



# STANDARD CONDITIONS AND REGULATIONS

## ENCROACHMENT/MISCELLANEOUS CONSTRUCTION PERMITS

CONTACT CITY INSPECTOR THREE (3) WORKING DAYS PRIOR TO START OF WORK AT 949-724-6329.

THE FOLLOWING STANDARD CONDITIONS AND REGULATIONS SHALL APPLY TO PERMIT: \_\_\_\_\_

### INFORMATION SHEET

#### REQUIRED COMPLIANCE WITH TERMS OF PERMIT

ALL WORK SHALL BE PERFORMED IN CONFORMANCE WITH THE APPROVED PLANS. ANY NECESSARY VARIATIONS SHALL BE APPROVED AS A PLAN REVISION BEFORE PROCEEDING.

APPLICANT SHALL BE RESPONSIBLE FOR OBTAINING ANY REQUIRED PERMITS AND APPROVALS FROM ALL AGENCIES WITH JURISDICTION OVER THE WORK AREA AND SHALL PROVIDE EVIDENCE OF WRITTEN APPROVAL FROM SUCH AGENCIES PRIOR TO COMMENCEMENT OF PLANNED CONSTRUCTION ACTIVITIES.

#### NOTIFICATION REQUIREMENTS

Seven days prior to starting any work that constitutes general circulation/access impacts or noise levels that may exceed normal ambient levels, applicant shall notify all local area residents and businesses within the proximity of the project with a written notice containing the project description including scope of work, expected project duration, and an on-site contact with phone number.

The contractor shall notify (by telephone and email) City of Irvine Traffic Research and Control (ITRAC), Signal Operations and Maintenance, Police Department (Public Safety), Traffic Engineering, CD Inspection and CIP Inspection (if applicable), four (4) working days prior to performing any work within 250 feet (measured from the nearest curb) of any signalized intersection, implementing any road closure, or implementing any detouring of traffic.

**Telephone notification** shall include the permit number, the dates and times of the proposed work, and the street intersection. Telephone numbers are:

CD Inspection	Tim Anderson	949-724-6329
CIP Inspection	Rick Torres	949-724-7653
Public Safety	Traffic Bureau Sergeant	949-724-7037
ITRAC	Mark Ha	949-724-6186
Signal Operations and Maintenance	Kevin Tobin	949-724-7684
Traffic Engineering	Stan Ng	949-724-7355

**Email notification** shall include a PDF attachment of specific plan sheets from the approved plan set. Only sheets pertaining to traffic control specific to the noticed work, and any related detour, shall be included. The email address is: [RoadWorkCoordination@Cityofirvine.org](mailto:RoadWorkCoordination@Cityofirvine.org)

The notification email subject line shall include the permit number; dates and times of proposed work; and the name of the street intersection. **For example:** 00523243-MCE; 9:00 a.m. to 3:00 p.m. Monday, January 9, 2012; 1st and Main

The body of the email shall contain the name of the contractor responsible for the work and the name and contact information for the on-site party to be in charge during the work.

A permittee shall not make or cause to be made any excavation, or construct, place upon, maintain or leave any obstruction

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or impediment to travel or pile or place any material in or upon any highway, median or adjacent pedestrian right-of-way or install or maintain or cause to be maintained any tank, pipe, conduit, duct, or tunnel in, upon or under the surface of any highway, median or adjacent pedestrian right-of-way at any location or in any manner other than that described in the application as approved by the City Engineer or contrary to the terms of the permit or of any provisions of this permit.

No access or work shall be performed within the City right-of-way without the full knowledge of the assigned City Inspector who shall be given **no less than three (3) working days advance notice** of the initiation of permitted use at 949-724-6329 or by written notice addressed to the City of Irvine, One Civic Center Plaza, P.O. Box 19575, Irvine, CA 92623-9575, Attn: **INSPECTION SUPERVISOR**. Said notice shall include the name and telephone number of the applicant's authorized representative responsible for coordination and supervision of permitted uses.

Applicant agrees that it shall be his/her responsibility to provide the contractor, subcontractor, or any other agent responsible for construction of permitted use within the City of Irvine right-of-way, with a copy of the permit with these conditions attached, and a complete set of City approved plans.

