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## State of New Jersey

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JOHN R. WEINGART

Chairman

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# WQMP AMENDMENT PROJECT REVIEW CHECKLIST

PROJECT INFORMATION

Sewer Service Area/Facility: KUSHNER-MINE HILL	
<b>WQMP</b> : UPPER RARITAN	
WMP Authority: MINE HILL TOWNSHIP	
Name of Facility: KUSHNER-MINE HILL	
Name of Applicant: CANFIELD BUILDERS ASSOCIATES	
Sewer Service Area/Facility: New	
Proposed Change in Service Area Wastewater Flow: N/A	
NJPDES No: N/A	
Proposed Discharge (GPD): 59,747	
Type of Discharge: GW SW	
Total Proposed Service Area (acres): ~46 ACRES	
Lot and Block, if applicable: BLOCK 606, LOT 1.01, BLOCK 1101, LOT 1	
<b>Description of Project:</b> 275 AGE-RESTRICTED RESIDENTIAL UNITS TO BE BUILT OF	
APPROXIMATELY 46.7 DEVELOPMENT TRACT ON THE PROPERY. ACCORDING T	O THE
APPLICANT, ~190 ACRES WOULD BE DEDICATED TO THE TOWNHSIP AS OPEN S	
IF THE TOWNSHIP AND CANFIELD BUILDERS IMPLEMENT A PURCHASE AGREE	MENT
THAT WOULD DEDICATE 178 ACRES OF THE PROPERTY TO OPEN SPACE.	
LAND USE CAPABILITY MAP ZONES	
Sewer Service Areas Encroach Within Which LUCM Zone? (Check all that apply.):	
Protection Zone	
Conservation Zone Conservation Constrained Zone	
Conservation Zone Conservation Constrained Zone	
Conservation Zone Conservation Constrained Zone Existing Community Zone Existing Community Constrained Zone	
Conservation Zone Conservation Constrained Zone Existing Community Zone HIGHLANDS ACT AREAS	
Conservation Zone Conservation Constrained Zone Existing Community Zone Existing Community Constrained Zone HIGHLANDS ACT AREAS  Project located in which Highlands Act Area? (Check all that apply.):	
Conservation Zone Conservation Constrained Zone Existing Community Zone HIGHLANDS ACT AREAS  Project located in which Highlands Act Area? (Check all that apply.):  Preservation Area	
Conservation Zone Existing Community Zone  HIGHLANDS ACT AREAS  Project located in which Highlands Act Area? (Check all that apply.): Preservation Area Planning Area  TOPOGRAPHY	
Conservation Zone	No
Conservation Zone Existing Community Zone  HIGHLANDS ACT AREAS  Project located in which Highlands Act Area? (Check all that apply.): Preservation Area Planning Area  TOPOGRAPHY  Sewer Service Areas Underlain by Limestone?  Steep Slopes >20% in Any Areas?	Yes
Conservation Zone	
Conservation Zone Existing Community Zone  HIGHLANDS ACT AREAS  Project located in which Highlands Act Area? (Check all that apply.): Preservation Area Planning Area  TOPOGRAPHY  Sewer Service Areas Underlain by Limestone?  Steep Slopes >20% in Any Areas?	Yes

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**Findings:** THE SITE CONTAINS SLOPE CONSTRAINTS OF 20%, 15% WITHIN FOREST, AND 10% WITHIN THE RIPARIAN AREA.

**Policy Statement:** TO PROHIBIT THROUGH LOCAL DEVELOPMENT REVIEW AND HIGHLANDS PROJECT REVIEW LAND DISTURBANCE WITHIN AREAS WHICH ARE SEVERELY CONSTRAINED SLOPES AND MODERATELY CONSTRAINED SLOPES.

**Recommendation**: THE APPLICANT HAS INDICATED A WILLINGNESS TO AVOID ALL SEVERELY CONSTRAINED AND MODERATELY CONSTRAINED SLOPES. THESE AREAS SHOULD BE EXCLUDED FROM THE SEWER SERVICE AREA.

HIGHLANDS OPEN WATERS	
Sewer Service Areas includes Highlands Open Waters Protection Area Buffer?	
If No, disregard remainder of Highlands Open Waters checklist.	Yes
Open Waters features within the Service Area:	
Streams	
Lakes & Ponds	
Wetlands	
Highlands Open Waters category:	
Highlands Waters	
Special Waters	
Exceptional Waters	
Intermediate Waters	
Highlands Open Waters description:	
Drainage HUCs Name and Number: LAMINGTON RIVER (ABOVE RT. 10), 020301050	
Name of nearest waterway: UNNAMED HEADWATER TRIBUTARY TO LAMINGTON	I RIVER
SWQS Classification: FW2-NT-C1	
Description of Impairments, or TMDL: NONE	
Watershed Value (Check one):	
High	
Medium	
Low	
Findings: THE APPLICANT HAS SUBMITED GIS COVERAGE OF THE DELINEATE	
WETLANDS. WETLANDS AND A C1 STREAM, CLASSIFIED AS HIGHLANDS SPECL	
WATERS EXIST ON SITE. ALTHOUGH THE PROPOSED CONCEPTUAL DEVELOP.	MENT
FOOTPRINT DOES NOT INCLUDE THESE FEATURES, THE PROTECTION BUFFEI	RS ARE
ENCROACHED UPON.	
Policy Statement: PROHIBIT MODIFICATIONS TO HIGHLANDS OPEN WATERS	
PROTECTION BUFFERS OTHER THAN IN OBJECTIVE 1D4D, EXCEPT AS NECESSA	
PROTECT PUBLIC HEALTH AND SAFETY, OR TO PROVIDE FOR MINIMUM PRAC	ΓICAL
USE IN THE ABSENCE OF ANY ALTERNATIVE (1D4E)	
RESTRICT NEW LAND USES OR THE ALTERATION OF EXISTING LAND USES TH	
WOULD ALTER OR BE DETRIMENTAL TO THE WATER QUALITY AND HABITAT	VALUE
OF A HIGHLANDS OPEN WATER OR A RIPARIAN AREA (OBJECTIVE 1D6A)	

