

Landscape Architect Training

Welcome to landscape architect training for The Church of Jesus Christ of Latter-day Saints. Please complete this training prior to beginning work on a Church landscape project. If you have questions, please contact the architect, or contact David Wright at wrightds@ldschurch.org or 801-240-9478.

Overview

Landscape architect training has two steps:

1. **Pework training.** The prework consists of self-study and tasks to help you learn the essential Church-specific standards, resources, and tools you will use on the job. Plan to spend about one to two hours completing the prework training.

To complete the prework tasks, you need to know the meetinghouse style for the project you will be working on. If you don't have that information, please obtain it from the architect.

2. **E-learning course.** After you complete the prework, you are provided a link to the e-learning course, in which you practice using the Church's tools and resources and make decisions similar to those you will make on the job.

Please do not begin the e-learning course until you complete the prework training.

Plan to spend about 45 minutes completing the e-learning course.

After you successfully complete the prework and e-learning course, you are trained to perform Church landscape work. Completing this training does not relieve you of your professional duties. It is your responsibility as a landscape architect to use your landscape design expertise and your best professional judgment in designing landscape projects.

Thank you for your participation!

Step 1: Prework

Please comply with the Church's unique landscaping needs and requirements. If this is your first project with the Church, the requirements are new to you. If you have worked on previous Church projects, you should still review the requirements because they might have changed.

We want to equip you with the resources and tools you need to successfully meet the Church's requirements as you complete a landscape project.

The tasks in this prework are intended to help you learn the essential design standards, methods, and online tools you will use to meet Church requirements and to design and oversee a successful landscape installation.

While it takes one to two hours of your time to complete this prework, it is intended to save time in the long run, and it gives you the foundation you need to move forward.

After you complete the following 12 tasks, you are prepared for Step 2: E-learning Course.

1. Review roles and responsibilities.

Here are some Church-specific roles you should be familiar with:

- **Project manager (PM)**—responsible for the overall construction of a meetinghouse and its landscape.
- **Facilities manager (FM)**—responsible for the management and maintenance of a meetinghouse.
- **FM group**—office staff, which includes the administrative assistant who supports the facilities manager.
- **Bishop**—ecclesiastical leader who presides over a single ward or branch congregation (the equivalent of a pastor in many other Christian denominations).
- **Stake president**—ecclesiastical leader who presides over a stake, which is organized from a group of contiguous wards or branches.

Your contribution as a member of the design team is important to the project's success. The design team consists of:

- Project manager
- Facilities manager
- Architect
- Landscape architect
- Civil engineer

2. Register for an LDS Account.

The LDS Account enables you to sign in to other necessary tools when directed. You do not need to be a member of the Church to register for an LDS Account.

Register for your LDS Account at <https://ldsaccount.lds.org/> by clicking these links:

- a. **Create an Account**
- b. **Register as a Member** or **Register as a Friend**

You can record your username and password here for future reference:

Username _____
Password _____

3. Bookmark the website for Architectural, Engineering, and Construction (AEC) for United States and Canada at (<http://aec.ldschurch.org/aec/>) and familiarize yourself with its content.

The AEC website provides access to the guiding principles, instructions, processes, resources, and tools you need to succeed with the project.

You will frequently use the following three sections of the website. The prework tasks in this document pertain to the tools in these sections.

- **Specifications:**
 - Specifications documents
- **Design Guidelines:**
 - United States and Canada Design Guidelines
 - Topsoil Testing Report and Template
- **Landscape Resources:**
 - Landscape Architect Checklist
 - Eco-Regions Map
 - Eco-Region Specific Documents (Prototypical Drawings)
 - Interactive Church-Approved Plants
 - Common Landscape Detail Sheets
 - SMART Controller Planning and Installation Checklists
 - Training

***Tip:** The green AEC button in the upper-left corner on each page of the website takes you to the international site, which you will not use. To return to the resources and tools you will use, click the **US/Canada Information** link.*

4. Study the United States and Canada design guidelines.

These guidelines represent the Church's design standards. Understanding and applying these standards is critical to the success of the project.

- a. Go to the AEC website: <http://aec.ldschurch.org/aec/>.
- b. Click **Design Guidelines**.
- c. Under Download the Design Guidelines, click the **United States and Canada Design Guidelines** link.

Review the introduction.

***Note:** While much of this training is focused on new meetinghouse landscapes, it also applies to replacement and improvement work, historic properties, Seminaries and Institutes projects, Welfare Department projects, mission offices projects, and additions.*

Review the glossary.

