



NEW HOPE™
HOUSING, INC.

New Hope is going green!



VIEW FROM SAKOWITZ STREET

New Hope Housing develops and operates single room occupancy (SRO) efficiency apartments with access to social services. Our mission is to stabilize lives through dignified housing for adults who live alone on very low incomes. Residents are veterans, the elderly, the working poor, students, those with minor disabilities, individuals overcoming substance abuse, and the formerly homeless.

New Hope's newest project, Sakowitz Apartments, will be Houston's first LEED-certified SRO community. Located in Houston's Fifth Ward/Denver Harbor area, Sakowitz Apartments will feature 166 fully-furnished efficiency apartments with community rooms for living and learning with views and access to landscaped courtyards. Completion of construction is scheduled for late fall 2010.

The project, incorporating high-performance and sustainable building practices, will conserve energy and resource consumption, lower maintenance costs, and ultimately provide a continuously affordable, secure, and beautiful home for years to come.

New Hope Housing • 1117 Texas Avenue, Houston, Texas 77002 • 713.222.0290 • www.newhopehousing.com
Architect: Val Glitsch, FAIA General Contractor: Camden Builders, Inc.



COURTYARD VIEW

valglitsch FAIA
ARCHITECT • LEED AP

LEED

for HOMES

New Hope Housing at SAKOWITZ

1. Integrated Project Planning

1.1 PRELIMINARY RATING: **GOLD**



79.5 points expected
+15.5 points pending

LEED for Homes Simplified Project Checklist

Builder Name: **Camden**
 Project Team Leader (if different): **Laura Myss**
 Home Address (Street/City/State):

Project Description:
 Building type: **Multi-Family** Project type: **Affordable**
 # of units: **150** Avg. Home Size Adjustment: **-10**

Adjusted Certification Thresholds:
 Certified: **35.0** Gold: **65.0**
 Silver: **50.0** Platinum: **80.0**

Final Credit Rating: **Gold**

Project Point Total:
 Prelim: **79.5 + 15.5** possible pts Final: **32.5**
 Certification Level: **Gold** Prelim: **Gold**

Final Credit Category Total Points:
 ID: 0 SS: 8 EA: 20 EQ: 0
 LL: 0 WE: 3 MR: 1.5 AE: 0

date last updated: _____

Category	Sub-Category	Description	Points	Project Points			
				Max	Preliminary	Final	Final
1. Integrated Project Planning (IP) (No Minimum Points Required)							
1.1	1.1	Preliminary Rating	1	1	1	1	1
		Integrated Project Team	1	1	1	1	
		Professional Coordinated with Respect to LEED for Homes	1	1	1	1	
		Design Charrette	1	1	1	1	
		Building Orientation for Solar Design	1	1	1	1	
2. Durability Management Process							
2.1	2.1	Durability Planning	1	1	1	1	
		Durability Management	1	1	1	1	
		Third-Party Durability Management Verification	1	1	1	1	
3. Innovation or Regional Design							
3.1	3.1	Innovation #1	1	1	1	1	
		Innovation #2	1	1	1	1	
		Innovation #3	1	1	1	1	
		Innovation #4	1	1	1	1	
Location and Linkages (LL) (No Minimum Points Required)							
1. LEED SD	1	LEED for Neighborhood Development	10	10	10	10	
		2. Site Selection	2	2	2	2	
		3. Preferred Locations	11	11	11	11	
4. Infrastructure	4	Edge Development	1	1	1	1	
		infill	1	1	1	1	
		Previously Developed	1	1	1	1	
5. Community Resources / Transit	5	Basic Community Resources / Transit	11	11	11	11	
		Extensive Community Resources / Transit	11	11	11	11	
		Outstanding Community Resources / Transit	11	11	11	11	
6. Access to Open Space	6	Access to Open Space	1	1	1	1	
Sustainable Sites (SS) (Minimum of 5 SS Points Required)							
1. Site Stewardship	1	Erosion Controls During Construction	1	1	1	1	
		Minimize Disturbed Area of Site	1	1	1	1	
2. Landscaping	2	No Invasive Plants	1	1	1	1	
		Basic Landscape Design	11	11	11	11	
		Limit Commercial Fuel	11	11	11	11	
		Drought Tolerant Plants	11	11	11	11	
		Reduce Overall Irrigation Demand by at Least 20%	11	11	11	11	
3. Local Heat Island Effects	3	Reduce Local Heat Island Effects	1	1	1	1	
4. Surface Water Management	4	Permeable Lot	1	1	1	1	
		Permanent Erosion Controls	1	1	1	1	
		Management of Run-off from Roof	1	1	1	1	
5. Non-toxic Pesticide Control	5	Non-toxic Pesticides	1	1	1	1	
6. Compact Development	6	Moderate Density	11	11	11	11	
		High Density	11	11	11	11	
		Very High Density	11	11	11	11	
Water Efficiency (WE) (Minimum of 3 WE Points Required)							
1. Water Reuse	1	Rainwater Harvesting System	11	11	11	11	
		Capturer Reuse System	11	11	11	11	
		Use of Municipal Recycled Water System	11	11	11	11	
2. Irrigation System	2	High Efficiency Irrigation System	11	11	11	11	
		Third Party Inspection	11	11	11	11	
		Reduce Overall Irrigation Demand by at Least 45%	11	11	11	11	
3. Indoor Water Use	3	High Efficiency Fixtures and Fittings	11	11	11	11	
4. Very High Efficiency Fixtures and Fittings	4	Very High Efficiency Fixtures and Fittings	11	11	11	11	
Energy and Atmosphere (EA) (Minimum of 0 EA Points Required)							
1. Optimize Energy Performance	1	Performance of ENERGY STAR for Homes	11	11	11	11	
		Exceptional Energy Performance	11	11	11	11	
7. Water Heating	7	Efficient Hot Water Distribution	2	2	2	2	
		Pipe Insulation	1	1	1	1	
11. Residential Refrigerant Management	11	Refrigerant Charge Test	11	11	11	11	
		Appropriate HVAC Refrigerants	11	11	11	11	
Energy and Atmosphere (EA) Credits							
1. Optimize Energy Performance	1	Performance of ENERGY STAR for Homes	11	11	11	11	
		Exceptional Energy Performance	11	11	11	11	
7. Water Heating	7	Efficient Hot Water Distribution	2	2	2	2	
		Pipe Insulation	1	1	1	1	
11. Residential Refrigerant Management	11	Refrigerant Charge Test	11	11	11	11	
		Appropriate HVAC Refrigerants	11	11	11	11	

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				Max	Preliminary	Final	Final
Materials and Resources (MR) (Minimum of 2 MR Points Required)							
1. Material Efficiency	1	Flaming Order Waste Factor Limit	11	11	11	11	11
		Detailed Framing Documents	11	11	11	11	
		Detailed Cut List and Lumber Order	11	11	11	11	
		Framing Efficiency	11	11	11	11	
		On-site Fabrication	4	4	4	4	
2. Environmentally Preferable Products	2	FSC Certified Tropical Wood	11	11	11	11	
		Environmentally Preferable Products	11	11	11	11	
3. Waste Management	3	Construction Waste Management Planning	11	11	11	11	
		Construction Waste Reduction	11	11	11	11	
Indoor Environmental Quality (EQ) (Minimum of 5 EQ Points Required)							
1. ENERGY STAR with IAQ	1	ENERGY STAR with Indoor Air Package	11	11	11	11	
		Basic Combustion Venting Measures	11	11	11	11	
2. Combustion Venting	2	Basic Combustion Venting Measures	11	11	11	11	
		Enhanced Combustion Venting Measures	11	11	11	11	
3. Moisture Control	3	Moisture Load Control	11	11	11	11	
4. Outdoor Air Ventilation	4	Basic Outdoor Air Ventilation	11	11	11	11	
		Enhanced Outdoor Air Ventilation	11	11	11	11	
5. Local Exhaust	5	Basic Local Exhaust	11	11	11	11	
		Enhanced Local Exhaust	11	11	11	11	
6. Distribution of Space Heating and Cooling	6	Third-Party Performance Testing	11	11	11	11	
		Return Air Flow / Room by Room Controls	11	11	11	11	
		Third-Party Performance Test / Multiple Zones	11	11	11	11	
7. Air Filtration	7	Good Filters	11	11	11	11	
		Best Filters	11	11	11	11	
		Best Filters	11	11	11	11	
8. Contaminant Control	8	Indoor Contaminant Control during Construction	11	11	11	11	
		Indoor Contaminant Control	11	11	11	11	
		Prosecuratory Flush	11	11	11	11	
9. Radon Protection	9	Radon-Resistant Construction in High-Risk Areas	11	11	11	11	
10. Garage Pollutant Protection	10	Radon-Resistant Construction in Moderate Risk Areas	11	11	11	11	
		No HVAC in Garage	11	11	11	11	
		Minimize Pollutants from Garage	11	11	11	11	
11. Exhaust Fan in Garage	11	Exhaust Fan in Garage	11	11	11	11	
12. Detached Garage or No Garage	12	Detached Garage or No Garage	11	11	11	11	
Awareness and Education (AE) (Minimum of 5 AE Points Required)							
1. Education of the Homeowner or Tenant	1	Basic Operations Training	11	11	11	11	
		Enhanced Training	11	11	11	11	
		Public Awareness	11	11	11	11	
2. Education of Building Manager	2	Education of Building Manager	11	11	11	11	
Energy and Atmosphere (EA) Credits							
1. Infiltration	1	Basic Infiltration	11	11	11	11	
		Enhanced Infiltration	11	11	11	11	
2. Air Infiltration	2	Reduced Envelope Leakage	11	11	11	11	
		Greatly Reduced Envelope Leakage	11	11	11	11	
		Minimal Envelope Leakage	11	11	11	11	
4. Windows	4	Good Windows	11	11	11	11	
		Enhanced Windows	11	11	11	11	
5. Heating and Cooling Distribution System	5	Reduced Distribution Losses	11	11	11	11	
		Greatly Reduced Distribution Losses	11	11	11	11	
6. Space Heating and Cooling Equipment	6	Minimal Distribution Losses	11	11	11	11	
		Good HVAC Design and Installation	11	11	11	11	
7. Water Heating	7	High Efficiency HVAC	11	11	11	11	
		Very High Efficiency HVAC	11	11	11	11	
		Efficient Hot Water Distribution	11	11	11	11	
8. Lighting	8	Pipe Insulation	11	11	11	11	
		Efficient Domestic Hot Water Equipment	11	11	11	11	
9. Appliances	9	ENERGY STAR Lights	11	11	11	11	
		Improved Lighting	11	11	11	11	
		Advanced Lighting Package	11	11	11	11	
10. Renewable Energy	10	High Efficiency Appliances	11	11	11	11	
		Water-Efficient Clothes Washer	11	11	11	11	
		Renewable Energy System	11	11	11	11	
11. Residential Refrigerant Management	11	Refrigerant Charge Test	11	11	11	11	
		Appropriate HVAC Refrigerants	11	11	11	11	

1. Integrated Project Planning

1.2 INTEGRATED PROJECT TEAM

- a. Individuals/Organizations with necessary capabilities
- b. All team members involved in various project phases
- c. Regular meetings held with project team

1

valglitsch^{FAIA}
ARCHITECT - LEED AP



CONTACTS
Consultants and Architects

Reihl Engineering, LLC
Sustainable Engineering for a Better Tomorrow

ENVIRONMENT ASSOCIATES
ARCHITECTS & CONSULTANTS

LC LANDTECH

**aSakura
robinson**



NEW HOPE
HOUSING, INC.