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PROHIBIT MODIFICATIONS TO HIGHLANDS OPEN WATER BUFFER REQUIREMENTS OR RIPARIAN AREAS, EXCEPT AS NECESSARY TO PROTECT PUBLIC HEALTH AND SAFETY, OR TO PROVIDE FOR MINIMUM PRACTICAL USE IN THE ABSENCE OF ANY ALTERNATIVE (1D6B)

REQUIRE, WHERE LAND DISTURBANCE IS OTHERWISE PERMITTED, THAT LOW IMPACT DEVELOPMENT BEST MANAGEMENT PRACTICES ARE FOLLOWED TO MINIMIZE ANY POTENTIAL FOR HABITAT OR WATER QUALITY IMPAIRMENT (1D6C)

THE HIGHLANDS COUNCIL MAY REQUIRE ON A CASE-BY-CASE BASIS AN EXPANSION OF THE 300-FOOT BUFFER TO PROTECT THE HABITAT OF WATER OR WETLANDS-DEPENDENT RARE, THREATENED, OR ENDANGERED SPECIES, TO THE MINIMUM EXPANSION NECESSARY TO ACHIEVE PROTECTION OF THAT SPECIES (1D4H)

**Recommendation:** THE APPLICANT HAS INDICATED A WILLINGNESS TO AVOID ALL HIGHLANDS OPEN WATER PROTECTION BUFFERS. THESE AREAS SHOULD BE EXCLUDED FROM THE SEWER SERVICE AREA.

RIPARIAN AREA	
Sewer Service Areas includes Riparian Area?	Yes
If No, disregard remainder of Riparian Area checklist.	res
Specific Riparian Area Features (Check all that apply.):	
Flood Prone Areas   Waters	
Riparian Soils Wetlands 🖂	
Wildlife Corridor	
Riparian Integrity Value (Check one):	
High	
Medium	
Low	
Findings: RIPARIAN AREAS FEATURES EXISTS ONSITE. THE CONCEPTUAL	
DEVELOPMENT FOOTPRINT EXTENDS INTO THE RIPARIAN AREA FOR WILDLII	ΞE
CORRIDORS.	
Policy Statement: PROHIBIT NEW LAND USES OR THE ALTERATION OF EXISTING	G LAND
USES IN THE PROTECTION ZONE THAT WOULD ALTER OR BE DETRIMENTAL T	
WATER QUALITY AND HABITAT VALUE OF A HIGHLANDS OPEN WATER OR A R	IPARIAN
AREA.	
RESTRICT NEW LAND USES OR THE ALTERATION OF EXISTING LAND USES THA	\T
WOULD ALTER OR BE DETRIMENTAL TO THE WATER QUALITY AND HABITAT	
OF A HIGHLANDS OPEN WATER OR A RIPARIAN AREA (OBJECTIVE 1D6A)	, 1111011
PROHIBIT MODIFICATIONS TO HIGHLANDS OPEN WATER BUFFER REQUIREME	NTS OR
RIPARIAN AREAS, EXCEPT AS NECESSARY TO PROTECT PUBLIC HEALTH AND SA	
OR TO PROVIDE FOR MINIMUM PRACTICAL USE IN THE ABSENCE OF ANY	,
ALTERNATIVE (1D6B)	

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REQUIRE, WHERE LAND DISTURBANCE IS OTHERWISE PERMITTED, THAT LOW IMPACT DEVELOPMENT BEST MANAGEMENT PRACTICES ARE FOLLOWED TO MINIMIZE ANY POTENTIAL FOR HABITAT OR WATER QUALITY IMPAIRMENT (1D6C

Recommendation: THE APPLICANT HAS INDICATED A WILLINGNESS TO AVOID ALL

HIGHLANDS RIPARIAN AREAS. THESE AREAS SHOULD BE EXCLUDED FROM THE			
SEWER SERVICE AREA.			
FOREST			
	Vo		
If yes to above, is there Encroachment into a Forest within Forest Resource Area?			
Parcel within Total Forest Area?			
Forest Integrity Value (check one):			
High			
Medium			
Low			
Findings: THE SITE IS FORESTED AND LOCATED WITHIN A MODERATE INTEGRIT	ГΥ		
FOREST AREA BUT OUTSIDE A FOREST RESOURCE AREA.			
Policy Statement: TO LIMIT THROUGH LOCAL DEVELOPMENT REVIEW AND HIGHI	LANDS		
PROJECT REVIEW HUMAN DEVELOPMENT OF FORESTS TO VERY LOW IMPACT			
RESIDENTIAL DEVELOPMENT IN THE PROTECTION ZONE AND THE CONSERVAT	ΓΙΟΝ		
ZONE IN THE PLANNING AREA (1B2)			
<b>Recommendation</b> : THE DEVELOPMENT OF FORESTS SHOULD USE VERY LOW IMPA	1CT		
DEVELOPMENT TECHNIQUES.			
CRITICAL HABITAT			
Sewer Service Areas within Critical Habitat Area?	Vo		
Critical Habitat (Landscape 2-5)?	l'es		
Significant Natural Area?	Vo		
Vernal Habitat +1,000 ft?	Yes		
GREAT			
Species of BLUE WOOD WOOD			
Concern: HERON TURTLE			
HABITAT			
Landscap 2 3			
e Rank:			

