gouldevans

May 14, 2014

Mr. Dave Corliss
City Manager
6 East 6th Street
Lawrence, KS 66044

Re: Lawrence Recreation Center – Change Order Request No. 1, 3 and 4.

Dear Dave,

As discussed in our meeting today I recommend approval of the following Change Orders on the Lawrence Recreation Center at Rock Chalk Park.

Change Order Requests

No. 1	Add Concure concrete admixture to the Track (232) concrete to ensure the track has reached the recommended moisture content level prior to the track surface being installed. Total area of concrete = 12,000 sqft.	$22,044.00
No. 3	Add the following electrical items requested by the City per attached sheets E102F, E101B, E101F, E101G, E101H, E304: • (4) electrical outlets in Turf (126) • (5) electrical outlets in Gymnastics (127) • (2) 2P/30A circuits for selected kitchen equipment in Food Prep #206. • electrical outlet in Storage (105)	$3,902.80
No. 4	Add a mop sink requested by the City in Storage (105) pre attached sheet P100B, P101B, and P101F.	$6,015.63
Total Recommended Change Order		$31,962.43

706 MASSACHUSETTS STREET
LAWRENCE, KS 66044
785.842.3800

KANSAS CITY LAWRENCE PHOENIX TAMPA SAN FRANCISCO NEW ORLEANS
WWW.GOULDEVANS.COM

Change Order No. 1: As discussed at a recent progress meeting, we were made aware that the subcontractor (Tarkett) had concerns with the installation of the rubber flooring at the elevated track given where the project was relative to getting it enclosed and the ability of the contractor to adequately dehumidify the space. As you are aware, documents were completed Spring of 2013 and bids were received in May 2013, however work did not start until late August 2013. This effectively pushed the critical structural trades into the winter. To compound this, we experienced some extreme conditions this winter that delayed much of this work. As a result, the current schedule that Gene Fritzel has provided the City anticipates the facility enclosed and conditioned by the end of May.

Tarkett and Gene Fritzel believe that it could take 4-6 months for the concrete slabs as planned to reach the appropriate moisture levels for installation of the flooring. In our opinions and that of the City's 3rd party consultant (KBS), we believe this could not have been anticipated when the drawings were completed and bids were taken.

If the flooring was installed with too great a moisture level in the slab, it most probably would lead to delamination, and bubbling of the surface. To mitigate this Tarkett has proposed through Gene Fritzel to add a Concure admixture to the concrete which in effect would turn the concrete into a vapor barrier.

In discussions with Tarkett, we have requested and Tarkett has agreed to provide a "letter of confidence" regarding the installation of the flooring following use of the Concur admixture, and furthermore, Tarkett would have a representative on-site during the placement of the Concur and provide a letter of acceptance of the installation as well as a recommended installation date for you're the rubber flooring.

It is our recommendation that you accept this change order request to ensure that we are able to have the rubber flooring installed on the track for the opening September 1, 2014. The alternative would be to have the contractor proceed per plans and specs and install the flooring when the moisture levels are acceptable, but most probably well after the opening.

Change Order No. 3 & 4: These were changes that were requested by LPRD in the last couple of months. In reviewing these changes, they seem very reasonable for the way they want to operate the building. Now would be the best time to incorporate these changes. We have review the attached proposals from the contractor and feel these are reasonable and fair prices, and would recommend that you proceed with them.

In summary, we recommend you approve a change order in the amount of $31,962.43. If acceptable, we will prepare the necessary paperwork and notify the contractor to proceed. If you have any questions, please give me a call.

Sincerely,

John Wilkins, AIA LEED AP
Principal

CHANGE ORDER

GENE FRITZEL
CONSTRUCTION CO., INC.
643 Massachusetts, Suite 300
P.O. Box 906
Lawrence, Kansas 66044-0906

Job: City of Lawrence Rec Center
670 N. 1800 Rd
Lawrence, KS 66049

Date: May 6, 2014

Number: 001

To: City of Lawrence Kansas

We hereby agree to make the change(s) specified below:

1. Elevated Track Add Concure A. 12,000 square feet @ 1.67	$ 20,040.00
2. GC Margin 5% & OH 5%	$ 2,004.00
TOTAL	**$ 22,044.00**

Total Price: **$22,044.00**

City of Lawrence

GC

CHANGE ORDER

GENE FRITZEL
CONSTRUCTION CO., INC.
643 Massachusetts, Suite 300
P.O. Box 906
Lawrence, Kansas 66044-0906

Job: City of Lawrence Rec Center
670 N. 1800 Rd
Lawrence, KS 66049

Date: May 6, 2014

Number: 003

To: City of Lawrence Kansas

We hereby agree to make the change(s) specified below:

1. Electrical Changes per City A. See attached breakdown	$ 3,548.00
2. GC Margin 5% & OH 5%	$ 354.80
TOTAL	**$ 3,902.80**

Total Price: **$3,902.80**

City of Lawrence

GC

Earnie's Mechanical
P.O. Box 1476
Lawrence, KS 66044

May 12, 2014

DFC Company of Lawrence
P.O. Box 721
Lawrence, KS 66044

RE: Lawrence Recreational Center

We are pleased to provide you with a proposal for change order for the above mentioned project.

E 102 F	
(6) 1/20 circuits $ 250.00 each	$ 1500.00
(2) 2/20 circuits $ 344.00 each	$ 688.00
E 101 B	$281.00
(1)1/20 circuit for floor machine $ 281.00	
E 101 F	
(1) add outlet $120.00	$ 120.00
E 101G	
(2) add outlets $120.00 each	$ 240.00
75 ft of surface wire way with 3 outlets.	$ 719.00
Total	$3,548.00

Please feel free to contact me at 785-424-4291.

Thank you.

Earnie Oshel

CHANGE ORDER

GENE FRITZEL
CONSTRUCTION CO., INC.
643 Massachusetts, Suite 300
P.O. Box 906
Lawrence, Kansas 66044-0906

Job: City of Lawrence Rec Center
670 N. 1800 Rd
Lawrence, KS 66049

Date: May 6, 2014

Number: 004

To: City of Lawrence Kansas

We hereby agree to make the change(s) specified below:

1. Add Janitors Sink per City request A. See attached breakdown	$ 5,468.75
2. GC Margin 5% & OH 5%	$ 546.88
TOTAL	**$ 6,015.63**

Total Price: **$6,015.63**

City of Lawrence

GC

Phone 785-842-1272 **Fax** 785-842-1292 **Cell** 785-423-0550

BID DATE: 5-7-2014

JOB NAME: City Rec. Center

BID SUBMITTED TO: Thomas Fritzel

BASE BID AMOUNT: **$ 5,468.75**
Alternate bid amount:

BASE BID INCLUDES: install plumbing as per instruction to added Janitors Sink in room 105, remove and replace concrete as needed, Domestic water piping as per plans and instructions, vent piping as per plans, Janitors sump is assumed to be a Mop sink 24X24 stone commercial grade , with faucet and mop hangers, bumper guards

BID EXCLUDES: any and all additional work

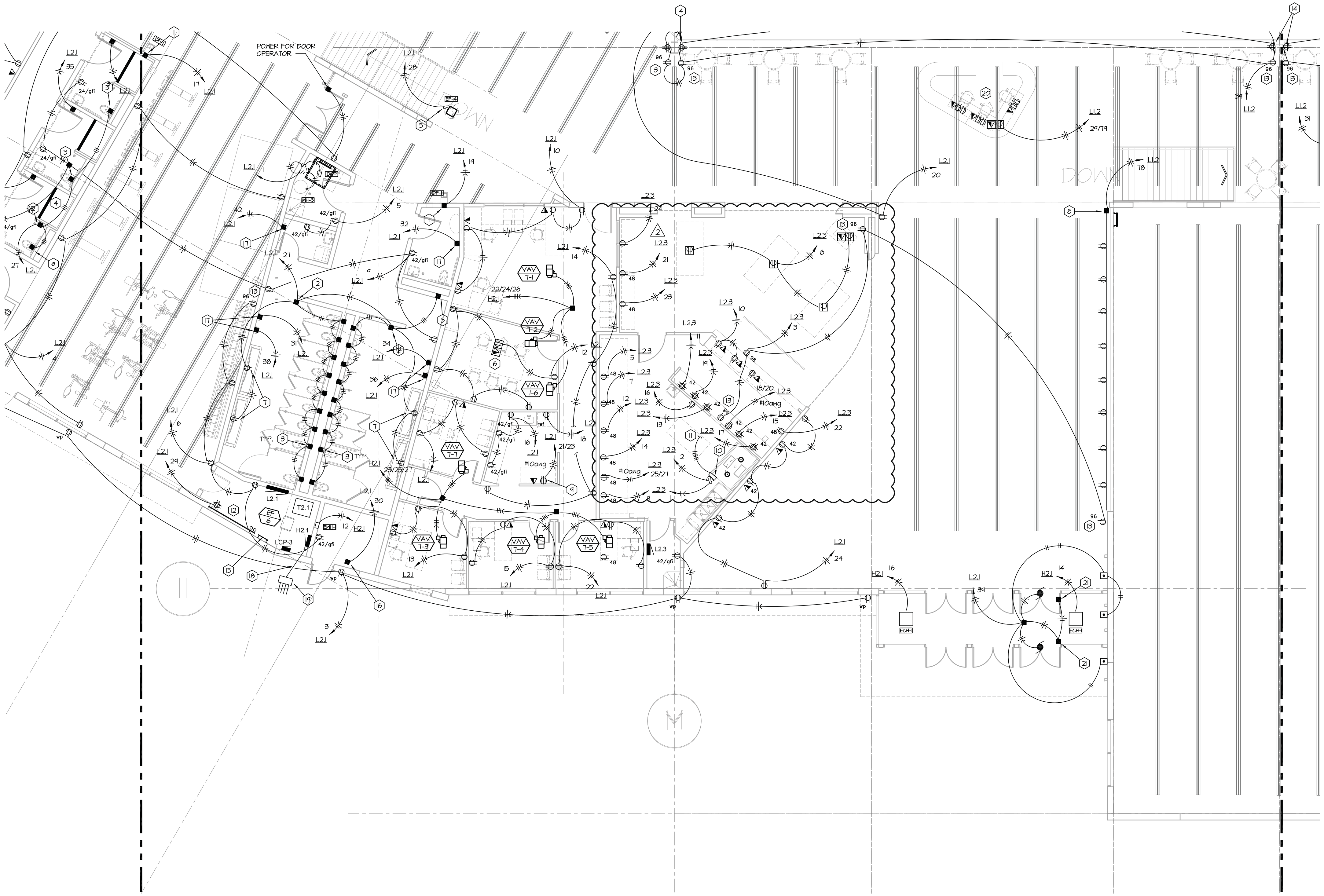
Josef Rantner

PLAN NOTES:

1. Drinking fountain rough-in - coordinate with PC
2. Flushvalve transformer box mounted above the ceiling. Transformer furnished by PC and installed by EC
3. Flushvalve sensor rough-in - coordinate the exact location and requirements with shop drawings.
4. #18ga wiring from flushvalve transformer to valve sensor
5. SPST disconnect provided with fan
6. Conference floor box for power and data. Provide ½" conduit for power. Provide 1" conduit for data/tele to above layin ceiling
7. Provide GFIC receptacle at 19" aff to center for lavatory AC plug-in transformers. Coordinate rough-in with PC
8. Surface raceway mounted on floor as base board. Route homerun underfloor to plenum space below in route to panel
9. Confirm voltage/phase and NEMA configuration of receptacle with Owners equipment
10. Range hood electrical control panel. One circuit for prewired lights and one for HVAC system controls
11. Provide interconnecting wiring between hood mounted control panel and roof mounted HVAC equipment
12. Receptacle for Office area data/telephone switch
13. Mount adjacent (or above as required) to TV Monitor outlet, refer E402F
14. Mount quad receptacle with bottom 2" aff. Provide ½" conduit up column to homerun
15. Grounding plate - refer specifications and riser diagram
16. 120 volt rough-in for irrigation controller by others. Coordinate exact location with Owner
17. Rough-in for electric hand dryer - refer architectural details for elevations
18. EC shall provide parking lot lighting circuits from H2.1 panel to junction box for extension to site fixtures by others.
19. Flush ground mounted junction box - refer spec's
20. Receptacles and tele/data outlets to be provided by EC and installed in casework by others. Floor box shall be provided with threaded covers to allow for flexible conduit run from box to devices. Coordinate location of devices in casework with GC.
21. 120 volt power junction box roughed in a head of door for interface between card reader (provided by others) and door lock mechanism (provided by others)
22. Provide NEMA 6-20R receptacle (2)

GENERAL NOTES:

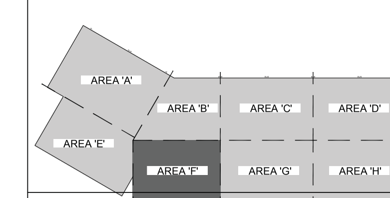
A. These drawings are diagrammatic in nature and indicate the general extent of the work. The electrical contractor shall provide all pull boxes, junction boxes and incidental materials and labor for a complete and fully functional system.
B. Electrical contractor shall de-rate conductors as required by the N.E.C. when grouped in common raceways.
C. Provide firestopping on conduits passing through fire rated walls and floors. coordinate location and ratings of walls with architectural drawings.
D. Verify requirements of all mechanical equipment with shop drawing submittals. Notify engineer of any conflicts between equipment submittals and electrical drawings.
E. Contractor shall offset outlet boxes on opposite sides of common wall to prevent sound transmission between adjoining rooms.
F. All low voltage wires not routed in conduit shall be provided as plenum rated cables.
G. Provide junction boxes and conduit with pull-strings up to plenum at all voice and data outlet locations.
H. Where boxes are installed in concrete block walls, the box mounting height shall be at the block joint and the device shall be provided with a jumbo coverplate.
I. E.C. to provide rough-in boxes and conduit for thermostats as indicated.
J. Refer to telecommunication drawings for data requirements.



