

RTIP ID# <i>(required)</i>
TCWG Consideration Date April 28, 2015
<p>Project Description <i>(clearly describe project)</i></p> <p>The City of Irwindale is proposing reconstruction of the Interstate 605 (I-605) Northbound off-ramp at Live Oak Avenue and installation of a traffic signal at this intersection to improve interchange operations, reduce queuing on the off-ramp and promote safe and efficient access to City streets from the freeway.</p> <p>I-605 is a 27-mile long major truck and commuter freeway. This north-south transportation corridor runs from I-405 in Seal Beach to Huntington Drive in Duarte, closely paralleling the San Gabriel River. The I-710 freeway is approximately 5 miles to the west, and State Route (SR) 57 is approximately 13 miles to the east.</p> <p>In the vicinity of the Live Oak Avenue interchange, I-605 is an eight-lane facility separated by a concrete median barrier. According to Caltrans 2011 Annual Average Daily Traffic (AADT) data, 133,000 vehicles traverse this freeway segment on a daily basis, with a peak hourly volume of 11,500. At the Live Oak Avenue interchange, connections to the freeway currently consist of directional northbound off-ramps to eastbound and westbound Live Oak Avenue, and a southbound on ramp. At the Arrow Highway interchange just to the north, connections to the freeway consist of northbound on-ramps from eastbound and westbound Arrow Highway and a southbound off-ramp from the I-605 freeway. Effectively, these two interchanges form an unusual “split diamond,” since Live Oak Avenue and Arrow Highway connect to each other on both the eastern and western sides.</p> <p>Currently the northbound off-ramp at Live Oak Avenue is a single lane as it exits the freeway which then splits into two directional ramps that only allows right turn to Live Oak Avenue eastbound and westbound with a Stop sign. Under the proposed project, this ramp will remain a single lane ramp at the gore point and where the northbound and southbound off-ramps split. The ramp termini will be improved for both directions of access to Live Oak Avenue. The direct ramp to eastbound Live Oak Avenue will be widened to provide dual right lanes at Live Oak Avenue, the angle of the intersection will be made less acute, and a signal will be provided at the intersection. The loop ramp to westbound Live Oak Avenue will remain in its current configuration, but will be signalized. The signalization of eastbound and westbound traffic will be able to be operated independently since traffic exiting each off-ramp can only turn right at the intersection. The proposed project is expected to be completed in 2016. With a heavy truck percentage of more than 10 percent, traffic congestion, queuing and delay are prevalent at the I-605/Live Oak Avenue interchange, particularly at the northbound off-ramp at Live Oak Avenue. The need for the proposed project is to improve interchange operations, safety and access to the City streets, as the proposed signal will reduce the queues at the northbound off-ramps and allow safe right turns onto Live Oak Avenue. The reconstruction of the northbound off-ramp is necessary to accommodate a traffic signal at the ramp terminal intersection.</p>
<p>Type of Project <i>(use Table 1 on instruction sheet)</i></p> <p>Intersection signalization.</p>

