ITEM 9. E.

MOORPARK CITY COUNCIL
AGENDA REPORT

TO: **Honorable City Council**

FROM: **Hugh R. Riley, Assistant City Manager**

DATE: **November 21, 2006 (CC Meeting of 12/6/06)**

SUBJECT: **Consider Final Report for Schematic Design for Ruben Castro Human Services Center**

DISCUSSION:

On March 1, 2006 the City Council approved the conceptual site plan for the Ruben Castro Human Services Center. Staff provided a status reports on June 7 and August 2, 2006 concerning proposed tenants for the facility and the proposed new building's setbacks and visual relationship with the Police Services Center located immediately south of the proposed site. Subsequently, staff directed HMC Architects to complete and submit a final report on the schematic design for the project after requesting additional modifications to the building's elevations. The Schematic Design Phase of the project has now been completed and is presented for the City Council's approval.

REVIEW OF FACILITY CONCEPT

The Human Services Center will include space to provide medical, dental, mental health, and other social services to the City's low and moderate income families. In April 2001, the City of Moorpark Redevelopment Agency acquired a 7.58 acre site on Spring Road for the Police Services Center. Approximately two acres of that site have been designated for the new Human Services Center. This parcel was acquired by the City with Community Development Block Grant Funds for that purpose. The proposed facility would include a 10,000 square foot medical building, a 15,000 square foot "Under-one-Roof" Building, for non-medical services.

The Center will be landscaped in accordance with the city's adopted Landscape Standards. To the extent economically feasible, design features and equipment will be utilized for the buildings to insure maximum resource consumption efficiency.

The medical building setback along Spring Road is thirty-three feet, seven inches which matches that of the CHP portion of the Police Service Center. The Under-One-Roof building is set back sixty-four feet, ten inches to create a plaza area and to create a

diminishing architectural site line for the two facilities as drivers and pedestrians proceed north into the downtown area. The plaza area could be utilized as a day-laborer assembly site or as a break/rest area for center patrons and employees.

The site provides opportunities for future increased parking on the south property line and room for expansion of the Under-One-Roof Building to the east. The existing property being leased to Catholic Charities at the east end of the site will be developed for parking in the final project stages to permit the agency to continue to operate there until the new building is ready for occupancy.

A detailed Executive Narrative Report prepared by the Architect is attached which provides detailed explanations of the recommended design concepts. A bound Presentation Document is included as a separate submittal with your agenda materials

The Redevelopment Agency will finance the construction of the Under-One-Roof Building, overall facility parking and site improvements with Community Development Block Grant funds and proceeds from the agencies 2006 Series Tax Allocation Bond Issue. The cost for this part of the project is approximately $ 6.5 million. The medical building and tenant improvements totaling approximately $ 3.4 million will be financed with State of California Health Mortgage Revenue Bonds in cooperation with Clinicas de Camino Real under a separate land lease agreement with the Redevelopment Agency that will be presented at a later date.

STAFF RECOMMENDATION

Approve Final Report on Schematic Design for Ruben Castro Human Services Center.

ATTACHMENT: Executive Narrative Report

Presentation Document Provided Separately

ATTACHMENT 1

Ruben Castro Human Services Center Moorpark, Ca.

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October 13, 2006

EXECUTIVE NARRATIVE

Project Description

The new Rubin Castro Human Services Center provides a new public services complex to the growing needs of the local Moorpark community, offering educational and health related counseling services in it's new two building 25,000 SF. Campus Facility. The 2.5 acre parcel adjacent to the recently opened police station marries the new center with a modernist view of the California mission style.

The project includes Medical, Dental, Counseling, Educational, and Charitable services offices and enhances the services component of the City while creating a momentum for private business to invest and develop in the downtown area.

Site Information

The 2.5 acre parcel, measuring approximately 260 ft. x 400 ft, rises approximately 5 feet in elevation across the site. The design will utilize this natural height feature to create optimum pad heights and produce the best possible drainage flows away from the buildings.

