

AGENDA
THE REGULAR MEETING OF THE PLANNING AND LAND USE COMMISSION
TOWN OF CASTLE VALLEY

THURSDAY, SEPTEMBER 5, 2024 AT 6:30 P.M.

CASTLE VALLEY TOWN BUILDING - 2 CASTLE VALLEY DRIVE

This meeting will be a hybrid meeting held electronically by Zoom and also in person at the anchor site at the Town Building. If you have comments or concerns please attend or email them prior to the Meeting: planningclerk@castlevalleyutah.com or call 259-9828

M-W 9AM-1PM. Thank you!

PLEASE NOTE: ** HOW TO JOIN THE ZOOM CONFERENCE CALL **

Meeting ID: 660 541 0108 Passcode: 84532

Option 1 Dial-in phone number (US): (253) 215-8782 follow prompts.

Option 2 Join the online meeting (must have computer speakers and microphone):

<https://zoom.us/j/6605410108?pwd=Q05sYm5qQ0lpNIY5TVp2bTU5VnZiQT09>

REGULAR MEETING

CALL TO ORDER & ROLL CALL

1. Adoption of Agenda
2. Open Public Comment
3. Approval of Minutes: 8.1.2024 Regular Meeting
8.13.2024 Workshop Meeting
4. Reports - Correspondence: TBA
Building Permit Agent Report - Thompson
Procedural Matters: Town Survey Update - PLUC Chair-Anderson

NEW BUSINESS

5. Discussion and possible action regarding approval of a Nonroutine Solar Energy System on Lot 387.

UNFINISHED BUSINESS

6. Discussion and possible action regarding updates to land use application forms, in order to align them with changes in procedure and recent amendments to Ordinances 85-3 and 95-6 (tabled):
 - Nonroutine Solar Energy System (SES) Permit Application (update)
 - Building Permit Information Sheet (update)
 - Land Disturbance Activity Permit (new)
 - Internal Accessory Dwelling Unit Permit Application (added 6.6.24)
 - Certificate of Land Use Compliance (CLUC) Form to replace CLUC for Agricultural Use (added 6.6.24)
 - Agricultural Exemption Form (added 8.1.24)
 - Septic Permit Application (approved 5.2.24)
 - Electric Permit Application (approved 5.2.24)
 - Land Disturbance Activity Review (approved 6.6.24)
 - Routine Solar Energy System (SES) Permit Application (approved 8.1.24)

CLOSED MEETING - If Needed

ADJOURNMENT

For Meeting Packets go to: <https://www.utah.gov/pmn/index.html>

Government: select "Cities", Entity: select "Castle Valley", Body: select "Town of Castle Valley", select this meeting and click on Meeting Packet to download.

PENDING MINUTES
THE REGULAR MEETING OF THE PLANNING AND LAND USE COMMISSION
TOWN OF CASTLE VALLEY
THURSDAY, AUGUST 1, 2024 AT 6:30 P.M.

This meeting was a hybrid meeting held electronically by Zoom and also in person at the anchor site at the Town Building.

CALL TO ORDER & ROLL CALL

Anderson Called to Order the Regular Meeting of the Planning and Land Use Commission of Castle Valley at 6:32 P.M. on Thursday, August 1, 2024.

PLUC Members Present:

In person: Chair Ryan Anderson, Dorje Honer, Janie Tuft, Jeff Whitney; Via Zoom: Marie Hawkins

Absent: None

Others Present: In person: Colleen Thompson, Mayor Jazmine Duncan

Clerk/Recorder: Faylene Roth

1. Adoption of Agenda

Tuft moved to accept the Minutes. Whitney seconded the Motion. Tuft, Whitney, Honer, Hawkins and Anderson approved the Motion. The Motion passed unanimously.

2. Open Public Comment – None.

3. Approval of Minutes:

1.4.2024 Regular Meeting

Honer moved to approve the Minutes. Tuft seconded the Motion. Tuft, Whitney, Honer, Hawkins and Anderson approved the Motion. The Motion passed unanimously.

6.6.2024 Regular Meeting

Tuft moved to approve the Minutes. Whitney seconded the Motion. Tuft, Honer, Hawkins and Anderson approved the Motion. Whitney abstained. The Motion passed four in favor and one abstention.

4. Reports - Correspondence – None.

Building Permit Agent Report – Thompson. Thompson reported four building permits issued in July: 1) Certificate of Land Use Compliance for a hay barn on Lot 55, Lazaris; 2) Electrical Permit for a future residence on Lot 146, Buchanan; 3) Residential building permit on Lot 303, Holyoak; 4) Building Permit for a garage on Lot 408, Cliffview. In addition, two Temporary Dwelling Permits (TDP) were renewed: (1) Lot 121, (2) Lot 303-past due renewal and current renewal. Lot 303 was also issued a Decommissioning Contract for his temporary dwelling in conjunction with his building permit. Four TDPs were decommissioned which fulfilled their Decommissioning Contracts. Their compliance was recorded and filed at the Grand County Recorder's Office: (1) Lot 20, (2) Lot 45, (3) Lot 118, (4) Lot 153. Tuft asked Thompson about demolition taking place on Lot 117 (Pace). Thompson said she is working with the owner but has not seen evidence of a Demolition Permit with the County. Whitney added that the owners will continue to be taxed on the property if they do not obtain a Grand County Demolition Permit.

Thompson reported that she has talked with the Grand County Building Inspector about how Castle Valley should handle agricultural exemptions, which exempts the building from Grand

County building inspections. Whitney added that the agricultural exemption informs the Assessor's Office that the building should be taxed in the future. Thompson will adapt the State Agricultural Exemption form to Castle Valley's needs, as Grand County did. Thompson also asked PLUC Members to consider whether Castle Valley should change our minimum square footage for a building permit from 120 S.F. to 200 S.F. to match Grand County's 200 S.F. minimum for structures that require a building permit, although plumbing and electrical services to these structures do require a permit regardless of size. That leaves Castle Valley applicants with a gap between structures of 120 S.F. and 200 S.F. where a permit and fee of \$40.00 is still required by the Town. These structures, such as small sheds or shipping containers, still require zoning approval from the Town to ensure they meet our setback requirements and some may require drainage reviews. Whitney explained that the 1997 Uniform Building Code used a 120 S.F. minimum for building permit applications. In 2000 the International Building Code raised the minimum to 200 S.F. and Grand County changed their minimum to match that. He reiterated that any electrical or plumbing added to a small structure does require a permit and inspection for those features. Thompson said that the only references she could find regarding CV's 120 S.F. minimum for a building permit was in Ordinance 85-3's discussion of total square footage on a lot and on the Town's fee schedule. Whitney noted that a code compliant house could be built with a minimum 200 S.F. structure. PLUC Members generally agreed that requiring a permit for structures between 120 S.F. and 200 S.F. is a good way to let people know that setbacks do need to be met. Thompson said that information might also be relayed via email to lot owners. Thompson thought that this was addressed in Ordinance 85-3, Section 5.7:

A. All buildings constructed in, reconstructed in, altered in, or moved into the Town, whether for Dwelling or accessory use including metal shipping containers and portable sheds, and unless exempted from building permit requirements under the provisions of state statutes related to buildings that are not located in residential areas and which are used solely in conjunction with agriculture use, and not for human occupancy, must have land use approval from the Town Designated Land Use Authority and, if required, a permit from the Grand County Building Inspector before commencing the construction or moving process.

Mayor Duncan and PLUC members agreed that this paragraph clarified the uncertainty around the 120-200 S.F. gap. They agreed that a fee is appropriate for structures within this range because they still need to show setback compliance and may need a drainage review.

Procedural Matters: Upcoming Public Hearing - PLUC Clerk-Roth. Roth informed PLUC Members that Utah State Code requires changes to the Town's Subdivision Ordinance. Mayor Duncan added that the State has paid for a third-party to update our Ordinance. Once it is returned, the PLUC will need to hold a Public Hearing. Roth said that she will send background information to PLUC Members when the time approaches.

Town Survey Update - PLUC Chair-Anderson. Anderson asked PLUC Members to select a date for a workshop session later this month. He would like to open it up to the public for input on changes they would like to see in the survey. Tuesday, August 13, at 6:30 P.M. was chosen for the workshop meeting.

NEW BUSINESS

5. Discussion and Possible Action re: Appointing PLUC Chair

Mayor Duncan reported that since Anderson began a new term of office on July 1, 2024, he must be re-elected as Chair.

Tuft nominated Anderson to continue to serve as Chair. Anderson replied he was willing to continue with a vice-chair or co-chair. Whitney seconded the nomination. Tuft, Whitney, Honer, Hawkins and

Anderson voted aye. The nomination was approved unanimously.

Honer said he was willing to serve in a secondary role.

Tuft nominated Honer as Vice-Chair. Tuft seconded the nomination. Tuft, Whitney, Honer, Hawkins and Anderson voted aye. The nomination was approved unanimously.

