MAIDENCREEK TOWNSHIP BOARD OF SUPERVISORS

JULY 9, 2020

ENGINEER'S AGENDA

Subdivision Review Status Checklist (1)

- **Next Supervisors Meeting August 13, 2020**

Subdivision / Zoning / LDP (2)

- **JoJaz Subdivision Prel./Final see SDE review ltr. Dated 7/1/20.**
- Redner's Quickshop & Car Wash Prel. Plan see SDE ltr. Dated 6/3/20.
- David Kopfer Sketch Plan for Record see SDE ltr. Dated 6/3/20.
- Gun Range regulations draft reviewed w/P.C. on 1/8/20 revisions/additions being made.
- **Burning Ordinance regulation draft reviewed by P.C. on 7/1/2020 additional revisions/additions being made.**
- **Zimmerman storm water rain gardens inspected, Notice of Violation ltr. sent.** (3)

Projects

- Street Projects 2020
  - Excelsior Drive & June Ave. BOS awarded:
    - Contract "A" to Recon Construction in the amount of $206,038.00.
    - Contract "B" to New Enterprise Stone & Lime Co. in the amount of $135,317.50
  - Storm water remediation reviewed with Twp.; Road crew to perform.
  - **Contracts signed and Notice to Proceed sent to contractors.**
- **Lutz Property E. Wesner Rd. storm water issue**
  - **Reviewed Walnut Manor & Golden Manor Subdivision Plans (Plans start in 1987). There is no storm water easement on plans. No notes for storm water system maintenance on plans.**

Subdivision Improvement LOC / Escrow Release (4)

- See Attached

Sewage Enforcement Officer Activity Report (5)

- See Attached

SUBDIVISION STATUS
MAIDENCREEK TOWNSHIP, BERKS COUNTY
7/9/2020

	CURRENT PLANS:							
No.	**Project Name**	**Plan Stage**	**90-Day Review Period Begins**	**90-Day Review Period Ends**	**Extension (may reflect more than one extension)**	**Approved BY BOS**	**Comments**	**Most Recent Review Letter Date**
1	Schick Dental Office	Prelm/Final Plan	04/17/20	07/16/20		05/14/20	Approval conditioned on SDE review letter	5/1/2020
2	Jojaz Subdivision	Prelm/Final Plan	06/03/20	09/01/20			No action taken by PC, resubmission needed	7/1/2020
3	Redner's Quickshop and Car Wash	Prelm Plan	06/03/20	09/01/20			No action taken by PC, resubmission needed	6/3/2020
4	David Kopfer Subdivision	Sketch Plan for Record	06/03/20	09/01/20			No action taken by PC, resubmission needed	6/3/2020
5								
6								
	APPROVED / PENDING PLANS:							
1								
2								

July 1, 2020

Diane Hollenbach, Township Manager
Maidencreek Township
1 Quarry Road
Blandon, PA 19510

Re: JoJaz Subdivision
Preliminary/Final Plan – Review #2

Ms. Hollenbach:

Systems Design Engineering, Inc. is in receipt of a Preliminary/Final Plan entitled "JoJaz Subdivision." The site has two (2) access points to Maiden Creek Road and the subdivision would result in four (4) new individual lots. The southern access point is to be a local single access street and the northern access is via a proposed easement. The Plan was prepared by The Crossroads Group, LLC. The submission consisted of the following:

Cover Sheet		Undated
Subdivision Plan	Sheet 1 of 8	Dated 5/6/2020, rev 6/24/2020
Existing Features Plan	Sheet 2 of 8	Dated 5/6/2020, rev 6/24/2020
Demolition Plan	Sheet 3 of 8	Dated 5/6/2020, rev 6/24/2020
Road Plan & Profile	Sheet 4 of 8	Dated 5/6/2020, rev 6/24/2020
E &S Control Plan	Sheet 5 of 8	Dated 5/6/2020, rev 6/24/2020
Construction Details	Sheet 6 of 8	Dated 5/6/2020, rev 6/24/2020
Pre-Dev Drainage Plan	Sheet 7 of 8	Dated 5/6/2020, rev 6/24/2020
Post-Dev Drainage Plan	Sheet 8 of 8	Dated 5/6/2020, rev 6/24/2020

BACKGROUND:

The purpose of the plan is to subdivide an existing tract that is zoned Industrial. The tract is currently 24.57 acres in size. Four (4) new lots would be created, two (2) existing parcels adjacent to the proposed lots would remain unchanged and would have various easements in common. Lots are to be served by private individual wells and individual on-site sewage disposal.

1032 James Drive, Leesport, PA 19533 • P: 610.916.8500 • F: 610.916.8501
Schuylkill Haven, PA • P: 570.385.5549 Boyertown, PA • P: 610.369.1319

REVIEW:

This letter presents comments on the second review of the submitted Preliminary/Final Plan.

