

## ODOT EXPERIENCES WITH RESPECT TO AESTHETICS

Presented at

THE PURDUE ROAD SCHOOL

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Prior to 1999 The Ohio Dept of Transportation considered roadway aesthetics to consist of seeding and mulching, a coating of polyurethane on selected bridge parapets and piers, and an occasional tree planting for a community that was adamant about landscape.

Aesthetics was not an important or necessary and certainly not an integral part of ODOT's roadway construction program.

March of 1999 brought about a change in ODOT's mindset with regard to highway aesthetics. Governor Taft embraced a growing trend across the country to build more aesthetically pleasing highway corridors and place the authority and the responsibility on our Director Gordon Proctor. Director Proctor got the ball rolling by establishing a committee whose soul purpose was to develop aesthetic guidelines that would be used by the entire department. These guidelines would help pave the way for each of our 12 Districts to conduct public involvement, and develop and design aesthetic elements that enhance each roadway project corridor.

The Aesthetic Design Steering Committee consisted of ODOT personnel from Design, Environmental, Construction, outside agencies such as the Ohio Arts Council, The Ohio Historical Society, two Architectural firms (one local and one nationally known) and one Historical Properties Consultant. Director Proctor made it clear that the process should not be monopolized by ODOT ideas but should incorporate outside expertise.

The task seemed monumental when we started, but all parties bought into the concept and got to work. After many meetings, presentations, bickering, reviewing a few other State programs, and Draft documents, a Final set of guidelines were developed. A training schedule was developed and one by one, each of our 12 District offices were brought on board and encouraged to use the aesthetic guidelines for every major bridge and roadway project.

### **Revising the Public Involvement Process**

A new P.I. process had to be established with the development of the guidelines, especially for the larger more complex projects. Our normal process involved holding public meetings to get general comments and answer general questions concerning right-of-way, traffic, roadway alignment, etc. Our new aesthetic initiative would call for more in depth public involvement geared toward aesthetics, or as it is more formally known, Context Sensitive Design. The Aesthetic Guidelines address a few types of community participation: The advisory committee, the open house meeting, and the Charrette (workshop). Though all techniques have their positives, the workshop is the chosen technique for ODOT. A small group of people representing a large community cross section can explore issues, come to a consensus, and make a decision in a specified amount of time. Usually one or two meetings are sufficient. With the help of some of our major consultants like MS Consultants, we have successfully used this technique for five or six major projects across the State with great success.

## ODOT Aesthetic Guidelines

Our Aesthetic Guide addresses six different corridor types that make up Ohio's network.

### **The Gateway Corridor - Slide**

A corridor that leads to a City from an airport or one that forms a gateway to the downtown. The highway elements in this situation deserve a high level of aesthetic treatment which can be achieved by giving attention to bridges, noise barriers, retaining walls, lighting and signing. The goal is to create a clean, memorable and unified look that is consistent throughout the corridor.



### **The Urban High Density Corridor - Slide**

A corridor that has closely spaced interchanges and ramps (one-half mile or less) with frequent overpass/underpass structures and retaining walls. The right-of-way is usually lined with buildings and adjacent streets. Since there are many signs, lights, walls, bridges and landscape elements in the drivers view, the goal is to reduce the number of elements, then simplify and coordinate their design. By keeping the shapes of retaining walls and noise walls simple as possible and providing a low key color scheme for concrete and steel surfaces, all of the highway elements will look more unified.



### **The Urban Low Density Corridor - Slide**

Urban Low Density Corridors have wider spaced interchanges and ramps (one mile or more) and occasional overpass/underpass structures and retaining walls. The adjoining development includes a significant amount of open space around freestanding buildings. The goal for aesthetic treatment would be very similar to that for the Urban High Density Corridor.



### **The Suburban Corridor - Slide**

The Suburban corridor is characterized by widely spaced interchanges (two miles or more) with few overpass/underpass structures or walls. The right-of-way is usually lined with office and industrial parks or by residential backyards. The aesthetic goal is to open up attractive areas and for travelers and screen unattractive areas with a planting plan. Retaining walls and noise barriers should be tied together with similar textures, colors, and patterns.



### **The Rural Corridor - Slide**

Rural corridors are characterized by widely spaced interchanges with the overpass and underpass structures mostly interchanges and infrequent retaining walls. Our aesthetic goal is to compliment the existing vegetation and to use contoured land forms in interchanges areas where space is available. Any deteriorated signing would be replaced and the concept of sign spreading would be used.

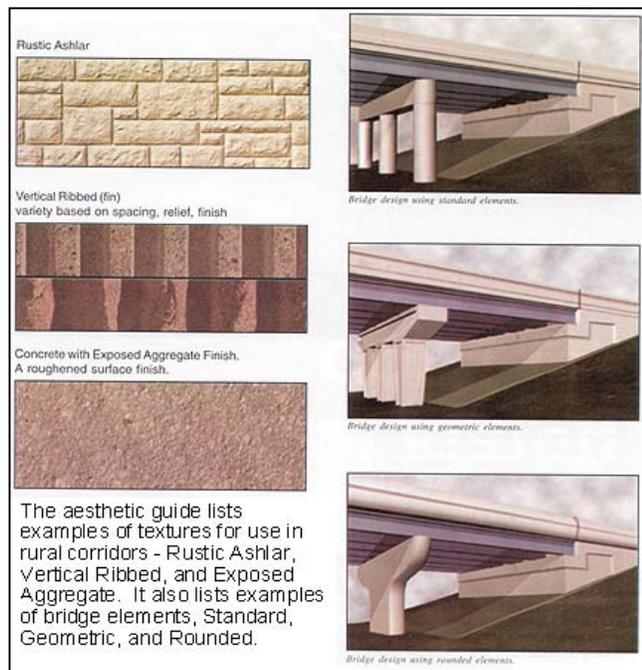


### The Scenic Corridor - Slide

Scenic corridors are those that have received State or National Scenic Byway designation. Even though our Aesthetic guidelines address ways to improve on the corridor I think most of us agree that there is not much needed to enhance a corridor that looks like this!