Study Chapter 4: Landscape. This chapter is essential to help you understand the standards and guidelines that are unique to the Church for landscape design and construction. Please take the time to study this chapter so you have a strong foundation for the remaining prework tasks below and for your work on the project.

5. Print and study the Landscape Architect Checklist.

The Landscape Architect Checklist identifies your most critical responsibilities throughout the project. Refer to it often, and use it as a guide throughout all phases of the project.

- a. Go to the AEC website: <http://aec.ldschurch.org/aec/>.
- b. Click **Landscape Resources**.
- c. Access the checklist under the heading Landscape Architect Checklist.

Print and study the checklist. Gain an understanding of the expectations.

6. Determine the eco-region for the project site.

The interactive eco-regions map enables you to determine the geographic and environmental region (eco-region) for a project site. This is important because specific landscape style options and prototypical drawings are based on eco-regions.

- a. Go to the AEC website: <http://aec.ldschurch.org/aec/>.
- b. Click **Landscape Resources**.
- c. Click on the map under the heading Eco-Regions Map.

Determine the eco-region for your project and record it here for future reference:

Note: *If your project site resides in one eco-region but is also very close to another eco-region, use your professional expertise to evaluate both eco-regions and select the eco-region you feel is most applicable.*

7. Study the prototypical drawings for the project.

The prototypical drawings are based on design element options for the specific eco-region. You will download the DWG file and adapt the design for the project location and conditions. For this task, review the PDF version of the drawings. To access the prototypical drawings:

- a. Go to the AEC website: <http://aec.ldschurch.org/aec/>.
- b. Click **Landscape Resources**.
- c. Under the section called Eco-Region Specific Documents and in the Meetinghouse Prototypical Drawings column, click the download button that corresponds with the project's eco-region.
- d. Click the PDF button for the project's meetinghouse style to download the PDF version.

Note: *If you don't know the project's meetinghouse style, please get that information from the architect before proceeding.*

Below is an example of where to click for the 9.2 Southern Plains eco-region's prototypical drawings for an Independence 230 meetinghouse:

Eco-Region Specific Landscape Style Options

Eco-Region		Meetinghouse Prototypical Drawings	CES Prototypical Drawings
1.0	Arctic Tundra		
5.0	Northeastern Forests		
6.0	Western Mountains		
7.0	West Coast Forests		
8.1	Eastern Forests		
8.2	Southeastern Forests		
9.1	Northern Plains		
9.2	Southern Plains		
10.1	Northern Cold Desert		
10.2	Southern Warm Desert		
11.0	Mediterranean California		
12.0	Southern Highlands		
13.0	Southwest Mountains		
14.0	Tropical Dry Forests		
15.0	Tropical Wet Forests		

Meetinghouse Prototypical Drawing Downloads

9.2 Southern Plains	Standard	Rural
Heritage 98		
Heritage 09T MH		
Heritage 09T SC		
Independence 130		
Independence 230		

= PDF of landscape drawings
 = ZIP of drawings in DWG format
[Prototypical Plan Design Table Instructions](#)

[Meetinghouse Prototypical Drawings Landscape Table Descriptions](#)

Open and study the PDF version of the prototypical drawings. Give particular attention to the following:

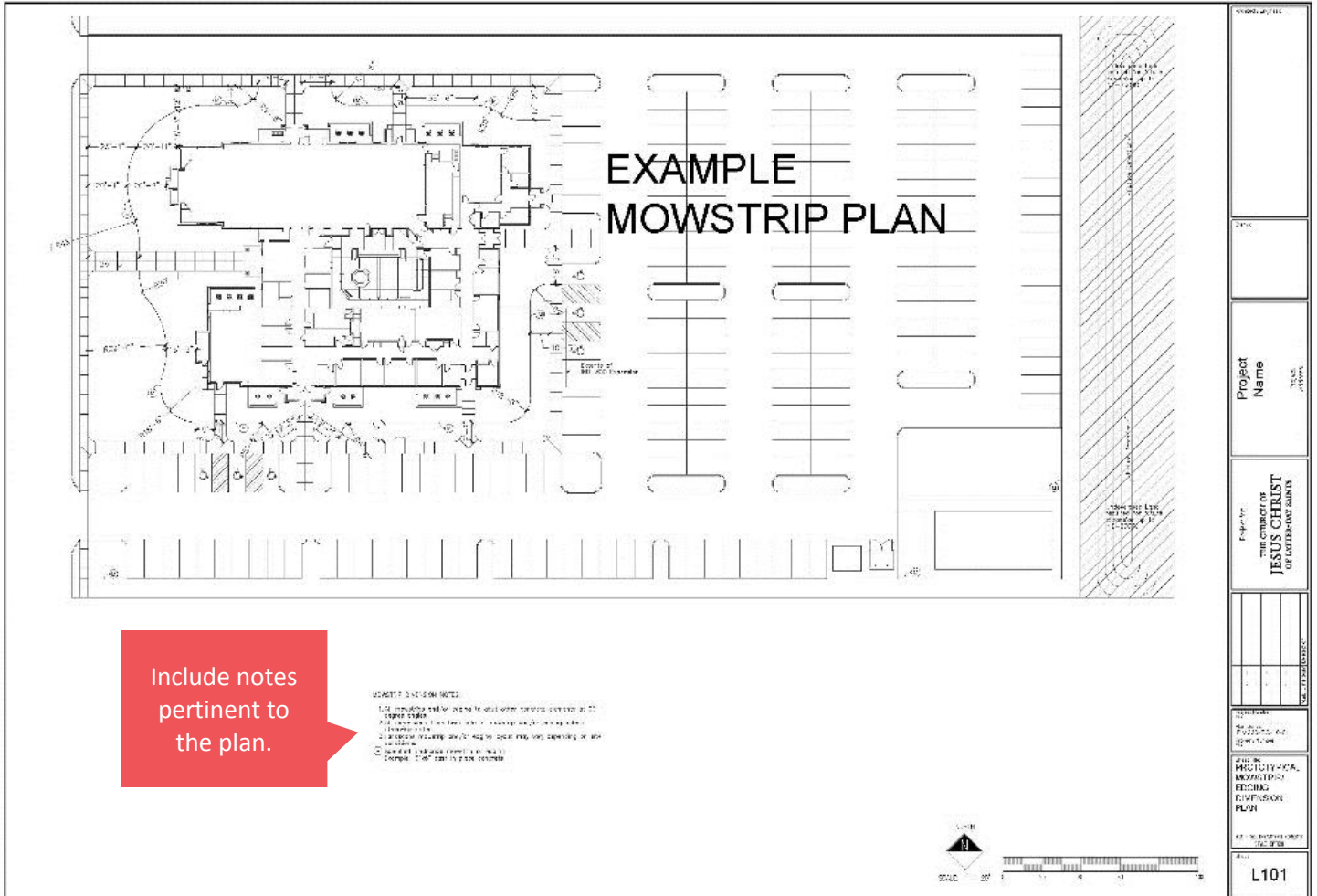
a. Sheet L100—Landscape/Irrigation Design Information

The image shows a technical drawing sheet titled 'L100' with several key sections and callouts:

- Top Left:** 'LANDSCAPE ARCHITECT OF RECORD' and 'REVIEW ITEMS OF THIS SHEET AND THIS SHEET FROM PLANS'. A red callout box says: "Important! Read the Instructions to Landscape Architects."
- Top Center:** 'EXAMPLE LEGEND' (watermark) and a table for 'PLANT MATERIALS LIST, LANDSCAPE' with columns for 'SYMBOL', 'PLANT NAME', 'EMITTER TYPE', and 'PLANT MATERIALS LIST'. A red callout box says: "Study the Example Legend. Your plant legend should include all the categories shown."
- Top Right:** 'CONCEPTUAL PLANT LEGEND - LANDSCAPE ARCHITECT TO REFER TO SHEET L102 FOR CONCEPTUAL PLANT LAYOUT'. It contains a 'CONCEPTUAL PLANT LEGEND' table with symbols for 'Small Deciduous Tree', 'Large Deciduous Tree', 'Flowering Tree', and 'Foliage Tree'. A red callout box says: "Use this Conceptual Plant Legend as a guide for the variety of plants you might use."
- Bottom Left:** 'PLANT COVERAGE DIAGRAM' with a color-coded legend for 'Grass', 'Shrub', 'Tree', and 'Water'. A red callout box says: "Study the Plant Coverage Diagram and instructions."
- Bottom Center:** A site plan diagram showing building footprints, parking areas, and landscaping zones.
- Bottom Right:** 'REMOVE SHEET BEFORE BIDDING' and 'L100'.

b. Sheet L101—Prototypical Mow Strip/Edging Dimension Plan

- The landscape contractor should install carefully placed and smooth-transitioning mow strips. Provide a layout to help accomplish this.
- When designing mow strips, terminate them at 90 degrees into adjacent concrete paving.



c. Sheet L102—Prototypical Landscape Plan

- Create a landscape plan using guidelines found on the AEC website and the instructions found on the Landscape/Irrigation Design Information sheet.
- The plan should comply with the five guiding principles found in the Architecture, Engineering, and Construction Design Guidelines (see number 3 above).

