

ATTACHMENT C



DESIGN PACKAGE COVER SHEET

HOUSTON AIRPORT SYSTEM NOISE MITIGATION PROGRAM

Homeowner: Townes	Phase: Phase 2
Address: 7511 Pin Oak Dr	PPN: 7
Town: Humble	Revised:

- Attachments:
- General Construction Scope of Work
 - HVAC Scope of Work
 - Electrical Scope of Work
 - General Notes
 - Photograph
 - Floor Plan (s)
 - Window Schedule
 - Door Schedule
 - Mechanical Schedule
 - Electrical Data

I (we) as the owner(s) of the above-referenced residence accept the attached scopes of work for the installation of sound insulation measures at the above-referenced residence as part of the Houston Airport System Noise Mitigation Program. I (we) understand that by signing and returning this document, I (we) will not be allowed to request further modifications to the scope of work.

Signature: _____

Date: _____

Signature: _____

Date: _____

Project: HOUSTON AIRPORT SYSTEM NOISE MITIGATION PROGRAM

Address: 7511 Pin Oak Dr

Phase: Phase 2

PPN: 7

General

- [] Replace windows and storm windows with new acoustical and non-acoustical windows and storms as scheduled.
- [] Provide fiberglass insulation around interior perimeter of all new windows and doors.
- [] Provide sealant around interior and exterior perimeter of all windows and doors.
- [] Provide acoustical storm windows at skylights as scheduled.
- [] Provide new exterior brake metal at all window replacement locations.
- [] Replace existing doors with new prime doors and storm doors as scheduled.
- [] Remove whole house fan. Reframe patch and restore ceiling to match existing conditions and finishes.
- [] Provide and install new pull down stairs at location indicated on floor plan. Contractor is responsible for structural modifications and electrical relocations necessary for installation of stairs. Provide flooring from stairs to the operating panel of unit. Stairs are for service only and not meant to hold weight of furnace.
- [] Insulate accessible areas of attic with blown Insulation to a R-Value of 38.
- [] Ensure that existing attic vents are in working order.
- [] Increase attic ventilation with soffit vents. (Typ. of 12)
- [] Test and renovate lead-based paint according to the EPA regulation 40 CFR part 745 subpart E "Residential Property Renovation".
- [] See Division 1 through 10 Specifications and Contract Details for detailed Scope of Work.

HVAC

- [] Replace 80% Efficiency horizontal gas-fired forced air furnace with new horizontal gas-fired forced air furnace/ air conditioning system with completely insulated ductwork system in attic. Provide light fixture and smoke detector at location of forced air unit.
- [] Remove visible ductwork in attic and provide new rigid ductwork. New ductwork shall tie into existing ductwork configuration. Install and insulate new ductwork. Approximate length of new ductwork shall be 200 LF. To be determined by contractor/engineer.
- [] Provide thermostat(s) as indicated on floor plans.
- [] Provide new electronic air cleaner. Reconfigure ductwork to accommodate air cleaner installation.
- [] Provide new B-vent stack. Conform to NFPA 5A, 112, 90A & 90B, and ANSI Z223.1.
- [] Provide new electronic outside air damper and associated ductwork with digital ventilation controller, wallcap and locking quadrant damper. Controller must meet ASHRAE 62.2-2010 standards for ventilation.
- [] Patch and restore all surfaces disturbed by ductwork installation.
- [] Replace bathroom fan(s) and/or fanlight(s) with new unit(s). Terminate exhaust ductwork at exterior of home with exterior hood/rain cap. To be determined at time of construction by contractor/engineer.

Address: 7511 Pin Oak Dr

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- [] Provide new aluminum downspout enclosure to conceal line set when run along the exterior of the home. Color of downspout shall match existing siding as closely as possible.
- [] Ensure that all existing ductwork is in working order.
- [] Perform HVAC air balance.
- [] Provide and Apply sealant at new exterior mechanical penetrations.
- [] See floor plan(s) for approximate locations of mechanical equipment and mechanical schedule for quantities/sizing. Coordinate all final locations with Homeowner and Architect.
- [] See Division 2, 23, 26 and 28 Specifications and Contract Details for detailed Scope of Work.

Electrical

- [] Provide new 125 amp. service entrance panel.
- [] Provide new copper ground rod with #4 AWG grounding electrode conductor in conduit to grounding lug of new service entrance panel.
- [] Provide power and control wiring to new digital ventilation controller and electronic outside air damper.
- [] Provide power and control wiring to new bath exhaust fans.
- [] Provide power and control wiring to new switch and fixture in attic, associated with new HVAC installation.
- [] Verify and ensure that new furnace, high velocity and/or ductless unit is on a dedicated circuit.
- [] Provide carbon monoxide detector(s) as required per specifications.
- [] Provide smoke detectors in accordance with local codes.
- [] Provide new service disconnect(s) for new air conditioning condenser(s)
- [] See Division(s) 2, 26 and 28 Specifications and Contract Details for detailed Scope of Work.

Miscellaneous Notes


- [] Home has brick siding.
- [] Home is on a slab foundation.
- [] Home has approximately 8 inches of blown attic insulation.
- [] Homeowner shall coordinate with security system company to disconnect and reinstall security system to existing windows and doors to accommodate window and door replacements.

PHOTO



FRONT OF RESIDENCE

HOUSTON AIRPORT SYSTEM NOISE MITIGATION PROGRAM

	Phase:	Phase 2
	PPN:	7
Address:	7511 Pin Oak Dr	Revised:
Town:	Humble	 QuieterHome® Program

BASEMENT/CRAWLSPACE PLAN

NOT TO SCALE

HOUSTON AIRPORT SYSTEM NOISE MITIGATION PROGRAM

Phase: **Phase 2**

PPN: **7**

Address: **7511 Pin Oak Dr**

Revised:

Town: **Humble**



QuieterHome® Program

Duct routings and locations are approximate and may differ from final constructed conditions. Floor plan is a schematic representation only.

FIRST FLOOR PLAN

NOT TO SCALE

HOUSTON AIRPORT SYSTEM NOISE MITIGATION PROGRAM

Phase: Phase 2

PPN: 7

Revised:

Address: 7511 Pin Oak Dr

Town: Humble



QuieterHome® Program

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SECOND FLOOR PLAN

NOT TO SCALE

HOUSTON AIRPORT SYSTEM NOISE MITIGATION PROGRAM

Phase: Phase 2

PPN: 7

Revised:

Address: 7511 Pin Oak Dr

Town: Humble



QuieterHome® Program


Duct routings and locations are approximate and may differ from final constructed conditions. Floor plan is a schematic representation only.

DOOR SCHEDULE


DOOR	W	H	EXIST. STORM	NEW PRIME	NEW STORM	NEW PATIO DOOR	NEW SL STORM	HARDWARE	DETAIL	REMARKS
A	36	78	YES	YES	YES	NO	NO	STANDARD	20	RELOCATE EXISTING DOORBELL. CONCRETE AT SILL.
B	31	78	YES	YES	YES	NO	NO	STANDARD	20	CONCRETE AT SILL.
C	33	78	NO	YES	NO	NO	NO	STANDARD	20	FIRE RATED DOOR.

