



BUILDING PERMIT APPLICATION Manufactured or Factory Built Home

In order to process a manufactured or factory built permit, the following must be submitted:
(Please place a check mark in each box to verify completion of each item **if not completed permit application will not be accepted**)

- Application – first page completed (valuation, square footage, description, etc.)
- Site plan to scale – 8 ½ x 11 size paper – showing:
 - Assessor's parcel number
 - Indicate scale (may be engineer or architect's scale)
 - Address
 - Signature of owner/authorized agent with a date
 - Parcel diagram (lines)
 - Dimensions of property
 - Show dimension and setbacks on all sides of home to property lines and between new and existing structures
 - Adjacent streets and alleys
 - Location and dimensions of easements that apply with proof of legal access
 - Indicate front of property
 - Indicate north
 - Ingress/Egress driveway location
 - Location of septic tank and leach line (include dimensions, size and setback or distance from proposed home)
 - Location of propane tanks
 - Indicate existing topographical contours (solid line) and proposed contours (dashed line)**
 - Indicate any required cut and fills amounts and crowning underneath the home as part of soil preparation, **except for homes installed in Mobile Home Parks**
 - Location of any terrain features that affect placements including washes, creeks or ditches within 20 feet of the building site
- Application Manufactured Home Installation Permit form (must list serial #, size, year, make and Unit Installer information)
- Completed lighting permit and lumen calculation form for all outdoor lighting, existing and new
- Water & Sanitary form
- Contractor Information form
- Driveway and Culvert Application
- Factory Built/Modular Homes and homes requiring engineered foundations due to flood zones, etc. must provide foundation plans (Residential: 2 copies/Commercial 5) that have been stamped/approved by the Department of Fire, Building and Life Safety Office of Manufactured Housing
- Anchoring System (2 copies) in compliance with the following: Manufacturer's Manual, approved patented system such as Minute Man or Tie Down, or a site-specific engineered design approved by the State Department of Fire, Building and Life Safety
- Soil Compaction Report verifying soil compaction at a minimum of 1,000 psf.
- Permit Fees will be collected upon application submittal

AN INCOMPLETE APPLICATION WILL CAUSE YOUR PERMIT TO BE DELAYED



TOWN OF CAMP VERDE
Community Development Department
473 S. Main Street, Suite 108
Camp Verde, AZ 86322
(928) 567-8514 • Fax (928) 567-7401
Website: www.campverde.az.gov

DATE
 RECV'D: _____

PERMIT
 NO. _____

APPLICATION FOR PERMIT

PROPERTY AND BUILDING INFORMATION

PARCEL NO: _____ LEGAL DESCRIPTION _____
 PROJECT ADDRESS _____
 DESCRIPTION OF PROJECT _____
 HAS WORK COMMENCED ON THIS PROPERTY? _____ SQUARE FOOTAGE _____ APPLICANT'S VALUATION _____
 PROJECT TYPE: RESIDENTIAL COMMERCIAL INDUSTRIAL NEW ALTERATION/REMODELING ADDITION DEMOLITION

PROPERTY OWNER INFORMATION

OWNER NAME _____
 MAILING ADDRESS _____ CITY _____
 STATE _____ ZIP _____ PHONE _____

Attention Applicant: If you are not the owner of this parcel, you must have something in writing from the owner granting you permission to take out this permit. Also, if you recently purchased this parcel you may have to show proof of ownership documentation.

APPLICANT OR CONTRACTOR INFORMATION

OWNER AGENT CONTRACTOR TENANT

APPLICANT NAME _____
 MAILING ADDRESS _____ CITY _____
 STATE _____ ZIP _____ PHONE _____
 CONTRACTOR'S LICENSE # _____ CLASS _____ TOWN BUSINESS LICENSE # _____

THE FOLLOWING INFORMATION IS REQUIRED FOR COMMERCIAL, INDUSTRIAL, AND MULTI-FAMILY PROJECTS ONLY

PROPOSED USE _____ EXISTING USE _____
 PROPOSED CONSTRUCTION TYPE WALLS: Combustible Non-Combustible ROOF STRUCTURE: Combustible Non-Combustible
 EXISTING CONSTRUCTION TYPE WALLS: Combustible Non-Combustible ROOF STRUCTURE: Combustible Non-Combustible
 IF THIS IS AN EXISTING BUILDING, DOES IT HAVE A FIRE SPRINKLER SYSTEM?: _____ FIRE ALARM SYSTEM?: _____
 OCCUPANCY LOAD: _____ IBC OCCUPANCY TYPE: _____ IBC CONSTRUCTION TYPE: _____

CURRENT CODE REQUIREMENTS:

2006 INTERNATIONAL BUILDING CODE	2006 INTERNATIONAL RESIDENTIAL CODE
2005 NATIONAL ELECTRIC CODE	2003 INTERNATIONAL FIRE CODE
2006 INTERNATIONAL MECHANICAL CODE	2006 ENERGY CONSERVATION CODE
2006 INTERNATIONAL PLUMBING CODE	2006 EXISTING BUILDING CODE
2006 INTERNATIONAL FUEL GAS CODE	

The Applicant assumes all responsibility for complying with any deed restrictions (CC&R's) that may apply to the property.

