| **G** | **OSI** | **Op Sys** | **SI** | **Sys** | **Builder Code, Notes, and Misc** |
| --- | --- | --- | --- | --- | --- |
|  | AAC | Actinide Analytical Chemistry |  |  | Not in BuilderTA 03-0029 Only |
| P |  |  | CVD | Confinement Vessel Disposition |  |
| P |  |  | HCE | Hot Cell Enclosure |  |
| P |  |  | OVEN | Oven |  |
| P |  |  | RMS | Radiation Monitoring System | Includes neutron and gamma detection system. |
| P |  |  | SD | BG Sphere |  |
|  | ACHEM | Analytical Chemistry |  |  | Not in Builder |
| P |  |  | CSPEC | Plasma/Mass Spectrometry |  |
| P |  |  | R5 | Radiochemistry |  |
| P |  |  | SMPPRP | Sample Preparation |  |
| P |  |  | SOLA | Solids Analysis |  |
| P |  |  | SOLCHM | Solution Chemistry |  |
|  | AO | Assembly Operation |  |  | Not in Builder |
| P |  |  | BRUSH | Brushing |  |
| P |  |  | CLNOP | Cleaning Operations |  |
| P |  |  | CRIMP | Tube Crimping |  |
| P |  |  | DOWNDR | Downdraft Room Operations |  |
| P |  |  | ECM | Electro Chemical Marking |  |
| P |  |  | EVB | Evacuation and Bake Out |  |
| P |  |  | FDENSE | Final Density |  |
| P |  |  | FMASS | Final Mass, Volume Displacement System |  |
| P |  |  | GPE | Grinding/Polishing/Etching |  |
| P |  |  | INERT | Inert Storage |  |
| P |  |  | LAZMK | Laser Marking |  |
| P |  |  | LAZSMP | Laser Sampling |  |
| P |  |  | LEAKS | Leak Testing System |  |
| P |  |  | PTEST | Pressure Proof |  |
| P |  |  | SBPREP | Sample Bottle Preparation System |  |
| P |  |  | SUBLT | Sub Assembly Leak Testing |  |
| P |  |  | ULTRAC | Ultrasonic Cleaning |  |
|  | AQCL | Aqueous Chloride |  |  | Not in Builder |
| P |  |  | AMDO | Americium Oxide Dry Operations |  |
| P |  |  | AQCLTP | Aqueous Chloride Transfer Piping |  |
| P |  |  | CALCL | Calcination AQCL |  |
| P |  |  | CLEAR | Chloride liquid effluent actinide recovery line |  |
| P |  |  | CRUSH | Crushing |  |
| P |  |  | DISSCL | Dissolution AQCL |  |
| P |  |  | HYDCL | Hydroxide Precipitation -EXCEL |  |
| P |  |  | IXCL | Ion Exchange AQCL |  |
| P |  |  | OHCL | Hydroxide Precipitation -CLEAR |  |
| P |  |  | OXCL | Oxalate Precipitation AQCL |  |
| P |  |  | SX | Solvent Extraction |  |
|  | AQN | Aqueous Nitrate |  |  | Not in Builder |
| P |  |  | 400FRN | 400 Wing Forensics |  |
| P |  |  | ATDIS | Dissolution ATLAS |  |
| P |  |  | ATLIX | Ion Exchange ATLAS |  |
| P |  |  | CALAT | Calcination ATLAS |  |
| P |  |  | CASDIS | Cascade Dissolvers |  |
| P |  |  | CF | Cementation |  |
| P |  |  | EDDIS | Dissolution AQN |  |
| P |  |  | EV | Evaporation |  |
| P |  |  | HD | Nitrate Dissolution |  |
| P |  |  | HNO3P | Nitric Acid Process Solutions |  |
| P |  |  | NARS | Nitric Acid Recovery |  |
| P |  |  | PMO | Pu Metal Oxidation AQN |  |
| P |  |  | RESIN | IX Resins for Weapons Grade |  |
| P |  |  | RFXCAL | Calcination AQN |  |
| P |  |  | RFXIX | Ion Exchange RFX |  |
| P |  |  | RFXOXP | Oxalate Precipitation AQN |  |
|  | ARIES | Advanced Recovery and Integrated Extraction System |  |  | Not in Builder |
| P |  |  | ACONV | Aries Conveyor |  |
| P |  |  | APC | Aries Pit Cutter |  |
| P |  |  | CONCAN | Packaging: Convenience Can Welder |  |
| P |  |  | DMO2 | Direct Metal Oxidation 2 |  |
| P |  |  | DMO3 | Direct Metal Oxidation 3 |  |
| P |  |  | ELDE | Electrolytic Decontamination |  |
| P |  |  | HEUOPS | Electrolytic Decontamination, Uranium size reduction, Oxidation, and packaging |  |
|  |  |  | ILMS | In-Line Material Storage |  |
| P |  |  | INCAN | Packaging: Inner Can Welder |  |
| P |  |  | NDAPDC | Non-Destructive Analysis |  |
| P |  |  | OUTCAN | Packaging: Outer Can Welder |  |
| P |  |  | PITD | PIT Disassembly |  |
| P |  |  | PSF | Parts Sanitization Furnace |  |
| P |  |  | RBLATH | Robotic Lathe |  |
| P |  |  | RIPS | Robotic Integrated Packaging System |  |
|  | ASR | Aqueous Scrap Recovery |  |  | Not in Builder |
| P |  |  | BLML | Ball Milling ASR |  |
| P |  |  | CALC | Calcination ASR |  |
| P |  |  | DISS | Dissolution ASR |  |
| P |  |  | HYDPRE | Hydroxide Precipitation ASR |  |
| P |  |  | IX | Ion Exchange ASR |  |
| P |  |  | OXPRE | Oxalate Precipitation ASR |  |
|  | BLDG | Building |  |  |  |
| R |  |  | BSMNT | Basement | A20 Basement ConstructionA2020 Basement WallsA202001 Basement Wall ConstructionA202002 Moisture ProtectionA202003 Basement Wall InsulationA202090 Other Basement WallsSee FOUND for basement floor. |
| R |  |  | CEILNG | Ceilings | C30 Interior FinishesC3030 Ceiling FinishesC303001 Acoustical Ceiling Tiles & PanelsC303002 Gypsum Wallboard Ceiling FinishesC303003 Plaster Ceiling FinishesC303004 Wood CeilingsC303005 Suspension SystemsC303006 Metal Strip CeilingsC303090 Other Ceiling & Ceiling FinishesC3040 Int Coatings / Special FinishesC304004 Metal Finishes |
| R |  |  | CONF | Confinement | Confinement used only for radiological barrier and marine doors.C10 Interior ConstructionC1020 Interior DoorsC102090 Other Interior Specialty Doors (used for radiological and marine doors)C1030 SpecialtiesC103090 Other Interior Specialties (use for radiological barriers other than doors) |
| R |  |  | COSTOR | Controlled Storage | C103001 Compartments, Cubicles & Toilet PartitionsStorage area for like ML1 parts. |
| R |  |  | EXTENC | Exterior Enclosure | B20 Exterior Enclosure (Use this when applicable to an entire building)B2010 Exterior WallsB201001 Exterior Closure (including siding)B201002 Exterior Wall Backup ConstructionB201003 Insulation & Vapor RetarderB201004 ParapetsB201005 Exterior Louvers & ScreensB201006 Balcony Walls & HandrailsB201007 Exterior SoffitsB201008 FlashingB201009 Exterior Painting and Special CoatingsB201010 Exterior Joint SealantB201011 Sun Control DevicesB201012 Screen WallsB201090 Other Exterior WallsB2030 Exterior DoorsB203001 Solid DoorsB203002 Glazed DoorsB203004 Overhead and Roll-Up DoorsB203005 Hangar DoorsB203006 Blast Resistant DoorsB203007 GatesB203090 Other Exterior Specialty Doors – Use this for security doorsB203091 Other Exterior Personnel DoorsDoor hardware, e.g. latches and releases, “Assessed as part of door”F10 Special ConstructionF1010 Special StructuresF101001 Metal Building SystemsF101002 Exterior Utility Buildings - Put security/guard towers under SEC/PIDASF101003 Air-Supported StructuresF101090 Other Special Construction(Use CONF System when radiological barrier) |
| P |  |  | FIRING | Firing Lanes | Not in BuilderFixed targets, moveable target mechanisms, berm bullet traps |
| R |  |  | FIXLDR | Affixed Ladders | B20 Exterior EnclosureB2010 Exterior WallsB201001 Exterior Closure (includes exterior ladders)C10 Interior ConstructionC1030 SpecialtiesC103090 Other Interior Specialties (includes interior ladders)This Sys is for ladders permanently affixed to the building structure. |
| R |  |  | FLOORC | Floors, Construction | B10 SuperstructureB1010 Floor ConstructionB101001 Structural FrameB101003 Floor Decks and SlabsB101004 Inclined and Stepped FloorsB101005 Balcony ConstructionB101006 RampsB101007 Floor Raceway SystemsB101090 Other Floor Construction |
| R |  |  | FLORIN | Floors, Interior Finishes | C30 Interior FinishesC3020 Floor FinishesC302001 Tile Floor FinishesC302002 Terrazzo Floor FinishesC302003 Wood FlooringC302004 Resilient Floor FinishesC302005 CarpetingC302006 Masonry & Stone FlooringC302008 Stair FinishesC302009 Floor Toppings and Traffic MembranesC302010 Hardeners and SealersC302011 Raised Access FlooringC302090 Other Flooring & Floor Finishes |
| R |  |  | FOUND | Foundations | A10 FoundationsA1010 Standard FoundationsA101001 Wall FoundationsA101002 Column Foundations & Pile CapsA101090 Other Standard FoundationsA1020 Special FoundationsA102001 Pile FoundationsA102090 Other Special FoundationsA1030 Slab On GradeA103001 Standard Slab on GradeA103003 TrenchesA103004 Pits and BasesA103090 Other Slab on GradeA20 Basement ConstructionA2010 Basement ExcavationA201001 Excavation For Basements Use this for basement floors |
| R |  |  | FURNSH | Furnishings | E20 FurnishingsE2010 Fixed FurnishingsE201001 Fixed ArtworkE201002 Window TreatmentsE201003 Seating (Fixed)E201004 Fixed Interior LandscapingE201090 Other Fixed Interior FurnishingsE2020 Moveable FurnishingsE202001 Moveable Art WorkE202002 Modular Prefabricated FurnitureE202003 Freestanding FurnitureE202004 Rugs & AccessoriesE202005 Moveable Multiple SeatingE202006 Moveable Interior LandscapingE202090 Other Moveable Furnishings |
| R |  |  | INTCON | Interior Construction | B10 SuperstructureB1030 Wall ConstructionB103002 Structural Interior WallsC10 Interior Construction Use when Entire Building InteriorC1010 PartitionsC101001 Fixed PartitionsC101002 Demountable PartitionsC101003 Retractable PartitionsC101004 Interior Guardrails & ScreensC101006 Glazed Partitions & StorefrontsC1020 Interior DoorsC102001 Standard Interior DoorsC102002 Glazed Interior DoorsC102004 Sliding & Folding DoorsC102005 Interior Overhead DoorsC102006 Interior Gates – Use this for security doorsC102090 Other Interior Specialty Doors (used for radiological and marine doors under CONF System)C102091 Other Interior Personnel Doors – Use for cipher lockset, with key pad, and Door Frame, Hardware, Motor, Signage, Surface, Window Glass.Door hardware, e.g. latches and releases, “Assessed as part of door”C30 Interior FinishesC3010 Wall FinishesC301001 Concrete Wall FinishesC301003 Gypsum Wallboard FinishesC301004 Tile & Terrazzo Wall FinishesC301005 Wall CoveringsC301006 Acoustical Panels Adhered To WallsC301090 Other Wall Finishes(Use CONF System when radiological barrier)(Fire doors under FP/FBP) |
| R |  |  | INTFIN | Interior Finishes | C30 Interior FinishesC3040 Int Coatings / Special FinishesC304001 General RequirementsC304002 Concrete FinishesC304003 Concrete Masonry FinishesC304004 Metal FinishesC304005 Interior Wood FinishesC304006 Gypsum Wallboard FinishesC304007 Special Coatings On WallsWall finishes under Sys INTCON. |
| R |  |  | KITCHN | Kitchen Equipment | E10 EquipmentE1090 Other EquipmentE109002 Food Service EquipmentExamples: Walk-in freezer, commercial grills, large ice makers, dishwashers, etc. |
| P |  |  | LAB | Laboratory Equipment | E10 EquipmentE1020 Institutional EquipmentE102003 Laboratory Equipment (Calorimeter, fume hood, with countertop & base, complex, incl. fixtures, sterilizer, Mass Spectrometer, and ovens. Fume hood exhaust scrubbers will be assessed as part of the fume hood. Fume hood exhaust fans are under VNT/EXH.E1090 Other EquipmentE109090 Other Specialized Fixed and Moveable EquipmentExamples: Incubators, Refrigerators for Specimens, radiation generating devices other than medical or security x-ray equipment. |
| R |  |  | LDRY | Laundry | E10 EquipmentE1010 Commercial EquipmentE101004 Laundry Equipment |
| R |  |  | MISC | Miscellaneous | E1020 Institutional EquipmentE102001 Miscellaneous Common Fixed & Moveable Equipment |
| R |  |  | NSB | Nuclear Support Building | TA55 onlyF10 Special ConstructionF1010 Special StructuresF101090 Other Special Construction |