ZONING:

The property is located in the I – Industrial Zoning District. The uses of the proposed parcels are not determined at this time. Each lot will require a Land Development Plan in order to develop a particular use.

Comments on other issues are presented below.

1. Per §220-48, Permitted Uses

    - The Applicant should list the intended and existing uses on the proposed parcels.

        - **Addressed**. Note 1 states that future uses will be commercial/industrial but exact uses are not known at this time.

2. Per §220-49, Area and Bulk Regulations

    - The proposed lots to be created appear to be compliant with area and bulk requirements. The subdivision plan does not show any new development on the proposed lots. Four (4) existing buildings would be removed.

    - Any future development would need to comply with the requirements in Section Per §220-49 as part of a land development plan submission.

        - **Acknowledged**. No immediate action needed.

3. Per §220-79, Environmental Impact Assessment

    - Any subdivision or land development plan requires the submission of an Environmental Impact Assessment (EIA). An overall EIA should be submitted or EIA's will be required at the time of land development on each subdivided lot.

        - **Addressed**. The Applicant stated that EIA's will be submitted for each individual lot at the time of land development.

SALDO:

1. Per §190-15, Preliminary Plan Requirements
    - Per Subsection N(4), all lots should be numbered.
        - The "residue lot" should be given a number even if it is to be non-buildable.
            - **Addressed**. Non-building lot is labelled "Lot 4."
            - **The applicant should coordinate with DEP regarding a "Planning Waiver" to be exempt from soil percolation testing. The applicant should coordinate with the Sewage Enforcement Officer.**
    - Per Subsection N(5), A statement of the intended use of all non-residential lots should be provided.
        - **Addressed**. Note 1 states that future uses will be commercial/industrial but exact uses are not known at this time.
2. Per §190-16, Information to Accompany a Preliminary Plan
    - Per Subsection G(5), a deed must be prepared and submitted to the Township prior to recording. The deed shall include descriptions of the proposed right-of-way and all easements.
        - **Partially addressed.** The Applicant stated that deeds will be prepared for each lot closer to final approval.
3. Per §190-17, Final Plan Requirements
    - The plans should be sealed by a Professional Engineer prior to Final Plan approval.
        - **Partially addressed**. The Applicant stated that the plans will be sealed closer to final approval.
    - Per Subsection A(12), clear sight triangles.
        - It appears that clear sight requirements are met. However, clear sight triangles should be added to the plan and clearly marked to satisfy this Final Plan requirement.
            - The Applicant should also see Sight Distance requirements in Section §190-32.H.
                - **Addressed**. Clear sight triangles were added to the plan.

4. Per §190-31, Improvement Specifications

    - Per Subsection A, the applicant shall submit a Subdivision Improvements Agreement to the satisfaction of the Planning Commission and Board of Supervisors. The agreement should also be reviewed by the Township Solicitor.

5. Per §190-32, Streets

    - Per Subsection A(5), Private street are prohibited unless they meet the Township's design standards.
        - The proposed street meets the Township's width and cartway standards; however, the cartway width may need to be increased per the comment below.
            - **Addressed.** Proposed cartway width has been widened to a minimum of 30' to a maximum of 36'.
    - Per Subsection B(3), the Township may require greater cartway and right-of-way widths if deemed necessary.
        - The Township should determine the need for additional cartway due to truck turning radii. It appears trucks would need to use the edge of the cartway.
            - **Addressed**. Proposed cartway width has been widened.
    - Per Subsection F(1), vertical curves along local access roads shall have a sight distance of at least 200 feet.
        - The proposed road should be amended to achieve a sight distance of at least 200 feet.
            - **Addressed**. A minimum 200' sight distance is provided.
    - Per Subsection G(6), curb radii at intersections involving local access road shall be at least twenty (20) feet.
        - Radius labels should be added to the plan and should demonstrate a minimum compliance with the 20-foot requirement.

- **Addressed**. Radii added to the plan.

- Per Subsection I(2), in no case shall a public single-access street be the sole means of vehicular access to a non-residential use.
  - **A waiver is being requested to this section.**
- Per Subsection L(3), curbs and sidewalks shall be provided in accordance with Section §186.
  - **A waiver is being requested to this section.**
- Per Subsection L(5), Streetlights may be required by the Board of Supervisors. If required, the streetlight plan shall be included with any Preliminary Plan or Final Plan submittal and shall be approved by mutual agreement between the Township, developer, and any appropriate public utility; a utility easement would also be required for maintenance.
  - The applicant requests that the necessity of street lights be determined at the time of land development on the subdivided lots.
  - A note should be added to the plan stating when/if streetlighting will be provided and included in the shared Maintenance Agreement.