UNDER PENALTY OF INTENTIONAL MISREPRESENTATION AND/OR PERJURY, I DECLARE that I have examined and/or made this application and it is true and correct to the best of my knowledge and belief. I agree to construct said improvement in compliance with all provisions of the Ordinances of the Town of Camp Verde. I realize that the information that I have stated heron forms a basis for the issuance of the Building Permit herein applied for and approval of any plans in connection therewith shall not be construed to permit any construction upon said premises or use thereof in violation of any provision of the Town Code or any other ordinance or to excuse the owner or his successors from complying therewith. WHERE NO WORK HAS COMMENCED WITHIN 180 DAYS AFTER THE ISSUANCE OF A PERMIT OR WHEN MORE THAN 180 DAYS LAPSE BETWEEN APPROVAL OF REQUIRED INSPECTIONS, SUCH PERMIT SHALL BE VOID. I hereby certify that I am the OWNER at this address or that, for the purposes of obtaining this approval; I am acting on behalf of the owner. All contract work on this project will be done by a contractor holding a valid privilege tax license issued by the Town of Camp Verde and contractor's license issued by the State of Arizona.

OWNER APPLICANT

NAME (Printed) _____ SIGNATURE: _____

BUILDING		
ELECTRICAL		
PLUMBING		
ZONING CLEARANCE		
MECHANICAL		
POOLS		
FENCES		
DEPOSIT		
TOTAL		
RECEIPT#:		
CHECK #		
APPLICATION TAKEN BY:		

TOWN OF CAMP VERDE RESIDENTIAL BUILDING CHECKLIST

PLEASE COMPLETE THE CHECKLIST IN FULL

Owner's Name and Mailing Address:

Project address:

Contractor Name/Address:

Parcel No. _____ Zoning: _____

Parcel Dimensions: _____
Building Dimensions shown on plot plan: _____

Description of Project: _____

Setbacks:

Per Ordinance: Front _____ Back _____ Left _____ Right _____
Proposed: Front _____ Back _____ Left _____ Right _____

Legal Access:

Right of Way _____ Public Road _____ Private _____

(If access is by easement, include legal description showing access.)

Construction must be commenced within 180 days of the Issuance of a permit or it becomes void/expired. IF CONSTRUCTION IS ABANDONED FOR 180 DAYS (i.e., owner has not had any inspections within 180 days) THE PERMIT WILL BECOME VOID/EXPIRED.

Owner/Agent acknowledgment: _____

For Official Use Only:

Culvert Permit sent to Streets Department on: _____
Septic # _____ Well # _____

(If service is to be provided by CV Sanitary District and CV Water Company, include approval dates from each entity)

