

LAMC

CAMPUS STANDARDS- MATRIX

(Note: Campus Preferences are indicated first, followed by additional manufacturers which are being considered by LACCD.)

PLEASE READ & FOLLOW THE DIRECTIONS PROVIDED BELOW

"The Campus Standards Matrix is to be used as a guide . LAMC has a comprehensive design standards which governs the design of any of our projects. In case there is a valid need to deviate from these Standards , a request will need to be submitted in writing to and a formal written approval needs to be received from the LAMC Campus Maintenance & Operations (M&O) or IT Departments.

This is a living document and updates regularly ; therefore , one should check with the M&O Department for the most updated version before proceeding

These design standards are not to be deviated from for the purpose of value engineering unless formally approved by M&O or IT

STANDARD		CAMPUS ALTERNATIVES
1	DIV. 06: WOOD, PLASTICS AND COMPOSITES	
2	ARCHITECTURAL CABINETS	
3	PLASTIC LAMINATE	WILSONART, OR EQUAL
4	CABINET LOCKS	BEST 5L SERIES DEADBOLTS AND STRIKES
5	DIV. 07: THERMAL & MOISTURE PROTECTION	
6	ROOFING	
7	GENERAL	Modified Bitumen 30-yr Garland, 4-yr ply. Build-up roof multi-ply no single ply. Build-up roof multi-ply (District Standards).
8	FIREPROOFING	
9	GENERAL	CAFCO
10	WATERPROOFING	
11	BITUMINOUS DAMPPROOFING	Subject to LAMC approval
12	SELF-ADHERING SHEET WATERPROOFING	Subject to LAMC approval
13	DIV. 08: OPENINGS	
14	HARDWARE	
15	KEYING OF CYLINDER	Best 1AK1B21NiAg Key Blanks; BEST I/C CORE CYLINDER, 7-PIN.
16	LOCKSET	Best 45H Series 3H -HIGH SECURITY PRIVACY
17	CABINET LOCKSETS	Haworth
18	HINGES	STAINLESS STEEL
19	EXIT DEVICES	VON DUPRIN-98 SERIES, Cylinder Dogging,, XP @ EXTERIOR
20	CLOSER	Subject to LAMC approval
21	ADA COMPLIANT PEDESTRIAN SWING DOOR OPERATOR	BESAM
22	CARD READER	HID-ICLASS SE 13.56 MGHZ, R40 Typ. For iClass card (sole-source). Requires ICLASS Standard Capability, 920NTNTEK00000 (typical model) Able to work with the Lenel System
23	ELECTRIC CYLINDRICAL LOCKS	HES 8300 ,field modification, cutting Fire Door frame SHALL NOT BE PERMITTED
24	ELECTRIC STRIKES : MORTISE LOCKS	HES 1006, field modification, cutting of Fire Door Frame SHALL NOT be permitted.
25	KEY SYSTEMS FIRE ALARM PANEL KEYING	CAT 45