6. Per §190-39, Soil Percolation Test Requirements
   - Soil percolation tests are required for all subdivisions where on-site sewage is provided.
     - The Applicant should coordinate percolation test requirements with the Sewage Enforcement Officer, especially as it relates to any requirements on the proposed non-building lot.
       - **A waiver is being requested to this section.**
       - **We do not believe the Planning Commission has the authority to grant a waiver to this section because it is required by the PA DEP.**
7. Boundaries between Proposed Lot 1, Proposed Lot 4 and the proposed right-of-way are unclear. The plan should be updated to clearly show the boundaries of each parcel and/or center line of the proposed right-of-way.

8. Paving details and cross sections should be provided to clarify the shaded areas provided on Sheet 3.

STORMWATER MANAGEMENT:

1. Per §182-11, Erosion and Sediment Control – The Erosion & Sediment Control Plan should be submitted to the Berks County Conservation District for review and approval. A copy of the approval letter and NPDES Permit (if required) should be submitted to the Township prior to Final Plan approval.

2. Per §182-13.B, Groundwater Recharge – We have the following comments on the recharge design computations:

   A. The CN used in the recharge volume equation should represent the existing pervious area being converted to impervious cover.

   B. The Impervious Area should be the area of new impervious cover.

   C. Documentation for the 0.65 in/hr infiltration rate should be provided in the report. A minimum safety factor of 2 should be applied to test rates to establish the design rate. Dewatering time computations should be provided for Trench A.

   D. The infiltration volume calculations for Trench A assume a fixed infiltration rate for a 36-hr period. The SCS hydrograph computations do not support this assumption. Assuming the trench will dewater in the required 96 hours, the storage volume provided behind the 2' "core" berms will provide the required recharge and water quality volume. Dewatering time computations should be provided.

3. Per §182-15, Streambank Erosion Requirements – Computations and rate control measures should be provided to reduce the post-development 2-yr 24-hr SCS storm runoff to the 1-yr pre-development rate. Revisions to the submitted computations are required to show compliance with this section.

4. Per §182-17.D.(1), Design Criteria for Stormwater Management and Conveyance BMPs – Design computations for Swale Z01 should be provided to support the information provided in Worksheet #11. In addition, the source of the Manning's n value of 0.030 should be provided.

   The entire drainage area to Swale Z01 should be shown on the plan.

Computations for the swale around the northwest portion of the cul-de-sac should be provided.

9. Per §182-21.B, Exemptions – The project meets the requirements for an exemption from the drainage plan requirements. The total new impervious area of 11, 526 SF (allowable area is 15,000 SF), is referenced in Note 10 on Sheet 1.

10. Per §182-21.C.(3), Exemptions – The project is located in RAWA's Source Water Protection Area. The Applicant's engineer has indicated they have contacted RAWA to discuss possible issues with the project. Written acknowledgement from RAWA that the proposed Stormwater management BMPs meet their requirements should be submitted to the Township.

11. Per §182-30, Performance Guarantee – A financial guarantee should be provided for the proposed stormwater management controls prior to Final Plan approval. A certified construction cost estimate should be submitted for the proposed stormwater management BMPs.

12. Per §182-33.B, Stormwater Management Easements – Portions of Swale Z01 will be located outside the 53' access easement for the private road. The temporary grading easement in this area should be revised to note that it is also a permanent storm drainage easement.

13. Per §182-32 and 182-34, Operations and Maintenance Agreement for Privately Owned Stormwater Controls and BMPs – Prior to Final Plan approval, the Applicant should execute the maintenance agreement contained in Appendix A.

14. Per §182-35, Recording of Approved Stormwater Control and BMP O&M Plan and Related Agreements – A note should be added to Sheet 1 requiring recording of the BMP O&M Plan within 15 days of plan approval by the Board of Supervisors.

MISCELLANEOUS STORMWATER MANAGEMENT PLAN AND REPORT COMMENTS:

1. A driveway culvert should be provided under the access to the Township grass clippings drop-off site.

2. The runoff computations include areas of Hydrologic Soil Group D soils; however, the Soil Survey report indicates there are no HSG D soils within the drainage areas being evaluated.

3. The plan should show how the Swale Z01flows will be dispersed in a non-erosive manner at the swale outfall to existing grade.

4. The plans show Swale Z01 terminating approximately 250' before Stone Trench A does. The design assumes the roadway runoff will be directed into the stone trench by ponding water behind check dams in the roadside swale. The design should ensure the roadway runoff will be directed into Trench A.

5. The routing computations assume the only drainage area contributing to Trench A is from the roadway corridor; however, the entire Swale Z01 drainage area will contribute flow to Trench A. The routing computations should be revised to include the actual contributing area to the roadside swale.

6. It is unclear what the 7.75" diameter orifice at invert 322.50 represents in the stage/discharge parameters.

7. While not utilized, it is unclear what the 2.5' rectangular weir represents since no flow exits Stone Trench A except through the 10" PVC pipe and exfiltration (possibly minimal flow out of CO A902 if there is a slotted cap).

8. A clay "core" should be provided below the lowest cleanout to prevent piping of the stored water along the 10" PVC pipe.

