

ROBERT M. WATKINS REGONIAL VICINITY MAP SCALE: 1" = 2000' LEGEND PROPERTY BOUNDARY EX. CONTOUR (2') EX. CONTOUR (10') EX. TREELINE $x^* \wedge x^* \wedge x^*$ PRIMARY MANAGEMENT AREA (PMA) LIMIT OF DISTURBANCE STREAM BUFFER (50') NONTIDAL WETLAND EX. WETLAND BUFFER (25') TREE PROTECTION FENCE ----- TPF (TEMPORARY) (PERMANENT) CLEARED OFF-SITE AREA (C-OS) WOODLAND PRESERVATION AREA (WPA)

> PRESERVATION AREA TCP2-94-02 WOODLAND PRESERVATION SIGN

AREA (NRA)

TOTAL

WOODLAND REFORESTATION/ AFFORESTATION AREA (WRA)

NATURAL REGENERATION

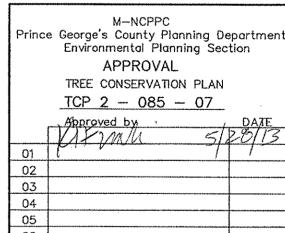
NATURAL REGENERATION AREA (NRA) AREA (AC) 1.71

0.28

3.65

WOODLAND REFORESTATION

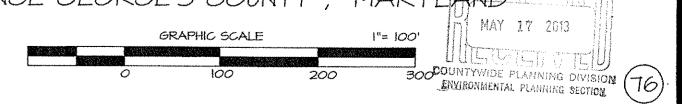
AFFORESTATION SIGN



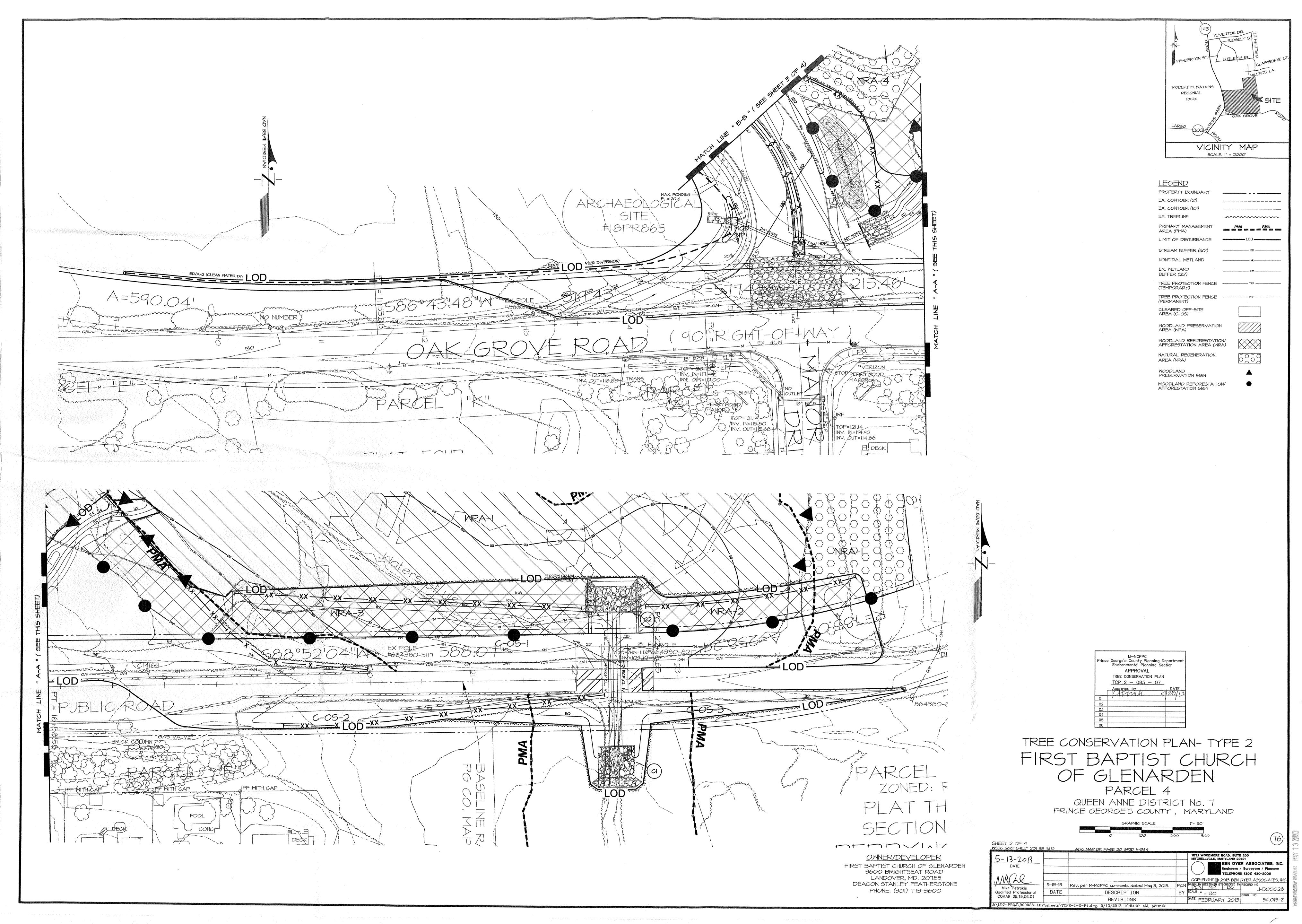
TREE CONSERVATION PLAN- TYPE 2 FIRST BAPTIST CHURCH OF GLENARDEN

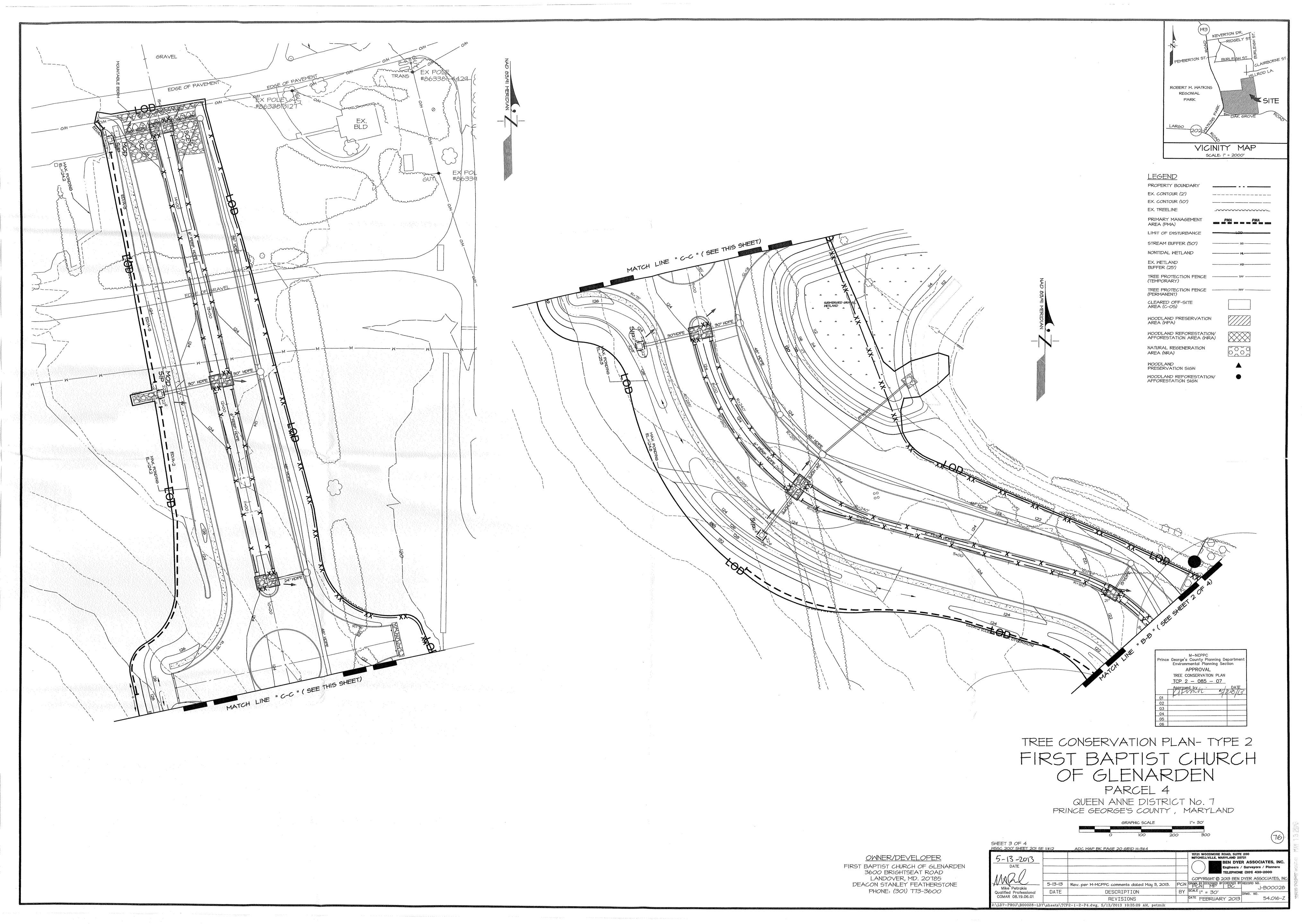
PARCEL 4

QUEEN ANNE DISTRICT NO. TPRINCE GEORGE'S COUNTY PRINCE GEORGE'S COUNTY, MARYLAND



MSSC 200' SHEET 201 SE	= II ∉I2	ADC MAP BK PAGE 20 GRID H-3&4				
5-13-2013				11721 WOODMORE ROAD, SUITE MITCHELLVILLE, MARYLAND 207		
Mike Petrakis Qualified Professional COMAR 08.19.06.01				BEN DYER ASSOCIATES, INC. Engineers / Surveyors / Planners TELEPHONE (301) 430-2000 COPYRIGHT © 2013 BEN DYER ASSOCIATES, INDRAM, BY DESIGNED BY CHECKED BY RECORD NO.		
	5-l3-l3	Rev. per M-MCPPC comments dated May 3, 2013.	D/N			
	DATE	DESCRIPTION		SCALE " - 100'	J-B00028	
		REVISIONS		DATE FEBRUARY 2013	DRWG. NO. 54.014-Z	
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SENERAL NOTES

- This plan is submitted to fulfill the woodland conservation requirements for 5C# 121-13 and permit #4561-2013. If the associated plan and permits expire, then this TCP2 also expires and is no longer valid.
- Cutting or clearing of woodland not in conformance with this plan or without the expressed written consent of the Planning Director or designee shall be subject to a \$9.00 per square foot mitigation fee.