1.3 CREDENTIALLED PROFESSIONALS

*Elizabeth Bryson, LEED AP Homes
Camden Builders Inc.*

1



CAMDEN
Builders, Inc.

1. Integrated Project Planning

1.4 DESIGN CHARETTE - July 25, 2008

1



Green Charette Notes



1. Integrated Project Planning

1.5 BUILDING ORIENTATION for solar design

a. Glazing on N/S walls 50% > E/W

1



ID 1.5 Building Orientation for Solar Design
SAKOWITZ STREET SRO APARTMENTS

23 June 2009

	A3.1e	A3.2e	A3.3e	A3.4e	A3.5e	A3.6e	Total
NORTH							
Exterior Wall	7575	0	2890	39	282	0	10786
Res. Fixed Glass	61	0	9	0	0	0	70
Res. Slider Glass	745	0	415	0	0	0	1160
Storefront Glass	438	0	28	0	0	0	466
Glass Doors	83	0	42	0	0	0	125
Ins Metal Doors	76	0	0	0	0	0	76
South							
Exterior Wall	0	6122	3849	39	282	0	10292
Res. Fixed Glass	0	18	37	0	0	0	55
Res. Slider Glass	0	746	483	0	0	0	1229
Storefront Glass	0	435	0	0	0	0	435
Glass Doors	0	126	0	0	0	0	126
Ins Metal Doors	0	57	0	0	0	0	57
EAST							
Exterior Wall	300	0	0	0	7069	1636	9005
Res. Fixed Glass	0	0	0	0	59	67	126
Res. Slider Glass	0	0	0	0	638	0	638
Storefront Glass	0	0	0	0	34	0	34
Glass Doors	0	0	0	0	42	0	42
Ins Metal Doors	0	0	0	0	113	0	113
WEST							
Exterior Wall	300	0	0	6309	0	1636	8245
Res. Fixed Glass	0	0	0	226	0	0	226
Res. Slider Glass	0	0	0	0	0	272	272
Storefront Glass	0	0	0	127	0	0	127
Glass Doors	0	0	0	0	0	0	0
Ins Metal Doors	0	0	0	0	0	321	321
Enclosed Wall							
Exterior Wall	152	249	96	0	0	384	881
TOTALS							
Exterior Wall	39209					4118	80.26%
Res. Fixed Glass	477					5131	
Res. Slider Glass	3299						
Storefront Glass	1062					22692	
Glass Doors	293					2712	
Ins Metal Doors	567					25279	
						2077 ft	

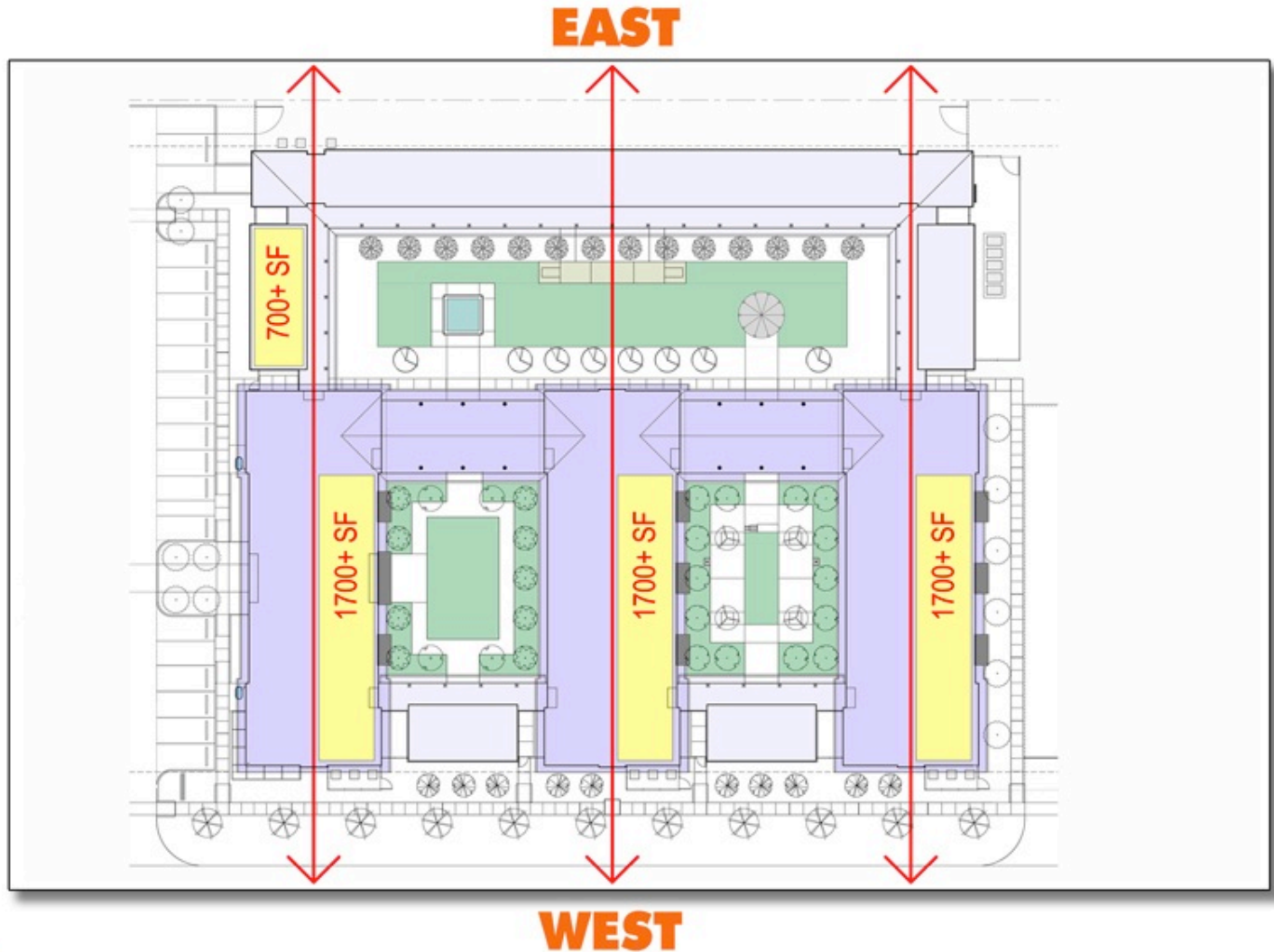
*Shaded glass is all glass under an overhang or awning and does not include building-shaded or tree-shaded glass

1. Integrated Project Planning

1.5 BUILDING ORIENTATION for solar design

b. E/W axis is within 15° of due E/W

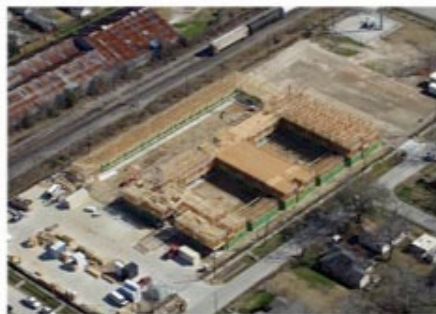
c. Minimum 450 SF of south-facing roof area (for SOLAR)