EXAMPLE PLANTING PLAN

Completely fill out design tables and place on plans.

Keep plants from overhanging or growing into the facilities.

Show plants at their mature size.

Address directives given in clouded notes, then remove the clouded notes.

CONTRACTOR MAY BE REQUIRED TO VERIFY ALL PLANTING OR OTHERS AS REQUIRED TO CONFIRM OR CHANGE THE NEIGHBORHOOD. THIS SHOULD BE DONE WITH ALL APPROVAL FROM THE CITY.

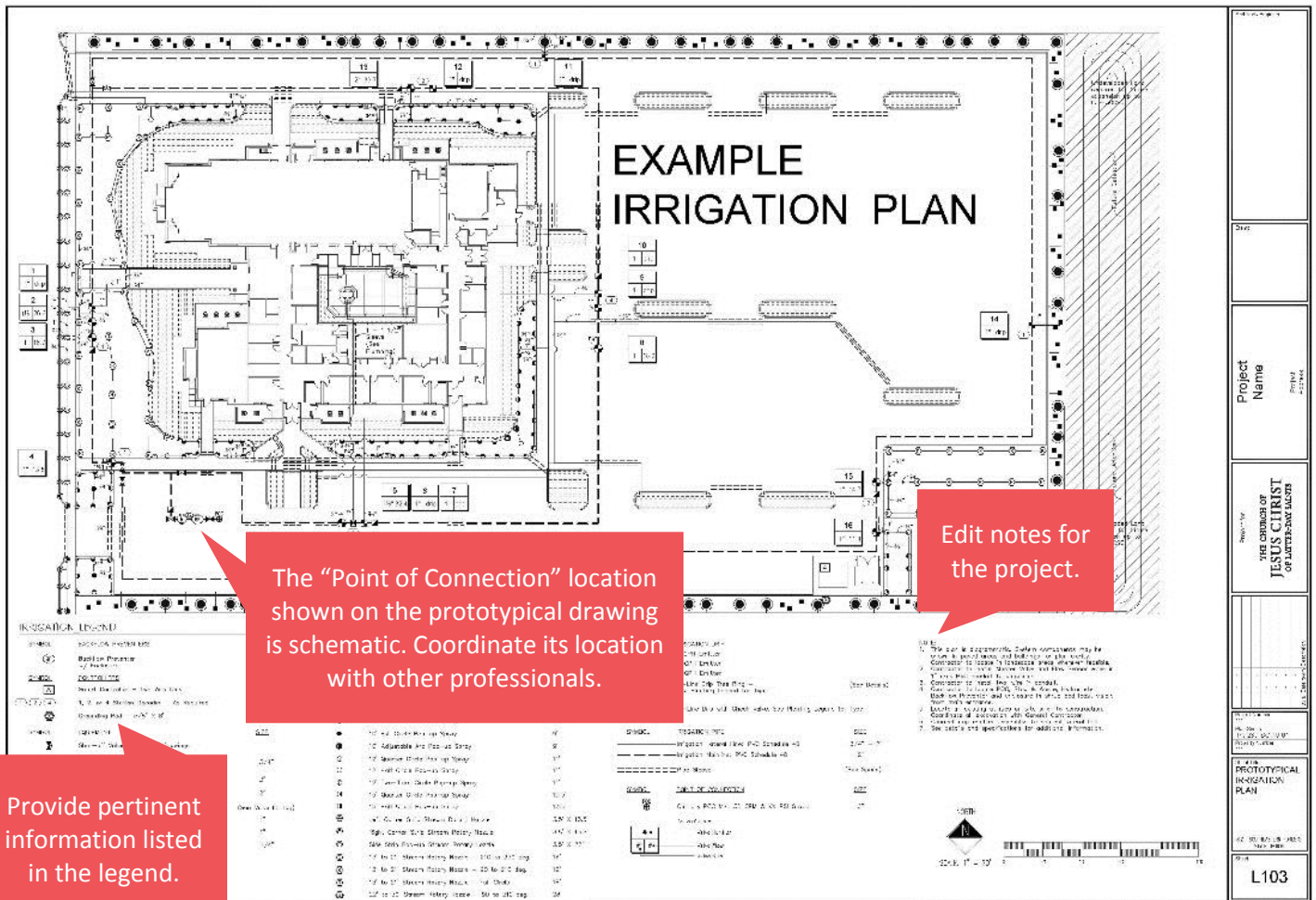
SEE SHEET L101 FOR EXHAUSTIVE AND COMPLETE PLANTING LEGENDS. LANDSCAPE ARCHITECT TO PROVIDE ACTUAL PLANTING LEGEND ON THIS SHEET, OR ADDITIONAL SHEET, AS REQUIRED.

