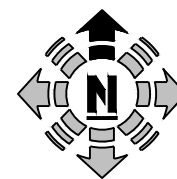
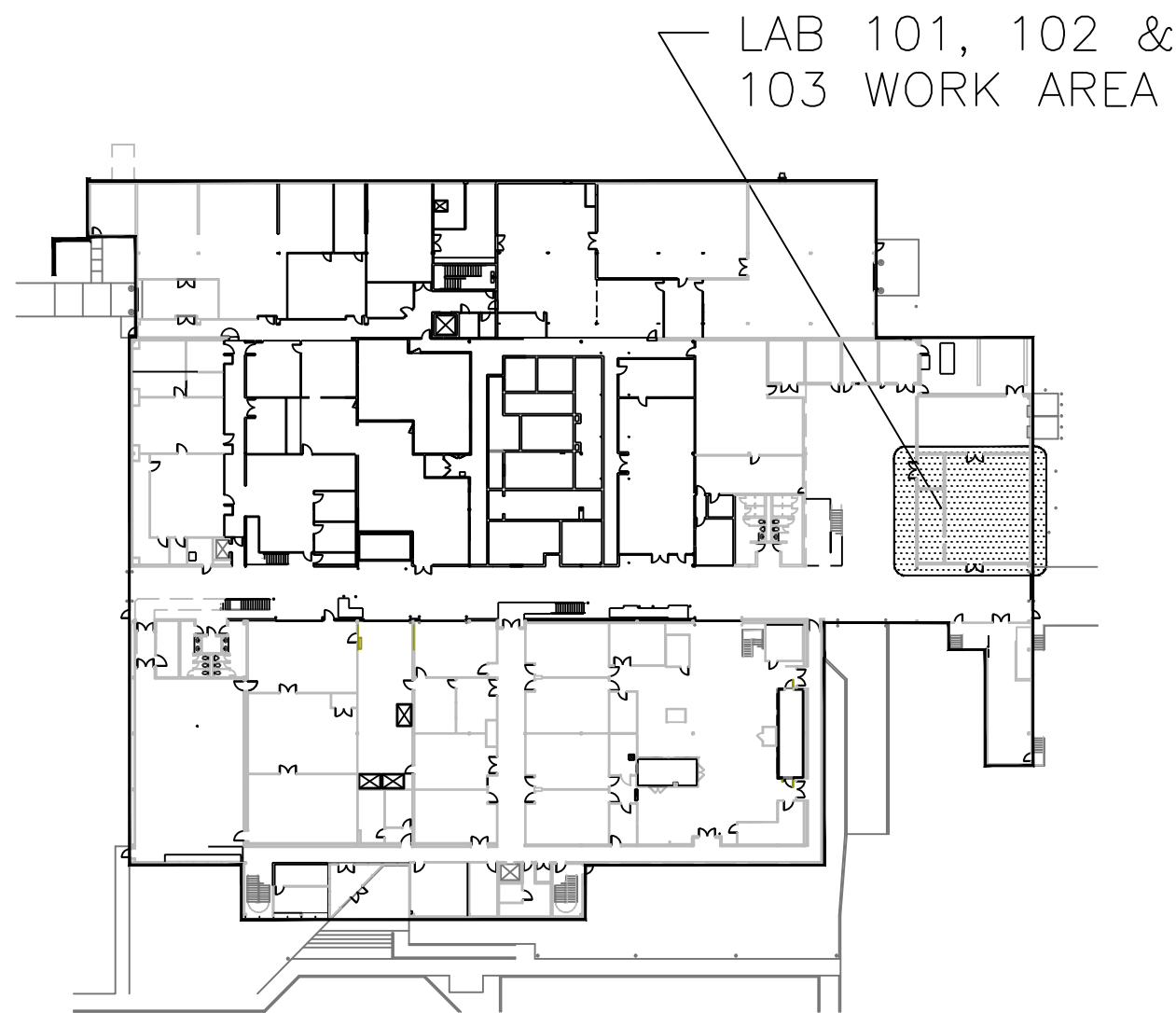