UNFINISHED BUSINESS

6. Discussion and possible action regarding updates to land use application forms, in order to align them with changes in procedure and recent amendments to Ordinances 85-3 and 95-6 (tabled):

- Septic Permit Application (approved 5.2.24)
- Electric Permit Application (approved 5.2.24)
- Routine Solar Energy System (SES) Permit Application (update)
- Nonroutine Solar Energy System (SES) Permit Application (update)
- Building Permit Information Sheet (update)
- Land Disturbance Activity Review (approved 6.6.24)
- Land Disturbance Activity Permit (new)
- Internal Accessory Dwelling Unit Permit Application (added 6.6.24)
- Certificate of Land Use Compliance (CLUC) Form to replace CLUC for Agricultural Use (added 6.6.24)

Thompson reminded PLUC Members that their role is to approve new or revised forms. She presented supporting documents from Ordinance 85-3 and Ordinance 95-6, and a copy of the previous Routine Solar Energy System (R-SES) application form plus the revised Routine Solar Energy System (R-SES) application form which includes an SES Information Sheet. She believes the revised form is more user friendly than the previous form. It does not ask for all the technical data that the Grand County Building Department (GCBD) requires because the Town will receive a copy of the technical data as submitted to GCBD. The application form requests a plot plan detailing existing structures, proposed structures, setback lines, and all dimensions clearly marked. The plot plan no longer has to be to scale since most submissions are now done digitally. The rest of the information is reorganized, and she removed the specific fee amount so that the Form does not have to be revised every time the fee amount is changed.

Thompson said she had consulted the GC Building Inspector regarding the measurement of height of adjustable tilt panels on a roof-mounted system. CV restricts the maximum distance between solar panels and the roof below so that the panels will not extend above the ridgeline when at maximum height, but the County does not have those rules. Whitney clarified that County rules are based on best performance. Their setback for roof-mounted solar panels is three (3) feet from the ridgeline. Whitney added that changes in tilt of solar panels occur primarily with ground-mount systems. He said variable-tilt roof mount systems are vanishingly rare. Thompson agreed, but said she needs to keep the application aligned with the Ordinance.

She added that there were no substantial changes in the Approval Section. A two-page Information Sheet will be attached to the application form. She noted that the new revised Info Sheet did not use bold highlighting like the old form, but Anderson and Duncan both thought the bold print was helpful. Tuft asked what "proposed structures" in 1.d of Submission requirements referred to? Thompson said it refers to building structures such as the building on which the SES will be installed or any accessory shed or building. Tuft asked whether most applicants could fill in this form on their own. Thompson said that anyone installing their own system should be able to do so, but that most SES applications were filed by the solar contractor. For plot plans, she said that many applicants use marked-up Google Earth printouts.

Honer suggested a formatting change to align the yes/no responses on page 2 in a column on the

side to make it easier for the applicant and reviewer to see the responses. Hawkins agreed. Thompson agreed to change the yes/no formatting and to reinstate the bold type on the Info Sheet from the previous version as detailed above. She also added a reference/link to the Fee Schedule on the Town's web site.

Whitney moved to accept the Routine-Solar Energy System Permit Application form as amended. Tuft seconded the Motion. Tuft, Whitney, Honer, Hawkins and Anderson approved the Motion. The Motion passed unanimously.

Anderson asked for a Motion to add an Agricultural Exemption form to the list in Item 6.

Honer moved to add an Agricultural Exemption form to Item 6. Whitney seconded the Motion. Tuft, Whitney, Honer, Hawkins and Anderson approved the Motion. The Motion passed unanimously.

Anderson asked for a Motion to table Item 6.

Honer moved to table Item 6. Whitney seconded the Motion. Tuft, Whitney, Honer, Hawkins and Anderson approved the Motion. The Motion passed unanimously.

CLOSED MEETING – None.

ADJOURNMENT

Whitney moved to adjourn. Honer seconded the Motion. Tuft, Whitney, Honer, Hawkins and Anderson approved the Motion. The Motion passed unanimously.

Anderson adjourned the Meeting at 7:32 P.M.

APPROVED:

ATTESTED:

Ryan Anderson, Chairperson

Date

Faylene Roth, PLUC Clerk

Date

PENDING MINUTES
WORKSHOP MEETING OF THE PLANNING AND LAND USE COMMISSION
TOWN OF CASTLE VALLEY
TUESDAY, AUGUST 13, 2024 AT 6:30 P.M.

This meeting was a hybrid meeting held electronically by Zoom and also in person at the anchor site at the Town Building.

1. Call to Order

Anderson Called to Order the Workshop Meeting of the Planning and Land Use Commission (PLUC) of Castle Valley at 6:34 P.M. on Tuesday, August 13, 2024.

2. Adoption of Agenda

Tuft moved to approve the Agenda. Honer seconded the Motion. Tuft, Whitney, Honer, Hawkins and Anderson approved the Motion. The Motion passed unanimously.

3. Roll Call

PLUC Members Present:

In person: Chair Ryan Anderson, Vice-Chair Dorje Honer, Members Janie Tuft and Jeff Whitney;
Via Zoom: Member Marie Hawkins

Absent: None

Others Present:

In person: Cody Shurtleff

Via Zoom: Pam Hackley, Peggy Llewellyn, Kinde Nebeker, and Colleen Thompson (joined after roll call).

Clerk/Recorder: Faylene Roth

4. Discussion Regarding Development of a General Plan Survey

Anderson provided a summary of the process ahead:

He noted the breadth and depth of past Castle Valley General Plan Surveys, which are designed to assess residents' thoughts and feelings about Castle Valley: what we value, what we hope to keep, what we might need to adapt or change. The surveys are used to update the General Plan in five year iterations. Past surveys have revealed consistent themes and values, as well as concerns and possible weak points to address to improve the general welfare and well-being of residents. The surveys can also help recognize potential areas of opportunity or reveal possible threats that the community may face in the future.

Anderson proposes examining past surveys with a S.W.O.T analysis technique: S= strengths; W = weaknesses; O= opportunities; T = Threats. He proposed that they begin to draft the next survey by reviewing past surveys and marking them up with notes, comments, changes, and ideas for future reference. He said this is a team effort and added that Town Council Member Bob O'Brien has offered to do the data analysis.

Whitney commented that he had sat with friends to go through the last two surveys and their consensus was that the surveys contained many questions that depended on the demographics of the respondent—full-time or part-time residents, rim side or valley floor, purely residential or agriculturally oriented. He said that making policy by the numbers in the survey does not truly address the issues. He asked how to adjust for that.

Members began with the most recent 2019 survey, saying it would be most reflective of current priorities and may not need as much tweaking. Honer added that he thought the response gradients ranging from Strongly Favor to Strongly Against used in the 2007 survey provided a better view of sentiment than strictly yes/no responses. Tuft asked whether Accessory Dwelling Units (ADU) should

be addressed in the upcoming General Plan. Whitney noted that it had already gone through the ordinance process.

Peggy Llewellyn asked whether questions are screened to be in compliance with Utah State Laws; for example, some people may not favor ADUs, but they are now allowed by State Law. Whitney added that State Laws remove the option of having an opinion, so there is no reason to ask residents about what cannot be changed.

Whitney observed that the 2019 survey posed a lot of essay questions which are difficult to analyze. Anderson noted that he and Colleen Thompson had devised a way to organize them by reading the comments into a computer which printed out the responses. Cody Shurtleff added that essay questions are a good way draw out deeper input.

Members discussed the options of a print or digital survey. Most Members favored a digital survey which would be more easily analyzed but noted that a print version would have to be provided for those who did not use computers. A digital version would reduce the paper and mailing costs of a printed survey. They discussed issues regarding privacy, anonymity, and how to prevent duplicate responses. Anderson noted that in some online surveys, you are locked out once you have taken the survey.

Hawkins noted that could be overcome by using another IP address. Colleen Thompson explained that the PLUC decided to go with a print survey in 2019 because they couldn't solve the issue of duplicate voting and didn't have the technical staff for it; plus, she said, they wanted to provide the opportunity for a second person in the household to respond.

Tuft asked if Survey Monkey would be appropriate for the survey. Shurtleff replied that it had limited function. He was aware, though, of a Utah State University well-being study that was done digitally and faced these same issues. They used data fields that that sorted different demographics which might be useful to prevent duplicate survey takers.

Shurtleff (who is the Moab City Planner) asked whether PLUC Members were starting with a vision and forming questions that would help them reach this vision or were they gathering data and then looking for a vision. Whitney rejoined that the group he had gone through the previous surveys with had felt manipulated by some of the questions, meaning that there was no good way to answer the question. Anderson added that they had received criticism about these kinds of push-pull questions in the last survey, especially regarding livestock numbers.

Hawkins responded to Shurtleff's question saying that the General Plan should reflect the outcomes of the survey. Shurtleff reaffirmed the need to look for data then design the vision. He warned against being backed into corners or pulled into policy that is being designed out of context. Or having a vision then asking questions to support it. Noting his own bias in favor of livestock, he suggested you would first ask "*Do you believe agriculture should be allowed?*" and then ask how many livestock.

Anderson suggested looking back at each General Plan to see how it aligns with the survey results and also to look for some consistency of vision that residents have for the valley and then look at those themes first for a residential vision to use to help create the survey.

Shurtleff suggested saying: *We've been consistently going in this direction. Do we want to continue this direction? Does that vision still make sense? Then create new questions to determine "is this good" or "has this been good?"*

Anderson asked PLUC Members to review the past General Plans before the next workshop and look for consistent threads in their visions. Shurtleff suggested to then determine which threads have continued and/or what diversions have occurred.

PLUC Members then began to review the questions within each section of the 2019 survey. A working document showing revisions, additions, and deletions will be available for the next Workshop.