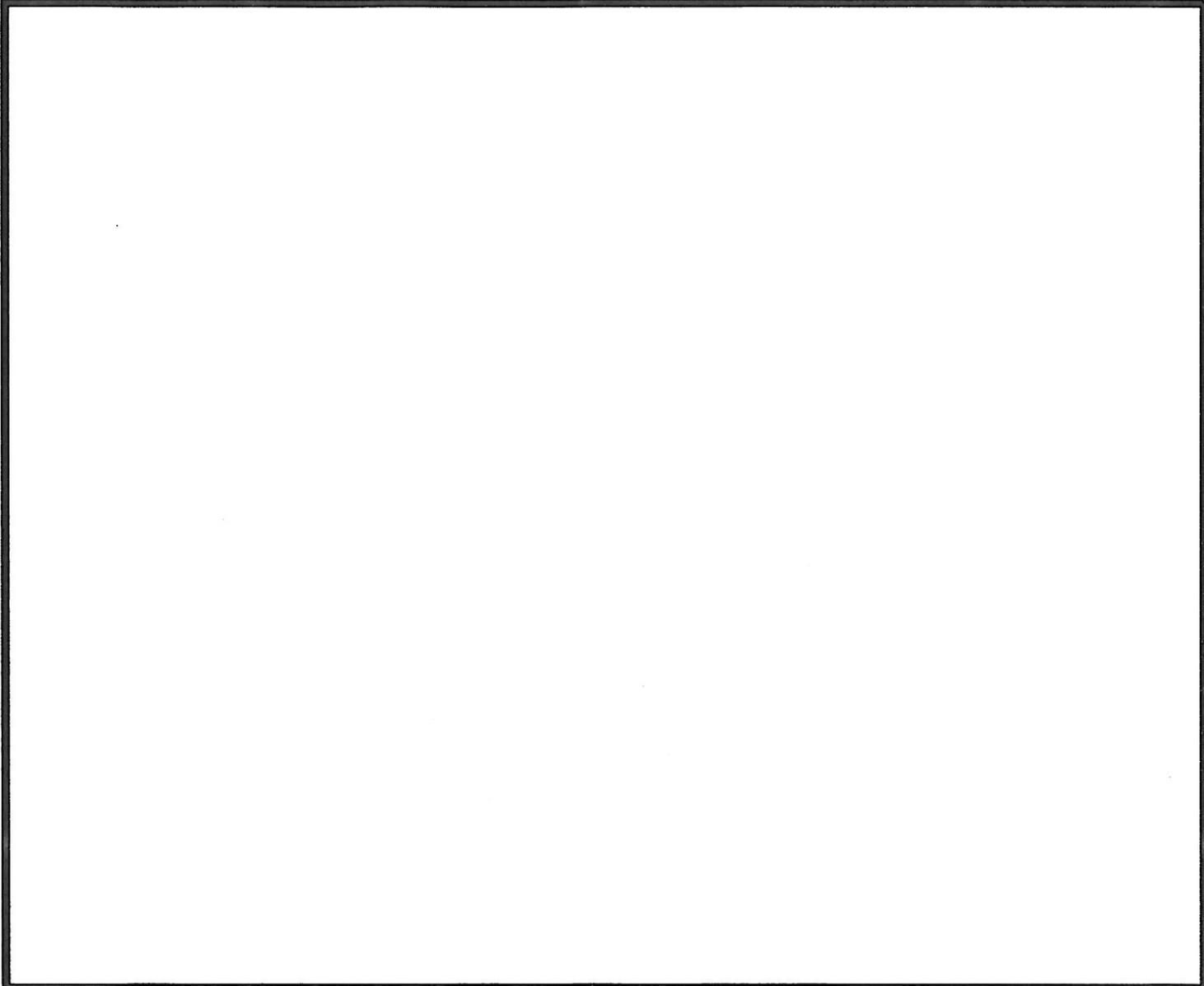
CV Sanitary District _____ CV Water Co. _____

Faxed to Flood Control (Prescott/Cottonwood) on: _____
Approval received on: _____ Flood Map # _____ Zone _____

Permit Approved by: _____ Date: _____
Permit #: _____

TOWN OF CAMP VERDE
COMMUNITY DEVELOPMENT DEPARTMENT
PLOT PLAN SKETCH

Show lot/parcel lines and dimensions, adjacent streets and alleys, front of property, driveway, location of all proposed and existing buildings including dimensions, all building setbacks and distances between buildings, location of septic tank and leach lines, locations of incoming water yard lines and meter, electric yard line and meter, gas lines and tanks, any terrain features that affect placements, location and dimensions of easements and any washes, creeks or ditches within 20 feet of the property.



PERMIT #	ASSESSOR'S PARCEL #	ADDRESS

I/we certify that the proposed construction will conform to the dimensions and uses shown and that no changes will be made without first obtaining approval. All structures (including fences, walls and pads, correct setback distances, legal access and easements, cuts, fills, drainage and any water course on or adjacent to the property within 20 feet of any proposed or existing structure has been indicated.



