking an entire unopened bag of the product being installed to an independent testing facility to perform compressive strength testing in accordance with ASTM C 109/modified: air-cure only. There are no in situ test procedures for the evaluation of compressive strength.

3.5 PROTECTION

A. Prior to the installation of the finish flooring, the surface of the underlayment should be protected from abuse by other trades by the use of plywood, Masonite or other suitable protection course.

## SECTION 05500 - METAL FABRICATIONS

1.1 GENERAL

A. Submittals: In addition to product data, submit the following:

1. Shop drawings detailing fabrication and erection, including templates for anchor bolt placement.
2. Samples, materials and finishes as may be requested by Architect.
3. For structural steel fabrication: AISC Certification for steel fabrication is required.

a. Fabricators Qualifications: A qualified fabricator who participates in the AISC Quality Certification Program and designated as an AISC Certified Plant, Category Sbd.

b. Welding Qualifications: Qualifying procedures and personnel according to AWS D1.1, structural welding code - steel.

1.2 PRODUCTS

A. General: Provide materials selected for their surface flatness, smoothness, and freedom from surface blemishes.

B. Steel and Iron: As follows:

1. Plates, Shapes, and Bars: ASTM A 36/A 36M.
2. Rolled Floor Plates: ASTM A 786/A 786M/Rolled from plate complying with ASTM A36/A, 36M, Grand C or D.
3. Cold-Formed Tubing: ASTM A 500.
4. Pipe: ASTM A 53, standard weight (schedule 40), unless otherwise indicated. Paint black, unless otherwise indicated.
5. Gray-Iron Castings: ASTM A 48, Class 30.
6. Concrete Inserts: Threaded or wedge type; galvanized ferrous castings, either ASTM A 47 (ASTM A 47M) malleable iron or ASTM A 27/A 27M cast steel. Provide bolts, washers, and shims as required, hot-dip galvanized per ASTM F2329.

C. Aluminum: As follows:

1. Extrusions: ASTM B 221 (ASTM B 221M), alloy 6063-T6.
2. Rolled Tread Plate: ASTM B 632 (ASTM B 632M) Pattern 1, alloy 6061-T6.

D. Fasteners: Provide plated fasteners complying with ASTM B 633, Class Fe/Zn 25 for electrodeposited zinc coating, for exterior use or where built into exterior walls. Select fasteners for the type, grade, & class req'd.

E. Shop Primer for Ferrous Metal: Fast-curing, lead- and chromate-free, universal modified-alkyd primer with good resistance to corrosion, compatible with finish paint systems, and complying with performance requirements of FSTT-P-664.

F. Galvanizing Repair Paint: High-zinc-dust-content paint, with dry film containing not less than 94 percent zinc dust by weight.

G. Concrete Fill: Comply with requirements of Division 3 Section "Cast-in-Place Concrete" for normal-weight concrete with a minimum 28-day compressive strength of 3,000 psi (20 MPa).

H. Nonshrink, Metallic Grout: Factory-packaged, ferrous-aggregate grout complying with ASTM C 1107.

I. Nonshrink, Nonmetallic Grout: Factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C 1107.

J. Fabrication, General: Form from materials of type, size, thickness, and shapes indicated. Work to dimensions indicated or accepted on shop drawings, using proven details of fabrication and support. Reassemble items in shop to greatest extent possible.

1. Shear and punch metals cleanly and accurately. Remove sharp or rough areas and ease exposed edges.
2. Weld corners and seams continuously. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals. Obtain fusion without undercut or overlap. Remove welding flux immediately. Finish exposed welds and surfaces smooth and blended.
3. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners where possible. Locate joints where least conspicuous.
4. Form bent-metal corners to smallest radius possible without causing grain separation or otherwise impairing work.

K. Rough Hardware: Furnish custom-fabricated bolts, plates, anchors, hangers, dowels, and other miscellaneous steel and iron shapes for supporting and anchoring woodwork.

L. Loose Bearing and Leveling Plates: Provide for steel items bearing on masonry or concrete, as indicated. Drill plates to receive anchor bolts.

1. Galvanize after fabrication.

M. Loose Steel Lintels: Fabricate from shapes and to sizes indicated.

1. Galvanize after fabrication.

N. Shelf and Relieving Angles: Fabricate to sizes indicated for attachment to support framing. Provide slotted holes to receive 3/4-inch (19-mm) bolts, spaced not more than 6 inches (150 mm) from ends and not more than 24 inches (600mm) o.c.

1. Furnish wedge-type concrete inserts, complete with fasteners, to attach shelf angles to cast-in-place concrete.
2. Galvanize shelf angles to be installed on exterior concrete.

O. Miscellaneous Framing and Supports: Provide as required to complete the Work but not included with structural steel framework. Fabricate as indicated and required to receive adjacent construction. Fabricate from structural steel of welded construction. Drll and tap to receive hardware, hangers, and similar items. Include anchors for building into other work, spaced not more than 24 inches (600 mm) o.c.

P. Miscellaneous Steel Trim: Fabricate from steel shapes, plates, and bars of profiles shown with continuously welded joints, and smooth exposed edges. Miter corners and use concealed field splices wherever possible. Provide cutouts, fittings, and anchorages; coordinate assembly and installation with other work.

Q. Pipe Bollards: Fabricate from Schedule 80 steel pipe capped with 1/4-inch (6.4-mm) steel plate.

1. Fabricate sleeves for bollards from steel pipe with 1/4-inch- (6.4-mm-) thick steel plate welded to bottom of sleeve.

R. Finish metal fabrications after assembly. Comply with NAAMM "Metal Finishes Manual for Architectural and Metal Products" for recommendations on application of finishes. Shop-prime ferrous metal items not indicated to be galvanized.

1. Hot-dip galvanize items indicated to be galvanized. Comply with ASTM A 153 or ASTM A 123 as applicable.
2. Preparation for Shop Priming: Prepare uncoated ferrous metal surfaces to comply with SSPC-SP 3 "Power Tool Cleaning."
3. Apply shop primer per requirements of SSPC-PA 1 "Paint Application Specification No. 1" for shop painting.

1.3 EXECUTION

A. Installation, General: Perform cutting, drilling, and fitting required for installing metal fabrications. Set units accurately in location, alignment and elevation with edges and surfaces level, plumb, and true.

1. Fit exposed connections accurately together and weld, unless otherwise indicated. Do not weld, cut, or abrade the surfaces of galvanized units that are intended for bolted connections.
2. Provide temporary bracing or anchors in formwork for items that are to be built into concrete masonry or similar construction.

B. Set loose items on cleaned bearing surfaces using wedges or other adjustable devices. After the items have been positioned and plumbed, tighten the anchor bolts and pack space with grout.

1. Use nonshrink, metallic grout in concealed locations where not exposed to moisture; use nonshrink, nonmetallic grout in exposed locations, unless otherwise indicated.

C. Anchor bollards in concrete with pipe sleeves preset into concrete. Fill space between bollard and sleeve soldly with nonshrink, nonmetallic grout.

1. Fill bollards soldly with concrete, mounding top surface.

D. Touch up shop paint after erection. Clean field welds, bolted connections, and abraded areas and paint with same material as used for shop painting.

E. For galvanized surfaces, clean welds, bolted connections, & abraded areas, & apply galvanizing repair paint.

F. Corrosion Protection: Coat concealed surfaces of aluminum that will come into contact with grout, concrete, masonry, wood or dissimilar with the following:

1. Cast Aluminum: Heavy coat of bituminous paint.
2. Extruded Aluminum: Two coats of clear lacquer.

## SECTION 06100 - ROUGH CARPENTRY

1.1 GENERAL

A. Submittals: Submit the following:

1. Product Data for engineered wood products, underlayment, insulating sheathing, air-infiltration barriers, metal framing anchors, and construction adhesives.
2. Material certificates for dimension lumber specified to comply with minimum allowable unit stresses.
3. Wood treatment data, including chemical treatment manufacturer's instructions for handling, storing, installing, and finishing treated materials.

1.2 PRODUCTS

A. Lumber, General: Comply with DOC PS 20 and with applicable grading rules of inspection agencies certified by the American Lumber Standards Committee's (ALSC) Board of Review. Provide dressed lumber, S4S, with each piece factory marked with grade stamp of inspection agency.

1. Provide lumber with 15 percent maximum moisture content at time of dressing for 2-inch nominal (38-mm actual) thickness or less, unless otherwise indicated.

B. Wood-Preservative-Treated Materials: Comply with applicable requirements of AWPA C2 (lumber) and AWPA C9 (plywood). Mark each treated item with the Quality Mark Requirements of an inspection agency approved by ALSC's Board of Review.

1. Pressure treat aboveground items with waterborne preservatives to a minimum retention of 0.25 lb/cu. ft. (4.0 kg/cu. m). After treatment, kiln-dry lumber and plywood to a maximum moisture content of 15 percent. Treat indicated items and the following:

a. Wood cants, nailers, curbs, equipment support bases, blocking, stripping, and similar members in connection with roofing, flashing, vapor barriers, and waterproofing.
b. Wood sills, sleepers, blocking, furring, stripping, and similar concealed members in contact with masonry or concrete.
c. Wood framing members less than 18 inches (460 mm) above grade.
d. Wood floor plates installed over concrete slabs directly in contact with earth.

2. Complete fabrication of treated items before treatment, where possible. If cut after treatment, apply field treatment complying with AWPA M4 to cut surfaces. Inspect each piece of lumber or plywood after drying and discard damaged or defective pieces.
3. For exposed items indicated to receive a stained or natural finish, use chemical formulations that do not require incising, contain colorants, bleed through, or otherwise adversely affect the finishes.

C. Dimension Lumber: Provide dimension lumber of grades indicated according to the ALSC National Grading Rule (NGR) provisions of the inspection agency indicated.

1. Framing Other than Non-Load-Bearing Partitions: Provide Construction or No. 2 grade and any of the following species:

a. Species: Southern pine; SPIB.
b. Species: Douglas fir-larch; NLGA, WCLIB, or WWPA.
c. Species: Hem-fir; NLGA, WCLIB, or WWPA.
d. Species: Douglas fir south; WWPA.

2. Framing Other than Non-Load-Bearing Partitions: Provide any species and grade with a modulus of elasticity of at least 1,300,000 psi (8950 MPa) and an extreme fiber stress in bending of at least 850 psi (5.9 MPa) for 2-inch nominal (38 mm-actual) thickness and 12-inch nominal (286-mm actual) width for single member use.

D. Fire-Retardant-Treated Materials:

1. General: Comply with performance requirements in AWPA C20 (lumber) and AWPA C27 (plywood).

a. Use Exterior type for exterior locations and where indicated.
b. Use Interior Type A, High Temperature (HT) for enclosed roof framing, framing in attic spaces, and where otherwise indicated.

2. Identify fire-retardant-treated wood with appropriate classification marking of testing and inspecting agency acceptable to authorities having jurisdiction.

a. For exposed lumber indicated to receive a stained or natural finish, mark end or back of each piece or omit marking and provide certificates of treatment compliance issued by inspection agency.

3. For exposed items to indicated to receive a stained or natural finish, use formulations that do not bleed through, contain colorants, or otherwise adversely affect finishes.

E. Miscellaneous Lumber: Provide No. 3 or Standard grade lumber of any species for support or attachment of other construction, including rooftop equipment curbs and support bases, cant strips, bucks, nailers, blocking, and similar members.

F. Air-Infiltration Barrier: Air retarder complying with ASTM E 1677; made from polyolefins; either cross-laminated films, woven strands, or spunbonded fibers; coated or uncoated; with or without perforations to transmit water vapor but not liquid water; and with minimum water-vapor transmission of 10 perms (575 ng/Pa x s x sq. m) when tested according to ASTM E 96, Procedure A.

G. Fasteners: Size and type indicated. Where rough carpentry is exposed to weather, in ground contact, or in area of high relative humidity, provide fasteners with a hot-dip zinc coating per ASTM A 153 or of Type 304 stainless steel.

H. Metal Framing Anchors: Provide galvanized steel framing anchors of structural capacity, type, and size indicated and as follows:

1. Research or Evaluation Reports: Provide products for which model code research or evaluation reports exist that are acceptable to authorities having jurisdiction and that evidence of compliance of metal framing anchors for application indicated with building code in effect for Project.
2. Allowable Design Loads: Provide products with allowable design loads, as published by manufacturer, that meet or exceed those indicated. Manufacturer's published values shall be determined from empirical data or by rational engineering analysis, and demonstrated by comprehensive testing performed by a qualified independent testing agency.
3. Galvanized Steel Sheet: Hot-dip, zinc-coated steel sheet complying with ASTM A 653, G60 (ASTM A 653M, Z180) coating designation; structural, commercial, or lock-forming quality, as standard with manufacturer for type of anchor indicated.

I. Sill-Sealer Gaskets: Glass-fiber-resilient insulation, fabricated in strip form, for use as a sill sealer; 1-inch (25-mm) nominal thickness, compressible to 1/32 inch (0.8mm); selected from manufacturer's standard widths to suit width of sill members indicated.

J. Adhesives for Field Gluing Panels to Framing: Formulation complying with APA AFG-01 that is approved for use with type of construction panel indicated by both adhesive and panel manufacturers.

K. Telephone and Electrical Equipment Backing Panels: DOC PS 1, exterior, AC where exposed to view, [Exterior, C-C Plugged, where acceptable to owner/landlord] [fire-retardant treated where required,] in thickness indicated or, if not indicated, not less than 3/4-inch nominal thickness.

1.3 EXECUTION

A. Set rough carpentry to required levels and lines, with members plumb, true to line, cut, and fitted.

B. Fit rough carpentry to other construction; scribe and cope as required for accurate fit. Correlate location of furring, nailers, blocking, grounds, and similar supports to allow attachment of other construction.

C. Securely attach rough carpentry work to substrate by anchoring and fastening as indicated, complying with the following:

1. CABO NER-272 for power-driven staples, P-nails, and allied fasteners.
2. Published requirements of metal framing anchor manufacturer.
3. "Recommended Nailing Schedule" of referenced framing standard and with AFPA's "National Design Specifications for Wood Construction."
4. "Table 23-I-Q--Nailing Schedule" of the Uniform Building Code.
5. "Table 2305.2--Fastening Schedule" of the B.O.C.A. National Building Code where applicable.
6. "Table 1705.1--Fastening Schedule," of the Standard Building Code.
7. "Table 2304.9.1--Fastening Schedule," of the International Building Code.

D. Use hot-dip galvanized or stainless-steel nails where rough carpentry is exposed to weather, in ground contact, or in area of high relative humidity.

E. Countersink nail heads on exposed carpentry work and fill holes with wood filler.

F. Framing Standard: Comply with AFPA's "Manual for Wood Frame Construction," unless otherwise indicated.

G. Air-Infiltration Barrier: Cover sheathing with air-infiltration barrier to comply with manufacturer's written instructions.

1. Apply air-infiltration barrier to cover upstanding flashing with 4-inch (100-mm) overlap.

a. All manufacturers of air barrier, installation and flashing products are to provide letters of compatibility for these products in combination with each other.

## SECTION 06200 - FINISH CARPENTRY

PART 1 - GENERAL (Not Applicable)

PART 2 - PRODUCTS

2.1 MATERIALS, GENERAL

A. Lumber Standards: DOC PS 20 and grading rules of inspection agencies certified by American Lumber Standards Committee Board of Review.

B. Softwood Plywood: DOC PS 1. C. Hardwood Plywood: HPVA HP-1.

2.2 STANDING AND RUNNING TRIM

A. Exterior Lumber Trim: Smooth-textured Clear Heart, western red cedar, Grade A, western red cedar, B & B, southern yellow pine.

B. Exterior Primed Hardboard Trim: High-temperature cured, high-resin, wood fiber composite; factory primed; and recommended by manufacturer for exterior use.

C. Interior Trim: Painted Trim C Select, eastern white pine; B & Btr. Select or Supreme, Idaho white, lodgepole, ponderosa, or sugar pine, Stained Trim rift-sawn, clear, kiln-dried red oak selected for compatible grain and color.

## SECTION 06400 - CUSTOM CASEWORK

Field Installation:

1. Install casework plumb, level, true and straight with no distortions. Shim as required using concealed shims. Install to a tolerance of 1/8" in 8'-0" for plumb and level and with no variations in flushness of adjoining surfaces. Scribe and cut to fit adjoining work. Anchor to blocking or directly to substrates without distortion so that cabinet doors fit openings properly and are accurately aligned. Adjust hardware to center doors in openings and to provide free operation. Anchor countertops securely to base units and other support systems as indicated.

Adjust and clean:

1. Repair damaged and defective casework where possible to eliminate defects, where not possible to repair, replace casework. Clean, lubricate and adjust hardware for smooth operation.
2. Do not deliver or install woodwork until building is enclosed, wet work is complete, and HVAC system is operating and maintaining temperature and relative humidity at occupancy levels during the remainder of the construction period.

## SECTION 07210 - BUILDING INSULATION

1.1 GENERAL

A. Submittals: Product Data for each type of insulation product specified.

B. Fire-Test-Response Characteristics: Provide insulation and related materials with the fire-test-response characteristics indicated as determined by testing identical products per ASTM E 84, ASTM E 119, or ASTM E 136 by UL or another testing and inspecting agency acceptable to authorities having jurisdiction. Identify materials with appropriate markings of applicable testing and inspecting agency.

C. All manufacturers of vapor barrier, insulation and flashing products, are to provide letters of compatibility for these products in combination with each other.

1.2 PRODUCTS

A. General: Provide insulating materials that comply with requirements and with referenced standards.

1. Preformed Units: Sizes to fit applications indicated; selected from manufacturer's standard thickness, widths, and lengths.

B. Polyisocyanurate Board Insulation: Rigid, cellular polyisocyanurate thermal insulation faced on both sides with aluminum foil to comply with requirements indicated below:

1. ASTM Standard: ASTM C 1289, Type I, Class 1 or 2.

C. Unfaced Mineral-Fiber Blanket Insulation: ASTM C 665, Type I (blankets without membrane facing) of type described below:

1. Mineral-Fiber Type: Fibers manufactured from glass, slag wool, or rock wool.
2. Mineral-Fiber Type: Fibers manufactured from glass.
3. Mineral-Fiber Type: Fibers manufactured from slag or rock wool.

PART 3 - EXECUTION

3.1 PREPARATION

A. Concrete Subfloors: Prepare substrate in accordance with manufacturer's instructions.

1. Prior to proceeding please refer to ASTM F710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring. All concrete subfloors must be sound, solid, clean, and free of all oil, grease, dirt, curing compounds and any substance that might act as a bond breaker before application.

2. Mechanical preparation of the surface is required to obtain a minimum ICRI concrete surface profile of 3 (CSP 3). This substrate preparation must be by mechanical means, such as shot blasting.

3. The concrete must have a minimum tensile strength of at least 150 psi for areas to receive normal foot traffic, and 200 psi for area of heavy commercial traffic when tested in accordance with ASTM C1583. The concrete surface can be damp, but must be free of standing water.

4. Prior to beginning the installation, measure the relative humidity within the concrete (ASTM F2170). For these relative humidity methods, the RH shall not exceed 100%. No standing water shall be present.

5. If the concrete substrate is too uneven to provide a uniform film thickness of the ARDEX MC™ RAPID (typically CSP 6 or higher), the substrate can be pre-smoothed using ARDEX X 301™ Self-Leveling Exterior Concrete Topping or ARDEX MRP™ Moisture Resistant Patch.

3.2 APPLICATION OF ARDEX MC™ RAPID:

A. Examine substrates and conditions under which materials will be installed. Do not proceed with installation until unsatisfactory conditions are corrected.

B. Coordinate installation with adjacent work to ensure proper sequence of construction. Protect adjacent areas from contact due to mixing and handling of materials.

C. Mixing: Comply with manufacturer's printed instructions and the following.

1. Each individual 22lb. unit contains separate, pre-measured quantities of hardener (Part B) and the resin (Part A). After opening each container, stir the individual components thoroughly before blending. The hardening agent (Part B) is added to the resin (Part A).

2. Pour all of the hardener into the resin portion and stir thoroughly for a minimum of 3 minutes using a low speed drill and an epoxy mixing paddle. Once mixed, pour some of the epoxy back into the hardener container, stir for 10 seconds, and then pour all of the contents back into the resin container. Mix for an additional 30 seconds before applying.

D. Application: Comply with manufacturer's printed instructions and the following.

1. Apply the first coat of freshly mixed ARDEX MC™ RAPID to the prepared concrete surface in a uniform direction at an application rate of up to 270 sq. ft. per unit to achieve a coating thickness of 10 mils. Use a short-nap paint roller or notched squeegee for smoother surfaces, and a longer nap roller for more uneven substrates. To minimize the potential for pinhole formation, work the ARDEX MC™ RAPID into the surface with the roller to ensure maximum penetration. ARDEX MC™ RAPID can also be worked into the surface with a paintbrush for hard to reach areas and corners. Once the area is completely coated, allow to dry for a minimum of 4 hours (max. 24 hours). It is not necessary to re-test the substrate for moisture emissions prior to installing the floor covering.

2. For ARDEX Underlayment applications of ¼" or less, prime the surface of the ARDEX MC™ RAPID with ARDEX P 82™ Ultra Prime. Allow the AREX P 82™ Ultra Prime to dry thoroughly (min. 3 hours; max. 24 hours) before installing the underlayment.

3. For ARDEX Underlayment applications greater than ¼" (6mm), or if the ARDEX MC™ RAPID was not worked into the surface sufficiently enough to prevent pinholes, a third coat with sand broadcast is needed. No ARDEX P82™ Ultra Prime in required.

a. Working at a 90° angle to the direction the first coat was applied; apply the ARDEX MC™ RAPID at a coverage rate of 10 mils. While this coat is still in a fresh state (maximum 20 minutes), broadcast an excess of fine sand (less than 1/50 of an inch in grain size or 98.5% passing sieve size #35 or #30) consistently over the entire area.

Note: When broadcasting sand,use a NIOSH approved dust mask in conformance with OSHA requirements regarding the handling of sand. Do not stand or walk on the freshly applied epoxy when broadcasting the sand.

b. Once an area has been completely covered with sand, the surface of the sand can be walked on, being careful not to expose the epoxy at any time. Use approximately 1 lb. of sand per square foot of area. Once the sand broadcast is complete, avoid all traffic over the surface for a minimum of 4 hours.

c. After 4 hours, broom sweep and vacuum the surface to remove all loose sand. The clean, prepared surface of the sand is the priming system for the ARDEX Underlayment. No additional priming is required.

d. Following the application of MC RAPID and primer or sand broadcast, install the ARDEX Underlayment, such as ARDEX K 15® Premium Self-Leveling Concrete Underlayment, or Topping in accordance with printed instructions found in the corresponding technical brochure.

e. It is not necessary to re-test the substrate for moisture emissions prior to installing the coating or floor covering.

3.3 FIELD QUALITY CONTROL

A. Where specified, field sampling of the ARDEX products is to be done by taking an entire unopened bag/unit of the product being installed to an independent testing facility to perform testing. There is no in-situ test method applicable for this system.

3.4 PROTECTION

A. Prior to the installation of the finish flooring, the surface of the underlayment should be protected from abuse by other trades by the use of plywood, Masonite or other suitable protection course.

## SECTION 07512 - ROOFING SYSTEM REPAIR

General: When penetration of the existing roofing system is required to accommodate new construction, perform necessary roofing system repair.

Coordination:

Before starting work, verify with the Tenant's Construction Manager and the Landlord the following:

1. Existing roof system materials and installation methods.

2. Repair work responsibilities and warranty requirements.

Qualifications:Repair work shall be performed only by an experienced roofing installer approved or licensed by the existing roofing system materials manufacturer; with not less than five years of successful experience installing and repairing roofing systems similar to this projects existing roofing system.

Materials: Provide and install only materials approved and recommended by the roofing manufacturer for repairing the existing roofing system.

Installation: Inspect roof surface conditions with roof manufacturer's representative to verify extent and location of any other repairs required to ensure a watertight roofing system upon completion of the repair work. Make necessary repairs. Match existing roof slope, insulation materials and roofing membrane materials, except as otherwise approved by the existing roofing system manufacturer to accommodate new construction and repair work. Install curb flashing furnished by mechanical and electrical trades for new roof top equipment.

## SECTION 07710 - MANUFACTURED ROOF SPECIALTIES

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submit Product Data, Shop Drawings, and color Samples.

B. Provide products that comply with applicable requirements of SMACNA's "Architectural Sheet Metal Manual," unless otherwise indicated.

PART 2 - PRODUCTS

2.1 ROOF SPECIALTIES

A. Aluminum coping system manufactured by Peterson Aluminum Co. Berridge, or Architect Approved Equal

B. Finish: As noted or as selected from manufacturers standard colors.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Coordinate with installation of roof decks and other substrates to produce a watertight assembly capable of withstanding inward and outward loading pressures, and thermal and lateral loads. Isolate metals from dissimilar metals or corrosive substrates using bituminous coatings or other means of permanent separation.

## SECTION 07720 - ROOF ACCESSORIES

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submit Product Data, Shop Drawings, and color Samples.

PART 2 - PRODUCTS

2.1 ROOF ACCESSORIES (as indicated on drawings)

A. Prefabricated Curbs and Equipment Supports

1. Provide units with cant strips where applicable and base profile coordinated with roof membrane requirements and with roof insulation thickness and roof deck slope.

B. Roof Hatches

C. Heat-and-Smoke Vents

D. Metal Grating Roof Walkway System

PART 3 - EXECUTION

3.1 INSTALLATION

A. Installation: Unless otherwise indicated, install roof accessory items according to construction details of NRCA's "Roofing and Waterproofing Manual." Coordinate with installation of roof deck, vapor barriers, roof insulation, roofing, and flashing to ensure combined elements are secure, waterproof, and weathertight. Verify compatibility for all products and materials used in combination with each other.

## SECTION 07840 - FIRESTOPPING

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. Submit Product Data and product certificates signed by manufacturer certifying compliance with specified requirements.

B. Provide firestopping systems with fire-resistance ratings indicated by reference to Ul designations as listed in its "Fire Resistance Directory," or to designations of another testing agency acceptable to authorities having jurisdiction.

C. Provide through-penetration firestopping systems with F-ratings indicated, as determined according to ASTM E 814, but not less than the fire-resistance rating of the constructions penetrated.

D. Provide through-penetration firestopping systems with T-ratings as well as F-ratings, as determined according to ASTM E 814, where indicated.

E. For exposed firestopping, provide products with flame-spread ratings of less than 25 and smoke-developed ratings of less than 450, as determined according to ASTM E 84.

PART 2 - PRODUCTS 2.1 FIRESTOPPING

A. As indicated on drawings.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install firestopping systems to comply with manufacturer's written instructions and with requirements listed in the testing agency's directory for the indicated fire-resistance rating. Furnish installer certifies, from installer indicating penetration fire stopping has been installed in compliance with requirements and manufacturer's written recommendations.

1. Penetrations in all fire resistant rated walls.

2. Penetrations in horizontal assemblies.

3. Penetrations in smoke barriers.

## SECTION 07900 - JOINT SEALANTS

1.1 GENERAL

A. Preconstruction Joint Sealant-Substrate Tests: Submit substrate materials representative of actual joint surfaces to joint sealant manufacturer for laboratory testing of joint sealants for adhesion to primed and unprimed substrates and for compatibility with joint substrates and other joint-related materials.

B. Submittals: In addition to product data submit the following:

1. Samples of each type and color of joint sealant required.

2. Certified test reports for joint sealants evidencing compliance with requirements.

1.2 PRODUCTS

A. Compatibility: Provide joint sealants, joint fillers, and other related materials that are compatible with one another and with joint substrates under service and application conditions, as demonstrated by testing and field experience.

B. Colors: Provide color indicated of exposed joint sealants or, if not otherwise indicated, as selected by Architect from manufacturer's standard colors.

C. Elastomeric Sealant Standard: Provide manufacturer's standard chemically curing, elastomeric sealant of base polymer indicated complying with ASTM C 920 variations.

1. One-Part, Nonsag Polysulfide Sealant: Type S; Grade NS; Class 12-1/2; Uses T, M, G, A, and O.

2. One-Part, Mildew-Resistant Silicone Sealant: Type S; Grade NS; Class 25; Uses NT, G, A, and O; formulated with fungicide; intended for sealing interior joints with nonporous substrates exposed to high humidity and temperature extremes.

D. Butyl Sealant: Manufacturer's standard one-part, nonsag, solvent-release-curing, polymerized butyl sealant complying with ASTM C 1085 and formulated with minimum of 75 percent solids to be nonstaining, paintable, and have a tack-free time of 24 hours or less.

E. Acrylic-Emulsion Sealant: One-part, nonsag, mildew-resistant, paintable, acrylic-emulsion sealant complying with ASTM C 834.

F. Silicone-Emulsion Sealant: Product complying with ASTM C 834 and, except for weight loss measured per ASTM C 792, with ASTM C 920, that accommodates joint movement of not more than 25 percent in both extension and compression for a total of 50 percent.

G. Acoustical Sealant: Nonsag, paintable, nonstaining, latex sealant complying with ASTM C 834 and effective in reducing airborne sound transmission through perimeter joints and openings in building construction as demonstrated by testing representative assemblies per ASTM E 90.

H. Acoustical Sealant for Concealed Joints: Nondrying, nonhardening, nonskinning, nonstaining, gunnable, synthetic rubber sealant recommended for sealing interior concealed joints to reduce transmission of airborne sound.

I. Tape Sealant: Solvent-free, butyl-based tape sealant with a solids content of 100 percent formulated to be nonstaining, paintable, and nonmigrating in contact with nonporous surfaces with or without reinforcement thread to prevent stretch and packaged on rolls with release paper on one side.

J. Preformed Foam Sealant: Preformed, precompressed, open-cell, high-density urethane foam sealant impregnated with a nondrying, water-repellent agent; in precompressed size and in roll or stick form to fit joint widths indicated; permanently elastic, mildew-resistant, nonmigratory, nonstaining, compatible with joint substrates and other joint sealants; and as follows:

1. Impregnating Agent: Manufacturer's standard.

2. Density: Manufacturer's standard.

3. Backing: Pressure-sensitive adhesive factory applied to one side, with protective wrapping.

K. Sealant Backings, General: Nonstaining; compatible with joint substrates, sealants, primers, and other joint fillers; approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.

1. Plastic Foam Joint Fillers: Preformed, compressible, resilient, nonwaxing, nonextruding strips of plastic foam of material indicated below, and of size, shape, and density to control sealant depth and otherwise contribute to producing optimum sealant performance.

a. Open-cell polyurethane foam.

b. Closed-cell polyethylene foam, nonabsorbent to liquid water and gas, nonoutgassing in unruptured state.

c. Proprietary, reticulated, closed-cell polymeric foam, nonoutgassing, with a density of 2.5 pcf and tensile strength of 35 psi per ASTM D 1623, and with water absorption less than 0.02 gram/cubic centimeter per ASTM C 1083.

d. Any material indicated above.

2. Elastomeric Tubing Joint Fillers: Neoprene, butyl, EPDM, or silicone tubing complying with ASTM D 1056, nonabsorbent to water and gas, and capable of remaining resilient at temperatures down to -26 deg F (-32 deg C).

3. Bond-Breaker Tape: Polyethylene tape or other plastic tape as recommended by sealant manufacturer for preventing bond between sealant and joint filler or other materials at back of joint.

L. Primer: As recommended by joint sealant manufacturer where required for adhesion of sealant to joint substrates indicated.

1.3 EXECUTION

A. General: Comply with joint sealant manufacturer's instructions applicable to products and applications indicated. Clean (and/or prime) joints in accordance with manufacturers recommendations prior to start of application of joint sealant. Comply with ASTM C1193 for use of joint sealants as applicable to materials, applications and conditions indicated.

B. Sealant Installation Standard: Comply with ASTM C 1193.

C. Acoustical Sealant Application Standard: Comply with ASTM C919 for use of joint sealants in acoustical applications.

D. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified in subparagraphs below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.

1. Remove excess sealant from surfaces adjacent to joints.

2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.

3. Provide concave joint profile per Figure 8A in ASTM C1193, unless otherwise indicated.

END OF SECTION 07901

## SECTION 08110 - STEEL DOORS AND FRAMES

1.1 GENERAL

A. Submit Product Data for each type of door and frame specified.

B. Quality Assurance: Comply with ANSI/SDI 100.

C. Fire-Rated Door Assemblies: NFPA 80, identical to assemblies tested per ASTM E 152, and labeled and listed by UL, Warnock Hersey, or another testing and inspecting agency acceptable to authorities having jurisdiction.

1.2 PRODUCTS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Amweld Building Products, Inc.

2. Ceco Door Products.

3. Fenestra Corp.

4. Kewanee Corp.

5. Republic Builders Products.

6. Steelcraft.

B. Hot-Rolled Steel Sheets: ASTM A 569 (ASTM A 569M).

C. Cold-Rolled Steel Sheets: ASTM A 366 (ASTM A 366M), commercial quality, or ASTM A 620 (ASTM A 620M), drawing quality.

D. Galvanized Steel Sheets: ASTM A 526 (ASTM A 526M), commercial quality, or ASTM A 642 (ASTM A 642M), drawing quality, with A 60 or G 60 (Z 180 or ZF 180) coating designation, mill phosphatized.

E. Steel Doors: Provide 1-3/4-inch- (44-mm-) thick doors of materials and ANSI/SDI A250.4, A250.8 and ANSI/SDI 100 grades and models specified below, or as indicated on Drawings or schedules:

1. Interior Doors: Level II, heavy-duty, Model 2, seamless design, minimum 0.0478-inch- (1.2-mm-) thick cold-rolled steel sheet faces.

2. Exterior Doors: Level III, extra heavy-duty, Model 2, seamless design, minimum 0.0635-inch- (1.6-mm-) thick galvanized steel sheet faces.

F. Frames: Provide frames for doors, sidelights, borrowed lights, and other openings that comply with ANSI/SDI 100; fabricate to be rigid, neat in appearance, and free from defects, warp, or buckle.

1. For interior frames provide units of the knock-down type, formed from 0.0478- inch- (1.2-mm-) thick cold-rolled steel for openings 48 inches (1220 mm) or less in width and from 0.0598-inch- (1.5-mm-) thick steel for openings over 48 inches (1220 mm) in width.

2. For exterior frames provide units with mitered or coped and continuously welded corners, formed from 0.0635-inch- (1.6-mm-) thick galvanized steel sheet.

3. Door Silencers: 3 on strike jambs of single-door frames and 2 on heads of double-door frames

G. Tolerances: Comply with SDI 117.

H. Fabricate concealed stiffeners, reinforcement, edge channels, louvers, and moldings from either cold- or hot- rolled steel sheet.

I. Hardware Preparation: Prepare doors and frames to receive mortised and concealed hardware according to SDI 107.

J. Glazing Stops: Minimum 0.0359-inch- (0.9-mm-) thick steel or 0.040-inch- (1-mm-) thick aluminum.

1. Provide nonremovable stops on outside of exterior doors and on secure side of interior doors for glass in doors.

2. Provide screw-applied, removable, glazing beads on inside of glass in doors.

K. Finishes, General: Comply with NAAMM's "Metal Finishes Manual" for recommendations relative to applying and designating finishes.

1. Apply primers and organic finishes to doors and frames after fabrication.

L. Galvanized Steel Sheet Finishes: Comply with SDI 112 and the following:

1. Surface Preparation: Clean surfaces with nonpetroleum solvent so that surfaces are free of oil or other contaminants. After cleaning, apply a conversion coating of the type suited to the organic coating applied over it. Clean welds, mechanical connections, and abraded areas, and apply galvanizing repair paint specified to comply with ASTM A 780.

2. Galvanizing Repair Paint: SSPC-Paint 20, high-zinc-dust-content paint with dry film containing not less than 94 percent zinc dust by weight.

3. Factory Priming for Field-Painted Finish: Where field painting after installation is indicated, apply air-dried primer specified below immediately after cleaning

M. Steel Sheet Finishes: Comply with SSPC-PA 1, "Paint Application Specification No. 1."

1. Surface Preparation: Solvent-clean surfaces according to SSPC-SP 1. Remove mill scale and rust to comply with SSPC-SP 5 (White Metal Blast Cleaning) or SSPC-SP 8 (Pickling).

2. Pretreatment: Immediately after surface preparation, apply a conversion coating suited to organic coating applied over it.

3. Factory Priming for Field-Painted Finish: Apply shop primer that complies with ANSI A224.1 acceptance criteria, is compatible with finish paint systems indicated, and has capability to provide a sound foundation for field-applied topcoats. Apply primer immediately after surface preparation and pretreatment.

1.3 EXECUTION

A. General: Install steel doors, frames, and accessories according to Shop Drawings, manufacturer's data, and as specified.

B. Placing Frames: Comply with provisions of SDI 105, unless otherwise indicated. Set frames accurately in position, plumbed, aligned, and braced securely until permanent anchors are set.

1. Except for frames located in existing concrete, masonry, or gypsum board assembly construction, place frames before constructing enclosing walls and ceilings and after finish flooring installation.

2. Install at least 3 anchors per jamb adjacent to hinge location on hinge jamb and at corresponding heights on strike jamb.

3. Install fire-rated frames according to NFPA 80.

C. Door Installation: Fit hollow-metal doors accurately in frames, within clearances specified in ANSI/SDI 100.

1. Fire-Rated Doors: Install with clearances specified in NFPA 80.

D. Prime Coat Touchup: Immediately after erection, sand smooth any rusted or damaged areas of prime coat and apply touchup of compatible air-drying primer.

E. Protection Removal: Immediately before final inspection, remove protective wrappings from doors and frames.

END OF SECTION 08110

## SECTION 08211 - FLUSH WOOD DOORS

1.1 GENERAL

A. Submittals: In addition to product data, submit the following:

1. Shop drawings indicating location and size of each door, elevation of each kind of door, details of construction, location and extent of hardware blocking, and other pertinent data.

2. Samples of actual materials in small sections for each face material and finish.

B. Quality Standards:

1. Comply with the following standards:

a. NWMDA Quality Standard: I.S.1-A, "Architectural Wood Flush Doors," of the National Wood Window and Door Association.

b. AWI Quality Standard: "Architectural Woodwork Quality Standards" of the Architectural Woodwork Institute.

c. WIC Quality Standard: "Manual of Millwork" of the Woodwork Institute of California.

2. Performance Grade:

a. Heavy Duty unless otherwise indicated.

b. Extra heavy Duty: public restrooms, exits, staging entrance.

c. Standard Duty: Closet, Washer/Dryer Closet.

1.2 PRODUCTS

A. Manufacturers Qualifications: A qualified manufacturer that is certified for chain of custody by an FSC-accredited certification body. Subject to compliance with requirements, provide doors by one of the following (or approved equal):

1. Algoma Hardwoods Inc.

2. Fenestra Corporation.

3. Mohawk Flush Doors, Inc.

4. Weyerhauser Co.

B. Interior Solid Core Doors for Opaque Finish: As follows:

1. Faces: Medium-density overlay over standard thickness hardwood face veneers.

2. Grade: Premium.

3. Construction: 7 plies.

4. Core: Glued-block core.

5. Bonding: Stiles and rails bonded to core, then entire unit abrasive planed before veneering.

C. Fire Rated Doors: Doors complying with NFPA-80 that are listed and labeled by a qualified testing agency, for fire protection rating where indicated.

D. Fabricate flush wood doors to comply with following requirements.

1. In sizes indicated for job-site fitting.

E. Shop prime exposed portions of doors for paint finish with one coat of wood primer specified in Division 9 Section "Painting."

1.3 EXECUTION

A. Install wood doors to comply with manufacturer's instructions and referenced quality standard and as indicated.

B. Align and fit doors in frames with uniform clearances and bevels. Machine doors for hardware. Seal cut surfaces after fitting and machining and pretreatment.

1. Shop Primer: Zinc-dust, zinc-oxide primer paint complying with performance requirements of FS TT-P-641, Type II.

## SECTION 08410 - ALUMINUM ENTRANCES AND STOREFRONTS

1.1 General:

A. System Performance Requirements: Comply with structural performance, air infiltration, and water penetration requirements indicated, as demonstrated by testing stock assemblies according to test methods indicated.

B. Accessibility Requirements: Entrance to comply with ADA/ABA Accessibility Guidelines: US Architectural and Transportation Barriers Compliance Boards, American's with Disability Act (ADA) and Architectural Barriers Act (ABA) Accessibility Guidelines for buildings and facilities, and ANSI A117.1, current version.

C. Thermal Movement: Provide for expansion and contraction resulting from an ambient temperature range of 180 deg F (100 deg C) without buckling, joint seal failure, undue stress on structural elements, damaging loads on fasteners, reduction of performance, or stress on glass. Doors shall function normally over specified range.

1. Wind Loads: Provide assemblies capable of withstanding pressures of 20 psf inward and outward, acting normal to plane of the wall.

D. Structural Performance: Test in accordance with ASTM E 330. There shall be no glass breakage or permanent damage to fasteners, anchors, hardware or actuating mechanism or permanent deformation of framing members in excess of 0.2 percent of their clear span.

1. Deflection Normal to the Plane of the Wall: Test pressure shall be wind load specified. Deflection shall not exceed 1/175 of clear span, when subjected to uniform load deflection test.

2. Deflection Parallel to the Plane of the Wall: Test pressure shall be 1.5 times wind pressure. Deflection of members carrying full dead load shall not exceed amount that will reduce glass bite below 75 percent of design dimension or edge clearance between member and fixed glass or other fixed member above to less than 1/8 inch. Clearance between the member and operable door or window shall be at least 1/16 inch.

3.Wind loads as per local jurisdictional and code requirements.

4.Seismic loads, where applicable.

5.Windbone, debris, impact resistance, where applicable.

E. Air Infiltration: Not more than 0.06 CFM per sq. ft. of fixed area (excluding operable door edges) when tested in accordance with ASTM E 283 at inward test pressure differential of 1.57 psf.

F. Water Penetration: No uncontrolled water penetration (excluding operable door edges) when tested in accordance with ASTM E 331 at an inward test pressure differential of 6.24 lbf per sq. ft.

G. Condensation Resistance: Provide units showing condensation resistance factor (CRF) of not less than 45 when tested in accordance with AAMA 1503.

H. Thermal Transmittance: Provide U-value of not more than 0.65 BTU/(hr x sq. ft. x deg F) at 15-mph exterior wind velocity when tested in accordance with AAMA 1503.

I. Submittals: Submit the following:

1.Product Data: Include fabrication methods, data on finishing, hardware and accessories and surface maintenance recommendations.

2. Shop Drawings: Include layout, installation details, 1/4-inch scale elevations, detail sections of composite members, anchors and reinforcement, hardware mounting heights and glazing details.

3. Hardware schedule organized into sets. Include item and manufacturer's name and designation of each item required.

4. Samples: Pairs of samples of each finish on 12-inch-long sections. Where normal color variations are anticipated, include sets indicating full range of color variations.

5. Certified test reports showing systems have been tested and comply with requirements.

J. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for installation of units required for this project and an installer who has completed installations similar to those required and whose work has resulted in a record of successful in-service performance.

K. Manufacturer's Qualifications: A firm experienced in manufacturing systems similar to those specific types and models indicated. Aluminum entrance and storefront by other manufacturers may be considered provided deviations do not change the design concept.

1.2 Products:

A. Aluminum Members: Alloy and temper recommended; comply with ASTM B 221 for extrusions, ASTM B 209 for sheet or plate, and ASTM B 211 for bars, rods, and wire. Kawneer screw spline

B. Carbon Steel Reinforcement: Comply with ASTM A 36 for structural shapes, plates and bars, ASTM A 611 for cold-rolled sheet and strip, or ASTM A 570 for hot-rolled sheet and strip.

C. Glazing Materials: Comply with "Glass and Glazing" section.

D. Panel Core Material: Rigid, closed-cell polyurethane insulation.

E. Fasteners: Aluminum, nonmagnetic stainless steel, zinc plated steel, or material warranted to be non-corrosive and compatible with aluminum components, hardware, anchors, and other components.

1. Do not use exposed fasteners except for application of hardware. For hardware, use Phillips flat-head machine screws that match finish of member or hardware being fastened.

F. Concealed Flashing: 0.0179-inch (26 gage) minimum dead-soft stainless steel, or 0.026-inch-thick minimum extruded aluminum of alloy and type selected for compatibility with other components.

G. Brackets and Reinforcements: High-strength aluminum; where use of aluminum is not feasible provide nonmagnetic stainless steel or hot-dip galvanized steel complying with ASTM A 123.

H. Concrete/Masonry Inserts: Cast iron, malleable iron, or hot-dip galvanized steel complying with ASTM A 123.

I. Compression Weatherstripping: Replaceable molded neoprene gaskets complying with ASTM D 2000 or molded PVC complying with ASTM D 2287.

J. Sliding Weatherstripping: Replaceable wool, polypropylene, or nylon woven pile weatherstripping, with nylon fabric or aluminum strip backing, complying with AAMA 701.2.

K. Hardware: Heavy-duty units required for operation; finish to match door.

1. Ball-Bearing Butts: 5-knuckle, 2-bearings, steel ball bearing butts sized to comply with ANSI A156.1, Grade 1; 2 butts for doors 7 feet 6 inches or less, 3 butts for taller heavier doors.

2. Non-removable Pins at all exterior door locations: Provide set screw in hinge barrel that, when tightened into a groove in hinge pin, prevents removal of pin while entrance door is closed.

3. Surface-Mounted Overhead Closers: Modern type with cover, for hinge side installation. Comply with ANSI A156.4, Grade 1. Comply with recommendations for closer size. Include the following:

a. Hold-open arm.

b. Delayed-action closing.

c. ADA, ANSI A117.1 for accessible entrances.

4. Door Stop: Floor or wall mounted, as appropriate, with integral rubber bumper; comply with ANSI A156.16, Grade 1.

5. Cylinders are supplied under another Division 8 Section.

6. Thumb-Turns: Inside thumb-turn cylinders of cast aluminum alloy.

7. Deadlocks: Mortised maximum security deadlock, with minimum 1-inch-long pivoted bolt and stainless steel strike box; comply with ANSI A156.5, Grade 1.

8. Deadlatches: Mortise-type deadlatch with stainless steel strike box; comply with ANSI A156.5, Grade 1.

9. Lever Handles: Cast aluminum alloy inside units.

10. Panic Hardware: Concealed-rod type actuated by full-width crash bar. Comply with UL 305.

11. Push-Pull Plates: Aluminum push-pull plates of style indicated.

12. Thresholds: Extruded aluminum in mill finish, with anchors and clips, coordinated with pivots and floor-concealed closers.

13. Silencers: At locations without weatherstripping, provide neoprene silencers on stops to prevent metal-to-metal contact.

L. Framing System: Fabricate from extruded aluminum members of size and profile indicated. Include reinforcing. Provide for flush glazing from the exterior without projecting stops. Shop-fabricate and pre-assemble. Provide frame sections without exposed seams.

1. Infill Panels: Flush-laminated panels of thickness indicated, with core material laminated with waterproof glue between two sheets of aluminum.

M. Stile-and-Rail Type Entrance Doors: Provide tubular frame members, fabricated with mechanical joints using heavy inserted reinforcing plates and concealed tie-rods or j-bolts.

1. Glazing: Fabricate to facilitate replacement of glass or panels, without disassembly. Provide snap-on extruded aluminum glazing stops with exterior stops anchored for nonremoval.

2. Design: Provide 1-3/4-inch-thick doors of design indicated.

a. Medium stile (3-1/2-inch nominal width).

N. Fabrication: Fabricate components to designs, sizes and thicknesses indicated and comply with indicated standards. Sizes and profiles are indicated on the drawings.

1. Thermal-Break Construction: Fabricate framing with an integrally concealed, low conductance thermal barrier, between exterior materials and interior members to eliminate direct metal-to-metal contact.

O. Prefabrication: Complete fabrication, assembly, finishing and hardware application before shipment to the Project. Disassemble only as necessary for shipment and installation.

1. Do not drill and tap for surface-mounted hardware items until time of installation.

2. Preglaze door and frame units to greatest extent possible.

P. Welding: Comply with AWS recommendations. Grind exposed welds smooth. Restore mechanical finish.

Q. Reinforcing: Install reinforcing for hardware and as necessary for performance requirements, sag resistance and rigidity.

R. Dissimilar Metals: Separate dissimilar metals with bituminous paint, suitable sealant, nonabsorptive plastic or elastomeric tape or gasket between surfaces. Do not use coatings containing lead.

S. Continuity: Maintain accurate relation of planes and angles, with hairline fit of contacting members.

T. Fasteners: Conceal fasteners wherever possible.

U. Provide finger guards of collapsible neoprene or PVC gasketing securely anchored into frame at hinge-jamb of center-pivoted doors.

V. Finishes: Comply with NAAMM "Metal Finishes Manual" for recommendations relative to application and designations of finishes. Finish designations prefixed by "AA" conform to the system established by the Aluminum Association for designating aluminum finishes.

W. Class I Color Anodized Finish: AA-M12C22A42/A44. Comply with AAMA 606.1 or AAMA 608.1.

1. Color: Clear Anodized

1.3 Execution:

A. Examine substrates for compliance with requirements, installation tolerances, and conditions that affect installation. Correct unsatisfactory conditions before proceeding.

B. Installation: Comply with manufacturer's instructions. Set units plumb, level, and true to line, without warp or rack of framing members, doors, or panels. Install in proper alignment and relation to established lines and grades. Provide support and anchor securely in place.

C. Drill and tap frames and doors and apply surface-mounted hardware.

D. Set sill members in bed of sealant, or with joint fillers or gaskets.

E. Refer to "Glass and Glazing" Section for installation of glass and other panels glazed into doors and framing.

F. Adjust hardware to function properly.

G. Clean completed system after installation. Avoid damage to coatings.

H. Clean glass after installation. Comply with "Glass and Glazing" Section for cleaning and maintenance.

END OF SECTION 08410

## SECTION 08710 - DOOR HARDWARE

1.1 GENERAL

A. Submit samples of hardware items, showing each required finish from each manufacturer (for acceptance of color and texture only).

B. Submit final hardware schedule organized by "hardware sets," to indicate specifically the product to be furnished for each item required on each door.

1. Furnish templates to each fabricator of doors and frames as required for hardware preparation.

2. Provide keying schedule. Verify keying and master keying requirements with tenant/landlord/owner as required.

C. For fire-rated openings provide hardware tested and listed by UL or FM (NFPA Standard 80). On panic exit devices provide UL or FM label indicating "Fire Exit Hardware."

1.2 PRODUCTS

A. Number Designations: Numbers indicating hardware items are ANSI/BHMA standard number designations.

B. Manufacturers: Subject to compliance with requirements, provide products by manufacturers for various products listed below. An asterisk (*) following manufacturer's name designates manufacturer whose products are indicated in Hardware Schedule. Such products are listed in the schedule by specific reference to manufacturer's catalog numbers. Except as otherwise indicated, products of equivalent quality, design, and function by other listed manufacturers may be used, subject to approval of Architect.

1. Butts and Hinges: Bommer, Cal Royal, Hager*, McKinney, H. Soss, Stanley, Roton.

2. Key Control System: Key Control Systems, Telkee. Verify with Owner.

3. Cylinders and Locks: Arrow, Best, Corbin & Russwin, Falcon, Sargent, Schlage*, Yale.

4. Exit/Panic Devices: Adams Rite, Arrow, Corbin & Russwin, Dor-O-Matic, Locknet*, Monarch, Precision, Reed, Sargent, Von Duprin*, Yale.

5. Overhead Closers: Arrow, Corbin & Russwin, Dorma, LCN*, International Door Closers, Monarch, Norton, Rixon-Firemark, Sargent, Yale.

6. Door Control Devices: Baldwin, Brookline, Builders Brass, Corbin & Russwin, Glynn-Johnson, Hager, Ives*, Quality, Triangle Brass.

7. Door Trim Units: Baldwin, Brookline, Builders Brass, Hager, Ives, Triangle Brass.

8. Kick, Mop, and Armor Plates: Baldwin, Brookline, Corbin & Russwin, Hager, Hiawatha, Ives Triangle Brass*.

9. Door Stripping and Seals: Hager, National Guard, Pemko, Reese, Sealeze, Ultra, Zero.

10. Thresholds: Hager, National Guard, Pemko*, Reese, Sealeze, Zero.

11. Automatic Drop Seals : Hager, National Guard, Pemko, Reese, Zero.

## SECTION 08800 - GLAZING

1.1 GENERAL

A. System Performance Requirements: Provide glazing systems capable of withstanding normal thermal movement, wind loading, and impact loading, without failure including loss or glass breakage attributable to: defective manufacture, fabrication, and installation; deterioration of glazing materials; and other defects in construction.

1. Glass Design: Provide glass lites in the thicknesses and strengths (annealed or heat-treated) to meet or exceed the following criteria based on analysis of Project loads and in-service conditions:

a. Minimum glass thickness, nominally, of lites in exterior walls is 6.0 mm (0.23 inch).

b. Minimum glass thicknesses of lites composed of annealed or heat-treated glass are selected so the worst-case probability of failure does not exceed the following:

1) 8 lites per 1000 for lites set vertically or not over 15 degrees off vertical and under wind action.

c. Provide safety glazing in all hazardous locations as defined by code requirements. Provide labeling at all tempered and/or safety glazing locations.

B. Submittals: In addition to product data, submit 12-inch-square samples of each type of glass indicated, except for clear monolithic glass products, and 12-inch-long samples of each color required (except black) for each type of sealant or gasket exposed to view.

C. Product certificates signed by glazing materials manufacturers certifying that their products comply with specified requirements.

D. Compatibility and adhesion test reports from sealant manufacturer indicating that glazing materials were tested for compatibility and adhesion with glazing sealants.

E. Compatibility test report from insulating glass edge sealant manufacturer indicating glass edge sealants were tested for compatibility with other glazing materials.

F. Glazing Publications: Comply with published recommendations of glass product manufacturers, "FGMA Glazing Manual," and publications of AAMA, LSGA, and SIGMA as applicable to products indicated, except where more stringent requirements are indicated.

G. Safety Glass: Products complying with ANSI Z97.1 and testing requirements of 16 CFR Part 1201 for Category II materials.

1. Insulating Glass Certification Council (IGCC).

2. Associated Laboratories, Inc. (ALI).

3. National Certified Testing Laboratories (NCTL).

1.2 PRODUCTS

A. Float Glass: ASTM C 1036, Type I, Class as indicated below, and Quality q3:

1. Class 1 (clear) unless otherwise indicated.

B. Heat Treated Float Glass, Fabrication: Fabricate heat-treated float glass by the following method:

1. Vertical (tong-held) or horizontal (roller-hearth) process, at manufacturer's option, except provide horizontal process where indicated as tongless or free of tong marks.

C. Heat-Treated Float Glass Products: As follows:

1. Uncoated, Clear, Heat-Treated Float Glass: ASTM C 1048, Condition A, Type I, Class 1, Quality q3, kind as indicated below:

a. Kind HS where indicated.

b. Kind FT where indicated.

D. Sealed Insulating Glass Units: Preassembled units complying with ASTM E 774 and with other requirements indicated.

1. For properties of individual glass lites making up units, refer to requirements specified elsewhere in this Section applicable to glass products comprising lites of insulating glass units.

2. Performance characteristics designated for coated insulating glass are nominal values based on manufacturer's published test data for units with lites 6.0 mm (0.23 inch) thick and nominal 1/2-inch dehydrated space between lites, unless otherwise indicated.

3. U-values are expressed as Btu/hour x sq. ft. x deg F.

E. Elastomeric Glazing Sealants: Products complying with ASTM C 920 requirements indicated on each Elastomeric Glazing Sealant Product Data Sheet at the end of this Section, in colors indicated, compatible with other materials they will contact.

1. Additional Movement Capability: Provide products, when tested

7. Steel Rigid Furring Channels: ASTM C 645, hat shaped, 0.0179-inch (0.45-mm) minimum base metal thickness, unless otherwise indicated.
   a. Protective Coating: ASTM A 653, G 40 (ASTM A 653M, Z 90) hot-dip galvanized coating for framing for exterior soffits and ceiling suspension members in areas within 10 feet (3 m) of exterior walls.

8. Steel Resilient Furring Channels: Standard product fabricated from steel sheet complying with ASTM A 653 (ASTM A 653M) or ASTM A 568 (ASTM A 568M) to form 1/2-inch- (12.7-mm-) deep channel of the following configuration:
   a. Single- or Double-Leg Configuration: Asymmetric-shaped channel with face connected to a single flange by a single-slotted leg (web) or hat-shaped channel, with 1-1/2-inch- (38.1-mm-) wide face connected to flanges by double-slotted or expanded-metal legs (webs).

9. Grid Suspension System for Interior Ceilings: ASTM C 645, manufacturer's standard direct-hung system.

C. Steel Framing for Walls and Partitions: Provide steel framing members complying with the following requirements:

1. Protective Coating: ASTM A 653, G 40 (ASTM A 653M, attached to and within 10 feet (3 m) of exterior walls.

2. Steel Studs and Runners: ASTM C645/ASTM C754, in depth indicated and with 0.0179-inch (0.45-mm) minimum base metal thickness, unless otherwise indicated.
   a. Provide 0.0329-inch (0.84-mm) minimum base metal thickness for head runner, sill runner, jamb, and cripple studs at door and other openings.
   b. Provide 0.0329-inch (0.84-mm) minimum base metal thickness in locations to receive cementitious backer units.

3. Deflection Track: Steel sheet top runner manufactured to prevent cracking of finishes applied to interior partition framing resulting from deflection of structure above; in thickness not less than indicated for studs and in width to accommodate depth of studs.
   a. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:

1) Dietrich Metal Framing; SLP-TRK Slotted Deflection Track.
2) MBA Building Suppliers; FlatSteel Deflection Track, Slotted Deflecto Track.
3) Steel Network Inc. (The); VertClip SLD, VertTrack VTD Series.
4) Superior Metal Trim; Superior Flex Track System (SFT).
5) Telling Industries; Vertical Slip Track, [Vertical Slip Track II]

4. Steel Rigid Furring Channels: ASTM C 645, hat shaped, in depth indicated and with 0.0179-inch (0.45-mm) minimum base metal thickness, unless otherwise indicated.

5. Furring Brackets: Serrated-arm type, adjustable, fabricated from corrosion-resistant steel sheet complying with ASTM C 645, minimum thickness of base (uncoated) metal of 0.0329 inch (0.84 mm), designed for screw attachment to steel studs and steel rigid furring channels used for furring.

6. Steel Resilient Furring Channels: Manufacturer's standard product designed to reduce sound transmission, fabricated from steel sheet complying with ASTM A 653 (ASTM A 653M) or ASTM A 568 (ASTM A 568M) to form 1/2-inch- (12.7-mm-) deep channel of the following configuration:
   a. Single- or Double-Leg Configuration: Asymmetric-shaped channel with face connected to a single flange by a single-slotted leg (web) or hat-shaped channel, with 1-1/2-inch- (38.1-mm-) wide face connected to flanges by double-slotted or expanded-metal legs (webs).

7. Z-Furring Members: Manufacturer's standard Z-shaped furring members with slotted or nonslotted web, fabricated from steel sheet complying with ASTM A 653 (ASTM A 653M) or ASTM A 568 (ASTM A 568M); with a minimum base metal (uncoated) thickness of 0.018 inch (0.45 mm), face flange of 1-1/4 inch (31.8 mm), wall-attachment flange of 7/8 inch (22.2 mm), and of depth required to fit insulation thickness indicated.

D. Fasteners for Metal Framing: Type, material, size, corrosion resistance, holding power, and other properties required to fasten steel framing and furring members securely to substrates involved; complying with the recommendations of gypsum board manufacturers for applications indicated.

E. Gypsum Board Products: Types indicated in maximum lengths available that will minimize end-to-end butt joints in each area indicated to receive gypsum board application.

1. Gypsum Wallboard: ASTM C36/C36M-01, in thickness indicated.
   a. Type: Regular for vertical surfaces, unless otherwise indicated.
   b. Type: Type X where required for fire-resistance-rated assemblies.
   c. Type: Say-resistant type for ceiling surfaces.
   d. Edges: Tapered.
   e. Proprietary Gypsum Board Products: Subject to compliance with requirements, provide one of the following products where proprietary gypsum wallboard is indicated:

1) Gyprock Fireguard C Gypsum Board; Domtar Gypsum.
2) Firestop Type C; Georgia-Pacific Corp.
3) Fire-Shield G; National Gypsum Co.; Gold Bond Building Products Division.
4) SHEETROCK Brand Gypsum Panels, FIRECODE C Core; United States Gypsum Co.
5) SHEETROCK Brand Gypsum Panels, ULTRACODE Core; United States Gypsum Co.

1. Gypsum Wallboard: ASTM C 36, in thickness indicated.
   a. Type: Regular for vertical surfaces, unless otherwise indicated.
   b. Type: Type X where required for fire-resistance-rated assemblies.
   c. Type: Sag-resistant type for ceiling surfaces.
   d. Edges: Tapered.
   e. Proprietary Gypsum Board Products: Subject to compliance with requirements, provide one of the following products where proprietary gypsum wallboard is indicated:

1) Gyprock Fireguard C Gypsum Board; Domtar Gypsum.
2) Firestop Type C; Georgia-Pacific Corp.
3) Fire-Shield G; National Gypsum Co.; Gold Bond Building Products Division.
4) SHEETROCK Brand Gypsum Panels, FIRECODE C Core; United States Gypsum Co.
5) SHEETROCK Brand Gypsum Panels, ULTRACODE Core; United States Gypsum Co.

2. Exterior Gypsum Soffit Board: ASTM C 931, with manufacturer's standard edges, in thickness indicated.
   a. Type: Regular, unless otherwise indicated.

3. Water-Resistant Gypsum Backing Board: ASTM C 630, in thickness indicated.
   a. Type: Regular, unless otherwise indicated.

F. Cementitious Backer Units: ANSI A118.9 and C1325, in maximum lengths available to minimize end-to-end butt joints with manufacturer's standard edges.

G. Accessories for Interior Installation: Cornerbead, edge trim, and control joints complying with ASTM C 1047, formed metal or plastic, with metal complying with the following requirement:

1. Steel sheet zinc coated by hot-dip process or rolled zinc.

H. Accessories for Exterior Installations: Cornerbead, edge trim, and control joints formed from steel sheet zinc coated by hot-dip process or rolled zinc complying with ASTM C 1047.

J. Joint Treatment Materials: Provide joint treatment materials complying with ASTM C475/C475M and the recommendations of both the manufacturers of sheet products and of joint treatment materials for each application indicated.

1. Joint Tape for Gypsum Board: Paper reinforcing tape, unless otherwise indicated.
   a. Use pressure-sensitive or staple-attached, open-weave, glass-fiber reinforcing tape with compatible joint compound where recommended by manufacturer of gypsum board and joint treatment materials for application indicated.
   b. Use pressure-sensitive or staple-attached, open-weave, glass-fiber reinforcing tape with compatible joint compound where recommended by manufacturer of gypsum board and joint treatment materials for application indicated.

2. Joint Tape for Cementitious Backer Units: As recommended by cementitious backer unit manufacturer.

3. Setting-Type Joint Compounds for Gypsum Board: Factory-packaged, job-mixed, chemical-hardening powder products formulated for uses indicated.
   a. For prefilling gypsum board joints, use formulation recommended by gypsum board manufacturer.
   b. For filling joints and treating fasteners of water-resistant gypsum backing board behind base for ceramic tile, use formulation recommended by gypsum board manufacturer.
   c. For topping compound, use sandable formulation.

4. Drying-Type Joint Compounds for Gypsum Board: Factory-packaged vinyl-based products complying with the following requirements for formulation and intended use.
   a. Ready-Mixed Formulation: Factory-mixed product.

1) All-purpose compound formulated for both taping and topping compounds.

5. Joint Compound for Cementitious Backer Units: Material recommended by cementitious backer unit manufacturer.

K. Acoustical Sealant for Exposed and Concealed Joints: Manufacturer's standard nonsag, paintable, nonstaining latex sealant complying with ASTM C 834 that is effective in reducing airborne sound transmission through perimeter joints and openings in building construction as demonstrated by testing representative assemblies according to ASTM E 90. Provide sealants that have VOC content of 250g/l or less when calculated according to 40 CFR 59, suprt D (EPA Method 24).

L. Acoustical Sealant for Concealed Joints: Manufacturer's standard nondrying, nonhardening, nonskinning, nonstaining, gunnable, synthetic-rubber sealant recommended for sealing interior concealed joints to reduce transmission of airborne sound.

M. Miscellaneous Materials: Provide auxiliary materials for gypsum board construction that comply with referenced standards and recommendations of gypsum board manufacturer.

1. Spot Grout: ASTM C 475, setting-type joint compound recommended for spot-grouting hollow metal door frames.

2. Fastening Adhesive for Wood: ASTM C557, as recommended by manufacturer.

3. Fastening Adhesive for Metal: Special adhesive recommended for laminating by manufacturer gypsum panels to steel framing.

4. Steel drill screws complying with ASTM C 1002 for the following applications:
   a. Fastening gypsum board to steel members less than 0.033 inch (0.84 mm) thick.
   b. Fastening gypsum board to wood members.
   c. Fastening gypsum board to gypsum board.

5. Steel drill screws complying with ASTM C 954 for fastening gypsum board to steel members from 0.033 to 0.112 inch (0.84 to 2.84 mm) thick.

6. Steel drill screws of size and type recommended by unit manufacturer for fastening cementitious backer units.

7. Gypsum Board Nails: ASTM C 514.

8. Asphalt-Saturated Organic Felt: ASTM D 226, Type I (No. 15 asphalt felt), nonperforated.

9. Foam Gaskets: Closed-cell vinyl foam adhesive-backed strips that allow fastener penetration without foam displacement, 1/8 inch (3.2 mm) thick, in width to suit metal stud size indicated.

10. Thermal Insulation: Material indicated below, of thickness and width to fill voids formed by Z-furring members:
   a. Unfaced mineral-fiber blanket insulation to comply with ASTM C 665 for Type I.
   b. Extruded-polystyrene board insulation to comply with ASTM C 578 for Type IV, and with flame-spread and smoke-developed ratings of 75 and 450, respectively, according to ASTM E 84.

11. Polyethylene Vapor Retarder: ASTM D 4397, thickness and maximum permeance rating as follows:
   a. 4 mils (0.1 mm), 0.19 perms (10.9 ng/Pa x s x sq. m.)

12. Vapor Retarder Tape: Pressure-sensitive tape of type recommended by vapor retarder manufacturer for sealing joints and penetrations in vapor retarder.

1.3 EXECUTION

A. Install steel framing to comply with ASTM C 754 and with ASTM C 840 requirements that apply to framing installation.

1. Examine all areas and substrates including welded hollow metal frames and framing, with installer present, for compliance with requirements and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected. Comply with ASTM 840.

2. Install supplementary framing, blocking, and bracing at terminations in gypsum board assemblies to support fixtures, equipment services, heavy trim, grab bars, toilet accessories, furnishings, or similar construction.

3. Isolate steel framing from building structure at locations indicated to prevent transfer of loading imposed by structural movement.
   a. Where building structure abuts ceiling perimeter or penetrates ceiling.
   b. Where partition framing and wall furring abut structure, except at floor.

4. Do not bridge building control and expansion joints with steel framing or furring members. Independently frame both sides of joints with framing or furring members as indicated.

B. Installing Steel Framing for Suspended and Furred Ceilings: As follows:

1. Sway-brace suspended steel framing with hangers used for support.

2. Install suspended steel framing components in sizes and at spacings indicated, but not less than that required by the referenced steel framing installation standard.

3. Grid Suspension System: Attach perimeter wall track or angle where grid suspension system meets vertical surfaces. Mechanically join main beam and cross-furring members to each other and butt-cut to fit into wall track.

4. For exterior soffits, install cross-bracing and additional framing to resist wind uplift according to details on Drawings.

C. Installing Steel Framing for Walls and Partitions: Install steel studs and furring at spacings indicated.

1. Where studs are installed directly against exterior walls, install asphalt felt strips or foam gaskets between studs and wall.

2. Extend partition framing full height to structural supports or substrates above suspended ceilings, except where partitions are indicated to terminate at suspended ceilings. Continue framing over frames for doors and openings and frame around ducts penetrating partitions above ceiling to provide support for gypsum board.

3. Cut studs 1/2 inch (13 mm) short of full height to provide perimeter relief.

4. For STC-rated and fire-resistance-rated partitions that extend to the underside of floor/roof slabs and decks or other continuous solid structural surfaces to obtain ratings, install framing around structural and other members extending below floor/roof slabs and decks, as needed, to support gypsum board closures needed to make partitions continuous from floor to underside of solid structure. Seal construction at perimeters, openings, joints, etc. with a continuous bead of acoustical sealant in accordance with manufactures requirements.

5. Frame door openings to comply with GA-219, and with applicable published recommendations of gypsum board manufacturer, unless otherwise indicated.

6. Frame openings other than door openings to comply with details indicated or, if none indicated, as required for door openings. Install framing below sills of openings to match framing required above door heads.

7. Install Z-furring members and thermal insulation as indicated and to comply with requirements of manufacturer's directions.

8. Install polyethylene vapor retarder where indicated to comply with the following requirements:
   a. Extend vapor retarder to extremities of areas to be protected from vapor transmission. Secure in place with mechanical fasteners or adhesives. Extend vapor retarder to cover miscellaneous voids in insulated substrates, including those filled with loose mineral-fiber insulation.
   b. Seal vertical joints in vapor retarders over framing by lapping not less than 2 wall studs. Fasten vapor retarders to framing at top, end, and bottom edges, at perimeter of wall openings, and at lap joints; space fasteners 16 inches (400 mm) o.c.
   c. Seal joints in vapor retarders caused by pipes, conduits, electrical boxes, and similar items penetrating vapor retarders with vapor retarder tape.
   d. Repair any tears or punctures in vapor retarder immediately before concealing it with the installation of gypsum board or other construction.

D. Gypsum Board Application and Finishing Standards: Install and finish gypsum panels to comply with ASTM C 840 and GA-216.

1. Install sound-attenuation blankets, where indicated, prior to installing gypsum panels unless blankets are readily installed after panels have been installed on one side.

2. Install ceiling board panels across framing to minimize the number of abutting end joints and to avoid abutting end joints in the central area of each ceiling. Stagger abutting end joints of adjacent panels not less than one framing member.

3. Spot grout hollow metal door frames for solid-core wood doors, hollow metal doors, and doors over 32 inches (813 mm) wide. Apply spot grout at each jamb anchor clip and immediately insert gypsum panels into frames.

4. Form control and expansion joints at locations in accordance with ASTM C840, or as indicated and as detailed, with space between edges of adjoining gypsum panels, as well as supporting framing behind gypsum panels.

5. Isolate perimeter of nonload-bearing gypsum board partitions at structural abutments, except floors, as detailed. Provide 1/4- to 1/2-inch- (6.4- to 12.7-mm-) wide spaces at these locations and trim edges with U-bead edge trim where edges of gypsum panels are exposed. Seal joints between edges and abutting structural surfaces with acoustical sealant.

6. Wood Framing: Install gypsum board panels over wood framing, with floating internal corner construction. Do not attach gypsum panels across the flat grain of wide-dimension lumber, including floor joists and headers. Float gypsum panels over these members, or provide control joints to counteract wood shrinkage.

7. Where STC-rated gypsum board assemblies are indicated, seal construction at perimeters, behind control and expansion joints, openings, and penetrations with a continuous bead of acoustical sealant including a bead at both faces of the partitions. Comply with ASTM C 919 and manufacturer's recommendations for location of edge trim and closing off sound-flanking paths around or through gypsum board assemblies.

8. Space fasteners in gypsum panels according to referenced gypsum board application and finishing standard and manufacturer's recommendations.
   a. Space screws a maximum of 12 inches (304.8 mm) o.c. for vertical applications.

9. Space fasteners in panels that are tile substrates a maximum of 8 inches (203.2 mm) o.c.

10. Install cementitious backer units to comply with ANSI A108.11.

11. Install glass-mat, water-resistant gypsum backing board panels to comply with manufacturer's installation instructions.

12. Install water-resistant gypsum backing board panels at showers, tubs, and where indicated. Install with 1/4-inch (6.4-mm) open space where panels abut other construction or penetrations.

13. Acoustical Tile Base: Where gypsum panels form the base for adhesively applied acoustical tile, install gypsum wallboard panels with tapered edges taped and finished to produce a flat surface.