Findings: THE NJDEP-ENSP PROVIDED THE HIGHLANDS COUNCIL WITH AN UPDATED LANDSCAPE PROJECT VERSION 3 IN 2006. THIS VERSION 3 IS THE VERSION UTILIZED IN ALL LUCM ZONE DELINEATIONS AND RESOURCE MAPPING. THIS GIS LAYER IDENTIFIES WOOD TURTLE HABITAT IN THE SOUTHERN PORTION OF THE SITE. OCCUPYING APPROXIMATELY 60-70% OF THE PROPOSED SSA. NJDEP'S PREVIOUS REVLEW OF THE APPLICATION RELIED UPON LANDSCAPE PROJECT VERSION 2, WHICH DID NOT INDICATE CONFLICTS BASED ON THAT INFORMATION. THE APPLICANT HAS PROVIDED A JUNE 14, 2004 T&E SPECIES REPORT SUBMITTED BY HERPETOLOGICAL ASSOCIATES (ZAPPALORTI REPORT). THE REPORT CONCLUDES THAT WOOD TURTLE IS ABSENT FROM THE SITE

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THE HIGHLANDS COUNCIL STAFF NOTES THAT THE REPORT STATED (PAGE 1) THAT ALL OBSERVATIONS WERE MADE FROM PUBLIC ACCESS POINTS THAT WERE AVAILABLE THAT INCLUDED EXISTING PAVED ROADS THAT SURROUND THE STUDY SITE, SUCH AS US HIGHWAY ROUTE 46, CANFIELD AVENUE, GREEN ROAD, AND WHARTON AVENUE. THE PERSONS PERFORMING THE SURVEY WALKED PORTIONS OF JERSEY CENTRAL POWER & LIGHT COMPANY'S RIGHT-OF-WAY, BUT DID NOT ENTER DIRECTLY UPON CANFIELD BUILDERS PROPERTY. THE LACK OF ONSITE ACCESS RAISES CONCERNC ABOUT HOW COMPLETE AND ACCURATE THE SURVEY OF ONSITE CRITICAL HABITAT COULD BE.

THE LANDSCAPE PROJECT IS A PRODUCT OF NJDEP THAT THE HIGHLANDS COUNCIL DOES NOT MODIFY. NJDEP REVIEW IS NEEDED TO DETERMINE THAT THE SITE IS NOT APPROPRIATE AS WOOD TURTLE HABITAT, BEFORE THE HIGHLANDS COUNCIL CAN CONCLUDE THAT FINAL RMP POLICIES FOR THE PROTECTION OF CRITICAL HABITAT ARE BEING MET.

IN ADDITION, THE SITE CONTAINS PORTIONS OF THE 1,000FT BUFFER OF TWO VERNAL POOLS, INCLUDING PORTIONS OF THE CONCEPTUAL DEVELOPEMNT FOOTPRINT. THE VERNAL POOLS ARE IDENTIED IN NJDEP'S LOI FOR THE SITE.

**Policy Statement:** TO PROHIBIT, THROUGH PLAN CONFORMANCE, LOCAL DEVELOPMENT REVIEW, AND HIGHLANDS PROJECT REVIEW, THE DIRECT IMPACT OF NEW HUMAN DEVELOPMENT OR EXPANSION OR INCREASED INTENSITY OF EXISTING DEVELOPMENT WITHIN CRITICAL WILDLIFE HABITATS, SIGNIFICANT NATURAL AREAS, OR WITHIN 1,000 FEET OF VERNAL POOLS (1F1)

TO REQUIRE THAT APPLICATIONS FOR ANY LOCAL DEVELOPMENT REVIEW AND HIGHLANDS PROJECT REVIEW FOR LANDS WITHIN CRITICAL WILDLIFE HABITATS, SIGNIFICANT NATURAL AREAS, OR WITHIN 1,000 FEET OF VERNAL POOLS BE SUBJECT TO MINIMUM STANDARDS AND CRITERIA OUTLINED IN THE HABITAT CONSERVATION AND MANAGEMENT PLAN (1F5)

PROHIBIT ALTERATION OR DISTURBANCE OF CRITICAL WILDLIFE HABITAT, SIGNIFICANT NATURAL AREAS, AND WITHIN 1,000 FEET OF VERNAL POOLS, EXCEPT AS NECESSARY TO PROTECT PUBLIC HEALTH AND SAFETY, OR TO PROVIDE FOR MINIMUM PRACTICAL USE OF IN THE ABSENCE OF ANY ALTERNATIVE (1F5A)

REQUIRE THAT ANY DISTURBANCE TO A CRITICAL HABITAT FEATURE INCLUDE MITIGATION FOR ALL ADVERSE MODIFICATION AND PROVIDE FOR NO NET LOSS OF HABITAT VALUE (1F5B)

TO PROHIBIT THROUGH LOCAL DEVELOPMENT REVIEW AND HIGHLANDS PROJECT REVIEW THE INDIRECT IMPACT OF ANY HUMAN DEVELOPMENT ACTIVITY WHICH WOULD RESULT IN DAMAGE OR DESTRUCTION OF HABITAT FOR RARE, THREATENED, OR ENDANGERED SPECIES OF ANIMAL OR PLANT (1F6)

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PROHIBIT THE INDIRECT IMPACT OF ANY ACTIVITY THAT IS OFF-SITE, ADJACENT TO, OR WITHIN CRITICAL HABITAT THAT WOULD RESULT IN THE DESTRUCTION OR ADVERSE MODIFICATION OF HABITAT FOR ANY RARE, THREATENED, OR ENDANGERED SPECIES OF ANIMAL OR PLANT (1F8)

**Recommendation**: THE HIGHLANDS COUNCIL STAFF HAS UTILIZED NJDEP'S LANDSCAPE PROJECT VERSION 3 DATA, WHICH INDICATES THE PRESENCE OF CRITICAL WILDLIFE HABITAT, AND THE NJDEP'S LOI INDICATING THE PRESENCE OF CONFIRMED VERNAL POOLS WITHIN THE CONCEPTUAL DEVELOPMENT FOOTPRINT. THE APPLICANT HAS STATED THE THE VERNAL POOL BUFFER CAN BE AVOIDED IN FINAL SITE DESIGN.