| R |  |  | ROOF | Roofing | B30 RoofingB3010 Roof CoveringsB301001 Steep Slope Roof SystemsB301002 Low Slope Roof SystemsB301003 Roof Insulation & FillB301004 Flashings & TrimB301005 Gutters & DownspoutsB301006 Roof Openings and SupportsB301090 Other RoofingD20 PlumbingD2040 Rain Water DrainageD204002 Roof DrainsD204003 Rainwater Drainage EquipmentD204090 Other Rain Water Drainage System |
| R |  |  | ROOFC | Roof Construction | B10 SuperstructureB1020 Roof ConstructionB102001 Structural FrameB102003 Roof Decks and SlabsB102004 CanopiesB102090 Other Roof Construction |
| R |  |  | STAIRS | Stairs | C20 StairsC2010 Stair ConstructionC201001 Interior and Exterior StairsC201002 Fire Escape StairsC201090 Stair Handrails, Guardrails and AccessoriesC30 Interior FinishesC3020 Floor FinishesC302008 Stair Finishes |
| R |  |  | WCFD | Laboratory Walls, Floors, Ceilings and Doors | PF4 onlyNot in Builder |
|  | CGS | Compressed Gas Supply |  |  | D20 PlumbingD2090 Other Plumbing SystemsRegardless of system, no safety or relief valves will be assessed by Builder. |
| R |  |  | AR | Argon Gas | D209090 Other Special Plumbing Systems |
| R |  |  | AR100 | Argon Gas (100 PSI) | D209090 Other Special Plumbing Systems |
| R |  |  | CA | Compressed Air | D209005 Compressed Air System – Non Breathing Air (Use this for large instrument air systems including dryers. Do not include moisture/oil separators or coolers. Do not include compressors for boilers burner systems. For systems supplying solely HVAC system as found in office or training buildings use the instrument air compressors found under HVAC System.) |
| R |  |  | CG | Calibration Gas | D209090 Other Special Plumbing Systems |
| R |  |  | CH4 | Methane Gas | D209090 Other Special Plumbing Systems |
| P |  |  | CL2 | Chlorine Gas | D209090 Other Special Plumbing Systems |
| P |  |  | CLDEL | Chlorine Gas Delivery | D209090 Other Special Plumbing Systems |
| P |  |  | CLDET | Chlorine Gas Detection | D209090 Other Special Plumbing Systems |
| R |  |  | CO2 | Carbon Dioxide Gas | D209090 Other Special Plumbing Systems |
| R |  |  | H2 | Hydrogen Gas | D209090 Other Special Plumbing Systems |
| R |  |  | H2S | Hydrogen Sulfide | D209090 Other Special Plumbing Systems |
| R |  |  | HE | Helium Gas | D209090 Other Special Plumbing Systems |
| R |  |  | IAS | Instrument Air System | D209090 Other Special Plumbing Systems |
| R |  |  | LAR | Liquid Argon (cryogenic) | D209090 Other Special Plumbing Systems |
| R |  |  | LN2 | Liquid Nitrogen (cryogenic) | D209090 Other Special Plumbing Systems |
| R |  |  | MULTI | Gas Bottled System | D209090 Other Special Plumbing Systems |
| R |  |  | N2 | Nitrogen Gas | D209090 Other Special Plumbing Systems |
| R |  |  | N2100 | Nitrogen Gas (100 PSI +/-) | D209090 Other Special Plumbing Systems |
| R |  |  | N2H2 | Nitrogen/ 6% Hydrogen | D209090 Other Special Plumbing Systems |
| R |  |  | O2 | Oxygen Gas | D209090 Other Special Plumbing Systems |
| R |  |  | P10 | P10 Gas | D209090 Other Special Plumbing Systems |
| R |  |  | PCA | Process Air Supply | D209090 Other Special Plumbing Systems |
| R |  |  | REGEN | Argon/6% Hydrogen Regen Gas | D209090 Other Special Plumbing Systems |
| R |  |  | RL | Refrigerant Liquid | D209090 Other Special Plumbing Systems |
| P |  |  | XE | Xenon Gas | D209090 Other Special Plumbing Systems |
|  | COMM | Communications |  |  |  |
| R |  |  | CCTV | Closed Circuit Television | F10 Special ConstructionF1050 Special Ctrls / InstrumentationF105001 Recording InstrumentationSecurity cameras are under SEC, Security. |
| R |  |  | LPS | Local Paging System | D50 ElectricalD5030 Communications & SecurityD503002 Public Address Systems |
| R |  |  | PA | Public Address | D503002 Public Address Systems – Use this for intercom also. |
| R |  |  | RC | Radio Communications | G40 Site Electrical UtilitiesG4030 Site Communication and SecurityG403001 Telecommunications Systems |
| R |  |  | REDNET | Secure Network | D503090 Other Communications & Alarm Systems |
| R |  |  | SPAS | Emergency Paging System | D503002 Public Address Systems |
| R |  |  | TEL | Telecommunications | G403001 Telecommunications Systems |
|  | CONT | Containers |  |  | Not in Builder |
| P |  |  | CNTRC | Credited Containers |  |
| P |  |  | EHS | Encapsulated Heat Sources |  |
| P |  |  | MIS | MIS Containers |  |
|  |  |  | POC | Pipe Overpack Containers |  |
| P |  |  | SCNTR | Containers for Movement of SNM OS GBs | Includes Pipe Overpack Containers, 55 Gallon Drums (With or Without Overpack), 85 Gallon Drums, Standard Waste Boxes, and Ten Drum Overpack containers. |
| P |  |  | SMPCNT | Non VSS Containers |  |
| P |  |  | TYPEA | Type A Containers |  |
| P |  |  | TYPEB | Type B Containers | Includes TRUPACT-II, HallfPACT, 10-160B, and RH TRU 72B – VSS (P) containers. |
| P |  |  | VWBC | Vault Water Bath Containers |  |
|  | COOLW | Cooling Water Systems |  |  |  |
| R |  |  | CCCW | Central Circulating Chilled Water | TA55 OnlyD30 HVACD3030 Cooling Generating SystemsD303001 Chilled Water Systems – Use for chillers and condensersD304006 Chilled Water Distribution Systems – Use for pump, and tanks (expansion, chem feed, etc.) |
| R |  |  | LVCCW | Limited Volume Circulating Chilled Water | PF4 onlyD303001 Chilled Water SystemsD304006 Chilled Water Distribution Systems – Use for pump, and tanks (expansion, chem feed, etc.) |
| R |  |  | NPCCW | Negative Pressure Circulating Chilled Water | PF4 onlyD303001 Chilled Water SystemsD304006 Chilled Water Distribution Systems – Use for pump, and tanks (expansion, chem feed, etc.) |
| R |  |  | PPCCW | Positive Pressure Circulating Chilled Water | PF4 onlyD303001 Chilled Water SystemsD304006 Chilled Water Distribution Systems – Use for pump, and tanks (expansion, chem feed, etc.) |
| R |  |  | TW | Tower Water | D30 HVACD3020 Heat Generating SystemsD302005 Equipment Thermal InsulationD302090 Other Heat Generating Systems - Use this for heat trace and tank heatersD3030 Cooling Generating SystemsD303001 Chilled Water SystemsD50 ElectricalD5090 Other Electrical ServicesD509090 Other Special Systems and Devices (Use for VFD’s) |
| P |  |  | VCCW | Vault Circulating Chilled Water |  |
|  | CRIT | Credited Criticality Safety |  |  | Not in Builder |
| P |  |  | CARTS | SNM Carts |  |
| P |  |  | CRITSP | Engineered Criticality Spacing |  |
|  | CRUC | Crucibles |  |  | Not in Builder |
| P |  |  | CRUCC | Credited Crucibles | (This is for containment of molten Pu metal) |
| P |  |  | CRUCNC | Non-Credited Crucible |  |
|  | CS | Chemical Supply |  |  | D20 PlumbingD2090 Other Plumbing SystemsD209090 Other Special Plumbing SystemsCMMS will only accept all caps |
| R |  |  | ALNO3 | Aluminum Nitrate |  |
| R |  |  | BIOCID | Biocide |  |
| R |  |  | CSC | Chemical Supply Caustic | 500230 OnlyCaustic chemical supply, CST-1, CST-2, CST-3, etc. |
| R |  |  | CSP | Chemical Supply Process | 500001 and 500230 OnlyWet chemical feed, HCl, NaOH, lime, etc. |
| R |  |  | CSTBS | Nitric Acid Storage Tank and Berm |  |
| R |  |  | FECL3 | Ferric Chloride | FeCl3 |
| R |  |  | FESUL | Ferric Sulfate | Fe2O12S3 |
| R |  |  | H2O2 | Hydrogen Peroxide |  |
| R |  |  | H2SO4 | Sulfuric Acid |  |
| R |  |  | HCL | Hydrochloric Acid |  |
| R |  |  | HFA | Hydrofluoric Acid |  |
| R |  |  | HNO3 | Nitric Acid |  |
| R |  |  | KOH | Potassium Hydroxide |  |
| R |  |  | MGCl2 | Magnesium Chloride | MgCl2 |
| R |  |  | MGSO4 | Magnesium Sulfate | MgSO4 |
| R |  |  | NACIT | Sodium Citrate | NaCIT |
| R |  |  | NAHSO3 | Sodium Bisulfite | NaHSO3 |
| R |  |  | NAOCl | Sodium Hypochlorite | NaOCl |
| R |  |  | NAOH | Sodium Hydroxide | NaOH |
| R |  |  | SO2 | Sulfur Dioxide |  |
|  | CTRL | Control Systems |  |  |  |
| R |  |  | BAS | Building Automation System | F10 Special ConstructionF1050 Special Ctrls / InstrumentationF105002 Building Automation Systems (Use this when applicable to an entire building) |
| R |  |  | FCS | Facility Control System | F105002 Building Automation Systems |
| R |  |  | FMS | Facility Management System | F105002 Building Automation SystemsD50 ElectricalD5090 Other Electrical ServicesD509006 Energy Management Control System |
| R |  |  | ICS | Instrument and Control System | F105090 Other Special Controls and Instrumentation |
| R |  |  | LCS | Local Control System | F105002 Building Automation Systems |
| R |  |  | SCADA | Supervisory Control & Data Acquisition | F105090 Other Special Controls and Instrumentation |
|  | DRYOPS | Material Preparation |  |  | Not in Builder |
| P |  |  | CALCDO | Calcination DRYOPS |  |
|  | DTO | Dynamic Testing Operations |  |  | PF4 OnlyNot in Builder |
| P |  |  | 40MM | 40mm Launcher |  |
| P |  |  | 40MMTK | 40mm Launcher Catch Tank |  |
| P |  |  | IFIT | IFIT |  |
| P |  |  | IFITAT | IFIT Ceiling Armr/Catch Tub Sys |  |
| P |  |  | IFITRD | IFIT Relief Device |  |
| P |  |  | KBOP | Kolsky Bar Operations |  |
|  | ECS | Environmental Chamber System |  |  | Not in Builder |
| P |  |  | ECOPS | Environmental Chamber Over-temperature Protection System | WETF |
|  | ENCL | Enclosures |  |  | Not in Builder |
| P |  |  | COVER | Covers for Material at Risk |  |
| P |  |  | ENCLBE | Beryllium Lathe Enclosure |  |
| P |  |  | GB | Gloveboxes |  |
| P |  |  | OM | Oxygen Monitoring | Monitoring for specific oxygen levels within a glovebox or such. Not for personnel health and safety. |
| P |  |  | SPRTC | Credited Support Stands |  |
| P |  |  | SPRTNC | Support Stands, Non-Credited |  |
| P |  |  | TRLLY | Trolley Conveyer System |  |
| P |  |  | WCG | Waste Characterization Glovebox |  |
|  | ES | Electrical Supply |  |  | D50 Electrical |
| R |  |  | 130VDC | 130 Volts Direct Current System | D5090 Other Electrical ServicesD509002 Emergency Lighting & Power – Backup and Standby GeneratorsPF4 Only |
| R |  |  | APS | Auxiliary Power System | D509002 Emergency Lighting & Power – Backup and Standby Generators (Include battery banks not specific to UPS or Emergency Lighting)D30 HVACD3010 Energy SupplyD301001 Oil Supply System – Use for diesel fuel tanks |
| R |  |  | CP | Cathodic Protection | G40 Site Electrical UtilitiesG4090 Other Site Electrical UtilitiesG409001 Sacrificial Anode Cathodic Protection SystemG409002 Induced Current Cathodic Protection System |
| R |  |  | EBP | Electric Balance of Plant | D501004 Panelboards [Includes ATS, MTS, Safety Switch (CDD), Switchgear, and Lighting Panels]D501005 Enclosed Circuit BreakersD501006 Motor Control Centers |
| R |  |  | EDS | Electrical Distribution System | D5010 Electrical Service & Distribution (Use this when applicable to an entire building)D501001 Main Transformers – oil-filled, 15 kV with taps, 480 V secondary 3 phase, pad mountedD501003 Interior Distribution TransformersD501004 Panelboards [Includes ATS, MTS, Safety Switch (CDD), Switchgear, PDU’s, and Power Panels]D501005 Enclosed Circuit BreakersD501006 Motor Control CentersD501090 Other Service and Distribution – Includes bus ductsD5020 Lighting & Branch WiringD502001 Branch Wiring |