	STANDARD	CAMPUS ALTERNATIVES
26	ELECTRICAL CABINET KEYING	LL803
27	ANTI VANDAL PULL	TRIMCO
28	ARMOR COLLAR/CYLINDER GUARD	KEEDEX K-24
29	ASTRAGAL	BY DOOR MANUFACTURER
30	AUTO DOOR OPERATOR	BESAM
31	AUTO DOOR CLOSER	BESAM
32	AUTO FLUSH BOLT	TRIMCO
33	BOLLARD ACTUATOR	LCN 8310-3853TWB
34	BOLLARD POST	LCN 8310-866
35	COORDINATORS	TRIMCO
36	DOOR BOTTOM	PEMKO
37	DOOR HOLDER	LCN PAH-60
38	DOOR STOPS	TRIMCO
39	REMOVABLE MULLION	VON DUPRIN KR4954 X MT54
40	DOORS	
41	WOOD DOOR	Graham Wood Doors
42	AUTOMATIC SLIDING ALUMINUM FRAMED GLASS DOORS	STANLEY
43	ACCESS DOORS	Subject to LAMC approval
44	EXTERIOR CEILING DOOR	Subject to LAMC approval
45	FIRE RATED AUTOMATIC ROOLING SERVICE DOORS	Subject to LAMC approval
46	INSULATED, ELECTRIC OPERATION, ROOLING SERVICE DOOR	Subject to LAMC approval
47	OVERHEAD COILING GRILLES	Subject to LAMC approval
48	FOLDING DOORS	WON-DOOR
49	ALUMINUM-FRAMED ENTRANCES & STORE FRONT	KAWNEER COMPANY
50	GLASS ENTRANCES & STOREFRONT	VISTAWALL
51	RESTROOM ENTRY DOORS	
52	HOLLOW METAL DOORS,	Subject to LAMC approval
53	HOLLOW METAL FRAMES, MINIMUM REQUIREMENTS	16 GAUGE THICK MATERIAL, TO SUIT DOOR.
54	MARBLE THRESHOLDS AT TOILET ROOM ENTRANCES	GROUP "A" MARBLE AS CLASSIFIED BY THE MARBLE INSTITUTE OF AMERICA
55	METAL DOOR LOUVERS (AT RATED OPENINGS)	ANEMOSTAT FLDL-UL-SG2 LOUVER
56	DIV. 09: FINISHES	
57	FLOOR/ WALL FINISHES	
58	CARPET	Tandus
59	RESILIENT FLOORING	Forbo
60	CARPET MODULES	Tandus 36X36 mold resistant
61	RESILIENT TILES/SHEET FLOORING	Forbo
62	HARD SURFACE (GYMNASIUM)	MONDO
63	WALL BASE - RUBBER	Subject to LAMC approval
64	RAISED FLOORING SYSTEMS	Subject to LAMC approval
65	WALL COVERINGS	Dunn Edwards

	STANDARD	CAMPUS ALTERNATIVES
66	PAINT	Dunn Edwards
67	HIGH PERFORMANCE COATINGS	Dunn Edwards
68	FLOOR MATS/WALK-OFF MATS	Tandus
69	GRAFFITI RESISTANT COATINGS	PERMASHIELD PREMIUM OR GENESIS COATING
70	GRAFFITI RESISTANT FILM	3M
71	SEAMLESS FLOORING	MONDO
72	VCT	Subject to LAMC approval
73	RESINOUS FLOORING-EPOXY	STONHARD, CROSSFIELD PRODUCTS
74	FIBERGLASS REINFORCED PLASTIC PANELS	MARLITE
75	GENERAL CERAMIC TILE	DAL TILES
76	MOTAR/GROUT	MAPEI, LATICRETE
77	TERRAZZO/MARBLE TILES	FRITZTILE OR EQUAL
78	CEMENTITIOUS GROUT (FLOOR TILE)	LATICRETE® PERMACOLOR™, OR APPROVED EQUAL.
79	EPOXY GROUT (WALL TILE)	LATICRETE® SPECTRALLOCK® PRO PREMIUM GROUT, OR APPROVED EQUAL.
80	SEALER	WALL TILE AND GROUT SHALL BE SEALED WITH A GRAFFITI RESISTANT, WATERBORNE URETHANE-SILICONE POLYMER COATING, NON-TOXIC, LOW VOC, NON-SACRIFICIAL, MOLD AND MILDEW RESISTANT, TRANSPARENT, UV RESISTANT, AND ABRASION RESISTANT. “SANIGLAZE PROCESS” SYSTEM (WWW.SANIGLAZE.COM)
81	WALL TILE	FIELD TILE AND BASE DAL TILE SEMI-GLOSS 4" X 4" , ACCENT TILE, DAL TILE SEMI-GLOSS 4"X4"
82	WATERPROOF MEMBRANE	Subject to LAMC approval
83	EXTERIOR PLASTER	LA HABRA, HIGHLAND
84	PHOTOVOLTAICS	Subject to LAMC approval
85	CEILING SYSTEMS	
86	ACOUSTICAL TILE	ARMSTRONG
87	GRID SYSTEM	ARMSTRONG
88	ACOUSTICAL SUSPENSION SYSTEM	ARMSTRONG
89	SOUND-ABSORBING UNITS	AcoustiColor, USG
90	INTERIOR SUSPENDED LIGHTS	LITHONIA
91	WALL & CEILING ACCESS DOORS	SQUARE OR RECTANGULAR FRAMES WITH HINGED LOCKED DOOR
92	DIV. 10: SPECIALTIES	
93	SOAP DISPENSERS	CLEA
94	PAPER TOWEL DISPENSERS	SuperMax Jumbo tissue Dispenser with Stub Roll (SuperMax Plus #855806)
95	Toilet paper dispensers	BOBRICK MODEL B-2892 SURFACE-MOUNTED TWIN JUMBO-ROLL TOILET TISSUE DISPENSER, OR APPROVED EQUAL.
96	HAND DRYER	DYSON AIR BLADE
97	BATHROOM PARTITIONS	BOBRICK SIERRASERIES® WATER-AND FIRE-RESISTANT SOLID COLOR REINFORCED COMPOSITE TOILET PARTITIONS AND URINAL SCREENS,
98	RESTROOM ACCESSORIES	BOBRICK
99	LOCKERS	Debourgh