Notes:

HOUSTON AIRPORT SYSTEM NOISE MITIGATION PROGRAM

	Phase: Phase 2	PPN: 7
Address: 7511 Pin Oak Dr	 QuieterHome® Program	
Town: Humble		

MECHANICAL SCHEDULE

Existing Equipment			New Equipment				
	System #1	System #2	New / Replace	System #1	System #2	System #3	System #4
System Description	Furnace 80%			Furnace 80%			
Location (See Floor plans)	Attic			Attic			
Age (furnace / condenser)	20/20	/					
FURNACE-A/C SYSTEMS							
Gas Fired Up-Flow							
Gas Fired Down-Flow							
Gas Fired Horizontal (90% / 80%)	FH-1		REPLACE 80%	FH-1			
Packaged System (Gas / Electric)							
Condenser / Heat Pump							
Floor Heater							
Wall / Space Heater							
Boiler							
DUCTLESS SYSTEM							
Ductless (Heat Pump)							
Ductless (Cooling Only)							
HIGH VELOCITY SYSTEMS							
Cooling Only (Horizontal)							
Cooling Only (Vertical)							
MECHANICAL VENTILATION							
Outside Air/Humidistat Damper (Vol)							
Outside Air/Humidistat DamperElec			NEW	Yes			
MECHANICAL ACCESSORIES							
Electronic Air Cleaner			NEW	Yes			
Unit Heaters							
Condensate Pump							
Sidewall Vent Kit (Power Vent)	Yes		REPLACE	Yes			
B-vent							
Thermostat	Digital		Digital	Yes			
Humidifier & Humidistat							
Line Set Enclosure	Yes		REPLACE	Yes			
Chimney Liner							
SIZING							
Discharge size: (inches)							
Inlet size: (inches)							
Flue Size							
Existing System Input (BTU)	75,000						
Existing A/C system size (Tons)	3						
*Forced Air System Heating Capacity - minimum BTU Output							
*Air Conditioning System Capacity -calculated sizing Tons							
				New	New	New	New
				75,000	0	0	0
				3	0	0	0
NEW MISCELLANEOUS EQUIPMENT			Existing	New / Replace	QTY	Location	
Bathroom Exhaust Fan		Yes	REPLACE	2	Bath 1 and 2		
Bathroom Exhaust Fan with Light							
Bathroom Exhaust Fan/Light & Heat Lamp							
AREAS SERVICED							
Basement	0	1st Floor	0	2nd Floor	0	3rd Floor	0
Floor Plan Total (SF)	0						
Installation Notes: Existing System 1							
Existing System 2							
New System 1							
New System 2							
* New Equipment shall be 90% minimum Efficiency with 13 SEER minimum Air Conditioning (Unless otherwise noted)							
HOUSTON AIRPORT SYSTEM NOISE MITIGATION PROGRAM							
			Phase:		PPN#:		
Address: 7511 Pin Oak Dr			Phase 2		7		
Town: Humble					QuieterHome® Program		

ELECTRICAL DATA

EXISTING ELECTRICAL DATA

Meter location: <u>Right</u>	Meter condition: <u>Good</u>
Cable rating: <u>125 amp</u>	Cable condition: <u>Good</u>
Panel No. 1 rating: <u>125 amp</u>	Panel No. 1 type: <u>Breakers</u>
Panel No. 2 rating: <u>N/A</u>	Panel No. 2 type: <u>N/A</u>

Panel No. 1 spaces: <u>24</u>	Main breaker (size): <u>125 amp</u>																					
<table style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <td style="width: 33%;">15 Amp(sp) <u>15</u></td> <td style="width: 33%;">15 Amp(dp) <u>0</u></td> <td style="width: 33%;">10 Amp(mini) <u>0</u></td> </tr> <tr> <td>20 Amp(sp) <u>4</u></td> <td>20 Amp(dp) <u>0</u></td> <td>15 Amp(mini) <u>0</u></td> </tr> <tr> <td>30 Amp(sp) <u>0</u></td> <td>30 Amp(dp) <u>0</u></td> <td>20 Amp(mini) <u>0</u></td> </tr> <tr> <td>40 Amp(sp) <u>0</u></td> <td>40 Amp(dp) <u>0</u></td> <td>30 Amp(mini) <u>2</u></td> </tr> <tr> <td>50 Amp(sp) <u>0</u></td> <td>50 Amp(dp) <u>0</u></td> <td>Others (mini) <u>3</u></td> </tr> <tr> <td>60 Amp(sp) <u>0</u></td> <td>60 Amp(dp) <u>0</u></td> <td># of spares <u>4</u></td> </tr> <tr> <td>Others (sp) <u>0</u></td> <td>Others (dp) <u>0</u></td> <td></td> </tr> </table>		15 Amp(sp) <u>15</u>	15 Amp(dp) <u>0</u>	10 Amp(mini) <u>0</u>	20 Amp(sp) <u>4</u>	20 Amp(dp) <u>0</u>	15 Amp(mini) <u>0</u>	30 Amp(sp) <u>0</u>	30 Amp(dp) <u>0</u>	20 Amp(mini) <u>0</u>	40 Amp(sp) <u>0</u>	40 Amp(dp) <u>0</u>	30 Amp(mini) <u>2</u>	50 Amp(sp) <u>0</u>	50 Amp(dp) <u>0</u>	Others (mini) <u>3</u>	60 Amp(sp) <u>0</u>	60 Amp(dp) <u>0</u>	# of spares <u>4</u>	Others (sp) <u>0</u>	Others (dp) <u>0</u>	
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Panel No. 1 location: <u>Exterior Wal</u>	Wall finish at location: <u>Block</u>																					


Panel No. 2 spaces: <u>0</u>	Main breaker (size): _____																					
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Others (sp) <u>0</u>	Others (dp) <u>0</u>																					
Panel No. 2 location: _____	Wall finish at location: _____																					

Major electrical appliances: A/C

NEW EQUIPMENT

Cable rating: <u>N/A</u>	Panel rating: <u>125A</u>
Mast weatherhead: <u>No</u>	Meter base: <u>No</u>
Service disconnect: <u>Yes</u>	Grounding rod: <u>No</u>

HOUSTON AIRPORT SYSTEM NOISE MITIGATION PROGRAM

	Phase: <u>Phase 2</u>
	PPN: <u>7</u>
Address: <u>7511 Pin Oak Dr</u>	Revised: _____
Town: <u>Humble</u>	 QuieterHome® Program



DESIGN PACKAGE COVER SHEET

HOUSTON AIRPORT SYSTEM NOISE MITIGATION PROGRAM

Homeowner: Probst	Phase: Phase 2
Address: 1826 Pecan Ln	PPN: 46
Town: Humble	Revised:

- Attachments:
- General Construction Scope of Work
 - HVAC Scope of Work
 - Electrical Scope of Work
 - General Notes
 - Photograph
 - Floor Plan (s)
 - Window Schedule
 - Door Schedule
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I (we) as the owner(s) of the above-referenced residence accept the attached scopes of work for the installation of sound insulation measures at the above-referenced residence as part of the Houston Airport System Noise Mitigation Program. I (we) understand that by signing and returning this document, I (we) will not be allowed to request further modifications to the scope of work.

