

JOB SAFETY ANALYSIS (JSA) FORM					Rev 1 Feb 24
Unit/Area:	Specific Location:	Work Authorizer (if applicable):	Supervisor / Work Lead:	Date:	
Job Description for Tasks with High Potential Consequence (i.e., life-altering injuries or Consequence Level 1 process safety events including HC 1&2 events) (include Equipment Numbers as Practical):					
Check LSRA(s) that apply and review Start Work Check(s). Complete Page 2 with any additional task steps with high potential consequence or if there is no applicable LSRA.					
 Confined Space Entry Obtain authorization before entering a confined space ☐		 Bypassing Safety Controls Obtain authorization before overriding or disabling safety controls ☐		 Energy Isolation Verify isolation and zero energy before work begins ☐	
<ol style="list-style-type: none"> 1. I confirm energy sources are isolated 2. I confirm the atmosphere has been tested and is monitored 3. I check and use my breathing apparatus when required 4. I confirm there is an attendant standing by 5. I confirm a rescue plan is in place 6. I obtain authorization to enter 		<ol style="list-style-type: none"> 1. I understand and use safety-critical equipment and procedures which apply to my task 2. I obtain authorization before: <ul style="list-style-type: none"> • Disabling or overriding safety equipment • Deviating from procedures • Crossing a barrier 		<ol style="list-style-type: none"> 1. I have identified all energy sources 2. I confirm that hazardous energy sources have been isolated, locked, and tagged 3. I have checked there is zero energy and tested for residual or stored energy 4. I never remove or tamper with energy control devices without authorization 5. I confirm equipment is back to safe operating condition prior to re-energizing 	
 Safe Mechanical Lifting Plan lifting operations and control the area ☐		 Hot Work Control flammables and ignition sources ☐		 Working Around Mobile Equipment See and be seen; maintain a safe distance ☐	
<ol style="list-style-type: none"> 1. I confirm that the equipment and load have been inspected and are fit for purpose 2. I only operate equipment that I am qualified to use 3. I establish and obey barriers and exclusions zones 4. I never walk under a suspended load 5. I understand the lift plan prior to starting work and keep hands off load unless authorized 6. I establish and maintain communication with lifting and rigging personnel 		<ol style="list-style-type: none"> 1. I identify and control ignition sources 2. Before starting any hot work: <ul style="list-style-type: none"> • I confirm flammable material has been removed or isolated • I obtain authorization 3. Before starting hot work in a hazardous area, I confirm: <ul style="list-style-type: none"> • A gas test has been completed • Gas will be monitored continually 		<ol style="list-style-type: none"> 1. I plan work to separate workers and mobile equipment 2. I only operate mobile equipment if qualified and use spotters where required 3. I verify safety devices are functional on mobile equipment 4. I establish clear means of communication with equipment operator 5. I stay out of the equipment's exclusion zone while in operation 6. I confirm controls are in place to prevent unintentional movement of mobile equipment and/or loads 	
 Breaking Containment/OPE Manage ignition sources and exposure to energy & hazardous substances ☐		 Driving Follow safe driving rules ☐		 Work Authorization Work with a valid permit when required ☐	
<ol style="list-style-type: none"> 1. I verify opening/break location(s) 2. I confirm energy isolation is complete 3. I manage ignition sources and confirm gas testing is completed when required 4. I use appropriate PPE and defensive behaviors when opening process equipment 		<ol style="list-style-type: none"> 1. I always wear a seatbelt 2. I do not exceed the speed limit, and reduce my speed for road conditions 3. I do not use phones or operate devices while driving 4. I am fit, rested and fully alert while driving 5. I follow journey management requirements 		<ol style="list-style-type: none"> 1. I have confirmed if a permit is required 2. I am authorized to perform the work 3. I understand the permit 4. I have confirmed that hazards are controlled, and it is safe to start 5. I stop and reassess if conditions change 	
				 Line of Fire Keep yourself and others out of the line of fire ☐	
				<ol style="list-style-type: none"> 1. I position myself to avoid: <ul style="list-style-type: none"> • Moving objects • Vehicles • Pressure releases • Dropped objects 2. I establish and obey barriers and exclusion zones 3. I take action to secure loose objects and report potential dropped objects 	
Confirm these safeguards are in place and effective prior to starting work using the applicable SWC(s). During the task, if safeguards are no longer in place or effective, STOP Work.					