NJDEP SHOULD ENSURE THAT THE DEVELOPMENT AVOIDS THE CRITICAL HABITAT AREAS. AS AN ALTERNATIVE, THE APPLICANT SHOULD SUBMIT THE REPORT TO NJDEP TO DETERMINE WHETHER THEIR CONCLUSION IS WARRANTED REGARDING THE CONCLUSIONS OF THE ZAPPOLARTI REPORT STATING THAT WOOD TURTLE IS ABSENT FROM THE SITE.

FROM THE SITE.	
AGRICULTURE	
Sewer Service Area within Agricultural Resource Area?	No
Farm Unit >250 acres?	No
Important Farmland Soils?	Yes
Findings: IMPORTANT FARMLAND SOILS OCCUR ONSITE, HOWEVER, THE	RE ARE NO
AGRICULTURAL USES ON SITE	
Policy Statement: N/A	
Recommendation: NO RECOMMENDATION	
WATER QUALITY	
Sewer Service Area Prime Recharge Area?	Yes
Sewer Service Area Wellhead Protection Area?	Yes
If yes to above, check one box below:	
Tier 1	
Tier 2	
Tier 3 \sum	
Findings: PRIME RECHARGE AREAS AND TIER 3 WELLHEAD PROTECTION	I AREAS
(WHPA) ARE LOCATED WITHIN THE CONCEPTUAL DEVELOPMENT FOOTPRINT. THE	
ÀPPLICANT HAS PROVIDED COMMENTS THAT PRIME RECHARGE DO NOT EXIST ON	
THE SITE. HIGHLANDS COUNCIL STAFF DOES NOT AGREE WITH THAT CONCLUSION.	
PRIME RECHARGE AREAS CONSIST OF THE MAJORITY OF THE CONCEPTU	JAL

THE APPLICANT HAS ALSO PROVIDED INFORMATION REGARDING THE DELINEATION OF THE TIER 3 WHPA. ACCORDING TO THE USGS AQUIFER MODEL OF THE BURIED VALLEY AQUIFER IN THIS LOCATION, THE TIER 3 WHPA WILL NOT ENCOMPASS THE SITE. THIS MODEL IS A MORE DEFINITIVE ANALYTICAL TOOL AND CAN REASONABLY BE EXPECTED TO PROVIDE A MORE DETAILED AND ACCURATE WHPA.

#### **Policy Statement:**

DEVELOPMENT FOOTPRINT.

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### PRIME RECHARGE AREAS

RESTRICT THROUGH LOCAL DEVELOPMENT REVIEW AND HIGHLANDS PROJECT REVIEW DEVELOPMENT ACTIVITIES AND OTHER ACTIVITIES WHICH RESULT IN REDUCTION TO GROUND WATER RECHARGE VOLUMES OR WILL CONTRIBUTE TO OR RESULT IN WATER QUALITY DEGRADATION WITHIN PRIME GROUND WATER RECHARGE AREA (2D3B).

PROHIBIT THE CREATION OF IMPERVIOUS SURFACES AND OTHER SURFACES THAT SIGNIFICANTLY IMPEDE RECHARGE WITHIN A PRIME GROUND WATER RECHARGE AREA, AND RESTRICT OTHER LAND USES THAT MAY DEGRADE WATER QUALITY WITHIN OR DRAINING TO A PRIME GROUND WATER RECHARGE AREA (2D5A).

ALLOW FOR MODIFICATIONS TO PRIME GROUND WATER RECHARGE AREA PROTECTION REQUIREMENTS, SUCH AS INCREASES IN IMPERVIOUS COVER OR LOSS OF FOREST OR OTHER NATURAL LAND COVER, ONLY UPON DEMONSTRATION THAT ANY RELIEF FROM PROTECTION REQUIREMENTS WILL NOT IMPAIR OR REDUCE GROUND WATER RECHARGE QUALITY OR VOLUMES AND ARE NECESSARY TO PROTECT PUBLIC HEALTH AND SAFETY, OR TO PROVIDE FOR MINIMUM PRACTICAL USE IN THE ABSENCE OF ANY ALTERNATIVE (2D5B).

IMPLEMENT A REQUIREMENT THROUGH LOCAL DEVELOPMENT REVIEW AND HIGHLANDS PROJECT REVIEW THAT ANY DEVELOPMENT ACTIVITY AN A PRIME GROUND WATER RECHARGE AREA DEMONSTRATE THAT AN EQUIVALENT OF 125% OF PRE-EXISTING RECHARGE VOLUMES OF THE SITE WILL BE PROVIDED FOR WITHIN THE SAME SUBWATERSHED, OR BY OTHER MEANS AS DETERMINED BY THE HIGHLANDS COUNCIL (2D4A).

#### WELLHEAD PROTECTION

REQUIRE THAT LAND USES THAT HAVE A SIGNIFICANT POTENTIAL TO RESULT IN MAJOR DISCHARGES OF POLLUTANTS TO GROUND WATER OR TO THE LAND SURFACE (INCLUDING BUT NOT LIMITED TO NON-SANITARY WASTEWATER EFFLUENT AND ANY MAJOR SOURCES OF POTENTIAL DISCHARGES SUCH AS SPILLS AND LEAKS), SUCH THAT THEY MAY DEGRADE GROUND WATER QUALITY WITHIN A DESIGNATED TIER 3 WELLHEAD PROTECTION AREA, SHALL INCORPORATE ONGOING MANAGEMENT OF TOXIC CHEMICAL SOURCES AND PROHIBITION OF UNREGULATED DISCHARGES, SO THAT THE POTENTIAL FOR GROUND WATER CONTAMINATION IS MINIMIZED AND THE OPPORTUNITY FOR DISCHARGE DISCOVERY AND CONTROL IS MAXIMIZED (2H2C).