Signature: _____

Date: _____

Signature: _____

Date: _____

Project: HOUSTON AIRPORT SYSTEM NOISE MITIGATION PROGRAM

Address: 1826 Pecan Ln

Phase: Phase 2

PPN: 46

General

- [] Replace windows and storm windows with new acoustical and non-acoustical windows and storms as scheduled.
- [] Provide fiberglass insulation around interior perimeter of all new windows and doors.
- [] Provide sealant around interior and exterior perimeter of all windows and doors.
- [] Provide acoustical storm windows as scheduled.
- [] Provide new exterior brake metal at all window replacement locations.
- [] Replace existing doors with new prime doors and storm doors as scheduled.
- [] Provide and install new pull down stairs at location indicated on floor plan. Contractor is responsible for structural modifications and electrical relocations necessary for installation of stairs. Provide flooring from stairs to the operating panel of unit. Stairs are for service only and not meant to hold weight of furnace.
- [] Insulate accessible areas of attic with blown Insulation to a R-Value of 38.
- [] Ensure that existing attic vents are in working order.
- [] Increase attic ventilation with soffit vents. (Typ. of 8)
- [] Remove existing insulation prior to installing new. (To be determined by contractor/engineer)
- [] See Division 1 through 10 Specifications and Contract Details for detailed Scope of Work.

HVAC

- [] Replace 80% Efficiency horizontal gas-fired forced air furnace with new horizontal gas-fired forced air furnace/ air conditioning system with completely insulated ductwork system in attic. Provide light fixture and smoke detector at location of forced air unit.
- [] Remove visible ductwork in attic and provide new rigid ductwork. New ductwork shall tie into existing ductwork configuration. Install and insulate new ductwork. Approximate length of new ductwork shall be 200 LF. To be determined by contractor/engineer.
- [] Provide thermostat(s) as noted.
- [] Provide new electronic air cleaner. Reconfigure ductwork to accommodate air cleaner installation.
- [] Provide new B-vent stack. Conform to NFPA 5A, 112, 90A & 90B, and ANSI Z223.1.
- [] Provide new electronic outside air damper and associated ductwork with digital ventilation controller, wallcap and locking quadrant damper. Controller must meet ASHRAE 62.2-2010 standards for ventilation.
- [] Patch and restore all surfaces disturbed by ductwork installation.
- [] Provide new bathroom fan(s) and/or fanlight(s). Terminate exhaust ductwork at exterior of home with exterior hood/rain cap. To be determined at time of construction by contractor/engineer.
- [] Inspect existing return air ductwork and associated grills and clean if necessary.

Address: 1826 Pecan Ln

Phase: Phase 2

PPN: 46

- [] Provide new aluminum downspout enclosure to conceal line set when run along the exterior of the home. Color of downspout shall match existing siding as closely as possible.
- [] Ensure that all existing ductwork is in working order.
- [] Provide lockable quadrant volume dampers in all ductwork branches where none previously exist.
- [] Perform HVAC air balance.
- [] Provide and Apply sealant at new exterior mechanical penetrations.
- [] See floor plan(s) for approximate locations of mechanical equipment and mechanical schedule for quantities/sizing. Coordinate all final locations with Homeowner and
- [] See Division 2, 23, 26 and 28 Specifications and Contract Details for detailed Scope of Work.

Electrical

- [] Provide new 200 amp. service entrance panel.
- [] Provide new copper ground rod with #4 AWG grounding electrode conductor in conduit to grounding lug of new service entrance panel.
- [] Provide power and control wiring to new digital ventilation controller and electronic outside air damper.
- [] Provide power and control wiring to new bath exhaust fans.
- [] Provide power and control wiring to new switch and fixture in attic, associated with new HVAC installation.
- [] Verify and ensure that new furnace, high velocity and/or ductless unit is on a dedicated circuit.
- [] Provide carbon monoxide detector(s) as required per specifications.
- [] Provide smoke detectors in accordance with local codes.
- [] Provide new service disconnect(s) for new air conditioning condenser(s)
- [] See Division(s) 2, 26 and 28 Specifications and Contract Details for detailed Scope of Work.


Miscellaneous Notes

- [] Home has brick siding.
- [] Home is on a slab foundation.
- [] Home has approximately 4 inches of blown attic insulation.