| R |  |  | EP | Electrical Power | 500230 OnlyD501004 Panelboards [Includes ATS, MTS, Safety Switch (CDD), Switchgear, and Lighting Panels]D501005 Enclosed Circuit BreakersD501006 Motor Control Centers |
| R |  |  | FDG | Fire Diesel Generator | PF4 onlyD509002 Emergency Lighting & Power – Backup and Standby Generators |
| R |  |  | GND | Grounding System | D5090 Other Electrical ServicesD509003 Grounding Systems (Use this when applicable to an entire building) (This includes static grounding systems) |
| R |  |  | LPT | Lightning Protection | D5090 Other Electrical ServicesD509004 Lightning ProtectionLightning protection aerials, grounding conductors, bonding conductors, and connections are all assessed as a system by the square footage of the roof.Lightning protection surge arrestors:• If in a panel, they are assessed as part of the panel.• If stand alone, they are assessed individually. |
| R |  |  | LTGEXT | Lighting, Normal, Exterior | D502002 Lighting EquipmentSecurity Lighting under SEC Op Sys and PIDAS SysD5030 Communications & SecurityD503090 Other Communications & Alarm Systems |
| R |  |  | LTGINT | Lighting, Normal, Interior | D502002 Lighting Equipment (Use this when applicable to an entire building) |
| R |  |  | OBP | Office Building Power | D501004 Panelboards [Includes ATS, MTS, Safety Switch (CDD), Switchgear, and Lighting Panels]D501005 Enclosed Circuit BreakersD501006 Motor Control Centers |
| R |  |  | PDS | Power Distribution System | D5010 Electrical Service & Distribution (Use this when applicable to an entire building)D501001 Main Transformers – oil-filled, 15 kV with taps, 480 V secondary 3 phase, pad mountedD501003 Interior Distribution TransformersD501004 Panelboards [Includes ATS, MTS, Safety Switch (CDD), Switchgear, PDU’s, and Lighting Panels]D501005 Enclosed Circuit BreakersD501006 Motor Control CentersD501090 Other Service and Distribution – Includes bus ductsD5020 Lighting & Branch WiringD502001 Branch Wiring |
| R |  |  | PV | Photovoltaic | D30 HVACD3010 Energy SupplyD301005 Solar Energy Systems |
| R |  |  | SES | Security Electrical Supply | TA55 onlyD501004 Panelboards [Includes ATS, MTS, Safety Switch (CDD), Switchgear, and Lighting Panels]D501005 Enclosed Circuit BreakersD501006 Motor Control Centers |
| R |  |  | SPOS | Seismic Power Shut-Off System | D501004 Panelboards |
| R |  |  | UPS | Uninterruptible Power Supply | D5010 Electrical Service & DistributionD501005 Enclosed Circuit BreakersD5090 Other Electrical ServicesD509002 Emergency Lighting & Power Includes battery and inverter |
| R |  |  | UPS391 | Credited Uninterruptible Power Supply | PF4 onlyD509002 Emergency Lighting & Power |
|  | FND | Foundry Operations |  |  | Not in Builder |
| P |  |  | CAST | Casting Operations |  |
| P |  |  | FRNOPS | Furnace Operations |  |
|  | FP | Fire Protection |  |  | D40 Fire Protection |
| R |  |  | FBP | Fire Barrier | B10 SuperstructureB1030 Wall ConstructionB103002 Structural Interior Walls – Use for interior fire rated wallsB20 Exterior EnclosureB2010 Exterior WallsB201001 Exterior Closure – Use for exterior fire rated wallsB2030 Exterior DoorsB203090 Other Exterior Specialty Doors – Use for exterior fire doorsDoor hardware, e.g. latches and releases, “Assessed as part of door”C10 Interior ConstructionC1020 Interior DoorsC102003 Fire Doors – Use for interior fire doorsDoor hardware, e.g. latches and releases, “Assessed as part of door”C1030 SpecialtiesC103012 Firestopping PenetrationsC103013 Sprayed Fire-Resistive MaterialsFire dampers not assessed by BUILDER due to inacessibility. |
| R |  |  | FCA | Clean Agent Fire Suppression | D4090 Other Fire Protection SystemsD409003 Clean Agent Systems |
| R |  |  | FEXT | Fire Extinguishers | D4050 Fire Protection SpecialtiesD405001 Portable Extinguishers (common and special types of all sizes) |
| R |  |  | FP | Fire Protection | 500230 Only |
| R |  |  | FPD | Fire Detection and Alarm | D4010 Fire Alarm and Detection SystemsD401001 Fire Alarm Distribution (fire alarm control panel, batteries, addressable fire alarm, and addressable mass notification)Detectors, pull stations, notification devices (bells, lights, strobes, horn, or siren) will not be assessed by Builder. |
| R |  |  | FPS | Fire Suppression | D4030 Standpipe SystemsD403001 Standpipe Equipment & Piping (includes risers and hoses)D4040 SprinklersD404001 Sprinklers and Releasing Devices (Dry Pipe, Preaction, Deluge, and Wet Pipe) Includes nitrogen system or air compressors and dryers.Sprinkler heads and associated piping, instrumentation, etc. are assessed as part of the “system”, and the parent equipment to link to is the riser, alarm check valve dry pipe valve, etc.D4090 Other Fire Protection SystemsD409001 Carbon Dioxide Systems (includes agent containers, distribution piping and controls)D409002 Foam Generating EquipmentD409003 Clean Agent SystemsD409004 Hood & Duct Fire Protection |
| R |  |  | FPW | Fire Water Supply | D4020 Fire Water Supply / EquipD402001 Fire Protection Water Piping and Equipment (includes storage tank, BFP, OS&Y, PIV, hydrants, and underground distribution main)D402002 Fire Pump (includes controllers, relief valves, jockey pumps, test header, and flow meters)(includes day tank and battery chargers for diesel driven fire pumps)D30 HVACD3020 Heat Generating SystemsD302005 Equipment Thermal InsulationD302090 Other Heat Generating Systems - Use this for heat trace and tank heaters, including circulation pump.Note: The D302005 and D302090 will be replaced in the future under D4020 Fire Water Supply / Equip as the insulation, heat trace, pumps, and inline heaters or boilers are within the boundaries of the fire water supply system.D50 ElectricalD5010 Electrical Service & DistributionD501004 Panelboards [Includes ATS, MTS, Safety Switch (CDD), Switchgear, and Lighting Panels] |
| R |  |  | FSHWI | Fire Suppression Hybrid Water/Inert | PF4 only |
| R |  |  | SPHS | Standpipe System |  |
|  | FS | Fuel Supply |  |  | D30 HVACD3010 Energy Supply |
| R |  |  | FO | Fuel Oil | D301001 Oil Supply System – Use for storage tanks, piping, pumps, etc. Day tanks belong to the supplied equipment. Dedicated equipment may be under own System such as FP for diesel fire pumps of ES for emergency diesel generators. Check equipment ID tags. LANL has no bulk storage tanks to supply other tanks or facilities. |
| R |  |  | NG | Natural Gas | D301002 Gas Supply System |
| R |  |  | LPG | Propane Gas | D301002 Gas Supply System |
|  | FSTF | Full Scale Test Facility |  |  | Not in Builder |
| P |  |  | FSTFH2 | Flammable Gas Control System |  |
| P |  |  | FSTFRC | Credited FSTF |  |
| P |  |  | FSTFU | Full-Scale Test Facility Uncredited |  |
| P |  |  | GASOPS | Gas Operations |  |
|  | HMP | Hazard Monitoring and Protection |  |  | F10 Special Construction |
| R |  |  | CAMS | Continuous Air Monitor System | F10 Special ConstructionF1030 Special Construction SystemsF103003 Radiation Protection |
| R |  |  | CAS | Criticality Alarm System | F10 Special ConstructionF1050 Special Ctrls / InstrumentationF105090 Other Special Controls and Instrumentation |
| R |  |  | ESM | Exhaust Stack Radiation Monitoring | F105090 Other Special Controls and Instrumentation |
| R |  |  | FASS | Fixed Air Head Sampling System | F105090 Other Special Controls and Instrumentation |
|  |  |  | HAZD | Hazardous Gas Monitoring | F105090 Other Special Controls and InstrumentationAll types of atmospheric monitoring except oxygen, e.g. propane, refrigerant, hydrogen. |
| P |  |  | HEP | High Explosives Processing | F105090 Other Special Controls and Instrumentation |
| P |  |  | O2R | Oxygen Monitoring Room | F105090 Other Special Controls and InstrumentationMonitoring for O2 levels sufficient for personnel safety in a room. |
| R |  |  | PCM | Personnel Contamination Monitors | F103003 Radiation Protection |
| R |  |  | PSS | Personnel Safety System | F105090 Other Special Controls and InstrumentationWarning lights, interlocks, and trips to protect workers from radiation and explosive hazardsInitiates accelerator beam, trips Beamstop. Functionally, a combination of a LANSCE-like radiation safety system (RSS) and a high explosive safety system (HESS).Use for TA18 interlocks. |
| P |  |  | BMSTP | Beam Stop | F103003 Radiation Protection |
| R |  |  | RADMON | Radiological Monitoring | F103003 Radiation Protection |
| R |  |  | RMS | Radiation Monitoring System | F103003 Radiation Protection |
| R |  |  | SHLD | Shielding | F103090 Other Special Construction Systems |
| R |  |  | SM | Exhaust Stack Monitoring(non-radiation) | F105090 Other Special Controls and Instrumentation |
|  | HSCHAR | HS-Pu Characterization |  |  | Not in Builder |
| P |  |  | ASPEC | Alpha Spectrometer |  |
| P |  |  | CALOR | Calorimetry |  |
| P |  |  | DCARC | Direct Current ARC |  |
| P |  |  | ELTEST | Electrical Tester |  |
| P |  |  | GASS | Gas Analysis & Sampling |  |
| P |  |  | GSPEC | Gamma Spectrometer |  |
| P |  |  | HAAS | HASS Lathe |  |
| P |  |  | HELKCK | Helium Leak Check |  |
| P |  |  | HSACHE | Heat Source Analytical Chemistry |  |
| P |  |  | HSCAN | Heat Source Can Processing |  |
| P |  |  | HSSEM | Heat Source Scanning Electronic Microscope |  |
| P |  |  | HSUT | Ultrasonic Testing |  |
| P |  |  | MET | Metallography |  |
| P |  |  | NER | Neutron Emission Rate |  |
| P |  |  | PARSA | Particle Size Analysis |  |
| P |  |  | UVVIS | UV Vis |  |
| P |  |  | WND | Weighing and Dimensioning |  |
|  | HSFF | HS-Pu Fuel Fabrication |  |  | Not in Builder |
| P |  |  | FGPREP | Fired Granulation Prep |  |
| P |  |  | GRAN | Granular Formation |  |
| P |  |  | HSFURN | Heat Source Furnace |  |
| P |  |  | PELPR | Hot Press |  |
|  | INSP | Inspection (MQ-1) |  |  | Not in Builder |
| P |  |  | CMM1 | Hot Infinity Coordinate Measuring Machine One |  |
| P |  |  | CMM2 | Hot Infinity Coordinate Measuring Machine Two |  |
| P |  |  | CMMC | Cold Coordinate Measuring Machine |  |
| P |  |  | CMMH | Hot Coordinate Measuring Machine |  |
| P |  |  | EDGBRK | Edgebreak |  |
| P |  |  | PROFO | Profilometry |  |
| P |  |  | SHADOW | Shadow Graph Optical Comparator |  |
| P |  |  | SHEFF | Sheffield Gauge |  |
|  | IS | Industrial Safety |  |  |  |
| R |  |  | BA | Breathing Air | D20 PlumbingD2090 Other Plumbing SystemsD209090 Other Special Plumbing Systems |
| R |  |  | FALPRO | Fall Protection | Not in BuilderIdentified tie-off points. |
| R |  |  | OSHA | OSHA Safety | D20 PlumbingD2010 Plumbing FixturesD201090 Other Plumbing Fixtures - EYE – Eyewash SHS – Safety Shower, used also for combination of eyewash and safety shower.D50 ElectricalD5020 Lighting & Branch WiringD502002 Lighting Equipment - Exit SignsD509002 Emergency Lighting & Power - Emergency LightsF10 Special ConstructionF1010 Special StructuresF101090 Other Special Construction – Use for training simulatorsF1050 Special Ctrls / InstrumentationF105090 Other Special Controls and InstrumentationUse IS/OSHA for windsocks, Not in Builder |
