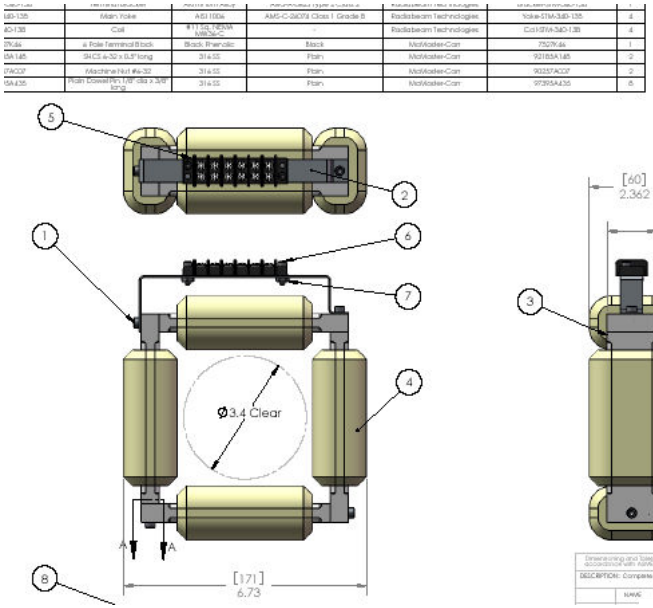
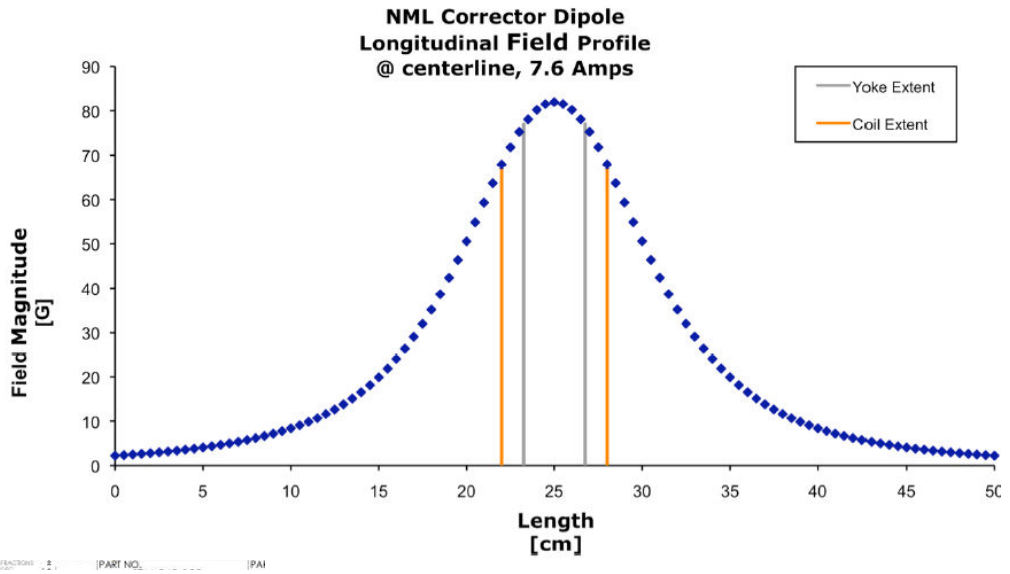
Summary of Magnets for NML

type	# ordered	vendor	int. field max	coil extent in z [mm]	Imax [A]	Vmax [V]
gun solenoid	2 (+ spare coil)	Danfysik	630 G-m (0.28T peak)	130	500	40
LE corr.	33	Radiabeam	12.3 G-m	60	7.5	1.2
LE dipole	14	Everson-Tesla	720 G-m	300	8	40
LE quad	37	Radiabeam	1.1 T-m/m	160	9	12
HE corr.	34	Everson-Tesla	200 G-m	200	9.2	13.4
HE dipole	4	FNAL + tbd	15,000 G-m	1500	1100	14
HE quad	34	Everson-Tesla	8 T-m/m	500	60	45

