



## **STORM DRAIN PLANS NOTES**

CITY OF ORANGE  
PUBLIC WORKS DEPARTMENT

JULY 2019

1. All storm drain construction shall comply with the City of Orange Standard Plans and Specifications.
2. No concrete shall be placed until the forms and reinforcing steel has been placed, inspected and approved.
3. Adjust all manholes to grade after placing final lift of asphalt.
4. Transverse reinforcements and traverse joints shall be placed at right angles (or radial) to conduit centerline except as otherwise shown on the drawings.
5. All concrete shall be Portland cement concrete with an ultimate 28 day compressive strength of 3000 psi.
6. All exposed edges shall be finished with a  $\frac{3}{4}$ " chamfer.
7. All steel adjacent to the face of concrete shall have a 2-1/2" clearance unless otherwise specified.
8. Reinforcement shall be deformed bars of intermediate grade steel as per ASTM A 615.
9. All bar bends and hooks shall conform to the American Concrete Institute "Manual of Standard Practice."
10. The contractor shall check the flow line elevation of existing juncture against control provided prior to construction. If the existing flow line varies from the plan elevation by more than +0.10' the engineer shall adjust the grades between the juncture and the next upstream manhole, with the approval of the City Engineer.