Section A-Community Profile

Members discussed whether to add additional information to A1 regarding the demographics of property owners; such as, location (*cliff side, valley floor, up valley, down valley*) and how the property is utilized (*residential only, agricultural use*) and intention (*to retire here, become full-time at a later date*). They decided to leave it as is. No other changes were made to Section A.

Section B-Water & Septic

Discussion focused on questions B5 and B6 which ask when the septic system was installed and when it was last pumped. Tuft pointed out that the frequency of pumping depends on whether residents are full-time or part-time, so what information do we gain from this question. Whitney added that at some point it was learned that some septic systems in the valley had never been pumped and that someone came up with the recommendation that they be pumped every five years. But, technically, it's not tanks, he said, that go bad; it is the leach field. He suggested asking instead whether there is a state-approved septic system for the number of bedrooms on the lot. They recognized that if someone answered "no" to this question there would be nothing the Town could do. However, Whitney said that knowing could influence the General Plan. He also added that the ordinance (85-3) already requires a state-approved septic system, so the question may not be necessary. All agreed that knowing the location of the septic system was important.

Accessory Dwelling Units were brought up, but Whitney said that the ordinance addresses them. Some thought that the ages of the septic systems around the valley could provide useful information. There was additional discussion regarding whether there was any move by the Town to replace older systems. The consensus was no, but Whitney added that the State now requires engineered systems.

Thompson noted that there are some lots without houses that do have installed septic systems which may indicate that the owners plan to build or to use a temporary dwelling at some point. She said that comments from the last survey also indicated that many did not know the size of their septic tanks.

Members decided that question B7 did not belong under Aquifer Protection. Since part of the motivation behind this question revolved around the effect of synthetic pesticides on bees, it was suggested that this question be moved to the agriculture section. Shurtleff said this question moves away from information gathering and switches to regulatory inquiries. He suggested phrasing it as: *Should the Town establish an ordinance regarding the use of pesticides and herbicides?* Honer suggested this question would be a good candidate for a scaled response. Whitney commented that the use of pesticides by large scale agriculture is the concern. He questioned whether spraying an ant hill would affect aquifer protection. There was discussion concerning the use of Roundup, 2,4-D, and organics; but, it was noted that even the use of nicotine on plants can kill chickens. The question of the difficulty in enforcing ordinances was also considered.

The discussion moved to other issues that would impact aquifer protection, such as septic systems and uncapped or improperly sealed wells or projects like the proposed Under Canvas development. Whitney referred to a comment from an official who said that adhering to State guidelines for one septic system per one acre would protect the aquifer. Tuft added that it is important for the Town to let people know that old wells may need attention to ensure the quality and quantity of water. She wondered whether the Watershed Protection Ordinance sufficiently protects the Town.

No changes were made to Section B.

Section C – Livestock

Discussion revealed that many of the questions in this section were addressed in the last General Plan. Members agreed to delete questions C3, C6, and C6a. They agreed to alter the first question to reflect the current numbers of livestock allowed. Shurtleff observed that the questions in this section were not objective. It was not asked: *Do you have livestock?* Just: *Do you have a problem with your neighbor*

who has livestock? He added that when you use terms like “maximum numbers,” the survey taker will imagine that everyone will have those numbers. It is better, he said, to use a more dynamic number or to refer to the matrix scale of appropriate animal units. Anderson noted this section was definitely criticized for using push/pull questions.

Anderson requested that Shurtleff, Whitney and others in the community re-write this question. Hawkins suggested replacing the word “consistent” in C2 with “appropriate.” Members agreed to retain the other questions.

Section D – Ordinances & Enforcement

Anderson suggested that question D1 might be a candidate for a scaled response. Honer suggested rephrasing the question to say and ask: *This is the way we do it. Do you feel we need different ordinance enforcement?*

Shurtleff commented that the first two questions are asking what kind of complaint resolution the community is comfortable with, but it is up to the Town. It depends on the expense. He recommended that the question should not set up expectations that cannot be implemented. The question could say: *What would you be comfortable with? Dealing directly with a neighbor, etc.* Anderson replied that question D1a was intended as an educational piece. Shurtleff said that it does work in that sense.

Anderson will consult with Mayor Duncan on this section. He and staff explained that the complaint-driven approach began with a signed letter from someone to the Mayor who selects a complaint resolution team who then negotiates with both parties for a resolution.

Honer suggested using a more general approach with the question: *How do you feel about (or) Are you satisfied with how the Town has been dealing with complaints.* Then leave the options up to the Town to determine through public meetings for input.

Whitney suggested deleting D1 and changing D1a to include a list of options. Hawkins said that some people were concerned that a Town-initiated approach would have the Town driving around looking for violations. Whitney noted that the Town-initiated approach can preserve anonymity of the complainant. Anderson asked: Who is the “Town?” The Mayor? The Clerk? The conflict resolution team?

Members discussed D4 and D5 related to the Town’s Lighting Ordinance. It was agreed that there might be some maintenance issues required for the Lighting Ordinance, so they agreed to change the word “strengthening” to “maintaining.” They agreed to drop D5 because the Town has achieved recognition as a Dark Sky Community. Town Clerk, Jocelyn Buck, will be consulted about future needs for fulfilling and maintaining the current ordinance.

Anderson reported that there were a few comments submitted from the public for future input. He did not have an opportunity to read them aloud. Whitney suggested addressing concerns about the Town’s approach to measuring square footage and building height, especially for construction on a slope. Anderson said that viewshed was the concern in developing this approach. He asked Members to consider survey questions that would address property owners’ right to viewshed and needed changes to the ordinance.

A date for the next workshop will be selected at the September 5 PLUC Meeting.

5. ADJOURNMENT

Whitney moved to Adjourn. Honer seconded the Motion. Tuft, Whitney, Honer, Hawkins and Anderson approved the Motion. The Motion passed unanimously.

Anderson adjourned the Workshop at 8:45 P.M.

APPROVED:

ATTESTED:

Ryan Anderson, Chairperson

Date

Faylene Roth, PLUC Clerk

Date

TOWN OF CASTLE VALLEY - Building Permits Report

Approval Date Between 8/1/24 And 8/31/24

Approval	Lot	Road	Owner	Type	Purpose	Description	Height	Sq Ft <=19	Sq Ft >19
8/13/2024	443	Firecliff Lane	Ambrose, Robert & Fl	Other	Manufactur	Certificate of Occupanc	0	0	0
8/21/2024	111	Hooley Lane	Webster, Carly	Building	Residence	2BR 2BA res	16	2441	0
8/21/2024	438	Rimrock Lane	Thoma, Franz	CLUC	Accessory B	Horse shelter & ship co	12	448	0
8/21/2024	315	Holyoak Lane West	Wagner, Peter	Electrical	Residence	Service entrance	0	0	0
8/27/2024	430	Rimrock Lane	Bellagamba, Sue	CLUC	Shed	Shipping container	8	96	0

3/26/2019 Certificate of Land Use Compliance for repairing a noncomplying structure on Lot 387

The Matz barn was damaged by snow ("calamity or act of nature", see 85-3.6.5 below) in February 2019. This is a pre-existing noncomplying structure, and the Matzes have submitted a complete CLUC application for a replacement structure (see 85-3.6.2, 85-3.6.3, and 85-3.6.5...). The noncompliance is in the form of a setback from the Castle Creek Lane road easement that is less than the currently required 50 feet (it's approximately 25 feet). The owners plan to replace the structure with a pole barn type building. The new building would be larger than the damaged barn, but would not be any closer to the road; in other words, the degree of noncompliance would not be increased. All other features of the new structure would comply with existing ordinances...

—Colleen Thompson
Building Permit Agent

8/29/2024 Nonroutine Solar Energy System application

Alison Fuller and Jason Matz are applying to install a roof-mount solar system on the south roof of the barn described above. I'm included the above information to explain the noncomplying structure, which was approved by the Planning and Land-Use Commission in 2019. Being a roof mount system, the proposed project would not add to the degree of existing noncompliance. Because it is over 10 kW, it must be approved by the PLUC as a Nonroutine application. Reasons for the proposed size of the installation are given in the answer to question #9 of the application.

Grand County has already approved the project, which now only awaits zoning approval from the Town.

—Colleen Thompson
Building Permit Agent

4.14 SOLAR ENERGY SYSTEMS

The purposes of this section is to allow and encourage solar energy systems in conjunction with residential and agricultural uses on a lot, to promote reduced dependence on nonrenewable energy sources, and to design solar energy systems in a manner that minimizes visual impacts on adjacent properties and that are not detrimental to public health, safety, and welfare.