Architectural Design Features

A number of design issues came into play in the development of the Human Services Center that influenced the design direction.

- Integration of the design to the new police center but with more refined elevations.
- Creating a park like setting with convenient vehicular access
- The use of the "Savings by Design" process using the "Systems Approach" to reduce the overall building energy usage by maximizing the efficiency of the interaction of the mechanical and lighting systems.
- The incorporation of a possible Day Labor component to the North West portion of the building to handle the issues of providing services and support facilities for short term labor workers.

- The allowance for future expansion of the planned facilities.

The design uses protected exterior circulation around a central breezeway to reduce the heating and cooling requirements of the building while at the same time providing shaded arcades for the interior glazing areas. Extensive and intelligent use of landscaping will provide shading for the user and glazing. The plaza hardscape area is broken and interspersed with landscaped areas to soften the feel, reduce heat gain and aid in the percolation of run-off. Utilization of landscape and lighter paving colors also will reduce heat islands and solar gain at parking and pedestrian walkways.

Building Materials

The buildings will be primarily steel frame structures with an exterior plaster finish with block, cast stone, steel and wood pergolas and deep recessed window elements. Various types of stucco will be used to emphasize building elements. The design incorporates the use of some skylighting to bring natural lighting into some of the tenant spaces.

Roofs will be flat with parapets sized to conceal rooftop mounted mechanical equipment.*

Landscape Design Features

Function (Active / Passive Space)

The sites plant material blends textures and colors to create visual harmonies that emphasize focal points, reinforce orientation, circulation, and encourage both active and passive use.
The curving walkways through the south east green offers users the opportunity to gather informally under deciduous trees that allow sun in the winter and shade in the summer.

Aesthetic Value

All trees, shrubs, vines, ground covers, and lawn have been selected for their colorful and textural aesthetic value.
The Windmill Palms, planted in a linear arrangement echo the angles of the buildings and the surrounding linear patterned hardscape.
A variety of evergreen, deciduous, and flowering trees ensures year-round interest and change. Flowering shrubs and perennials also add a continuous cycle of color to the landscape.

Plant Materials – Climatic Compatibility

All plants are grouped in hydro-zones according to water needs and will be irrigated on separate valves to ensure efficient water usage. Much of the plant material is drought-tolerant, and is appropriate to this climate. Lawn is limited to a small specific area designed to be used and enjoyed by the users.

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Plant Materials – Neighborhood Integration

A majority of the plant palette is found around the adjacent properties and helps to integrate the new landscape into its surroundings.

Structural Design Features

Scope of Work

The scope of work consists of three (3) buildings as follows:

- **Building "A" – Clinicas**
- **Building "B" – Catholic Charities**
- **Building "C" – Retail Spaces**

And covered walks between buildings.

General

Structural design and analysis of these new buildings for resisting vertical and lateral (seismic and wind) loadings will be in accordance with 2001 Edition of the California Building Code.

Structural System

The new buildings will consist of the following:

Foundation – Conventional spread footing for column and continuous grade beam for braced frame.

First Floor – Conventional concrete slab on grade.

Roof Framing – 1 ½" deep metal deck supported by steel purlins, beams and columns.

Lateral System – Steel concentric braced frames.

Specifications and Design Criteria

Design Criteria

Governing Codes

a) 2001 Edition - California Building Code
b) Wind Speed – 70 mph
c) Seismic Factors and Coefficients:
    - Closest Fault – Simi-Santa Rosa Fault and Oakridge Fault.
    - Seismic Zone 4
    - Seismic Source Type B
    - Importance Factor = 1.00
    - Near Source Factor, Na = (to be provided by Geotechnical Engineer)
    - Near Source Factor, Nv = (to be provided by Geotechnical Engineer)
    - Seismic Coefficient, Ca = (to be provided by Geotechnical Engineer)

- Seismic Coefficient, Cv = (to be provided by Geotechnical Engineer)