14. Curved Surfaces:
   a. Install panels horizontally (perpendicular to supports) and unbroken, to extent possible, across curved surface plus 12-inch- (300-mm-) long straight sections at ends of curves and tangent to them.
   b. For double layer construction, fasten base layer to studs with screws 16 inches (400 mm) o.c. Center gypsum board face layer over joints in base layer, and fasten to studs with screws spaces 12 inches (300 mm) o.c.

15. Single-Layer Fastening Methods: Apply gypsum panels to supports as follows in accordance with manufacturers installation instructions and specifications:
   a. Fasten with screws
   b. Fasten to wood supports with single nailing.
   c. Fasten to wood supports with double nailing.
   d. Fasten to wood supports with adhesive and supplementary nails or screws.

16. Multilayer Fastening Methods: Apply base layers of gypsum panels and face layer to base layers as follows:
   a. Fasten both base layers and face layers separately to supports with screws.
   b. Fasten base layers with screws and face layer with adhesive and supplementary fasteners.
   c. Fasten base layers to wood supports with nails and face layer with adhesive and supplementary fasteners.

E. Direct-Bonding to Substrate: Where gypsum panels are indicated as directly adhered to a substrate (other than studs, joists, furring members, or base layer of gypsum board), comply with gypsum board manufacturer's recommendations, and temporarily brace or fasten gypsum panels until fastening adhesive has set.

F. Exterior Soffits and Ceilings: Apply exterior gypsum soffit board panels perpendicular to supports, with end joints staggered over supports. Install with 1/4-inch (6.4-mm) open space where panels abut other construction or structural penetrations. Fasten with corrosion-resistant screws.

G. Installing Trim Accessories: For trim accessories with back flanges, fasten to framing with the same fasteners used to fasten gypsum board. Otherwise, fasten trim accessories according to accessory manufacturer's directions for type, length, and spacing of fasteners.

1. Install cornerbead at external corners.

2. Install edge trim where edge of gypsum panels would otherwise be exposed. Provide edge trim type with face flange formed to receive joint compound, except where other types are indicated.
   a. Install LC-bead where gypsum panels are tightly abutted to other construction and back flange can be attached to framing or supporting substrate.
   b. Install L-bead where edge trim can only be installed after gypsum panels are installed.
   c. Install U-bead where indicated.
   d. Install aluminum trim and other accessories where indicated.
   e. Install control joints at locations indicated.
   f. Install control joints according to ASTM C 840 and manufacturer's recommendations and in specific locations approved by Architect for visual effect.

H. Finishing Gypsum Board Assemblies: Treat gypsum board joints, interior angles, flanges of cornerbead, edge trim, control joints, penetrations, fastener heads, surface defects, and elsewhere as required to prepare gypsum board surfaces for decoration.

1. Prefill open joints, rounded or beveled edges, and damaged areas using setting-type joint compound.

2. Apply joint tape over gypsum board joints, except those with trim accessories having flanges not requiring tape.

3. Apply joint tape over gypsum board joints and to flanges of trim accessories, except those with trim having flanges not intended for tape, as recommended by trim accessory manufacturer.

4. Levels of Gypsum Board Finish: Provide the following levels of gypsum board finish per GA-214/ASTM C840.
   a. Level 1 for ceiling plenum areas, concealed areas, and where indicated, unless a higher level of finish is required for fire-resistance-rated assemblies and sound-rated assemblies.
   b. Level 2 where panels form substrates for tile and where indicated.
   c. Level 4 for gypsum board surfaces, unless otherwise indicated.
   d. Level 5 for gypsum board surfaces, as indicated on drawings. Level 5 - The highest quality finish is the most effective method to provide a uniform surface and minimize the possibility of joint photographing and of fasteners showing through the final decoration. This level of finish is required where gloss, semi-gloss or enamel are specified, or when flat joints are specified over an untextured surface, or where critical lighting conditions occur. The prepared surface shall be coated with a drywall primer prior to the application of final decoration. All joints and interior angles shall have tape embedded in joint compound and immediately wiped with a joint knife or trowel, leaving a thin coating of joint compound over all joints and interior angles. Two separate coats of joint compound shall be applied over all flat joints and one separate coat of joint compound applied over interior angles. Fastener heads and accessories shall be covered with three separate coats of joint compound. A thin skim coat of joint compound shall be trowel applied to the entire surface. Excess compound is immediately sheared off, leaving a film or skim coating of compound completely covering the paper. As an alternative to a skim coat, a material manufactured especially for this purpose may be applied. The surface must be smooth and free of tool marks and ridges. The prepared surface shall be covered with a drywall primer prior to the application of the final decoration.

5. For Level 4 gypsum board finish, embed tape in joint compound and apply first, fill (second), and finish (third) coats of joint compound over joints, angles, fastener heads, and accessories. Touch up and sand between coats and after last coat as needed to produce a surface free of visual defects and ready for decoration.

6. Where Level 2 gypsum board finish is indicated, embed tape in joint compound and apply first coat of joint compound.

7. Where Level 1 gypsum board finish is indicated, embed tape in joint compound.

8. Finish exterior gypsum soffit board using setting-type joint compounds to prefill joints and embed tape, and for first, fill (second), and finish (third) coats, with the last coat being a sandable product. Smooth each coat before joint compound hardens to minimize need for sanding. Sand between coats and after finish coat.

a. Painting exterior gypsum soffit board after finish coat has dried is specified in another Division 9 Section.

9. Finish cementitious backer units to comply with unit manufacturer's directions.

END OF SECTION 09250

## SECTION 09300 - TILE

1.1 General

A. ANSI Tile Standards: Comply with ANSI A137 Standard Specification for Ceramic Tile and ANSI 108 series of tile installation standards included under "American National Standard specifications for the Installation of Ceramic Tile."

B. TCA Installation Guidelines: TCA "Handbook for Ceramic Tile Installation"; comply with TCA installation methods indicated.

C. Performance Requirements:

1. Static Coefficient of Friction: For tile installed on walkways surfaces, provide products with the following values as determined by testing identical products per ASTM C1028:
   a. Level Surfaces: Minimum 0.50 thru 0.60 static coefficient of friction.
   b. Step Treads: Minimum 0.50 static coefficient of friction.
   c. Ramp Surfaces: Minimum 0.80 static coefficient of friction.

2. Manufacturer shall verify compliance and submittal documentation for all materials installed on all walking surfaces.

D. Submittals: With manufacturer's product data and installation instructions for tile work, submit samples of each type, color, and texture of tile mounted on 12-inch- square backing with joints grouted.

1.2 Products

A. Colors, Textures, and Patterns: For tile, grout, and other products requiring selection of colors, surface textures, patterns, and other appearance characteristics, comply with the following requirements

1. Provide selections made by Architect from manufacturer's full range of standard colors, textures, and patterns for products of type indicated.

B. Sizes and Thickness: As indicated or, if not indicated, as selected by Architect from manufacturer's standard sizes and thicknesses.

C. Tile Grade: "Standard Grade" unless otherwise indicated.

D. Unglazed Ceramic Mosaic Tile: Factory-mounted flat tile and as indicated on finish schedule to comply with manufacturers requirements.

E. Glazed Ceramic Mosaic Tile: Provide factory-mounted flat tile as indicated on finish schedule to comply with manufacturers requirements.

F. Trim Shapes: Same material, size, color, and texture as field tile.

G. Marble Thresholds: ASTM C503, with a minimum abrasion resistance of 10 per ASTM C1353 or ASTM C241and with honed finish.

1. Description: Uniform, line to medium-grained white stone.

2. Description: Match Architect's sample as indicated on finish schedule.

H. Setting Materials: See Section 09305 TILE AND STONE SETTING MATERIALS AND ACCESSORIES

I. Elastomeric Sealants: Manufacturer's standard chemically curing, elastomeric sealants of base polymer indicated that comply with requirements of Division 7 Section "Joint Sealers" including ASTM C 920 as referenced by Type, Grade, Class, and Uses.

1. One-Part Mildew-Resistant Silicone Sealants: ASTM C 920, Type S, Grade NS, Class 25, Uses NT, G, A, and O (for use in joints in nontraffic areas).

J. Cementitious Backer Units: Proprietary backing units with glass fiber mesh reinforcing and water-resistant coating on both faces, complying with the following requirements:

1. Cement-Coated Portland Cement Panels: High-density portland cement surface coating on both faces and lightweight concrete core composed of portland cement and expanded ceramic aggregate; fabricated in panels 7/16-inch thick by 36 inches wide, weighing 3.2 - 3.8 psf.

K. Miscellaneous Materials: Provide the following materials as recommended by manufacturer as compatible with both tile units and grout:

1. Temporary Protective Coating: Where applicable, provide protective coating to protect exposed surfaces of tile against adherence of mortar and grout, as recommended by manufacturer compatible with tile and mortar/grout products.

L. Crack Isolation Membrane:

1. General: Installing Contractor is required to field inspect substrate prior to tile installation for acceptable surfaces and provide crack isolation membrane as recommended by manufacturer to achieve proper tile installation results.

2. Provide Manufacturer's standard product that complies with ANSI A118.12 for standard performance and is recommended by the manufacturer for the application where required. Include reinforcement and accessories recommended by manufacturer.

1.3 Execution

A. Examine substrates, areas and conditions where tile will be installed, with installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of installed tile. Proceed with installation only after unsatisfactory conditions have been corrected.

B. Extend tile work into recesses and under or behind equipment and fixtures, to form a complete covering without interruptions, except as otherwise shown. Terminate work neatly at obstructions, edges and corners without disrupting pattern or joint alignments. Accurately form intersections and returns. Perform cutting and drilling of tile without marring visible surfaces. Carefully grind cut edges of tile abutting trim, finish or built-in items for straight aligned joints. Fit tile closely to electrical outlets, piping, fixtures and other penetrations so that plates, colors, or covers overlap tile.

C. Field-Applied Temporary Protective Coating: Contractor to verify and coordinate with tile manufacturer methods to prevent adhesion or staining of exposed tile surfaces by grout and comply with manufacturers recommendations and installation instructions.

3. Protection: When recommended by tile manufacturer, apply a protective coat of neutral protective cleaner to completed tile walls and floors. Protect installed tile work with Kraft paper or other heavy covering during construction period to prevent damage and wear.

D. At "wet areas," install cementitious backer units and treat joints to comply with manufacturer's instructions for type of application indicated.

E. Installation: Comply with ANSI A108.1 and 108.4 through A108.10, as applicable for type of tile, setting materials, grout, and methods of installation indicated. Comply with manufacturer's instructions for application of proprietary materials.

1. Prohibit foot and wheel traffic from using tiled floors for at least three (3) days after grouting is completed.

F. Joint Pattern: Use grid pattern with 1/16-inch-wide joints unless otherwise indicated. Align joints when adjoining tile on floor, base, walls and trim are the same size. Lay out tile work and center fields in both directions within each space or on each wall area. Adjust to minimize tile cutting. Provide uniform joint widths.

G. Expansion, Control, Contraction, and Isolation Joints: As indicated, or as in accordance with TCA Handbook Method EJ171. Keep joints free of adhesive and grout.

1. Seal tile joints with elastomeric sealants to comply with Division 7 Section "Joint Sealers."

2. Sealing tile joints is specified in Division 7 section "Joint Sealers."

H. Cleaning: Upon completion of placement and grouting, clean all ceramic tile surfaces so they are free of foreign matter. Use only recommended cleaners by the tile and grout manufacturer's and only after determining that cleaners are safe to use by testing on samples of the tile and other surfaces to be cleaned.

1. Remove latex-portland cement grout residue from tile as soon as possible.

2. Unglazed tile may be cleaned with acid solutions only when permitted by tile and grout manufacturer's printed instructions but no sooner than 14 days after installation. Protect metal surfaces, cast iron, and vitreous plumbing fixtures from effects of acid cleaning. Flush surface with clean water before and after cleaning.

3. Before final inspection, remove temporary protective coating, by method recommended by coating manufacturer that is acceptable to brick and grout manufacturer. Trap and remove coating to prevent it from clogging drains.

4. Finished Tile Work: Leave finished installation clean and free of cracked, chipped, broken unbonded, or otherwise defective tile work.

## SECTION 09305 - TILE AND STONE SETTING MATERIALS AND ACCESSORIES (ARDEX)

Part 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings, general provisions of the Contract, and other related construction documents such as Division 01 specifications apply to this Section

1.2 SUMMARY

A. This Section includes materials for the preparation of substrates and materials for the installation of tile and stone finishes to include setting materials and grouts.

B. Complete ARDEX product and system installation details are provided in their corresponding Technical Brochure available at www.ardexamericas.com.

C. Related Sections include the following:

7.Division 09 Tile & Stone Sections

1.3 REFERENCES

A. AMERICAN NATIONAL STANDARDS INSTITUTE (A.N.S.I.)

1. A-118.3 Chemical Resistant, Water Cleanable Tile Setting & Grouting Epoxy
2. A-118.4 Fast-setting latex thin-set mortar and latex Portland cement mortar
3. A-118.7 High Performance Cement Grouts for Tile Installation
4. A-118.10 Thin, Load Bearing Waterproofing Membrane
5. A-118.11 EGP latex Portland cement mortar.
6. A-118.12 Crack Isolation Membrane
7. A-108.01 General Requirements for Subsurfaces and Preparations by Other Trades
8. A-108.10 Installation of Grout in Tilework
9. A-108.5 Installation of Ceramic Tile with Latex Thin-Set Mortar
10. A-108.17 Installation of Crack Isolation Membrane

B. TILE COUNCIL OF AMERICA, INC.

1.Handbook for Ceramic Tile Installation

C. INTERNATIONAL STANDARDS ORGANIZATION (ISO)

1.ISO 13007 - Ceramic Tile-Grouts & Adhesives

1.4 SUBMITTALS

A. Product Data: Submit manufacturer's product data and installation instructions for each material and product used. Include manufacturer's Material Safety Data Sheets.

B. Qualification Data: For Installer

1.5 DELIVERY, STORAGE AND HANDLING

A. Deliver products in original packaging, labeled with product identification, manufacturer, batch number and shelf life.

B. Store products in a dry area with temperature maintained between 50° and 85°F (10° and 29°C) and protect from direct sunlight.

C. Handle products in accordance with manufacturer's printed recommendations.

1.6 PROJECT CONDITIONS

A. Maintain temperature in tile areas at not less than 50ºF (10ºC) or more than 85ºF (29ºC) during installation and for at least 7 days after completion, unless otherwise indicated in the product instructions and/or in ANSI A108 installation standards.

1.7 WARRANTY

The ARDEX products as specified herein qualify for the 10 year ARDEX SYSTEM ONE Extended Warranty Program.

PART 2 - PRODUCTS

2.1 SETTING MORTAR

A. Acceptable Products Manufactured by ARDEX Engineered Cements: 400 Ardex Park Drive, Aliquippa, PA 15001 USA, (724) 203-5000, www.ardexamericas.com :

1. ARDEX X 5™ Thin Set Mortar (No Substitutions)

B. Performance and Physical Properties: Meet or exceed the following values for material cured at 70° F+/-3°F (21° C+/-3°C) and 50% +/-5% relative humidity:

1.Meets or Exceeds ANSI A 118.11 & ANSI A 118.4

2.2 GROUT & CAULK

A. Acceptable Products Manufactured by ARDEX Engineered Cements: 400 Ardex Park Drive, Aliquippa, PA 15001 USA (724)203-5000, www.ardexamericas.com

ARDEX FL™ Sanded Grout; Color: Silver Shimmer (No Substitutions)

B. Performance and Physical Properties: Meet or exceed the following values for material cured at 70° F+/-3°F (21° C+/-3°C) and 50% +/-5% relative humidity:

1.Pot Life: 30 minutes
2.Working Time: 30 minutes
3.Open to Traffic: 90 minutes

C. ARDEX SX Caulk - color to match grout

## SECTION 09305 - TILE AND STONE SETTING MATERIALS AND ACCESSORIES (MAPEI)

1.1 GENERAL

A. Section Includes

1. Tile and stone setting mortars and adhesives.
2. Grout for tile and stone.
3. Self Leveling Underlayment, skimcoating and patching.
4. Moisture Mtigation System

B. RELATED SECTIONS

1.Section 09300 - Tile: Ceramic tile materials.
2.Section 09380 - Cut Natural Stone Tile: Stone tile materials.

C. REFERENCES

1. ANSI A108 Series/A118 Series - American National Standards for Installation of Ceramic Tile.
2. ASTM C 150 - Standard Specification for Portland Cement.
3. TCNA (HB) - Handbook for Ceramic Tile Installation; Tile Council of America.
4. ISO 13007 - International Standards Organization; classification for Grout and Adhesives.

D. SUBMITTALS

1. Submit under provisions of Section 01300.
2. Manufacturer's technical information for each product specified.
3. Samples: Color charts for selection of grout.
4. Installation Instructions: Manufacturer's printed instructions for each product.

E. QUALITY ASSURANCE

1. Provide tile grout, setting materials, additives, and factory-prepared polymer modified mortars from the same manufacturer.

F. DELIVERY, STORAGE AND HANDLING

1. Deliver and store packaged materials in original containers with seals unbroken and labels intact until time of use.
2. Prevent damage or contamination to materials by water, freezing, foreign matter or other causes.
   a. Do not use frozen materials unless specifically allowed by manufacturer.
   b. Deliver and store materials on site at least 24 hours before work begins.
   c. Provide heated and dry storage facilities on site.

G. PROJECT CONDITIONS

1. Maintain environmental conditions and protect work during and after installation to comply with referenced standards and manufacturer's printed recommendations.
2. Vent temporary heaters to exterior to prevent damage to tilework from carbon dioxide build-up.
3. Maintain temperatures at not less than 50 deg F (10 deg C) in tiled areas during installation and for 7 days after completion, unless higher temperatures are required by referenced installation standards or manufacturer's written instructions.

1.2 PRODUCTS

A. MANUFACTURERS

1. Acceptable Manufacturer: MAPEI Americas U.S.A., 1144 E. Newport Center Rd., Deerfield Beach, Fl. 33442; ASD. Toll Free Tel: 800-42-MAPEI; Web: www.mapei.com/US-EN

2. Acceptable Manufacturer: MAPEI, Inc. Canada, 2900 Francis-Hughes, Laval, PQ, Canada H7L3J5; ASD. Tel: 450-662-1212; Fax: 450-662-0444; Email: mnordloh@mapei.com; Web: www.mapei.com/CA-EN.

3. Substitutions: Not permitted.

B. MORTAR MATERIALS

1. Setting Mortar for Large Module Tile and Stone: Medium-bed polymer-modified single-component mortar complying with ANSI A118.4 and ISO 13007. MAPEI "Ultracontact", ISO 13007; C2ES1P1 or MAPEI "Ultracontact RS"; ISO 13007 C2FS1P1 ( floors only), or MAPEI "Granirapid", ISO C2FS2P2 (for walls) or MAPEI, "Ultralite", ISO: 13007; C2TES1P1 or MAPEI, "Ultraflex LFT", ISO 13007;C2TES1P1 or MAPEI Ultraflex 3, ISO 13007; C2ES1P1

   a. Applications: Interior floor installations; interior wall installations.

2. Fast-Setting Thin-Set and Medium-Bed Mortar: Latex modified hydraulic cement mortar; MAPEI "Granirapid System" two-component system, of hydraulic mortar and flexible liquid polymer additive complying with ANSI A118.4 and ISO 13007 C2FS2P2 or MAPEI, " Ultracontact RS" ISO 13007; C2FS1P1 or "Ultraflex LFT Rapid Set", ISO 13007;C2TFS1P1

   a. Applications: Interior wall and floor installations.

C. GROUT MATERIALS

1. Grout: Fast-setting sanded polymer-modified grout, ANSI A118.6, ANSI A118.7 and ISO 13007 CG2WAF; MAPEI "Ultracolor Plus FA

   a. Compressive Strength: When tested in accordance with ASTM C109 at 110 percent flow:
   b. Color: 27 Silver
   c. Applications: All interior and exterior tile; joints between 1/8 inch and 1 inch (3 mm and 25 mm) wide.
   d. Applications: Use for all tile for which a different grout is not specified.

D. ACCESSORIES

1. Floor Skimming Coating and Patching: Per Mapei recommendations.

2. Self-Leveling Fast Track Underlayment: Pre-blended cementitious, for fast track floor covering installation, for use in dry interior applications.
   a. Acceptable Product: MAPEI Ultraplan 1 Plus, fast setting; for over cured concrete, exterior grade plywood, 1/8 inch to 1 inch (3 mm to 25 mm).
   b. Acceptable Product: MAPEI Ultraplan M20 Plus, fast setting; for over concrete and exterior grade plywood, 1/4 inch (6 mm) to 2 inches (50 mm).
   c. Acceptable Product: MAPEI Ultraplan Easy, fast setting reduced surface preparation self leveling underlayment featheredge to 2 inches (50 mm), over cured concrete, exterior grade plywood, and adhesives residues.
   d. Primer: As recommended by underlayment manufacturer.

3. Self-Leveling Underlayment: Pre-blended cementitious, for thicknesses from feather edge, for use in dry interior applications.
   a. Acceptable Product: MAPEI Novoplan 2, normal-setting, polymer-modified; for over cured concrete, exterior grade plywood, 1/8 inch to 1 inch (3 mm to 25 mm).
   b. Acceptable Product: MAPEI Novoplan Easy, medium setting reduced surface preparation self-leveling underlayment 1/8 inch to 1 inch (3 mm to 25 mm), over cured concrete, exterior grade plywood, and adhesives residues.
   c. Primer: As recommended by underlayment manufacturer

4. Moisture Reduction Barrier for Concrete Substrates: Suitable moisture reduction barrier to treat substrate moisture levels that exceed the manufacturers of subsequent flooring recommendations.
   a. Acceptable Product: Planiseal VS:

## SECTION 09510 - ACOUSTICAL PANEL CEILINGS

1.1 GENERAL

A. Submittals: In addition to product data for each type of acoustical panel and suspension system required, submit the following: One set of 12-inch- (300-mm-) long samples of exposed suspension system members, including moldings, for each color and system type required.

B. Seismic Standard: in areas subject to seismic zones: Provide acoustical tile ceilings designed and installed to withstand the effect of earthquake motions according to the following:

1. Standard for Ceiling Suspension Systems Requiring Seismic Restraint: Comply with ASTM E580.

2. Acoustical Installation contractor to verify and comply with requirements of authorities having jurisdiction.

3. UBS Standard 25-2, "Metal Suspension Systems for Acoustical Tile and for Lay-in Panel Ceilings".

4. ASCE 7. "Minimum Design Loads for Building and Other Structures": Section 9. " Earthquake Loads".

5. Special Inspections: Engage a qualified special inspector to perform the following special inspections where required by governing authority:

   a. Compliance of seismic design.

1.2 PRODUCTS

A. Acoustical Tile Products: Subject to compliance with requirements, provide the following:

1. Suspension system and acoustic panels as listed in finish legend within drawings.

B. Acoustical Tile Standard: Provide manufacturer's standard tiles of configuration indicated that comply with ASTM E 1264 classifications as designated by types, acoustical ratings, and light reflectances, unless otherwise indicated.

1. Mounting Method for Measuring Noise Reduction Coefficient (NRC): Type E-400 (plenum mounting in which face of test specimen is 15-3/4 inches [400 mm] away from the test surface) per ASTM E 795.

2. Test Method for Ceiling Attenuation Class (CAC): Where acoustical tile ceilings are specified to have a CAC, provide units identical to those tested per ASTM E 1414 by a qualified testing agency.

C. Water-Felted, Mineral-Base Tiles: Type III, Form 2 acoustical tiles per ASTM E 1264, with painted finish, complying with pattern and other requirements indicated on drawings.

D. Wire Hangers, Braces, and Ties: Provide wires complying with the following requirements:

1. Zinc-Coated Carbon Steel Wire: ASTM A 641 (ASTM A 641M), Class 1 zinc coating, soft temper.

2. Size: Select wire diameter so that its stress at 3 times the hanger design load (ASTM C 635, Table 1, Direct Hung) will be less than the yield stress of wire, but provide not less than 0.106-inch- (2.69-mm-) diameter wire.

E. Sheet-Metal Edge Moldings and Trim: Type and profile indicated, or if not indicated, manufacturer's standard moldings for edges and penetrations that fit acoustical tile edge details and suspension systems indicated; formed from sheet metal of same material and finish as that used for exposed flanges of suspension system runners.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

   a. Armstrong World Industries, Inc.

   b. Chicago Metallic Corporation.

   c. USG Interiors, Inc.

F. Fire-Resistance-Rated Suspension System: Provide manufacturer's standard metal suspension systems of types, structural classifications, and finishes indicated that comply with applicable ASTM C 635 requirements:

1. Direct-Hung, Double-Web Suspension System: Main and cross runners roll formed from and capped with pre-painted or electrolytic zinc-coated, cold-rolled steel sheet; other characteristics as follows:

   a. Structural Classification: Heavy-duty system.

   b. Access: Upward, with initial access openings of size indicated or, if not indicated, as selected by Architect from opening sizes approved for the fire-resistance-rated assembly indicated. Locate initial access openings throughout the ceiling within each module formed by main runners and cross runners, and make additional access available through progressively removing remaining acoustical tiles.

2. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

   a. Armstrong World Industries, Inc.

   b. Chicago Metallic Corporation.

   c. USG Interiors, Inc.

G. Maintenance stock: At time of completion, provide two packages of each type of acoustic panels to owner for future replacement.

1.3 EXECUTION

A. General: Install acoustical tile ceilings to comply with publications referenced below per manufacturer's instructions and CISCA "Ceiling Systems Handbook."

1. Standard for Ceiling Suspension System Installations: Comply with ASTM C636/C636M.

2. CISCA Recommendations per "Ceiling Systems Handbook' for Acoustical Ceilings: Comply with CISCA "Recommendations for Direct-Hung Acoustical Tile and Lay-In Panel Ceilings."

B. Suspend ceiling hangers as follows:

1. Secure wire hangers to ceiling suspension members and to supports above. Connect hangers either directly to structures or to inserts, eye screws, or other devices that are secure, that are appropriate for substrate, and that will not deteriorate or otherwise fail due to age, corrosion, or elevated temperatures.

2. Space hangers not more than 48 inches (1200 mm) o.c. along each member supported directly from hangers, unless otherwise shown; and provide hangers not more than 8 inches (200 mm) from ends of each member.

3. Splay hangers only where required to miss obstructions; offset resulting horizontal forces by bracing, countersplaying, or other equally effective means. Where width of ducts and other construction within ceiling plenum produces hanger spacing that interfere with location of hangers at spacing required to support standard suspension-system members, install supplemental suspension members and hangers in form of trapezes or equivalent devices.

C. Install edge moldings and trim of type indicated at perimeter of acoustical ceiling area and where necessary to conceal edges of acoustical tiles.

D. Install suspension system runners so they are square and securely interlocked with one another. Remove and replace dented, bent, or kinked members.

E. Install acoustical tiles in coordination with suspension system. Place splines or suspension system flanges into kerfed edges so that tile-to-tile joints are closed by double lap of material.

1. Fit adjoining tile to form flush, tight joints. Scribe and cut tile for accurate fit at borders and around penetrations through tile.

2. Hold tile field in compression by inserting leaf-type, spring-steel spacers between tile and moldings, spaced at 12 inches (305 mm) o.c.

3. Fabricate access units for special suspension system access members and tile units modified as required to allow for removal of access units.

4. Clean exposed surfaces of acoustical tile ceilings, including trim and edge moldings. Comply with manufacturer's written instructions for cleaning and touch up of minor finish damage. Remove and replace tiles and other ceiling components that cannot be successfully cleaned and repaired to permanently eliminate evidence of damage.

END OF SECTION 09510

## SECTION 09660 - RESILIENT WALL BASE AND TILE FLOORING

1.1 GENERAL

A. Submittals: In addition to product data, submit the following.

1. Samples of each type, color, and pattern of resilient base and floor tile.

2. Maintenance data for resilient base and floor tile, to be included in Operating and Maintenance Manual specified in Division 1.

B. Extra Materials: Deliver to Owner not less than one box for each 50 boxes or fraction thereof, of each class, wearing surface, color, pattern, and size of resilient base and floor tile installed.

1.2 PRODUCTS

A. Available Products: Subject to compliance with requirements, resilient floor tiles that may be incorporated in the work include, but are not limited to, the products specified in the drawings.

B. Products: Subject to compliance with requirements, provide one of the products specified in the drawings.

C. Vinyl Composition Floor Tile: Products complying with ASTM F 1066, Composition 1 (nonasbestos formulated), and with requirements specified in Vinyl Composition Floor Tile Product shown on drawings.

D. Rubber Wall Base: Products complying with FS SS-W-40, Type I, and with requirements specified in the Rubber Wall Base Product shown on the drawings.

E. Rubber Accessories: Products complying with requirements shown on the drawings.

F. Concrete Slab Primer: Nonstaining type recommended by flooring manufacturer.

G. Trowelable Underlayments and Patching Compounds: portland-cement-based formulation provided or approved by tile manufacturer for applications indicated.

H. Adhesives (Cements): Water-resistant type recommended by tile manufacturer to suit resilient floor tile products and substrate conditions indicated.

I. Edge Strips: Vinyl of width shown, of height required to protect exposed edge of tiles, and in maximum available lengths to minimize running joints.

1.3 EXECUTION

A. Examine areas where installation of tiles will occur, with Installer present, to verify that substrates and conditions are satisfactory for tile installation and comply with tile manufacturer's requirements.

1. Concrete Subfloors: Verify that concrete slabs comply with ASTM F 710 before beginning installation:

2. For wood subfloors verify that underlayment surface is free of surface irregularities and substances with potential to interfere with adhesive bond, show through surface, or stain tile.

3. Proceed with installation only after substrate passes testing according to floor tile manufacturer's written recommendation.

B. Preparation: Comply with manufacturer's installation specifications to prepare substrates indicated to receive tile.

C. Installation: Comply with tile manufacturer's installation directions and other requirements indicated.

1. Lay out tiles from center marks established with principal walls, discounting minor offsets, so tile widths at opposite edges of room are equal to one another and are not less than one-half of a tile.

2. Match tiles for color and pattern by selecting tiles from cartons in same sequence as manufactured and packaged.

   a. Lay tiles with grain running in one direction.

   b. Lay tiles in basket weave pattern with grain direction alternating between reversed in adjacent tiles.

   c. Lay tiles in pattern with respect to location of colors, patterns, and sizes as indicated on Drawings.

3. Where demountable partitions and other items are indicated for installing on top of finished tile floor, install tile before these items are installed.

D. Install metal edge strips where indicated, using countersunk stainless steel anchors.

E. Cleaning:

1. Clean resilient tile floors after installation and 4 days prior to date scheduled for inspections intended to establish date of Substantial Completion.

2.Apply protective polish according to floor tile manufacturer's directions.

3. Comply with manufacturer's written instructions for cleaning, protecting and polishing floor tile.

END OF SECTION 09660

## SECTION 09720 - WALL COVERING

1.1 GENERAL

If at any time during the installation a product or installation issue should be discovered - immediately contact your distributor or dealer for further directions, additional instructions and/or resolution to address issue before proceeding. After installing the first 3 strips of any wallcovering immediately confirm quality. Once again, make sure the product is correct, that there are no quality or product issues with the wallcovering. Should a quality issue or question arise, please call the Designtex installation HOTLINE at 1-800-797-4949, Option 1, Ext. 8349 between the hours of 8 a.m to 5 p.m EST. Designtex will not take responsibility for any quality issues raised after the first 3 strips are cut and installed.

Before installing any wallcovering, verify compliance and acceptable conditions, for any moisture problems that could have an effect on mold and mildew growth after the wallcovering is installed. Do not install any wallcovering if the walls appear to have any moisture damage or if the building appears to have moisture infiltration problems. If you are uncertain if moisture problems are present, contact the manufacturer and general contractor for the standard of care and best application or finish for that area and that design of a building. Designtex will not take responsibility for any quality issues if moisture problems are not addressed before installation. You should also refer to the Mold Handbook authored by the Wallcovering Association with respect to considerations for specifying vinyl wallcovering in various climates and for various building designs. The handbook can be located at: http://www.wallcoverings.org/MOLDbook.pdf

A. Before Installing:

1. Inspect each piece upon receipt. Immediately make claim with the carrier if the pieces are damaged.

2. Check to see that you have received what was ordered and that the rolls all have the same style and run numbers.

3. If the material is to be stored, make sure the pieces are kept in a temperature controlled, dry area, and not crushed.

B. Surface Preparation:

1.Site conditions: For best results, finished lighting should be in place at the time of wall preparation and wallcovering installation

2. Acceptable hanging surfaces must be clean, smooth, dry and structurally intact.

3. Any mildew must be removed from the walls and surfaces treated to inhibit further mildew growth. In humid, mold, and mildew prone areas use Zinsser Plus Mildew Proof Commercial Wallcovering System or manufacturer approved equal that offers protection against the growth of mildew. More extensive moisture problems may require additional steps before installation.

4. Do not install wallcovering unless temperature above 55 degrees Fahrenheit is maintained.

5. Prior to priming, seal damaged drywall facing paper prior to skim coating.

6. Note: Crayon, pen markers, ink, screw and nail heads, and heavy pencil marks, and stains need to be sealed with a stain-killer prior to priming.

7. For all new or refinished wall surfaces, a water-based wallcovering primer should be applied to surface before application of wallcovering. Use a wallcovering primer that dries to a solid color to help conceal drywall joints

8. Where there is a color contrast between the wall surface and the wallcovering, it is always best to tint the primer to match the color of the wallcovering.

9. Glossy and non-porous surfaces should be primed with a coat of an adhesion promoting primer such as R-35 prior to installation of wallcovering.

10. Verify and comply with all manufacturer's installation instructions and specifications.

C. Adhesive Application:

1. Provide the use of a good quality heavy duty "clear" vinyl adhesive as made by Zinsser and Roman as recommenced by wallcovering manufacturer. It's always advantageous to use a primer and adhesive from the same manufacturer.

2. Do not dilute adhesive.

3. In mildew prone environments, use of a mildew inhibitor is recommended. More extensive moisture problems may require additional steps before installation.

4. New vapor permeable primers and adhesives are now available to wallcovering installers, which could reduce the risk of mold for all types of wallcoverings, versus the use of traditional primers and adhesives. Verify recommended product with manufacturer of wallcovering. Examples of such newly available permeable mildew systems are Zinsser's V.P. Vapor Permeable ™ System, specifically Shieldz V.P. Primer and Sure Grip V.P. Primer such as described in their attached flyer (www.zinsser.com tel. 732 469-8100 ) and Roman Decorating Products' Ultra™ Plus Mildew System, specifically Ultra™ Plus Primer and Ultra™ Plus Adhesive (www.romandecoratingproducts.com tel.800 488-6117)

D. Wallcovering Installation: Verify and comply with manufacturer's current written installation instructions, and as a minimum:

1. Determine whether the pattern match is random, straight across, or drop match. Measure the wall height, allowing for pattern match, add 4 inches, and then cut the wallcovering. It will overlap onto the ceiling and the base approximately 2 inches

2. Cut rolls in sequential order starting with the highest number working down to the lowest number. Make certain that the run numbers are separated at break points such as corners. Number panels and headers as they are cut from the roll and apply to the wall in the same sequence.

3. Any wallcovering design that does not have specific direction or horizontal match, could be installed by reversing alternate strips to ensure color uniformity at the seams. If product appears shaded or paneled after the first 3 strips, we strongly suggest reversing alternate strips.

4. If the wallcovering is table trimmed, use of a straight-edge and a razor is recommended. A fresh blade should be used on each cut. "Snap off" cutting tools are not recommended.

5. The "overlap and double cut" method is an alternative method of installation with many fabric backed vinyl wallcoverings.

6. All wallcoverings should be trimmed 2" to 4" on each edge to ensure best appearance.

7. If paste does get on the vinyl wallcovering, clean it off immediately with warm water and blot dry with clean lint free towel. Use a soft bristle brush to clean if necessary. Change this water frequently. Be certain to wash the ceiling and the baseboard to remove any paste residue. Do not leave any overlap at the seams since vinyl will not adhere to itself. Seams should be vertical, have a tight fit, and free from air and paste bubbles. Seams should not be located closer than 6" to corners.

8. Avoid burnishing the face of the material. Use a wallcovering brush or a plastic scraper to smooth the wallcovering onto the wall.

9. Use a seam roller to flatten the edges at the seams, ceilings and baseboards. Use light pressure. Do not press hard enough to remove the adhesive from underneath the wallcovering.

10. After installing the first 3 strips of any wallcovering immediately conform quality of product. Once again, make sure the product is correct, that there are no quality or product issues with the wallcovering. Should a quality issue or question arise please call our installation HOTLINE at 1-800-797-4949, Option 1, Ext. 8349 between the hours of 8 a.m to 5 p.m EST. Designtex will not take responsibility for any quality issues raised after the first 3 strips are cut and installed.

11. If any of the above conflicts with manufacturer's written instructions, manufacturer written instruction shall take precedence.

12. It is the responsibility of the installer to verify and comply with manufacturer's installation instructions and provide a complete and acceptable finished product.

END OF SECTION 09720

## SECTION 09900 - PAINTING

1.1 GENERAL

A. This Section includes surface preparation, painting, and finishing of exposed interior and exterior items and surfaces.

1. Surface preparation, priming, and finish coats specified are in addition to shop-priming and surface treatments.

B. Paint exposed surfaces whether or not colors are designated in the schedules, except where a surface or material is specifically indicated not to be painted or is to remain natural. Where an item or surface is not specifically mentioned, paint the same as similar adjacent materials or surfaces. If color or finish is not designated, the Architect will select from standard colors or finishes available.

C. Painting is not required on prefinished items, finished metal surfaces, concealed surfaces, operating parts, and labels.

1. Labels: Do not paint over Underwriters Laboratories, Factory Mutual, or other code-required labels or equipment name, identification, performance rating, or nomenclature plates.

D. Submittals: Submit the following:

1. Product data for each paint system specified, including block fillers and primers.

   a. Provide the manufacturer's technical information including label analysis and instructions for handling, storage, and application of each material proposed for use.

   b. List each material and cross-reference the specific coating, finish system, and application. Identify each material by the manufacturer's catalog number and general classification.

   c. Certification by the manufacturer that products supplied comply with local regulations controlling use of volatile organic compounds (VOCs).

2. Samples for initial color selection in the form of manufacturer's color charts. After color selection, the Architect will furnish color chips for surfaces to be coated.

3. Samples for Verification Purposes: Provide samples of each color and material to be applied, with texture to simulate actual conditions, on actual samples of the actual substrate. Provide stepped samples, defining each separate coat, including block fillers and primers. Use actual colors when preparing samples for review. Resubmit until required sheen, color, and texture are achieved.

   a. Submit samples on the following substrates for the Architect's review of color and texture only:

1) Concrete Masonry: Two 4-by-8-inch samples of masonry, with mortar joint in the center, for each finish and color.

2) Painted Wood: Two 12-inch-square samples of each color and material on hardboard.

3) Ferrous Metal: Two 4-inch-square samples of flat metal and two 8-inch-long samples of solid metal for each color and finish.

E. Applicator Qualifications: Engage an experienced applicator who has completed painting system applications similar in material and extent to those indicated for the Project that have resulted in a construction record of successful in-service performance.

F. Single-Source Responsibility: Provide primers and undercoat paint produced by the same manufacturer as the finish coats.

G. Field Samples: On wall surfaces and other exterior and interior components, duplicate finishes of prepared samples. Provide full-coat finish samples on at least 100sq. ft. of surface.

1. Final acceptance of colors will be from job-applied samples.

2. The Owner will select one room or surface to represent surfaces and conditions for each type of coating and substrate to be painted. Apply coatings in this room or surface according to the schedule or as specified.

H. Deliver materials to the job site in the manufacturer's original, unopened packages and containers bearing manufacturer's name and label with the product trade name manufacturer's instructions.

I. Store materials not in use in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 45 deg F (7 deg C). Protect from freezing. Keep storage area neat and orderly. Remove oily rags and waste daily.

J. Project Conditions: Do not apply paint in snow, rain, fog, or mist, or when the relative humidity exceeds 85 percent, or at temperatures less than 5 deg F (3 deg C) above the dew point, or to damp or wet surfaces.

K. Apply water-based paints only when the temperature of surfaces to be painted and surrounding air temperatures are between 50 deg F (10 deg C) and 90 deg F (32 deg C).

L. Apply solvent-thinned paints only when the temperature of surfaces to be painted and surrounding air temperatures are between 45 deg F (7 deg C) and 95 deg F (35 deg C).

1.2 PRODUCTS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated in the Work include, but are not limited to, the following:

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to:

   a. Benjamin Moore & Co.

   b. Sherwin-Williams Company

B. Paint Materials, General: Provide block fillers, primers, finish coat materials, and related materials that are compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by the manufacturer, based on testing and field experience.

C. Material Quality: Provide the manufacturer's best-quality trade sale paint material of the various coating types specified. Paint material containers not displaying manufacturer's product identification will not be acceptable.

1. Proprietary Names: Use of manufacturer's proprietary product names to designate colors or materials is not intended to imply that products named are required to be used to the exclusion of equivalent products of other manufacturers. Furnish the manufacturer's material data and certificates of performance for proposed substitutions.

D. Colors: Provide color selections made by the Architect from the manufacturer's full range of standard colors.

1.3 EXECUTION

A. Examination: Examine substrates and conditions under which painting will be performed for compliance with requirements. Do not begin application until unsatisfactory conditions have been corrected.

B. Coordination: Review other Sections in which primers are provided to ensure compatibility of the total systems for various substrates. On request, furnish information on characteristics of finish materials to ensure use of compatible primers.

1. Notify the Architect about anticipated problems using the materials specified over substrates primed by others.

C. Preparation: Remove hardware and hardware accessories, plates, machined surfaces, lighting fixtures, and similar items already installed that are not to be painted, or provide surface-applied protection prior to surface preparation and painting. Remove these items, if necessary, to completely paint the items and adjacent surfaces. Following completion of painting operations in each space or area, have items reinstalled by workers skilled in the trades involved.

D. Cleaning: Clean substrates of substances that could impair the bond of the various coatings. Remove oil and grease prior to cleaning. Schedule cleaning and painting so dust and other contaminants from the cleaning process will not fall on wet, newly painted surfaces.

E. Surface Preparation: Clean and prepare surfaces to be painted according to the manufacturer's instructions for each particular substrate condition and as specified.

1. Provide barrier coats over incompatible primers or remove and reprime.

2. Cementitious Materials: Prepare cementitious surfaces to be painted. Remove efflorescence, chalk, dust, dirt, grease, oils, and release agents. Roughen to remove glaze. If hardeners or sealers have been used to improve curing, use mechanical methods of surface preparation.

   a. Use abrasive blast-cleaning methods if recommended by the paint manufacturer.

   b. Determine alkalinity and moisture content of surfaces. Do not paint surfaces where moisture content exceeds that permitted in manufacturer's printed directions.

3. Wood: Clean surfaces of dirt, oil, and other foreign substances with scrapers, mineral spirits, and sandpaper, as required. Sand surfaces exposed to view smooth and dust off.

   a. Scrape and clean small, dry, seasoned knots and apply a thin coat of white shellac or other recommended knot sealer before applying primer.

   b. Prime, stain, or seal wood to be painted immediately upon delivery. Prime edges, ends, faces, undersides, and backsides of wood, including cabinets, counters, cases, and paneling.

   c. Seal tops, bottoms, and cutouts of unprimed wood doors with a heavy coat of varnish or sealer immediately upon delivery.

4. Ferrous Metals: Clean ungalvanized ferrous-metal surfaces that have not been shop-coated; remove oil, grease, dirt, loose mill scale, and other foreign substances. Use solvent or mechanical cleaning methods that comply with recommendations of the Steel Structures Painting Council.

   a. Touch up bare areas and shop-applied prime coats that have been damaged. Wire-brush, clean with solvents and touch up with the same primer as the shop coat.

5. Galvanized Surfaces: Clean galvanized surfaces with nonpetroleum-based solvents so that the surface is free of oil and surface contaminants. Remove pretreatment from galvanized sheet metal fabricated from coil stock by mechanical methods.

F. Materials Preparation: Carefully mix and prepare paint materials according to manufacturer's directions.

1. Stir material before application to produce a mixture of uniform density; stir as required during application. Do not stir surface film into material. Remove film and, if necessary, strain material before using.

2. Use only thinners approved by the paint manufacturer and only within recommended limits.

G. Application: Apply paint according to manufacturer's directions. Use applicators and techniques best suited for substrate and type of material being applied. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable paint film.

1. Paint colors, surface treatments, and finishes are indicated in the schedules.

2. Provide finish coats that are compatible with primers used.

3. The number of coats and the film thickness required are the same regardless of the application method. Do not apply succeeding coats until previous coat has cured. Sand between applications where sanding is required to produce an even smooth surface. Tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of same material are to be applied. Tint undercoats to match color if topcoat, but provide sufficient difference in shade of undercoats to distinguish each separate coat.

4. Apply additional coats if undercoats, stains, or other conditions show through final coat of paint until paint film is of uniform finish, color, and appearance.

5. The term exposed surfaces includes areas visible when permanent or built-in fixtures are in place. Extend coatings in these areas to maintain system integrity and provide desired protection.

6. Paint surfaces behind movable equipment and furniture the same as similar exposed surfaces. Paint surfaces behind permanently fixed equipment or furniture as indicated on drawings.

7. Paint back sides of access panels and removable or hinged covers to match exposed surfaces.

H. Scheduling Painting: Apply first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for painting as soon as practicable and before subsequent surface deterioration. Allow sufficient time between successive coats to permit proper drying. Do not recoat until paint has dried.

I. Application Procedures: Apply paints and coatings by brush, roller, spray or other applicators according to manufacturer's directions.

1. Brushes: Use brushes best suited for the material applied.

2. Rollers: Use rollers of carpet, velvet back, or high-pile sheep's wool as recommended by the manufacturer for the material and texture required.

3. Spray Equipment: Use airless spray equipment with orifice size as recommended for the material and texture required.

J. Minimum Coating Thickness: Apply materials at the manufacturer's recommended spreading rate. Provide the total dry film thickness of the entire system as recommended by the manufacturer.

K. Block Fillers: Apply block fillers at a rate to ensure complete coverage with pores filled.

L. Prime Coats: Before applying finish coats, apply a prime coat to material to be painted or finished that has not been prime-coated by others. Recoat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to ensure a finish coat with no burn-through or other defects due to insufficient sealing.

M. Completed Work: Match approved samples for color, texture, and coverage. Remove, refinish, or repaint work not complying with specified requirements.

N. Cleanup: At the end of each work day, remove empty cans, rags, rubbish, and other discarded paint materials from the site.

1. After completing painting, clean glass and paint-spattered surfaces. Remove spattered paint by washing and scraping. Be careful not to scratch or damage adjacent finished surfaces.

O. Protection: Protect work of other trades, whether being painted or not, against damage by painting. Correct damage by cleaning, repairing or replacing, and repainting, as acceptable to Architect.

P. Provide "Wet Paint" signs to protect newly painted finishes. Remove temporary protective wrappings provided by others to protect their work after completing painting operations.

1. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

Q. Paint Schedule: Provide the following paint systems ( or approved equal) for the various substrates indicated:

1. Exterior Surfaces

   a. Ferrous & Non-Ferrous Metals (doors):

   1st coat: IronClad Latex Low Lustre Metal & Wood Enamel (363)

   2nd coat: Moore's IMC DTM Acrylic Semi-Gloss (M29)

   3rd coat: Moore's IMC DTM Acrylic Semi-Gloss (M29)

   b. Galvanized Metal:

   1st coat IronClad Latex Low Lustre Metal & Wood Enamel (363)

   2nd coat: Moore's IMC DTM Acrylic Semi-Gloss (M29)

   3rd coat:Moore's IMC DTM Acrylic Semi-Gloss (M29)

   c. Concrete:

   1st coat: Moorcraft Super Craft Latex Block Filler (285)

   2nd coat: MoorGard Latex House Paint (103)

   3rd coat: MoorGard Latex House Paint (103)

   d. Stucco:

   1st coat: Moore's Acrylic Masonry Sealer (066)

   2nd coat: MoorGard Latex House Paint (103)

   3rd coat: MoorGard Latex House Paint (103)

   e.Unit Masonry (Concrete block):

   1st coat: Moorcraft Super Craft Latex Block Filler (285)

   2nd coat: MoorGard Latex House Paint (103)

   3rd coat: MoorGard Latex House Paint (103)

2. Interior Surfaces: (refer to finish schedule on sheet A-4.1)

   a. Wood (painted):

   1st coat Moorcraft Super Spec Latex Enamel Undercoater & Primer Sealer (253)

   2nd coat Moorcraft Super Spec Latex Semi-Gloss Enamel (276)

   3rd coat: Moorcraft Super Spec LatexSemi-Gloss Enamel (276)

   b. Drywall:

   1st coat Moorcraft Super Spec Latex Enamel Undercoater & Primer Sealer (253)

   2nd coat Moorcraft Super Spec Latex Pearl Finish (277)

   3rd coat Moorcraft Super Spec Latex Pearl Finish (277)

   c. Concrete (concrete/ concrete block walls):

   1st coat Moorcraft Super Craft Latex Block Filler (285)

   2nd coat Moorcraft Super Spec Latex Pearl Finish (277)

   3rd coat Moorcraft Super Spec Latex Pearl Finish (277)

   d. Metals (hand rails, doors, frames & grills):

   1st coat IronClad Latex Low Lustre Metal and Wood Enamel (363)

   2nd coat Impervex Latex High Gloss Metal and Wood Enamel (309)

   3rd coat Impervex Latex High Gloss Metal and Wood Enamel (309)

   e. Metals (columns, joists):

   1st coat IronClad Latex Low Lustre Metal and Wood Enamel (363)

   2nd coat Impervex Latex High Gloss Metal and Wood Enamel (309)

   3rd coat Impervex Latex High Gloss Metal and Wood Enamel (309)

   f. Ceilings (drywall):

   1st coat Moorcraft Super Spec Latex EnamelUndercoater & Primer Sealer (253)

   2nd coat Moore's Muresco Ceiling Paint (258)

   3rd coat Moore's Muresco Ceiling Paint (258)

   g. Wood Doors (painted):

   1st coat IronClad Latex Low Lustre Metal and Wood Enamel (363)

   2nd coat IronClad Latex Low Lustre Metal and Wood Enamel (363)

   Insert schedules for exterior and interior paint systems as required. See the Basic Section for examples of various systems.

R. Clean-up: During the progress of the work, remove from site, discarded paint materials, rubbish, cans and rags at the end of each work day. Upon completion of painting work, clean window glass and other damaged paint-scattered surfaces. Remove spattered paint and clean damaged finish surfaces. Touch-up and restore all damaged or defaced painted surfaces after completion of work of other trades.

## SECTION 10260 - SPECIALTY WALL PANELS

A. Provide surface preparation of substrate wall surfaces and installation of wall protection elements, where indicated on the drawings, as specified herein and as needed for a complete and proper installation. Comply with manufacturer's installation instructions, recommendations, procedures and installation sequence.

B. FRP Panels:

0.090" thick x 4' wide "Marlite FRP", #P-100 White or equal USDA accepted, semi-rigid fiberglass reinforced plastic paneling (ASTM D5319). If required per local codes, use Marlite #P-100 FR White, Class A: UL classified flame-spread less than 20, fuel contributed 0, and smoke developed less than 200, per ASTM E-84.

C. Panel Fitting:

Position panels with 1/8" gap between each panel and division bar of moldings to allow for normal expansion and contraction and extend 6 inches above ceiling line. Allow not less than 1/8" gap around pipes, electrical fittings and other projections. Use carbide-tipped power saws to cut panels or other methods as recommended by manufacturer. Prefit each panel before installing.

D. Install panels by using Marlite #C-375 adhesive complying with ASTM G557, (or Marlite #C551 adhesives where solvent vapors cannot be adequately ventilated) to back of panels for 100% coverage, with a notched trowel. Before adhesive skins over, set panels in position and press against wall. Comply with manufacturer installation instructions as required to flash off solvents. Apply adequate pressure to make full contact between panel and wall.

E. Panel Moldings:

Provide one-piece matching trim and panel moldings at all joints between panels and at top and bottom edges of panels. Install moldings with continuous bead of Marlite Silicone Sealant MS-250 during installation of panels. Seal joints between moldings and between molding and adjacent finish material. Remove excess sealant immediately.

F. Stainless Steel Wall Panels: 18 and 24 gauge, as scheduled on the drawings, #4 Brushed Finish. Install panels in sheets as large as possible. All flush and corner joints to be lapped. Break all corners and edges to straight true lines. Exposed fasteners to be stainless steel.

G. Clean all panels and protect from damage. Refer to manufacturer's specific cleaning recommendations. Do not use abrasive cleaners.

## SECTION 10522 - FIRE EXTINGUISHERS, CABINETS, AND ACCESSORIES

1.1 GENERAL

A. Submittals: Submit the following:

1. Product Data: Include rough-in dimensions, details showing mounting methods, relationships of box and trim to surrounding construction, door hardware, cabinet type and materials, trim style, door construction, panel style, and materials.

B. Coordination: Verify that cabinets are sized to accommodate type and capacity of extinguishers indicated, as well as wall depth requirements may be required.

C. UL-Listed Products: Fire extinguishers shall be UL listed with UL listing mark for type, rating, and classification of extinguisher.

D. FM-Listed Products: Fire extinguishers approved by Factory Mutual Research Corporation for type, rating, and classification of extinguisher with FM marking.

1.2 PRODUCTS

A. Fire Extinguishers: Provide fire extinguishers as recommended by Owner's surety for each cabinet and for other locations required by Owner's surety.

1. Dry Chemical Type: UL-rated 10-B:C, 5-lb nominal capacity, in enameled steel container.

2. Multipurpose Dry Chemical Type: UL-rated minimum 2-A:10-B:C, 2-1/2-lb nominal capacity, in enameled steel container.

B. Mounting Brackets: Provide brackets of sizes required for type and capacity of extinguisher indicated, in plated finish.

C. Cabinet Construction: Box with trim, frame, door, and hardware to suit cabinet type, trim style, and door style indicated. Weld joints and grind smooth. Miter and weld perimeter door frames.

1. Fire-Rated Cabinets: UL listed with UL listing mark with fire-resistance rating of wall where it is installed.

2. Cabinet Type: Suitable for containing the following:

   a. Fire extinguisher.

3. Cabinet Mounting: Suitable for the mounting indicated:

   a. Recessed: Fully recessed in walls of sufficient depth to suit trim style.

   b. Surface-Mounted: Fully exposed and mounted directly on wall.

4. Trim Style: One piece with corners mitered, welded, and ground smooth.

   a. Exposed Trim: One-piece combination trim and perimeter door frame overlapping surrounding wall surface with exposed trim face and wall return at outer edge.

1) Square-edge with 1/4- to 5/16-inch backbend depth.

2) Metal: Same metal and finish as door.

D. Door Material and Construction: Manufacturer's standard of material indicated, coordinated with cabinet types and trim styles selected.

1. Enameled Steel: Hollow construction with tubular stiles and rails.

2. Door Glazing: Fully tempered float glass complying with ASTM C 1048, Condition A, Type I, Quality q3, Kind FT, and Class as follows:

   a. Class 1 (clear).

3. Identify fire extinguisher in cabinet with FIRE EXTINGUISHER lettering applied to door. Provide lettering to comply with authorities having jurisdiction for letter style, color, size, spacing, and location.

   a. Application Process: Silk screen.

E. Identify bracket-mounted extinguishers with FIRE EXTINGUISHER in red letter decals applied to wall surface. Letter size, style, and location to comply with authorities having jurisdiction.

F. Door Style: Manufacturer's standard design.

1. Full-Glass Panel: Float glass, 1/8 inch thick.

G. Door Hardware: Provide door-operating hardware of proper type for cabinet type, trim style, and door material and style indicated. Provide lever handle with cam-action latch, or exposed or concealed door pull and friction latch. Provide concealed or continuous-type hinge permitting door to open 180 degrees.

H. Cabinet Finishes: Comply with NAAMM "Metal Finishes Manual." Protect exposed finishes from damage by application of temporary strippable covering prior to shipment.

I. Steel Cabinet Finishes: Solvent-clean surfaces to remove dirt, oil, grease, and other contaminants that could impair paint bond. Remove mill scale and rust from uncoated steel.

1. Baked-Enamel Finish: Immediately after cleaning and pretreatment, apply a two-coat baked-enamel finish consisting of prime coat and thermosetting topcoat. Comply with paint manufacturer's instructions for application and baking to achieve a minimum dry film thickness of 2.0 mils.

   a. Color and Gloss: Manufacturer's standard designations. Paint the following:

1) Exterior of cabinet except for surfaces indicated to receive another finish

2) Interior of cabinet.

1.3 EXECUTION

A. Installation: Follow manufacturer's printed instructions.

B. Install at heights indicated, or if not indicated, at heights to comply with applicable regulations of governing authorities.

1. Prepare wall recesses for cabinets as required by type and size of cabinet and style of trim and to comply with manufacturer's instructions.

2. Fasten mounting brackets and fire extinguisher cabinets to structure, square and plumb.

C. Comply with NFPA 10 for extinguisher placement.

D. Fire-Rated Fire Protection Cabinets, where applicable, comply with ASTM E814 for fire resistance rating of walls where they are installed.

## SECTION 10800 - TOILET AND BATH ACCESSORIES

1.1 GENERAL

A. Submittals: Manufacturer's product data for each toilet accessory item specified, including details of construction relative to materials, dimensions, gages, profiles, mounting methods, specified options, and finishes.

1.2 PRODUCTS

A. Manufacturers: Subject to compliance with requirements, provide toilet accessories by one of the following:

1. American Specialties, Inc.

2. Bobrick Washroom Equipment, Inc.

3. McKinney/Parker.

B. Materials, General: Fabricate toilet accessory items from the following materials and according to requirements specified for individual accessory items:

1. Stainless Steel: AISI Type 302/304, with polished No. 4 finish, 0.034-inch (22-gage) minimum thickness, unless otherwise indicated.

2. Sheet Steel: Cold-rolled, commercial quality ASTM A1008/A1008M, 0.04-inch (20-gage) minimum thickness, unless otherwise indicated. Surface preparation and metal pretreatment as required for applied finish.

3. Galvanized Steel Sheet: ASTM A653/A653M, G60.

4. Mirror Glass: Nominal 6.0-mm (0.25-inch) thick plate glass conforming to ASTM C1503, Type I, Class 1, Quality q2, and with silvering, electro-plated copper coating, and protective organic coating.

5. Galvanized Steel Mounting Devices: ASTM A153, hot-dip galvanized after fabrication.

6. Fasteners: Screws, bolts, and other devices of same material as accessory unit, or of galvanized steel where concealed.

7. Keys: Provide universal keys for access to toilet accessory units requiring internal access for servicing, resupply, etc. Provide a minimum of six keys to Owner's representative.

C. Surface-Mounted Roll Paper Towel Dispensers: Provided by Ulta and installed by G.C. Fabricate of cast aluminum with satin finish.

D. Single Roll Toilet Tissue Dispenser: Provided by Ulta and installed by G.C. Size to accommodate core type tissue to 5" diameter roll.

E. Stainless Steel Grab Bars: Provide grab bars with wall thickness not less than .050 inch (18 gage) and as follows:

1. Mounting: Concealed, manufacturer's stand

PREPARATION OF SUB-FLOORS:

Mannington Commercial suggests that you reference the current ASTM F710, "Standard Practice of Preparing Concrete Floors to Receive Resilient Flooring" and contact one or more of the following or other moisture suppressant system suppliers for assistance:

Ardex (724) 203-5000 www.ardex.com
Koester American Corp. (757) 425-1206 www.koesterusa.com
Mapei (800) 426-2734 www.mapei.com
Uzin Ltd. (800) 505-4810 www.ufloorsystems.com

A. Subfloor Preparation

Careful subfloor preparation is vital for an excellent floor appearance and good tile adhesion. The subfloor must be smooth, firm, flat, clean, dry, free from defects and fit for purpose. A suitable smoothing compound should be used to ensure that no irregularities show through to the surface of the finished floor. In all cases, the subfloor must meet the moisture and pH requirements before installation.

Below and On-grade concrete subfloors must have a suitable vapor retarder properly installed beneath the slab. Crawlspaces and basements directly beneath the new floor installation should be maintained with a relative humidity +/- 10% of the room relative humidity where the flooring is installed. This can be accomplished by proper ventilation and air circulation or using a dehumidifier. Always follow other manufacturers' written recommendations for the use and installation of their proprietary surface preparation materials.

1. Record site conditions, test results and corrective action(s). Mannington Commercial requires written documentation of site conditions, test results and corrective action(s) before processing claims.
2. Subfloor must be clean (free of dirt, sealers, curing, hardening or parting compounds or any substance that may stain or prevent adhesion), smooth, flat, sound, fit for purpose, free of movement, excessive moisture and high alkalinity.
3. Slick surfaces such as power troweled concrete shall be profiled to allow for a mechanical bond between the adhesive and subfloor.
4. Remove existing resilient floor covering, 100% traces of old adhesives, paint or other contaminants by scraping, sanding, grinding, shot blasting or scarifying the substrate. The use of adhesive removers or solvents in the abatement or removal of existing or old adhesives is prohibited and may void the warranty.

WARNING: ASBESTOS & SILICA - Refer to the current Resilient Floor Covering Institute (RFCI) document "Recommended Work Practices for Removal of Existing Resilient Floor Coverings" for guidance.

5. Perform corrective actions necessary for elevated moisture or high alkalinity conditions.
6. Surface Flatness for all Subfloors: The surface shall be flat to 1/8" in 10 ft (3 mm in 3 m). Bring high spots level by sanding, grinding etc. and fill low spots. Smooth surface to prevent any irregularities or roughness from telegraphing through the new flooring.
7. Leveling and Patching:

a. For concrete subfloors, use only high quality Portland cement based materials (minimum 3000 psi compressive strength according to ASTM C109). Mix with water only, do not use latex. Caution: Do not lightly skim coat highly polished or slick power troweled concrete surfaces. A thin film of floor patch will not bond to a slick subfloor and may become a bond breaker causing tiles to release at the interface of the subfloor and patching material.

b. Wood subfloors require an underlayment (double layer construction) with a minimum total thickness of
1" (25 mm). Use minimum ¼" (6 mm) thick APA rated "underlayment grade" plywood with a fully sanded face or other underlayment panel that is appropriate for the intended usage. Install and prepare panels and seams
according to the manufacturers' instructions.

B. Installation Procedures

Before starting the Spacia installation, ensure the following are satisfactorily completed. Start of flooring installation indicates acceptance of current subfloor conditions and full responsibility for completed work.

- Acclimation: Acclimate tiles (keep cartons flat), adhesive, jobsite and subfloor to a stable condition between
64°-81° F (18°-27° C) and 50% +/- 10% RH for a minimum of 48 hours before and after installation.
- Flooring Materials: Check quantity of Spacia tile and adhesive are sufficient for area to be installed. Check tile for visual defects before installation. Installation of flooring acknowledges acceptance of materials.
- Expansion joints, isolation joints, or other moving joints are incorporated into concrete floor slabs in order to permit movement without causing random cracks in the concrete. These joints must be honored and not be filled with underlayment products or other materials, and floor coverings must not be laid over them. Expansion joint covering
systems should be detailed by the architect or engineer based upon intended usage and aesthetic considerations.
- Surface cracks, grooves, depressions, control joints or other non-moving joints, and other irregularities shall be filled or smoothed with high quality Portland cement based patching or underlayment compound for filling or smoothing, or both. Patching or underlayment compound shall be moisture, mildew, and alkali-resistant, and shall provide a minimum of 3000 psi compressive strength after 28 days, when tested in accordance with Test Method C 109 or Test Method C 472, whichever is appropriate.

AMTICO High Moisture PS Adhesive Specifications

AMTICO High Moisture PS Adhesive offers the following benefits:

- Very low volatile organic compounds (VOC)
- Meets California SCAQMD Rule 1168 & Section 01350 Requirements
- Solvent-free - non-flammable - non-staining
- Extended working time (up to 3 hours)
- High tack and bond strength
- Excellent plasticizer resistance
- Protected against bio-degradation and mold growth
- Freeze-thaw stable to 10°F (5 cycles)

This adhesive should be used for bonding Amtico and Spacia tile floor coverings to APA registered underlayment grade plywood, terrazzo, existing well adhered tile, radiant heated subfloors where surface temperature do not exceed 85°F (29.40°C); and above, on, or below grade concrete in the absence of hydrostatic pressure, excessive moisture or alkalinity.

Preparation

Sub-floors must be sound, smooth, dry and free from any contamination which will affect adhesion. Concrete subfloors must be fully cured, clean, free from curing agents, excessive relative humidity (maximum 93% per ASTM F-2170) and or excessive moisture vapor emissions (maximum 10 lbs./1000 SF/24 hrs. per ASTM F-1869). Concrete must have a 5.0 to 12.0 ph (ASTM F-710). If necessary, a suitable moisture suppressant system should be applied to the sub-floor. On grade and below-grade concrete subfloors must have an approved vapor retardant membrane (ASTM E-1745) which is properly installed (ASTM E-1673). Wooden sub-floors should be overlaid with a suitable APA 'underlayment grade' sanded face, exterior AC or BC plywood with a minimum ¼" (6mm) thickness. Tiles, adhesive and sub-floor should be allowed to stabilize to a temperature between 64°F (18°C) and 81°F (27°C), for a period of 48 hours before, during and 24 hours after installation. Tiles must be stored flat.

Amtico PS Adhesive is not designed to be used over floors with Moisture Vapor Emission (VE) from water of intrusion or hydrostatic pressure.

It is designed for slabs with high vapor emission from the water of hydration, or initial mixing. Amtico PS Adhesive should not be used on concrete slabs that do not have a vapor retardant membrane properly placed above the sand layer and next to the concrete.

Installation

Apply the adhesive to the substrate using the recommended trowel. Holding the trowel at an angle of 600, spread the adhesive evenly over an area of sub-floor that can be covered within the 3 hour working time. Wait until the adhesive has tacked up, which is usually about 15 minutes depending on site conditions, before placing the tiles in position. Press tiles firmly into position to obtain contract, paying particular attention to the tile edges. Pails of adhesive must be resealed with lid after use.

Finishing

After the tile have been placed in the adhesives, roll the floor within the 3 hour working time with a minimum 100 lbs (45 kg) roller to ensure complete contact with the adhesive. Remove any adhesive from the face of the tile with a cloth moistened with denatured alcohol. The finished floor should be protected from point loads and heavy traffic for 24 hours after installation. Tiles may be damp-mopped 24 hours after installation.

Trowel Recommendation and Approximate Coverage

Porous Substrates
Actual size notch:
$\frac{1}{16}$" X $\frac{1}{32}$" x $\frac{1}{32}$" U-Notch
(1.6mm x 0.8mm x 0.8mm)
200-250 sq. ft./gal. (600-800 sq. ft/4gal.)

Non-porous Substrates
Actual size notch:
$\frac{1}{16}$" X $\frac{1}{32}$" x $\frac{2}{32}$" U-Notch
(1.6mm x 0.8mm x 2mm)
300-350 sq.ft./gal. (1,200-1,400 sq.ft./4gal.)

Note: Trowel dimensions are width x depth x spacing. Coverage is approximate and may vary depending on type, condition, and porosity of substrate and the angle at which the trowel is held. Trowel illustrations shown above are not a 100% scale.

Sizes
1 gallon, 4 gallons

Shelf life
2 years when stored in original unopened containers at temperatures between +50°F (12°C) and + 86°F (30°C). Protect from freezing.

CHIPMAN DESIGN ARCHITECTURE INC
JOHN A CHIPMAN ARCHITECT
1 1 8 1 1 1 2 T H A V E N U E N E
F I R S T F L O O R E A S T
B E L L E V U E , W A 9 8 0 0 5
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ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

VINYL FLOOR TILE PREP, INSTALLATION & ADHESIVE SPECIFICATIONS

Revisions
1. ISSUE FOR CL/LL REVIEW 04/20/18
2. ISSUE FOR PERMIT & BID 04/20/18
3.
4.
5.
6.
7.

6367 REGISTERED ARCHITECT JOHN A. CHIPMAN STATE OF WASHINGTON

04/20/2018 DATE
06/30/2018 EXPIRATION DATE

I HEREBY CERTIFY THAT THESE PLANS HAVE BEEN PREPARED UNDER MY SUPERVISION AND THAT TO THE BEST OF MY KNOWLEDGE, THE SAME COMPLY WITH ALL RULES, REGULATIONS AND ORDINANCES OF KIRKLAND, WA RELATING TO STRUCTURES AND BUILDINGS.