HIGHLANDS COUNCIL STAFF ACKNOWLEDGES THE APPLICANT'S COMMENTS REGARDING THE WELLHEAD PROTECTION AREAS. BECAUSE THE APPLICATION DOES NOT PROPOSED ACTIVITIES THAT ARE IN CONFLICT WITH THE RMP STANDARDS, STAFF DOES NOT INTEND TO INTERPRET THE USGS WELLHEAD MODELS.

**Recommendation**: THE CREATION OF IMPERVIOUS AREAS ON PRIME RECHARGE AREAS WITHIN THE PROTECTION ZONE CAN ONLY BE MADE TO PROTECT PUBLIC HEALTH AND SAFETY, OR TO PROVIDE FOR MINIMUM PRACTICAL USE IN THE ABSENCE OF ANY ALTERNATIVE. THE HIGHLANDS COUNCIL STAFF DOES NOT BELIEVE THAT EITHER

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SITUATION APPLIES. THEREFORE THE CURRENT CONCEPTUAL FOOTPRINT IS INCONSISTENT WITH THE RMP. EVEN IF THESE FINDINGS COULD BE MADE, THE PROJECT SHOULD PROVIDE 125% OF PRE-CONSTRUCTION RECHARGE, RATHER THAN THE 100% RATE REQUIRED BY NJDEP STORMWATER MANAGEMENT RULES.

WATER CAPACITY	
Site: KUSHNER-MINE HILL	
Potable Water Supply	1
Domestic?	No
If Domestic, source HUC:	
Public Community Water System?	Yes
If PCWS, Name of Facility MUNICIPAL UTILITY MINE HILL TOWNSHIP WATER	
DEPARTMENT	
WATER PURVEYOR MCMUA	
PCWS ID No.? 1420001 MINE HILL TWP. WATER DEPT	Yes
<b>Source Water HUC</b> : 02030105010020 (FLANDERS WELL) & 02030105050020 (ALAMATONG	
WELL))	
Total Projected Water Demand (MGD): 81,782 GPD	
HUC Net Availability (MGD): -3.21 MGD & -1.85 MGD	
Conditional Availability (MGD): 0.0323MGD & 0.0343 MGD	
HUC Constraint:	
Current Deficit Area	
Existing Constrained Area	
Findings: PROPOSED WATER MAIN EXTENSION FROM ADJACENT MINE HILL T	WP. MUA.
MINE HILL TWP MUA IS SUPPLIED BY MCMUA. THE MCMUA SOURCE WELLS AR	E
MCMILA'S WELLS ARE LOCATED IN TWO DEELCH LILICIA SURWATERSHED. THE	DEEODE

Findings: PROPOSED WATER MAIN EXTENSION FROM ADJACENT MINE HILL TWP. MUA. MINE HILL TWP MUA IS SUPPLIED BY MCMUA. THE MCMUA SOURCE WELLS ARE MCMUA'S WELLS ARE LOCATED IN TWO DEFICIT HUC14 SUBWATERSHED. THEREFORE, THE USE IS DEPLETIVE UNLESS DEMONSTRATION CAN BE MADE THE HUC14 SUBWATERSHEDS ARE SUFFICIENTLY HYDROLOGICALLY CONNECTED, AT WHICH POINT THE USES WOULD BE CONSIDERED CONSUMPTIVE.

**Policy Statement:** A CURRENT DEFICIT AREA SUBWATERSHED THAT IS PRIMARILY WITHIN THE PROTECTION ZONE OR CONSERVATION ZONE SHALL BE ASSIGNED A CONDITIONAL NEW WATER AVAILABILITY OF 1% OF GROUND WATER CAPACITY, BASED ON THE LOW FLOW MARGIN METHOD, CONDITIONED UPON PRIOR IMPLEMENTATION OR COMMITMENT FOR IMPLEMENTATION OF THE 125% MITIGATION REQUIREMENT IN OBJECTIVE 2B4B (2B5B).

PROPOSED INCREASES IN WATER USE, INCLUDING CONSUMPTIVE OR DEPLETIVE WATER USES, WITHIN A CURRENT DEFICIT AREA OR AN AREA WHERE THE PROPOSED INCREASE WOULD CAUSE THE HUC14 SUBWATERSHED TO BECOME A CURRENT DEFICIT AREA SHALL PROVIDE MITIGATION EQUAL TO 125% OF THE PROPOSED NEW CONSUMPTIVE OR DEPLETIVE WATER USES WITHIN THE SAME HUC14 SUBWATERSHED THROUGH: A PERMANENT REDUCTION OF EXISTING CONSUMPTIVE AND DEPLETIVE WATER USES; GROUND WATER RECHARGE IN EXCESS OF THE REQUIREMENTS OF N.J.A.C. 7:8 (STORMWATER MANAGEMENT RULES); OR OTHER PERMANENT MEANS (2B4B).

TO APPLY STANDARDS IN THE PROTECTION ZONE DESIGNED TO MAINTAIN THE

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INTEGRITY OF AQUATIC ECOSYSTEMS, RECOGNIZING THE REGIONAL SIGNIFICANCE OF THESE RESOURCES. CONSUMPTIVE AND DEPLETIVE WATER USES AND ASSOCIATED LAND USES SHALL BE STRINGENTLY LIMITED (2B8).