- A pre-construction meeting is required prior to the issuance of grading permits. The Department of Public Works and Transportation or the Department of Environmental Resources, as appropriate, shall be contracted prior to the start of any work on the site to conduct a pre-construction meeting where implementation of woodland conservation measures shown on this plan will be discussed in detail.
- The developer or builder of the lots or parcels shown on this plan shall notify future buyers of any woodland conservation areas through the provision of a copy of this plan at time of contract signing. Future property owners are also subject to this requirement.
- The owners of the property subject to this tree conservation plan are solely responsible for conformance to the requirements contained herein.
- The property is within the Developing Tier and is zoned R-E (Residential-Estate). The property has frontage on Watkins Park Drive and Oak Grove Road, both of
- The property is located abutting Watkins Park Road which is classified as a Master Planned designated arterial roadway.

TREE PRESERVATION AND RETENTION NOTES

which are designated as historic roadways.

All woodlands designated on this plan for preservation are the responsibility of the property owner. The woodland areas shall remain in a natural state. This includes the canopy trees and understory vegetation. A revised tree conservation plan is required prior to clearing woodland areas that are not specifically identified to be cleared on the approved

- Tree and woodland conservation methods such as root pruning shall be conducted as noted on this plan.
- The location of all temporary tree protection fencing (TPFs) shown on this plan shall be flagged or staked in the field prior to the pre-construction meeting. Upon approval of the locations by the county inspector, installation of the TPFs may begin.
- All temporary tree protection fencing required by this plan shall be installed prior to the commencement of clearing and grading of the site and shall remain in place until the bond is released for the project. Failure to install and maintain temporary or permanent tree protective devices is a violation of this TCP2.