Scale: _____

Approved By: _____

Date: _____

Signature of Owner or Authorized Representative

Date

PERMIT NUMBER: _____
 PARCEL #: _____
 TOTAL PERMIT FEE: _____
 DATE ISSUED: _____
 ISSUED BY: _____

TOWN OF CAMP VERDE

COMMUNITY DEVELOPMENT DEPARTMENT

473 S. MAIN STREET CAMP VERDE, AZ 86322
 (928) 567-8513 – FAX (928) 567-7401



REVISED 1/18/2012

PERMIT EXPIRES 6 MONTHS FROM DATE OF ISSUE

POST IN A CONSPICUOUS PLACE

MOBILE/MANUFACTURED/FBB UNIT INSTALLATION PERMIT

CHECK UTILITY	*CHECK ATTACHED ACCESSORY STRUCTURES LISTED ON ORIGINAL SALES CONTRACT	SKIRTING REQUIRED CHECK TYPE	INSPECTIONS	INSIGNIA#	DATE	APPROVED BY INITIALS
<input type="checkbox"/> WATER <input type="checkbox"/> SEWER/SEPTIC <input type="checkbox"/> GAS/NAT/LP <input type="checkbox"/> ELECTRIC <input type="checkbox"/> APS /OTHER** <input type="checkbox"/> AIR CONDITIONING ** Separate permit required	<input type="checkbox"/> AWNING <input type="checkbox"/> PORCH <input type="checkbox"/> COVERED PATIO <input type="checkbox"/> COVERED DECK <input type="checkbox"/> UNCOVERED DECK <input type="checkbox"/> CARPORT <input type="checkbox"/> GARAGE	<input type="checkbox"/> VINYL <input type="checkbox"/> BLOCK NON-BEARING (DETAIL REQUIRED) <input type="checkbox"/> RETAINING and/or LOAD BEARING (STATE APPROVED PLANS REQUIRED) APPROVED PLAN NO # _____ <input type="checkbox"/> LANDING/STEPS PER 2006 IRC <input type="checkbox"/> OVER 50 CUBIC YARDS GRADING** ** Separate permit required	WATER SEWER GAS-NAT/LP ELECTRICAL FOOTINGS/ PIERS COOLER REFRIGERATION PATIO/DECK ABOVE GND SKIRTING GRND SET FOUND AWNINGS GARAGES LANDING/STEPS			
OWNER NAME _____ PHONE _____ MAILING ADDRESS _____ STATE _____ ZIP _____ CITY/TOWN _____ IF HOME IS TO BE INSTALLED ON PRIVATE LAND, A DETAILED MAP SHOWING NEAREST MAJOR INTERSECTION AND EXACT LOCATION OF LOT MUST ACCOMPANY THIS APPLICATION. PARK NAME _____ STREET ADDRESS _____ SPACE # _____ CITY/TOWN _____ COUNTY _____ ZIP _____ UNIT MANUFACTURED _____ DATE OF MFG. OR YEAR _____ SIZE _____ UNIT SERIAL # _____ LICENSE # _____ UNIT INSTALLERS NAME _____ CITY _____ ZIP _____ ADDRESS _____ ACCESSORY INSTALLER'S NAME _____ ADDRESS _____ CITY _____ ZIP _____ LICENSE # _____ LICENSE CLASS _____ BUS PHONE _____ DEALER NAME _____ LICENSE # _____ MAILING ADDRESS _____ BUS PHONE _____ CITY/TOWN _____ STATE _____ ZIP _____			UNIT HUD LABEL #'S _____ STATE STATUTES REQUIRE ALL INSTALLATION WORK BE PERFORMED BY APPROPRIATELY LICENSED CONTRACTORS. LIST ANY ADDITIONAL CONTRACTORS/SUB CONTRACTORS ON THE LICENSING FORM. THIS PERMIT PROVIDES FOR FOUR (3) INSPECTIONS, ONE OF WHICH IS RESERVED FOR ACCESSORY STRUCTURES UNDER THE ORIGINAL SALES CONTRACT. ANY ADDITIONAL INSPECTIONS WILL BE CHARGED AT THE RATE OF \$50.00 PER INSPECTION. *A COPY OF THE STATE APPROVED PLANS FOR PERMANENT FOUNDATION WALLS AND/OR ATTACHED ACCESSORY STRUCTURES IS REQUIRED UPON SUBMITTAL. ALL APPROVED PLANS/DOCS MUST BE ON SITE FOR INSPECTION. NOTE: AFTER JANUARY 1, 2009, DESIGN CRITERIA REQUIRED FOR SNOW LOADS. INSPECTION IS REQUIRED FOR INSPECTIONS CALL THE TOWN OF CAMP VERDE COMMUNITY DEVELOPMENT OFFICE AT (928) 567-8514.			

PERMIT PURCHASER SIGNATURE X _____

TOWN OF CAMP VERDE
COMMUNITY DEVELOPMENT DEPARTMENT
P.O. BOX 710 CAMP VERDE, AZ 86322
(928) 567-8513

NAME: _____ DATE: _____

PARCEL NO.: _____

PHYSICAL ADDRESS: _____

MAILING ADDRESS: _____

PHONE NO.: _____

SANITATION SERVICE PROVIDED BY:

CAMP VERDE SANITARY DISTRICT (SEWER) _____

SEPTIC TANK PERMIT NO: _____

.....
WATER SERVICE PROVIDED BY:

CAMP VERDE WATER COMPANY _____

VERDE LAKES WATER COMPANY _____

WELL NO.: _____

.....
DITCH INFORMATION:

THE ABOVE DESCRIBED PROPERTY IS SET BACK _____ (DISTANCE) FROM THE
_____ DITCH. OR _____ NOT LOCATED CLOSE TO AN
IRRIGATION DITCH.