PREVENT NET INCREASES IN CONSUMPTIVE AND DEPLETIVE WATER USES IN CURRENT WATER DEFICIT AREAS TO PREVENT EXACERBATION OF AND HELP REDUCE OR ELIMINATE THE DEFICIT TO ENSURE SUSTAINABLE WATER SUPPLY, WATER RESOURCE AND ECOLOGICAL VALUES, EMPHASIZING TECHNIQUES INCLUDING BUT NOT LIMITED TO WATER REUSE, RECYCLING AND CONSERVATION (2B8B).

REQUIRE THE MAXIMUM FEASIBLE WATER CONSERVATION AND RECYCLING FOR ANY REDEVELOPMENT OR DEVELOPMENT ACTIVITY, INCLUDING RENOVATIONS TO EXISTING SINGLE FAMILY RESIDENCES AND COMMERCIAL/INDUSTRIAL BUILDINGS (2J8A).

REQUIRE THAT NEW RESIDENTIAL DEVELOPMENT SERVED BY PUBLIC COMMUNITY WATER SYSTEMS BE AT A MINIMUM DENSITY OF 1/2 ACRE PER DWELLING UNIT FOR THE DEVELOPED PART OF THE SITE (I.E., NOT INCLUDING WETLANDS, OPEN WATER BUFFERS, RECREATIONAL SPACE), TO ENSURE COST-EFFECTIVE UTILITY SERVICE (2J8C).

REQUIRE THAT NEW NON-RESIDENTIAL DEVELOPMENT SERVED BY PUBLIC WASTEWATER COLLECTION AND TREATMENT SYSTEMS BE DESIGNED TO TARGET A FLOOR AREA RATIO (FAR) OF 0.84 FOR THE DEVELOPED PART OF THE SITE (I.E., NOT INCLUDING WETLANDS, OPEN WATER BUFFERS, AND RECREATIONAL SPACE) TO THE MAXIMUM EXTENT FEASIBLE, AS A MEANS TO MAXIMIZE PARKING AND EMPLOYMENT EFFICIENCY AND COMPACT DEVELOPMENT (2J8D).

PROHIBIT NEW, EXPANDED, OR EXTENDED PUBLIC WATER SYSTEMS UNLESS THEY ARE SHOWN TO BE NECESSARY FOR AND ARE APPROVED BY THE HIGHLANDS COUNCIL TO ADDRESS DOCUMENTED THREAT TO PUBLIC HEALTH AND SAFETY WHERE NO ALTERNATIVE IS FEASIBLE, TO SERVE A HIGHLANDS REDEVELOPMENT AREA, OR CLUSTER DEVELOPMENT, OR TO PROVIDE FOR MINIMUM PRACTICAL USE IN THE ABSENCE OF ANY ALTERNATIVE THROUGH ISSUANCE OF A WAIVER BY NJDEP OR THE HIGHLANDS COUNCIL, AND WILL MAXIMIZE THE PROTECTION OF SENSITIVE ENVIRONMENTAL RESOURCES (2J4A).

ACCOMMODATE COMPACT DEVELOPMENT SERVED BY EXISTING OR PROPOSED PUBLIC WATER SUPPLY SYSTEMS ONLY WHERE SUCH DEVELOPMENT IS WITHIN OR IMMEDIATELY ADJACENT TO AN EXISTING SERVICE AREA PROVIDES FOR THE CLUSTERING OR AGGREGATION OF DEVELOPMENT THAT WILL PRESERVE AT LEAST 80 PERCENT OF THE PROJECT AREA IN PERPETUITY FOR ENVIRONMENTAL PROTECTION OR AGRICULTURAL PURPOSES AND THE DEVELOPMENT IMPACTS ARE OTHERWISE CONSISTENT WITH THE GOALS AND REQUIREMENTS OF THE PLAN. (2J4B).

**Recommendation**: THE SOURCE WATER OF MCMUA SUBWATERSHEDS ARE IN DEFICIT, REQUIRING THE ASSIGNMENT OF CONDITIONAL WATER AVAILABILITY FOR THE

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PROJECT. THIS STANDARD AND OTHER STANDARD REQUIRES WATER
CONSERVATION, REUSE AND RECYCLING AT THE SITE. IT ALSO REQUIRES A
MITIGATION OF 125% RECHARGE OF THE ADDITIONAL CONSUMPTIVE AND
DEPLETIVE USES IN THE DEFICIT HUC14, THROUGH CONSERVATION OR RECHARGE.
BECAUSE THE SOURCE HUC14 ARE IN SEPARATE SUBWATERSHEDS, THE APPLICANT
MUST MAKE ARRANGEMENTS FOR THE MITIGATION IN THOSE SOURCE
SUBWATERSHEDS. ALTERNATIVELY, A CLEAR DEMONSTRATION MUST BE MADE THAT
THE RECHARGE IS HYDROLOGICALLY CONNECTED TO THE VALLEY-FILL AND
CARBONATE AQUIFERS OF THE ALAMATONG WELLFIELD. THE APPLICANT HAS
PROVIDED SOME INFORMATION REGARDING PREVIOUS STUDIES OF THE WELLFIELD,
BUT SHOULD CLEARLY DEMONSTRATE THE CONNECTION WITH THE SUBSURFACE
DISCHARGE INTO THE CRYSTALLINE BEDROCK UNDERLYING THE SITE TO THE
ADJACENT VALLEY FILL SEDIMENTS AND CARBONATE FORMATION.

THE EXTENSION OF PUBLIC WATER TO THE SITE WILL REQUIRE CLUSTERING OF 20% OF THE SITE WITH DEDICATION OF THE REMAINING 80% LAND TO ENVIRONMENTAL PROTECTION. LOT SIZE OF THE DEVELOPED PORTION OF THE PROJECT MUST BE AT A MINIMUM DENSITY OF 1/2-ACRE. WATER CONSERVATION, REUSE AND RECYCLING ARE REQUIRED.

