## Technology Education Department Advanced Technical Drawing - Architectural



# PROJECT ANALYSIS

FOR

## "DESIGN OF 2020 EAST NORTHWEST HWY BUILDING"

BY Keith Madden

To design an approximately 35,000 sq. ft. (one story) building with a grocery store and an attached café with seating to be used by Whole Foods Market, Inc., a grocery store chain based out of Austin, TX. The café can be owned by Whole Foods or under the ownership of a separate chain such as Starbucks, Panera Bread, etc. in a cooperative manner. The existing structure made of concrete block, a former Mercedes Benz dealership, will be used and added on to in order to accommodate the size of the grocery store and other areas. The site at 2020 East Northwest Highway in Arlington Heights, IL will provide parking and storage areas and will have some landscaping around the building, especially in the entrance area. There will also be fencing along the north edge of the site to separate it from the bordering neighborhood. The total cost of the project is not to exceed \$2 million and must be completed by June 1, 2009.

### I. CLIENT DATA

- A. Company Name: Whole Foods Market, Inc.
- B. Owner or Contact Person: John Mackey, Chairman/CEO of Whole Foods or regional officials of the company
- C. Street Address: 525 N Lamar Blvd
- D. City: Austin State: TX Zip Code: 78703
- E. Product or Services: Grocery store

# II. BUILDING SITE DATA

- A. Lot Dimensions: curbside length is around 700 ft. X width varies (about 130 ft. in area of building)Area: approximately 80,000 sq. ft.
- B. Existing Contours: none
- C. Existing Landscape: flat, with parking lots, driveways, sidewalks, small strips of grass along parking lots
- D. Existing Easements: Per City Ordinance
- E. Location of Lot (Address) 2020 East Northwest Highway Arlington Heights IL, 60004
- F. Utilities Available:

- 1. Water Service Village of Arlington Heights
- 2. Sewer Service Village of Arlington Heights
- 3. Electrical Service CommEd
- 4. Natural Gas People's Energy
- 5.Telephone AT & T
- 6. Internet Access AT & T

#### III. PERSONNEL DATA & NEEDS

- A. Number of Occupants
  - 1. Salaried Employees 80
  - 2. Hourly Employees 40
  - 3. Part-time Employees 30
- B. List of Personnel by Position
  - 1. Job Title: Shipping/unloading personnel Qty. 16
  - a. Responsibilities of Job: These workers unload delivery trucks with food and take them to temporary storage areas
  - b. Equipment Needed for Job: Forklift, boxcutters
  - 2. Job Title: Shelf Stockers Qty. 18
  - a. Responsibilities of Job: Destribute food products onto shelves
  - b. Equipment Needed for Job: boxcutters, gloves, a stool to reach higher shelves, a cart to transport items
  - 3. Job Title: Clerk/cashier Qty. 18
  - a. Responsibilities of Job: Allows customers to check out, collects money and scans in foodb. Equipment Needed for Job none

  - 4. Job Title: Bagger Qty. 12
  - a. Responsibilities of Job: bag groceries, organize carts
  - b. Equipment Needed for Job: several sizes or types of bags for groceries
  - 5. Job Title: Inventory/Ordering personnel Qty. 12
  - a. Responsibilities of Job : keeps inventory of all items in the store, orders more of what they are low on

- b. Equipment Needed for Job: some sort of computer system to keep track of grocery data
- 6. Job Title: Bakers Qty. 6
- a. Responsibilities of Job: bake breads, pastries, etc. to be sold in bakery department
- b. Equipment Needed for Job: apron, baking pans and supplies
- 7. Job Title: Deli workers Qty. 8
- a. Responsibilities of Job: prepare and serve meats, cheeses, etc. to customers in line
- b. Equipment Needed for Job: gloves, meat and cheese cutters
- 8. Job Title: Meat butcher Qty. 5
- a. Responsibilities of Job: cut and prepare meat to be sold
- b. Equipment Needed for Job: gloves, knives, apron
- 9. Job Title: Fish cutter Qty. 4
- a. Responsibilities of Job: cut and prepare fish to be sold
- b. Equipment Needed for Job: gloves, knives, apron
- 10. Job Title: Produce worker Qty. 8
- a. Responsibilities of Job: put out produce for customers, make sure that available produce is fresh
- b. Equipment Needed for Job: gloves, watering system for vegetables
- 11. Job Title: Café Clerk (only in café area) Qty. 10
- a. Responsibilities of Job: all of them rotate between taking orders, preparing/gathering food and being the cashier
- b. Equipment Needed for Job: apron, napkins, cups, plates, plastic silverware, straws
- 12. Job Title: Store Chefs Qty. 6
- a. Responsibilities of Job: Prepare pre-made food products sold in grocery store or items in restaurant/café such as pasta salad, soups, sandwiches etc.
- b. Equipment Needed for Job: cooking supplies, kitchen, apron
- 13. Job Title: Customer Service worker/Nutrionist Qty: 5a. Responsibilities: help customers, give nutritional advice/helpb. Phone to communicate with rest of staff
- 14. Job Title: Liquor staff Qty: 4a. Responsibilities: manages and organizes liquor part of grocery storeb. none
- Job Title: Administrative workers Qty: 12

   a. Responsibilities: creates signs, works with labeling and pricing of objects. Deals with payroll and data technology