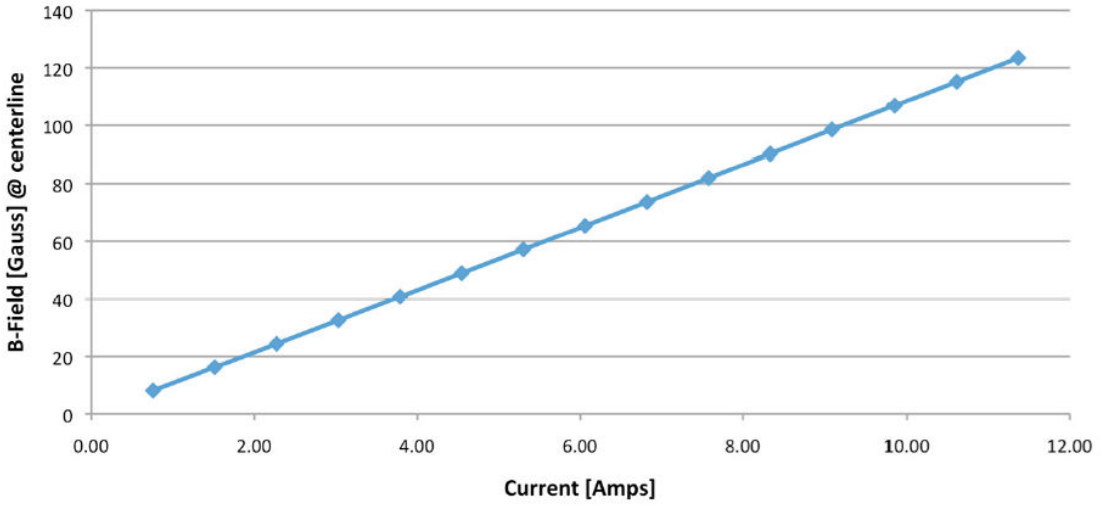
- See D Broemmelsiek's update on solenoids
- For other magnets, 1st magnets will arrive in ~ 3 months; final magnets will arrive in ~15 months
- Contract for HE dipole to be awarded after technical review later today
- All magnets split in 2 halves for insertion of vacuum pipe and easy moving