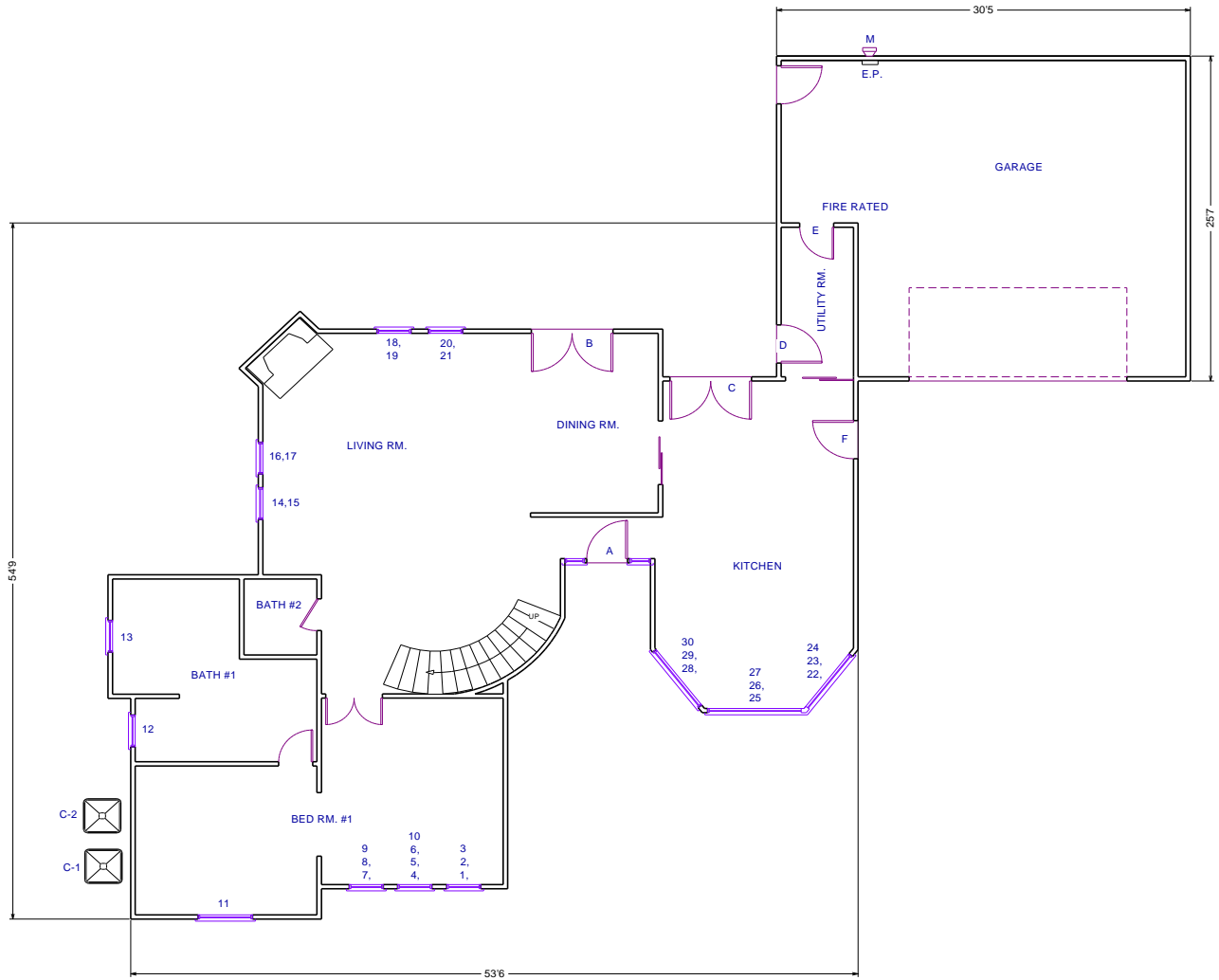
PHOTO



HOUSTON AIRPORT SYSTEM NOISE MITIGATION PROGRAM


	Phase:	Phase 2
	PPN:	46
Address:	1826 Pecan Ln	Revised:
Town:	Humble	 QuieterHome® Program

FIRST FLOOR PLAN



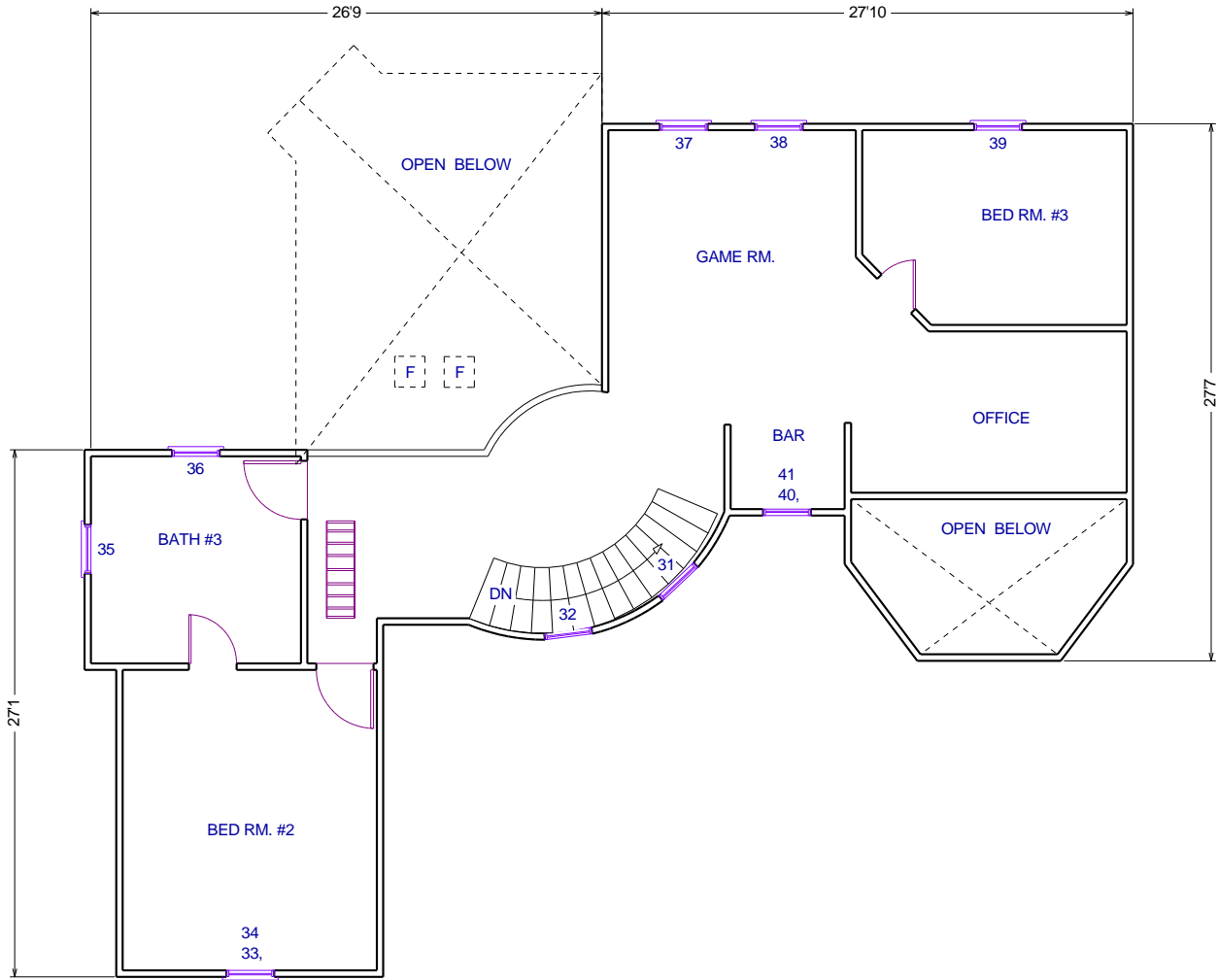
NOT TO SCALE

HOUSTON AIRPORT SYSTEM NOISE MITIGATION PROGRAM

		Phase:	Phase 2
		PPN:	46
Address: 1826 Pecan Ln		Revised:	
Town: Humble			QuieterHome® Program


Duct routings and locations are approximate and may differ from final constructed conditions. Floor plan is a schematic representation only.

SECOND FLOOR PLAN



NOT TO SCALE

HOUSTON AIRPORT SYSTEM NOISE MITIGATION PROGRAM

	Phase: Phase 2
	PPN: 46
Address: 1826 Pecan Ln	Revised:
Town: Humble	 QuieterHome® Program

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WINDOW SCHEDULE

#	W	H	EXISTING STYLE	NEW STYLE	NEW STORM	BOTTOM CLEAR OPENING	NEW MUNTINS	DETAIL	REMARKS
1	23	71	DH	DH		1"	COL	2.1A	TEMPERED GLASS.
2	23	24	FX	FX			COL	2.1A	
3	23	14	FX	FX	YES		COL	5.5	ARCH TOP.
4	35	71	DH				COL	2.1A	TEMPERED GLASS.
5	35	24	FX				COL	2.1A	
6	35	14	FX	FX	YES		COL	5.5	ARCH TOP.
7	23	71	DH	DH		1"	COL	2.1A	TEMPERED GLASS.
8	23	24	FX	FX			COL	2.1A	
9	23	14	FX	FX	YES		COL	5.5	ARCH TOP.
10	16	16	FX	FX	YES			5.5	CIRCULAR WINDOW.
11	35	70	DH	DH		11	COL	2.1A	TEMPERED GLASS.
12	35	35	DH	DH				2.1A	OPAQUE GLASS. TEMPERED GLASS.
13	55	39	GB						NO ACTION. GB.
14	35	70	FX	FX		18		2.1A	TEMPERED GLASS.
15	35	70	FX	FX				2.1A	
16	35	70	FX	FX		18		2.1A	TEMPERED GLASS.
17	35	70	FX	FX				2.1A	
18	35	70	FX	FX		18		2.1A	TEMPERED GLASS.
19	35	70	FX	FX				2.1A	
20	35	70	FX	FX		18		2.1A	TEMPERED GLASS.
21	35	70	FX	FX				2.1A	
22	35	45	DH	DH			COL	2.1A	
23	35	58	DH	DH			COL	2.1A	
24	35	24	FX	FX	YES		COL	5.5	ARCH TOP.
25	47	45	DH	DH			COL	2.1A	
26	47	58	DH	DH			COL	2.1A	
27	47	24	FX	FX	YES		COL	5.5	ARCH TOP.
28	35	45	DH	DH			COL	2.1A	
29	35	58	DH	DH			COL	2.1A	
30	35	24	FX	FX	YES		COL	5.5	ARCH TOP.
31	16	28	FX	FX	YES			5.5	ARCH TOP.
32	16	28	FX	FX	YES			5.5	ARCH TOP.
33	35	58	DH	DH			COL	2.1A	TEMPERED GLASS.
34	35	22	FX	FX	YES		COL	5.5	ARCH TOP.
35	59	46	FX	FX				2.1A	TEMPERED GLASS.
36	23	34	DH	DH				2.1A	OPAQUE GLASS. TEMPERED GLASS.
37	35	70	FX	FX				2.1A	TEMPERED GLASS.
38	35	70	FX	FX				2.1A	TEMPERED GLASS.
39	35	70	DH	DH				2.1A	TEMPERED GLASS.
40	47	46	DH	DH			COL	2.1A	TEMPERED GLASS.
41	47	26	FX	FX	YES		COL	5.5	ARCH TOP.