ARCHITECT

| Drawn By | Checked By |
|---|---|
| KC | BW/RD |
| Scale | Date |
| AS NOTED | 04/20/18 |

Job No. 16-4170

Sheet No. SP6

City of Kirkland
Reviewed by
J Tumelson
05/30/2018

ENR18-03206
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# HVAC GENERAL NOTES

1. HVAC SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE BUILDING CODES.
2. ALL DUCTWORK SHALL BE CONSTRUCTED OF GALVANIZED IRON SHEET METAL AND BE FABRICATED ACCORDING TO THE S.M.A.C.N.A. LOW VELOCITY DUCT MANUAL AND ASHRAE HANDBOOK EQUIPMENT VOLUME, 1988. ALL ELBOWS SHALL HAVE PROPER RADIUS, OR HVAC CONTRACTOR SHALL PROVIDE DOUBLE THICKNESS, AIRFOIL TURNING VANES REQUIRED BY S.M.A.C.N.A. NO SQUARE THROAT ELBOWS SHALL BE INSTALLED WITHOUT DOUBLE THICKNESS TURNING VANES.
3. THE HVAC CONTRACTOR SHALL INSTALL HVAC SYSTEMS AS SHOWN, NOTED AND SPECIFIED. EQUIPMENT MAY NOT BE SUBSTITUTED UNLESS WRITTEN APPROVAL BY THE ARCHITECT, ENGINEER, OR OWNER'S REPRESENTATIVE IS OBTAINED. ANY CHANGES TO THE DUCTWORK LAYOUT WILL NECESSITATE SUBMISSION OF SHEET METAL SHOP DRAWINGS FOR ENGINEER'S REVIEW. ANY UNAUTHORIZED CHANGES WILL BE REMOVED AT CONTRACTOR'S EXPENSE, IF DEEMED NECESSARY BY ARCHITECT, ENGINEER, OR OWNER'S REPRESENTATIVE.
4. THE HVAC CONTRACTOR SHALL COORDINATE DUCTWORK INSTALLATION WITH ARCHITECT/OWNER'S REPRESENTATIVE IN FIELD AND OTHER TRADES. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND HEIGHTS.
5. ALL DUCT CONNECTIONS TO EQUIPMENT SHALL BE LOADED TYPE VINYL, VIBRATION ELIMINATION CONNECTIONS, (F.C.) FLEXIBLE CONNECTIONS.
6. ALL DUCTWORK TRANSITIONS SHALL BE (FOT) "FLAT ON TOP" UNLESS OTHERWISE SPECIFIED ON PLAN.
7. ALL DUCTWORK AND PIPING SHALL BE ROUTED ABOVE THE SUSPENDED CEILING SPACE UNLESS OTHERWISE NOTED ON THE PLANS.
8. ALL OUTSIDE AIR INTAKES SHALL BE A MINIMUM OF 10'-0" AWAY FROM EXHAUST DISCHARGE OPENINGS AND PLUMBING VENT STACKS.
9. ALL BRANCH SUPPLY DUCTS SHALL HAVE (VD) MANUAL VOLUME DAMPERS INSTALLED FOR BALANCING.
10. ALL NEW SHEET METAL SUPPLY AND RETURN AIR RECTANGULAR/ SQUARE DUCTWORK SHALL BE INSULATED WITH 1-1/2" THICK DUCT LINER. DUCT LINER SHALL BE FASTENED TO INSIDE OF DUCTWORK AS PER MANUFACTURER'S DIRECTIONS AND S.M.A.C.N.A. "DUCT LINER APPLICATION STANDARD". SIZE OF DUCTS SHALL BE INCREASED FOR DUCT LINER INSULATION. SIZES SHOWN ON PLAN ARE INSIDE FREE AREA. ALL NEW SUPPLY, RETURN AND OUTSIDE AIR ROUND/OVAL DUCTWORK SHALL BE INSULATED WITH 2" THICK FLEXIBLE INSULATION, 1 PCF DENSITY FOIL REINFORCED KRAFT FACING. DUCT WRAP SHALL BE FASTENED TO DUCTWORK AS PER MANUFACTURER'S DIRECTIONS. ROUND/OVAL SUPPLY AND RETURN DUCTWORK EXPOSED TO VIEW AND LOCATED IN THE CONDITIONED SPACE SHALL NOT BE INSULATED. ALL INSULATION R-VALUES SHALL CONFORM TO ENERGY CODE.
11. CORE-DRILL OR SAW-CUT EXISTING WALLS, ROOF, ETC. AS REQUIRED FOR PIPING OR DUCTWORK AND FIRE-STOP OPENING AROUND PIPE OR DUCTWORK. VERIFY LOCATION OF STRUCTURAL BEAMS, JOISTS, ETC. BEFORE DRILLING.
12. WHEREVER FOUNDATION WALLS, OUTSIDE WALLS, ROOFS, ETC. ARE CUT FOR INSTALLATION OF SYSTEMS, THEY SHALL BE PATCHED TO MATCH EXISTING CONSTRUCTION AND SEALED WEATHER TIGHT. WORK SHALL BE PERFORMED BY CRAFTSMEN SKILLED IN THEIR RESPECTIVE TRADES.
13. THE MECHANICAL SYSTEMS SHALL BE COMPLETE WITH ALL NECESSARY APPURTENANCES FOR A COMPLETE OPERATING SYSTEM.
14. HVAC CONTRACTOR SHALL INSTALL ALL CONTROL WIRING AS REQUIRED. THERMOSTATS SHALL BE AS SCHEDULED WITH THE EQUIPMENT. PROVIDE TRANSFORMERS AS REQUIRED.
15. PROVIDE UL APPROVED FIRE DAMPERS FOR ALL PENETRATIONS THROUGH FIRE RATED WALLS, PARTITIONS, CEILINGS, AND FLOORS. INSTALL FIRE DAMPERS AS PER MANUFACTURER'S DIRECTIONS AND AS PER UL GUIDELINES.
16. HVAC CONTRACTOR SHALL BALANCE SYSTEM TO AIR QUANTITIES SHOWN ON PLAN. BALANCING CONTRACTOR SHALL USE DUCT MOUNTED MANUAL DAMPERS FOR AIR SYSTEM BALANCING. USE OF TERMINAL DAMPER IS NOT ACCEPTABLE.
17. THE VENTILATION/ HEATING AND AIR CONDITIONING CONTRACTOR SHALL SUBMIT WRITTEN REPORTS OF ALL AIR FLOW READINGS, STATIC PRESSURES, TEMPERATURE READINGS, MOTOR AMPERAGE, ETC. TO DOCUMENT PROPER BALANCED AIR FLOW IN THIS HVAC SYSTEMS IN ALL AREAS.
18. ALL ROOF PENETRATIONS EXCEEDING 12" X 12" IN SIZE SHALL BE FURNISHED WITH BURGLAR BARS.
19. THE CONTRACTOR SHALL WARRANTEE ALL MATERIAL AND GUARANTEE ALL WORKMANSHIP FOR ONE YEAR FROM SUBSTANTIAL COMPLETION.
20. ALL CONTRACTOR FABRICATED AND MANUFACTURER FABRICATED COMPONENTS OF THE OUTSIDE AIR, SUPPLY AIR, RETURN AIR AND EXHAUST SYSTEMS SHALL BE CONSTRUCTED AND INSTALLED AIR-TIGHT. THE INSTALLED SYSTEMS SHALL BE PRESSURE TESTED AS SPECIFIED. PIPE OPENINGS IN SYSTEM COMPONENT SHALL HAVE SHEET METAL BAFFLES, SET IN SEALANT, TO PREVENT LEAKAGE.
21. DRAWINGS FOR HVAC WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENTS. REFER TO MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS AS REQUIRED. FURNISH AND INSTALL DUCTWORK, CONNECTIONS, ACCESSORIES, OFFSETS AND MATERIALS NECESSARY TO FACILITATE THE SYSTEM'S FUNCTIONING AS INDICATED BY THE DESIGN AND THE EQUIPMENT INDICATED. THE WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES AND ORDINANCES AND SUBJECT TO INSPECTION.
22. FLEX DUCT: PROVIDE FACTORY ASSEMBLED CLASS 1 AIR DUCT (UL 181) WITH FIBERGLASS INSULATION AND REINFORCED OUTER PROTECTIVE COVER/VAPOR BARRIER. FLEX DUCT SHALL MEET NFPA 90A WITH FLAME SPREAD UNDER 25, SMOKE DEVELOPED UNDER 50, AND SHALL BE RATED FOR 2" W.C. PRESSURE AND 0 TO 250 DEGREE TEMPERATURE. MAXIMUM LENGTH SHALL BE PER CODE AND NOT TO EXCEED 5'-0" LONG.
23. ALL MECHANICAL EQUIPMENT ELECTRICAL'S & STRUCTURAL REQUIREMENTS SHALL BE COORDINATED WITH OTHER TRADES PRIOR TO PURCHASE AND INSTALLATION OF THE UNITS. NOTIFY ARCHITECT/ENGINEER WITH DISCREPANCIES IMMEDIATELY.
24. GENERAL CONTRACTOR TO REROUTE FIRE SPRINKLER PIPING IF REQUIRED FOR THE NEW SUPPLY AIR AND RETURN AIR DUCTWORK LAYOUT.
25. ULTA CEILING SPACE IS NOT PLENUM RATED AND SHALL NOT BE USED AS A RETURN AIR PLENUM.
26. PRIOR TO CONSTRUCTION, FIELD VERIFY CEILING SPACE AVAILABILITY TO RUN DUCTWORK AGAINST EXISTING BUILDING STRUCTURAL CONDITION AND CEILING HEIGHT. NOTIFY ARCHITECT/ENGINEER WITH DISCREPANCIES IMMEDIATELY.
27. ALL LOW VOLTAGE WIRING OR CABLING SHOULD RUN ADJACENT TO THE PERIMETER SOFFITS NOT MORE THAN 3' OFF THEIR DEMISING WALLS.
28. MOUNT REMOTE SENSORS AT 60" ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE.
29. CONTRACTOR SHALL VERIFY AVAILABLE DEPTH FOR DUCTWORK PRIOR TO DUCTWORK FABRICATION.
30. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL EXISTING CONDITIONS PRIOR TO SUBMITTING HIS BID. NO ADDITIONAL COMPENSATION WILL BE MADE FOR ANY EXTRAS DUE TO CONTRACTOR'S FAILURE TO VISIT THE JOBSITE AND/OR PREDETERMINE ALL EXISTING CONDITIONS BEFORE SUBMITTING HIS BID. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER FOR RESOLUTION.
31. MECHANICAL CONTRACTOR SHALL TAG EACH INDIVIDUAL REMOTE SENSOR WITH THE ROOFTOP UNIT THEY ARE SERVING.
32. PROVIDED MEANS FURNISH AND INSTALL.
33. PAINT PORTION OF DUCTWORK VISABLE THRU GRILLE, DIFFUSER, LOUVER, ETC. WITH FLAT BLACK PAINT.
34. REMOTE SENSORS, KEY PADS, ETC. ARE TO NOT BE MOUNTED ON MILLWORK. COORDINATE LOCATION WITH ARCHITECTURAL DRAWINGS.

# LEGEND

| | | | |
|---|---|---|---|
| AFF | ABOVE FINISHED FLOOR | DET. | DETAIL |
| CD | CONDENSATE | DN. | DOWN |
| DG | DOOR GRILLE, SEE ARCH. DWG'S. | DWG. | DRAWING |
| EF | EXHAUST AIR FAN | E.A.T. | ENTERING AIR TEMPERATURE |
| ETR | EXISTING TO REMAIN | E.E.R | ENERGY EFFICIENCY RATIO |
| FC | FLEXIBLE CONNECTION | E.S.P | EXTERNAL STATIC PRESSURE |
| FOB | FLAT ON BOTTOM | E.T.R | EXISTING TO REMAIN |
| FOT | FLAT ON TOP | GA. | GAUGE |
| MOD | MOTOR OPERATED CONTROL DAMPER | L.A.T. | LEAVING AIR TEMPERATURE |
| NC | NEW CONNECTION TO EXISTING | MT'D | MOUNTED |
| NTS | NOT TO SCALE | NIC | NOT IN CONTRACT |
| RTU | ROOF TOP HVAC UNIT | REQ'D | REQUIRED |
| S | SENSOR | T.S.P. | TOTAL STATIC PRESSURE |
| T | THERMOSTAT | TV | TURNING VANE |
| ARCH | ARCHITECT OR ARCHITECTURAL | UCD | UNDERCUT DOOR |
| BLD'G | BUILDING | VD | VOLUME DAMPER |
| B.H.P | BRAKE HORSEPOWER | W.C. | WATER COLUMN |
| COL. | COLUMN | W/ | WITH |
| CONST'N | CONSTRUCTION | Ø | DIAMETER/ROUND |

# MECHANICAL SYMBOLS

| | |
|---|---|
| | MANUAL VOLUME DAMPER (VD) WITH LOCKING HAND QUADRANT HANDLE AND AIR-TIGHT END BEARINGS |
| S DEVICE | SENSOR WITH DEVICE CONTROLLED MOUNTED ON WALL. |
| SD | DUCT MOUNTED SMOKE DETECTOR |
| | TYPICAL SUPPLY DIFFUSER. NECK SIZE / CFM |
| | TYPICAL RETURN OR EXHAUST GRILLE. NECK SIZE / CFM |
| | AIRFOIL TURNING VANES, TYPICAL FOR ALL SQUARE TURNS. |

# TEMPERATURE ZONES

| UNIT | ROOMS SERVED |
|---|---|
| RTU-1 | 100, 101 |
| RTU-2 | 101 |
| RTU-3 | 101, 102, 105, 107, 108 |
| RTU-4 | 103, 104 |

THE CONTRACTORS ARE REQUIRED TO VISIT THE SITE AND FULLY ACQUAINT THEMSELVES WITH THE EXISTING CONDITIONS AND THE DIFFICULTIES INVOLVED IN ACCOMPLISHING THE NEW WORK. PROBLEMS, DISCREPANCIES OR INFORMATION NEEDED SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER IN WRITING PRIOR TO SUBMITTING A PROPOSAL. THE SUBMISSION OF PROPOSAL WILL INDICATE THAT THE CONTRACTOR HAS FULLY UNDERSTOOD AND HAS INCLUDED ALL COSTS FOR THIS PROJECT.

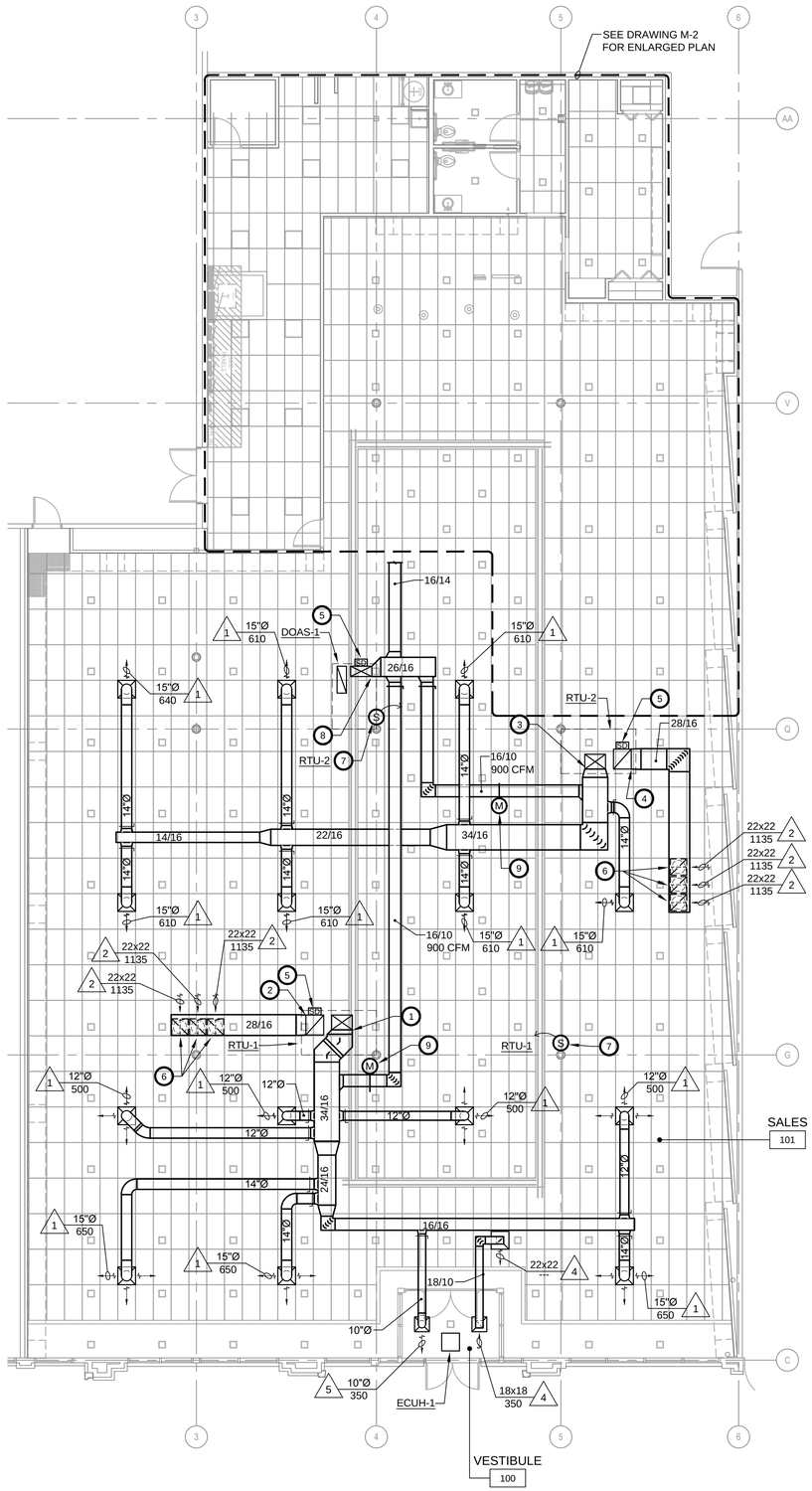
# PLAN NOTES (#)

1. CONNECT 34/16 SUPPLY DUCT TO DUCT DROP FROM LANDLORD PROVIDED ROOFTOP UNIT, RTU-1. PROVIDE TURNING VANE ELBOW AT BOTTOM OF RISER
2. CONNECT 28/16 RETURN DUCT TO DUCT DROP FROM LANDLORD PROVIDED ROOFTOP UNIT, RTU-1. PROVIDE TURNING VANE ELBOWS AT BOTTOM OF RISER.
3. CONNECT 34/16 SUPPLY DUCT TO DUCT DROP FROM LANDLORD PROVIDED ROOFTOP UNIT, RTU-2. PROVIDE TURNING VANE ELBOW AT BOTTOM OF RISER.
4. CONNECT 28/16 RETURN DUCT TO DUCT DROP FROM LANDLORD PROVIDED ROOFTOP UNIT, RTU-2. PROVIDE TURNING VANE ELBOWS AT BOTTOM OF RISER.
5. SMOKE DETECTOR PER CODE PROVIDED BY LANDLORD. PROVIDE EXTRA SMOKE DETECTOR HEAD FOR REPLACEMENT INSTALLATION AT SUBSTANTIAL COMPLETION FOR ALL DUCT SMOKE DETECTORS.
6. 18"Ø CONNECTION W/ V.D. IN NECK. PROVIDE DUCTWORK, VOLUME DAMPER AND AIR DEVICE.
7. TEMPERATURE SENSOR LOCATION FOR RTU, TAG NUMBER INDICATED ON THE DRAWINGS. SENSOR FURNISHED WITH RTU AND INSTALLED BY EMS CONTRACTOR. EACH REMOTE SENSOR TO BE LABELED WITH ZONE SERVED. DO NOT LOCATE COLUMN MOUNTED SENSORS FACING THE FRONT OF THE STORE, LOCATE THE SENSORS ON THE SIDE OR BACK OF THE COLUMN WHEN VIEWED FROM THE FRONT OF THE STORE. DO NOT ATTACH SENSORS TO STORE FIXTURES, CONTACT ARCHITECT IF THERE APPEARS TO BE A FIXTURE CONFLICT. COORDINATE SENSOR LOCATIONS SO SENSORS ARE NOT ATTACHED TO ARCH. COORDINATE SENSOR LOCATIONS WITH ARTWORK, GRAPHICS, ETC..
8. CONNECT 26/16 DOAS DUCT TO DUCT DROP FROM LANDLORD PROVIDED DOAS UNIT, DOAS-1. PROVIDE TURNING VANE ELBOW AT BOTTOM OF RISER.
9. PROVIDE MOTORIZED ISOLATION DAMPER TO ISOLATE DOAS DUCTWORK FROM RTU DUCTWORK. DAMPERS TO BE OPEN WHEN DOAS IS ENERGIZED AND CLOSED WHEN DOAS IS NOT OPERATING. DAMPERS TO BE LOW VOLTAGE. COORDINATE VOLTAGE WITH EMS CONTRACTOR. EMS CONTRACTOR TO PROVIDE CONTROL WIRING INTO EMS SYSTEM

NOTE:
MECHANICAL CONTRACTOR SHALL STENCIL THE ROOFTOP UNITS. STENCIL SHALL INDICATE STORE NAME, SPACE NUMBER AND EQUIPMENT DESIGNATION IN LETTERING A MINIMUM OF 2 INCHES IN HEIGHT.

# EXISTING CONDITIONS NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD SURVEY AND DOCUMENTING OF EXISTING SYSTEMS. THESE CONTRACT DRAWINGS SHALL SERVE AS GUIDANCE FOR THE CONTRACTOR ALONG WITH FIELD SURVEY INFORMATION TO INSTALL THE DISTRIBUTION SYSTEMS REQUIRED FOR THE NEW EQUIPMENT AND DEVICES.
2. REFER TO THE ARCHITECTURAL DRAWINGS FOR WALLS, CEILINGS, ETC. THAT ARE BEING REMOVED. ALL EXISTING SYSTEMS INCLUDING PIPING, WIRING, ANCHORING, ETC. THAT ARE EXPOSED SHOULD BE REMOVED OR RELOCATED, COORDINATE WITH LANDLORD.




2 MECHANICAL PLAN

SCALE: 1/8"=1'-0"

City of Kirkland
Reviewed by
J Tumelson
05/30/2018

ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

MECHANICAL REFLECTED CEILING PLAN, NOTES, AND SYMBOLS


CHAPMAN DESIGN ARCHITECTURE, INC
JOHN A CHIPMAN ARCHITECT
1ST FLOOR EAST
DES PLAINES, IL 60018
ENGINEERS

WGW Engineers, Inc.
760 Canal Drive
Wood Dale, IL 60191
Tel. 630/595-8850 Fax. 630/595-8818
www.WGWengineers.com


Revisions
- ISSUE FOR CL\LL REVIEW 04/20/18
- ISSUE FOR PERMIT & BID 04/20/18

LICENSED PROFESSIONAL ENGINEER
JOSEPH G. THOMAS JR
M 31400
Exp. 6/30/18
MECHANICAL
STATE OF WASHINGTON

Signature
Date 04/19/2018
Expiration Date 09/30/2019

I HEREBY CERTIFY THAT THESE PLANS HAVE BEEN PREPARED UNDER MY SUPERVISION AND THAT TO THE BEST OF MY KNOWLEDGE, THE SAME COMPLY WITH ALL RULES, REGULATIONS AND ORDINANCES OF KIRKLAND, WA RELATING TO STRUCTURES AND BUILDINGS.

ENGINEER

| Drawn By | Checked By |
|---|---|
| JS | DH |
| Scale 1/8"=1'-0" | Date 04/20/18 |

Job No. 16-4170

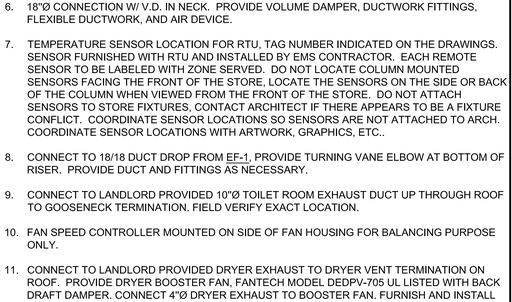
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# PLAN NOTES (#)

1. CONNECT 22/16 AND 18/16 SUPPLY DUCTS TO DUCT DROP FROM LANDLORD PROVIDED ROOFTOP UNIT, RTU-3, PROVIDE TURNING VANE ELBOWS AT BOTTOM OF RISER.
2. CONNECT 28/16 RETURN DUCT TO DUCT DROP FROM LANDLORD PROVIDED ROOFTOP UNIT, RTU-3, PROVIDE TURNING VANE ELBOW AT BOTTOM OF RISER.
3. CONNECT 18/14 SUPPLY DUCT TO DUCT DROP FROM LANDLORD PROVIDED ROOFTOP UNIT, RTU-4, PROVIDE TURNING VANE ELBOW AT BOTTOM OF RISER.
4. CONNECT 20/10 RETURN DUCT TO DUCT DROP FROM LANDLORD PROVIDED ROOFTOP UNIT, RTU-4, PROVIDE TURNING VANE ELBOW AT BOTTOM OF RISER.
5. SMOKE DETECTOR PER CODE PROVIDED BY LANDLORD. PROVIDE EXTRA SMOKE DETECTOR HEAD FOR REPLACEMENT INSTALLATION AT SUBSTANTIAL COMPLETION FOR ALL DUCT SMOKE DETECTORS.
6. 18"Ø CONNECTION W/ V.D. IN NECK. PROVIDE VOLUME DAMPER, DUCTWORK FITTINGS, FLEXIBLE DUCTWORK, AND AIR DEVICE.
7. TEMPERATURE SENSOR LOCATION FOR RTU, TAG NUMBER INDICATED ON THE DRAWINGS. SENSOR FURNISHED WITH RTU AND INSTALLED BY EMS CONTRACTOR. EACH REMOTE SENSOR TO BE LABELED WITH ZONE SERVED. DO NOT LOCATE COLUMN MOUNTED SENSORS FACING THE FRONT OF THE STORE, LOCATE THE SENSORS ON THE SIDE OR BACK OF THE COLUMN WHEN VIEWED FROM THE FRONT OF THE STORE. DO NOT ATTACH SENSORS TO STORE FIXTURES, CONTACT ARCHITECT IF THERE APPEARS TO BE A FIXTURE CONFLICT. COORDINATE SENSOR LOCATIONS SO SENSORS ARE NOT ATTACHED TO ARCH. COORDINATE SENSOR LOCATIONS WITH ARTWORK, GRAPHICS, ETC..
8. CONNECT TO 18/18 DUCT DROP FROM EF-1, PROVIDE TURNING VANE ELBOW AT BOTTOM OF RISER. PROVIDE DUCT AND FITTINGS AS NECESSARY.
9. CONNECT TO LANDLORD PROVIDED 10"Ø TOILET ROOM EXHAUST DUCT UP THROUGH ROOF TO GOOSENECK TERMINATION. FIELD VERIFY EXACT LOCATION.
10. FAN SPEED CONTROLLER MOUNTED ON SIDE OF FAN HOUSING FOR BALANCING PURPOSE ONLY.
11. CONNECT TO LANDLORD PROVIDED DRYER EXHAUST TO DRYER VENT TERMINATION ON ROOF. PROVIDE DRYER BOOSTER FAN, FANTECH MODEL DEDPV-705 UL LISTED WITH BACK DRAFT DAMPER. CONNECT 4"Ø DRYER EXHAUST TO BOOSTER FAN. FURNISH AND INSTALL LINT TRAP MODEL DBLT4 IN DRYER EXHAUST DUCT UPSTREAM OF BOOSTER FAN ACCORDING TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. LINT TRAP TO BE INSTALLED ABOVE DRYER IN VERTICAL DRYER DUCT WHICH IS EASILY ACCESSIBLE TO THE DRYER USER. DRYER EXHAUST DUCTWORK SHALL HAVE A SMOOTH INTERIOR FINISH WITH JOINTS RUNNING IN THE DIRECTION OF THE AIRFLOW. DUCTS SHALL NOT BE CONNECTED OR INSTALLED WITH SHEET METAL SCREWS OR OTHER FASTENERS THAT WILL OBSTRUCT THE FLOW. FLEXIBLE DUCT CONNECTORS SHALL BE METALLIC WITH A MAXIMUM LENGTH OF 6 FEET. TERMINATION SHALL BE A MINIMUM OF 10'-0" FROM OUTSIDE AIR INTAKE LOUVERS. MINIMUM HORIZONTAL DUCT ELEVATION TO BE 11'-6".
12. CONNECT TO LANDLORD PROVIDED 10"Ø DUCT UP THRU ROOF FOR COMBUSTION AIR. THE OPENING SHALL TERMINATE BELOW THE CEILING AND SHALL NOT EXTEND IN EXCESS OF 12" BELOW THE CEILING. MECHANICAL CONTRACTOR TO PROVIDE A MOTORIZED DAMPER THAT IS INTERLOCKED WITH THE BURNER OPERATION ON WATER HEATER. WHEN BURNER IS FIRING DAMPER SHALL OPEN. WHEN BURNER IS NOT FIRING DAMPER SHALL REMAIN CLOSED. DAMPER SHALL FAIL IN THE OPEN POSITION. INTERLOCK AND WIRING TO BE PROVIDED BY THE MECHANICAL CONTRACTOR. COORDINATE WITH STRUCTURE. LANDLORD PROVIDED ROOF TERMINATION IS A GREENHECK ROOF CAP MODEL GRS-10 ON THE ROOF.
13. CONNECT TO LANDLORD 6"Ø TYPE B VENT UP THRU ROOF. FIELD VERIFY EXACT LOCATION. PROVIDE B-VENT TO WATER HEATER.
14. DETAIL 6 ON SHEET M-3 SHALL BE CUT OUT, PLACED IN A FRAME, AND HUNG IN THE MANAGERS OFFICE. COORDINATE EXACT LOCATION WITH ARCHITECTURAL ITEMS.
15. CO2 SENSOR FURNISHED AND INSTALLED BY EMS CONTRACTOR, SEE EMS DRAWINGS FOR MORE INFORMATION. COORDINATE SENSOR LOCATIONS WITH ARTWORK, GRAPHICS, ETC..
16. HUMIDITY SENSOR FURNISHED AND INSTALLED BY EMS CONTRACTOR, SEE EMS DRAWINGS FOR MORE INFORMATION. INSTALL SENSOR AT 60" AFF ADJACENT TO OR BELOW CO2 SENSOR. COORDINATE SENSOR LOCATIONS WITH ARTWORK, GRAPHICS, ETC..
17. COORDINATE AIR DEVICE LOCATIONS AND ORIENTATION IN OFFICE WITH OFFICE CEILING STRUCTURE SO THAT THE DUCTWORK AND AIR DEVICES ARE ROUTED BETWEEN JOISTS AND NOT THRU JOISTS TO MAINTAIN CEILING STRUCTURE.
18. PROVIDE MOTORIZED ISOLATION DAMPER TO ISOLATE DOAS DUCTWORK FROM RTU DUCTWORK. DAMPERS TO BE OPEN WHEN DOAS IS ENERGIZED AND CLOSED WHEN DOAS IS NOT OPERATING. DAMPERS TO BE LOW VOLTAGE. COORDINATE VOLTAGE WITH EMS CONTRACTOR. EMS CONTRACTOR TO PROVIDE CONTROL WIRING INTO EMS SYSTEM

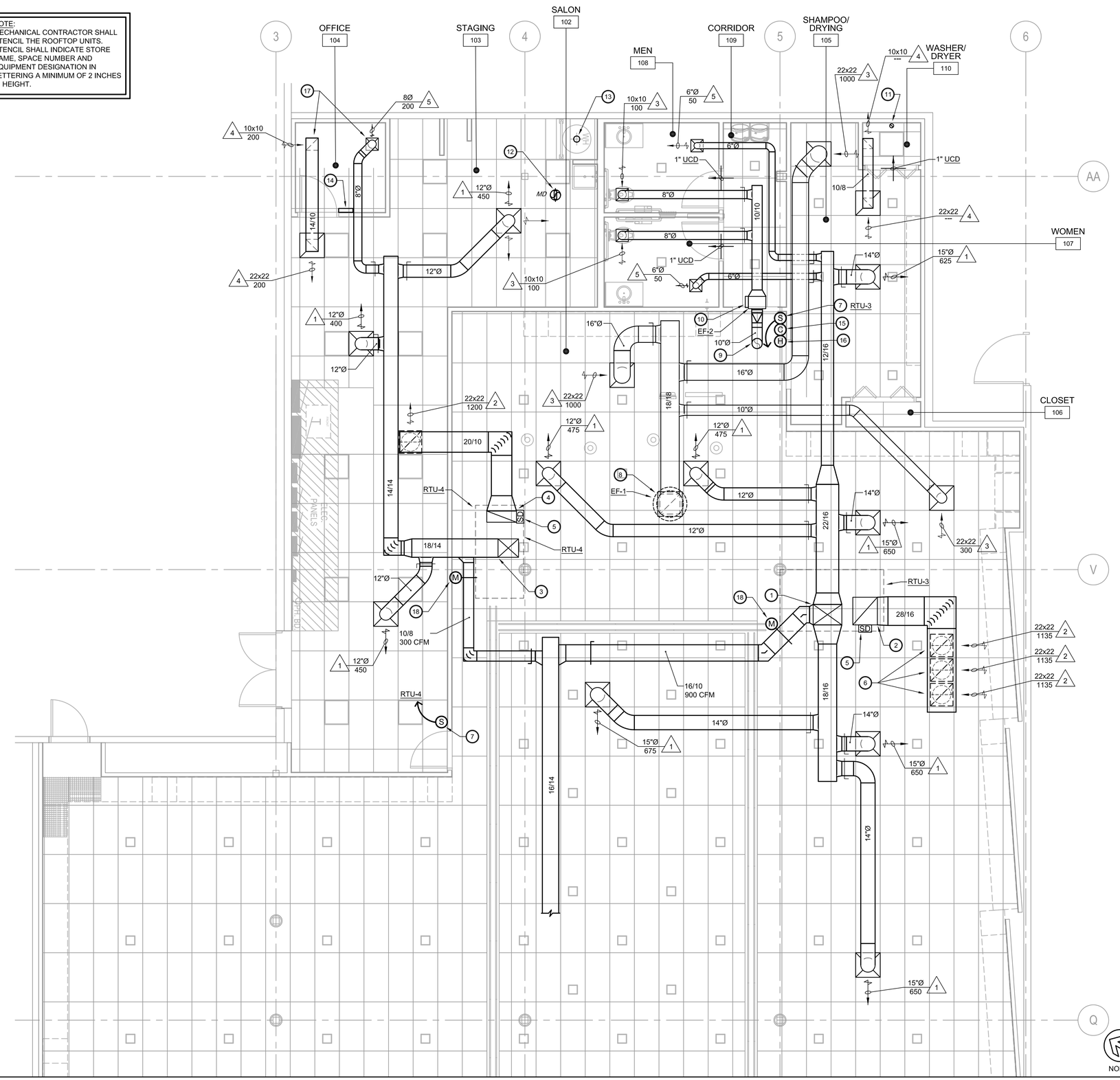
NOTE:
MECHANICAL CONTRACTOR SHALL STENCIL THE ROOFTOP UNITS. STENCIL SHALL INDICATE STORE NAME, SPACE NUMBER AND EQUIPMENT DESIGNATION IN LETTERING A MINIMUM OF 2 INCHES IN HEIGHT.




NOTES:
1. INTERLOCK MOTORIZED DAMPER WITH BURNER OPERATION ON WATER HEATER. WHEN BURNER IS FIRING, DAMPER SHALL OPEN. WHEN BURNER IS NOT FIRING, DAMPER SHALL CLOSE. DAMPER TO FAIL IN OPEN POSITION.

## 2 COMBUSTION AIR INTAKE DETAIL

SCALE: NOT TO SCALE




## 1 ENLARGED MECHANICAL PLAN

SCALE: 1/4"=1'-0"

ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

ENLARGED REFLECTED CEILING PLAN


CHIPMAN DESIGN ARCHITECTURE INC
JOHN A CHIPMAN ARCHITECT
1 EAST FIRST AVENUE, FIRST FLOOR EAST
DOYLESTOWN, PA 18901
PH 215.340.0400

WGW Engineers, Inc.
760 Oak Creek Drive
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www.wgwengineers.com


Revisions
- ISSUE FOR CLL REVIEW 04/20/18
- ISSUE FOR PERMIT & BID 04/20/18

LICENSED PROFESSIONAL ENGINEER JOSEPH G. THOMAS M 31400 Exp. 6/30/18 MECHANICAL STATE OF CALIFORNIA

Signature 04/18/2018
Date 09/30/2019
Expiration Date

I HEREBY CERTIFY THAT THESE PLANS HAVE BEEN PREPARED UNDER MY SUPERVISION AND THAT TO THE BEST OF MY KNOWLEDGE, THE SAME COMPLY WITH ALL RULES, REGULATIONS AND ORDINANCES OF KIRKLAND, WA RELATING TO STRUCTURES AND BUILDINGS.

ENGINEER

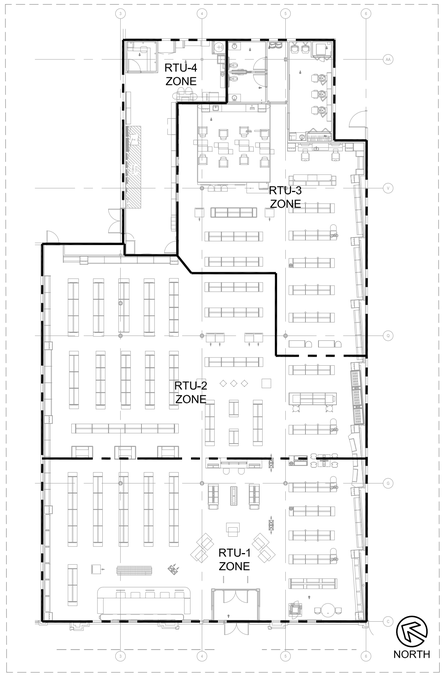
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Job No. 16-4170

Sheet No. M-2

City of Kirkland Reviewed by J Tumelson 05/30/2018

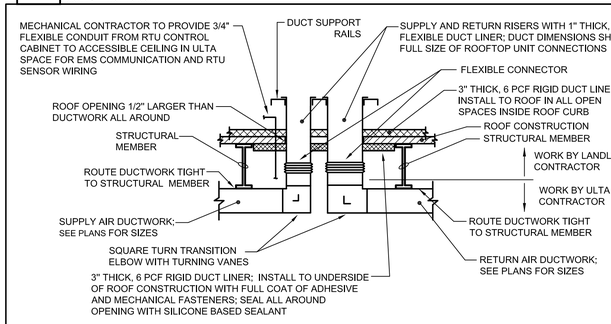
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NOTE: GENERAL CONTRACTOR TO CUT ALONG DASHED LINES, PLACE IN FRAME, AND HANG IT IN THE MANAGER'S OFFICE

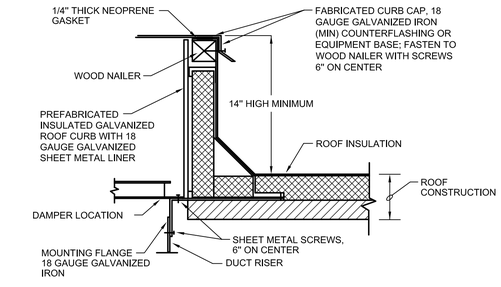
## 6 RTU ZONES

SCALE: NOT TO SCALE




## 5 ROOFTOP UNIT DUCT DROP DETAIL (FURNISHED AND INSTALLED BY LANDLORD)

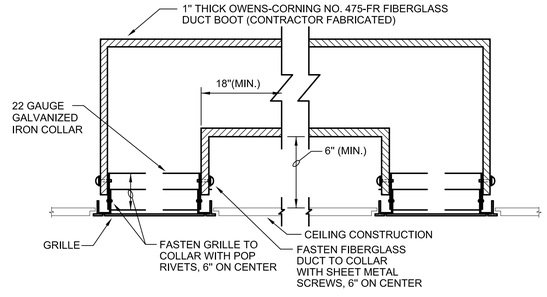
SCALE: NOT TO SCALE




NOTES:
1. CUT AND PATCH EXISTING ROOFING AS REQUIRED FOR NEW CURB INSTALLATION.
2. CURB SHALL BE TAPERED TYPE AND MATCH THE PITCH OF THE ROOF.
3. SECURELY INSTALL CURB TO ROOF; USE FASTENERS AS REQUIRED BY ROOF CONSTRUCTION.

## 8 TYPICAL PREFABRICATED EF ROOF CURB DETAIL (FURNISHED AND INSTALLED BY LANDLORD)

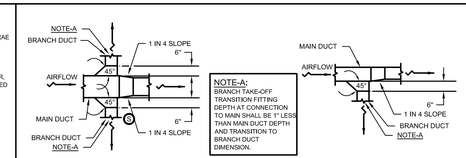
SCALE: NOT TO SCALE




## 7 TYPICAL RETURN TRANSFER DETAIL

SCALE: NOT TO SCALE

NOTES:
1. ALL DUCTWORK CONSTRUCTED IN ACCORDANCE WITH ASHRAE HANDBOOK AND PRODUCT DIRECTORY 1988 EQUIPMENT VOLUME, CHAPTER NO. 1.
2. ALL CONTRACTOR FABRICATED AND MANUFACTURER FABRICATED COMPONENTS OF THE OUTSIDE AIR, SUPPLY AIR, RETURN AIR AND EXHAUST SYSTEMS SHALL BE CONSTRUCTED AND INSTALLED AIR-TIGHT. REFER TO DUCTWORK SEALANT DETAILS ON THIS SHEET. PIPE OPENINGS IN SYSTEM COMPONENTS SHALL HAVE SHEET METAL BAFFLES, SET IN SEALANT, TO PREVENT LEAKAGE.

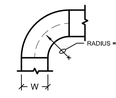



TYPICAL DOUBLE BRANCH TAKE-OFF
NOT TO SCALE

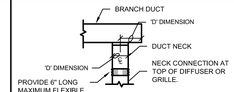
NOTE-A:
BRANCH TAKE-OFF TRANSITION FITTING DEPTH AT CONNECTION TO MAIN SHALL BE 1" LESS THAN MAIN DUCT DEPTH AND TRANSITION TO BRANCH DUCT DIMENSION.




TYPICAL SINGLE BRANCH TAKE-OFF
NOT TO SCALE



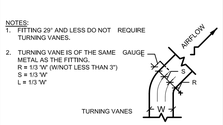

TYPICAL 30° TO 90° RADIUS ELL TURN FITTING
NOT TO SCALE



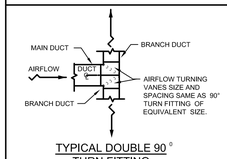

1. DUCT BRANCH AND DUCT NECK SHALL BE RIGID SHEET METAL CONSTRUCTION.
2. FLEXIBLE CONNECTION SHALL BE METAL-EDGE VENTILATION FABRIC OR TRIPLE-LOK FLEXIBLE ALUMINUM AIR DUCT.

TYPICAL TOP CONNECTION TO DIFFUSER OR GRILLE DETAIL NOT
TO SCALE

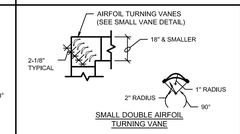
NOTES:
1. FITTING 29° AND LESS DO NOT REQUIRE TURNING VANES.
2. TURNING VANE IS OF THE SAME GAUGE METAL AS THE FITTING.
   R = 1/3 'W' (W/NOT LESS THAN 3")
   S = 1/3 'W'
   L = 1/3 'W'




TYPICAL 30° TO 89° TURN FITTINGS
NOT TO SCALE

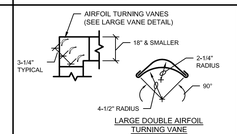



TYPICAL DOUBLE 90° TURN FITTING
(EQUAL CFM SPLIT SHOWN, UNEQUAL CFM SPLIT SIMILAR)
NOT TO SCALE



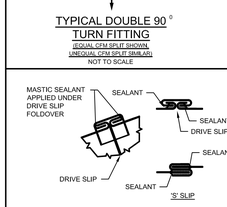

SMALL DOUBLE AIRFOIL TURNING VANE

TYPICAL 90° TURN FITTING 18" AND SMALLER
NOT TO SCALE



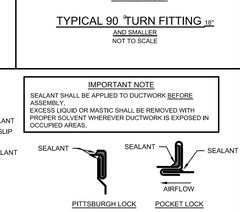

LARGE DOUBLE AIRFOIL TURNING VANE

TYPICAL 90° TURN FITTING 19" AND LARGER
NOT TO SCALE

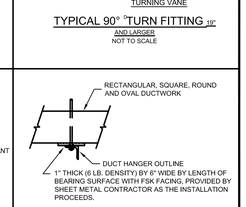



DUCTWORK SEALANT DETAIL NO. 1
NOT TO SCALE

IMPORTANT NOTE
SEALANT SHALL BE APPLIED TO DUCTWORK BEFORE ASSEMBLY.
EXCESS LIQUID OR MASTIC SHALL BE REMOVED WITH PROPER SOLVENT WHEREVER DUCTWORK IS EXPOSED IN OCCUPIED AREAS.



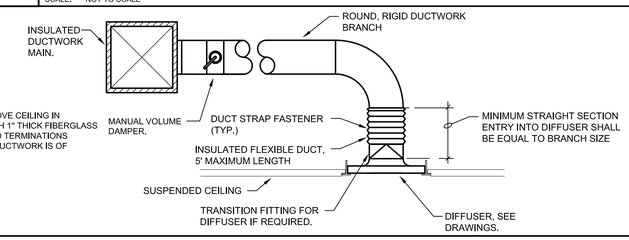

DUCTWORK SEALANT DETAIL NO. 2
NOT TO SCALE




DETAIL OF INSULATION AT DUCT HANGER
NOT TO SCALE

## 4 DUCTWORK DETAILS

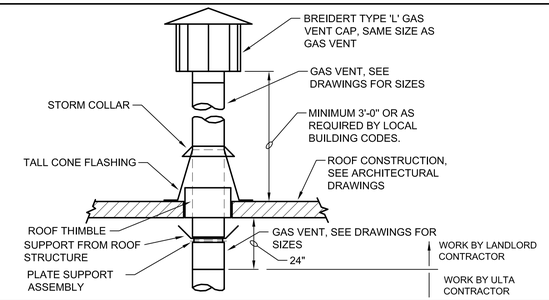
SCALE: NOT TO SCALE




NOTE:
THE ROUND BRANCH DUCTWORK LOCATED ABOVE CEILING IN CONCEALED SPACES SHALL BE INSULATED WITH 1" THICK FIBERGLASS SLEEVE WITH FOIL JACKET AND ALL JOINTS AND TERMINATIONS SEALED WITH FOIL OR DUCT TAPE, EXCEPT IF DUCTWORK IS OF FIBERGLASS CONSTRUCTION.

## 3 DUCT CONNECTION TO CEILING DIFFUSER DETAIL

SCALE: NOT TO SCALE




NOTE:
METALBESTOS TYPE 'B' GAS VENT UP THRU ROOF WITH ROOF SUPPORT ASSEMBLY, TALL CONE FLASHING, STORM COLLAR, AND ROOF THIMBLE; SEE PLANS FOR SIZES.

## 2 TYPICAL GAS VENT THRU ROOF DETAIL (FURNISHED AND INSTALLED BY L

SCALE: NOT TO SCALE

City of Kirkland
Reviewed by
J Tumelson
05/30/2018

ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

MECHANICAL SCHEDULES AND DETAILS

CHIPMAN DESIGN ARCHITECTURE INC
JOHN A CHIPMAN ARCHITECT
1 ISSUE FLOOR EAST
2 ISSUE FLOOR EAST
DES ENG 18572 6 05 05
EXPIRES 10/16/2018

WGW Engineers, Inc.
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Wilmington, OH 45177
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www.wgwengineers.com
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Revisions
1. ISSUE FOR CL/LL REVIEW 04/20/18
2. ISSUE FOR PERMIT & BID 04/20/18

LICENSED PROFESSIONAL ENGINEER
JOSEPH G. THOMAS
M 31400
Exp. 6/30/18
MECHANICAL
STATE OF WASHINGTON

Signature
Date 04/18/2018
Expiration Date 09/30/2019

I HEREBY CERTIFY THAT THESE PLANS HAVE BEEN PREPARED UNDER MY SUPERVISION AND THAT TO THE BEST OF MY KNOWLEDGE, THE SAME COMPLY WITH ALL RULES, REGULATIONS AND ORDINANCES OF KIRKLAND, WA RELATING TO STRUCTURES AND BUILDINGS.

ENGINEER

| Drawn By | Checked By |
|---|---|
| JS | DH |
| Scale | Date |
| AS SHOWN | 04/20/18 |

Job No. 16-4170

Sheet No. M-3

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## ELECTRIC CABINET UNIT HEATER SCHEDULE

| DESIG'N | AREA SERVED | MFG'R MODEL NO. | TYPE | BTU/HR | TOTAL WATTS | ELECTRICAL | | REMARKS |
|---|---|---|---|---|---|---|---|---|
| | | | | | | PHASE | VOLTAGE | |
| ECUH-1 | VESTIBULE | QMARK CDF-RE-547-NW | CEILING MOUNTED | 13,640 | 4,000 | 1 | 277 | TAMPER RESISTANT BUILT-IN THERMOSTAT, RECESSED MOUNT, FACTORY NORTHERN WHITE |

## EXHAUST FAN SCHEDULE

| DESIG'N | MFG'R MODEL NO. | TYPE | CFM | STATIC PRESSURE ("W.C.) | DRIVE | ELECTRICAL | | | ROOF CURB | BACKDRAFT DAMPER | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | HP (WATTS) | PHASE | VOLTAGE | | | |
| EF-1 | LOREN COOK 150 ACEB | ROOF MOUNTED | 2,300 | 0.5 | BELT | 3/4 | 1 | 115 | 14 IN. HIGH | GAVITY | LANDLORD FURNISHED AND INSTALLED ROOF MOUNTED EXHAUST FAN WITH ACCESSORIES UNDER SEPARATE PERMIT. |
| EF-2 | LOREN COOK GNVF-500 | IN-LINE | 200 | 0.5 | DIRECT | (35 W) | 1 | 115 | NONE | INTEGRAL | PROVIDE ECM MOTOR, FAN SPEED CONTROLLER AND ACCESS PANEL FOR SPEED CONTROLLER. |

NOTE: EF-1 TO BE CONTROLLED BY EMS SYSTEM VIA CONTROLLABLE BREAKER. PROVIDE BURGLAR BARS AT ROOF PENETRATION FOR EF-1.

## DIFFUSER AND GRILLE SCHEDULE (NO ALTERNATE MANUFACTURERS)

| PLAN MARK | SERVICE | MODULE | TYPE | MOUNTING LOCATION | FASTENING | MOUNTING FRAME | MATERIAL | FINISH | MFG'R | MODEL NO. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | SUPPLY | 24" x 24" | PLAQUE FACE | CEILING | LAY-IN | TYPE-3 | ALUMINUM | #26-WHITE | TITUS | OMNI-AA | SEE PLAN FOR NECK SIZE. PROVIDE |
| 2 | RETURN | 12" x 12"<br>24" x 12"<br>24" x 24" | PARALLEL BLADE | CEILING | LAY-IN/ SCREW | TYPE-3/ TYPE-1 | ALUMINUM | #26-WHITE | TITUS | 355-FL | SEE PLAN FOR NECK SIZE. PROVIDE PFA MOUNTING FRAME FOR GYP. CEILING. |
| 3 | EXHAUST | 12" x 12"<br>24" x 12"<br>24" x 24" | PARALLEL BLADE | CEILING | LAY-IN/ SCREW | TYPE-3/ TYPE-1 | ALUMINUM | #26-WHITE | TITUS | 355-FL | SEE PLAN FOR NECK SIZE. PROVIDE PFA MOUNTING FRAME FOR GYP. CEILING. |
| 4 | TRANSFER | 12" x 12"<br>24" x 12"<br>24" x 24" | PARALLEL BLADE | CEILING | LAY-IN/ SCREW | TYPE-3/ TYPE-1 | ALUMINUM | #26-WHITE | TITUS | 355-FL | SEE PLAN FOR NECK SIZE. PROVIDE PFA MOUNTING FRAME FOR GYP. CEILING. |
| 5 | SUPPLY | 12" x 12"<br>20" x 20"<br>24" x 24" | PLAQUE FACE | CEILING | SCREW | TYPE-1 | ALUMINUM | #26-WHITE | TITUS | OMNI-AA | SEE PLAN FOR NECK SIZE. PROVIDE PFA MOUNTING FRAME FOR GYP. CEILING. |

NOTE: PROVIDE FITTINGS AS NECESSARY TO CONNECT DUCTWORK TO AIR DEVICE.

## DOAS UNIT SCHEDULE (EXISTING BY LANDLORD)

| DESIG'N | MANUFACTURER AND MODEL NO. | NOMINAL TONS | STATUS | SUPPLY CFM | MIN. O.A. CFM | E.S.P. W.C. | COOLING CAPACITY | | | HEATING CAPACITY | | | | CONDENSER E.A.T. | | ELECTRICAL | | | | | E.E.R. | APPROXIMATE WEIGHT (LBS) | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | E.A.T. (F° DB/WB) | TOTAL (MBH) | SENSIBLE (MBH) | E.A.T. (F° DB) | L.A.T. (F° DB) | GAS INPUT (MBH) | HEAT OUTPUT (MBH) | AMBIENT (°F) | MIN. AMBIENT (°F) | SUPPLY FAN B.H.P. | PHASE | VOLTS | MCA | MOCP | | | |
| DOAS-1 | DAIKIN DPS010A | 10 | EXT'G BY LL | 3,000 | 3,000 | 1 | 82/66 | 117.2 | 92.3 | 22 | 96 | 300 | 240 | 95 | 40 | 4 | 3 | 460 | 20.2 | 25 | 12.1 | 2250 | SEE NOTES FOR OPTIONS |

- 2' HIGH ROOF CURB WITH ACOUSTIC LINED SHEET METAL DUCT.
- HIGH STATIC DRIVE KIT.
- BACNET MODULE WITH REMOTE TEMPERATURE SENSOR WITHOUT LOCAL DISPLAY AND WITHOUT LOCAL ADJUSTMENT.
- LOUVERED CONDENSER COIL HAIL GUARDS.
- FACTORY WIRED AND FACTORY INSTALLED NON-FUSED DISCONNECT.
- FACTORY INSTALLED UNPOWERED GFI WEATHERPROOF CONVENIENCE OUTLET.
- FACTORY INSTALLED SMOKE DETECTOR WIRED BY ELECTRICAL CONTRACTOR. DETECTOR TO BE MOUNTED IN SUPPLY AND RETURN AS REQUIRED BY LOCAL CODE.
- FACTORY START-UP.
- EACH UNIT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- FACTORY INSTALLED CORROSION PROTECTION (EPOXY COATING) WHEN LOCATED WITHIN 10 MILES OF COASTLINE OR AS REQUIRED BASED ON LOCAL CONDITIONS.

- ATTACH ROOFTOP UNITS TO CURB FOR EARTHQUAKE OR HURRICANE ZONE PER THE LOCAL CODES.
- SMOKE DETECTOR TEST STATIONS.
- INSTALL FACTORY FURNISHED ITEMS SHIPPED LOOSE FOR FIELD INSTALLATION.
- FOLLOW MANUFACTURERS PUBLISHED PROCEDURE FOR TEMPORARY OPERATION OF RTU'S TO MAINTAIN WARRANTY.
- BURGLAR BARS AT DUCT DROP CONNECTION TO CURB.
- STRUCTURAL REINFORCEMENT AS NECESSARY.
- CONDENSATE PIPE ROUTED AND TERMINATED PER CODE.
- MODULATING GAS HEAT.
- ROUTE DOAS DUCT TO RTU SUPPLY AIR DUCT DROPS AS INDICATED..
- ECM VARIABLE SPEED MOTOR

PROVIDE OUTDOOR LIGHT AT SERVICE SIDE OF ALL RTU'S INCLUDING THE FOLLOWING:
1. LIGHT SWITCH IN WEATHERPROOF HOUSINGS.
2. JELLY JAR LIGHT FIXTURE WITH METAL CAGE TO BE MCGILLE #606 WITH 1435-6 AND 13W MEDIUM BASE LED LAMP (OR APPROVED EQUAL).

## ROOFTOP UNIT SCHEDULE (EXISTING BY LANDLORD)

| DESIG'N | MANUFACTURER AND MODEL NO. | NOMINAL TONS | STATUS | SUPPLY CFM | MIN. O.A. CFM | E.S.P. W.C. | COOLING CAPACITY | | | HEATING CAPACITY | | | | CONDENSER E.A.T. | | ELECTRICAL | | | | | E.E.R. | APPROXIMATE WEIGHT (LBS) | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | E.A.T. (F° DB/WB) | TOTAL (MBH) | SENSIBLE (MBH) | E.A.T. (F° DB) | L.A.T. (F° DB) | GAS INPUT (MBH) | HEAT OUTPUT (MBH) | AMBIENT (°F) | MIN. AMBIENT (°F) | SUPPLY FAN B.H.P. | PHASE | VOLTS | MCA | MOCP | | | |
| RTU-1 | LENNOX LGH102H4 | 8.5 | EXT'G BY LL | 3,400 | 0 | 1 | 80/67 | 103.8 | 78.9 | 58 | 86 | 130 | 104 | 95 | 40 | 3 | 3 | 480 | 23 | 25 | 12.2 | 1500 | SEE NOTES FOR OPTIONS |
| RTU-2 | LENNOX LGH102H4 | 8.5 | EXT'G BY LL | 3,400 | 0 | 1 | 80/67 | 103.8 | 78.9 | 58 | 86 | 130 | 104 | 95 | 40 | 3 | 3 | 480 | 23 | 25 | 12.2 | 1500 | SEE NOTES FOR OPTIONS |
| RTU-3 | LENNOX LGH102H4 | 8.5 | EXT'G BY LL | 3,400 | 0 | 1 | 80/67 | 103.8 | 78.9 | 58 | 86 | 130 | 104 | 95 | 40 | 3 | 3 | 480 | 23 | 25 | 12.2 | 1500 | SEE NOTES FOR OPTIONS |
| RTU-4 | LENNOX LGH036H4 | 3 | EXT'G BY LL | 1,200 | 0 | 1 | 80/67 | 35.8 | 27.2 | 58 | 98 | 65 | 52 | 95 | 40 | 0.75 | 3 | 480 | 13 | 15 | 12.8 | 850 | SEE NOTES FOR OPTIONS |

- 2' HIGH ROOF CURB, FLEXIBLE CONNECTORS AND ACOUSTIC LINED SHEET METAL DUCT DROPS EXTENDED TO 24" BELOW DECK FOR TENANT COLLECTION.
- FACTORY PROVIDED SINGLE ENTHALPY OUTSIDE AIR ECONOMIZER.
- FACTORY PROVIDED POWER EXHAUST FAN.
- HIGH STATIC DRIVE KIT.
- BACNET MODULE WITH MODEL REMOTE SENSOR #94L60.
- LOUVERED CONDENSER COIL HAIL GUARDS.
- FACTORY WIRED AND FACTORY INSTALLED NON-FUSED DISCONNECT.
- FACTORY INSTALLED UNPOWERED GFI WEATHERPROOF CONVENIENCE OUTLET.
- FACTORY INSTALLED SMOKE DETECTORS WIRED BY ELECTRICAL CONTRACTOR. SMOKE DETECTOR TO BE MOUNTED IN SUPPLY & RETURN AIR DUCT OR AS REQUIRED BY LOCAL CODE.
- FACTORY START-UP
- EACH UNIT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- FACTORY INSTALLED CORROSION PROTECTION (EPOXY COATING) WHEN LOCATED WITHIN 10 MILES OF COASTLINE OR AS REQUIRED BASED ON LOCAL CONDITIONS.

- ATTACH ROOFTOP UNITS TO CURB FOR EARTHQUAKE OR HURRICANE ZONE PER THE LOCAL CODES.
- SMOKE DETECTOR TEST STATIONS.
- INSTALL FACTORY FURNISHED ITEMS SHIPPED LOOSE FOR FIELD INSTALLATION.
- FOLLOW MANUFACTURERS PUBLISHED PROCEDURE FOR TEMPORARY OPERATION OF RTU'S TO MAINTAIN WARRANTY.
- BURGLAR BARS AT DUCT DROP CONNECTION TO CURB.
- STRUCTURAL REINFORCEMENT AS NECESSARY.
- CONDENSATE PIPE ROUTED AND TERMINATED PER CODE.
- MSAV DEMAND CONTROL VENTILATION TO MEET LOCAL ENERGY CODE.
- SA AND RA MOTORIZED DAMPERS TO ISOLATE UNIT FROM DUCT SYSTEM WHEN NOT OPERATING.

PROVIDE OUTDOOR LIGHT AT SERVICE SIDE OF ALL RTU'S INCLUDING THE FOLLOWING:
1. LIGHT SWITCH IN WEATHERPROOF HOUSINGS.
2. JELLY JAR LIGHT FIXTURE WITH METAL CAGE TO BE MCGILLE #606 WITH 1435-6 AND 13W MEDIUM BASE LED LAMP (OR APPROVED EQUAL).

**LENNOX NATIONAL ACCOUNTS CUSTOMER SERVICE: ULTA SALON, COSMETICS & FRAGRANCE, INC.**
FOR QUOTATIONS AND ORDERS CONTACT: NATIONAL ACCOUNT SALES, PHONE 800-367-6285 OPTION 1 EXT 6847, FAX 972-497-5112, EMAIL BLACKTEAM@LENNOXIND.COM.
FOR EQUIPMENT WITH FACTORY INSTALLED ACCESSORIES PLEASE ALLOW 6-8 WEEKS LEAD TIME.
FOR TECHNICAL SUPPORT CONTACT: NATIONAL ACCOUNT TECHNICIAN CONSULTANT, PHONE 800-367-6285 OPTION 2 (HOLD FOR NEXT AVAILABLE CONSULTANT), FAX 800-453-7290, EMAIL NATIONALACCOUNTSTECHNICALSUPPORT@LENNOXIND.COM.
FOR PARTS ORDER CONTACT: COMMERCIAL PARTS CUSTOMER SERVICE, PHONE 800-906-4427, FOR IN-WARRANTY PARTS PROCEDURES CONTACT: EMAIL LNXNATIONALACCOUNTSPARTS@LENNOXIND.COM.
FOR CREDIT/BILLING ISSUES CONTACT: CHELSEA FRICKE, CUSTOMER FINANCIAL SERVICES ADMINISTRATOR, PHONE 972-497-5436, FAX 972-497-6151, EMAIL CHELSEA.FRICKE @LENNOXIND.COM.
FOR GENERAL ACCOUNT NEEDS IF ABOVE MEMBERS CAN'T ASSIST YOU, CONTACT: RAZI DOLE, NATIONAL ACCOUNT MANAGER, PHONE 614-305-4387, EMAIL RAZI.DOLE@LENNOXIND.COM.
FOR FACTORY STARTUP CONTACT: LENNOX NAS, PHONE 800-333-4001, FAX 214-576-3873 ATTN: SERVICES, EMAIL LENNOXSERVICES@LENNOXNAS.COM

1 HVAC SCHEDULES
SCALE: NOT TO SCALE

City of Kirkland
Reviewed by
J Tumelson
05/30/2018

ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

MECHANICAL SCHEDULES

CHIPMAN DESIGN ARCHITECTURE INC
JOHN A CHIPMAN ARCHITECT
FIRST FLOOR EAST
DESIGNERS BUILDING
PO BOX 1718 LOGO
DESIGNERS, MD 21769-1718
Tel. 301-874-5900 Fax. 301-874-5910

WGW Engineers, Inc.
760 Oak Drive
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Revisions
1. ISSUE FOR CL/LL REVIEW 04/20/18
2. ISSUE FOR PERMIT & BID 04/20/18

LICENSED PROFESSIONAL ENGINEER
JOSEPH G. THOMAS
M 31400
Exp. 6/30/18
MECHANICAL
STATE OF CALIFORNIA

Signature 04/18/2018
Date 09/30/2019
Expiration Date

I HEREBY CERTIFY THAT THESE PLANS HAVE BEEN PREPARED UNDER MY SUPERVISION AND THAT TO THE BEST OF MY KNOWLEDGE, THE SAME COMPLY WITH ALL RULES, REGULATIONS AND ORDINANCES OF KIRKLAND, WA RELATING TO STRUCTURES AND BUILDINGS.

ENGINEER

| Drawn By | Checked By |
|---|---|
| JS | DH |
| Scale | Date |
| AS SHOWN | 04/20/18 |

Job No. 16-4170

Sheet No. M-3.1

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SECTION 15050
BASIC MATERIALS AND METHODS

PART 1 - GENERAL

1.01 DESCRIPTION
A. THIS SECTION DEFINES THE GENERAL PROVISIONS WHICH ARE COMMON TO ALL SECTIONS OF DIVISION 15.
B. FURNISH ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT; FABRICATE, AND INSTALL COMPLETE AND IN PLACE, ALL THE FIXTURES, EQUIPMENT AND SYSTEMS AS SHOWN ON THE DRAWINGS, SPECIFIED HEREIN, AND AS REQUIRED FOR A COMPLETE AND OPERABLE INSTALLATION.
C. THE CONTRACTOR SHALL PAY FOR ALL PERMITS, FEES AND CHARGES REQUIRED FOR THIS WORK.

1.02 DRAWINGS AND SPECIFICATIONS
A. DESIGN DRAWINGS: THE DRAWINGS ACCOMPANYING THESE SPECIFICATIONS ARE GENERALLY DIAGRAMMATIC. ANY CHANGES FROM THE GENERAL ROUTING SHOWN ON THE DRAWINGS SUCH AS OFFSETS, BENDS OR CHANGES IN ELEVATION DUE TO COORDINATION WITH THE WORK OF OTHER TRADES AND THE BUILDING CONSTRUCTION SHALL BE DONE WITHOUT ADDITIONAL CHARGE TO THE OWNER.
B. SHOP DRAWINGS: SHOP DRAWINGS SHALL BE SUBMITTED FOR EACH AND EVERY ITEM OF MANUFACTURED MATERIAL AND EQUIPMENT.
C. RECORD DRAWINGS:
1. THE CONTRACTOR SHALL KEEP AN ACCURATE RECORD OF ALL CONCEALED PIPES, DUCTS, VALVES, CONDUITS, ETC. IN ADDITION, HE SHALL RECORD, IN A SPECIAL SET OF CONTRACT DRAWINGS, ALL CHANGES AND DEVIATIONS FROM THE DESIGN DRAWINGS THAT OCCURRED DURING THE INSTALLATION OF THE WORK.
2. AT COMPLETION OF THE JOB, THESE DRAWINGS ILLUSTRATING CHANGES OR DEVIATIONS SHOWING BY DIMENSION AND LOCATION THE EXACT POSITION OF ALL CONCEALED PIPES, VALVES, ETC., SHALL BE DELIVERED TO THE ARCHITECT/ENGINEER.
D. SPECIFICATIONS - REFER TO THE FOLLOWING GENERAL SPECIFICATIONS AS THEY ARE A PART OF ALL SECTIONS OF DIVISION 15.
1. DIVISION 1 - GENERAL REQUIREMENTS; REGARDING BUT NOT LIMITED TO: ALTERATION PROJECT PROCEDURES, SUBMITTALS, CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS, CLEANING DURING CONSTRUCTION, AND PRODUCT OPTIONS AND SUBSTITUTIONS.
2. DIVISION 2 - SITEWORK; REGARDING BUT NOT LIMITED TO: SELECTIVE DEMOLITION, EARTHWORK, EXCAVATION AND BACKFILLING.
3. DIVISION 3 - CONCRETE; REGARDING BUT NOT LIMITED TO: CAST-IN-PLACE CONCRETE, FORMWORK AND REINFORCEMENT.
E. IT IS THE INTENTION OF THIS SPECIFICATION SECTION THAT ALL ITEMS OF MATERIAL AND EQUIPMENT HEREIN SPECIFIED OR SHOWN ON THE DRAWINGS FOR EACH SECTION SHALL BE FURNISHED BY THE CONTRACTOR FOR THAT SECTION, AND INSTALLED BY THAT CONTRACTOR, UNLESS IT IS SPECIFICALLY STATED IN THE SECTION SPECIFICATION, OR SHOWN ON THE DRAWINGS, THAT ANY ITEM OF MATERIAL OR EQUIPMENT IS TO BE FURNISHED BY THE CONTRACTOR OF A SECTION AND INSTALLED BY THE CONTRACTORS OF OTHER SECTIONS, OR FURNISHED BY OTHER SECTION CONTRACTORS AND INSTALLED BY THE CONTRACTOR OF THE SECTION.

1.03 CHASES AND RECESSES
A. ALL CHASES, RECESSES AND MAJOR MASONRY OPENINGS AS SHOWN ON THE DRAWINGS WILL BE PROVIDED BY THE ARCHITECTURAL TRADES.

1.04 LUBRICATION
A. PRIOR TO TESTING, ALL EQUIPMENT SHALL BE PROPERLY LUBRICATED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. ONE SET OF TOOLS NECESSARY FOR LUBRICATION SHALL BE DELIVERED TO OWNER. AFTER PROPER LUBRICATING, ALL UNITS SHALL BE STARTED AND SUCCESSFULLY OPERATED BY THE CONTRACTOR IN THE PRESENCE OF THE ARCHITECT AND/OR ENGINEER.
B. EXCEPT FOR SMALL ELECTRICAL MOTORS WHICH UNDER NEMA STANDARDS ARE EQUIPPED WITH LIFETIME LUBRICATION, ALL BEARINGS ON LARGE MOTORS AND MECHANICAL EQUIPMENT SHALL BE EQUIPPED WITH LUBRICATOR FITTINGS EXTENDED TO THE EXTERIOR OF THE HOUSING.

1.05 POWER WIRING
A. MOTORS UP TO AND INCLUDING 1/3 H.P. SHALL BE 120 VOLT, 60 HERTZ, SINGLE PHASE AND MOTORS 1/2 H.P. AND LARGER SHALL BE THREE PHASE, 60 HERTZ, AT EITHER 460 VOLTS, 60 HERTZ, THREE PHASE; UNLESS OTHERWISE INDICATED PER DRAWING SCHEDULES, PLANS AND DETAILS.
B. THE ELECTRICAL CONTRACTOR SHALL PROVIDE COMBINATION MAGNETIC STARTERS WITH H.O.A. SWITCH FOR EACH ITEM OF THREE PHASE EQUIPMENT AND UNFUSED DISCONNECTS FOR EACH ITEM OF SINGLE PHASE EQUIPMENT, EXCEPT WHERE STARTERS ARE FURNISHED AS A PART OF WIRED EQUIPMENT.
C. THE ELECTRICAL CONTRACTOR SHALL DO ALL POWER WIRING INCLUDING CONNECTIONS TO THE MOTORS FURNISHED BY THE CONTRACTORS OF THIS DIVISION.
D. REFER TO SECTION 15900 FOR THE WIRING TO BE PERFORMED BY THE TEMPERATURE CONTROL CONTRACTOR AND THE ELECTRICAL CONTRACTOR AS THEY RELATE TO TEMPERATURE CONTROLS.

1.06 FLUSHING AND TESTING
A. ALL NEW WATER PIPING SYSTEMS SHALL BE FLUSHED USING WATER.
B. ALL OPEN SYSTEMS, CONDENSATE DRAINAGE, ETC., SHALL BE TESTED WITH WATER, AT A HEAD OF FIVE (5) FEET ABOVE FINISHED FLOOR OR GRADE.
C. ALL PIPING SYSTEMS SHALL BE TESTED. IF LEAKS OCCUR, THE PIPE OR FITTING SHALL BE REMOVED AND REPLACED AND THE SYSTEM RETESTED.
D. PIPING SHALL NOT BE BACKFILLED OR INSULATED UNTIL TESTED. TESTS MUST BE OBSERVED BY THE ARCHITECT/ENGINEER.

1.07 GUARANTEE
A. IN ADDITION TO GUARANTEE PROVISIONS OF THE GENERAL CONDITIONS, ALL REFRIGERANT COMPRESSORS SHALL HAVE AN EXTENDED WARRANTY OF FOUR (4) YEARS BEYOND THE FIRST YEAR FOR REPLACEMENT OF PARTS AND LABOR TO REPAIR.

1.08 SUPPORTS
A. CONTRACTOR SHALL FURNISH AND INSTALL ALL ANGLES, CHANNELS, PLATES, OR BEAMS REQUIRED FOR THE SUPPORT OF THE EQUIPMENT OF EACH SECTION, WHETHER SHOWN ON THE DRAWINGS OR NOT.
B. FURNISH AND INSTALL ALL RODS, AUXILIARY STRUCTURAL STEEL FRAMES, ATTACHMENTS, BRACKETS AND PLATFORMS REQUIRED FOR SUPPORT OF EQUIPMENT FROM OVERHEAD CONSTRUCTION FOR THE RESPECTIVE SECTION.
C. VERTICAL PIPE RISERS SHALL BE ANCHORED MIDWAY OF THEIR HEIGHT, AND SHALL BE SUPPORTED AT EACH FLOOR BY 1-1/2" X 1/4" BAR CLAMPS ATTACHED TO PIPES AND RESTING ON THE FLOOR CONSTRUCTION.
D. HORIZONTAL PIPING SHALL BE SUPPORTED BY ADJUSTABLE, WROUGHT, CLEVIS TYPE HANGERS, FEE & MASON, ELCEN, OR CRAWFORD. WHERE PARALLEL PIPES ARE INSTALLED AT THE SAME LEVEL, PROVIDE TRAPEZE HANGERS; THE VARIOUS TRADES SHALL COORDINATE IN THE JOINT USE OF SUCH HANGERS. PIPE HANGERS SHALL BE OF SIZE TO SUIT PIPE COVERING PROTECTION SADDLES.
E. PIPES SHALL BE SUPPORTED ONLY FROM THE STRUCTURAL MEMBERS OF THE BUILDING. THEY SHALL BE SUPPORTED AT SUCH INTERVALS AS WILL PREVENT SAGGING, AND SO THAT EXCESSIVE LOADS WILL NOT BE PLACED UPON ANY ONE SUPPORT. SPACING AND ROD SIZES SHALL BE AS FOLLOWS:

| PIPE SIZE | MAXIMUM SPACING | MINIMUM ROD SIZE |
|---|---|---|
| 1/2" | 6'-0" AND AT ALL TURNS | 3/8" |
| 3/4", 1" | 7'-0" AND AT ALL TURNS | 3/8" |
| 1-1/4", 1-1/2", 2" | 9'-0" AND AT ALL TURNS | 3/8" |
| 2-1/2", 3" | 10'-0" AND AT ALL TURNS | 1/2" |

F. HANGER RODS SHALL BE FULL-DIAMETER STEEL WITH THREADED ENDS FOR FIELD CUTTING AND THREAD EXTENDING AS REQUIRED. WHERE THREADED ROD IS SHORTER THAN 6" IT SHALL BE DIPPED IN RUST RESISTANT PAINT PRIOR TO INSTALLATION.
G. AT THE CONTRACTOR'S OPTION, HANGER RODS SHALL BE CONTINUOUS THREADED STEEL WITH GALVANIZED FINISH.
H. HANGER RODS SHALL NOT BE BENT OR ALTERED IN ANY MATTER AND SHALL BE INSTALLED PLUMB AND TRUE. THE ROD SUPPORTING THE HANGER SHALL BE NO LONGER THAN 1/2" BELOW THE LOWER NUT.