- Woodland preservation areas shall be posted with signage as shown on the plans at the same time as the temporary TPF installation. These signs must remain in perpetuity.
- The owner, developer and/or builder is responsible for the complete preservation of all forested areas shown on the approved plan to remain undisturbed. Only trees or part thereof designated by the county as dead, duing, or hazardous may be removed.
- A tree is considered hazardous if a condition is present which leads a Certified Arborist or Licensed Tree Expert to believe that the tree or a portion of the tree has a potential to fall and strike a structure, parking area, or other high use area and result in personal injury or property
- During the initial stages of clearing and grading, if hazardous trees are present, or trees are present that are not hazardous but are leaning into the disturbed area, the permitee shall remove said trees using a chain saw. Corrective measures requiring the removal of the hazardous tree or portions thereof shall require authorization by the county inspector. Only after approval by the inspector may the tree be cut by chain saw to near the existing ground level. The stump shall not be removed or covered with soil, mulch or other materials that would inhibit sprouting.
- If a tree or trees become hazardous prior to bond release for the project, due to storm events or other situations not resulting from an action by the permitee, prior to removal, a Certified Arborist or a Licensed Tree Expert must certify that the tree or the portion of the tree in question has a potential to fall and strike a structure, parking area, or other high use area and may result in personal injury or property damage. If a tree or portions thereof are in imminent danger of striking a structure, parking area, or other high use area and may result in personal injury or property damage then the certification is not required and the permitee shall take corrective action immediately. The condition of the area shall be fully documented through photographs prior to corrective action being taken. The photos shall be submitted to the inspector for documentation of the damage.