Low Energy Correctors

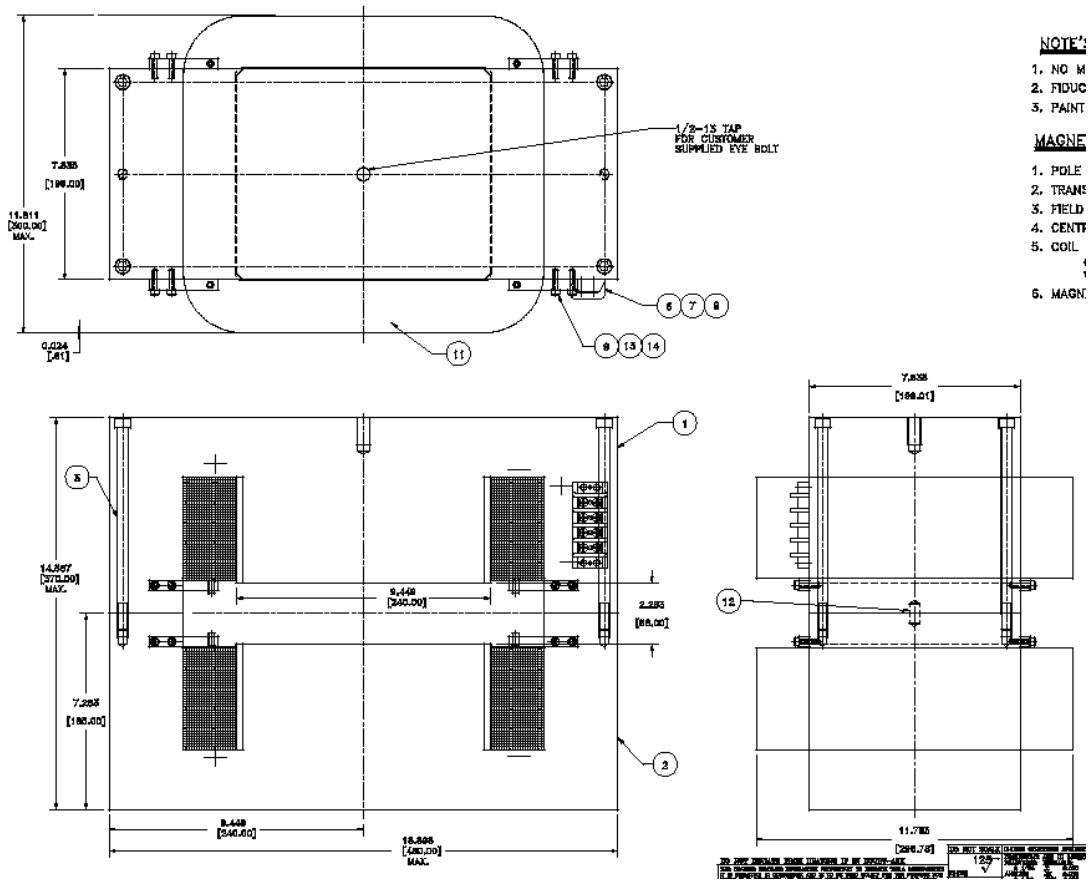




- air cooled
- each magnet has V and H independent corrector
- fits around CF3.7 flange
- final design approval soon
- will give up to 9 mrad kick at 40 MeV (equiv. to 1 mm offset of full strength quad)
- 16 lbs