Are there any additional high potential consequence hazards present?

Electrical Energy 	Moving Objects 	Lighting & Visibility 	Simultaneous Operations (SIMOPS) or Stacked Work 
Stored Energy 	Hazardous Substances 	Noise & Vibration 	
Thermal Energy 	Radiation 		

High Potential Consequence Task Steps (Description)	Check off to indicate Hold Point	POTENTIAL HAZARDS & CONSEQUENCES Include applicable Error Prone Situations and Triggers	SAFEGUARDS (Actions & Physical Safeguards) Eliminate or Mitigate the hazards
	Hold Point ☐		
	Hold Point ☐		
	Hold Point ☐		
	Hold Point ☐		
	Hold Point ☐		

**Confirm these safeguards are in place and effective prior to starting work using this JSA.
During the task, if safeguards are no longer in place or effective, STOP Work.**

Lessons Learned (as needed): What improvements should be made for future work? Discussion leader to provide feedback to update planning package.

LAI HAZARD ANALYSIS

Project Number:		Project Task: Paving and Pedestals				Location:					
Prepared By:			Date:		Reviewed By:				Date:		
Ref. Number	High Potential Consequence Task Steps	POTENTIAL HAZARDS & CONSEQUENCES Include applicable Error Prone Situations and Triggers	Target Check off to indicate Hold Point ☐	Preliminary Risk Assessment			Control Type	SAFEGUARDS (Actions & Physical Safeguards) Eliminate or Mitigate the hazards	Final Risk Assessment		
				H	M	L			H	M	L
1	General work activities (housekeeping) within and around the GOLD project    	Slips, trips, and falls due to poor housekeeping resulting in personnel injury	P ☐		X		D/E /S/ W/A A A/D D	Prior to starting a task, Evaluate the Lifesaving Rules and actions (LSRA) start work Checks (SWC) that may apply to that task review START/STOP work expectations and implement, Verify & Validate (V&V) the appropriate behaviors and or control Safeguards per the ExxonMobil PSMS and site HSE Procedures during the pre-task brief Ensure JSA for specific LAI tasks address proper hazard control methods. Shop work areas shall be set up and organized to minimize the buildup of materials and eliminate slip/trip hazards. Use pre-job stretching and flexing exercises.			X

LAI HAZARD ANALYSIS

Project Number:		Project Task: Paving and Pedestals			Location:							
Prepared By:				Date:		Reviewed By:				Date:		
Ref. Number	High Potential Consequence Task Steps	POTENTIAL HAZARDS & CONSEQUENCES Include applicable Error Prone Situations and Triggers	Target Check off to indicate Hold Point	Preliminary Risk Assessment			Control Type	SAFEGUARDS (Actions & Physical Safeguards) Eliminate or Mitigate the hazards	Final Risk Assessment			
				H	M	L			H	M	L	
								<p>A/E</p> <p>A/D</p> <p>A/D /E</p> <p>A</p>	<p>Proper waste management receptacles shall be utilized to control trash, debris, and scrap material.</p> <p>Access/ egress points and walkways shall be kept clear at all times.</p> <p>Extension cords, welding leads, and other cables shall be routed overhead, when possible, in a manner that does not create a slip/trip hazard.</p> <p>Regular supervisor walkthroughs should identify and eliminate housekeeping hazards and ensure proper housekeeping methods are being implemented throughout the work shift.</p>			

 Target: **P**=Personnel, **F**=Facilities and equipment, **E**=Environment

 Control Type: **D**=Design hazard out or minimize, **E**=Engineering control, **S**=Safety device, **W**=Warning device, **A**=Administrative control

LAI HAZARD ANALYSIS

Project Number:		Project Task: Paving and Pedestals				Location:					
Prepared By:				Date:		Reviewed By:				Date:	
Ref. Number	High Potential Consequence Task Steps	POTENTIAL HAZARDS & CONSEQUENCES Include applicable Error Prone Situations and Triggers	Target Check off to indicate Hold Point	Preliminary Risk Assessment			Control Type	SAFEGUARDS (Actions & Physical Safeguards) Eliminate or Mitigate the hazards	Final Risk Assessment		
				H	M	L			H	M	L
							E/W A A/W/E A/D	All employees are to correct (or notify their supervisor) if they observe uneven walking/working surfaces. Care should be exercised, when surveying overhead areas. All holes/floor opening eliminated or protected with hard barricades Complete a Last Minute Risk Assessment (LMRA) prior to beginning each task			
2	Paving and Pedestals Layout for foundations C/L of foundation Benchmark near work zone for grade	Trip Hazards Slips, Trips and Falls Pulls and strains Impalement Hazards Pinch points	P ☐		X		A A A	Beware of footing and surroundings. Practice good housekeeping. Eyes on walking path, keep tools and materials away from walking paths in central locations, good housekeeping. Use proper form, worker rotation, teamwork, use equipment when possible.			X