1 UPPER LEVEL POWER PLAN - AREA F

1/8"=1'-0"

PLAN NORTH TRUE NORTH



Issue for Bid and Construction

H&B HOSS & BROWN ENGINEERS
4910 Corporate Centre Drive
Suite 177
Lawrence, Kansas 66047
(785) 832-1105 phone
(785) 832-1236 fax
mail@hbengineerstk.com
H&B Project Number: 12110

paul werner ARCHITECTS gouldevans
123 W. 8th STREET
SUITE B2
LAWRENCE, KS 66049
OFFICE: 785.832.0804
FAX: 785.832.0890

4.16.2013
ENGINEER OF RECORD:
Pete C. Laughlin, P.E. - License No. 10089

CITY OF LAWRENCE RECREATION AND WELLNESS CENTER

ROCK CHALK PARK
LAWRENCE, KANSAS

PROJECT # 212-140

RELEASE:	DATE:
BIDDING	4.16.13
ADDENDA 1	5.8.13
ESI-1 (1)	7.8.13
ESI-2 (2)	4.10.14

E102F

PANEL H2.1

DESCRIPTION: 125A, 42P, MAIN LUGS ONLY, SURFACE MOUNT w/ GROUND KIT
VOLTAGE: 277/480v, 3P, 4 WIRE
TOTAL CONNECTED LOAD: 35,364w= 98a
TOTAL DEMANDED LOAD: 30,918w= 86a
10 kAIC RATING

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
1	1680	Lights 2nd Floor Dance	1	20	A	20	2	Parking Lot Lights	1030	2
3	3076	Lights 2nd Floor Weights, Showers	1	20	B				1030	4
5	1148	Lights 2nd Floor Restrooms	1	20	C	20	2	Parking Lot Lights	832	6
7	1400	Lights 2nd Floor Admin Area	1	20	A				832	8
9	1912	Lights 2nd Floor Kitchen, Concession	1	20	B	20	1	Spare	1000	10
11	342	Lights Ext. Façade, Entry	1	20	C	20	1	Electric Wall Heater	2000	12
13	603	Lights Ext. Ground	1	20	A	20	1	Electric Wall Heater	2000	14
15	617	Lights Ext. Ground/Façade	1	20	B	20	1	Electric Wall Heater	2000	16
17	9418	Elevator Power 25hp max	3	70	C	20	1	Spare	1000	18
19	9418				A	20	1	Emergency/Night Lights	1000	20
21	9418				B	15	3	Office Heat	2327	22
23	3490	Office Heat	1	20	C				2327	24
25	3490				A				2327	26
27	3490				B	20	1	Spare	1000	28
29	309	Parking Lot Lights	2	20	C	20	2	Parking Lot Lights	832	30
31	309				A				832	32
33			1	20	B	20	1			34
35			1	20	C	20	1			36
37			1	20	A	20	1			38
39			1	20	B	20	1			40
41			1	20	C	20	1			42

PANEL H2.2

DESCRIPTION: 125A, 30P, MAIN LUGS ONLY, SURFACE MOUNT w/ GROUND KIT
VOLTAGE: 277/480v, 3P, 4 WIRE
TOTAL CONNECTED LOAD: 51,000w= 61a
TOTAL DEMANDED LOAD: 48,000w= 58a
10 kAIC RATING

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
1	1000	Spare	1	20	A	20	1	Spare		2
3	1000	Spare	1	20	B	20	1	Spare		4
5	1000	Spare	1	20	C	20	1	Spare		6
7	1000	Spare	1	20	A	20	1	Spare		8
9	1000	Spare	1	20	B	20	1	Spare		10
11	1000	Spare	1	20	C	20	1	Spare		12
13			1	20	A	80	3	Transformer T2.2	15000	14
15			1	20	B				15000	16
17			1	20	C				15000	18
19			1	20	A					20
21			1	20	B					22
23			1	20	C					24
25			1	20	A					26
27			1	20	B					28
29			1	20	C					30

PANEL H1.3 △1

DESCRIPTION: 225A, 30P, MAIN LUGS ONLY, SURFACE MOUNT w/ GROUND KIT
VOLTAGE: 277/480v, 3P, 4 WIRE
TOTAL CONNECTED LOAD: 83,760w= 101a
TOTAL DEMANDED LOAD: 75,280w= 91a
10 kAIC RATING

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
1	1000	Spare	1	20	A	30	3	Lights Tennis Courts	4320	2
3	1000	Spare	1	20	B			Contactor C1,C2,C3 & C4	4320	4
5	1000	Spare	1	20	C				4320	6
7	1000	Spare	1	20	A	30	3	Lights Tennis Courts	4320	8
9	1000	Spare	1	20	B			Contactor C5,C6,C7 & C8	4320	10
11	1000	Spare	1	20	C				4320	12
13			1	20	A	30	3	Lights Tennis Courts	4320	14
15			1	20	B			Contactor C9,C10,C11 & C12	4320	16
17			1	20	C				4320	18
19			1	20	A	30	3	Lights Tennis Courts	4320	20
21			1	20	B			Contactor C13,C14,C15 & C16	4320	22
23			1	20	C				4320	24
25	4320	Spare	3	30	A	30	3	Spare	4320	26
27	4320				B				4320	28
29	4320				C				4320	30

PANEL H1.1

DESCRIPTION: 225A, 42P, MAIN LUGS ONLY, SURFACE MOUNT w/ GROUND KIT
VOLTAGE: 120/208v, 3P, 4 WIRE
TOTAL CONNECTED LOAD: 69,580w= 193a
TOTAL DEMANDED LOAD: 55,580w= 154a
10 kAIC RATING

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
1	896	Lights 1st Floor Storage, Elec.	1	20	A	20	1	Lights Ext. Façade	663	2
3	2016	Lights 1st Floor Gym, Storage	1	20	B	20	1	Electric Wall Heater	2000	4
5	1008	Lights 1st Floor Gym	1	20	C	20	1	Electric Unit Heater	3000	6
7	1428	Lights 1st Floor Team Check-In	1	20	A	20	1	Electric Unit Heater	3000	8
9	3672	Lights 2nd Floor Track	1	20	B	20	1	Spare	1000	10
11	3672	Lights 2nd Floor Track	1	20	C	20	1	Spare	1000	12
13	3672	Lights 2nd floor Track, Cardio	1	20	A	20	1	Spare	1000	14
15	3888	Lights Court 1A	1	20	B	20	1	Spare	1000	16
17	3888	Lights Court 1A	1	20	C	20	1	Spare	1000	18
19	3888	Lights Court 1B	1	20	A	20	1	Spare	1000	20
21	3888	Lights Court 1B	1	20	B	20	1	Spare	1000	22
23	3888	Lights Court 2A	1	20	C	20	1	Spare	1000	24
25	3888	Lights Court 2A	1	20	A	20	1	Spare	1000	26
27	3888	Lights Court 2B	1	20	B	20	1	Spare	1000	28
29	3888	Lights Court 2B	1	20	C	20	1	Spare	1000	30
31	910	2nd Floor Team Check-In	1	20	A	20	1	Spare	1000	32
33		Space	1	20	B	20	1	Space		34
35		Space	1	20	C	20	1	Space		36
37		Space	1	20	A	20	1	Space		38
39		Space	1	20	B	20	1	Emergency/Night Lights	310	40
41		Space	1	20	C	20	1	Emergency/Night Lights	229	42

PANEL L2.1 (Section 1)

DESCRIPTION: 200A, 42P, MAIN BREAKER, SURFACE MOUNT w/ GROUND KIT
VOLTAGE: 120/208v, 3P, 4 WIRE
TOTAL CONNECTED LOAD: 61,404w= 170a
TOTAL DEMANDED LOAD: 47,854w= 133a
10 kAIC RATING

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
1	750	Water Heater 3	1	20	A	20	1	Lighting Control Panel LCP-3	1000	2
3	1000	Exterior Receptacles	1	20	B	20	1	Wrestling Receptacles	800	4
5	800	Dance Receptacles	1	20	C	20	1	Wrestling Receptacles	1000	6
7	1000	Dance Receptacles	1	20	A	20	1	General Receptacles	1200	8
9	1200	Restroom Receptacles	1	20	B	20	1	Open Office	1700	10
11	800	Office 1	1	20	C	20	1	Conference Rpom	1200	12
13	800	Office 2	1	20	A	20	1	Copy Room	1200	14
15	800	Office 3	1	20	B	20	1	Break Room	1250	16
17	750	Drinking Fountain	1	20	C	20	1	Break Room	1250	18
19	750	Drinking Fountain	1	20	A	20	1	General Receptacles	800	20
21	1125	Copier	2	30	B	20	1	Office 4	800	22
23	1125				C	20	1	Lobby Receptacles	1000	24
25	1176	EF-6	1	20	A	20	1	EF-3	864	26
27	150	Flushvalve Transformer	1	20	B	20	1	EF-4	864	28
29	1500	Data Switch Receptacle	1	20	C	20	1	Irrigation Controller	750	30
31	1500	Hand dryer	1	20	A	20	1	Hand dryer	1500	32
33	1500	Hand dryer	1	20	B	20	1	Hand dryer	1500	34
35	1500	Hand dryer	1	20	C	20	1	Hand dryer	1500	36
37	1500	Hand dryer	1	20	A	20	1	Hand dryer	1500	38
39	1000	Entry ADA Door Control	1	20	B	20	1	Second floor WiFi	500	40
41	1000	Spare	1	20	C	20	1	Hand dryer	1500	42

PANEL L2.1 (Section 2)

DESCRIPTION: 200A, 42P, MAIN LUGS ONLY, SURFACE MOUNT w/ GROUND KIT
VOLTAGE: 120/208v, 3P, 4 WIRE

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
43	1000	Spare	1	20	A	20	1	Spare	1000	44
45	1000	Spare	1	20	B	20	1	Spare	1000	46
47	1000	Spare	1	20	C	20	1	Spare	1000	48
49	1000	Spare	1	20	A	20	1	Spare	1000	50
51	1000	Spare	1	20	B	20	1	Spare	1000	52
53	1000	Spare	1	20	C	20	1	Spare	1000	54
55	1000	Spare	1	20	A	20	1	Spare	1000	56
57	1000	Spare	1	20	B	20	1	Spare	1000	58
59			1	20	C	20	1			60
61			1	20	A	20	1			62
63			1	20	B	20	1			64
65			1	20	C	20	1			66
67			1	20	A	20	1			68
69			1	20	B	20	1			70
71			1	20	C	20	1			72
73			1	20	A	20	1			74
75			1	20	B	20	1			76
77			1	20	C	20	1			78
79			1	20	A	20	1			80
81			1	20	B	20	1			82
83			1	20	C	20	1			84

PANEL L1.2 (Section 1)

DESCRIPTION: 400A, 42P, MAIN BREAKER, SURFACE MOUNT w/ GROUND KIT AND THRU FEED LUGS
VOLTAGE: 120/208v, 3P, 4 WIRE
TOTAL CONNECTED LOAD: 148,428w= 412a
TOTAL DEMANDED LOAD: 115,878w= 322a
10 kAIC RATING

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
1	1200	Score Table Receptacle	1	20	A	20	1	Lighting Control Panel LCP-2	1000	2
3	1200	Score Table Receptacle	1	20	B	20	1	Exterior Receptacles	800	4
5	1200	Score Table Receptacle	1	20	C	20	1	Restroom Receptacles	800	6
7	1200	Score Table Receptacle	1	20	A	20	1	General Receptacles	800	8
9	1200	Score Table Receptacle	1	20	B	20	1	General Receptacles	1200	10
11	1200	Score Table Receptacle	1	20	C	20	1	Drinking Fountain	1750	12
13	1000	Party Room Receptacles	1	20	A	20	1	DVR outlets CCTV	1800	14
15	1800	Party Room Receptacles	1	20	B	20	1	DVR outlets CCTV	1800	16
17	1200	General Receptacles	1	20	C	20	1	Party Room Receptacles	1800	18
19	400	Restroom Receptacles	1	20	A	20	1	Party Room Receptacles	1200	20
21	1750	Drinking Fountain	1	20	B	20	1	Vending	1750	22
23	1750	Vending	1	20	C	20	1	Vending	1750	24
25	1750	Vending	1	20	A	20	1	Vending	1750	26
27	1200	Checkin Desk Receptacle	1	20	B	20	1	First Floor WiFi	500	28
29	1200	Checkin Desk Receptacle	1	20	C	20	1	Second Floor WiFi	500	30
31	864	EF-1	1	20	A	20	1	General Receptacles	1400	32
33	864	EF-2	1	20	B	20	1	General Receptacles	1200	34
35	200	Flushvalve Transformers	1	20	C	20	1	Drinking Fountain	1750	36
37	1500	TV Monitors	1	20	A	20	1	FACP	1500	38
39	1500	TV Monitors	1	20	B	20	1	TV Monitors	1500	40
41	1500	TV Monitors	1	20	C	20	1	General Receptacles	1200	42

PANEL L1.2 (Section 2)

DESCRIPTION: 400A, 42P, MAIN LUGS ONLY, SURFACE MOUNT w/ GROUND KIT
VOLTAGE: 120/208v, 3P, 4 WIRE

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
43	1200	General Receptacles	1	20	A	20	1	General Receptacles	1200	44
45	1200	General Receptacles	1	20	B	20	1	Elevator 120 volt	1200	46
47	3360	Gym Control Panel	1	30	C	30	1	Gym Control Panel	3360	48
49	3360	Gym Control Panel	1	30	A	30	1	Gym Control Panel	3360	50
51	3360	Gym Control Panel	1	30	B	30	1	Gym Control Panel	3360	52
53	3360	Gym Control Panel	1	30	C	30	1	Gym Control Panel	3360	54
55	3360	Gym Control Panel	1	30	A	30	1	Gym Control Panel	3360	56
57	3360	Gym Control Panel	1	30	B	30	1	Gym Control Panel	3360	58
59	3360	Gym Control Panel	1	30	C	30	1	Gym Control Panel	3360	60
61	3360	Gym Control Panel	1	30	A	30	1	Gym Control Panel	3360	62
63	3360	Gym Control Panel	1	30	B	20	1	Hand Dryer	1500	64
65	3360	Gym Control Panel	1	30	C	20	1	Hand Dryer	1500	66
67	3360	Gym Control Panel	1	30	A	20	1	Hand Dryer	1500	68
69	3360	Gym Control Panel	1	30	B	20	1	Hand Dryer	1500	70
71	1500	Hand dryer	1	20	C	20	1	Hand Dryer	1500	72
73	1500	Hand dryer	1	20	A	20	1	Hand Dryer	1500	74
75	1500	Hand dryer	1	20	B	20	1	TV Monitors	1000	76
77	1500	Hand dryer	1	20	C	20	1	Plug Strip	1600	78
79	1200	Checkin Desk	1	20	A	20	1	Spare	1000	80
81	1200	Checkin Desk	1	20	B	20	1	Spare	1000	82
83	1000	Spare	1	20	C	20	1	Spare	1000	84

PANEL L2.2

DESCRIPTION: 100A, 30P, MAIN BREAKER, SURFACE MOUNT w/ GROUND KIT
VOLTAGE: 120/208v, 3P, 4 WIRE
TOTAL CONNECTED LOAD: 30,200w= 84a
TOTAL DEMANDED LOAD: 16,200w= 45a
10 kAIC RATING

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
1	400	General Power	1	20	A	20	1	Data Power	1800	2
3	1000	Spare	1	20	B	20	1	Spare	1000	4
5	1000	Spare	1	20	C	20	1	Spare	1000	6
7	1000	Spare	1	20	A	20	1	Spare	1000	8
9	1000	Spare	1	20	B	20	1	Spare	1000	10
11	1000	Spare	1	20	C	20	1	Spare	1000	12
13	1000	Spare	1	20	A	20	1	Spare	1000	14
15	1000	Spare	1	20	B	20	1	Spare	1000	16
17	1000	Spare	1	20	C	20	1	Spare	1000	18
19	1000	Spare	1	20	A	20	1	Spare	1000	20
21	1000	Spare	1	20	B	20	1	Spare	1000	22
23	1000	Spare	1	20	C	20	1	Spare	1000	24
25	1000	Spare	1	20	A	20	1	Spare	1000	26
27	1000	Spare	1	20	B	20	1	Spare	1000	28
29	1000	Spare	1	20	C	20	1	Spare	1000	30

PANEL L1.1 (Section1)

