KEYSTONE ENGINEERING & CONSULTING, INC.
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BAREFOOT TRACE CONDOMINIUM

St. Augustine, Florida

FACILITY CONDITION ASSESSMENT

Survey Report and Results

Prepared By
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JUNE 2022

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June 7, 2022
Barefoot Trace Condominium Association, Inc.
6240 A1A South
St. Augustine, FL 32080

Re: Limited Building and Site Condition Assessment & Evaluation Written Report

EXECUTIVE SUMMARY

Keystone Engineering and Consulting, Inc. performed a limited and generally non-destructive visual and acoustical condition survey of the Barefoot Trace Condominium building in St. Augustine, Florida. The purpose of this survey was to gather information as to the condition of the existing exterior structural components, which included evaluating the elevated balconies, walkways, stairwells, garage, pool deck and parking deck, envelope, balcony sliding glass doors, windows, coatings, sealants, aluminum guard railings, and other related building elements. The survey was specifically conducted to determine where areas of distress existed relating to reinforcing steel corrosion. Keystone was also to recommend repair and preventative maintenance actions that would both correct the existing damage and slow the degradation of the building to reduce future maintenance expenses.

Our findings have concluded that routine areas of the building are exhibiting structural maintenance needs with some advanced locations where actions should be performed as soon as practical. At this point, there are conditions which are not desirable for protecting the structure against water intrusion or additional ingress of chlorides.

The existing spalled conditions and general waterproofing details are contributing to the continued effects associated with corrosion and water intrusion. These adverse issues can be corrected during a repair project by utilizing proper materials and methods. Additionally, these actions can be integrated with overall improved aesthetics of the structure.

Within this report are the findings and recommendations for the repair and maintenance of the building. Included in the report are example photos of the issues described with a conceptual budget intended for planning purposes.
Keystone Engineering is available to present these findings in a PowerPoint format for your owners. We will explain our findings and recommendations and answer any questions you may have. We can also discuss the preparation of a Project Manual to solicit competitive bids for the work and the execution of the construction phase and look forward to assisting Barefoot Trace in the continuing evaluation of this project and consulting with you during the upcoming decision-making process.

WRITTEN REPORT

Dear Board and Association Members:

BUILDING STRUCTURE DESCRIPTION

The Barefoot Trace condominium is a 66-Unit, direct ocean-front, 4-story tall masonry structure with cast-in-place columns and conventionally reinforced floor slabs with cantilevered balconies and was placed into service in about 1985. All living Units enjoy at least one balcony space with the balconies fall protection provision consisting of welded aluminum railings that have been replaced since original construction. The Units are accessed via two elevator cabs leading to common walkways. The original construction fenestrations consisted of aluminum framed sliding glass doors and windows and have also been replaced in a previous rehabilitation cycle.
Envelope vertical surfaces are coated with waterborne products with mostly solvent based sealants at penetrations, and all balcony slabs and walkways are protected with a decorative polyurethane deck coating system.
The parking structure is a post tensioned reinforcing scheme and topside surfaces protected with a vehicular rated polyurethane waterproofing.

INVESTIGATION METHODOLOGY

The inspection process was completed on a visual and hands-on basis with all efforts overseen by Florida Registered Professional Engineers and trained assistants who hold Florida general contractor licenses. The survey included inspection of all available Units, but 6% were inaccessible which were 209, 302, 315 and 412, to evaluate systemic and specific issues only determinable from the elevated balcony area. The parking deck, and garage were included as agreed in our scope of work and are integrated into this report. The inspections occurred over several periods that commenced on April 11, 2022, to perform the condition survey of the garage area and first day of balconies. The evaluation on April 19th included remaining balconies after additional keys were secured and the final visit transpired on April 26, 2022, to inspect all walkways, stairwells, common areas, parking deck and ramp, boundary/retaining walls, and shearwalls.

Generally, the inspection of an aged oceanfront condominium focuses on the existing and potential for reinforcing steel damage that occurs due to water intrusion sources. As a result of the actual and potential damage, affected building components such as exterior floor finishes, guard railings, window assemblies, sliding glass doors, and storm shutters are also evaluated as applicable.

The inspection process was completed in a generally non-destructive manner, except for specific areas where the spalling had manifested to a degree concrete removal was simple to observe underlying conditions, such as concrete cover over the reinforcing steel.

The results of the inspection and evaluation will generate an anticipated and recommended scope of work. It must be considered and understood that many work items identified are interrelated and therefore not easily or cost-effectively addressed separately. For example, in order to repair slab damage associated with reinforcing steel corrosion the fall protection railings will be affected and therefore must be considered as part of the repair process.

It should also be well understood that portions of the work anticipated are estimated quantities, while other items are fixed quantities. In general, all of the concrete activities are an estimated quantity due to the number of variables involved and the high likelihood for hidden damage. Therefore, the concrete work is typically bid on a unit cost basis since we can establish the necessary repair task items accurately but cannot estimate the exact quantities. Unit Cost Line Items provide the fairest basis for both owner and contractor, as the contractor is paid only for the number of each units completed at the unit rate bid, whether the quantities are higher or lower than the engineers estimate. The remainder of the bid items will generally be at fixed cost, as they are directly measurable quantities and known scope of work. Waterproofing of walls and floors, glass door replacement and railing replacement or removal and re-installation are some examples of fixed items as both the task and quantities can be generally established accurately in advance.

OBSERVATIONS

Barefoot Trace condominium is in fair condition overall even after considering the age of the structure and its location in an indisputably highly corrosive environment for over three decades. Previous structural repairs were found to remain serviceable in most instances, whereas others have failed most likely related to low quality craftsmanship or ingress of chlorides since the repair was completed. Seventeen Units exhibited no structural distress although unfortunately, nineteen Units were documented to have concrete spalling immediately adjacent to the sliding glass door opening that a high probability exists for encroachment. Should you look through the site maps incorporated into this report, understand the arrow drawn on the map indicates a confirmation, and or likelihood, of entering the living space, but that disruptive intrusion will not occur until all exterior excavations have been exhausted without the engineer approving the termination as complete and proper.
The most prominent and widespread maintenance situation found at the site is documented reinforcing steel corrosion. Although these critical components have lasted well for thirty years, the symptoms of spalling and delamination is visually detectable that range from minor-to-severe.

Quality, long lasting repairs are crucial in controlling future maintenance costs. Taking steps to reduce the ingress of water has proven to be a good investment of maintenance dollars eliminating the redundancy of repairs to the same areas. This can be achieved by ensuring proper industry standard waterproofing details are accomplished during the rehabilitation project.

For the specific situations at Barefoot Trace, the most effective solutions available to us involve reducing the exposure of the structural components of the building to the atmospheric elements along with the use of properly specified products. This is best achieved by the elimination of all water intrusion sources at envelope surfaces, at railing anchorage points, at fenestrations to include windows, storefronts and sliding glass doors, and all exterior horizontal surfaces by utilizing proper fasteners, methods, sealants and coatings. While these efforts will not fully stop the effects of normal deterioration on the building structure, they can greatly reduce the magnitude and rate of their effects over time. This will save the Association substantially in terms of maintenance costs, future assessments, the inconvenience, and loss of use as a result of construction and the collateral costs of construction including removing, reinstalling and/or replacing components such as railings, coatings, and doors.

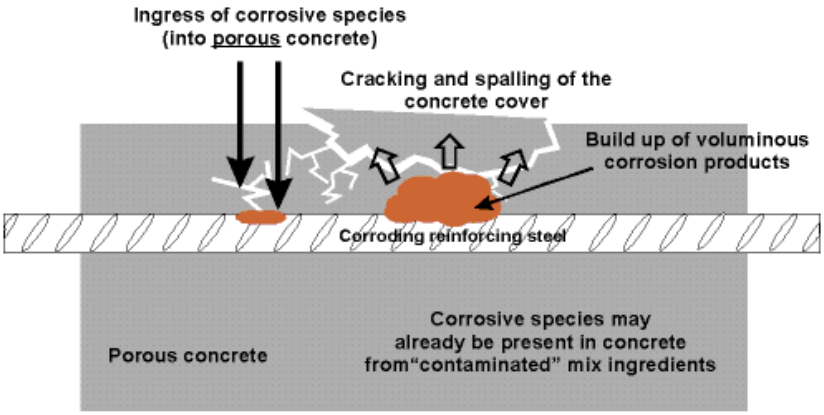
FINDINGS

The photograph section of this Report is intended to represent a global overview of our findings and point out typical discrepancies. Over one hundred pictures were generated during the survey process, which we will give to you electronically, and many photographs will be placed as slides into the PowerPoint Presentation.
The pattern of concrete spalling was found to be characteristic with structures of this age with distressed areas located through visual inspection and acoustical sounding techniques. The acoustical process was completed utilizing either a metal rod or chain-drag techniques that create a distinct sound when sub-surface delamination exits due to reinforcing steel corrosion where the concrete interface with the steel has been compromised. Historically with wide variations based upon certain factors such as amount of concrete cover over the reinforcement, roughly 30% of the volume of spalling is acoustically determined.

One challenge Keystone encountered was to fully evaluate the topside of the floor slabs where polyurethane deck coatings exist that in the past has disguised underlying spalling until the conditions reach an advanced stage.

Concrete Damage General Discussion

Concrete spalling is due to the long-term exposure to the coastal salt air, whereby chlorides will migrate through the concrete and reach the reinforcing steel. Once the chlorides accumulate at the steel depth, the corrosion process will accelerate in an exponential fashion, resulting in expanding steel reinforcement due to corrosion activity, internal delamination of the reinforced concrete, cracking and spalling of the surrounding concrete. Left unabated, this process will lead to increasingly costly building repair projects.



Initial concrete spalling typically becomes noticeable as the building approaches 15-20 years of age, grows exponentially, and then cyclically thereafter depending on the level and quality of repairs and protective measures.

Cast-in-Place Components

Overall, the thirty-seven year old structural concrete components where inspection could be performed were found to range from good-to-fair and no necessity to install temporary shoring was determined.

Balcony Slabs - The conventionally reinforced floor slab system at the balconies were observed to have occasional visible and or acoustically detectable subsurface spalled conditions. The situations were generally adjacent to the sliding glass doors or at the leading edges, which is anticipated for several reasons. Door assemblies allowing ingress of soluble salts over an extended period involve one hot spot area and the original construction "cored-in" design of the handrail stanchions attribute to another obvious path for chloride contamination. Understand that to repair documented spalling adjacent to the glassed openings, which were at 19 locations with an example at the balcony of Units 215 on page 14, that encroachment into the living areas at some repair locations will occur while others are possible resulting in collateral impact to interior finishes. Sixteen Units have elected to install or keep their storm shutters and should spalling be discovered shutter removal will be required as an added expense to allow access to the repair area. A minimal amount of slab edge

spalling was determined with the majority acoustically confirmed that summed 58 linear feet. An additional amount of overhead spalling was estimated with that total being 43 square feet and the largest amount of spalling recorded was 196 square feet of surface repairs that are defined as 3" deep into the slab.

Walkway Slabs - The cantilevered walkways were observed to have minimal visible and or acoustically detectable spalls that were estimated at 57 square feet of surface, 12 linear feet of edge, 5 square feet of overhead and 3 cubic feet of column, beam, wall repairs.

Balcony Columns, Walls and Headers - The exposed sides where surveying was possible were found to be in good condition with only 10 cubic feet of estimated repairs, but it would be anticipated that some portion of the stucco covered components that were acoustically documented will ultimately only be delaminated stucco and be a much less actual cost than the earmarked spall repair.

Garage and Parking Deck – The parking deck slab is a post tension design with no symptoms of post tension related repairs that would typically be observed at the perimeters where the #4 reinforcing steel is placed directly behind the anchor and parallel with the edges about 4-inches inward and a linear crack will form when spalling manifests.

There was no documented spalling in the garage beams or column capitals which is the square area of concrete above each column, although the area under the approach ramp has allot of surface staining and appears to be in distress.

Balcony Access Door and Window Assemblies

Sliding glass doors and single-hung window assemblies were fully replaced in the 2008 cycle and remain serviceable with some minor oxidation beginning especially at the door thresholds where the expansive forces caused by the by-product of the corrosion that has pushed the sealant away from the juncture. The cant bead sealant, defined at the polyurethane sealant bridging the horizontal-to-vertical transitions of the balconies and walkways will be replaced on an as-needed approach.

Envelope

The Portland-based stucco veneer envelope finish was found in good condition overall and dry film thickness exists to not recommend another high-build elastomeric coating application. Any envelope cracks will be treated as static and sealed with elastomeric patching compounds and if dynamic in nature will be routed-and-sealed with a polyurethane sealant. There are unsealed penetrations at envelope areas, for instance at the south wall of the generator room. The

planned system will incorporate a conditioner and one finish coat of 100% acrylic with a satin sheen for added self-rinsing qualities to achieve a standard Sherwin Williams 7-year standard warranty.

Guard Rails

The railings at the balconies and walkways have been replaced since original construction with a fully welded and baseplate mounted aluminum design with the initial and minor so far symptoms of filiform corrosion witnessed. It is believed the rails were pretreated with chromium and coated with a fluorocarbon high performance system, such as Kynar, following the Architectural Aluminum Manufacturers Association AAMA 2605 standards that has proven to be the most durable alternative. Baseplate stainless steel washers have randomly been replaced with a larger diameter for an undetermined purpose and no further replacements are included in the scope of work.

Balcony and Walkway Deck Coating

Balcony and Walkway deck surfaces are coated with a decorative polyurethane, pedestrian-grade fluid-applied waterproofing membrane and remain serviceable as a deterrent against chloride ingress as intended. Unit 112 was observed to have some peeling areas but could still be prepared and an overlay applied without stripping to the bare concrete as recommended for all other pedestrian locations. The budget reflects coating all balconies with the walkways as an alternate for association consideration.

Parking Deck Coating

The parking deck polyurethane waterproofing is in fair-to-poor condition with the most commonly used parking spaces and center driving lanes worn down from friction related to the tires turning and is an expected result after years in-service. Unlike the discussion with pedestrian areas at the walkways and balconies, stripping to a bare substrate is the recommended scope of work to attain a full adhesion and performance guarantee from both the manufacturer and applicator. A 10-year warranty is available for an upgraded system known as the extra heavy-duty specification that requires a primer, multiple intermediate coats that the aggregate is broadcast-and-backrolled. An added cost is to replace the routed-and-sealed cracks that usually become collaterally damaged during the stripping process whether the contractor elects to use a hydro-blaster or grinding for coating removal. The reason the parking deck coating was placed as an alternate was due to the estimated cost of over a million might exceed available funds and could be deferred and become a separate project since aerial equipment is not required and impact to the occupants would be minimal, or we will discuss a partial coating effort at failed areas only.

