1. Presentation by Midwest FieldTurf on synthetic turf fields (Brian Launderville and Brian Kramer)
   a. A video and PowerPoint presentation was shown describing the manufacturing process, installation, and performance of synthetic turf fields.
      i. The “turf” is a tufted carpet that has strands of grass like material and a perforated mat for water drainage.
      ii. The infill is sand and rubber, and is recommended to be at least 2 ½” high.
      iii. The subfield infrastructure is rock and drain tile.
iv. FieldTurf produces its own carpet

v. Midwest FieldTurf is the local representative and installer for FieldTurf products

b. There are two types of turf carpet filament:
   i. Monofilament (i.e. single blade). Monofilament systems are good for all around purposes.
   ii. Slit film filament (wider blade with slits that fan out).

c. There are two types of infill that FieldTurf offers:
   i. XM – a 6 lb/SF two layer system made of sand and rubber fill
   ii. Elite – a 9.1 lb/SF three layer system made of sand/rubber fill and additional sand. (better grip)

d. Average life of a FieldTurf synthetic field is 12 to 15 years, depending on use and maintenance.

e. Replacement after usable life of carpet is reached is typically just the cost of the carpet and about 20% of the fill. The other 80% of the fill is reused and all the under field infrastructure remains in place. Removed carpet is recycled.

f. At approximately 6 years the synthetic turf fields tend to “lay down” due to some degradation and wear. This is a gradual process and can affect the speed of a soccer ball traveling across the surface (increased speed). The infill remains stable.

g. A groomer and a sweeper, pulled behind a gater, are required to maintain the field. FieldTurf provides the groomer and sweeper equipment to the owner. The first year no grooming is required, the second year two grooming are required, ensuing years 4 groomings per year are recommended. FieldTurf provide owner training for use of this equipment.

h. A FieldTurf field can cost between $8.80 and $9.80 per yard to install (excluding subfield infrastructure)

i. FieldTurf warranties are for 8 years.

j. Games can be played on a synthetic turf field during rain events or immediately following rain events.

k. A synthetic turf field has a good chance of being able to be installed by the fall football season if the project is bid in the winter. A synthetic turf field can be played on as soon as it is installed.
l. The following items are not permitted on a synthetic turf field (signage is provided to alert patrons): sunflower seeds, tobacco, fireworks, and pets.

m. FieldTurf products are installed on numerous professional sports fields and university complexes, but 65% of their installations are H.S. stadium fields.

2. Presentation by I-Cubs on natural turf fields (Casey Sheidel)
   a. A study entitled “The Dirt of Turf” was distributed and reviewed by the presenter. It was suggested that both proponents of synthetic turf and proponents of natural turf have strong biases. Some of the information presented in the study is skewed (costs, hazards, etc.) However, the decision point really hinges on the following two factors:

      i. How much will the field be used
         1. Natural fields are for games only, practice needs to be elsewhere.
         2. It is critical for a school district to have adequate land for practice fields and other facilities for JV and Middle School competition or community use.

      ii. Impact of weather on use of field. If a natural turf field is compromised during foul weather play it can be difficult to repair in time for ensuing events or seasons.

b. Natural turf fields have the following benefits:

   i. The surface is preferred by athletics

   ii. They are somewhat safer than synthetic turf fields for impact (because the ground absorbs more of the impact that a synthetic turf field)

   c. Natural turf fields have the following drawbacks:

   i. The maximum recommended number of games played per year on a natural turf field is limited to 70. Back to back games are not recommended. More games can be played on an amended natural turf field if the field is used only for soccer (up to 200 games)

   ii. Practice is not recommended

   iii. Marching band practice is not recommended

   iv. Tournaments are not possible

   v. Community use of field is not recommended

   vi. They are slippery when wet
vii. They are susceptible to damage when wet

viii. If damaged at the end of a football season it is not possible to restore the field prior the start of the soccer season the following spring.

d. Natural turf fields have two basic types of installations for H.S. level fields:

i. Amended soil with sub drainage (“sand capped”)
   1. 4” top layer of sand/loam over native soil and lateral drainage
   2. Provides better drainage

ii. Native soil with or without sub drainage
   1. Existing soils are used
   2. Does not provide as good of drainage as an amended soil field

iii. An amended soil field can cost between $350,000 and $460,000 to install. More if it so to be sod instead of seed.

iv. If the field is to be seeded it generally means that a full football season is lost because the field would be seeded in May and would not be able to be played on until the following May (one full year of allowing the seed to establish)

v. A natural turf field would be very difficult to install if it is bid in the winter. The absolute latest a sod field can be placed is the first part of July, and that is not ideal. May is best for sod so that it has at least 8 weeks to establish prior to play. It would be improbable to have a field ready for sod installation in May if construction does not start until spring thaw.

vi. It is recommended that an amended soil field is professionally maintained for the life of the field. Depending on the needs, the cost to maintain a field can be between $12,000 and $15,000 per year, excluding mowing and striping. Professional maintenance would include:
   1. Aerating
   2. Over seeding
   3. Sodding if needed
   4. Adding additional lifts of sand
   5. Pesticide/herbicide applications
   6. Top dressing.

vii. Sideline protection of a natural turf field is critical to be provided during the football season to help prevent damage in these areas for the
following spring soccer season.

viii. Some myths about synthetic turf:

1. Studies on hazards from synthetic turf fields (i.e. health concerns) are largely inconclusive.

2. The surface temperature of a synthetic turf field can be hot during summer games and might delay the start of a game. However, this is not common in the Midwest (more common in southern tier states)

3. Maintenance costs are not as significant as some studies show. A synthetic turf field is generally fairly straightforward to maintain.

ix. Local natural turf fields:

1. Nevada
2. Dallas Center Grimes

x. Local fields that transitioned from natural turf to synthetic turf due to increased use:

1. Dowling
2. Carlisle

3. Committee Discussion on timeline and priorities

a. The committee understands that a full season of track and soccer will be missed due to construction activity.

b. The committee prefers pursuing the track and field replacement as a 2016 project, to be bid in early winter. This is with the understanding that the bid documents can start in November and bidding would be in late January. It is also with the understanding that weather might affect the project schedule and the field might not be ready in time for the first game or two of the fall football season. As long as the district has advance notice, the first games of the football season can be scheduled as away games.

c. The committee consensus at this time is for a synthetic turf field, with the following considerations informing this perspective:

i. The district is growing, which means the stadium field will see increasing use

ii. A synthetic turf allows for practice, PE classes, tournaments, and marching band use, whereas a natural turf field does not
iii. A synthetic turf field that closely mimics natural turf is preferred.
d. The committee will reconvene on October 26, 2015, to make a final recommendation to the school board on turf type, track type, timeline, and phase priorities.