DESCRIPTION: 400A, 42P, MAIN BREAKER, SURFACE MOUNT w/ GROUND KIT AND THRU FEED LUGS
VOLTAGE: 120/208v, 3P, 4 WIRE
TOTAL CONNECTED LOAD: 98,534w= 274a
TOTAL DEMANDED LOAD: 85,564w= 238a
10 kAIC RATING

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
1	1200	Score Table Receptacle	1	20	A	20	1	Lighting Control Panel LCP-1	1000	2
3	1200	Score Table Receptacle	1	20	B	20	1	Exterior Receptacles	800	4
5	1000	General Receptacles	1	20	C	20	1	General Receptacles	800	6
7	1650	Cardio Equipment	1	20	A	20	1	Cardio Equipment	1650	8
9	1650	Cardio Equipment	1	20	B	20	1	Cardio Equipment	1650	10
11	1650	Cardio Equipment	1	20	C	20	1	Cardio Equipment	1650	12
13	1650	Cardio Equipment	1	20	A	20	1	Cardio Equipment	1650	14
15	1650	Cardio Equipment	1	20	B	20	1	Cardio Equipment	1650	16
17	1650	Cardio Equipment	1	20	C	20	1	Cardio Equipment	1650	18
19	1650	Cardio Equipment	1	20	A	20	1	Cardio Equipment	1650	20
21	1650	Cardio Equipment	1	20	B	20	1	Cardio Equipment	1650	22
23	1650	Cardio Equipment	1	20	C	20	1	Cardio Equipment	1650	24
25	1650	Cardio Equipment	1	20	A	20	1	Cardio Equipment	1650	26
27	1650	Cardio Equipment	1	20	B	20	1	Cardio Equipment	1650	28
29	1650	Cardio Equipment	1	20	C	20	1	Cardio Equipment	1650	30
31	1000	Spare	1	20	A	20	1	Cardio Equipment	1650	32
33	1176	EF-7	1	20	B	20	1	EF-8	1176	34
35	1176	EF-9	1	20	C	20	1	EF-10	1176	36
37	2400	Trash Compactor (5hp)	3	40	A	20	1	Temperature Control Panel	1500	38
39	2400				B	20	1	Spare	1000	40
41	2400				C	20	1	Spare	1000	42

PANEL L1.1 (Section 2)

DESCRIPTION: 400A, 42P, MAIN LUGS ONLY, SURFACE MOUNT w/ GROUND KIT
VOLTAGE: 120/208v, 3P, 4 WIRE

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
43	3360	Gym Control Panel	1	30	A	20	1	Spare	1000	44
45	3360	Gym Control Panel	1	30	B	20	1	Spare	1000	46
47	3360	Gym Control Panel	1	30	C	20	1	Spare	1000	48
49	3360	Gym Control Panel	1	30	A	20	1	Spare	1000	50
51	3360	Gym Control Panel	1	30	B	20	1	Spare	1000	52
53	3360	Gym Control Panel	1	30	C	20	1	Spare	1000	54
55	3360	Gym Control Panel	1	30	A	20	1	Spare	1000	56
57	3360	Gym Control Panel	1	30	B	20	1	Spare	1000	58
59			1	20	C	20	1			60
61			1	20	A	20	1			62
63			1	20	B	20	1			64
65			1	20	C	20	1			66
67			1	20	A	20	1			68
69			1	20	B	20	1			70
71			1	20	C	20	1			72
73			1	20	A	20	1			74
75			1	20	B	20	1			76
77			1	20	C	20	1			78
79			1	20	A	20	1			80
81			1	20	B	20	1			82
83			1	20	C	20	1			84

PANEL H1.2 (Section 1)

DESCRIPTION: 225A, 42P, MAIN LUGS ONLY, SURFACE MOUNT w/ GROUND KIT
VOLTAGE: 277/480v, 3P, 4 WIRE
TOTAL CONNECTED LOAD: 141,364w= 170a
TOTAL DEMANDED LOAD: 136,864w= 165a
10 kAIC RATING

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
1	2688	Lights 1st Floor Gyms	1	20	A	20	1	Lights Court 7A	2916	2
3	3304	Lights 1st Floor Restrooms, Party	1	20	B	20	1	Lights Court 7A	2916	4
5	3240	Lights 2nd Floor Viewing Gallery	1	20	C	20	1	Lights Court 7B	2916	6
7	2336	Lights 2nd Floor Entry	1	20	A	20	1	Lights Court 7B	2916	8
9	2916	Lights Court 3A	1	20	B	20	1	Lights Court 8A	2916	10
11	2916	Lights Court 3A	1	20	C	20	1	Lights Court 8A	2916	12
13	2916	Lights Court 3B	1	20	A	20	1	Lights Court 8B	2916	14
15	2916	Lights Court 3B	1	20	B	20	1	Lights Court 8B	2916	16
17	2916	Lights Court 4A	1	20	C	20	1	Gymnastics	2916	18
19	2916	Lights Court 4A	1	20	A	20	1	Gymnastics	2916	20
21	2916	Lights Court 4B	1	20	B	20	1	Turf Field A	3240	22
23	2916	Lights Court 4B	1	20	C	20	1	Turf Field A	3240	24
25	2916	Lights Court 5A	1	20	A	20	1	Turf Field B	3240	26
27	2916	Lights Court 5A	1	20	B	20	1	Turf Field B	3240	28
29	2916	Lights Court 5B	1	20	C	20	1	Turf Field C	3240	30
31	2916	Lights Court 5B	1	20	A	20	1	Turf Field C	3240	32
33	2916	Lights Court 6A	1	20	B	20	1	Lights 1st Floor Tele, Elec	280	34
35	2916	Lights Court 6A	1	20	C	20	1	Spare	1000	36
37	2916	Lights Court 6B	1	20	A	20	1	Emergency/Night Lights	262	38
39	2916	Lights Court 6B	1	20	B	20	1	Emergency/Night Lights	506	40
41	1000	Spare	1	20	C	20	1	Emergency/Night Lights	492	42

PANEL H1.2 (Section 2)

DESCRIPTION: 200A, 42P, MAIN LUGS ONLY, SURFACE MOUNT w/ GROUND KIT
VOLTAGE: 277/480v, 3P, 4 WIRE

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
43	5000	Water Heater 1	3	30	A	20	3	Water Heater 2	3000	44
45	5000				B				3000	46
47	5000				C				3000	48
49	1000	Spare	1	20	A	20	1	Spare	1000	50
51	1000	Spare	1	20	B	20	1	Spare	1000	52
53	1000	Spare	1	20	C	20	1	Spare	1000	54
55	1000	Spare	1	20	A	20	1	Spare		56
57			1	20	B	20	1			58
59			1	20	C	20	1			60
61			1	20	A	20	1			62
63			1	20	B	20	1			64
65			1	20	C	20	1			66
67			1	20	A	20	1			68
69			1	20	B	20	1			70
71			1	20	C	20	1			72
73			1	20	A	20	1			74
75			1	20	B	20	1			76
77			1	20	C	20	1			78
79			1	20	A	20	1			80
81			1	20	B	20	1			82
83			1	20	C	20	1			84

PANEL L2.3 △2

DESCRIPTION: 100A, 42P, MAIN LUGS ONLY, SURFACE MOUNT w/ GROUND KIT
VOLTAGE: 120/208v, 3P, 4 WIRE
TOTAL CONNECTED LOAD: 39,252w= 109a
TOTAL DEMANDED LOAD: 28,482w= 79a
10 kAIC RATING

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
1	300	Hood Lights	1	20	A	20	1	Hood Controls	500	2
3	1500	Menu Boards	1	20	B	20	1	Hood Exhaust Fan	1176	4
5	1500	Future	1	20	C	30	1	Hood Make-up Unit	1656	6
7	1500	Future	1	20	A	20	1	Floor Power	800	8
9	900	Refrigerator	1	20	B	20	1	Cash Registers	1500	10
11	1000	Equipment	1	20	C	20	1	Freezer	1140	12
13	1000	Equipment	1	20	A	20	1	Freezer	1140	14
15	1000	Equipment	1	20	B	20	1	Pizza Table	900	16
17	1000	Equipment	1	20	C	30	2	Microwave	3100	18
19	1000	Equipment	1	20	A				3100	20
21	1920	Merchandizer	1	20	B	20	1	Pepsi	500	22
23	1920	Merchandizer	1	20	C	20	1	Ice Cream	1000	24
25	3100	Hot Cart	2	30	A	20	1	Spare	500	26
27	3100				B	20	1	Spare	500	28
29	500	Spare	1	20	C	20	1	Spare	500	30
31			1	20	A	20	1			32
33			1	20	B	20	1			34
35			1	20	C	20	1			36
37			1	20	A	20	1			38
39			1	20	B	20	1			40
41			1	20	C	20	1			42

PANEL L1.3

DESCRIPTION: 100A, 30P, MAIN BREAKER, SURFACE MOUNT w/ GROUND KIT
VOLTAGE: 120/208v, 3P, 4 WIRE
TOTAL CONNECTED LOAD: 36,364w= 101a
TOTAL DEMANDED LOAD: 29,074w= 81a
10 kAIC RATING

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
1	1800	Data Room Receptacles	1	20	A	25	2	DDS/CU-1	1664	2
3	1800	Data Room Receptacles	1	20	B				1664	4
5	800	General Receptacles	1	20	C	20	1	EF-5	1176	6
7	1800	Data Room Receptacles	1	20	A	30	1	Soccer Control Panel	3360	8
9	3360	Gym Control Panel	1	30	B	30	1	Soccer Control Panel	3360	10
11	3360	Gym Control Panel	1	30	C	20	1	Sump Pump	1000	12
13	3360	Gym Control Panel	1	30	A	20	1	Spare	1000	14
15	3360	Gym Control Panel	1	30	B	20	1	Spare	1000	16
17	1500	MUSCO control power	1	20	C	20	1			18
19	1000	LCP-4 control power	1	20	A	20	1			20
21			1	20	B	20	1			22
23			1	20	C	20	1			24
25			1	20	A	20	1			26
27			1	20	B	20	1			28
29			1	20	C	20	1			30

PANEL L1.4

DESCRIPTION: 100A, 30P, MAIN BREAKER, SURFACE MOUNT w/ GROUND KIT
VOLTAGE: 120/208v, 3P, 4 WIRE
TOTAL CONNECTED LOAD: 30,500w= 85a
TOTAL DEMANDED LOAD: 16,500w= 46a
10 kAIC RATING

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
1	1500	Ice Machine	1	20	A	20	1	Spare	1000	2
3	1000	Spare	1	20	B	20	1	Spare	1000	4
5	1000	Spare	1	20	C	30	1	Spare	1000	6
7	1000	Spare	1	20	A	20	1	Spare	1000	8
9	1000	Spare	1	20	B	20	1	Spare	1000	10
11	1000	Spare	1	20	C	20	1	Spare	1000	12
13	1000	Spare	1	20	A	20	1	Spare	1000	14
15	1000	Spare	1	20	B	20	1	Spare	1000	16
17	1000	Spare	1	20	C	20	1	Spare	1000	18
19	1000	Spare	1	20	A	20	1	Spare	1000	20
21	1000	Spare	1	20	B	20	1	Spare	1000	22
23	1000	Spare	1	20	C	20	1	Spare	1000	24
25	1000	Spare	1	20	A	20	1	Spare	1000	26
27	1000	Spare	1	20	B	20	1	Spare	1000	28
29	1000	Spare	1	20	C	20	1	Spare	1000	30

Issue for Bid and Construction

HOSS & BROWN ENGINEERS
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H&B Project Number: 12110

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4.16.2013
ENGINEER OF RECORD:
Pete C. Laughlin, P.E. - License No. 10089

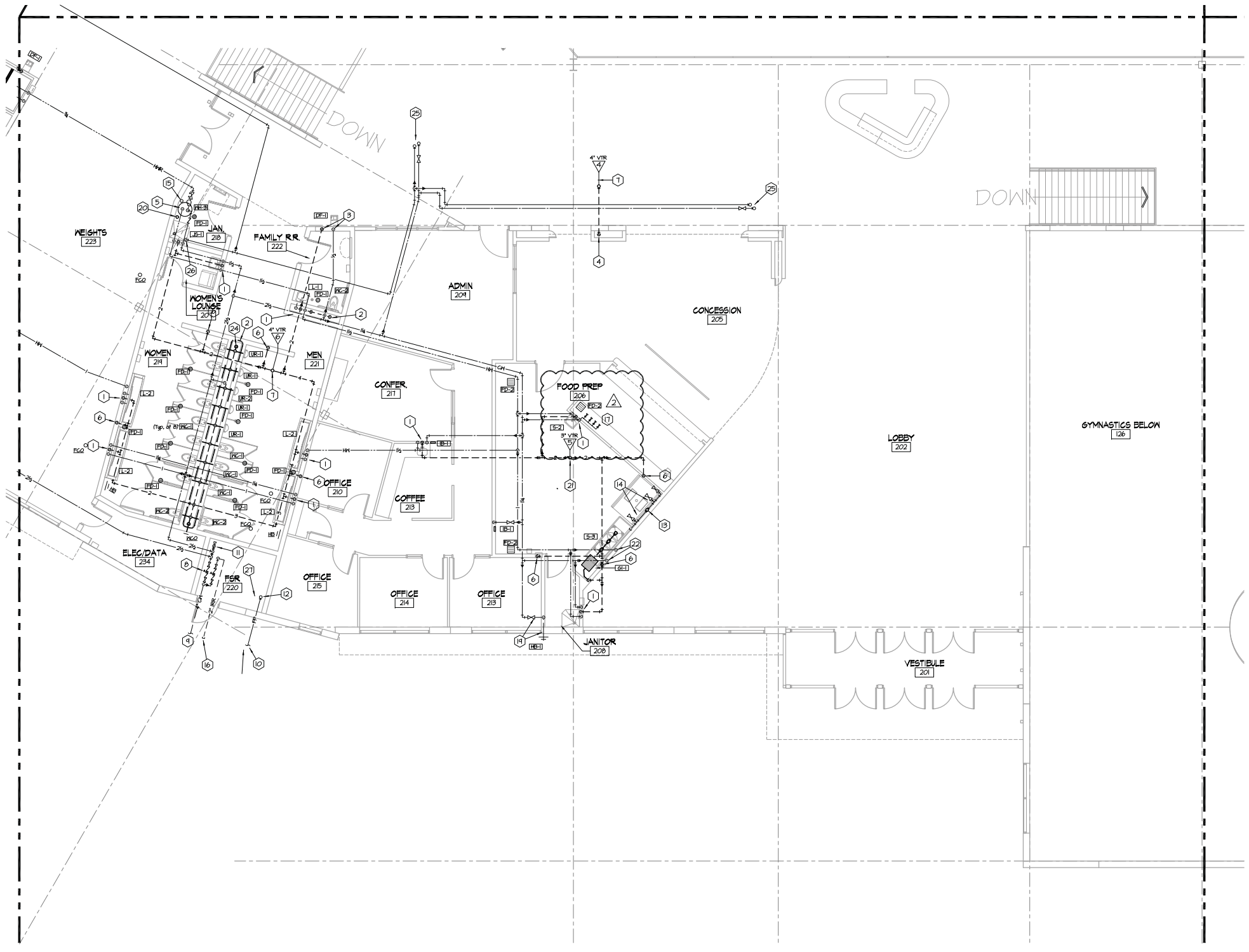
CITY OF LAWRENCE RECREATION AND WELLNESS CENTER

ROCK CHALK PARK
LAWRENCE, KANSAS

PROJECT # 212-140

RELEASE:	DATE:
BIDDING	4.16.13
ADDENDA 1	5.8.13
△1 ESI-1	7.8.13
△2 ESI-2	4.10.14

E304



PLAN NOTES:

1. Vent, hw & cw down to fixture, refer to riser diagram.
2. Refer to riser diagram for continuation and sizing of vent, cw, and waste piping in chase
3. Vent & cw down to fixture, refer to riser diagram.
4. 4" vent down to lower level. Refer to sheet P101F for continuation.
5. Hw, cw, and hwr down to water heater. Refer to riser diagram on sheet P303 and refer to gas water heater detail on sheet P201.
6. 2" vent down through slab.
7. 4" vent through roof.
8. Domestic water service entrance; refer to detail #5 on sheet P201.
9. 3" domestic water service entrance out 5 feet. Refer to civil plans for continuation.
10. Fire Protection service entrance out 5 feet. Refer to civil plan for continuation.
11. 3" cw down to lower level. Refer to sheet P101F for continuation.
12. Fire Protection service entrance location. Provide and install backflow prevention equipment as required by local codes. Refer to fire protection specification. Coordinate all scheduling and work with other trades so as to prevent conflicts, and to ensure orderly progress of the work.
13. 2" low pressure gas riser up to roof. Refer to sheet MPE201F for continuation of piping.
14. 2" gas header along wall. Verify with kitchen plans for connection sizes to equipment.
15. 1" low pressure gas riser up to roof. Refer to sheet MPE201F for continuation of piping. Refer to gas water heater detail on sheet P201 for gas piping requirements.
16. 2" irrigation line below slab and out five (5) foot for extension by others
17. Provide 1/2 DNC line from sink line through wall above the counter with four (4) 3/8 ball valves for Owner connection to coffee machines
18. Not used
19. 3/4" cw down in wall to freeze proof wall hydrant. Provide with shutoff valve above ceiling.
20. 4" concentric termination (AO Smith FN 900932B005) up through roof for direct vent of water heater. Provide 3" PVC pipe and fitting for connection from water heater to termination piece. Refer to manufacturer's installation manual.
21. 3" vent through roof.
22. Hw & cw down to fixture. Refer to riser diagram.
23. 2" vent down to grease waste interceptor piping. Refer to riser diagram.
24. 4" waste down through slab.
25. 3/4" domestic water and 1/2" drain line up to roof mounted hose bibb
26. 3/4" drain line terminated over janitors sump with Code air gap
27. Not Used
28. Not Used

GENERAL NOTES:

A. These drawings are diagrammatic and indicate the general extent of the work, provide plumbing systems complete and per applicable codes including all required components, offsets required to avoid the structure, ductwork, etc.

B. Refer to the architectural plans for the exact locations of plumbing fixtures.

C. Coordinate the installation of plumbing and piping with the work of all other trades.

D. Piping shall not be located over electrical equipment/panels, provide the code required working clearance around all electrical equipment.

E. The contractor shall not locate piping below duct mounted air terminal units, terminal heating coils, or other equipment.

F. Provide supplementary steel as required for the proper support of all plumbing systems.

G. Plumbing vent piping through the roof shall be located a minimum of 10'-0" away from any fresh air intake location and a minimum of 18" clear from the inside face of the parapet.

H. Provide the code required clearance for all cleanouts installed in sanitary waste and vent piping.

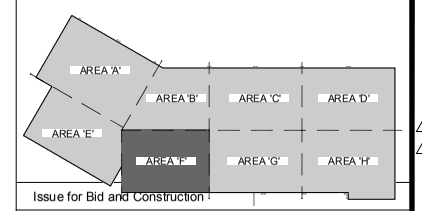
I. Plumbing contractor shall provide all condensate drains required for refrigeration equipment.

J. Coordinate all locations of floor drains and floor sink receptors with kitchen equipment plans.

K. Plumbing contractor is responsible to run condensate line from cooler coil, through wall, to indirect drain. Seal hole in wall and hold drain line as high as possible and tight to wall to allow for shelving.

L. Plumbing contractor is responsible to run & insulate condensate line from freezer coil, through wall, to indirect drain. Condensate line must be wrapped with heat tape. Seal hole in wall and hold drain line as high as possible and tight to wall to allow for shelving.

M. Plumbing contractor is responsible to mount all faucets and pre-rinse units provided. All gas lines, elbows, shut-off valves, pressure reducers, water supply lines, drain lines, "p" traps, floor sinks, and other indirect drains required to hook up the kitchen service equipment shall be provided and installed by the plumbing contractor.



Issue for Bid and Construction

PLAN NORTH / TRUE NORTH

1 UPPER LEVEL PLUMBING PLAN - AREA F
1/8"=1'-0"

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4.16.2013
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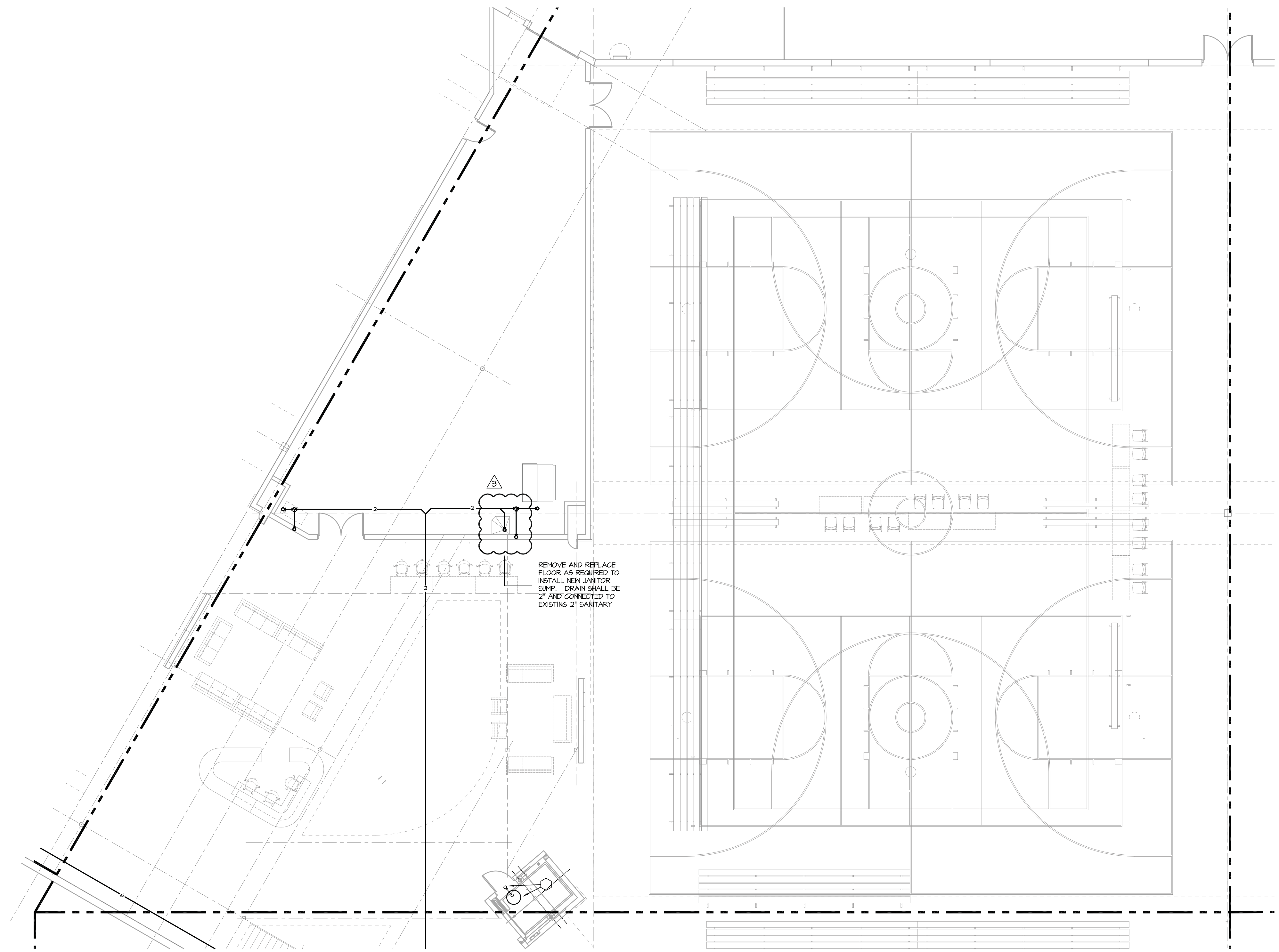
CITY OF LAWRENCE RECREATION AND WELLNESS CENTER

ROCK CHALK PARK
LAWRENCE, KANSAS

PROJECT # 212-140

RELEASE:	DATE:
BIDDING	4.16.13
ADDENDA 1	5.8.13
ESI-1	7.8.13
ESI-2	4.10.14

P102F



1 BELOW SLAB PLUMBING PLAN - AREA B

1/8"=1'-0"

PLAN NORTH

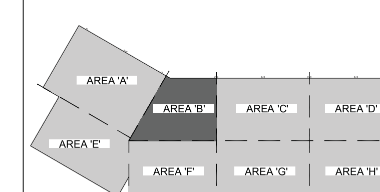
TRUE NORTH

PLAN NOTES:

1. Elevator sump pump with 1 ¼" discharge line. Coordinate line location with elevator to insure there are no conflicts.

GENERAL NOTES:

A. These drawings are diagrammatic and indicate the general extent of the work, provide plumbing systems complete and per applicable codes including all required components, offsets required to avoid the structure, ductwork, etc.
B. Refer to the architectural plans for the exact locations of plumbing fixtures.
C. Coordinate the installation of plumbing and piping with the work of all other trades.
D. Piping shall not be located over electrical equipment/panels, provide the code required working clearance around all electrical equipment.
E. The contractor shall not locate piping below duct mounted air terminal units, terminal heating coils, or other equipment.
F. Provide supplementary steel as required for the proper support of all plumbing systems.
G. Plumbing vent piping through the roof shall be located a minimum of 10'-0" away from any fresh air intake location and a minimum of 18" clear from the inside face of the parapet.
H. Provide the code required clearance for all cleanouts installed in sanitary waste and vent piping.



Issue for Bid and Construction

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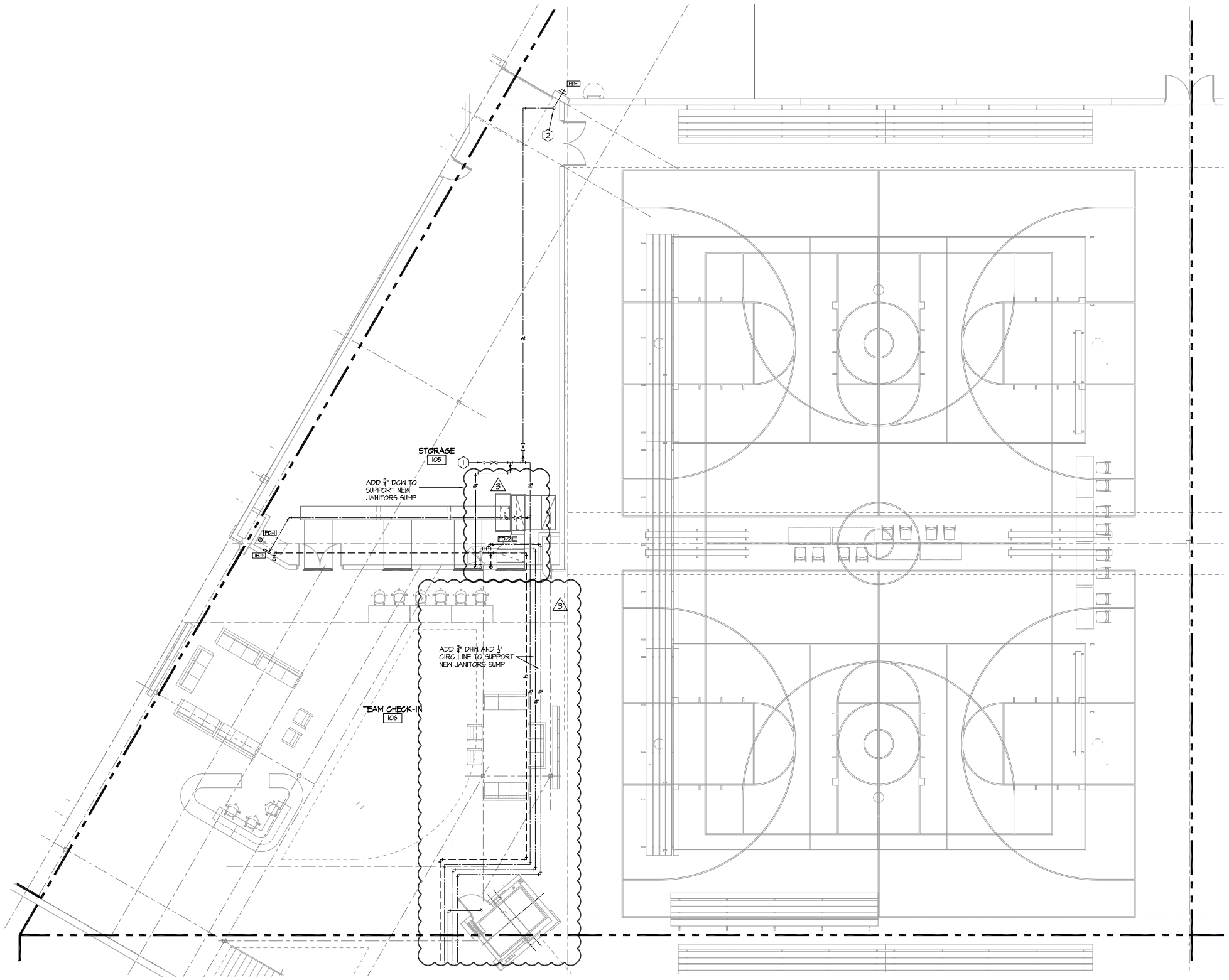
CITY OF LAWRENCE RECREATION AND WELLNESS CENTER

ROCK CHALK PARK
LAWRENCE, KANSAS

PROJECT # 212-140

RELEASE:	DATE:
BIDDING	4.16.13
ADDENDA 1	5.8.13
1 ESI-1	7.8.13
2 ESI-2	4.10.14
3 ESI-3	4.21.14

P100B



PLAN NOTES:

1. Cap 1-1/2" cw line for future tenant finish.
2. 3/4" cw down in wall to freeze proof wall hydrant.

GENERAL NOTES:

A. These drawings are diagrammatic and indicate the general extent of the work, provide plumbing systems complete and per applicable codes including all required components, offsets required to avoid the structure, ductwork, etc.

B. Refer to the architectural plans for the exact locations of plumbing fixtures.

C. Coordinate the installation of plumbing and piping with the work of all other trades.

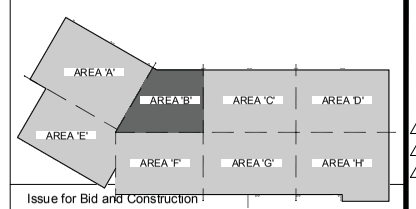
D. Piping shall not be located over electrical equipment/panels, provide the code required working clearance around all electrical equipment.