1. Integrated Project Planning

1.5 BUILDING ORIENTATION for solar design

d. 90% of SOUTH glazing is shaded in summer / unshaded in winter

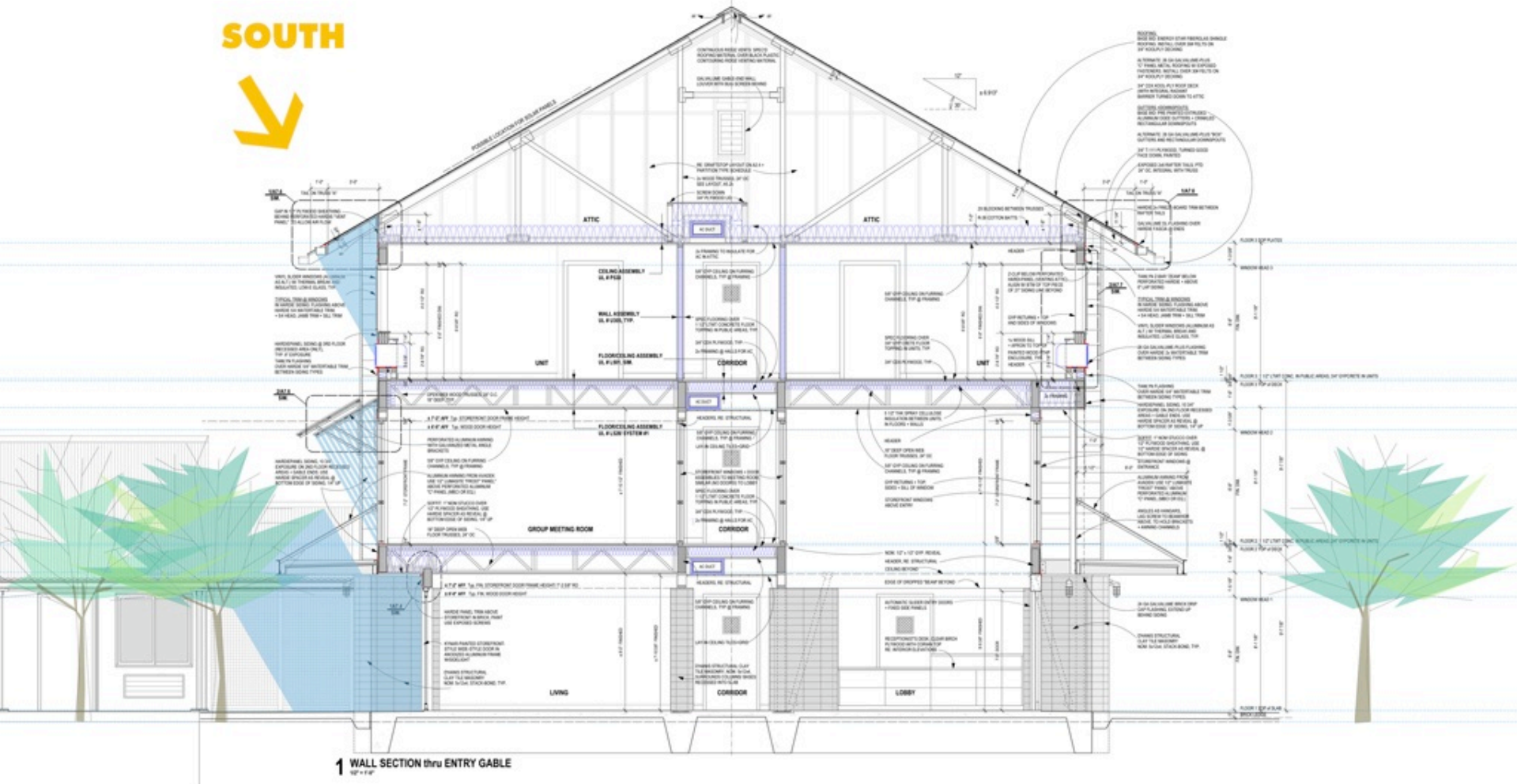


1. Integrated Project Planning

1.5 BUILDING ORIENTATION for solar design

d. 90% of SOUTH glazing is shaded in summer / unshaded in winter

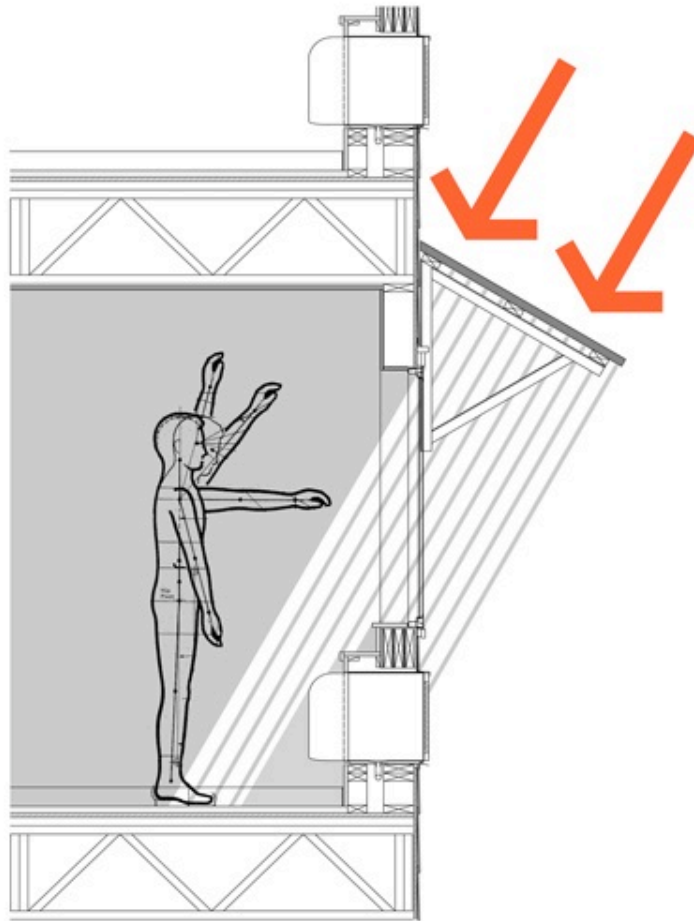
SOUTH



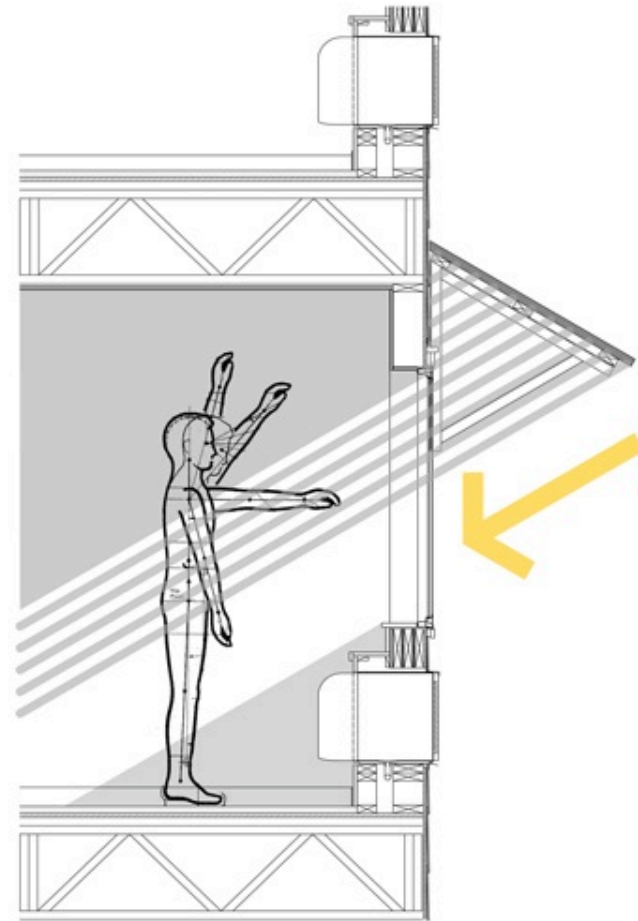
1. Integrated Project Planning

1.5 BUILDING ORIENTATION for solar design

d. 90% of SOUTH glazing is shaded in summer / unshaded in winter



Summer Sun



Winter Sun

3. Innovative or Regional Design

3.1 **Homerun: LL** 5.3 Transit Linkages
> 250 rides/weekday within 1/2 mile

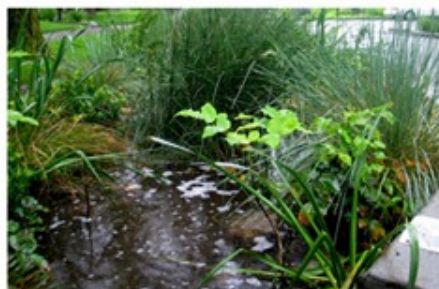
+1

3.2 **Homerun: WE** 2.1 Irrigation
Satisfied 5 instead of 3 of the Irrigation requirements

+1

3.3 **Homerun: SS** 6.3 Sensitive Density
> 40 units/acre

+1



Smart Growth / Smart Energy



Excellent Transit Connections



Sustainable Landscape Design



High Density/Efficient Services

2. Site Selection

2.2 Site Selection: *Meet ALL*

2

- a. Built Above the 100-year FLOODPLAIN (FEMA)
- b. Not built on HABITAT for endangered species
- c. Not built within 100' of WATER (including wetlands)
- d. Not built on previous public PARK land
- e. Not built on land with prime, unique, or significant SOILS

3. Preferred Locations

3.2 In-fill: *Existing Neighborhoods/Businesses*

2
1

3.3 Previously-Developed: *±1950's Apartments*

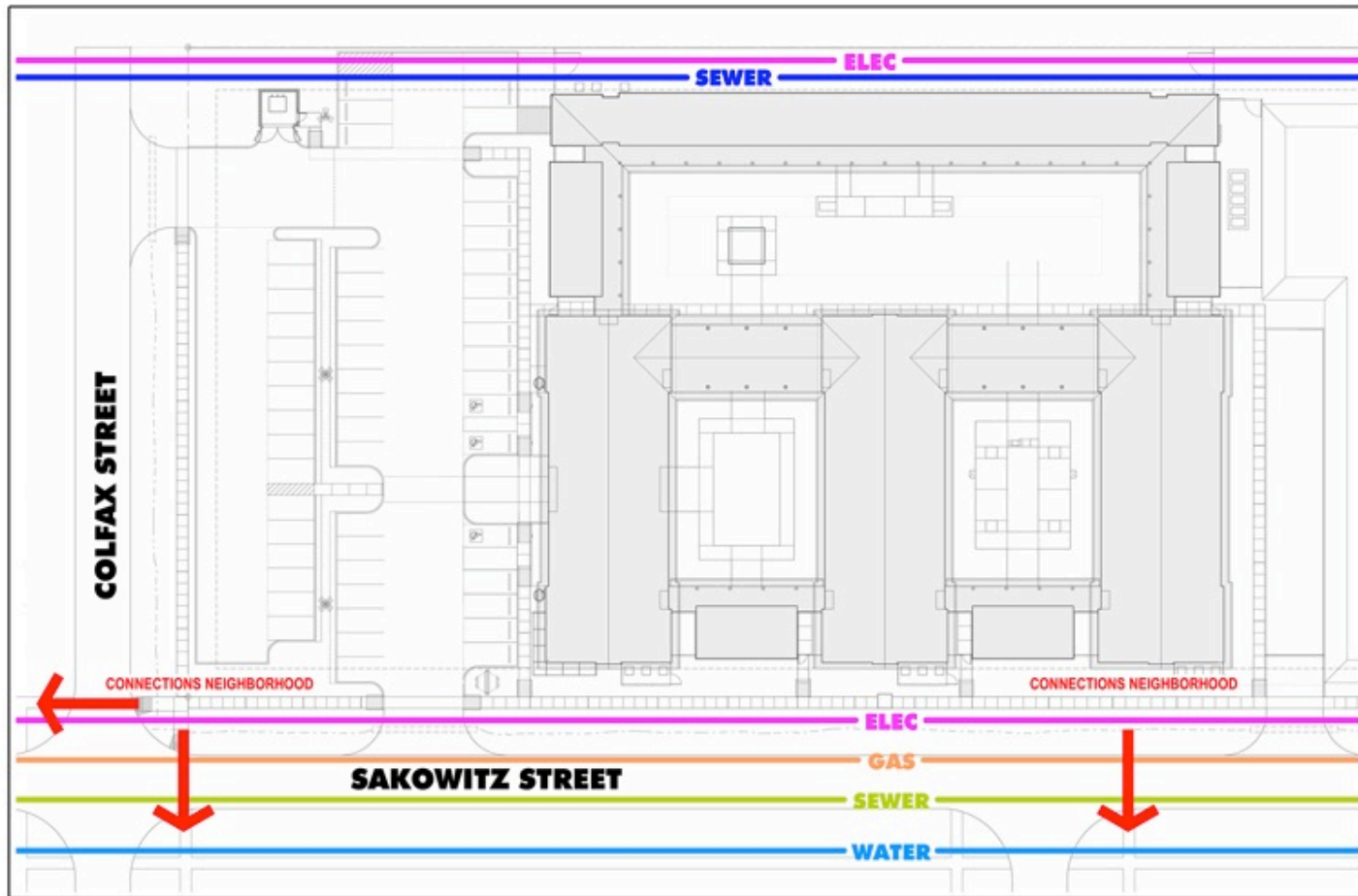


4. Existing Infrastructure

1

4.1 Existing Utilities + Sidewalks/Roads

Utilize existing infrastructure to avoid developing greenfields or over-taxing municipalities to provide new services