	STANDARD	CAMPUS ALTERNATIVES
100	STORAGE/TRANSFER	Tyga-Box System or EQUAL
101	MARKER BOARD	Subject to LAMC approval
102	TACKBOARDS	Subject to LAMC approval
103	OPERABLE PARTITIONS	WON DOOR
104	WALL AND CORNER GUARDS	Subject to LAMC approval
105	DIAPER-CHANGING STATION	KOALA KARE PRODUCTS MODEL KB-110-SSWM HORIZONTAL WALL MOUNTED STAINLESS STEEL FINISH BABY CHANGING STATION, OR APPROVED EQUAL.
106	FOLDING SHOWER SEATS	BOBRICK MODEL B-5181 REVERSIBLE SOLID PHENOLIC FOLDING SHOWER SEAT, OR APPROVED EQUAL.
107	GRAB BARS	BOBRICK 1½" DIAMETER STAINLESS STEEL GRAB BARS WITH SNAP FLANGE, SATIN FINISH, B-6806 SERIES, OR APPROVED EQUAL. (DO NOT USE L-SHAPED TWO-WALL GRAB BARS.)
108	KEYING FOR TOILET ACCESSORIES	BOBRICK KEY #2055
109	LAVATORY SINK (COUNTERTOP):	AMERICAN STANDARD MODEL 0476.028 AQUALYN™ VITREOUS CHINA COUNTERTOP SINK, OR APPROVED EQUAL.
110	LAVATORY SINK (WALL-HUNG, WHERE REPLACING EXISTING WALL-HUNG LAVATORY)	4" CENTERSET WITH CONCEALED ARM CARRIERS: AMERICAN STANDARD LUCERNE MODEL 0355.012, OR KOHLER KINGSTON K- 2005-0, OR APPROVED EQUAL.
111	MIRRORS (FRAMED)	BOBRICK B-290 SERIES, 18" X 36", OR APPROVED EQUAL.
112	SHOWER CURTAIN HOOKS	BOBRICK MODEL 204-1 STAINLESS STEEL SHOWER CURTAIN HOOK, OR APPROVED EQUAL.
113	SHOWER CURTAIN RODS	BOBRICK MODEL B-6107 HEAVY-DUTY SHOWER CURTAIN ROD, OR APPROVED EQUAL.
114	SHOWER CURTAINS	BOBRICK MODEL 204-3 VINYL SHOWER CURTAIN, OR APPROVED EQUAL.
115	SHOWER SOAP DISH	BOBRICK MODEL B-4390 RECESSED HEAVY-DUTY SOAP DISH WITH BAR, OR APPROVED EQUAL.
116	TOILET SEATS	BEMIS MODEL 1955CT, OR APPROVED EQUAL. SEATS SHALL BE HEAVY WEIGHT AND INJECTION-MOLDED OF SOLID PLASTIC. SEATS SHALL BE OPEN FRONT LESS COVER FOR ELONGATED BOWL AND FEATURE LARGE MOLDED-IN BUMPERS.
117	UNDERSINK PIPING COVERS AT ACCESSIBLE LAVATORIES AND SINKS WITH HOT WATER, ON HOT WATER SUPPLY PIPING AND DRAINS, COMPLYING WITH ADA AND CBC ACCESSIBILITY REGULATIONS.	TRUEBRO® LAV GUARD®2, OR APPROVED EQUAL.
118	UTILITY SHELF	BOBRICK MODEL B-298 STAINLESS STEEL SHELF, 24" MINIMUM LENGTH X 8" DEPTH, OR APPROVED EQUAL.
119	WALL HOOKS (AT TOILET STALLS, AND BELOW OR ADJACENT TO UTILITY SHELVES)	BOBRICK MODEL B-671 SURFACE-MOUNTED SINGLE ROBE HOOK, BRIGHT POLISHED STAINLESS STEEL, OR APPROVED EQUAL.
120	WASTE RECEPTACLES (AT STAFF/FACULTY RESTROOMS ONLY)	BOBRICK MODE B-3644 RECESSED WASTE RECEPTACLE, OR APPROVED EQUAL.
121	EMERGENCY RESPONDER LOCK BOX	KNOX BOX 3200 SERIES
122	EVACUATION CHAIR	GARAVENTA LIFT
123	FIRE ALARM SYSTEM	NOTIFIER
124	FIRE EXTINGUISHER CABINET W/ LOCK	Potter Roemer
125	DIV. 11: EQUIPMENT	