Notes: Existing Window Material: 1-41 ARE ALUMINUM

CONTRACTOR TO VERIFY WINDOW COMBOS WITH ARCH-TOPS

HOUSTON AIRPORT SYSTEM NOISE MITIGATION PROGRAM

	Phase: Phase 2
	PPN: 46

Address: 1826 Pecan Ln	Revised:
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Town: Humble		QuieterHome® Program
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DOOR SCHEDULE

DOOR	W	H	EXIST. STORM	NEW PRIME	NEW STORM	NEW PATIO DOOR	NEW SL STORM	HARDWARE	DETAIL	REMARKS
A	36	80	NO	YES	YES	NO	NO	STANDARD	20	RELOCATE EXISTING DOORBELL. 2-12 INCH SIDELITES WITH STORMS.
B	70	78	NO	NO	NO	YES	YES	STANDARD	23&24	ATRIUM DOOR.
C	69	78	NO	NO	NO	YES	YES	STANDARD	23&24	ATRIUM DOOR.
D	32	79	NO	YES	YES	NO	NO	STANDARD	20	CONCRETE AT SILL.
E	32	80	NO	YES	NO	NO	NO	STANDARD	20	FIRE RATED DOOR.
F	32	78	NO	YES	YES	NO	NO	STANDARD	20	CONCRETE AT SILL.


Notes:

HOUSTON AIRPORT SYSTEM NOISE MITIGATION PROGRAM

	Phase: Phase 2	PPN: 46
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Address: 1826 Pecan Ln		QuieterHome® Program
Town: Humble		

MECHANICAL SCHEDULE

Existing Equipment			New Equipment				
	System #1	System #2	New / Replace	System #1	System #2	System #3	System #4
System Description	Furnace 80%	Furnace 80%		Furnace 80%	Furnace 80%		
Location (See Floor plans)	Attic	Attic		Attic	Attic		
Age (furnace / condenser)	20/20	20/3					
FURNACE-A/C SYSTEMS							
Gas Fired Up-Flow							
Gas Fired Down-Flow							
Gas Fired Horizontal (90% / 80%)	FH-1	FH-2	REPLACE 80%	FH-1	FH-2		
Packaged System (Gas / Electric)							
Condenser / Heat Pump	C-1	C-2	REPLACE	C-1	C-2		
Floor Heater							
Wall / Space Heater							
Boiler							
DUCTLESS SYSTEM							
Ductless (Heat Pump)							
Ductless (Cooling Only)							
HIGH VELOCITY SYSTEMS							
Cooling Only (Horizontal)							
Cooling Only (Vertical)							
MECHANICAL VENTILATION							
Outside Air/Humidistat Damper (Vol)			NEW	Yes	Yes		
Outside Air/Humidistat DamperElec							
MECHANICAL ACCESSORIES							
Electronic Air Cleaner			NEW	Yes	Yes		
Unit Heaters							
Condensate Pump							
Sidewall Vent Kit (Power Vent)							
B-vent	Yes	Yes	REPLACE	Yes	Yes		
Thermostat	Mercury	Digital	Digital	Yes	Yes		
Humidifier & Humidistat							
Line Set Enclosure			NEW	Yes	Yes		
Chimney Liner							
SIZING							
Discharge size: (inches)							
Inlet size: (inches)							
Flue Size							
Existing System Input (BTU)	100,000	100,000					
Existing A/C system size (Tons)	4	3.5					
*Forced Air System Heating Capacity - minimum BTU Output				New	New	New	New
				100,000	100,000	0	0
*Air Conditioning System Capacity -calculated sizing Tons				4	3.5	0	0
NEW MISCELLANEOUS EQUIPMENT			Existing	New / Replace	QTY	Location	
Bathroom Exhaust Fan				NEW	2	Bath 1 and 2	
Bathroom Exhaust Fan with Light							
Bathroom Exhaust Fan/Light & Heat Lamp							
AREAS SERVICED							
Basement	0	1st Floor	2476	2nd Floor	1198	3rd Floor	0
Floor Plan Total (SF)	3674						
Installation Notes: Existing System 1							
Existing System 2							
New System 1							
New System 2							
* New Equipment shall be 90% minimum Efficiency with 13 SEER minimum Air Conditioning (Unless otherwise noted)							
HOUSTON AIRPORT SYSTEM NOISE MITIGATION PROGRAM							
			Phase:		PPN#:		
Address: 1826 Pecan Ln			Phase 2		46		
Town: Humble					QuieterHome® Program		

ELECTRICAL DATA

EXISTING ELECTRICAL DATA

Meter location: <u> Rear </u>	Meter condition: <u> Good </u>
Cable rating: <u> 200 amp </u>	Cable condition: <u> Good </u>
Panel No. 1 rating: <u> 200 amp </u>	Panel No. 1 type: <u> Breakers </u>
Panel No. 2 rating: <u> N/A </u>	Panel No. 2 type: <u> N/A </u>

Panel No. 1 spaces: <u> 42 </u>	Main breaker (size): <u> 200 amp </u>	
15 Amp(sp) <u> 10 </u>	15 Amp(dp) <u> 0 </u>	10 Amp(mini) <u> 0 </u>
20 Amp(sp) <u> 7 </u>	20 Amp(dp) <u> 0 </u>	15 Amp(mini) <u> 1 </u>
30 Amp(sp) <u> 0 </u>	30 Amp(dp) <u> 7 </u>	20 Amp(mini) <u> 3 </u>
40 Amp(sp) <u> 0 </u>	40 Amp(dp) <u> 0 </u>	30 Amp(mini) <u> 0 </u>
50 Amp(sp) <u> 0 </u>	50 Amp(dp) <u> 1 </u>	Others (mini) <u> 0 </u>
60 Amp(sp) <u> 0 </u>	60 Amp(dp) <u> 0 </u>	# of spares <u> 2 </u>
Others (sp) <u> 0 </u>	Others (dp) <u> 1 </u>	
Panel No. 1 location: <u> Garage </u>	Wall finish at location: <u> GWB </u>	