9. R-4 riprap is too large to be used for the 12" high check dams since the maximum rock size in this material is 12".

10. The starting STAs for Swale Z01 and Stone Trench A, and the STAs for CO A901 and A902 should be noted.

11. The plans should clarify the future status of the existing guard shack. Presently Trench A conflicts with the guard shack on most of the sheets.

12. In order to clarify the impervious coverage assumptions for future lot development designs, the Existing Impervious Coverage to Remain note should be expanded to reference the Demolition Plan.

13. Many of the Maintenance Notes on Sheet 4 should be revised to specifically address only the grassed swale and stone trench proposed for this project. References to plant replacement, pruning, naturalized swales and rain gardens should be deleted. In addition, the mowing requirements should be revised to reflect the Manning's coefficient used for the Swale Z01 design.

CONSTRUCTION DETAILS:

1. The following revisions should be made to the Typical Proposed Interior Road Section:
   A. The centerline crown should be eliminated.
   B. Dimension the width of the grass strip along the edge of paving.
   C. Specify the aggregate size and PG type for the Superpave materials.
   D. A Superpave designation should be noted for the base course.
   E. The minimum thickness for a 19.0mm Superpave binder course is 2.5".
2. The Stone Trench A detail appears to indicate that the Class 1 geotextile will be exposed on the surface of the trench. The geotextile will degrade over time due to exposure to sunlight, and will most likely be damaged over time by mowing equipment.

BERKS COUNTY PLANNING COMMISSION COMMENTS:

1. The following are stand-out comments from the BCPC letter dated May 19, 2020. There are twelve (12) comments in total, not all are mentioned here. The Applicant should be aware of all BCPC comments; the May 19, 2020 letter states that both JoJaz Properties, LLC and Crossroads, LLC received carbon copy of the BCPC review letter.
2. Highlighted BCPC Comments
   - Access Easement 2 should be reviewed by the Township Solicitor for appropriateness and the easement should be recorded with the Final Plan.
     i. **Acknowledged**. The applicant stated solicitor comments will be incorporated and recorded with the final plan.
   - Special consideration should be given to Peter's Creek, which is designated as Exceptional Value (EV) waters. It is located approximately 600 feet south of the subject site on land owned by the City of Reading Water Bureau.

i. **Acknowledged**. The Erosion and Sediment Control narrative should be submitted to the Berks County Conservation District for review and approval. An approval letter from BCCD should be provided upon receipt.

- The site is within the surface water source area of the Reading Area Water Authority. BCPC recommends that the developer contact the Authority for more information.

  i. **Acknowledged**. The applicant stated they are in contact with the Authority.

MISCELLANEOUS:

1. Traffic

   a. Trucks are prohibited on Evansville Road. Trucks will be required to use Maiden Creek Road to Route 73 and to Pleasant Hill Road.

   b. The proposed road construction at Maiden Creek Road requires a PennDOT Highway Occupancy Permit. If there is an HOP for the existing driveway, a copy should be provided by the Applicant.

      In addition, Recording Note 8 should be removed or revised.

      - **Addressed**. HOP has been provided and Note 8 has been revised.

   c. The previous submission included a full turning radius for vehicles entering and exiting onto Maiden Creek Road. The current submission shows larger vehicles but does not show full turn radii.

      i. It appears the turn radii may be too small for the larger vehicles. Full turning radii should be provided. Any construction to increase the radii will require new PennDOT HOP approval.

2. On-lot sewage is proposed.

   a. A public sewer system should be investigated to determine feasibility to include Molltown area and Maiden Creek Road users.

3. The plan should clarify the limits of the existing pavement to be removed in the area of the proposed cul-de-sac where the existing driveway for Custom Milling & Consulting, Inc. will tie into the new road.

    a. **Addressed**. Clarification has been added to the Sheet 3.

4. Maidencreek Township currently maintains a Township residential grass clippings drop-off location on the northwest corner of the property along Maiden Creek Road. The future status of this facility should be noted.

    a. **Acknowledged**. Note added to Sheet 1.

5. The proposed road is to remain private; a Maintenance agreement for the proposed road should be submitted by the Applicant and commented on by Township Solicitor.

    a. **Partially addressed**. The applicant stated that a Maintenance Agreement would be submitted closer to final approval.

WAIVER REQUESTS:

Waivers to three (3) sections are requested via a letter dated June 24, 2020.

1. Waiver to Section §190-32.I.2 regarding a public single access street to be the sole vehicular access to a nonresidential use.

2. Waiver to Section §190-32.L.3 regarding the requirement for curbs and sidewalks.

3. Waiver to Section §190-39 regarding soils percolation tests for all subdivisions and land developments where on-lot sewage disposal is proposed.

    a. The Planning Commission should determine the feasibility and necessity of the first two (2) above requests and make recommendations accordingly.

    b. The Planning Commission cannot grant a waiver with regard to soil percolation tests as this is a DEP regulation.