 Target: **P**=Personnel, **F**=Facilities and equipment, **E**=Environment

 Control Type: **D**=Design hazard out or minimize, **E**=Engineering control, **S**=Safety device, **W**=Warning device, **A**=Administrative control

LAI HAZARD ANALYSIS

Project Number:		Project Task: Paving and Pedestals				Location:					
Prepared By:			Date:		Reviewed By:				Date:		
Ref. Number	High Potential Consequence Task Steps	POTENTIAL HAZARDS & CONSEQUENCES Include applicable Error Prone Situations and Triggers	Target Check off to indicate Hold Point	Preliminary Risk Assessment			Control Type	SAFEGUARDS (Actions & Physical Safeguards) Eliminate or Mitigate the hazards	Final Risk Assessment		
				H	M	L			H	M	L
							A/D	Maintain excavation edges, barricade excavations, practice good housekeeping.			
							A/D /S	Cap or remove all impalement hazards.			
							A	Situational awareness, keep body parts away from all pinch point/Line of fire.			
3	Paving and Pedestals Set up work area Set outside forms, Online, Plumb, properly braced, Chamfered edges	Struck by/ caught between backing concrete trucks, or concrete chute Concrete burns Concrete splatter Struck by/ caught between hazards while using hand and power tools. Strains from hand setting forms Construction debris in eyes Damage to extremities	P ☐		X		A/D /S	One worker operates chute. Spotters will be used for any backing operations. All workers will high-vis reflective vests.			X
							S	Chemical resistant gloves and long sleeves will be worn by workers doing concrete work.			
							S	ANSI Z87 safety glasses shall be always worn. Face shield shall be worn by vibrator operator.			
							A/D	Be mindful of body positioning and co-worker body positioning. Tools shall be inspected monthly.			

 Target: **P**=Personnel, **F**=Facilities and equipment, **E**=Environment

 Control Type: **D**=Design hazard out or minimize, **E**=Engineering control, **S**=Safety device, **W**=Warning device, **A**=Administrative control

LAI HAZARD ANALYSIS											
Project Number:		Project Task: Paving and Pedestals				Location:					
Prepared By:			Date:		Reviewed By:				Date:		
Ref. Number	High Potential Consequence Task Steps	POTENTIAL HAZARDS & CONSEQUENCES Include applicable Error Prone Situations and Triggers	Target Check off to indicate Hold Point	Preliminary Risk Assessment			Control Type	SAFEGUARDS (Actions & Physical Safeguards) Eliminate or Mitigate the hazards	Final Risk Assessment		
				H	M	L			H	M	L
							A/D A/D	Battery packs removed from power tool while not in use. Team lifts on items over 50 lbs. Use equipment to move bulk items.			
4	Paving and Pedestals Tie rebar Correct bar Correct spacing Pedestal dowels in correct location	Impalement Hazards Cuts and scrapes from rebar ends and tie wire Struck by equipment while moving rebar bundles Repetitive strain injuries	P ☐		X		A/D /S S A/D /S	All impalement hazards will be removed if possible or capped with OSHA approved caps. Site approved proper gloves and long sleeves will be always worn. Tie wire ends will be beaten down. Spotters will be use when moving material. Workers shall always wear High-vis reflective vests. Foot traffic should make eye contact with operator before entering machine working area. Regular breaks will be taken to stretch frequently used muscle groups			X

Target: **P**=Personnel, **F**=Facilities and equipment, **E**=Environment

Control Type: **D**=Design hazard out or minimize, **E**=Engineering control, **S**=Safety device, **W**=Warning device, **A**=Administrative control