If corrective pruning may alleviate a hazardous condition, the Certified Arborist or a Licensed Tree Expert may proceed without further authorization. The pruning must be done in accordance with the latest edition of the appropriate ANSI A-300 Pruning Standards. The condition of the area shall be fully documented through photographs prior to corrective action being taken. The photos shall be submitted to the inspector for documentation of the damage.

Debris from the tree removal or pruning that occurs within 35 feet of the woodland edge may be removed and properly disposed of by recycling, chipping or other acceptable methods. All debris that is more than 35 feet from the woodland edge shall be cut up to allow contract with the ground, thus encouraging decomposition. The smaller materials shall be placed into brush piles that will serve as wildlife habitat.

Tree work to be completed within a road right-of-way requires a permit from the Maryland Department of Natural Resources unless the tree removal is shown within the approved limits of disturbance on a TCP2. The work is required to be conducted by a Licensed Tree Expert.

Tree protection fencing (TPFs) is not required for all or portions of this plan because an undisturbed 100-foot buffer of open land/or a 50-foot forested buffer is being maintained between the limit of disturbance (LOD) and the woodland preservation areas. If the LOD changes and the change Impacts these buffers, the county inspector shall be contacted to evaluate the change to determine if a revision to the tree conservation plan is necessary or if installation TPFs will be required.

AFFORESTATION AND REFORESTATION NOTES

All afforestation and reforestation bonds, based on square footage, shall be posted with the county prior to the issuance of any permits. These bonds will be retained as surety until all required activities have been satisfied or the required timeframe for maintenance has passed, whichever is longer.

The planting of afforestation or reforestation areas shall be completed prior to the issuance of the first building permit. (This standard note may be modified as necessary to address which building permits are adjacent to the proposed planting areas.) Seedling planting is to occur from November through May only. No planting shall be done while ground is frozen. Planting with large caliper stock or containerized stock may be done at any time provided a detailed maintenance schedule is provided.

If planting cannot occur due to planting conditions, the developer or property owner shall install the fencing and signage in accordance with the approved Type 2 Tree Conservation Plan. Planting shall then be accomplished during the next planting season. If planting is delayed beyond the transfer of the property title, the developer or builder shall obtain a signed statement from the purchaser Indicating that they understand that the reforestation area is located on their property and that reforestation will occur during the next planting season. A copy of that document shall be presented to the Grading inspector and the county.

Reforestation areas shall not be moved. The management of competing vegetation around individual trees and the removal of noxious, invasive, and non-native vegetation within the reforestation areas is acceptable.

All required temporary tree protection fencing shall be installed prior to the clearing and grading of the site and shall remain in place until the permanent tree protection fencing is installed with the required planting. The temporary fencing is not required to be installed if the permanent fencing is installed prior to clearing and grading of the site. Failure to install and maintain temporary or permanent tree protective fencing is a violation of this TCP2.

Afforestation/reforestation areas shall be posted with notification signage, as shown on the plans, at the same time as the permanent protection fencing installation. These signs shall remain in perpetuity.

The county inspector shall be notified prior to soil preparation or initiation of any tree planting on this site.

At time of issuance of the first permit, the following information shall be submitted to the M-NCPPC Planning Department regarding the contractor name, address, and phone number responsible for implementation of this plan.

Results of annual survival checks for each of the required four years after tree planting shall be reported to the M-NCPPC, Planning Department.

Fallure to establish the afforesation or reforestation within the prescribed time frame will resulting the forfeiture of the reforestation bond or a violation of this plan including the associated \$9.00 per square foot penalty unless the county Inspector approves a written extension.