Panel No. 2 spaces: <u> 0 </u>	Main breaker (size): <u> </u>	
15 Amp(sp) <u> 0 </u>	15 Amp(dp) <u> 0 </u>	10 Amp(mini) <u> 0 </u>
20 Amp(sp) <u> 0 </u>	20 Amp(dp) <u> 0 </u>	15 Amp(mini) <u> 0 </u>
30 Amp(sp) <u> 0 </u>	30 Amp(dp) <u> 0 </u>	20 Amp(mini) <u> 0 </u>
40 Amp(sp) <u> 0 </u>	40 Amp(dp) <u> 0 </u>	30 Amp(mini) <u> 0 </u>
50 Amp(sp) <u> 0 </u>	50 Amp(dp) <u> 0 </u>	Others (mini) <u> 0 </u>
60 Amp(sp) <u> 0 </u>	60 Amp(dp) <u> 0 </u>	# of spares <u> 0 </u>
Others (sp) <u> 0 </u>	Others (dp) <u> 0 </u>	
Panel No. 2 location: <u> </u>	Wall finish at location: <u> </u>	

Major electrical appliances: A/C-Dryer-Range-Jacuzzi-Pool Pump

NEW EQUIPMENT

Cable rating: <u> N/A </u>	Panel rating: <u> 200A </u>
Mast weatherhead: <u> No </u>	Meter base: <u> No </u>
Service disconnect: <u> Yes </u>	Grounding rod: <u> Yes </u>

HOUSTON AIRPORT SYSTEM NOISE MITIGATION PROGRAM

	Phase: <u> Phase 2 </u>
	PPN: <u> 46 </u>
Address: <u> 1826 Pecan Ln </u>	Revised: <u> </u>
Town: <u> Humble </u>	 QuieterHome® Program



DESIGN PACKAGE COVER SHEET

HOUSTON AIRPORT SYSTEM NOISE MITIGATION PROGRAM

Homeowner: Russell	Phase: Phase 2
Address: 7638 Live Oak Dr	PPN: 131
Town: Humble	Revised:

- Attachments:
- General Construction Scope of Work
 - HVAC Scope of Work
 - Electrical Scope of Work
 - General Notes
 - Photograph
 - Floor Plan (s)
 - Window Schedule
 - Door Schedule
 - Mechanical Schedule
 - Electrical Data

I (we) as the owner(s) of the above-referenced residence accept the attached scopes of work for the installation of sound insulation measures at the above-referenced residence as part of the Houston Airport System Noise Mitigation Program. I (we) understand that by signing and returning this document, I (we) will not be allowed to request further modifications to the scope of work.

Signature: _____

Date: _____

Signature: _____

Date: _____

Project: HOUSTON AIRPORT SYSTEM NOISE MITIGATION PROGRAM

Address: 7638 Live Oak Dr

Phase: Phase 2

PPN: 131

General

- [] Replace windows and storm windows with new acoustical and non-acoustical windows and storms as scheduled.
- [] Provide fiberglass insulation around interior perimeter of all new windows and doors.
- [] Provide sealant around interior and exterior perimeter of all windows and doors.
- [] Provide acoustical storm windows at skylights as scheduled.
- [] Provide new exterior brake metal at all window replacement locations.
- [] Replace existing doors with new prime doors and storm doors as scheduled.
- [] Provide and install new pull down stairs at location indicated on floor plan. Contractor is responsible for structural modifications and electrical relocations necessary for installation of stairs. Provide flooring from stairs to the operating panel of unit. Stairs are for service only and not meant to hold weight of furnace (Typ. 2).
- [] Insulate accessible areas of attic with blown Insulation to a R-Value of 38.
- [] Insulate accessible areas of attic with batt Insulation to a R-Value of 38.
- [] Increase attic ventilation with soffit vents. (Typ. of 8)
- [] Remove existing insulation prior to installing new. (To be determined by contractor/engineer)
- [] See Division 1 through 10 Specifications and Contract Details for detailed Scope of Work.

HVAC

- [] Replace 80% Efficiency horizontal gas-fired forced air furnace with new horizontal gas-fired forced air furnace/ air conditioning system with completely insulated ductwork system in attic. Provide light fixture and smoke detector at location of forced air unit.
- [] Replace existing horizontal fan coil with backup electric heat, with new 80% efficient horizontal gas fired forced air furnace/air conditioning system. Provide new black iron gas line to new furnace.
- [] Provide new Ductless Heat Pump split system at location(s) shown on floor plan.
- [] Remove visible ductwork in attic and provide new rigid ductwork. New ductwork shall tie into existing ductwork configuration. Install and insulate new ductwork. Approximate length of new ductwork shall be 300 LF. To be determined by contractor/engineer.
- [] Provide thermostat(s) as noted.
- [] Provide new electronic air cleaner. Reconfigure ductwork to accommodate air cleaner installation.
- [] Provide new B-vent stack. Conform to NFPA 5A, 112, 90A & 90B, and ANSI Z223.1.
- [] Provide new electronic outside air damper and associated ductwork with digital ventilation controller, wallcap and locking quadrant damper. Controller must meet ASHRAE 62.2-2010 standards for ventilation.
- [] Patch and restore all surfaces disturbed by ductwork installation.

Address: 7638 Live Oak Dr

Phase: Phase 2

PPN: 131

- [] Provide new bathroom fan(s) and/or fanlight(s). Terminate exhaust ductwork at exterior of home with exterior hood/rain cap. To be determined at time of construction by contractor/engineer.
- [] Replace bathroom fan(s) and/or fanlight(s) with new unit(s). Terminate exhaust ductwork at exterior of home with exterior hood/rain cap. To be determined at time of construction by contractor/engineer.
- [] Inspect existing return air ductwork and associated grills and clean if necessary.
- [] Provide new aluminum downspout enclosure to conceal line set when run along the exterior of the home. Color of downspout shall match existing siding as closely as possible.
- [] Ensure that all existing ductwork is in working order.
- [] Provide lockable quadrant volume dampers in all ductwork branches where none previously exist.
- [] Perform HVAC air balance.
- [] Provide and Apply sealant at new exterior mechanical penetrations.
- [] See floor plan(s) for approximate locations of mechanical equipment and mechanical schedule for quantities/sizing. Coordinate all final locations with Homeowner and contractor.
- [] See Division 2, 23, 26 and 28 Specifications and Contract Details for detailed Scope of Work.

Electrical

- [] Provide new 200 amp. service entrance panel and 60 amp sub-panel to replace existing.
- [] Provide new copper ground rod with #4 AWG grounding electrode conductor in conduit to grounding lug of new service entrance panel.
- [] Provide power and control wiring to new digital ventilation controller and electronic outside air damper.
- [] Provide power and control wiring to new bath exhaust fans.
- [] Provide power and control wiring to new switch and fixture in attic, associated with new HVAC installation.
- [] Verify and ensure that new furnace, high velocity and/or ductless unit is on a dedicated circuit.
- [] Provide carbon monoxide detector(s) as required per specifications.
- [] Provide smoke detectors in accordance with local codes.
- [] Provide new service disconnect(s) for new air conditioning condenser(s)
- [] See Division(s) 2, 26 and 28 Specifications and Contract Details for detailed Scope of Work.