4.14.1 General Design Standards

1. All solar energy systems shall comply with setback requirements in section 5.2 of this ordinance.
2. To the maximum extent feasible, ancillary solar equipment shall be located inside a building or screened from public view. Solar energy system appurtenances shall be screened without compromising the effectiveness of the solar collectors to the extent reasonably feasible.
3. The applicant shall demonstrate that the height, location, setback or base elevation of a solar energy system minimizes potential glare and visual impacts of the system on adjacent properties without compromising the effectiveness of the solar collectors to the extent reasonably feasible.
4. Any solar energy system that has been determined to be unsafe by the Grand County Building Inspector, shall be subject to Section 115 (Unsafe Structures and Equipment) of the International Building Code, which may require the panels or modules and associated equipment to be removed, or the unsafe condition otherwise mitigated if it is determined to be unsafe. If it is determined by the Grand County Building Inspector that the unsafe condition of the panels or modules and/or associated equipment cannot be mitigated, then they shall be promptly removed from the property to a place of safe and legal disposal, after which the site and/or building, as applicable, must be returned to its preexisting condition.
5. All building-mounted or roof-mounted solar energy system permits (routine and nonroutine) shall only be approved for systems that will be mounted on an existing building or in conjunction with an approved building permit for the building on which the system will be mounted.
6. For routine ground-mounted or pole-mounted solar energy system permits, the vertical distance between the highest point of any panel or module (at its maximum design tilt) to finished grade or slab on grade directly below, shall not exceed twelve (12) feet.
7. For routine and nonroutine building-mounted or roof-mounted solar energy system permits, the vertical distance between the highest point of any panel or module (at its maximum design tilt) to the roof directly below, shall not exceed one (1) foot, unless roof pitch is 3:12 or less, in such case up to two (2) feet is permitted. No portion of a solar energy system shall project above the maximum allowed building height of 25 feet as measured on a vertical axis from the highest point of the system to the lower of either 1) the lowest point where the vertical face (or a vertical line extending directly below the vertical face) around the perimeter of the building intersects the Existing Grade or 2) the lowest point where the vertical face (or a vertical line extending directly below the vertical face) around the perimeter of the building intersects the Finished Grade.
8. Applicants must submit approval of an interconnection agreement from the local electric utility company in order to gain Town approval on systems that will be interconnected to the Town's electrical infrastructure

9. The total combined kilowatts for all routine permitted solar energy systems shall not exceed 10 kilowatts per legally platted lot.
10. Storage facilities that require a building permit to store battery backup and ancillary equipment for a solar energy system (routine and nonroutine), must receive a building permit for the building in which said equipment will be stored before final approval of the solar energy system is granted.

4.14.2 Nonroutine Solar Energy System Permits

Applicants may apply for approval of a solar energy system that exceeds the maximum allowed height and kilowatts in section 4.15.1 through a nonroutine solar energy system permit application. The Land Use Authority shall ask applicants to demonstrate that a system taller than twelve (12) feet in height is needed in order to prevent compromising the effectiveness or safety of the solar collectors. Applicants must also demonstrate that a system larger than 10 kilowatts is needed by listing intended uses of the electricity generated from the proposed system. The Planning and Land Use Commission shall act as the Land Use Authority for such applications and shall require a design review of nonroutine solar energy systems in order to minimize visual impacts on adjacent properties and ensure public health, safety and welfare.

1. In reviewing an application, the Land Use Authority shall identify the potential negative effects of the proposed system such as, but not limited to, potential glare and visual impacts on adjacent properties, and may require additional screening, placement and design layout without compromising the effectiveness of the solar collectors to the extent reasonably feasible.
2. The Land Use Authority may require an engineering assessment from the local electric utility company or a Town approved expert to assess the proposed system and its compatibility with the Town's existing electrical infrastructure to ensure public health, safety and welfare. Based on this assessment, additional requirements may be imposed, and Town approval may be contingent upon the Applicant being responsible for the cost to upgrade the Town's electrical infrastructure to ensure that it will not compromise the safety, reliability and operability of the Town's utility infrastructure or place other residents' electrical equipment at risk.
3. The total combined kilowatts for all permitted solar energy systems shall not exceed 25 kilowatts per legally platted lot.
4. For nonroutine ground-mounted or pole-mounted solar energy system permits, the vertical distance between the highest points of any panel or module (at its maximum design tilt) to finished grade or slab on grade directly below, shall not exceed nineteen (19) feet.
5. The total combined square footage of all ground-mounted or pole-mounted photovoltaic panels or modules shall not exceed 1500 square feet per legally platted lot.

Town Land Use Regulations and its impact on the zone in which the land use will be located.

1.2 Electrical and Solar Energy System Permits. Electrical Permits are necessary only when no other construction work is being done. Otherwise, they are included as part of a building or remodel permit and not independent of it. Solar Energy System Permit Applications must always be submitted independent of construction work being done.

Unless determined inapplicable by the Designated Land Use Authority, the signed documents and information listed below are required in order to attain Town Approval for an Electrical Permit Application or a Solar Energy System Permit Application. Required submission documents and information may be determined inapplicable by the Designated Land Use Authority or the Building Permit Agent only if deemed unnecessary in order to properly evaluate and ensure a Land Use Application's compliance with Town Land Use Regulations and its impact on the zone in which the land use will be located.

- a. A completed Castle Valley Electrical Permit Application or Solar Energy System Permit Application along with submission of all information specified in the Application. If electricity (including solar electricity) is being installed or upgraded to supply an existing building for the first time, a statement of change of use may be required if deemed applicable by the Designated Land Use Authority.
- b. Electrical system Applicants must submit 3 complete copies of the Electrical Plan as submitted to the Grand County Building Department.
- c. Solar Energy System Applicants must submit approval of an interconnection agreement from the local electric utility company to the Town in order to gain Town approval on systems connected to the grid.
- d. Solar Energy System Applicants must submit 3 complete copies of the Grand County Residential Solar Photovoltaic (PV) System Plan Review as submitted to Grand County Building Department with the attachments as listed on the Town's Solar Energy System Permit Application.
- e. (Where applicable) A Grade Review to determine Existing Grade prior to any earth-moving signed by the Building Permit Agent or other designated official.
- f. (Where applicable) a Land Disturbance Review performed by the Roads Manager or other designated official.
- g. Any additional information and signed documents deemed necessary in order to properly evaluate and ensure a Land Use Application's compliance with Town Land Use Regulations and its impact on the zone in which the land use will be located.

Copies of these forms and agreements as they exist at the time of this Ordinance are attached to this Ordinance for information purposes.

**Town of Castle Valley
Nonroutine Solar Energy System (SES) Permit Application**

SES Permit Applications for systems in excess of 12 feet in height and/or greater than 10 kilowatts in capacity must use this Nonroutine Solar Energy System Permit Application form. The height of any nonroutine SES shall not exceed 19 feet in height (see attached SES Information Sheet), the total combined kilowatts for all SESes on lot shall not exceed 25 kilowatts per plotted lot, and the total combined square footage of all ground-mounted or pole-mounted photovoltaic panels or modules shall not exceed 1500 square feet.

Lot # 09-0000-0385

Applicant Ali Fuller (Matz)

Application Date 08/20/2024

Physical Address 387 Castle Creek Ln, Castle Valley, UT 84532

Mailing Address HC 64 Box 2811 Castle Valley, UT 84532

E-mail Address alldfuller@yahoo.com

Telephone (970) 676-1032

Contractor Loyal Energy/Clay Nesor

Telephone (385) 384-2043

RMP Work Order # _____ or RMP Net Metering # 66642083

Applicant provides 3 complete copies (1 for Town, 1 for County, 1 for contractor) and the following (unless determined inapplicable by the Designated Land Use Authority):

Note: All drawings must be drawn to a measurable scale and be clearly labeled.

- a) ~~Grand County Residential Solar Photovoltaic (PV) System Plan Review (SPSPR) with the attachments listed below:~~
- b) ~~Site Plan (Item #1 of the Grand County SPSPR shall include:~~
 - 1. ~~Lot #, name, address, phone #, and signature of lot owner and contractor;~~
 - 2. ~~Property lines, road easement lines and minimum setback lines with dimensions;~~
 - 3. ~~Existing structures (designate use) with dimensions and setbacks;~~
 - 4. ~~Proposed structures (designate use) with dimensions and setbacks;~~
 - 5. ~~Identification of battery storage building, if applicable, with dimensions and setbacks;~~
 - 6. ~~Location of solar installation with dimensions and setbacks;~~
 - 7. ~~Location of battery back-up and ancillary equipment, including transfer switch and rapid shutdown disconnect, where applicable;~~
- c) ~~Diagram of footprint for solar installation with measurements showing post locations and/or building dimensions (Item #1-H of the Grand County SPSPR);~~
- d) ~~Elevation drawings to scale with height measurements (include post dimensions) and dimensions of height to finished grade or slab on grade directly below a ground mounted system, and height above roof of solar apparatus if roof mounted. Elevations for roof-mounted systems must show building height, finished grade, and existing grade. For sites which have never been disturbed, existing grade shall be the same as natural grade which is the elevation of the surface of the ground that existed before any earth was moved. When existing structures or older disturbances to the land make natural grade indistinguishable from existing grade, existing grade is the ground level established when the existing structure or disturbance was created. Recent earthwork will not necessarily qualify as existing grade and will require a determination from the Building Permit Agent as part of the Grade Review.~~
- e) ~~Line Diagram (Item 3 of the Grand County SPSPR);~~
- f) ~~If solar electricity is being installed or upgraded to supply an existing building for the first time, a list of fixtures being connected and a statement of change of use may be required if deemed applicable by the Designated Land Use Authority;~~
- g) ~~Application of Right-of-Way Encroachment Permit, if applicable;~~
- h) ~~Grade Review if applicable;~~
- i) ~~Grand County Building Permit Application;~~
- j) ~~\$15 (check payable to the "Town of Castle Valley").~~ \$35

Is this a pole mount installation? (yes) (no) Is this a roof mount installation? (yes) (no)

Is this a set tilt installation? (yes) (no) Is this an adjustable tilt installation? (yes) (no)

Is this a grid tie/net meter SES? (yes) (no) Is this a battery support installation? (yes) (no)

Does this SES require the construction of a new structure to store any aspect of the SES? (yes) (no)

Check the intended use(s):