| R |  |  | STOR | Storage Cabinets | C10 Interior ConstructionC1030 SpecialtiesC103009 CabinetsStorage cabinets for chemicals, flammables, spill kits, etc. Typically contain items that have PM’s performed on them. |
|  | LIFT | Lift |  |  | For anything associated with “lifting”. |
| R |  |  | DOCKEQ | Loading Dock Equipment | E10 EquipmentE1030 Vehicular EquipmentE103002 Loading Dock Equipment (Architectural equipment, dock bumpers, rubber blocks, dock levelers, dock lifters, dock shelters, truck, scissor arms, etc.) |
| R |  |  | ELV | Elevators | D10 ConveyingD1010 Elevators and LiftsD101001 General Construction ItemsD101002 Passenger Elevators (Includes permanently installed man-lifts)D101003 Freight ElevatorsD101004 Wheelchair LiftD101005 DumbwaitersD101090 Other Vertical Transportation Equipment (Includes permanently installed lift table and other material handling lifts)D1090 Other Conveying SystemsD109002 Conveyors |
| R |  |  | HC | Hoists and Cranes | D1010 Elevators And LiftsD101090 Other Vertical Transportation Equipment (use this for stationary, fixed in place, drum handling devices and such)D1020 Weight Handling EquipmentD102001 Basic Requirements of Cranes and MonorailsD102002 Overhead Cranes – Use for all others, even if unknown. Use for breaker handling devices permanently attached to switchgear.D102003 Monorails – Use if known to be a monorailE10 EquipmentE1030 Vehicular EquipmentE103002 Loading Dock Equipment – includes dock levelersE103004 Automotive Shop Equipment – Use for automotive lifts fixed in place.Hoists, cranes, or drum handlers fixed in place. |
| R |  |  | MBLEQ | Mobile Lifting Equipment | Not in BuilderFor any type of equipment used for lifting and is not fixed in place, e.g. forklifts, man lifts, material lifts, lift tables, portable gantry cranes (on wheels designed to be pushed around the building), engine hoists, chain hoists, handling equipment such as drum handlers, breaker handling devices if they are designed to be moved around building. None of these will be linked to Builder as Builder is only for fixed assets. Breaker handling devices attached to the electrical cabinet are part of that cabinet. |
| R |  |  | RACK | Rack | Not in BuilderEquipment storage racks and shelving. |
| R |  |  | RGNG | Rigging | Not in BuilderAny rigging equipment such as slings, eye hooks, and shackles. |
| R |  |  | TRUDOC | TRUPACT II Working Platform | E103002 Loading Dock EquipmentElevated platform and controls/equipment necessary for TRUPACT-II Waste Handling. |
|  | LLW | Low Level Waste |  |  | Not in Builder |
| R |  |  | EFF | Effluent |  |
| R |  |  | UF | Ultra Filter |  |
|  | LLWBLP | Low Level Waste Balance of Plant |  |  | F10 only |
| R |  |  | AR | Argon Gas | See Builder Codes under CGS as Op Sys. |
| R |  |  | AS | Air Sampling | See Builder Codes under HMP as Op Sys.Vacuum Pump Stack Sampling System |
| R |  |  | BLDG | Building | See Builder Codes under BLDG as Op Sys. |
| R |  |  | CA | Compressed Air | See Builder Codes under CGS as Op Sys. |
| R |  |  | CS | Chemical Supply | See Builder Codes under CS as Op Sys. |
| R |  |  | CW | Chilled Water | See Builder Codes under VNT as Op Sys. |
| R |  |  | ED | Electrical Distribution | See Builder Codes under ES as Op Sys. |
| R |  |  | EP | Electrical Power | See Builder Codes under ES as Op Sys. |
| R |  |  | FCS | Facility Control System | See Builder Codes under CTRL as Op Sys. |
| R |  |  | FP | Fire Protection | See Builder Codes under FP as Op Sys. |
| R |  |  | HR | Heat Recovery | See Builder Codes under VNT as Op Sys. |
| R |  |  | HVAC | Heat, Vent, & Air Cond | See Builder Codes under VNT as Op Sys. |
| R |  |  | HW | Heating Water | See Builder Codes under VNT as Op Sys. |
| R |  |  | LLWICS | Low Level Waste Internal Collection System | Not in Builder |
| R |  |  | LP | Lightning Protection | See Builder Codes under ES as Op Sys. |
| R |  |  | LTG | Lighting | See Builder Codes under ES as Op Sys. |
| R |  |  | NG | Natural Gas | See Builder Codes under FS as Op Sys |
| R |  |  | NPW | Non-Potable Water | See Builder Codes under WS as Op Sys. |
| R |  |  | P10 | P10 Gas | See Builder Codes under CGS as Op Sys. |
| R |  |  | PCW | Process Cooling Water | See Builder Codes under VNT as Op Sys |
| R |  |  | PW | Potable Water | See Builder Codes under WS as Op Sys. |
| R |  |  | RM | Radiation Management | See Builder Codes under HMP as Op Sys. |
| R |  |  | RO | Reverse Osmosis | Not in Builder |
| R |  |  | SECW | Secondary Waste | Not in Builder |
| R |  |  | SS | Sanitary Sewer | See Builder Codes under WSTWTR as Op Sys. |
| R |  |  | VAC | Vacuum | See Builder Codes under VAC as Op Sys. |
|  | LLWPRC | Low Level Waste Process |  |  | F10 only |
| R |  |  | CA | Compressed Air | See Builder Codes under CGS as Op Sys. |
| R |  |  | CS | Chemical Supply | See Builder Codes under CS as Op Sys. |
| R |  |  | EFL | Treated Effluent | Not in Builder |
| R |  |  | FESUL | Ferric Sulfate | Fe2O12S3 |
| R |  |  | H2S04 | Sulfuric Acid | See Builder Codes under CS as Op Sys. |
| R |  |  | HNO3 | Nitric Acid |  |
| R |  |  | HVAC | Heat, Vent, & Air Cond | See Builder Codes under VNT as Op Sys. |
| R |  |  | INF | Influent Storage | Not in Builder |
| R |  |  | IX | Ion Exchange | Not in Builder |
| R |  |  | LLWICS | Low Level Waste Internal Collection System | Not in Builder |
| R |  |  | MCRFLT | Microfilter | Not in Builder |
| R |  |  | MF | Microfiltration | Not in Builder |
| R |  |  | MGSO4 | Magnesium Sulfate | MgSO4 |
| R |  |  | NAOH | Sodium Hydroxide | See Builder Codes under VNT as Op Sys. |
| R |  |  | RO | Reverse Osmosis | Not in Builder |
| R |  |  | RXN | Reaction/Precipitation | Not in Builder |
| R |  |  | SECW | Secondary Waste | Not in Builder |
|  | MACH | Machining |  |  | Not in Builder |
| P |  |  | BOSTO | Bostomatic |  |
| P |  |  | FMLATH | Back Machine |  |
| P |  |  | HAASL1 | CNC/Manuel Lathe for Part Prep and Disassembly |  |
| P |  |  | LATS | Lathes |  |
| P |  |  | MDMU | DMU-35 Manufacturing |  |
| P |  |  | MDRILL | Manual Drill and Press |  |
| P |  |  | MHARD1 | Manual Hardinge1 |  |
| P |  |  | MHARD2 | Manual Hardinge2 |  |
| P |  |  | MHARD3 | Manual Hardinge3 |  |
| P |  |  | MLATHE | Myford Lathe |  |
|  |  |  | MMS | Milling Machines |  |
| P |  |  | NNMACH | Non-Nuclear Machining |  |
| P |  |  | TBASE1 | Moore Tbase1 |  |
| P |  |  | TBASE2 | Moore Tbase2 |  |
|  | MAGGEN | Magnetic Generator |  |  | Not in Builder |
| P |  |  | CI | Chemical Injection |  |
| P |  |  | DS | Drive System |  |
| P |  |  | DSC | Drive System Cooling |  |
| P |  |  | EX | Exciter |  |
| P |  |  | EXC | Exciter Cooling |  |
| P |  |  | GAD | Generator Air Drying |  |
| P |  |  | GC | Generator Cooling |  |
| P |  |  | GD | Generator Disassembly |  |
| P |  |  | GLO | Generator Lube Oil |  |
| P |  |  | GJ | Generator Jacking |  |
| P |  |  | GLOC | Generator Lube Oil Cooling |  |
| P |  |  | GT | Generator Turning Gear |  |
| P |  |  | GW | Generator Waste Water |  |
| P |  |  | HEAT | Heat |  |
| P |  |  | HVAC | Heat, Vent, & Air Cond |  |
|  | MCPP | Metals & Ceramic Part Processing |  |  | Not in Builder |
| P |  |  | CENTOR | CENTORR Furnace Operation |  |
| P |  |  | CM1750 | CM Furnace Operation |  |
| P |  |  | PRTPRS | Part Pressing |  |
| P |  |  | PRTSAN | Non-SNM Part Sanitization |  |
|  | MISS | Material, Identification, Surveillance and Stabilization |  |  | Not in Builder |
| P |  |  | HGAS | Headspace Gas Analysis System |  |
|  |  |  | MISLC | MIS Large Can |  |
| P |  |  | MISSC | MIS Small Can Sample |  |
|  | MTCHAR | Material Characterization |  |  | Not in Builder |
| P |  |  | MTA | Material Analysis |  |
| P |  |  | MTPREP | Sample Material Preparation |  |
| P |  |  | XRD | X-Ray Diffraction |  |
|  | NCERC | National Criticality Experiments Center |  |  | Not in BuilderDAF Only |
| P |  |  | COMET | Comet | Support stand, two stacked hydraulic rams and a stepper motor drive.Comet is a general purpose critical assembly machine used to move nuclear materials into a critical configuration. |
| P |  |  | FLATOP | Flat-Top | Support table, two hydraulic rams and three stepper motor driven control rod drives. The Flat-Top critical assembly is a benchmark critical assembly consisting of a natural uranium reflector and two fissile cores, one enriched uranium, one plutonium. |
| P |  |  | GODIVA | Godiva | Core, hydraulic ram-driven safety block, compressed air cylinder-driven burst rod, 2 stepper-motor-driven control rods.A prompt burst critical assembly. The core consists of a stack of high enriched uranium rings and plates. |
| P |  |  | NI | Nuclear Instrumentation | Log-N, linear channel, startup counter, and area monitoring subsystems.Monitors the neutron leakage that is generated in the critical configuration. |
| P |  |  | OIS |  | Part of SCRAM |
| P |  |  | PLANET | Planet |  |
| P |  |  | SCRAM | SCRAM | Buttons, interlocks, horns, beacons.Provides an automatic shutdown of the critical assemblies due to a trip of the Nuclear Instruments, an operator pushing a manual SCRAM button, or a door being opened during remote operation. Also provides warning horns and beacons that indicate a critical assembly operation is underway. SCRAM Safety System (SSS), Operational Interlock System (OIS) |
| P |  |  | SSS | SCRAM Safety System |  |
|  | NDA | Non-Destructive Analysis |  |  | Not in Builder |
| P |  |  | CAL | Calorimeter |  |
| P |  |  | IRNDA | In Room NDA Devices |  |
| P |  |  | ISO | Gamma Isotopic System |  |
| P |  |  | NBC | Neutron Barrel Counter |  |
| P |  |  | NSC | HOLDUP/Safeguards Neutron Slab Counter |  |
| P |  |  | PANI | Passive/Active Neutron Counter |  |
| P |  |  | QED | Low Level Drum Counter |  |
| P |  |  | SAI | Solution Assay Instrument |  |
| P |  |  | SGS | Segmented Gamma Scanner |  |
| P |  |  | SH2 | Uranium Shuffler |  |
| P |  |  | SNAP | Special Non-Destructive Assay Platform |  |
| P |  |  | TGSC | Tomographic Gamma Scanner, Can |  |
| P |  |  | TGSD | Tomographic Gamma Scanner, Drum |  |
| P |  |  | TNC | Thermal Neutron Counter |  |
| P |  |  | WCAS | Crate Counter |  |
|  | NDE | Non-Destructive Evaluation |  |  | Not in BuilderPF4 Only |
| P |  |  | CABRT | Cabinet Radiography Operations |  |
| P |  |  | DYEPEN | Dye Penetrant |  |
| P |  |  | EDDY | Eddy Current |  |
| P |  |  | NDMOS | Nondestructive measurement and observation measurement system |  |
| P |  |  | UT | Ultrasonic Testing |  |
|  | NONRAD | Non Radiological |  |  | Not in BuilderOp Sys & Sys created to allow procurement. For Cold Lab Laboratory equipment |
| P |  |  | XPRDEV | Experimental Process Development |  |
|  | OSRP | Off-Site Source Recovery Program |  |  | Not in Builder |
| P |  |  | OSRPO | Pipe Overpack Container |  |
| P |  |  | OSRPS | Off-Site Source Recovery Material Staging |  |
|  | PLW | Process Liquid Waste |  |  | TA55 only |