Miscellaneous Notes

- [] Home has brick siding.
- [] Home is on a slab foundation.
- [] Home has approximately 6 inches of batt attic insulation.

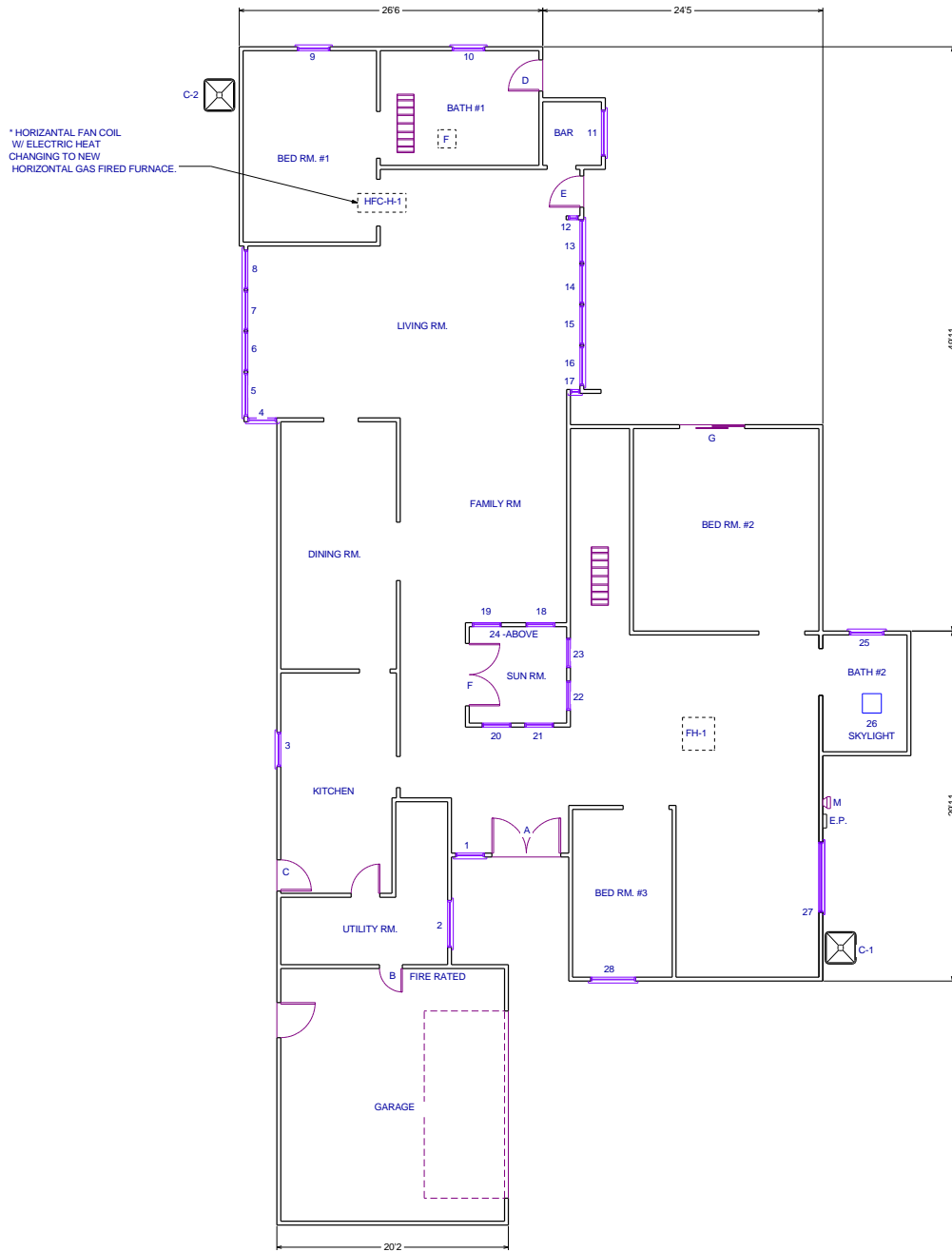
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HOUSTON AIRPORT SYSTEM NOISE MITIGATION PROGRAM

	Phase:	Phase 2
	PPN:	131
Address:	7638 Live Oak Dr	
Town:	Humble	
	Revised:	
		QuieterHome® Program

FIRST FLOOR PLAN



NOT TO SCALE

HOUSTON AIRPORT SYSTEM NOISE MITIGATION PROGRAM

Phase: **Phase 2**

PPN: **131**

Revised:

Address: **7638 Live Oak Dr**

Town: **Humble**



QuieterHome® Program


Duct routings and locations are approximate and may differ from final constructed conditions. Floor plan is a schematic representation only.

WINDOW SCHEDULE

#	W	H	EXISTING STYLE	NEW STYLE	NEW STORM	BOTTOM CLEAR OPENING	NEW MUNTINS	DETAIL	REMARKS
1	35	70	DH	DH		11		2.1A	REMOVE AND REINSTALL INTERIOR SHUTTERS.
2	33	69	DH	DH		11		2.1A	REMOVE AND REINSTALL INTERIOR SHUTTERS.
3	34	33	DH	DH				2.1A	MARBLE SILL.
4	29	82	FX						NO ACTION.
5	40	110	FX						NO ACTION.
6	40	110	FX						NO ACTION.
7	40	110	FX						NO ACTION.
8	40	110	FX						NO ACTION.
9	35	70	DH	DH		11		2.1A	REMOVE AND REINSTALL INTERIOR SHUTTERS.
10	36	52	DH	DH				2.1A	
11	41	35	SL	SL				2.1A	TEMPERED GLASS.
12	31	73	FX						NO ACTION.
13	39	91	FX						NO ACTION.
14	39	91	FX						NO ACTION.
15	39	91	FX						NO ACTION.
16	39	91	FX						NO ACTION.
17	31	73	FX						NO ACTION.
18	34	71	FX		YES	11		5.5	
19	34	71	FX		YES	11		5.5	
20	34	71	FX		YES	11		5.5	
21	34	71	FX		YES	11		5.5	
22	34	71	FX		YES	11		5.5	
23	34	71	FX		YES	11		5.5	
24	56	56	FX		YES			5.5	UPPER WINDOW - ABOVE #24.
25	35	71	FX		YES			5.5	REMOVE AND REINSTALL INTERIOR SHUTTERS.
26	33	39	SKY		YES			6.4	INTERIOR STORM. REMOVE EXISTING STORM.
27	71	46	SL	SL				2.1A	
28	46	59	DH	DH				2.1A	REMOVE AND REINSTALL INTERIOR SHUTTERS.
29	40	71	FX	FX					REMOVE AND REINSTALL INTERIOR SHUTTERS. NON-ACOUSTIC WINDOW.