LAI HAZARD ANALYSIS

Project Number:		Project Task: Paving and Pedestals				Location:					
Prepared By:			Date:		Reviewed By:				Date:		
Ref. Number	High Potential Consequence Task Steps	POTENTIAL HAZARDS & CONSEQUENCES Include applicable Error Prone Situations and Triggers	Target Check off to indicate Hold Point ☐	Preliminary Risk Assessment			Control Type	SAFEGUARDS (Actions & Physical Safeguards) Eliminate or Mitigate the hazards	Final Risk Assessment		
				H	M	L			H	M	L
5	Paving and Pedestals Place foundation concrete Drawings and specs E-cure	Struck by/ caught between backing concrete trucks, or concrete chute Concrete burns Concrete splatter Chemical curing compound used Slips/Trips from clutter work zone	P ☐		X		A/D /S S S A/W A/D	One worker operates chute. Spotters will be used for any backing operations. All workers will high-vis reflective vests. Chemical approved resistant gloves and long sleeves will b work by workers doing concrete work. ANSI Z87 safety glasses shall be always worn. Face shields shall be worn by vibrator operator and helper. SDS will be kept with job paperwork and reviewed prior to work task Work zone will be cleared of excess material before placement.			X

 Target: **P**=Personnel, **F**=Facilities and equipment, **E**=Environment

 Control Type: **D**=Design hazard out or minimize, **E**=Engineering control, **S**=Safety device, **W**=Warning device, **A**=Administrative control

LAI HAZARD ANALYSIS

Project Number:		Project Task: Paving and Pedestals				Location:					
Prepared By:			Date:		Reviewed By:				Date:		
Ref. Number	High Potential Consequence Task Steps	POTENTIAL HAZARDS & CONSEQUENCES Include applicable Error Prone Situations and Triggers	Target Check off to indicate Hold Point ☐	Preliminary Risk Assessment			Control Type	SAFEGUARDS (Actions & Physical Safeguards) Eliminate or Mitigate the hazards	Final Risk Assessment		
				H	M	L			H	M	L
6	Paving and Pedestals Set pedestal forms Online Plumb Brace properly Verify cast in place anchor location with manufacturer's drawings.	Struck by/caught between hazards while using hand power tools. Strains from hand setting forms. Construction debris in eyes Damage to extremities	P ☐		X		A A/D A/D S S	Be mindful of body positioning and co-worker body positioning. Tools shall be inspected monthly. Battery packs removed from power tool while not in use. Team lifts on items over 50 lbs. Use equipment to move bulk items. ANSI Z87 safety glasses shall be always worn. Site approved proper gloves and long sleeves, and safety toed boots shall be always worn.			X
7	Paving and Pedestals Tie pedestal rebar Correct rebar Correct spacing	Impalement hazards Cuts and scrapes from rebar ends and tie wire. Struck by equipment while moving rebar bundles Repetitive strain injuries	P ☐		X		A/D /S S D	All impalement hazards will be removed if possible or capped with OSHA approved caps Approved proper gloves and long sleeves will be always worn. Tie wire ends will be beaten down			X

 Target: **P**=Personnel, **F**=Facilities and equipment, **E**=Environment

 Control Type: **D**=Design hazard out or minimize, **E**=Engineering control, **S**=Safety device, **W**=Warning device, **A**=Administrative control

LAI HAZARD ANALYSIS

Project Number:		Project Task: Paving and Pedestals				Location:					
Prepared By:			Date:		Reviewed By:			Date:			
Ref. Number	High Potential Consequence Task Steps	POTENTIAL HAZARDS & CONSEQUENCES Include applicable Error Prone Situations and Triggers	Target Check off to indicate Hold Point	Preliminary Risk Assessment			Control Type	SAFEGUARDS (Actions & Physical Safeguards) Eliminate or Mitigate the hazards	Final Risk Assessment		
				H	M	L			H	M	L
							A/D	Spotters will be used when moving material. Workers shall always wear high-vis reflective vest.			
							A	Foot traffic should make eye contact with operator before entering machine working area.			
8	Paving and Pedestals Place pedestal concrete Mud tailgated in place Correct finish according to drawing and specs E-cure	Struck by/caught between backing concrete truck, or concrete chute Concrete burns Concrete spatter Chemical curing compound used Slips Trips from cluttered work zone	P ☐		X		A/D	One worker operates chute. Spotters will be used for any backing operations. All workers will high-vis reflective vests.			X
							S	Chemical resistant gloves and long sleeves will be worn by workers doing concrete work.			
							S	ANSI Z87 safety glasses shall be always worn. Face shields shall be worn by vibrator operator and helper.			
							A/W	SDS will be kept with job paperwork and reviewed prior to work task.			