I. ALTERNATE WIRE ROPE HANGER SYSTEM (CONTRACTOR OPTION)
A. GENERAL: AT THE OPTION OF THE CONTRACTOR AND IF APPROVED BY AUTHORITIES HAVING JURISDICTION, WIRE ROPE SYSTEM FOR DUCTWORK MAY BE USED IN LIEU OF CONVENTIONAL HANGERS. HANGER SYSTEMS SHALL BE APPROVED IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS (HVAC-DCS) WITH A MINIMUM LOAD SAFETY FACTOR OF 5:1.
B. WIRE ROPE HANGER SYSTEM AND LOCKING DEVICES TO BE ONE OF THE FOLLOWING MANUFACTURED SYSTEMS:
1. DUCTMATE INDUSTRIES, CHARLEROI, PA - CLUTCHER MECHANICAL HANGER SYSTEM WITH ZINC COATED STEEL AIRCRAFT QUALITY ROPE (FIELD CUT TO LENGTH). LOCKING DEVICE TO BE CLUTCHER CAST ZINC HOUSING WITH STAINLESS STEEL SPRINGS.
2. GRIPPLE, INC., BATAVIA, IL - HANG FAST WIRE ROPE HANGING SYSTEM WITH ZINC GALVANIZED STEEL WIRE ROPE. STANDARD LENGTHS OF 5, 10, 15 AND 30 FT WITH A PERFORATED LOOP AT ONE END. LOCKING DEVICE TO BE GRIPPLE ZINC HOUSING WITH STAINLESS STEEL SPRINGS.
3. ERICO, INC., SOLON, OH - CADDY SPEED LINK UNIVERSAL SUPPORT SYSTEM WITH GALVANIZED STEEL AIRCRAFT QUALITY WIRE ROPE. AVAILABLE IN 3.3, 6.6, 9.9, 16.4, AND 32.8 FT. LENGTHS WITH FACTORY HOOK AT ONE END. LOCKING DEVICE TO BE ERICO STAINLESS STEEL HOUSING WITH ALL STEEL LOCKING DEVICE.

1.09 EQUIPMENT IDENTIFICATION
A. ALL MECHANICAL EQUIPMENT SHALL BE CLEARLY IDENTIFIED WITH 2" HIGH STENCILED LETTERS, PAINTED ON THE EQUIPMENT (I.E. "RTU-1"). THIS INCLUDES EXTERIOR EQUIPMENT WHERE THE PAINT SHALL BE WEATHER RESISTANT.

PART 2 - PRODUCTS

2.01 DESCRIPTION
A. THIS PART DEFINES THE PIPE AND FITTINGS TO BE USED FOR ALL SERVICES INSTALLED UNDER DIVISION 15.
B. REFER TO THE DRAWING LEGENDS AND SYMBOL SCHEDULES FOR DEFINITION OF THE DESIGNATORS USED IN THE FOLLOWING SPECIFICATION.

2.02 PIPE AND FITTINGS RELATED TO SECTION 15800
A. CONDENSATE DRAIN PIPING:
1. PIPING SHALL BE SCHEDULE 40, ASTM 53 OR ASTM 120, GALVANIZED PIPE AND FITTINGS.
2. POLYVINYL CHLORIDE (PVC), SCHEDULE 40, PIPE AND FITTINGS, ASTM D2665; WITH PRIMER AND SOLVENT CEMENT JOINTS MAY BE USED IF ACCEPTABLE TO LOCAL AUTHORITIES HAVING JURISDICTION.
A. NO CELLULAR CORE OR FOAMED PIPING WILL BE PERMITTED.

2.03 ACCESS DOORS
A. PROVIDE 24" X 24" ACCESS DOORS MANUFACTURED AS AN INTEGRAL UNIT COMPLETE WITH ALL PARTS AND READY FOR INSTALLATION AS MANUFACTURED BY ONE OF THE FOLLOWING:
1. BIRMINGHAM ORNAMENTAL.
2. KARP.
3. MILORD, DIVISION OF INRYCO.
B. PROVIDE FLUSH PANEL DOORS, EXCEPT PROVIDE RECESSED PANEL DOORS WHERE ACCESS DOORS OCCUR IN PLASTER OR ACOUSTICAL TILE GLUED TO GYPSUM LATH.
C. PROVIDE UL "B" LABELED UNITS WHERE ACCESS DOORS OCCUR IN HOUR RATED-CONSTRUCTION.
D. PROVIDE SCREW DRIVER OPERATED CAM LOCKS OF NUMBER REQUIRED BY SIZE OF DOOR.
E. PROVIDE ANCHORAGE APPROPRIATE TO CONSTRUCTION.

PART 3 - EXECUTION

3.01 CUTTING AND PATCHING
A. ALL CUTTING, REPAIRING, FITTING AND REFINISHING OF IN PLACE CONSTRUCTION REQUIRED FOR THE INSTALLATION OF THE WORK OF A SECTION SHALL BE DONE AT THE EXPENSE OF THE CONTRACTOR OF THE SECTION, EXCEPT AS SPECIFICALLY SHOWN ON THE DRAWINGS OR HEREINAFTER SPECIFIED.
B. WORK SHALL BE PERFORMED BY CRAFTSMEN SKILLED IN THEIR RESPECTIVE TRADES.

3.02 OPERATING INSTRUCTIONS
A. THE CONTRACTOR FOR THE SECTION SHALL, WHEN DIRECTED BY THE ARCHITECT/ENGINEER, PROVIDE THE OWNER WITH A COMPETENT TRADESMAN TO INSTRUCT THE OWNER'S PERSONNEL IN THE PROPER OPERATION AND MAINTENANCE OF THE EQUIPMENT HE HAS INSTALLED.
B. PROVIDE COPIES OF OPERATING INSTRUCTIONS, EQUIPMENT MANUALS, AND CONTROL DIAGRAMS PER DIVISION-1 CONTRACT CLOSE-OUT.
C. CONTROL DIAGRAMS AND WRITTEN INSTRUCTIONS SHALL BE FRAMED UNDER GLASS.

3.03 CODES AND STANDARDS
A. PIPING AND APPURTENANCES INSTALLED UNDER THIS DIVISION OF THE SPECIFICATIONS SHALL COMPLY WITH THE REQUIREMENTS OF THE FOLLOWING, WHERE APPLICABLE:
ANSI CODES FOR PRESSURE PIPING
ANSI STANDARDS FOR PIPE AND FITTINGS
B. IN ADDITION, THE WORK SHALL CONFORM TO ALL APPLICABLE STATE AND LOCAL CODES AND ORDINANCES.

3.04 WORK CLEANLINESS
A. CONTRACTOR SHALL KEEP STORED MATERIALS, STORAGE AREAS, AND INSTALLED SYSTEMS FREE OF DIRT AND DEBRIS.
B. ALL EXPOSED ENDS OF INCOMPLETE OR UNCOVERED WORK SHALL BE TEMPORARILY PLUGGED AS EACH PHASE OF PIPING WORK AND DUCTWORK IS COMPLETED.
C. PIPING, DUCTWORK AND EQUIPMENT TO BE PAINTED (EXPOSED TO VIEW IN COMPLETED STRUCTURE) SHALL BE CLEANED BY REMOVING RUST, PLASTER, AND DIRT BY WIRE BRUSHING. GREASE, OIL AND SIMILAR MATERIALS SHALL BE REMOVED BY WIPING WITH CLEAN RAGS AND SUITABLE SOLVENTS.
D. MOTOR, PUMPS, FANS AND OTHER ITEMS WITH FACTORY FINISH SHALL BE REMOVED OF GREASE AND OIL AND LEAVE WITH ALL SURFACES CLEANED AND POLISHED.

3.05 ARRANGEMENT AND ALIGNMENT
A. ALL PIPING SHALL BE ARRANGED AND ALIGNED IN ACCORDANCE WITH THE DRAWINGS. ELEVATIONS AS GIVEN MUST BE HELD. FLOOR ELEVATIONS WHERE GIVEN ARE TO HIGH POINTS OF FLOOR. DIMENSIONS MUST BE HELD AS CLOSELY AS POSSIBLE. ALL DIMENSIONS ARE TO BE FIELD CHECKED FOR ACCURACY BEFORE PIPE IS FABRICATED.
B. INSTALL ALL PIPING STRAIGHT AND DIRECT AS POSSIBLE, GENERALLY FORMING RIGHT ANGLES WITH, OR RUNNING PARALLEL WITH, WALLS OR ADJACENT PIPING. ALL PIPING SHALL BE NEATLY SPACED WITH RISERS AND DROPS RUNNING PLUMB AND TRUE.
C. RUN PIPING IN WALL CHASES, PIPE SHAFTS, HUNG CEILINGS, RECESSES, ETC., WHERE SAME ARE PROVIDED. DO NOT RUN SERVICE PIPING IN FLOOR SLAB FILL UNLESS SPECIFICALLY SO NOTED ON DRAWINGS. PIPING SHALL NOT BE COVERED OR CLOSED UNTIL TESTING IS COMPLETED.
D. DRAWINGS, IN GENERAL, ARE MADE TO SCALE. ALL DIMENSIONS SHALL BE CHECKED IN THE FIELD BY THE CONTRACTOR BEFORE FINAL CONNECTIONS ARE FABRICATED
E. DRAWINGS FOR SMALL PIPING ARE, IN GENERAL, DIAGRAMMATIC AND THE EXACT LOCATION OF THESE LINES SHALL BE DETERMINED BY THE CONTRACTOR FROM FIELD MEASUREMENTS TAKEN BY HIM. THE ACTUAL ARRANGEMENT OF THE SMALL SIZE PIPING, WHEN ERECTED, SHALL FOLLOW THE GENERAL LOCATIONS SHOWN ON THE DRAWINGS AS FAR AS PRACTICABLE. THE INSTALLATION MADE IN THIS WAY SHALL BE NEAT IN APPEARANCE AND CONVENIENT TO OPERATE, AND SHALL PROVIDE FOR PROPER EXPANSION AND DRAINAGE.
F. INSTALLATION OF PIPING SYSTEMS SHALL BE COORDINATED WITH OTHER WORK TO AVOID BLOCKING BUILDING OPENINGS, LIGHT FIXTURES, ETC.. PIPING SHALL NOT INTERFERE WITH ACCESS TO VALVES OR EQUIPMENT AND SHALL NOT OBSTRUCT PASSAGEWAYS. PIPING SHALL BE INSTALLED TO PROVIDE WORKING CLEARANCE FOR OPERATION AND MAINTENANCE.

3.06 MODIFICATIONS AND INTERFERENCES
A. CONTRACTOR SHALL CAREFULLY CHECK AND BECOME FAMILIAR WITH THE ARCHITECTURAL, STRUCTURAL, ELECTRICAL AND ALL MECHANICAL DRAWINGS AND DETAILS, AND MAKE NOTE OF ALL LOCATIONS WHERE WALLS, PARTITIONS, CEILINGS, STRUCTURAL MEMBERS, ETC., ARE CALLED FOR TO BE FURRED OR CLOSED IN.
B. MODIFICATIONS TO THE ARRANGEMENT OF THE PIPING SYSTEM MAY BE REQUIRED TO SUIT STRUCTURAL CONDITIONS, OR TO AVOID INTERFERENCE WITH THE WORK OF OTHER TRADES. CONTRACTOR SHALL FURNISH ALL OFFSETS, ADDITIONAL FITTINGS, ETC., AS REQUIRED TO MEET INSTALLATION CONDITIONS WHETHER DETAILED ON THE DRAWINGS OR NOT.
C. ANY QUESTIONABLE INFORMATION IN THE SPECIFICATIONS OR ON THE DRAWINGS SHALL BE CALLED TO THE ATTENTION OF THE ARCHITECT AND/OR ENGINEER FOR CLARIFICATION BEFORE PROCEEDING WITH FABRICATION OR ERECTION OF THE PARTS AFFECTED. IF, IN THE OPINION OF THE CONTRACTOR, ANY ADDITIONAL DETAIL DRAWINGS ARE NECESSARY, HE SHALL PREPARE THEM AT HIS OWN EXPENSE, TOGETHER WITH ALL BILLS OF MATERIAL.

3.07 PIPE CLEARANCES
A. INSTALL PIPING TO PROVIDE MINIMUM CLEARANCE OF AT LEAST ONE INCH BETWEEN EXTREME PROJECTIONS OF PIPING, FLANGES, FITTINGS, VALVES, ALLOWING FOR INSULATION, PIPE EXPANSION AND THE LIKE.

3.08 DRAINAGE AND VENTING
A. WHERE LINES ARE PURPOSELY PITCHED FOR DRAINAGE OR VENTING, AN ACCURATE GRADE SHALL BE MAINTAINED. LINES SHALL BE SUPPORTED IN SUCH A MANNER AS TO PREVENT DEFLECTION OF THE PIPING SUFFICIENT TO POCKET THE LINES.

3.09 PIPE AND FITTINGS
A. ALL PIPE SIZES REFERRED TO IN THESE SECTIONS SHOULD BE INTERPRETED AS IPS (IRON PIPE SIZE) UNLESS SPECIFICALLY DESIGNATED OTHERWISE, SUCH AS "O.D." FOR TUBING.
B. FULL LENGTHS OF PIPE SHALL BE USED WHEREVER POSSIBLE. SHORT LENGTHS OF PIPE WITH COUPLINGS WILL NOT BE PERMITTED.
C. ALL PIPE SHALL BE CUT TO EXACT MEASUREMENT TO BE INSTALLED WITHOUT FORCING (EXCEPT WHERE COLD SPRINGING IS SPECIFICALLY CALLED FOR). AFTER CUTTING, ENDS SHALL BE REAMED AND CLEANED TO ELIMINATE FOREIGN MATTER.
D. CUTTING OR OTHER WEAKENING OF THE BUILDING STRUCTURE TO FACILITATE PIPING INSTALLATION WILL NOT BE PERMITTED.
E. ALL PIPE AND FITTINGS SHALL BE INSTALLED IN THE MANUFACTURER'S ACCORDANCE WITH THE MARKING SECTIONS OF THE STANDARDS TO WHICH REFERENCE IS MADE IN THIS SPECIFICATION MANUAL. STANDARD MARKING SYSTEM FOR VALVES, FITTINGS, FLANGES AND UNIONS OF THE MANUFACTURERS STANDARDIZATION SOCIETY OF THE VALVE AND FITTINGS INDUSTRY.
F. MAKE ALL CHANGES IN SIZE AND DIRECTION OF PIPING WITH FITTINGS. DO NOT USE BENDS, MITER FITTINGS, FACE OR FLUSH BUSHINGS, STREET ELBOWS OR FIELD-FABRICATED REDUCERS.
G. CLOSE NIPPLES SHALL NOT BE PERMITTED USE ONLY SHOULDER NIPPLES. SHOULDER NIPPLE WITH SHOULDER LENGTH LESS THAN 1-1/2" SHALL BE OF HEAVY WALL PIPE; NIPPLES HAVING SHOULDER LENGTH OF 1-1/2" OR GREATER SHALL BE OF SAME SCHEDULE AS CONNECTED PIPE.

3.10 REDUCING FITTINGS
A. USE ECCENTRIC REDUCING FITTINGS OR ECCENTRIC REDUCING COUPLINGS WHERE REQUIRED TO PREVENT POCKETING OF LIQUID.

3.11 CONNECTIONS TO EQUIPMENT AND SPECIALTIES
A. PIPING SYSTEMS SHALL BE INSTALLED COMPLETE TO EQUIPMENT CONNECTIONS OR TERMINAL USE POINTS.
B. PIPING SHALL BE FABRICATED CAREFULLY AND ACCURATELY TO MEET CONNECTIONS AS INSTALLED WITHOUT SPRINGING THE PIPE.
C. PROVIDE UNIONS OR FLANGES AT ALL PIPING CONNECTIONS TO EQUIPMENT, ETC., AT ALL LOCATIONS AS SHOWN ON THE DRAWINGS, AND GENERALLY AS REQUIRED TO DISCONNECT PIPING FROM EQUIPMENT AND APPARATUS. ARRANGE CONNECTIONS SO THAT THE EQUIPMENT SERVED MAY BE REMOVED WITHOUT DISTURBING THE PIPING. WHERE VALVES SERVE TO ISOLATE EQUIPMENT OR SPECIALTIES, THE UNIONS OR FLANGES SHALL BE LOCATED BETWEEN VALVES AND EQUIPMENT OR SPECIALTIES. UNIONS SHALL GENERALLY BE USED FOR PIPE SIZES 2" AND SMALLER AND FLANGES FOR PIPE SIZES 2-1/2" AND LARGER.

3.12 DIELECTRIC CONNECTIONS
A. PROVIDE DIELECTRIC FITTINGS BETWEEN FERROUS AND COPPER PIPING.

3.13 PIPE SLEEVES
A. PROVIDE ALL PIPE OPENINGS THROUGH WALLS, PARTITIONS AND SLABS WITH SLEEVES HAVING AN INTERNAL DIAMETER AT LEAST 1" LARGER THAN THE OUTSIDE DIAMETER OF THE PIPE FOR UNINSULATED LINES OR OF THE THICKNESS OF THE INSULATION FOR INSULATED SERVICES.
B. INSTALL SLEEVES THROUGH INTERIOR WALLS AND PARTITIONS FLUSH WITH FINISHED SURFACES; SLEEVES THROUGH OUTSIDE WALLS ARE TO PROJECT 1/2" ON OUTSIDE OF THE FINISHED WALL. FLOOR SLEEVES ARE TO PROJECT 2" ABOVE FINISHED FLOORS.
C. SET SLEEVES IN PLACE BEFORE POURING CONCRETE OR SECURELY FASTEN AND GROUT IN WITH CEMENT.
D. SLEEVE CONSTRUCTION:
1. INTERIOR PARTITIONS: NO. 22 GAUGE GALVANIZED SHEET STEEL WITH SOLDERED JOINT.
2. INTERIOR MASONRY WALLS AND FLOORS: SCHEDULE 40 GALVANIZED STEEL PIPE.
E. INTERIOR WALLS: FILL THE SPACE BETWEEN OUTSIDE OF PIPE OR INSULATION AND THE INSIDE OF THE SLEEVE OR FRAMED OPENING WITH FIBER GLASS.
F. EXTERIOR WALLS: PACK WITH OAKUM, SEAL WITH LEAD AND WATERTIGHT MASTIC OR ASPHALT.
G. PROVIDE ESCUTCHEONS ON BOTH SIDES OF THE PENETRATION THROUGH THE STRUCTURE FOR ALL PIPES EXPOSED TO VIEW PASSING THROUGH WALLS, FLOORS, CEILINGS, AND PARTITIONS, WHETHER OR NOT INSULATED. FOR PIPES PASSING THROUGH FLOORS, ESCUTCHEONS SHALL FIT OVER THE PIPE.
H. FIRE-STOPPING SHALL BE PROVIDED AT ALL OPENINGS TO INCLUDE THE ANNULAR SPACE AROUND DUCTS, PIPING, CONDUITS, ETC. AND SHALL BE U.L. RATED MATERIALS AND METHODS PER THE ARCHITECTURAL SPECIFICATION SECTIONS. SUBMIT THROUGH PENETRATION PROTECTION SYSTEMS FOR ALL FIRE RATED ASSEMBLIES TO THE LOCAL AUTHORITIES AND THE ARCHITECT/ENGINEER FOR REVIEW.

3.14 SCREWED JOINTS
A. CUT THREADS FULL AND CLEAN WITH SHARP DIES.
B. REAM ENDS OF PIPE AFTER THREADING AND BEFORE ASSEMBLY, TO REMOVE BURRS.
C. LEAVE NOT MORE THAN THREE PIPE THREADS EXPOSED AT EACH CONNECTION.
D. USE JOINT SEALANT OR TAPE ON MALE THREADS ONLY.

SECTION 15250

INSULATION

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. SECTION 15050, "BASIC MATERIALS AND METHODS", APPLIES TO THE WORK SPECIFIED IN THIS SECTION.

PART 2 - PRODUCTS

2.01 INSULATION - COLD PIPING

A. INSULATION FOR DRAINAGE PIPING SYSTEMS (COOLING COIL CONDENSATE) SHALL BE 1" THICK GLASS FIBER.

B. GLASS FIBER INSULATION SHALL BE UL RATED, NONCOMBUSTIBLE, SECTIONAL PIPE INSULATION OF HEAVY DENSITY GLASS FIBER WITH ALL SERVICE JACKET HAVING A COMPOSITE RATING NOT TO EXCEED 25 FLAME SPREAD AND 50 SMOKE DEVELOPED. INSULATION SHALL BE AS SUPPLIED BY CERTAINTEED, OWENS/CORNING, OR KNAUF.

C. EVERY PACKAGE OR STANDARD CONTAINER OF COVERING, ADHESIVE AND COATING DELIVERED AT THE BUILDING FOR USE MUST HAVE THE MANUFACTURER'S STAMP OR LABEL ATTACHED, GIVING NAME OF MANUFACTURER AND BRAND.

D. JACKET LAPS AND BUTT STRIPS SHALL BE SELF-SEALING TYPE.

E. PROVIDE HALF ROUND GALVANIZED 18 GAUGE SHEET METAL HANGER SHIELDS. SHIELDS SHALL BE 12" LONG FOR PIPE SIZES UP TO 3", 18" FOR PIPE SIZES OVER 3" AND UP TO 6", AND 24" LONG FOR PIPE SIZES OVER 6".

2.02 REFRIGERANT - SUCTION PIPING

A. INSULATION SHALL BE 1/2" THICKNESS OF FLEXIBLE FOAMED PLASTIC.

2.03 INSULATION - AIR SYSTEM COMPONENTS

A. INSULATION SHALL BE 2" THICKNESS OF SEMI-RIGID BOARD, 3 PCF DENSITY, FOIL REINFORCED KRAFT FACING.

B. BOARD SHALL BE UL RATED, NONCOMBUSTIBLE GLASS FIBER, 25 FLAME SPREAD, 50 SMOKE DEVELOPED, AS MANUFACTURED BY CERTAINTEED, OWENS/CORNING AND KNAUF.

C. EVERY PACKAGE OR STANDARD CONTAINER OF COVERING, ADHESIVE AND COATING DELIVERED AT THE BUILDING FOR USE MUST HAVE THE MANUFACTURER'S STAMP OR LABEL ATTACHED, GIVING NAME OF MANUFACTURER AND BRAND.

2.04 INSULATION - DUCTWORK

A. INSULATION SHALL BE 2" THICKNESS OF FLEXIBLE INSULATION, 1 PCF DENSITY, FOIL REINFORCED KRAFT FACING, HAVING A COMPOSITE RATING NOT TO EXCEED 25 FLAME SPREAD AND 50 SMOKE DEVELOPED. INSULATION SHALL BE AS SUPPLIED BY OWENS/CORNING, CERTAINTEED OR KNAUF.

B. EVERY PACKAGE OR STANDARD CONTAINER OF COVERING, ADHESIVE AND COATING DELIVERED AT THE BUILDING FOR USE MUST HAVE THE MANUFACTURER'S STAMP OR LABEL ATTACHED, GIVING NAME OF MANUFACTURER AND BRAND.

C. REFER TO SECTION 15800 FOR LINED DUCTS.

PART 3 - EXECUTION

3.01 INSULATED PIPING SYSTEMS

A. PROVIDE INSULATION ON PIPING SYSTEMS AS FOLLOWS:
1. REFRIGERANT SUCTION PIPING.
2. CONDENSATE DRAIN PIPING, AS PER COLD PIPING.

3.02 PIPE HANGER SHIELDS

A. EACH CONTRACTOR INSTALLING HOT OR COLD PIPING SHALL SET THE PIPING UP ON WOOD BLOCKING AT EACH HANGER.

B. THE WOOD BLOCKING THICKNESS SHALL BE THE SAME AS THAT OF THE PIPE INSULATION.

C. THIS CONTRACTOR SHALL REPLACE THE WOOD BLOCKING WITH A FULL SECTION OF HEAVY DENSITY PIPE INSULATION AND A HANGER SHIELD.

3.03 INSTALLATION, GENERAL - COLD PIPING

A. ALL SURFACES MUST BE CLEAN AND DRY AND PIPE LINES TESTED BEFORE APPLYING PIPE INSULATION. IF COVERING IS APPLIED AT THE PIPE COVERER'S OPTION PRIOR TO TESTING, AND DEFECTS IN COVERED WORK APPEAR AT OR BEFORE THE TIME OF INSPECTION AND TESTS, THE COVERING MUST BE REMOVED, AND AFTER DEFECTS HAVE BEEN CORRECTED, MUST BE REINSTALLED WITHOUT EXPENSE TO THE OWNER.

B. COVERING SHALL BE DRY WHEN INSTALLED AND BEFORE AND DURING THE APPLICATION OF ANY FINISH. SURFACES OF COVERING SHALL BE SMOOTH, EVEN AND SUBSTANTIALLY FLUSH WITH ADJACENT PIPE COVERING.

C. MANUFACTURER'S APPLICATION INSTRUCTIONS FOR ALL MATERIALS SHALL BE FOLLOWED.

D. INSULATION SHALL NOT BE APPLIED OVER PIPE PLUGS, BLIND NIPPLES, NAMEPLATES, INSPECTION STAMPS, OR IDENTIFICATION TAGS.

E. INSULATOR MUST EXERCISE EXTREME CAUTION IN THE STORAGE OF FLAMMABLE ADHESIVES AND DURING THEIR APPLICATION.

3.04 INSULATION OF PIPING - COLD PIPING

A. BUTT JOINTS FIRMLY TOGETHER. OVERLAP SEAM SHALL BE DOWNWARD ON SIDE OF PIPE, SEALED TIGHT AND SMOOTH. STAPLE OVERLAP ON 6" SPACING.

B. INSTALL BUTT STRIPS WITH 2" OVERLAP DOWNWARD STAPLE END OF OVERLAP.

C. INSULATION SHALL BE FASTENED WITH 9/16" FLARE TYPE STAPLES.

D. SEAL OVER STAPLES WITH VAPOR-BARRIER MASTIC, CHILDERS NO. CP-32 (WHITE).

3.05 INSULATION OF FITTINGS, VALVES, ETC. - COLD PIPING

A. VALVES AND FITTINGS 3" AND LESS SHALL BE INSULATED BY WRAPPING WITH PRE-CUT FIBER GLASS BLANKET INSULATION AND SECURING WITH JUTE TWINE. A PREFORMED, MOLDED PVC JACKET COVER SHALL BE INSTALLED OVER THE BLANKET INSULATION. THE JACKET SHALL BE FASTENED WITH STAINLESS STEEL TACKS AND BUTT STRIPS OVERLAPPING ONTO THE ADJOINING PIPE INSULATION. A VAPOR-BARRIER MASTIC, CHILDERS NO. CP-32 (WHITE), SHALL BE USED TO SEAL THE JACKET THROAT AND JACKET TO THE PIPE INSULATION PRIOR TO TACK AND BUTT STRIP INSTALLATION.

B. FLANGES SHALL BE INSULATED WITH NESTING PIPE INSULATION. THE FLANGE INSULATION SHALL EXTEND NOT LESS THAN 2" OVER THE ADJACENT PIPE INSULATION ON EACH SIDE OF THE FLANGE. INSULATION ON PIPES IS TO BE STOPPED SHORT OF FLANGES TO PERMIT REMOVAL OF FLANGE BOLTS. THE FLANGE INSULATION SHALL BE APPLIED IN SUCH A MANNER THAT IT MAY BE REMOVED WITHOUT DAMAGE TO THE ADJACENT PIPE INSULATION.

C. U

3.18 DUCTWORK
A. PROVIDE DUCTWORK SYSTEMS PER DRAWING PLANS AND DETAILS.
B. THE FOLLOWING DUCT SYSTEMS SHALL BE CONSTRUCTED FOR 2" W.C.
1. ALL SUPPLY AIR DUCTWORK.
2. ALL RETURN AIR DUCTWORK.
3. ALL EXHAUST DUCTWORK.
C. DUCT CONSTRUCTION FOR 2" W.C.
1. ALL DUCTWORK SHALL BE NEAT, ACCURATE, MECHANICALLY TIGHT AND RIGIDLY CONSTRUCTED. OFFSETS OF EXPOSED DUCTWORK SHALL BE MADE ON SIDE OPPOSITE TO WALLS AND CEILINGS, UNLESS OTHERWISE SHOWN OR SPECIFIED. ALL UNINSULATED PANELS WIDER THAN 12 INCHES SHALL BE CROSS-BROKEN.
2. DUCTWORK SHALL BE CONSTRUCTED OF NEW SHEETS OF LOCK-FORMING QUALITY. ENDS OF ALL SHEETS WHICH ARE NOT PERFECTLY SQUARE SHALL BE SO TRIMMED IN SHOP BEFORE LAYOUT IS BEGUN. GAUGES SHALL BE NOT LESS THAN THOSE SHOWN AS FOLLOWS:

| LARGEST DIMENSION (INCHES) | GALV. STEEL GAUGE | ALUM. GAUGE |
|---|---|---|
| UP TO 12 | 26 | .027" |
| 1 TO 30 | 24 | .035" |
| 31 TO 60 | 22 | .043" |
| 61 TO 90 | 20 | .052" |

A. ALL CASINGS AND PLENUM CHAMBERS SHALL BE CONSTRUCTED OF 18 GAUGE MATERIAL, WITH STANDING SEAMS, AND FRAMED WITH 1-1/2" X 1-1/2" X 1/8" GALVANIZED ANGLES.
B. ALL DUCTWORK EXPOSED TO OUTSIDE WEATHER SHALL BE AN 18 GAUGE REGARDLESS OF DIMENSIONS.
3. LONGITUDINAL SEAMS OF RECTANGULAR DUCTWORK SHALL BE EITHER PITTSBURGH LOCK, DOUBLE OR GROOVED. ONLY ONE TYPE OF SEAM SHALL BE USED IN EACH RUN OF DUCT. LONGITUDINAL SEAMS OF ROUND DUCT SHALL BE GROOVED. BUTTON PUNCH SNAP LOCK SEAMS MAY BE USED WHEN INSTALLED WITH SEALANT IN JOINT AND SHEETMETAL SCREWS INSTALLED THRU JOINT PER SMACNA STANDARDS.
4. TRANSVERSE JOINTS OF RECTANGULAR DUCT SHALL BE AS FOLLOWS:
A. LESS THAN 19 INCHES - POCKET, BAR OR S SLIP AND DRIVE SLIPS.
B. 19 TO 24 INCHES - 3/4 INCH POCKET OR BAR SLIP AND DRIVE SLIP.
5. DRIVE SLIPS SHALL BE USED ON SHORT SIDES OF TRANSVERSE DUCT JOINTS IF SIDE IS LESS THAN 24 INCHES. METAL AND GAUGE OF S SLIPS AND DRIVE SLIPS SHALL BE SAME AS DUCT. ENDS OF DRIVE SLIPS SHALL BE BENT OVER AT LEAST 1/2 INCH AT CORNERS. BAR SLIPS SHALL BE FASTENED WITH SHEET METAL SCREWS ON 12 INCH CENTERS, CORNERS OF ALL BAR SLIP JOINTS SHALL BE FOLDED OVER AND RIVETED. POCKET SLIPS SHALL BE RIVETED TO DUCT ON 6 INCH CENTERS, AND CORNERS SHALL BE OVERLAPPED AND RIVETED.
6. ALL FASTENERS, SUCH AS SHEET METAL SCREWS, MACHINE SCREWS, OR RIVETS SHALL BE CADMIUM-PLATED FOR GALVANIZED DUCT.
7. ALL DUCTS OVER 18 INCHES WIDE SHALL BE PROVIDED WITH TRANSVERSE STIFFENERS OF EITHER JOINT SLIPS OR BRACING ANGLES ON CENTERS OF NOT OVER 4'-0" FOR DUCTS UP TO 60" WIDE ON THE LONG SIDE AND NOT OVER 2'-0" FOR DUCTS WITH LONG SIDE EXCEEDING 60" WIDTH.
8. FITTINGS SHALL BE CONSTRUCTED AS DETAILED ON THE DRAWINGS.
9. WHERE IT IS NECESSARY BECAUSE OF STRUCTURAL REASONS TO CHANGE SHAPES OF DUCTS, THE ARCHITECT WILL BE NOTIFIED IMMEDIATELY FOR RESIZING OR REROUTING. EQUIVALENT AREAS MUST BE MAINTAINED.
10. WHERE RADIUS ELBOWS OR TAKEOFFS ARE INDICATED, THE INSIDE RADIUS SHALL NOT BE LESS THAN THREE-QUARTERS OF THE WIDTH OF THE DUCT OR TAKEOFF. WHERE DIVERGING CHANGES ARE MADE IN DUCT SIZES IN THE DIRECTION OF THE AIR FLOW, THEY SHALL BE AT A SLOPE OF 1 IN 4.
11. ALL TRANSVERSE JOINTS SHALL BE SEALED. USE LIQUID SEALANT ON FLAT SURFACE

SECTION 15950
AUTOMATIC TEMPERATURE CONTROLS

PART 1 - GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE
A. IN ADDITION, THE FOLLOWING SECTIONS APPLY: 15050, AND 15800.

1.02 DESCRIPTION OF WORK
A. SEQUENCE OF OPERATION IS HEREBY DEFINED AS THE MANNER AND METHOD BY WHICH CONTROLS FUNCTION. REQUIREMENTS FOR EACH TYPE OF CONTROL SYSTEM OPERATION ARE SPECIFIED IN THIS SECTION.
B. OPERATING EQUIPMENT, DEVICES AND SYSTEM COMPONENTS REQUIRED FOR CONTROL SYSTEMS ARE SPECIFIED IN OTHER DIVISION-15 CONTROLS' SECTIONS OF THESE SPECIFICATIONS.
C. THIS SECTION DEFINES THE INSTALLATION OF THE AUTOMATIC TEMPERATURE CONTROLS REQUIRED AS SHOWN ON THE DRAWINGS AND AS HEREINAFTER SPECIFIED.

1.03 DEFINITIONS
A. ATC IS AUTOMATIC TEMPERATURE CONTROLS.
B. OPEN FOR MOTORIZED DAMPERS, THE POSITION OF THE BLADES THAT CREATES THE MAXIMUM FREE AREA POSSIBLE OF THE DAMPER WHICH ALLOWS PASSAGE OF AIR.
C. CLOSE FOR MOTORIZED DAMPERS, THE POSITION OF THE BLADES THAT PREVENTS ANY PASSAGE OF AIR.
D. MAXIMUM FOR MOTORIZED DAMPERS, THE POSITION OF THE BLADES OTHER THAN OPEN WHERE THE BLADES ARE ADJUSTED TO GIVE THE REQUIRED MAXIMUM CFM.
E. MINIMUM FOR MOTORIZED DAMPERS, THE POSITION OF THE BLADES OTHER THAN CLOSE WHERE THE BLADES ARE ADJUSTED TO GIVE THE REQUIRED MINIMUM CFM.
F. ENABLED SHALL BE THE CONDITION WHERE THE EQUIPMENT IS ENERGIZED AND/OR OTHERWISE ACTIVATED TO A STAND-BY STATE AWAITING CONTROL SIGNALS FROM THE ATC SYSTEM.
G. DISENABLED SHALL BE THE CONDITION WHERE THE EQUIPMENT IS DE-ENERGIZED.
H. ON SHALL BE THE CONDITION WHERE THE EQUIPMENT IS OPERATING AND PRODUCING THE DESIRED EFFECT.
I. OFF SHALL BE THE CONDITION WHERE THE EQUIPMENT IS NOT OPERATING AND IS STANDING BY IN AN IDLE STATE.

PART 2 - PRODUCTS

2.01 CONTROL SYSTEMS
A. AUTOMATIC TEMPERATURE CONTROL COMPONENTS SHALL BE ELECTRIC AND ELECTRONIC AS SHOWN ON THE DRAWING.
B. THE ATC SYSTEM SHALL CONSIST OF ALL NECESSARY THERMOSTATS, TRANSMITTERS, RECEIVER-CONTROLLERS, DAMPER OPERATORS, RELAYS, CONTROL PANELS, THERMOMETERS, GAUGES, TIME CLOCKS, AND ALL ACCESSORIES AND ELECTRIC WIRING TO FULFILL THE INTENT OF THIS SPECIFICATION.

2.02 CONTRACTOR
A. THE CONTROL SYSTEM SHALL BE SUPERVISED AND INSTALLED BY COMPETENT CONTROL MECHANICS AND ELECTRICIANS REGULARLY EMPLOYED BY THIS CONTROL CONTRACTOR.

2.03 WORK TO BE PERFORMED BY OTHER TRADES
A. THE FOLLOWING INCIDENTAL WORK SHALL BE PROVIDED BY THE MECHANICAL CONTRACTORS UNDER THE SUPERVISION OF THE ATC CONTRACTOR AND ELECTRICAL CONTRACTOR.
1. THE MECHANICAL CONTRACTOR SHALL:
A. INSTALL ALL AUTOMATIC DAMPERS.
B. ASSEMBLE MULTIPLE SECTION DAMPERS WITH REQUIRED INTER-CONNECTING LINKAGES AND EXTEND REQUIRED NUMBER OF SHAFTS THROUGH DUCT FOR EXTERNAL MOUNTING OF DAMPER MOTORS.
C. PROVIDE NECESSARY SHEET METAL BAFFLE PLATES TO ELIMINATE STRATIFICATION AND PROVIDE AIR VOLUMES SPECIFIED. LOCATE BAFFLES BY EXPERIMENTATION AND AFFIX AND SEAL PERMANENTLY IN PLACE ONLY AFTER STRATIFICATION PROBLEM HAS BEEN ELIMINATED.
D. PROVIDE ACCESS DOORS THROUGH DUCTS FOR SERVICE TO CONTROL EQUIPMENT.
E. INSTALL DUCTSTATS.
F. INSTALL SMOKE DETECTORS.

2.04 ELECTRICAL WIRING
A. ALL ELECTRIC WIRING AND WIRING CONNECTIONS REQUIRED FOR THE INSTALLATION OF THE ATC, HEREIN SPECIFIED, SHALL BE PROVIDED BY THE ATC CONTRACTOR UNLESS SPECIFICALLY SHOWN ON THE ELECTRICAL DRAWINGS OR CALLED FOR IN THE ELECTRICAL SPECIFICATIONS. ALL WIRING SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 16000 - ELECTRICAL OF THE SPECIFICATION.

2.05 SHOP DRAWINGS
A. SHOP DRAWINGS OF THE FOLLOWING ARE REQUIRED:
1. ALL ATC CONTROL COMPONENTS.
2. ATC SYSTEM DIAGRAMS COORDINATED TO INCLUDE PROVISION FOR FUTURE INTERFACE WHERE SPECIFIED.
3. CONTROL DRAWINGS WITH DETAILED COMPONENT AND WIRING DIAGRAMS, INCLUDING BILL OF MATERIAL AND DESCRIPTION OF OPERATION FOR ALL SYSTEMS. DRAWINGS SHALL BY 22" X 34" STANDARD SIZE AND SHALL BE MADE FROM 22" X 34" REPRODUCIBLE MYLARS.
4. PANEL LAYOUTS AND NAMEPLATE LISTS FOR ALL LOCAL PANELS, WITH PANEL DIMENSIONS.
5. DATA SHEETS FOR ALL CONTROL SYSTEM COMPONENTS.

2.06 CONTROL DAMPERS
A. REFER TO THE DAMPER SCHEDULES ON THE DRAWINGS FOR DAMPERS TO BE FURNISHED BY THE CONTRACTOR OF THIS SECTION.
B. DAMPERS SHALL BE LOW LEAKAGE, OPPOSED BLADE, GALVANIZED STEEL CONSTRUCTION.

2.07 CONTROL DEVICES
A. ELECTRONIC PROGRAMMABLE THERMOSTAT:
1. THE ELECTRONIC PROGRAMMABLE THERMOSTAT SHALL CONSIST OF THERMISTOR TYPE OF RESISTANCE TEMPERATURE DETECTOR WITH A HIGH REFERENCE RESISTANCE AND BUILT-IN RECALIBRATION MEANS. OR THE THERMOSTAT SHALL CONSIST OF SOLID-STATE PLATINUM RESISTANCE TEMPERATURE DETECTOR WITH A HIGH REFERENCE RESISTANCE. THE THERMOSTAT SHALL BE PROGRAMMABLE AT THE FACE AND HAVE MINIMUM TWO (2) SETTINGS PER DAY, SEVEN (7) DAY PROGRAMMING STEPS AND SKIP-A-DAY FEATURES. THE PROGRAMMABLE INFORMATION SHALL BE MAINTAINED INDEFINITELY, AND THE TIME OF DAY AND DAY OF WEEK SHALL BE MAINTAINED FOR MINIMUM EIGHT (8) HOURS DURING POWER FAILURE. EACH THERMOSTAT SHALL ALSO HAVE AN INTEGRAL 5 MINUTE TIME DELAY BETWEEN STAGING TO THE REFRIGERATION SYSTEM COMPRESSORS.

2.08 CONTROLLED DEVICES
A. DAMPER OPERATORS FOR ALL AUTOMATIC DAMPERS SHALL BE UNIDIRECTIONAL SPRING RETURN TYPE. PROVIDE ALL DAMPERS FOR NORMALLY CLOSED POSITION. DAMPER OPERATORS SHALL BE INSTALLED OUTSIDE OF THE DUCTWORK AND CONNECTED TO AN EXTENDED SHAFT. VOLTAGE SHALL BE 24 VOLTS, 1 PHASE.

2.09 SUPERVISION
A. THE AUTOMATIC TEMPERATURE CONTROL INSTALLER SHALL SUPERVISE THE COMPLETE INSTALLATION OF ALL TEMPERATURE CONTROL DEVICES.

2.10 INSTRUCTIONS
A. UPON COMPLETION OF THE PROJECT, THE ATC CONTRACTOR SHALL:
1. COMPLETELY ADJUST, READY FOR USE, ALL THERMOSTATS, CONTROLLERS, VALVES, DAMPER OPERATORS, RELAYS, TIME CLOCKS, ETC., PROVIDED UNDER THIS SECTION. IN ADDITION, CALIBRATE EACH INSTRUMENT AND CONTROL LOOP, AND INDICATE THE SETTINGS FOR EACH CONTROLLER ON THE "AS-BUILT" DRAWINGS.
2. FURNISH MINIMUM TWO (2) MANUALS CONSISTING OF COMPLETE APPROVED SUBMITTAL DATA COVERING THE FUNCTION AND OPERATION OF THE ENTIRE ATC SYSTEM ON THE PROJECT FOR THE USE OF THE OWNER'S OPERATING PERSONNEL. A TEMPERATURE CONTROL TECHNICIAN SHALL BE PROVIDED FOR INSTRUCTION PURPOSES DURING THE GUARANTEE PERIOD, AFTER AN INITIAL SESSION OF 8 HOURS.
3. THE ATC CONTRACTOR SHALL PROVIDE THE SERVICES OF A QUALIFIED TECHNICIAN FOR THE SYSTEM START-UP AND AIR BALANCING PERIODS.

2.11 GUARANTY
A. THE AUTOMATIC TEMPERATURE CONTROL CONTRACTOR SHALL GUARANTY ALL MATERIALS AND LABOR TO BE FREE OF DEFECTS OF ANY KIND FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE BY THE ENGINEER AND OWNER. ANY DEFECTS FOUND DURING THIS PERIOD SHALL BE REPAIRED OR REPLACED BY THE ATC CONTRACTOR AT NO EXPENSE TO THE OWNER.

PART 3 - EXECUTION

3.01 TEMPERATURE CONTROL
A. PROVIDE A COMPLETE SYSTEM OF TEMPERATURE AND OPERATING CONTROLS, WIRING, CONDUIT, PIPING AND DEVICES AS REQUIRED FOR THE SEQUENCES DESCRIBED IN SEQUENCE OF OPERATION.

3.02 SEQUENCE OF OPERATION
A. HVAC UNITS PROVIDE MATERIALS AND LABOR TO INSTALL PROGRAMMABLE WALL THERMOSTAT WITH REMOTE TEMPERATURE SENSORS.
1. PROGRAMMABLE THERMOSTAT SHALL BE CONFIGURABLE PROGRAMMABLE COMMERCIAL THERMOSTAT WITH ON-AUTO FAN CONTROL, AND HEAT-OFF-COOL-AUTO SYSTEM SWITCHING SWITCHES.
2. INSTALL THERMOSTAT WHERE SHOWN ON PLANS, 60" ABOVE FLOOR OR AS REQUIRED BY LOCAL CODES AND/OR ADA.
3. INSTALL REMOTE TEMPERATURE SENSORS WHERE SHOWN ON PLANS, 60" ABOVE FLOOR OR AS REQUIRED BY LOCAL CODES AND/OR ADA.
4. PROVIDE INITIAL SETTING AND PROGRAMMING OF WALL THERMOSTAT IN ACCORDANCE TO THE OWNER'S BUSINESS SCHEDULE.
5. THERMOSTAT SHALL CYCLE HVAC UNIT HEATING AND COOLING SYSTEMS.
6. HVAC UNIT FAN SHALL RUN CONTINUOUSLY DURING OCCUPIED PERIODS.
7. HVAC UNIT FAN AND HEATING SYSTEM SHALL CYCLE TO MAINTAIN NIGHT SET BACK TEMPERATURES.
B. EXHAUST FANS
1. INTERLOCK EXHAUST FAN MOTOR WITH SUPPLY FAN MOTOR IN ASSOCIATED HVAC UNIT. HVAC UNIT SUPPLY FAN ON, EXHAUST FAN ON; HVAC UNIT SUPPLY FAN OFF, EXHAUST FAN OFF.
2. PROVIDE CONDUITS, WIRING, RELAYS, ETC. AND LABOR TO ACCOMPLISH THE INTERLOCK.

SECTION 15900

TEST AND BALANCE MECHANICAL SYSTEM SPECIFICATIONS

PART 1 - GENERAL

1.01 SUMMARY

A. SECTION INCLUDES TESTING, ADJUSTING, AND BALANCING OF AIR, WATER, AND REFRIGERATION SYSTEMS AND MEASUREMENT OF FINAL OPERATING CONDITION OF HVAC SYSTEMS.

1.02 REFERENCES

A. AABC (ASSOCIATED AIR BALANCE COUNCIL) - NATIONAL STANDARDS FOR TOTAL SYSTEM BALANCE.

B. NEBB (NATIONAL ENVIRONMENTAL BALANCING BUREAU) - PROCEDURAL STANDARDS FOR TESTING, ADJUSTING, AND BALANCING OF ENVIRONMENTAL SYSTEMS.

C. TABB (TESTING, ADJUSTING AND BALANCING BUREAU) - INTERNATIONAL STANDARDS FOR ENVIRONMENTAL SYSTEMS BALANCE.

1.03 SUBMITTALS

A. TEST REPORTS: THE TAB REPORT SHALL BE IN THE FORMAT OF THE AABC NATIONAL STANDARD REPORT, THE NEBB CERTIFIED REPORT FORMS, OR THE TABB PROCEDURE FOR INSTALLED SYSTEMS AS PUBLISHED IN THEIR MOST CURRENT EDITIONS.

B. FURNISH FOUR COPIES OF REPORTS, COMPLETE WITH TABLE OF CONTENTS PAGE AND INDEXING TABS AND WITH COVER IDENTIFICATION AT FRONT, IDENTIFIED TO CORRESPOND WITH DATA SHEETS, AND INDICATING THERMOSTAT LOCATIONS.

C. INCLUDE A COPY OF AABC NATIONAL PROJECT PERFORMANCE GUARANTY, COPY OF NEBB CERTIFICATE OF CONFORMANCE CERTIFICATION OR TABB QUALITY ASSURANCE PROGRAM FOR ENVIRONMENTAL SYSTEMS BALANCE.

1.04 QUALITY ASSURANCE

A. PERFORM WORK IN ACCORDANCE WITH AABC NATIONAL STANDARDS FOR FIELD MEASUREMENTS AND INSTRUMENTATION, TOTAL SYSTEM BALANCE OR NEBB PROCEDURAL STANDARDS FOR TESTING, BALANCING, AND ADJUSTING OF ENVIRONMENTAL SYSTEMS.

1.05 QUALIFICATIONS

A. THE TESTING, ADJUSTING, AND BALANCING (TAB) OF ALL WORK SHALL BE PERFORMED BY AN INDEPENDENT CONTRACTOR THAT IS CURRENTLY LICENSED BY AABC OR NEBB. THE COMPANY SHALL SPECIALIZE IN TAB OF SYSTEMS SPECIFIED IN THIS SECTION AND SHALL HAVE A MINIMUM THREE YEARS DOCUMENTED EXPERIENCE CERTIFIED BY AABC, NEBB OR TABB.

B. PERFORM WORK UNDER SUPERVISION OF AABC CERTIFIED TEST AND BALANCE ENGINEER OR NEBB CERTIFIED TESTING, BALANCING, AND ADJUSTING SUPERVISOR OR BY A CERTIFIED MEMBER OF TABB EXPERIENCED IN PERFORMANCE OF THIS WORK AND LICENSED AT PLACE WHERE PROJECT IS LOCATED.

1.06 TIMING

A. THE COMPLETE TAB REPORTS SHALL BE PROVIDED TO THE OWNER NO LATER THAN ONE (1) WEEK PRIOR TO CONSTRUCTION END DATE.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

3.01 HVAC CONTRACTOR RESPONSIBILITIES

A. THE HVAC CONTRACTOR SHALL VERIFY THAT THE HVAC SYSTEMS ARE COMPLETE AND OPERABLE BEFORE TAB WORK IS STARTED. THE HVAC CONTRACTOR SHALL BE PRESENT DURING THE TESTING, ADJUSTING, AND BALANCING OF THE HVAC SYSTEM TO PROVIDE ASSISTANCE TO THE TAB CONTRACTOR. REQUIREMENTS INCLUDE THE FOLLOWING:

1. SYSTEMS ARE STARTED AND OPERATING IN SAFE AND NORMAL CONDITION.
2. TEMPERATURE CONTROL SYSTEMS ARE INSTALLED COMPLETE AND OPERABLE.
3. ALL BALANCING DEVICES AND HVAC EQUIPMENT ARE ACCESSIBLE.
4. PROPER THERMAL OVERLOAD PROTECTION IS IN PLACE FOR ELECTRICAL EQUIPMENT.
5. NEW AIR FILTERS ARE INSTALLED JUST PRIOR TO AIR BALANCE AND IMMEDIATELY AFTER PROJECT IS COMPLETE.
6. DUCT SYSTEMS ARE CLEAN OF DEBRIS.
7. FANS ARE ROTATING CORRECTLY.
8. FIRE AND VOLUME DAMPERS ARE IN PLACE AND OPEN.
9. AIR COIL FINS ARE CLEANED AND COMBED.
10. ACCESS DOORS ARE INSTALLED AND CONNECTED.
11. AIR OUTLETS ARE INSTALLED AND CONNECTED.
12. DUCT SYSTEM LEAKAGE IS MINIMIZED.
13. DUCT SYSTEMS ARE FLUSHED, FILLED, AND VENTED.
14. PUMPS ARE ROTATING CORRECTLY.
15. PROPER STRAINER BASKETS ARE CLEAN AND IN PLACE OR IN NORMAL POSITION.
16. SERVICE AND BALANCING VALVES ARE OPEN.

B. IF THE TAB CONTRACTOR DETERMINES THAT A FAN SHEAVE OR BELT REPLACEMENT IS NEEDED TO MEET THE BALANCING REQUIREMENTS, THEN THE HVAC CONTRACTOR SHALL REPLACE THE FAN SHEAVE/BELT AS REQUIRED. THE HVAC CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING OF THE REPLACEMENT WORK.

3.02 INSTALLATION TOLERANCES

A. ALL AIR SYSTEMS MUST BE BALANCED WITHIN PLUS OR MINUS 10% OF DESIGN.

3.03 ADJUSTING

A. VERIFY RECORDED DATA REPRESENTS ACTUAL MEASURED OR OBSERVED CONDITIONS.

B. PERMANENTLY MARK SETTINGS OF VALVES, DAMPERS, AND OTHER ADJUSTMENT DEVICES ALLOWING SETTINGS TO BE RESTORED. SET AND LOCK MEMORY STOPS.

C. AFTER ADJUSTMENT, TAKE MEASUREMENTS TO VERIFY BALANCE HAS NOT BEEN DISRUPTED. IF DISRUPTED, VERIFY CORRECTING ADJUSTMENTS HAVE BEEN MADE.

D. LEAVE SYSTEMS IN PROPER WORKING ORDER, REPLACING BELT GUARDS, CLOSING ACCESS DOORS, CLOSING DOORS TO ELECTRICAL SWITCH BOXES, AND RESTORING THERMOSTATS TO SPECIFIED SETTINGS.

E. AT FINAL INSPECTION, RECHECK RANDOM SELECTIONS OF DATA RECORDED IN REPORT, RECHECK POINTS OR AREAS AS SELECTED AND WITNESSED BY OWNER.

3.04 AIR SYSTEM PROCEDURE

A. ADJUST AIR HANDLING AND DISTRIBUTION SYSTEMS TO OBTAIN REQUIRED OR DESIGN SUPPLY, RETURN, AND EXHAUST AIR QUANTITIES (AT SITE ALTITUDE).

B. MAKE AIR QUANTITY MEASUREMENTS IN MAIN DUCTS BY PITOT TUBE TRAVERSE OF ENTIRE CROSS SECTIONAL AREA OF DUCT.

C. MEASURE AIR QUANTITIES AT AIR INLETS AND OUTLETS.

D. ADJUST DISTRIBUTION SYSTEM TO OBTAIN UNIFORM SPACE TEMPERATURES FREE FROM OBJECTIONABLE DRAFTS.

E. USE VOLUME CONTROL DEVICES TO REGULATE AIR QUANTITIES ONLY TO EXTENT ADJUSTMENTS DO NOT CREATE OBJECTIONABLE AIR MOTION OR SOUND LEVELS. EFFECT VOLUME CONTROL BY USING VOLUME DAMPERS LOCATED IN DUCTS.

F. VARY TOTAL SYSTEM AIR QUANTITIES BY ADJUSTMENT OF FAN SPEEDS. PROVIDE SHEAVE DRIVE CHANGES TO VARY FAN SPEED. VARY BRANCH AIR QUANTITIES BY DAMPER REGULATION.

3.05 REPORTS

A. REFER TO PLANS FOR EQUIPMENT DESIGN DATA SCHEDULES

B. REPORT FORMS.
1. TITLE PAGE:
A. NAME OF TESTING ADJUSTING, AND BALANCING AGENCY
B. ADDRESS OF TESTING, ADJUSTING, AND BALANCING AGENCY
C. TELEPHONE AND FACSIMILE NUMBERS OF TESTING, ADJUSTING, AND BALANCING AGENCY
D. AABC OR NEBB CERTIFICATION NUMBER AND SIGNATURE OF CONTRACTOR
E. PROJECT NAME
F. PROJECT LOCATION
G. PROJECT ARCHITECT
H. PROJECT ENGINEER
I. PROJECT CONTRACTOR
J. PROJECT ALTITUDE
K. DATE TAB WAS PERFORMED

2. SUMMARY COMMENTS:
A. COPY OF CERTIFICATE OF CONFORMANCE WITH NATIONAL STANDARDS (AABC OR NEBB) FOR THIS PROJECT
B. ACTUAL SPACE TEMPERATURES WITH CORRESPONDING THERMOSTAT SET POINTS FOR EACH UNIT
C. DESIGN VERSUS FINAL PERFORMANCE
D. NOTABLE CHARACTERISTICS OF SYSTEM
E. DESCRIPTION OF SYSTEMS OPERATION SEQUENCE
F. SUMMARY OF OUTDOOR AND EXHAUST FLOWS TO INDICATE BUILDING PRESSURIZATION
G. NOMENCLATURE USED THROUGHOUT REPORT
H. TEST CONDITIONS

3. INSTRUMENT LIST:
A. INSTRUMENT
B. MANUFACTURER
C. MODEL NUMBER
D. SERIAL NUMBER
E. RANGE
F. CALIBRATION DATE

4. AIR DISTRIBUTION TEST SHEET:
A. AIR TERMINAL NUMBER
B. ROOM NUMBER/LOCATION
C. TERMINAL TYPE
D. TERMINAL SIZE
E. AREA FACTOR
F. DESIGN VELOCITY
G. DESIGN AIR FLOW
H. TEST (FINAL) VELOCITY
I. TEST (FINAL) AIR FLOW
J. PERCENT OF DESIGN AIR FLOW

5. DUCT TRAVERSE:
A. SYSTEM ZONE/BRANCH
B. DUCT SIZE
C. AREA
D. DESIGN VELOCITY
E. DESIGN AIR FLOW
F. TEST VELOCITY
G. TEST AIR FLOW
H. DUCT STATIC PRESSURE
I. AIR TEMPERATURE
J. AIR CORRECTION FACTOR

6. ELECTRIC MOTORS FOR ALL HVAC EQUIPMENT:
A. MANUFACTURER
B. MODEL/FRAME
C. HP/BHP AND KW
D. PHASE, VOLTAGE, AMPERAGE; NAMEPLATE, ACTUAL, NO LOAD
E. RPM
F. SERVICE FACTOR
G. STARTER SIZE, RATING, HEATER ELEMENTS
H. SHEAVE MAKE/SIZE/BORE

7. V-BELT DRIVE:
A. IDENTIFICATION/LOCATION
B. REQUIRED DRIVEN RPM
C. DRIVEN SHEAVE, DIAMETER AND RPM
D. BELT, SIZE AND QUANTITY
E. MOTOR SHEAVE DIAMETER AND RPM
F. CENTER TO CENTER DISTANCE, MAXIMUM, MINIMUM, AND ACTUAL

8. COOLING COIL DATA:
A. IDENTIFICATION/NUMBER
B. LOCATION
C. SERVICE
D. MANUFACTURER
E. AIR FLOW, DESIGN AND ACTUAL
F. ENTERING AIR DB TEMPERATURE, DESIGN AND ACTUAL
G. ENTERING AIR WB TEMPERATURE, DESIGN AND ACTUAL
H. LEAVING AIR DB TEMPERATURE, DESIGN AND ACTUAL
I. LEAVING AIR WB TEMPERATURE, DESIGN AND ACTUAL
J. WATER FLOW, DESIGN AND ACTUAL
K. WATER PRESSURE DROP, DESIGN AND ACTUAL
L. ENTERING WATER TEMPERATURE, DESIGN AND ACTUAL
M. LEAVING WATER TEMPERATURE, DESIGN AND ACTUAL
N. SATURATED SUCTION TEMPERATURE, DESIGN AND ACTUAL
O. AIR PRESSURE DROP, DESIGN AND ACTUAL

9. AIR MOVING EQUIPMENT:
A. LOCATION
B. MANUFACTURER
C. MODEL NUMBER
D. SERIAL NUMBER
E. ARRANGEMENT/CLASS/DISCHARGE
F. AIR FLOW, SPECIFIED AND ACTUAL
G. RETURN AIR FLOW, SPECIFIED AND ACTUAL
H. OUTSIDE AIR FLOW, SPECIFIED AND ACTUAL
I. TOTAL STATIC PRESSURE (TOTAL EXTERNAL), SPECIFIED AND ACTUAL
J. INLET PRESSURE
K. DISCHARGE PRESSURE
L. SHEAVE MAKE/SIZE/BORE
M. NUMBER OF BELTS/MAKE/SIZE
N. FAN RPM

10. RETURN AIR/OUTSIDE AIR DATA:
A. IDENTIFICATION/LOCATION
B. DESIGN AIR FLOW
C. ACTUAL AIR FLOW
D. DESIGN RETURN AIR FLOW
E. ACTUAL RETURN AIR FLOW
F. DESIGN OUTSIDE AIR FLOW
G. ACTUAL OUTSIDE AIR FLOW
H. RETURN AIR TEMPERATURE
I. OUTSIDE AIR TEMPERATURE
J. REQUIRED MIXED AIR TEMPERATURE
K. ACTUAL MIXED AIR TEMPERATURE

11. AIR COOLED CONDENSER:
A. IDENTIFICATION/NUMBER
B. LOCATION
C. MANUFACTURER
D. MODEL NUMBER
E. SERIAL NUMBER
F. ENTERING DB AIR TEMPERATURE, DESIGN AND ACTUAL
G. LEAVING DB AIR TEMPERATURE, DESIGN AND ACTUAL
H. NUMBER OF COMPRESSORS

12. EXHAUST FAN DATA:
A. LOCATION
B. MANUFACTURER
C. MODEL NUMBER
D. SERIAL NUMBER
E. AIR FLOW, SPECIFIED AND ACTUAL
F. TOTAL STATIC PRESSURE (TOTAL EXTERNAL), SPECIFIED AND ACTUAL
G. INLET PRESSURE
H. DISCHARGE PRESSURE
I. SHEAVE MAKE/SIZE BORE
J. NUMBER OF BELTS/MAKE/SIZE
K. FAN RPM

13. TAB PROCESS & PROCEDURE:
A. TAB CONTRACTOR SHALL PROVIDE INITIAL REPORT TO GENERAL CONTRACTOR FOR REVIEW. IF ANY ITEMS ON TAB REPORT ARE NOT WITHIN PLUS OR MINUS 10% OF DESIGN, TAB AND GENERAL CONTRACTOR SHALL MAKE THE APPROPRIATE CHANGES TO MEET DESIGN SPECIFICATION. IF DESIGN SPECIFICATION CANNOT BE MET, SUBMIT A DEFICIENCY REPORT TO ULTA, INC FOR REVIEW. GENERAL CONTRACTOR TO SUBMIT FINAL TAB REPORT TO ULTA, INC. WHEN ALL ITEMS ARE WITH SPECIFICATION.

B. TESTING ADJUSTING, AND BALANCING REPORT MUST BE COMPLETE AND TURNED OVER TO THE G.C.'S CONSTRUCTION MANAGER 1 WEEK PRIOR TO MERCHANDISING DATE. THE HVAC CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING THEIR WORK AND THE WORK OF THEIR SUBCONTRACTORS WITH THE G.C. TO ALLOW ADEQUATE TIME FOR TABC TO COMPLETE THEIR WORK.

C. THE HVAC CONTRACTOR SHALL COMPLETE THE AIR BALANCE REVIEW START-UP VERIFICATION CHECKLIST BELOW AND FAX A COPY AS NOTED TO TABC. A COPY SHALL ALSO BE PROVIDED TO THE G.C. SUPERINTENDENT AT THIS TIME. IF ALL SYSTEMS ARE NOT OPERATIONAL AT THE TIME OF BALANCING, IT SHALL BE THE HVAC CONTRACTOR'S RESPONSIBILITY TO PAY ALL COSTS ASSOCIATED WITH THE ADDITIONAL TESTING AND BALANCING INCLUDING ALL LABOR, TRAVEL EXPENSES, MEALS, HOTEL COSTS ETC, INCURRED BY TBC.

D. THE HVAC CONTRACTOR SHALL BE PRESENT FOR AIR BALANCE TO VERIFY ACCESSIBILITY TO ALL DEVICES, VERIFY ALL OPERATING SEQUENCES AND INSTALL NEW FILTERS IN ALL UNITS JUST PRIOR TO THE AIR BALANCE. HVAC CONTRACTOR SHALL INSTALL A NEW SET OF FILTERS AFTER PROJECT IS COMPLETE.

TEST AND BALANCE CORPORATION
START-UP VERIFICATION CHECKLIST

STORE #: _____ DATE: _____
LOCATION: _____

| EQUIPMENT DESIGNATION | MECH. CHECK | ELEC. CHECK | CONTROLS CHECK | READY FOR TESTING | |
|---|---|---|---|---|---|
| | | | | DATE | INITIAL |
| RTU-1 | | | | | |
| RTU-2 | | | | | |
| RTU-3 | | | | | |
| RTU-4 | | | | | |
| EF-1 | | | | | |
| EF-2 | | | | | |

THIS CERTIFIES THAT THIS PROJECT IS FULLY INSTALLED AND OPERATIONAL AND READY FOR INDEPENDENT TESTING AND BALANCING AGENCY TO BEGIN TAB WORK.

MECHANICAL CONTRACTOR (COMPANY) _____ REPRESENTATIVE (NAME) _____ DATE _____

INSTRUCTIONS

COMPLETION OF THIS START-UP VERIFICATION CHECKLIST BY THE APPROPRIATE INSTALLING CONTRACTOR, IS REQUIRED TO ENSURE THAT ALL EQUIPMENT AND SYSTEM COMPONENTS ARE COMPLETE, CORRECTLY INSTALLED, IN OPERATION AND FULLY READY FOR TESTING AND BALANCING WORK TO PROCEED.

THE COMPLETED CHECKLIST SHOULD BE SUBMITTED TO ULTA'S PROJECT MANAGER VIA FAX. THIS NUMBER CAN BE FOUND ON THE COVER PAGE OF THE CONSTRUCTION DOCUMENTS.

TAB CONTRACTOR TO COMPLETE THE FOLLOWING
CHECKLIST AS PART OF TAB WORK AND INCLUDE
THIS DATA AS PART OF THE TAB REPORT

| EQUIPMENT DESIGNATION | OA DAMPER POSITION % OPEN | VERIFIED BY TAB CONTRACTOR | | TAB CONTRACTOR TO INDICATE WHICH RTU EF-1 IS INTERLOCKED WITH | |
|---|---|---|---|---|---|
| | | DATE | INITIAL | DATE | INITIAL |
| RTU-1 | | | | | |
| RTU-2 | | | | | |
| RTU-3 | | | | | |
| RTU-4 | | | | | |

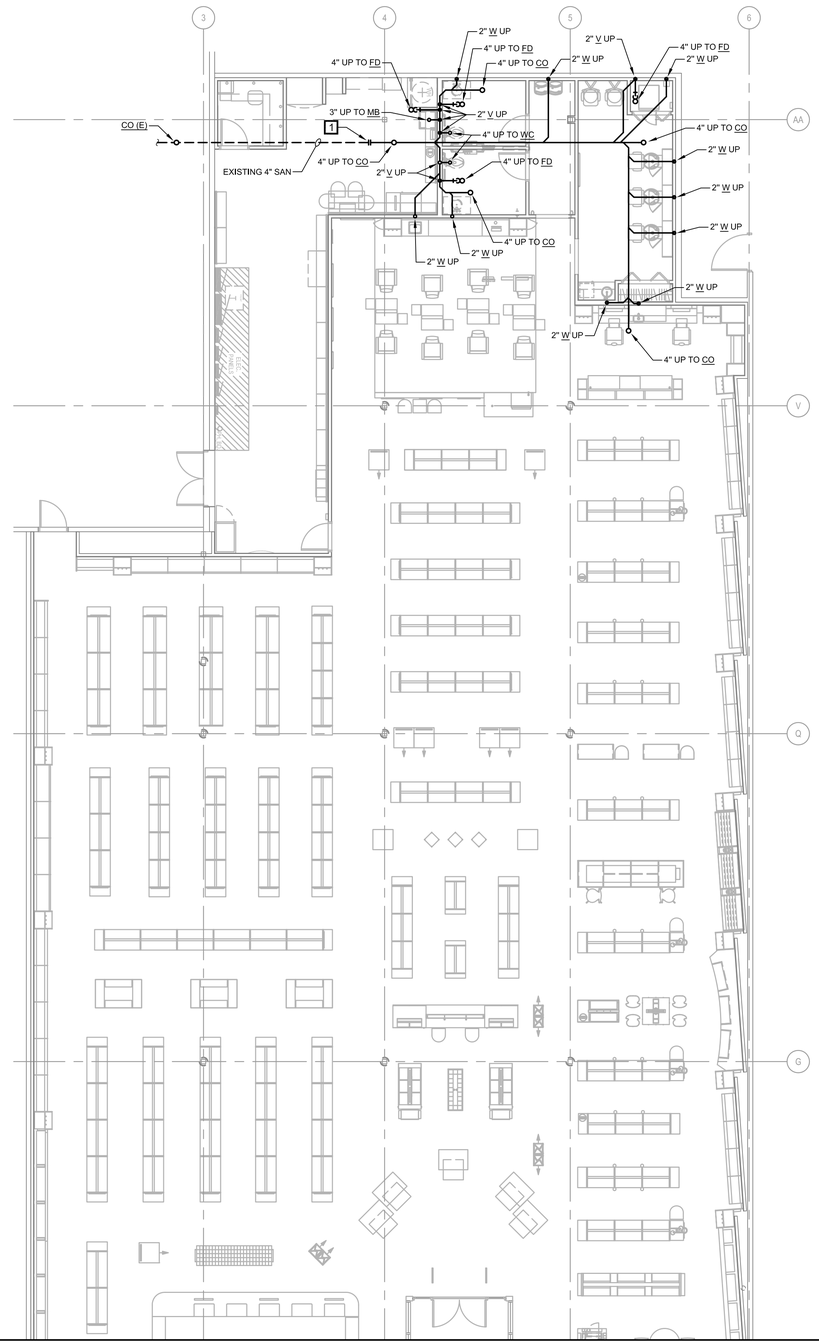
TAB CONTRACTOR TO PROVIDE A COMPLETE TAB REP

## PLAN NOTES #

1. CONNECT NEW SANITARY PIPING TO EXISTING LANDLORD PROVIDED SANITARY PIPING. FIELD COORDINATE EXACT LOCATION, SIZE, INVERT ELEVATION AND DIRECTION OF FLOW OF THE EXISTING SANITARY PIPING PRIOR TO CONSTRUCTION. ADJUST THE NEW SANITARY PIPING AS REQUIRED TO ALLOW FOR CONNECTION TO THE EXISTING SANITARY PIPING SYSTEM.

## LEGEND

- EXISTING
- NEW



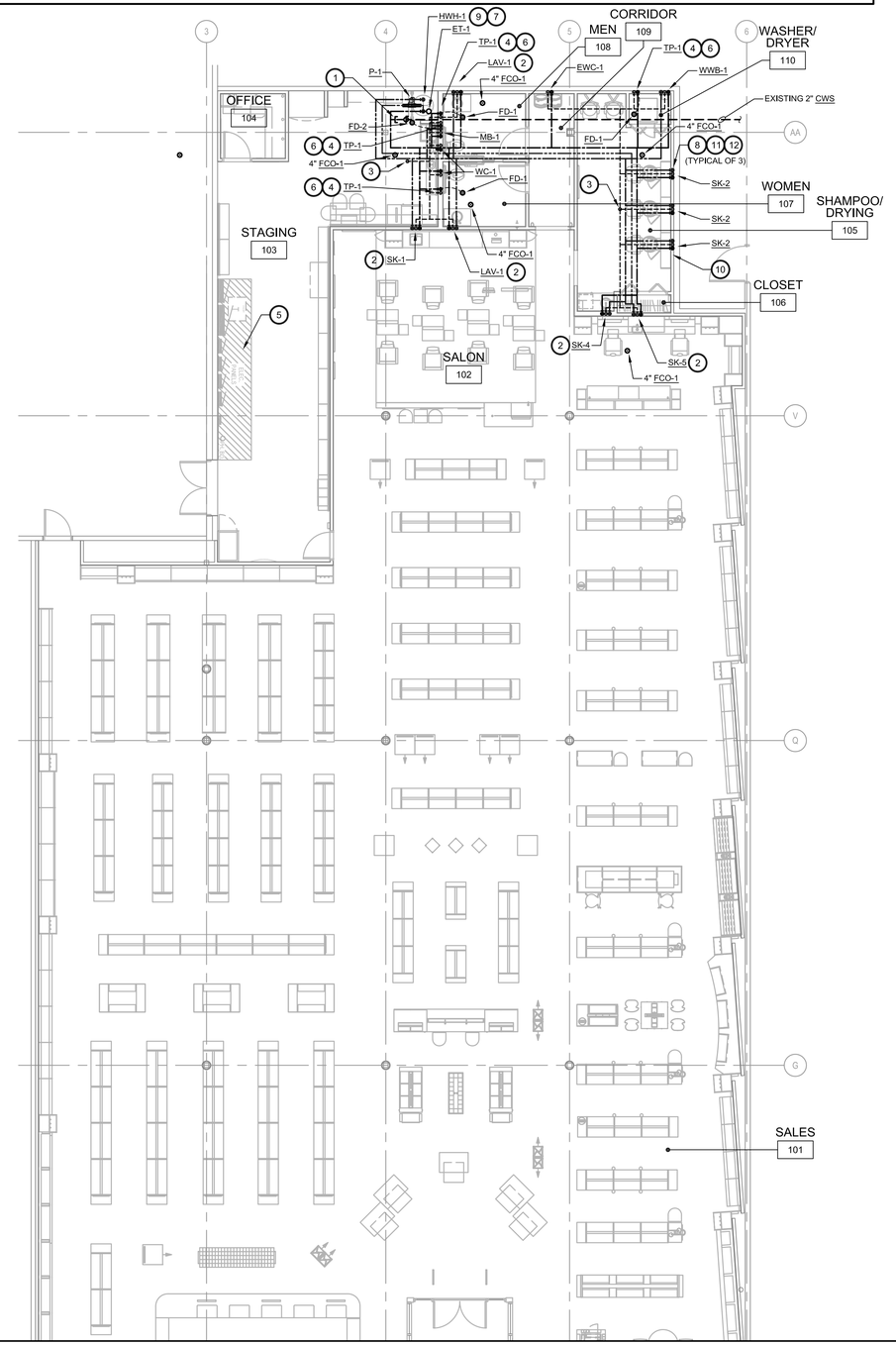

1 UNDERGROUND PLUMBING PLAN

SCALE: 1/8" = 1'-0"

NORTH

## PLAN NOTES #

1. CONNECT NEW 2" DOMESTIC COLD WATER LINE TO EXISTING 2" COLD WATER LINE. WATER METER, PRESSURE REGULATOR AND BACKFLOW PREVENTER FURNISHED AND INSTALLED BY LANDLORD AND LOCATED IN ACCESSIBLE LOCATION. FIELD VERIFY THE EXACT LOCATION AND SIZE OF THE EXISTING WATER SYSTEM PRIOR TO CONSTRUCTION. ADJUST THE NEW WATER LAYOUT AS REQUIRED TO ALLOW FOR CONNECTION TO THE EXISTING WATER SYSTEM.
2. MIXING VALVE LOCATED BELOW COUNTERTOP. SEE SHEET P-4 FOR SCHEDULE. SET TEMPERATURE AS REQUIRED BY AUTHORITIES HAVING JURISDICTION.
3. CONNECT TO LANDLORD PROVIDED VTR.
4. INSTALL TRAP PRIMER IN THE WALL. PROVIDE AN ACCESS PANEL AS NECESSARY TO MAINTAIN EQUIPMENT.
5. THIS SPACE IS RESERVED FOR ELECTRICAL EQUIPMENT. NO PIPING SHALL PASS BELOW, ABOVE, OR AROUND ELECTRICAL EQUIPMENT. PROVIDE CODE REQUIRED MINIMUM CLEARANCE ABOVE ELECTRICAL EQUIPMENT ACCESS SPACE.
6. 1/2" FLEXIBLE CONTINUOUS TYPE "K" COPPER TUBING BELOW GRADE FROM TRAP PRIMER TO FLOOR DRAIN. NO FITTINGS OR SPLICES ARE ALLOWED BELOW GRADE.
7. PIPE WATER HEATER RELIEF TO THE NEAREST FLOOR DRAIN BELOW THE WATER HEATER. PROVIDE A CODE APPROVED AIR GAP ON THE DISCHARGE OF THE WATER HEATER RELIEF. REFER TO DETAILS SHEET FOR ADDITIONAL INFORMATION.
8. HAIR TRAP BELOW EACH SINK, PROVIDED BY SINK VENDOR
9. CONNECT NEW 1-1/4" GAS PIPING TO EXISTING GAS STUB PROVIDED BY LANDLORD SERVING 199,000 BTUH HWH-1. VERIFY EXACT LOCATION OF EXISTING GAS STUB PRIOR TO CONSTRUCTION.
10. CONTRACTOR SHALL RUN VENT TO ONE SIDE OF CHASE IN SHAMPOO WALL TO ALLOW ROOM FOR ELECTRICAL CONDUIT INSTALLATION.
11. THERMOSTATIC MIXING VALVE AT FIXTURE. TMV SUPPLIED BY SHAMPOO BOWL SUPPLIER. SET TEMPERATURE AS REQUIRED BY AUTHORITIES HAVING JURISDICTION.
12. COORDINATE PLUMBING FIXTURE AND ROUGH IN LOCATIONS WITH FIXTURE LOCATIONS INDICATED ON ARCHITECTURAL DRAWING A1.1.