Residence	<u>✓</u>	Home occupation	_____
Accessory Building	_____	Premise occupation	_____
Agriculture	_____	Public building	_____
Irrigation	_____	Other	_____ *

* Describe _____

Ordinance 85-3, Section 4.15:

- Does the location of your SES comply with minimum setbacks? (yes) (no)
- Is ancillary SES equipment located inside a building or screened from view? n/a (yes) (no)
Explain. (Use attached sheet.)
- Explain why an SES in excess of 12 feet is required, if applicable. (Use separate sheet.) n/a
- Explain how the height, location, setback, and base elevation of your SES minimize potential glare and visual impacts on adjacent properties. (Use attached sheet.)
- If you are replacing previously installed panels or modules or associated equipment that might present a hazard on your or your neighbors' properties, please describe your plan for safe and legal removal? (Use separate sheet.) n/a
- Is the building on which you plan to mount your solar panels an existing building or a currently permitted building? (yes) (no)
- Does the vertical distance between the highest point of any panel or module (at maximum design tilt) to finished grade or slab on grade directly below exceed 19 feet? (yes) (no)
- For building or roof-mounted systems:
 - does the vertical distance between the highest point of any panel or module (at maximum design tilt) and the roof directly below exceed one foot for roof pitches greater than 3:12 or two feet for roof pitches less than 3:12? (yes) (no)
 - does any portion of the SES (at maximum design tilt) exceed 25 feet as measured on a vertical axis from the highest point of the system to the lower of either (1) the lowest point where the vertical face (or a vertical line extending directly below the vertical face) around the perimeter of the building intersects the Existing Grade or (2) the lowest point where the vertical face (or a vertical line extending directly below the vertical face) around the perimeter of the building intersects the Finished Grade? (yes) (no)
- Explain why an SES in excess of 10 kilowatts is required. (Use separate sheet.)
- Do the combined kilowatts for all SESes on your lot exceed 25 kilowatts? (yes) (no)
- Have you permitted any buildings necessary for battery storage or ancillary equipment? (yes) (no)

Total Existing Capacity (in kilowatts): 0

Total Proposed Capacity (in kilowatts): 16.02kW

Capacity per Module/Panel (in kilowatts): .445

Number Modules/Panels per Array 36

Number Modules/Panels: 36

Number of Arrays: 1

Module/Panel Dimensions: n/a

Array(s) Dimensions: n/a

Ground Footprint (in S.F.): n/a

Rooftop Footprint (in S.F.): 1,759

Highest point of panels at maximum design tilt:

Setbacks: Front 50 Left Side 30 Right Side 30 Back 30

Approval:

- The Grand County Building Permit Application form must be signed by the Designated Castle Valley Land Use Authority and then the Grand County Building Department to be a complete and valid permit.
- **Castle Valley zoning approval of a Solar Energy System Permit Application will be revoked and become invalid if, within six months of receiving Town Approval, the applicant has not received a completed SPSPR Permit from the Grand County Building Department with all fees paid.** If the Town's Approval is revoked on this basis, the fee paid to the Town will not be refunded. If the applicant wishes to start the application process again, new forms must be filed and a new fee must be paid.
- If the County revokes a completed SPSPR Permit Application for any reason, the Town's Approval is also revoked. If the applicant wishes to revive such an application, the applicant must begin anew the application process with the Town. In such an instance, the original fee will not be refunded.
- The applicant may extend the Town's Approval for an additional six months with no additional fee as long as: no changes have been made to the applicant's proposed Solar Energy System; no changes have occurred in the Town's Land Use Regulations since the applicant's original approval by the Town that would affect the application; the request is made before the expiration date of the permit; and the Town's Approval has not been revoked. If any of the above has occurred, the applicant must begin anew the application process with the Town.
- Solar Energy System Permits will not be approved that are not in compliance with Castle Valley Land Use Regulations and other applicable laws.
- Solar Energy System Permits issued on the basis of false or misleading information are void.
- Construction begun without an approved Solar Energy System Permit may be subject to delays, fines and/or increased fees.
- Substantive changes in plans (i.e., lay-out, use, structural) after a Solar Energy System Permit is issued require NEW approval by the Castle Valley Designated Land Use Authority and the Grand County Building Department.

I acknowledge and agree to comply with all requirements as stated on this Application.

Property Owner's Signature: _____ Date: 08/20/2024

Contractor's Signature: _____ Date 08/20/2024

PLUC CHAIR Signature: _____ Date _____



Alison Fuller

08/21/2024

Loyal Energy

180 N University Ave #550, Provo, UT 84601

Overview

387 Castle Creek Ln Castle Valley, UT 84532

4. The base elevation of the panels is aligned with the existing roof structure, maintaining the aesthetics of the building and ensuring that the system does not create an unsightly appearance from nearby properties. The panels' orientation and the use of a corrugated metal roof also contribute to minimizing any potential reflective glare that might affect neighboring residences.

9. Properties with higher electricity consumption, such as those with large appliances, electric vehicles, future building additions or a need for heating and cooling systems, may require more than 10 kW to adequately offset their energy usage. The larger system ensures that the property generates sufficient power to meet its energy needs and reduces dependency on the grid.

From: ali fuller alidfuller@yahoo.com
Subject: Solar Application
Date: August 21, 2024 at 4:19 PM
To: Colleen Thompson colleent@castlevalleyutah.com



Hello Colleen and PLUC,

Question #9 :

We are asking for a 16 kw solar system for our property to plan ahead for increased power needs and to compensate for losing the sun at 1:30pm on the winter solstice to compensate for the short winter months in order to help zero out our power bill.

We recently got an electric car, and foresee getting another one when we need to replace our other car. Once our solar is installed we plan to switch some of our heating/cooling over to electric and continue to ween as much as possible off of fossil fuels.

Thank you so much for your time.

The Matz Family

Plans Rcvd:

Record #: 9808

File Name:

BUILDING PERMIT ■ GRAND COUNTY, UT

<https://www.grandcountyutah.net/143/Building-Inspector> ■ 125 E CENTER ST, MOAB, UT 84532
CALL 435-259-4134 to SCHEDULE INSPECTIONS (24 Hr. Notice) ■ building@grandcountyutah.net

Building Address 387 Castle Creek Ln		Receipt Number 3774	Date Issued	Permit Number
Assessor's Parcel # (from site plan) 09-0000-0385		Jurisdiction: Grand County		Utah State # GRA
OWNER BUILDER No ☐ If yes, Owner Builder Certification Form Attached		Res/Com: Residential		Valuation 0.00
Applicant Name Alison Fuller		Building SF	0	Number of Buildings 0
Mail Address 387 Castle Creek Ln		Rough Basement SF		Number of Dwellings 0
City/State/Zip Castle Valley, UT 84532		Finish Basement SF		Number of Stories
Email alidfuller@yahoo.com		Covered Patio/Deck SF		Number of Bedrooms 0
Phone 970-676-1032		Garage/Carport SF	0	Number of Bathrooms 0
Contractor Type Residential Electrical		Type of Construction	VB	Max Occupancy Load
Contractor Name Loyal Energy LLC		Occupancy Group	U Utility, miscellaneous	Fire Sprinkler
Mail Address 180 N University Ave #550		NEW Plan Review Deposit - Solar		\$65.00
City/State/Zip Provo, UT 84601		TOTAL FEES		\$65.00
Email peritting@loyalenergy.com		BRIEF DESCRIPTION OF BUILDING PROJECT		
Phone 385-384-2043		Roof-mount solar		
License # 13554868-5501		CULINARY WATER		
LIST ALL ADDITIONAL CONTRACTORS / ARCHITECTS / ENGINEERS ON THE BACK OF THIS FORM		SEWAGE ☒ Septic Tank ☐ Sewer ☐ Other		
Type of Improvement/Kind of Construction		FLOODPLAIN STATUS Elevation Certificate		
☐ Sign ☐ Build ☐ Remodel ☐ Addition		FIRE DEPARTMENT (REQUIRED FOR ALL COMMERCIAL APPLICATIONS)		
☐ Repair ☐ Move ☐ Convert Use ☐ Demolish		Approved by N/A Date		
Number of off-street parking spaces: 0 Covered 0 Uncovered		FLOODPLAIN ADMINISTRATION		
Minimum Setbacks in Feet		Approved by N/A Date		
Front	Side	Side	Rear	ENGINEER
				Approved by Date
ZONE	Site Plan ☐ Submitted ☐ N/A	GRAND WATER AND SEWER SERVICE AGENCY		
NOTE 24 HOURS NOTICE IS REQUIRED FOR ALL INSPECTIONS		Approved by N/A Date		
		ZONING ADMINISTRATION		
		Approved by Date		
		HEALTH DEPARTMENT		
		Approved by N/A Date		
		BUILDING DEPARTMENT		
		Approved by <i>Con Con</i> Date 08/23/2024		
I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all County Ordinances and State of Utah laws regulating building construction, zoning, and sanitation.				
Date 08/20/2024				
Signature of Permittee/Owner Alison Fuller				