 Target: **P**=Personnel, **F**=Facilities and equipment, **E**=Environment

 Control Type: **D**=Design hazard out or minimize, **E**=Engineering control, **S**=Safety device, **W**=Warning device, **A**=Administrative control

LAI HAZARD ANALYSIS

Project Number:		Project Task: Paving and Pedestals				Location:					
Prepared By:			Date:		Reviewed By:				Date:		
Ref. Number	High Potential Consequence Task Steps	POTENTIAL HAZARDS & CONSEQUENCES Include applicable Error Prone Situations and Triggers	Target Check off to indicate Hold Point ☐	Preliminary Risk Assessment			Control Type	SAFEGUARDS (Actions & Physical Safeguards) Eliminate or Mitigate the hazards	Final Risk Assessment		
				H	M	L			H	M	L
							A	Work zone will be cleared of excess material before placement.			
9	Paving and Pedestals Strip forms/ General clean-up Remove excess material and waste from the work zone	Smashed hands Repetitive strain injuries Debris in eyes from splintered wood and concrete Silica exposure	P ☐		X		A	Be mindful of the task at hand			X
							A	Take regular breaks from repetitive task and stretch those muscle groups multiple times a day			
							S	OSHA approved ANSI Z87 safety glasses always worn.			
							A/W	Use wet method and follow 1926.1153 Table 1 for silica exposure			
10	Paving and Pedestals Backfill Area Fill in Soil Compact Check moisture content	Struck by equipment. Operational equipment Slips, Trip and Falls Strains and Sprains Equipment failure Fall from ladder Caught between equipment/structure Damage tools			X		A/S /D	Class 2 High visibility vest, use path of travel away from equipment, use spotter, make eye contact with operator before approaching, operator equipment at slow speeds.			X
							A/D	Use designated spotter when near foundations or other equipment, do not move equipment in area with out spotter in good position			

 Target: **P**=Personnel, **F**=Facilities and equipment, **E**=Environment

 Control Type: **D**=Design hazard out or minimize, **E**=Engineering control, **S**=Safety device, **W**=Warning device, **A**=Administrative control

LAI HAZARD ANALYSIS

Project Number:		Project Task: Paving and Pedestals			Location:							
Prepared By:				Date:		Reviewed By:				Date:		
Ref. Number	High Potential Consequence Task Steps	POTENTIAL HAZARDS & CONSEQUENCES Include applicable Error Prone Situations and Triggers	Target Check off to indicate Hold Point	Preliminary Risk Assessment			Control Type	SAFEGUARDS (Actions & Physical Safeguards) Eliminate or Mitigate the hazards	Final Risk Assessment			
				H	M	L			H	M	L	
								and directing operator, know location of all equipment, personnel, and structures always. Eyes on walking path, keep tools and materials away from walking paths in central locations, good housekeeping. A Use proper form, worker rotation, teamwork, use equipment when possible. A Inspect equipment prior to use, remove defective equipment from service. Three points of contact, have additional person hold ladder, boot with well-defined heel. A Keep body position away from structure when equipment is in the area, have an escape path.				

 Target: **P**=Personnel, **F**=Facilities and equipment, **E**=Environment

 Control Type: **D**=Design hazard out or minimize, **E**=Engineering control, **S**=Safety device, **W**=Warning device, **A**=Administrative control

LAI HAZARD ANALYSIS											
Project Number:		Project Task: Paving and Pedestals				Location:					
Prepared By:				Date:		Reviewed By:				Date:	
Ref. Number	High Potential Consequence Task Steps	POTENTIAL HAZARDS & CONSEQUENCES Include applicable Error Prone Situations and Triggers	Target Check off to indicate Hold Point	Preliminary Risk Assessment			Control Type	SAFEGUARDS (Actions & Physical Safeguards) Eliminate or Mitigate the hazards	Final Risk Assessment		
				H	M	L			H	M	L
							A	Inspect tools prior to used, removed damaged tools from services.			

Target: **P**=Personnel, **F**=Facilities and equipment, **E**=Environment

Control Type: **D**=Design hazard out or minimize, **E**=Engineering control, **S**=Safety device, **W**=Warning device, **A**=Administrative control