Reference Standards

a) America Welding Society – AWS Latest Edition
b) American Society for Testing and Materials
c) American Institute of Steel Construction – 9th Edition
d) Concrete Reinforcing Steel Handbook
e) American Concrete Institute – ACI 318 (Latest Edition)
f) Reinforced Masonry Engineering Handbook

Design Loads

1. Roof Live Load — 20 psf (reducible)
2. Special Loads
   Exterior Skin — (To be verified)

Materials

3. Concrete
   a) Aggregates (Hardrock) — ASTM C-33
   b) Cement — ASTM C-150 Type I or II
   c) Concrete 28-day Compressive Strengths
      - Footings — 3000 psi
      - Slab on grade — 3000 psi

4. Reinforcing Steel
   a) ASTM A-165 Grade 60 (typical)
   b) ASTM A-706 Grade 60 (for welded bars)

5. Structural Steel
   a) WF Sections — ASTM 36
   b) Connection Plates — ASTM 36
   c) Pipe Sections — ASTM A-35, Grade B
   d) Tube Sections — ASTM A-500, Grade B
   e) Miscellaneous Steel — ASTM A-36
   f) Bolts — ASTM A-325 SC & A-307
   g) Welding Electrodes — ASTM E70XX
   h) Metal Deck (Galvanized) — ASTM A 653
   i) Metal Deck (Primer painted) — ASTM A611
6. Masonry (if any for site structure)
   a) Units Conforming to ASTM C90
   b) Block Design Strength — 1500 psi
   c) Mortar Strength — 1800 psi
   d) Grout Strength — 2000 psi

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Recommendations and Opinion of Cost
It is recommended that the exterior covered walkway be seismically separated from the existing building.

Electrical Design Features

Electrical Service

The electrical service will be fed underground from Southern California Edison (SCE) by a pad mount transformer. Initial contact with SCE has been made to determine Service Planner assigned to the project area. The design will be based on two buildings with one SCE meter in each. Note that it is assumed that Building B & C are considered one building.

Load Calculations

Parking Area (80,000 s.f.)	
General lighting, 0.25w / S.F.	
at 125% = 25,000	
Total	**= 25,000 = 70 amps, 120/208V-3PH-4W**
Building A	
Clinicas = 9,795 s.f.	
Lighting – 3.5 w/s.f. x 125%	= 42,854
Power – 12 w/s.f.	= 117,540
HVAC – 10 w/s.f.	= . 97,950
Misc – 1 w/s.f.	= . 9,795
Total	**= 268,139 = 745 amps, 120/208V-3PH-4W**
Building B	
Catholic Charities 6462 + Lease 1738 = 8,200 S.F.	
Lighting – 3.5 w/s.f. x 125%	= 35,875
Power – 8 w/s.f.	= 65,600
HVAC – 10 w/s.f.	= 82,000
Misc – 1 w/s.f.	= 8,200
Total	**= 191,675 = 534 amps, 120/208V-3PH-4W**

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Building C	
First Five 3284 + LEASE 2495	= 5,780 S.F.
Lighting – 3.5 w/s.f. x 125%	= 25,288
Power – 8 w/s.f.	= 46,240
HVAC – 10 w/s.f.	= 57,800
Misc – 1 w/s.f.	= 5,780
Total	**= 135,108 = 376 amps, 120/208V-3PH-4W**

Building DD – Future = Same as Building C

Electrical Rooms

The electrical rooms will be located in the following spaces:

- Building A – Main Switchboard MSA with one meter and tenant panelboards.
- Building B – Main Switchboard MSB with one meter and tenant panelboards.
- Building C – Distribution Board DBC (fed from Building B) and tenant panelboards.

Telephone Rooms

A Main Telephone Room will be required with a dimension of 10'W x 10'L. Telephone service conduit(s) will be routed from the Telephone Company Utility lines to the building main point of entry. A 4' x 8' plywood backboard and outlets will be provided in the Main Telephone Room.

Lighting

Title 24 calculations will be coordinated with the Lighting Design to comply with the requirements including switching, automatic shut-off, overrides, daylight area controls, and allowed lighting power.

Low Voltage Systems (Fire Alarm, Telephone, Data, Security, etc.)