Sealant

The envelope sealant at fenestration perimeters, penetrations and terminations range from good-to-failed. Most areas where discrepancies were found existed at east-facing shearwall windows replaced in the 2008 rehabilitation cycle where the sealant has alligatored and chalked. The exposure is qualified as weather-bearing and a cost was earmarked to replace it on an as-needed basis, since roughly one-third is reaching its useful life, including other deficient areas at doors or other windows.

The two east/west axis expansion/construction joints located at each elevator lobby were strategically placed to marry the three structures together. The conditions concealed by coverplates is unknown but the areas abutting the stairwells is visibly adhesively and cohesively failed and Dow Corning silicone sealant is the planned specification that will provide superior elongation and recovery over the existing polyurethane option.

All replaced sealant will follow fundamental industry standards specified in the Sealant, Waterproofing and Restoration Institute guidelines and be 100% polyurethane dry-tooled to create a proper and durable joint.

Miscellaneous

1. Balcony light fixtures, receptacles and dryer shrouds were generally a water intrusion point with unsealed fixture-to-wall junctures, with missing or broken weatherproof covers and should be addressed promptly.
2. The trash chute guillotine assembly is missing, including the springs and fusible link, that is required by the National Fire Protection Association guidelines to close in the event there is a fire in the dumpster.
3. Fire-rated common area doors at the stairwells and storage rooms of the condominium building have been replaced, other than the social room door, with the upgraded Chem-Pruf fiber-reinforced polymer option and no actions are required. Standard steel doors exist at the other required common areas of the equipment rooms and maintenance shop that are serviceable but will need periodic deferred maintenance to extend their useful life.
4. Stairwell steel stair assemblies are in fair condition with normally expected corrosion occurring that will be an ongoing action until replaced at some future cycle. An allowance was placed in the budget to engage a welder to remedy the failed landing section at the center stairwell 3rd floor landing and the topping topside will be replaced and the plywood removed. The recommendation on an annual frequency is to locally treat the corrosion with 10% phosphoric acid, followed by a coat of Sherwin Williams Macropoxy or the Procryl primer and Shercryl topcoat combination would provide better protection than standard paint

RECOMMENDATIONS and CONCLUSION

General Industry Methodology

There are several basic aspects to concrete spalling and restoration that must be understood and accepted to allow for the findings and recommendations to be discussed productively. The following represents some basic industry positions that dictate the consultants thought process:

Spalling-Concrete spalling is delamination of the concrete from the expansive effects of reinforcing steel corrosion. Spalling occurs when chlorides migrate to the reinforcing steel, which changes the chemistry of the concrete and creates a corrosive environment. Spalling can be detected visually and/or acoustically and requires an experienced eye to distinguish between spalling and non-spalling and to extrapolate findings into estimated quantities.

Contractor Selection-Concrete restoration is a small, specialized, yet mature industry. While the work must be performed by a licensed general contractor under the supervision of an experienced professional engineer, not all general contractors are experienced in concrete restoration of an existing occupied building. There is a relatively short, but high-quality list of local qualified restoration contractors. Restoration contractors generally perform best in their local region.

Project Timing-Project timing will be dictated by the decision-making process and contractor availability. However, the lowest cost project is one that is done today, as a single-phase project. Unnecessarily delaying a project or doing it in multiple phases will increase the project costs due to increased corrosion damage and rate, inflationary costs, and mobilization costs. Financing is available to allow for payments over time, while getting the work done in a single, lower cost, lower impact project.

Project Considerations-Project considerations are primarily prioritized as safety, asset preservation and aesthetics. It is up to the Association to decide on what level of asset preservation and aesthetics they wish to employ. The engineer can only make recommendations and explain consequences of the decisions. Safety is the only area where the engineer has to insist on a solution. The Association can decide to adopt all, some, or none of the engineer's recommendations.

Comprehensive Solution-A long-term comprehensive solution provided is the most effective at minimizing future restoration cycles and providing the most aesthetic result. It is the lowest cost over time, and considers proactive protective measures and maintainable coating finishes, and overall protection of the structure from the elements.

Decision-Making-Not everyone wants the same level of building maintenance, aesthetic considerations, or maintenance budget funding. Everyone will have their individual opinion of what is appropriate or acceptable. That is one of the challenges of providing consultation to a condominium, as we cannot provide any solution that will please all parties. Each of you has the discretion to agree or disagree with our recommendations.

A prioritized effort should be undertaken to correct all structural component deficiencies and diminish ingress of future chlorides as soon as practical. The rehabilitation repairs should be accomplished as soon by an experienced restoration contractor under the supervision of a restoration engineering expert. It is further recommended that the association undergo a complete structural and exterior weatherproofing effort and preventative maintenance project as soon as funds are available. The work would include, but not be limited to; column, slab and beam repairs, and other envelope activities, replacement of any deficient sealant or application at missing penetrations, horizontal waterproof coating finishes after proper concrete repairs and general maintenance actions that typically reoccur on a 7 to 8-year cycle as asset-preservation.

Once the information in this report is reviewed, discussed, and understood, the Association can reach conclusions as to the planning and timing of the recommended repair work. Keystone Engineering can provide valuable input and services towards this discussion. Keystone can also provide the necessary services for the subsequent solicitation of bids for the work from qualified contractors as well as the oversight of the construction phase to ensure the work is properly executed, including control of the budget, quality of work, contractor payments and warranties.

It is our intention to assist and guide you to complete a quality and cost-effective project that will both enhance the value of your building and provide extended service life. We look forward to meeting and discussing the project further to assist with the ongoing decision-making process.

Sincerely,

James E. Emory, P.E., SI
Keystone President

Chuck Hays, C.G.C.
Keystone Vice-president

Tomas Ponce, P.E., MSCE Structural Engineer
Structural Engineer

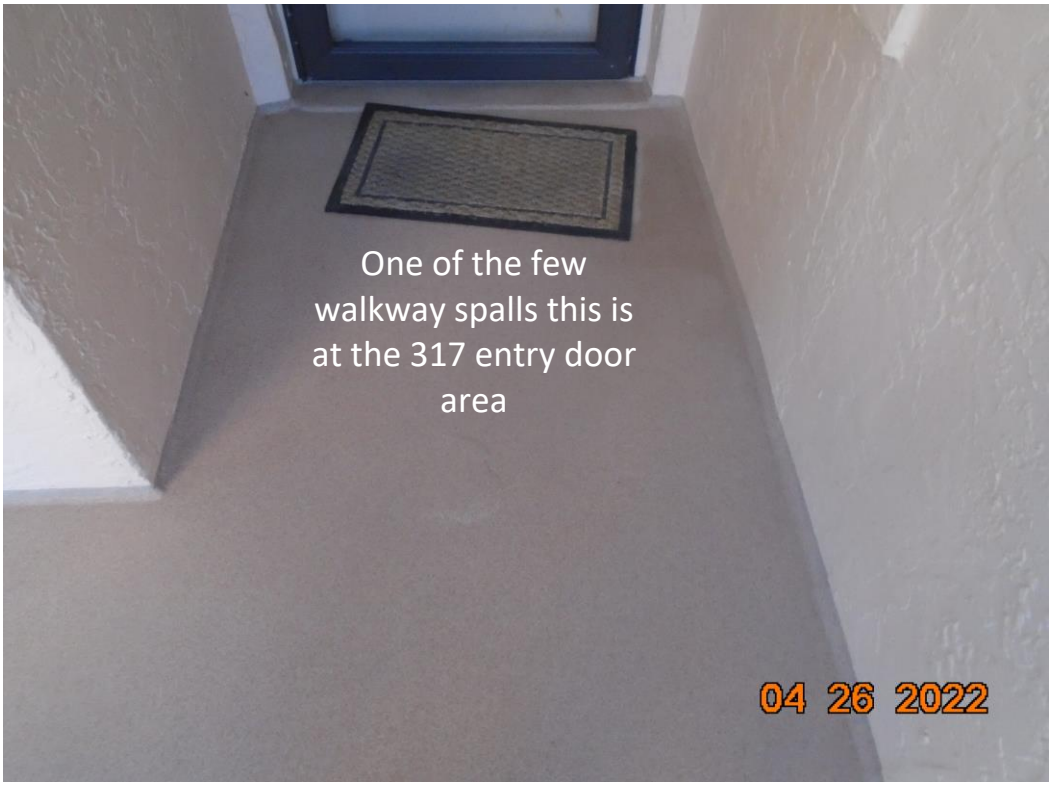
Krista Hays, CAM
Administrative Director


Unit 307 three small
surface spalls
04 11 2022


Unit 206 multiple
surfaces spalls
04 19 2022


Example of possible encroachment at 215 because of the size and proximity to the door threshold
04 19 2022

