Public Works Department

Concrete vs Asphalt Policy Update



Presented by Ernesto De La Garza, P.E., Director of Public Works



Current Council Policy



28. Award Guidelines for Arterial and Collector Streets with Concrete Pavement or Asphalt Pavement.

If the project contains a majority subgrade with a PI greater than 30 or deemed as moderate to highly expansive soil by the design Geotechnical Engineer, the asphalt pavement alternative will be used by City Council when deciding to award a contract for arterial and collector roadways.

If the PI is less than 30 and the construction cost for concrete pavement is within \$125,000 per lane mile (\$17.75/square yard), which should represent the future anticipated maintenance cost, of the asphalt pavement alternative, the concrete pavement alternative will be used by City Council when deciding to award a contract for arterial and collector roadways.

This policy will be updated annually.

(Res. No. 031813, § 1, 7-16-2019; Ord. No. 032255, § 1, 10-27-2020)

* Current Policy states that if PI is less than 30, street may be bid both ways



Recommended Criteria

for Bidding/Selecting One Surface Type



Arterials

- 1. Overabundance of underground Utilities (Concrete)
- 2. Continuity (Asphalt or Concrete)
- 3. Volume of trucks/buses (Concrete)
- 4. Constructability (Asphalt for residential areas)

Collectors

- 1. Continuity (Asphalt or Concrete)
- 2. Volume of trucks/buses (Concrete)
- 3. Constructability (Asphalt for residential areas)

*Staff recommends not utilizing PI as a criteria for pavement types



Recommended Criteria for Bidding/Selecting Two Surface Types



Bid both Concrete and Asphalt:

 Previous criteria does not preclude the street project from being bid both ways

* In the event that project is bid both ways, \$125,000/lane mile will determine the pavement selection



Street Network



Arterials

	CL Miles	Percent
Asphalt	152.68	91%
Concrete	14.44	9%
Total	167.12	100%

Collectors

	CL Miles	Percent
Asphalt	209.11	96%
Concrete	8.11	4%
Total	217.22	100%



Street Network



Arterial Rate of Conversion

- 0.93 CL miles per year
- 164 years to convert to concrete

Collector Rate of Conversion

- 0.56 CL miles per year
- Of 209 CL miles, 88.2 CL miles qualify for conversion
- 158 years to convert to concrete



Upper/Middle/Lower Broadway



- Collector
- Bid Concrete
 - Utilities
 - Constructability
 - Elevation
 - Hills









- Collector
- Bid HMAC
 - Constructability
 - Residential





Surfside Boulevard



- Collector
- Bid HMAC
 - Continuation
 - Newly existing flatwork









- Local
- Bid Concrete
 - Utilities
 - Industrial
 - Continuity
 - 1500 LF of Concrete pavement









- Arterial
- Bid Concrete and HMAC





Carroll Lane



- Collector
- Bid HMAC
 - Continuity
 - Bond 2020
 - Constructability
 - Residential





Bonner Drive



- Collector
- Bid HMAC
 - Constructability
 - Residential





Martin Street



- Collector
- Bid HMAC
 - Constructability
 - Residential





Flour Bluff Drive



- Arterial
- Bid Concrete and HMAC









- Arterial
- Bid Concrete and HMAC





Timbergate Drive



- Collector
- Bid HMAC
 - Constructability
 - Residential





Aaron Drive



- Collector
- Bid HMAC
 - Constructability
 - Residential





Bond 2022 Project List



Council District	Project Name	Bid	CLASSIFICATION
1	Upper/Middle/ Lower Broadway - Coopers Alley to Twigg - Design Only	Concrete	C-1
1	Starlite Lane - Violet to Leopard	HMAC	C-1
1	Surfside Blvd - Breakwater to Elm	HMAC	C-1
1	McCampbell - Agnes to Leopard	Concrete	LOCAL
2	Alameda Street (Texan to Doddridge) Design Only	Concrete/HMAC	A-2
2	Alameda Street - Airline to Everhart	Concrete/HMAC	A-2
3	Carroll Lane - SPID to Holly	HMAC	C-1
3	Bonner Drive - Everhart to Flvnn	HMAC	C-1
3	Martin Street - Holly to Dorado	HMAC	C-1
4	Flour Bluff Drive - Yorktown to Don Patricio	Concrete/HMAC	A-1
4	Holly Road - Paul Jones to Ennis Joslin - Design Only	Concrete/HMAC	A-2
5	Timbergate Drive - Snowgoose to Staples	HMAC	C-1
5	Aaron Dr - Saratoga Blvd to Summer Winds	HMAC	C-1





Questions?