Electrical drawings will specify empty conduits, stub-outs, outlet boxes as required by the Low Voltage vendors. In addition, power to the Low Voltage equipment will be specified as required.

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Savings-by-Design

The following are two Savings-by-Design system approaches that can be implemented into the project:

1. **Daylighting**
   The electrical portion of daylighting consists of controlling lighting fixtures within daylit areas. The implementation of this system will be dependent on the architectural glazing / skylights and will be coordinated with the architect.

2. **Interior Lighting Systems**
   The lighting measures for interior lighting include the use of occupancy sensors for control and high-efficiency lamps and ballasts. These items will be implemented as coordinated with the architect.

Due to the small size of the building, a full blown Savings by Design approach is not cost effective, HMC will however design the building to take advantage of energy saving systems and products that not only incorporate new technologies but are just the way that HMC designs buildings. HMC remains dedicated through its Energy Resource Management approach to provide the owner with a building that is energy efficient, conserves resources and respects the environment.*

Mechanical Design Features

Load Calculations

Building A

The HVAC load requirements of the building are derived from the accepted engineering standards and estimated as follows:

Description	Area (SF)	HVAC Load (Tons)
First Floor	9,795	33

Building B

Description	Area (SF)	HVAC Load (Tons)
First Floor	8,200	28

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Building C

Description	Area (SF)	HVAC Load (Tons)
First Floor	5,780	20

Building D – Future = Same as Building C

Building A
Alternative I (Rooftop Packaged AC Units)

The proposed system shall consist of seven (7) Rooftop Packaged Air Conditioning Units. Each Rooftop Packaged Unit will be equipped with economy cycle and related controls.

This alternative involves the provision of the following equipment:

- Rooftop Packaged Air Conditioning Units with roof curb and vibration isolators
- Electrical Room Ventilation System
- Low pressure ductwork controls
- 3, 4 and 5 Ton Packaged unit dimension 6'-2" L x 3'-9" W x 2'-10" H

Advantages:

1. Lower initial cost compared to other alternatives.
2. No hot water piping is required.
3. More flexibility for off-hours and weekend work schedules compared to single VAV Rooftop Packaged Air Conditioning Unit.

Disadvantages:

1. Lower efficiency.
2. Lower individual zone control.
3. Too many pieces of equipment (which may be scattered on the roof) and higher maintenance cost.
4. Higher operating cost than other alternatives.
5. Less flexibility for future expansion/modifications.

Provision of this alternative is the less costly, however <u>not recommended</u> due to the following:

1. Comfort requirement expectations in office building applications of this size cannot be easily achieved by utilizing this type of system.
2. The system will have too many pieces of equipment that may result in high maintenances cost.

3. Lower service life.
4. The system is not flexible enough to accommodate future expansion or modifications.
5. Excessive quantities of roof penetrations.

Building A

Alternative II (VAV Rooftop Packaged Air Conditioning Units)

The proposed system shall consist of (1) 35-Ton rooftop VAV packaged units mounted on the roof of the building. Each packaged unit will be equipped with economy cycle, variable frequency drive, and power exhaust. The supply fans variable frequency drives will be controlled by static pressure sensors located at the supply duct. The conditioned air will be supplied to the floor medium pressure ductwork, VAV boxes, and low pressure ductwork downstream of VAV boxes. In addition, the heating hot-water lines feed the exterior zones VAV terminal units. The ceiling space throughout the building may be used as a return air plenum (in case of no combustible construction material). The return air will enter to the packaged units via lined ducts and/or sound trap. Each zone will be served by a pressure independent variable volume terminal box.