2 PLUMBING FLOOR PLAN

SCALE: 1/8" = 1'-0"

NORTH

City of Kirkland
Reviewed by
J Tumelson
05/30/2018

ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

PLUMBING PLANS AND NOTES


CHIPMAN DESIGN ARCHITECTURE INC
JOHN A CHIPMAN ARCHITECT
1 9 0 1 1 5 T H A V E N E
F I R S T F L O O R E A S T
D E L L E V U E , W A 9 8 0 0 5
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Revisions
- ISSUE FOR CL/LL REVIEW 04/20/18
- ISSUE FOR PERMIT & BID 04/20/18

LICENSED PROFESSIONAL ENGINEER
JOSEPH G. THOMAS
M 31400
Exp. 6/30/18
MECHANICAL
STATE OF WASHINGTON

Signature 04/18/2018

Date 09/30/2019

Expiration Date

I HEREBY CERTIFY THAT THESE PLANS HAVE BEEN PREPARED UNDER MY SUPERVISION AND THAT TO THE BEST OF MY KNOWLEDGE, THE SAME COMPLY WITH ALL RULES, REGULATIONS AND ORDINANCES OF KIRKLAND, WA RELATING TO STRUCTURES AND BUILDINGS.

ENGINEER

| Drawn By | Checked By |
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| Scale | Date |
| 1/8"=1'-0" | 04/20/18 |

Job No. 16-4170

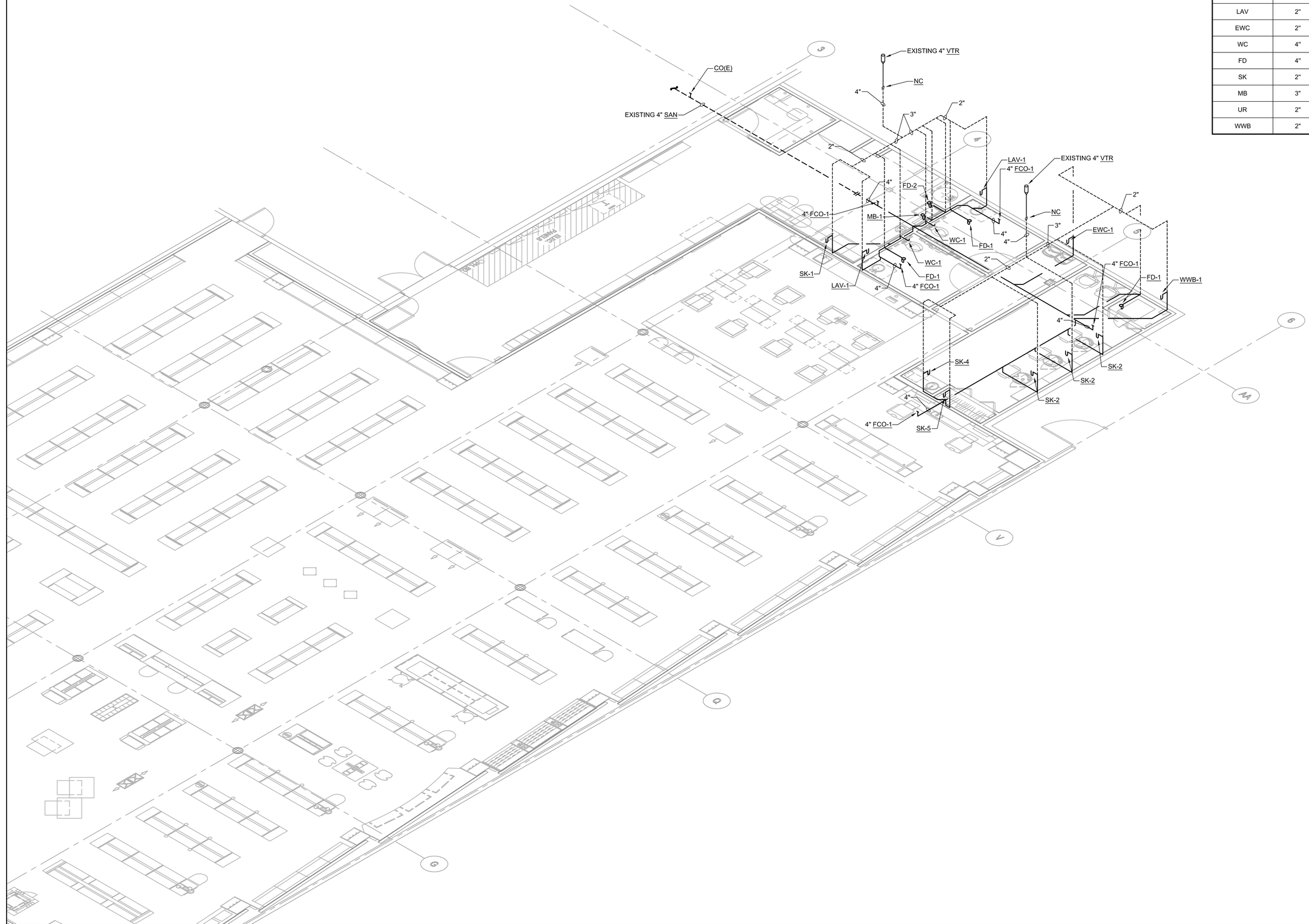
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SEE PLUMBING GENERAL NOTES ON P-4.

## FIXTURE CONNECTION SCHEDULE

| FIXTURE | WASTE | VENT |
|---|---|---|
| LAV | 2" | 1-1/2" |
| EWC | 2" | 1-1/2" |
| WC | 4" | 2" |
| FD | 4" | 2" |
| SK | 2" | 1-1/2" |
| MB | 3" | 2" |
| UR | 2" | 1-1/2" |
| WWB | 2" | 1-1/2" |




1 SANITARY ISOMETRIC

SCALE: NOT TO SCALE

City of Kirkland
Reviewed by
J Tumelson
05/30/2018

ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

SANITARY ISOMETRIC


CHIPMAN DESIGN ARCHITECTURE INC
JOHN A CHIPMAN ARCHITECT
1 9 0 1 1 S E 3 6 T H S T
F I R S T F L O O R E A S T
D E S I G N @ C H I P M A N D E S I G N . C O M
P H O N E ( 4 2 5 ) 7 8 6 - 6 0 9 0

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Revisions
- ISSUE FOR CL\LL REVIEW 04/20/18
- ISSUE FOR PERMIT & BID 04/20/18

LICENSED PROFESSIONAL ENGINEER
JOSEPH G. THOMAS
M 31400
Exp. 6/30/18
MECHANICAL
STATE OF CALIFORNIA

Signature
04/18/2018
Date
09/30/2019
Expiration Date

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ENGINEER

| Drawn By | Checked By |
|---|---|
| AC | DH |
| Scale | Date |
| NO SCALE | 04/20/18 |

Job No. 16-4170

Sheet No. P-2

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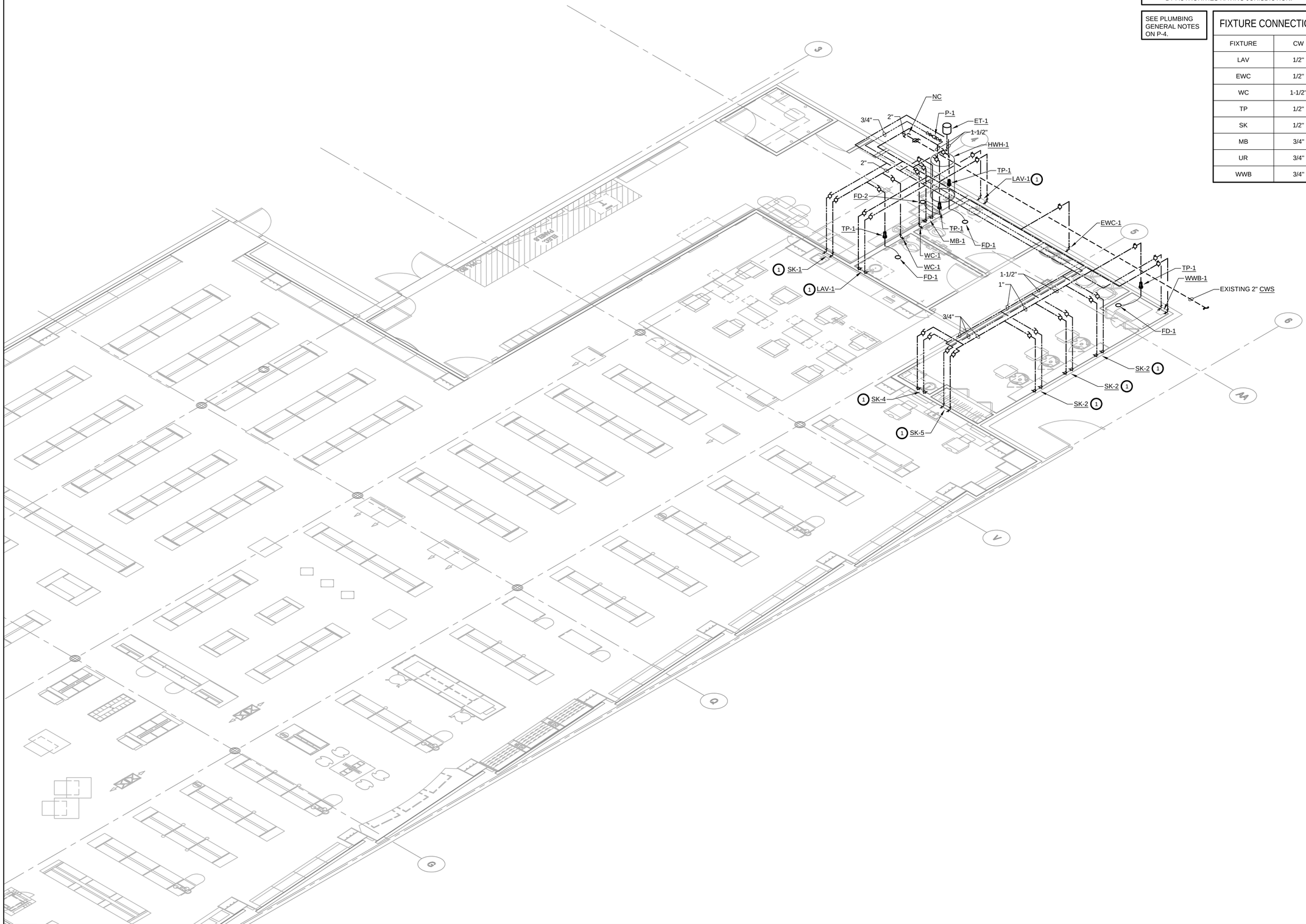
## PLAN NOTES

1. PROVIDE TMV-1 AT FIXTURE. SET TEMPERATURE AS REQUIRED BY AUTHORITIES HAVING JURISDICTION.

SEE PLUMBING GENERAL NOTES ON P-4.

## FIXTURE CONNECTION SCHEDULE

| FIXTURE | CW | HW |
|---|---|---|
| LAV | 1/2" | 1/2" |
| EWC | 1/2" | --- |
| WC | 1-1/2" | --- |
| TP | 1/2" | --- |
| SK | 1/2" | 1/2" |
| MB | 3/4" | 3/4" |
| UR | 3/4" | --- |
| WWB | 3/4" | 3/4" |




1 WATER ISOMETRIC

SCALE: NOT TO SCALE

City of Kirkland
Reviewed by
J Tumelson
05/30/2018

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ULTA - STORE #1384
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WATER ISOMETRIC


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Revisions
1. ISSUE FOR CL/LL REVIEW 04/20/18
2. ISSUE FOR PERMIT & BID 04/20/18

LICENSED PROFESSIONAL ENGINEER
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M 31400
Exp. 6/30/18
MECHANICAL
STATE OF COLORADO

Signature
04/19/2018
Date
09/30/2019
Expiration Date

I HEREBY CERTIFY THAT THESE PLANS HAVE BEEN PREPARED UNDER MY SUPERVISION AND THAT TO THE BEST OF MY KNOWLEDGE, THE SAME COMPLY WITH ALL RULES, REGULATIONS AND ORDINANCES OF KIRKLAND, WA RELATING TO STRUCTURES AND BUILDINGS.

ENGINEER

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| Scale | Date |
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Job No. 16-4170

Sheet No. P-3

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## VALVE SCHEDULE

| TYPE | MFR'R. | THREADED/FLANGED PIPING | | SOLDERED/ BRAZED PIPING |
|---|---|---|---|---|
| | | 2" AND SMALLER | 2-1/2" AND LARGER | 3" AND SMALLER |
| GATE | JENKINS | 47-C | 651-C | 1242-C |
| | MILWAUKEE | 148 | 2885 | 115 |
| | STOCKHAM | B-100 | G-623 | B-108 |
| BALL | JENKINS | 901A | --- | 902A |
| | MILWAUKEE | BA100 | --- | BA150 |
| | STOCKHAM | S-216-BR1-R-T | --- | S-216-BR1-R-S |
| CHECK | JENKINS | 4092 | 624-C | 4093 |
| | MILWAUKEE | 509 | F2974 | 1509 |
| | STOCKHAM | B-319 | G-931 | B-309 |
| AUTOMATIC BALANCING | HAYS | 43-45-2510-0.50-P/T | N.A. | N.A. |

NOTES:
1. VALVES MATERIAL (BODIES, DISC, GASKETS, LININGS, PACKINGS, ETC.) SHALL BE APPROVED FOR THE SERVICE IN WHICH THEY ARE INSTALLED.
2. VALVES SHALL BE LINE SIZE UNLESS OTHERWISE INDICATED.
3. VALVES SHALL BE EQUIPPED WITH ACCESSORIES AS REQUIRED.

## PLUMBING SYMBOLS

| | |
|---|---|
| —W— | WATER SERVICE |
| —CWS— | COLD WATER SUPPLY PIPING |
| —HWS— | HOT WATER SUPPLY PIPING |
| —TWS— | TEMPERED WATER SUPPLY PIPING |
| | SANITARY DRAINAGE & WASTE PIPING/SEWER |
| — — V — — | SANITARY VENT PIPING |
| — G — | GAS PIPING |
| —CD— | CONDENSATE PIPING |
| CB | CAST BRONZE |
| CP | CHROME PLATED |
| CO | CLEANOUT |
| ETR | EXISTING TO REMAIN |
| FCO | FLOOR CLEANOUT |
| FD | FLOOR DRAIN |
| GALV | GALVANIZED |
| NC | NEW CONNECTION |
| S | SANITARY |
| V | VENT |
| VTR | VENT THRU ROOF |
| W | WASTE |
| —⊕— | LINE SIZE BALL VALVE (2" & SMALLER) OR LINE SIZE BUTTERFLY VALVE (2-1/2" & LARGER) |
| —⊘— | BALANCING VALVE |

## DRAIN SCHEDULE

| DESIGNATOR | TYPE | SIZE | MANUFACTURER | MODEL NO. | TOP FINISH | REMARKS |
|---|---|---|---|---|---|---|
| FD-1 | FLOOR DRAIN | 4" | SMITH | 2010-A 5"Ø STRAINER | NICKEL BRONZE | VANDAL-PROOF SCREWS; GALVANIZED BODY; 4" DEEP SEAL 'P' TRAP. |
| FD-2 | FLOOR DRAIN | 4" | SMITH | 2350-P050 | GALVANIZED CAST IRON | GALVANIZED BODY; 4" DEEP SEAL 'P' WITH TRAP PRIMER |
| FCO-1 | FLOOR CLEANOUT | SEE PLANS | SMITH | 4020 | NICKEL BRONZE | VANDAL-PROOF SCREWS; GALVANIZED BODY. |

## THERMOSTATIC MIXING VALVE SCHEDULE

| | |
|---|---|
| TMV-1 | LEONARD THERMOSTATIC MIXING VALVE MODEL: 170LF MOUNT UNDER FIXTURE, ASSE 1070 CERTIFIED. |

## PUMP SCHEDULE

| DESIG'N | SERVICE | LOCATION | MFG'R | MODEL NO. | TYPE | GPM | HEAD (FT.) | ELECTRICAL | | | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | MOTOR HP | VOLTS | PH | CYC. | RPM | |
| P-1 | HOT WATER RECIRCULATION | STAGING 101 | BELL & GOSSETT | NBF-12F/LW | IN-LINE | 2 | 10 | 1/20 | 115 | 1 | 60 | 2800 | |

## WATER HEATER SCHEDULE

ALTERNATE MANUFACTURERS:BRADFORD-WHITE, LOCHINVAR, STATE, RHEEM OR RUDD. ALTERNATE TO BE OF GREATER OR EQUAL QUALITY, PROVIDE SUBMITTALS TO ULTA AND ARCHITECT

| DESIG'N | TYPE | LOCATION | MFG'R | MODEL NO. | STORAGE CAPACITY | GAS MBH | RECVY. AT 100° RISE | REMARKS |
|---|---|---|---|---|---|---|---|---|
| HWH-1 | STORAGE TANK | STAGING 101 | A.O. SMITH | BTR-198 | 100 GAL. | 199 | 193 GPH | SEE DETAIL |

**SET THERMOSTAT TO AN OUTPUT TEMPERATURE OF 140°. PROVIDE LOW NOX WHERE REQUIRED BY CODE.

## EXPANSION TANK SCHEDULE

| DESIG'N | LOCATION | SERVES | CAPACITY (GAL.) | WORKING PRESS. (PSI) | SIZE (APPROX.) | MFG'R | MODEL | REMARKS |
|---|---|---|---|---|---|---|---|---|
| ET-1 | STAGING 101 | DOM. HW | 4.4 | 150 | 11"Øx15" | AMTROL | ST-12 | |

## PLUMBING FIXTURE SCHEDULE

| DESIGNATOR | FIXTURE | SIZE | TYPE | MANUFACTURER | MODEL NO. | COLOR | TRAP | CARRIER | MOUNTING HEIGHT | SUPPLY FITTING | STOP VALVE | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WC-1 | 1.28 GPF HCP WATER CLOSET | ELONGATED | FLOOR MOUNTED | AMERICAN STANDARD | 3043.001 | WHITE | INTEGRAL | NONE | RIM 17-1/4" ABOVE FLOOR | SLOAN-ROYAL 111-YO-1.28 | --- | BEMIS NO. 1955-SSC, OPEN FRONT, SELF SUSTAINING CHECK HINGE SEAT HANDICAPPED ACCESSIBLE |
| LAV-1 | LAVATORY | --- | COUNTERTOP | ELKAY | RLLVR12 | --- | MCGUIRE C8902F | NONE | SEE ARCH DWG. | AMERICAN STANDARD 1340.825 | MCGUIRE H2167CCLK | MCGUIRE NO. 155A STRAINER WITH TAILPIECE, PROVIDE WATER-CONSERVING PRESSURE COMPENSATING VANDAL RESISTANT AERATOR FOR FAUCET. INSULATE HOT WATER SUPPLY AND DRAIN PIPING; HANDICAPPED ACCESSIBLE FAUCET FURNISHED AND INSTALLED BY G.C. REFER TO A6.3 FOR EXACT FAUCET LOCATION. |
| SK-1 | SALON SINK | --- | COUNTERTOP | ELKAY | LR1716 | --- | MCGUIRE C8912F | NONE | SEE ARCH DWG. | GROHE EUROSMART 32643-00A CHROME FINISH | MCGUIRE H2167CCLK | FURNISHED AND INSTALLED BY G.C., SUPPLY FITTING LAVATORY CENTERSET LESS DRAIN. |
| SK-2 | SHAMPOO SINK | --- | COUNTERTOP | FURNISHED BY ULTA | --- | --- | -- | NONE | SEE ARCH DWG. | --- | MCGUIRE H2167CCLK | FURNISHED BY ULTA AND INSTALLED BY G.C. THERMOSTATIC MIXING VALVE BY SHAMPOO SUPPLIER. |
| SK-3 | NOT USED | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SK-4 | COFFEE BAR SINK | --- | COUNTERTOP | ELKAY | RLLVR12 | --- | MCGUIRE C8912F | NONE | SEE ARCH DWG. | GROHE EUROSMART 32665-001 CHROME FINISH | MCGUIRE H2167CCLK | FURNISHED AND INSTALLED BY G.C. MAINTAIN 1/2" CLEAR BETWEEN SINK FLANGE AND FACE OF SPOUT. |
| SK-5 | SKIN BAR | --- | COUNTERTOP | SIGNATURE HARDWARE | 918626 | --- | MCGUIRE C8912F | NONE | SEE ARCH DWG. | GROHE EUROSMART 32643-00A CHROME FINISH | MCGUIRE H2167CCLK | 9" INFINITE NARROW TOP MOUNT BOWL. BOWL, FAUCET, STOP AND DRAIN FURNISHED AND INSTALLED BY G.C. SUPPLY FITTING LAVATORY CENTERSET LESS DRAIN. MAINTAIN 1/2" CLEAR BETWEEN SINK FLANGE AND FACE OF SPOUT. |
| MB-1 | MOP BASIN | 24" x 24" | FLOOR MOUNTED | FIAT | MSB-2424 | WHITE | 3" CAST IRON | NONE | SEE REMARK | CHICAGO FAUCET 897-CRCF | INTEGRAL | MOUNT SUPPLY FITTING 36" ABOVE FLOOR, ROUGH CHROME FINISH WITH INTEGRAL VACUUM BREAKER. |
| EWC-1 | ELECTRIC WATER COOLER | --- | WALL MOUNTED | ELKAY | EZSTL8LC | STANDARD FINISH | MCGUIRE C8872F | SMITH 834 | ↖ OF BUBBLER ORIFICE 36"&41" ABOVE FLOOR | INTEGRAL | MCGUIRE H2167CCLK | HANDICAPPED ACCESSIBLE. 1Ø-120V. |
| WWB-1 | WASHER WALL BOX | --- | WALL RECESSED | GUY GRAY CO. PRODUCTS | B-200 | GRAY | 2" CAST IRON 'P' TRAP | --- | RIM 42" ABOVE FLOOR | INTEGRAL | 1/2" BALL VALVE (ABOVE CEILING) | FINAL CONNECT CLOTHES WASHER SUPPLIES AND LINES. |
| TP-1* | TRAP PRIMER | --- | MOUNTED IN WALL | PRECISION PLUMBING PRODUCTS | P1-500 | NA | NA | --- | 18" ABOVE FLOOR | NA | 1/2" BALL VALVE | PROVIDE CHROME PLATED ACCESS PANEL AND AG-500 AIR GAP CONNECTION. |

*PROVIDE TRAP PRIMER PROTECTION ON ALL FLOOR DRAINS.

## FIRE PROTECTION GENERAL NOTES

1. PROVIDE ALTERATIONS AND MODIFICATIONS AS NECESSARY TO FURNISH AND INSTALL COMPLETE FIRE PROTECTION SYSTEM PER NFPA #13. THE SYSTEM SHALL COMPLY WITH ALL REQUIREMENTS OF LOCAL, STATE AND FEDERAL AUTHORITIES AND LANDLORD'S INSURING AGENCY.
2. ALL WORK SHALL BE IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE LOCAL FIRE PROTECTION DISTRICT AND WATER DEPARTMENT.
3. ALL AUTHORITIES HAVING JURISDICTION SHALL BE NOTIFIED AT LEAST THREE (3) WORKING DAYS PRIOR TO COMMENCEMENT OF WORK.
4. PROVIDE AN AUTOMATIC WET PIPE SPRINKLER SYSTEM INCLUDING PIPING, HANGERS, VALVES, ALARMS, SUPPORTS AND SPRINKLER HEADS, NECESSARY AND AS REQUIRED FOR INSTALLATION OF COMPLETE AND APPROVED FIRE PROTECTION SYSTEMS.
5. WORK SHALL BE PERFORMED BY AN APPROVED AUTOMATIC FIRE PROTECTION SPRINKLER CONTRACTOR. SHOP DRAWINGS AND CALCULATIONS SHALL BE PREPARED BY A REGISTERED PROFESSIONAL ENGINEER. APPROVED CONTRACTOR AND THE CONTRACTOR'S REGISTERED ENGINEER SHALL BE LICENSED WITH THE PROPER AUTHORITIES FOR THE LOCATION OF THIS PROJECT.
6. PROVIDE A COMPLETE WET PIPE SPRINKLER SYSTEM FOR ALL AREAS, UNLESS OTHERWISE INDICATED OR REQUIRED FOR FREEZE PROTECTION.
7. SPECIAL CONSIDERATION SHALL BE GIVEN TO AREAS THROUGHOUT THE BUILDING SUCH AS DROPPED SOFFITS, LIGHTING SOFFITS AND RECESSED STORAGE RACKS THAT NECESSITATE ADDITIONAL SPRINKLER HEADS.
8. RUN PIPING HORIZONTALLY AND AT RIGHT ANGLES TO WALLS AND CEILINGS. CENTER SPRINKLER HEADS IN BOTH HORIZONTAL DIRECTION WITH RESPECT TO CEILING COMPONENTS, SUCH AS CEILING GRID, LIGHT FIXTURES, HVAC DIFFUSERS AND SPEAKERS OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
9. FIRE PROTECTION SYSTEM SHOP DRAWINGS SHALL INCLUDE SEPARATE AND COMPLETE REFLECTED CEILING PLANS INDICATING LOCATION OF EACH SPRINKLER HEAD AS WELL AS PIPING LAYOUTS.
10. PROVIDE MAIN DRAINS AND AUXILIARY DRAINS WHERE NECESSARY.
11. PROVIDE TEST CONNECTIONS AT MOST REMOTE POINT OF MAIN PORTION OF EACH SPRINKLER SYSTEM.
12. LAYOUT THE SPRINKLER PIPING SO THAT THERE IS A MINIMUM SEPARATION OF 12" BETWEEN THE CEILING HEIGHT AND THE BOTTOM OF THE SPRINKLER PIPE OR ROUTE PIPING AROUND LIGHT FIXTURES TO AVOID CONFLICTS.
13. FIRE PROTECTION CONTRACTOR SHALL FIELD VERIFY EXACT REQUIREMENTS FOR BUILDING REGARDING PIPE SIZES, ADEQUATE PRESSURES, SERVICE LOCATIONS, ZONING AND SUBMIT SHOP DRAWINGS TO THE AUTHORITIES FOR APPROVAL PRIOR TO FABRICATION OR INSTALLATION OF FIRE PROTECTION WATER SERVICE AND SYSTEMS.
14. AUTOMATIC SPRINKLERS SHALL BE OF THE OPERATING TEMPERATURE AS REQUIRED BY THE LOCATION WITH SPECIAL REGARD FOR HEATING UNITS. SPRINKLER PIPING SHALL ROUTE AROUND, PROVIDE PROPER CLEARANCES, AND AVOID CONFLICT WITH BUILDING EQUIPMENT AND SYSTEMS.
15. ALL PIPING SHALL BE ROUTED IN THE SUSPENDED CEILING SPACE, CONCEALED IN WALLS AND BEHIND FIXED FURNISHINGS, UNLESS OTHERWISE INDICATED. ALL PIPING EXPOSED TO VIEW SHALL BE ROUTED AS HIGH AS POSSIBLE AND TIGHT TO THE UNDERSIDE OF THE STRUCTURE.
16. REFER TO ARCHITECTURAL DRAWINGS OR CONSULT ARCHITECT FOR EXACT LOCATION OF FIXTURES, EQUIPMENT, ETC. AND FINAL FINISHED ELEVATIONS PRIOR TO ANY INSTALLATION WORK.
17. EXISTING SYSTEMS THAT REQUIRE RELOCATION AND SERVE EXISTING FIXTURES OR EQUIPMENT OR AREAS THAT MUST REMAIN ACTIVE, SHALL BE RELOCATED DURING OWNER SCHEDULED SHUT-DOWNS. TEMPORARY CONNECTIONS AND EXTENSIONS OF REQUIRED SYSTEMS SHALL BE PROVIDED AS NEEDED AND AT THE CONTRACTOR'S EXPENSE.
18. CONTRACTOR SHALL VISIT THE SITE AND DOCUMENT EXISTING CONDITIONS WITHIN THE LIMITS OF DEMOLITION, PRIOR TO START OF ANY WORK. FORWARD TO ARCHITECT/ENGINEER, FOR REVIEW, ONE (1) COPY OF EQUIPMENT AND SYSTEMS BEING REMOVED BY DEMOLITION WORK AND NEW INSTALLATION WORK. LIMITS OF DEMOLITION AREA SHALL BE AS INDICATED ON DRAWINGS PREPARED BY THE ARCHITECTURAL CONSULTANT.
19. CARFULLY REVIEW THE INTERIOR DESIGN, ARCHITECTURAL, STRUCTURAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL ITEMS TO BE REMOVED, RELOCATED, OR ACCOMMODATED; INCLUDE ALL COSTS IN BASE BID FOR THIS WORK.
20. NEW OR EXISTING EQUIPMENT SHALL NOT BE LOCATED ABOVE INACCESSIBLE CEILINGS. PROVIDE LOCATION OR RELOCATION OF EQUIPMENT TO AREAS ABOVE ACCESSIBLE CEILINGS AND RECONNECT EQUIPMENT TO SYSTEMS.
21. DRAINING AND REFILLING OF SYSTEMS AS REQUIRED FOR DEMOLITION AND/OR NEW INSTALLATIONS WORK, SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR.
22. REROUTE FIRE SPRINKLER PIPING IF REQUIRED FOR THE NEW SUPPLY AND RETURN AIR DUCTWORK LAYOUT.
23. ALL SPRINKLERS IN CEILINGS IN CUSTOMER AREAS SHALL BE CONCEALED TYPE WITH WHITE COVER PLATE TO MATCH COLOR OF CEILING FINISH. EXACT LOCATIONS OF EACH AND EVERY SPRINKLER WILL BE APPROVED BY INTERIOR DESIGNER AND OWNER. SUBMIT PRODUCTS AND SPRINKLER LOCATIONS TO INTERIOR DESIGNER AND OWNER FOR APPROVAL PRIOR TO SHOP DRAWING PROCESS.
24. CONTRACTOR TO PROVIDE BID ALTERNATE FOR ANY MODIFICATIONS NEEDED, DUE TO LOW SPRINKLER BRANCH LINES/STRUCTURE HEIGHTS. MODIFICATIONS TO SPRINKLER BRANCH LINES NEED TO BE TIGHT TO STRUCTURE AS POSSIBLE.
25. PROVIDED MEANS FURNISH AND INSTALL.

## PLUMBING GENERAL NOTES

A. ALL WORK SHALL BE IN ACCORDANCE WITH ALL APPLICABLE RULES AND REGULATIONS OF LOCAL AUTHORITIES.

B. ALL AUTHORITIES HAVING JURISDICTION SHALL BE NOTIFIED AT LEAST THREE WORKING DAYS PRIOR TO COMMENCEMENT OF WORK.

C. ALL PIPING SHALL BE ROUTED IN THE SUSPENDED CEILING SPACE UNLESS OTHERWISE INDICATED. ALL PIPING EXPOSED TO VIEW SHALL BE ROUTED AS HIGH AS POSSIBLE AND TIGHT TO THE UNDERSIDE OF THE STRUCTURAL STEEL.

D. EXPOSED PIPING IN FINISHED AREAS SHALL BE CHROME PLATED WITH CHROME PLATED ESCUTCHEON AT PIPE ENTRY TO FINISHED AREA.

E. SLEEVE OR CORE-DRILL FLOOR SLABS, WALLS, ETC. AS REQUIRED FOR PIPING AND FIRE-STOP OPENING AROUND PIPE. VERIFY LOCATION OF STRUCTURAL BEAMS, JOISTS, ETC. BEFORE DRILLING.

F. ALL OPENINGS IN DRAINAGE AND/OR VENT SYSTEMS AS A RESULT OF INSTALLATION ROUGH-IN SHALL BE PROTECTED WITH A TEST PLUG THAT IS SECURELY LOCKED IN PLACE UNTIL FINAL FINISHED CONNECTIONS ARE INSTALLED.

G. ALL PIPING SHALL BE CONCEALED IN WALLS AND BEHIND FIXED FURNISHINGS UNLESS OTHERWISE INDICATED.

H. WHEREVER FOUNDATION WALLS, OUTSIDE WALLS, ROOF, ETC. ARE PENETRATED FOR INSTALLATION OF SYSTEMS, THEY SHALL BE PATCHED TO MATCH EXISTING CONSTRUCTION AND SEALED WEATHER TIGHT. WORK SHALL BE PERFORMED BY CRAFTSMEN SKILLED IN THEIR RESPECTIVE TRADES.

I. ALL PIPING SHALL RUN PARALLEL TO BUILDING LINES AND SUPPORTED AND ANCHORED AS REQUIRED TO FACILITATE EXPANSION AND CONTRACTION, ALL PIPING SHALL BE CONCEALED EXCEPT IN UNFINISHED SPACES. INSTALL AS REQUIRED TO MEET ALL CONSTRUCTION CONDITIONS AND TO ALLOW FOR INSTALLATION OF OTHER WORK INCLUDING DUCTS AND ELECTRICAL CONDUIT. AT ALL CONNECTIONS BETWEEN FERROUS PIPING AND NONFERROUS PIPING, PROVIDE AN ISOLATING DIELECTRIC UNION.

J. PROVIDE ALL FITTINGS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY TO FACILITATE THE PLUMBING SYSTEM'S FUNCTIONING AS INDICATED BY THE DESIGN AND THE EQUIPMENT INDICATED.

K. PROVIDE A COMPLETE SYSTEM OF COPPER OR STEEL (OR DWV PVC IF ALLOWED BY CODE) VENT RISERS ABOVE FLOOR. ALL VENTS SHALL BE CARRIED THROUGH THE ROOF WITH FLASHING.

L. CONDENSATE AND INDIRECT DRAIN PIPING SHALL BE TYPE "M" COPPER TUBING.

M. PROVIDE CLEANOUTS AT THE END OF EACH HORIZONTAL RUN, AND AT THE BASE OF ALL VERTICAL WASTE AND DRAIN PIPES. CLEANOUTS SHALL BE OF THE SAME SIZE AS THE PIPES THEY SERVE.

N. HOT AND COLD WATER PIPING SHALL BE TYPE L COPPER PIPING ABOVE GRADE AND TYPE "K" COPPER PIPE BELOW GRADE. FITTINGS AS REQUIRED BY LOCAL AUTHORITIES. PROVIDE WATER HAMMER ARRESTORS WADE "SKOKSTOP" MODEL NO. W-S THROUGH W-100, SIZE AND LOCATION AS INDICATED BY MANUFACTURER. INSTALL STOP VALVE IN AN ACCESSIBLE LOCATION IN EACH WATER SUPPLY TO EACH FIXTURE. CHECK EXISTING WATER PRESSURE AND PROVIDE PRV WHEN WATER PRESSURE EXCEEDS 80 PSI.

O. INSULATE ALL HOT AND COLD WATER PIPING BOTH VERTICALLY AND HORIZONTALLY. IN CEILING BELOW ALL HANDICAPPED FIXTURES AND CONCEALED IN WALLS COMPLETELY, PROVIDE 1" PREFORMED FIBERGLASS ASJ-VB, FLAME SPREAD 25, SMOKE DEVELOPED 50, ASTM C-547.

P. PIPING ROUTED IN EXTERIOR WALLS SHALL BE ROUTED ON WINTER WARM SIDE OF BUILDING WALL INSULATION.

Q. ACCESS PANELS SHALL BE PROVIDED WHERE CONCEALED CONTROL DEVICES, VALVES, ETC. ARE CONCEALED WITHIN WALLS. WHERE ACCESS FOR ADJUSTMENT AND MAINTENANCE IS POSSIBLE THROUGH LAY-IN SUSPENDED CEILINGS, ACCESS PANELS ARE NOT REQUIRED.

R. TEST WATER SYSTEM UNDER 150 PSIG HYDROSTATIC PRESSURE, FOR FOUR (4) HOURS MINIMUM. WHEN TESTING INDICATES MATERIALS OR WORKMANSHIP IS DEFICIENT, REPLACE OR REPAIR AS REQUIRED, AND REPEAT TEST UNTIL STANDARDS ARE ACHIEVED.

S. PROVIDE A COMPLETE NATURAL GAS PIPING SYSTEM AS NOTED ON THE DRAWINGS, PIPE AND FITTINGS SHALL BE AS REQUIRED BY LOCAL AUTHORITIES. PROVIDE ALL UNIONS, SHUT-OFF VALVES AND DIRT LEGS REQUIRED BY NFPA-54 AND GOVERNING LOCAL CODES. PROVIDE ALL TESTS, METERS, INSPECTIONS, HANGERS AND EQUIPMENT CONNECTIONS REQUIRED FOR A COMPLETE AND OPERATING SYSTEM. PAINT PIPING ON ROOF WITH TWO COATS OF RUST RESISTANT OUTDOOR PAINT.

T. THE DOMESTIC WATER SYSTEM, DRAINAGE SYSTEMS, AND GAS PIPING SYSTEM SHALL BE FLUSHED AND PRESSURE TESTED. THE DOMESTIC WATER SYSTEM SHALL BE PURIFIED.

U. DRAINAGE PIPING ABOVE AND BELOW FLOOR SHALL BE SCHEDULE 40 PVC UNLESS OTHERWISE REQUIRED BY CODE. PROVIDE CAST IRON OR OTHER APPROVED MATERIAL ONLY WHEN REQUIRED BY JURISDICTION, CONTRACTOR SHALL CLEARLY IDENTIFY WHAT MATERIAL WAS BID AT THE TIME OF BID SUBMITTAL.

V. ALL FLOOR DRAINS SHALL BE CONNECTED TO THE SANITARY SEWER SYSTEM.

W. THE EXISTING CONDITIONS ARE BASED ON "AS-BUILT" DRAWINGS AND/OR LIMITED FIELD VERIFICATIONS. THE CONTRACTOR SHALL ADJUST TO ACTUAL FIELD CONDITIONS AT NO ADDITIONAL EXPENSE TO THE PROJECT. NO ADDITIONAL COMPENSATION WILL BE PROVIDED FOR ANY EXTRAS DUE TO THE CONTRACTOR'S FAILURE TO VISIT THE PROJECT SITE AND/OR PREDETERMINATION OF EXISTING CONDITIONS PRIOR TO SUBMITTING THE BID. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ARCHITECT/ENGINEER FOR RESOLUTION.

X. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE INCIDENTAL DEMOLITION WORK PRIOR TO BIDDING AND COMMENCEMENT OF WORK. THE CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF ALL EXISTING EQUIPMENT AS REQUIRED FOR INSTALLATION/CONSTRUCTION OF NEW WORK.

Y. COORDINATE ALL SLAB PENETRATIONS WITH GENERAL CONTRACTOR PRIOR TO CONSTRUCTION. MAINTAIN A MINIMUM OF 2" CLEARANCE FROM THE EDGE OF THE SLAB OPENING TO ANY STRUCTURAL MEMBERS AND PIPES.

Z. PIPE SIZES INDICATED ON THE PLANS ARE MINIMUM. THE CONTRACTOR SHALL PROVIDE PIPE SIZES EQUAL TO OR GREATER THAN THE SPECIFIED SIZES. THE CONTRACTOR MAY INCREASE PIPE SIZES AS REQUIRED AT NO ADDITIONAL EXPENSE TO THE PROJECT.

AA. THE CONTRACTOR SHALL OBTAIN A COPY OF THE LANDLORD'S TENANT CRITERIA MANUAL PRIOR TO BIDDING. THE TENANT CRITERIA MANUAL REQUIREMENTS SHALL BE INCLUDED IN THE CONTRACTOR CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH THE LANDLORD REQUIREMENTS AT NO ADDITIONAL EXPENSE TO THE PROJECT.

AB. PROVIDE TEMPORARY COVERS, CAPS, OR PLUGS ON SANITARY SEWER SYSTEM THROUGHOUT THE DURATION OF CONSTRUCTION. RAG WADS, DUCT TAPE, OR OTHER SIMILAR METHODS OF TEMPORARY COVERS SHALL NOT BE UTILIZED. UPON COMPLETION OF CONSTRUCTION, COMPLETELY REMOVE ANY AND ALL OBSTRUCTIONS INSIDE THE ENTIRE SYSTEM BY SNAKING, RODING, OR JETTING THE SYSTEM IMMEDIATELY PRIOR TO PROJECT TURNOVER TO THE OWNER.

AC. ALL BELOW GRADE SANITARY LINES SHALL BE A MINIMUM OF 2" OR IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS.

AD. USE SANITARY TEE FITTINGS, STRAIGHT TEE FITTINGS SHALL NOT BE INSTALLED IN DRAIN WASTE, AND VENT (DWV) SYSTEM.

AE. INSTALL SANITARY PIPING 2" OR SMALLER AT A SLOPE OF 1/4" PER FOOT AND SANITARY PIPING LARGER THAN 2" AT A SLOPE OF 1/8" PER FOOT.

AF. ALL PUBLIC USE LAVATORY FAUCETS SHALL HAVE AN AUTOMATIC SAFETY WATER MIXING DEVICE IN ACCORDANCE WITH ANSI/ASSE 1016 OR 1017.

AG. ALL HANDICAPPED ACCESSIBLE WATER CLOSETS SHALL HAVE THE FLUSHING HANDLE ON THE WIDE SIDE OF THE HANDICAPPED ACCESSIBLE STALL AS REQUIRED BY ADA REQUIREMENTS.

AH. HARD 90 DEGREE ELBOW WILL NOT BE PERMITTED ON SANITARY LINES.

AI. SUPPORT ALL PIPING AND DUCTWORK, EQUIPMENT, ETC. FROM TOP CHORD OF ROOF/FLOOR JOISTS, OR PROVIDE STRUCTURAL CALCULATIONS INDICATING BOTTOM CHORD ATTACHMENT IS ACCEPTABLE.

AJ. PLUMBING CONTRACTOR SHALL VERIFY EXISTING WATER PRESSURE AND PROVIDE PRESSURE REDUCING VALVE ON WATER SERVICE IF PRESSURE EXCEEDS 80 PSI.

AK. PROVIDED MEANS FURNISH AND INSTALL.

City of Kirkland
Reviewed by
J Tumelson
05/30/2018

ULTA BEAUTY

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PLUMBING SCHEDULES AND SPECIFICATIONS


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JOHN A CHIPMAN ARCHITECT
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Revisions
- ISSUE FOR CL/LL REVIEW 04/20/18
- ISSUE FOR PERMIT & BID 04/20/18

LICENSED PROFESSIONAL ENGINEER
JOSEPH G. THOMAS
M 31400
Exp. 6/30/18
STATE OF WASHINGTON
MECHANICAL

Signature 04/18/2018
Date 09/30/2019
Expiration Date

I HEREBY CERTIFY THAT THESE PLANS HAVE BEEN PREPARED UNDER MY SUPERVISION AND THAT TO THE BEST OF MY KNOWLEDGE, THE SAME COMPLY WITH ALL RULES, REGULATIONS AND ORDINANCES OF KIRKLAND, WA RELATING TO STRUCTURES AND BUILDINGS.

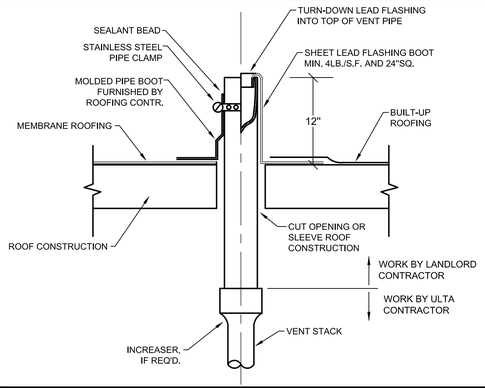
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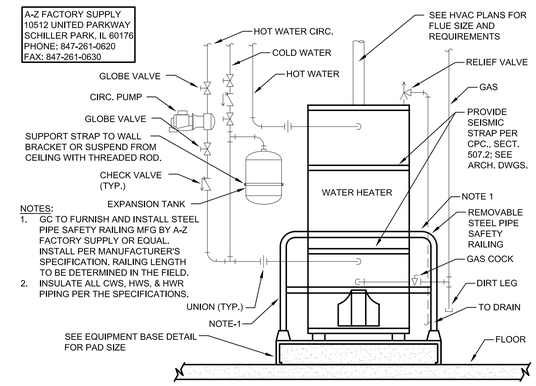
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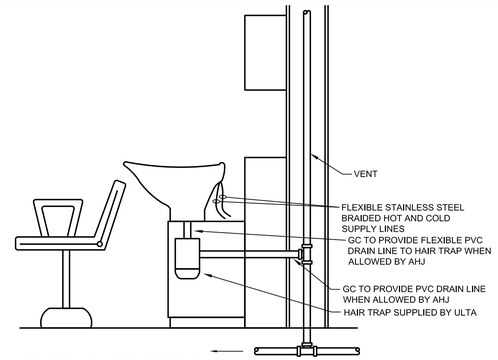

## 9 VENT THRU ROOF DETAIL (EXISTING)

SCALE: NOT TO SCALE




## 5 DOMESTIC WATER HEATER DETAIL - GAS

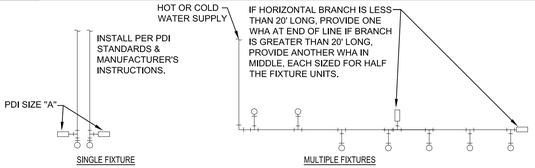
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NOTE: KEEP ALL PLUMBING (VENT, DRAIN, AND SUPPLY LINES) AS TIGHT TO A 6" CIRCLE AS POSSIBLE.

## 1 SHAMPOO SINK DETAIL

SCALE: NOT TO SCALE




SINGLE FIXTURE

| PDI SIZE | PIPE SIZE | FIXTURE UNIT LOAD |
|---|---|---|
| A | 1/2" | 1-11 |
| B | 3/4" | 12-32 |
| C | 1" | 33-60 |
| D | 1-1/4" | 61-113 |
| E | 1-1/2" | 114-154 |
| F | 2" | 154-330 |

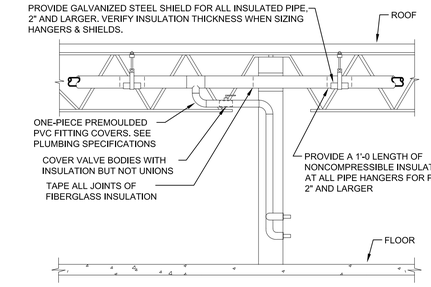
MULTIPLE FIXTURES

| FIXTURE UNIT TABULATION | | |
|---|---|---|
| FIXTURE | COLD | HOT |
| VALVE WATER CLOSET | 10 | -- |
| TANK WATER CLOSET | 5 | -- |
| URINAL | 10 | -- |
| LAVATORY/SINK | 0.75/1.5 | 0.75/1.5 |
| JANITOR'S SINK | 2.25 | 2.25 |
| SHOWER/BATHTUB | 2 | 2 |

PC TO PROVIDE WATER HAMMER ARRESTERS BY SIOUX CHIEF, PRECISION PLUMBING PRODUCTS, WATTS OR APPROVED EQUIVALENT WITH PISTON & O-RING CONSTRUCTION, HAVING PDI #WH-201, ASSE #1010 & ANSI #A112.26.1M CERTIFICATION. INSTALL IN HORIZONTAL OR VERTICAL POSITION, BUT NEVER UPSIDE DOWN. INSTALL IN LINE WITH WATER FLOW DIRECTION. SIZE THE UNITS AS SHOWN ON THE DRAWINGS AND/OR PER THE TABLES SHOWN ABOVE.

## 6 WATER HAMMER ARRESTERS

SCALE: NOT TO SCALE




PROVIDE INSULATION ON ALL COLD/HOT WATER PIPING AND CONDENSATE DRAIN PIPE PER THE SPECIFICATIONS AND MANUFACTURERS INSTRUCTIONS.

## 2 PIPE INSULATION DETAIL

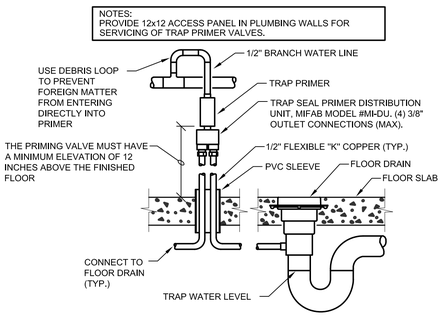
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| EQUIPMENT | DIMENSIONS W (IN) | L (IN) |
|---|---|---|
| HWH-1 (GAS) | 39 | 39 |
| HWH-1 (ELECTRIC) | 41.5 | 47 |

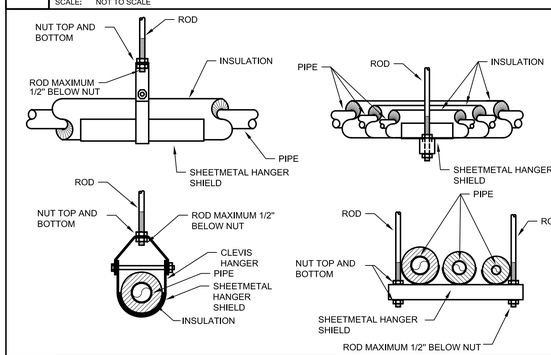
## 7 EQUIPMENT BASE DETAIL

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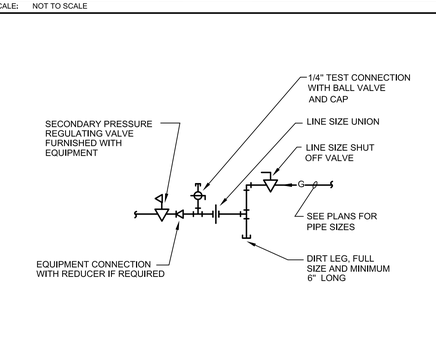

## 3 TRAP PRIMER DETAIL

SCALE: NOT TO SCALE




## 8 TYPICAL HANGER DETAIL

SCALE: NOT TO SCALE




## 4 TYPICAL GAS PIPING CONNECTION DE

SCALE: NOT TO SCALE

City of Kirkland
Reviewed by
J Tumelson
05/30/2018

ULTA BEAUTY

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PLUMBING DETAILS

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Revisions
- ISSUE FOR CL/LL REVIEW 04/20/18
- ISSUE FOR PERMIT & BID 04/20/18

LICENSED PROFESSIONAL ENGINEER
JOSEPH G. THOMAS
M 31400
Exp. 6/30/18
MECHANICAL
STATE OF CALIFORNIA

Signature 04/18/2018
Date 09/30/2019
Expiration Date

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ENGINEER

| Drawn By | Checked By |
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| AC | DH |
| Scale | Date |
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Job No. 16-4170

Sheet No. P-5

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SECTION 15050
BASIC MATERIALS AND METHODS

PART 1 - GENERAL

1.01 DESCRIPTION
A. THIS SECTION DEFINES THE GENERAL PROVISIONS WHICH ARE COMMON TO ALL SECTIONS OF DIVISION 15.
B. FURNISH ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT; FABRICATE, AND INSTALL COMPLETE AND IN PLACE, ALL THE FIXTURES, EQUIPMENT AND SYSTEMS AS SHOWN ON THE DRAWINGS, SPECIFIED HEREIN, AND AS REQUIRED FOR A COMPLETE AND OPERABLE INSTALLATION.
C. THE CONTRACTOR SHALL PAY FOR ALL PERMITS, FEES AND CHARGES REQUIRED FOR THIS WORK.

1.02 DRAWINGS AND SPECIFICATIONS
A. DESIGN DRAWINGS: THE DRAWINGS ACCOMPANYING THESE SPECIFICATIONS ARE GENERALLY DIAGRAMMATIC, ANY CHANGES FROM THE GENERAL ROUTING SHOWN ON THE DRAWINGS SUCH AS OFFSETS, BENDS OR CHANGES IN ELEVATION DUE TO COORDINATION WITH THE WORK OF OTHER TRADES AND THE BUILDING CONSTRUCTION SHALL BE DONE WITHOUT ADDITIONAL CHARGE TO THE OWNER.
B. SHOP DRAWINGS: SHOP DRAWINGS SHALL BE SUBMITTED FOR EACH AND EVERY ITEM OF MANUFACTURED MATERIAL AND EQUIPMENT.
C. RECORD DRAWINGS:
1. THE CONTRACTOR SHALL KEEP AN ACCURATE RECORD OF ALL CONCEALED PIPES, DUCTS, VALVES, CONDUITS, ETC. IN ADDITION, HE SHALL RECORD, IN A SPECIAL SET OF CONTRACT DRAWINGS, ALL CHANGES AND DEVIATIONS FROM THE DESIGN DRAWINGS THAT OCCURRED DURING THE INSTALLATION OF THE WORK.
2. AT COMPLETION OF THE JOB, THESE DRAWINGS ILLUSTRATING CHANGES OR DEVIATIONS SHOWING BY DIMENSION AND LOCATION THE EXACT POSITION OF ALL CONCEALED PIPES, VALVES, ETC., SHALL BE DELIVERED TO THE ARCHITECT/ENGINEER.
D. SPECIFICATIONS - REFER TO THE FOLLOWING GENERAL SPECIFICATIONS AS THEY ARE A PART OF ALL SECTIONS OF DIVISION 15.
1. DIVISION 1 - GENERAL REQUIREMENTS; REGARDING BUT NOT LIMITED TO: ALTERATION PROJECT PROCEDURES, SUBMITTALS, CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS, CLEANING DURING CONSTRUCTION, AND PRODUCT OPTIONS AND SUBSTITUTIONS.
2. DIVISION 2 - SITEWORK; REGARDING BUT NOT LIMITED TO: SELECTIVE DEMOLITION, EARTHWORK, EXCAVATION AND BACKFILLING.
3. DIVISION 3 - CONCRETE; REGARDING BUT NOT LIMITED TO: CAST-IN-PLACE CONCRETE, FORMWORK AND REINFORCEMENT.
E. IT IS THE INTENTION OF THIS SPECIFICATION SECTION THAT ALL ITEMS OF MATERIAL AND EQUIPMENT HEREIN SPECIFIED OR SHOWN ON THE DRAWINGS FOR EACH SECTION SHALL BE FURNISHED BY THE CONTRACTOR FOR THAT SECTION, AND INSTALLED BY THAT CONTRACTOR, UNLESS IT IS SPECIFICALLY STATED IN THE SECTION SPECIFICATION, OR SHOWN ON THE DRAWINGS, THAT ANY ITEM OF MATERIAL OR EQUIPMENT IS TO BE FURNISHED BY THE CONTRACTOR OF A SECTION AND INSTALLED BY THE CONTRACTORS OF OTHER SECTIONS, OR FURNISHED BY OTHER SECTION CONTRACTORS AND INSTALLED BY THE CONTRACTOR OF THE SECTION.

1.03 CHASES AND RECESSES
A. ALL CHASES, RECESSES AND MAJOR MASONRY OPENINGS AS SHOWN ON THE DRAWINGS WILL BE PROVIDED BY THE ARCHITECTURAL TRADES.

1.04 LUBRICATION
A. PRIOR TO TESTING, ALL EQUIPMENT SHALL BE PROPERLY LUBRICATED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. ONE SET OF TOOLS NECESSARY FOR LUBRICATION SHALL BE DELIVERED TO OWNER. AFTER PROPER LUBRICATING, ALL UNITS SHALL BE STARTED AND SUCCESSFULLY OPERATED BY THE CONTRACTOR IN THE PRESENCE OF THE ARCHITECT AND/OR ENGINEER.
B. EXCEPT FOR SMALL ELECTRICAL MOTORS WHICH UNDER NEMA STANDARDS ARE EQUIPPED WITH LIFETIME LUBRICATION, ALL BEARINGS ON LARGE MOTORS AND MECHANICAL EQUIPMENT SHALL BE EQUIPPED WITH LUBRICATOR FITTINGS EXTENDED TO THE EXTERIOR OF THE HOUSING.

1.05 POWER WIRING
A. MOTORS UP TO AND INCLUDING 1/3 H.P. SHALL BE 120 VOLT, 60 HERTZ, SINGLE PHASE AND MOTORS 1/2 H.P. AND LARGER SHALL BE BUILT FOR 208 VOLTS, 60 HERTZ, THREE PHASE; UNLESS OTHERWISE INDICATED PER DRAWING SCHEDULES, PLANS AND DETAILS.
B. THE ELECTRICAL CONTRACTOR SHALL PROVIDE COMBINATION MAGNETIC STARTERS WITH H.O.A. SWITCH FOR EACH ITEM OF THREE PHASE EQUIPMENT AND UNFUSED DISCONNECTS FOR EACH ITEM OF SINGLE PHASE EQUIPMENT, EXCEPT WHERE STARTERS ARE FURNISHED AS A PART OF WIRED EQUIPMENT.
C. THE ELECTRICAL CONTRACTOR SHALL DO ALL POWER WIRING INCLUDING CONNECTIONS TO THE MOTORS FURNISHED BY THE CONTRACTORS OF THIS DIVISION.
D. REFER TO SECTION 15900 FOR THE WIRING TO BE PERFORMED BY THE TEMPERATURE CONTROL CONTRACTOR AND THE ELECTRICAL CONTRACTOR AS THEY RELATE TO TEMPERATURE CONTROLS.

1.06 FLUSHING AND TESTING
A. ALL NEW WATER PIPING SYSTEMS SHALL BE FLUSHED USING WATER. LOW POINT DRAINS SHALL BE OPENED AND THE SYSTEM FLUSHED TO BE DRAINABLE.
B. ALL CLOSED SYSTEMS, OPERATING UNDER PRESSURE, SHALL BE TESTED, WITH WATER, AT 1 1/2 TIMES THEIR OPERATING PRESSURE.
C. ALL OPEN SYSTEMS, SEWERS, ETC., SHALL BE TESTED WITH WATER, AT A HEAD OF FIVE (5) FEET ABOVE FINISHED FLOOR OR GRADE.
D. GAS PIPING SHALL BE FLUSHED USING 100 PSIG COMPRESSED AIR. AFTER CLEANING, PIPING SHALL FIRST BE AIR TESTED AT 5 PSIG USING GAUGES WITH INCREMENTS OF NO MORE THAN 1" W.G. AND FINAL TESTED WITH A MERCURY MANOMETER AT 6" W.G. THE FIRST TEST SHALL BE APPLIED FOR A MINIMUM OF ONE (1) HOUR, THE SECOND TEST FOR A PERIOD OF 15 MINUTES.
E. ALL PIPING SYSTEMS SHALL BE TESTED. IF LEAKS OCCUR, THE PIPE OR FITTING SHALL BE REMOVED AND REPLACED AND THE SYSTEM RETESTED.
F. PIPING SHALL NOT BE BACKFILLED OR INSULATED UNTIL TESTED. TESTS MUST BE OBSERVED BY THE ARCHITECT/ENGINEER.

1.07 SUPPORTS
A. CONTRACTOR SHALL FURNISH AND INSTALL ALL ANGLES, CHANNELS, PLATES, OR BEAMS REQUIRED FOR THE SUPPORT OF THE EQUIPMENT OF EACH SECTION, WHETHER SHOWN ON THE DRAWINGS OR NOT.
B. FURNISH AND INSTALL ALL RODS, AUXILIARY STRUCTURAL STEEL FRAMES, ATTACHMENTS, BRACKETS AND PLATFORMS REQUIRED FOR SUPPORT OF EQUIPMENT FROM OVERHEAD CONSTRUCTION FOR THE RESPECTIVE SECTION.
C. VERTICAL PIPE RISERS SHALL BE ANCHORED MIDWAY OF THEIR HEIGHT, AND SHALL BE SUPPORTED AT EACH FLOOR BY 1-1/2" X 1/4" BAR CLAMPS ATTACHED TO PIPES AND RESTING ON THE FLOOR CONSTRUCTION.
D. HORIZONTAL PIPING SHALL BE SUPPORTED BY ADJUSTABLE, WROUGHT, CLEVIS TYPE HANGERS, FEE & MASON, ELCEN, OR CRAWFORD. WHERE PARALLEL PIPES ARE INSTALLED AT THE SAME LEVEL, PROVIDE TRAPEZE HANGERS; THE VARIOUS TRADES SHALL COOPERATE IN THE JOINT USE OF SUCH HANGERS. PIPE HANGERS SHALL BE OF SIZE TO SUIT PIPE COVERING PROTECTION SADDLES.
E. PIPES SHALL BE SUPPORTED ONLY FROM THE STRUCTURAL MEMBERS OF THE BUILDING. THEY SHALL BE SUPPORTED AT SUCH INTERVALS AS WILL PREVENT SAGGING, AND SO THAT EXCESSIVE LOADS WILL NOT BE PLACED UPON ANY ONE SUPPORT. SPACING AND ROD SIZES SHALL BE AS FOLLOWS:

| PIPE SIZE | MAXIMUM SPACING | MINIMUM ROD SIZE |
|---|---|---|
| 1/2" | 6'-0" AND AT ALL TURNS | 3/8" |
| 3/4", 1" | 7'-0" AND AT ALL TURNS | 3/8" |
| 1-1/4", 1-1/2", 2" | 9'-0" AND AT ALL TURNS | 3/8" |
| 2-1/2", 3" | 10'-0" AND AT ALL TURNS | 1/2" |
| 4", 5" | 14'-0" AND AT ALL TURNS | 5/8" |
| 6" | 16'-0" AND AT ALL TURNS | 3/4" |
| 8", 10", 12" | 18'-0" AND AT ALL TURNS | 7/8" |

F. HANGER RODS SHALL BE FULL-DIAMETER STEEL WITH THREADED ENDS FOR FIELD CUTTING AND THREAD EXTENDING AS REQUIRED. WHERE THREADED ROD IS SHORTER THAN 6" IT SHALL BE DIPPED IN RUST RESISTANT PAINT PRIOR TO INSTALLATION.
G. AT THE CONTRACTOR'S OPTION, HANGER RODS SHALL BE CONTINUOUS THREADED STEEL WITH GALVANIZED FINISH.
H. HANGER RODS SHALL NOT BE BENT OR ALTERED IN ANY MATTER AND SHALL BE INSTALLED PLUMB AND TRUE. THE ROD SUPPORTING THE HANGER SHALL BE NO LONGER THAN 12" BELOW THE LOWER NUT.
I. ALTERNATE WIRE ROPE HANGER SYSTEM (CONTRACTOR OPTION)
A. GENERAL: AT THE OPTION OF THE CONTRACTOR AND IF APPROVED BY AUTHORITIES HAVING JURISDICTION, WIRE ROPE SYSTEM MAY BE USED IN LIEU OF CONVENTIONAL HANGERS. MINIMUM LOAD SAFETY FACTOR OF 5:1
B. WIRE ROPE HANGER SYSTEM AND LOCKING DEVICES TO BE ONE OF THE FOLLOWING MANUFACTURED SYSTEMS:
1. DUCTMATE INDUSTRIES, CHARLEROI, PA - CLUTCHER MECHANICAL HANGER SYSTEM WITH ZINC COATED STEEL AIRCRAFT QUALITY ROPE (FIELD CUT TO LENGTH), LOCKING DEVICE TO BE CLUTCHER CAST ZINC HOUSING WITH STAINLESS STEEL SPRINGS.
2. GRIPPLE, INC., BATAVIA, IL - HANG FAST WIRE ROPE HANGING SYSTEM WITH ZINC GALVANIZED STEEL WIRE ROPE. STANDARD LENGTHS OF 5, 10, 15 AND 30 FT WITH A PERFORATED LOOP AT ONE END. LOCKING DEVICE TO BE GRIPPLE ZINC HOUSING WITH STAINLESS STEEL SPRINGS.
3. ERICO, INC., SOLON, OH - CADDY SPEED LINK UNIVERSAL SUPPORT SYSTEM WITH GALVANIZED STEEL AIRCRAFT QUALITY WIRE ROPE. AVAILABLE IN 3,3, 6,6, 9,9, 16.4, AND 32.8 FT. LENGTHS WITH FACTORY LOOP AT ONE END. LOCKING DEVICE TO BE ERICO STAINLESS STEEL HOUSING WITH ALL STEEL LOCKING DEVICE.

1.08 VALVES
A. ALL CONNECTIONS SHALL BE PROPERLY VALVED: INSTALL VALVES IN THE DOMESTIC COLD WATER SUPPLY, HOT WATER SUPPLY, HOT WATER RETURN, AND NATURAL GAS SUPPLY AND ALL OTHER LOCATIONS AS MAY BE NECESSARY TO SHUT OFF A PORTION OF A SYSTEM WHETHER SHOWN ON THE DRAWINGS OR NOT, AND SPECIFICALLY WHERE HEREINAFTER SPECIFIED.
B. ALL VALVES SHALL COMPLY WITH THE SCHEDULE OR LEGEND ON THE DRAWINGS. WHERE VALVES ARE NOT SCHEDULED OR SHOWN IN THE LEGEND, THEY SHALL BE RATED FOR THE SERVICE.
C. ANY DOMESTIC HOT WATER SUPPLY OR COLD WATER SUPPLY SERVING TWO OR MORE FIXTURES SHALL BE SEPARATELY VALVED IN ADDITION TO THE SHUT OFF VALVE REQUIRED AT EACH FIXTURE.
D. MAKE PROVISIONS FOR DRAINING ALL LOW POINTS OF ALL PIPING SYSTEMS WHETHER INDICATED ON THE DRAWINGS OR NOT, USING A GLOBE VALVE AND IRON PIPE THREAD TO HOSE THREAD ADAPTER WITH CAP. DRAINS SHALL NOT BE LESS THAN 3/4".

1.09 VALVE TAGS
A. EACH VALVE ON EVERY PIPELINE SHALL BE PROVIDED WITH A NUMBERED BRASS TAG WHICH SHALL BE FASTENED TO THE VALVE OR LINE WITH NON-RUSTING WIRE. WHEN ALL WORK IS COMPLETE, DELIVER TO THE ARCHITECT/ENGINEER A FRAMED (UNDER GLASS) CHART WHICH SHALL INDICATE THE SERVICE AND LOCATION OF EACH VALVE. VALVES USED FOR LOCAL SHUT-OFF MAY BE OMITTED FROM THIS LIST.

1.10 EQUIPMENT IDENTIFICATION
A. ALL MECHANICAL EQUIPMENT SHALL BE CLEARLY IDENTIFIED WITH 2" HIGH STENCILED LETTERS, PAINTED ON THE EQUIPMENT (I.E. "WH-1"). THIS INCLUDES EXTERIOR EQUIPMENT WHERE THE PAINT SHALL BE WEATHER RESISTANT.

PART 2 - PRODUCTS

2.01 DESCRIPTION
A. THIS PART DEFINES THE PIPE AND FITTINGS TO BE USED FOR ALL SERVICES INSTALLED UNDER DIVISION 15.
B. REFER TO THE DRAWING LEGENDS AND SYMBOL SCHEDULES FOR DEFINITION OF THE DESIGNATORS USED IN THE FOLLOWING SPECIFICATION.

2.02 PIPE AND FITTINGS RELATED TO SECTION 15400
A. Piping designations: CWS, HWS, HWR, and TWS.
1. PIPING SHALL BE TYPE "L" HARD COPPER TUBING MADE UP WITH WROUGHT COPPER FITTINGS USING 95-5 (LEAD FREE) SOLDER.
2. CWS AND HWS PIPING UNDER FLOOR SHALL BE TYPE "K" HARD COPPER WITH FLARE FITTINGS.
B. WATER MAIN: REFER TO DIVISION 2 SPECIFICATIONS SECTIONS AND/OR CIVIL ENGINEERING DRAWINGS AND COMPLY WITH AUTHORITIES HAVING JURISDICTION.
C. SANITARY AND STORM: BELOW GRADES INSIDE BUILDING.
1. PIPING SHALL BE SERVICE WEIGHT CAST IRON SOIL PIPE, ASTM A74; WITH LEAD AND OAKUM JOINTS.
A. PREFORMED JOINTS MAY BE USED IF ACCEPTABLE TO THE LOCAL AUTHORITIES HAVING JURISDICTION.
2. POLYVINYL CHLORIDE (PVC), SCHEDULE 40 PIPE AND FITTINGS, ASTM D2665; WITH PRIMER AND SOLVENT CEMENT JOINTS MAY BE USED IF ACCEPTABLE TO THE LOCAL AUTHORITIES HAVING JURISDICTION.
D. SANITARY AND STORM: ABOVE GRADE INSIDE BUILDING.
1. 2-1/2" AND LARGER: PIPING SHALL BE SERVICE WEIGHT CAST IRON SOIL PIPE AND FITTINGS, ASTM A74, WITH LEAD AND OAKUM JOINTS.
A. CAST IRON NO-HUB PIPE, FITTINGS, AND JOINTS, CISPI 301, MAY BE USED IF ACCEPTABLE TO THE LOCAL AUTHORITIES HAVING JURISDICTION.
2. 2" AND SMALLER: PIPING SHALL BE SCHEDULE 40 GALVANIZED PIPE, ASTM 53 OR ASTM 120, WITH BLACK CAST IRON DRAINAGE FITTINGS.
A. CAST IRON NO-HUB PIPE, FITTINGS, AND JOINTS, CISPI 301, MAY USED IF ACCEPTABLE TO THE LOCAL AUTHORITIES HAVING JURISDICTION.
3. POLYVINYL CHLORIDE (PVC), SCHEDULE 40, PIPE AND FITTINGS, ASTM D2665; WITH PRIMER AND SOLVENT CEMENT JOINTS MAY BE USED IF ACCEPTABLE TO LOCAL AUTHORITIES HAVING JURISDICTION.
A. NO CELLULAR CORE OR FOAMED PIPING WILL BE PERMITTED.