STANDARD		CAMPUS ALTERNATIVES
126	FOOD SERVICE EQUIPMENT	Hobart
127	KITCHEN, APPLIANCES	GE, Whirlpool
128	PROJECTION SCREENS	DA-LITE
129	LAB FUME HOOD	Subject to LAMC approval
130	DIV. 12: FURNISHINGS	
131	WINDOW SHADES	MECHO-SHADE CORP OR EQUAL
132	METAL LAB CASEWORK	Subject to LAMC approval
133	LAMINATED CASEWORK	Subject to LAMC approval
134	WOOD LAB CASEWORK	Subject to LAMC approval
135	BLEACHERS	
136	INTERIOR, GYMNASIUM	Irwin Telescopic
137	Exterior, Gym	Sturdisteel
138	WINDOW COVERING	
139	SOLAR SHADE	Mecho Shade, Levolor
140	BLINDS - VERTICAL/ HORIZONTAL	Levolor
141	BIKE PARKING RACK	PARK A BIKE
142	DIV. 13: SPECIAL CONSTRUCTION	
143	MODULAR STRUCTURES	Subject to LAMC approval
144	DIV. 14: CONVEYING EQUIPMENT	
145	STANDARD ELEVATORS	SCHINDLER, OTIS
146	CONTROLLER	MOTION CONTROLS.....CONTROLLER CANNOT BE PROPRIETARY
147	WHEELCHAIR LIFTS	Garaventa
148	EXIT STAIR EVACUATION CHAIRS	Garaventa Evacuation chairs , EVACU-TRAC CD7 or better
149	HYDRAULIC ELEVATORS	SCHINDLER
150	DUMBWAITER	MATOT
151	DIV. 21: FIRE SUPPRESSION	
152	HYDRANTS	James Jones
153	DIV. 22: PLUMBING	
154	PIPE	
155	DOMESTIC, /POTABLE	C900 Blue, Copper K and Tpye L, #80 PVC
156	UNDERGROUND WATER IRRIGATION PIPING	Schedule 40 and schedule 80 PVC 1/2" to 3" CVPC clorinated polyvinyl
157	UNDERGROUND SANITARY PIPING	Cast iron, SDR-35 ASTM A888
158	ABOVE GROUND SANITARY PIPING	Cast Iron Tyler Pipe /DWV Copper
159	PIPE TUBING AND FITTINGS	C-900 Mega Lug FTGs Approved CI Conn Flange
160	STEEL PIPE FUEL GAS/NATURAL GAS	Black Schedule 40 indor only with similar fittings
161	PIPE WATER OR AIR	USE COPPER ONLY
162	BRASS PIPE	Schedule 40 lead free
163	COPPER TUBING	Type "K" below grade or Type "L" above grades only
164	BRASS SCHEDULE 40 SOLDER JOINT FTG's	Domestic
165	SCREWED FITTINGS	Domestic
166	GAS PIPING UNDERGROUND	Poly Pipe, yellow tracer wire, Butt fusion or socket
167	BUILDING DRAIN, WASTE & VENT	Cast iron no hub, Cast Iron, Ftg. / DWV Copper ANANCO, Domestic only