This alternative involves the provision of the following equipment:

- (1) 70 ton VAV Rooftop Packaged Unit
- (1) Hot Water Boiler (200,000 MBH output)
- (1+1) Hot Water Pumps
- Electrical Room Ventilation System
- Digital Control (DDC) System
- Hot water piping floor loop
- Medium pressure ductwork
- VAV boxes and low pressure air distribution
- Packaged unit dimensions: 35 Ton - 215'-6" L x 9'-0" W x 5'-8" H
- Required roof area including clearance: 35 Ton – 24'-0" x 29'-0"

Advantages:

1. Higher efficiency.
2. Better zone control.
3. Higher comfort level.
4. Less fan energy consumption.

Disadvantages:

1. Higher initial cost.
2. Hot water piping requirements.
3. Space and access requirement for VAV box compared to single zone rooftop packaged unit.
4. Less flexibility for off-hours or weekend work schedules compared to

multiple packaged DX units.

Provision of this alternative is recommended due to the above advantages.

Buildings B and C (Rooftop Packaged AC Units)
The proposed system shall consist of seven (7) Rooftop Packaged Air Conditioning Units (per building). Each Rooftop Packaged Unit will be equipped with economy cycle and related controls (for size of packaged units see equipment schedule on mechanical drawings).

This alternative involves the provision of the following equipment:

- Rooftop Packaged Air Conditioning Units with roof curb and vibration isolators
- Electrical Room Ventilation System
- Low pressure ductwork controls
- 3, 4 and 5 Ton Packaged unit dimension 6'-2" L x 3'-9" W x 2'-10" H

Plumbing Design Features

Water System

Building A

The total load for the Building A domestic cold water system is estimated to be 100 fixture units, which corresponds to 67 gpm. Therefore, a 2 ½" water connection, a 1 ½" water meter, and a 2 ½" reduced pressure backflow preventor (if required by City of Moorpark) will be required to serve the building.

The 2 ½" water connection from the street main to the water meter at the property line and the meter will be installed by the water company. The backflow preventor shall be installed downstream of the meter. The underground water line from the backflow device to the building shall be copper pipe type K, and shall be wrapped to resist the corrosion.

Buildings B and C –

The total load for the Building A domestic cold water system is estimated to be 100 fixture units, which corresponds to 67 gpm. Therefore, a 2 ½" water connection, a 1 ½" water meter, and a 2 ½" reduced pressure backflow preventor.

Sewer System Design

Building A

The total load for the building sewer system is estimated to be 90 fixture units. Therefore, one 4" sewer lateral will be required to serve the building.

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Buildings B and C
The total load for the building sewer system is estimated to be 90 fixture units. Therefore, one 4" sewer lateral will be required to serve the building.

Hot Water System Design
A 75-gallon, 75,000 btu/hr storage type gas fired water heater installed in a closet shall be utilized to serve the lavatories, service sink, and Exam Rooms sinks.

Buildings B and C - A 20-gallon, 6kw storage type electric water heater installed above the restroom ceiling or janitor closet shall be utilized to serve the lavatories and service sink at each building.

Gas Piping Design
Building A
1 ¼" low pressure gas line shall be extended from the gas meter to the space heating boiler located on the roof. Gas piping shall be black steel.

Building Band C
1 ½" low pressure gas line shall be extended from the gas meter to the space heating boiler located on the roof. Gas piping shall be black steel.

Community Narrative
Location: Conveniently located in the southeastern part of Ventura County just 50 miles northwest of downtown Los Angeles, Moorpark sits in a rich agricultural region near the communities of Simi Valley and Thousand Oaks.

History: In 1887, Robert W. Poindexter was granted title to the present site of Moorpark. He named the City after the Moorpark apricot which grew throughout the valley. Poindexter plotted Moorpark city streets and planted Pepper trees in the downtown area.

City Incorporation: Moorpark incorporated in July 1983, and contains 12.44 square miles

Population - 35,801 people as of 2006 collected data

Transportation: The Burbank, Van Nuys and Oxnard commuter airports are within 35 miles of Moorpark. Los Angeles International Airport is only 50 miles away. The Southern Pacific and AMTRAK rail systems provide convenient freight and passenger service. The City has its own Metrolink Station, with Metrolink operating Monday through Friday on all lines and making regular stops from Oxnard to Los Angeles Union Station. The city owns its own bus fleet and contracts for bus service and maintenance.