PLANTING SPECIFICATION NOTES

- i. Quantity: (See Plant Schedule)
- 2. Type: (See Plant Schedule)
- Plant Quality Standards: The plants selected shall be healthy and sturdy representatives of their species. Seedlings shall have a minimum top growth of 18". The diameter of the root collar (the part of the root just below ground level) shall be at least 3/8". The roots shall be well developed and at least 8" long, no more than twenty-five percent (25%) of the root system (both primary and auxiliary/fibrous roots) shall be present.
- Plants that do not have an abundance of well developed terminal buds on the leaders and branches shall be rejected.
- Plants shall be shipped by the nursery immediately after lifting from the field or removal from the green house, and planted immediately upon receipt by the landscape contractor.
- If the plants cannot be planted immediately after delivery to the reforestation site, they shall be stored in the shade with their root masses protected from direct exposure to sun and wind by the use of straw, peat moss, compost, or other suitable material and shall be maintained through periodic watering, until the time of planting.
- Planting Handling: The quantity of seedlings taken to the field shall not exceed the quantity that can be plated in a day. Seedlings, once removed from the nursery or temporary storage area shall be planted immediately.
- Timing of Planting: The best time to plant seedlings is while they are dormant, prior to spring budding. The most suitable months for planting are March and April, when the soil is moist, but may be planted from March through November. No planting shall be done while ground is frozen. Planting shall occur within one growing season of the issuance of grading/building permits and/or reaching the final grades and stabilization of planting areas.
- Seedling Planting: Tree seedlings shall be hand planted using a dibble bar or sharp-shooter shovel. It is important that the seedling be placed in the hole so that the roots can spread out naturally; they should not be twisted, balled up or bent. Moist soil should then be packed firmly around the roots. Seedlings should be planted at a depth where their roots lie just below around surface. Air pockets should not be left after closing the hole which would allow the roots to dry out. See planting details for further explanation. If the contractor wishes to plant by another method, the preparer of this tree conservation plan must be contracted and give his approval before planting may begin.
- Spacing: See Plant Schedule and/or Planting Plan for spacing requirements. Also refer to the Planting Layout detail for a description of the general planting theory.
- Soil: Upon the completion of all grading operations, a soil test shall be conducted to determine what soil preparation and soil amendments, if any, are necessary to create good tree growing conditions. Soil samples shall be taken at a rate that provides one soil sample for each area that appears to have a different soil type (if the entire area appears uniform, then only one sample is necessary), and submitted for testing to a private company. The company of choice shall make recommendations for improving the existing soil. The soil will be tested and recommended for corrections of soil texture, pH, magnesium, phosphorus, potassium, calcium and organic matter.
- Soil Improvement Measures: The soil shall then be improved according to the recommendations made by the testing company.
- 10. Fencing and Signage: Final protective fencing shall be placed on the visible and/or development side of planting areas. The final protective fence shall be installed upon completion of planting operation unless it was installed during the initial stages of development. Signs shall be posted per the signage detail on this sheet.
- Planting method: Consult the Planting Detail(s) shown on this plan.
- 12. Mulching: Apply two-linch thick layer of woodchip or shredded hardwood mulch (as noted) to each planting site (see detail shown on this plan).
- 13. Groundcover Establishment: The remaining disturbed area between seedling planting site shall be seeded and stabilized with white clover seed at the rate of 5 lbs/acre.
- 14. Mowing: No mowing shall be allowed in any planting area.
- Survival Check for Bond Release: The seedling planting is to be checked at the end of each year for four years to assure that no less than 75% of the original planted quantity survives. If the minimum number has not been provided the area must be supplemented with additional seedlings to reach the required number at time
- 16. Source of Seedlings: State name, address, and phone number of nursery or supplier When areas designated for reforestation will be reforested by natural regeneration the following notes shall be added to the plan:

NATURAL REGENERATION NOTES

- I. All existing turf, ground covers, and invasive species shall be exterminated using a general broadcast herbicide such as Round-Up or equivalent. Secondary applications shall be applied as necessary. 2. Care shall be taken to avoid spraying any hardwood seedlings or saplings
- Roto-tilling of turf areas and manual removal of invasive vines, as necessary, shall be completed two weeks after chemical treatments are completed.
- Reforestation signs shall be installed every fifty feet or as appropriate and two strand wire fencing shall be installed along road frontages adjacent to any reforestation areas.
- Reforestation internal to the site shall be posted as required in the direction of any trails used to reach those areas.
- Natural regeneration shall be encouraged by semi-annual maintenance of the designated areas. The maintenance shall, at a minimum, require removal of competitive and invasive species from the desired indigenous hardwoods. This maintenance shall occur for a period of two years.
- 7. After one and two years all desirable seedlings and saplings shall be counted and flagged with surveyors tape in the late fall.
- 8. If after two years there is less than one seedling per 60 square feet and there are indications that natural regeneration is not occurring adequately then the owners shall plant those areas with container grown seedlings at a rate of one per 60 square feet. Only naturally occurring species already present within the site