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168	PIPE AND FITTINGS	Domestic only
169	PLUMBING FIXTURES	
170	TOILET FIXTURES (Low Flow, Viterous China)	Kohler
171	SINKS	American Standard, Kohler
172	Stop Fittings	Chicago Faucets model 1013-ABLP
173	KITCHEN SINKS	Elkay, (stainless steel)
174	URINALS (Low Flow)	Kohler
175	URINALS (Waterless)	DO NOT USE
176	FAUCETS	Chicago-HYTRONIC 116.21..AB.1
177		SYMMONS NO Zurn
178	FLUSH VALVES - TOILETS, URINALS	Sloan 111 -1.28 DFMS OR 186 -0.125 SFSM- no zurn
179	DOMESTIC WATER HEATER	Lochinvar
180	CIRCULATING PUMP	Bell and Gossett
181	PRESSURE REGULATOR VALVES	WATTS LF2235 AND LFU5B-Z3
182	PLUMBING VALVES AND ACCESSORIES	
183	GENERAL	Nibco, Apollo, domestic product only
184		lead free where applicable
185	EXPANSION TANKS	AMTROL
186	BACKFLOW PREVENTERS	Watts, Conbraco
187	CLEAN OUTS	J.R. Smith, Zurn
188	FLOOR DRAINS	J.R. Smith, Zurn
189	TRAP PRIMERS	Automatic or connect to flush valve
190	ROOF DRAINS	J.R. Smith
191	BALL VALVES	NIBCO (Brass, Full Port) Accorn
192	GATE VALVES	NIBCO (Union Bonnet, Raised Stem) Accorn
193	GLOBE VALVES	NIBCO (Brass)
194	CHECK VALVES	NIBCO (Brass)
195	VALVES(WATER, BELOW GROUND)	Domestic, Stockham (Cast Iron Flanged AWWA with operating unit)
196	Backwater	Zurn
197	Drain Pumps	Weil Pump
198	Drainage	J.R. Smith
199	CHECK VALVES	DOMESTIC
200	Drainage System	J.R. Smith
201	Electric Self regulating T&M Cable	Raycem Corp
202	Trench Funnel Drains	Stockham Valves & Fittings Co.
203	Hose Bibb Box	ACORN 8141/8102
204	Piston Water Hammer	MIFAB MWA Series
205	Shower heads & Faucets	Symmons
206	Boiler	Raypack
207	EMERGENCY EYEWASH & SHOWER	
208	EMERGENCY EYEWASH & SHOWERS	Haws
209	WATER FOUNTAINS	
210	DRINKING	Haws