AERIAL IMAGE



GENERAL NOTES

1. THIS PROJECT INVOLVES THE INSTALLATION OF A GRID-INTERACTIVE PV SYSTEM. PV MODULES WILL BE MOUNTED USING A PRE-ENGINEERED MOUNTING SYSTEM. THE MODULES WILL BE ELECTRICALLY CONNECTED TO THE LOCAL UTILITY USING MEANS AND METHODS CONSISTENT WITH THE RULES ENFORCED BY THE LOCAL UTILITY AND AUTHORITY HAVING JURISDICTION.
2. THIS DOCUMENT HAS BEEN PREPARED TO DESCRIBE THE DESIGN OF A PROPOSED PV SYSTEM WITH ENOUGH DETAIL TO DEMONSTRATE COMPLIANCE WITH APPLICABLE CODES AND REGULATIONS. THE DOCUMENT SHALL NOT BE RELIED UPON AS A SUBSTITUTE FOR FOLLOWING MANUFACTURER INSTALLATION INSTRUCTIONS. THE SYSTEM SHALL COMPLY WITH ALL MANUFACTURER INSTALLATION INSTRUCTIONS, AS WELL AS ALL APPLICABLE CODES. NOTHING IN THIS DOCUMENT SHALL BE INTERPRETED IN A WAY THAT OVERRIDES THEM. THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF ALL DETAILS IN THIS DOCUMENT.
3. THIS DOCUMENT IS BASED ON FIELD INSPECTIONS AND OTHER INFORMATION AVAILABLE AT THE TIME. ACTUAL FIELD CONDITIONS MAY VARY AND REQUIRE MODIFICATIONS IN CONSTRUCTION DETAILS.
4. THE DIMENSIONS AND MEASUREMENTS SHOWN IN THIS DOCUMENT ARE BASED ON AERIAL IMAGERY AND OTHER AVAILABLE INFORMATION, AND ARE TO BE TREATED AS APPROXIMATED TO SHOW A GENERAL IDEA OF EQUIPMENT LOCATION AND PROPERTY SIZE.
5. ANY CHANGES TO THIS DESIGN AT THE TIME OF INSTALLATION DUE TO FIELD CONDITIONS MUST BE REPORTED TO THE DESIGNER AND AHJ.

SCOPE OF WORK

INSTALLATION OF ROOF-MOUNTED UTILITY INTERACTIVE PV SYSTEM

16.02 KW DC & 10.44 KW AC PV SOLAR ARRAY

PV MODULES - 36 URECO FBM445M7G-BB
INVERTER(S) - 36 ENPHASE IQ8PLUS-72-2-US

ROOF TYPE - CORRUGATED METAL
RACKING - UNIRAC NXT UMount
ATTACHMENT - S5! S5 PROTEA BRACKET

APPLICABLE CODES & STANDARDS

GOVERNING CODES

1. ALL WORK SHALL COMPLY WITH:
 - 1.1. 2020 NATIONAL ELECTRICAL CODE
 - 1.2. 2021 INTERNATIONAL BUILDING CODE
 - 1.3. 2021 INTERNATIONAL FIRE CODE
 - 1.4. 2021 INTERNATIONAL RESIDENTIAL CODE
 - 1.5. 2021 INTERNATIONAL EXISTING BUILDING CODE
 - 1.6. AND ALL OTHER STATE AND LOCAL AMENDMENTS TO BUILDING AND ELECTRICAL CODES

STRUCTURAL CRITERIA

1. WIND EXPOSURE CATEGORY: C
2. WIND SPEED: 103.0 MPH
3. GROUND SNOW LOAD: 21.0 PSF

ELECTRICAL NOTES

1. ALL EQUIPMENT TO BE LISTED BY UL OR OTHER NRTL, AND LABELED FOR ITS APPLICATION
2. ALL RACEWAYS ON ROOFTOPS SHALL BE PLACED MORE THAN 7/8" ABOVE THE ROOFTOP. ALL CONDUCTORS SHALL BE COPPER, RATED FOR 600V AND 90°C WET ENVIRONMENT
3. WIRING, CONDUIT, AND RACEWAYS MOUNTED ON ROOFTOPS SHALL BE ROUTED DIRECTLY TO, AND LOCATED AS CLOSE AS POSSIBLE TO THE NEAREST RIDGE, HIP, OR VALLEY
4. WORKING CLEARANCES AROUND ALL NEW AND EXISTING ELECTRICAL EQUIPMENT SHALL COMPLY WITH NEC 110.26
5. DRAWINGS INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS
6. CONTRACTOR SHALL FURNISH ALL NECESSARY OUTLETS, SUPPORTS, FITTINGS, AND ACCESSORIES TO FULFILL APPLICABLE CODES AND STANDARDS
7. WHERE SIZES OF JUNCTION BOXES, RACEWAYS, AND CONDUCTORS ARE NOT SPECIFIED, THE CONTRACTOR SHALL SIZE THEM ACCORDINGLY
8. ARRAY GROUNDING TO BE INSTALLED PER RACKING MANUFACTURER'S INSTRUCTION
9. ARRAY RACKING TO BE BONDED WITH CONTINUOUS COPPER E.G.C. VIA WEEB LUG OR ILSCO GBL-4DBT LAY-IN LUG
10. THE POLARITY OF THE GROUNDED CONDUCTORS IS NEGATIVE.
11. SURGE PROTECTION REQUIRED PER NEC 230.67

ILLOYAL

LOYAL ENERGY
180 N UNIVERSITY AVE,
PROVO, UT 84601

LICENSE # 13554868-5501

UTIL - ROCKY MOUNTAIN POWER (UTAH)
AHJ - CASTLE VALLEY (CITY)
OCCUPANCY - II
CONSTRUCTION - SFR
ZONING - RESIDENTIAL

SHEET INDEX

PV-1 COVER PAGE
PV-2 SITE PLAN
PV-3 ATTACHMENT DETAILS
PV-4 THREE LINE DIAGRAM
PV-5 ELECTRICAL LABELS
PV-6+ SPEC SHEETS

SCALE
NTS

DATE
8.22.2024

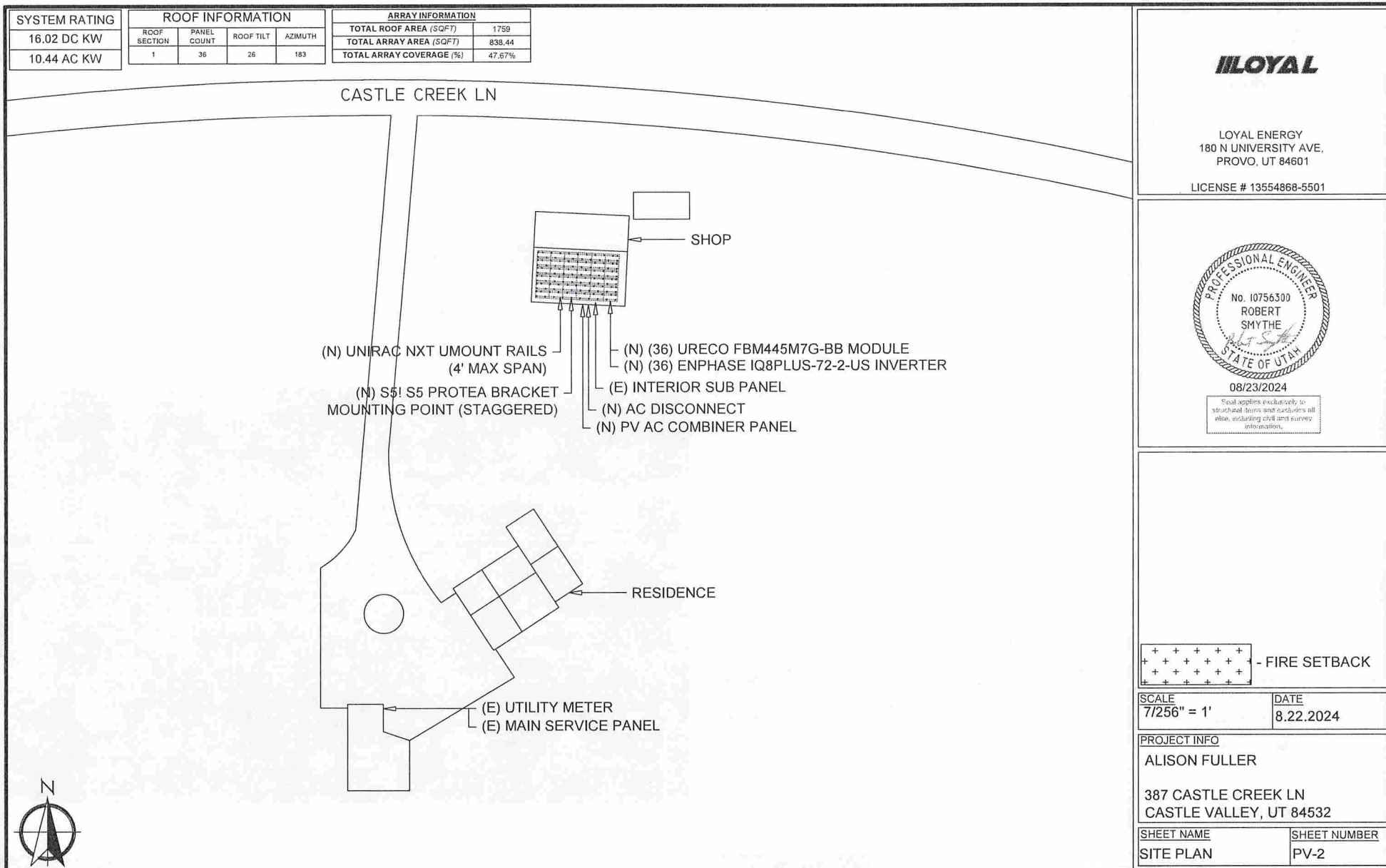
PROJECT INFO

ALISON FULLER

387 CASTLE CREEK LN
CASTLE VALLEY, UT 84532

SHEET NAME
COVER PAGE

SHEET NUMBER
PV-1



NEC 690.13(B) & 690.54
LOCATED AT PV SYSTEM DISCONNECT

PV SYSTEM AC DISCONNECT
RATED AC OUTPUT CURRENT: 43.56 AAC
NOMINAL OPERATING AC VOLTAGE: 240 VAC

NEC 690.13(B) & 705.15(C)
LOCATED AT PV SYSTEM DISCONNECT

WARNING

ELECTRICAL SHOCK HAZARD
TERMINALS ON THE LINE AND LOAD
SIDES MAY BE
ENERGIZED IN THE OPEN POSITION

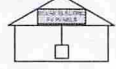
NEC 690.56(C)(2)
LOCATED AT PV SYSTEM DISCONNECT