.....
CAMP VERDE SANITARY DISTRICT:

**SEWER HOOK-UP PERMITS MUST BE OBTAINED FROM THE SANITARY DISTRICT AND
A SEPARATE SET OF PLANS MUST BE SUBMITTED TO THE SANITARY DISTRICT.**

BELOW INFORMATION TO BE FILLED OUT BY SANITARY DISTRICT

_____ IS LOCATED WITHIN THE SANITARY DISTRICT AND IS PRESENTLY CONNECTED TO
AND SERVED BY THE SEWER.

_____ IS LOCATED WITHIN THE SANITARY DISTRICT AND REQUIRED TO BE CONNECTED
TO AND SERVED BY THE SEWER.
PERMIT ISSUED ON _____.

_____ IS LOCATED WITHIN THE SANITARY DISTRICT BUT IS NOT WITHIN AN AREA
PRESENTLY SERVED BY THE DISTRICT.

_____ IS NOT WITHIN CAMP VERDE SANITARY DISTRICT.

SANITARY DISTRICT REP. SIGNATURE X _____

32-1169. Local proof of valid license; violation; penalty

A. Each county, city or other political subdivision or authority of this state or any agency, department, board or commission of this state which requires the issuance of a building permit as a condition precedent to the construction, alteration, improvement, demolition or repair of a building, structure or other improvement to real property for which a license is required under this chapter, as part of the application procedures which it utilizes, shall require that each applicant for a building permit file a signed statement that the applicant is currently licensed under the provisions of this chapter with the applicant's license number and the applicant's privilege license number required pursuant to section 42-5005. If the applicant purports to be exempt from the licensing requirements of this chapter, the statement shall contain the basis of the asserted exemption and the name and license number of any general, mechanical, electrical or plumbing contractor who will be employed on the work. The local issuing authority may require from the applicant a statement signed by the registrar to verify any purported exemption.

B. The filing of an application containing false or incorrect information concerning an applicant's contractor's license or transaction privilege license with the intent to avoid the licensing requirements of this chapter is unsworn falsification pursuant to section 13-2704.

I am currently a licensed contractor: Name _____

License No. ROC _____ License Class _____

Signature _____ Title: _____

EXEMPTION FROM LICENSING

I am exempt from Arizona contractors' license laws on the basis of the license exemptions contained in A.R.S. §32-1121A, namely:

- A.R.S. §32-1121A.5 – I am the owner/builder of the property and the property will not be sold or rented for at least one year after completion of this project.
- A.R.S. §32-1121A.6 – I am the owner/developer of this property and I will contract with a licensed general contractor to provide all construction services. All contractors' names and license numbers will be included in all sales documents.
- Other - _____
(Please specify)

I understand that the exemption provided by A.R.S. §32-1121A.14 (the Handyman Exemption) does not apply to any construction project which requires a building permit and/or the total cost of materials and labor are \$1000 or more.

I will be using the following licensed contractors on this project:

_____ License No. ROC _____ Class _____
(General Contractor)

_____ License No. ROC _____ Class _____
(Mechanical Contractor)

_____ License No. ROC _____ Class _____
(Electrical Contractor)

_____ License No. ROC _____ Class _____
(Plumbing Contractor)

SIGNATURE _____ DATE _____

Falsification of information on this document for the purpose of evading State licensing laws is a Class II misdemeanor pursuant to A.R.S. §13-2704.

L. STREET AND EASEMENT STANDARDS:

1. Frontage Requirement: Any lots established requesting a building permit shall front onto a publicly dedicated street or a private easement recorded for access or ingress/egress purposes. This regulation ensures access to any and all lots within the town. Streets are governed by the Uniform Standard Specifications and Uniform Standard Details adopted by the Town Council in 1994. A private easement shall be attached to the deed of any parcel granting access to cross private property to provide ingress/egress to another private property. Newly created lots or parcels are required to obtain an approved Minor Land Division permit as noted in subsection K of Section 108 to ensure access to all parcel(s) within the town.

**DRIVEWAYS / CULVERT
APPLICATION FOR PERMIT TO USE
TOWN OF CAMP VERDE ROADS OR DEDICATED STREETS**

The undersigned herewith make application for a permit to enter in upon and use a portion of the right-of-way of the Town of Camp Verde roads or dedicated streets for the purpose of installing a driveway and/or driveway culvert.