| R |  |  | AWS | Acid Waste System | D20 PlumbingD2090 Other Plumbing SystemsD209002 Acid Waste Systems |
| R |  |  | CWS | Caustic Waste System | G30 Site Civil/Mechanical UtilitiesG3090 Other Site Mechanical UtilitiesG309090 Other Industrial Waste |
| R |  |  | IWS | Industrial Waste System | G309090 Other Industrial Waste |
|  | PROG | Programs |  |  |  |
| R |  |  | CONOPS | Conduct of Operations Performance Checks | No real equipment, but program. Not in BuilderIncludes F06 Quarterly Radioactive Material Inventory Surveillance |
| R |  |  | PSCS | Pressure Safety | Includes real and programmatic equipment. Relief devices will not be in Builder. Tanks and Pressure Vessels will be in Builder. |
| R |  |  | CHEM | Chemical Inventory | No real equipment, but program. Not in Builder |
|  | PSAA | Power Source Assembly Area |  |  | 550005 Only |
| P |  |  | PCW | Process Cooling Water | D30 HVACD3040 Distribution SystemsD304004 Change Over Distribution Systems – Use for water to water heat exchangersD304006 Chilled Water Distribution Systems – Use for pump, and tanks (expansion, chem feed, etc.) |
| P |  |  | PSAVAC | PSAA Vacuum | Not in Builder |
| P |  |  | PSPROD | Power Source Production | Not in Builder |
| P |  |  | PSSHIP | Power Source Shipping | Not in Builder |
| P |  |  | PSTEST | Power Source Testing | Not in Builder |
| P |  |  | RGEN | Regen Gas | D20 PlumbingD2090 Other Plumbing SystemsD209090 Other Special Plumbing Systems |
| P |  |  | YAGRTG | RTG Laser Welder | Not in Builder |
|  | PVES | Pressure Vessels |  |  | TA55 OnlyNot in Builder |
| P |  |  | CPV | Containment Pressure Vessels |  |
| P |  |  | HIP | Hot Isostatic Press |  |
|  | PYRO | Pyrochemistry WG-Pu |  |  | PF4 OnlyNot in Builder |
| P |  |  | CALDOR | Pu Metal Oxidation |  |
| P |  |  | COAL | Coalescence |  |
|  |  |  | DOR | Direct Oxidation Reduction |  |
| P |  |  | DORMC | Direct Metal Oxidation and Metal Chlorination |  |
| P |  |  | ER | Electrorefining |  |
|  |  |  | MC | Metal Chlorination |  |
| P |  |  | SALTS | Salt Casting |  |
|  | PYROLS | Pyrolysis HS-Pu |  |  | Not in Builder |
| P |  |  | HYDFLO | Hydroxide Precipitation & Flocculation PYROLS |  |
| P |  |  | TSCM | Thermal Stabilization of 238 HS-Pu |  |
|  | QE | Quartz Encapsulation |  |  | Not in Builder |
| P |  |  |  |  |  |
|  | RDGRPH | Radiography |  |  | Not in Builder |
| P |  |  | HYTEC | Radiography HYTEC |  |
| P |  |  | IRO | Interim Radiography Operations |  |
| P |  |  | RADSCB | Closed Beam Radiography |  |
| P |  |  | RADSOB | Open Beam Radiography |  |
| P |  |  | RADRTR | Real Time Radiography |  |
| P |  |  | RADSU | Radiography Unit |  |
|  | RLWCS | Low Level Waste Collection Systems |  |  |  |
| R |  |  | ILW | Industrial Liquid Waste | D20 PlumbingD2090 Other Plumbing SystemsD209090 Other Special Plumbing Systems |
| R |  |  | IWS | Industrial Waste System | G30 Site Civil/Mechanical UtilitiesG3090 Other Site Mechanical UtilitiesG309090 Other Industrial WasteD50 ElectricalD5010 Electrical Service & DistributionD501004 Panelboards – Use for disconnect switches.D20 PlumbingD2030 Sanitary WasteD203003 Floor Drains – Use for floor drains and floor cups.D20 PlumbingD2010 Plumbing FixturesD201004 Sinks – Use for sinks.IWS from PF4 goes to PLW, and is under that Op Sys. |
| R |  |  | LLWICS | Low Level Waste Internal Collection System | D209090 Other Special Plumbing Systems |
| R |  |  | RLW | Radioactive Liquid Waste Interior Collection System | D209090 Other Special Plumbing Systems |
| R |  |  | RLWECS | LLW Exterior Collection System | D209090 Other Special Plumbing Systems |
| R |  |  | RLWICS | LLW Interior Collection System | D209090 Other Special Plumbing Systems |
|  | RLWLLW | Low Level Waste Treatment Systems |  |  | F10 only |
| R |  |  | CIP | Clean-in-Place | Not in Builder |
| R |  |  | CL | Clarifiers | Not in Builder |
| R |  |  | CSP | Chemical Supply - Process | Not in Builder |
| R |  |  | CUF | Centrifugal Ultra Filter | Not in Builder |
| R |  |  | EFFEVP | Effluent Evaporation | Not in Builder |
| R |  |  | GRVF | Gravity Filter | Not in Builder |
| R |  |  | INF | Influent Storage | Not in Builder |
| R |  |  | LLWSTO | Low Level Storage | Not in Builder |
| R |  |  | MCRFLT | Microfiltration | Not in Builder |
| R |  |  | MF | Microfiltration | Not in Builder |
| R |  |  | PIX | Perchlorate Ion Exchange | Not in Builder |
| R |  |  | POL | Polish and Sample Effluent | Not in Builder |
| R |  |  | PRO | Primary Reverse Osmosis | Not in Builder |
| R |  |  | RLW | Radioactive Liquid Waste | Not in Builder |
| R |  |  | RO | Reverse Osmosis | Not in Builder |
| R |  |  | RVF | Rotary Vacuum Filter | Not in Builder |
| R |  |  | SRO | Secondary RO | Not in Builder |
| R |  |  | SW | Sanitary Waste | See Builder Codes under WSTWTR as Op Sys. |
| R |  |  | TUF | Tubular Ultra Filter | Not in Builder |
| R |  |  | WEVP | Waste Evaporation | Not in Builder |
| R |  |  | WM2 | WM2 Influent - Effluent Distribution | Not in Builder |
| R |  |  | WMRM | Waste Mitigation Risk Mgmt | Not in Builder |
| R |  |  | ZLD | Zero Liquid Discharge | Not in Builder |
|  | RLWTRU | TRU Systems |  |  | Not in BuilderF10 only |
| R |  |  | INF | Influent Storage |  |
| R |  |  | TCS |  |  |
| R |  |  | TINF | TLW or TRU Influent Storage |  |
| R |  |  | TLT | TRU Liquid Treatment |  |
| R |  |  | TST | TRU Sludge Treatment |  |
|  | SD | Steam Distribution |  |  |  |
| R |  |  | CON | Condensate | D30 HVACD3040 Distribution SystemsD304002 Steam Distribution Systems (Use this when applicable to an entire building)D302004 Auxiliary Equipment – Use for tanks and pumps |
| R |  |  | STM | Steam | D30 HVACD3020 Heat Generating SystemsD302001 Boilers – For boilers, feedwater, makeup, blowdown, chemical addition, etc. Safety valves will not be assessed by Builder.D302004 Auxiliary Equipment – Use for tanks, including air separators.D3040 Distribution SystemsD304002 Steam Distribution Systems – Reducing valves and steam traps will not be assessed by Builder. |
|  | SEC | Security |  |  |  |
| R |  |  | AACS | Automated Access Control | D50 ElectricalD5030 Communications & SecurityD503005 Security SystemsBadge readers, personal identification number (PIN) entry keypads (RAPs), biometric devices, door strikes, electric latches, door openers/closers/holders Turnstiles under B203007 Gates |
| R |  |  | AFP | Argus Field Panel | D503005 Security Systems |
| R |  |  | ECF | Entrance Control Facility | D503005 Security SystemsF10 Special ConstructionF1050 Special Ctrls / InstrumentationF105090 Other Special Controls And Instrumentation – Use for security x-ray equipment and cameras.G20 Site ImprovementsG2010 RoadwaysG202005 Guardrails & Barriers (Barriers used to restrict traffic for security reasons, slow approach, even hydraulic pop-up barriers at entrance gates) |
| R |  |  | IDS | Intrusion Detection System | D503090 Other Communications & Alarm SystemsIntrusion detection inside the perimeter, includes detection, & alarms |
| P |  |  | MARTRK | Material at Risk Tracker | Not in Builder |
| R |  |  | PASS | PASS Site Access Control | D503005 Security SystemsSite Access Control System |
| R |  |  | PIDAS | Perimeter Intrusion Detection/Assessment [& Delay] | D503090 Other Communications & Alarm Systems (Radio communications, microwave detection systems, metal detectors, tamper indicating switchesF1010 Special StructuresF101002 Exterior Utility Buildings - Security towerF1050 Special Ctrls / InstrumentationF105090 Other Special Controls And Instrumentation – Use for security cameras.G2040 Site DevelopmentG204001 Fencing & GatesG204004 Security Structures (Guard stations)G40 Site Electrical UtilitiesG4020 Site LightingG402002 Special Security Lighting Systems (Security lighting) |
| R |  |  | SAFE | Safe | E10 EquipmentE1010 Commercial EquipmentE101005 Security & Vault Equipment – Use for source safes like at TWF. |
| R |  |  | VTR | Vault Type Room | F10 Special ConstructionF1020 Integrated ConstructionF102090 Other Integrated ConstructionStructural assemblies |
|  | SMPFAB | Sample Fabrication |  |  | Not in Builder |
| P |  |  | DMU35 | DMU 35 Milling Machining |  |
| P |  |  | LBASE | Moore L-Base Lathe |  |
| P |  |  | PRECI1 | Precitech Lathe1 |  |
| P |  |  | PRECI2 | Precitech Lathe2 |  |
|  | SNMST | Special Nuclear Material Storage |  |  | Not in BuilderPF4 only |
| P |  |  | FRS | Fire Rated Safes |  |
| P |  |  | KRX | Kardex |  |
| P |  |  | SAFES | Safes, SNM |  |
| P |  |  | STRG | NonCredited SNM Storage |  |
| P |  |  | STRGC | Shelves, Storage Racks, Cages and Kardex | Credited shelves, storage racks, cages, KardexStores SNM, prevents criticality including during a seismic event. |
|  | TOOL | Tool |  |  | Not in Builder |
| R |  |  | SHOPEQ | Stationary tools | Tools expected to be stationary such as large drill presses or lathes. |
| R |  |  | PORTL | Portable tools | Sys: PORTL – Portable ToolsIf it is designed to be moved, but not down the road, it is likely the Sys of Portable Tool under the Op Sys of TOOL. Examples would be carts designed to push around a building regardless of what is on the cart such as a welder, pressure tester, small air compressor, etc.Tools designed to be taken to the jobsite such as electric drills, chainsaws, skill saws, etc.Includes test equipment.Walk-behind snow blowers, walk-behind mowers, and weed eaters.Large mowers that are at times attached to tractors via 3-point hitches.Loader buckets, dozer blades, back blades, etc., that can be attached to tractors.Snow plows to be attached to trucks or tractors. |
|  | TRIT | Tritium |  |  |  |
| P |  |  | GTE | Gas Treatment, Effluent (SRL) | Not in BuilderPF4 only |
| P |  |  | GTF | Gas Treatment, Furnace (SRL) | Not in BuilderPF4 only |
| P |  |  | HIS | Hot-Inlet System | Not in Builder |
| R |  |  | TC | Tritium Containment Vessel | D20 PlumbingD2090 Other Plumbing SystemsD209090 Other Special Plumbing Systems |
| R |  |  | TGCS | Tritium Gas Containment System | D209090 Other Special Plumbing Systems |
| R |  |  | TGHS | Tritium Gas Handling System | D209090 Other Special Plumbing Systems |
| R |  |  | TMS | Tritium Monitoring System | F10 Special ConstructionF1050 Special Ctrls / InstrumentationF105090 Other Special Controls and Instrumentation |
| R |  |  | TWTS | Tritium Waste Treatment System | D209090 Other Special Plumbing Systems |
|  | TRU | Transuranic Liquid Waste |  |  | Not in BuilderF10 only |
| R |  |  | INF | Influent Storage |  |
| R |  |  | TCS |  |  |
| R |  |  | TLT | TRU Liquid Treatment |  |
| R |  |  | TST | TRU Sludge Treatment |  |
|  | UCOMM | Utilities Communications |  |  |  |
| R |  |  | TEL | Telecommunications | G40 Site Electrical UtilitiesG4030 Site Communication and SecurityG403001 Telecommunications SystemsG403003 Cables & WiringG403004 Ductbanks, Manholes & HandholesG403005 Towers, Poles & StandsG403008 Other Communication & AlarmG403009 Grounding Systems |
|  | UEG | Utilities Electrical Generation |  |  |  |
