

SECTION 01 56 19
SITE NOISE CONTROL

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Temporary fence with Noise Soaker panels for noise attenuation at site perimeter.
 - 1. Per site fencing layout, construct the following.
 - a. Post hole footings, posts and fencing.
 - b. Noise Attenuating panels.

1.2 RELATED SECTIONS

- A. Section 01 56 16 – Dust barriers.
- B. Section 01 56 26 – Temporary Fencing.
- C. Section 01 57 19 – Temporary Environmental Controls.

1.3 REFERENCES

- A. ASTM C423 - Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.
- B. ASTM E90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01 30 00 - Administrative Requirements.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Acoustic Test data from an NVLAP accredited lab.
 - 2. Manufacturer's data sheet.
 - 3. 12 x 12 sample including attachment hardware, bottom soil seal and vertical edge attachment components.
 - 4. Plan, elevation, details of proposed installation.
 - 5. Structural engineer's calculations.
 - 6. Weather emergency action plan and weather reporting sample.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Documented experience of 5 years minimum with work similar to work of this Section.
 - 1. Pre-installation Meeting: Convene pre-installation meeting after Award of Contract, one week before starting work to verify project requirements, site conditions and coordination with other site sub-trades, and to review manufacturer's information.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials and accessories to project secure location and assure materials are supported off the soil to maintain dry condition.

- B. Store products in manufacturer's packaging or covered from weather until ready for installation.
- C. Ensure insulation materials are not exposed to inclement weather during delivery or storage.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: PACIFIC SOUND CONTROL; 2677 N Main Street, Santa Ana, CA 92705 Phone: 714-892-6022 6022, 408-780-7603, 425-496-1176. E-mail: info@noisesoaker.com, www.noisesoaker.com
- B. Substitutions: Materials equal to, or exceeding NRC, STC ratings and weatherization standards are to be approved prior to bid time by Architect using substitution process per Section 01 60 00 - Product Requirements.

2.2 PRODUCTS

- A. Foundation:
 - 1. Per site fencing layout, construct the following.
 - a. Auger post hole footings as per structural engineer's requirements
 - b. Place appropriate size post and backfill with compacted or solid masonry approved by structural engineer.
- B. Fence structure and materials:
 - 1. 2", 3", 3-1/2" or 4" standard galvanized pipe posts as required by structural engineer.
 - 2. 1-3/8 inch standard galvanized pipe intermediate framing.
 - 3. 11 Ga Galvanized fabric
- C. Sound attenuation fence panels:
 - 1. PSC Noise Soaker Panels to have,
 - 2. 1# mass-loaded vinyl barrier layer,
 - 3. 2" fiberglass absorption layer encased in heavy duty exterior grade vinyl,
 - 4. Mass-loaded vinyl, fiberglass, and vinyl layers to be assembled with UV resistant TENARA® thread,
 - 5. Panels to have rows of #4 brass grommets to attach to fencing top, middle and bottom of an 8 ft, 10 ft or 12 ft high panel,
 - 6. 2" wide heavy duty VELCRO® vertical mating edges and,
 - 7. 8" tall bottom soil seal to mate with undulating site conditions.
 - 8. Panels shall have minimum noise attenuation qualities as follows:

Acoustical Performance:

Sound Transmission Loss (ASTM E-90 & E 413)

Product	OCTAVE BAND FREQUENCIES (Hz)						STC
	125	250	500	1000	2000	4000	
Noise Soaker	14	20	32	41	42	41	33

Sound Absorption Performance (ASTM C 423)

Product	125	250	500	1000	2000	4000	NRC
Noise Soaker	0.45	0.96	0.87	0.66	0.47	0.28	0.75

2.3 ACCESSORIES

- A. Attached panels to fencing with plastic cable ties, nylon, UV resistant, minimum 120lb tensile strength, or 14 gage wire ties.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Survey site for obstructions, planting, irrigation and review anomalous installation areas with General Contractor.

3.2 PREPARATION

- A. Alert Underground Service Alert, follow marking instructions, arrange and supervise marking services and wait prescribed time before digging.

3.3 INSTALLATION

- A. General:
 1. Install in accordance with manufacturer's written recommendations.
 2. Attach panels from top, down, making sure panel soil seal is in firm contact with soil.
 3. Place adjacent panels overlapping VELCRO® one to another and close tightly.
 4. Maintain panels through the duration of construction period, checking and repairing fence, relocating as needed for construction phasing and site conditions.
 5. During inclement weather, exceeding structural capacity of fence structure, remove top section of panel or entire panel as needed to assure that structural capacity of structure is not exceeded during high winds.
 6. Upon completion of construction, as requested by General Contractor, remove panels and fencing materials including concrete foundation materials.
 - a. Brush panels clean for re-use on the next project.
 - b. Remove panels, fencing, posts and concrete foundation materials.
 - c. Fill holes left by foundations to relatively level ground.

3.4 FIELD QUALITY CONTROL

- A. Upon completion of fencing and panel installation, inspect panels to make sure no gaps larger than 1" at soil are left and that all panels are fully connected and overlapping one to another.
- B. Monitor and report weather to General Contractor during construction period on agreed report forms 3 times each week

3.5 CLEANING

- A. None.

3.6 PROTECTION

- A. None.

END OF SECTION