2.03 PIPE AND FITTINGS RELATED TO SECTION 15350
A. GAS PIPING:
1. GAS PIPING ABOVE THE FLOOR SHALL BE BLACK, SCHEDULE 40, ASTM A120 STEEL PIPE. FITTINGS SHALL BE GALVANIZED, MALLEABLE CAST IRON FOR PIPING 2" AND SMALLER AND WELDING FITTINGS FOR PIPING 2-1/2" AND LARGER.
2. GAS PIPING BELOW GRADE SHALL BE BLACK, SCHEDULE 80, ASTM A120, ALL WELDED CONSTRUCTION, WRAPPED WITH ASPHALT IMPREGNATED KRAFT PAPER. FINISH JOINTS WITH BITUMASTIC #50 AND PAPER.

2.04 ACCESS DOORS
A. PROVIDE 24" X 24" ACCESS DOORS MANUFACTURED AS AN INTEGRAL UNIT COMPLETE WITH ALL PARTS AND READY FOR INSTALLATION AS MANUFACTURED BY ONE OF THE FOLLOWING:
1. BIRMINGHAM ORNAMENTAL.
2. KARP.
3. MILORD, DIVISION OF INRYCO.
B. PROVIDE FLUSH PANEL DOORS, EXCEPT PROVIDE RECESSED PANEL DOORS WHERE ACCESS DOORS OCCUR IN PLASTER OR ACOUSTICAL TILE GLUED TO GYPSUM LATH.
C. PROVIDE UL "B" LABELED UNITS WHERE ACCESS DOORS OCCUR IN HOUR RATED CONSTRUCTION.
D. PROVIDE SCREW DRIVER OPERATED CAM LOCKS OF NUMBER REQUIRED BY SIZE OF DOOR.
E. PROVIDE ANCHORAGE APPROPRIATE TO CONSTRUCTION.

PART 3 - EXECUTION

3.01 CUTTING AND PATCHING
A. ALL CUTTING, REPAIRING, FITTING AND REFINISHING OF IN PLACE CONSTRUCTION REQUIRED FOR THE INSTALLATION OF THE WORK OF A SECTION SHALL BE DONE AT THE EXPENSE OF THE CONTRACTOR OF THE SECTION INVOLVED, EXCEPT AS SPECIFICALLY SHOWN ON THE DRAWINGS OR HEREINAFTER SPECIFIED.
B. WORK SHALL BE PERFORMED BY CRAFTSMEN SKILLED IN THEIR RESPECTIVE TRADES.

3.02 EXCAVATING
A. THE CONTRACTOR OF EACH SECTION SHALL DO ALL EXCAVATING AND BACKFILLING AS REQUIRED FOR THE INSTALLATION OF HIS WORK.
B. THE WORK SHALL BE PERFORMED IN ACCORDANCE WITH DIVISION 2 SPECIFICATION SECTIONS AND AS HEREINAFTER SPECIFIED.
C. EXCESS EARTH FROM THE EXCAVATIONS SHALL BE DEPOSITED ON THE SITE WHERE DIRECTED.
D. ALL EXCAVATIONS SHALL BE BACKFILLED AS FOLLOWS:
1. WITHIN THE BUILDING WALLS AND UNDER PAVED AREAS: BANK RUN GRANULAR FILL COMPACTED TO 95% MODIFIED PROCTOR.
2. UNDER CONCRETE AREAS AND PAVED AREAS, FILL AS WITHIN THE BUILDINGS.
3. IN GRASSY AREAS, FILL WITH BANK RUN GRANULAR FILL TO A DEPTH OF 12 INCHES OVER THE HIGHEST PART OF THE PIPING AND FINISH WITH ACCEPTABLE EXCAVATED MATERIAL.

3.03 OPERATING INSTRUCTIONS
A. THE CONTRACTOR FOR THE SECTION SHALL, WHEN DIRECTED BY THE ARCHITECT/ENGINEER, PROVIDE THE OWNER WITH A COMPETENT TRADESMAN TO INSTRUCT THE OWNER'S PERSONNEL IN THE PROPER OPERATION AND MAINTENANCE OF THE EQUIPMENT HE HAS INSTALLED.
B. PROVIDE COPIES OF OPERATING INSTRUCTIONS, EQUIPMENT MANUALS, AND CONTROL DIAGRAMS PER DIVISION-1 CONTRACT CLOSE-OUT.
C. CONTROL DIAGRAMS AND WRITTEN INSTRUCTIONS SHALL BE FRAMED UNDER GLASS.

3.04 CODES AND STANDARDS
A. PIPING AND APPURTENANCES INSTALLED UNDER THIS DIVISION OF THE SPECIFICATIONS SHALL COMPLY WITH THE REQUIREMENTS OF THE FOLLOWING, WHERE APPLICABLE:
ANSI CODES FOR PRESSURE PIPING
ANSI STANDARDS FOR PIPE AND FITTINGS
ASME CODE FOR UNFIRED PRESSURE VESSELS
FACTORY INSURANCE ASSOCIATION
AMERICAN WATER WORKS ASSOCIATION
B. IN ADDITION, THE WORK SHALL CONFORM TO ALL APPLICABLE STATE AND LOCAL CODES AND ORDINANCES.

3.05 WORK CLEANLINESS
A. CONTRACTOR SHALL KEEP STORED MATERIALS, STORAGE AREAS, AND INSTALLED SYSTEMS FREE OF DIRT AND DEBRIS.
B. ALL EXPOSED ENDS OF INCOMPLETE OR UNCOVERED WORK SHALL BE TEMPORARILY PLUGGED AS EACH PHASE OF PIPING WORK AND DUCTWORK IS COMPLETED.
C. PIPING AND EQUIPMENT TO BE PAINTED (EXPOSED TO VIEW IN COMPLETED STRUCTURE) SHALL BE CLEANED BY REMOVING RUST, PLASTER, AND DIRT BY WIRE BRUSHING. GREASE, OIL AND SIMILAR MATERIALS SHALL BE REMOVED BY WIPING WITH CLEAN RAGS AND SUITABLE SOLVENTS.
D. MOTOR, PUMPS, AND OTHER ITEMS WITH FACTORY FINISH SHALL BE REMOVED OF GREASE AND OIL AND LEAVE WITH ALL SURFACES CLEANED AND POLISHED.

3.06 ARRANGEMENT AND ALIGNMENT
A. ALL PIPING SHALL BE ARRANGED AND ALIGNED IN ACCORDANCE WITH THE DRAWINGS. ELEVATIONS AS GIVEN MUST BE HELD. FLOOR ELEVATIONS WHERE GIVEN ARE TO HIGH POINTS OF FLOOR. DIMENSIONS MUST BE HELD AS CLOSELY AS POSSIBLE. ALL DIMENSIONS ARE TO BE FIELD CHECKED FOR ACCURACY BEFORE PIPE IS FABRICATED.
B. INSTALL ALL PIPING STRAIGHT AND DIRECT AS POSSIBLE, GENERALLY FORMING RIGHT ANGLES WITH, OR RUNNING PARALLEL WITH, WALLS OR ADJACENT PIPING. ALL PIPING SHALL BE NEATLY SPACED WITH RISERS AND DROPS RUNNING PLUMB AND TRUE.
C. RUN PIPING IN WALL CHASES, PIPE SHAFTS, HUNG CEILINGS, RECESSES, ETC., WHERE SAME ARE PROVIDED. DO NOT RUN SERVICE PIPING IN FLOOR SLAB FILL UNLESS SPECIFICALLY SO NOTED ON DRAWINGS. PIPING SHALL NOT BE COVERED OR CLOSED UNTIL TESTING IS COMPLETED.
D. DRAWINGS, IN GENERAL ARE MADE TO SCALE. ALL DIMENSIONS SHALL BE CHECKED IN THE FIELD BY THE CONTRACTOR BEFORE FINAL CONNECTIONS ARE FABRICATED
E. DRAWINGS FOR SMALL PIPING ARE, IN GENERAL, DIAGRAMMATIC AND THE EXACT LOCATION OF THESE LINES SHALL BE DETERMINED BY THE CONTRACTOR FROM FIELD MEASUREMENTS TAKEN BY HIM. THE ACTUAL ARRANGEMENT OF THE SMALL SIZE PIPING, WHEN ERECTED, SHALL FOLLOW THE GENERAL LOCATIONS SHOWN ON THE DRAWINGS AS FAR AS PRACTICABLE. THE INSTALLATION MADE IN THIS WAY SHALL BE NEAT IN APPEARANCE AND CONVENIENT TO OPERATE, AND SHALL PROVIDE FOR PROPER EXPANSION AND DRAINAGE.
F. INSTALLATION OF PIPING SYSTEMS SHALL BE COORDINATED WITH OTHER WORK TO AVOID BLOCKING BUILDING OPENINGS, LIGHT FIXTURES, ETC. PIPING SHALL NOT INTERFERE WITH ACCESS TO VALVES OR EQUIPMENT AND SHALL NOT OBSTRUCT PASSAGEWAYS. PIPING SHALL BE INSTALLED TO PROVIDE WORKING CLEARANCE FOR OPERATION AND MAINTENANCE.

3.07 MODIFICATIONS AND INTERFERENCES
A. CONTRACTOR SHALL CAREFULLY CHECK AND BECOME FAMILIAR WITH THE ARCHITECTURAL, STRUCTURAL, ELECTRICAL AND ALL MECHANICAL DRAWINGS AND DETAILS, AND MAKE NOTE OF ALL LOCATIONS WHERE WALLS, PARTITIONS, CEILINGS, STRUCTURAL MEMBERS, ETC., ARE CALLED FOR TO BE FURRED OR CLOSED-IN.
B. MODIFICATIONS TO THE ARRANGEMENT OF THE PIPING SYSTEM MAY BE REQUIRED TO SUIT STRUCTURAL CONDITIONS, OR TO AVOID INTERFERENCE WITH THE WORK OF OTHER TRADES. CONTRACTOR SHALL FURNISH ALL OFFSETS, ADDITIONAL FITTINGS, ETC., AS REQUIRED TO MEET INSTALLATION CONDITIONS WHETHER DETAILED ON THE DRAWINGS OR NOT.
C. ANY QUESTIONABLE INFORMATION IN THE SPECIFICATIONS OR ON THE DRAWINGS SHALL BE CALLED TO THE ATTENTION OF THE ARCHITECT AND/OR ENGINEER FOR CLARIFICATION BEFORE PROCEEDING WITH FABRICATION OR ERECTION OF THE PARTS AFFECTED. IF, IN THE OPINION OF THE CONTRACTOR, ANY ADDITIONAL DETAIL DRAWINGS ARE NECESSARY, HE SHALL PREPARE THEM AT HIS OWN EXPENSE, TOGETHER WITH ALL BILLS OF MATERIAL.

3.08 PIPE CLEARANCES
A. INSTALL PIPING TO PROVIDE MINIMUM CLEARANCE OF AT LEAST ONE INCH BETWEEN EXTREME PROJECTIONS OF PIPING, FLANGES, FITTINGS, VALVES, ALLOWING FOR INSULATION, PIPE EXPANSION AND THE LIKE.

3.09 PIPING EXPANSION
A. SPECIAL ATTENTION SHALL BE GIVEN TO THE INSTALLATION OF HOT AND COLD LINES WHICH HAVE AN APPRECIABLE MOVEMENT SO THAT THEY WILL NOT HIT OTHER PIPES, STRUCTURAL MEMBERS AND THE LIKE WHEN THEY HEAT UP OR COOL.
B. INSTALL ANCHORS WHERE SHOWN ON THE DRAWINGS AND WHERE REQUIRED.
C. GUIDES ARE TO BE FURNISHED ON EACH SIDE OF ALL EXPANSION LOOPS, OFFSETS, SWING JOINTS AND EXPANSION JOINTS WHETHER OR NOT DETAILED ON THE DRAWINGS.
D. COLD SPRINGING WHERE REQUIRED SHALL BE DONE WITH ANCHORS, HANGERS AND SLIDING SUPPORTS IN PLACE.

3.10 LOCATION OF VALVES, ETC.
A. SYSTEM COMPONENTS WHICH REQUIRE OBSERVATION, OPERATION OR MAINTENANCE - SUCH AS VALVES, GAUGES, CONTROLS, STRAINERS, DIRT POCKETS, CLEANOUTS, UNIONS AND FLANGES, ETC. - SHALL BE LOCATED WHENEVER POSSIBLE SO AS TO BE READILY ACCESSIBLE. THEY SHALL NOT BE CONCEALED IN CHASES OR ABOVE CEILINGS WITHOUT PROVISION FOR ACCESS. VALVES WHICH REQUIRE FREQUENT OPERATION, OR WHICH MAY REQUIRE EMERGENCY OPERATION, AND WHICH ARE NOT ACCESSIBLE FROM NORMAL WORKING LEVEL, SHOULD BE INSTALLED WITH APPROPRIATE PROVISIONS SUCH AS CHAIN WHEELS OR EXTENSION STEMS.
B. INSTALL ALL VALVES WITH STEMS IN EITHER AN UPRIGHT (PREFERRED) OR HORIZONTAL POSITION. CONTROL VALVES SHALL BE INSTALLED WITH TOP WORKS UPWARD UNLESS SPECIFICALLY SHOWN OTHERWISE.
C. GLOBE VALVES SHOULD BE INSTALLED TO SEAT AGAINST THE DIRECTION OF FLOW.

3.11 DRAINAGE AND VENTING
A. WHERE LINES ARE PURPOSELY PITCHED FOR DRAINAGE OR VENTING, AN ACCURATE GRADE SHALL BE MAINTAINED. LINES SHALL BE SUPPORTED IN SUCH A MANNER AS TO PREVENT DEFLECTION OF THE PIPING SUFFICIENT TO POCKET THE LINES.

3.12 PIPE AND FITTINGS
A. ALL PIPE SIZES REFERRED TO IN THESE SECTIONS SHOULD BE INTERPRETED AS IPS (IRON PIPE SIZE) UNLESS SPECIFICALLY DESIGNATED OTHERWISE, SUCH AS "O.D." FOR TUBING.
B. FULL LENGTHS OF PIPE SHALL BE USED WHEREVER POSSIBLE. SHORT LENGTHS OF PIPE WITH COUPLINGS WILL NOT BE PERMITTED.
C. ALL PIPE SHALL BE CUT TO EXACT MEASUREMENT TO BE INSTALLED WITHOUT FORCING (EXCEPT WHERE COLD SPRINGING IS SPECIFICALLY CALLED FOR). AFTER CUTTING, ENDS SHALL BE REAMED AND CLEANED TO ELIMINATE FOREIGN MATTER.
D. CUTTING OR OTHER WEAKENING OF THE BUILDING STRUCTURE TO FACILITATE PIPING INSTALLATION WILL NOT BE PERMITTED.
E. ALL PIPE SIZES REFERRED TO IN THESE SECTIONS SHALL BE MARKED BY THE MANUFACTURER IN ACCORDANCE WITH THE MARKING SECTIONS OF THE STANDARDS TO WHICH REFERENCE IS MADE IN THIS SPECIFICATION MANUAL. STANDARD MARKING SYSTEM FOR VALVES, FITTINGS, FLANGES AND UNIONS OF THE MANUFACTURERS STANDARDIZATION SOCIETY OF THE VALVE AND FITTINGS INDUSTRY.
F. MAKE ALL CHANGES IN SIZE AND DIRECTION OF PIPING WITH FITTINGS. DO NOT USE BENDS, MITER FITTINGS, FACE OR FLUSH BUSHINGS, STREET ELBOWS OR FIELD-FABRICATED REDUCERS.
G. CLOSE NIPPLES SHALL NOT BE PERMITTED; USE ONLY SHOULDER NIPPLES. SHOULDER NIPPLE WITH SHOULDER LENGTH LESS THAN 1-1/2" SHALL BE OF HEAVY WALL PIPE; NIPPLES HAVING SHOULDER LENGTH OF 1-1/2" OR GREATER SHALL BE OF SAME SCHEDULE AS CONNECTED PIPE.
H. UNLESS OTHERWISE SHOWN ON THE DRAWINGS, INSTALL ALL SUPPLY PIPING TO COILS, PUMPS AND OTHER EQUIPMENT INCLUDING VALVES AND STRAINERS THEREIN, AT LINE SIZE. IF A REDUCTION IS REQUIRED AT A PUMP OR CONTROL VALVE, THE REDUCER SHALL BE INSTALLED ABUTTING THE INLET AND/OR OUTLET OF THE PUMP OR VALVE.

3.13 WELDING FITTINGS
A. BUTT-WELDING FITTINGS SHALL BE MANUFACTURED ACCORDING TO ANSI STANDARD B16.9 (LATEST EDITION). MITERED JOINT ELBOWS AND FIELD FABRICATED REDUCERS ARE NOT PERMITTED.
B. MAKE ALL BRANCH CONNECTIONS WITH TEES, EXCEPT THAT ON STEEL PIPING, FORGED STEEL "WELDOLETS" AS MANUFACTURED BY BONNEY FORGE MAY BE USED WHERE THE BRANCH PIPE IS NOT LARGER THAN ONE-HALF THE SIZE OF THE MAIN PIPE (NOMINAL SIZES).

3.14 REDUCING FITTINGS
A. USE ECCENTRIC REDUCING FITTINGS OR ECCENTRIC REDUCING COUPLINGS WHERE REQUIRED TO PREVENT POCKETING OF LIQUID.
B. WHERE ECCENTRIC REDUCERS ARE USED, THE STRAIGHT SIDE SHOULD BE INSTALLED ON TOP FOR PUMP SUCTION AND ON THE BOTTOM FOR ALL OTHER LINES.

3.15 CONNECTIONS TO EQUIPMENT AND SPECIALTIES
A. PIPING SYSTEMS SHALL BE INSTALLED COMPLETE TO EQUIPMENT CONNECTIONS OR TERMINAL USE POINTS.
B. PIPING SHALL BE FABRICATED CAREFULLY AND ACCURATELY TO MEET CONNECTIONS ON EQUIPMENT WITHOUT SPRINGING THE PIPE.
C. PROVIDE UNIONS OR FLANGES AT ALL PIPING CONNECTIONS TO COILS, EQUIPMENT, CONTROL VALVES, PRESSURE REDUCING VALVES, STEAM TRAPS, ETC., AT ALL LOCATIONS AS SHOWN ON THE DRAWINGS, AND GENERALLY AS REQUIRED TO DISCONNECT PIPING FROM EQUIPMENT AND APPARATUS. ARRANGE CONNECTIONS SO THAT THE EQUIPMENT SERVED MAY BE REMOVED WITHOUT DISTURBING THE PIPING. WHERE VALVES SERVE TO ISOLATE EQUIPMENT OR SPECIALTIES, THE UNIONS OR FLANGES SHALL BE LOCATED BETWEEN VALVES AND EQUIPMENT OR SPECIALTIES. UNIONS SHALL GENERALLY BE USED FOR PIPE SIZES 2" AND SMALLER AND FLANGES FOR PIPE SIZES 2-1/2" AND LARGER.

3.16 DIELECTRIC CONNECTIONS
A. PROVIDE DIELECTRIC FITTINGS BETWEEN FERROUS AND COPPER PIPING.

3.17 PIPE SLEEVES
A. PROVIDE ALL PIPE OPENINGS THROUGH WALLS, PARTITIONS AND SLABS WITH SLEEVES HAVING AN INTERNAL DIAMETER AT LEAST 1" LARGER THAN THE OUTSIDE DIAMETER OF THE PIPE OR UNINSULATED LINES OR OF THE THICKNESS OF THE INSULATION FOR INSULATED SERVICES.
B. INSTALL SLEEVES THROUGH INTERIOR WALLS AND PARTIT

3.13 PIPING IDENTIFICATION
A. ALL NEW PIPING, INSTALLED UNDER THIS CONTRACT, SHALL BE IDENTIFIED AS TO THE TYPE OF SERVICE, AND THE DIRECTION OF FLOW, USING A SYSTEM CURRENTLY IN USE BY THE OWNER.
B. WHERE PIPING IS INSULATED, PIPE IDENTIFICATION MARKERS SHALL BE INSTALLED AFTER THE INSULATION HAS BEEN INSTALLED.
C. PIPE IDENTIFICATION MARKERS SHALL BE INSTALLED AT EACH EQUIPMENT CONNECTION AND ON TWENTY (20) FOOT CENTERS FOR RUNS OF STRAIGHT PIPING.

3.14 ACCESS DOORS
A. INSTALL ACCESS DOORS IN THE BUILDING CONSTRUCTION WHERE SHOWN ON THE DRAWINGS OR WHERE REQUIRED TO ACCESS VALVES AND CLEANOUTS.
B. COORDINATE INSTALLATION WITH THE GENERAL CONTRACTOR.

3.15 BACKFLOW PREVENTERS
A. INSTALL PREVENTERS COMPLETE WITH DRAIN. ALL PIPING IN ACCORDANCE WITH MANUFACTURER'S LITERATURE.

SECTION 15500
AUTOMATIC SPRINKLER SYSTEM

PART 1 - GENERAL

1.01 GENERAL CONDITIONS AND SPECIAL CONDITIONS
A. SECTION 15000, BASIC MATERIALS AND METHODS, APPLIES TO THE WORK SPECIFIED IN THIS SECTION.
B. GENERAL AND SPECIAL CONDITIONS APPLY TO THE WORK UNDER THIS SECTION.
C. A PRE-CONSTRUCTION MEETING BEFORE THE SHOP DRAWING PROCESS. A MEETING WILL BE HELD TO DISCUSS THE SENSITIVITY OF THE PIPING AND SPRINKLERS IN THE FACILITY AND ESPECIALLY THE SPECIAL CEILINGS. LOCATION OF AUTOMATIC SPRINKLES SHALL BE APPROVED THE ARCHITECT/OWNER.

1.02 SCOPE OF WORK
A. AUTOMATIC WET PIPE SPRINKLER SYSTEM AND COMPONENTS AS SPECIFIED HEREIN AND AS MIGHT BE SHOWN ON DRAWINGS, INCLUDING PIPING, HANGERS, VALVES, ALARMS, SUPPORTS AND SPRINKLER HEADS, NECESSARY AND AS REQUIRED FOR INSTALLATION OF COMPLETE AND APPROVED FIRE PROTECTION SYSTEMS.
B. WORK UNDER THIS SECTION SHALL BE PERFORMED BY AN APPROVED AND AUTOMATIC FIRE SPRINKLER CONTRACTOR. SHOP DRAWINGS AND CALCULATIONS SHALL BE PREPARED BY A REGISTERED PROFESSIONAL ENGINEER. APPROVED CONTRACTOR AND THE CONTRACTOR'S REGISTERED ENGINEER SHALL BE LICENSED WITH THE PROPER AUTHORITIES FOR THE LOCATION OF THIS PROJECT.
C. WORK SHALL BE DONE IN A FIRST CLASS AND WORKMANLIKE MANNER, COMPLETE IN ALL RESPECTS INCLUDING ITEMS OF WORK SPECIFIED HEREIN OR OUTLINED AND ILLUSTRATED ON DRAWINGS AND NECESSARY TO ACCOMPLISH A COMPLETE, FULLY OPERATING, SATISFACTORY AND APPROVED INSTALLATION.

1.03 APPLICABLE STANDARDS
A. LOCAL AND STATE FIRE MARSHAL CODES.
B. NATIONAL FIRE PROTECTION ASSOCIATION STANDARDS.
C. NFPA-13 - SPRINKLER SYSTEMS.
D. UNDERWRITERS LABORATORIES STANDARDS.
E. OWNER'S OR TENANT'S INSURANCE UNDERWRITER.
F. MATERIALS AND EQUIPMENT SHALL BE U.L. INC. APPROVED AND LISTED AND APPROVED BY FACTORY MUTUAL.

1.04 SHOP DRAWINGS
A. UPON AWARD OF CONTRACT, FIRE PROTECTION CONTRACTOR SHALL IMMEDIATELY PREPARE WORKING DRAWINGS, HYDRAULIC CALCULATIONS, AND MANUFACTURER'S DATA SHEETS FOR EACH AND EVERY ITEM OF EQUIPMENT AND MATERIAL; AND SUBMIT THE SAME FOR APPROVAL TO:
1. LOCAL FIRE PREVENTION BUREAU.
2. OWNER'S OR TENANT'S INSURANCE UNDERWRITER.
3. ARCHITECT/ENGINEER.
B. AFTER APPROVAL, FIRE PROTECTION CONTRACTOR SHALL SUBMIT APPROVED WORKING DRAWINGS BEARING SEAL OR STAMP OR APPROVAL FROM THE FIRE PREVENTION BUREAU AND THE OWNER'S/TENANT'S INSURANCE UNDERWRITER, IF REQUIRED. SUBMIT ONE (1) REPRODUCIBLE SEPIA AND THREE (3) BLUELINE PRINTS OF COMPLETE SHOP DRAWINGS, AND SIX (6) SETS OF MANUFACTURER'S DATA ON DEVICES AND (4) SETS OF CALCULATIONS.
C. CONTRACTOR SHALL SUBMIT COMPLETE PACKAGES. PARTIAL SUBMITTALS SHALL BE AVOIDED.
D. FIRE PROTECTION WORK, INCLUDING ORDERING OF MATERIALS, SHALL NOT BE DONE UNTIL AFTER REQUIRED APPROVALS HAVE BEEN OBTAINED.
E. PREPARE SHOP DRAWINGS AT MINIMUM SCALE OF 1/8"=1'-0" FOR PLANS, AND 1/4"=1'-0" FOR DETAILS. SHOW ALL PIPING, SPRINKLERS, HANGERS, FLEXIBLE COUPLINGS, ROOF CONSTRUCTION AND OCCUPANCY OF EACH AREA, INCLUDING CEILING AND ROOF HEIGHTS AS REQUIRED BY NFPA-13. WHEN WELDING IS PLANNED, SHOP DRAWINGS SHALL INDICATE THE SECTIONS TO BE SHOP WELDED AND THE TYPE OF WELDED FITTINGS TO BE USED.
F. INSTALLATION SHALL BE BASED ON THE LATEST ARCHITECTURAL, STRUCTURAL, HEATING AND VENTILATING, PLUMBING AND ELECTRICAL DRAWINGS.
G. SPRINKLER SYSTEM CONTROLS, VALVING, DEVICES, PIPE ROUTING, SPRINKLER HEAD LOCATIONS AND SPACING IF SHOWN ARE A CRITERIA FOR CONTRACTOR TO PREPARE FINAL SHOP DRAWINGS. FIRE PROTECTION CONTRACTOR SHALL FIELD VERIFY EXACT REQUIREMENTS FOR BUILDING REGARDING PIPE SIZES, ADEQUATE PRESSURES, SERVICE LOCATIONS, ZONING AND SUBMIT SHOP DRAWING TO THE AUTHORITIES FOR APPROVAL PRIOR TO FABRICATION OR INSTALLATION OF FIRE PROTECTION WATER SERVICE AND SYSTEMS.

1.05 AS-BUILT DRAWINGS
A. MAINTAIN AT THE SITE AN UP-TO-DATE MARKED SET OF AS-BUILT DRAWINGS, WHICH SHALL BE CORRECTED AND DELIVERED TO THE ARCHITECT UPON COMPLETION OF THE WORK.
B. FURNISH THE ARCHITECT WITH ONE (1) REPRODUCIBLE SEPIA PRINT OF EACH APPROVED SHOP DRAWINGS, REVISED TO SHOW "AS-BUILT" CONDITIONS.

1.06 VALVE DIAGRAM AND OPERATING INSTRUCTIONS
A. AT THE COMPLETION OF THE WORK, PROVIDE A SMALL SCALE PLAN OF EACH BUILDING SYSTEM INDICATING THE LOCATIONS OF ALL CONTROL VALVES, LOW POINT DRAINS, AND INSPECTOR'S TESTS. THE PLANS SHALL BE NEATLY DRAWN AND COLOR CODED TO INDICATE THE PORTION OF THE BUILDING PROTECTED BY EACH SYSTEM, FRAMED UNDER GLASS AND PERMANENTLY MOUNTED ON THE WALL ADJACENT TO THE SPRINKLER RISER VALVES.
B. FURNISH ONE (1) COPY OF NFPA-25, 'INSPECTION, TESTING AND MAINTENANCE OF WATER BASE PROTECTION SYSTEMS', AND BOUND SET(S) OF PRINTED OPERATING AND MAINTENANCE INSTRUCTIONS TO THE OWNER, AND ADEQUATELY INSTRUCT THE OWNER'S MAINTENANCE PERSONNEL IN PROPER OPERATION AND TEST PROCEDURES OF ALL FIRE PROTECTION COMPONENTS PROVIDED.

1.07 CHANGES
A. MAKE NO CHANGES IN INSTALLATION FROM LAYOUT AS SHOWN ON DRAWINGS, UNLESS CHANGE IS SPECIFICALLY APPROVED BY THE ARCHITECT. THIS DOES NOT INCLUDE MINOR REVISIONS FOR THE PURPOSE OF COORDINATION.
B. ANY CHANGES MADE, OTHER THAN AS ABOVE STATED, ARE AT THE CONTRACTOR'S OWN EXPENSE AND RESPONSIBILITY.

1.08 LEAK DAMAGE
A. THE CONTRACTOR SHALL BE RESPONSIBLE DURING THE INSTALLATION AND TESTING PERIODS OF THE SPRINKLER SYSTEM FOR ANY DAMAGE TO THE WORK OF OTHERS, TO THE BUILDING, ITS CONTENTS, ETC. CAUSED BY LEAKS IN ANY EQUIPMENT, BY UNPLUGGED OR DISCONNECTED PIPES, FITTINGS, ETC. OR BY OVERFLOW, AND SHALL PAY FOR THE NECESSARY REPLACEMENTS OR REPAIRS TO WORK OF OTHERS, DAMAGED BY SUCH LEAKAGE.

1.09 PERMITS AND FEES
A. THE CONTRACTOR SHALL PAY FOR ALL PERMITS, FEES AND CHARGES REQUIRED FOR THIS WORK.

PART 2 - PRODUCTS

2.01 GENERAL
A. THE NAMING OF MANUFACTURERS IN THE SPECIFICATIONS SHALL NOT BE CONSTRUED AS ELIMINATING THE MATERIALS, PRODUCTS OR SERVICES OF OTHER MANUFACTURERS AND SUPPLIERS HAVING APPROVED EQUIVALENT ITEMS.
B. "LISTED" SHALL REFER TO MATERIALS OR EQUIPMENT INCLUDED IN A LIST PUBLISHED BY A NATIONALLY RECOGNIZED TESTING LABORATORY THAT MAINTAINS PERIODIC INSPECTION OF PRODUCTION OF LISTED EQUIPMENT OR MATERIALS, AND WHOSE LISTING STATES EITHER THAT THE EQUIPMENT OR MATERIAL MEETS NATIONALLY RECOGNIZED STANDARD OR HAS BEEN TESTED AND FOUND SUITABLE FOR USE IN A SPECIFIED MANNER.

2.02 SPRINKLERS
A. SPRINKLERS FOR THE PROPOSED EQUIPMENT SHALL BE NEW AND OF THE LISTED AUTOMATIC, CONCEALED WITH WHITE COVER PLATE OR APPROVED EQUAL, AND SHALL BE DISTRIBUTED THROUGHOUT THE BUILDING, APPROXIMATE NUMBER OF SPRINKLERS AND TYPE SHOWN ON CONTRACTOR'S SHOP DRAWINGS. IF THE NUMBER OF SPRINKLERS INDICATED IN THE SPRINKLER COUNT SUMMARY DIFFERS FROM ACTUAL COUNT ON PLANS, THE ACTUAL COUNT SHALL BE PROVIDED.
B. INSTALL SPRINKLERS OF PROPER DEGREE RATING WHEREVER NECESSARY TO MEET REQUIREMENTS OF NFPA-13.

2.03 HOSE THREADS
A. HOSE THREADS FOR HYDRANTS AND FIRE DEPARTMENT SIAMESE CONNECTION SHALL MATCH THOSE OF THE LOCAL FIRE DEPARTMENT.

2.04 VALVES AND DEVICES
A. ALL SPRINKLER CONTROL VALVES, DEVICES, CHECK VALVES, ALARM VALVES, ETC. SHALL BE OF THE APPROVED AND LISTED TYPE.

2.05 PIPING
A. PIPE SHALL BE SCHEDULE 40, ASTM 53, BLACK STEEL WITH 125 & 250 WORKING PRESSURE CAST IRON FITTINGS, ANSI B16.4 OR 150 & 300 WORKING PRESSURE MALLEABLE IRON FITTINGS, ANSI B16.3. FITTINGS 2" & SMALLER SHALL BE STANDARD WEIGHT AND 2-1/2" & LARGER SHALL BE EXTRA HEAVY. CAST IRON FLANGED FITTINGS, ANSI B16.1, MAY BE USED FOR PIPING 3" & LARGER. NO THINWALL TYPE PIPE WILL BE PERMITTED.
B. SCHEDULE 10, ASTM 135 BLACK STEEL THINWALL PIPE WITH MECHANICAL PIPE COUPLING AND ROLL-GROOVED JOINTS MAY BE USED FOR 2-1/2" AND LARGER PIPING. NO "XL" TYPE PIPE WILL BE PERMITTED.
C. PIPING SHALL BE JOINTED BY THREADING AND/OR GROOVED JOINT MECHANICAL PIPE COUPLINGS. GROOVED JOINT COUPLINGS SHALL BE FOR 2-1/2" & LARGER ONLY AND SHALL BE EQUAL TO VICTAULIC STYLE 75 OR 77. NO THREADED THINWALL PIPE IS PERMITTED; WELDING WILL BE ACCEPTED WHEN IN ACCORDANCE WITH THE STANDARDS OF NFPA, AND WHERE APPROVED BY AUTHORITIES HAVING JURISDICTION; NO FIELD WELDING IS PERMITTED.

PART 3 - EXECUTION

3.01 HYDRANT FLOW TEST
A. HYDRANT FLOW TEST EXISTING SITE FIRE LOOP PIPING PRIOR TO MAKING ANY CONNECTIONS. NOTIFY ARCHITECT IF FLOW TEST IS UNSUCCESSFUL. SCHEDULE TESTING TO ALLOW SUFFICIENT TIME FOR REPAIRS TO BE MADE OR IF FIRE PUMP IS REQUIRED TO SUPPLEMENT THE REQUIRED PRESSURE AND DESIGN FLOW RATE.

3.02 TESTING OVERHEAD PIPE
A. TEST ALL SPRINKLER PIPING IN ACCORDANCE WITH NFPA-13 REQUIREMENTS. NOTIFY ARCHITECT'S REPRESENTATIVE, OWNER'S REPRESENTATIVE AND LOCAL FIRE DEPARTMENT, 72 HOURS IN ADVANCE REGARDING TIME AND DATE OF ALL TESTS. OWNER SHALL ALSO ARRANGE WITH INSURING AGENCY AUTHORITIES FOR THEM REPRESENTATIVE TO BE PRESENT.

3.03 DRAINS
A. PROVIDE ALL MAIN AND AUXILIARY DRAINS WHERE NECESSARY. PROVIDE MEANS FOR DRAINING ENTIRE SYSTEMS, DOWN STREAM OF ALL SHUT-OFF VALVES AND ALL LOW POINTS.

3.04 CEILING AND WALL PLATES
A. INSTALL CHROME FINISHED CEILING AND WALL PLATES WHEREVER EXPOSED SPRINKLER PIPING PASSES THROUGH CEILINGS AND WALLS.

3.05 SLEEVES
A. SET SLEEVES IN PLACE FOR ALL PIPES PASSING THROUGH FLOOR AND WALL OPENINGS.

3.06 WELDING
A. NO FIELD WELDING OF SPRINKLER PIPING SHALL BE PERMITTED.
B. JOIN ALL INSIDE PIPING BY MEANS OF SCREWED, FLANGED OR FLEXIBLE GASKETED JOINTS OR OTHER ACCEPTABLE FITTINGS.

3.07 INSPECTOR'S TEST
A. PROVIDE TEST CONNECTIONS AT MOST REMOTE POINT OF MAIN PORTION OF EACH SPRINKLER SYSTEM WITH 1-INCH PIPE AND VALVE. TEST PIPE SHALL BE CONNECTED TO SPRINKLER PIPE AT LEAST 1-1/4" DIAMETER AND SHALL DISCHARGE OUTSIDE BUILDING OR ADEQUATE FLOOR DRAIN THROUGH 1/2" SMOOTH BORE BRASS OUTLET WHERE IT CAN BE EASILY SEEN.
B. CONSULT WITH ARCHITECT'S REPRESENTATIVE AT JOB FOR EXACT LOCATION OF INSPECTORS TEST CONNECTIONS.

3.08 EXTRA SPRINKLERS
A. PROVIDE TWO SPARE SPRINKLER CABINETS COMPLETE WITH SPRINKLERS OF ASSORTED TEMPERATURE RATINGS OF THE TYPE NECESSARY AND IN USE THROUGHOUT THE INSTALLATION. EACH CABINET SHALL BE EQUIPPED WITH TWELVE (12) SPRINKLERS AND A SPECIAL SPRINKLER WRENCH FOR EACH TYPE OF SPRINKLER FURNISHED.
B. INSTALL SPRINKLER CABINETS ADJACENT TO THE RISER VALVES AND CONFER WITH ARCHITECT'S REPRESENTATIVE FOR EXACT LOCATION OF CABINET.

3.09 SPECIALTY DEVICES
A. INSTALLATION OF ALL SPECIALTY DEVICES SHALL BE IN ACCORDANCE WITH THE MANUFACTURERS' INSTRUCTIONS. WHERE THE INSTALLATION OF THOSE DEVICES REQUIRE USE OF A TORQUE WRENCH OR OTHER APPLIANCE, THE CONTRACTOR SHALL CERTIFY THAT THE MANUFACTURERS' INSTRUCTIONS HAVE BEEN COMPLIED WITH.

ULTA BEAUTY

ULTA - STORE #1384
12601 120TH AVE NE
KIRKLAND, WA 98034

PLUMBING SPECIFICATIONS


CHIPMAN DESIGN ARCHITECTURE INC
JOHN A CHIPMAN ARCHITECT
2331 FACTORIA BLVD SE, FLOOR EAST
BELLEVUE, WA 98006
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WGW Engineers, Inc.
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Revisions
1 ISSUE FOR CL/LL REVIEW 04/20/18
2 ISSUE FOR PERMIT & BID 04/20/18
3
4
5
6
7

LICENSED PROFESSIONAL ENGINEER
JOSEPH G. THOMAS
M 31400
Exp. 6/30/18
MECHANICAL
STATE OF WASHINGTON

Signature
Date 04/18/2018
Expiration Date 09/30/2019

I HEREBY CERTIFY THAT THESE PLANS HAVE BEEN PREPARED UNDER MY SUPERVISION AND THAT TO THE BEST OF MY KNOWLEDGE, THE SAME COMPLY WITH ALL RULES, REGULATIONS AND ORDINANCES OF KIRKLAND, WA RELATING TO STRUCTURES AND BUILDINGS.

ENGINEER

| Drawn By | Checked By |
|---|---|
| AC | DH |
| Scale | Date |
| NO SCALE | 04/20/18 |

Job No. 16-4170

Sheet No. P-7

City of Kirkland
Reviewed by
J Tumelson
05/30/2018



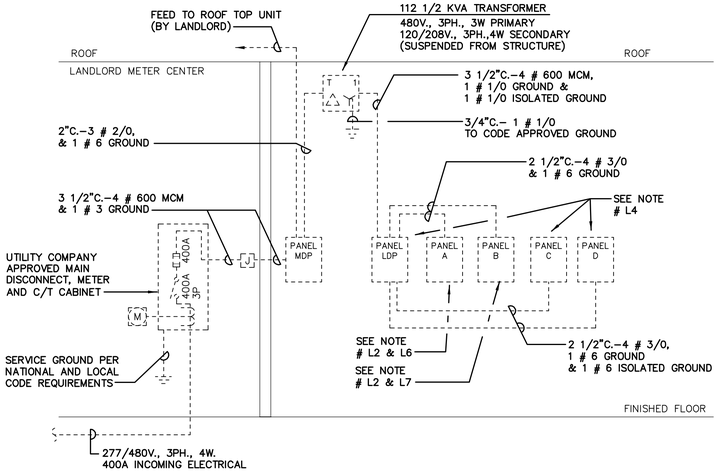

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## LIGHTING FIXTURE SCHEDULE

| TYPE | SYMBOL | DESCRIPTION | VOLTS | LAMPS | | | MANUFACTURER & CATALOG # | REMARKS |
|---|---|---|---|---|---|---|---|---|
| | | | | WATTAGE | TYPE | TOTAL WATTAGE | | |
| L1 | | 1' SURFACE MOUNTED LED STRIP W/ INTEGRAL DRIVER (ACTUAL LENGTH 11") | 120 | 500 LUMENS | LED 5,000K | 5W | ATTAINLED # AT-11-005-50 | SEE NOTES #1,9 |
| L2 | | 2' SURFACE MOUNTED LED STRIP W/ INTEGRAL DRIVER (ACTUAL LENGTH 21.5") | 120 | 900 LUMENS | LED 5,000K | 9W | ATTAINLED # AT-21-009-50 | SEE NOTES #1,9 |
| L3 | | 3' SURFACE MOUNTED LED STRIP W/ INTEGRAL DRIVER (ACTUAL LENGTH 33") | 120 | 1,200 LUMENS | LED 5,000K | 12W | ATTAINLED # AT-33-012-50 | SEE NOTES #1,9 |
| L4 | | 4' SURFACE MOUNTED LED STRIP W/ INTEGRAL DRIVER (ACTUAL LENGTH 45") | 120 | 1,500 LUMENS | LED 5,000K | 15W | ATTAINLED # AT-45-015-50 | SEE NOTES #1,9 |
| L5 | | 5' SURFACE MOUNTED LED STRIP W/ INTEGRAL DRIVER (ACTUAL LENGTH 57") | 120 | 1,800 LUMENS | LED 5,000K | 18W | ATTAINLED # AT-56-018-50 | SEE NOTES #1,9 |
| L (LD) | | 2X2 LED PANEL LIGHT W/0-10V DIMMING DRIVER ("LD" DENOTES WIRED FOR DIMMING) | 120/ 277 | 3,600 LUMENS | LED 3,700K | 30W | ATTAINLED # AT-PN-22-30-37-W | SEE NOTES #1 |
| SP | | LED PENDANT 11.8" GLOBE | 120 | 800 LUMENS | 9W LED A LAMP 5,000K | 60W | VISO # SM.07.760.E26 (ULEE SUSPENSION) W/PHILIPS # 9A19/AMB/850 DIM 120V (LAMP) | SEE NOTES #1,3 |
| U (UD) | | 8" SQUARE LED DOWNLIGHT W/ WHITE REFLECTOR & 0-10V DIMMING DRIVER ("UD" DENOTES WIRED FOR DIMMING) | 120/ 277 | 3,950 LUMENS | LED 4,000K | 38W | ATTAINLED # AT-SDL-8-38-40-WH & AT-SDL-8-HOUSING | SEE NOTES #1 |
| UE (UED) | | 8" SQUARE LED DOWNLIGHT W/ WHITE REFLECTOR, 0-10V DIMMING DRIVER & EMERGENCY BATTERY PACK ("UED" DENOTES WIRED FOR DIMMING) | 120/ 277 | 3,950 LUMENS | LED 4,000K | 38W | ATTAINLED # AT-SDL-8-38-40-WH-EM & AT-SDL-8-HOUSING | SEE NOTES #1,5 |
| UCL | | 8" SURFACE MOUNTED LED STRIP W/ REMOTE 0-10V DIMMING DRIVER (ACTUAL LENGTH 7 3/8") | 120 | 300 LUMENS | LED 4,000K | 3W | ATTAINLED # AT-LNR-100-3-40-90 | SEE NOTES #1, 10 |
| UCL4 | | 4' SURFACE MOUNTED LED STRIP W/ REMOTE 0-10V DIMMING DRIVER (ACTUAL LENGTH 44 1/8") | 120 | 1,500 LUMENS | LED 4,000K | 15W | ATTAINLED # AT-LNR-100-15-40-90 | SEE NOTES #1, 10 |
| EX | | EMERGENCY LED EXIT LIGHT WITH BATTERY BACKUP | 120/ 277 | LED | LED | 5W | PATHWAY LIGHTING # PEXUR-DL | SEE NOTES #1, 6, 7 |
| EX3 | | WALL MOUNTED 2-HEAD EMERGENCY LIGHT WITH BATTERY BACKUP (MOUNT AT 7'6" AFF) | 120/ 277 | 2-2W | LED | 2W | BEST LIGHTING # LEDR-1-HL | SEE NOTES #1, 6 |
| EX4 | | CEILING/PENDANT MOUNTED 2-HEAD EMERGENCY LIGHT WITH BATTERY BACKUP | 120/ 277 | 2-2W | LED | 2W | BEST LIGHTING # LEDR-1-HL | SEE NOTES #1, 6 |

LIGHTING SCHEDULE NOTES:

1. FURNISHED BY ULTA, INSTALLED AND WIRED BY ELECTRICAL CONTRACTOR.
2. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL LIGHT FIXTURES. COORDINATE EXACT MOUNTING REQUIREMENTS WITH ARCHITECTURAL DETAILS.
3. COORDINATE EXACT MOUNTING HARDWARE REQUIRED WITH OWNER VENDOR AND MANUFACTURER PRIOR TO BIDDING AND INCLUDE ALL COST IN BASE BID.
4. COORDINATE EXACT FINISH OF FIXTURE WITH INTERIOR DESIGNER.
5. EMERGENCY BATTERY BACK-UP WITH A MINIMUM OF 1,212 LUMEN OUTPUT FOR LED DOWNLIGHT FIXTURES FOR 90 MINUTES.
6. PROVIDE EXIT SIGNS AND EMERGENCY BATTERY PACKS PER LOCAL ORDINANCES.
7. PROVIDE DIRECTIONAL ARROWS AS SHOWN ON PLAN DRAWINGS AND AS REQUIRED BY LOCAL CODE AUTHORITIES. PROVIDE LETTER SIZE, COLOR AND TYPE AS REQUIRED BY LOCAL CODE AUTHORITIES.
8. LIGHT FIXTURES MUST BE POSITIVELY ATTACHED TO THE CEILING GRID WITH AN ATTACHMENT CAPABLE OF CARRYING 100% OF THE WEIGHT OF THE LIGHT FIXTURE IN ANY DIRECTION. THIS ATTACHMENT SHALL CONSIST OF FOUR EQUALLY SPACED ATTACHMENT POINTS USING SCREWS, RIVETS, BOLTS OR OTHER APPROVED POSITIVE ATTACHMENT DEVICES. VERIFY ALL REQUIREMENTS WITH BUILDING CODES AND LOCAL AMENDMENTS.
9. FIXTURE SHALL BE CONTINUOUS MOUNTED, PROVIDE WITH HARDWIRE BOX, CONNECTING CABLES, CONNECTORS AND MOUNTING HARDWARE AS REQUIRED FOR A COMPLETE INSTALLATION. A MAXIMUM OF 1440W (720W PER PORT) SHALL BE CONNECTED TO A SINGLE HARDWIRE BOX.
10. DRIVER SHALL BE MOUNTED INSIDE SKIN BAR CABINET, AS DETAILED ON THE ARCHITECTURAL ELEVATIONS. PROVIDE WITH 96W REMOTE PLUG-IN DRIVER (# AT-24DC-96/US (D)), CONNECTING CABLES AND MOUNTING HARDWARE AS REQUIRED FOR A COMPLETE INSTALLATION. VERIFY EXACT SIZE REQUIRED FOR EACH LOCATION BEFORE ORDERING FIXTURES.




## ELECTRICAL ONE-LINE DIAGRAM

NO SCALE

NOTES:

L1. ALL WORK SHALL COMPLY WITH THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE AND ALL LOCAL CODES. COORDINATE EXACT CODE REQUIREMENTS AND LOCAL AMENDMENTS WITH LOCAL INSPECTOR PRIOR TO ANY INSTALLATION.

L2. CONTRACTOR SHALL CONTACT EMS VENDOR FOR EXACT SYSTEM REQUIREMENTS FOR EMS/LIGHTING CONTROL PANELS AND PROVIDE ALL EQUIPMENT FOR A FULLY FUNCTIONAL SYSTEM. REFER TO SHEET CS-3 OR CONTACT ULTA PROJECT MANAGER FOR EMS VENDOR INFORMATION.

L3. LANDLORD SHALL PROVIDE GROUNDING IN ACCORDANCE WITH N.E.C. AND ALL LOCAL CODES.

L4. PANELS LDP, C AND D SHALL HAVE AN ISOLATED GROUND BUS AND ISOLATED GROUND CONDUCTOR TO POINT OF SERVICE GROUND.

L5. LANDLORD SHALL OBTAIN AVAILABLE FAULT CURRENT RATING FROM LOCAL UTILITY COMPANY AND PROVIDE PROPER PROTECTION FOR MAIN CIRCUIT BREAKER AND ALL BRANCH DEVICES.

L6. LANDLORD SHALL PROVIDE A SQUARE D POWERLINK G3 PANELBOARD, NEMA 1 ENCLOSURE, GROUND BAR, 208Y/120V, MAIN LUGS ONLY, 200 AMPS, 48 CIRCUIT INTERIOR (42 AVAILABLE), LEFT AND RIGHT 21 CIRCUIT CONTROL BUSSES, 3500 LEVEL MASTER CONTROLLER WITH LCD DISPLAY (NF3500G4), 16 PHYSICAL INPUTS, MODBUS ASCII/RTU, ASTROLOGICAL TIMECLOCK AND POWER SUPPLY. ELECTRICAL CONTRACTOR SHALL PROVIDE NEW CONTROLLABLE BREAKERS (ECB-G3) IN PANEL PROVIDED BY THE LANDLORD.

L7. LANDLORD SHALL PROVIDE A SQUARE D POWERLINK G3 PANELBOARD, NEMA 1 ENCLOSURE, GROUND BAR, 208Y/120V, MAIN LUGS ONLY, 200 AMPS, 48 CIRCUIT INTERIOR (42 AVAILABLE), LEFT AND RIGHT 21 CIRCUIT CONTROL BUSSES AND SLAVE ID SELECTOR. ELECTRICAL CONTRACTOR SHALL PROVIDE NEW CONTROLLABLE BREAKERS (ECB-G3) IN PANEL PROVIDED BY THE LANDLORD.

L8. ALL ROOF TOP UNITS, ROOF MOUNTED RECEPTACLES AND SERVICE LIGHTS FOR ROOF TOP UNITS ARE FURNISHED, INSTALLED, AND WIRED BY LANDLORD.

L9. FIELD VERIFY AND COORDINATE ALL EXISTING EQUIPMENT AND CONDITIONS.

L10. ULTA AND SQUARE D HAVE A NATIONAL AGREEMENT FOR PANELBOARDS. THIS INCLUDES PANELBOARDS, POWERLINK PANELS, TRANSFORMERS AND CIRCUIT BREAKERS. THE ELECTRICAL CONTRACTOR SHALL CALL GRAYBAR AT 1-800-784-6059 TO REQUEST THE ULTA NATIONAL ACCOUNT PRICING.

L11. CONTRACTOR SHALL INSTALL EMS DEMAND METERS ON MAIN DISTRIBUTION PANEL MDP. REFER TO EMS DRAWINGS FOR RESPONSIBILITY AND INSTALLATION INSTRUCTIONS.

L12. ALL WIRE SHALL BE THW OR THWN COPPER.

L13. CONTRACTOR SHALL VERIFY THAT LANDLORD HAS INSTALLED POWERLINK CONTROL PANELS WITH 'COMMUNICATION CABLE' (4-WIRE 18 AWG, CLASS 1 CABLE, SUBNET CABLE (GENERAL CABLE 236100, BELDEN CABLE 27326 OR EQUIVALENT)) BETWEEN 'MASTER' AND 'SLAVE' PANEL AND INSTALLED 'SLAVE BUS INTERCONNECT CABLE' BETWEEN CONTROL BUSSES FOR EACH PANEL.

## LEGEND:

——— DENOTES FURNISHED AND INSTALLED BY TENANT ELECTRICAL CONTRACTOR

- - - - - - DENOTES WORK TO BE PERFORMED BY LANDLORD UNDER A SEPARATE PERMIT

## PANEL & CIRCUIT BREAKER NOTES:

- ALL ELECTRICAL PANELS, MAIN CIRCUIT BREAKERS AND SUBFEED CIRCUIT BREAKERS SHALL BE FURNISHED, INSTALLED AND WIRED BY LANDLORD.
- BRANCH CIRCUIT BREAKERS AS REQUIRED TO POWER LANDLORD PROVIDED EQUIPMENT SHALL BE FURNISHED, INSTALLED AND WIRED BY LANDLORD.
- CONTRACTOR SHALL PROVIDE, INSTALL AND WIRE ALL BRANCH CIRCUIT BREAKERS AND ECB-G3 CONTROLLABLE CIRCUIT BREAKERS.

## ABBREVIATIONS

| SYMBOL | DESCRIPTION |
|---|---|
| A. | DENOTES AMPERES |
| A.F.F. | DENOTES ABOVE FINISHED FLOOR |
| B.P.S. | DENOTES BOLTED PRESSURE SWITCH |
| C. | DENOTES CONDUIT |
| E | DENOTE EXISTING TO REMAIN |
| EC | DENOTE ELECTRICAL CONTRACTOR |
| EWC | DENOTES ELECTRIC WATER COOLER |
| GFI | DENOTES GROUND FAULT INTERRUPTER |
| GRD. | DENOTES GROUND |
| M.L.O. | DENOTES MAIN LUGS ONLY |
| ND | DENOTE NEW DEVICE IN EXISTING LOCATION OF REMOVED DEVICE |
| N.I.C. | DENOTES NOT IN CONTRACT |
| NEC | DENOTES NATIONAL ELECTRICAL CODE |
| SS | DENOTES GRAY DEVICE WITH STAINLESS STEEL COVERPLATE |
| WP | DENOTES WEATHERPROOF |

## DRAWING INDEX

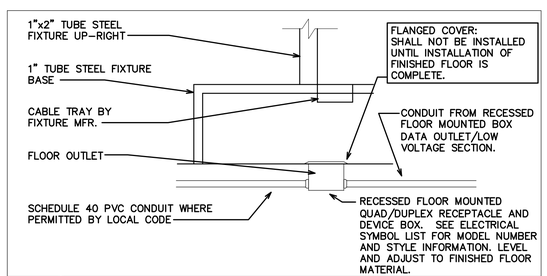


| | |
|---|---|
| E0-1 | SYMBOL LIST, ONE LINE DIAGRAM & LIGHTING SCHEDULE |
| E0-2 | PANEL SCHEDULES |
| E0-3 | ROOF PLAN - POWER, DETAILS & ARCH LIGHTING ELEVATIONS |
| E1-1 | FLOOR PLAN - LIGHTING |
| E2-1 | FLOOR PLAN - ELECTRICAL DIMENSIONS |
| E2-2 | FLOOR PLAN - POWER |
| E3-1 | FLOOR PLAN - LOW VOLTAGE WIRING |
| E3-2 | FLOOR PLAN - VOICE/DATA & SECURITY |
| E4-1 | ELECTRICAL SPECIFICATIONS |



## SYMBOL LIST

| SYMBOL | DESCRIPTION |
|---|---|
| K | SINGLE POLE SWITCH - "K" DENOTES KEY OPERATED SWITCH (MAXIMUM +48"AFF UNLESS NOTED OTHERWISE, TYPICAL FOR SWITCHES) |
| 3W | THREE WAY SWITCH |
| T | THERMAL OVERLOAD SWITCH - "P" DENOTES PILOT LIGHT |
| D | 0-10V DIMMER SWITCH (LUTRON # NTSTV-DV) |
| D1 | ELECTRONIC LOW VOLTAGE DIMMER SWITCH (LUTRON # DVELV-300P) |
| D2 | 120V DIMMER SWITCH (LUTRON # NT-600) |
| | SIMPLEX OUTLET - IG DENOTES ISOLATED GROUND TYPE (+18"AFF UNLESS NOTED OTHERWISE) |
| | DUPLEX CONVENIENCE OUTLET - IG DENOTES ISOLATED GROUND TYPE (+18"AFF UNLESS NOTED OTHERWISE) |
| | DOUBLE DUPLEX OUTLET (+18"AFF UNLESS NOTED OTHERWISE) |
| GFI | TRIPLE DUPLEX OUTLET IN THREE GANG BOX WITH (1) DUPLEX GFI OUTLET WIRE TO PROVIDE PROTECTION FOR ALL THREE DUPLEX OUTLETS |
| | DUPLEX CONVENIENCE OUTLET MOUNTED 6" ABOVE COUNTER TOP UNLESS NOTED OTHERWISE |
| GFCI | REMOTE GFCI MODULE., 20A., 120V., GRAY WITH STAINLESS STEEL COVERPLATE (HUBBELL # GFBFST20GY OR APPROVED EQUAL) |
| | HUBBELL RECTANGULAR NONMETALLIC FLUSH FLOOR BOX WITH DUPLEX RECEPTACLES, FLANGE & ALUMINUM COVER - 1-GANG FLOOR BOX # PFBRG1, RECTANGULAR FLANGE # SA3083W, ADAPTER COLLAR # PFBRAC, COVER & GASKET # SA3826, "CONTROLLED" RECEPTACLE DR20C02GRY (FLOOR OUTLETS WILL BE PROVIDED BY OWNER, CONTRACTOR SHALL INDICATE QUANTITY ON BID SHEET.) |
| | HUBBELL RECTANGULAR NONMETALLIC FLUSH FLOOR BOX WITH QUAD RECEPTACLES, FLANGE & ALUMINUM COVER - 2-GANG FLOOR BOX # PFBRG2, RECTANGULAR FLANGE # SA3084W, (2) ADAPTER COLLAR # PFBRAC, (2) COVER & GASKET # SA3826, (2) "CONTROLLED" RECEPTACLES DR20C02GRY (FLOOR OUTLETS WILL BE PROVIDED BY OWNER, CONTRACTOR SHALL INDICATE QUANTITY ON BID SHEET.) |
| | HUBBELL CIRCULAR NONMETALLIC FLUSH FLOOR BOX WITH DUPLEX RECEPTACLE, DATA OUTLET & ALUMINUM COVER - SYSTEMONE 4" FLOOR BOX # CFBS1R4PFB, MOUNTING CUP # CFBS1R4CUP, SUB PLATE # S1R4SP2X2STYLE, COVER # CFBS1R4CVRALU, "CONTROLLED" RECEPTACLE DR20C02GRY (FLOOR OUTLETS WILL BE PROVIDED BY OWNER, CONTRACTOR SHALL INDICATE QUANTITY ON BID SHEET.) |
| | HUBBELL RECTANGULAR NONMETALLIC FLUSH FLOOR BOX WITH DUPLEX RECEPTACLE & CONDUIT CONNECTION WITH FLANGE & ALUMINUM COVER - 2-GANG FLOOR BOX # PFBRG2, RECTANGULAR FLANGE # SA3084W, (2) ADAPTER COLLAR # PFBRAC, (1) COVER & GASKET # SA3826, (1) COVER & GASKET # SA2425 (2 1/8" & 3/4" OPENING), (1) "CONTROLLED" RECEPTACLES DR20C02GRY (FLOOR OUTLETS WILL BE PROVIDED BY OWNER, CONTRACTOR SHALL INDICATE QUANTITY ON BID SHEET.) |
| | DUPLEX RECEPTACLE FLUSH MOUNTED IN CEILING |
| H | HARDWIRE BOX FOR LED STRIP (ATTAINLED # AT-HWB-120) |
| | RECEPTACLE - RATING & VOLTAGE AS INDICATED ON DRAWINGS |
| | DATA OUTLET. E.C. TO PROVIDE BACKBOX AND PLASTER TRIM RING. JACKS AND DEVICES BY TELEPHONE DATA SYSTEM VENDOR. |
| | TELEPHONE OUTLET. E.C. TO PROVIDE BACKBOX AND PLASTER TRIM RING. JACKS AND DEVICES BY TELEPHONE DATA SYSTEM VENDOR. |
| | COMBINATION TELEPHONE/DATA OUTLET. E.C. TO PROVIDE BACKBOX AND PLASTER TRIM RING. JACKS AND DEVICES BY TELEPHONE DATA SYSTEM VENDOR. |
| | WIRELESS ACCESS POINT |
| J, J | JUNCTION BOX - FLOOR, WALL OR CEILING MOUNTED |
| | NON - FUSED DISCONNECT SWITCH |
| | FUSED DISCONNECT SWITCH |
| | MOTOR CONNECTION - H.P. AS NOTED ON DRAWINGS |
| | CONDUIT RUN CONCEALED IN CEILING OR WALLS |
| | CONDUIT RUN IN FLOOR SLAB |
| | CONDUIT RUN EXPOSED |
| | X DENOTES GROUND WIRE |
| | JUNCTION BOX WITH FINAL EQUIPMENT CONNECTION |
| | FINAL EQUIPMENT CONNECTION |
| | CONDUIT STUBBED UP |
| | CONDUIT STUBBED DOWN |
| | CIRCUIT BREAKER |
| | SWITCH & FUSE |
| | PANELBOARD |
| | DISTRIBUTION PANELBOARD |
| | PUSH BUTTON FOR DOOR BELL. |
| GB | GLASS BREAK DETECTOR BY OTHERS. WHEN LOCATED IN DRYWALL CEILING, INSTALL (1) SINGLE GANG JUNCTION BOX IN ACCESSIBLE CEILING SPACE FOR WIRING OF GLASS BREAK DETECTOR. INSTALL (1) SINGLE GANG JUNCTION BOX FLUSH IN DRYWALL CEILING CEILING FOR GLASS BREAK DETECTOR. PROVIDE 3/4" CONDUIT BETWEEN JUNCTION BOXES. |
| S | FLUSH MOUNT SPEAKER, FURNISHED AND INSTALLED BY SOUND VENDOR. REFER TO SOUND VENDOR DRAWINGS FOR EXACT LOCATIONS. |
| V | VOLUME CONTROL SWITCH FURNISHED AND INSTALLED BY SOUND VENDOR. PROVIDE 1900 BOX AT 48" AFF WITH SINGLE GANG TRIM PLATE AND 3/4"C. STUBBED TO ACCESSIBLE CEILING SPACE |
| M | SECURITY MONITOR FURNISHED AND INSTALLED BY CCTV VENDOR |
| AMP | SOUND SYSTEM HEAD END LOCATED IN MANAGERS OFFICE VERIFY LOCATION IN FIELD WITH GENERAL CONTRACTOR FURNISHED AND INSTALLED BY SOUND VENDOR |
| S | SAFE BOX |
| BA | BURGLAR ALARM SIREN |
| A | ALARM KEY PAD |
| DA | DOOR ALARM |
| CD | JVC STAND ALONE DESKTOP SYSTEM VERIFY LOCATION IN FIELD WITH G.C. FURNISHED AND INSTALLED BY SOUND VENDOR |
| CH | CHIME PUSH BUTTON. SEE WIRING DIAGRAM FOR CONNECTION VERIFY LOCATION IN FIELD WITH G.C. FURNISHED AND INSTALLED BY SOUND VENDOR |
| HE | HEAD END FOR CCTV SYSTEM FURNISHED AND INSTALLED BY CCTV VENDOR |
| # | CAMERA FOR CCTV SYSTEM FURNISHED AND INSTALLED BY CCTV VENDOR - SHOWN FOR REFERENCE ONLY |
| DD | DUCT MOUNTED SMOKE DETECTOR |
| PC | PHOTO CELL, PROVIDED AND INSTALLED BY EMS BY E.C. REFER TO EMS DRAWINGS FOR WIRING D |




1 **FLOOR FIXTURE OUTLET DETAIL**

SCALE: NOT TO SCALE

GENERAL NOTE

CONTRACTORS SHALL VISIT THE SITE AND FULLY ACQUAINT THEMSELVES WITH THE EXISTING CONDITIONS AND THE DIFFICULTIES INVOLVED IN THE WORK PRIOR TO SUBMISSION OF BID. INCLUDE ALL COSTS FOR A COMPLETE AND OPERATING SYSTEM IN THE BASE BID PROPOSAL. NOTIFY ARCHITECT/ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

## SPECIAL NOTE

ELECTRICAL CONTRACTOR SHALL INCLUDE ALL COSTS FOR CUTTING AND PATCHING OF FLOOR SLAB TO INSTALL NEW CONDUITS. COORDINATE EXACT SCOPE OF WORK WITH GENERAL CONTRACTOR PRIOR TO BID.

ULTA BEAUTY

ULTA - STORE #1384
12634 TOTEM LAKE BLVD NE
KIRKLAND, WA 98034

SYMBOL LIST, ONE LINE DIAGRAM & LIGHTING SCHEDULE


CHIPMAN DESIGN ARCHITECTURE INC.
JOHN A CHIPMAN ARCHITECT
1 FIRST FLOOR EAST
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Revisions
- ISSUE FOR CLIENT/LL REVIEW 04/20/18
- ISSUE FOR PERMIT & BID 04/20/18

DAVID L. DICKERSON — STATE OF WASHINGTON — REGISTERED — PROFESSIONAL ENGINEER
EXPIRES 05/05/2018
SIGNATURE
04/23/2018 DATE
05/05/2018 EXPIRATION DATE

| Drawn By | Checked By |
|---|---|
| RM | DD/AH |
| Scale: AS NOTED | Date: 04/20/18 |

Job No. 16-4170

Sheet No. E0-1

City of Kirkland Reviewed by J Tumelson 05/30/2018



SF: 1.00 CC JN: H:\16004.66 FN: 01 E01-SYMB_KIRKLAND, WA

## PANEL DATA SCHEDULE — PANEL NAME: MDP

LOCATION: STAGING
SERVICE: 277/480V.,3PH.,4W.
MAIN BREAKER: 400A–3P
MAIN LUGS ONLY:
NEUTRAL BUS: 400A
GROUND BUS: YES
SHORT CIRCUIT RATING: BY LANDLORD RMS SYM AMPS
NOTES: PROVIDED AND INSTALLED BY LANDLORD.

| CONNECTED LOAD | | DEMAND LOAD | |
|---|---|---|---|
| PHASE A | 62.12 KVA | | 52.44 KVA |
| PHASE B | 60.96 KVA | | 50.69 KVA |
| PHASE C | 67.35 KVA | | 56.94 KVA |
| TOTAL | 190.42 KVA | | 160.07 KVA |
| SHORT CIRCUIT RATING | 229.0 AMPS | | 192.5 AMPS |

DEMAND LOAD — FLUSH ☐ SURFACE ■

| KEY: | | |
|---|---|---|
| L: LIGHTING | 0.00 | KVA |
| R: RECEPTACLES | 0.00 | KVA |
| M: MOTORS | 92.96 | KVA |
| P: PANELS | 0.00 | KVA |
| T: TRANSFORMERS | 67.10 | KVA |
| E: EXTRA | 0.00 | KVA |
| S & X: SPARE & SPACE | 0.00 | KVA |

* DENOTES LOCK–OUT CLIP: ** DENOTES GFI BREAKER: *** DENOTES VIA TIMECLOCK: **** DENOTES VIA CONTACTOR

| CIRCUIT USE | CONNECTED LOAD A | B | C | CCT. NO. | CIRCUIT BREAKER | CIRCUIT BREAKER | CCT. NO. | CONNECTED LOAD A | B | C | CIRCUIT USE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| M: RTU–1 (BY LL) | 6,374 | | | 1 | 25A–3P | 25A–3P | 2 | 6,374 | | | M: RTU–3 (BY LL) |
| M: | | 6,374 | | 3 | HACR | HACR | 4 | | 6,374 | | M: |
| M: | | | 6,374 | 5 | RATED | RATED | 6 | | | 6,374 | M: |
| M: RTU–2 (BY LL) | 6,374 | | | 7 | 25A–3P | 15A–3P | 8 | 3,603 | | | M: RTU–4 (BY LL) |
| M: | | 6,374 | | 9 | HACR | HACR | 10 | | 3,603 | | M: |
| M: | | | 6,374 | 11 | RATED | RATED | 12 | | | 3,603 | M: |
| M: DOAS–1 (BY LL) | 6,929 | | | 13 | 30A–3P | 175A–3P | 14 | 32,462 | | | T: TRANSF–1 (LDP) |
| M: | | 6,929 | | 15 | HACR | | 16 | | 31,308 | | T: |
| M: | | | 6,929 | 17 | RATED | | 18 | | | 33,691 | T: |
| X: SPACE | | | | 19 | | | 20 | 0 | | | X: SPACE |
| X: SPACE | | | | 21 | | | 22 | | 0 | | X: SPACE |
| X: SPACE | | | | 23 | | | 24 | | | 0 | X: SPACE |
| R: EMS METER | | | | 25 | 15A–3P | | 26 | 0 | | | X: SPACE |
| R: (REFER TO EMS–1 DRAWING) | | | | 27 | | | 28 | | 0 | | X: SPACE |
| R: | | | | 29 | | 20A–1P | 30 | | | 4,000 | M: ECUH–1 |
| SUB TOTAL | 19,677 | 19,677 | 19,677 | | | | | 42,439 | 41,285 | 47,668 | SUB TOTAL |

## PANEL DATA SCHEDULE — PANEL NAME: LDP

LOCATION: STAGING
SERVICE: 120/208V.,3PH.,4W.
MAIN BREAKER: 400A–3P
MAIN LUGS ONLY:
NEUTRAL BUS: 400A
GROUND BUS: YES
SHORT CIRCUIT RATING: BY LANDLORD RMS SYM AMPS
NOTES: PROVIDED AND INSTALLED BY LANDLORD. PROVIDE WITH ISOLATED GROUND BUS AND GROUND BUS

| CONNECTED LOAD | | DEMAND LOAD | |
|---|---|---|---|
| PHASE A | 32.46 KVA | | 22.79 KVA |
| PHASE B | 31.31 KVA | | 21.03 KVA |
| PHASE C | 33.69 KVA | | 23.28 KVA |
| TOTAL | 97.46 KVA | | 67.10 KVA |
| SHORT CIRCUIT RATING | 270.5 AMPS | | 186.3 AMPS |

DEMAND LOAD — FLUSH ☐ SURFACE ■

| KEY: | | |
|---|---|---|
| L: LIGHTING | 0.00 | KVA |
| R: RECEPTACLES | 0.00 | KVA |
| M: MOTORS | 0.00 | KVA |
| P: PANELS | 67.10 | KVA |
| T: TRANSFORMERS | 0.00 | KVA |
| E: EXTRA | 0.00 | KVA |
| S & X: SPARE & SPACE | 0.00 | KVA |

* DENOTES LOCK–OUT CLIP: ** DENOTES GFI BREAKER: *** DENOTES VIA TIMECLOCK: **** DENOTES VIA CONTACTOR

| CIRCUIT USE | CONNECTED LOAD A | B | C | CCT. NO. | CIRCUIT BREAKER | CIRCUIT BREAKER | CCT. NO. | CONNECTED LOAD A | B | C | CIRCUIT USE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| P: PANEL _A_ (BY LL) | 11,301 | | | 1 | 200A–3P | 200A–3P | 2 | 7,070 | | | P: PANEL _C_ (BY LL) |
| P: | | 9,685 | | 3 | | | 4 | | 6,380 | | P: |
| P: | | | 11,369 | 5 | | | 6 | | | 7,460 | P: |
| P: PANEL _B_ (BY LL) | 8,091 | | | 7 | 200A–3P | 200A–3P | 8 | 6,000 | | | P: PANEL _D_ (BY LL) |
| P: | | 7,080 | | 9 | | | 10 | | 8,163 | | P: |
| P: | | | 8,032 | 11 | | | 12 | | | 6,830 | P: |
| X: SPACE | 0 | | | 13 | | | 14 | | | | X: SPACE |
| X: SPACE | | 0 | | 15 | | | 16 | | | | X: SPACE |
| X: SPACE | | | 0 | 17 | | | 18 | | | | X: SPACE |
| X: SPACE | 0 | | | 19 | | | 20 | 0 | | | X: SPACE |
| X: SPACE | | 0 | | 21 | | | 22 | | 0 | | X: SPACE |
| X: SPACE | | | 0 | 23 | | | 24 | | | 0 | X: SPACE |
| X: SPACE | 0 | | | 25 | | | 26 | 0 | | | X: SPACE |
| X: SPACE | | 0 | | 27 | | | 28 | | 0 | | X: SPACE |
| X: SPACE | | | 0 | 29 | | | 30 | | | 0 | X: SPACE |
| SUB TOTAL | 19,392 | 16,765 | 19,401 | | | | | 13,070 | 14,543 | 14,290 | SUB TOTAL |

## PANEL DATA SCHEDULE — PANEL NAME: _A_

LOCATION: STAGING
SERVICE: 120/208V.,3PH.,4W.
MAIN BREAKER:
MAIN LUGS ONLY: 225A
NEUTRAL BUS: 225A
GROUND BUS: YES
SHORT CIRCUIT RATING: BY LANDLORD RMS SYM AMPS
NOTES: PROVIDED AND INSTALLED BY LANDLORD. SQUARE D POWERLINK G3 PANEL – LIGHTING CONTROL PANEL – REFER TO ONE LINE DIAGRAM
* DENOTES LOCK–OUT CLIP: ** DENOTES GFI BREAKER: *** DENOTES VIA TIMECLOCK: **** DENOTES VIA CONTACTOR SB – DENOTES SMART BREAKER

| CONNECTED LOAD | | DEMAND LOAD | |
|---|---|---|---|
| PHASE A | 11.30 KVA | | 10.73 KVA |
| PHASE B | 9.69 KVA | | 8.71 KVA |
| PHASE C | 11.37 KVA | | 10.13 KVA |
| TOTAL | 32.36 KVA | | 29.56 KVA |
| SHORT CIRCUIT RATING | 89.8 AMPS | | 82.1 AMPS |

DEMAND LOAD — FLUSH ☐ SURFACE ■

| KEY: | | |
|---|---|---|
| L: LIGHTING | 20.44 | KVA |
| R: RECEPTACLES | 9.12 | KVA |
| M: MOTORS | 0.00 | KVA |
| P: PANELS | 0.00 | KVA |
| T: TRANSFORMERS | 0.00 | KVA |
| E: EXTRA | 0.00 | KVA |
| S & X: SPARE & SPACE | 0.00 | KVA |

| CIRCUIT USE | CONNECTED LOAD A | B | C | CCT. NO. | CIRCUIT BREAKER | CIRCUIT BREAKER | CCT. NO. | CONNECTED LOAD A | B | C | CIRCUIT USE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| X: SQUARE D | | | | | CONTROLS | CONTROLS | | | | | X: SQUARE D |
| X: POWERLINK G3 | | | | | CONTROLS | CONTROLS | | | | | X: POWERLINK G3 |
| X: POWER PACK | | | | | CONTROLS | CONTROLS | | | | | X: CONTROL PACK |
| L: PRIMARY DAYLIGHT ZONE | 504 | | | 1 | 20A–1P–SB | 20A–1P–SB | 2 | 834 | | | L: ACCENT LIGHTING |
| L: SECONDARY DAYLIGHT ZONE | | 378 | | 3 | 20A–1P–SB | 20A–1P–SB | 4 | | 876 | | L: ACCENT LIGHTING |
| L: SALES LIGHTING | | | 756 | 5 | 20A–1P–SB | 20A–1P–SB | 6 | | | 816 | L: COVE LIGHTING |
| L: SALES LIGHTING | 888 | | | 7 | 20A–1P–SB | 20A–1P–SB | 8 | 816 | | | L: COVE LIGHTING |
| L: SALES LIGHTING | | 862 | | 9 | 20A–1P–SB | 20A–1P | 10 | | 559 | | L: OFFICE/STAGING * |
| L: SALES LIGHTING | | | 840 | 11 | 20A–1P–SB | 20A–1P–SB | 12 | | | 1,000 | R: SALON STATION |
| L: SALES EMERGENCY * | 865 | | | 13 | 20A–1P–SB | 20A–1P–SB | 14 | 1,000 | | | R: SALON STATION |
| L: (EM BREAKER) – SEE NOTE # P1 | | 0 | | 15 | (EM) | 20A–1P–SB | 16 | | 1,000 | | R: SALON STATION |
| L: SALES EMERGENCY * | | | 776 | 17 | 20A–1P–SB | 20A–1P–SB | 18 | | | 1,000 | R: SALON STATION |
| L: (EM BREAKER) – SEE NOTE # P1 | 0 | | | 19 | (EM) | 20A–1P–SB | 20 | 1,000 | | | R: SALON STATION |
| L: SALES LIGHTING | | 756 | | 21 | 20A–1P–SB | 20A–1P–SB | 22 | | 1,000 | | R: SALON STATION |
| S: SPARE | | | 0 | 23 | 20A–1P–SB | 20A–1P–SB | 24 | | | 1,000 | R: SALON STATION |
| L: ARCH LIGHTING | 1,278 | | | 25 | 20A–1P–SB | 20A–1P–SB | 26 | 1,000 | | | R: SALON STATION |
| L: ARCH LIGHTING | | 1,014 | | 27 | 20A–1P–SB | 20A–1P–SB | 28 | | 1,000 | | R: SALON STATION |
| L: ARCH LIGHTING | | | 981 | 29 | 20A–1P–SB | 20A–1P–SB | 30 | | | 1,000 | R: SALON STATION |
| L: ARCH LIGHTING | 1,116 | | | 31 | 20A–1P–SB | 20A–1P–SB | 32 | 1,000 | | | R: SALON STATION |
| L: SALON PENDANT LTG | | 240 | | 33 | 20A–1P–SB | 20A–1P–SB | 34 | | 1,000 | | R: SALON STATION |
| L: EXTERIOR SIGNAGE | | | 1,200 | 35 | 20A–1P–SB | 20A–1P–SB | 36 | | | 1,000 | R: SALON STATION |
| S: SPARE | 0 | | | 37 | 20A–1P–SB | 20A–1P–SB | 38 | 1,000 | | | R: SALON STATION |
| S: SPARE | | 0 | | 39 | 20A–1P–SB | 20A–1P–SB | 40 | | 1,000 | | R: SALON STATION |
| L: ROOF TOP UNIT LTG (BY LL) | | | 0 | 41 | 20A–1P | 20A–1P–SB | 42 | | | 1,000 | R: SALON STATION |
| SUB TOTAL | 4,651 | 3,250 | 4,553 | | | | | 6,650 | 6,435 | 6,816 | SUB TOTAL |

PANEL NOTES:

P1. PROVIDE SQUARE D ECB–G3EL CIRCUIT BREAKERS FOR CONTROL OF EMERGENCY LIGHTING FIXTURES, REFER TO SHEET # E1–1 FOR ADDITIONAL INFORMATION.