E. The contractor shall not locate piping below duct mounted air terminal units, terminal heating coils, or other equipment.

F. Provide supplementary steel as required for the proper support of all plumbing systems.

G. Plumbing vent piping through the roof shall be located a minimum of 10'-0" away from any fresh air intake location and a minimum of 18" clear from the inside face of the parapet.

H. Provide the code required clearance for all cleanouts installed in sanitary waste and vent piping.



Issue for Bid and Construction

1 LOWER LEVEL PLUMBING PLAN - AREA B

1/8"=1'-0"

PLAN NORTH / TRUE NORTH

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gouldevans
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4.16.2013

ENGINEER OF RECORD:
Pete C. Laughlin, P.E. - License No. 10099

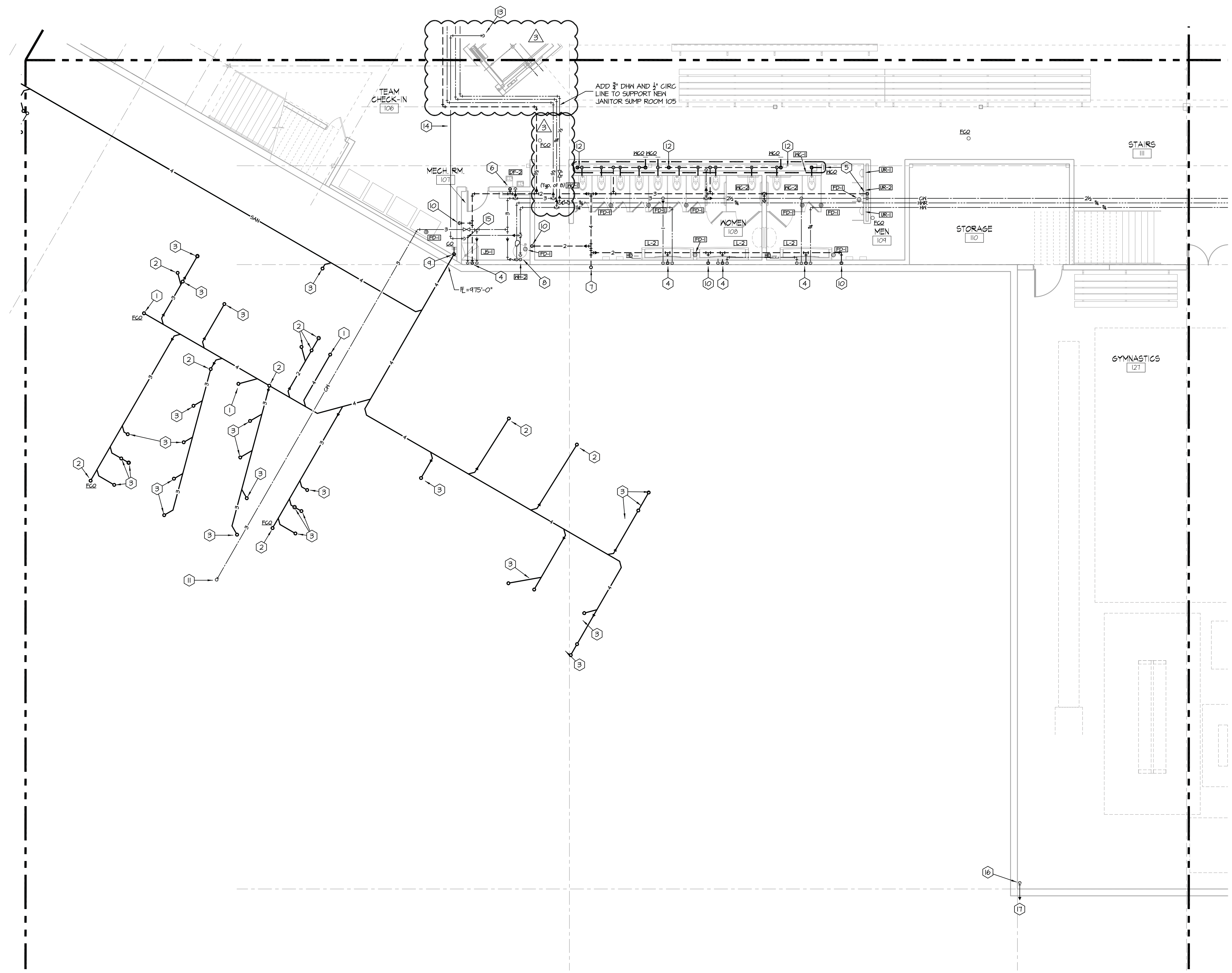
CITY OF LAWRENCE RECREATION AND WELLNESS CENTER

ROCK CHALK PARK
LAWRENCE, KANSAS

PROJECT # 212-140

RELEASE:	DATE:
BIDDING	4.16.13
ADDENDA 1	5.8.13
1 ESI-1	7.8.13
2 ESI-2	4.10.14
3 ESI-3	4.21.14

P101B



1 LOWER LEVEL PLUMBING PLAN - AREA F

1/8"=1'-0"

PLAN NORTH

TRUE NORTH

PLAN NOTES:

1. 4" waste up through slab.
2. 3" waste up through slab.
3. 2" waste up through slab.
4. Vent, hw & cw down to fixture, refer to riser diagram.
5. Refer to riser diagram for continuation and sizing of vent, cw, and waste piping in chase
6. Vent & cw down to fixture, refer to riser diagram.
7. Vent up chase to roof. Refer to sheet P102G for continuation.
8. Hw, cw, and hwr down to water heater. Refer to riser diagram on sheet P302 and refer to electric water heater detail on sheet P201.
9. Provide finish wall cleanout at base of riser.
10. 2" vent down through slab.
11. 3" cw down from domestic water service entrance. Refer to sheet P102F for continuation.
12. 4" waste down through slab.
13. 1 ¼" discharge line from elevator sump pump.
14. Route line in web of metal decking above structural beams
15. Drop in janitors room and terminate over janitors sump
16. 1 ¼" discharge line from gym pit sump pump
17. Route line exposed on wall, exist building wall 12" above grade and terminate in Zurn Z199 (spash block by others)

GENERAL NOTES:

A. These drawings are diagrammatic and indicate the general extent of the work, provide plumbing systems complete and per applicable codes including all required components, offsets required to avoid the structure, ductwork, etc.

B. Refer to the architectural plans for the exact locations of plumbing fixtures.

C. Coordinate the installation of plumbing and piping with the work of all other trades.

D. Piping shall not be located over electrical equipment/panels. provide the code required working clearance around all electrical equipment.

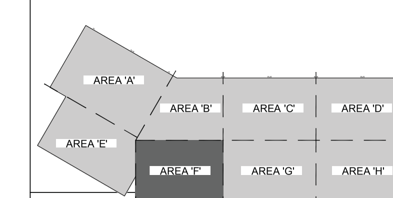
E. The contractor shall not locate piping below duct mounted air terminal units, terminal heating coils, or other equipment.

F. Provide supplementary steel as required for the proper support of all plumbing systems.

G. Plumbing vent piping through the roof shall be located a minimum of 10'-0" away from any fresh air intake location and a minimum of 18" clear from the inside face of the parapet.

H. Provide the code required clearance for all cleanouts installed in sanitary waste and vent piping.

I. Flowlines are based on a lower level finished floor elevation of 970'-0" and an upper level finished floor elevation of 981'-0".



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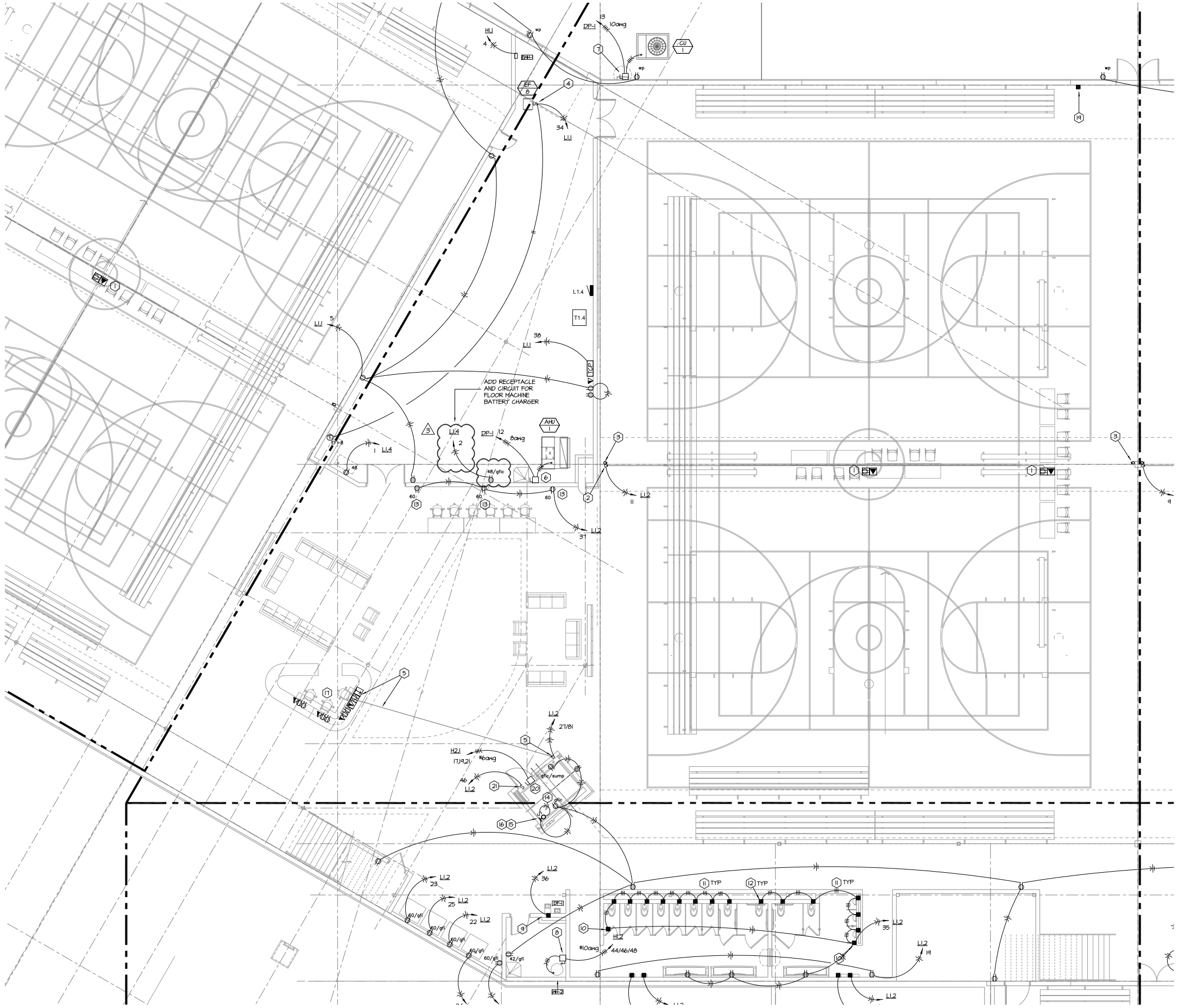
P101F



PLAN NOTES:

1. Floor box for scorers table power and data
2. ¾" underfloor conduit for power - rise against column to within roof structure and route to panel indicated
3. ¾" underfloor conduit for hardwired scoreboard control - rise against column to within roof structure and route to scoreboard as indicated on upper level plans
4. Disconnect furnished with fan and installed by EC
5. Floor box at checkin desk for power and data/tel. Provide ¾" underfloor conduit from data/tel box and ¾" underfloor conduit for power
6. 3P/60A/NF NEMA 1 disconnect
7. 3P/30A/NF NEMA 3R disconnect
8. 3P/30A/NF NEMA 1 disconnect
9. Drinking fountain rough-in - coordinate with PC
10. Flushvalve transformer box mounted above ceiling - coordinate with PC
11. #18ga 24V wiring from transformer to each flushvalve sensor - typical for all as indicated
12. Rough-in box for flushvalve sensor furnished by PC and installed by EC - coordinate location with shop drawings
13. Receptacles for TV Monitors - mount adjacent to TV cable outlet - refer E401B
14. Outlet located in elevator pit per ANSI requirements
15. Switch and light fixture located in pit per ANSI requirements
16. Light fixture shall be equal to Hubbell
17. Receptacles and tele/data outlets to be provided by EC and installed in casework by others. Floor box shall be provided with threaded covers to allow for flexible conduit run from box to devices. Coordinate location of devices in casework with GC.
18. Not Used
19. Sports equipment touchpad location (btm @ 48" aff) with one ½" conduit with 2-#14awg 12 volt wires and one ½" conduit with one pair #14awg shielded cable.
20. Elevator Power Module - refer specifications
21. Elevator 120 volt power disconnect

GENERAL NOTES:

A. These drawings are diagrammatic in nature and indicate the general extent of the work. The electrical contractor shall provide all pull boxes, junction boxes and incidental materials and labor for a complete and fully functional system.

B. Electrical contractor shall de-rate conductors as required by the N.E.C. when grouped in common raceways.

C. Provide firestopping on conduits passing through fire rated walls and floors. coordinate location and ratings of walls with architectural drawings.

D. Verify requirements of all mechanical equipment with shop drawing submittals. Notify engineer of any conflicts between equipment submittals and electrical drawings.

E. Contractor shall offset outlet boxes on opposite sides of common wall to prevent sound transmission between adjoining rooms.

F. All low voltage wires not routed in conduit shall be provided as plenum rated cables.

G. Provide junction boxes and conduit with pull-strings up to plenum at all voice and data outlet locations.

H. Where boxes are installed in concrete block walls, the box mounting height shall be at the block joint and the device shall be provided with a jumbo coverplate.