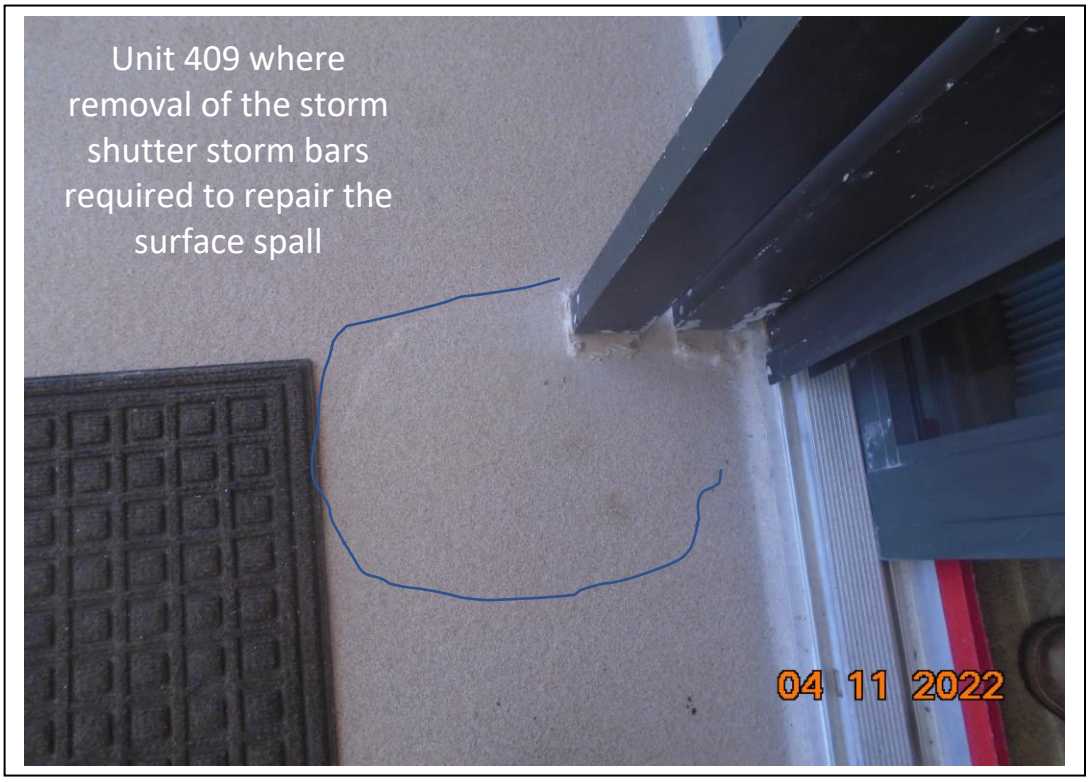

217 surface spall
04 19 2022

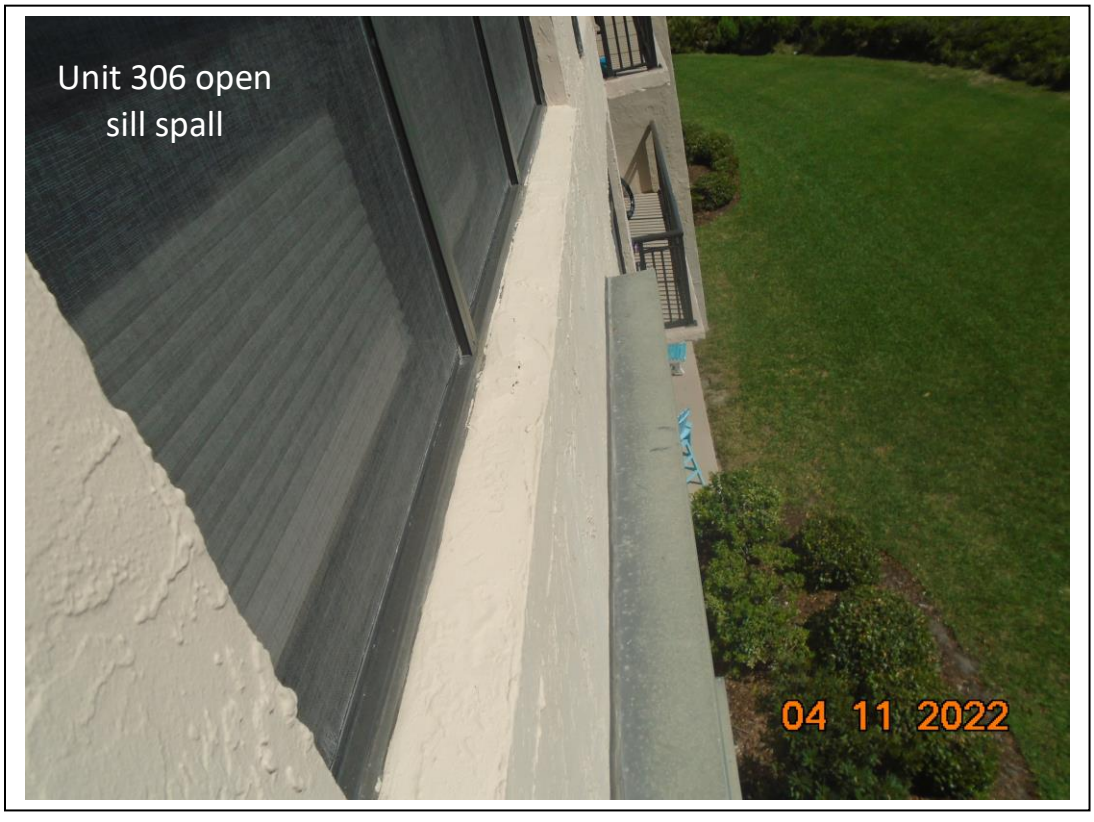

One of the few walkway spalls this is at the 317 entry door area
04 26 2022


Walkway edge spall outside of Unit 305
04 26 2022

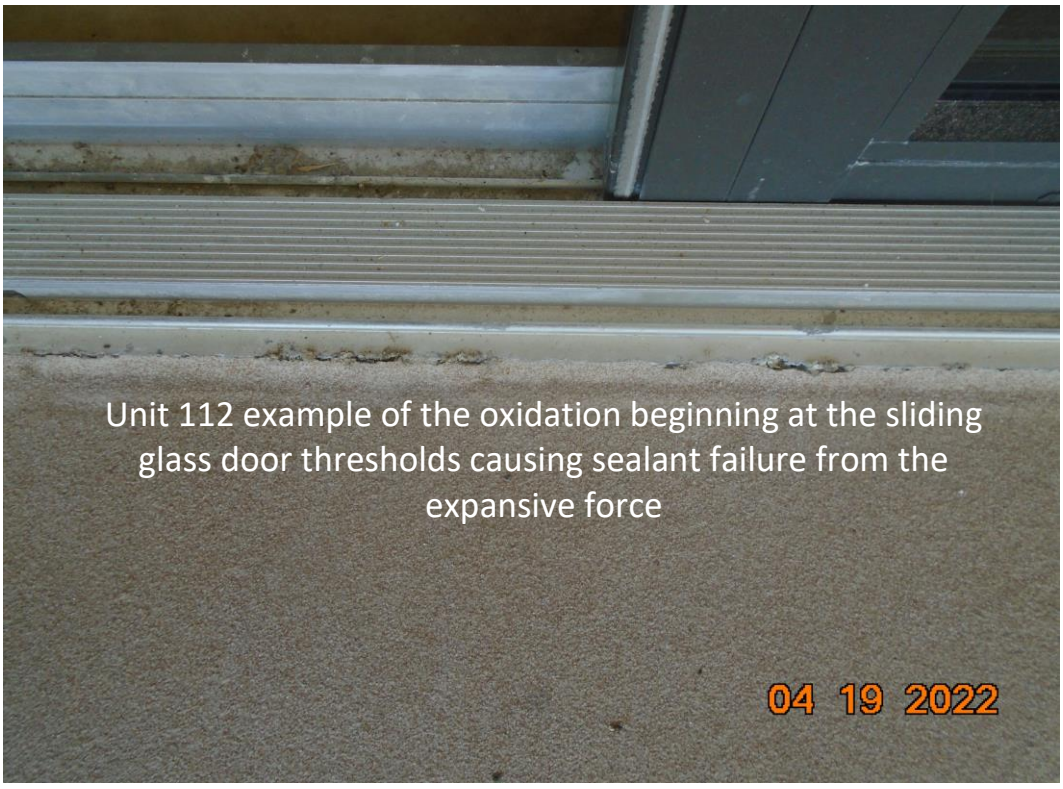

217 entry door surface spall
04 26 2022


Walkway edge spall at east
2nf floor breezeway
04 26 2022


Unit 409 where removal of the storm shutter storm bars required to repair the surface spall
04 11 2022


Unit 306 open sill spall
04 11 2022

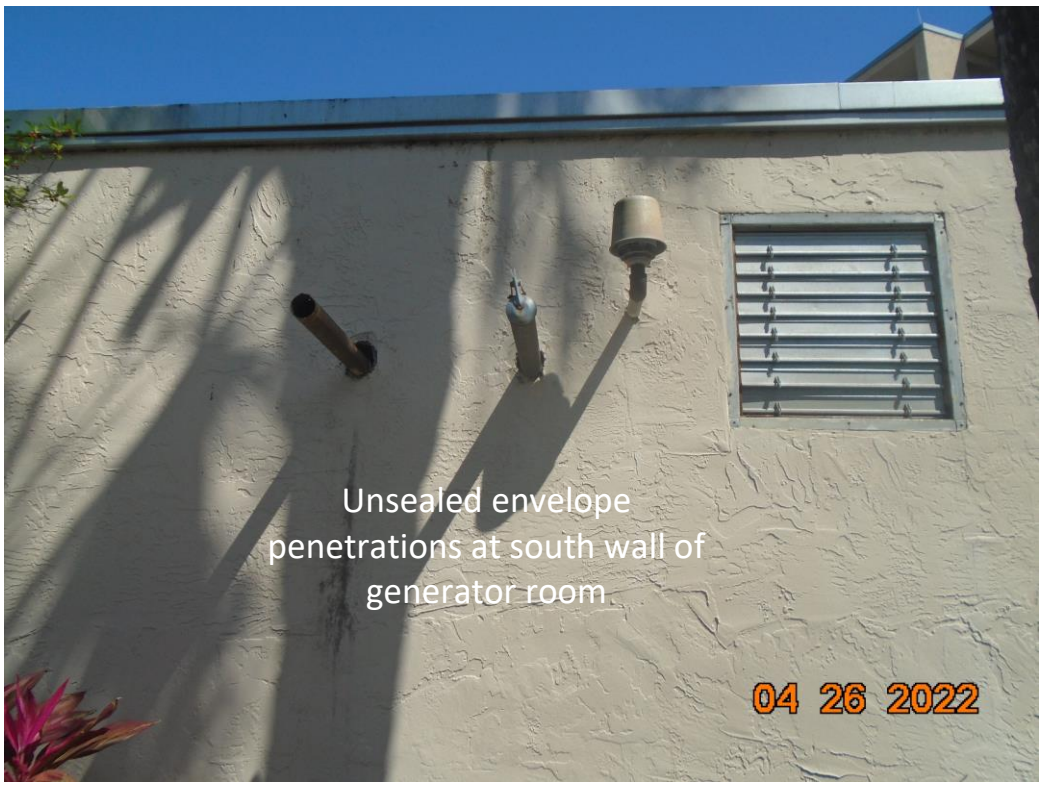

Example of east-facing
weather-bearing
window sealant
04 19 2022


Unit 112 example of the oxidation beginning at the sliding glass door thresholds causing sealant failure from the expansive force
04 19 2022


Beams under the approach ramp stained but not spalled
04 11 2022


3rd floor center stairwell landing requiring steel pan repair and topping replacement
04 26 2022


Trash chute missing the guillotine assembly and a National Fire Protection Association infraction
04 26 2022


Unsealed envelope penetrations at south wall of generator room
04 26 2022


Fixtures should be sealed to the stucco transition
04 11 2022


304 fixture junction box corroding from not being properly sealed
04 11 2022


Unsealed envelope penetration at walkways
04 26 2022


Filiform corrosion example located at the walkway breezeway
04 26 2022

SITE MAPS

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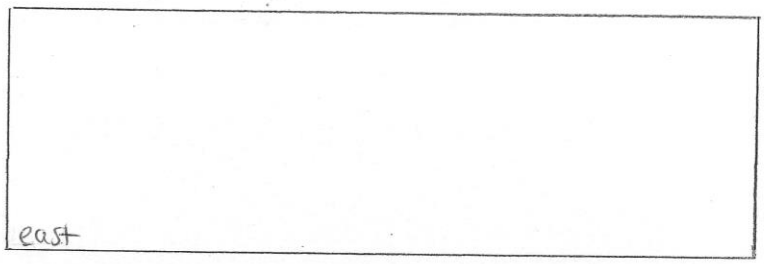
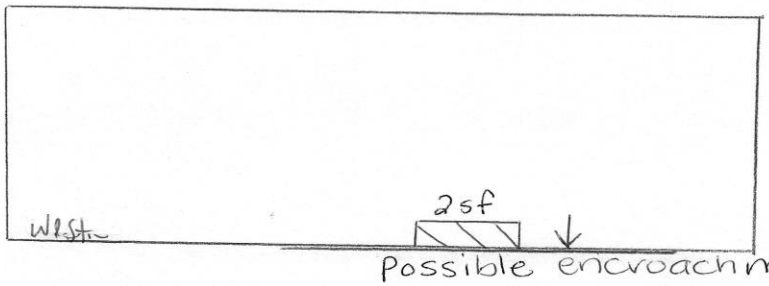
Barefoot Trace Unit: 401





LR - balcony - Shutter
Seal Light

MBR - original S61) wet zone not Sealed

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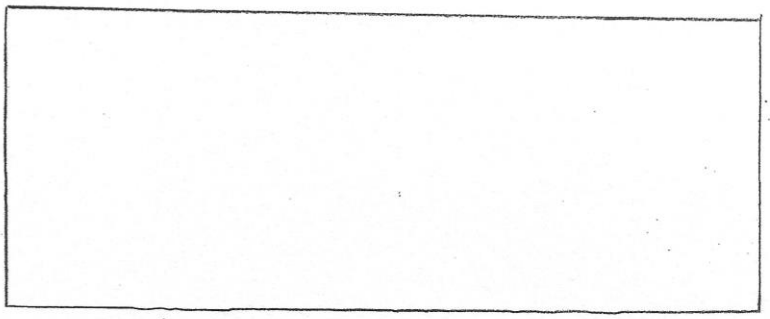
Barefoot Trace Unit: 402



Shutter

Receptacle and Light not Sealed

Rust bleeding from Light

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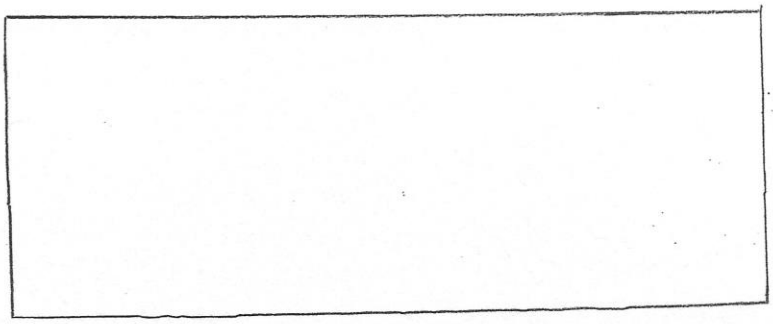
Barefoot Trace Unit: 403



Shutter

Seal light and Receptacle

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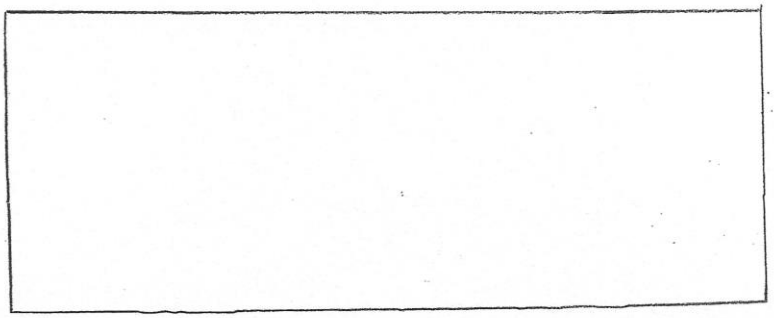
Barefoot Trace Unit: 404



Light and Receptacle not sealed

Sill Spall MBR window 2LF

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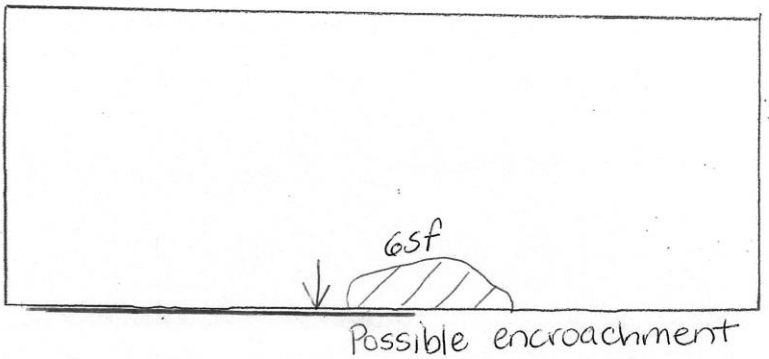
Barefoot Trace Unit: 405



Seal Light and Receptacle

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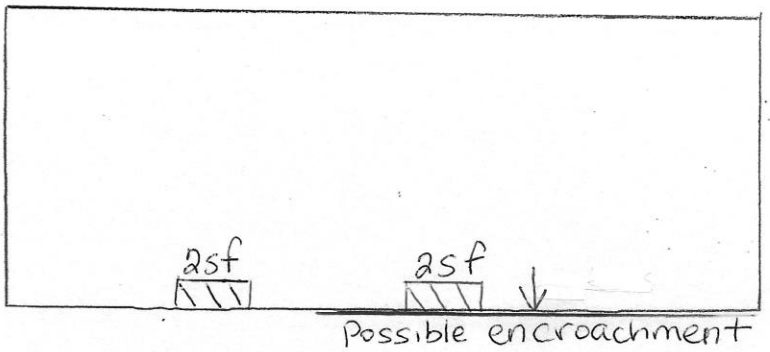
Barefoot Trace Unit: 406



Light and receptacle not Sealed

MBR Windows unsealed

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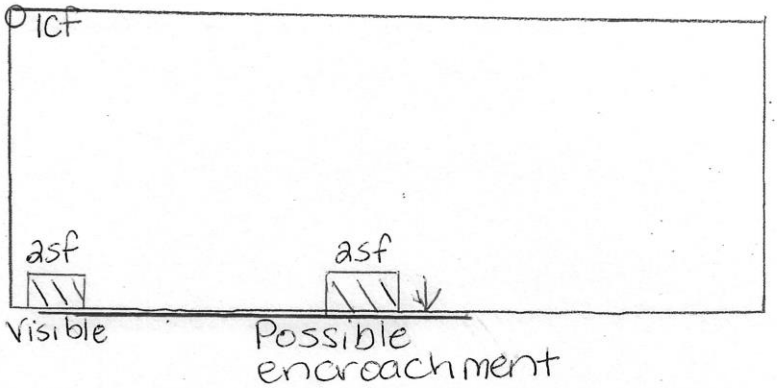
Barefoot Trace Unit: 407