P2. PROVIDE HANDLE TIES AS REQUIRED FOR MULTIWIRE BRANCH CIRCUITS WITH COMMON NEUTRALS PER NEC 210.4.

## CODE MINIMUM SERVICE CALCULATION

(277/480V., 3PH., 4W.)

| LOAD DESCRIPTION | ACTUAL (NEC) CONNECTED KW | DEMAND FACTOR | NEC DEMAND KW |
|---|---|---|---|
| LIGHTING | 15.6 | 125% | 19.5 |
| SHOW WINDOW (FT) | 59.0 | 125% | 14.8 |
| RECEPTACLES | 80.1 | 1ST 10KW @ 100% REMAINING @ 50% | 45.1 |
| WATER HEATER | 0.2 | 100% | 0.2 |
| MECHANICAL | 94.0 | 100% | 94.0 |
| (LARGEST MOTOR) | 7.0 | 25% | 1.8 |
| MISCELLANEOUS | 5.0 | 100% | 5.0 |
| | 201.9 | TOTAL KW | 180.2 |
| | | TOTAL AMPS | 216 |

## PANEL DATA SCHEDULE — PANEL NAME: _B_

LOCATION: STAGING
SERVICE: 120/208V.,3PH.,4W.
MAIN BREAKER:
MAIN LUGS ONLY: 225A
NEUTRAL BUS: 225A
GROUND BUS: YES
SHORT CIRCUIT RATING: BY LANDLORD RMS SYM AMPS
NOTES: PROVIDED AND INSTALLED BY LANDLORD. SQUARE D POWERLINK G3 PANEL – LIGHTING CONTROL PANEL – REFER TO ONE LINE DIAGRAM
* DENOTES LOCK–OUT CLIP: ** DENOTES GFI BREAKER: *** DENOTES VIA TIMECLOCK: **** DENOTES VIA CONTACTOR SB – DENOTES SMART BREAKER

| CONNECTED LOAD | | DEMAND LOAD | |
|---|---|---|---|
| PHASE A | 8.09 KVA | | 4.61 KVA |
| PHASE B | 7.08 KVA | | 4.04 KVA |
| PHASE C | 8.03 KVA | | 5.01 KVA |
| TOTAL | 23.20 KVA | | 13.66 KVA |
| SHORT CIRCUIT RATING | 64.4 AMPS | | 37.9 AMPS |

DEMAND LOAD — FLUSH ☐ SURFACE ■

| KEY: | | |
|---|---|---|
| L: LIGHTING | 0.00 | KVA |
| R: RECEPTACLES | 12.66 | KVA |
| M: MOTORS | 1.00 | KVA |
| P: PANELS | 0.00 | KVA |
| T: TRANSFORMERS | 0.00 | KVA |
| E: EXTRA | 0.00 | KVA |
| S & X: SPARE & SPACE | 0.00 | KVA |

| CIRCUIT USE | CONNECTED LOAD A | B | C | CCT. NO. | CIRCUIT BREAKER | CIRCUIT BREAKER | CCT. NO. | CONNECTED LOAD A | B | C | CIRCUIT USE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| X: SQUARE D | | | | | CONTROLS | CONTROLS | | | | | X: SQUARE D |
| X: POWERLINK G3 | | | | | CONTROLS | CONTROLS | | | | | X: POWERLINK G3 |
| X: POWER PACK | | | | | CONTROLS | CONTROLS | | | | | X: CONTROL PACK |
| S: SPARE | 0 | | | 1 | 20A–1P–SB | 20A–1P | 2 | 411 | | | R: TLT LTG/EF–2 |
| R: CASE WORK | | 1,080 | | 3 | 20A–1P–SB | 20A–1P–SB | 4 | | 600 | | R: ELECTRIC WATER COOLER |
| R: GONDOLA | | | 552 | 5 | 20A–1P–SB | 20A–1P–SB | 6 | | | 1,080 | R: GONDOLA |
| R: CASE WORK | 720 | | | 7 | 20A–1P–SB | 20A–1P–SB | 8 | 1,080 | | | R: GONDOLA |
| R: GONDOLA | | 360 | | 9 | 20A–1P–SB | 20A–1P–SB | 10 | | 720 | | R: GONDOLA |
| R: CASE WORK | | | 720 | 11 | 20A–1P–SB | 20A–1P–SB | 12 | | | 720 | R: GONDOLA |
| R: CASE WORK | 720 | | | 13 | 20A–1P–SB | 20A–1P–SB | 14 | 540 | | | R: GONDOLA |
| R: CASE WORK | | 720 | | 15 | 20A–1P–SB | 20A–1P–SB | 16 | | 720 | | R: GONDOLA |
| R: GONDOLA | | | 900 | 17 | 20A–1P–SB | 20A–1P–SB | 18 | | | 720 | R: GONDOLA |
| R: GONDOLA | 540 | | | 19 | 20A–1P–SB | 20A–1P–SB | 20 | 540 | | | R: GONDOLA |
| R: GONDOLA | | 540 | | 21 | 20A–1P–SB | 20A–1P–SB | 22 | | 540 | | R: GONDOLA |
| R: GONDOLA | | | 540 | 23 | 20A–1P–SB | 20A–1P–SB | 24 | | | 720 | R: GONDOLA |
| S: SPARE | 0 | | | 25 | 20A–1P–SB | 20A–1P–SB | 26 | 1,200 | | | R: WAITING |
| S: SPARE | | 0 | | 27 | 20A–1P–SB | 20A–1P–SB | 28 | | 540 | | R: GONDOLA |
| S: SPARE | | | 0 | 29 | 20A–1P–SB | 20A–1P–SB | 30 | | | 360 | R: GONDOLA |
| S: SPARE | 0 | | | 31 | 20A–1P–SB | 20A–1P–SB | 32 | 720 | | | R: GONDOLA |
| S: SPARE | | 0 | | 33 | 20A–1P–SB | 20A–1P–SB | 34 | | 720 | | R: GONDOLA |
| S: SPARE | | | 0 | 35 | 20A–1P–SB | 20A–1P–SB | 36 | | | 360 | R: GONDOLA |
| R: SKIN BAR | 540 | | | 37 | 20A–1P–SB | 20A–1P–SB | 38 | 1,080 | | | R: GONDOLA |
| R: SKIN BAR | | 540 | | 39 | 20A–1P–SB | 20A–1P–SB | 40 | | 0 | | S: SPARE |
| R: SKIN BAR | | | 360 | 41 | 20A–1P–SB | 20A–1P–SB | 42 | | | 1,000 | M: EXHAUST FAN EF–1 (BY LL) |
| SUB TOTAL | 2,520 | 3,240 | 3,072 | | | | | | 5,571 | 3,840 | 4,960 | SUB TOTAL |

## PANEL DATA SCHEDULE — PANEL NAME: _C_

LOCATION: STAGING
SERVICE: 120/208V.,3PH.,4W.
MAIN BREAKER:
MAIN LUGS ONLY: 225A
NEUTRAL BUS: 225A
GROUND BUS: YES
SHORT CIRCUIT RATING: BY LANDLORD RMS SYM AMPS
NOTES: PROVIDED AND INSTALLED BY LANDLORD. PROVIDE WITH ISOLATED GROUND BUS AND GROUND BUS
* DENOTES LOCK–OUT CLIP: ** DENOTES GFI BREAKER: *** DENOTES VIA TIMECLOCK: **** DENOTES VIA CONTACTOR

| CONNECTED LOAD | | DEMAND LOAD | |
|---|---|---|---|
| PHASE A | 7.07 KVA | | 4.03 KVA |
| PHASE B | 6.38 KVA | | 3.64 KVA |
| PHASE C | 7.46 KVA | | 4.25 KVA |
| TOTAL | 20.91 KVA | | 11.92 KVA |
| SHORT CIRCUIT RATING | 58.0 AMPS | | 33.1 AMPS |

DEMAND LOAD — FLUSH ☐ SURFACE ■

| KEY: | | |
|---|---|---|
| L: LIGHTING | 0.00 | KVA |
| R: RECEPTACLES | 11.92 | KVA |
| M: MOTORS | 0.00 | KVA |
| P: PANELS | 0.00 | KVA |
| T: TRANSFORMERS | 0.00 | KVA |
| E: EXTRA | 0.00 | KVA |
| S & X: SPARE & SPACE | 0.00 | KVA |

| CIRCUIT USE | CONNECTED LOAD A | B | C | CCT. NO. | CIRCUIT BREAKER | CIRCUIT BREAKER | CCT. NO. | CONNECTED LOAD A | B | C | CIRCUIT USE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| R: HAIR DRYER OUTLET | 1,200 | | | 1 | 20A–1P | 20A–1P | 2 | 1,200 | | | R: HAIR DRYER OUTLET |
| R: HAIR DRYER OUTLET | | 1,200 | | 3 | 20A–1P | 20A–1P | 4 | | 1,200 | | R: HAIR DRYER OUTLET |
| R: HAIR DRYER OUTLET | | | 1,200 | 5 | 20A–1P | 20A–1P | 6 | | | 1,200 | R: HAIR DRYER OUTLET |
| R: HAIR DRYER OUTLET | 1,200 | | | 7 | 20A–1P | 20A–1P | 8 | 1,200 | | | R: HAIR DRYER OUTLET |
| S: SPARE | | 0 | | 9 | 20A–1P | 20A–1P | 10 | | 1,200 | | R: HAIR DRYER OUTLET |
| S: SPARE | | | 0 | 11 | 20A–1P | 20A–1P | 12 | | | 1,200 | R: HAIR DRYER OUTLET |
| S: SPARE | 0 | | | 13 | 20A–1P | 20A–1P | 14 | 0 | | | S: SPARE |
| S: SPARE | | 0 | | 15 | 20A–1P | 20A–1P | 16 | | 0 | | S: SPARE |
| S: SPARE | | | 0 | 17 | 20A–1P | 20A–1P | 18 | | | 1,100 | R: HAIR DRYER |
| S: SPARE | 0 | | | 19 | 20A–1P | 20A–1P | 20 | 1,100 | | | R: HIAR DRYER |
| S: SPARE | | 0 | | 21 | 20A–1P | 20A–1P | 22 | | 540 | | R: SHAMPOO OUTLETS |
| S: SPARE | | | 0 | 23 | 20A–1P | 20A–1P | 24 | | | 0 | S: SPARE |
| S: SPARE | 0 | | | 25 | 20A–1P | 20A–1P | 26 | 720 | | | R: TOILET RECEPT. |
| S: SPARE | | 0 | | 27 | 20A–1P | 20A–1P | 28 | | 1,500 | | R: HAND DRYER |
| S: SPARE | | | 0 | 29 | 20A–1P | 20A–1P | 30 | | | 1,500 | R: HAND DRYER |
| S: SPARE | 0 | | | 31 | 20A–1P | 20A–1P | 32 | 0 | | | S: SPARE |
| S: SPARE | | 0 | | 33 | 20A–1P | 20A–1P | 34 | | 540 | | R: COLUMN RECEPT. |
| S: SPARE | | | 0 | 35 | 20A–1P | 20A–1P | 36 | | | 540 | R: COLUMN RECEPT. |
| S: SPARE | 0 | | | 37 | 20A–1P | 20A–1P | 38 | 450 | | | R: HOT WATER RECIRC PUMP |
| S: SPARE | | 0 | | 39 | 20A–1P | 20A–1P | 40 | | 200 | | R: WATER HEATER |
| S: SPARE | | | 0 | 41 | 20A–1P | 20A–1P | 42 | | | 720 | R: ROOF TOP UNIT RECP (BY LL) |
| SUB TOTAL | 2,400 | 1,200 | 1,200 | | | | | 4,670 | 5,180 | 6,260 | SUB TOTAL |

## PANEL DATA SCHEDULE — PANEL NAME: _D_

LOCATION: STAGING
SERVICE: 120/208V.,3PH.,4W.
MAIN BREAKER:
MAIN LUGS ONLY: 225A
NEUTRAL BUS: 225A
GROUND BUS: YES
SHORT CIRCUIT RATING: BY LANDLORD RMS SYM AMPS
NOTES: PROVIDED AND INSTALLED BY LANDLORD. PROVIDE WITH ISOLATED GROUND BUS AND GROUND BUS
* DENOTES LOCK–OUT CLIP: ** DENOTES GFI BREAKER: *** DENOTES VIA TIMECLOCK: **** DENOTES VIA CONTACTOR

| CONNECTED LOAD | | DEMAND LOAD | |
|---|---|---|---|
| PHASE A | 6.00 KVA | | 3.42 KVA |
| PHASE B | 8.16 KVA | | 4.65 KVA |
| PHASE C | 6.83 KVA | | 3.89 KVA |
| TOTAL | 20.99 KVA | | 11.97 KVA |
| SHORT CIRCUIT RATING | 58.3 AMPS | | 33.2 AMPS |

DEMAND LOAD — FLUSH ☐ SURFACE ■

| KEY: | | |
|---|---|---|
| L: LIGHTING | 0.00 | KVA |
| R: RECEPTACLES | 11.97 | KVA |
| M: MOTORS | 0.00 | KVA |
| P: PANELS | 0.00 | KVA |
| T: TRANSFORMERS | 0.00 | KVA |
| E: EXTRA | 0.00 | KVA |
| S & X: SPARE & SPACE | 0.00 | KVA |

| CIRCUIT USE | CONNECTED LOAD A | B | C | CCT. NO. | CIRCUIT BREAKER | CIRCUIT BREAKER | CCT. NO. | CONNECTED LOAD A | B | C | CIRCUIT USE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| R: OFFICE – COMPUTER (IG) | 180 | | | 1 | 20A–1P | 20A–1P | 2 | 540 | | | R: BURGLAR ALARM (IG) * |
| R: OFFICE – COMPUTER (IG) | | 360 | | 3 | 20A–1P | 20A–1P | 4 | | 360 | | R: TELEPHONE SYSTEM (IG) * |
| R: OFFICE – MONITOR/CCTV (IG) | | | 180 | 5 | 20A–1P | 20A–1P | 6 | | | 360 | R: DATA CABINET (IG) * |
| R: OFFICE – SOUND SYSTEM (IG) | 360 | | | 7 | 20A–1P | 20A–1P | 8 | 200 | | | R: EMS PANEL * |
| R: OFFICE – CONVENIENCE | | 1,080 | | 9 | 20A–1P | 20A–1P | 10 | | 200 | | R: SECURITY POWER PACK * |
| R: OFFICE – CHARGING STATION | | | 180 | 11 | 20A–1P | 20A–1P | 12 | | | 500 | R: SCANNER CHARGER |
| S: SPARE | 0 | | | 13 | 20A–1P | 20A–1P | 14 | 720 | | | R: SERVICE DESK RECEPT. (IG) |
| R: STOCK/ROOM DOOR BELL | | 740 | | 15 | 20A–1P | 20A–1P | 16 | | 720 | | R: SERVICE DESK RECEPT. (IG) |
| R: HAIR COLORING | | | 180 | 17 | 20A–1P | 20A–1P | 18 | | | 720 | R: SERVICE DESK RECEPT. (IG) |
| R: HAIR COLOR COMPUTER (IG) | 360 | | | 19 | 20A–1P | 20A–1P | 20 | 360 | | | R: SERVICE DESK |
| R: DRYER BOOSTER FAN | | 83 | | 21 | 20A–1P | 20A–1P | 22 | | 180 | | R: SERVICE DESK |
| R: WASHER | | | 1,000 | 23 | 20A–1P | 20A–1P | 24 | | | 360 | R: CCTV AT SERVICE DESK |
| R: ELECTRIC DRYER | 2,200 | | | 25 | 30A–2P | 20A–1P | 26 | 0 | | | S: SPARE |
| R: | | 2,200 | | 27 | | 20A–1P | 28 | | 0 | | S: SPARE |
| R: SECURITY ANTENNA * | | | 200 | 29 | 20A–1P | 20A–1P | 30 | | | 0 | S: SPARE |
| S: SPARE | 0 | | | 31 | 20A–1P | 20A–1P | 32 | 0 | | | S: SPARE |
| S: SPARE | | 0 | | 33 | 20A–1P | 20A–1P | 34 | | 540 | | R: CONCERGE RECEPTS. |
| R: SHOW WINDOWS | | | 1,080 | 35 | 20A–1P | 20A–1P | 36 | | | 0 | S: SPARE |
| R: COFFEE MAKER | 900 | | | 37 | 20A–1P | 20A–1P | 38 | 180 | | | R: FR–17 MOBILE WORK STATION |
| R: COFFEE MAKER | | 900 | | 39 | 20A–1P | 20A–1P | 40 | | 800 | | R: REFRIGERATOR |
| R: U/C REFRIGERATOR | | | 720 | 41 | 20A–1P | 20A–1P | 42 | | | 1,350 | R: MICROWAVE |
| SUB TOTAL | 4,000 | 5,363 | 3,540 | | | | | 2,000 | 2,800 | 3,290 | SUB TOTAL |

City of Kirkland
Reviewed by
J Tumelson
05/30/2018

ENR18-03206
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ULTA BEAUTY

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PANEL SCHEDULES


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Revisions
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EXPIRES 05/05/2018

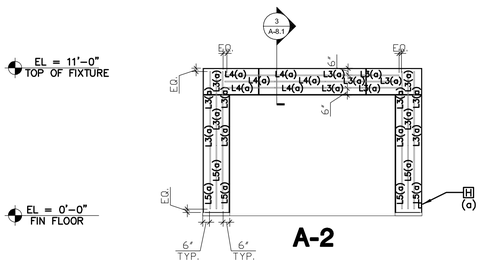
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04/23/2018 DATE — 05/05/2018 EXPIRATION DATE

| Drawn By | Checked By |
|---|---|
| RM | DD/AH |
| Scale: AS NOTED | Date: 04/20/18 |

Job No. 16-4170

Sheet No. E0-2

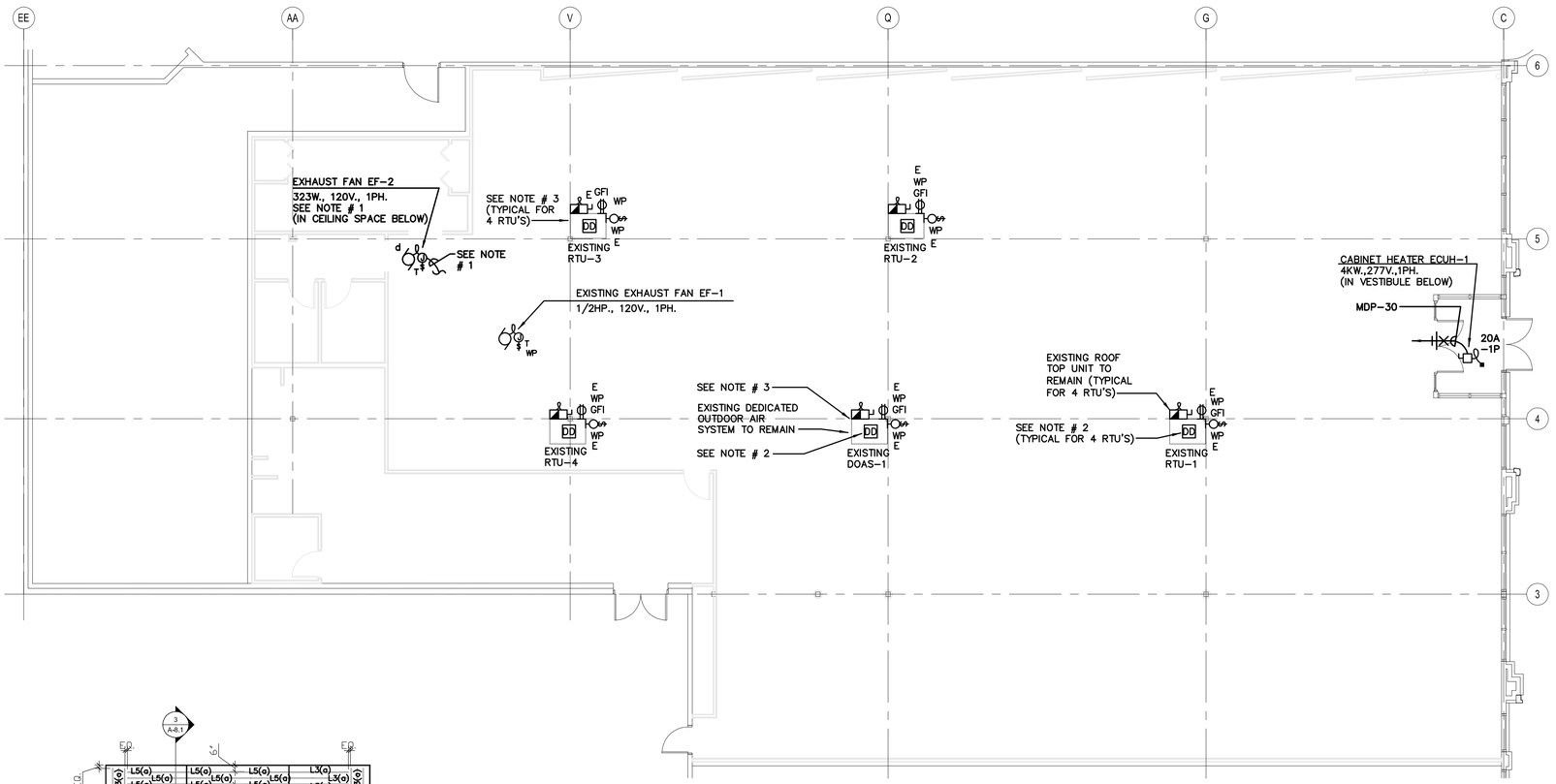



## ARCH LIGHTING ELEVATION

NO SCALE

GENERAL NOTES:

1. REFERENCE POWER SHEETS E2-1 AND E2-2 FOR POWER CONNECTIONS FOR ALL ARCH LIGHTING FIXTURES.




## ROOF PLAN - POWER

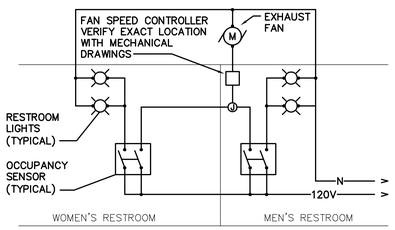
SCALE: 1/8"=1'-0"

0' 8' 16' 24' 32'

NORTH

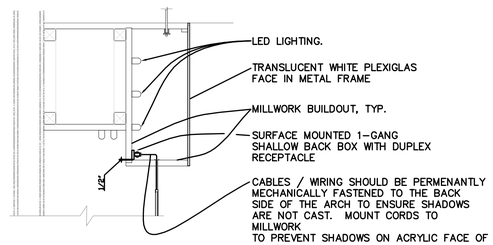
NOTES:

1. EXHAUST FAN TO BE POWERED FROM LIGHTING CIRCUIT THAT SERVES RESTROOMS ROOMS AND CONTROLLED VIA OCCUPANCY SENSOR IN EACH ROOM AND FAN SPEED CONTROLLER. SEE SHEET E1-1 FOR CIRCUIT DESIGNATION AND DETAIL ON THIS SHEET FOR WIRING DIAGRAM.
2. DUCT SMOKE DETECTOR AND SHUT-DOWN RELAY SHALL BE EXISTING TO REMAIN. COORDINATE RELOCATION OF EXISTING REMOTE INDICATOR LOCATIONS WITH ULTA'S CONSTRUCTION MANAGER AND LOCAL CODES.
3. DISCONNECT, FINAL CONNECTION, WEATHERPROOF GFCI SERVICE RECEPTACLE, SERVICE LIGHT AND ASSOCIATED BRANCH CIRCUIT ARE EXISTING TO REMAIN.



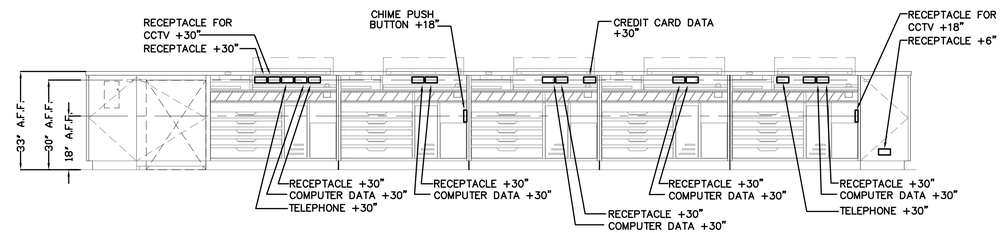

## 2 E0-3 TOILET EXHAUST FAN (EF-2) CONTROL DIAGRAM

NO SCALE




## 5 E0-3 ARCH SIGN RECEPTACLE DETAIL

NO SCALE




## 3 E0-3 CASHWRAP ROUGH-IN ELEVATION

NO SCALE

NOTE:
INSTALL OUTLETS ON INSIDE FACE OF BACK PANEL OF CASHWRAP UNLESS INDICATED OTHERWISE. REFER TO DETAIL # 1 SHEET F1.1C FOR ADDITIONAL INFORMATION. NO SENSOR, KEYPADS OR SIMILAR DEVICES SHALL BE MOUNTED TO MILLWORK.

ULTA BEAUTY

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ROOF PLAN - POWER, DETAILS & ARCH LIGHTING ELEVATIONS

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| Drawn By | Checked By |
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| RM | DD/AH |
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| AS NOTED | 04/20/18 |

Job No. 16-4170

Sheet No. E0-3

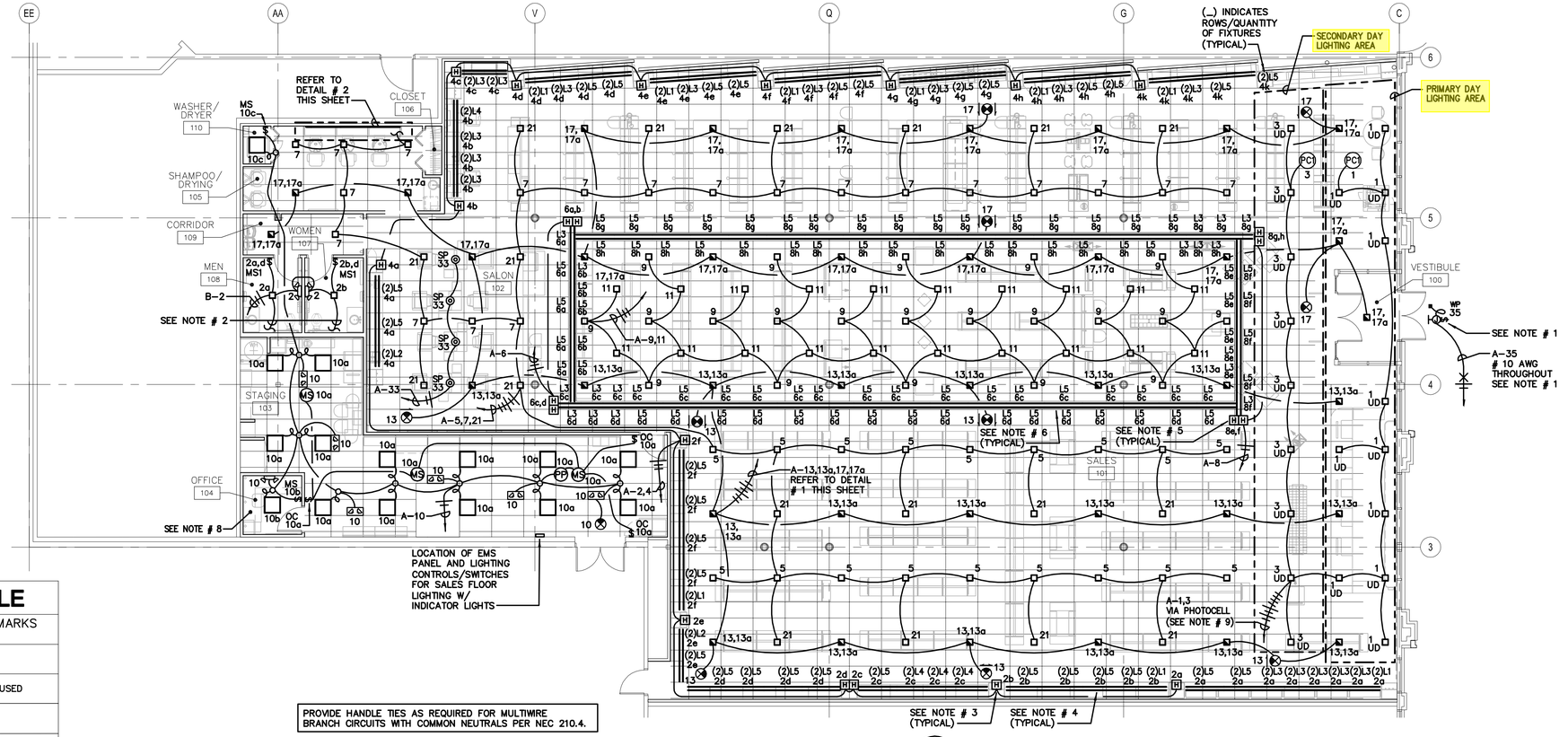
City of Kirkland
Reviewed by
J Tumelson
05/30/2018



SF: 1.00 CC JN: H:\16004.66 FN: 03 E03-ROOF_KIRKLAND, WA

Occupancy Sensor Controls shall be installed per WSEC C405.2.1

Daylight Responsive Controls shall be installed per WSEC C405.2.4, C405.2.4.1 & C405.2.4.1.1.




## FLOOR PLAN - LIGHTING

SCALE: 1/8"=1'-0"

0' 8' 16' 24' 32'

NORTH

OCCUPANCY SENSOR NOTES:

OS1. FURNISH AND INSTALL A POWER PACK FOR EACH CIRCUIT/SWITCH LEG THAT IS CONTROLLED BY A OCCUPANCY SENSOR.

OS2. PLAN DRAWING LOCATIONS OF OCCUPANCY SENSOR ARE DIAGRAMATIC ONLY. CONTRACTOR SHALL LOCATE OCCUPANCY SENSOR PER MANUFACTURER'S RECOMMENDATIONS.

OS3. CONTRACTOR SHALL COORDINATE OCCUPANCY SENSOR SETTINGS WITH OWNER AND FIELD ADJUST AS REQUIRED.

OS4. RESTROOM WALL MOUNTED OCCUPANCY SENSORS SHALL TURN ON WHEN OCCUPANCY IS DETECTED AND TURN OFF AFTER NO OCCUPANCY HAS BEEN DETECTED FOR 30 MINUTES. IF, SWITCH IS MANUALLY TURNED OFF AND NO OCCUPANCY HAS BEEN DETECTED AFTER BRIEF GRACE PERIOD, SENSOR SHALL DEFAULT TO OCCUPANCY DETECTION ON.

OS5. OCCUPANCY SENSORS SHALL BE MANUAL ON AND TURN OFF AFTER NO OCCUPANCY HAS BEEN DETECTED FOR 30 MINUTES.

## OCCUPANCY SENSOR SCHEDULE

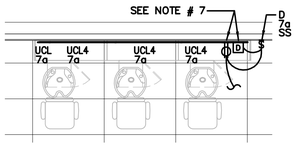
| | TYPE DESCRIPTION | MANUFACTURER & MODEL NUMBER | REMARKS |
|---|---|---|---|
| MS | 360° MOTION SENSOR LOW VOLTAGE – PASSIVE INFRARED | SENSORSWITCH # CM–10 | |
| MS1 | 360° MOTION SENSOR LINE VOLTAGE – PASSIVE INFRARED | SENSORSWITCH # CMR–10 | NOT USED |
| PP | MOTION SENSOR POWER PACK | SENSORSWITCH # PP–20 | |
| PC1 | PHOTOCELL WITH 0–10V DIMMING | SENSORSWITCH # CMRB–ADC | SEE NOTE # 9 |
| ~~3~~ OC | 3–WAY WALL MOUNTED CEILING SENSOR INTERFACE SWITCH | SENSORSWITCH # SPODM–SA–3X | |
| ~~3~~ OC1 | WALL MOUNTED CEILING SENSOR INTERFACE SWITCH | SENSORSWITCH # SPODM–SA | NOT USED |
| ~~3~~ OC2 | WALL MOUNTED CEILING SENSOR INTERFACE SWITCH WITH 0–10V DIMMING | SENSORSWITCH # SPODM–SA–D | NOT USED |
| ~~3~~ OC3 | 3–WAY WALL MOUNTED CEILING SENSOR INTERFACE SWITCH WITH 0–10V DIMMING | SENSORSWITCH # SPODM–SA–3X–D | NOT USED |
| ~~3~~ OC4 | WALL MOUNTED CEILING SENSOR INTERFACE SWITCH WITH 0–10V DIMMING | SENSORSWITCH # SPODM–SA–D | NOT USED |
| ~~3~~ MS | WALL MOUNTED MOTION SENSOR | SENSORSWITCH # WSD | |
| ~~3~~ MS1 | 2 CIRCUIT WALL MOUNTED MOTION SENSOR | SENSORSWITCH # WSD–2P | |

## LIGHTING ZONE SCHEDULE

SIGNAGE, INTERIOR AND EXTERIOR LIGHTING IS CONTROLLED AUTOMATICALLY BY THE EMS SYSTEM VIA THE LIGHTING CONTROL PANELS WITH SMART/CONTROLLABLE BREAKERS. CONTROL/OVERRIDES WILL BE AT EMS PANELS AND CONTROLLED VIA SECURITY STATION KEY PAD.

ALL RECEPTACLES TO BE CONTROLLED BY EMS SYSTEM SHALL BE PROVIDED WITH ENGRAVED NEC "CONTROLLED RECEPTACLE MARKING SYMBOL".

| ZONE | CIRCUITS CONTROLLED | REMARKS |
|---|---|---|
| 1 | A–5,7 | EMPLOYEE LIGHTING – AREA 1 |
| 2 | A–11 | EMPLOYEE LIGHTING – AREA 2 |
| 3 | A–1 | SALES – PRIMARY DAYLIGHTING |
| 4 | A–3 | SALES – SECONDARY DAYLIGHTING |
| 5 | A–2,4,12,14,16,18,20,22,24,26, 28,30,32,34,36,38,40,42<br>B–4,14,16,18,20,41 | EMPLOYEE LIGHTING – VALENCE & RECEPTACLES |
| 6 | A–21,25,27,29,31<br>B–3,5,6,7,8,9,10,11,12,13, 15,17,19,21,22,23,24,26,28, 30,32,34,36,37,38,39,42 | CUSTOMER LIGHTING – AREA 1 |
| 7 | A–9 | CUSTOMER LIGHTING – AREA 2 |
| 8 | A–6,8,33 | CUSTOMER LIGHTING – COVE & PENDANTS |
| 9 | A–13a,17a | ENTRY LIGHTING |
| 10 | A–35 | EXTERIOR SIGNAGE |
| 11 | – | SPARE |

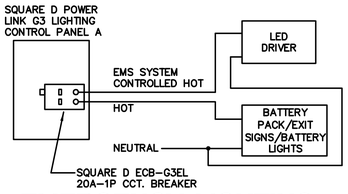



## ② SHAMPOO/DRYING CABINET

SCALE: 1/4"=1'-0"

0' 4' 8' 12' 16'

NORTH




## ① EMERGENCY LIGHTING FIXTURE WIRING DIAGRAM

NO SCALE

LIGHTING PLAN NOTES:

1. PROVIDE FINAL CONNECTION TO SIGNAGE. COORDINATE LOCATION AND REQUIREMENTS WITH SIGN CONTRACTOR. PROVIDE LOCAL DISCONNECT SWITCH MOUNTED IN AN INCONSPICUOUS LOCATION. EACH SIGN CIRCUIT SHALL HAVE SEPARATE NEUTRAL AND SEPARATE EQUIPMENT GROUND CONDUCTORS. SIGNAGE TO BE FURNISHED AND INSTALLED BY ULTA, WITH FINAL CONNECTION BY ELECTRICAL CONTRACTOR. VERIFY NUMBER AND LOCATION OF SIGNS WITH OWNER'S REPRESENTATIVE PRIOR TO ROUGH–IN.
2. CONNECT THE EXHAUST FAN SERVING THIS ROOM TO THE SWITCHED SIDE OF THE LOCAL LIGHTING CIRCUIT SERVING THIS ROOM. SEE SHEET E0–3 FOR CONTINUATION AND DETAIL FOR ADDITIONAL INFORMATION.
3. MOUNT HARDWIRE BOX FOR VALANCE/ARCH VALANCE LIGHTING INSIDE ARCH ON BACK PANEL OF MILLWORK BEHIND ARCH FACE PANEL IN CONCEALED ACCESSIBLE LOCATION. REFER TO TYPICAL HARDWIRE BOX LOCATION ON ARCHITECTURAL SHEET A8.1.
4. PENETRATIONS FOR CONNECTING CABLES FROM THE HARDWIRE BOX TO LIGHTING FIXTURE SHALL SHALL BE MADE IN–LINE WITH LIGHT FIXTURE TO CONCEALED CABLES. NO CONDUIT OR CONNECTION CABLES SHALL BE VISIBLE FROM THE SALES FLOOR.
5. MOUNT HARDWIRE BOX TO BOTTOM SIDE OF CHAIN HUNG PLYWOOD FOR CENTER BOX LIGHTING, REFER TO ARCHITECTURAL DETAIL. EACH ROW SHALL HAVE (1) HARDWIRE BOX DIRECTLY CONNECTED TO END FIXTURE OF EACH ROW.
6. CENTER BOX LED STRIPS SHALL BE MOUNTED TO BOTTOM SIDE OF CHAIN HUNG PLYWOOD, REFER TO ARCHITECTURAL DETAIL.
7. LED DRIVER AND RECEPTACLE FOR UNDER CABINET LIGHTING. DRIVER SHALL BE MOUNTED IN CABINET AND RECEPTACLE TO BE MOUNTED IN BACKPANEL OF MILLWORK AT 62" A.F.F.. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION. THE SWITCH CONTROLS THE RECEPTACLE ON/OFF, THE DRIVER IS PLUGGED IN TO RECEPTACLE, THE SWITCH IS HARDWIRED TO THE DRIVER FOR 0/10V DIMMING AND THE UNDER CABINET LIGHTS ARE PLUG INTO THE DRIVER WITH FACTORY CORD.
8. 'L' TYPE FIXTURE IN OFFICE SHALL BE SURFACE MOUNTED. CONTACT VENDOR TO SUPPLY SURFACE BOX KIT (PART # 60R20070100–2X2W) AS REQUIRED TO SURFACE MOUNT FIXTURE. VERIFY EXACT REQUIREMENTS WITH VENDOR.
9. ALL LIGHTING CONTROL WIRING SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR. PROVIDE CONTROL WIRES FOR 0–10V DIMMING FOR EACH CIRCUIT/ZONE INDICATED IN "LIGHTING ZONE SCHEDULE". PROVIDE 2 # 18 WIRES FOR EACH CIRCUIT FROM EACH FIXTURE (DAISY CHAINED) TO PHOTOCELL.

GENERAL LIGHTING NOTES:

A. EXISTING CONDITIONS SHOWN ARE BASED ON AS–BUILT DRAWINGS PROVIDED BY THE OWNER. CONTRACTOR SHALL ADJUST FOR ACTUAL FIELD CONDITIONS AT NO ADDITIONAL EXPENSE TO THE OWNER.

B. ALL CONDUIT AND JUNCTION BOXES SHALL BE SUPPORTED INDEPENDENTLY FROM ACOUSTICAL CEILING.

C. CONTRACTOR SHALL LAYOUT BRANCH CIRCUIT WIRING AND ARRAGEMENT OF HOME RUNS FOR MAXIMUM EFFICIENCY. INCREASE WIRE SIZE IF VOLTAGE DROP EXCEEDS 2% OR 100 FEET IN LENGTH.

D. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL LIGHTING FIXTURES.

E. ALL LIGHT FIXTURES SHOWN ( ◪ ) SHALL BE WIRED TO EMERGENCY LIGHTING CIRCUIT UNLESS NOTED OTHERWISE.

F. ALL LIGHT FIXTURES SHOWN ( ▢ ) SHALL BE TYPE "L" UNLESS NOTED OTHERWISE.

G. ALL LIGHT FIXTURES SHOWN ( ⊓ ) SHALL BE TYPE "U" UNLESS NOTED OTHERWISE.

H. ALL LIGHT FIXTURES SHOWN ( ◪ ) SHALL BE TYPE "UE" AND WIRED TO EMERGENCY LIGHTING CIRCUIT UNLESS NOTED OTHERWISE. REFER TO DETAIL 1/E1–1.

I. ALL LIGHT FIXTURES SHOWN ( ⊗ ◑ ) SHALL BE TYPE "EX" UNLESS NOTED OTHERWISE.

J. ALL LIGHT FIXTURES SHOWN ( ⇦⇨ ) SHALL BE TYPE "EX3" UNLESS NOTED OTHERWISE.

K. ALL LIGHT FIXTURES SHOWN ( ◪ ) SHALL BE TYPE "EX4" UNLESS NOTED OTHERWISE.

L. MAINTAIN CONTINUITY OF CIRCUITS SERVING FIXTURES, DEVICES, OR EQUIPMENT NOT BEING REMOVED.

M. ALL FIXTURES INSTALLED IN SUSPENDED CEILINGS SHALL BE DIRECTLY SUPPORTED FROM THE BUILDING STRUCTURE PER BUILDING CODES AND LOCAL AMENDMENTS. IF STEEL RODS ARE UTILIZED FOR THIS PURPOSE, NO LESS THAN 2 SEPARATE RODS SHALL BE USED. THESE RODS MUST EXTEND FROM OPPOSITE CORNERS OF THE FIXTURE WITH EACH ROD INDEPENDENTLY SUPPORTED FROM STRUCTURE. ATTACH RODS WITHIN 3 INCHES OF EACH CORNER OF EACH FIXTURE. ALL LIGHTING FIXTURES SHALL BE ATTACHED TO CEILING GRID. VERIFY ALL REQUIREMENTS WITH BUILDING CODES AND LOCAL AMENDMENTS.

N. BRANCH CIRCUIT WIRING IS SHOWN AS A GUIDE ONLY, EXACT QUANTITIES OF CONDUITS AND CONDUCTORS ARE NOT INDICATED. CONTRACTOR SHALL PROVIDE BRANCH CIRCUIT WIRING AS REQUIRED FOR A COMPLETE AND OPERABLE SYSTEM.

O. SIGNAGE, INTERIOR AND EXTERIOR LIGHTING SHALL BE CONTROLLED BY THE EMS SYSTEM VIA THE LIGHTING CONTROL PANELS, REFER TO SHEET E0–1 FOR ADDITIONAL INFORMATION. LOCAL LIGHTING OVERRIDES WILL BE AT LIGHTING CONTROL PANELS AND SECURITY STATIONS THROUGHOUT THE BUILDING. COORDINATE EXACT LOCATIONS AND REQUIREMENTS WITH ENERGY MANAGEMENT COMPANY AND SECURITY VENDOR.

P. REFERENCE DETAIL ON SHEET # E0–3 FOR ARCH LIGHTING DETAILS.

Q. CONTRACTOR SHALL FURNISH AS–BUILT DRAWINGS FOR ELECTRICAL POWER SYSTEMS WITHIN 30 DAYS OF SYSTEM ACCEPTANCE.

R. CONTRACTOR SHALL FURNISH OPERATION & MAINTENANCE INSTRUCTIONS FOR SYSTEMS AND EQUIPMENT TO THE BUILDING OWNER OR DESIGNATED REPRESENTATIVE.

S. CONTRACTOR SHALL PROVIDE WRITTEN VERIFICATION WITH COPY TO ENGINEER THAT LIGHTING SYSTEMS HAVE BEEN TESTED TO ENSURE PROPER CALIBRATION, ADJUSTMENT, PROGRAMMING AND OPERATION.

T. SWITCHES SHALL BE GRAY DEVICES WITH STAINLESS STEEL COVER PLATE WHEN LOCATED OVER WC–5, STAINLESS STEEL OR OTHER GRAY WALL FINISHES. SEE ARCHITECTURAL INTERIOR ELEVATIONS FOR ADDITIONAL INFORMATION.

City of Kirkland Reviewed by J Tumelson 05/30/2018

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FLOOR PLAN - LIGHTING


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JOHN A CHIPMAN ARCHITECT
1 3 3 S T. F L O O R E A S T
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P H O N E 8 0 2 7 9 8 . 9 9 0 0

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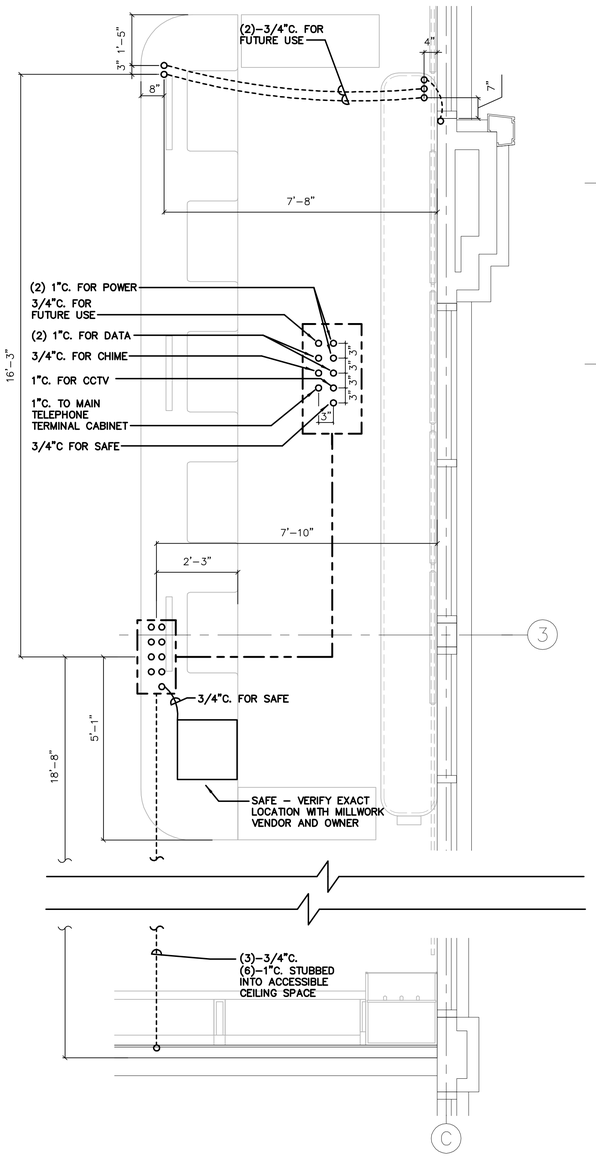

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| Drawn By | Checked By |
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| RM | DD/AH |
| Scale | Date |
| AS NOTED | 04/20/18 |

Job No. 16-4170

Sheet No. E1-1




## ENLARGED ROUGH-IN PLAN (CASHWRAP) ELECTRICAL DIMENSIONS

SCALE: 1/2"=1'–0"

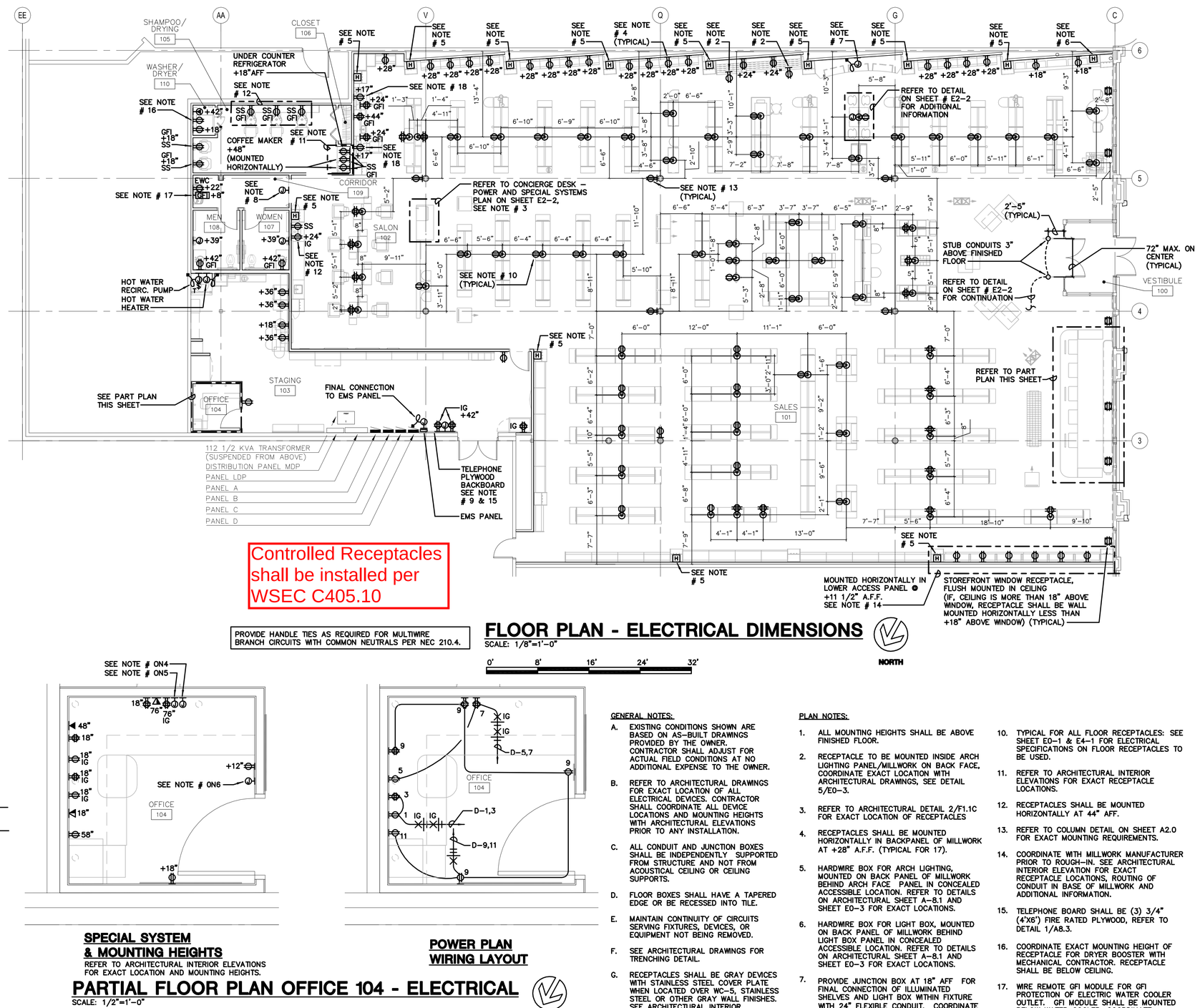
0' 2' 4' 6' 8'

NORTH

SERVICE DESK NOTES:

S1. ELECTRICAL CONTRACTOR SHALL FURNISH, INSTALL AND WIRE ALL DEVICES AND BOXES WITHIN RECEPTION/SALES COUNTER. COORDINATE EXACT LOCATION AND ROUTING IN FIELD WITH MILLWORK AND MILLWORK VENDOR PRIOR TO ROUGH–IN.

S2. COORDINATE STUB UP LOCATIONS WITH EXACT SAFE LOCATION TO AVOID ALL INTERFERENCES.




Controlled Receptacles shall be installed per WSEC C405.10

PROVIDE HANDLE TIES AS REQUIRED FOR MULTIWIRE BRANCH CIRCUITS WITH COMMON NEUTRALS PER NEC 210.4.

## FLOOR PLAN - ELECTRICAL DIMENSIONS

SCALE: 1/8"=1'–0"

0' 8' 16' 24' 32'

NORTH




**SPECIAL SYSTEM & MOUNTING HEIGHTS**

REFER TO ARCHITECTURAL INTERIOR ELEVATIONS FOR EXACT LOCATION AND MOUNTING HEIGHTS.




**POWER PLAN WIRING LAYOUT**

## PARTIAL FLOOR PLAN OFFICE 104 - ELECTRICAL

SCALE: 1/2"=1'–0"

0' 2' 4' 6' 8'

NORTH

OFFICE NOTES:

ON1. COORDINATE EXACT LOCATION OF VOICE/DATA OUTLET WITH ULTA "IT" DEPARTMENT AND ARCHITECT. REFER TO ARCHITECTURAL ELEVATION FOR ALL DEVICE LOCATIONS AND MOUNTING HEIGHTS.

ON2. REFER TO SHEET # E3–2 FOR LOW VOLTAGE WIRING.

ON3. PRIOR TO ROUGH IN OF ALL OUTLETS, CONTRACTOR SHALL FIELD VERIFY EXACT EQUIPMENT LOCATIONS WITH OWNER'S REPRESENTATIVE AND EQUIPMENT VENDOR.

ON4. PROVIDE 3–GANG JUNCTION BOX (FOR SOUND SYSTEM VOLUME CONTROLS) MOUNTED 48" A.F.F. WITH 3/4" CONDUIT STUB TO ACCESSIBLE CEILING SPACE.

ON5. PROVIDE JUNCTION BOX (FOR SOUND SYSTEM AMP) MOUNTED 76" A.F.F. WITH 3/4" CONDUIT STUB TO ACCESSIBLE CEILING SPACE AND 7/8" ROUND OPENING COVER PLATE.

ON6. 4"x4" JUNCTION BOX FOR TEMPERATURE SENSOR, WITH SINGLE GANG COVER, MOUNTED AT WITHIN 16" OF WALL LIGHT SWITCH AT SAME HEIGHT AND IN SAME STUD POCKET (SPACE). INSTALL 3/4" CONDUIT FROM JUNCTION BOX INTO ACCESSIBLE CEILING SPACE.

GENERAL NOTES:

A. EXISTING CONDITIONS SHOWN ARE BASED ON AS–BUILT DRAWINGS PROVIDED BY THE OWNER. CONTRACTOR SHALL ADJUST FOR ACTUAL FIELD CONDITIONS AT NO ADDITIONAL EXPENSE TO THE OWNER.

B. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL ELECTRICAL DEVICES. CONTRACTOR SHALL COORDINATE ALL DEVICE LOCATIONS AND MOUNTING HEIGHTS WITH ARCHITECTURAL ELEVATIONS PRIOR TO ANY INSTALLATION.

C. ALL CONDUIT AND JUNCTION BOXES SHALL BE INDEPENDENTLY SUPPORTED FROM STRUCTURE AND NOT FROM ACOUSTICAL CEILING OR CEILING SUPPORTS.

D. FLOOR BOXES SHALL HAVE A TAPERED EDGE OR BE RECESSED INTO TILE.

E. MAINTAIN CONTINUITY OF CIRCUITS SERVING FIXTURES, DEVICES, OR EQUIPMENT NOT BEING REMOVED.

F. SEE ARCHITECTURAL DRAWINGS FOR TRENCHING DETAIL.

G. RECEPTACLES SHALL BE GRAY DEVICES WITH STAINLESS STEEL COVER PLATE WHEN LOCATED OVER WC–5, STAINLESS STEEL OR OTHER GRAY WALL FINISHES. SEE ARCHITECTURAL INTERIOR ELEVATIONS FOR ADDITIONAL INFORMATION.

H. ALL CONDUIT ROUTED IN FLOOR SLAB SHALL BE 3/4" SCHEDULE PVC CONDUIT WITH GROUND WIRE WHERE ALLOWED BY LOCAL CODE AND UNLESS SPECIFICALLY NOTED OTHERWISE.

I. ALL RECEPTACLES TO BE CONTROLLED BY EMS SYSTEM SHALL BE PROVIDED WITH ENGRAVED NEC "CONTROLLED RECEPTACLE MARKING SYMBOL".

PLAN NOTES:

1. ALL MOUNTING HEIGHTS SHALL BE ABOVE FINISHED FLOOR.
2. RECEPTACLE TO BE MOUNTED INSIDE ARCH LIGHTING PANEL/MILLWORK ON BACK FACE, COORDINATE EXACT LOCATION WITH ARCHITECTURAL DRAWINGS, SEE DETAIL 5/E0–3.
3. REFER TO ARCHITECTURAL DETAIL 2/F1.1C FOR EXACT LOCATION OF RECEPTACLES
4. RECEPTACLES SHALL BE MOUNTED HORIZONTALLY IN BACKPANEL OF MILLWORK AT +28" A.F.F. (TYPICAL FOR 17).
5. HARDWIRE BOX FOR ARCH LIGHTING, MOUNTED ON BACK PANEL OF MILLWORK BEHIND ARCH FACE PANEL IN CONCEALED ACCESSIBLE LOCATION. REFER TO DETAILS ON ARCHITECTURAL SHEET A–8.1 AND SHEET E0–3 FOR EXACT LOCATIONS.
6. HARDWIRE BOX FOR LIGHT BOX, MOUNTED ON BACK PANEL OF MILLWORK BEHIND LIGHT BOX PANEL IN CONCEALED ACCESSIBLE LOCATION. REFER TO DETAILS ON ARCHITECTURAL SHEET A–8.1 AND SHEET E0–3 FOR EXACT LOCATIONS.
7. PROVIDE JUNCTION BOX AT 18" AFF FOR FINAL CONNECTION OF ILLUMINATED SHELVES AND LIGHT BOX WITHIN FIXTURE WITH 24" FLEXIBLE CONDUIT. COORDINATE EXACT ELECTRICAL REQUIREMENTS WITH FIXTURE MANUFACTURER, PRIOR TO ANY ROUGH–IN INSTALLATION.
8. EAS SECURITY ANTENNA, REFER TO SHEET # E3–1 FOR RISER DIAGRAM.
9. CONTRACTOR SHALL VERIFY TIMING OF TELEPHONE COMPANY CONNECTION WITH ULTA. RECEPTACLES NEED TO BE INSTALLED PRIOR TO TELEPHONE COMPANY CONNECTION COMPLETION.
10. TYPICAL FOR ALL FLOOR RECEPTACLES: SEE SHEET E0–1 & E4–1 FOR ELECTRICAL SPECIFICATIONS ON FLOOR RECEPTACLES TO BE USED.
11. REFER TO ARCHITECTURAL INTERIOR ELEVATIONS FOR EXACT RECEPTACLE LOCATIONS.
12. RECEPTACLES SHALL BE MOUNTED HORIZONTALLY AT 44" AFF.
13. REFER TO COLUMN DETAIL ON SHEET A2.0 FOR EXACT MOUNTING REQUIREMENTS.
14. COORDINATE WITH MILLWORK MANUFACTURER PRIOR TO ROUGH–IN. SEE ARCHITECTURAL INTERIOR ELEVATION FOR EXACT RECEPTACLE LOCATIONS, ROUTING OF CONDUIT IN BASE OF MILLWORK AND ADDITIONAL INFORMATION.
15. TELEPHONE BOARD SHALL BE (3) 3/4" (4'X6') FIRE RATED PLYWOOD, REFER TO DETAIL 1/A8.3.
16. COORDINATE EXACT MOUNTING HEIGHT OF RECEPTACLE FOR DRYER BOOSTER WITH MECHANICAL CONTRACTOR. RECEPTACLE SHALL BE BELOW CEILING.
17. WIRE REMOTE GFI MODULE FOR GFI PROTECTION OF ELECTRIC WATER COOLER OUTLET. GFI MODULE SHALL BE MOUNTED BELOW WATER COOLER, COORDINATE RECEPTACLE LOCATION WITH MANUFACTURER'S INSTRUCTIONS AND ARCHITECT TO BE HIDDEN BY WATER COOLER.
18. RECEPTACLES SHALL BE MOUNTED IN WALL AT +17" A.F.F. REFER TO ARCHITECTURAL ELEVATIONS FOR EXACT LOCATION.

City of Kirkland Reviewed by J Tumelson 05/30/2018

ULTA BEAUTY

ULTA - STORE #1384
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FLOOR PLAN - ELECTRICAL DIMENSIONS

CHIPMAN DESIGN ARCHITECTURE INC.
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1191 SECOND AVENUE, 21ST FLOOR, EAST
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FAX (847) 966–0294

Revisions
- ISSUE FOR CLIENT/LL REVIEW 04/20/18
- ISSUE FOR PERMIT & BID 04/20/18

DAVID L. DICKERSON — STATE OF WASHINGTON — REGISTERED PROFESSIONAL ENGINEER
EXPIRES 05/05/2018
SIGNATURE
04/23/2018 DATE
05/05/2018 EXPIRATION DATE

| Drawn By | Checked By |
|---|---|
| RM | DD/AH |
| Scale | Date |
| AS NOTED | 04/20/18 |

Job No. 16-4170

Sheet No. E2-1

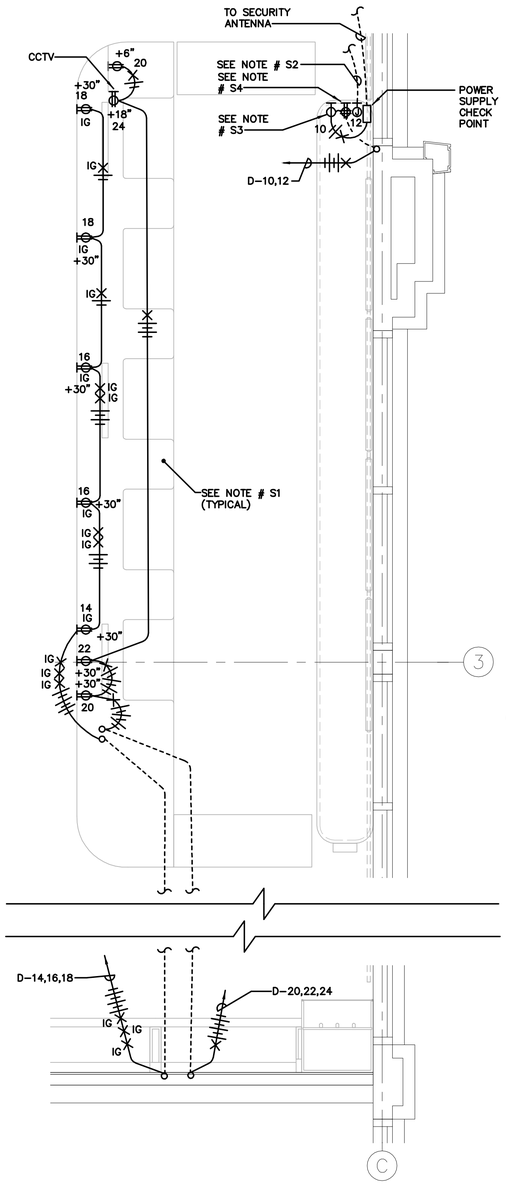
SERVICE DESK NOTES:

S1. CONDUIT SHALL BE ROUTED IN BASE OF MILLWORK. ELECTRICAL CONTRACTOR SHALL FURNISH, INSTALL, AND WIRE ALL DEVICES AND BOXES WITHIN RECEPTION/SALES COUNTER. COORDINATE EXACT LOCATION AND ROUTING IN FIELD WITH MILLWORK.

S2. SEE SECURITY SYSTEM WIRING DIAGRAM, SHEET E3-2, FOR CONTINUATION OF SECURITY SYSTEM CONNECTIONS.

S3. SINGLE RECEPTACLE MOUNTED 12" ABOVE BASE SHELF OF CABINET IN BACKWRAP AREA FOR CHECK-POINT SECURITY SYSTEM "POWER PACK". LABEL RECEPTACLE "SECURITY SYSTEM." ROUTE CONTROL WIRING IN CONDUIT. SEE SHEET E3-1 FOR ADDITIONAL INFORMATION.

S4. RECEPTACLE MOUNTED 12" ABOVE BASE SHELF OF CABINET IN BACKWRAP AREA FOR HAND-HELD SCANNER CHARGER. LABEL DUPLEX RECEPTACLE "SCANNER CHARGER."