This permit may be immediately revoked for reasons in the best interest of the City, for violation of permit conditions or for the creation of a nuisance upon notice given by the Director of Community Development/Public Works or its authorized representative.

An approved set of plans and specifications shall be kept at the job site for the City Inspector's review.

In the event of a permit revocation, applicant shall immediately cease all operations and restore City right-of-way as directed by the City Inspector/authorized representative. After notification, City may take full possession of the area. Applicant shall pay to the City all costs incurred by the City to restore the worksite to a safe condition in the event the contractor fails to do so in a timely manner.

This permit becomes null and void if work is not completed within 180 calendar days, or if work has not started and/or is suspended for 60 calendar days or more.

Miscellaneous construction permits may be extended upon written request from the applicant and approval by the City Engineer.

Encroachment Permits may be extended upon written request from the applicant and approval by the City's Chief Building Official.

## **COST OF FUTURE REPAIRS TO BE PAID BY PERMITTEE**

If at any time subsequent to the first repair of a surface of a highway damaged or destroyed by any excavation or obstruction in such highway it becomes necessary again to repair such surface due to settlement or any other cause directly attributable to such excavation or obstruction, the permittee shall pay to the City the cost of such additional repairs made by the City. The City Engineer shall compute the cost.

## **RESTORATION OF HIGHWAY UPON COMPLETION OF WORK**

Immediately upon completion of the work necessitating the excavation or obstruction authorized by this permit, the permittee shall promptly and in a workmanlike manner refill the excavation or remove the obstruction to the satisfaction of the City Inspector/authorized representative.

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If any permittee fails or refuses to refill any excavation that he/she made or remove any obstruction that he/she placed on any highway, all work will stop until conditions are corrected. The City Engineer may elect to employ another contractor or City crew to perform this work and the applicant shall promptly reimburse the City the cost thereof.

## **COST OF RESURFACING TO BE BORNE BY PERMITTEE**

If, after the refilling of an excavation, the permittee fails or refuses to resurface or repair that portion of the surface of the highway damaged by him/her, all work will stop until conditions are corrected. The City Engineer may elect to employ another contractor or City crew to do such resurfacing or repairing, and the permittee shall promptly reimburse the City the cost thereof.

If a permittee, upon demand, fails to pay any costs due the City hereunder, the City may recover the same by an action in any court of competent jurisdiction. Until such cost is paid in full, a permit shall not be issued to such permittee.

## **PERMITTEE SHALL HOLD CITY HARMLESS**

The permittee guarantees to hold, indemnify and keep harmless the City of Irvine and all its agents, officers, employees, and officials against all liabilities, judgments, costs and expenses which may in any manner or form arise in consequence to the issuance of this permit or any work performed in consequence thereof.

Survey monuments shall be preserved and referenced before construction and, if disturbed, replaced after construction pursuant to Section 8771 of the Business and Professions Code.

## **PERMITTEE SHALL PROVIDE ACCESS**

In the event that any work permitted by this permit prevents or hinders vehicular or pedestrian traffic to travel from the street to any property, whether public or private, the permittee shall maintain access to said property, as instructed by the City Inspector or authorized representative.

## **PERMITTEE TO PAY DEFICIENCY**

If any deposit is insufficient to pay all fees and costs herein provided, the permittee shall, upon demand, pay to the City the amount equal to the deficiency.

## **STORMWATER POLLUTION PREVENTION REQUIREMENTS**

Stormwater pollution prevention devices and practices shall be installed and/or instituted as necessary to ensure compliance to the City of Irvine water quality standards contained in Chapter 3, Water, Division 8, Title 6, of the Irvine Municipal Code. All such devices and practices shall be maintained, inspected and/or monitored to ensure adequacy and proper function throughout the duration of the construction project.

Compliance to the water quality standards includes, but is not limited to, the following requirements:

- A. Sediment and other pollutants shall be properly disposed of, and may not be transported from the construction zone via sheet flow, swales, area drains, natural drainage courses or wind. Care shall be taken to ensure that no such pollutants are deposited in gutters or catch basins or allowed to enter any other component of the City or any other storm drain system.
- B. Spoils from saw cutting operations shall be collected and disposed in an approved manner. Wet saw cutting may only occur when accompanied by a vacuum to collect all spoils.