RAPID SHUTDOWN SWITCH FOR SOLAR PV SYSTEM

NEC 690.56(C)
LOCATED AT UTILITY METER

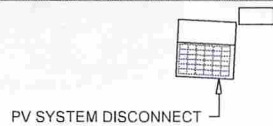
SOLAR PV SYSTEM IS EQUIPPED
WITH RAPID SHUTDOWN

TURN RAPID SHUTDOWN SWITCH
TO THE "OFF" POSITION TO
SHUTDOWN PV SYSTEM AND
REDUCE SHOCK HAZARD IN
ARRAY

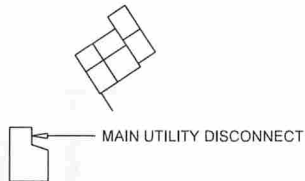


NEC 690.56(A) & (B), 706.21(A)
LOCATED AT UTILITY METER

CAUTION: MULTIPLE SOURCES OF POWER



PV SYSTEM DISCONNECT



MAIN UTILITY DISCONNECT



RMP (UTILITY METER)
LOCATED AT UTILITY METER

PARALLEL
GENERATION
ON SITE

LOYAL

LOYAL ENERGY
180 N UNIVERSITY AVE,
PROVO, UT 84601

LICENSE # 13554868-5501

LABEL NOTES

ALL CAUTION, WARNING, OR DANGER SIGNS
OR LABELS SHALL:

1. COMPLY WITH ANSI Z535.4-2011
STANDARDS.
2. BE PERMANENTLY AFFIXED TO THE
EQUIPMENT OR WIRING METHODS AND
SHALL NOT BE HANDWRITTEN.
3. SHALL BE OF SUFFICIENT DURABILITY
TO WITHSTAND THE ENVIRONMENT
INVOLVED.
4. UNLESS OTHERS SPECIFIED, MINIMUM
TEXT HEIGHT TO BE 1/8" (3MM).

SCALE

NTS

DATE

8.22.2024

PROJECT INFO

ALISON FULLER

387 CASTLE CREEK LN
CASTLE VALLEY, UT 84532

SHEET NAME

ELECTRICAL LABELS

SHEET NUMBER

PV-5

URE

UNITED RENEWABLE ENERGY

FBM445M7G-BB / 120 cells 445 Watt Mono-Crystalline PV Module

URE modules use state-of-the-art cell cutting technology, and advanced module manufacturing experience to provide leading power density and long term reliability.



UL 61730, CE-compliant
Quality Controlled PV-1 PV
SMD REC 61215-2016,
IEC 61710-2016
Type 1/Class C Fire Rating

Key Features

- At 445 Watts and 20.57% Efficiency URE Solar Panels are Industry Leaders in Output and Efficiency
- 25 Year Output Warranty and 25 Year Product Guarantee
- Super All Black Design with more Uniform Appearance for High Profile Residential Installations
- High Quality Solar Cell Technology allows URE to be a major international exporter to Solar Module manufacturers in the United States and Europe
- Excellent Performance in Low Light and Poor Weather Conditions to Maximize Energy Harvest
- Winner of Taiwan Excellence Award 7 Consecutive Years for Highest Efficiency Module

THE IDEAL SOLUTION FOR:

- Rooftop arrays on residential buildings
- Residential ground mount arrays

UNITED RENEWABLE ENERGY

For more information, please visit us at www.ureusa.com
Powering US, 2024 USDOE Green 40+ rights reserved



URE

UNITED RENEWABLE ENERGY

Electrical Data

Model - STC	FBM440M7G-BB	FBM445M7G-BB	FBM450M7G-BB	FBM455M7G-BB
Maximum Rating Power (Pmax)	440	445	450	455
Module Efficiency	20.44	20.57	20.80	21.03
Open Circuit Voltage (Voc)	41.70	41.50	42.10	42.40
Maximum Power Voltage (Vmp)	34.60	34.80	35.00	35.20
Short Circuit Current (Isc)	13.41	13.48	13.56	13.63
Maximum Power Current	12.72	12.79	12.86	12.93

*Standard Test Condition (STC): Cell temperature 25°C, irradiance 1000 W/m², AM 1.5
*Values without tolerance are typical numbers Measurement tolerance: ±1%

Mechanical Data

Item	Specification
Dimensions	1908 mm (L) x 1134 mm (W) x 35 mm (D) / 75.12" (L) x 44.65" (W) x 1.38" (D)
Weight	7.8 kg / 17.2 lbs
Solar Cell	12x10 pieces monocrystalline solar cells series strings
Front Glass	White tempered safety glass, 3.2mm thickness
Cell Encapsulation	EVA (Ethylene Vinyl Acetate)
Back Cover	Black composite film
Frame	Black anodized aluminum profile
Junction Box	IP 68, 3 diodes
Connectors Type	Stäubli MC4
Cable	1200mm (cable length can be customized), 4mm²
Package Configuration	81 pcs per pallet, 744 pcs per 40' HQ container

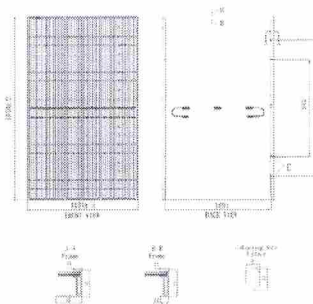
1: With assembly tolerance of ±1 mm (±0.04")
2: With assembly tolerance of ±0.8 mm (±0.03")

Operating Conditions

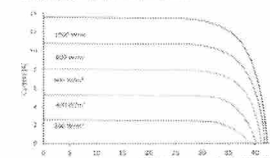
Item	Specification
Mechanical Load	5400 Pa
Maximum System Voltage	1500V
Series Fuse Rating	30 A
Operating Temperature	-40 to 85 °C
Temperature Characteristics	
Item	Specification
Nominal Module Operating Temperature	45°C ± 2°C
Temperature Coefficient of Isc	0.048 % / °C
Temperature Coefficient of Voc	-0.27 % / °C
Temperature Coefficient of Pmax	-0.39 % / °C

*Nominal module operating temperature (NOPT): 40 °C (94 °F) AM 1.5, irradiance 800 W/m², temperature 30 °C, wind speed 1 m/s
*Module test in efficiency from 1000 W/m² to 2000 W/m² at 25 °C, AM 1.5

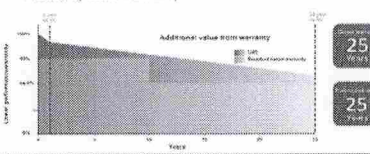
Engineering Drawing (mm)



Dependence on Irradiance



Reliability with Warranty



UNITED RENEWABLE ENERGY

For more information, please visit us at www.ureusa.com
Copyright © 2024 URE Corp. All rights reserved



LOYAL

LOYAL ENERGY
180 N UNIVERSITY AVE,
PROVO, UT 84601

LICENSE # 13554868-5501

EQUIPMENT SPECIFICATION NOTES

- ALL ELECTRICAL EQUIPMENT SHALL BE CERTIFIED ACCORDING TO AHJ AND NATIONAL REQUIREMENTS BY A NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL).
- FOR DOCUMENTATION SHOWING NRTL CERTIFICATION, SEE MANUFACTURER WEBSITE.
- ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER INSTRUCTION.

SCALE
NTS

DATE
8.22.2024

PROJECT INFO

ALISON FULLER

387 CASTLE CREEK LN
CASTLE VALLEY, UT 84532

SHEET NAME
MFG SPEC. SHEETS

SHEET NUMBER
PV-6

Subject **Draft Land Disturbance Activity Form B—PERMIT for your review**

From Colleen Thompson <colleent@castlevalleyutah.com>

To Town of Castle Valley <planningclerk@castlevalleyutah.com>

Cc Ryan Anderson <ryana@castlevalleyutah.com>, <marieh@castlevalleyutah.com>, Dorje Honer <dorjeh@castlevalleyutah.com>, <jeffw@castlevalleyutah.com>, <janiet@castlevalleyutah.com>, Jazmine Duncan <jazmined@castlevalleyutah.com>

Date 2024-09-02 6:07 pm



• 240902 Land Dist Form B DRAFT.pdf(~239 KB)

Hi all

Last month you approved the new Land Disturbance Activity Form A—REVIEW, the lower-level review that replaced the old Drainage Review.

Here's a draft of the next level version, the Land Disturbance Activity Form B—PERMIT. I expect Dorje will have some feedback on the actual usage of this application because he's been working with several people whose projects rise to the higher level of disturbance. This will be in the packet Thursday; sending out a day or two ahead so you have more time to review it.