The aesthetic guide lists examples of textures for use in rural corridors - Rustic Ashlar, Vertical Ribbed, and Exposed Aggregate. It also lists examples of bridge elements, Standard, Geometric, and Rounded.



## History of noise barrier material selection process

From 1975 to early 1990, the noise barrier material selection process did not involve much in the way of aesthetics. The affected residents and property owners were asked via public meetings, whether they wanted a noise barrier and secondly, what color would you want the barrier to be. We could not tell them what type of material to expect because we as a dept. did not know. The practice at the time was to allow the contractor to choose the material of the barriers from a pre-approved list of suppliers based on cost.

The only 'known' was that the material was going to be wood, steel, or concrete. After the construction of two of our largest noise barrier projects in the Cleveland and Cincinnati area, the state legislators and ODOT got many negative comments about the appearance of the barriers. The contractors had installed relatively smooth surfaced, jagged topped, concrete panels with rusting steel (Core-10) posts. The panels were integrally pigmented an earth tone color which highlighted the efflorescence that began to appear after the second season. ODOT's answer was to require a texture on the surfaces of all noise barrier panels and to apply a protective stain either in the field or in the plant. This revision was a step in the right direction but it was only that...just a step.

Another basic complaint from communities was about the clear-cutting of vegetation when installing noise barriers. In cut areas where the noise barriers are on the top-of-cut, there is no need to clear all vegetation, so in the mid-90s we decided to make another revision to our construction practice and only allow the necessary clearing of vegetation. **Slide I-71 (new)**

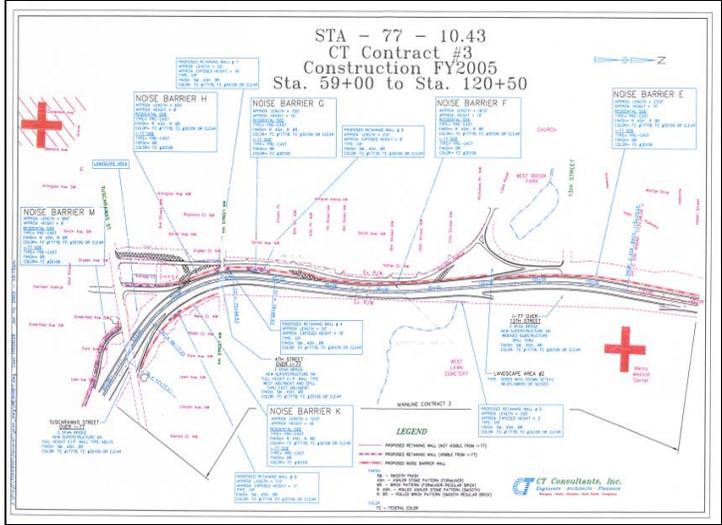


ODOT has found that concrete has been the most versatile, least expensive, and widely accepted material for noise barriers. Wood, both domestic and imported has posed aesthetic and acoustic challenges, while steel has not been cost competitive. As a part of the overall Ohio Aesthetic initiative the decision has been made to build only concrete noise barriers at this time, with the exception of bridge mounted applications which require a lighter weight material. Concrete panels can be made to look like wood, stone, or brick giving the public a choice that is accepted around the State.



**I-77 Corridor - Stark County - Canton, Ohio**

I'd like to touch on a real world project that involved our new procedure for addressing community aesthetics and context sensitive design. The project is a 3 phase major upgrade and lane addition to Interstate 77 thru the City of Canton and northern municipalities. The project involved many bridges and the construction of numerous retaining walls and noise barriers. The public involvement process for the aesthetic enhancements involved the local Arts Council, The City of Canton, surrounding townships, local development representatives and design consultants. The many project meetings with this group yielded a type, color and texture of each of the retaining walls and noise barriers along with a color scheme for all components (including bridges) that reflected the theme of the downtown area.



The task of relaying the aesthetic information to the contractors was a concern to say the least. There were texture options, color options, wall types and icons (to be addressed later in this presentation) that had to be placed at specific locations.

The decision was made to provide special schematic sheets in the design plans that showed the aesthetic treatment for each retaining wall, noise wall and location of landscaped areas.

We learned from the community during the Public Involvement process that Icon panels were desired to represent points of interest and Historic Sites throughout the corridor. This slide shows the icons that will be placed in various noise barrier and retaining wall panels:

- 1) Courthouse Angels
- 2) Classic Car Museum
- 3) City of Canton Excellence
- 4) Cuyahoga Valley Railroad
- 5) McKinley Monument
- 6) Pro Football Hall of Fame
- 7) Pegasus - The Arts
- 8) First Ladies Library

The Icon form liners cost an estimated \$10,000 each but to aesthetically enhance a \$50,000,000 project and increase the overall acceptance of the project by the community, we feel that it will be well worth the money. ODOT's goal is to keep the cost of the enhancements in the range of 1 to 2% of the project cost. This project was in the ballpark.

This has been a very quick overview of a complex project with a slightly more complex public involvement process. We feel that the outcome will be very beneficial to the communities at a minimal cost to the Dept.

Thank You.

