turfRad

Advanced Moisture Mapping Technology

Onboarding your facility

Welcome to turfRad. This is a step-by-step guide to setting up your facility and your account to start using turfRad.

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1. Provide irrigation data
2. Submit boundaries
3. Choose basemap for turfRad platform background image
4. Link to: turfRad Onboarding Form

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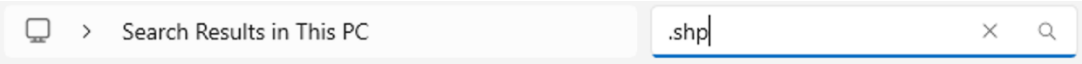
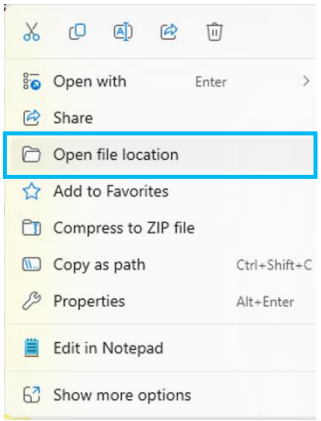
1. File options to onboard your sprinkler location. Click on the link on point 4. to get to the Data Uploader.

We can onboard your golf course or sports field without any additional files but to get maximum use out of the system we recommend using the irrigation integration features.

A. If you use a Toro Lynx irrigation system and you have a map view of your irrigation system in Lynx, we can request your sprinkler locations and IDs from Toro NSN. Please indicate this in the Onboarding Form.
B. You can use **"Shapefiles"** often found in your irrigation computer. Your irrigation computer likely contains a digital file that we can use to map the sprinkler heads. These files are stored in the shapefile format which each consist of 3 files on your irrigation computer with endings .shp, .shx, .dbf. We suggest attempting this method before continuing to the less preferred methods.
    a. The easiest way to locate these irrigation files is to open File Explorer ( ) and search for ".shp". Before searching make sure "This PC" is selected so that you search the whole computer.



b. If you start to get some results, look for a file called sprinklers.shp, stations.shp, or often they are just letters/numbers indicating the satellite or the sprinkler model or hidden files begginging with ".__.". Right click on one of these files and select "Open file location".



c. Press CTRL-A to select all the shapefiles in this folder. Right click and select "Compress to ZIP file". Now drag this ZIP file to the Desktop or Documents and upload this file to the turfRad Onboarding Form.

C. Irrigation "**CAD" or "AutoCAD" files;** your irrigation architect or consultant will often be able to provide you with a computer aided design (CAD) file of your irrigation system. We can often use this file to extract the sprinkler locations, and occasionally also station tags or IDs. If you were not able to locate any shapefiles with method 1, please request a .dxf or .dwg file from the appropriate person and upload it to the turfRad Onboarding Form.

D. The distributor or support person of your irrigation system (e.g. local Toro / Rainbird / Hunter distributor) can often provide the sprinkler locations (if you have a map view available) either in shapefile format or excel / csv. Please request if they have this information available if the above steps have not been successful.

E. As a last resort if any of the above didn't work you can send us a "**PDF", "TIFF",** or "**JPEG**". We can also digitize a scan of paper "**as-builts**" or your irrigation handbook. This option requires more labour and will result in longer onboarding lead times.

2. File options to onboard your fairway and greens boundaries

A. We build the turfRad maps using boundaries of your fairways and greens. We typically create these from satellite imagery (e.g. google earth) and this works well, but we have alternative options for those who are using GPS sprayers or have performed high resolution mapping on their course.
B. If you uploaded a recent **"Shapefile"** or **"CAD"** file mentioned above, this may provide us with the boundaries needed, see if "fairways.shp" or "greens.shp" was included in your zip. Make sure this is an updated file since the last renovation. Please use the check box in the upload form to note whether it is a recent file that should be used for boundaries instead of the standard google earth onboarding.
C. If you are using a GPS sprayer and require the upmost precision of an RTK accurate boundary, we can often onboard the boundaries exported from these systems, this needs additional onboarding time.

3. Basemap for turfRad platform background image

We typically use google satellite imagery as the base-layer image behind your moisture maps. If you have an alternative image that you would like to use, from a drone or aircraft aerial, please provide this via our large file WeTransfer link.

If you find that the default base-layer image is extremely outdated or of poor quality please submit a request to support@terraradtech.com and we will try to search custom satellite imagery for a more up-to-date or acceptable image. Please include the earliest date and preferred timeframe for the image in your request.