STANDARD	CAMPUS ALTERNATIVES
DIV. 23: HEATING, VENTILLATION & AIR CONDITIONING (HVAC)	
211 A/C UNITS, ROOF MOUNTED	Trane
212 A/C UNITS WALL MOUNTED	Trane
213 AIR HANDLERS – CUSTOM	Trane
214 AIR HANDLERS	Trane
215 HVAC HYDRONIC CONTROL VALVE	Belimo
216 HVAC HEATING & COOLING CONTROL VALVE	Belimo PICCV two way with reversing switch
217 HVAC HYDRONIC PIPE FLANGE ADAPTER CONNECTIONS	OMNI
218 MOTORS	Baldor
219 PUMPS	TACO
220 COOLING TOWERS	Baltimore Air Coil
221 OTHER FILTERS	Camfil-Farr
222 BOILER CONTROLS-HOT WATER	Raypack condensening boiler 98% efficient
223 FAN COILS DX	Trane
224 COMPUTER ROOM AC UNITS	Liebert
225 CHILLED WATER FAN COILS	Trane
226 AIR COOLED CHILLER	Trane
227 CENTRIFUGAL WATER-COOLED CHILLER	Trane
228 SCREW-TYPE AIR COOLED CHILLER	Trane
229 SCREW-TYPE WATER COOLED CHILLER	Trane
230 SCROLL-TYPE AIR COOLED CHILLER	Trane
231 CHILLER-GENERAL	Trane
232 ABSORBTION CHILLER	Trane
233 OTHER ABSORBTION CHILLER	Subject to LAMC approval
234 VENTILATORS AND EXHAUST FANS	Cook
235 FIRE SMOKE DAMPER	Belmo w/ end switch to communicate to EMS
236 VARIABLE FREQUENCY DRIVES	ABB
237 AIR CONIDITIONING THERMOSTAT	Total Line
238 THERMOSTAT LOCK BOX	Large Opaque / PINTG 512B1007
239 Motor Controls	Allen Bradley
DIV. 25: INTEGRATED AUTOMATION	
241 ENERGY MANAGEMENT SYSTEM	ALERTON-CLIMATECH
DIV. 26: ELECTRICAL	
ELECTRICAL FIXTURES	
242 INTERIOR LIGHT FIXTURES(LED), Fluoresces No incandesce light fixture	ENERGY STAR REQUIRMENTS (T-8 TUBES, LED)
243 CONNECT WITH EMERGENCY LIGHTS	ALERTRON TO EMERGENCY GRID
244 EXIT SIGNS	LED
245 ELECTRONIC WALL CLOCKS	PRIMEX WIRELESS
246 INTERIOR SUSPENDED LIGHTS	LITHONIA, LED
LIGHTING/INDOOR-OUTDOOR	
247 VANDAL PROOF LIGHTING FIXTURES	LED Tpye, 10 years warranty on LED and Driver
LANDSCAPING FIXTURES	

	STANDARD	CAMPUS ALTERNATIVES
253	EXTERIOR LIGHTS-PARKING LOT	LED Tpye, 10 years warranty on LED and Driver
254	LIGHT SENSORS	LUTRON
255	PARKING LOT	LED Tpye, 10 years warranty on LED and Driver
256	ATHLETIC FIELD	LITHONIA
257	ELECTRICAL EQUIPMENT	
258	MAIN SWITCHBOARD	SQUARE D
259	MAIN DISTRIBUTION SWITCHBOARDS	SQUARE D
260	DRY TYPE TRANSFORMERS	SQUARE D
261	MAGNETIC MOTOR STARTERS	SQUARE D
262	SOFT START MOTOR STARTERS	SQUARE D
263	PANELBOARDS	SQUARE D
264	MCC (MOTOR CONTROL CENTERS)	SQUARE D
265	DRIVES	ABB
266	ELECTRICAL FINISH FACE PLATES	STAINLESS
267	ELECTRIC VEHICLES/ CHARGERS	
268	ELECTRICAL VEHICLES AND CHARGERS	TAYLOR DUNN
269	CHARGER Mfr	LESTER
270	EMERGENCY POWER SYSTEM-GRID MATRIX	
271	CONNECT WITH SUMP PUMPS	ALERTRON TO EMERGENCY GRID
272	CONNECT WITH CO2 SENSORS	ALERTRON TO EMERGENCY GRID
273	CONNECT WITH EMS/CMMS	ALERTRON TO EMERGENCY GRID
274	EMERGENCY MANAGEMENT SYSTEM	
275	EMERGENCY MANAGEMENT SYSTEM	ALERTON-CLIMATECH
276	ENERGY MANAGEMENT SYSTEM	ALERTON-CLIMATECH
277	FIRE PROTECTION	
278	ELECTRONICS	NOTIFIER
279	LIGHTING SUPPLIES	
280	LIGHT BULBS, FLOURESCNETS T-8's	PHILLIPS 4100K MIN 80CRI
281	BALLASTS	PHILLIPS
282	OTHER	LED
283	EMERGENCY POWER SYSTEMS	
284	GENERATORS	CATERPILLAR
285	UPS	APC
286	INVERTORS	MYERS POWER
287	DIV. 27: COMMUNICATIONS	
288	Data Center Server Enclosures	CHARTWORTH
289	Network Cabling Systems	GENERAL CABLE CAT 6 & 6A
290	27 05 00 COMMON RESULTS FOR COMM	
291	Structured Cabling System Warranty	MINIMUM 25 YEAR WARRANTY
292	27 05 26 GROUNDING & BONDING	
293	Bus Bar	COPPER B LINE
294	27 05 28 PATHWAYS FOR COMM SYSTEMS	
295	EMT Conduits & Couplings & Connectors	APPLETON