I. E.C. to provide rough-in boxes and conduit for thermostats as indicated.

J. Refer to telecommunication drawings for data requirements.

Issue for Bid and Construction

PLAN NORTH / TRUE NORTH

1 LOWER LEVEL POWER PLAN - AREA B

1/8"=1'-0"

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ROCK CHALK PARK
LAWRENCE, KANSAS

PROJECT # 212-140

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1	ES1-1	7.8.13
2	ES1-2	4.10.14
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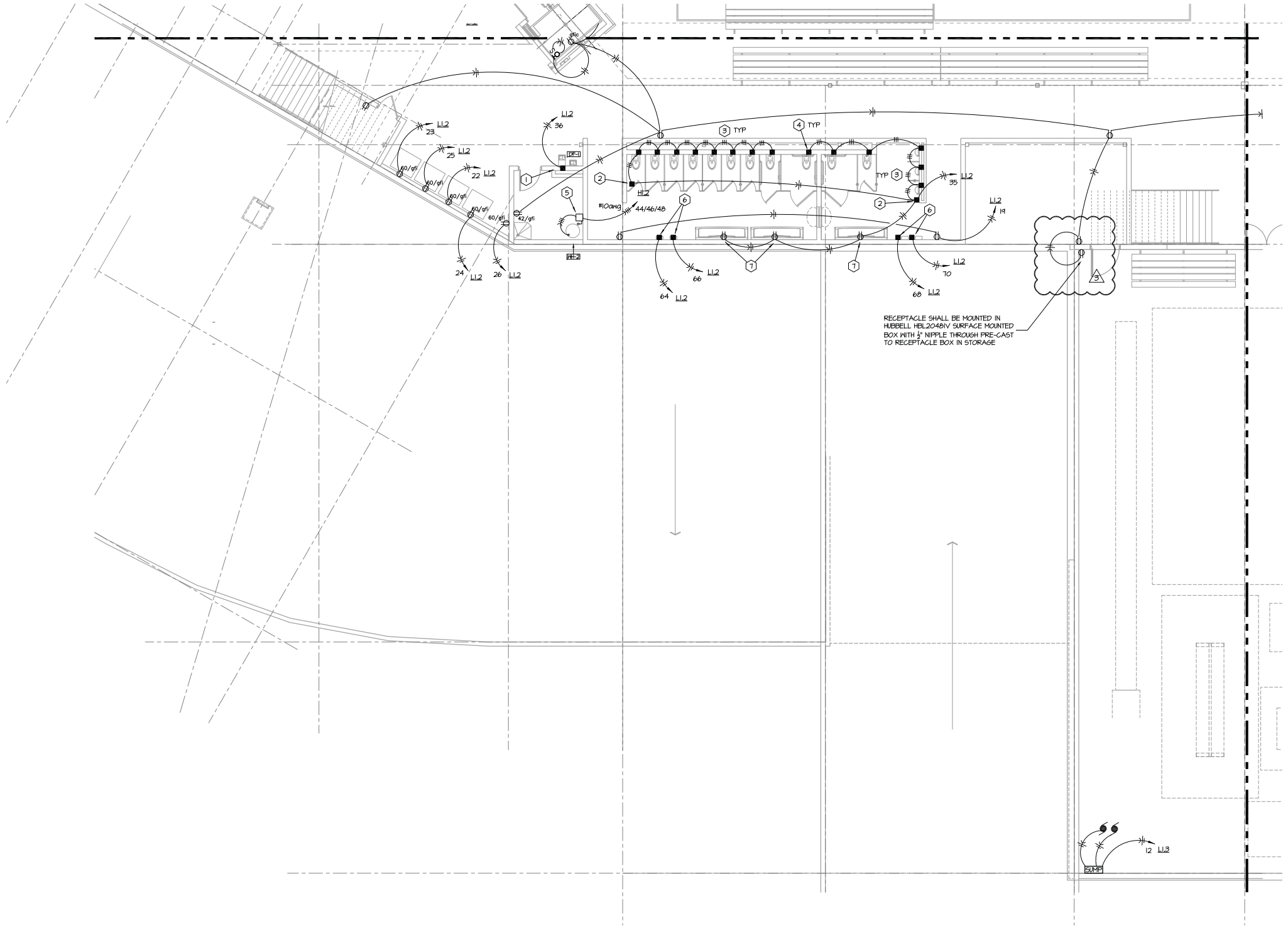
H&B Project Number: 12110

E101B



PLAN NOTES:

1. Drinking fountain rough-in - coordinate with PC
2. Flushvalve transformer box mounted above ceiling - coordinate with PC
3. #18ga 24V wiring from transformer to each flushvalve sensor - typical for all as indicated
4. Rough-in box for flushvalve sensor furnished by PC and installed by EC - coordinate location with shop drawings
5. 3P/30A/NF NEMA 1 disconnect
6. Rough-in for electric hand dryers - refer architectural details for elevation
7. Provide GFIC receptacle for lavatory plug-in transformers at 29" aff to center - coordinate rough-in with PC
8. Not Used
9. Not Used

GENERAL NOTES:

A. These drawings are diagrammatic in nature and indicate the general extent of the work. The electrical contractor shall provide all pull boxes, junction boxes and incidental materials and labor for a complete and fully functional system.

B. Electrical contractor shall de-rate conductors as required by the N.E.C. when grouped in common raceways.

C. Provide firestopping on conduits passing through fire rated walls and floors. coordinate location and ratings of walls with architectural drawings.

D. Verify requirements of all mechanical equipment with shop drawing submittals. Notify engineer of any conflicts between equipment submittals and electrical drawings.

E. Contractor shall offset outlet boxes on opposite sides of common wall to prevent sound transmission between adjoining rooms.

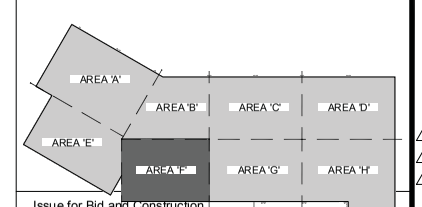
F. All low voltage wires not routed in conduit shall be provided as plenum rated cables.

G. Provide junction boxes and conduit with pull-strings up to plenum at all voice and data outlet locations.

H. Where boxes are installed in concrete block walls, the box mounting height shall be at the block joint and the device shall be provided with a jumbo coverplate.

I. E.C. to provide rough-in boxes and conduit for thermostats as indicated.

J. Refer to telecommunication drawings for data requirements.



Issue for Bid and Construction

PLAN NORTH / TRUE NORTH

1 LOWER LEVEL POWER PLAN - AREA F

1/8"=1'-0"

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CITY OF LAWRENCE RECREATION AND WELLNESS CENTER

ROCK CHALK PARK
LAWRENCE, KANSAS

PROJECT # 212-140

RELEASE:	DATE:
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3 ESI-3	4.21.14

E101F

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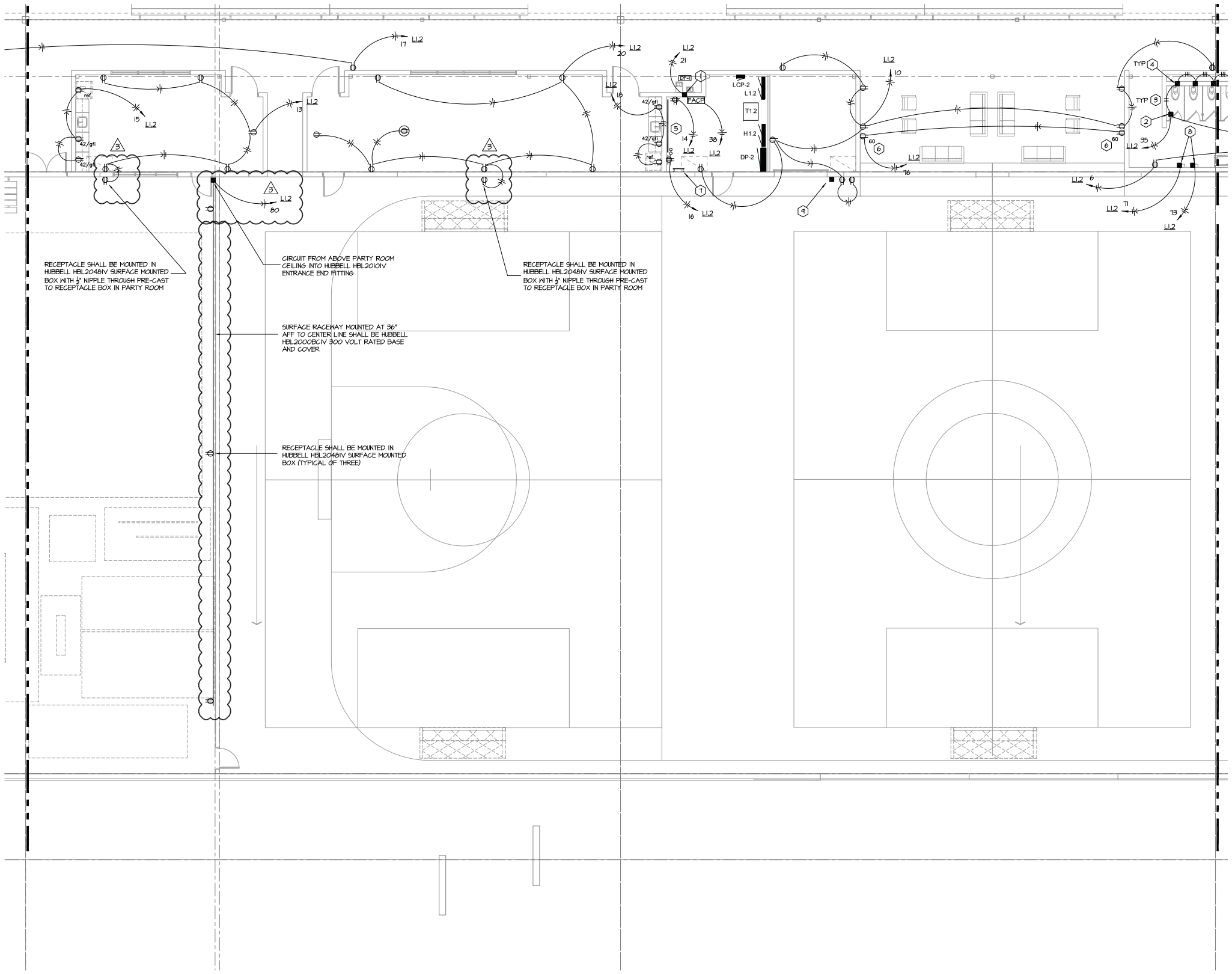


1 LOWER LEVEL POWER PLAN - AREA G

1/8"=1'-0"

PLAN NOTES:

1. Drinking fountain rough-in - coordinate with PC
2. Flushvalve transformer box mounted above ceiling - coordinate with PC
3. #18ga 24V wiring from transformer to each flushvalve sensor - typical for all as indicated
4. Rough-in box for flushvalve sensor furnished by PC and installed by EC - coordinate location with shop drawings
5. Receptacle and backboard for CCTV DVR use
6. Receptacles for TV Monitors - mount adjacent to TV cable outlet - refer E4016
7. Grounding plate - refer specifications and riser diagram
8. Rough-in for electric hand dryers - refer architectural details for elevation
9. Sports equipment touchpad location (btm @ 48" aff) with one ½" conduit with 2-#14awg 12 volt wires and one ½" conduit with one pair #14awg shielded cable.

GENERAL NOTES:

A. These drawings are diagrammatic in nature and indicate the general extent of the work. The electrical contractor shall provide all pull boxes, junction boxes and incidental materials and labor for a complete and fully functional system.

B. Electrical contractor shall de-rate conductors as required by the N.E.C. when grouped in common raceways.

C. Provide firestopping on conduits passing through fire rated walls and floors. coordinate location and ratings of walls with architectural drawings.

D. Verify requirements of all mechanical equipment with shop drawing submittals. Notify engineer of any conflicts between equipment submittals and electrical drawings.

E. Contractor shall offset outlet boxes on opposite sides of common wall to prevent sound transmission between adjoining rooms.

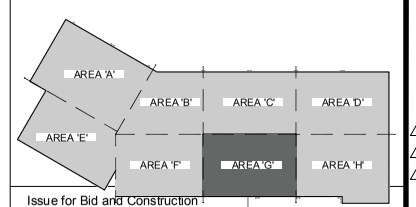
F. All low voltage wires not routed in conduit shall be provided as plenum rated cables.

G. Provide junction boxes and conduit with pull-strings up to plenum at all voice and data outlet locations.

H. Where boxes are installed in concrete block walls, the box mounting height shall be at the block joint and the device shall be provided with a jumbo coverplate.

I. E.C. to provide rough-in boxes and conduit for thermostats as indicated.

J. Refer to telecommunication drawings for data requirements.



Issue for Bid and Construction

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CITY OF LAWRENCE RECREATION AND WELLNESS CENTER

ROCK CHALK PARK
LAWRENCE, KANSAS

PROJECT # 212-140

RELEASE:	DATE:
BIDDING	4.16.13
ADDENDA 1	5.8.13
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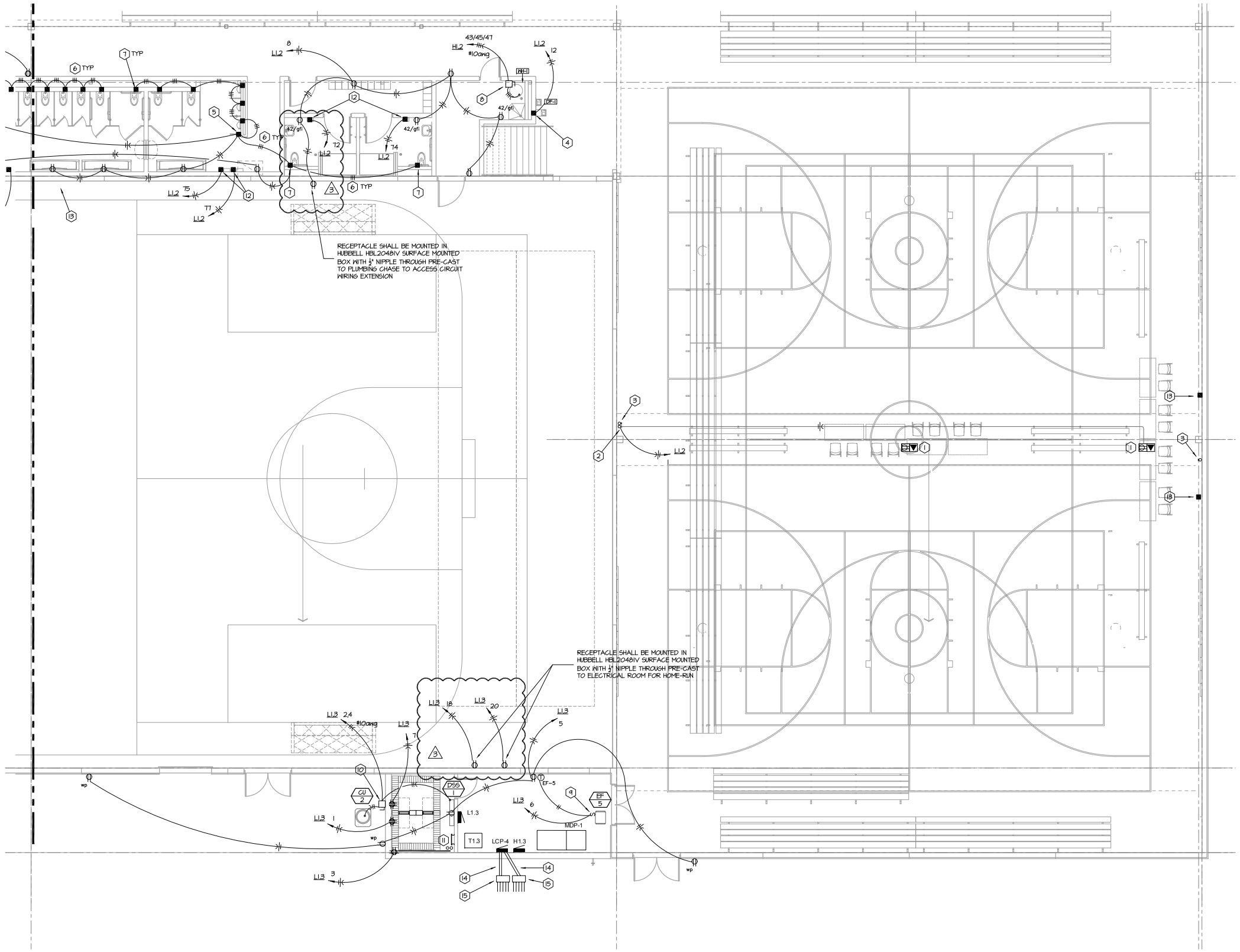
E101G



PLAN NOTES:

1. Floor box for scorers table power and data
2. ¾" underfloor conduit for power - rise against column to within roof structure and route to panel indicated
3. 3" underfloor conduit for hardwired scoreboard control - rise against column to within roof structure and route to scoreboard as indicated on upper level plans
4. Drinking fountain rough-in - coordinate with PC
5. Flushvalve transformer box mounted above ceiling - coordinate with PC
6. #18ga 24V wiring from transformer to each flushvalve sensor - typical for all as indicated
7. Rough-in box for flushvalve sensor furnished by PC and installed by EC - coordinate location with shop drawings
8. 3P/30A/NF NEMA 1 disconnect
9. Disconnect furnished by MC and installed by EC
10. 2P/30A/NF NEMA 3R disconnect
11. Grounding plate - refer specifications and riser diagram
12. Rough-in for electric hand dryer - refer architectural details for elevation
13. Sports equipment touchpad location (btm @ 48" aff) with one ¾" conduit with 2-#14awg 12 volt wires and one ½" conduit with one pair #14awg shielded cable.
14. EC shall provide tennis court lighting circuits from H1.3 panel via LCP-4 and MUSCO panel to junction box for extension to site fixtures by others.
15. Flush ground mounted junction box - refer spec's

GENERAL NOTES:

A. These drawings are diagrammatic in nature and indicate the general extent of the work. The electrical contractor shall provide all pull boxes, junction boxes and incidental materials and labor for a complete and fully functional system.