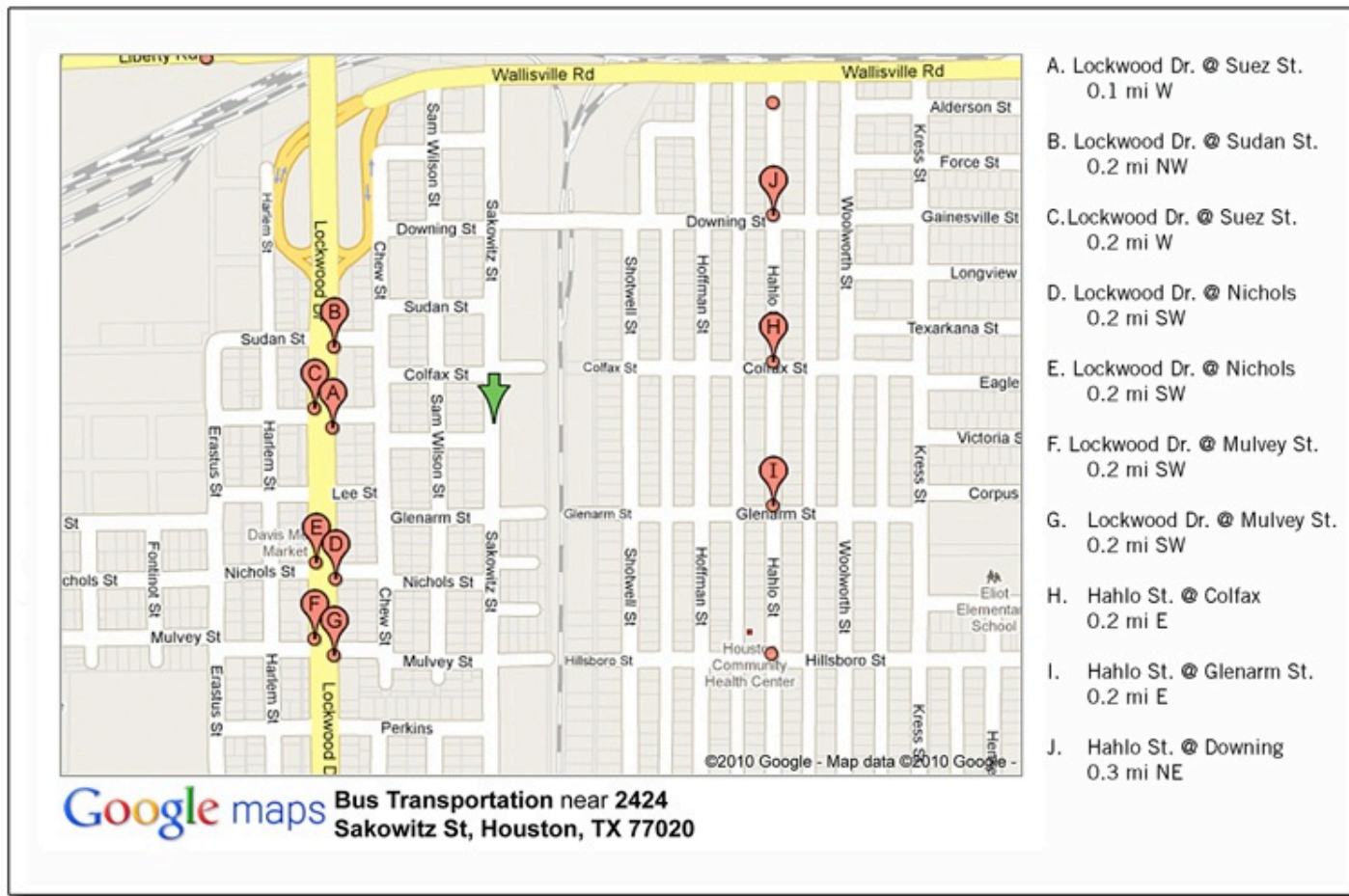


5. Existing Infrastructure

5.3 Outstanding Community Resources

c. Within 1/2 mile of transit services providing 125 rides/weekday

1



1. Site Stewardship

1.1 Erosion Control *(prerequisites)*

- a. Stockpile & Protect disturbed topsoil from EROSION
- b. Control RUN-OFF
- c. Protect SEWER INLETS
- d. Provide swales to divert water from HILLSIDE runoff
- e. Not built on land with prime, unique, or significant SOILS

1.2 Minimize Disturbed Area of Site

- d. Minimum of 7 units / acres

Actual: 166 units / 1.6 acres

1



Hay Bales @ Drainage Ditch



Silt Fence @ Property Line

2. Landscaping

2.1 No **INVASIVE** plants! (*prerequisite*)

2.2 **Basic Landscape DESIGN**

- a. Drought-tolerant TURF
- b. No turf in SHADE
- c. No turf on slopes > 25%
- d. Add appropriate SOIL AMENDMENTS
 - a. Till compacted soil minimum 6"

2

2.3 **Limit conventional TURF**

Actual turf coverage: 40%

2

2.4 **Install drought-tolerant PLANTS**

Actual tuff-plant usage: 90%

2



Star Jasmine



Knockout Roses!



Wax Myrtle



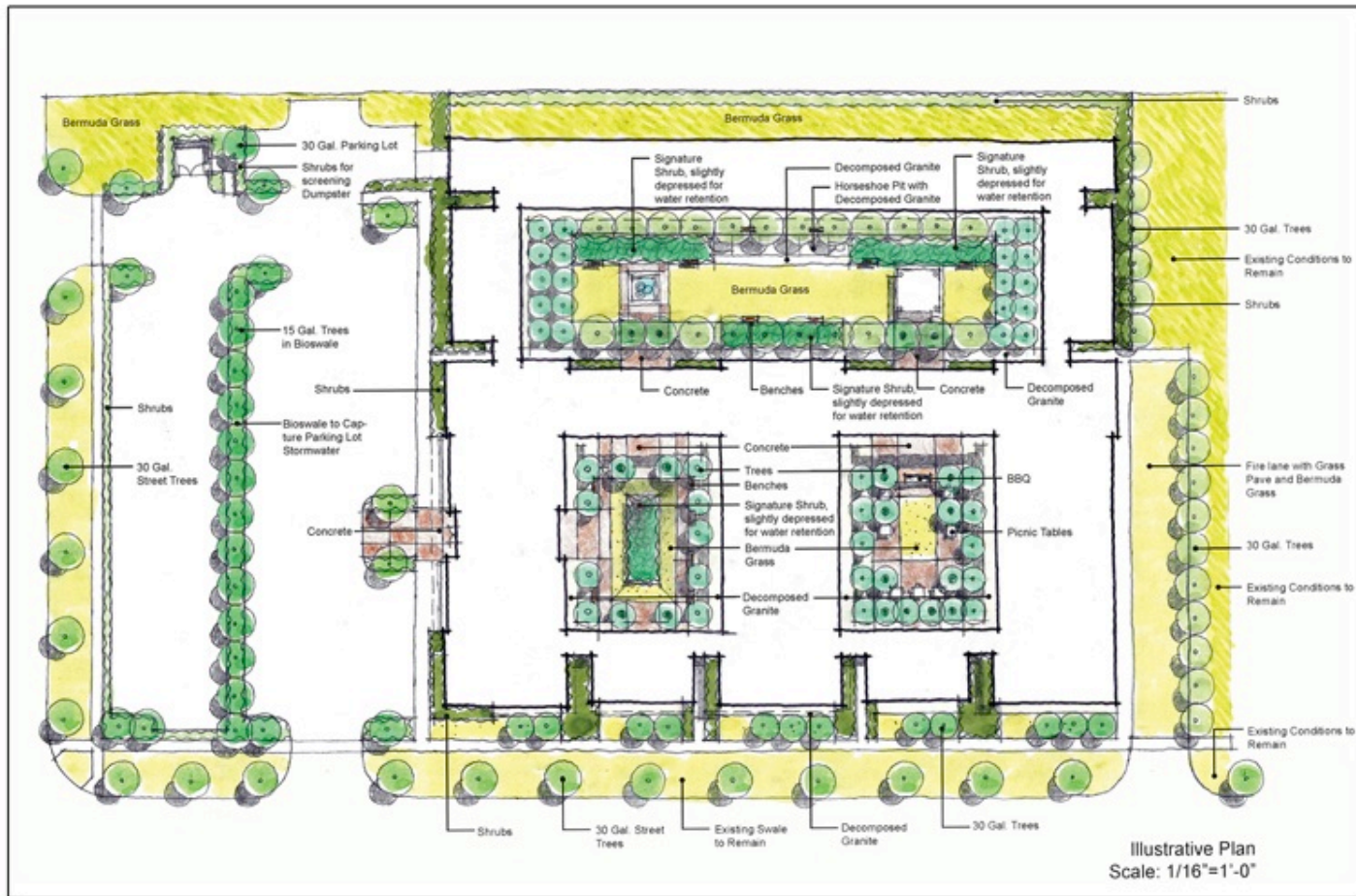
Parkinsonia

2. Landscaping

2.2 Creative DESIGN:

incorporating sustainable objectives with a variety of color/texture
+ seasonal response, helping to define the character of the exterior
spaces & their relationship to interior spaces