If you should have any questions or comments, please do not hesitate to contact our office.

Sincerely,

SYSTEMS DESIGN ENGINEERING, INC.

Philip J. Ashear
Township Planning Consultant

Cc: Maidencreek Township Planning Commissioners
Diane Hollenbach / Township Manager
Eugene Orlando, Jr. / Township Solicitor
The Crossroads Group
SDE File # 20-0024-0715

SDE SYSTEMS DESIGN ENGINEERING, INC

"A Passion for Engineering Excellence"

sdei.net

July 2, 2020

CERTIFIED MAIL
Return Receipt Requested
7019 2970 0001 9169 5208

Scott W. Zimmerman
451 Hoch Road
Blandon, PA 19510

Re: Storm Water Permit/Rain Garden Maintenance
NOTICE OF VIOLATION

Dear Mr. Zimmerman:

Please be advised that in accordance with your storm water permit, you as property owner, are responsible for the perpetual maintenance of the storm water facilities located on your property.

Upon inspection of the storm water facilities, by this office, on behalf of Maidencreek Township, it appears that rain gardens one (1) through three (3) are not being maintained and may being altered. Please find attached the Drainage Plan Dwg. D101 as prepared by Berks Surveying & Engineering Inc. and approved for your property's storm water permit.

Please contact this office within ten (10) days of receipt of this letter.

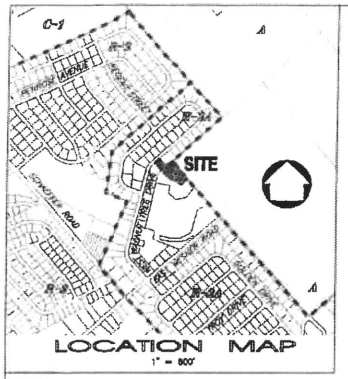
Regards,
Systems Design Engineering, Inc.

Thomas S. Unger, P.E.

Enclosure

Cc: Maidencreek Township
File 20-0019-0700

ZIMMERMAN PROPOSED RESIDENCE
DRAINAGE PLAN



Soil Types
DbA – Duffield silt loam, 0 to 3% slopes
DbB – Duffield silt loam, 3 to 8% slopes

Geology
Dd – Richmond Formation Dolomite, Chert

RAIN GARDEN 1 DETAIL
N.T.S.



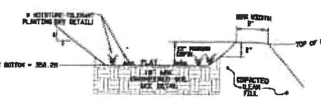
RG-1 will require 1 trees & 2 shrub plantings.

RAIN GARDEN 2 DETAIL
N.T.S.



RG-2 will require 1 trees & 2 shrub plantings.

RAIN GARDEN 3 DETAIL
N.T.S.



RG-3 will require 1 trees & 2 shrub plantings.

Rain Garden Typical Notes
1. Areas proposed for infiltration shall be protected from contamination & compaction during construction phases, so as to maintain their maximum infiltration capacity.
2. Infiltration facilities shall not be constructed nor made operational until their entire contributory drainage areas have received final stabilization.
3. All maximum 24 hr. infiltration times (T) shall be stated in 1" Increments.
4. The 2D Test pit to be completed 5 days from proposed design to allow for drilling.
5. Infiltration facilities shall be setback as follows:
   From water supply well
   From basement/crawl space/slab foundations
   From septic drainfields
   From property boundary
   From potential geologic features related to carbonate geology
6. Infiltration not recommended in fill soils.
7. The bottom of the basin shall be flat by design. Natural vegetation shall be allowed to establish to provide evapotranspiration benefits.
8. All inlets and Project stormwater facilities serving any tributary area over 1/10yr storm shall be protected from unauthorized use of that parcel.

Post Construction Operation and Maintenance Procedures for Infiltration Ponds

Infiltration basins are designed to store stormwater and allow percolation into the subsoils, recharging groundwater. In order to maintain the effectiveness of these infiltration facilities, periodic inspection and maintenance procedures must be performed by owner(s) as follows:

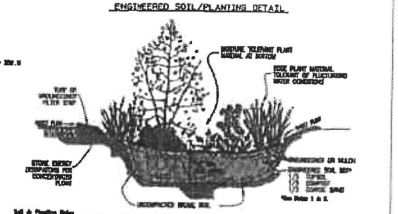
(A) Inspection shall be performed at least quarterly and after every storm event exceeding 1 inch of rainfall. Sediment and debris shall be removed from the basin surface, control structure and inlet/outlet pipes. Sediment removal shall be conducted when the basin is completely dry to avoid mixing. If unnecessary, excessive loads to be disposed during dissolution. Sediment should be disposed of properly in accordance with all local, state and federal regulations and guidelines. Immediately replace disturbed areas with proposed topsoil, seed and mulch. Inspect and remove debris if required. If required, the inlet and outlet orifices could be taken to replace the structure to the designed specifications.