B. Electrical contractor shall de-rate conductors as required by the N.E.C. when grouped in common raceways.

C. Provide firestopping on conduits passing through fire rated walls and floors. Coordinate location and ratings of walls with architectural drawings.

D. Verify requirements of all mechanical equipment with shop drawing submittals. Notify engineer of any conflicts between equipment submittals and electrical drawings.

E. Contractor shall offset outlet boxes on opposite sides of common wall to prevent sound transmission between adjoining rooms.

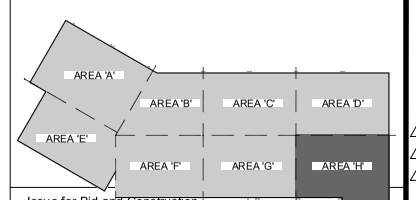
F. All low voltage wires not routed in conduit shall be provided as plenum rated cables.

G. Provide junction boxes and conduit with pull-strings up to plenum at all voice and data outlet locations.

H. Where boxes are installed in concrete block walls, the box mounting height shall be at the block joint and the device shall be provided with a jumbo coverplate.

I. E.C. to provide rough-in boxes and conduit for thermostats as indicated.

J. Refer to telecommunication drawings for data requirements.



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	ESI-3	4.21.14

E101H

1 LOWER LEVEL POWER PLAN - AREA H

1/8"=1'-0"

PANEL H2.1

DESCRIPTION: 125A, 42P, MAIN LUGS ONLY, SURFACE MOUNT w/ GROUND KIT

VOLTAGE: 277/480v, 3P, 4 WIRE

TOTAL CONNECTED LOAD: 35,364w= 98a
TOTAL DEMANDED LOAD: 30,918w= 86a

10 kAIC RATING

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
1	1680	Lights 2nd Floor Dance	1	20	A	20	2	Parking Lot Lights	1030	2
3	3076	Lights 2nd Floor Weights, Showers	1	20	B				1030	4
5	1148	Lights 2nd Floor Restrooms	1	20	C	20	2	Parking Lot Lights	832	6
7	1400	Lights 2nd Floor Admin Area	1	20	A				832	8
9	1912	Lights 2nd Floor Kitchen, Concession	1	20	B	20	1	Spare	1000	10
11	342	Lights Ext. Façade, Entry	1	20	C	20	1	Electric Wall Heater	2000	12
13	603	Lights Ext. Ground	1	20	A	20	1	Electric Wall Heater	2000	14
15	617	Lights Ext. Ground/Façade	1	20	B	20	1	Electric Wall Heater	2000	16
17	9418	Elevator Power 25hp max	3	70	C	20	1	Spare	1000	18
19	9418				A	20	1	Emergency/Night Lights	1000	20
21	9418				B	15	3	Office Heat	2327	22
23	3490	Office Heat	1	20	C				2327	24
25	3490				A				2327	26
27	3490				B	20	1	Spare	1000	28
29	309	Parking Lot Lights	2	20	C	20	2	Parking Lot Lights	832	30
31	309				A				832	32
33			1	20	B	20	1			34
35			1	20	C	20	1			36
37			1	20	A	20	1			38
39			1	20	B	20	1			40
41			1	20	C	20	1			42

PANEL L2.1 (Section 1)

DESCRIPTION: 200A, 42P, MAIN BREAKER, SURFACE MOUNT w/ GROUND KIT

VOLTAGE: 120/208v, 3P, 4 WIRE

TOTAL CONNECTED LOAD: 61,404w= 170a
TOTAL DEMANDED LOAD: 47,854w= 133a

10 kAIC RATING

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
1	750	Water Heater 3	1	20	A	20	1	Lighting Control Panel LCP-3	1000	2
3	1000	Exterior Receptacles	1	20	B	20	1	Wrestling Receptacles	800	4
5	800	Dance Receptacles	1	20	C	20	1	Wrestling Receptacles	1000	6
7	1000	Dance Receptacles	1	20	A	20	1	General Receptacles	1200	8
9	1200	Restroom Receptacles	1	20	B	20	1	Open Office	1700	10
11	800	Office 1	1	20	C	20	1	Conference Rpom	1200	12
13	800	Office 2	1	20	A	20	1	Copy Room	1200	14
15	800	Office 3	1	20	B	20	1	Break Room	1250	16
17	750	Drinking Fountain	1	20	C	20	1	Break Room	1250	18
19	750	Drinking Fountain	1	20	A	20	1	General Receptacles	800	20
21	1125	Copier	2	30	B	20	1	Office 4	800	22
23	1125				C	20	1	Lobby Receptacles	1000	24
25	1176	EF-6	1	20	A	20	1	EF-3	864	26
27	150	Flushvalve Transformer	1	20	B	20	1	EF-4	864	28
29	1500	Data Switch Receptacle	1	20	C	20	1	Irrigation Controller	750	30
31	1500	Hand dryer	1	20	A	20	1	Hand dryer	1500	32
33	1500	Hand dryer	1	20	B	20	1	Hand dryer	1500	34
35	1500	Hand dryer	1	20	C	20	1	Hand dryer	1500	36
37	1500	Hand dryer	1	20	A	20	1	Hand dryer	1500	38
39	1000	Entry ADA Door Control	1	20	B	20	1	Second floor WiFi	500	40
41	1000	Spare	1	20	C	20	1	Hand dryer	1500	42

PANEL L2.1 (Section 2)

DESCRIPTION: 200A, 42P, MAIN LUGS ONLY, SURFACE MOUNT w/ GROUND KIT

VOLTAGE: 120/208v, 3P, 4 WIRE

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
43	1000	Spare	1	20	A	20	1	Spare	1000	44
45	1000	Spare	1	20	B	20	1	Spare	1000	46
47	1000	Spare	1	20	C	20	1	Spare	1000	48
49	1000	Spare	1	20	A	20	1	Spare	1000	50
51	1000	Spare	1	20	B	20	1	Spare	1000	52
53	1000	Spare	1	20	C	20	1	Spare	1000	54
55	1000	Spare	1	20	A	20	1	Spare	1000	56
57	1000	Spare	1	20	B	20	1	Spare	1000	58
59			1	20	C	20	1			60
61			1	20	A	20	1			62
63			1	20	B	20	1			64
65			1	20	C	20	1			66
67			1	20	A	20	1			68
69			1	20	B	20	1			70
71			1	20	C	20	1			72
73			1	20	A	20	1			74
75			1	20	B	20	1			76
77			1	20	C	20	1			78
79			1	20	A	20	1			80
81			1	20	B	20	1			82
83			1	20	C	20	1			84

PANEL L2.3

DESCRIPTION: 100A, 42P, MAIN LUGS ONLY, SURFACE MOUNT w/ GROUND KIT

VOLTAGE: 120/208v, 3P, 4 WIRE

TOTAL CONNECTED LOAD: 39,252w= 109a
TOTAL DEMANDED LOAD: 28,482w= 79a

10 kAIC RATING

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
1	300	Hood Lights	1	20	A	20	1	Hood Controls	500	2
3	1500	Menu Boards	1	20	B	20	1	Hood Exhaust Fan	1176	4
5	1500	Future	1	20	C	30	1	Hood Make-up Unit	1656	6
7	1500	Future	1	20	A	20	1	Floor Power	800	8
9	900	Refrigerator	1	20	B	20	1	Cash Registers	1500	10
11	1000	Equipment	1	20	C	20	1	Freezer	1140	12
13	1000	Equipment	1	20	A	20	1	Freezer	1140	14
15	1000	Equipment	1	20	B	20	1	Pizza Table	900	16
17	1000	Equipment	1	20	C	30	2	Microwave	3100	18
19	1000	Equipment	1	20	A				3100	20
21	1920	Merchandizer	1	20	B	20	1	Pepsi	500	22
23	1920	Merchandizer	1	20	C	20	1	Ice Cream	1000	24
25	3100	Hot Cart	2	30	A	20	1	Spare	500	26
27	3100				B	20	1	Spare	500	28
29	500	Spare	1	20	C	20	1	Spare	500	30
31			1	20	A	20	1			32
33			1	20	B	20	1			34
35			1	20	C	20	1			36
37			1	20	A	20	1			38
39			1	20	B	20	1			40
41			1	20	C	20	1			42

PANEL H2.2

DESCRIPTION: 125A, 30P, MAIN LUGS ONLY, SURFACE MOUNT w/ GROUND KIT

VOLTAGE: 277/480v, 3P, 4 WIRE

TOTAL CONNECTED LOAD: 51,000w= 61a
TOTAL DEMANDED LOAD: 48,000w= 58a

10 kAIC RATING

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
1	1000	Spare	1	20	A	20	1	Spare		2
3	1000	Spare	1	20	B	20	1	Spare		4
5	1000	Spare	1	20	C	20	1	Spare		6
7	1000	Spare	1	20	A	20	1	Spare		8
9	1000	Spare	1	20	B	20	1	Spare		10
11	1000	Spare	1	20	C	20	1	Spare		12
13			1	20	A	80	3	Transformer T2.2	15000	14
15			1	20	B				15000	16
17			1	20	C				15000	18
19			1	20	A					20
21			1	20	B					22
23			1	20	C					24
25			1	20	A					26
27			1	20	B					28
29			1	20	C					30

PANEL L1.2 (Section 1)

DESCRIPTION: 400A, 42P, MAIN BREAKER, SURFACE MOUNT w/ GROUND KIT AND THRU FEED LUGS

VOLTAGE: 120/208v, 3P, 4 WIRE

TOTAL CONNECTED LOAD: 148,428w= 412a
TOTAL DEMANDED LOAD: 115,878w= 322a

10 kAIC RATING

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
1	1200	Score Table Receptacle	1	20	A	20	1	Lighting Control Panel LCP-2	1000	2
3	1200	Score Table Receptacle	1	20	B	20	1	Exterior Receptacles	800	4
5	1200	Score Table Receptacle	1	20	C	20	1	Restroom Receptacles	800	6
7	1200	Score Table Receptacle	1	20	A	20	1	General Receptacles	800	8
9	1200	Score Table Receptacle	1	20	B	20	1	General Receptacles	1200	10
11	1200	Score Table Receptacle	1	20	C	20	1	Drinking Fountain	1750	12
13	1000	Party Room Receptacles	1	20	A	20	1	DVR outlets CCTV	1800	14
15	1800	Party Room Receptacles	1	20	B	20	1	DVR outlets CCTV	1800	16
17	1200	General Receptacles	1	20	C	20	1	Party Room Receptacles	1800	18
19	400	Restroom Receptacles	1	20	A	20	1	Party Room Receptacles	1200	20
21	1750	Drinking Fountain	1	20	B	20	1	Vending	1750	22
23	1750	Vending	1	20	C	20	1	Vending	1750	24
25	1750	Vending	1	20	A	20	1	Vending	1750	26
27	1200	Checkin Desk Receptacle	1	20	B	20	1	First Floor WiFi	500	28
29	1200	Checkin Desk Receptacle	1	20	C	20	1	Second Floor WiFi	500	30
31	864	EF-1	1	20	A	20	1	General Receptacles	1400	32
33	864	EF-2	1	20	B	20	1	General Receptacles	1200	34
35	200	Flushvalve Transformers	1	20	C	20	1	Drinking Fountain	1750	36
37	1500	TV Monitors	1	20	A	20	1	FACP	1500	38
39	1500	TV Monitors	1	20	B	20	1	TV Monitors	1500	40
41	1500	TV Monitors	1	20	C	20	1	General Receptacles	1200	42

PANEL L1.2 (Section 2) △3

DESCRIPTION: 400A, 42P, MAIN LUGS ONLY, SURFACE MOUNT w/ GROUND KIT

VOLTAGE: 120/208v, 3P, 4 WIRE

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
43	1200	General Receptacles	1	20	A	20	1	General Receptacles	1200	44
45	1200	General Receptacles	1	20	B	20	1	Elevator 120 volt	1200	46
47	3360	Gym Control Panel	1	30	C	30	1	Gym Control Panel	3360	48
49	3360	Gym Control Panel	1	30	A	30	1	Gym Control Panel	3360	50
51	3360	Gym Control Panel	1	30	B	30	1	Gym Control Panel	3360	52
53	3360	Gym Control Panel	1	30	C	30	1	Gym Control Panel	3360	54
55	3360	Gym Control Panel	1	30	A	30	1	Gym Control Panel	3360	56
57	3360	Gym Control Panel	1	30	B	30	1	Gym Control Panel	3360	58
59	3360	Gym Control Panel	1	30	C	30	1	Gym Control Panel	3360	60
61	3360	Gym Control Panel	1	30	A	30	1	Gym Control Panel	3360	62
63	3360	Gym Control Panel	1	30	B	20	1	Hand Dryer	1500	64
65	3360	Gym Control Panel	1	30	C	20	1	Hand Dryer	1500	66
67	3360	Gym Control Panel	1	30	A	20	1	Hand Dryer	1500	68
69	3360	Gym Control Panel	1	30	B	20	1	Hand Dryer	1500	70
71	1500	Hand dryer	1	20	C	20	1	Hand Dryer	1500	72
73	1500	Hand dryer	1	20	A	20	1	Hand Dryer	1500	74
75	1500	Hand dryer	1	20	B	20	1	TV Monitors	1000	76
77	1500	Hand dryer	1	20	C	20	1	Plug Strip	1600	78
79	1200	Checkin Desk	1	20	A	20	1	Gymnastics Receptacles	600	80
81	1200	Checkin Desk	1	20	B	20	1	Spare	1000	82
83	1000	Spare	1	20	C	20	1	Spare	1000	84