	STANDARD	CAMPUS ALTERNATIVES
296	Conduit Supports	UNISTRUT
297	Hangers & Cable Ties	COOPER B-LINE
298	Metal Outlet Boxes - Double Gang, Extra Deep	STEEL CITY
299	Pull Boxes and Cabinets	HOFFMAN ENCLOSURES
300	IDF Data Enclosures	MIDDLE ATLANTIC
301		CHATSWORTH PRODUCTS
302	27 05 43 UG DUCTS & RACEWAY FOR COMM	
303	Manholes	UTILITY VAULT (OLDCASTLE)
304	Pull boxes	UTILITY VAULT (OLDCASTLE)
305	Conduits (Schedule 40 or Type C)	CARLON
306	Detectable Warning Tape	CARLON
307	Pull, Rope 1700 lb tensile strength	CARLON
308	27 13 00 COMM BACKBONE CABLING	
309	Splice Cases - Outside	3M
310	Splice Cases - Inside	3M
311	Splice Bay & Relay Labels	3M
312	27 15 00 COMM HORIZONTAL CABLING	
313	Jacks	ORTRONICS
314	Faceplates	ORTRONICS
315	Emergency Phone	TALK-A-PHONE ANALOG BLUE PHONE
316	Elevator Phone	TALK-A-PHONE ANALOG
317	27 40 00 AUDIO VISUAL	
318	PROJECTOR	PANASONIC
319	PROJECT SCREEN	DA-LITE
320	MICROPHONE	SHURE
321	CLASSROOM LIGHTING CONTROL	LUTRON
322	DIV. 28: ELECTRONIC SAFETY & SECURITY	
323	28 10 00 ELECTRONIC ACCESS CONTROL	
324	Card Readers	HID ICLASS SE contactless smart card (R40 type) - no sub. Requires ICLASS Standard Compatibility, 920NTNTEK00000 (Typical model)
325	Software	Lenel OnGuard
326	Controllers	Lenel OnGuard. LNL 3300
327	Room Signs	Per Kendall Sign Inc. design dated 10-1-14.
328	FIRE ALARM SYSTEM	
329	GENERAL	NOTIFIER
330	FIRE ALARM PULL STATION	NOTIFIER
331	DIV. 32: EXTERIOR IMPROVEMENTS	
332	IRRIGATION SYSTEMS	
333	IRRIGATION CONTROLLER	RAINBIRD
334	IRRIGATION - Sprinkler Heads	RAINBIRD 1800 6" OR 8"
335	IRRIGATION - Heads	RAINBIRD FALCON WITH STAINLESS STEEL BODY
336	IRRIGATION - Heads	RAINBIRD 5000
337	IRRIGATION - Control Valves	SUPERIOR 950 DSPS BRASS