(B) The entire facility shall be inspected annually by a qualified individual. The inspection shall ensure that the system is free from clogging and is functioning as designed. If stormwater runoff does have infiltration facilities within 72 hours after rainfall has ceased, it is determined that the facility is not functioning properly, the owner(s) shall be responsible for the repairs necessary for the facility.

(C) Mowing is required for the first couple of years. During these years, mow & whitemark all non-campsite weeds, reducing reinforcement.

(D) During Spring, when growth is 4 to 6 inches tall, cut back battered plants and thick patches with a string trimmer or hand shears. Cool plant material can be removed & composted.

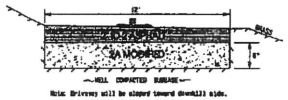
ENGINEERED SOIL/PLANTING DETAIL



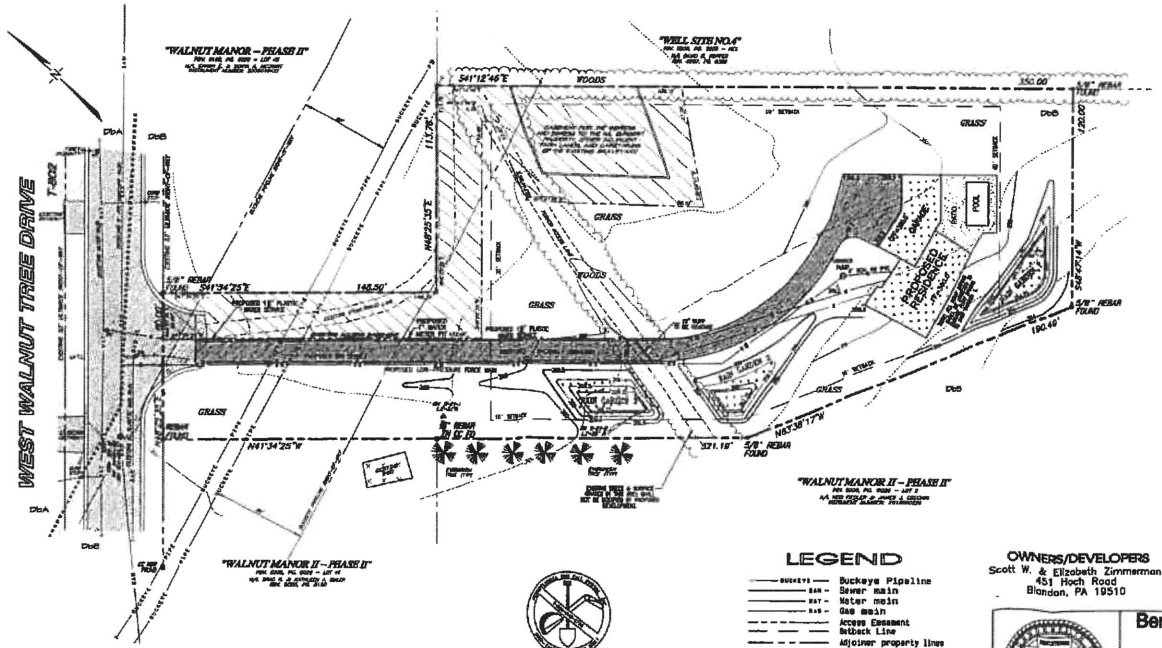
Soil & Planting Notes
1. Engineered soil depth shall be a minimum of 18", unless only sod is used. Plant species will be chosen between proposed depths and required for functional conditions. Perennial and grass mixtures shall be planted 6" to 12" on center, based on species and size at maturity. Trees shall be planted 12' to 20' on center, based on species and size at maturity. Trees and shrubs should be planted in groups of 3 to 7 of the same species, depending on the size at maturity. Trees shall be planted at least 6' from the edge of the basin and front of lip, but not closer than 3' from the edge of the basin. Trees and shrubs shall not be planted over the underdrain or inlet/outlet structures. Only species that are tolerant of wet conditions and periodic inundation shall be planted in the bottom of the basin. Consult with a landscape architect or horticulturist for additional information.
2. Rain garden bottoms shall be planted with Deer Resistant Native Seed Mix (Ernst-100), or equivalent, for this seed mix shall take up to 2 years to establish, a companion crop, such as ryegrass shall be used to stabilize these areas until the low-retention vegetation will be established.
3. Trees & Shrubs shall be planted in soil pockets at a minimum ratio of 10 shrubs & 200 trees per acre of low-retention area. Deer tolerant species such as Red Osier Dogwood, Virginia Sweet, Penn Allen, Black Haw, Sweet Pepper Bush, Silky Dogwood, Witch Hazel, Pussy Willow, Black Chokeberry or Arrow Wood are acceptable species. If total of 1 tree and 2 shrubs will be planted, should several species be planted in the same area. Tree plantings shall be a minimum of 2 & 1/2 caliper when planted.
4. Rain garden bottoms shall be planted with sod, seed, or plugs and wood immediately after completing planting soil bed. Continue watering twice a week until vegetation is established.