Shutter

Light and receptacle unsealed

rust bleeding from light

missing nut on base plate

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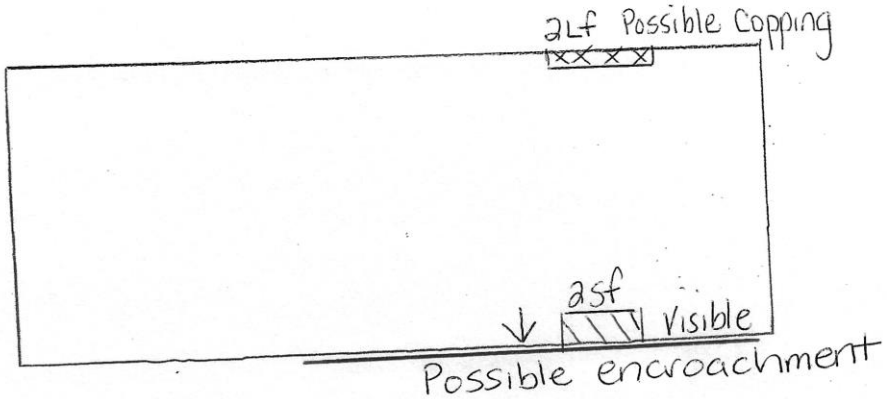
Barefoot Trace Unit: 408



Shutter PGT SGD

Seal Light and receptacle

Sill Sealants on MBR Starting to Alligator

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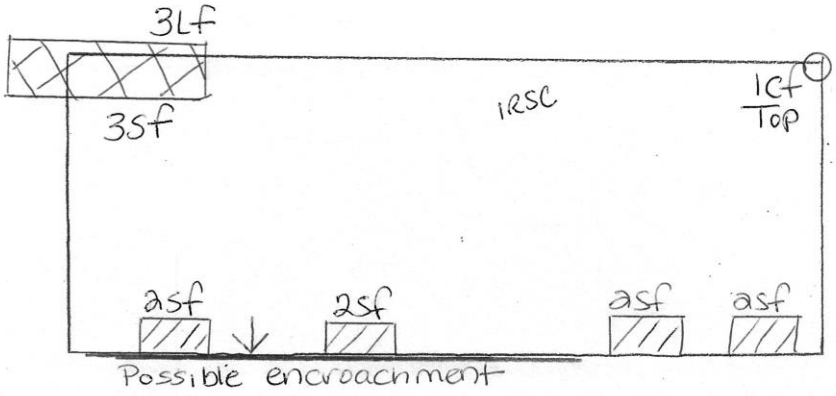
Barefoot Trace Unit: 409



Shutters

Seal Light and receptacle

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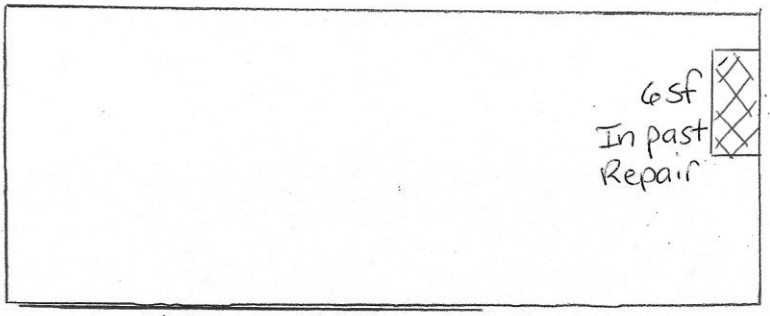
Barefoot Trace Unit: 410



Shutters

Seal Light and Receptacle

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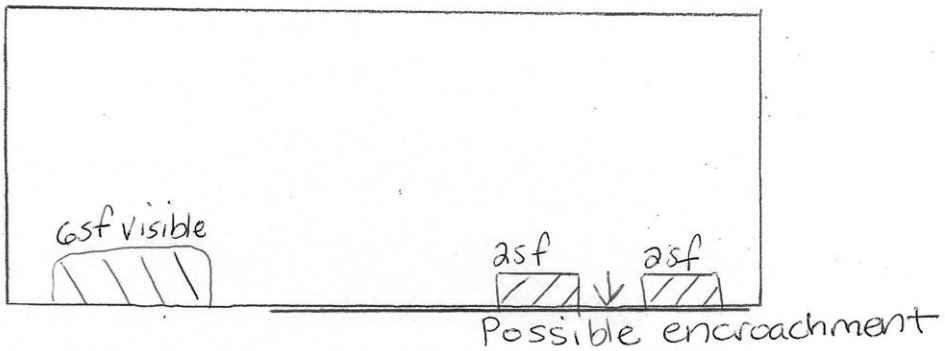
Barefoot Trace Unit: 411



Seal Light and Receptacle

MBR window - Replace Sealant

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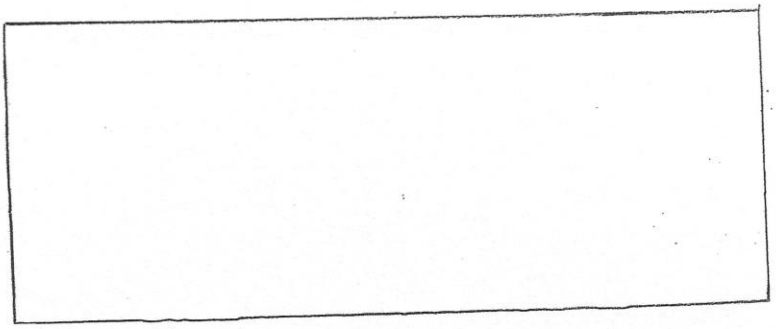
Barefoot Trace Unit: 412



No access

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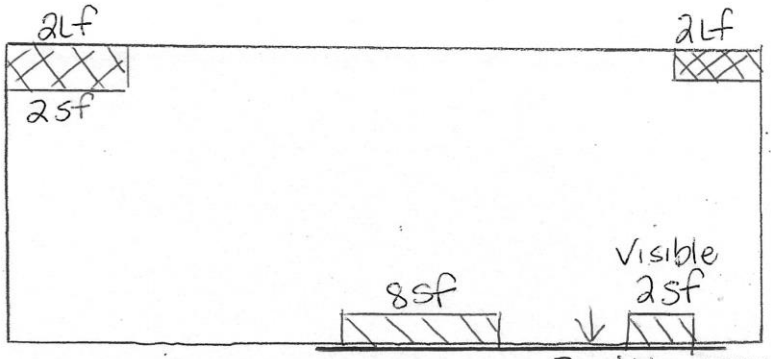
Barefoot Trace Unit: 413



Shutter

Seal Light and receptacle

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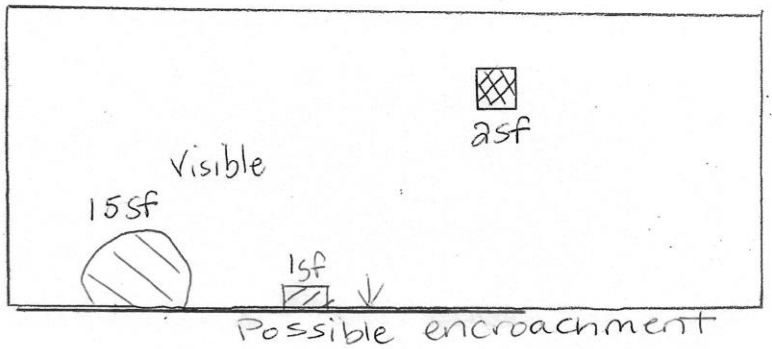
Barefoot Trace Unit: 414



Seal Light and receptacle.

Rusted Anchors on receptacle conduit

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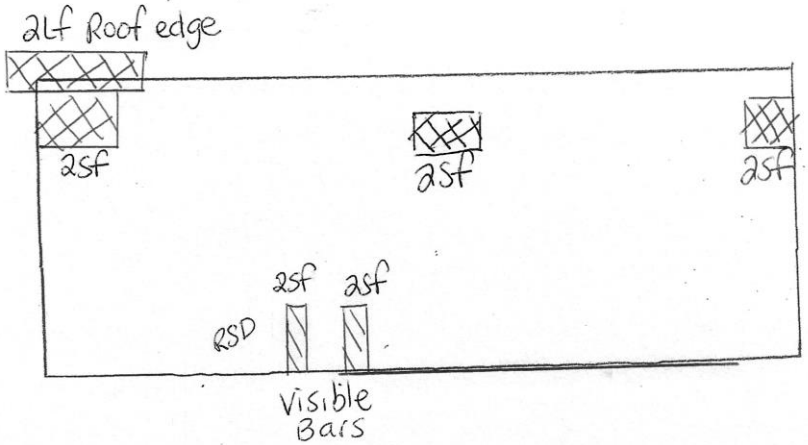
Barefoot Trace Unit: 415



Seal Light and receptacle

Rusted Anchors in junction box conduit

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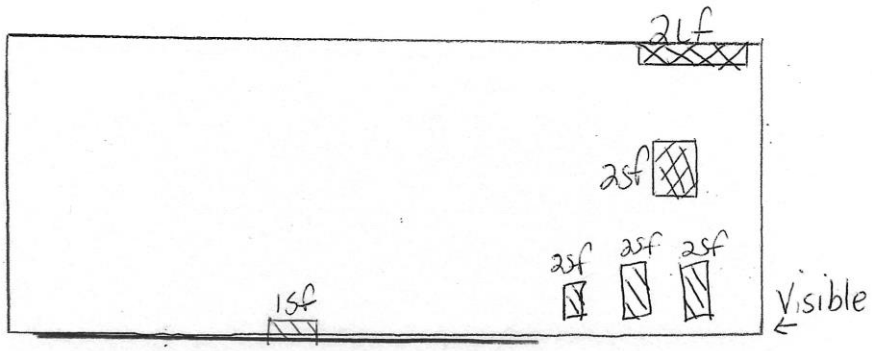
Barefoot Trace Unit: 416



Shutters

Seal Light and receptacle

rust spots from shutter Anchors

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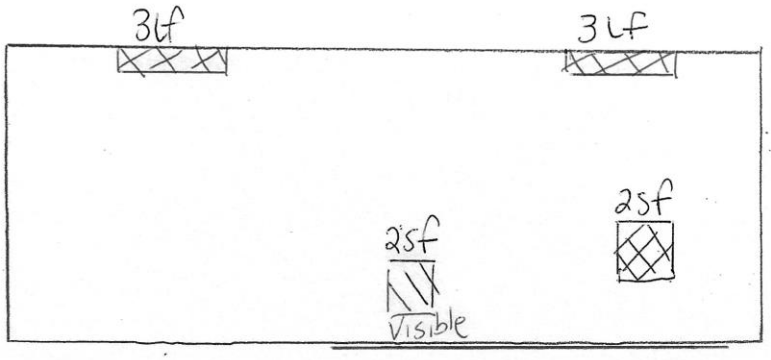
Barefoot Trace Unit: 417



Shutter

Seal Light and receptacle

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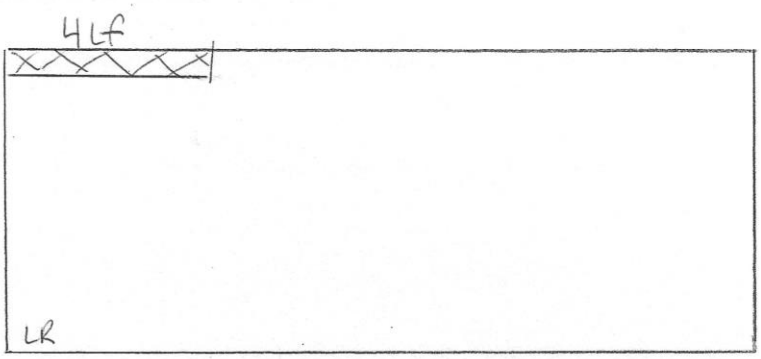
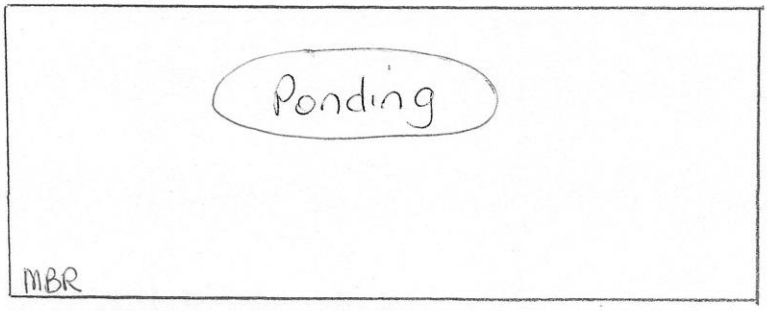
Barefoot Trace Unit: 301





LR- Seal Light
Door need track insert

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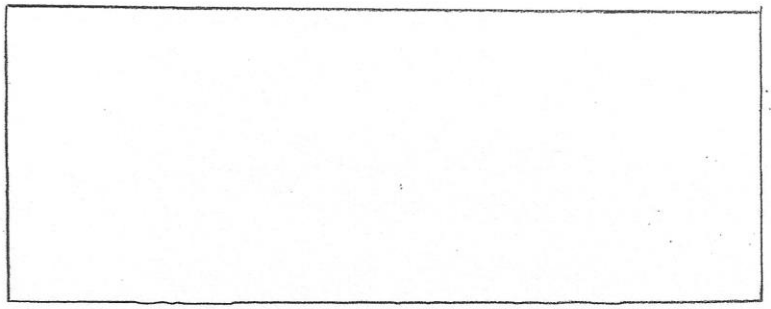
Barefoot Trace Unit: 302



No Access

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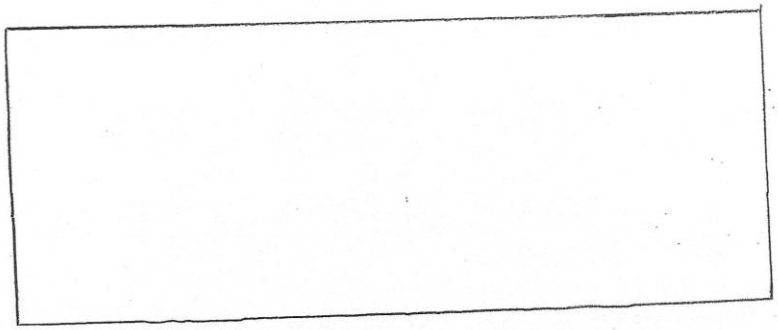
Barefoot Trace Unit: 303