- b. sign making supplies and computers
- 16. Job Title: Maintainence crew, electricians, and janitorial staff Qty: 16
  - a. Responsibilities: fix any problems, keep grocery store and café clean
  - b. broom, mop, cleaning supplies, gloves
- 17. Job Title: Store managers Qty: 1 store manager, 3 assistantsa. Responsibilities: Make sure store runs smoothly, makes sure everyone is doing their jobb. computer

## IV. CUSTOMER NEEDS

- A. Outside of Building: Nice, large entrance area, large parking areas, access to all parking lots, sidewalks
- B. Inside of Building: customer service desk, carts, seating for café, checkout lines
- V. BUILDING DESIGN DATA
  - A. Approximate Shape Desired: existing building shape plus a somewhat rectangular addition that sticks out toward to east side of the building
  - B. Maximum Length & Width Allowed: 200 ft long, 100 ft wide
  - C. Number of Levels Desired: 1 floor, except maybe a small upstairs area for staff/managers
  - D. Square Footage Desired: approximately 35,000
  - E. Style of Building Desired: concrete, with glass and stone parts of exterior

### VI. BUILDING MATERIALS DESIRED

- A. Exterior Walls: concrete block walls
- B. Roofing: green roof with grasses, small plants, accessible to people with a few benches
- C. Soffit or Trim: aluminum soffit painted beige, wood trim inside
- D. Windows: Pella Proline series picture windows for storefront
- E. Glazing of Windows: low E tint coating to reflect some light to protect the food from sun and insulate from cold and heat
- F. Exterior Doors: large automatic sliding glass doors
- G. Roof Drainage System: part of green roof, water drains through plants and is sent down sides of building through gutters
- H. Interior Walls: 2x4 wood stud plus gypsum board
- I. Interior Doors: mostly normal, durable wooden doors but large, fire-retardant doors for kitchen/baking areas

- J. Interior Trim: metal trim in grocery store, wood trim in café area
- K. Cabinetry: wood cabinets and countertops at customer service desk, kitchen, bathrooms
- L. Hardware: pewter handles
- M. Floor Coverings: tile in grocery store
- N. Wall Coverings: painted walls in café, wallpaper with some sort of plant design in parts of grocery store, other areas painted
- O. Ceilings: Open ceiling in main, center area of grocery store, drop ceiling everywhere else, espcially in café area
- P. Lighting: flourescent lights in the grocery store area, incandescant lights in café

#### VII. SPACE NEEDS

- A. Public Areas (Type & Sq.Ft.)
  - 1. Entrances/atrium 300 sq. ft.
  - 2. Grocery area accessible to customers 20,000 sq. ft.
  - 3. Café line and seating area 5,000 sq. ft.
- B. Employee Areas (Type & Sq.Ft.)
  - 1. Offices 400 sq. ft. total
  - 2. meat, deli, fish department 3,000 sq. ft.
  - 3. Café counter/serving area 250 sq. ft.
- C. Mechanical Areas (Type & Sq.Ft.)
  - 1. Shipping/loading/unloading zone for trucks 2,000 sq. ft.
  - 2. Kitchen/bakery/preparation areas 500 sq. ft.
- D. Storage Areas (Type & Sq.Ft.)
  - 1. Cart storage 400 sq. ft.
  - 2. Food storage 4,000 sq. ft.
  - 3. Cleaning/maintainence storage 200 sq. ft.

# VIII. MECHANICAL EQUIPMENT & SPECIAL FEATURES

- A. Heating System Arlington Heights Heating and Cooling Inc.
- B. Cooling System Arlington Heights Heating and Cooling Inc.
- C. Electronic Air Cleaner an air purification system (Northtown Commerical HVAC) will be included in grocery store to keep food as fresh as possible
- D. Water Heater American Standard water heaters
- E. Humidifier DRI-STEEM Commercial Humidification Systems
- F. Dehumidifier same as above; both used to regulate humidity to keep food in proper environment
- G. Central Vacuum Cleaner -none
- H. Intercom System several speakers to allow for staff commication and to inform customers of important information
- I. Security System ADT security
- J. Skylights a couple in grocery store area to provide natural light
- K. Atriums customer entry will have open space, skylights

#### IX. MISCELANEOUS INFORMATION & NOTES