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- C. Stockpiles of earth and other construction-related materials shall be protected from exiting the site by the forces of wind and water flow.
- D. Fuels, oils, solvents, and other toxic materials shall be stored in accordance with their listing and are not to contaminate the soil and surface waters. All approved storage containers are to be protected from the weather. Spills must be cleaned immediately and disposed in a proper manner. Spills may not be washed into the drainage system, nor be allowed to settle or infiltrate into soil. Plastic or other approved material should be placed under all storage materials or drums.
- E. Excess or waste concrete may not be washed into the City of Irvine storm drain system or any other drainage system. Provisions shall be made to retain concrete wastes until they can be disposed as solid wastes. Any wash-out within the construction zone may only occur in an approved location and manner.
- F. Trash and construction solid wastes shall be deposited into a covered receptacle to prevent contamination of stormwater and dispersal by wind.
- G. Sediment and other materials may not be tracked from the construction zone by vehicular traffic. Accidental deposits shall be swept (not washed) immediately.
- H. Any slopes with disturbed soils or removed vegetation shall be stabilized to inhibit erosion by wind and water.

Stormwater pollution prevention and erosion control devices and/or practices shall be modified, as needed, to ensure effectiveness as the project progresses.

## **CONSTRUCTION**

Permitted use shall be constructed in accordance with the City of Irvine Standard Plans, Standard Specifications for Public Works Construction "Green Book" and approved plans, subject to inspection and approval by the City Inspector. Any compaction testing shall be paid by the contractor. Certification shall be made by a certified testing agency or firm approved by the City.

For all arterial highways, a final cap of 2" of Asphalt Rubber Hot Mix (ARHM) shall be used in accordance with the "Green Book".

Any excavated area covered by pavement shall be cut to a neat line and asphalt concrete (A.C.) replacement shall be installed to the satisfaction of the City Inspector or authorized representative.

Care shall be exercised to prevent water, soil, and debris from depositing in gutters and catch basins.

All commercial drive approaches shall be placed monolithically with curb and gutter. The required section is 8" concrete over 6" Class II aggregate base (A.B.).

One sack cement slurry backfill shall be required when tunneling under curb and gutter. Slurry backfill is required around all manhole construction within paved streets.

One sack cement slurry mix shall be required as backfill, in accordance with Standard Plan 223 "Alternative A" on all trench excavations and potholes within arterial travel ways and all street intersections unless directed otherwise by the City Inspector. Prior to cement slurry backfill, 12" sand shall be placed over pipes or conduits.

Slurry seal shall be required for all trenching repairs, including where potholing occurs or where construction damage occurs (lane line to lane line) as a result of construction activity for the entire length of the project, unless noted otherwise on the approved plan. For work within intersections, slurry seal shall be required over the entire intersection (limit line to limit line) as directed by the City Inspector or authorized representative. For perpendicular cuts, slurry seal shall be required for ten (10)

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feet on each side of the cut or as directed by the City Inspector or authorized representative. Type I slurry shall be used on non-arterial highways and Type II slurry shall be used on arterial highways.

All concrete work shall consist of six (6) sack, Type V cement unless deemed unnecessary by sulfate content tests and approved by the City Inspector or authorized representative.

## **TRAFFIC SIGNALS**

The Standard Conditions and Regulations for Traffic Signal Permits shall govern in addition to the following requirements.

Prior to excavating within three (3) feet of traffic signal loops, the contractor must notify the City Inspector.

Any traffic signal detection loop system shown to be affected during the authorized work shall be replaced or restored to functioning condition by the end of the work day.

If such affected traffic signal detection loops cannot be replaced by the end of the work day then the contractor, prior to cutting any detection loop system, shall furnish and install an operational temporary video detection system in accordance with City of Irvine Design Manual Section 104.