Seal Light and Receptacle

Vinyl door newer PGT 5570

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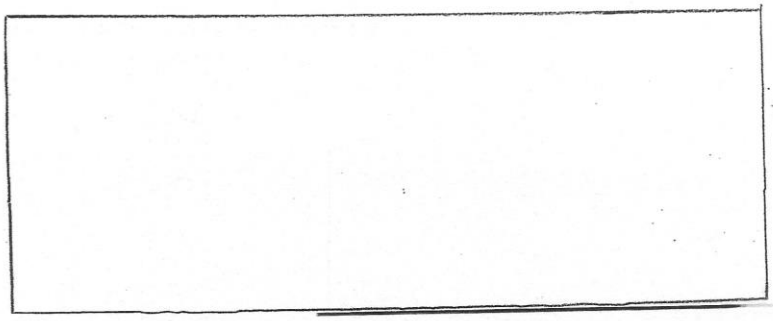
Barefoot Trace Unit: 304



Co Lf MBR Sill spall

Rust bleeding from light fixture

Seal Light and receptacle

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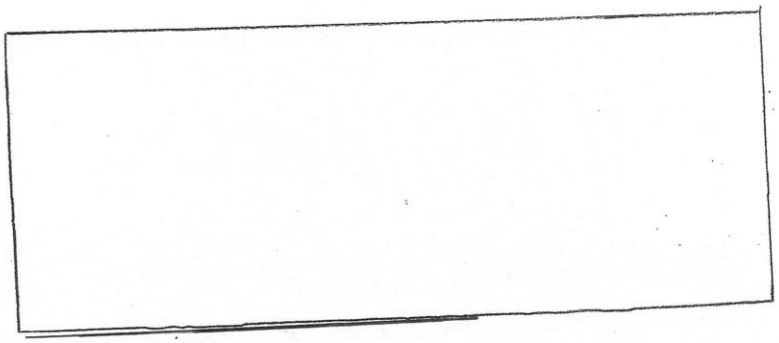
Barefoot Trace Unit: 305



Shutter

Rusted Anchors on Shutter Posts

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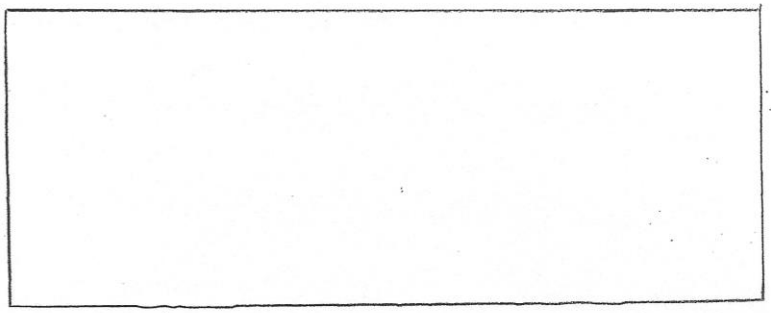
Barefoot Trace Unit: 306



OPen Sill Spall on MBR window (Seal ASAP)

Seal Light and receptacle

rust Stains inside from Above

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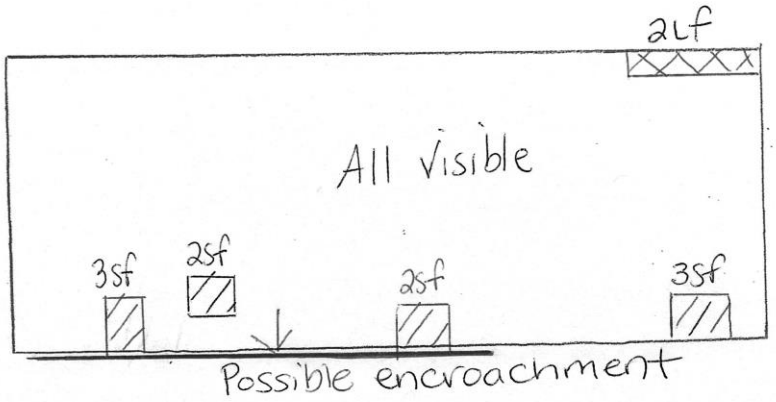
Barefoot Trace Unit: 307



Shutters

Seal Light and receptacle

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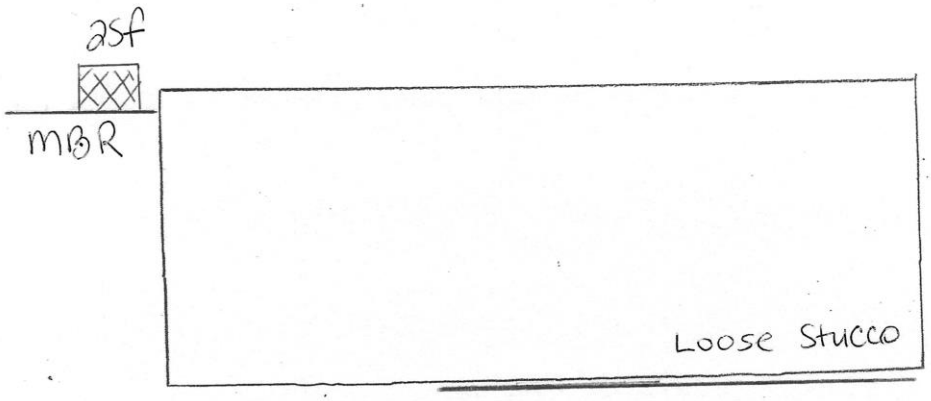
Barefoot Trace Unit: 308



Seal Light and receptacle

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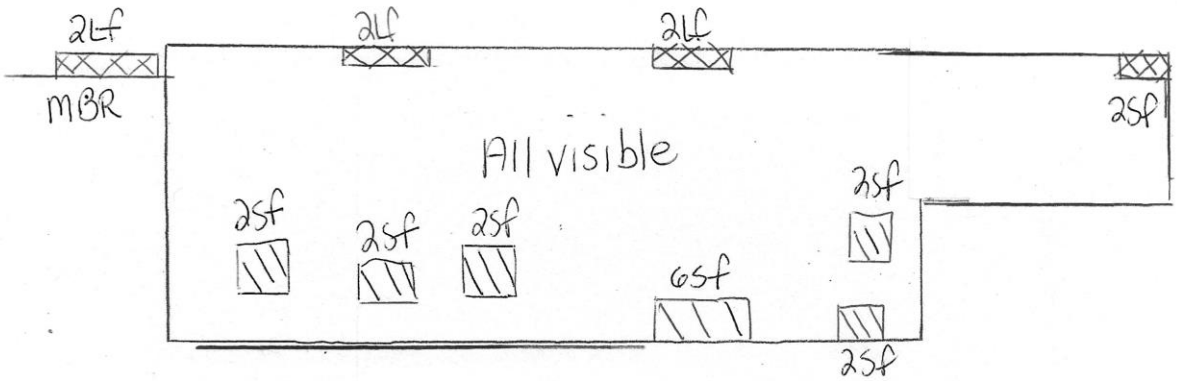
Barefoot Trace Unit: 309



Seal light and receptacle

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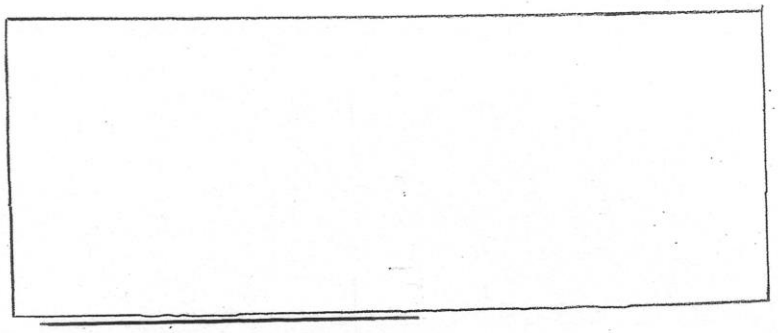
Barefoot Trace Unit: 310



Seal Light and receptacle

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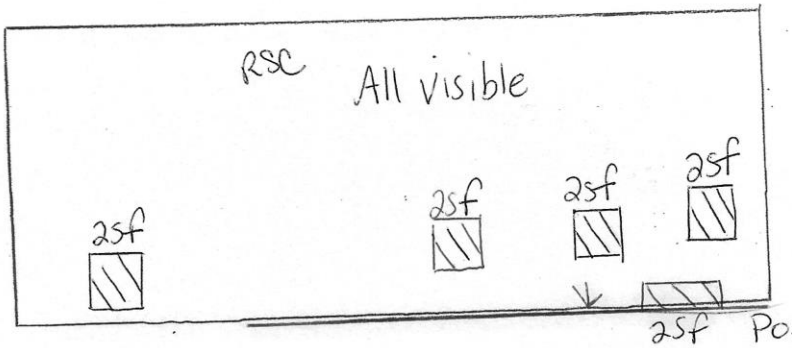
Barefoot Trace Unit: 311



Seal Light and receptacle

Cant bead on All base plates

(3 sides outside open)

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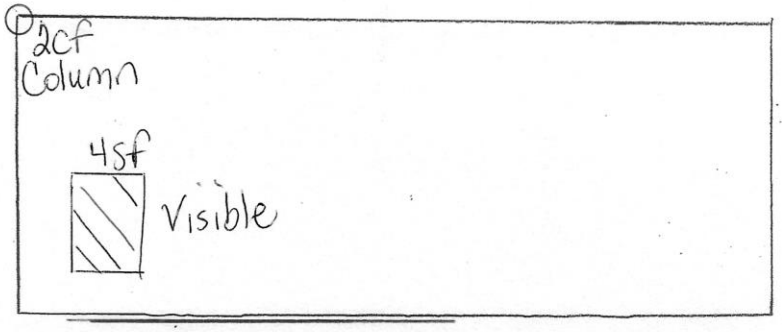
Barefoot Trace Unit: 312



Seal Light and receptacle

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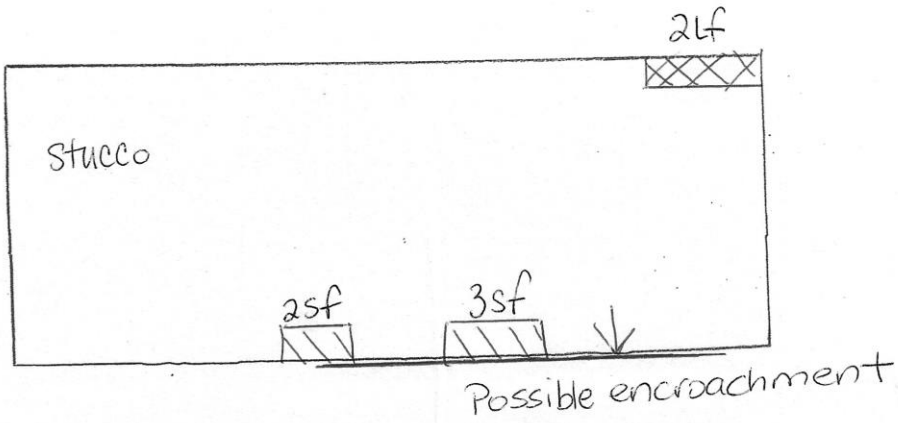
Barefoot Trace Unit: 313



Seal Light and receptacle

threshold oxidizing on SGD

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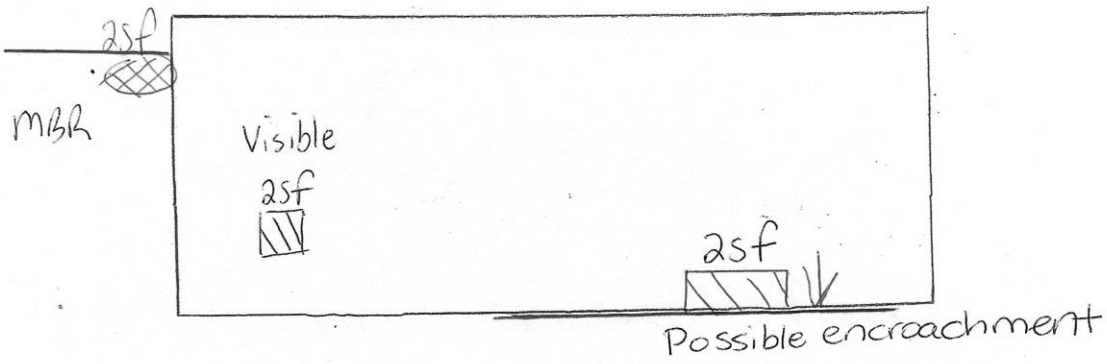
Barefoot Trace Unit: 314



Seal light and receptacle

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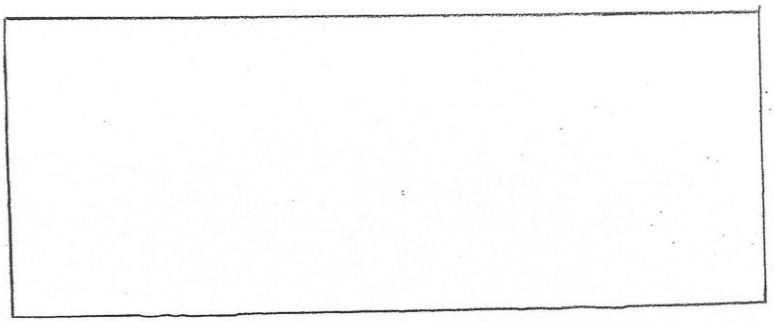
Barefoot Trace Unit: 315



No Access

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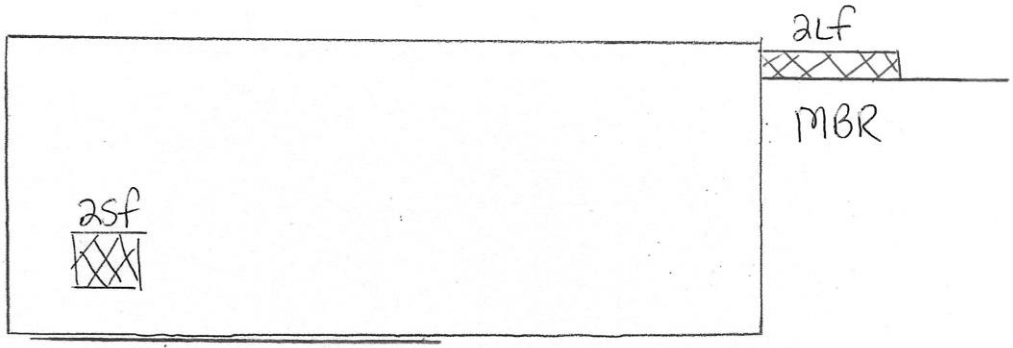
Barefoot Trace Unit: 316