WASTEWATER CAPACITY	
Name of Facility: KUSHNER-MINE HILL	
NJPDES Permit Number: PROPOSED NEW DGW SYSTEM	
Projected Flow (MGD): 59,747 gpd	
HDSF Facility?	No
HDSF Available Capacity (MGD): N/A	
Subject to Allocation Agreement	No
Allocating Capacity: N/A	
Extent of HDSF Service Area Included in WMP: Full Partial	
Wastewater Treatment Facility:	
New: Wastewater Discharge Flow (MGD)	
NJPDES-DGW: Existing Proposed S 59,747 gpd	
Findings: PROPOSED NEW GRAVITY COLLECTION SYSTEM AND DEDICATED ON	I-SITE
TREATMENT SYSTEM WITH DISCHARGE TO GROUND WATER.	

Policy Statement: PROHIBIT NEW, EXPANDED, OR EXTENDED WASTEWATER COLLECTION OR TREATMENT OUTSIDE OF EXISTING AREAS SERVED UNLESS THEY ARE SHOWN TO BE NECESSARY FOR AND ARE APPROVED BY THE HIGHLANDS COUNCIL TO ADDRESS DOCUMENTED THREAT TO PUBLIC HEALTH AND SAFETY WHERE NO ALTERNATIVE IS FEASIBLE, TO SERVE A HIGHLANDS REDEVELOPMENT AREA, OR CLUSTER DEVELOPMENT, OR TO PROVIDE FOR MINIMUM PRACTICAL USE IN THE ABSENCE OF ANY ALTERNATIVE THROUGH ISSUANCE OF A WAIVER BY NJDEP OR THE HIGHLANDS COUNCIL, AND WILL MAXIMIZE THE PROTECTION OF SENSITIVE ENVIRONMENTAL RESOURCES (2K3B).

CLUSTER DEVELOPMENT UTILIZING COMMUNITY-BASED ON-SITE TREATMENT FACILITIES SHALL BE PERMITTED: (1) WHERE SUCH DEVELOPMENT IS NOT WITHIN AN

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EXISTING AREA SERVED OR ADJACENT TO AN EXISTING AREA SERVED WITH AVAILABLE CAPACITY, (2) WHERE THE SYSTEM IS DESIGNED AND HAS CAPACITY ONLY FOR THE CLUSTER DEVELOPMENT, (3) WHERE THE SYSTEM DOES NOT CREATE THE POTENTIAL FOR FUTURE EXPANSION INTO AREAS THAT ARE NOT THE SUBJECT OF CLUSTER DEVELOPMENTS IMMEDIATELY ADJACENT TO THE INITIAL CLUSTER SERVED, (4) WHERE ADEQUATE PROVISION IS MADE FOR THE PRESERVATION OF AT LEAST 80 PERCENT OF THE PROJECT AREA IN PERPETUITY FOR ENVIRONMENTAL PROTECTION OR AGRICULTURAL PURPOSES, (5) WHERE AGRICULTURAL PURPOSES ARE INVOLVED, INCREASED IMPERVIOUS SURFACES OF GREATER THAN 3% BUT LESS THAN 9% OF AGRICULTURAL LANDS REQUIRES THE APPROVAL OF A FARM CONSERVATION PLAN FROM THE USDA NATURAL RESOURCES CONSERVATION SERVICE AND IMPERVIOUS SURFACES OF 9% OR GREATER REQUIRES THE APPROVAL OF A RESOURCE MANAGEMENT SYSTEM PLAN FROM THE USDA NATURAL RESOURCES CONSERVATION SERVICE, AND (6) PROVIDED THAT THE PROPOSED DEVELOPMENT IS OTHERWISE CONSISTENT WITH THE GOALS AND REQUIREMENTS OF THE PLAN (2K3F).

**Recommendation**: THE APPLICATION PROPOSES A COMMUNITY-BASED ONSITE TREATMENT SYSTEM. OBJECTIVE 2K3F INCLUDES CERTAIN CONDITIONS, INCLUDING THE 80% CLUSTERING PROVISION AND THE PROHIBITION OF CONNECTING FUTURE FLOWS TO THE SYSTEM. THE APPLICANT IS DEDICATING A PORTION O THE SITE FOR OPEN SPACE, BUT ADDITIONAL INFORMATION IS REQUIRED TO DETERMINE IF THE PROPOSAL MEETS THE 80% REQUIREMENT.

THE TOWNSHIP HAS ALSO INDICATED A DESIRE FOR THE CANFIELD SITE TO ACCEPT WASTEWATER FLOWS FROM AN ADJOINING AREA CALLED "THE FLATS" DUE TO THE PREVALENCE OF FAILING SEPTICS, AT A LATER DATE. THIS IS NOT PERMITTED BY THE CONDITIONS OF OBJECTIVE 2K3F, UNLESS FOR PUBLIC HEALTH OR SAFETY. HOWEVER, THIS EXTENSION IS NOT PART OF THE CURRENT PROPOSAL NOR IS THE TREATMENT PLANT BEING SIZED FOR ACCEPTANCE OF THAT FLOW.

#### HISTORIC, ARCHAEOLOGICAL AND SCENIC

Highlands Historic District Polygons	Absence
Highlands Historic Properties Polygons	Absence
Highlands Historic Property Points	Absence
Archaeological Grids	Absence
Highlands Scenic Resource Inventory	Absence

**Description of Resources:** 

**Findings**: HISTORIC, ARCHAEOLOGICAL, AND SCENIC RESOURCES ARE NOT LOCATED ONSITE.

**Policy Statement:** NO POLICY STATEMENT

**Recommendation**: NO RECOMMENDATION

#### **CONCLUSIONS AND RECOMMENDATIONS**

THE CONCEPTUAL DEVELOPMENT FOOTPRINT THAT THE APPLICANT HAS SUBMITTED HAS NUMEROUS CONFLICTS WITH THE FINAL DRAFT RMP STANDARDS,

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INCLUDING: STEEP SLOPES, OPEN WATER PROTECTION AREAS, RIPARIAN AREAS, FOREST RESOURCES, CRITICAL HABITATS, PRIME RECHARGE AREAS, AND WATER AVAILABILITY DEFICITS.

