

Taper Slope Decision Matrix

I-40 On-Ramp Country Club Team

| Decision Matrix | | | | | |
|-----------------|----------|------|-------------|-------|-------|
| Slope | Capacity | Cost | Constraints | Speed | Total |
| 8:1 | 2 | 2 | 3 | 1 | 8 |
| 15:1 | 1 | 1 | 2 | 2 | 6 |

| Rank | Description |
|------|-------------|
| 1 | Poor |
| 2 | Moderate |
| 3 | Excellent |

Summary

For the proposed additional right turn lane on S Country Clube Drive, taper slopes of 8:1 and 15:1 were examined and compared through a decision matrix found above. After ranking each desired aspect, including projected cost, expected increase in capacity, least added constraints, and lowest impact on speed, it was determined that a taper slope of 8:1 was the best choice for this project.

Supplemental Information

| Factor | Description |
|-------------|--|
| Capacity | Will the taper slope increase capacity of the proposed right turn lane? |
| Cost | Will the taper slope decrease/minimize costs with respect to project? |
| Constraints | Will taper slope minimize conflict with project constraints? |
| Speed | Will the taper slope minimize disruption in delay due to changes in speed? |