



Project PlayBook Part 3: The Resource Guide of Resources



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Appendix A: Tesla Works Officers

They're here to help.

There are nine officers that change every year. The positions are as follows:

President and Vice President: They make sure the group is running. For your purpose they are good to talk to about almost anything. In theory, they should know it all.

Secretary: This person does a lot for the inner parts of Tesla but not much for the projects specifically but they are still a good person to ask general questions to.

Treasurer: This is the person that deals with all of the Tesla Works money. They can help you with any budgeting questions you may have.

Purchasing Manager: This is the person that buys your stuff.

Project Director: This is the person you will hear from the most. They are here to make sure you can be a successful project. Always feel free to come and talk to this officer. It is their job to listen and help you with anything you need.

Outreach Coordinator: This is the person you will work with anytime you are talking during a general meeting. This is also the person who will be helping with Showcases and other events in the future.

Communications Director: This is the person who deals with all the social media and emails in Tesla. Feel free to ask them to help promote things either in the Tesla emails or on the Facebook. (Other social media too)

Friday Night Project Manager: This is the person who runs mini projects every Friday night. Sometimes if you need a specific build night this is a person that you can work with to get a bunch of things made in one Friday night. (Example: Pyroboard once used FNP's to prototype different sized holes by making multiple mini boards.)

A current list of the Officer Board can be found on Basecamp or gopherlink.

Or to send a message to all the officers or you're not sure which one to talk to email them at tesla@umn.edu.



Appendix B: General List of all the Resources We can think of...

- **PROJECT DIRECTOR--Literally their job is to help you with all of this and more!**
 - Other Project Managers
 - Online Research
 - Find a faculty advisor
 - Classes
 - Internships
 - Jobs
 - Consult senior members
 - Alumni
 - The news
 - Textbooks
 - Google (scholar)
 - Asking similar projects
 - Sketch modeling
 - Events
 - Guest speakers
 - Collaborate with other student groups
 - Communication with corporations
 - Kindergarteners/school age children
 - Officers may know who to get you in contact with for more help
 - Dumpsters/recycling bins in the hallways
 - CSE Admin Contacts
 - Kyle Dukart (our Advisor)
 - Fleet Services
 - Light Rail
 - Carts
 - People in the labs
 - Lab Managers
 - Professors
 - Family members
 - Coworkers
 - Friends
 - Novels
 - This is not all of them, there are unlimited amounts of resources, find them.
-

Appendix C: Useful Online Resources

Basecamp.

It's kinda like Facebook and you won't want to use it BUT it is a super useful tool and a great way to share information, gain members and keep all your stuff in one place! Also there's a phone app that's pretty good.

Start using Basecamp! Add to-dos, upload files, set dates. It'll get things moving and make people eager to contribute. It's very useful in getting information out to the Tesla Works community.

Email.

Take the advice of organizing your school email now. If you don't check your school email at least daily start doing that now. You are going to get a bunch of emails now. From Tesla and other members and officers. Don't get lost in them. Answer them in a timely manner. A good general tip: put your email on your phone and use your school email not a personal one.

Google Drive.

Most Projects use google drive. If you haven't used it yet, start now. It's a perfect tool for any group project. It allows you and your team to efficiently share information as well as store it all in one place. Keep record of important stuff. Keep all your future budget requests in here. (Don't worry you'll learn about those soon.) Keep all your designs in one place. Also keep your meeting minutes in here. (Described in the next section!)

When2meet.com

Anytime you need to plan a meeting or event and want to know when people are available this is the best tool to use. People can put times of when they are free and you can then pick a time when the most people are available. This tool is used frequently in Tesla because it's super useful.

Groupme.

If you haven't heard of this, it's like group texting but less annoying and a little more useful. It also allows your members to not give everyone their phone number if they don't want to. It's a useful app for any group.

Other.

There are a lot of other good resources out there. If you find something really awesome let us know as maybe we'll add it here. Also new apps and stuff come out like every day so this section could be outdated like a month from now. Who knows? Never be afraid to ask other project managers or just peers in general in order to find other useful online applications.

Appendix D: Places to Work

Exceed [*ik-seed*]

verb

1. to go beyond the bounds or limits of.
2. to be greater; to excel.

Exceed Lab.

Exceed Labs (KHKH 2-160 & 2-164) The Exceed Lab is a workspace in Keller Hall that can be accessed using your U-Card. There's typically people in there that can either help you or get you in contact with someone who can.

To gain access go to: <https://sites.google.com/a/umn.edu/exceed/access-exceed>

Anderson Labs.