| R |  |  | CON | Condenser | D302001 Boilers – Use for steam turbine generator exhaust condenser, including pumps, gland exhaust, etc.  |
| R |  |  | GTGTXXXX | Gas Turbine Generator | Not in BuilderGas compressors, air filtration, instrument air, fuel, motor control and low voltage electrical, lube oil |
| R |  |  | NGC | Natural Gas Compressor | G306006 Gas Distribution PipingFor use in combustion gas turbine. |
| R |  |  | STG | Steam Turbine Generator | Not in BuilderAs of October 2, 2019, the BUILDER Catalog has no option for steam driven electrical generating system. These *utility scale* generators typically operate full time.Instrument air, motor control and low voltage electrical, generator breaker, lube oilCondenser, lube oils, control air/oil, cooling tower, circulating water, motor control and low voltage electrical |
| U | UES | Utilities Electrical Supply |  |  |  |
| U |  |  | ETETxx(example: ET03, ETMP) | Electrical Transmission (115kV) | D50 ElectricalD5010 Electrical Service & DistributionD501001 Power Transformers – oil-filled, 115kV with taps, 15kV secondary, 3 phase, pad-mountedG40 Site Electrical UtilitiesG4010 Electrical DistributionG401001 SubstationsG401002 TransformersG401003 Switches, Controls & DevicesG401005 Towers, Poles, Crossarms & InsulatorsG401007 Ductbanks, Manholes, Handholes & Raceways |
| U |  |  | EDEDxxxx(example: EDSM01, EDTA03) | Electrical Distribution (15kV) | D50 ElectricalD5010 Electrical Service & DistributionD501001 Power/Distribution Transformers – oil-filled/dry-type, 15 kV with taps, >600V secondary 3/1-phase, pad-mounted/pole-mountG40 Site Electrical UtilitiesG4010 Electrical DistributionG401001 SubstationsG401002 TransformersG401003 Switches, Controls & DevicesG401005 Towers, Poles, Crossarms & InsulatorsG401007 Ductbanks, Manholes, Handholes & Raceways |
| U |  |  | EMEMXXXX(example: EMS4, EMS17) | Electrical Meter | D50 ElectricalD5010 Electrical Service & DistributionD501001 MeteringG40 Site Electrical UtilitiesG4010 Electrical DistributionG401001 Primary Metering |
|  | UFS | Utilities Fuel Supply |  |  | LANL has no bulk fuel storage tanks to supply other tanks or facilities. Facility fuel storage tanks under FS Op Sys. |
| U |  |  | NGNG1NG2NG3NG4NG5 | Natural GasNatural Gas Line Segment Number | G30 Site Civil/Mechanical UtilitiesG3060 Fuel DistributionG306006 Gas Distribution Piping (Natural Gas only. LANL has no distribution system for propane)G306009 Other Gas DistributionNG1 - 5 (distribution) High Pr – NG Med Pr – NGM Low Pr – NGLPiping, pressure regulators/stations; block, relief, and control valves; rectifiers, meters, gauges, analyzers. NG1 (TAs 3, 60, 61), NG2 (TAs 6, 8, 9, 15, 16, 22, 69), NG3 (TAs 39, 49), NG4 (TAs 53), NG5 (TAs 35, 46, 48, 50-52, 54, 55, 59, 63, 64, 66)Distributes natural gas (NG1 - 5, Utilities), becomes NG just outside and within facilities for heating and process equipment such as furnaces. High Pr > 5 psig; Low Pr < 14” W.C. |
|  | UOPS | Uranium Ops |  |  | Not in Builder |
| P |  |  | UCAL | Calorimeter |  |
| P |  |  | UEE | Uranium Electrolytic Etching |  |
| P |  |  | UOX | Uranium Oxidation |  |
|  | URG | Roads and Grounds |  |  |  |
| R |  |  | BRIDGE | Bridges | G90 Other Site ConstructionG9090 Other Site ConstructionG909001 Bridges |
| R |  |  | PAVMNT | Pavement | G20 Site ImprovementsG2010 RoadwaysG201001 Bases & SubbasesG201002 Curbs & GuttersG201003 Paved SurfacesG201004 Marking & SignageG201005 Guardrails & BarriersG201006 ResurfacingG201090 Other RoadwaysG2020 Parking LotsG202001 Bases & SubbasesG202002 Curbs & GuttersG202003 Paved SurfacesG202004 Marking & SignageG202005 Guardrails & BarriersG202006 ResurfacingG202007 Miscellaneous Structures and EquipmentG202090 Other Parking LotsG2030 Pedestrian PavingG203001 Bases & SubbasesG203002 Curbs & GuttersG203003 Paved SurfacesG203004 Guardrails & BarriersG203005 ResurfacingG203090 Other Walks, Steps & TerracesIncludes Roads, Curbs, Gutters, Trails, Striping, Parking Lots, Sidewalks, Signage |
| R |  |  | SB | Site Beautification | G20 Site ImprovementsG2040 Site DevelopmentG204001 Fencing & GatesG204002 Retaining Walls and Freestanding WallsG204003 Exterior FurnishingsG204005 SignageG204006 Fountains & PoolsG204008 Terrace and Perimeter WallsG204009 FlagpolesG204090 Other Site ImprovementsG2050 LandscapingG205006 PlantersG205007 Irrigation SystemsG205090 Other Landscaping |
| R |  |  | SIGNAL | Traffic Signals | G20 Site ImprovementsG2010 RoadwaysG201004 Marking & Signage |
| U |  |  | USTW | Utilities Storm Water | G30 Site Civil/Mechanical UtilitiesG3030 Storm SewerG303001 Storm Sewer PipingG303002 Storm Sewer StructuresG303003 Lift StationsG303004 CulvertsG303005 HeadwallsG303006 Erosion & Sediment Control MeasuresG303007 Stormwater ManagementG303090 Other Storm SewerFor stormwater under jurisdiction of Roads and Grounds. For individual buildings See WSTWTR/STW. |
| R |  |  | VB | Vehicle Barriers | G20 Site ImprovementsG2010 RoadwaysG201005 Guardrails & Barriers (Includes credited barriers preventing vehicles impacting critical facility structures as well as those for general traffic control or in lieu of guardrails) (Includes bollards, jersey barriers, cables, etc.)Barriers used for security purposes are under SEC/ECF. |
|  | USD | Utilities Steam Distribution |  |  | Regardless of system, safety and relief valves will not be assessed by Builder. |
| R |  |  | BFW | Boiler Feedwater | D30 HVACD3020 Heat Generating SystemsD302001 Boilers – For boilers, feedwater, makeup, blowdown, chemical addition, etc.D302004 Auxiliary Equipment – Use for tanks, including air separators. |
| R |  |  | BLR | Boilers | D302001 Boilers – Includes forced draft fans, flue gas recirculating fans, etc. |
| R |  |  | CRS | Condensate Return System | D304002 Steam Distribution Systems – Condensate being returned from buildings to steam plant |
| R |  |  | TW | Cooling Towers | G30 Site Civil/Mechanical UtilitiesG3050 Cooling DistributionG305006 On-Site Cooling Towers |
| U |  |  | STM | Steam | D3040 Distribution SystemsD304002 Steam Distribution Systems (From Central Plant) Includes manholes and pitsReducing valves and steam traps will not be assessed by Builder. |
|  | UWSTWR | Utilities Waste Water |  |  |  |
| R |  |  | UWWP | Utilities Waste Water Plant | G30 Site Civil/Mechanical UtilitiesG3020 Sanitary SewerG302004 Packaged Sanitary Sewer Treatment Plants |
| U |  |  | UWWC | Utilities Waste Water Collection | F10 Special ConstructionF1020 Integrated ConstructionF102002 Integrated Assemblies (Sewage lagoon, aerator, etc.)G30 Site Civil/Mechanical UtilitiesG3020 Sanitary SewerG302001 Sanitary Sewer PipingG302002 Sanitary Sewer Manholes & CleanoutsG302003 Lift Stations and Pumping StationsG302004 Packaged Sanitary Sewer Treatment PlantsG302005 Septic TanksG302006 Drain FieldsG302090 Other Sanitary Sewer – Use for sumps, pumps, and tanks |
|  | UWS | Utilities Water Supply |  |  |  |
| U |  |   | WDWD1WD2WD3WD4WD5WD6WD7WD8WD9WD10WD11WD12WD13 | Water Distribution | G30 Site Civil/Mechanical UtilitiesG3010 Water SupplyG301002 Potable Water Distribution – Use this for the water distribution loop around siteG301003 Potable Water Storage – Use this for water storage tanks. For dedicated FWST’s see Fire Protection.G301004 Fire Protection Water Distribution – Use this for fire hydrants and block valves outside building jurisdictionsG301007 Pumping StationsTA00 – Utility water distribution line segment crossing multiple TA'sWD1 (TAs 00, 53, 61, and 72), WD2 (TAs 00, 02, 21, 41, 43, and 73), WD3 (TAs 00, 03, 58, 59, and 60), WD4 (TAs 00, 48 and 64), WD5 (TAs 00 and 55), WD6 (TAs 00 and 16), WD7 (TAs 00, 06, 08, 09, 22, 40 and 69), WD8 (TAs 00, 11, 14 and 15), WD9 (TAs 00, 35, and 50), WD10 (TAs 00, 36, 52, and 63), WD11 (TAs 00, 18, 36, and 54), WD12 (TAs 00, 46 and 51), and WD13 (TAs 00, 33, 39, and 49) |
|  | VAC | Vacuum |  |  | D30 HVACD3090 Other HVAC Systems and EquipmentD309090 Other Special Mechanical Systems |
| R |  |  | DV | Dry Vacuum | D309090 Other Special Mechanical SystemsIn PF4, all DV in Area 300 |
| R |  |  | DRYVAC | Dry Vacuum | D309090 Other Special Mechanical SystemsRLUOB only |
| R |  |  | HEPVAC | Portable HEPA Vacuums | D309090 Other Special Mechanical Systems |
|  |  |  | HDV | House Dry Vacuum | D309090 Other Special Mechanical SystemsIn PF4, all HDV in Areas 100, 200, and 400 |
| R |  |  | HPV | Health Physics Vacuum | D309090 Other Special Mechanical SystemsD50 ElectricalD5090 Other Electrical ServicesD509090 Other Special Systems and Devices (Use for VFD’s) |
| R |  |  | MVP | Miscellaneous Vacuum Pump | D309090 Other Special Mechanical SystemsIn PF4, all 1st floor dry vacs are MVP |
|  |  |  | VAC | Vacuum | D309090 Other Special Mechanical Systems500230 Only |
| R |  |  | WV | Wet Vacuum | D309090 Other Special Mechanical Systems |
|  | VHCL | Vehicle |  |  | Not in BuilderFor equipment designed to go down the road.Not for anything associated with lifting such as cranes, fork lifts, man lifts, rigging, etc. |
| R |  |  | MOT | Motorized | Trucks, tractors, loaders, riding mowers, ATVs/OHVs, etc. |
| R |  |  | NMOT | Non-Motorized | Trailers of all types from small cargo trailers to belly dump pulled by tandem axle truck tractors.Large mowers pulled behind tractors that could also be moved by a truck. |
|  | VNT | Ventilation |  |  | Regardless of system, safety and relief valves will not be assessed by Builder. |
| R |  |  | CCHW | Central Circulating Heating Water | D30 HVACD3020 Heat Generating SystemsD302001 Boilers – For boilers, feedwater, makeup, blowdown, chemical addition, etc. Safety valves will not be assessed by Builder.D302004 Auxiliary Equipment – Use for tanks, including air separators.D3040 Distribution SystemsD304003 Hot Water Distribution Systems – Use for pumpsD3060 Controls & Instrumentation – Some of these in MEL, but did not see any on initial Builder assessments.D306001 HVAC Controls – Including PDI’sD306002 Electronic Controls – Includes duct mounted smoke detectorsD306003 Pneumatic Controls (includes VAV’s)D306004 Instrument Air Compressors (Use this for small systems supplying solely HVAC system as found in office or training buildings. For larger systems used for other purposes as well see Compressed Air System.) |
| R |  |  | CVS | Confinement Ventilation System | D3040 Distribution SystemsD304007 Exhaust Systems – Includes fans.Filters, HEPA filters, and dampers will not be assessed. |
| R |  |  | CW | Chilled Water | D30 HVACD3010 Energy SupplyD301090 Other Energy Supply – Use for RLUOB ice storageD3030 Cooling Generating SystemsD303001 Chilled Water Systems – Use for chillers and condensers (small HX’s such as oil coolers will not be assessed individually, but as part of the chiller package) Use for cooling coils inside AHU’s.D303002 Direct Expansion SystemsD3040 Distribution SystemsD304004 Change Over Distribution Systems – Use for water to water and glycol to water heat exchangers.D304005 Glycol Distribution Systems – Use for glycol chillers, condensers, circulating pumps, expansion tanks, chem feed, etc. (small HX’s such as oil coolers will not be assessed individually, but as part of the chiller package)D304006 Chilled Water Distribution Systems – Use for pump and tanks (expansion, chem feed, etc.).D3090 Other HVAC Systems and EquipmentD309090 Other Special Mechanical Systems – Use for refrigerant storage tanks/systems.D50 ElectricalD5090 Other Electrical ServicesD509090 Other Special Systems and Devices (Use for VFD’s) |