PM Conformity Hot Spot Analysis – Project Summary for Interagency Consultation

County Los Angeles	Narrative Location/Route & Postmiles: I-605 Northbound Off-Ramp/Live Oak Avenue 7-LA-605 PM 23.4/23.5 Caltrans Projects – EA No. 30920 EFIS Project ID 0714000267								
Lead Agency: City of Irwindale									
Contact Person William K. Tam	Phone# (626) 430-2211	Fax# (626) 430-2295	Email wtam@ci.irwindale.ca.us						
Hot Spot Pollutant of Concern (<i>check one or both</i>) PM2.5 x PM10 x									
Federal Action for which Project-Level PM Conformity is Needed (<i>check appropriate box</i>)									
<input checked="" type="checkbox"/>	Categorical Exclusion (NEPA)	<input type="checkbox"/>	EA or Draft EIS	<input type="checkbox"/>	FONSI or Final EIS	<input type="checkbox"/>	PS&E or Construction	<input type="checkbox"/>	Other
Scheduled Date of Federal Action: September 2015									
NEPA Delegation – Project Type (<i>check appropriate box</i>)									
<input type="checkbox"/>		<input checked="" type="checkbox"/>	Section 6004 – Categorical Exclusion		<input type="checkbox"/>		Section 6005 – Non Categorical Exclusion		
Current Programming Dates (<i>as appropriate</i>)									
	PE/Environmental	ENG	ROW	CON					
Start	4/2014	3/2015	N/A	11/24/2015					
End	5/2015	9/2015	N/A	5/24/2016					
Project Purpose and Need (Summary): (<i>attach additional sheets as necessary</i>) The purpose of the proposed project is to reduce the queue at the northbound off-ramps and allow safe right turns onto (eastbound) Live Oak Avenue. With a heavy truck percentage of more than 10 percent, traffic congestion, queuing and delay are prevalent at the I-605/Live Oak Avenue interchange, particularly at the northbound off-ramp at Live Oak Avenue. The project is needed as the northbound off-ramp at Live Oak Avenue is currently a single lane as it exits the freeway, which then splits into two directional ramps that only allows right turns onto to Live Oak Avenue with a stop sign.									
Surrounding Land Use/Traffic Generators (<i>especially effect on diesel traffic</i>) Surrounding land uses within the project area include vacant land, utility features, a speedway, and industrial uses. Industrial uses account for the majority of the land uses within the vicinity of the I-605 Northbound Off-Ramp/Live Oak Avenue Interchange Improvement project.									
Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility 2015 – I-605 Northbound Off-Ramp No Build: ADT = 11,380, Truck ADT = 797 (7%), LOS = F Build: ADT = 11,380, Truck ADT = 797 (7%), LOS = B									
RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility 2035 – I-605 Northbound Off-Ramp No Build: ADT = 15,210, Truck ADT = 1,065 (7%), LOS = F Build: ADT = 15,210, Truck ADT = 1,065 (7%), LOS = C									

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT
2015 – Live Oak Avenue

No Build: ADT = 19,470, Truck ADT = 1,947 (10%), LOS = F

Build: ADT = 19,470, Truck ADT = 1,947 (10%), LOS = B

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

2035 – Live Oak Avenue

No Build: ADT = 25,660, Truck ADT = 2,566 (10%), LOS = F

Build: ADT = 25,660, Truck ADT = 2,566 (10%), LOS = C

Describe potential traffic redistribution effects of congestion relief (*impact on other facilities*)

See attached analysis

Comments/Explanation/Details (*attach additional sheets as necessary*)

See attached analysis

PM_{2.5}/PM₁₀ Hot-Spot Analysis

The proposed project is located within a nonattainment area for the federal PM_{2.5} standards and within an attainment/maintenance area for the federal PM₁₀ standard. Therefore, per 40 CFR Part 93 hot-spot analyses are required for conformity purposes. However, the EPA does not require hot-spot analyses, qualitative or quantitative, for projects that are not listed in 40 CFR Section 93.123(b)(1) as an air quality concern. The project does not qualify as a project of air quality concern (POAQC) because of the following reasons:

- i. The proposed project is a intersection improvement project that will widen an existing regionally significant street. Based on the *Traffic/Circulation Study* (AECOM, November 2013), the proposed project would improve traffic flow without increasing the traffic volumes along I-605 Northbound Off-Ramp and Live Oak Avenue. As shown in Table 1, the traffic volumes along I-605 Northbound Off-Ramp and Live Oak Avenue would not exceed the 125,000 average daily trips threshold necessary to be considered a POAQC. In addition, although the truck percentage exceeds 8 percent of the total traffic volume, the truck traffic volumes would not exceed the 10,000 daily trip threshold for POAQC. As the proposed project would increase the capacity of the off-ramp without widening the existing gore point, Live Oak Avenue, or I-605, the no build and build traffic volumes are the same.

Table 1 Traffic Volumes (No Build and Build)

Roadway Link	2015 (No Build and Build)		2035 (No Build and Build)	
	Total ADT	Truck ADT	Total ADT	Truck ADT
I-605 Northbound Off-Ramp	11,380	797	15,210	1,065
Live Oak West of I-605 Southbound Ramps	26,840	2,684	34,700	3,470
Live Oak East of I-605 Southbound Ramps	24,650	2,465	32,280	3,228
Live Oak West of I-605 Northbound Ramps	19,470	1,947	25,660	2,566
Live Oak East of I-605 Northbound Ramps	19,470	1,947	25,660	2,566
Live Oak West of Graham Access Road	26,320	2,632	34,140	3,414
Live Oak East of Graham Access Road	25,660	2,566	34,160	3,416

Source: AECOM, October 2014.