Labs through CSE that are good places to work. <https://sites.google.com/a/umn.edu/csesil/home>
General Workspace - Student Design Lab (MECHE 2134)

Student Shop (CIVE 335)

Metal Working and other machining- Student Machine Shop (MECHE 176)

Contracted professional Engineering shop.

Not many projects have done this however there are a lot who have and this is something that will be project specific. If you want help the officers might know but also lab managers from the labs listed above are also good resources to get more information on this.

The Design Labs.

If you are in the College of Design or know someone who is there are a lot of labs that are CDes specific, meaning you need to be in that college to use their labs. A few of them allow you to pay a few to use them per hour but it's not recommended as it tends to be expensive.

For more information go to: http://design.umn.edu/current_students/leo/hall/

River Flats/Northrop Mall.

For larger projects sometimes the only space large enough is outside. Some of our projects have been this big. Permits aren't always needed but sometimes they are. As long as you're not doing anything that could hurt others and for a short period of time it is probably fine. To double check ask an officer for help or look up the regulations for your specific project.

Other.

There are of course other places to work, whether its empty classrooms or your dorm room, just make sure that the area is safe for what you are doing.

Appendix E: Places to Store

If you need help getting storage talk to the Project Director.

Exceed/Paint Room.

You have to register for storage space with the Exceed lab. There are 3 main storage spaces: the cabinets inside the lab, the Paint room (2-149) and North Star storage lockers (for long term cold storage of larger projects.)

Tesla Storage Unit- Northstar Storage Unit.

We typically store larger and archived projects in our storage unit. If your project fits one of those talk to the Project Director. If it is not large or achieved a better place should probably be found as it is inconvenient to keep materials far off campus.

Lind Hall Sub Basement Storage.

This is a place that Light Show is able to use to store their stuff. On rare occasions other things are stored there however typically it has to do with light show in some way. Talk to the Light Show manager or Project director if you think this is the right choice.

Other.

There other places in the U to store things however this is something to research to find what fits your project specifically. If you need help ask the Project Director or a lab manager.



Appendix F: Places to Get Things

Places to Stuff:

HOME DEPOT! :)

Ax Man

Menards

Lowe's

Walmart

Habitat for Humanity Restore

Rapson Design Workshop Store

Goodwill Outlet (on Fairview and University)

Hack Factory

Amazon

Dumpsters

(Electronic) Recycling Bins around campus

UMN ReUse Program- <https://facm.umn.edu/waste-recovery-services/reuse>

McMaster-Carr - <https://www.mcmaster.com/>

Discount Steel - <http://www.discountsteel.com/>

Digikey - <https://www.digi.com/>

ECE Depot

Chem Depot (and the random liquid N2, dry ice etc containers around Smith and Amundsen).

And the ice machines.

Google the part



Places to Buy but also sponsored things in the past.

Stratsys - <http://www.stratsys.com/>

Arduino - <https://www.arduino.cc/>

Foundry - Foundry was a sponsor they do software- <https://www.foundry.com/>

SICK lasers- Donated Lasers for AVP- <https://www.sick.com/us/en/>

Places to buy that have our logo

Prime Advertising in Maple Grove - Random promotional things (Table Cloth)

Underground Printing in Dinkytown (Owned by Custom Ink) for T-Shirts

MENARDS®



Appendix G: Funding Resources

Through Companies

As of right now, we can only receive donations if they are made in kind. An “in kind” donations means that that company donates knowing that they can not write off the donation on their taxes. We are working on achieving non-profit status.

Places that have donated before:

Foundry (t-shirt company that donated in the past)

SICK Sensors (donated sensors to AVP)

Center Point Energy (Used to fund the lightshow)

- The CSE Expo
- The CSE Small Grant
- The Coca Cola Grant
- The SUA Events Grant
- The MSA Events Grant

How do I get money through Tesla Works though?

Treasurer? Do I get \$\$\$?

Short answer, no. Longer answer, become a project manager (if you're reading this chances are you are one) and we'll help buy stuff to make your dreams a reality (your results may vary).

Okay, so you're a Project Manager now. What do you do now?

Now that you're a Project Manager, you have gone through a bunch of things with the Project Director and prototyping and planning and now want to hurry and come up with your first purchase request. Keep in mind, that you and your team can decide whatever you want for items, but keep them within reason. These items shouldn't include things like pizza at every meeting and should instead include items or services that help you reach your goals, and eventually your project. Here's the link to a handy-dandy spreadsheet you can copy and use for your purposes <http://z.teslaworks.net/projectbudget>.

What the heck goes in this document...? Or rather, where the heck is it?!