| R |  |  | EXH | Exhaust | D304007 Exhaust Systems – Includes fans, even fume hood and glove box exhaust fans, and stacks.Filters, HEPA filters, dampers, scrubbers, and duct mounted smoke detectors will not be assessed.D50 ElectricalD5090 Other Electrical ServicesD509090 Other Special Systems and Devices (Use for VFD’s) |
| R |  |  | HR | Heat Recovery | D304008 Air Handling UnitsD509090 Other Special Systems and Devices (Use for VFD’s) |
| R |  |  | HVAC | Heat, Vent, & Air Cond | D30 HVACD3020 Heat Generating SystemsD302002 FurnacesD302003 Fuel-Fired Unit Heaters (use for HUG’s)D302090 Other Heat Generating SystemsD3040 Distribution SystemsD304001 Air Distribution Heating & Cooling – Use for Fans, Humidifiers, Dehumidifiers, VAV Terminals.Duct Mounted Heating Coils and Dampers will not be assessed.D304008 Air Handling Units – Use also for air-to-air heat exchangersD304090 Other Distribution SystemsD3050 Terminal & Package UnitsD305001 Unit Ventilators (fans, including makeup air)D305002 Unit Heaters (infrared and hydronic, which includes both HUW heating water and HUS steam) Use D305005 Electric Heating if electrically powered HUE. Use D302003 Fuel-Fired Unit Heaters if gas heated HUG.D305003 Fan Coil UnitsD305004 Fin Tube Radiation (baseboard)D305005 Electric Heating – Used this even when equip is Unit Heater if it is electrically powered.D305006 Package Units (Includes RUA’s, heat pumps, evap coolers, air washers/pumps, and window AC units)D305090 Other Terminal & Package UnitsD3060 Controls & Instrumentation – Some of these in MEL, but did not see any on initial Builder assessments.D306002 Electronic Controls – Includes duct mounted smoke detectorsD306003 Pneumatic Controls (includes VAV’s)D306004 Instrument Air Compressors (Use this for small systems supplying solely HVAC system as found in office or training buildings. For larger systems used for other purposes as well as maybe HVAC see Compressed Air System.)D50 ElectricalD5090 Other Electrical ServicesD509090 Other Special Systems and Devices (Use for VFD’s) |
| R |  |  | HVACCF | HVAC Confinement | D509090 Other Special Systems and Devices (Use for VFD’s) |
| R |  |  | HVACOB | HVAC, Office Bldg | RLUOB onlyD30 HVACD3010 Energy SupplyD301090 Other Energy Supply – Use for RLUOB ice storageD3030 Cooling Generating SystemsD303001 Chilled Water Systems – Use for chillers and condensersD303002 Direct Expansion SystemsD3040 Distribution SystemsD304006 Chilled Water Distribution Systems – Use for pump and tanks (expansion, chem feed, etc.)D3040 Distribution SystemsD304001 Air Distribution Heating & Cooling – Use for Humidifiers, Dehumidifiers, and VAV Terminals.Dampers are not to be addressed due to low cost and inaccessibility.D304008 Air Handling Units – Use also for air-to-air heat exchangersD3050 Terminal & Package UnitsD305001 Unit Ventilators (fans, including makeup air)D305002 Unit Heaters (infrared and hydronic, which includes both heating water and steam)D305003 Fan Coil UnitsD305004 Fin Tube RadiationD305005 Electric Heating – Used this even when equip is Unit Heater if it is electrically powered.D305006 Package Units (Includes heat pumps, evap coolers, and window AC units)D3060 Controls & Instrumentation – Some of these in MEL, but did not see any on initial Builder assessments.D306001 HVAC Controls – Including PDI’sD306002 Electronic Controls – Includes duct mounted smoke detectorsD50 ElectricalD5090 Other Electrical ServicesD509090 Other Special Systems and Devices (Use for VFD’s) |
| R |  |  | HVACRL | HVAC, Radiological Lab | RLUOB onlyD509090 Other Special Systems and Devices (Use for VFD’S) |
| R |  |  | HVACUB | HVAC, Central Utility Building | RLUOB onlyD509090 Other Special Systems and Devices (Use for VFD’S) |
| R |  |  | HW | Heating Water | D30 HVACD3020 Heat Generating SystemsD302001 Boilers – For boilers, feedwater, makeup, blowdown, chemical addition, etc. Safety valves will not be assessed by Builder.D302004 Auxiliary Equipment – Use for tanks, including air separators.Need BUILDER Catalog item for condensate neutralizers used on the output of gas fired condensing boilers.D3040 Distribution SystemsD304003 Hot Water Distribution Systems – Use for pumpsand heat exchangersD304004 Change Over Distribution Systems – Use for water to water heat exchangersD50 ElectricalD5090 Other Electrical ServicesD509090 Other Special Systems and Devices (Use for VFD’s) |
| R |  |  | LRW | Lab Reheat Water | D30 HVACD3020 Heat Generating SystemsD302004 Auxiliary Equipment – Use for tanks~~, heat exchangers,~~ and air separators.D3040 Distribution SystemsD304003 Hot Water Distribution Systems – Use for pumpsD304004 Change Over Distribution Systems – Use for water to water heat exchangersD50 ElectricalD5090 Other Electrical ServicesD509090 Other Special Systems and Devices (Use for VFD’s)RLUOB Only |
| R |  |  | NNHVAC | Ventilation, Non-Nuclear | TA55 non-nukeD509090 Other Special Systems and Devices (Use for VFD’s) |
| R |  |  | PCW | Process Chilled WaterorProcess Cooling Water(building dependent) | RLUOB onlyD30 HVACD3040 Distribution SystemsD304004 Change Over Distribution Systems – Use for water to water heat exchangersD304006 Chilled Water Distribution Systems – Use for pumps~~,~~ and tanks (expansion, chem feed, etc.)D50 ElectricalD5090 Other Electrical ServicesD509090 Other Special Systems and Devices (Use for VFD’s) |
| R |  |  | PG | Primary Glycol | RLUOB onlyD30 HVACD3040 Distribution SystemsD304005 Glycol Distribution Systems – Use for glycol chillers, condensers, circulating pumps, expansion tanks, chem feed, etc.  |
| R |  |  | SCW | Secondary Chilled Water | RLUOB onlyD304006 Chilled Water Distribution Systems – Use for pumps and tanks (expansion, chem feed, etc.) |
| R |  |  | SHW | Secondary Heating Water | RLUOB onlyD304003 Hot Water Distribution Systems – Use for pumps |
| R |  |  | TW | Tower Water | D30 HVACD3020 Heat Generating SystemsD302005 Equipment Thermal InsulationD302090 Other Heat Generating Systems - Use this for heat trace and tank heatersD3030 Cooling Generating SystemsD303001 Chilled Water Systems – Use for towers, fans, pumps, air separators, and chem add. |
|  | WASTE | Waste Management |  |  | Not in Builder |
| P |  |  | RADW | Radioactive and Mixed Solid Waste Processing | For tools and equipment that deal with solid radioactive waste. The tools and equipment themselves are not waste. |
|  | WELD | Welding |  |  | Not in Builder |
| P |  |  | 1219W | 1219 Welder |  |
| P |  |  | 267W | 267 Welder |  |
| P |  |  | 295W | 295 Welder |  |
| P |  |  | 297W | 297 Welder |  |
| P |  |  | 3013W | 3013 Welder |  |
| P |  |  | EBEAM | Electron Beam |  |
| P |  |  | GTA | Gas Tungsten Arc Welding Operation |  |
| P |  |  | HVEBW | High Voltage EBEAM Welder |  |
| P |  |  | IPGW | IPG Welder |  |
| P |  |  | HSCG | HS Calibration Gas System |  |
| P |  |  | LSRWLD | Laser, Weld |  |
| P |  |  | LVEBW | Low Voltage Electron Beam Welder |  |
| P |  |  | MOXW | MOX Welder |  |
| P |  |  | PIGMA | PIGMA Welder |  |
| P |  |  | YBLAZR | YB Laser Welder |  |
|  | WGCHAR | WG Characterization |  |  | Not in Builder |
| P |  |  | ACHAR | Analytical Chemistry Characterization |  |
| P |  |  | OXPRO | Oxide Processing |  |
|  | WS | Water Supply |  |  | D20 PlumbingRegardless of system, safety and relief valves will not be assessed by Builder. |
| R |  |  | DEMIN | Demineralized Water | D2090 Other Plumbing SystemsD209090 Other Special Plumbing SystemsD50 ElectricalD5090 Other Electrical ServicesD509090 Other Special Systems and Devices (Use for VFD’s) |
| R |  |  | DIS | Distilled Water | D209090 Other Special Plumbing Systems |
| R |  |  | DIW | Deionized Water | D209090 Other Special Plumbing Systems |
| R |  |  | IW | Industrial Water | D209090 Other Special Plumbing Systems |
| R |  |  | IWH | Industrial Water Hot | 550005 OnlyD209090 Other Special Plumbing Systems |
| R |  |  | MKUP | Makeup Water | D209090 Other Special Plumbing Systems |
| R |  |  | NPW | Non-Potable Water | D209090 Other Special Plumbing Systems |
| R |  |  | NPWC | Non-Potable Water Cold | D209090 Other Special Plumbing Systems |
| R |  |  | NPWH | Non-Potable Water Hot | D209090 Other Special Plumbing Systems |
| R |  |  | PW | Potable Water | D20 PlumbingD2010 Plumbing FixturesD201001 WaterclosetsD201002 UrinalsD201003 LavatoriesD201004 SinksD201005 Showers/TubsD201006 Drinking Fountains and CoolersD201007 BidetsD201090 Other Plumbing Fixtures - includes Emergency Eye Wash & ShowerD2020 Domestic Water DistributionD202001 Pipes & FittingsD202002 Valves & Hydrants - includes BFP’s and hose bibsD202003 Domestic Water Equipment (includes storage tanks, booster pumps & motors, water heaters, and water treatment equipment) (Use this when applicable to an entire building)D30 HVACD3010 Energy SupplyD301005 Solar Energy Systems (use for solar hot water heating)D50 ElectricalD5090 Other Electrical ServicesD509090 Other Special Systems and Devices (Use for VFD’s) |
| R |  |  | PWH | Potable Water Hot | D202003 Domestic Water Equipment (includes storage tanks, booster pumps & motors, water heaters, and water treatment equipment)Some buildings use PW even for hot potable water. Check tags and drawings. |
| R |  |  | RO | Reverse Osmosis | D209090 Other Special Plumbing Systems |
| R |  |  | PWT | Potable Water Tepid | D202002 Valves & Hydrants - includes BFP’s and hose bibsD202003 Domestic Water Equipment (includes storage tanks, booster pumps & motors, water heaters, and water treatment equipment) Use this for eye wash water heaters. |
|  | WSTWTR | Waste Water |  |  |  |
| R |  |  | EFLD | Effluent Discharge | D20 PlumbingD2090 Other Plumbing SystemsD209090 Other Special Plumbing SystemsNot storm water, not sanitary, suitable for discharge to environment. Example, cooling tower blowdown and sewage plant effluent. |
| R |  |  | STW | Stormwater | D2040 Rain Water DrainageD204001 Pipe & FittingsD204002 Roof DrainsD204003 Rainwater Drainage EquipmentD204004 Insulation & IdentificationD204090 Other Rain Water Drainage SystemFor individual buildings. Once Stormwater leaves building jurisdiction it comes under Utilities’ Roads and Grounds. See RNG/STW. |
| R |  |  | SWP | Sanitary Sewer | D2030 Sanitary WasteD203001 Waste Pipe & FittingsD203002 Vent Pipe & FittingsD203003 Floor DrainsD203004 Sanitary and Vent EquipmentD203005 Insulation & IdentificationD203090 Other Sanitary Waste – Use for sumps and pumpsD2090 Other Plumbing SystemsD209003 Interceptors e.g. oil separators |