FOUR-YEAR MANAGEMENT PLAN FOR RE/AFFORESTATION AREAS

Field check the re-afforestation area according to the following schedule:

- Site Preparation and Tree Planting Survival check once annually (September-November) see Note 1) Watering is needed (2 x month) Control of undesirable vegetation as needed (1 \times in June and 1 \times in September min.)
- Year 2-3: Reinforcement planting is needed (See Note 2)
- Survival check once annually (September-November) Control of undesirable vegetation if needed (1 \times in May and 1 \times in August min.)

done on an as needed basis. Special return operations or

recommendations will be conducted on an as needed basis

Reinforcement planting if needed. (See Note 2) Survival Check (September-November)

- I. Survival Check: Check planted stock against plant list (or as-built) by walking the site and taking inventory. Plants must show vitality. Submit field data forms (Condition Check Sheets) to owner after each inspection. Remove all dead plants. 2. Reinforcement Planting: Replace dead or missing plants in sufficient
- quantity to bring the total number of live plants to at least 75% of the number originally planted. If a particular species suffers unusually high mortality, replace with an alternative plant type. 3. Miscellaneous: Fertilization or watering during years I through 3 will be

POST DEVELOPMENT NOTES

If the developer or builder no longer has an interest in the property and the new owner desires to remove a hazardous tree or portion thereof, the new owner shall obtain a written statement from a Certified Arborist or Licensed Tree Expert identifying the hazardous condition and the proposed corrective measures prior to having the work conducted. After property documentation has been completed per the handout "Guidance for Prince George's County Property Owners, Preservation of Woodland Conservation Areas", the arborist or tree expert may then remove the tree. The stump shall be cut as close to the ground as possible and left in place. The removal or grinding of the stumps in the woodland conservation area is not

If a tree or portions thereof are in imminent danger of striking a structure, parking area, or other high use area and may result in personal injury or property damage then the certification is not required and the permittee shall take corrective action immediately. The condition of the area shall be fully documented through photographs prior to corrective action being taken. The photos shall be submitted to the inspector for documentation of the damage.

Tree work to be completed within a road right-of-way requires a permit from the Maryland Department of Natural Resources unless the tree removal is shown within the approve limits of disturbance on a TCP2. The work is required to be conducted by a Licensed Tree Expert.

- The removal of noxious, invasive, and non-native plant species from any woodland preservation area shall be done with the use of hand-held equipment only (pruners or a chain saw). These plants may be cut near the ground and material less than two inches diameter may be removed from the area and disposed of appropriately. All material from these noxious, invasive, and non-native plants greater than two (2) Inches diameter shall be cut to allow contact with the ground, thus encouraging
- 3. The use of broadcast spraying of herbicides is not permitted. However, the use of herbicides to discourage re-sprouting of invasive, noxious, or non-native plants is permitted if done as an application of the chemical directly to the cut stump immediately following cutting of plant tops. The use of any herbicide shall be done
- in accordance with the label instructions. The use of chainsaws is extremely dangerous and should not be conducted with
- in the use of this equipment for the pruning and/or cutting of trees. Protection of Reforestation and Afforestation Areas
- Reforestation fencing and signage shall remain in place in accordance with the approved Type 2 Tree Conservation Plan.

poorly maintained equipment, without safety equipment, or by individuals not trained

Reforestation areas shall not be moved; however, the management of competing vegetation and removal of noxious, invasive, and non-native vegetation around individual trees is acceptable.