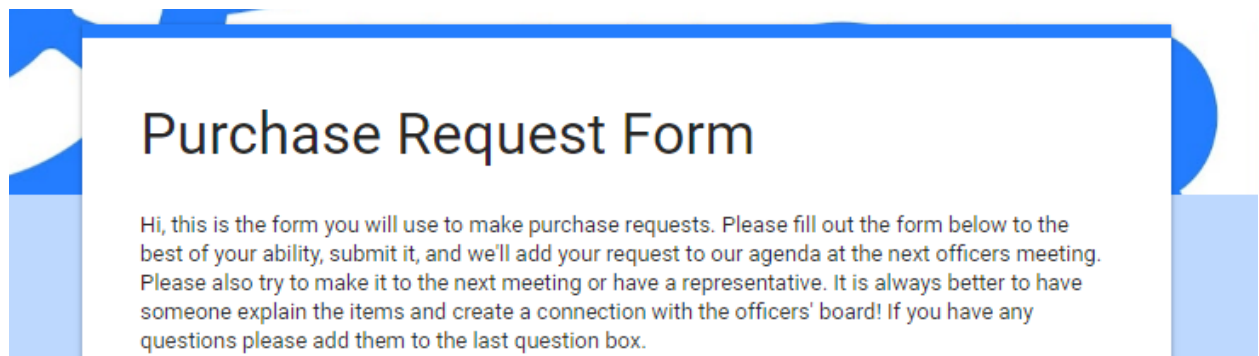
A purchase request (also known as budget request) currently works as an itemized spreadsheet which has all the things you need and want Tesla to buy for you. Sometimes the website is under maintenance and won't have all the resources you need. This means that you will need to make the spreadsheet yourself. The spreadsheet needs to be orderly, otherwise we won't have any idea what you want to buy. One column should list all the names of items you want to buy, for example 200 g of Military Grade Plutonium. You should also include an actual link to the item you want to buy from the website you want us to make the purchase from. If the website lists the item as "Med. T-shirt Waffles", you put that down for the item name. You should also include a detailed explanation as to why you need the item. When I say detailed, I mean actually take some

time to describe what the item is for. Do not just say "Resistor" in the description for a KAL50FB5R00-ND from Digikey. Clearly say what the item is used for and how it will help you. Be sure to also include a price for each "unit" you want. If you found the item yourself, it should either list a price or a price range for special items (more on that later). Include it. Now what about (sales) tax? Shipping? Include that too. But that stuff isn't listed you say? There's a handy-dandy way to check shipping and tax by heading to checkout on most sites. Once there, the sites will usually give you a nice little "estimate shipping" button. Click it. Depending on how soon you need your items, prices will vary. Include this number on your spreadsheet. Now that you're through with all the hard stuff, just indicate how many units you need, and provide a sum of all the items (plus sales tax times number of items) plus shipping. And that's all we need from you.

I have the document!! Now what?

Here's the link to the Purchase Request Form:

z.teslaworks.net/purchaserequest



Follow the instructions on the form and give what it needs. Be sure to attend or have a representative at the next Officers' Meeting where we will discuss and vote on your request. **FAILURE TO HAVE A REPRESENTATIVE MAY AFFECT YOUR REQUEST'S CHANCES OF BEING APPROVED.** This can't be stressed enough. If you're not there to answer questions, the officers are just going to be confused what you want or how much progress you have made and will either reject or table your request. While the officers may sometimes approve it, assuming you are detailed in your request and are active, there is a good chance they won't. Again, **PLEASE HAVE A REPRESENTATIVE ONCE YOU HAVE MADE A REQUEST TO THE BOARD OF OFFICERS.**

Soooo, my purchase request has been approved... what next?

Now, if our President or Purchasing Manager hasn't said anything, you need to contact the Purchasing Manager (contact info on Tesla Works basecamp) and let them know where you want your items to go. Generally speaking, this can be Keller (ECE Depot) but we've recently been sending items directly to residential addresses, **BECAUSE** it is more convenient.

And when will your stuff get here?

We will give you receipts and invoices of your items. Sometimes they include UPS or other tracking numbers. Sometimes they don't. When they don't, ask the purchasing manager to look into it. Sometimes the tracking info is hidden...

So what about special items?