Maintenance Notes
1. Mowing is required for the first couple of years. During these years, mow & whitemark all non-campsite weeds, reducing reinforcement.
2. During Spring, when growth is 4 to 6 inches tall, cut back battered plants and thick patches with a string trimmer or hand shears. Cool plant material can be removed & composted.

PAVED DRIVEWAY CROSS SECTION
N.T.S.



Note: Driveway will be sloped toward downhill side.



GRAPHIC SCALE 1"=30'
30 0 30 60 90

1-800-242-1776
SERIAL #20182472141

LEGEND

BUCKEYE	Buckeye Pipeline
SAN	Sewer main
WAT	Water main
GAS	Gas main
	Access Easement
	Setback Line
	Adjoiner property lines
	Property Boundary
	Boile boundary
	Existing contour
	Woodsline
S	Proposed contour
S	Proposed sewer
W	Proposed water
G	Proposed gas

ZONING: R-2A
HIGH DENSITY RESIDENTIAL

Minimum requirements	
Lot Area	18,000 sq.ft.
Lot Width	
at Building line	80 ft.
at Road line	80 ft.
Maximum requirements	
Building Height	35 ft.
Impervious Coverage	50%
Setbacks	
Front yard	30 ft.
Side yard	
each	8 ft.
total	20 ft.
Rear yard	40 ft.

Plan Notes

1. This plan shows one lot.
2. The purpose of this plan is to depict the proposed house & driveway development.
3. Berks Surveying & Engineering has not completed a boundary survey for this site. Property lines shown are based on record deed/plan information.
4. References previous subdivision plan, "Walnut Manor II Phase II" PBV 0206, pg 0029, prepared by C. L. Smith & Associates, Inc., last revised 4/24/1995.
5. Berks Surveying & Engineering has completed a topographic survey for this site. Existing site features have been taken from field measurements. Elevations reference NAVD88 datum (LIDAR).
6. The total area of this property is 1.322 acres (gross/net).
7. This lot is currently vacant. The proposed use of this lot is residential.
8. The proposed dwelling on this lot will be served by public water and public sewage disposal.
9. Stormwater runoff from this site will drain to the Willow Creek (CWF, MF).
10. No wetlands were observed on this site.
11. This property is not associated with any flood plain according to FEMA mapping.
12. Existing utilities shown on this plan are based on field markings and information available at the time of the survey. The contractor is responsible to verify actual locations & elevations of underground utilities prior to beginning earthmoving activities.
13. Driveway grades shall not exceed 7%. The proposed driveway shall be paved within the street right-of-way or a distance of 30 feet from the cartway edge, whichever is greater.
14. The property owner is responsible for all maintenance responsibility of the property owner.
15. The owner/developer is responsible to obtain required E&S approvals from Berks County Conservation District prior to any earthmoving activities.
16. Runoff from impervious areas shall be directed towards proposed rain gardens.
17. No person shall modify, remove, fill, landscape, or alter any Stormwater Management BMP's, facilities, areas or structures without the written approval of Maidencreek Township.
18. Stormwater controls have been designed to accept flows from the proposed improvements as shown on this plan. Should the owner/developer alter the design and increase the impervious coverage, the stormwater facilities must be revised accordingly. Total additional impervious surfaces to be added per this plan is 6,800 sf.
19. Property owners are responsible for perpetual maintenance of the stormwater facilities located on their property. The Township Inspector shall have an inspection easement on & around all areas on this lot, including the areas containing structural facilities, for inspection only/or maintenance access to stormwater facilities located on this lot, being the driveway from West Walnut Tree Drive to the highest and rearmost easement. All stormwater facilities shall meet the performance standards and design criteria specified in Township Ordinances. The Township may perform necessary maintenance and may require a stormwater maintenance agreement for privately owned facilities. Any costs incurred by stormwater features if the owner(s) fail to do so after receiving notice from the Township. The Township may recover the cost of such necessary maintenance and reports from the property owner.

Owner Stormwater Statement

I, Scott W. Zimmerman, the owner of this property, agree that the stormwater management systems shown on this plan shall not be changed in any manner unless approved by the municipality and the Township of Maidencreek and Berks County Conservation District. I will notify any subsequent owners of this requirement. Further, we understand that the construction and maintenance of the stormwater structures is our responsibility.

Scott W. Zimmerman — Date

Engineer Stormwater Certification

I, Bruce T. Rader, on this date, hereby certify that the Drainage Plan meets all design standards and criteria of the Willow Creek Watershed Act 167 Stormwater Management Ordinance.