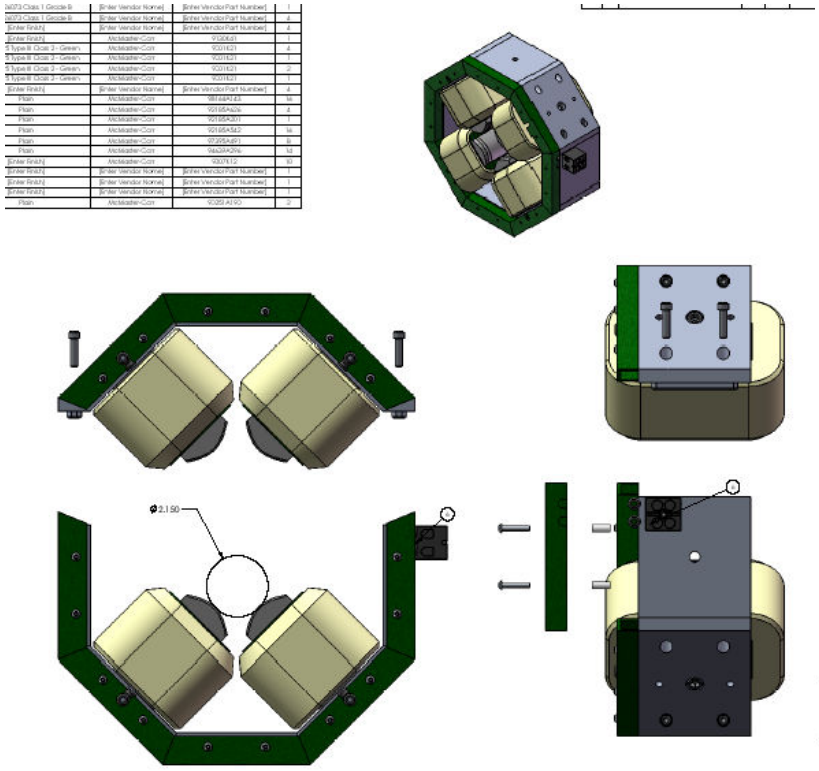


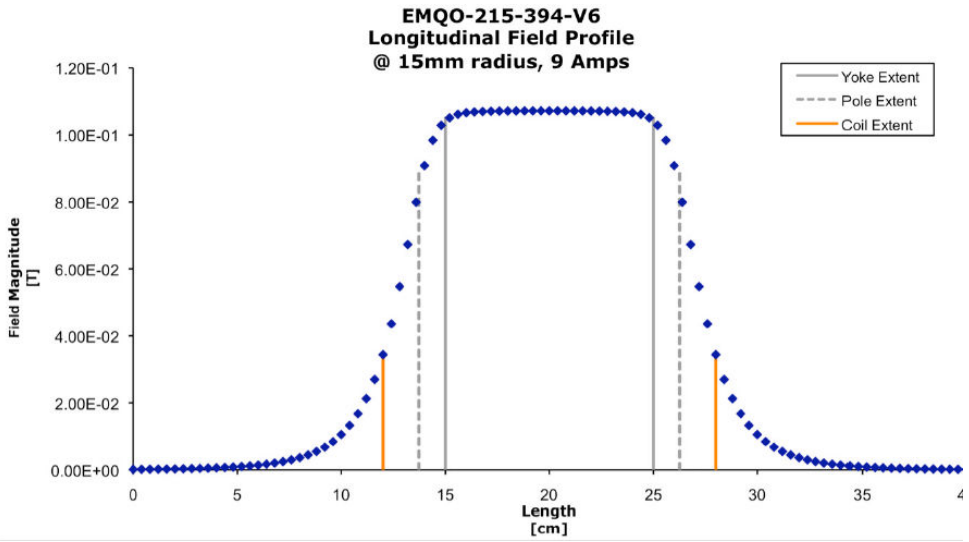
Low Energy Dipoles

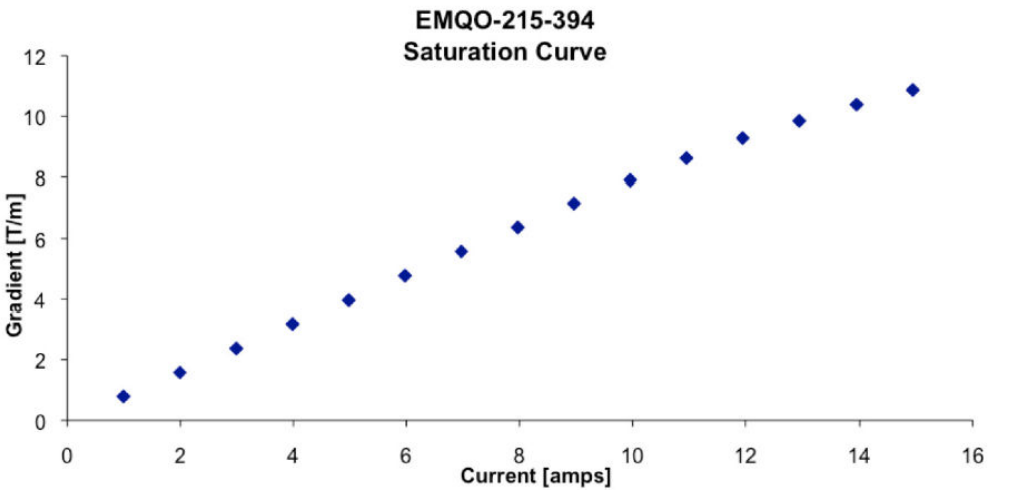


- air cooled
- standard picture frame magnet, similar to NDA
- intended for 22.5 deg bend at 40 MeV (chicanes, bends, dumps, ...)
- design approved; first magnet in production
- 620 lbs
- field drops to < 2% of peak field 30 cm from center

