BELOW IS A BRIEF ANALYSIS AND DESIGN GUIDELINES TO CONSIDER WHEN CONTEMPLATING ADDING A THIRD LEFT TURNING LANE FROM TEMESCAL CANYON RD TO SOUTHBOUND PACIFIC COAST HWY.

Alternative 1

Widening on the southbound (Oceanside) side of the highway:
The estimated cost for construction is 2.5Million, this estimate does not include: support, right of way and utility relocation cost. This is possibility that the parking lot will be impacted by the widening on the southbound side thereby requiring additional right of way and utility relocation. The traffic signals and ADA curb ramps would also need to be reconstructed.

Alternative 2

Widening on the northbound (landside) side of the highway:
The estimate cost for construction 12.5Million, this does not include support, right of way and utility relocation. The cost on the northbound is higher because of the cost for grading, earthwork and possible retaining wall that may be needed in order to widen the roadway.

The cost related to the utility relocation and right of way acquisition may be significant and should be explored further before the project is pursued for funding. Based on the truck turning template the outside receiving lane has be at least 28 feet wide, the lane would later be narrowed to much the existing lane width. A traffic study will also be needed to determine the level of service at this intersection for the additional third left turning lane.

The following are some of the standards outlined in the Highway Design Manual (HDM). There may be more standards related to the proposed design which have not been listed below.

Lane Width

- *HDM Index 405.2- Lane Width* – The lane width for both single and double left-turn lanes on State highways shall be 12 feet. For conventional State highways with posted speeds less than or equal to 40 miles per hour and AADTT (truck volume) less than 250 per lane that are in urban, city or town centers (rural main streets), the minimum lane width shall be 11 feet.
- *What standards/guidelines determine how wide that lane must be?*
    - HDM Index 404 Design Vehicles, HDM Index 301.1 Lane width
- *How wide is the receiving lane right now?*
    - The lane is approximately 13 ft. at the beginning then narrows to 10ft.
- *Can the other lanes (north/southbound) be narrowed to accommodate this width?*
    - No, the existing lanes vary between 10 ft. to 11 ft. In addition there should be a bike buffer between the northbound thru lanes and the left turning lane. The northbound direction has no usable shoulder. Any proposed widening will have to address all these issues.

Note: This was an informal set of guidelines sent to PPCC from DOT and the Council Office, upon request. These findings are not finite or bindingly instructive, only advisory. No plan is currently contemplated and no action has been taken.