Bruce T. Rader — 7/19/2018
Bruce T. Rader, PE — Date

OWNERS/DEVELOPERS
Scott W. & Elizabeth Zimmerman
451 Hoch Road
Blandon, PA 19510

No.	Date	Description	By
C2	7-19-18	Rain Gardens 2 & 3	RDH
1	11-30-18	Per SCD Review	RDH

BRUCE RADER — PROFESSIONAL ENGINEER — Engineer Seal

Berks Surveying & Engineering, Inc.
311 EAST MAIN ST. FLEETWOOD, PA 19522
Telephone 610-944-8539 Fax 610-944-4129
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ZIMMERMAN PROPOSED RESIDENCE
DRAINAGE PLAN

Location: 252 West Walnut Tree Drive, Maidencreek Township - Berks Co. PA

Date	Drawn By	Checked By	Project No.	
11-9-18	RDH	BTR	1695-37-18	D101

3
2/2

SUMMARY
IMPROVEMENT AGREEMENTS INVOICES
APPROVED FOR PAYMENT
MAIDENCREEK TOWNSHIP BOARD OF SUPERVISORS
JULY 9, 2020

DATE OF INVOICE/PAYEE	INVOICE NO.	AMOUNT
1. GSP Properties, LLC		
6/30/20 Maidencreek Twp. – Re: SDE, Inc.		$426.26
	AMOUNT DUE	$426.26
	TOTAL AMOUNT DUE	**$426.26**

MAIDENCREEK TOWNSHIP
SEO ACTIVITY REPORT
June, 2020

SDE #	App. #	Applicant/Activity	Fee Paid to Date By Applicant	Billed/Paid	Chk #
19-0019-0479	Z176966	281 Blandon Road 7/19/19 -Replacement septic system application. Testing was performed by previous SEO. Verify test site. Send idemntification form to applicant. Septic system permit cannot be issued until the notarized indemnification is received by SEO. 9/4/19 - Process application and verification of prior testing for new septic system. Review design/issue permit No update	$ 724.00	Paid	1002
19-0019-0480	Z203635	65 Troxel Rd. 10/7/19 - Review design/issue permit for new system No update	$ 585.00	Paid	122
20-0019-0481	Subdivision	1142 Pleasant Hill Road - Owner wants to subdivide another lot off of the farm. 2/17/20 - Schedule testing and notify PADEP. 3/5/20 - Probes for primary and replacement system on new lot and replacement area for existing lot. 3/6/20 - Conduct percolation testing for primary and replacement system on new lot. 3/31/20 - Complete soil reports, send to consultant **6/2/20 - Rec incomplete planning module. Send letter to consultant.** **6/9/20 - Communications w/Phil Ashear and PADEP re: nitrate easement requirements.**	$1,608.00	Paid	114
20-0019-0482	Z215216	1070 Maidencreek Road - The property didn't pass the real estate inspection. Replacement septic system testing is necessary. 3/17/20 - Conduct soil probes. Dig/presoak perc holes. 3/18/20 - Perform percolation test. No update	$ 692.00	Paid	
20-0019-0483	Z2010423	48 Troxel Rd - Septic system is shared with neighbor at 56 Troxel Road. The system is malfunctioning so replacement will be necessary for both properties. Each home will apply for a permit for their own system instead of sharing one. 4/1/20 - Probes 4/3/20 - Observe perc test 4/9/20 - Soil report 4/14/20 - Process application 4/24/20 - Review design/issue permit 5/12/20 - Scarification inspection PASSED 5/14/20 - Tank installation inspectin PASSED 5/15/20 - Pressure test PASSED 5/18/20 - Final grading inspection PASSED **6/2/20 - Rec. activated warranty registration for treatment system.**	700+240= $940	Paid	
20-0019-0484	ZZ136352	56 Troxel Rd - Replacement system 4/1/20 - Probes 4/7/20 - Observe perc test 4/9/20 - Soil report 4/24/20 - Review design/issue permit 5/12/20 Scarification Inspection 5/15/20 Pressure Test Inspection 5/18/20 Final Grading Inspection **6/2/20 - Rec. activated warranty registration for treatment system.**	700+240= $940	Paid	
20-0019-0485	Z210426	872 Park Rd - Replacement system 5/13/20 - Process application 5/14/20 - Observe probes 5/15/20 - Perform percolation test 5/18/20 Soil report and send to deigner **6/11/20 - Review design. Fees due before permit can be issued.**	$ 570.00	Paid	50873
20-0019-0456	Z207852	185 Orchard Road - Replacement system 5/20/20 Probes testing 5/21/20 Perc Test 5/21/20 soil & perc report write up 5/25/20 scanned soil & perc report and email to designer	$ 700.00	Paid	1264
20-0019-0300	General Work	**Misc Admin** **6/1/20 - Discuss Jojaz subdivision with Philip Ashear. Some soil test sites are shown on the plan but SEO requires DEP planning approval before the lots can be created.** **6/11/20 - Communications w/applicant re: permitting requirements for a replacement system.**			

(5)

Cc: T. Unger 2 copies
SEO Desk

MAIDENCREEK TOWNSHIP
SEO ACTIVITY REPORT
June, 2020

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