SCALE: 1" = 10'

THE ORDER OF JESUS CHRIST OF SACRAMENTO COUNTY
PROTOTYPICAL LANDSCAPE PLAN
L102

d. Sheet L103—Prototypical Irrigation Plan

- Determine if permanent irrigation system plans are necessary for the site. This decision is based on a discussion with the design team as well as consideration of climatic conditions and cultural practices. Do not propose irrigation systems for where they are not agreed upon and not necessary.
- Design an efficient irrigation system.
- Separate trees and shrubs located within planters on different irrigation zones.
- Coordinate the selection and proposed location of the SMART controller.
- The “Point of Connection” location shown on the prototypical drawing is schematic. Coordinate its location with other professionals.



Note: Prototypical drawings are occasionally updated. Be sure to download and use the most current prototypical drawings found on the AEC website for your landscape project.

8. Create a Church-approved plant list.

The interactive Church-approved plants online search tool is used to create a list of Church-approved plants to select from and use in construction documents. You can base your list on filters such as eco-region, USDA hardiness zone, soil composition preference, and more. You can submit additional plants for approval if desired.

For this task, use the interactive Church-approved plants online search tool to create a list of Church-approved plants.

- a. Go to the AEC website: <http://aec.ldschurch.org/aec/>.
- b. Click **Landscape Resources**.
- c. Click **Interactive Church Approved Plants**.
- d. If prompted, sign in with your LDS Account.
- e. In the tool, click **Filters** (at the far right).
- f. Select the correct filters for the project's eco-region and USDA hardiness zone, and then click the green **Apply** button (in the lower right).
- g. The results are listed by plant category. Click the arrow next to a category to reveal approved plants.
- h. Hover over a plant name to see plant details.

Experiment with additional filters to create a Church-approved plant list. Become familiar with the tool.

***Note:** After you begin work on the project, you should acquire accurate information to base the plant list on. Use this task for practice.*

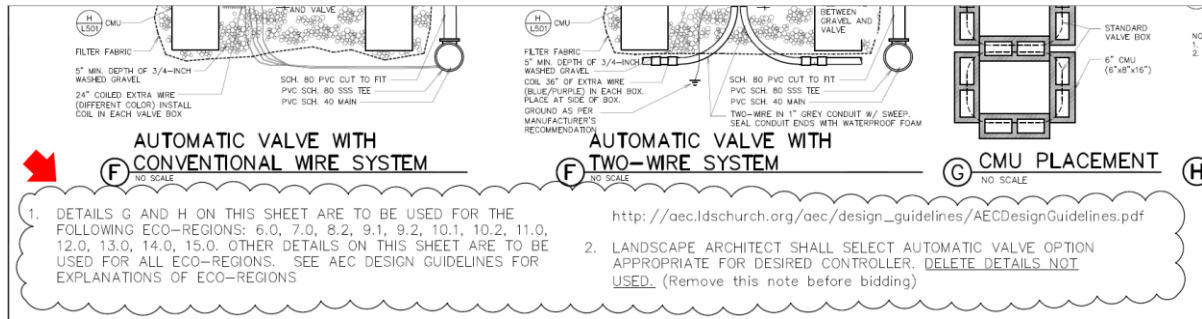
Next, in the left menu, click **Submit a Plant**. Review the types of information that are requested to submit a new plant for approval.

9. Study the common landscape detail sheets.

The common landscape detail sheets contain Church-specific irrigation and planting detail drawings that you should download and use as you create construction documents. Please follow the specific instructions provided in the detail sheets.

- a. Go to the AEC website: <http://aec.ldschurch.org/aec/>.
- b. Click **Landscape Resources**.
- c. Under the heading Common Landscape Detail Sheets, click the PDF button.