6



4. Surface Water Management

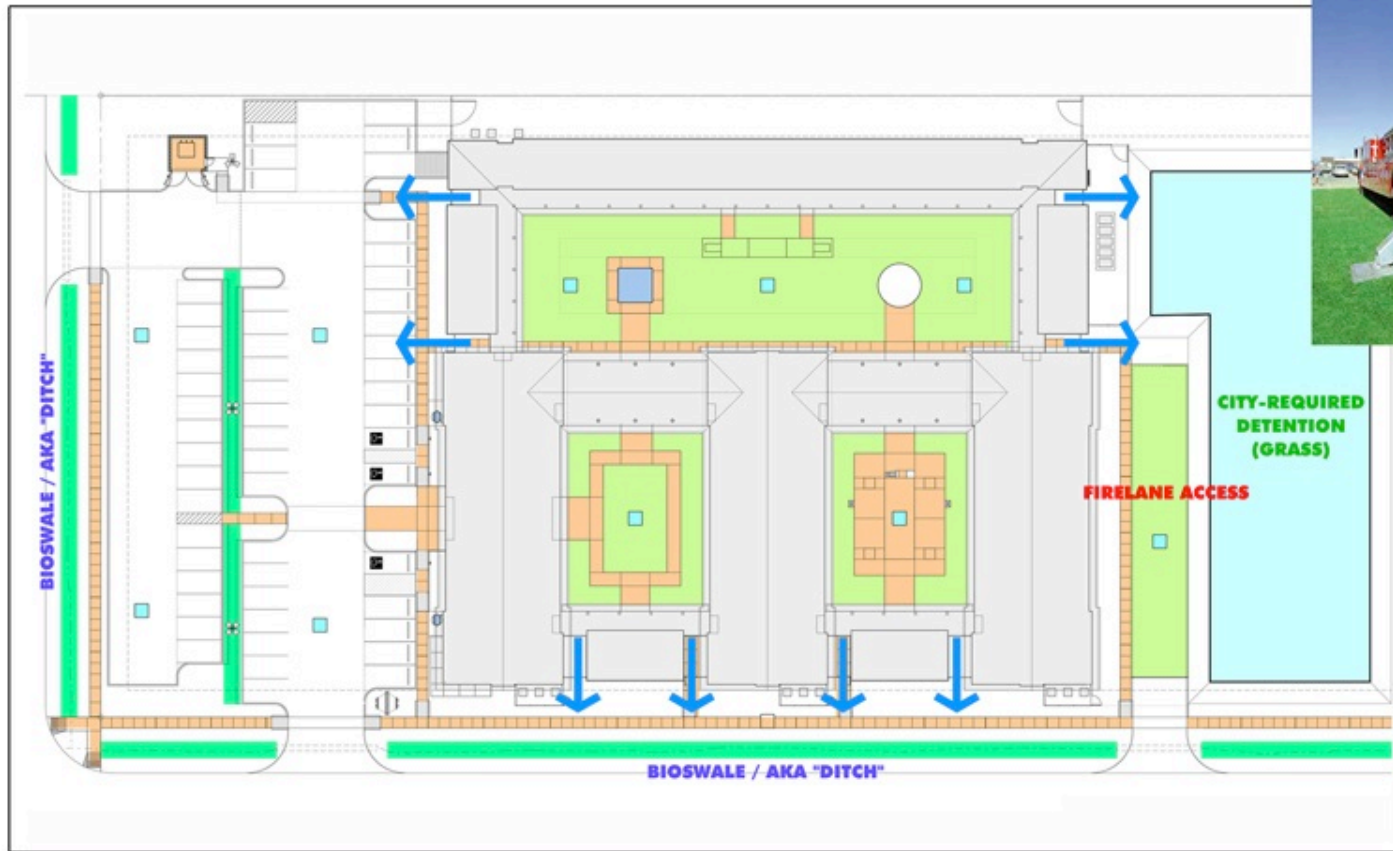
4.2 Permanent Erosion Controls: **LANDSCAPE PLAN**

2

4.3 Management of Roof Run-off: **CIVIL PLAN**

2

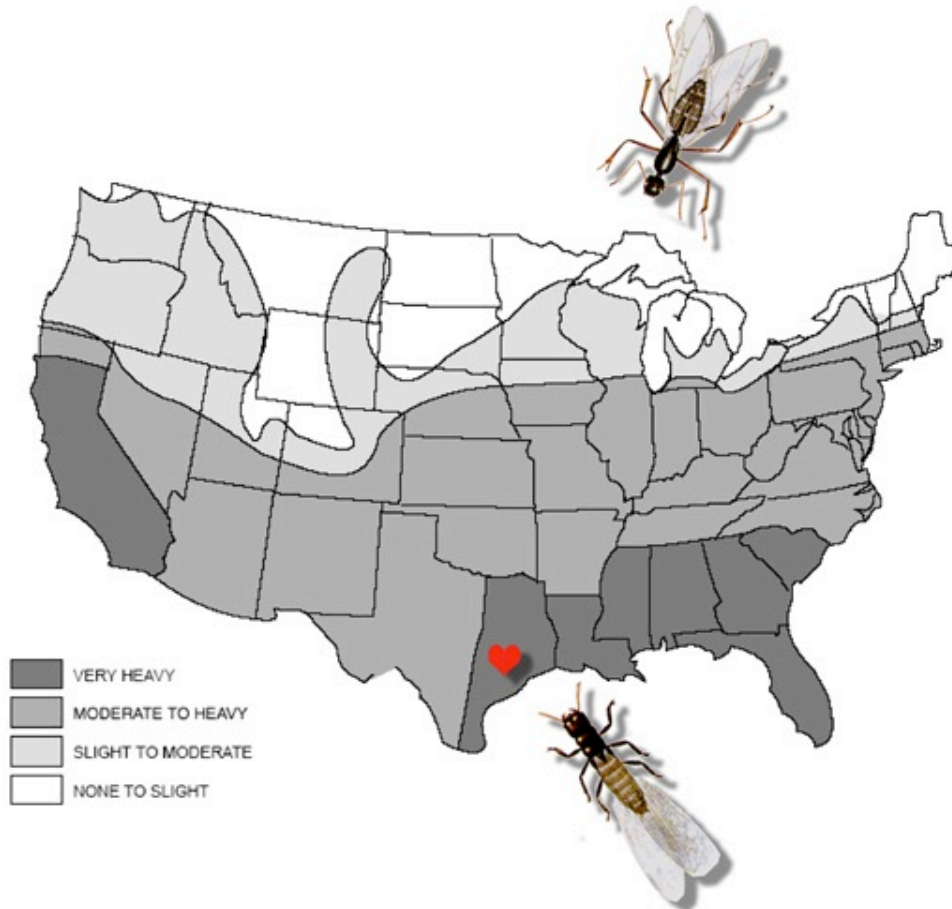
- a. Install permanent stormwater controls
- b. Professional design for stormwater management



5. Non-toxic Pest Control

5.1 Pest control ALTERNATIVES

- b. Seal external cracks with CAULK + INSECT SCREENS
- c. No wood-to-concrete connections / use dividers
- e. In VERY HEAVY TERMITE RISK areas:
 - i. Treat all wood with BORATE to 3' AFF
 - iii. Install steel mesh TERMITE BARRIER



1

Bora-Care®
Termiticide, Insecticide and Fungicide Concentrate



The long-term natural solution to eliminating wood destroying organisms.

Target Pests:

- ◆ Subterranean Termites
- ◆ Drywood Termites
- ◆ Formosan Termites
- ◆ Carpenter Ants
- ◆ Wood Destroying Beetles
- ◆ Wood Decaying Fungi



6. Compact Development

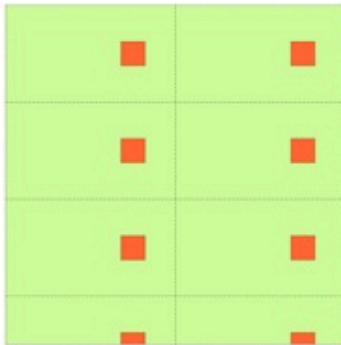
6.3 VERY HIGH Density

c. > 20 Units / Acre

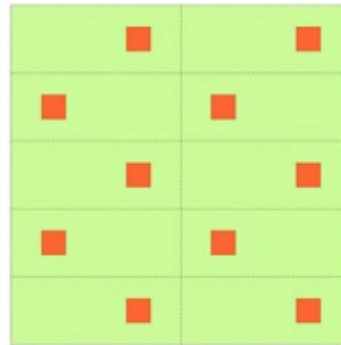
(re: *ID 3.3: INNOVATIVE DESIGN: Sensitive Density*)

ACTUAL DENSITY = 103.75 Units / Acre

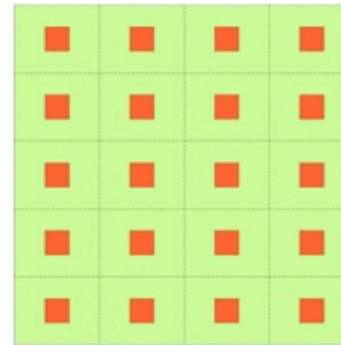
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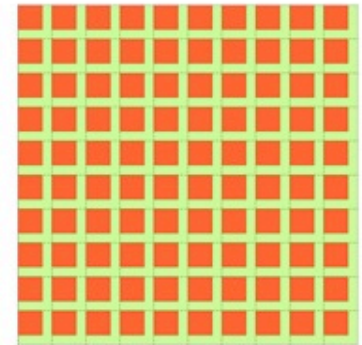
Moderate: 7+/acre



High: 10+/acre



Very High: 20+/acre



Actual: 100+/acre

2. Irrigation System

2.1 High-Efficiency Irrigation System

- c. Install central shut off valve
- d. Install submeter for the irrigation system
- f. Create separate zones for each type of bedding
- g. Install timer or controller for each watering zone
- k. Install moisture sensor or rain delay controller