- ii. The proposed project does not affect intersections that are at LOS D, E, or F with a significant number of diesel vehicles. Based on the *Traffic/Circulation Study*, with the exception of the Live Oak Avenue/Rivergrade Road intersection in 2015, the LOS at intersections within the project vicinity would improve or remain the same. The LOS at Live Oak Avenue/Rivergrade Road would remain acceptable at LOS C. The LOS conditions in the project vicinity with and without the proposed project are shown in Tables 2, 3, 4, and 5.
- iii. The proposed project does not include the construction of a new bus or rail terminal.
- iv. The proposed project does not expand an existing bus or rail terminal.

PM Conformity Hot Spot Analysis – Project Summary for Interagency Consultation

- v. The proposed project is not in or affecting locations, areas, or categories of sites that are identified in the PM_{2.5} and PM₁₀ applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

Therefore, the proposed project meets the Clean Air Act requirements and 40 CFR 93.116 without any explicit hot-spot analysis. The proposed project would not create a new, or worsen an existing, PM₁₀ or PM_{2.5} violation.

Table 2: 2015 Without Project Intersection Levels of Service

Intersection	AM Peak Hour	PM Peak Hour
Live Oak Avenue/Arrow Highway	C	D
Live Oak Avenue/Speedway Drive	A	A
Live Oak Avenue/I-605 Southbound On-Ramp	B	C
Live Oak Avenue/I-605 Northbound Off-Ramps	D	F
Live Oak Avenue/Graham Access Road	A	A
Live Oak Avenue/Rivergrade Road	B	B

Source: AECOM, October 2014.

Table 3: 2015 With Project Intersection Levels of Service

Intersection	AM Peak Hour	PM Peak Hour
Live Oak Avenue/Arrow Highway	C	C
Live Oak Avenue/Speedway Drive	A	A
Live Oak Avenue/I-605 Southbound On-Ramp	B	C
Live Oak Avenue/I-605 Northbound Off-Ramps	B	B
Live Oak Avenue/Graham Access Road	A	A
Live Oak Avenue/Rivergrade Road	B	C

Source: AECOM, October 2014.

Table 4: 2035 Without Project Intersection Levels of Service

Intersection	AM Peak Hour	PM Peak Hour
Live Oak Avenue/Arrow Highway	D	F
Live Oak Avenue/Speedway Drive	A	A
Live Oak Avenue/I-605 Southbound On-Ramp	B	D
Live Oak Avenue/I-605 Northbound Off-Ramps	F	F
Live Oak Avenue/Graham Access Road	A	A
Live Oak Avenue/Rivergrade Road	B	D

Source: AECOM, October 2014.

Table 5: 2035 With Project Intersection Levels of Service

Intersection	AM Peak Hour	PM Peak Hour
Live Oak Avenue/Arrow Highway	D	E
Live Oak Avenue/Speedway Drive	A	A
Live Oak Avenue/I-605 Southbound On-Ramp	B	D
Live Oak Avenue/I-605 Northbound Off-Ramps	C	C
Live Oak Avenue/Graham Access Road	A	A
Live Oak Avenue/Rivergrade Road	B	D

Source: AECOM, October 2014.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
7	LA	605			