Open and study the PDF version of the detail sheets (L501–L505). Give particular attention to the instructions noted in clouds, for example:



Note: Detail sheets are regularly updated. Be sure to download and use the most current detail sheets found on the AEC website for your construction documents. You may have to supplement these details with your own if required.

10. Study the SMART controller checklists.

You will select the type of SMART controller for the site from the approved products found in the standard specifications. Provide the SMART controller checklist to the landscape contractor as part of the specification manual. The contractor will complete the checklist during installation to ensure it is correctly completed.

- Go to the AEC website: <http://aec.ldschurch.org/aec/>.
- Click **Landscape Resources**.
- Under the heading SMART Controller Planning and Installation Checklists, click **Controller Link, Rain Master, and WeatherTRAK**.

Study the different checklists. If desired, contact David Wright to view recorded SMART controller trainings.

11. Access and review the Topsoil Testing Report form.

The Topsoil Testing Report is a Church-specific form that is provided to the testing laboratory to tabulate the soil-testing data. The form lists the Church's acceptable soil levels so you can compare them with the test data.

- Go to the AEC website: <http://aec.ldschurch.org/aec/>.
- Click **Design Guidelines**.
- Scroll all the way down, and under Landscape, click **Topsoil Testing Report** to review the PDF version.

Study the Topsoil Testing Report and give particular attention to the instructions provided on the form and the Acceptable Level(s) in the Soil Test Data section.

12. Access the standard specifications documents and familiarize yourself with their format.

Standard specification documents are provided so that you can edit them for site-specific conditions. Use the specifications related to work on your project in Division 31: Earthwork and Division 32: Exterior Improvements. You will include the edited specifications with the construction documents. The landscape contractor relies on these specifications during construction.

- a. Go to the AEC website: <http://aec.ldschurch.org/aec/>.
- b. Click **Specifications**.
- c. Click **New Meetinghouse**.
- d. Scroll down to the division entitled Division 31: Earthwork and click **Expand this division . . .**
- e. Click the Word document for 31 0501 (Common Earthwork Requirements) under the column New Meetinghouse and Std.
- f. If prompted, enter the password **nephi** (use this password for all specification documents).

Open and study the downloaded document as an example of a specifications document. Give particular attention to the instructions provided in red text.

Open and review these additional documents:

- 31 1100
- 31 1413
- 31 2213
- 31 2216
- 32 8423
- 32 9001
- 32 9120
- 32 9121
- 32 9122
- 32 9223
- 32 9300

Note: *Specifications documents are occasionally updated. Be sure to download and edit the most current specifications documents found on the AEC website for your project.*

You have completed Step 1: Prework.

You should have a good foundation in the guidelines, resources, and tools required for a Church landscape project. Step 2: E-learning Course builds on this foundation.

Here is a [Quick Reference Guide](#). It is “cheat sheet” that lists all of the above resources and tools, their uses, and how to access them.

Step 2: E-learning Course

The prework prepared you for the e-learning course. In the e-learning course, you will practice applying the Church's standards, tools, and resources and make decisions similar to those you will make on the job. The e-learning course emphasizes areas that present a continual challenge and potential for error in meeting the Church's requirements.

Please begin the e-learning course only after you have completed the prework training. Plan to spend 45-60 minutes completing the e-learning course.

1. To access the e-learning course, go to <http://broadcast.lds.org/elearning/mfd/landscape-architect/course/story.html>.
2. Complete the online course.
3. **Important: At the end of the course, follow the instructions to receive course credit and so your name is added to the Church's list of trained landscape architects.**

Completion

Congratulations on completing the landscape architect training! After you complete the prework and e-learning course, you are trained to perform LDS Church landscape work. Remember, this does not relieve you of your professional duties. It is your responsibility as a landscape architect to use your landscape design expertise and best professional judgment in designing landscape projects.

We suggest the following steps:

1. Download the DWG files for the project's prototypical drawings and detail sheets.
2. Review the Landscape Architect Checklist, and give particular attention to the Preliminary Design Phase items that you will begin working on first.
3. With the architect, discuss your role in the project and next steps, such as:
 - Verifying the submission of the Topsoil Testing Report.
 - Visiting the project site and examining the conditions.
 - Assisting in the development of a proposed site plan.
 - Assisting in the location of utility lines, boxes, poles, and relevant appurtenances.
 - Assisting in setting proper grades and overall grading character.

Thank you for your participation!