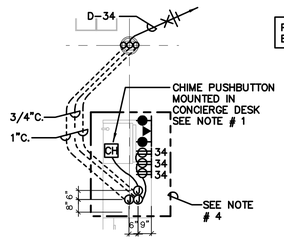



## 2 SERVICE COUNTER PART PLAN - POWER & SPECIAL SYSTEMS

SCALE: 1/2"=1'-0"

0' 2' 4' 6' 8'

NORTH

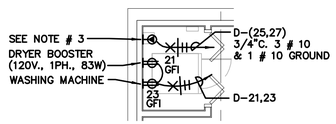



## 1 CONCIERGE DESK - POWER & SPECIAL SYSTEMS

SCALE: 1/4"=1'-0"

0' 4' 8' 12' 16'

NORTH

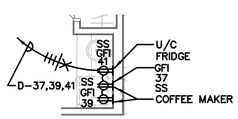



## 3 BACK OF THE HOUSE DETAIL

SCALE: 1/4"=1'-0"

0' 4' 8' 12' 16'

NORTH

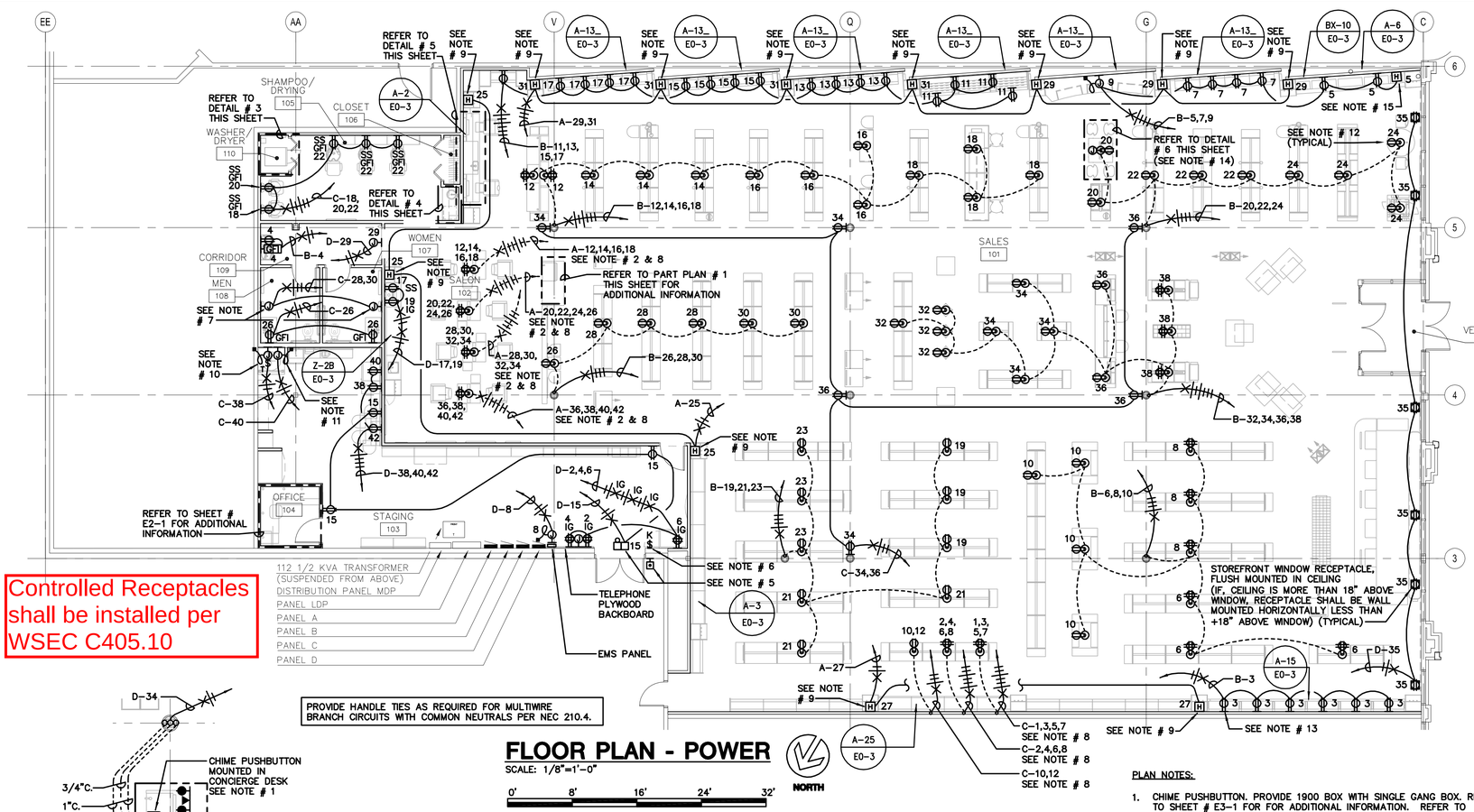



## 4 COFFEE BAR DETAIL

SCALE: 1/4"=1'-0"

0' 4' 8' 12' 16'

NORTH




Controlled Receptacles shall be installed per WSEC C405.10

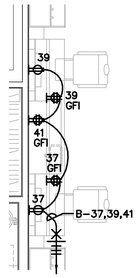
PROVIDE HANDLE TIES AS REQUIRED FOR MULTIWIRE BRANCH CIRCUITS WITH COMMON NEUTRALS PER NEC 210.4.

# FLOOR PLAN - POWER

SCALE: 1/8"=1'-0"

0' 8' 16' 24' 32'

NORTH

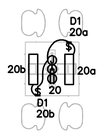



## 5 SKIN BAR DETAIL

SCALE: 1/4"=1'-0"

0' 4' 8' 12' 16'

NORTH




## 6 X-57 BENEFIT STATION DETAIL

SCALE: 1/4"=1'-0"

0' 4' 8' 12' 16'

NORTH

GENERAL POWER NOTES:

A. EXISTING CONDITIONS SHOWN ARE BASED ON AS-BUILT DRAWINGS PROVIDED BY THE OWNER. CONTRACTOR SHALL ADJUST FOR ACTUAL FIELD CONDITIONS AT NO ADDITIONAL EXPENSE TO THE OWNER.

B. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL ELECTRICAL DEVICES. CONTRACTOR SHALL COORDINATE ALL DEVICE LOCATIONS AND MOUNTING HEIGHTS WITH ARCHITECTURAL ELEVATIONS PRIOR TO ANY INSTALLATION.

C. ELECTRICAL CONTRACTOR SHALL INSTALL RECEPTACLES AND BOXES WITHIN CONCIERGE MILLWORK COUNTER. COORDINATE EXACT LOCATION AND CONDUIT ROUTING WITH MILLWORK CONTRACTOR.

D. ALL CONDUIT ROUTED IN FLOOR SLAB SHALL BE 3/4" SCHEDULE PVC CONDUIT WITH GROUND WIRE WHERE ALLOWED BY LOCAL CODE AND UNLESS SPECIFICALLY NOTED OTHERWISE.

E. ALL CONDUIT AND JUNCTION BOXES SHALL BE SUPPORTED INDEPENDENTLY FROM ACOUSTICAL CEILING.

F. CONTRACTOR SHALL LAYOUT BRANCH CIRCUIT WIRING AND ARRANGEMENT OF HOMERUNS FOR MAXIMUM EFFICIENCY. INCREASE WIRE SIZE IF VOLTAGE DROP EXCEEDS 2% OR 100 FEET IN LENGTH.

G. SEE DETAIL ON SHEET E0-3 FOR ADDITIONAL REQUIREMENTS FOR HVAC UNIT WIRING.

H. MAINTAIN CONTINUITY OF CIRCUITS SERVING FIXTURES, DEVICES, OR EQUIPMENT NOT BEING REMOVED.

I. SEE ARCHITECTURAL DRAWINGS FOR TRENCHING DETAIL.

J. BRANCH CIRCUIT WIRING IS SHOWN AS A GUIDE ONLY. EXACT QUANTITIES OF CONDUITS AND CONDUCTORS ARE NOT INDICATED. CONTRACTOR SHALL PROVIDE BRANCH CIRCUIT WIRING AS REQUIRED FOR A COMPLETE AND OPERABLE SYSTEM.

K. ALL RECEPTACLES TO BE CONTROLLED BY EMS SYSTEM SHALL BE PROVIDED WITH ENGRAVED NEC "CONTROLLED RECEPTACLE MARKING SYMBOL".

PLAN NOTES:

1. CHIME PUSHBUTTON. PROVIDE 1900 BOX WITH SINGLE GANG BOX. REFER TO SHEET # E3-1 FOR FOR ADDITIONAL INFORMATION. REFER TO DETAIL 3/F-1.1C FOR EXACT CHIME LOCATION.
2. CONTRACTOR SHALL ROUTE FEEDERS FROM SALON STATION THROUGH FLOOR OUTLET OVER TO NEAREST COLUMN/WALL.
3. NEMA 14-30R RECEPTACLE FOR ELECTRIC DRYER. VERIFY WITH EQUIPMENT SUPPLIER FOR EXACT ELECTRICAL REQUIREMENTS AND OUTLET TYPE PRIOR TO ROUGH-IN.
4. REFER ARCHITECTURAL DETAIL # 2 ON SHEET F-1.1C FOR EXACT RECEPTACLE AND DATA LOCATIONS.
5. PROVIDE A GENERAL PURPOSE BELL (EDWARDS # 156G-4AM), PUSH BUTTON (TRINE ACCESS TECHNOLOGY # 65P) AND CLASS 2 SIGNAL TRANSFORMER (EDWARDS # 590). PROVIDE # 10 WIRING BETWEEN PUSH BUTTON AND TRANSFORMER.
6. DOUBLE GANG, 3" DEEP JUNCTION BOX FOR SECURITY SYSTEM KEY SWITCH. MOUNT ON RIGHT SIDE OF DOOR. IF ROOM IS NOT AVAILABLE THEN MOUNT ON THE LEFT SIDE OF THE DOOR.
7. PROVIDE FINAL CONNECTION TO HAND DRYER (120V., 1,500W.). VERIFY ALL REQUIREMENTS WITH EQUIPMENT VENDOR PRIOR TO ROUGH-IN. PROVIDE LABEL WITH CIRCUIT NUMBER FOR HAIR DRYERS. PROVIDE CIRCUIT BREAKER WITH PAD LOCK OUT CAPABILITIES.
8. WIRE EACH OUTLET OF THE DUPLEX FLOOR BOX TO A DEDICATED CIRCUIT, PROVIDE A HANDLE TIE FOR CIRCUITS TO THE SAME RECEPTACLE.
9. HARDWIRE BOX FOR ARCH LIGHTING, MOUNTED ON BACK PANEL OF MILLWORK BEHIND ARCH FACE PANEL IN CONCEALED ACCESSIBLE LOCATION. REFER TO DETAILS ON ARCHITECTURAL SHEET A8.1 AND SHEET E0-3 FOR EXACT LOCATIONS.
10. PROVIDE FINAL CONNECTION TO RECIRCULATION PUMP (120V., 1PH 55W). VERIFY EXACT ELECTRICAL CONNECTION WITH PLUMBING CONTRACTOR.
11. PROVIDE FINAL CONNECTION TO GAS WATER HEATER. VERIFY EXACT ELECTRICAL CONNECTION WITH PLUMBING CONTRACTOR PRIOR TO ROUGH-IN. (120V., 1PH.)
12. SEE DETAIL ON SHEET E0-1 FOR ADDITIONAL INFORMATION. TYPICAL FOR ALL FLOOR RECEPTACLES.
13. CONDUIT AND WIRING FOR ARCH RECEPTACLES SHALL BE ROUTED IN CHASE WITHIN BASE MILLWORK FIXTURE. CONDUIT SHALL ENTER AT BACK OF VERTICAL ARCH SECTION BEHIND VERTICAL PANEL (WITH LIGHT FIXTURES). CONDUIT TO BE INSTALLED PRIOR TO INSTALLATION OF ARCH. THERE SHALL BE NO EXPOSED CONDUIT.
14. VERIFY EXACT LOCATION OF DIMMER SWITCH WITH VENDOR DRAWINGS, PRIOR TO INSTALLATION. LIGHT FIXTURE AND DIMMER SWITCH SHALL BE PROVIDED BY VENDOR AND INSTALLED AND WIRED BY CONTRACTOR. ALL CONDUIT AND WIRING SHALL BE CONCEALED WITHIN MILLWORK.
15. HARDWIRE BOX FOR LIGHT BOX, MOUNTED ON BACK PANEL OF MILLWORK BEHIND LIGHT BOX PANEL IN CONCEALED ACCESSIBLE LOCATION. REFER TO DETAILS ON ARCHITECTURAL SHEET A-8.1 AND SHEET E0-3 FOR EXACT LOCATIONS.

City of Kirkland
Reviewed by
J Tumelson
05/30/2018

ULTA BEAUTY

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FLOOR PLAN - POWER


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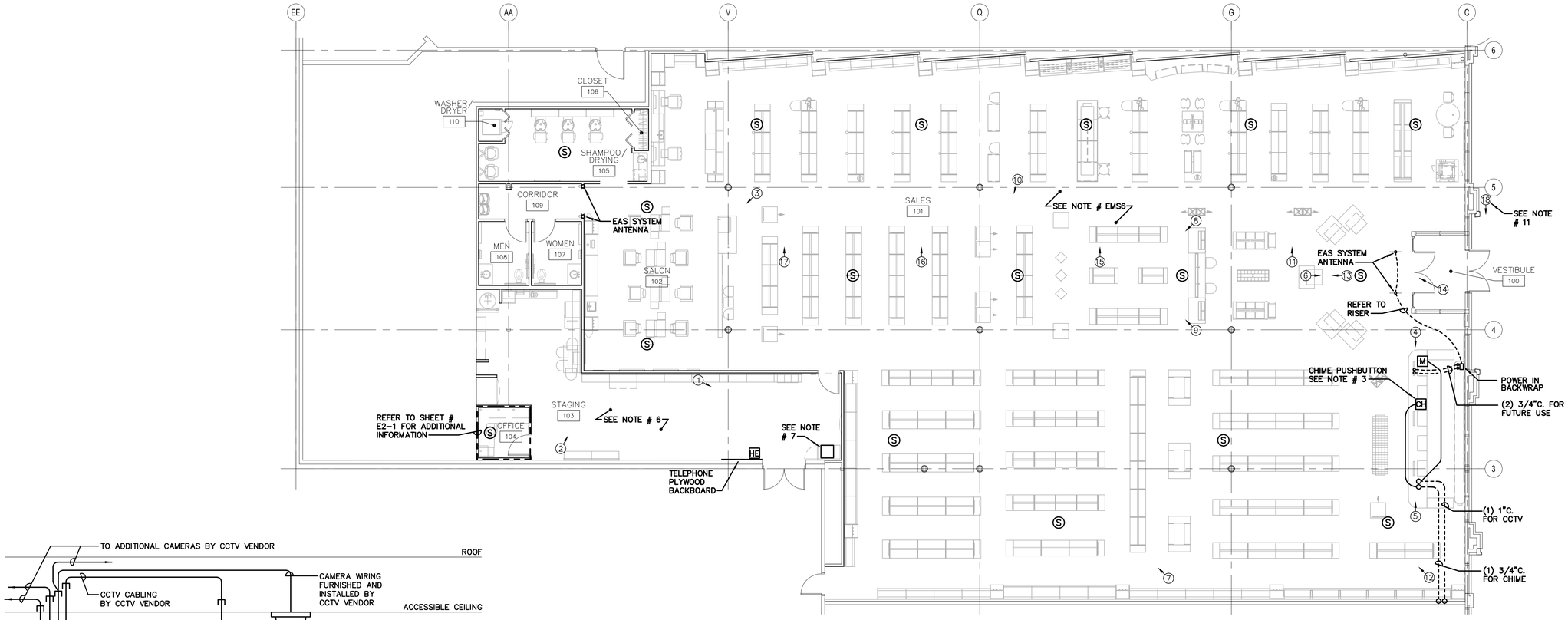
DAVIS L. DICKERSON
STATE OF WASHINGTON
REGISTERED
PROFESSIONAL ENGINEER
EXPIRES 05/05/2018

SIGNATURE
04/23/2018 DATE
05/05/2018 EXPIRATION DATE

| Drawn By | Checked By |
|---|---|
| RM | DD/AH |
| Scale | Date |
| AS NOTED | 04/20/18 |

Job No. 16-4170

Sheet No. E2-2




## FLOOR PLAN - LOW VOLTAGE WIRING

SCALE: 1/8"=1'-0"

0' 8' 16' 24' 32'

NORTH

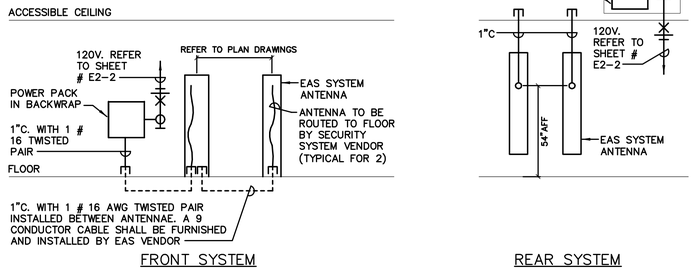



## CCTV CAMERA WIRING DIAGRAM

NO SCALE

CCTV NOTES:

1. REFER TO CCTV VENDOR DRAWINGS FOR EXACT LOCATION OF ALL EQUIPMENT. ALL CCTV EQUIPMENT AND WIRING SHALL BE FURNISHED AND INSTALLED BY VENDOR.




## EAS CHECKPOINT SYSTEM RISER

NO SCALE

EAS NOTES:

EAS1. PROVIDE 10' SLACK CABLE AT EACH END FOR TERMINATION BY EAS VENDOR.

EAS2. ALL SECURITY SYSTEM WIRING SHALL BE FURNISHED AND INSTALLED BY VENDOR.

EAS3. PROVIDE 2' X 3' FIRE TREATED PLYWOOD FOR SECURITY ANTENNA. SCREW PLYWOOD INTO WALL STUDS AND MOUNT BOTTOM OF PLYWOOD 6" ABOVE CEILING. COORDINATE LOCATION WITH ARCHITECTURE DRAWINGS AND VENDOR IN FIELD. VERIFY EXACT CONNECTION REQUIREMENTS OF SECURITY ANTENNA TO SECURITY POWER PACK WITH SECURITY VENDOR IN FIELD.

EMS NOTES

EMS1. ELECTRICAL CONTRACTOR TO MOUNT 12"X12" JUNCTION BOX (PROVIDED BY EMS VENDOR) NEXT TO THE EMS PANEL BASEPLATE. COORDINATE EXACT LOCATION WITH EMS VENDOR. ELECTRICAL CONTRACTOR TO INSTALL CONDUIT BETWEEN EMS PANEL BASEPLATE AND 12"X12" JUNCTION BOX.

EMS2. ELECTRICAL CONTRACTOR TO PROVIDE DEDICATED 120V. CIRCUIT FOR THE EMS PANEL POWER SUPPLY AND TERMINATE COMPLETE (INSTALLED INSIDE OF 12"X12" JUNCTION BOX). TERMINATION TO OCCUR ONCE THE EMS PANEL POWER SUPPLY IS INSTALLED BY VENDOR.

EMS3. ELECTRICAL CONTRACTOR TO INSTALL SQUARE D FACTORY WIRING COMMUNICATION CABLE BETWEEN THE SQUARE D NF2000G3 MASTER CONTROLLER LOCATED IN PANEL A AND THE SQUARE D NFSELG3 SLAVE CONTROLLER LOCATED IN PANEL B AND TERMINATE COMPLETE. COMMUNICATION WIRE SHALL BE ROUTED IN CONDUIT.

EMS4. ELECTRICAL CONTRACTOR TO MOUNT THE EMON CURRENT TRANSFORMERS ON THE MAIN ELECTRICAL FEEDS IN THE MAIN DISTRIBUTION PANEL MDP. ELECTRICAL CONTRACTOR TO MOUNT THE EMON ENERGY METER NEXT TO THE PANEL MDP AND CONNECT IT TO THE EMS METER BREAKER IN PANEL. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL CONDUIT BETWEEN EMON METER AND EMS PANEL.

EMS5. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL ALL CONDUIT AND BOXES, WHERE NECESSARY FOR CONTROL WIRING, REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION. THIS INCLUDES LENNOX ZONE TEMPERATURE SENSORS AND COMMUNICATION WIRING. IF THE WIRE NEED TO BE IN THE CONDUIT, THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE AND INSTALL THE CONDUIT; ULTA'S EMS VENDOR WILL PROVIDE AND INSTALL THE WIRING INSIDE THE CONDUIT. IF CONDUIT IS NOT REQUIRED, ELECTRICAL CONTRACTOR IS TO PROVIDE A CUT-IN RING AND PULL STRING FROM ABOVE THE CEILING TO THE CUT-IN RING.

EMS6. PROVIDE 1-GANG BACK BOX WITH 3/4" CONDUIT STUB TO ACCESSIBLE CEILING SPACE WITH PULL STRING FOR EACH EMS TEMPERATURE, HUMIDITY AND CO2 SENSOR AS REQUIRED FOR EACH HVAC SYSTEM. SEE MECHANICAL DRAWINGS M-1 AND M-2 FOR SENSOR QUANTITIES AND LOCATIONS.

SOUND SYSTEM WIRING NOTES:

S1. MANAGER'S OFFICE, LOUNGE & DM OFFICE VOLUME CONTROL IS LOCATED IN THE MANAGER'S OFFICE. SKIN TREATMENT AREAS' VOLUME CONTROL LOCATIONS WILL VARY FROM SITE TO SITE BUT IS LOCATED IN EACH AREA. VERIFY THE EXACT LOCATION OF EACH AREA VOLUME CONTROL WITH G.C. ON SITE.

S2. SOUND SYSTEM TO BE 100% BY THE BEGINNING OF SUBSTANTIAL COMPLETION WEEK.

S3. REFER TO SOUND SYSTEM VENDOR DRAWINGS FOR EXACT LOCATION OF ALL EQUIPMENT. ALL HEAD END EQUIPMENT, SPEAKER, VOLUME CONTROL AND WIRING SHALL BE FURNISHED AND INSTALLED BY VENDOR.

NOTES:

1. ALL CONDUIT AND BACK BOXES SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR. ALL CABLING, DEVICES AND TERMINATIONS SHALL BE FURNISHED AND INSTALLED BY ULTA'S SOUND VENDOR. PROVIDE 10 FEET OF SLACK CABLE AT EACH DEVICE.
2. INSTALLATION OF VOLUME CONTROL STATIONS SHALL BE BY SOUND SYSTEM VENDOR. PROVIDE SINGLE GANG BACKBOX WITH 3/4" CONDUIT STUBBED INTO ACCESSIBLE CEILING SPACE.
3. CHIME PUSHBUTTON. ELECTRICAL CONTRACTOR TO PROVIDE 1900 BOX WITH SINGLE GANG TRIM PLATE. SEE SOUND SYSTEM WIRING DIAGRAM THIS SHEET FOR ADDITIONAL INFORMATION. SEE DETAIL 1/F-1.1B FOR EXACT CHIME LOCATION.
4. ALL LOW VOLTAGE CABLING/WIRING SHALL BE RUN ADJACENT TO THE PERIMETER SOFFITS NOT MORE THAN 3'-0" OFF DEMISING WALLS.
5. ALL CONDUIT AND JUNCTION BOXES SHALL BE SUPPORTED INDEPENDENTLY FROM ACOUSTICAL CEILING.
6. DUCT MOUNTED SMOKE DETECTORS SHALL BE EXISTING TO REMAIN (BY LANDLORD). MAINTAIN CONTINUITY OF SERVICE TO EXISTING DUCT DETECTORS AS REQUIRED. RELOCATE EXISTING REMOTE INDICATING DEVICES TO NEAREST COLUMN/WALL AS REQUIRED.
7. IT CABINET TO BE FURNISHED BY ULTA AND INSTALLED BY GENERAL CONTRACTOR.
8. CAMERA LOCATIONS SHOWN ARE FOR REFERENCE ONLY.
9. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL ELECTRICAL DEVICES. CONTRACTOR SHALL COORDINATE ALL DEVICE LOCATIONS AND MOUNTING HEIGHTS WITH ARCHITECTURAL ELEVATIONS PRIOR TO ANY INSTALLATION.
10. NO SENSORS, KEYPADS OR SIMILAR EQUIPMENT TO BE MOUNTED TO MILLWORK.
11. PROVIDE CONDUIT STUB WITH PULL STRING FROM EXTERIOR CAMERA TO ACCESSIBLE CEILING SPACE, VERIFY EXACT LOCATION WITH SECURITY VENDOR.

ULTA BEAUTY

ULTA - STORE #1384
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FLOOR PLAN - LOW VOLTAGE WIRING

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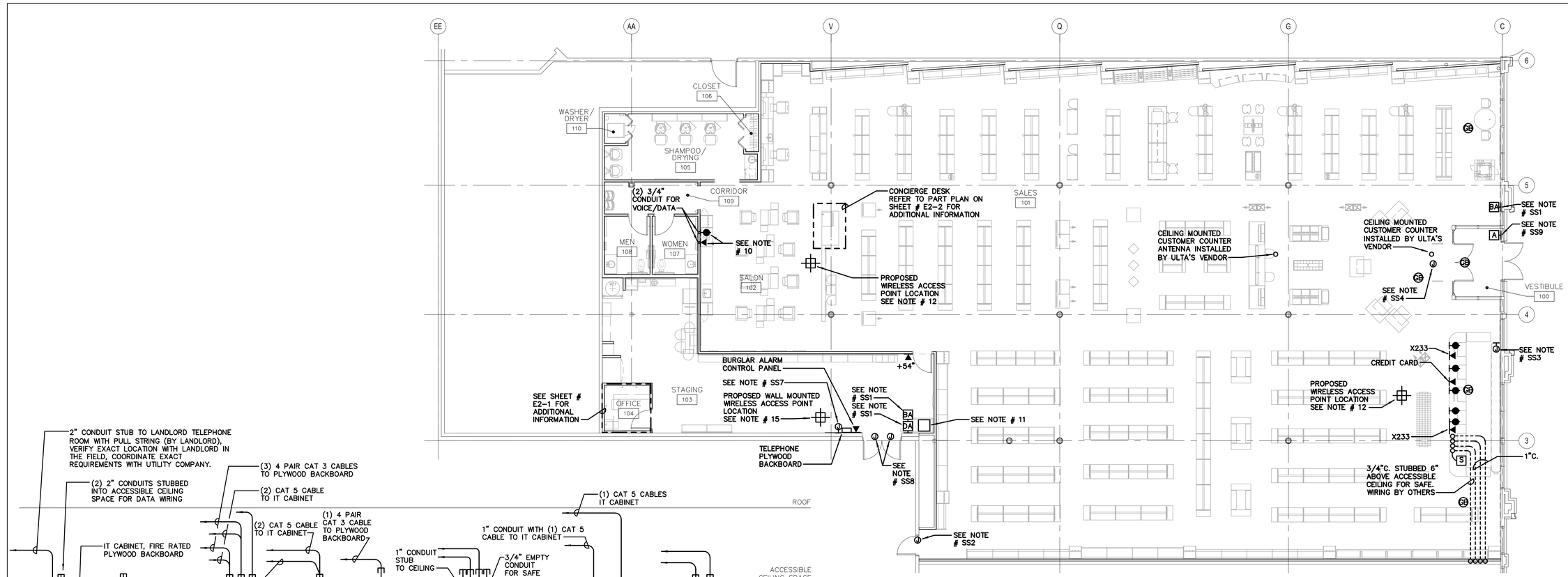
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| Drawn By | Checked By |
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| AS NOTED | 04/20/18 |

Job No. 16-4170

Sheet No. E3-1

City of Kirkland
Reviewed by
J Tumelson
05/30/2018

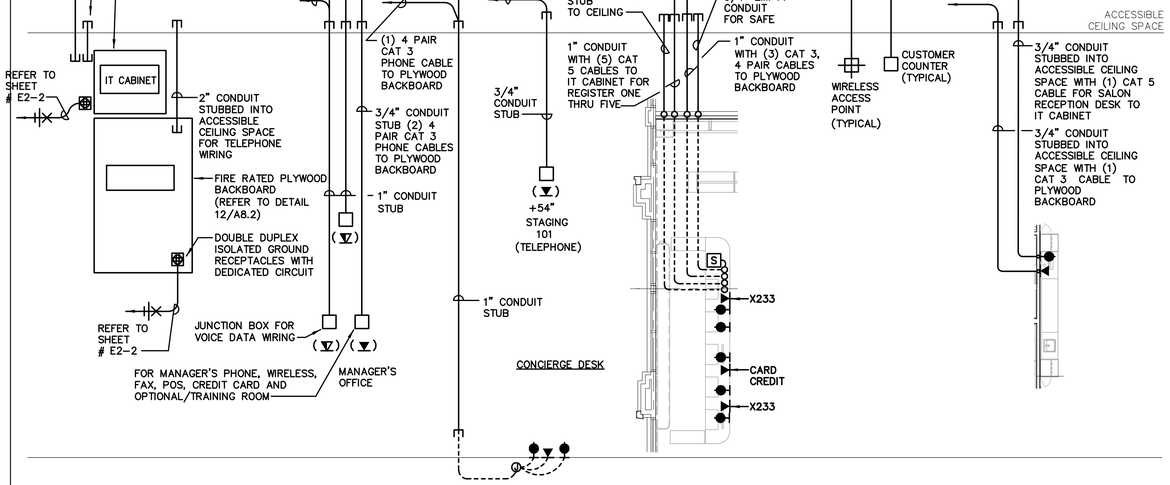



# FLOOR PLAN - VOICE/DATA AND SECURITY

SCALE: 1/8"=1'-0"

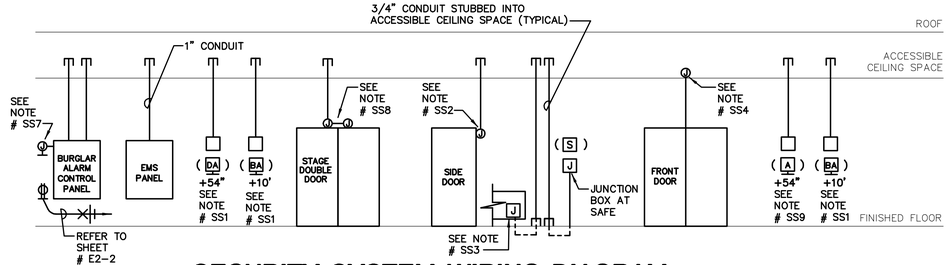
NORTH

0' 8' 16' 24' 32'




# VOICE/DATA CABLING

NO SCALE




# SECURITY SYSTEM WIRING DIAGRAM

NO SCALE

## SECURITY SYSTEM NOTES:

SS1. PROVIDE DOUBLE GANG BOX AND TRIM RING WITH 3/4" CONDUIT STUB INTO ACCESSIBLE CEILING SPACE. ALL BURGLAR ALARM DEVICES SHALL BE BY BURGLAR ALARM VENDOR.

SS2. INSTALL SINGLE GANG JUNCTION BOX AT INSIDE OF DOOR FRAME ON LATCH SIDE WITH 3/4" CONDUIT TO ACCESSIBLE CEILING SPACE CONCEALED IN WALL FOR DOOR CONTACTS AT EGRESS DOOR. ALL WIRING SHALL BE CONCEALED IN CONDUIT OR DOOR FRAME.

SS3. SINGLE GANG JUNCTION BOX AND PLASTER RING WITH 3/4" CONDUIT STUBBED INSIDE BACKWRAP COMPARTMENT FOR SECURITY SYSTEM.

SS4. INSTALL (1) SINGLE GANG JUNCTION BOX IN ACCESSIBLE CEILING SPACE. PROVIDE 1/2" CONDUIT FROM JUNCTION BOX, STUBBED INTO DOOR FRAME. ALL WIRING SHALL BE CONCEALED IN CONDUIT OR DOOR FRAME FROM JUNCTION BOX TO DOOR CONTACTS.

SS5. ALL SECURITY SYSTEM WIRING AND DEVICES SHALL BE FURNISHED, INSTALLED AND WIRED BY SECURITY SYSTEM VENDER.

SS6. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL BACKBOXES, TRIM RINGS, CONDUIT STUBS TO ACCESSIBLE CEILING SPACE AND CONDUIT BUSHINGS.

SS7. PROVIDE A 4"X4" JUNCTION BOX FOR "EMS SECURITY RELAY" ADJACENT TO SECURITY PANEL WITH 3/4" CONDUIT STUB TO SECURITY PANEL.

SS8. INSTALL (2) SINGLE GANG JUNCTION BOXES 6" FROM CENTER OF DOOR WITH 1/2" CONDUIT INTERCONNECTION BETWEEN AND 3/4" CONDUIT TO ACCESSIBLE CEILING SPACE CONCEALED IN WALL FOR DOOR CONTACTS AT EGRESS DOOR. ALL WIRING SHALL BE CONCEALED IN CONDUIT OR DOOR FRAME.

SS9. PROVIDE SURFACE MOUNTED DOUBLE GANG BOX TO VESTIBULE MULLION WITH ADDITIONAL WIREWAY CHASE. MULLION SHALL BE PROVIDED WITH WIREWAY CHASE TO CONCEAL WIRING. PROVIDE 3/4" CONDUIT TO ACCESSIBLE CEILING SPACE FROM WIREWAY CHASE. REFER TO STOREFRONT BRAKE METAL DETAIL ON SHEET A8.1.

## VOICE/DATA CABLING NOTES:

1. ALL VOICE CABLING SHALL BE RUN WITHIN THE ACCESSIBLE CEILING SPACE AND STRAPPED USING TIE WRAPS TO THE BUILDING STRUCTURE. DO NOT STRAP CABLE TO SPRINKLER PIPES, CEILING GRID PENCIL ROD OR CONDUITS.
2. ALL CABLE SHALL BE ROUTED PARALLEL AND PERPENDICULAR TO BUILDING STRUCTURE UTILIZING 90° ANGLES IN CEILING SPACE.
3. ALL LOCAL BUILDING CODES MUST BE FOLLOWED AND A SEPARATE LOW VOLTAGE PERMIT SHALL BE OBTAINED IF REQUIRED BY LOCAL CODE AUTHORITY.
4. ALL LOW VOLTAGE CABLE/WIRING SHALL BE RUN ADJACENT TO THE PERIMETER SOFFITS NOT MORE THAN 36" FROM DEMISING WALLS.
5. ALL BACKBOXES, PLASTER RINGS, CONDUITS AND CONDUIT BUSHINGS SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR. ALL CONDUITS, CABLING, WIRING, AND JUNCTION BOXES SHALL BE SUPPORTED INDEPENDENTLY OF THE ACOUSTICAL CEILING AND SUPPORTS. LOW VOLTAGE CABLING AND CABLING SUPPORTS SHALL BE FURNISHED AND INSTALLED BY CABLING VENDOR.
6. PROVIDE 15' SLACK CABLE AT EACH DEVICE AND BACKBOARD LOCATION.
7. ALL CABLING SHALL BE FURNISHED, INSTALLED, TAGGED AND TERMINATED BY ULTA TELE/DATA VENDOR. VENDOR SHALL FURNISH AND INSTALL ALL FACE PLATES, JACKS AND PATCH PANELS.
8. COORDINATE EXACT LOCATION OF DEVICES WITHIN MILLWORK WITH MILLWORK VENDOR.
9. ELECTRICAL CONTRACTOR SHALL LABEL ALL CONDUITS FOR SPECIFIC VENDOR USE.
10. MOUNT DEVICES AT 24" ABOVE FINISHED FLOOR IN BACK PANEL OF CABINET.
11. VERIFY EXACT MOUNTING REQUIREMENTS OF DATA CABINET WITH ARCHITECTURAL PLANS AND ULTA'S IT DEPARTMENT.
12. WIRELESS ACCESS POINT. VERIFY EXACT MOUNTING REQUIREMENTS WITH ARCHITECTURAL PLANS.
13. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL ELECTRICAL DEVICES. CONTRACTOR SHALL COORDINATE ALL DEVICE LOCATIONS AND MOUNTING HEIGHTS WITH ARCHITECTURAL ELEVATIONS PRIOR TO ANY INSTALLATION.
14. NO SENSORS, KEYPADS OR SIMILAR EQUIPMENT TO BE MOUNTED TO MILLWORK.
15. WIRELESS ACCESS POINT TO BE WALL MOUNTED ABOVE PHONE BOARD. COORDINATE EXACT REQUIREMENTS WITH VENDOR PRIOR TO INSTALLATION.

City of Kirkland
Reviewed by
J Tumelson
05/30/2018

ULTA - STORE #1384
12634 TOTEM LAKE BLVD NE
KIRKLAND, WA 98034

FLOOR PLAN - VOICE/DATA & SECURITY

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FIRST FLOOR EAST
CHICAGO, ILLINOIS 60611
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Revisions
- ISSUE FOR CLIENT/LL REVIEW 04/20/18
- ISSUE FOR PERMIT & BID 04/20/18

DAVID L. DICKERSON — STATE OF WASHINGTON — REGISTERED PROFESSIONAL ENGINEER
EXPIRES 05/05/2018
SIGNATURE
04/23/2018 DATE
05/05/2018 EXPIRATION DATE

| Drawn By | Checked By |
|---|---|
| RM | DD/AH |
| Scale | Date |
| AS NOTED | 04/20/18 |

Job No. 16-4170

Sheet No. E3-2

DIVISION 16 – ELECTRICAL
SECTION 16010
GENERAL PROVISIONS

PART 1 – GENERAL

1.01 RELATED DOCUMENTS
A. The General Conditions, Supplementary Conditions, and General Requirements apply to the Work specified in this Section.

1.02 DESCRIPTION
A. This Section defines the General Provisions which are common to all Sections of Division 16.
B. The information in the Specifications and the Plan Drawings are basic facts to follow in determining a reasonable and competitive price for the disciplines intended. The Drawings and Specifications do not necessarily indicate or describe each item necessary for the full performance and completion of the particular work the contractor may be bidding. These documents provide the general intent necessary to inform the contractor of the Owner's desire for the systems required for Electrical. Contractor shall visit the site prior to bidding to become familiar with the existing conditions under which the work shall be performed. Failure to inspect the site will not be considered justification for an adjustment in contract price or failure to perform the work under this contract.
C. Work Included:
1. All electrical work herein specified and/or shown on Drawings unless noted otherwise.
2. Installation shall be complete from location designated by the Electric Utility Company as point of service connection, to the final connection of motors, fixtures, devices, apparatus or pieces of equipment, unless modified by Drawings or these Specifications.
3. The Electrical Drawings and Specifications shall be understood to cover complete operating system. The Drawings and Specifications are to be taken together. Work specified and not shown, or Work shown and not specified shall be performed or furnished as though mentioned in both Drawings and Specifications.
4. Minor items and accessories reasonably inferred as necessary to the complete and proper operation of any system, shall be provided by this Contractor or Subcontractor for such systems.
D. Description of Systems:
1. Complete power wiring from existing panelboards to motorized equipment, motors, equipment cabinets, and miscellaneous outlets.
2. General wiring for power, lighting, and miscellaneous systems.
3. Materials and equipment for electrical work.
4. Motor and equipment wiring.
5. General and emergency lighting and power systems.
6. Wiring of equipment furnished by others.
7. Motor and equipment, including Starters if required.
8. Empty conduit stubs and backboxes for telephone system.
9. Reconnection of all relocated electrical equipment (where applicable).
10. Power and empty conduit system and backboxes for Owners security system.
11. Power and empty conduit system and backboxes for Owners computer system.
12. Power and empty conduit system and backboxes for Owners sound system.
13. All other equipment, material, devices, accessories required and/or shown on the Drawings.
14. Arrange for sources of temporary construction services. Such services shall be nominally 120/208 volt, 1 phase, 3 wire from which a complete system of temporary power and lighting shall be installed for all construction needs and as required by the occupational safety and health departments. (OSHA) Temporary services shall be removed upon completion of all construction.
15. Cutting, patching, excavation and backfill and concrete work required to complete the work of this section. Backfill shall be compacted to 95% of standard compaction. All existing surfaces shall be patched or replaced to "Like New" conditions.
E. Related work to be completed by others:
1. Telephone system wiring.
2. Computer system wiring.
3. Sound system wiring.
4. Security system wiring.
5. Temperature controls and thermostat wiring.
6. Fire alarm system by owner vendor.
F. Definitions – As used within the Contract Documents:
1. The term "Contractor" shall be understood to mean the Electrical Contractor or Electrical Subcontractor.
2. "Circuitry" shall mean any electric work (not limited to light and power distribution) which consists of wires, cables, raceways, and/or specialty wiring method assemblies taken all together complete with associated junction boxes, pull boxes, outlet boxes, joints, couplings, splices and connections, except where limited to a lesser meaning by specific description.
3. "Wiring" shall mean the same as Circuitry.
4. "Package Unit" shall mean an item of equipment having one or more motors or other electric energy consuming elements integrally factory mounted on a single base, complete with all associated control devices and interconnecting wiring.
5. "Normal Electric Work Conditions" means locations within building confines which are neither damp, wet, nor hazardous, and which are not used for air handling.
6. "Raceway" shall mean any pipe, duct, extended enclosed, or conduit (as specified for a particular system) which is used to contain wires, and which is of such nature as to require that the wires be installed by a "pulling in" procedure.
7. "Concealed" (as applied to circuitry) means covered completely by building materials, except for penetrations(by boxes or fittings) to a level flush with the surface as necessitated by functional or specified accessibility requirements. Unless directed otherwise, all outlet boxes in walls are to be concealed.
G. Fees and Permits:
1. Obtain all permits and pay all inspection fees required for the complete electrical system.

1.03 QUALITY ASSURANCE
A. Qualifications:
1. Only new products will be acceptable unless otherwise noted.
2. The Electrical Contractor and his Subcontractors shall only employ workmen who are skilled in their respective trades.
3. All equipment, material, fixtures, devices, articles, accessories or products included in the Contract shall be of the exact make, model or catalog number, size, form and of the characteristics specified.
B. Requirements of Regulatory Agencies:
1. All electrical work shall be in accordance with the National Electrical Code (N.E.C.), (check with local inspector for edition), and other governing bodies which have jurisdiction over this project.
2. Where applicable, all fixtures, equipment and materials shall be as approved or listed by the following agencies:
a. Factory Mutual Laboratories.
b. National Fire Protection Association.
c. Underwriters Laboratories, Inc. (UL)
d. National Electrical Manufacturers Association (NEMA)
e. Americans with Disabilities Act (ADA)
C. Allowable Tolerances:
1. Review Architectural, Structural and Mechanical Drawings for all dimensions, locations, partitions and walls, structural details, and location of mechanical pipes and ducts so that the electrical installation shall be in harmony with that of the other trades.
2. Exact size, location, and electrical requirements of equipment furnished by other trades and wired by this Contractor shall be obtained from the Drawings of the other trades.

1.04 SUBMITTALS
A. Shop drawings for all fixtures, equipment, materials, etc., shall be submitted as specified in Division 1.
B. Installation, maintenance and operating manuals and instructions for all equipment shall be provided as specified in Division 1.

1.05 APPROVAL DRAWINGS
A. Prepare and submit for approval to local code authorities such additional electrical drawings, diagrams, and specifications as are required by:
1. Local Fire Prevention Bureau
2. Local Building Department – Electrical Inspection Section
3. Local Utility Company Metering Department

1.06 EXAMINATION OF THE SITE
A. All Contractors submitting proposals for this work are requested to visit the existing site. Failure to visit the existing site will in no way relieve the successful bidder from the necessity of furnishing any materials or performing any work that may be required to complete work in accordance with Drawings and Specifications without additional cost to the Owner.

1.07 PRODUCT DELIVERY, STORAGE, AND HANDLING
A. Exercise care in transporting and handling to avoid damage to fixtures, equipment and materials.
B. Store materials on the site so as to prevent damage.
C. Keep fixtures, equipment and materials clean, dry and free from deleterious conditions.
D. Where items of electrical equipment and/or materials are furnished by others for installation by Electrical Contractor, Electrical Contractor will be held responsible for the unloading of such equipment and/or materials from the delivery truck. He shall check equipment and/or materials upon receipt and notify party furnishing item of any damaged or missing equipment. He shall coordinate installation with Contractor providing equipment.

1.08 GUARANTEE
A. Provide one year guarantee for all fixtures, equipment, materials and workmanship, upon final acceptance by Owner.

PART 2 – PRODUCTS
2.01 MATERIALS
A. Refer to individual Sections of Division 16.

PART 3 – EXECUTION
3.01 INSTALLATION/APPLICATION/PERFORMANCE/ERECTION
A. Excavating and Backfilling:
1. The Electrical Contractor shall do all excavating and backfilling required for the installation of any and all parts of his work requiring excavation. He shall also do all sheathing and bracing required for the installation of his work. He shall provide and operate pumping equipment, if required, to keep the trenches free of standing water. All work shall comply with requirements given in Section 02200.
2. The above shall include all excavation of every character, including rock, if encountered. Contractor shall visit the premises and determine for himself, by actual observations, boring, or other means, the nature of the soil conditions. The cost of all such inspections, boring, etc., shall be borne by the Contractor.
3. All excavations are to be so conducted that no walls or footings shall be disturbed or injured in any way.
4. Remove all surplus earth not needed for filling and dispose of same as specified under Section 02200 of the Specifications.
5. All backfilling shall be thoroughly tamped and settled in a manner as is proper for the particular type of work.
6. Where it is necessary to install work in or across roads, pavements, curbs, sidewalks, etc., this Contractor shall restore the present construction to its original or better condition if disturbed by his operation at no additional cost to the Owner.
B. Application, Installation:
1. In the event that conflicts, if any, cannot be settled rapidly and amicably between the affected trades, with work proceeding in a workmanlike manner, then the Architect/Engineer shall decide which work is to be relocated and his judgement shall be final and binding on this Contractor.
2. No measurements of a Drawing by scale shall be used as a dimension to work by. The Drawings are not intended to show complete or accurate details of the building in every respect. Exact locations and relations are to be defined in the field and shall be satisfactory to the Architect/Engineer. This Contractor shall take all field measurements and shall be responsible therefore.
3. Compare Drawings and Specifications, checking all measurements and determine intent of Contract Documents. Discrepancies shall be brought to the Architect/Engineer's attention for interpretation prior to any installation.
4. The right is reserved to make any reasonable change in location of outlets and equipment prior to roughing-in without involving additional expense. Any change from the Electrical Drawings as is necessary to make the work of this Contractor conform to the building as constructed and to fit the work of other trades shall be included in Contractor's Contract and installed without extra cost.

3.02 FIELD QUALITY CONTROL
A. Testing:
1. After wires are in place and connected to devices and equipment, the system shall be tested for shorts and grounds.
2. All hot wires, if shorted or grounded, shall be removed and replaced.
3. A voltage test shall be made at the last outlet on each circuit. If drop in potential is excessive, Contractor will be required to correct the condition by locating partly grounded conductor or high resistance splice.
4. All grounds, shorts and high resistance splices shall be rectified.
5. Any wiring device, electrical apparatus or lighting fixture furnished under this Contract, if grounded or shorted on any integral "live" part, shall be removed and the trouble rectified by replacing all defective parts or materials as directed.
6. Service ground to be tested per National Electrical Code requirement. Grounding pole of all receptacles to be tested.
7. All motors shall be tested under load with ammeter readings taken in each phase, and the RPM of motors recorded at the time. All motors shall be tested for correct direction or rotation. Electrical Contractor shall be responsible for testing running of all motors and shall verify that proper overload devices have been installed.
8. All meters, instruments, cable connections, equipment or apparatus necessary for making all tests, shall be furnished by this Contractor at his own expense.
9. Contractor shall submit proof of all tests to the Architect before final acceptance of the work.

3.03 ADJUST AND CLEAN
A. Cleaning Equipment, Completed Work and Premises: After the completion of all installations, each system shall be thoroughly cleaned to remove all paint, oil and other foreign material. Contractor shall also clean all foreign paint, grease, oil, dirt, labels and stickers, etc., from all fixtures, equipment, etc. The Contractor shall remove all rubbish, debris, etc., accumulated from his operations from the premises.
B. Demonstration: At the conclusion of the work and before final contract payment is made demonstrate and explain to the Using Agency's personnel, the function, operation and maintenance of all equipment and systems installed by this Division of the work and furnish a copy of all tests performed.
C. Protect all equipment and systems against harmful exposures to, or accumulations of dust and moisture, flooding, corrosion or other forms of damage and clean and restore damaged finishes as may be required to place installations in a "like-new" condition before acceptance by the Architect.

3.04 SCHEDULES
A. Equipment Schedules: See Drawings for schedules of lighting fixtures, switchboard, panelboards, distribution equipment, and related items.

3.05 APPROVALS
A. Obtain all permits and approvals from the governing bodies which have jurisdiction over this project.

3.06 IDENTIFICATION AND TAGGING
A. Provide all distribution switches and/or circuit breakers, starters, etc. whether individually mounted in panelboards, switchboards, etc., with suitable identification. The designation, using proper nomenclature, shall indicate the load served. Provide all feeders with suitable identification as to their designation in all junction boxes, pullboxes, gutter spaces through which they pass, and at their terminal points of connection. Identification of distribution switches or circuit breakers in panelboards shall be by means of panelboard directories. Identification of distribution switches or circuit breakers and starters individually mounted or in switchboards shall be by means of engraved lamacoid nameplates permanently fastened on the front face of the housing, showing 1/4" high white lettering on a black background. Identification of feed cables shall be by means of engraved fiber tags suitably fastened to the cables.

3.07 SLEEVES
A. Provide coring in walls and floor slabs for the passage of all conduits, pipes and ducts installed.
B. Cored holes in floor shall be provided with sleeves extended one inch above finished floor level and made watertight.

3.08 PAINTING
A. All equipment, panelboards, switchboards, etc., shall be factory finished in baked enamel or lacquer, or as specified. Standard factory finishes shall be approved. Any scratches shall be neatly touched up by the installing Contractor.
B. All metal work installed by this Contractor exposed to the weather and not factory finished shall be painted with two coats of oil paint of color selected by Architect.
C. All finish painting shall comply with the Painting Section of the Specifications.

3.09 CUTTING AND PATCHING
A. Perform all cutting and patching required to complete the Work, except where specifically shown on the Architectural or Structural Drawings.
B. Refer to Section 01070 for additional requirements.
END OF SECTION

SECTION 16100
BASIC MATERIALS AND METHODS

PART 1 – GENERAL
1.01 DESCRIPTION
A. This section defines the Basic Material and Methods which are common to all Sections of Division 16.

PART 2 – PRODUCTS
2.01 MATERIALS
A. Conduit:
1. Electrical Metallic Tubing: EMT, "Thinwall" conduit shall in general be utilized where permitted by Code except where described herein. Minimum size conduit shall be 3/4", unless otherwise specifically noted otherwise.
2. Heavy-wall steel conduit and I.M.C shall be either hot dipped galvanized or sherardized.
3. Flexible conduit shall be heavy duty steel Greenfield type except, where exposed to oil, grease, or water – then conduit shall be Sealtite.
4. MC cable, if factory assembly of one or more current-carrying conductors in an overall metallic sheath, rated 600V.
5. Plastic conduit shall be PVC Schedule 40.
6. Conduit Fittings:
a. Rigid & IMC: Threaded.
b. Thin-Wall: Compression Type or Set Screw.
c. Flexible: Connectors shall be compatible with conduit used.
7. Conduit shall be as manufactured by AFC Cable Systems, Inc., Alflex Inc., Allied Tube & Conduit, Anamet Electrical, Inc., or Wheatland Tube Company.
8. Flexible liquid tight conduit as manufactured by Anamet Electrical, Inc., Electri-Flex Co or International Metal Hose.
9. Provide an insulating bushing for all conduits containing #4 and larger wire as well as all conduits 1" and larger regardless of the size wire they contain.
B. Wires and Cables:
1. All wire shall be type THW or THWN copper. Aluminum is unacceptable. Wiring shall be a minimum of # 12 AWG.
2. Wire smaller than #8 shall be solid; #8 and larger, stranded.
3. Where light fixtures are wired in continuous rows, wire pulled through these areas shall be type SF2.
4. Final connections to heating equipment where shown, type SF2.
5. Cable and wire shall be as manufactured by Alcoa, Anaconda, General Cable, Triangle, Simplex, Hatfield, Rail, Alpha, and Coleman Cable and Wire.
6. Unless specifically noted otherwise, all wiring shall be installed in conduit.
7. Layout branch circuit wiring and arrangement of home runs for maximum economy efficiency. Increase wire size if voltage drop exceeds 2% or 100 ft in length.
C. Color Coding: Color coding shall be used throughout the entire electrical system. Colors shall be factory applied or field applied for sizes larger # 8 AWG.
1. Colors for 208/120V, 3 Circuits:
a. Phase A – Black.
b. Phase B – Red.
c. Phase C – Blue.
2. Colors for 480/277V. Circuits:
a. Phase A – Brown.
b. Phase B – Orange.
c. Phase C – Yellow.
3. Neutral – White.
4. Grounding Wire – Green, insulated.
5. Control Wire – Colors other than above.
D. Wire Pulling Lubricant: Use of wire pulling lubricant is optional; but, if needed to prevent damage to the conductors, it must be listed by Underwriters Laboratories and be of such consistency that it will leave no obstruction or tackiness that will prevent pulling out old wires or pulling in new wires or additional wires.
E. Electrical Connections, Terminals and Splicing shall be in accordance with Section 110-14 of the NEC. Connection materials and equipment must be given special attention when using dissimilar metal conductors, etc.
F. Outlet, Pull and Junction Boxes:
1. Boxes shall be 12 gauge or heavier steel, sherardized or galvanized to prevent rusting and shall have readily removable knockouts.
2. Pullboxes and pull fittings shall be accessible with removable covers secured with brass machine screws.
3. Junction boxes shall be minimum 4" square or octagon, not less than 2" deep, deeper if required by the number of wires or construction, with appropriate covers. Provide with 3/8" stud where lighting fixture is suspended from box.
4. All switch and receptacle outlets shall be equipped with minimum 4" box. Gang boxes shall be provided where gangs of switches occur. All boxes shall be equipped with proper raised covers, mounted at heights shown on Drawings, or as directed. The approximate location of outlets is shown on the Drawings, but care shall be taken to install all outlets with proper relation to equipment or material to be installed by other trades. Special outlets shall have proper boxes to accommodate special equipment. Outlet boxes in masonry shall be of proper depth to allow conduit to be installed without cutting of shell of blocks, etc.
5. Outlet boxes shall be as manufactured by Appleton, Steel City, Raco or Crouse-Hinds.
6. Boxes for all exterior conduit, or conduit mounted in exterior walls, shall be cast iron boxes, type "FS" or "FD", as manufactured by Crouse-Hinds, Appleton, Pyle National, Or Killark and provided with gasketed watertight covers. Fittings shall be pull type with gasketed covers.
G. Disconnect Switches:
1. Switches shall meet NEMA enclosed switch standards KS1, current rating, and voltage rating, quick-make, quick-break so that operation of the contacts shall not be capable, during normal operation of the switch, of being restrained by the operating handle after the opening or closing of the contacts has started.
2. All safety switches shall be heavy duty of voltage matching equipment served, NEMA 1 for indoor use and NEMA 3R for outdoor use. Switches shall be as manufactured by Square D, Eaton, Siemens or General Electric.
H. Fuses: Furnish and install all fuses. Fuses shall be Bussman "Fusetron", dual element, current limiting type, unless specifically noted otherwise.
I. Switches:
1. Except where otherwise specified, wall switches shall be mounted in suitable outlet boxes in the walls, partitions, or as shown on Drawings.
2. Wall switches shall be located as indicated on the Drawings, arranged singly or in gangs and at the height specified or indicated and shall have proper covers with finishes specified herein. Switches shall be as follows unless otherwise called for on Drawings or hereinafter specified. (Contractor shall check architectural drawings for additional information.)
a. Light switches shall be toggle 20amp., 120/277 Volt Specification grade.
b. SPST Hubbell #1221; P & S #20AC1; Leviton #1221
c. 3-way Hubbell #1223; P & S #20AC3; Leviton #1223
d. 30A-SPST (Motor Disconnect): Hubbell #3031; P & S #30AC1; Leviton #3031. Coordinate location with mechanical trades.
e. Key switch Hubbell #1221L.
3. Verify door swings before installing switchboxes and install the boxes on the latch side of the door unless otherwise directed by the Architect.
4. Color of devices to be white, unless noted otherwise.
J. Receptacles:
1. Receptacle shall be located as shown on the Drawings and at the heights specified or indicated. Receptacle and power outlets shall be of the grounding type and as manufactured by Hubbell, Pass & Seymour, or Leviton.
2. Duplex Convenience Receptacles: 20A.,2 Pole, 3 Wire, 125 Volt, (NEMA designation 5-20R) Specification Grade.
a. Pass & Seymour #5362
b. Leviton # 5362
c. Hubbell # 5362
3. Special Receptacles and Floor Boxes: As indicated on Drawings.
4. Color of receptacles to match switches (white), unless noted otherwise. Color of isolated Ground receptacles shall be orange.
5. Ground fault circuit interrupter to be provided for receptacles outdoors, in toilet rooms, and within 6' of sinks.
K. Switch and Receptacle Plates:
1. Plates in finished areas for switches and receptacles shall be white finish and thermoplastic nylon, unless noted otherwise.
2. Provide multigang or combination plates for devices grouped in gang or combination.
3. Provide cadmium plated steel plates in unfinished areas.
4. Identify all dedicated circuits with a laser printed adhesive label indicating panel and circuit number.
L. Circuit Breakers:
1. Circuit breakers shall be as manufactured by Square D, Eaton, Siemens, General Electric or of type and manufacturer to match existing for existing panels.
M. Motors, Control Panels, Etc., Furnished by Others:
1. Check the Drawings and Specifications covering all branches of the work to ascertain what equipment is furnished by others. It will be this Contractor's responsibility to furnish the necessary labor and materials to receive and wire said equipment. Check the Plumbing and Mechanical Drawings and Division 15 of the Specifications carefully for wiring by the Electrical Contractor.

PART 3 – EXECUTION
3.01 PREPARATION/INSTALLATION/APPLICATION
A. Conduit:
1. Installation – All conduit shall be sized in accordance per local codes:
a. Conduit to be run exposed in unfinished areas such as mechanical, electrical room, and janitors' closets used as electrical closets. All other conduit shall be concealed.
b. All conduit and wiring shall be concealed wherever possible. Where conduit and wire cannot be concealed, obtain direction from the Architect. No surface mounted conduit, wiremold or power poles will be acceptable, unless specifically indicated on the drawings.
c. Run parallel or perpendicular to exterior walls of building.
d. Locate to avoid equipment, fixtures, ductwork, piping, etc.
e. Layout and install work in advance of the laying of floors, walls, etc., and furnish and install all sleeves that may be required for openings through floors, walls, etc.
f. Where conduit is to be run exposed, furnish and install all inserts and clamps for the supporting of conduit.
g. If contractor does not properly install all sleeves and inserts he will be required to do the necessary cutting and patching later at his own expense, and to the satisfaction of the Architect.
h. Do not obstruct openings or passageways.
i. Where conduit passes through floors or through smoke and fire walls, space between conduit and floor or wall shall be filled with cement grout.
j. Radius of bends shall be not less than six(6) times internal diameter. Any run of conduit shall not include more than the equivalent of four(4) quarter bends.
k. Provide expansion fittings for all conduits at expansion joints.
2. Cutting Conduit:
a. Measure and cut conduit from job site conditions, not from Drawings.
b. Conduit shall be cut square and butted solidly into fittings.
c. On rigid conduit, cut conduit full and clean with sharp dies. Ream ends of pipe after cutting and before assembly to fittings.
d. Ream thin-wall conduit (EMT) after it is cut.
3. Liquid Tight and Flexible Conduit:
a. Liquid tight flexible conduit shall be installed in such a manner that liquids tend to run off the surfaces and not drain toward the fittings.
b. Final connections of flexible conduit shall be as short as practical, of the same size as the conduit it extends and with enough slack to reduce the effects of vibration. A minimum of 24 inches of flexible conduit shall be installed.
c. Where the fittings are brought into an enclosure with a knockout, an insulated throat type fitting with liquid sealing "O" ring shall be used.
d. Flexible metal conduit shall be bonded for all final equipment connections to transformers, light fixtures (lay-in type) and all other devices where so required.
4. Type of Conduit:
a. The following areas shall be galvanized steel heavy wall conduit:
1) In earth fill.
2) Exposed in wet areas.
3) Exposed outdoors (Provide watertight fittings & boxes).
4) Outside masonry walls.
5) Within building confines run in concrete slab.
6) Exposed in mechanical rooms.
7) Feeder conduit for panelboards.
Couplings for conduit run in poured concrete shall be concrete tight.
b. Conduit run in dry areas within building confines shall be EMT. Dry areas are inside partitions, ceiling cavities and areas not subject to damage. Outside areas are not considered dry areas.
c. IMC may be used in above grade floor slabs of size 3/4" only.
d. Where permitted by local codes run conduits under floor slabs and in contact with earth may be schedule 40 PVC.
e. Where permitted by local code MC cable can be utilized in lengths less than 20', all home runs and exposed conduits shall be in conduit.
5. Supporting of Conduit:
a. All conduits must be independently supported from structure. No conduits shall be supported from the ventilating ducts, ceiling hangers, mechanical piping or their hangers.
b. All surface run conduit one inch(1") and smaller shall be supported every five feet with one hole straps with clamp backs. Perforated strap hangers will not be permitted.
c. Hangers shall be proportioned for the weight of the conduit(s) supported. All rods, clamps and/or hangers shall be galvanized, bonderized, plated or painted. Where factory supplied, with one of the above rust resistant finishes, all field cuts and threads are to be painted and covered with a grey finishing paint.
d. Trapeze type hangers may be used where several conduits occur at the same elevation. The spacing of such trapeze hangers shall be determined by the electrical code spacing requirements for the smallest conduit in the run.
e. Approved type inserts for support of work in cast or concrete construction.
f. Approved type steel beam clamps in the case of steel construction.
6. Where holes or recesses must be cut in walls, floors, ceilings, or any part of the building to admit apparatus, conduit or other work of this Contractor, he must have it done in a competent manner, in a neat and workmanlike manner. The portions cut must be restored to their original condition at the expense of this Contractor. This Contractor shall provide for all of his own cutting and patching.
7. All conduits run in or below any grade slab shall be heavy wall conduit and entirely encased in 2" of concrete. In no case shall conduit be laid in fill below slab. Conduit shown as plastic shall be schedule 40.
8. 3/4"D. minimum conduit shall be provided in all non-accessible construction such as floor slabs, earth, masonry, walls, partitions, etc.
9. Provide:
a. Supplementary angles, channels, plates, etc., where supports are required between building's structural members, spanning the space and attached to building structural members, by welding, bolting or with concrete anchors.
b. All rods, angles, rails, struts, brace plates, platforms, etc. required for suspension or support of conduit and equipment.
c. Straps, clamps, threaded rods, turnbuckles, anchors, etc., and all miscellaneous specialties for the attachment of hangers and supports to the structure.
10. Unless otherwise noted on the Drawings, the following shall apply:
a. Convenience outlets shall be placed on separate circuits from motor and lighting outlets.
b. Motors shall be placed on separate circuits from lighting outlets.
c. Convenience outlets shall not be installed back to back.
11. Provide full size ground wire in all conduits, PVC or Metallic. Where the drawings do not identify the size of the equipment ground wire, it shall be the same size as the phase conductors.
B. Motor and Equipment Wiring:
1. Unless indicated or specified elsewhere perform the following:
a. Connect and wire to each motor and piece of electrically operated equipment shown on the Drawings or as specified in these Specifications.
b. Furnish, install and connect all starters, controller selector switches, pilot lights, pushbuttons' stations for each motor and piece of electrically operated equipment shown on Drawings, or as specified in the Specifications, unless otherwise indicated.
c. Furnish and install all wiring from the current source to all starters and from starters to motors, except in the case of factory installed wiring packaged equipment. Wire to the line side of all prewired equipment.
d. Furnish and install a disconnect switch ahead of all prewired package equipment. Coordinate with Mechanical Trades Contractor.
e. Install all roughing-in pertaining to each item of equipment furnished under other Sections of the Specifications or by the Owner. Locations of electrical outlets for this equipment are indicated on the Drawings in their approximate locations. The supplier furnishing the equipment will furnish dimensional drawings accurately locating all roughing-in required for his equipment.
f. Receive, set and align motors which are shipped loose if local union or trade jurisdiction practice requires doing so.
g. Provide all control circuit and interlock wiring and connections for all mechanical equipment as indicated and scheduled on the Drawings.
2. If a disconnect switch is required by the enforcing code and not indicated on the Drawings or in the Specifications, it shall be furnished and installed.
3. Where specific locations of switches and starters are not shown on the Drawings, these shall be placed near the motor.
C. Conductors, Cables:
1. Except where otherwise shown on the drawings all wiring shall be installed in conduit.
2. Conductors and cables shall not be installed in conduit or raceways until same are free from moisture and debris.
3. Leave a minimum of six inch(6") length of cable and conductor slack at each outlet.
4. All wire shall be type THW or THWN copper.
D. Expansion Fittings:
1. Expansion fittings shall be installed in all conduits crossing expansion joints. Refer to Architectural drawings for locations.
E. Fire and Smoke Partition Penetrations:
1. The Contractor shall familiarize himself with all fire rated construction and install his work so as to maintain the integrity of the fire code rating. Maintain rating of fire rated and smoke rated construction. Sleeves shall be steel or pre-manufactured sleeves similar to Pipe Shields, Inc. , for bare pipe through fire walls and floors, model WFB, DFB or ODFB. For plastic pipe, use type WFB with one inch thick calcium silicate insulation encased in metal sleeve extension two feet either side of fire rated walls or floor. Seal annular space around conduits. For fire and smoke rated floors, walls and partitions, use UL listed material that maintains fire rated wall and floor integrity, similar to R/N foam, Dow Corning "Fire Stop" or Pipe Shields, Inc. , model WFB, DFB, or ODFB. For non-rated walls and partitions, use mineral or glass fiber insulation.
END OF SECTION

SECTION 16400
SERVICE AND DISTRIBUTION

PART 1 – GENERAL
1.01 RELATED DOCUMENTS
A. The General Conditions, Supplementary Conditions, and General Requirements apply to the Work specified in this Section.
B. Section 16010, "General Provisions – Electrical", applies to the work specified in this Section

1.02 DESCRIPTION
A. Work Included:
1. Existing current transformers cabinet shall remain.
2. All charges by the Local Utility Company for construction related work. Owner charges will be paid by the Owner.
3. System Grounding per the local Utility Company and the N.E.C.
4. Existing panelboards shall remain, by Landlord.
5. Provide new circuit breakers of type to match existing as required for complete distribution system, refer to One Diagram notes for additional information.
6. Existing tenant metering to remain, by Landlord.

PART 2 – PRODUCTS
2.01 EQUIPMENT
A. Lighting and Application Panelboards:
1. Panelboards are furnished and installed by Landlord.
2. The Electrical Contractor shall balance all circuits. All conductors shall be continuous without splicing from last outlet to their terminals in cabinet. All circuit conductors in cabinet shall be installed with sufficient amount of length to reach the most remote breaker connection from its point of entrance.
3. Contractor shall provide a directory of circuits for cabinet. Directory shall be typewritten designating room or equipment, circuit numbers and any existing circuits to remain. Directory frame are to be secured to inside of door and trim in such a manner that screws, holes or welds, etc., are not visible on the door panel or trim.
4. Where 2 or 3 pole breaker units are called for, they shall be one unit with common trip and not single pole units with handle ties. Capacity of main busses shall be as shown on the Drawings.
5. Branch circuit breakers shall be provided by this contractor for all panelboards furnished by landlord. Circuit breakers, manufacturer, model numbers, AIC ratings shall be type to match landlords provided equipment.

PART 3 – EXECUTION
3.01 INSTALLATION
A. Grounding:
1. Provide an electrically continuous ground system from existing service ground to all points of utilization. In general, all pieces of electrical equipment shall be grounded and tested by Federal, State and Local Codes and regulations, but special attention is called to the following items to be grounded as indicated:
a. Conduit and other metallic raceways.
2. In general where grounding wire is shown use green color.
END OF SECTION

SECTION 16500
LIGHTING SYSTEMS AND CONTROLS

PART 1 – GENERAL
1.01 DESCRIPTION
A. Work Included:
1. Installing and wiring lighting fixtures as shown on Drawings, Lighting Fixture Schedule, and as furnished by the Owner.
2. Refer to the Architectural Room Finish Schedules and Architectural and Structural details to determine conditions and finishes affecting the installation of the work. Include, to the full intent and meaning of these Specifications, all items of labor and materials necessary for design, detailing or adjustment of fixtures due to surrounding finishes and construction.

PART 2 – PRODUCTS
2.01 MATERIALS
A. All lighting fixtures shall be furnished by Owner.
B. All lamps shall be furnished by Owner.

PART 3 – EXECUTION
3.01 INSTALLATION
A. Fixtures: An outlet is to be provided for each fixture. All fixtures shall be located to suit the Architectural details of the areas involved. Unpack, assemble, wire and install all fixtures at the proper locations indicated on the Drawings.
B. Recessed Fixture Installation: Recessed fixtures shall be of type suitable for mounting in the type of ceiling as scheduled on the Drawings. Variations to catalog numbers indicated shall be made to assure proper mounting and fitting arrangements, prior to fabrication. Changes to be made by this Division Contractor must have prior written approval from the Architect.
C. Supports:
1. Each lighting fixture shall be rigidly supported from the building construction. Provide suspension hangers, stems and extra steel work for fixture support where required.
2. Confer with Ceiling Contractor to determine modifications required to make fixtures suitable for ceiling as installed.
3. Where recessed fixtures are called for, each shall be provided with the proper plaster frame or suitable adapter to receive the finished ceiling construction.
4. Where suspended acoustic tile ceilings on steel channels occur, outlets and fixtures shall be supported on members resting on the channel framework. In no case shall fixtures be supported from plaster or acoustic material.
5. Suspended fixtures shall be hung on suspension hangers furnished by the fixture manufacturer and shall be adjusted as necessary during installation to insure that all fixtures in the room or area are at a uniform height from the floor. Mounting height shall be as specified, detailed or noted on the Drawings.
6. Any electrically lighting fixture weighing more than 50 pounds shall be supported independently of the outlet box.
D. Fixture Wiring:
1. Fixtures shall be wired with white wire for the neutral and colored wire for phase wires, see Section 16100.
2. Housing of all fixtures must be grounded to conduit system.
3. Each fixture to be complete with holders, screws, sockets, wires, lamps, etc., as is necessary for a complete installation.
E. Operation and Controls:
1. Local switches as shown and wired.
2. Exit and directional signs shall be constantly on, and wired as shown.
END OF SECTION

SECTION 16620
EMERGENCY LIGHT AND POWER

PART 1 – GENERAL
1.01 DESCRIPTION
A. Install all exit signs and battery emergency lights as shown on the Drawings and required by all governing authorities having jurisdiction.

1.02 SUBMITTALS
A. Requirements of Regulatory Agency: Obtain any and all plan approvals as required by the authorities which have jurisdiction over this Project, prior to start of work.

PART 2 – PRODUCTS
2.01 MATERIALS AND FIXTURES
A. Conduits, fittings, wire, etc., shall be in accordance with applicable Section of this Specification.
B. Exit and Direction Signs:
1. Shall be U.L. approved.
2. Colored letters on white background. (Color per the local Code Authority).
3. Directional arrows as required by local Fire Protection Bureau.
4. Color of trim as selected by Architect.

PART 3 – EXECUTION
3.01 INSTALLATION
A. Furnish and install all panels, conduits, feeders, branch circuit wiring, etc., with green ground wire required by Code and as shown on the Drawings.
B. All emergency system branches shall be installed in separate conduits.
END OF SECTION

SECTION 16720
ALARM AND DETECTION SYSTEMS

PART 1 – GENERAL
1.01 DESCRIPTION
A. Work Included:
1. Provide necessary conduit and power for alarm and detection systems. This shall only include the following:
a. Dedicated 20 Amp., 120 Volt circuit (s).
b. 3/4" conduit (empty) to each door contact, silent duress alarm, camera and keypad.

PART 2 – PRODUCTS (REFER TO OTHER SECTIONS OF THE SPECIFICATION)

PART 3 – EXECUTION
3.01 RELATED DOCUMENTS
A. All conduit and wiring requirements shall conform with Section 16100, "Basic Materials and Methods" of this Specification.
END OF SECTION

SECTION 16700
COMUNICATIONS

PART 1 – GENERAL
1.01 DESCRIPTION
A. Work Includes:
1. Empty conduit and boxes for wiring installed by owner's vendor.
B. Work by Telephone Utility:
1. All wiring for telephone instruments.
2. All telephone instruments.

PART 2 – PRODUCTS
2.01 MATERIALS
A. Conduits, fittings, and outlet boxes shall be as hereinbefore specified in Section 16100.
B. All boxes to be flush, 4" square, with extension ring.
C. Telephone System Grounding Conductors: Furnish a #6 AWG, copper grounding conductor from each telephone service equipment to respective electrical service grounding electrode system.
D. Telephone/Computer Conduit System: Furnish as indicated on the Drawings, including the following:
1. Telephone service conduits for underground service.
2. Other conduits as indicated on the Drawings. Furnish #14 AWG soft iron pull wire or heavy twine cord in each conduit for pulling the telephone cable to each termination point.
3. Outlet boxes with a 3/4" conduit stubbed into accessible ceiling space with pullwire for cabling by others. Provide separate dedicated conduits for P. O. S. lines. (Do not share with other telephone or data lines.)
4. No electrical conduits or power wiring shall pass over the telecommunications closet and panels, except for telecommunications room light fixtures.
5. Contact DreaCom National Green team/Ulta Project Coordinator at (800) 933-9203 to fully coordinate entire Tele/Data low voltage installation.

PART 3 – EXECUTION
3.01 INSTALLATION
A. Furnish and install conduit system as shown. Cabling and final connection to be by the owners subcontractor. The system shall consist of telephone/data outlets in locations as indicated, branch conduits, and all accessories required by the telephone company for complete installation.
END OF SECTION

City of Kirkland
Reviewed by
J Tumelson
05/30/2018

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ELECTRICAL SPECIFICATIONS

DAVID L. DICKERSON
STATE OF WASHINGTON
REGISTERED
PROFESSIONAL ENGINEER
EXPIRES 05/05/2018

SIGNATURE
04/23/2018 DATE
05/05/2018 EXPIRATION DATE

Revisions
ISSUE FOR CLIENT/LL REVIEW 04/20/18
ISSUE FOR PERMIT & BID 04/20/18

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| Scale | Date |
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