Any unanticipated damages to the traffic signal interconnect conduit, interconnect cable, or detection loop system during operations of this permit shall be replaced within 72 hours to the satisfaction of the City Inspector.

The contractor shall complete the City Traffic Control Facility Damage Report, if so directed by the City Inspector for any damaged traffic signal interconnect conduit, interconnect cable or detection loop system.

Mechanical trenching shall not be used in tree crown areas unless approved by the City Inspector or authorized representative. The use of rockwheel trenching is not allowed in any City right-of-way.

The installation of all underground facilities crossing existing arterial highways requires boring or jacking unless otherwise approved by the City Engineer or authorized representative.

The permittee shall not excavate, construct, place upon, maintain or leave any obstruction or impediment to travel, shall not pile or place any material in or upon any highway or install or maintain or cause to be maintained any tank, pipe, conduit, duct or tunnel in, upon or under the surface of any highway, at any location or in any manner other than that described in the application, as approved by the City Engineer or contrary to the terms of the permit or any provisions of this permit.

The shallowest portion of any pipeline or conduit shall be installed not less than 42" below the roadway surface on arterial highways and not less than 30" on local streets.

After each workday and upon completion of work all excess material including excess excavation, shall be removed from the right-of-way, and the roadway shall be left in a neat and orderly condition.

## **RESURFACING BY PERMITTEE OR CITY AND SPECIFICATIONS THEREOF**

Temporary patching of trench is required on all cuts in surfaced streets immediately after backfilling.

Trenching through the A.C. section shall be a minimum of 24" in width per City Standard Plan 223. A.C. shall be replaced using a section 1" greater than existing A.C. A.C. shall be compacted using a mechanical roller narrow enough to fit completely within the trench boundaries.

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After completion of the refilling and compacting of the backfill material in the excavation as specified, the permittee shall promptly replace with temporary or permanent patching material or repair any portion of the highway surface removed or damaged by the excavation, obstruction or construction operations to the satisfaction of the City Inspector or authorized representative and as specified elsewhere herein. All work will stop until conditions are corrected. The City Engineer may elect to employ another contractor or City crew to perform this work and the applicant shall promptly reimburse the City the cost thereof.

Where the A.C. pavement or surface has been removed by others, the permittee shall replace it with a standard repair of 3" A.C. over 6" A.B. or repair section shall be existing structural section plus 1" A.C., whichever is greater. Road-mixed surfacing over native soil is 3" A.C. minimum. Portland cement surfacing shall be replaced with Portland Cement Concrete. A.C. shall conform to Standard Specification (State of California) consisting of 85-100 penetration paving asphalt, 3/4" maximum aggregate for base course (medium), and 1/2" aggregate for surface course (medium). A.C. shall conform to Standard Specifications (State of California) Class III modified and tack shall be required. Saw cutting of edges of trenches is required for all surfaces. Equivalent total A.C. sections may be substituted with the approval of the City Engineer. Slurry seal shall be required for all trenching repairs including where construction activity occurs. Slurry seal is required for all lanes damaged (lane line to lane line). For work within intersections, slurry seal shall be required over the entire intersection (limit line to limit line) as directed by the City Inspector or authorized representative.

Clay and earth which adhere to the paved surface of the roadway shall be immediately removed by hand scraping and sweeping or by any other method which will leave a clean nonskid surface without impairing, damaging or loosening the surface.

Permittee shall comply with any and all directives issued by the City Inspector or authorized representative in order to prevent dust or other material from becoming a nuisance or annoyance.

The contractor shall encase utilities crossing a trench with one foot of sand around the utility. Slurry backfill shall not encroach within one (1) foot of the utility.

The contractor shall replace any sidewalk, curb, and gutter disturbed by construction activities from score line to score line with no less than ten-foot sections.

The contractor shall replace any access ramp disturbed by construction activities in accordance with City Standard Plan No. 202.

All USA markings shall be removed within seven (7) calendar days after completion of the work for which the markings were provided and before the City's acceptance and/or approval of the work.

The installation of all underground facilities crossing existing arterial highways requires boring or jacking unless otherwise approved by the City Engineer.