LOCATION OF WORK _____
(parcel number and 911 street address if known)

FOR AND IN THE CONSIDERATION of the granting of a permit for the purpose set forth herein the Permittee hereby agrees, covenants and binds said Permittee as follows, to-wit:

CONDITIONS

1. That the permittee assumes the responsibility and all liability for any injury or damage to said highway, or to any person while using said highway in a lawful manner, caused by or arising out of the exercise of this permit.
2. **Maintenance of driveway and/or driveway culvert shall be the sole responsibility of the property owner and will in no way be responsibility of the Town of Camp Verde.** All work shall be at the sole cost and expense of the permittee and shall be done a such time and in some manner as to be the least inconvenient to the traveling public. No driveway will be approved which causes a hazard to the traveling public.
3. If at any time hereafter the right-of-way, or any portion thereof, occupied and used by the permittee may be needed or required by the Permittee, application may be revoked by the Permitter and all right thereunder terminated and upon sufficient notice, the Permittee shall and will remove all property belonging to said Permittee.
4. All culverts shall be set at the apparent flow line of the ditch. No construction done under this permit shall alter the existing characteristics of the roadway and/or the drainage ditch without prior permission from the Town of Camp Verde Engineer's office.
5. Permit shall be in effect for thirty (30) days from the date issued.
6. MISCELLANEOUS -
 - a. Any and all work performed within a Town right-of-way and/or a Town maintained road shall require a permit from the Town of Camp Verde Engineer's office and shall be subject to whatever inspections that shall be deemed necessary by the Town Engineer.
 - b. The Permittee shall replace all signs moved or damaged during construction.
 - c. During the course of work, the Permittee shall maintain the work area in a clean and orderly condition. When a hazardous condition is created to the traveling public, barricades or proper warning devices should be used. Excess excavation, debris, etc., will not be permitted to accumulate on the road surface or shoulders. Work shall progress in such a manner that no condition such as soft trenches, drop-offs from the edge of the pavement, etc., will exist. Upon completion of installation, the Permittee shall clean the pavement surface, pull and dress shoulders, and otherwise put in order the entire work area covered by the permit to the satisfaction of the Town Engineer or his representative.

IN WITNESS WHEREOF this application has been duly signed this _____ day of _____, _____.

Name (Please Print) _____

Mailing Address _____

Phone Number _____

Signature of Applicant

☆☆

THIS APPLICATION IS APPROVED WITH THE FOLLOWING REQUIREMENTS:

_____ NCR - No culvert is required at this time. However, if in the future this road is improved, a culvert of the proper size will be required at the owner's expense.

_____ " (inside diameter) CMP 16-gauge culvert required.

_____ " (inside Diameter) CMP 16-gauge culvert or arch equivalent required.

☆☆

Date

Town of Camp Verde

COMMENTS:



Attention Building Permit Applicant:

The Town of Camp Verde Building Department is now requiring that a lumen calculation sheet be submitted with all permits for new construction; for both residential and commercial development. To help you understand the information needed to fill out the form, we have included with your building permit application a graphic illustration of the differences between shielded and unshielded light fixtures and a lumens calc sheet of different types of light bulbs. You must use the maximum size bulb allowed by the manufacture of the lamp to figure your lumens. This will be found on the lamp itself or on the packing material.

Unless you are a part of a development project (for an example: a developed subdivision or master planned community) you are allowed at least 5500 unshielded lumens or 100,000 total lumens for your project even if your lot size is under an acre.

For more information on our lighting ordinance you may visit our website at www.cvaz.org and click on the Planning and Zoning Ordinance and go to Section 120 or call our office at (928) 567-8514 and staff will answer any of your questions.

Please help us protect our dark skies and rural lifestyle.

The Community Development Department
Town of Camp Verde, Arizona



SAMPLE

LIGHTING PERMIT & LUMEN CALCULATION

OWNER/AGENT: John Smith DATE: 7/7/2007

SITE ADDRESS: 123 First St. PARCEL NO. 123-456-789A

SUBDIVISION: (if applicable) PHONE: (555) 555-5555

MAILING ADDRESS: PO Box 123 Any Town, AZ 85000

OWNER/AGENT SIGNATURE: _____

I hereby file the above request and declare that all information submitted is true and correct to the best of my knowledge and belief. I further acknowledge that any omission of information or any error in my application may void permit.

- Site plan indicating placement of each existing and proposed fixture.

FOR ADDITIONAL INFORMATION:

- Refer to Section 120 of P&Z Ordinance 'Outdoor Lighting Regulations' and attached information.