Low Energy Quadrupoles

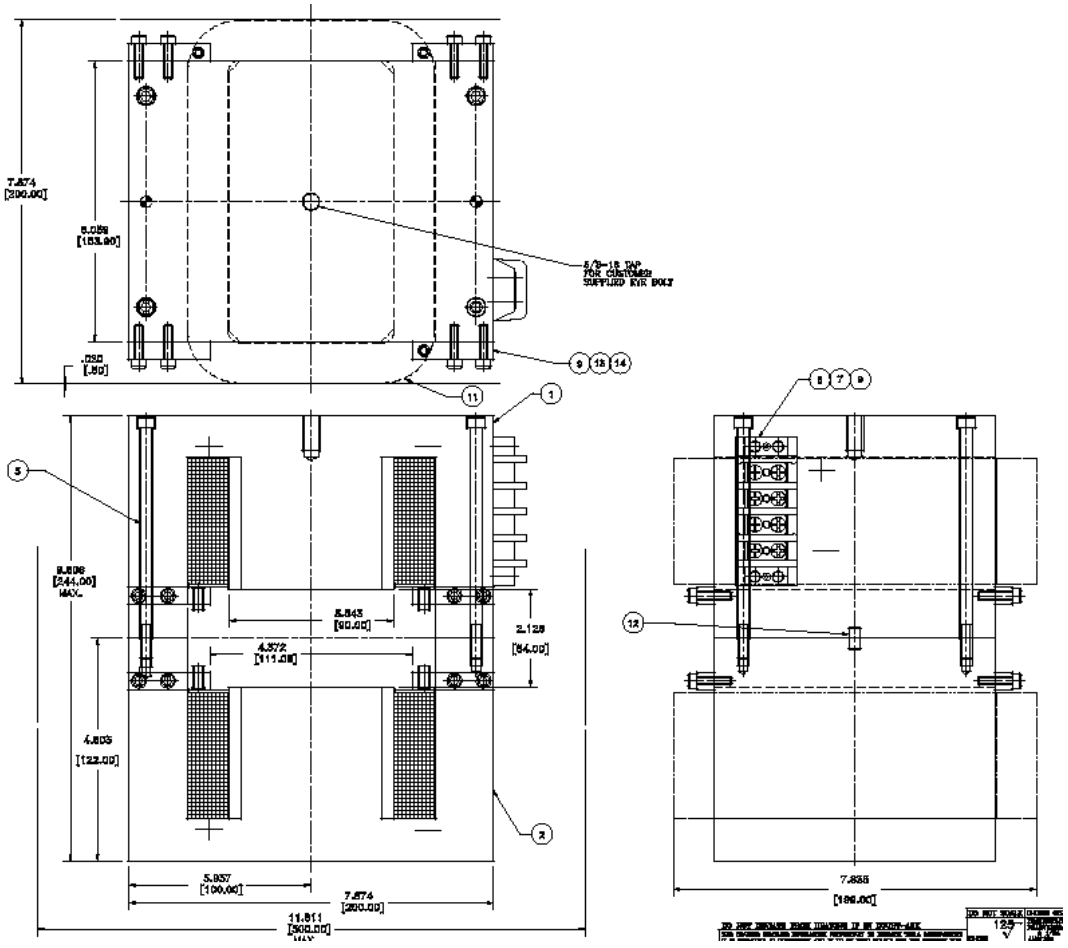






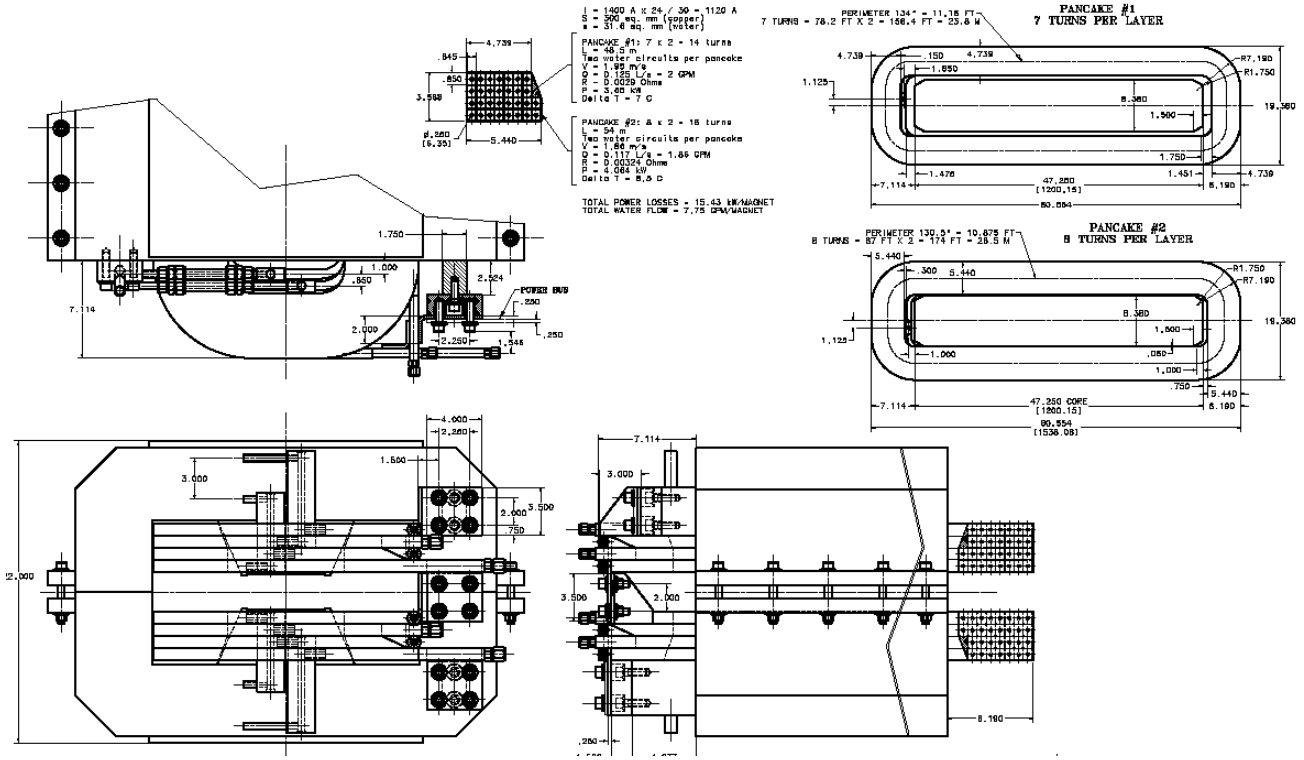
- air cooled
- final design approval soon
- 120 lbs