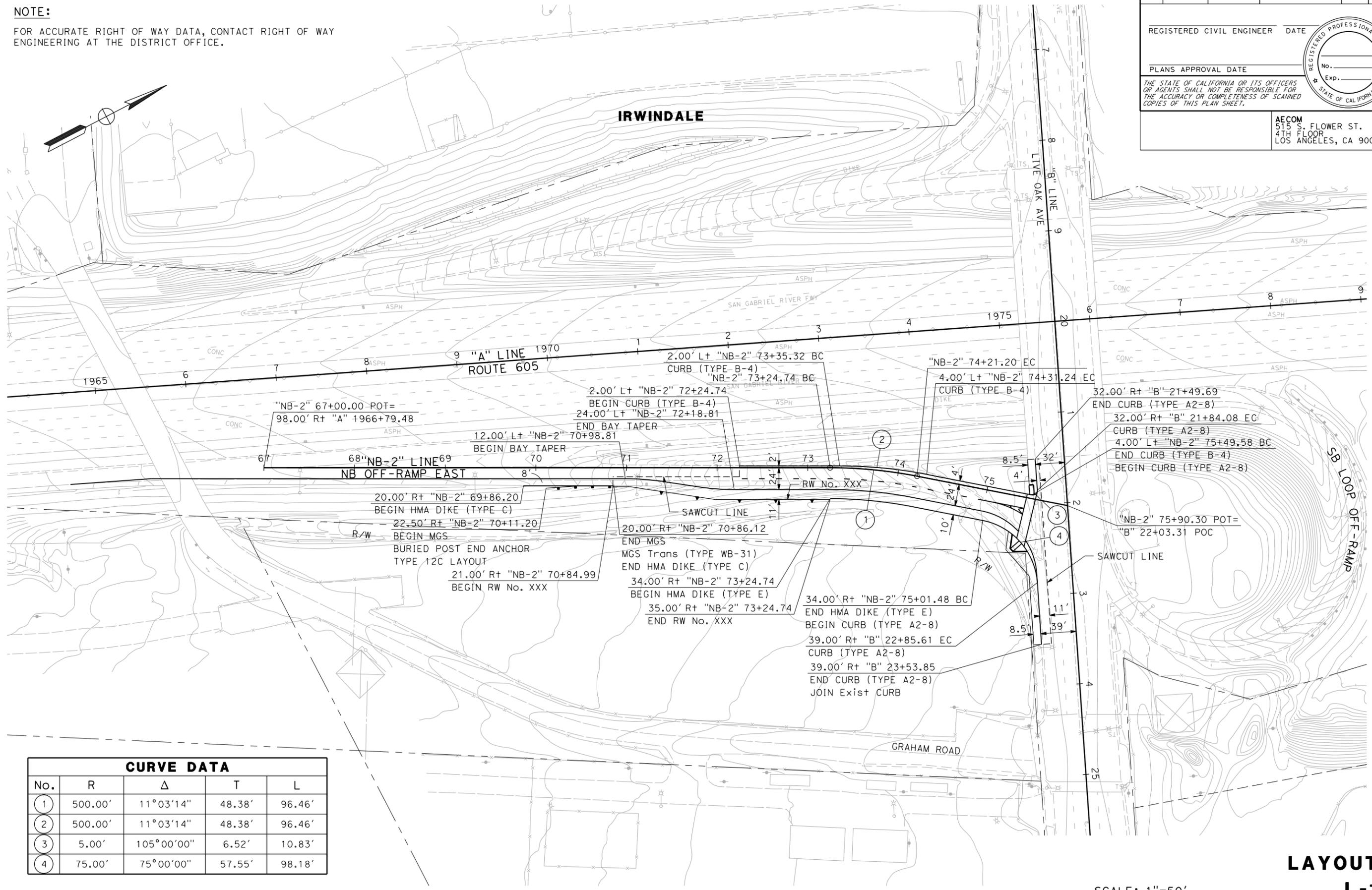
REGISTERED CIVIL ENGINEER DATE _____

PLANS APPROVAL DATE _____

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

AECOM
515 S. FLOWER ST.
4TH FLOOR
LOS ANGELES, CA 90071

NOTE:
FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



CURVE DATA				
No.	R	Δ	T	L
1	500.00'	11°03'14"	48.38'	96.46'
2	500.00'	11°03'14"	48.38'	96.46'
3	5.00'	105°00'00"	6.52'	10.83'
4	75.00'	75°00'00"	57.55'	98.18'

SCALE: 1"=50'

**LAYOUT
L-1**

6/28/2014 5:25:58 PM tammern
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 CONSULTANT FUNCTIONAL SUPERVISOR
 RICHARD SILOS
 CALCULATED/DESIGNED BY
 CHECKED BY
 REVISED BY
 DATE REVISED