All excavation and backfill shall be compacted to a relative density of at least 90% of the maximum density. Compaction tests are required at 300' maximum intervals or as required by City Inspector.

One (1) sack cement slurry mix shall be required as backfill on all lateral excavations within arterial travel ways and all street intersections in accordance with City Standard Plan 223, unless directed otherwise by the City Inspector.

## **LOCATION OF PIPES AND CONDUITS**

All pipes and conduits laid parallel to the roadway shall be placed at least five (5) feet from the edge of the pavement or graded traveled roadway, unless otherwise authorized; in writing, by the City Engineer. The shallowest portion of any pipeline or other

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facility shall be installed not less than 42" below the roadway surface for arterial roads, and not less than 30" below the roadway surface for non-arterial highways.

**BACKFILL:** Backfill shall be dampened and well tamped with a pneumatic tamper or in any other workmanlike manner satisfactory to the City inspector, to obtain 90% relative compaction.

All muck or mud resulting from water or any leaky condition will be removed and the excavation backfilled with a compatible material which is most effective (soil, A.B., or slurry) as determined by the City inspector.

Any excess excavated material shall be completely removed from the construction zone and adjacent areas prior to completion of the project.

Any affected roadside drainage ditches shall be restored to true grade, and culvert intake and outlet ends shall be maintained free of obstructions.

## **TRAFFIC CONTROL**

The permittee shall take adequate precautions for the protection of the traveling public. Barricades, lights and warning signs, together with flagmen where necessary, shall be maintained until the excavation is refilled, the obstruction removed and the roadway is safe for the use of the traveling public. The City Engineer may specify, as a condition of the issuance of the permit, the safety devices or measures to be used by the permittee, but the failure of the City Engineer to so specify the devices or measures to be used shall not relieve the permittee of his obligation.

The contractor shall conduct operations as to create the least possible obstruction and inconvenience to the public. The contractor shall not begin work that cannot be completed with regard to the rights of the public.

Traffic control devices shall be in place prior to start of work and all traffic control within the construction area shall be installed to the satisfaction of the City Inspector or authorized representative and conform to the latest edition of:

- A. California Manual on Uniform Traffic Control Devices for Streets and Highways
- B. American Public Works Association (APWA) Southern California Chapter, "Work Area Traffic Control Handbook" (WATCH Manual)
- C. Standard Specifications for Public Works Construction "Greenbook"
- D. All Occupational Safety and Health Administration (OSHA) Requirements
- E. California Vehicle Code
- F. Approved Traffic Control Plan

The contractor shall maintain two-way traffic at all times.

The contractor shall maintain at least two (2) lanes of traffic in each direction during construction operations on arterial highway unless otherwise indicated on the approved traffic control plan.

Arrow boards shall be used for any lane closure on arterial highways.

At least ten (10) working days prior to the start of work, the contractor shall provide portable changeable message boards in all directions of travel (including side streets), to warn the public of the work.

During non-working hours or when work is not scheduled, all roadway lanes shall be returned to their full traffic use by plating

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or backfilling and paving the open trenches unless otherwise approved by the City Inspector. At the end of the work day, the contractor shall remove all traffic control devices not in use.

No steel plates shall remain on local streets over weekends or holidays unless otherwise approved by the City Inspector.

Steel plates shall be installed per the applicable specification below.

Arterial Highways: Steel plates shall be installed flush with existing asphalt surface, tack welded together, and have a non-slip surface.

Steel plates installed adjacent to residential tracts shall have DOT approved anti-skid coating technology and shall not use welded ridges to accomplish anti-skid requirements.

Local Streets: Steel plates shall be pinned at all corners, tack welded together, have non-slip surface and 12" wide minimum A.C. taper at edge of steel plates.

The roadway shall be free of all obstructions and completely open to traffic at the end of each day (no later than 3:00 p.m. on arterial highways).

No work shall begin on arterial highways before 9:00 a.m. or continue after 3:00 p.m.

On local streets, no work shall begin before 7:00 a.m. or continue after 7:00 p.m. on weekdays. On local streets, Saturday work hours are from 9:00 a.m. to 6:00 p.m. unless otherwise approved by the Chief Building Official. Prior authorization is required for overtime inspections. **No work is permitted on Sundays or federal holidays.** The Chief Building Official or his/her authorized representative must approve any deviation from the above work hours in writing.