High Energy Correctors



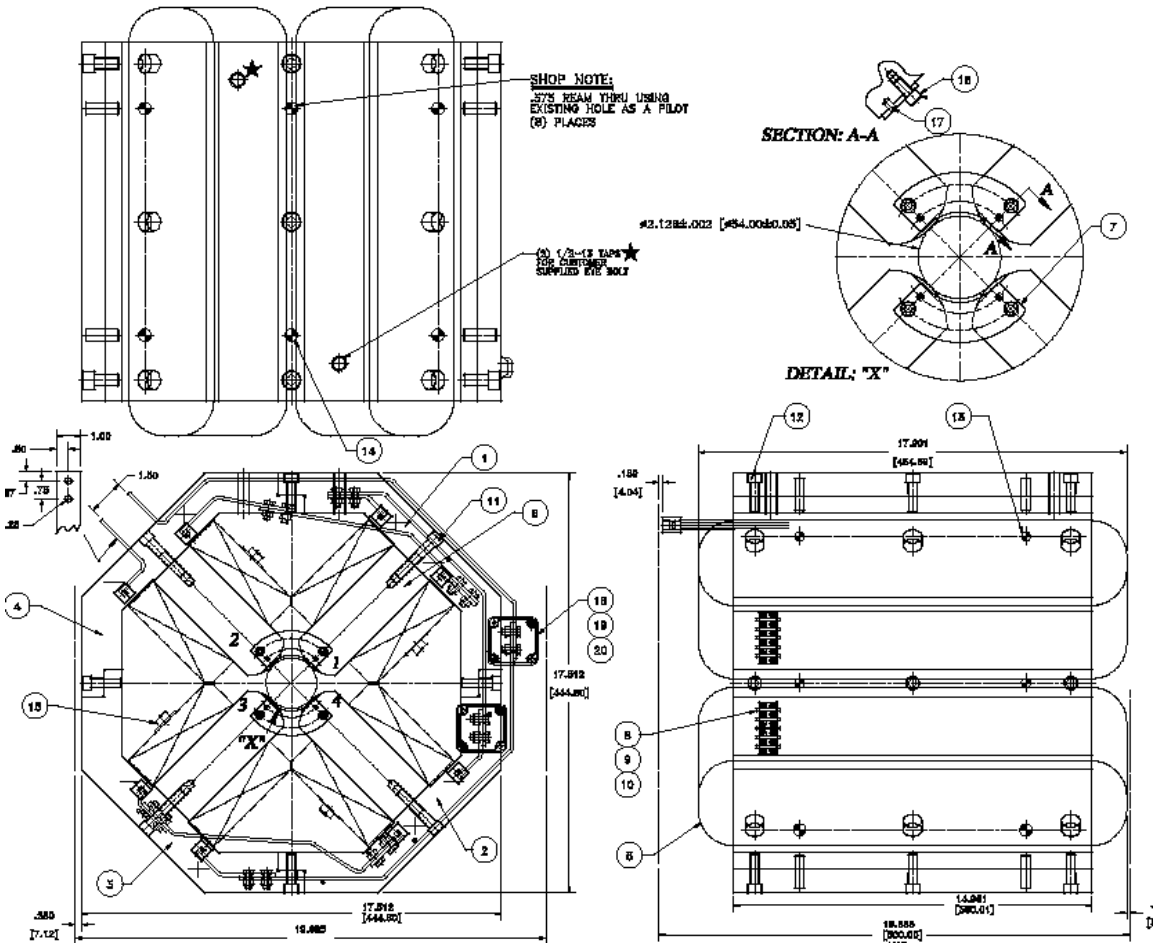
- air cooled
- will give up to 6 mrad kick at 1 GeV (equiv. to 2.5 mm offset of full strength quad)
- design approved; first magnet in production
- 125 lbs
- standard picture frame dipole
- intended for vertical and horizontal orientation

High Energy Dipoles



- water cooled (up to 7.7 GPM)
- intended for 15 deg bend at up to 1.5 GeV
- vendor selection later today
- ~8000 lbs
- hybrid – FNAL will stack cores from old MI laminations and send to vendor with old MI copper conductor for coil winding and assembly into magnet

High Energy Quadrupoles



- water cooled (1.3 GPM)
- design approved; first magnet in production
- 680 lbs