STANDARD		CAMPUS ALTERNATIVES
338	IRRIGATION - Pipes	SCHEDULE 80 PVC PIPE - HIGH PRESSURE
339		SCHEDULE 40 PVC
340	IRRIGATION - Fittings	SCHEDULE 80 SOCKED WELD FITTINGS
341		NO COUPLINGS OR BELL END CONNECTIONS
342	IRRIGATION SYSTEMS	RAINBIRD
343	PAVEMENT MARKINGS	DUNN-EDWARDS
344	CONTROLLER REMOTE SITE MANAGEMENT	RAINBIRD
345	CONTROLLER HAND-HELD REMOTE CONTROL	TRC COMMANDER
346	CONTROLLER ENCLOSURE	V.I.T. Strong Box SB-xxSS with QP
347	RAIN SENSOR	RAINBIRD
348	CONTROL WIRE - COMMON	Paige P7001D 12 AWG White
349	CONTROL WIRE - HOT	Paige P7001D 14 AWG Colored
350	WATERPROOF WIRE CONNECTOR	Spears DS-500 Dri-Splice
351	GROUNDING ROD	Paige 182007 with Paige 1820037P Connection
352	DIELECTRIC CONNECTION	Approved by Electrical Engineer
353	BOOSTER PUMP	RAINBIRD ONLY
354	BASKET STRAINER	Yardney SBx-T Series
355	BASKET STRAINER ENCLOSURE	V.I.T. Strong Box SBBC-xxSS with QP Option
356	PRESSURE REGULATOR	WATTS LF2235 LARGE
357		WATTS LFU5B23 FOR SMALL
358	MASTER VALVE	Rainbird P22o Brass series with Pressure regulator
359	FLOW SENSOR	RAINBIRD
360	GATE VALVE (2" and SMALLER)	Nibco T-113 Series
361	GATE VALVE (2 1/2" and LARGER)	Nibco F-619-SON Series
362	BALL VALVE (2" and SMALLER)	Nibco T-585-70 Series
363	AIR RELEASE VALVE	Cla-Val #33-A Series
364	QUICK COUPLING VALVE	Rain Bird #44-NP 3/4"
365	ELECTRIC CONTROL VALVE	SUPERIOR 950 DSPS
366	DRIP ZONE VALVE KIT	Toro TPV Series, NATAFIM
367	VALVE BOX	NDS Pro Plus Series (green plastic with purple bolt-down cover)
368	MAINLINE PIPING (6" and LARGER)	C9000
369	MAINLINE PIPING (2" - 4")	Pacific Plastics or equal CL315 Solvent-Weld PVC - Purple
370		NO BELL END CONNECTION - USE SCH 80 COUPLINGS
371	MAINLINE PIPING (1 1/2" and SMALLER)	Pacific Plastics or equal SCH 40 Solvent-Weld PVC – Purple or Sch 80 PVC
372	LATERAL LINE PIPING	Pacific Plastics or equal SCH 40 Solvent-Weld PVC – Purple, or SCH 80 PVC
373		USE 711 SOLVENT CEMENT WITH PURPLE PRIMER
374	PIPE FITTINGS (LATERAL LINES)	USE SCH 80 MALE ADAPTER
375	LARGE TURF ROTOR HEADS	RAINBIRD FALCON W/ STAINLESS STEEL BODY
376	MEDIUM ROTOR HEADS	RAINBIRD 5000
377	SMALL ROTOR HEADS	RAINBIRD
378	FIXED SPRAY HEADS	RAINBIRD 1800
379	FLOOD BUBBLER	RAINBIRD

STANDARD		CAMPUS ALTERNATIVES
380	TREE ROOT WATERING SYSTEM	RAINBIRD RWS SERIES
381	DRIP LINE SYSTEMS	RAINBIRD
382	DRIP SYSTEM FITTINGS / ACCESSORIES	RAINBIRD
LANDSCAPE DESIGN		
384	LARGE TREES	Cedrus deodora [Deodar cedar]
385	MEDIUM TREES PRIMARILY FOR SHADE	Jacaranda mimosifolia [Jacaranda]
386		Liriodendron arnoldii [Tulip tree]
387	SMALL TREES FOR FLOWERS & FRAGRANCE	Arbutus 'Marina' [Marina Strawberry tree]
388		Cassia leptophylla [Gold medallion tree]
389		Lagerstromia indica [Crape Myrtle]
390		Tabebuia lpe [Pink trumpet tree]
391	PALMS	Cycas revoluta [Sago palm]
392	SHRUBS INACTIVE AREAS	Heteromeles arbutifolia [Toyon]
393		Rhamnus calif. 'San Bruno's mound' [Coffeeberry]
394	SHRUBS IN IRRIGATED AREAS	Agave attenuata, [Fox tail agave]
395		Callistemon 'Little John' Little John bottlebrush
396		Cistus sp. [Rockrose]
397		Coelonema pulchrum, [Pink breath of heaven]
398		Ligustrum texanum [Texas privet]
399		Myrtus communis [Myrtle]
400		Osmanthus fragrans [Sweet olive]
401		Pittosporum tobira sp. [Tobira]
402		Raphiolepis indica sp. [Indian hawthorne]