Added OVEN as Sys under Op Sys AAC, Actinide Analytical Chemistry.

Added CVD, CVD Confinement Vessel Disposition, as a Sys under Op Sys of AAC.

Changed the following Systems to all caps as CMMS requires:

FeCl3 FECL3

Fe2O12S3 FE2O12S3

MgCl2 MGCL2

MgSO4 MGSO4

NaCIT NACIT

NaHSO3 NAHSO3

NaOCl NAOCL

NaOH NAOH

Added H2S04, Sulfuric Acid, as Sys under Op Sys LLWPRC.

Added NAOH, Sodium Hydroxide, as Sys under Op Sys LLWPRC.

Added LLWICS, Low Level Waste Interior Collection System, as Sys under Op Sys of RLWCS.

Changed the description of Sys MCRFLT from *Microfilter* to *Microfiltration*.

Add info that *man lifts* are included under LIFT / MBLEQ.

Added PWT, Potable Water Tepid, as Sys under Op Sys of WS, Water Supply.

Added RLW as Sys under RLWLLW Op Sys as F10 has buildings with RLW as part of tag number.

Added ILW, Industrial Liquid Waste, as Sys under RLWCS.

Added info that “Fire dampers not assessed by BUILDER due to inacessability.” To FP/FBP.

Added CHEM as Sys under PROG Op Sys.

Deleted MC, Multiplicity Counter, from Op Sys NDA.

Deleted Op Sys RLW.

Added a note to FP/FPW
Note: The D302005 and D302090 will be replaced in the future under D4020 Fire Water Supply / Equip as the insulation, heat trace, pumps, and inline heaters or boilers are within the boundaries of the fire water supply system.

Added info that “Need BUILDER Catalog item for condensate neutralizers used on the output of gas fired condensing boilers.”

Added LAZMK, Laser Marking as Sys under Op Sys AO, Assembly Operation.

Under Op Sys UWSTWR, Utilities Waste Water:

* Renamed USTP, Utilities Sewage Treatment Plant, UWWP, Utilities Waste Water Plant.
* Renamed USWP, Utilities Sanitary Sewer, UWWC, Utilities Waste Water Collection.
* Moved USTW, Utilities Storm Water to be under Op Sys URG, Roads and Grounds.

Under Op Sys UES, Utilities Electrical Supply:

* Replaced UET with two new Sys that reflect how Utilities labels their lines.
* Added new Sys for Meters.

Created a new Op Sys UEG, Utilities Electrical Generation, and moved the Sys for electrical generation from UES to here.

Added IWS, Industrial Waste System, as Sys under Op Sys RLWCS, Low Level Waste Collection Systems.

Deleted IWS from WSTWTR.

Changed “Storm Water” to “Stormwater” under WSTWTR (may be moving to Roads and Grounds).

Deleted RLBECS, Radioactive Liquid Waste Exterior Collection System, from Op Sys RLWCS.

Deleted FP, Fire Protection as Sys under Op Sys RLWLLW.

Deleted Sys RLWLLW, Low Level Waste Treatment Systems, from Op Sys RLWLLW.

Deleted MFLTS, Media Filters as Sys under RLWLLW.

Deleted SPSTR, Special Structures as Sys from under Op Sys BLDG.

Deleted LLWICS Sys from Op Sys RLWLLW.

Deleted RLWLLW Sys from Op Sys RLWLLW.

Deleted CG Sys from Op Sys RLWLLW.

STW, Stormwater

* Added to WSTWTR/STW to clarify change of Op Sys: “For individual buildings. Once Stormwater leaves building jurisdiction it comes under Utilities’ Roads and Grounds. See URG/STW.”
* Added STW as Sys under URG, Roads and Grounds.

Added Sys PSCS, Pressure Safety, under Op Sys of Programs.

Added H2S, Hydrogen Sulfide, as a Sys under Op Sys CGS.

Added AFP, Argus Field Panel, as Sys under SEC, Security, Op Sys.

Deleted the following under Op Sys MISS, Material, Identification, Surveillance and Stabilization:

* MIS, MIS Large Can Sample
* MISHR, MIS Heated Reactor

Deleted Sys HYDHY, Hydride/Dihydride, which was under Op Sys ARIES.