PANEL L1.3 △3

DESCRIPTION: 100A, 30P, MAIN BREAKER, SURFACE MOUNT w/ GROUND KIT

VOLTAGE: 120/208v, 3P, 4 WIRE

TOTAL CONNECTED LOAD: 38,364w= 106a
TOTAL DEMANDED LOAD: 31,074w= 86a

10 kAIC RATING

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
1	1800	Data Room Receptacles	1	20	A	25	2	DDS/CU-1	1664	2
3	1800	Data Room Receptacles	1	20	B				1664	4
5	800	General Receptacles	1	20	C	20	1	EF-5	1176	6
7	1800	Data Room Receptacles	1	20	A	30	1	Soccer Control Panel	3360	8
9	3360	Gym Control Panel	1	30	B	30	1	Soccer Control Panel	3360	10
11	3360	Gym Control Panel	1	30	C	20	1	Sump Pump	1000	12
13	3360	Gym Control Panel	1	30	A	20	1	Pitching Machine	1000	14
15	3360	Gym Control Panel	1	30	B	20	1	Pitching Machine	1000	16
17	1500	MUSCO control power	1	20	C	20	1	Spare	1000	18
19	1000	LCP-4 control power	1	20	A	20	1	Spare	1000	20
21			1	20	B	20	1			22
23			1	20	C	20	1			24
25			1	20	A	20	1			26
27			1	20	B	20	1			28
29			1	20	C	20	1			30

PANEL H1.3

DESCRIPTION: 225A, 30P, MAIN LUGS ONLY, SURFACE MOUNT w/ GROUND KIT

VOLTAGE: 277/480v, 3P, 4 WIRE

TOTAL CONNECTED LOAD: 83,760w= 101a
TOTAL DEMANDED LOAD: 75,280w= 91a

10 kAIC RATING

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
1	1000	Spare	1	20	A	30	3	Lights Tennis Courts	4320	2
3	1000	Spare	1	20	B			Contactor C1,C2,C3 & C4	4320	4
5	1000	Spare	1	20	C				4320	6
7	1000	Spare	1	20	A	30	3	Lights Tennis Courts	4320	8
9	1000	Spare	1	20	B			Contactor C5,C6,C7 & C8	4320	10
11	1000	Spare	1	20	C				4320	12
13			1	20	A	30	3	Lights Tennis Courts	4320	14
15			1	20	B			Contactor C9,C10,C11 & C12	4320	16
17			1	20	C				4320	18
19			1	20	A	30	3	Lights Tennis Courts	4320	20
21			1	20	B			Contactor C13,C14,C15 & C16	4320	22
23			1	20	C				4320	24
25	4320	Spare	3	30	A	30	3	Spare	4320	26
27	4320				B				4320	28
29	4320				C				4320	30

PANEL L2.2

DESCRIPTION: 100A, 30P, MAIN BREAKER, SURFACE MOUNT w/ GROUND KIT

VOLTAGE: 120/208v, 3P, 4 WIRE

TOTAL CONNECTED LOAD: 30,200w= 84a
TOTAL DEMANDED LOAD: 16,200w= 45a

10 kAIC RATING

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
1	400	General Power	1	20	A	20	1	Data Power	1800	2
3	1000	Spare	1	20	B	20	1	Spare	1000	4
5	1000	Spare	1	20	C	20	1	Spare	1000	6
7	1000	Spare	1	20	A	20	1	Spare	1000	8
9	1000	Spare	1	20	B	20	1	Spare	1000	10
11	1000	Spare	1	20	C	20	1	Spare	1000	12
13	1000	Spare	1	20	A	20	1	Spare	1000	14
15	1000	Spare	1	20	B	20	1	Spare	1000	16
17	1000	Spare	1	20	C	20	1	Spare	1000	18
19	1000	Spare	1	20	A	20	1	Spare	1000	20
21	1000	Spare	1	20	B	20	1	Spare	1000	22
23	1000	Spare	1	20	C	20	1	Spare	1000	24
25	1000	Spare	1	20	A	20	1	Spare	1000	26
27	1000	Spare	1	20	B	20	1	Spare	1000	28
29	1000	Spare	1	20	C	20	1	Spare	1000	30

PANEL L1.1 (Section1)

DESCRIPTION: 400A, 42P, MAIN BREAKER, SURFACE MOUNT w/ GROUND KIT AND THRU FEED LUGS

VOLTAGE: 120/208v, 3P, 4 WIRE

TOTAL CONNECTED LOAD: 98,534w= 274a
TOTAL DEMANDED LOAD: 85,564w= 238a

10 kAIC RATING

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
1	1200	Score Table Receptacle	1	20	A	20	1	Lighting Control Panel LCP-1	1000	2
3	1200	Score Table Receptacle	1	20	B	20	1	Exterior Receptacles	800	4
5	1000	General Receptacles	1	20	C	20	1	General Receptacles	800	6
7	1650	Cardio Equipment	1	20	A	20	1	Cardio Equipment	1650	8
9	1650	Cardio Equipment	1	20	B	20	1	Cardio Equipment	1650	10
11	1650	Cardio Equipment	1	20	C	20	1	Cardio Equipment	1650	12
13	1650	Cardio Equipment	1	20	A	20	1	Cardio Equipment	1650	14
15	1650	Cardio Equipment	1	20	B	20	1	Cardio Equipment	1650	16
17	1650	Cardio Equipment	1	20	C	20	1	Cardio Equipment	1650	18
19	1650	Cardio Equipment	1	20	A	20	1	Cardio Equipment	1650	20
21	1650	Cardio Equipment	1	20	B	20	1	Cardio Equipment	1650	22
23	1650	Cardio Equipment	1	20	C	20	1	Cardio Equipment	1650	24
25	1650	Cardio Equipment	1	20	A	20	1	Cardio Equipment	1650	26
27	1650	Cardio Equipment	1	20	B	20	1	Cardio Equipment	1650	28
29	1650	Cardio Equipment	1	20	C	20	1	Cardio Equipment	1650	30
31	1000	Spare	1	20	A	20	1	Cardio Equipment	1650	32
33	1176	EF-7	1	20	B	20	1	EF-8	1176	34
35	1176	EF-9	1	20	C	20	1	EF-10	1176	36
37	2400	Trash Compactor (5hp)	3	40	A	20	1	Temperature Control Panel	1500	38
39	2400				B	20	1	Spare	1000	40
41	2400				C	20	1	Spare	1000	42

PANEL L1.1 (Section 2)

DESCRIPTION: 400A, 42P, MAIN LUGS ONLY, SURFACE MOUNT w/ GROUND KIT

VOLTAGE: 120/208v, 3P, 4 WIRE

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
43	3360	Gym Control Panel	1	30	A	20	1	Spare	1000	44
45	3360	Gym Control Panel	1	30	B	20	1	Spare	1000	46
47	3360	Gym Control Panel	1	30	C	20	1	Spare	1000	48
49	3360	Gym Control Panel	1	30	A	20	1	Spare	1000	50
51	3360	Gym Control Panel	1	30	B	20	1	Spare	1000	52
53	3360	Gym Control Panel	1	30	C	20	1	Spare	1000	54
55	3360	Gym Control Panel	1	30	A	20	1	Spare	1000	56
57	3360	Gym Control Panel	1	30	B	20	1	Spare	1000	58
59			1	20	C	20	1			60
61			1	20	A	20	1			62
63			1	20	B	20	1			64
65			1	20	C	20	1			66
67			1	20	A	20	1			68
69			1	20	B	20	1			70
71			1	20	C	20	1			72
73			1	20	A	20	1			74
75			1	20	B	20	1			76
77			1	20	C	20	1			78
79			1	20	A	20	1			80
81			1	20	B	20	1			82
83			1	20	C	20	1			84

PANEL H1.1

DESCRIPTION: 225A, 42P, MAIN LUGS ONLY, SURFACE MOUNT w/ GROUND KIT

VOLTAGE: 120/208v, 3P, 4 WIRE

TOTAL CONNECTED LOAD: 69,580w= 193a
TOTAL DEMANDED LOAD: 55,580w= 154a

10 kAIC RATING

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
1	896	Lights 1st Floor Storage, Elec.	1	20	A	20	1	Lights Ext. Façade	663	2
3	2016	Lights 1st Floor Gym, Storage	1	20	B	20	1	Electric Wall Heater	2000	4
5	1008	Lights 1st Floor Gym	1	20	C	20	1	Electric Unit Heater	3000	6
7	1428	Lights 1st Floor Team Check-In	1	20	A	20	1	Electric Unit Heater	3000	8
9	3672	Lights 2nd Floor Track	1	20	B	20	1	Spare	1000	10
11	3672	Lights 2nd Floor Track	1	20	C	20	1	Spare	1000	12
13	3672	Lights 2nd floor Track, Cardio	1	20	A	20	1	Spare	1000	14
15	3888	Lights Court 1A	1	20	B	20	1	Spare	1000	16
17	3888	Lights Court 1A	1	20	C	20	1	Spare	1000	18
19	3888	Lights Court 1B	1	20	A	20	1	Spare	1000	20
21	3888	Lights Court 1B	1	20	B	20	1	Spare	1000	22
23	3888	Lights Court 2A	1	20	C	20	1	Spare	1000	24
25	3888	Lights Court 2A	1	20	A	20	1	Spare	1000	26
27	3888	Lights Court 2B	1	20	B	20	1	Spare	1000	28
29	3888	Lights Court 2B	1	20	C	20	1	Spare	1000	30
31	910	2nd Floor Team Check-In	1	20	A	20	1	Spare	1000	32
33		Space	1	20	B	20	1	Space		34
35		Space	1	20	C	20	1	Space		36
37		Space	1	20	A	20	1	Space		38
39		Space	1	20	B	20	1	Emergency/Night Lights	310	40
41		Space	1	20	C	20	1	Emergency/Night Lights	229	42

PANEL H1.2 (Section 1)

DESCRIPTION: 225A, 42P, MAIN LUGS ONLY, SURFACE MOUNT w/ GROUND KIT

VOLTAGE: 277/480v, 3P, 4 WIRE

TOTAL CONNECTED LOAD: 141,364w= 170a
TOTAL DEMANDED LOAD: 136,864w= 165a

10 kAIC RATING

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
1	2688	Lights 1st Floor Gyms	1	20	A	20	1	Lights Court 7A	2916	2
3	3304	Lights 1st Floor Restrooms, Party	1	20	B	20	1	Lights Court 7A	2916	4
5	3240	Lights 2nd Floor Viewing Gallery	1	20	C	20	1	Lights Court 7B	2916	6
7	2336	Lights 2nd Floor Entry	1	20	A	20	1	Lights Court 7B	2916	8
9	2916	Lights Court 3A	1	20	B	20	1	Lights Court 8A	2916	10
11	2916	Lights Court 3A	1	20	C	20	1	Lights Court 8A	2916	12
13	2916	Lights Court 3B	1	20	A	20	1	Lights Court 8B	2916	14
15	2916	Lights Court 3B	1	20	B	20	1	Lights Court 8B	2916	16
17	2916	Lights Court 4A	1	20	C	20	1	Gymnastics	2916	18
19	2916	Lights Court 4A	1	20	A	20	1	Gymnastics	2916	20
21	2916	Lights Court 4B	1	20	B	20	1	Turf Field A	3240	22
23	2916	Lights Court 4B	1	20	C	20	1	Turf Field A	3240	24
25	2916	Lights Court 5A	1	20	A	20	1	Turf Field B	3240	26
27	2916	Lights Court 5A	1	20	B	20	1	Turf Field B	3240	28
29	2916	Lights Court 5B	1	20	C	20	1	Turf Field C	3240	30
31	2916	Lights Court 5B	1	20	A	20	1	Turf Field C	3240	32
33	2916	Lights Court 6A	1	20	B	20	1	Lights 1st Floor Tele, Elec	280	34
35	2916	Lights Court 6A	1	20	C	20	1	Spare	1000	36
37	2916	Lights Court 6B	1	20	A	20	1	Emergency/Night Lights	262	38
39	2916	Lights Court 6B	1	20	B	20	1	Emergency/Night Lights	506	40
41	1000	Spare	1	20	C	20	1	Emergency/Night Lights	492	42

PANEL H1.2 (Section 2)

DESCRIPTION: 200A, 42P, MAIN LUGS ONLY, SURFACE MOUNT w/ GROUND KIT

VOLTAGE: 277/480v, 3P, 4 WIRE

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
43	5000	Water Heater 1	3	30	A	20	3	Water Heater 2	3000	44
45	5000				B				3000	46
47	5000				C				3000	48
49	1000	Spare	1	20	A	20	1	Spare	1000	50
51	1000	Spare	1	20	B	20	1	Spare	1000	52
53	1000	Spare	1	20	C	20	1	Spare	1000	54
55	1000	Spare	1	20	A	20	1	Spare		56
57			1	20	B	20	1			58
59			1	20	C	20	1			60
61			1	20	A	20	1			62
63			1	20	B	20	1			64
65			1	20	C	20	1			66
67			1	20	A	20	1			68
69			1	20	B	20	1			70
71			1	20	C	20	1			72
73			1	20	A	20	1			74
75			1	20	B	20	1			76
77			1	20	C	20	1			78
79			1	20	A	20	1			80
81			1	20	B	20	1			82
83			1	20	C	20	1			84

PANEL L1.4 △3

DESCRIPTION: 100A, 30P, MAIN BREAKER, SURFACE MOUNT w/ GROUND KIT

VOLTAGE: 120/208v, 3P, 4 WIRE

TOTAL CONNECTED LOAD: 31,420w= 87a
TOTAL DEMANDED LOAD: 17,920w= 50a

10 kAIC RATING

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
1	1500	Ice Machine	1	20	A	20	1	Floor Machine Charger	1920	2
3	1000	Spare	1	20	B	20	1	Spare	1000	4
5	1000	Spare	1	20	C	30	1	Spare	1000	6
7	1000	Spare	1	20	A	20	1	Spare	1000	8
9	1000	Spare	1	20	B	20	1	Spare	1000	10
11	1000	Spare	1	20	C	20	1	Spare	1000	12
13	1000	Spare	1	20	A	20	1	Spare	1000	14
15	1000	Spare	1	20	B	20	1	Spare	1000	16
17	1000	Spare	1	20	C	20	1	Spare	1000	18
19	1000	Spare	1	20	A	20	1	Spare	1000	20
21	1000	Spare	1	20	B	20	1	Spare	1000	22
23	1000	Spare	1	20	C	20	1	Spare	1000	24
25	1000	Spare	1	20	A	20	1	Spare	1000	26
27	1000	Spare	1	20	B	20	1	Spare	1000	28
29	1000	Spare	1	20	C	20	1	Spare	1000	30

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ENGINEER OF RECORD:
Pete C. Laughlin, P.E. - License No. 10089

CITY OF LAWRENCE RECREATION AND WELLNESS CENTER

ROCK CHALK PARK
LAWRENCE, KANSAS

PROJECT # 212-140

RELEASE:	DATE:
BIDDING	4.16.13
ADDENDA I	5.8.13
△1 ESI-1	7.8.13
△2 ESI-2	4.10.14
△3 ESI-3	4.21.14

Issue for Bid and Construction

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