Yeah, that stuff gets annoying. Special order items tend to require extra effort beyond putting items in a cart and going to checkout. This includes phone orders, confirmation calls, catalog orders, and in-person visits. Phone orders are a no in general. Nothing more sketch than giving your credit card info over the phone. Confirmation calls generally require the buyer to contact customer service and be on wait for a while. (A while means forever). Not because we are waiting for them to talk to us, but because they tell us to go contact a different department. Catalog orders are almost the same as the above except with the added step of emailing them first, then getting redirected. In-person visits aren't that bad, but usually require an officer to physically be with you making the purchase which is hard to coordinate. But let's go into why these items are "special". Special items generally have special requirements or hazards associated with them and require special handling or equipment. You might be qualified to handle those items, or it might just be a law they (the company) has to follow when people make purchases. Either way, I have to jump through a lot of hoops to get some of these items, and some of the hoops are hanging over lava.

So, are there places Tesla doesn't want to buy from?

Yes. This will vary from Purchasing Manager to the next, but in general they dislike making purchases from large industrial/research grade places. The problem here is that these large corporations all assume that the one making the purchase, is another large corporation or research institute. We are neither. We don't have that credibility (though I can say we are a UMN student group). This includes places like Sigma Aldrich. Another issue is the need for a loading dock which we don't have access to without jumping through some University hoops. Not too hard but quite a bit more work. Making purchases from hobby-oriented places can also be difficult. Hobbying and extremely small businesses are good examples of this. Places that use paypal to run through their purchases. The procedures to make purchases through these hobby people are awkward and dated. Like, comic sans for your font? Are you a real company in the 21st century? Not that comic sans is a bad font (it is), it's just that companies tend to stop using it when they, you know, become a real company that you cannot lose your credit info to.

If you have any further questions about purchasing or specific orders, you can contact the Purchasing Manager. Budgeting questions can be directed to the Treasurer.



Appendix H: Conflict Resources

On Policies

MSA - for Policy decisions and such <http://www.msa.umn.edu/>

SUA - for policy decisions and such <http://sua.umn.edu/groups/>

Information Technology Help (CSE)

<https://cseit.umn.edu/>

Is there issues with a Schedule conflict/ commuting conflicts?

Be accommodating. Maybe reschedule meetings times so everyone can come, incorporate skype/google hangouts/ Wechat/ tango/ facetime so members can participate off site and of course have detailed meeting notes to make sure everyone is on the same page and is aware of the project's progress. Use when2meet.

On Conflict Resolution and Communication strategies

Have some self-restraint. Don't go out of your way to chew someone out. BE mindful of your approach.

Which means if you are having a conflict with someone, privately discuss the matter one on one with the person in question. Because we are all adults who are fully capable of using words to explain ourselves in a calm and civil manner.

In general there are 4 parts to effective communication: listening, rephrasing, probing, and positive speaking. Remember to never attack a person's character. There is a big difference between saying, "I think there's a better way to do this" and "you're stupid." Constructive criticism works if it is constructive and considerate.

<http://ocr.umn.edu/services/informal-services>

On Burnout

Are you feeling disconnected with your team? Constantly stressed and fatigued? Exhausted and overwhelmed with work? You might be burned out. Take care of your health. Eat, sleep, socialize, and be creative. Studies have shown you can prevent burnout by spending 20% of your time doing what you like. So take one day a week to do whatever you want/makes you happy. Maybe take a break from some of your activities. It's okay to accept when things become too much.

<http://mentalhealth.umn.edu/stressmgmt/index.html>

Discrimination and Harassment, Sexual Harassment, Sexual Assault, Stalking, and Relationship Violence, Nepotism and Retaliation

EOAA investigates complaints about discrimination; harassment, including sexual harassment; sexual misconduct, including sexual assault, stalking, and relationship violence; nepotism; and retaliation.

<https://diversity.umn.edu/eoaa/>

Appendix I: Safety/Red Tape Resources

In the Labs:

Cleanup after yourself and be trained in proper use of equipment with necessary safety precautions. This is a communal space. Other people also have similar needs of space and resources to build their projects and its not helpful if the tools aren't put away in the labeled areas. If you don't know how to use a tool ask someone. It's always better to learn the right way to do it than to break something. However if you do break something let the lab manger know.

NO EXCUSES.

Tool you need isn't there? If it's an item that will benefit other projects, ask the workshop manager to buy it. If it's specifically suited for yours still talk to the lab manger but if they can't get it then ask for it in a purchase request.

Safety:

In general if safety is a concern talk to someone who would know more. It's always better to ask then to hurt someone or something.

Safety First Don't Just Say it live it.

Appendix J: Other Useful Links

Project Proposal Form:

z.teslaworks.net/newproject

Sample Budget Sheet:

<http://z.teslaworks.net/projectbudget>

Purchase Request form:

z.teslaworks.net/purchaserequest

Tesla Works Constitution:

z.teslaworks.net/constitution

Tesla Works Bylaws:

z.teslaworks.net/bylaws