2.2 Third-party Inspection

3

1

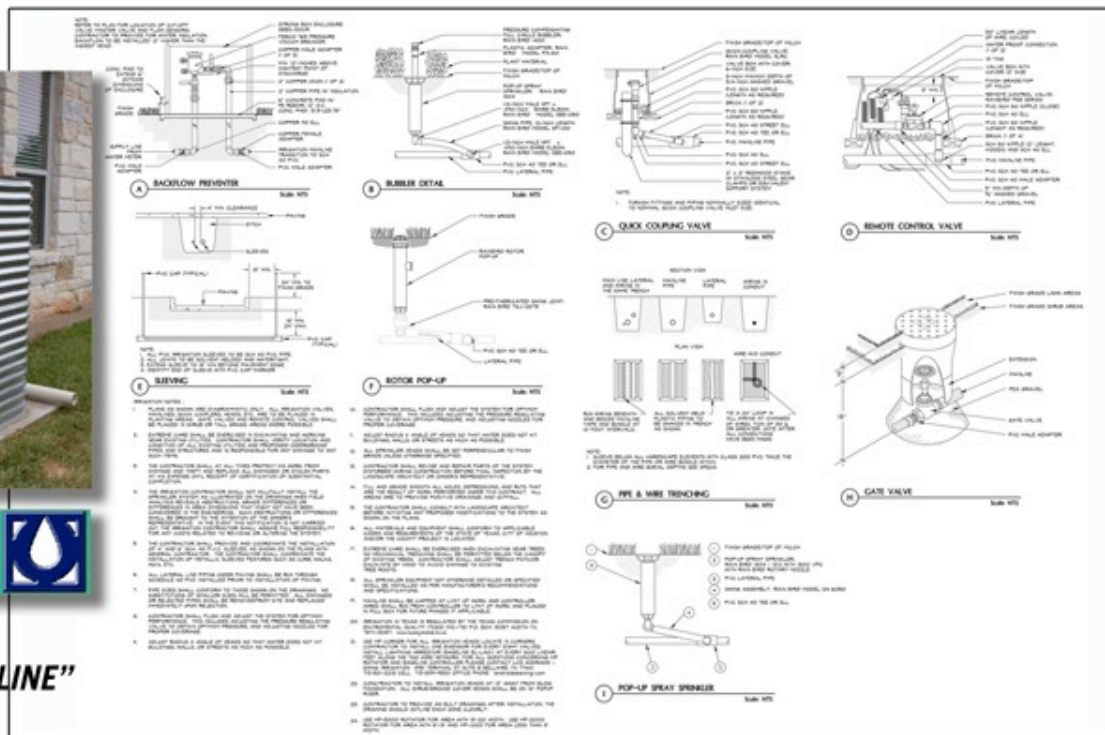


TexasRainWaterTanks.com

Call Us Today at 877-389-1099



300 gallon
"WATERHARVEST SLIMLINE"



3. Indoor Water Use

3.1 High-Efficiency Fixtures and Fittings

b. Average flow rate for all showers is < 2.0 gpm per stall

1

3.2 Very High-Efficiency Fixtures and Fittings

a. Lavatory faucets meet the EPA Water Sense specification

c. Average flow rate for all toilets is < 1.1 gpf

4



166



1.75 GPM Water Saving Showerhead, Arm and Flange



Buy it for looks. Buy it for life.*

FLOW

- Flow is limited to 1.5 gpm max (5.7L/min) at 60 psi,

168



CHATEAU®
Single-Handle Lavatory Faucet

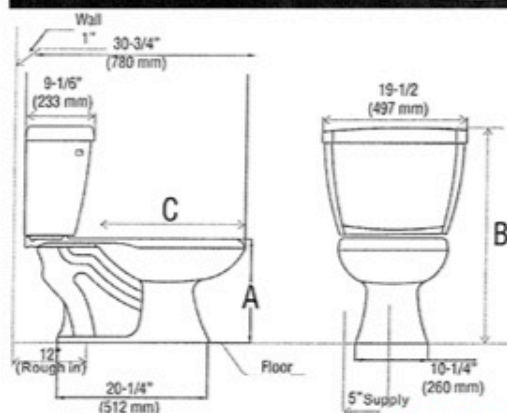


2

TOTO® Aqua® III Dual Flush ADA Toilet, 1.6 GPF / 0.9 GPF



Public Restrooms



166

Unit Bathrooms

1. Optimize Energy Performance

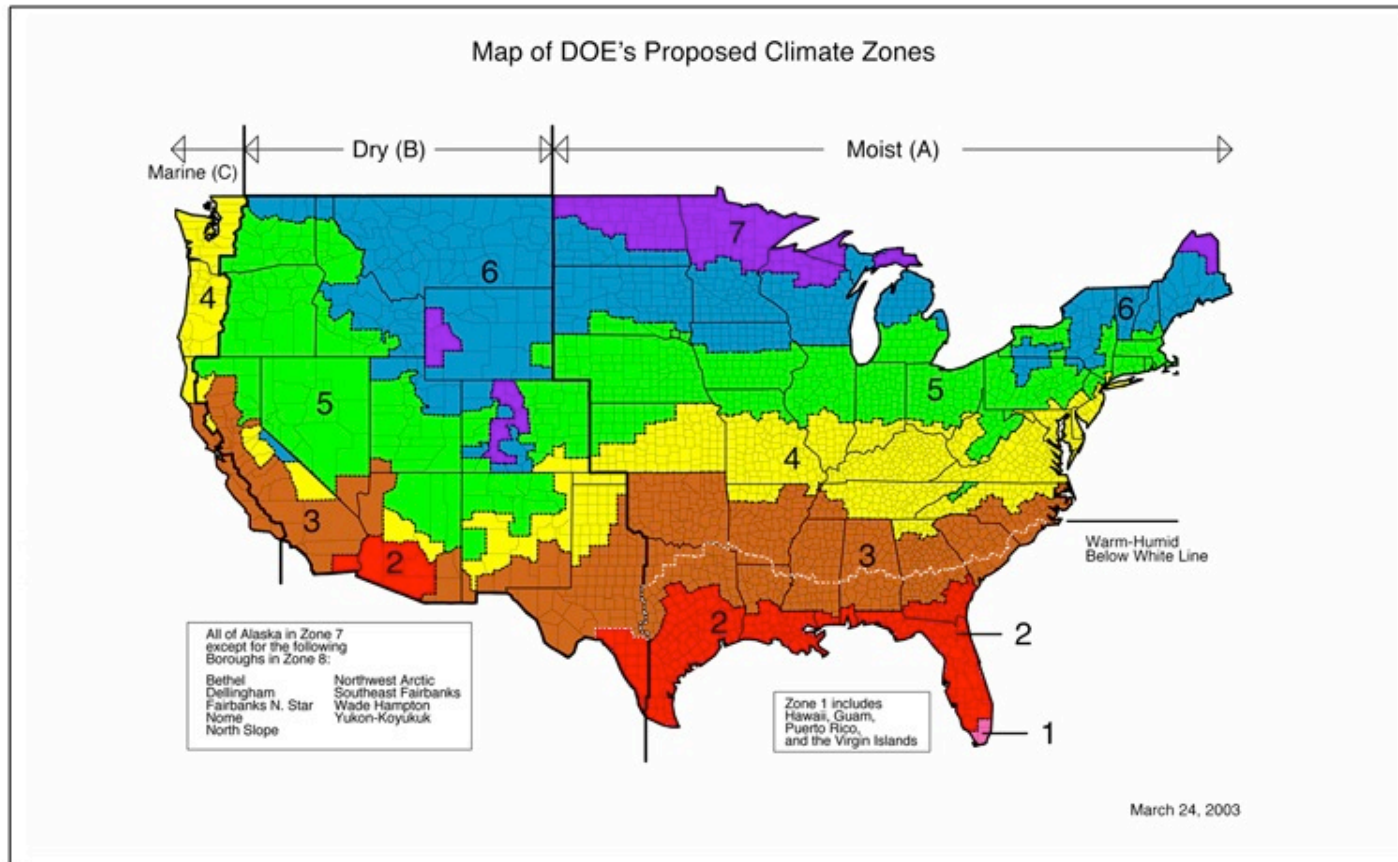
1.1 ENERGY STAR for Homes (*prerequisite*)

1.2 Exceptional Energy Performance

IECC Climate **Zone: 2**

HERS Index: **56** (*Home Energy Rating System*)

20



2. Insulation

2.1 Reduced Envelope Leakage (prerequisite)

3. Air Infiltration

3.1 Reduced Envelope Leakage (prerequisite)

4. Windows

4.1 Reduced Envelope Leakage (prerequisite)

High Performance Windows LOW-E insulated glass & “ZIP” tape seal

**“TECH Shield”
Reflective Barrier**



**INSULATION
Sprayed “CELBAR”**



5. Heating & Cooling Distribution

5.1 Reduced Distribution Losses

6. Heating & Cooling Equipment

6.1 Efficient Equipment



DigiSmart. PTAC

PACKAGED TERMINAL AIR CONDITIONERS AND HEAT PUMPS

Heating & Air Conditioning
Amana

Honeywell

PRO 2000 Thermostats

RIGHT BRAND. RIGHT PRICE.

Application Flexibility - Modes for 2 Heat/1 Cool Heat Pump or 1 Heat/1 Cool conventional



Simple-Set Programming - Basic operation makes it easy to set the heat, cool, fan and program schedules that fit your customers' lifestyle. Simplicity helps to reduce call backs.

Adaptive Intelligence Recovery - Ensures that the programmed temperature is reached by the programmed time.

Energy Savings* - Program to save up to 33% on annual heating and cooling costs.