SGD wet zone not Sealed

Seal light and receptacle

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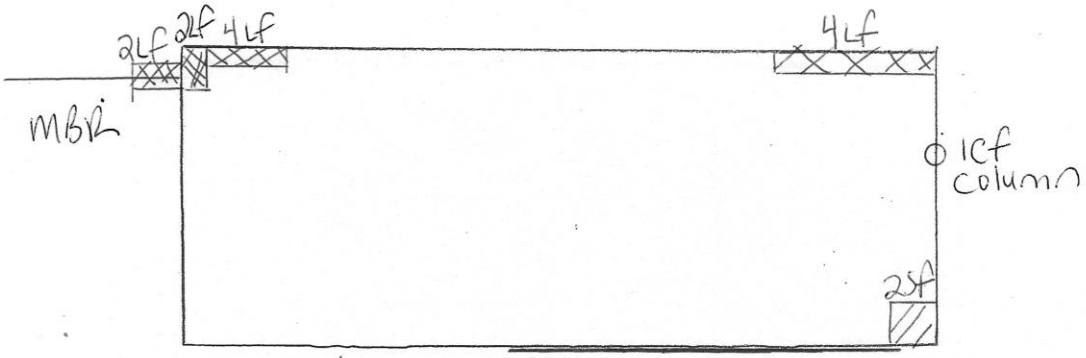
Barefoot Trace Unit: 317



Seal Light and Receptacle

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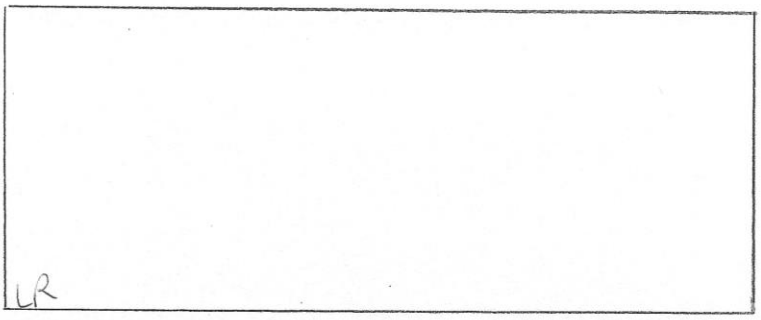
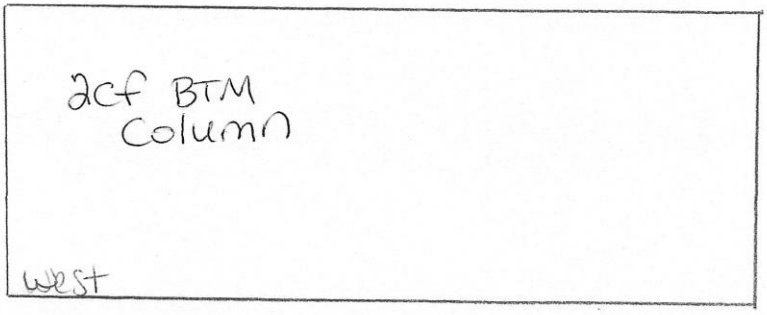
Barefoot Trace Unit: 201





LR- Seal Light and receptacle hole in MBR window Sealant

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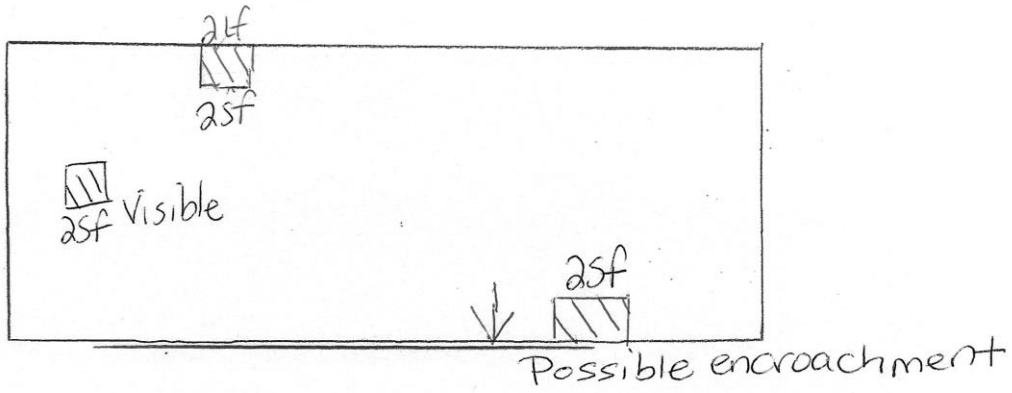
Barefoot Trace Unit: 202



Seal Light and receptacle

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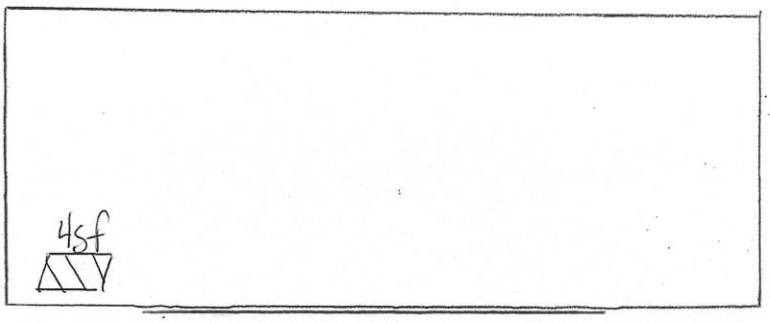
Barefoot Trace Unit: 203



Seal Light and receptacle

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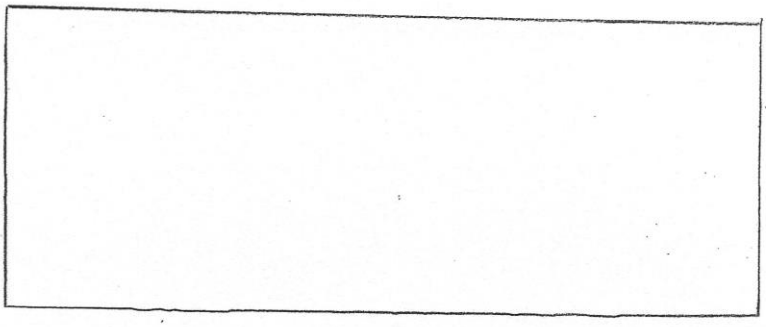
Barefoot Trace Unit: 204



Rug on balcony was stuck to deck

Seal Light and receptacle

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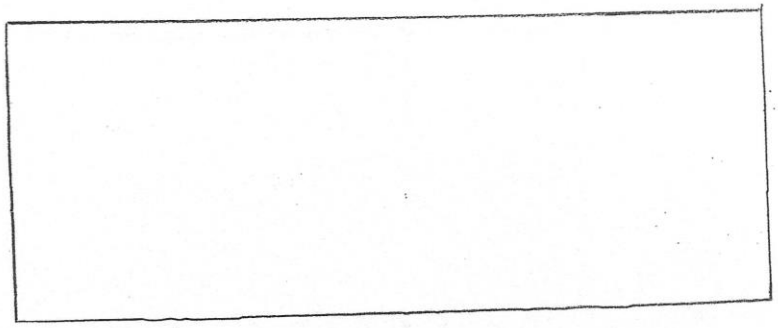
Barefoot Trace Unit: 205



Seal light and receptacle

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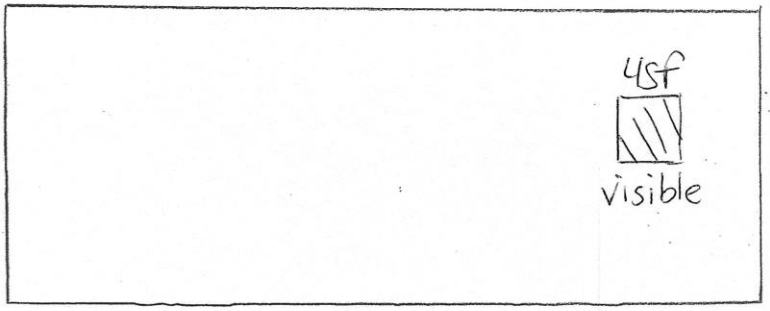
Barefoot Trace Unit: 206



Shutter

Seal Light and receptacle

Water Stain on LR ceiling at SGD and Plaster damage

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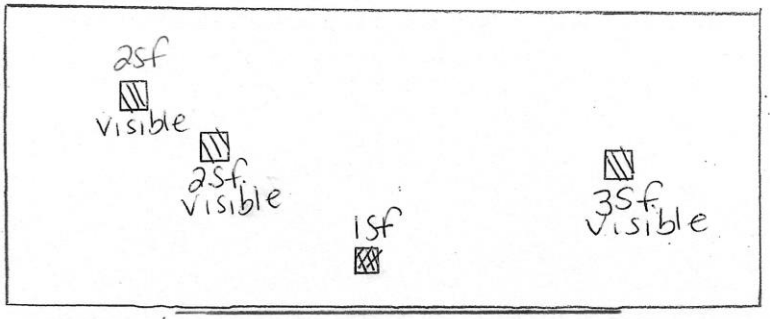
Barefoot Trace Unit: 207



Seal light and receptacle

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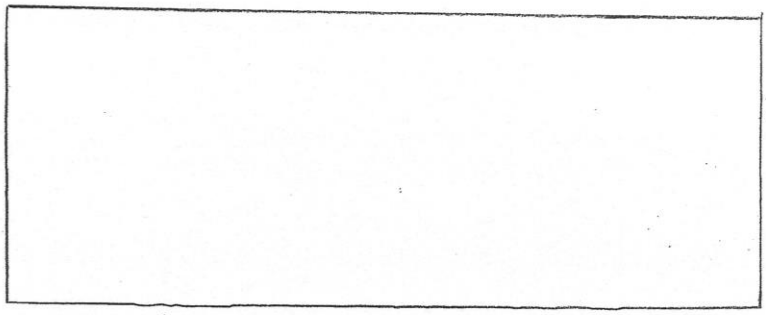
Barefoot Trace Unit: 208



Seal light and receptacle

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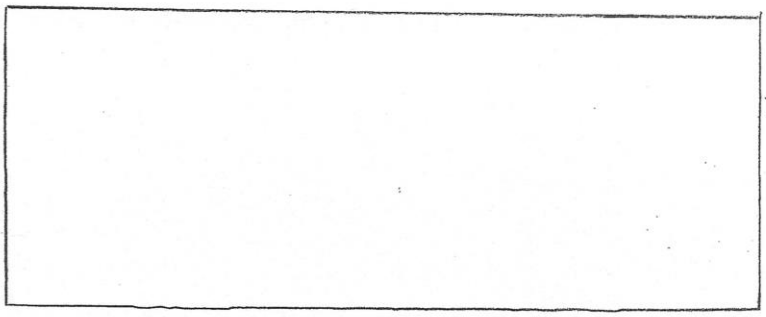
Barefoot Trace Unit: 209



No Access

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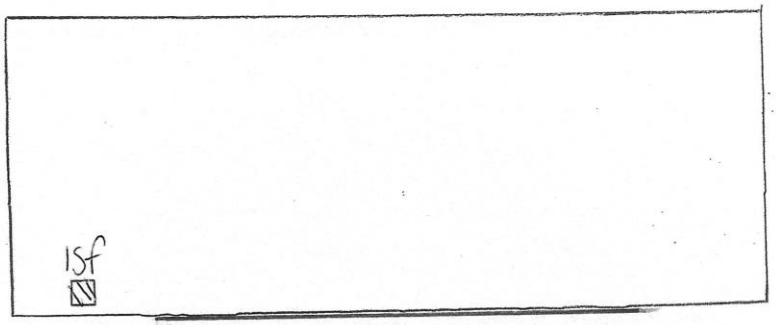
Barefoot Trace Unit: 210



Seal light and receptacle

MBR window Sealant Alligatored & failed

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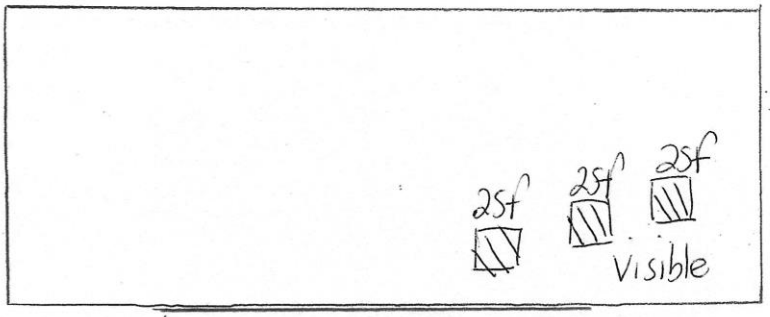
Barefoot Trace Unit: 211



Seal light and receptacle

Sealant on MBR windows was Alligatored

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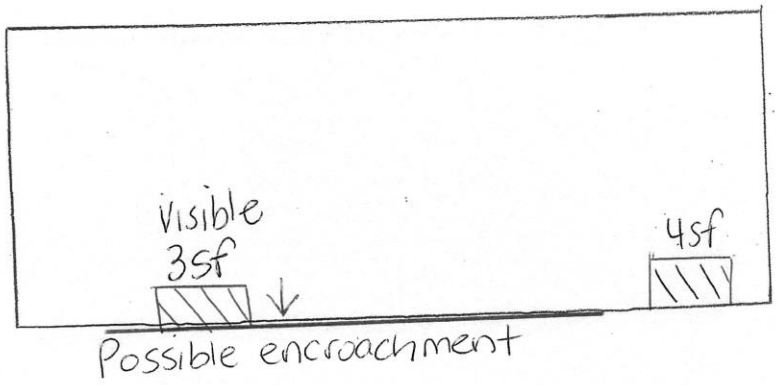
Barefoot Trace Unit: 212