If the contractor desires to work on Saturdays (and/or any Friday when City offices are closed) or outside of the 7:00 a.m. to 7:00 p.m. weekday work hours, authorization shall be approved by the City inspection Supervisor. All requests for such work shall be submitted at least four (4) working days in advance of any work. Inspections for any such authorized work are subject to overtime pay and may also include overtime pay for ITRAC and Public Safety personnel (should the nature of the work necessitate their involvement to ensure traffic impacts are properly managed).

Trenching for installations across any intersecting roadway open to traffic shall be progressive (i.e. not more than one-half of the width of a traveled way shall be disturbed at one time and the remaining width shall be kept open to traffic by bridging or backfilling).

## **TRAFFIC CONTROL SETUP**

All traffic control devices, including barricades, traffic control signs, and delineators, shall be in place prior to start of work. All tubular delineators shall be 36" minimum height and cones shall be 28" minimum height and shall include a 12" high intensity reflectorized sleeve. Contractor shall be responsible for the placement of any additional traffic control devices required by the City of Irvine to assure safety to the public at all times during construction.

Safe, adequate, continuous and unobstructed pedestrian, vehicular and emergency access shall be maintained, unless otherwise approved by the City Inspector.

Flagger control shall be in conformance with Chapter 6E of California Manual of Uniform Traffic Control Devices for Streets and Highways (CA MUTCD).

The contractor shall provide flaggers and equipment as deemed necessary by the City Inspector to give adequate warning to



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the public of any dangerous conditions that may be encountered. The contractor shall employ personnel trained in flagging fundamentals and procedures referenced in the CA MUTCD. As a reference, the contractor may refer to the “Flagger Handbook” on Caltrans' website: <http://www.dot.ca.gov/hq/construc/flagging/flaggerhandbook2007.pdf>

The contractor shall maintain all traffic control signs, delineators, etc., to ensure proper flow and safety of traffic while working in the street. See the section “Traffic Signal” requirements within this document and the Standard Conditions and Regulations for Traffic Signal Permits.

Any roadway striping or signage damaged or removed during the operation of this permit shall be replaced by the applicant, and work shall conform to the latest CA MUTCD and to the satisfaction of the City Inspector.

Signing and striping shall conform to the latest edition of the CA MUTCD. Installation and removal of pavement markers shall conform to the latest edition of the Standard Specifications for Public Works Construction “Greenbook”. All pavement legends shall be installed in accordance with the City stencils (Hawkins stencils or equivalent).

All striping and pavement markings shall be reflectorized and applied in two coats. A minimum of seven (7) days shall be provided between first and second coats.

All conflicting striping, pavement markings, and curb paint shall be removed by wet sandblasting or other approved method prior to installation of new striping. All conflicting raised pavement markers shall be removed. “Blackout” removal method for conflicting striping shall not be used.

Pavement that is damaged due to removal of markers or striping shall be repaired to the satisfaction of the City Inspector.

All signs shall be reflective and comply with the latest edition of the CA MUTCD.

Contractor shall be responsible for the placement of any additional traffic control devices required by the City Inspector or authorized representative to assure safety to the public at all times during construction.

Striping shall be “cat tracked” and approved by the City Inspector prior to final installation.

Crosswalks shall conform to the City of Irvine Standard Plan No. 203.

Contractor shall restore any and all striping, pavement markings, and traffic signal loops damaged or removed during construction to the satisfaction of the City Inspector or authorized representative.

The contractor shall place advance warning signs for any on-street bike lane closures. Bike lane warning signs are as follows (each sign package shall be spaced at a minimum of 150 feet):

1. C20(CA) (Bike) - Bike Lane Closed Ahead
2. W11-1 and W16-1 - Bicyclist Symbol and Share the Road
3. SC11(CA) (Bike) - Bike Lane Close

Where off-street bicycle lanes and/or trails are closed, the contractor shall provide a detour plan for the City Engineer's review and approval prior to the closure.