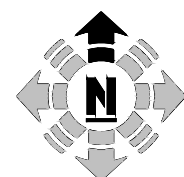
SECOND FLOOR HVAC KEYNOTES:

- ① FUTURE FOR 2ND FLOOR.
- ② ROUTE 12"Ø SUPPLY LINE DOWN TO LAB 104C.
- ③ PIPING DOWN IN UTILITY CHASE.
- ④ REFER TO MAU-5 RISER DIAGRAM FOR DUCTWORK CONTINUATION.
- ⑤ SEE DIAGRAM 2 ON SHEET M-03 FOR CONTINUATION.
- ⑥ UP TO EAU-5. SEE SHEET M-03 FOR CONTINUATION.
- ⑦ 24"Ø EXHAUST DOWN TO FIRST FLOOR SEE SHEET M-01 FOR CONTINUATION.
- ⑧ VALVES MOVED FOR DRAWING CLARITY. ROUTE PIPING UNDER DUCTWORK AND COORDINATE VALVE PLACEMENT WITH GENERAL CONTRACTOR.
- ⑨ CWS&R AND HWS&R SHOWN AS EXISTING AS NEW SECTIONS WERE INSTALLED DURING DEMOLITION.
- ⑩ CONNECT 12"Ø EXHAUST DUCT WITH (E) EXHAUST DUCT THAT RISES UP FROM WEST WALL OF LAB 104C.
- ⑪ ROUTE ALL HORIZONTAL DUCT AS HIGH AS POSSIBLE.
- ⑫ EXISTING PIPE AND CONNECTIONS CONSTRUCTED DURING DEMOLITION PHASE. CONNECT NEW PIPE AS SHOWN.



SECOND FLOOR HVAC PIPING PLAN

SCALE: 1/4" = 1'



KEY PLAN

SCALE: NTS

REVISIONS						REVISIONS						FILE INFORMATION				ENGINEERING REVIEW		
NO.		DATE	BY	APP'D.	BAE	NO.		DATE	BY	APP'D.	BAE	USER:	DATE:	TIME:	XREF'S:	DESIGNER	APPROVAL	DATE
0	50% CONSTRUCTION DOCUMENTS	8-25-11	-	-	-	-	-	-	-	-	-	DLD	1/20/12	-	-	DLD	-	-
1	90% CONSTRUCTION DOCUMENTS	9-30-11	-	-	-	-	-	-	-	-	-	DWG. FILE:	-	-	-	DLD	-	-
2	100% CONSTRUCTION DOCUMENTS	11-3-11	-	-	-	-	-	-	-	-	-	DWG. FOLDER:	-	-	-	MTM	-	-
3	FOR CONSTRUCTION	1-20-12	-	-	-	-	-	-	-	-	-	ACAD VERSION: AUTOCAD 2010	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	PLATFORM: WINDOWS XP	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	BORDER: ZBD22340-3.DWG	PLOT SCALE: 1:1	-	UNITS: ARCH	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	PLOT INFO.: NREL.STB	-	-	-	-	-	-

N.E.P. ENGINEERING		NREL		FLTB THERMO-CHEM LABORATORY 101 CONVERSION		MECH	
1555 S. Yosemite St.		National Renewable Energy Laboratory		TASK ORDER 13		SECOND FLOOR HVAC / PIPING PLAN	
Denver, CO 80202		1617 Cole Boulevard		DRAWING NO. PREFIX		REVISION NO.	
(P) 303.556.5299		Golden, Colorado 80401-3393		FLTB-135-		3	
www.nep-eng.com		Operated for the		DRAWING NO.		M-02	
		U.S. Department of Energy		NREL PROJECT NO.		EX2010034	
		by Midwest Research Institute • Battelle • Bechtel		NREL WORK ORDER NO.		13	
				A/E PROJECT NO.		11261	