STOCK SPECIFICATION: 700 SEEDLINGS PER ACRE

TOTAL RE/AFFORESTATION PROVIDED: 1.17 ACRES

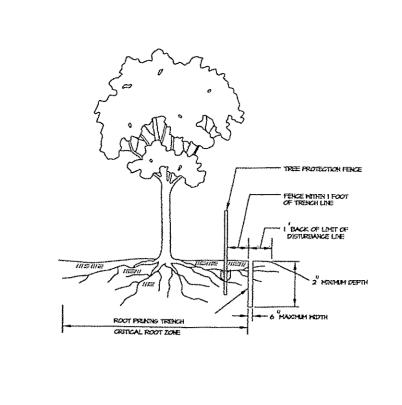
Reforestation Area									
	Acreage	Tulip Poplar	Sweet Gum	Sycamore	Red Oak	White Oak	Total No. of Seedlings		
	6.08	844	844	844	844	844	4220°2		
2	0.13	19	19	19	19	19	95		
3	0.56	70	70	70	70	70	350°2		
4	0.31	44	44	44	44	44	220		
TOTAL	7.08	977	977	977	977	977	4885		

1. All tree/shrub species planted within the re/afforestation areas, should be randomly distributed throughout the proposed relafforestation area, so as to promote a natural woodland structure. (See Planting Layout detail) 2. Details concerning the stocking specifications for Micro-Bioretention Basin #2 in WRA-I and Micro-Bioretention Basin #3 in WRA-3 can be found on the Storm Drain, Stormwater Management, Road Improvements, Street Tree and Lighting Plan-Phase I,

Sheet 8 (BDAI Drwa. No. 8.038-Y) 3. In the event of species unavailability, a substitution may be made. Any substitution made requires written notification to MNCPPC, Environmental

Planning Section.

Forest Conservation Manual Chapter 3: Forest Conservation Plan Section 3.6: Reforestation and Afforestation Procedures Handling Seedlings in the Field Flaure 3.6.6 Correct
in backet with edifficient victor to
cover roots h hand roots dry out. Figure 3.3.6 notes the correct method for handling seedlings in the planting field. Seedlings dry out very quickly and, once dry, often are not usable even Seedling and Whip Planting Specification Figure 3.6.7 Mulching newly planted seedlings is suggested as it helps the soil retain moisture and it protects the seedling from compaction and stem injury.



1. Retention Areas to be established as part of the forest conservation plan review process.

2. Boundaries of Retention Areas should be staked, flagged and/or fenced prior to trenching.

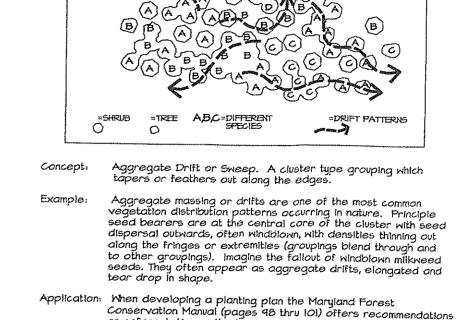
3. Exact location of trench should be identified. 4. Trench should be immediately backfilled with soil removed or other high 5. Roots should be cleanly cut using vibratory knife or other acceptable

ROOT PRUNING

9. Contractor may use blaze orange tree protection fence or equal according to MD State Forest Conservation Technical Manual Figure D-5.

TREE PROTECTION FENCING - TYPE I

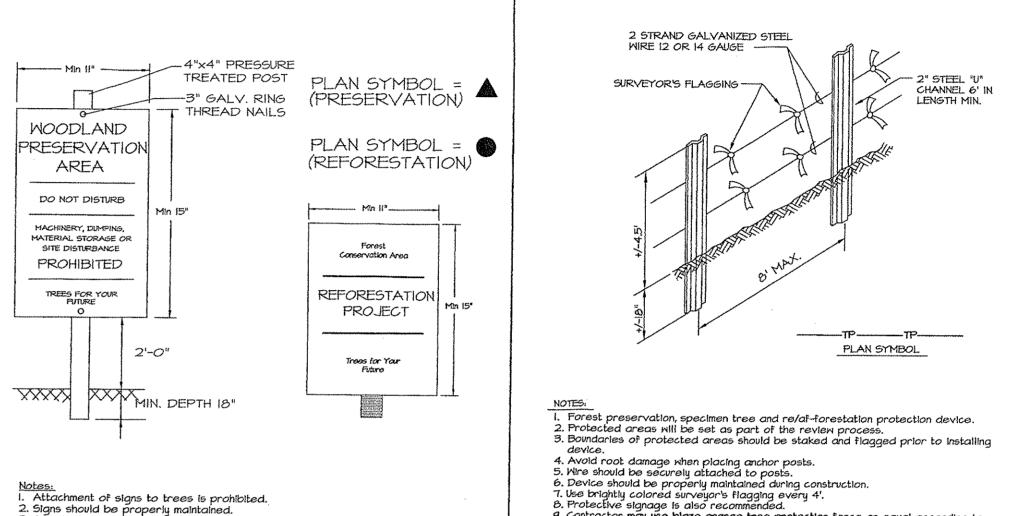
Source: Haryland State Forest Conservation Technical Harval, 3nd Edition - 1997