LIGHTING INVENTORY

List information below for each *fixture* to be used for outdoor illumination (existing and proposed). Use the following Abbreviations:

- * LAMP TYPES:**
- LPS** Low Press, Sodium
 - HPS** High Pressure Sodium
 - HL** Halogen
 - IN** Incandescent
 - FL** Fluorescent

SITE ACREAGE

TOTAL SITE ACRES .25

ACRES FOR RIGHTS-OF-WAY & UNDEVELOPED ACRES _____

NET ACRES: .20

PURPOSE OR USE	CANOPY SIZE (if applicable)*	LAMP TYPE *(See above)	MAXIMUM DESIGN WATTS EACH	LUMENS EACH	QTY.	SUB-TOTAL FULLY SHIELDED LUMENS	SUB-TOTAL UNSHIELDED LUMENS	LUMEN TOTAL
Existing - Residential		IN (Incandescent)	75	1180	2	2360		2360
New - Residential		HL (Halogen)	100	1800	3		5400	5400

Total Shielded Lumens:	Total Unshielded:
2360	5400
TOTAL LUMEN PER NET ACRE	TOTAL LUMEN PER NET ACRE
7760	7760

STAFF REVIEW

APPROVED BY: _____

DATE: _____

SHEET _____ OF _____

*Gas Station Canopies: See Lighting Regulation, under light measurement, for calculating lumen output.

Ball fields and outdoor display areas which exceed 100,000 lumen per acre: I hereby certify that lighting associated with related facilities described above is no greater than minimum illuminance levels for the activity recommended by the IESNA.

Signature of Lighting Engineer _____ Arizona Registrar's No. _____

Not to exceed 5,500 Unshielded lumen per net acre; nor more than 100,000 total lumen per net acre, overall.

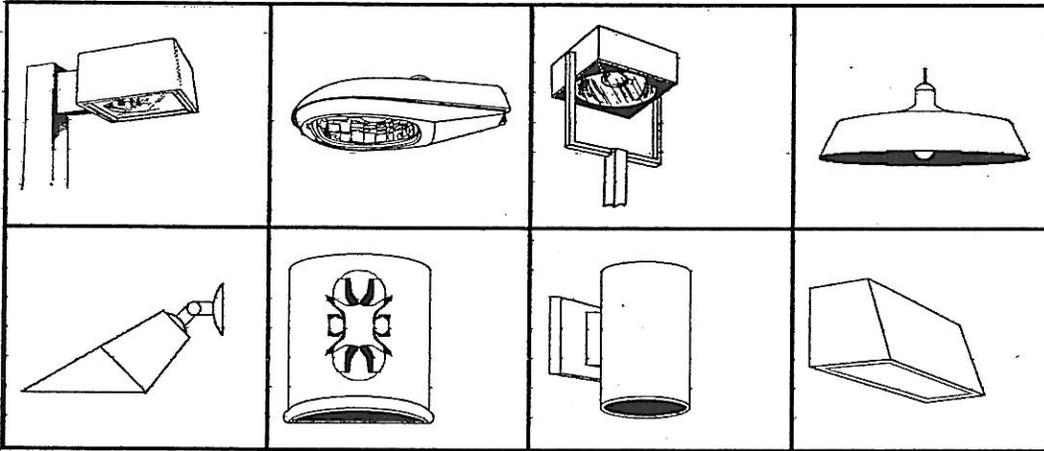
Revised 6/07/08

O. Addendums/Additional Information:

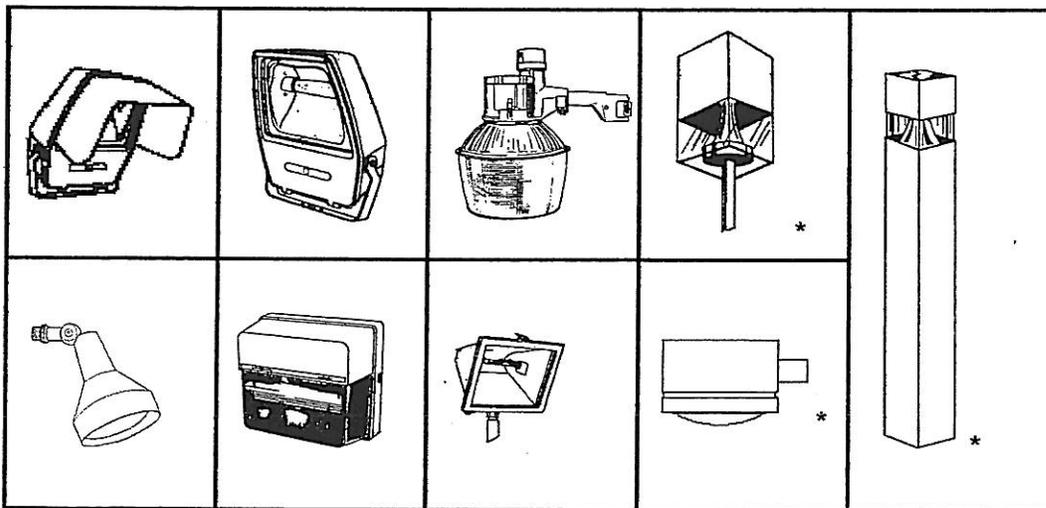
1. Shielding:

A practical working way to determine if a fixture or tube is fully shielded: if the lamp or tube, any reflective surface, or lens cover (clear or prismatic) is visible when viewed from above or directly from the side, or from any angle around the fixture or tube, the fixture or tube *is not* fully shielded.

Examples of fixtures that are Fully Shielded (Note: to be fully shielded these fixtures must be closed on top and mounted such that the bottom opening is horizontal):



Examples of fixtures that are NOT Fully Shielded:



* Note: even though the lamp in these fixtures is shielded from direct view when viewed from the side or above, reflective surfaces and/or lens covers *are* directly visible from the side.

Note for luminous (neon) tubes: when such lighting is installed under or behind a roof overhang, if the roof-line or eave is not horizontal the tubing may be visible from above when viewed from the side and therefore be unshielded.

2. Typical Lumen Outputs and Energy Costs for Outdoor Lighting

Per year costs based on 4000 hours operation (all night every night) and \$0.10/kwh energy cost. Power costs are for lamps only; they do not include ballast losses used with HID lamps (LPS, HPS, MH and fluorescent). Ballast losses have typically been somewhat larger for LPS lamps than for other types, though not enough to offset the increased luminous efficiencies of these lamps. This effect has been decreasing with the newer ballasts.

Lamp Type	Lumen Output (Initial)	Power Cost (Per Year)	Cost per 100 Lumens (Per Year)
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Low Pressure Sodium (LPS):

18 Watt	1800	\$7.20	\$0.40
35 Watt	4800	\$14.00	\$0.29
55 Watt	8000	\$22.00	\$0.28
90 Watt	13500	\$36.00	\$0.27
135 Watt	22500	\$54.00	\$0.24
180 Watt	33000	\$72.00	\$0.22

High Pressure Sodium (HPS):

35 Watt Clear	2250	\$14.00	\$0.62
50 Watt Clear	4000	\$20.00	\$0.50
70 Watt Clear	6300	\$28.00	\$0.44
100 Watt Clear	9500	\$40.00	\$0.42
150 Watt Clear	16000	\$60.00	\$0.38
200 Watt Clear	22000	\$80.00	\$0.36
250 Watt Clear	29000	\$100.00	\$0.34
400 Watt Clear	50000	\$160.00	\$0.32
1000 Watt Clear	140000	\$400.00	\$0.29

Metal Halide (MH) (Example Sylvania 'Metalarc' series):

100 Watt	8000	\$40.00	\$0.50
175 Watt	14000	\$70.00	\$0.50
250 Watt	16000	\$100.00	\$0.63
400 Watt	36000	\$160.00	\$0.44
1000 Watt	84000	\$400.00	\$0.48

Fluorescent (Standard Cool- White, 1.5-inch tubes):

21 Watt F24T12/CW	1190	\$8.40	\$0.71
30 Watt F36T12/CW	2050	\$12.00	\$0.59
36 Watt F42T12/CW	2450	\$14.40	\$0.59
39 Watt F48T12/CW	3000	\$15.60	\$0.52
50 Watt F60T12/CW	3700	\$20.00	\$0.54
52 Watt F64T12/CW	3900	\$20.80	\$0.53
55 Watt F72T12/CW	4600	\$22.00	\$0.48
70 Watt F84T12/CW	5400	\$28.00	\$0.52
75 Watt F96T12/CW	6300	\$30.00	\$0.48

Incandescent Lights:

15 Watt Standard	120	\$6.00	\$5.00
25 Watt Standard	210	\$10.00	\$4.76
40 Watt Standard	490	\$16.00	\$3.27
60 Watt Standard	855	\$24.00	\$2.81
75 Watt Standard	1180	\$30.00	\$2.54
100 Watt Standard	1750	\$40.00	\$2.29
150 Watt Standard	2800	\$60.00	\$2.14
200 Watt Standard	3850	\$80.00	\$2.08

Tungsten Halogen (Quartz):

75 Watt	1400	\$30.00	\$2.14
100Watt	1800	\$40.00	\$2.22
150 Watt	2800	\$60.00	\$2.14
250 Watt	5000	\$100.00	\$2.00
500 Watt	10100	\$200.00	\$1.98