Seal light and receptacle

Track on SGD is corroding making it difficult to open

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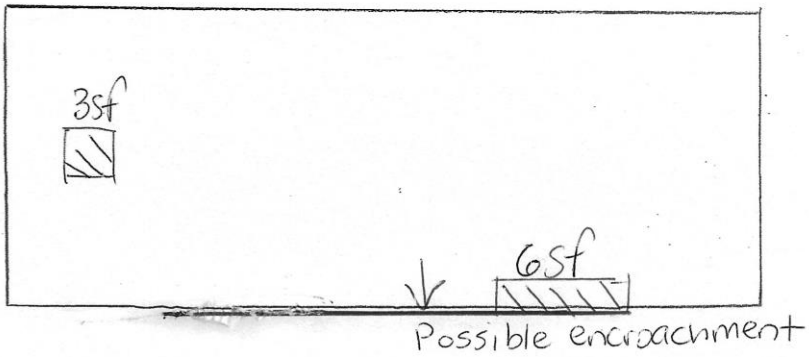
Barefoot Trace Unit: 213



Seal light and receptacle.
Can't bead on btm of window
did not bridge (original window)

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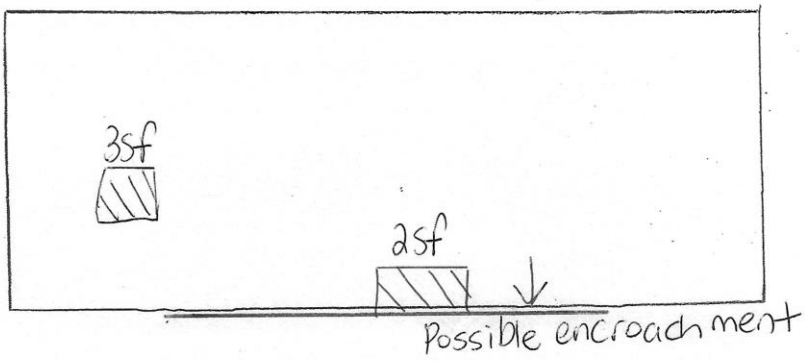
Barefoot Trace Unit: 214



Seal light and receptacle

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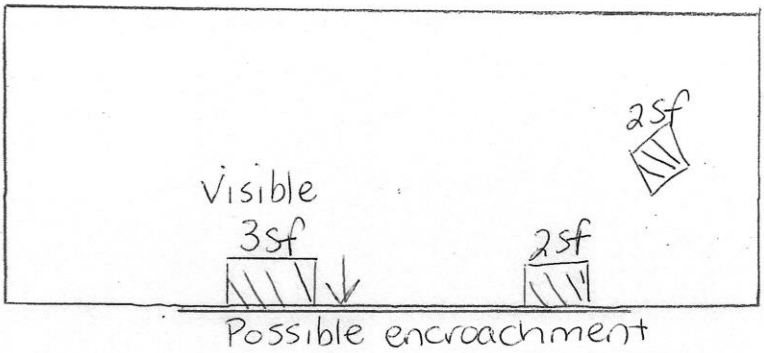
Barefoot Trace Unit: 215



Seal Receptacle and light

SGD seal broken

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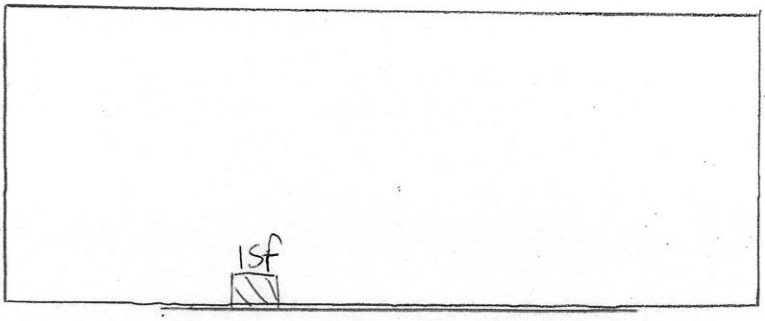
Barefoot Trace Unit: 216



Seal light and receptacle
cap bead on mbr sill

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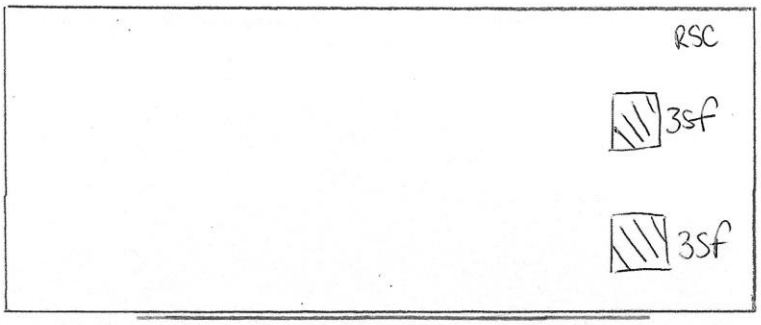
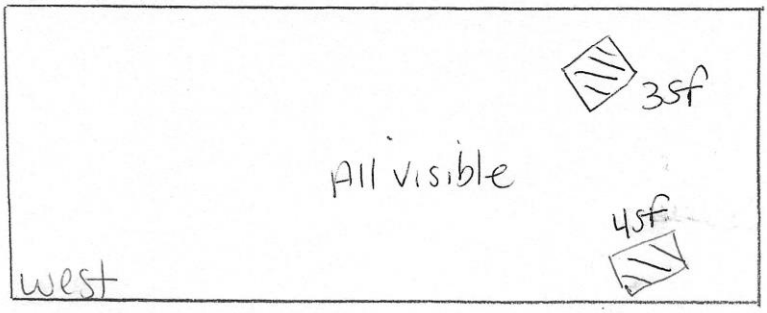
Barefoot Trace Unit: 217





Seal light and receptacle on both balconies

Shutters

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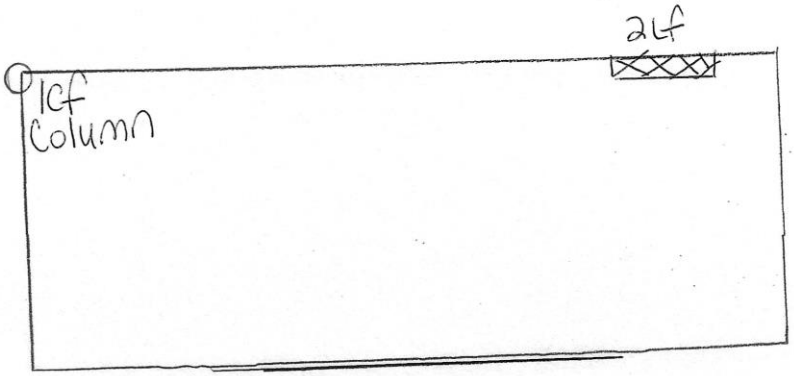
Barefoot Trace Unit: 101



Seal light and receptacle

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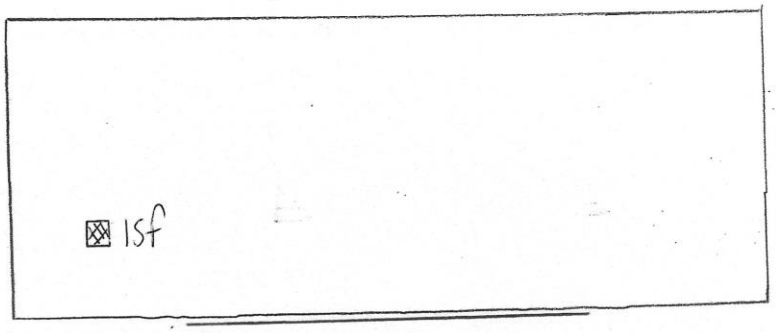
Barefoot Trace Unit: 102



Seal light and receptacle

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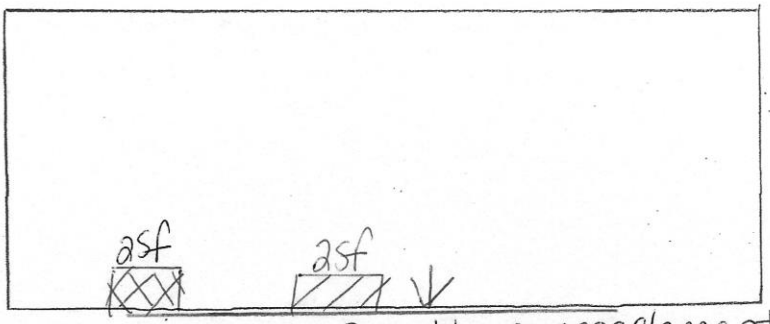
Barefoot Trace Unit: 103



Seal Light and receptacle

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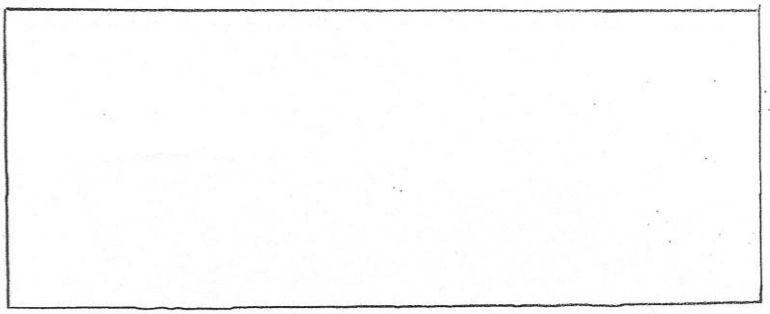
Barefoot Trace Unit: 104



Seal receptacle and light

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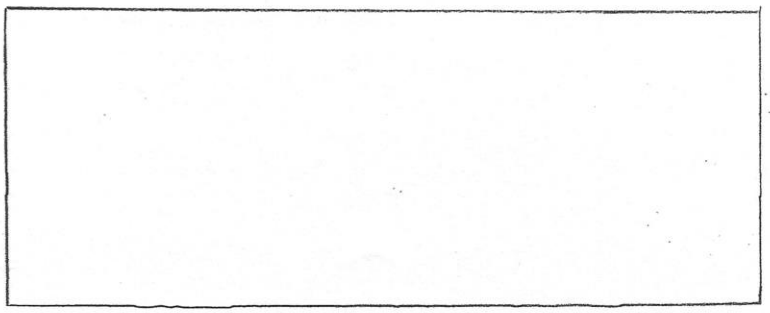
Barefoot Trace Unit: 105



Seal light and receptacle

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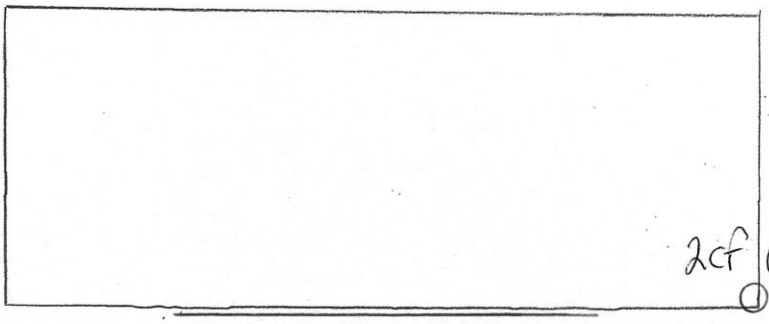
Barefoot Trace Unit: 106



Seal Light and receptacle
Shutter

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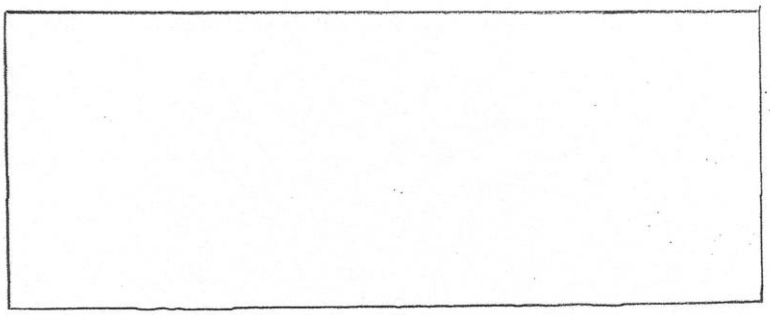
Barefoot Trace Unit: 109



Seal light and receptacle

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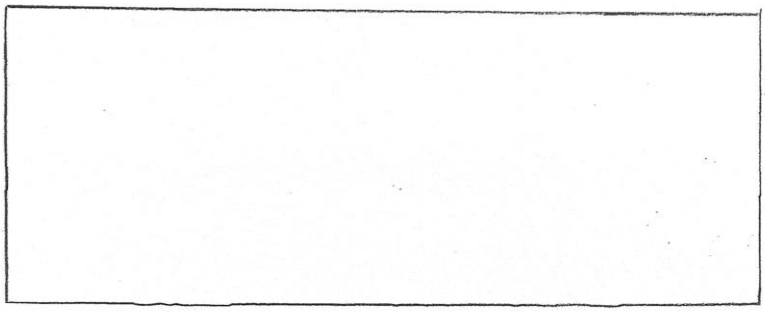
Barefoot Trace Unit: 110



Seal light and receptacle

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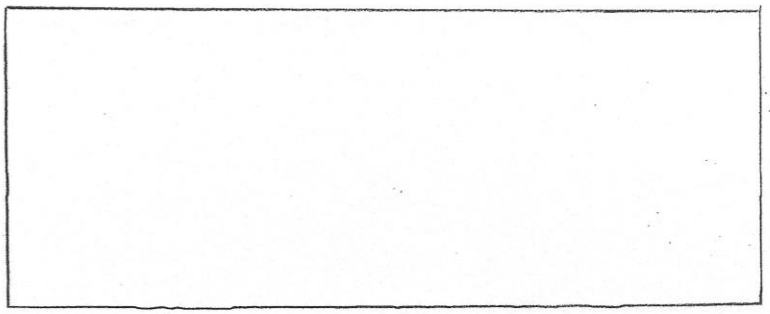
Barefoot Trace Unit: 111



Seal light and receptacle

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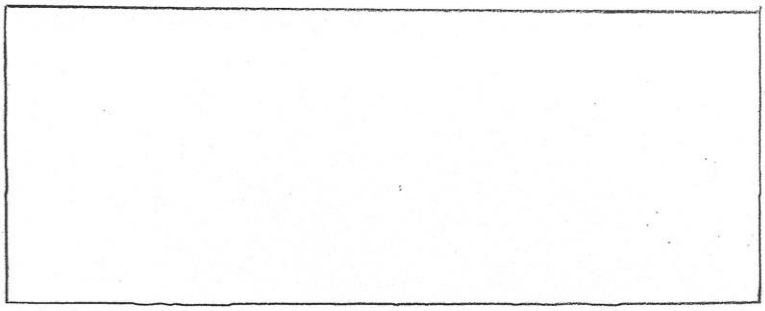
Barefoot Trace Unit: 112