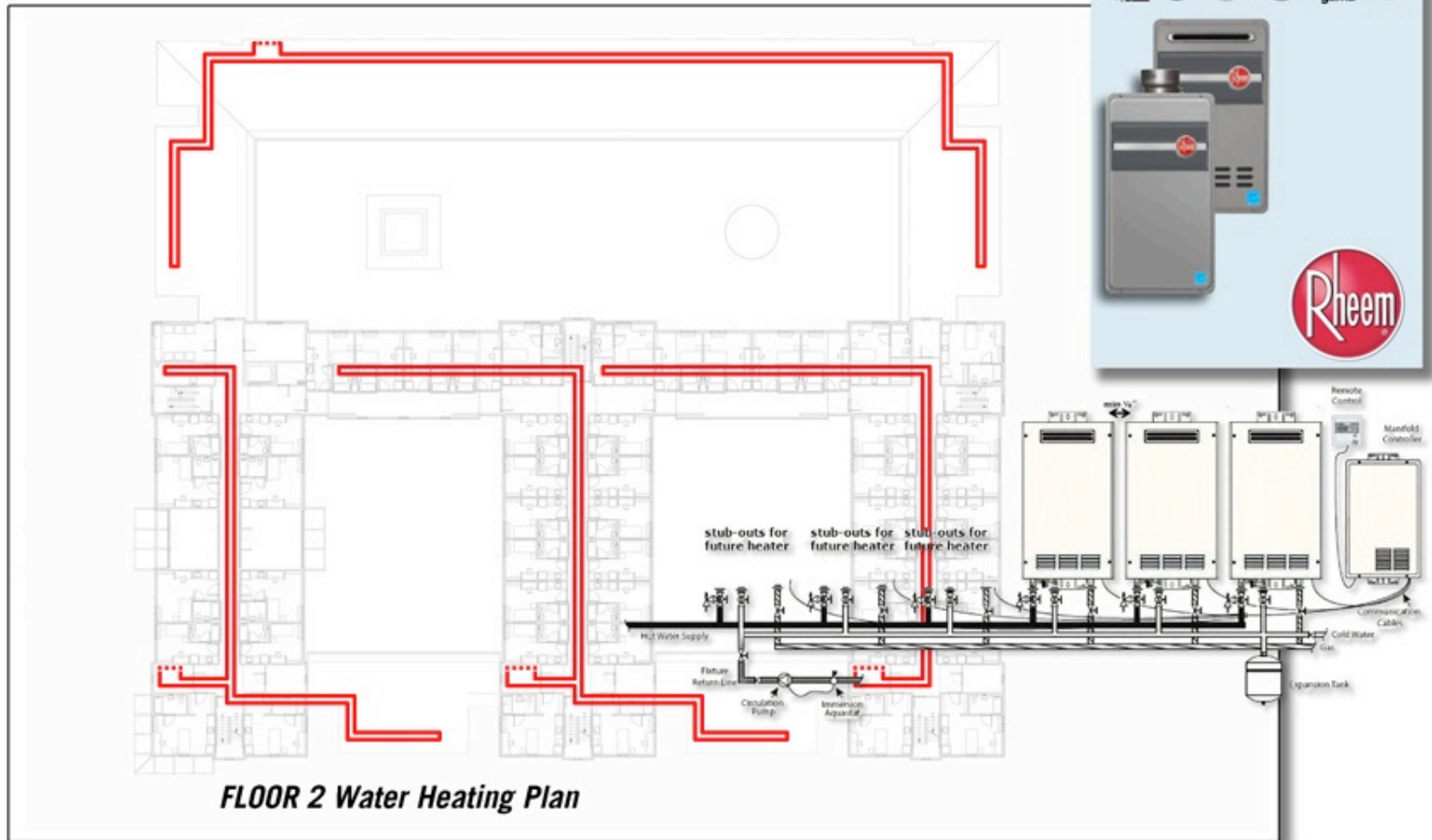
2-YEAR WARRANTY



ENERGY STAR

7. Water Heating System

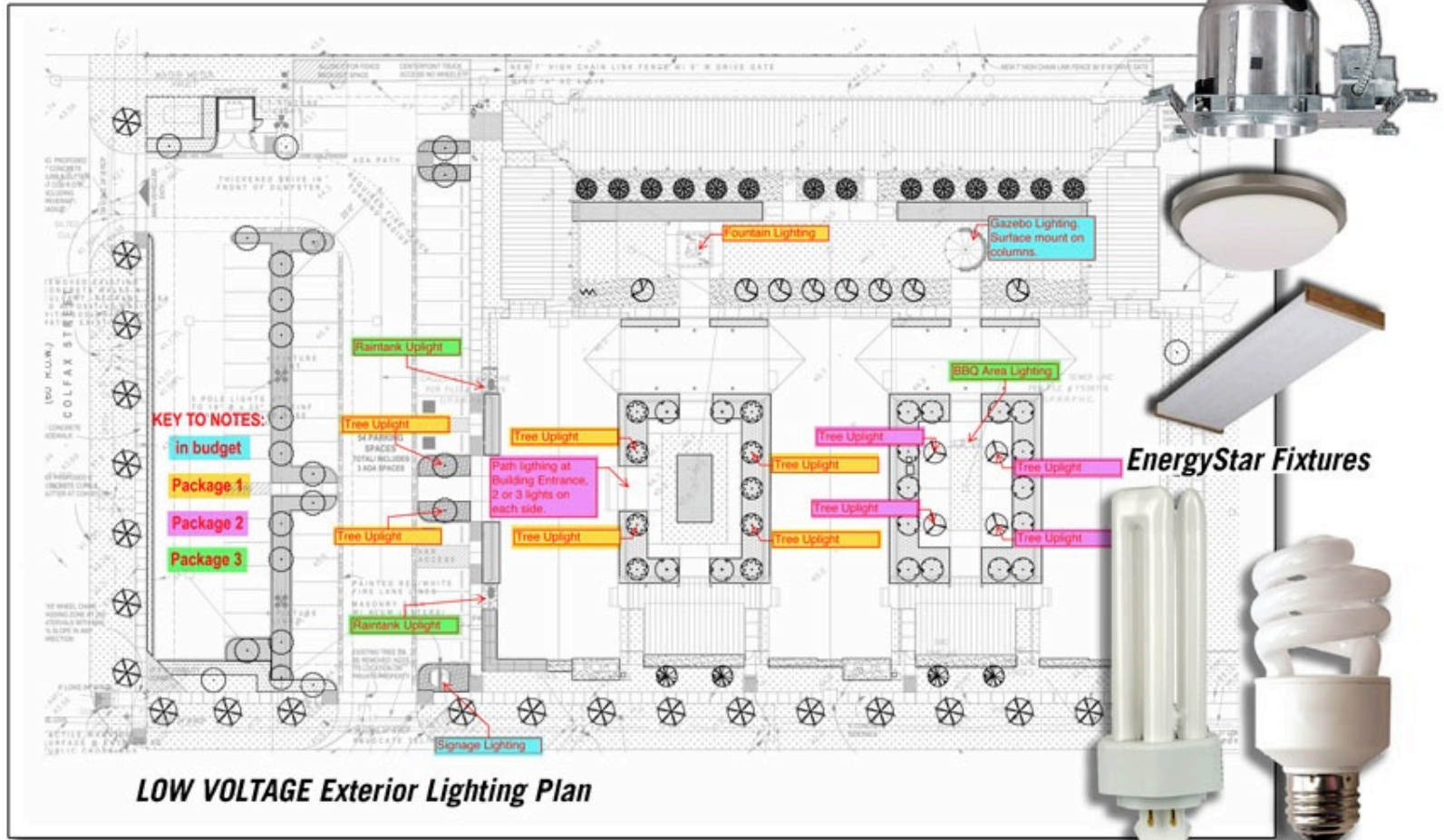
7.1 Tankless Water Heating Manifold Installation with Direct Return Circulation Efficient Distribution Plan, Insulation



8. Lighting

8.1 Efficient Fixtures & Lamping

Reduce Energy Consumption associated with interior & exterior lighting



LOW VOLTAGE Exterior Lighting Plan

Efficient Fluorescent Lamping

9. Appliances

9.1 Energy Star Appliances



S-Series 422 Ice Machine
SPA-160 Ice Dispenser



Commercial Ice Dispenser, Freezer + Refrigerator for Communal Kitchen (1)



Refrigerator and Freezer Frost-Free Apartment-Size SR-1031W/S



**Smaller size (10 cu ft) Ref/Freezer for Regular Units
Larger size (15.5 cu ft) Ref/Freezer for ADA + Big Units**



GTH16BBX
GE® ENERGY STAR® 15.5 Cu. Ft. Top-Freezer Refrigerator



11. Residential Refrigerant Management

11.1 Refrigerant Charge Test (*prerequisite*)

11.2 Appropriate HVAC Refrigerants
b. Use Non-HCFC refrigerants

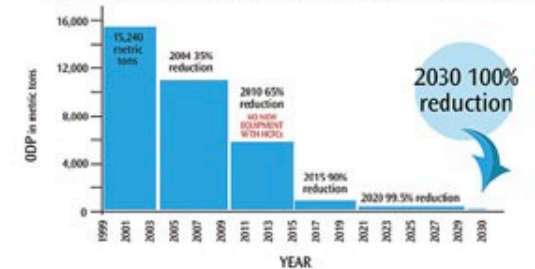
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Heating & Air Conditioning
Amana

PACKAGED TERMINAL AIR CONDITIONERS AND HEAT PUMPS
WITH OUR DIGISMART™ CONTROL BOARD & EMS



Montreal Protocol HCFC Phase-out Requirement



1. Material-Efficient Framing

1.1 Framing Order Waste Factor *(prerequisite)*

1.2 Detailed Framing Documents

1.3 Detailed Cut List and Lumber Order

1.4 Framing Efficiencies

- Precut framing packages
- Open-web floor trusses
- Ceiling joist spacing greater than 16" on center
- Floor joist spacing greater than 16" on center
- Roof rafter spacing greater than 16" on center
- Size headers for loads
- 2-STUD Corners

1

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3



2. Environmentally Preferable Products

2.1 FSC Certified Tropical Wood (*prerequisites*)

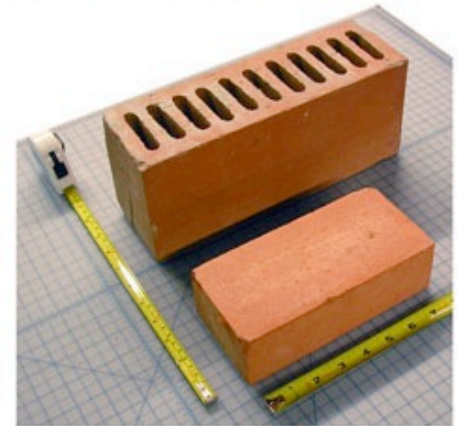
- a. Provide wood suppliers with a notice of preference for FSC-certified products
- b. Only use tropical wood that is FSC-certified

2.2 Environmentally Preferable Products

1. Masonry - Local Production
2. 90% Hard Flooring (SCS FloorScore) - Low Emission
4. Foundation Aggregate - Local Production
5. Gypsum Board - Local Production
6. Interior paint - Low Emission
7. Adhesive & Sealant - Low Emission
8. Insulation - EPP, Low Emission, Local Production
9. Wall Sheathing - Local Production



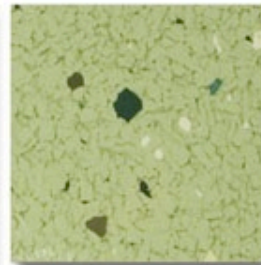
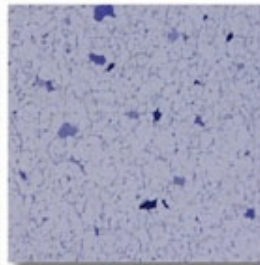
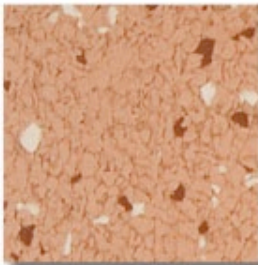
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D'HANIS Brick/San Antonio

AZROCK
LOOK SMART

PRODUCTS



Vinyl Tiles are a major part of the 100% Hard Surface Flooring used throughout.