Notes: Existing Window Material: 1-28 ARE ALUMINUM

HOUSTON AIRPORT SYSTEM NOISE MITIGATION PROGRAM


	Phase: Phase 2
	PPN: 131
Address: 7638 Live Oak Dr	Revised:
Town: Humble	 QuieterHome® Program

DOOR SCHEDULE


DOOR	W	H	EXIST. STORM	NEW PRIME	NEW STORM	NEW PATIO DOOR	NEW SL STORM	HARDWARE	DETAIL	REMARKS
A	65	80	NO	NO	YES	YES	NO	ORNAMENTAL	23	FRENCH DOOR.
B	32	80	NO	YES	NO	NO	NO	STANDARD	20	FIRE RATED DOOR.
C	32	80	YES	YES	YES	NO	NO	STANDARD	20	
D	32	80	NO	YES	YES	NO	NO	ORNAMENTAL	20	
E	32	80	YES	YES	YES	NO	NO	STANDARD	20	
F	65	80	NO	NO	YES	NO	NO	STANDARD	23	FRENCH DOOR.
G	72	79	NO	NO	NO	YES	YES	STANDARD	24	SLIDING GLASS DOOR. REMOVE AND REINSTALL SHUTTER DOORS.

Notes:

HOUSTON AIRPORT SYSTEM NOISE MITIGATION PROGRAM

	Phase:	PPN:
Address: 7638 Live Oak Dr	Phase 2	131
Town: Humble	 QuieterHome[®] Program	

MECHANICAL SCHEDULE

Existing Equipment			New Equipment				
	System #1	System #2	New / Replace	System #1	System #2	System #3	System #4
System Description	Furnace 80%			Furnace 80%	Furnace 80%		
Location (See Floor plans)	Attic	Attic		Attic	Attic		
Age (furnace / condenser)	25/25	12/12					
FURNACE-A/C SYSTEMS							
Gas Fired Up-Flow		w/Elec Heat					
Gas Fired Down-Flow							
Gas Fired Horizontal (90% / 80%)	FH-1		REPLACE 80%	FH-1	FH-2		
Packaged System (Gas / Electric)							
Condenser / Heat Pump	C-1	C-2	REPLACE	C-1	C-2		
Floor Heater							
Wall / Space Heater							
Boiler							
DUCTLESS SYSTEM							
Ductless (Heat Pump)							
Ductless (Cooling Only)							
HIGH VELOCITY SYSTEMS							
Cooling Only (Horizontal)							
Cooling Only (Vertical)							
MECHANICAL VENTILATION							
Outside Air/Humidistat Damper (Vol)			NEW	Yes	Yes		
Outside Air/Humidistat DamperElec							
MECHANICAL ACCESSORIES							
Electronic Air Cleaner			NEW	Yes	Yes		
Unit Heaters							
Condensate Pump							
Sidewall Vent Kit (Power Vent)							
B-vent	Yes		REPLACE	Yes	Yes		
Thermostat	Digital	Digital	Digital	Yes	Yes		
Humidifier & Humidistat							
Line Set Enclosure			NEW	Yes	Yes		
Chimney Liner							
SIZING							
Discharge size: (inches)	22X20						
Inlet size: (inches)	22X20						
Flue Size	4"						
Existing System Input (BTU)	100,000						
Existing A/C system size (Tons)	5	2					
*Forced Air System Heating Capacity - minimum BTU Output							
*Air Conditioning System Capacity -calculated sizing Tons							
NEW MISCELLANEOUS EQUIPMENT			Existing				
Bathroom Exhaust Fan		Yes	REPLACE	2	Bath 1 and 2		
Bathroom Exhaust Fan		No	NEW	1	Bath 3		
Bathroom Exhaust Fan/Light & Heat Lamp							
AREAS SERVICED							
Basement	0	1st Floor	3618	2nd Floor	0	3rd Floor	0
Floor Plan Total (SF)	3618						
Installation Notes: Existing System 1							
Existing System 2							
New System 1							
New System 2							
* New Equipment shall be 90% minimum Efficiency with 13 SEER minimum Air Conditioning (Unless otherwise noted)							
HOUSTON AIRPORT SYSTEM NOISE MITIGATION PROGRAM							
			Phase:		PPN#:		
Address: 7638 Live Oak Dr			Phase 2		131		
Town: Humble					QuieterHome® Program		

ELECTRICAL DATA

EXISTING ELECTRICAL DATA

Meter location: <u>Right</u>	Meter condition: <u>Good</u>
Cable rating: <u>200 amp</u>	Cable condition: <u>Good</u>
Panel No. 1 rating: <u>200 amp</u>	Panel No. 1 type: <u>Breakers</u>
Panel No. 2 rating: <u>N/A</u>	Panel No. 2 type: <u>N/A</u>

Panel No. 1 spaces: <u>40</u>	Main breaker (size): <u>100 amp</u>	
15 Amp(sp) <u>8</u>	15 Amp(dp) <u>0</u>	10 Amp(mini) <u>0</u>
20 Amp(sp) <u>11</u>	20 Amp(dp) <u>1</u>	15 Amp(mini) <u>0</u>
30 Amp(sp) <u>0</u>	30 Amp(dp) <u>1</u>	20 Amp(mini) <u>0</u>
40 Amp(sp) <u>0</u>	40 Amp(dp) <u>2</u>	30 Amp(mini) <u>0</u>
50 Amp(sp) <u>0</u>	50 Amp(dp) <u>3</u>	Others (mini) <u>0</u>
60 Amp(sp) <u>0</u>	60 Amp(dp) <u>0</u>	# of spares <u>7</u>
Others (sp) <u>0</u>	Others (dp) <u>0</u>	
Panel No. 1 location: <u>Exterior Wal</u>	Wall finish at location: <u>Paneling</u>	


Panel No. 2 spaces: <u>7</u>	Main breaker (size): <u>None - Supplied off 50 amp breaker in Mini panel.</u>	
15 Amp(sp) <u>7</u>	15 Amp(dp) <u>0</u>	10 Amp(mini) <u>0</u>
20 Amp(sp) <u>0</u>	20 Amp(dp) <u>0</u>	15 Amp(mini) <u>0</u>
30 Amp(sp) <u>0</u>	30 Amp(dp) <u>0</u>	20 Amp(mini) <u>0</u>
40 Amp(sp) <u>0</u>	40 Amp(dp) <u>0</u>	30 Amp(mini) <u>0</u>
50 Amp(sp) <u>0</u>	50 Amp(dp) <u>0</u>	Others (mini) <u>0</u>
60 Amp(sp) <u>0</u>	60 Amp(dp) <u>0</u>	# of spares <u>0</u>
Others (sp) <u>0</u>	Others (dp) <u>0</u>	
Panel No. 2 location: <u>Exterior Wal</u>	Wall finish at location: <u>Paneling</u>	

Major electrical appliances: A/C, Water Heater

NEW EQUIPMENT

Cable rating: <u>N/A</u>	Panel rating: <u>200A</u>
Mast weatherhead: <u>No</u>	Meter base: <u>No</u>
Service disconnect: <u>Yes</u>	Grounding rod: <u>Yes</u>

HOUSTON AIRPORT SYSTEM NOISE MITIGATION PROGRAM

	Phase: <u>Phase 2</u>
	PPN: <u>131</u>
Address: <u>7638 Live Oak Dr</u>	Revised:
Town: <u>Humble</u>	 QuieterHome® Program