on reforestation methods, species selection, plant materials and site stocking options. This is meant for determining the appropriate number of plants required, not necessarily a feeton-center "grid pattern" layout. Many of the State's regulatory reforestation sites installed since the inception of the Act appear as orchards. This unnatural grid patterns can be corrected thru the application of aggregate distribution. This does not mean that plants must be in a grid pattern, the drifts of shrubs cannot blend into groupings of trees or that groupings of same species cannot occur together. It simply means that the installer should meet the aforementioned forest conservation act criteria at the same time replicating natures aggregate drift patterns (see When using this theory to lay out a planting plan the size of the drifts should depend on the quantity of plants allocated, the scale of the site, and the careful consideration of the

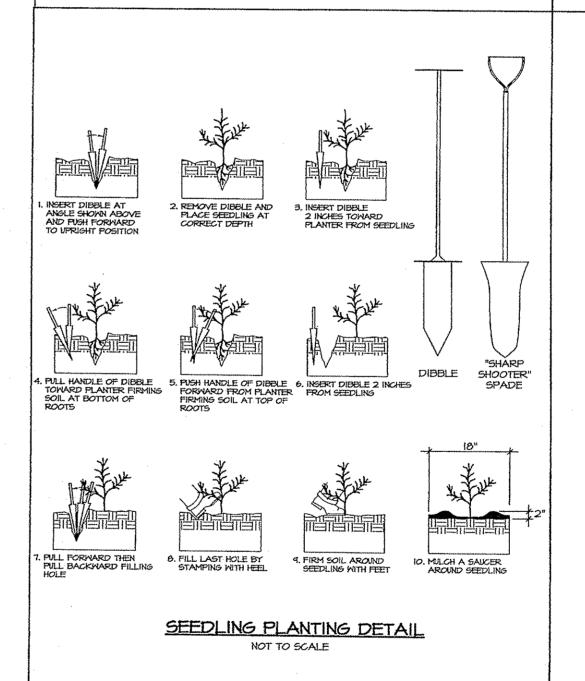
PLANTING LAYOUT (AGGREGATE DISTRIBUTION DRIFT THEORY)

12"



1. Reforestation signs to be attached to wood posts 2. Top of sign to be flush with top of wood post. 3. Signs to be attached using 2 galvanized wood screws each with a galvanized washer.

SPLIT RAIL FENCE DETAIL



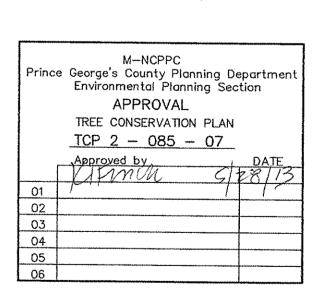
3. Avoid injury to roots when placing posts for the signs.

and remain in perpetuity.

. Locate signs approximately every 50 feet along fencing.

1. Signs should be in place immediately following stake out of L.O.D.

Signs should be posted to be visible to all construction personnel from all direction
 Signs should be installed at same time as tree protection device.



TREE CONSERVATION PLAN- TYPE 2 FIRST BAPTIST CHURCH OF GLENARDEN PARCEL 4

QUEEN ANNE DISTRICT No. 7 PRINCE GEORGE'S COUNTY, MARYLAND

OWNER/DEVELOPER FIRST BAPTIST CHURCH OF GLENARDEN 3600 BRIGHTSEAT ROAD LANDOVER, MD. 20785 DEACON STANLEY FEATHERSTONE PHONE: (301) 773-3600

SHEET 4 OF 4 WSSC 200' SHEET 201 SE 11&12 ADC MAP BK PAGE 20 GRID H-3&4 5-13-2013 11721 WOODMORE ROAD, SUITE 200 MITCHELLVILLE, MARYLAND 20721 BEN DYER ASSOCIATES, INC Engineers / Surveyors / Planners OPYRIGHT @ 2013 BEN DYER ASSOCIATES, II 5-13-13 Rev. per M-MCPPC comments dated May 3, 2013. PCN DRAWN BY DESIGNED BY CHECKED BY RECORD NO Mike Petrakis Qualified Professional DATE DESCRIPTION COMAR 08.19.06.01 REVISIONS FEBRUARY 2013 54.017-Z \LD7-PROJ\B00028-LD7\sheets\TCP2-0V-P4.dwg, 5/13/2013 10:36:36 AM, petmik