MANY OF THE CONFLICTS CAN BE RESOLVED BY REDUCING THE DEVELOPMENT FOOTPRINT FROM THE CURRENT CONCEPTUAL PLAN. THE APPLICANT HAS INDICATED A WILLINGNESS TO MODIFY THE SITE PLAN TO ADDRESS CONFLICTS WITH STEEP SLOPES, HOW BUFFERS, RIPARIAN AREAS AND THE 1,000 FOOT BUFFERS AROUND VERNAL POOLS. ADDITIONAL REQUIREMENTS SHOULD ALSO BE IMPOSED ON THE SITE PLAN SUCH AS CLUSTERING, LOW IMPACT DESIGN, AND WATER CONSERVATION MEASURES.

HOWEVER, SEVERAL CONFLICTS CANNOT LIKELY BE AVOIDED BY SITE DESIGN CHANGES BUT MAY BE RESOLVED WITH ADDITIONAL INFORMATION BY THE APPLICANT.

- 1. CRITICAL HABITATS THE EXTENSIVE INTRUSION INTO IDENTIFIED WOOD TURTLE HABITAT CANNOT LIKELY BE AVOIDED. THE APPLICANT HAS SUBMITTED A REPORT THAT CONCLUDED THAT HABITAT APPROPRIATE FOR WOOD TURTLE IS NOT PRESENT. THE NJDEP SHOULD EVALUATE THE REPORT AND DETERMINE IF THE CONCLUSION IS WARRANTED BY THE DATA PROVIDED.
- 2. PRIME RECHARGE AREAS THIS CONFLICT CANNOT BE RESOLVED DUE TO ITS EXTENSIVE AREA IN THE DEVELOPMENT FOOTPRINT
- 3. NET WATER AVAILABILITY DEFICITS THE DEFICITS IN THE MCMUA SOURCE SUBWATERSHEDS WOULD ONLY PERMIT ADDITIONAL CONSUMPTIVE AND DEPLETIVE USES WITH A 125% MITIGATION IN THE SOURCE HUC14. BECAUSE THE SITE HUC14 IS LOCATED IN AN UPSTREAM SUBWATERSHED, THE APPLICANT WOULD HAVE TO ARRANGE FOR THE RECHARGE IN THE SOURCE SUBWATERSHED. IN THAT INSTANCE, THE ADDITIONAL USE WOULD BE CONSIDERED DEPLETIVE AND REQUIRE A 102,228 GPD (81,782 \* 125%) RECHARGE REQUIREMENT.

HOWEVER, BASED ON THE CURRENT USGS AQUIFER MODEL THAT THE APPLICANT REFERENCES IN THEIR COMMENTS, IF THE UNDERLYING CRYSTALLINE BEDROCK IS SUFFICIENTLY IMPERVIOUS, THEN IT WOULD REASONABLE TO ASSUME THAT THE SANITARY DISCHARGE AND ENGINEERED STORMWATER RECHARGE ONSITE MAY TRAVEL AS SHALLOW SUBSURFACE FLOW ABOVE THE BEDROCK AND INTO THE ADJACENT GLACIAL SEDIMENTS OF THE VALLEY-FILL AQUIFER AND CARBONATE AQUIFER. THIS FINDING WOULD PROVIDE JUSTIFICATION THAT THE CANFIELD SITE AND THE ALAMATONG WELLFIELD ARE HYDROLOGICALLY CONNECTED. UNDER THAT CONCLUSION, THE ADDITIONAL WATER USE REQUIRED WOULD BE CONSUMPTIVE AND REQUIRE A 29,646 GPD (81,782 \* 29% \* 125%) RECHARGE MITIGATION. SUCH ADDITIONAL DOCUMENTATION SHOULD BE SUBMITTED AS A CONDITION OF APPROVAL.

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4. CLUSTERING – THE WASTEWATER AND WATER POLICIES REGARDING EXTENSION OF UTILITY SERVICE INTO THE PROTECTION ZONE REQUIRE A CLUSTERING PROVISION OF 80% OF THE SITE TO ENVIRONMENTAL PROTECTION. IT IS NOT CLEAR BASED ON THE APPLICANT'S MATERIAL WHETHER THIS REQUIREMENT HAS BEEN SATISFIED BY SETTLEMEN'T AGREEMEN'T. BASED ON STAFF'S ANALYSIS, THE 228-ACRE PARCEL WOULD REQUIRE A MINIMUM OF 182.4-ACRES DEDICATED TO OPEN SPACE. THE APPLICANT HAS REFERENCED THAT 190-ACRES WILL BE DEDICATED FROM THE CANFIELD SITE AND AN ADJACENT PARCEL, BUT CONSERVATION RESTRICTIONS ON THAT AREA IS NOT CLEAR, ESPECIALLY WITH REGARD TO THE SEPARATE PARCEL THAT MAY BE USED AS A RECREATIONAL SITE FOR A SCHOOL. DUE TO THE NEED TO AVOID OTHER RESOURCES ON THE SITE, IT WOULD BE DIFFICULT FOR THE APPLICANT TO FULFILL THE 80% REQUIREMENT. ADDITIONAL L DOCUMENTATION SHOULD BE SUBMITTED AS A CONDITION OF APPROVAL.