Seal light and receptacle
threshold oxidizing
Deck coating peeling in areas

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Barefoot Trace Unit: 113

Seal light and receptacle

Shutter

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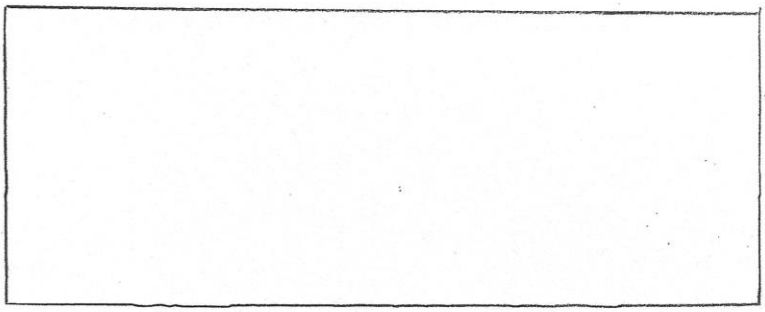
Barefoot Trace Unit: 114



Seal light and receptacle

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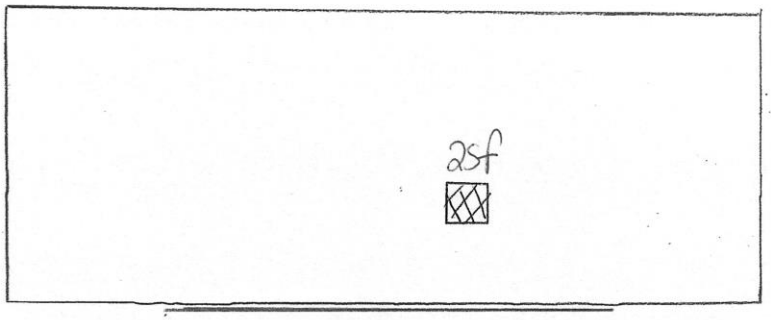
Barefoot Trace Unit: 115



Seal light and receptacle

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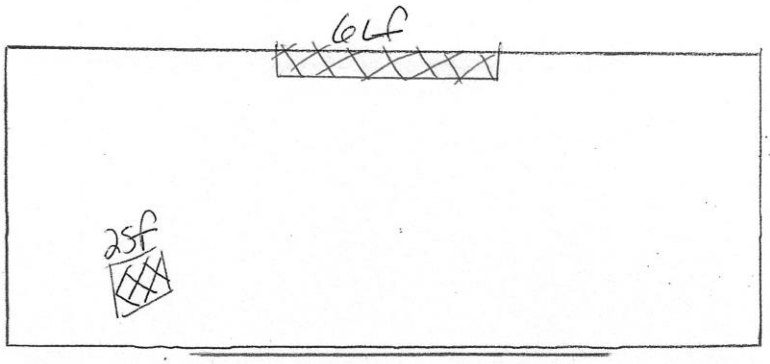
Barefoot Trace Unit: 116



Seal Light and receptacle

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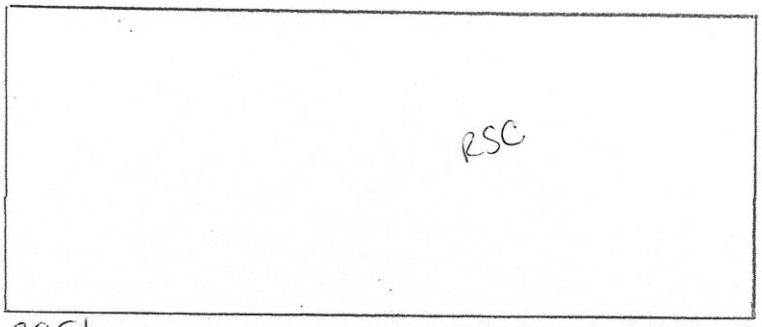
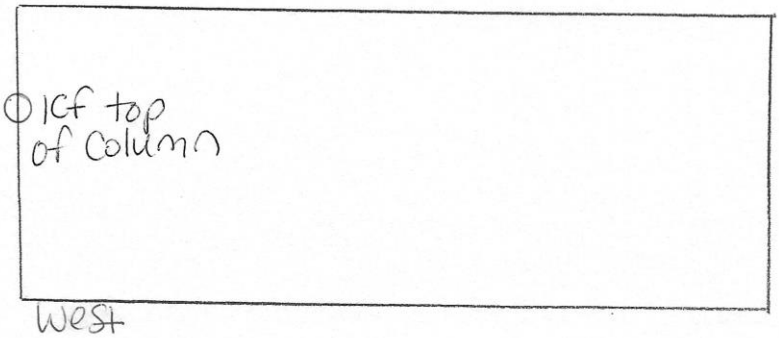
Barefoot Trace Unit: 117



east



west

east - Seal light and receptacle
receptacle cover broken
west - Seal light and receptacle (original SGD)

BAREFOOT TRACE
*** Estimated Balcony Quantities**

Keystone Engineering 6/7/22

Unit Number	Rust Spots	Concrete Edge Repairs LF	Concrete Surface Repairs SF	Concrete Ceiling Repairs SF	Concrete Column/Wall/ Beam Repairs CF	Possible Encroachment	Shutters	Comments
401 E							yes	seal light & receptacle
401 W						yes		wet zone on SGD not sealed
402							yes	seal light & receptacle rust bleeding from light
403							yes	seal light & receptacle
404		2 MBR Sill						seal light & receptacle
405			6			yes		seal light & receptacle
406			4			yes		seal light & receptacle & MBR light unsealed
407		1	4			yes	yes	seal light & receptacle; rust bleeding from light; missing base plate nut
408		2	2			yes	yes	seal light & receptacle; sill sealant on MBR is alligatoring
409	1	3	8	3	1	yes	yes	seal light & receptacle
410				6			yes	seal light & receptacle
411			10			yes		seal light & receptacle; MBR window replace sealant
412	no access							no access
413		4	10	2		yes	yes	seal light & receptacle
414			16	2		yes		seal light & receptacle; rusted anchors on electrical conduit
415	1	2	4	6				seal light & receptacle; rusted anchors on electrical conduit
416		2	7	2			yes	seal light & receptacle; rust spots from shutter anchors
417		6	2	2			yes	seal light & receptacle
301 E		4						seal light
301 W								seal light; ponding on deck
302	no access							no access
303								seal light & receptacle
304		6 MBR Sill						seal light & receptacle; rust bleeding from light fixture
305							yes	rusted anchors on shutter frame
306								open sill spall on MBR window; seal light & receptacle; rust stains inside from above water intrusion
307		2	10			yes	yes	seal light & receptacle
308				2				seal light & receptacle

Unit Number	Rust Spots	Concrete Edge Repairs LF	Concrete Surface Repairs SF	Concrete Ceiling Repairs SF	Concrete Column/Wall/ Beam Repairs CF	Possible Encroachment	Shutters	Comments
309		8	16					seal light & receptacle
310								seal light & receptacle
311	1		10			yes		seal light & receptacle
312			4		2			seal light & receptacle
313		2	5			yes		seal light & receptacle; threshold oxidizing on SGD
314			4	2		yes		seal light & receptacle
315	no access							no access
316				4				SGD wet zone not sealed; seal light & receptacle
317		12	2		1			seal light & receptacle
201					2			seal light & receptacle; hole in MBR window sealant
202		2	6			yes		seal light & receptacle
203			4					seal light & receptacle
204								seal light & receptacle; rug on balcony was stuck to deck
205								seal light & receptacle
206			4				yes	seal light & receptacle; water stain and plaster damage on the LR ceiling at the SGD
207			7	1				seal light & receptacle
208								seal light & receptacle
209	no access							no access
210			1					seal light & receptacle; MBR window sealant alligatored and failed
211			6					seal light & receptacle; sealant on MBR window is alligatored
212			7			yes		seal light & receptacle; track on SGD is corroded and making it difficult to open door
213			9			yes		seal light & receptacle; cant bead on window did not bridge allowing water intrusion
214			5			yes		seal light & receptacle
215			7			yes		seal light & receptacle; SGD seal broken
216			1					seal light & receptacle
217	1		13				yes	seal lights & receptacles
101		2			1			seal light & receptacle
102				1				seal light & receptacle
103			2	2		yes		seal light & receptacle
104								seal light & receptacle
105								seal light & receptacle
106					2		yes	seal light & receptacle
109								seal light & receptacle
110								seal light & receptacle
111								seal light & receptacle

Unit Number	Rust Spots	Concrete Edge Repairs LF	Concrete Surface Repairs SF	Concrete Ceiling Repairs SF	Concrete Column/Wall/ Beam Repairs CF	Possible Encroachment	Shutters	Comments
112								seal light & receptacle; threshold oxidizing on SGD; deck coating peeling in areas
113				4			yes	seal light & receptacle; both ceiling spalls are at the shutter
114								seal light & receptacle
115				2				seal light & receptacle
116		6		2				seal light & receptacle
117	1				1			seal light & receptacle; receptacle cover broken on east patio
Totals	5	58	196	43	10	19	16	
SGD-SLIDING GLASS DOOR; MBR-MASTER BEDROOM; LR-LIVING ROOM; BR-BEDROOM								
* Quantities are estimated based on limitations of survey. Contingencies need to be considered for additional damage due to hidden conditions and additional damage that will occur with time prior to completing the work.								

6/7/2022	BAREFOOT TRACE				
	Bid Item	**Estimates**	**Unit Cost**		**Extended Cost**
Unit Rate Repairs*Includes Balcony, Walkway, Garage, Boundary Walls, Parking Deck Areas					
1a	Minimum Concrete	85	$ 350.00	EA	$29,750.00
1b	Edge Spall Repair	60	$ 225.00	LF	$13,500.00
1c	Surface Spall Repair	360	$ 200.00	SF	$72,000.00
1d	Overhead Spall Repair	75	$ 250.00	SF	$18,750.00
1e	Column, Beam, Kneewall, Prestressed Spall Repairs	45	$ 525.00	CF	$23,625.00
1f	Full Depth Spall Repair	50	$ 225.00	SF	$11,250.00
1g	Post Tension Anchor Parking Deck	5	$ 3,500.00	CF	$17,500.00
1h	Post Tension Grout Pocket Parking Deck	15	$ 175.00	CF	$2,625.00
1i	Rust Spot Repair	350	$ 35.00	EA	$12,250.00
1j	Stucco Replacement Masonry Miscellaneous	1100	$ 25.00	SF	$27,500.00
1k	Rout/Seal Crack Treatment Building 900	900	$ 12.00	LF	$10,800.00
1l	Rout/Seal Crack Treatment Parking Deck	1700	$ 12.00	LF	$20,400.00
1m	Hardwall Barricade *Interior 14lf	19	$ 1,250.00	EA	$23,750.00
1n	Exterior Barricade *Windowsill Repair	4	$ 900.00	EA	$3,600.00
1o	Softwall Barricade	5	$ 250.00	EA	$1,250.00
1p	Profiling / Leveling for Ponding	4500	$ 30.00	SF	$135,000.00
1q	Strip/Cleanup Loose Paint / 20MIL	1000	$ 5.50	SF	$5,500.00
1r	Miscellaneous Fasteners	350	$ 25.00	EA	$8,750.00
1s	Miscellaneous Sealant Polyurethane	1500	$ 11.00	LF	$16,500.00
1t	Polyurethane Build Coat at Deck Repairs	600	$ 18.00	SF	$10,800.00
1u	Windowsill Spall Repair	200	$ 135.00	SF	$27,000.00
Fixed Cost					
2	Mobilization & General Conditions 12%	1	$ 113,700.00	LS	$113,700.00
3	Prepare/Paint all Concrete and Stucco Exterior Surfaces of the Building, Including Garage Exterior Walls, Garage Ramp Walls, Parking Deck Curbs, and Retaining/BoundaryWalls with One Coat Sherwin Williams Guidecoat Conditioner and One Coat SuperPaint 100% Satin Acrylic and Provide 7-year Warranty *Excludes all Doors and Windows, Seawall, Prefinished Products, Lighting, Aluminum or Steel Elements	1	$ 334,400.00	LS	$334,400.00
4	Prepare all Balcony Surfaces and Apply a Quartz to Match or Non-patterned Hybrid Knockdown with Two Coats Non-skid Acrylic	1	$ 112,800.00	LS	$112,800.00
Allowances					
5	Stairwell Steel Stair Allowance	1	$ 6,500.00	LS	$6,500.00
6	Electrical Allowance	1	$ 1,500.00	LS	$1,500.00
	CONCEPTUAL BUDGET				**$1,061,000.00**
Alternates					
A1	In Lieu of Line Item #4, Apply Two-Coat, Sanded-to-Refusal, Polyurethane System Standard Color	1	$ 75,200.00	LS	$75,200.00
A2	In Lieu of Line Item A7, Apply Two-Coat, Sanded-to-Refusal, Polyurethane System Standard Color	1	$ 176,000.00	LS	$176,000.00
A3	Prepare and Paint a 3' Fire-Rated Common Area Door	1	$ 375.00	LS	$375.00
A4	Prepare and Paint a Unit Entry Door	1	$ 275.00	LS	$275.00
A5	100% Payment & Performance Bond *2.5%	1	$ 26,500.00	LS	$26,500.00
A6	Prepare all Walkway Surfaces and Apply a Quartz to Match or Non-patterned Hybrid Knockdown with Two Coats Non-skid Acrylic	1	$ 258,000.00	LS	$258,000.00
A7	Strip to Bare Concrete and Prepare all Parking Deck Surfaces, Including Cant Beads and Apply a Extra Heavy-Duty Vehicular Polyurethane Deck Coating System w/10-year Manufacturers Guarantee*Includes Expansion Joints w/Silicone	1	$ 364,600.00	LS	$364,600.00
CF _ Cubic Foot; LF _ Linear Foot; SF _ Square Foot; EA _ Each; LS _ Lump Sum					

Understand this budget is intended for discussion and planning purposes only and not for budgeting. Keystone recommends the association not secure funds until the costs are finalized from soliciting formal proposals from pre-approved general contractors based upon the timing and the scope of work decided upon.
We also suggest a contingency of 15% or $159,000 for hidden and or unknown conditions.