I struggled a little anticipating the back-and-forth process that will be involved sometimes, for example:

1. people will submit the first two pages (with required signature)
2. the Town will evaluate it and either approve it as is or, if it's very extensive...
3. The Town will come back to the applicant with page 3 specifying required conditions, mitigations, or timeline commitment, which I'm sure we would need the applicant to agree to do in order to get approved. It seems to me that IF such conditions are imposed, we need to get some acknowledgment from the applicant that they will comply with those requirements. Hence the initials. Would full signatures be more appropriate?

Page 3 will not always be required.

Still in the works is a Land Disturbance Activity Info Sheet, basically the relevant section from 95-6 fleshed out with a few more details and perhaps a bit of FAQ.

I know the naming we came up with, Form A—REVIEW and Form B—PERMIT, is not as clear as we might like (to put it mildly). I'm wondering if we could consider changing it to Form A—Routine and Form B—Nonroutine, which parallels some other things we have like building permits, CUPs and Solar Energy System permits. Thoughts and ideas welcome.

See you Thursday.

—Colleen
BPA

TOWN OF CASTLE VALLEY UTAH
Land Disturbance Activity
Form B—Land Disturbance PERMIT Application

Lot # _____ Applicant (if different from owner) _____
Property owner _____
Mailing address _____
Phone _____ Cell _____ Email _____

OFFICE USE	Permit expires on date _____
☐ Basic Fee Paid \$ _____ # _____ date _____ rec'd by _____	
☐ Add'l Fee Paid \$ _____ # _____ date _____ rec'd by _____ _____ hrs x \$ _____ /hr	
DETERMINATION	
☐ Approved, no further review necessary, by _____	
☐ Additional review required, as determined by the Roads Manager or other designated official, including possible mitigations or timeline commitment as detailed on page 3.	
Official's signature _____	

Per Ordinance 95-6 section 1.3, Land Disturbance Activity (as defined in Ordinance 85-3) may require Town oversight, including such activity not associated with a Building Permit, to protect property from changes in drainage.

Any Building Permit application is required to have a Land Disturbance REVIEW by the Roads Manager or other designated official (this review replaces the former Drainage Review).

Any planned Land Disturbance Activity, including devegetation, that meets one or more specified thresholds requires an approved Land Disturbance REVIEW, or in the case of higher thresholds, a Land Disturbance PERMIT. See Ordinance 95-6 and/or the Land Disturbance Activity Info Sheet for details. If the project activity exceeds the approved projected scope of work, further review may be necessary.

Submission requirements

1. Attach plot plan showing entire lot with setback lines, existing structures including septic systems, and scope of proposed Land Disturbance Activity. Hand drawn OK. All distances must be clearly marked. Attach additional page zoomed with detail if necessary. If associated with a building permit, detail any planned Land Disturbance Activity which is not already included in the building plans (for example, a driveway). Note that earthmoving in the road right of way/easement area may also require a Right of Way Encroachment Excavation Permit.

2. List contractors, engineers, and any other involved professionals, with contact information. Attach additional page if necessary.

3. ☐ Check box if you expect to exceed any of these thresholds, and add a separate sheet with details:
- a. Land Disturbance of 1 acre or more; Utah licensed engineering required if greater than 2 acres.
Approval is contingent on notification of the State under UPDES (as defined in Ordinance 85-3).
 - b. Engaging (crossing or changing) a Watercourse.
 - c. Moving or disturbing 100 cubic yards of material or more; Utah licensed engineering required if greater than 2,000 cubic yards.

4. Any additional details or notes. Attach separate page if necessary

5. Applicant signature _____ date _____
(if different from property owner/s)

Property Owner 1 signature _____ date _____

Property Owner 2 signature _____ date _____

The above signatories attest that the provided information is accurate and complete, to the best of their knowledge. Permits issued on the basis of false or misleading information are void.

Ordinance 85-3 Ch. 9.1.C: No license, building permit, or other Land Use Application Permit shall be issued by any official, employee, or agent vested with the duty and authority to issue licenses or permits which would not be in conformance with the provisions of Town Land Use Regulations in effect at the time of application. It shall be a violation of this land use ordinance for any official, employee, or agent to issue any permit or license in violation of Town Land Use Regulations. Any license or permit not in compliance with Town Land Use Regulations or issued on the basis of false or misleading information shall be void.

Page 3: Additional review (if required)
including possible mitigations or timeline commitment

- a. Revegetation of disturbed areas.
- b. Riprap/armoring on erosion prone areas.
- c. Silt fencing or other silt retention methods.
- d. Timeframe for mitigations.

Applicant initials _____ date _____
(if different from property owner/s)

Required mitigations or other conditions. Attach extra sheet if necessary.

Required mitigations or other conditions. Attach extra sheet if necessary.

TOWN OF CASTLE VALLEY UTAH
Certificate of Land Use Compliance Application

Lot # _____ Applicant (if different from owner) _____

Property owner _____

Mailing address _____

Phone _____ Cell _____ Email _____

Contractor _____

Phone _____ Cell _____ Email _____

OFFICE USE	Combined square feet _____	height _____
☐ Approved by _____ date _____		
☐ Fee Paid \$ _____ # _____ date _____ rec'd by initials _____		
☐ Fee exempt—notarized Agricultural Exemption Acknowledgement attached		

Ordinance 85-3 5.7.A: "All buildings constructed in, reconstructed in, altered in, or moved into the Town, whether for Dwelling or accessory use including metal shipping containers and portable sheds, and unless exempted from building permit requirements under the provisions of state statutes related to buildings that are not located in residential areas and which are used solely in conjunction with agriculture use, and not for human occupancy, must have land use approval from the Town Designated Land Use Authority and, if required, a permit from the Grand County Building Inspector before commencing the construction or moving process." Structures >200sf or that will have utilities installed may require a Grand County building permit.

Submission requirements

1. Plot plan showing entire lot with the following details. Hand drawn OK; all distances and dimensions must be clearly marked. Include additional page zoomed with detail if necessary.
 - a. Lot #, name, address, phone, and signature of lot owner and contractor.
 - b. Property lines, road easement lines, and minimum setback lines. Applicant may be required to submit documentation prepared by a registered land surveyor or civil engineer identifying property lines and road easements if deemed necessary to verify the setback requirements.
 - c. Existing structures (designate use) with dimensions and setbacks.
 - d. Proposed structures (designate use) with dimensions and setbacks.
2. Elevation drawings with height measurements as defined in Ordinance 85-3 Definitions for Height, Building. This may require a Grade Review by the Building Permit Agent. Indicate any exterior lights on elevations.
3. Floor plan with dimensions, including eaves and porch roofs.
4. Land Disturbance Activity application, if applicable, or any other forms or information deemed necessary by the Designated Castle Valley Land Use Authority.

5. Construction Documents as provided to the Grand County Building Department, if applicable. Note that any future revisions to these documents must also be provided to the Town of Castle Valley.
6. Payment of fee by cash or check made out to Town of Castle Valley (see current Fee Schedule at <https://www.castlevalleyutah.com/documents/index.php>).

Approval

- If applicable, the Grand County Building Permit application must be signed by the Designated Castle Valley Land Use Authority and by the Grand County Building Department to be a complete and valid permit.
- Castle Valley zoning approval will be revoked and become invalid if, within six months of receiving Town approval, the applicant has not a) started the proposed project; or b) (if applicable) received an approved building permit from the Grand County Building Department with all fees paid. If Town approval is revoked on this basis, the fee paid to the Town will not be refunded. If the applicant wishes to start the application process again, new forms must be filed and a new fee must be paid.
- The applicant may extend Town approval for an additional six months with no additional fee as long as: no changes have been made to the proposed project; no changes have occurred in Town Land Use Regulations since the applicant's original approval by the Town that would affect the application; the request is made in writing before the expiration date of the permit; and Town approval has not been revoked. If any of the above has occurred, the applicant must begin anew the application process with the Town.
- If the County revokes a completed building permit for any reason, Town approval is also revoked. If the applicant wishes to revive such an application, the applicant must begin anew the application process with the Town. In such an instance, the original fee will not be refunded.
- Certificate of Land Use Compliance (CLUC) applications will not be approved that are not in compliance with Castle Valley Land Use Regulations and other applicable laws.
- A CLUC issued on the basis of false or misleading information is void.
- Construction begun without an approved CLUC may be subject to delays, fines, and/or increased fees.
- Substantive changes in plans (i.e. layout, use, structural) after a CLUC is issued require NEW approval by the Town and the Grand County Building Department (if applicable).

Applicant signature _____ date _____
(if different from property owner/s)

Property Owner 1 signature _____ date _____

Property Owner 2 signature _____ date _____

The above signatories acknowledge and agree to comply with all requirements as stated on this application, and attest that the provided information is accurate and complete, to the best of their knowledge. Permits issued on the basis of false or misleading information are void.

Ordinance 85-3 Ch. 9.1.C: No license, building permit, or other Land Use Application Permit shall be issued by any official, employee, or agent vested with the duty and authority to issue licenses or permits which would not be in conformance with the provisions of Town Land Use Regulations in effect at the time of application. It shall be a violation of this land use ordinance for any official, employee, or agent to issue any permit or license in violation of Town Land Use Regulations. Any license or permit not in compliance with Town Land Use Regulations or issued on the basis of false or misleading information shall be void.