Achieve
Solid Vinyl Tile



3. Waste Management

3.1 Construction Waste Management Planning

(prerequisites)

- a. Investigate local options for waste diversion
- b. Document diversion rate for construction waste

3.2 Construction Waste Reduction

- b. 50% of waste diverted



Dumpsters for Off-site Waste Separation

1.5

RAINSBOROUGH CORPORATION
REGULATORY TYPE V-TS TRANSFER STATION
 MONTHLY RECYCLING & TRACKING FORM
 5200 EGBERT BOUSTON, TEXAS 77047 713-785-8858 FAX 713-785-6641

MONTH: March 2010
 CUSTOMER NAME: CAMDEN
 SERVICE LOCATION: 2424 SARKOWITZ

VOLUMES MEASURED IN CUBIC YARDS

DATE	CONTAINER SIZE	METAL	CARDBOARD PAPER	CONCRETE	WOOD RAW	PLASTIC	TRASH
3-1	40	2	10	5	2	6	6
3-5	40	2	9	4	2	5	7
3-10	40	6	9	3	9	7	10
3-13	40	5	7	4	8	5	7
3-16	40	7	9	4	7	10	7
3-18	40	3	8	3	4	7	10
3-20	40	6	10	3	6	5	7
3-22	40	3	8	2	2	5	7
3-25	40	3	9	3	7	8	8
3-29	40	7	8	4	8	5	10
Total	400	63	93	35	81	61	67

Monthly Recycling Report

2. Combustion Venting

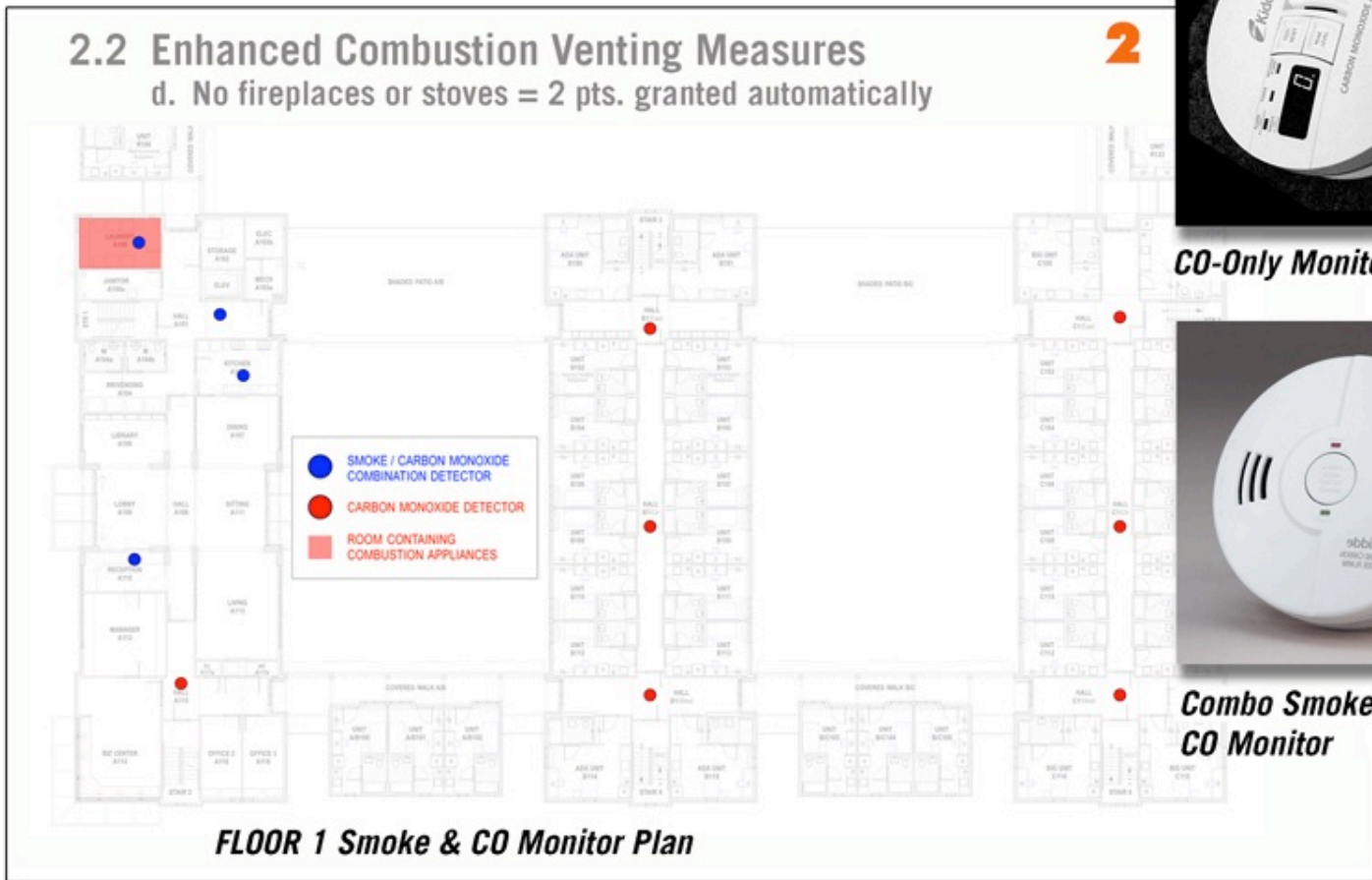
2.1 Basic Combustion Venting Measures *(prerequisites)*

- No unvented combustion appliances
- Carbon monoxide monitors on each floor
- All fireplaces and woodstoves have doors
- Space and water heating equipment has power-vented exhaust

2.2 Enhanced Combustion Venting Measures

d. No fireplaces or stoves = 2 pts. granted automatically

2



CO-Only Monitor



Combo Smoke + CO Monitor

4. Outdoor Ventilation

- 4.1 Basic Outdoor Air Ventilation *(prerequisite)*
c. Intermittent ventilation

4.3 3RD PARTY TESTING

5. Local Exhaust

- 5.1 Basic Local Exhaust *(prerequisite)*
a. Bathroom and kitchen exhaust meets ASHRAE Std. 62.2 air flow req.
b. Fans and ducts designed and installed to ASHRAE Std. 62.2
c. Air exhausted to outdoors
d. ENERGY STAR labeled bathroom exhaust fans

5.3 3RD PARTY TESTING

6. Distribution of Space Heating and Cooling

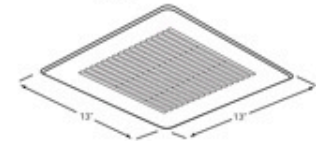
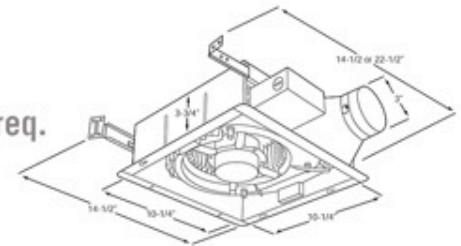
- 6.1 Room-by-Room Load Calculations *(prerequisite)*

6.3 3RD PARTY TESTING



Panasonic
WhisperValue
EXHAUST FAN

FV-05VS1 (50 CFM)



Typical Unit Bath Exhaust

7. Air Filtering

7.1 Good Filters *(prerequisite)*

8. Contaminant Control

8.1 Indoor Contaminant Control *during Construction*

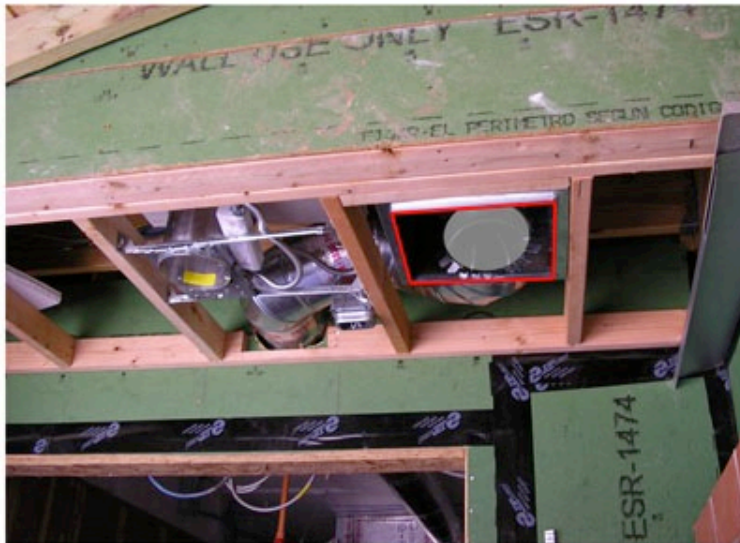
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10. Garage Pollutant Protection

10.1 No HVAC in Garage *(prerequisite)*

10.4 Detached or NO Garage

3



Screening of Outdoor Fresh Air Supply Grilles



Keep HVAC Ducts sealed during construction

1. Education of Tenant + Public

1.1 Basic Operations Training (*prerequisites*)

- Operations and training manual
- One-hour walkthrough with occupant(s)

1.3 Public Awareness

- Website about features and benefits of LEED homes
- Newspaper article on the project
- Display LEED signage on the exterior

1



TexasArchitect 1/2 2010



displayed in Houston Downtown Tunnel System

2. Education of the Building Manager

2.1 Education of the Building Manager

- a. Operations and training manual
- b. One-hour walk-through with building manager

1



New Hope Housing Staff @ SAKOWITZ Ground-breaking 9/24/2009